LEPPINGTON TOWN CENTRE MARKET DEMAND ANALYSIS

PART A: HOUSING DEMAND ANALYSIS
PART B: RETAIL AND EMPLOYMENT DEMAND ANALYSIS

Prepared for Camden Council
August 2020/April 2021
Final Draft V5.1

HillPDA
CONSULTING

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This document is for discussion purposes only unless signed and dated by a Principal of HillPDA.

Reviewer

Signature	L:\Administration\Staff\Electronic Signatures	Dated	Click here to enter a date.

Report details

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DEFINITION OF TERMS

'As is' Value - This value relates to the current value of the property in its existing state and current use. This does not take into consideration future uplift in planning controls

Current ILP - is the current ILP for Leppington Town Centre

Category killers - a large store, typically a chain, which sells a range of merchandise for a particular market segment and becomes the dominant retailer in that category

Development Margin (DM) - is the net profit expressed as a percentage of the development costs.

Englobo land - land that is largely undeveloped or minimally developed and un-serviced and may be subdivided into smaller parcels of land

Indicative Layout Plan (ILP) - is a masterplan that includes zones and the road layout.

Leppington Town Centre Core is generally defined as the main retail precinct and transit boulevard

Leppington Town Centre Middle is generally defined as within 800metre radius from the railway station

Leppington Town Centre Fringe is generally defined as outside of 800metre radius from the railway station

Gross Floor Area (GFA) - is Net Lettable Area plus communal areas (including amenities), centre management area and plant rooms.

Net Saleable Area - Usually used for residential property. It includes all floor area including internal walls, mezzanines, hallways, bathrooms but excludes common spaces, patios and balconies.

Project Internal Rate of Return (IRR) - is the actual return on the investment on an annualised basis and expressed as a percentage. This approach considers the cost of time in its calculation within a cash flow and indicates average returns over time.

Recommended draft ILP - is recommend changes to the working draft ILP based on the findings of this report. The recommended draft ILP is subject to further refinement by Council.

Residual Land Value or Development Value - is the maximum price that a hypothetical developer would pay for the land to achieve acceptable hurdle rates (such as an IRR and DM) based on the highest and best use or optimal development option for the land.

Tipping Point - What we refer to as the tipping point is the minimum FSR (and in turn building height) required to achieve a financially feasible development (i.e. an IRR of 18% and a Development Margin of 20%)

Working draft ILP - is a working draft ILP produced in August 2020, prepared by Camden and Liverpool Councils, DPIE and LFA consultants.

LIST OF ABBREVIATIONS

CBD	Central Business District
DCP	Development Control Plan
DPIE	NSW Department of Planning, Industry and Environment
FSR	Floor Space Ratio
GBA	Gross Building Area
GFA	Gross Floor Area
GLA	Gross Lettable Area (as defined by Property Council of Australia)
GLAR	Gross Lettable Area Retail (as defined by Property Council of Australia)
ILP	Indicative Layout Plan
IRR	Project Internal Rate of Return
LEP	Local Environmental Plan
LGA	Local Government Area
LTC	Leppington Town Centre
NLA	Net Lettable Area
NSA	Net Saleable Area
SEPP	State Environmental Planning Policy
Sqm	Square metre
WSA	Western Sydney Airport

Critical Assumptions

1. The assessment assumes the availability of vacant possession.
2. The assessment assumes an encumbrance free title with no impediments to redevelopment
3. We are not an architect or town planner and the adopted unit yield is indicative only for the purpose of assessing the site value by way of our feasibility analysis. This report is conditional that the above potential dwelling yield be confirmed by an appropriately qualified architect or town planner. On receipt of professional advice should there be any deviation in the yield which may adversely affect the assessment, this report should be returned back to HillPDA for further comment.
4. In the case of advice provided in this report, which is of a projected nature, we must emphasise those specific assumptions have been made that appear reasonable based on current market sentiment and forecasts. It follows that any one of the associated assumptions may change over time and no responsibility can be accepted in this event. The value performance indicated above is an assessment of the potential value trend and the indicated figures should not be reviewed as absolute certainty.
5. For the purpose of our modelling, the 'as is' values may vary as it could account for variables such as the encumbrance of a long lease, special value (financial value of any advantage) attached to the property and potential landowner motivations. For this exercise, the adopted rates are typical for the area however in some scenarios a site by site analysis should be considered.

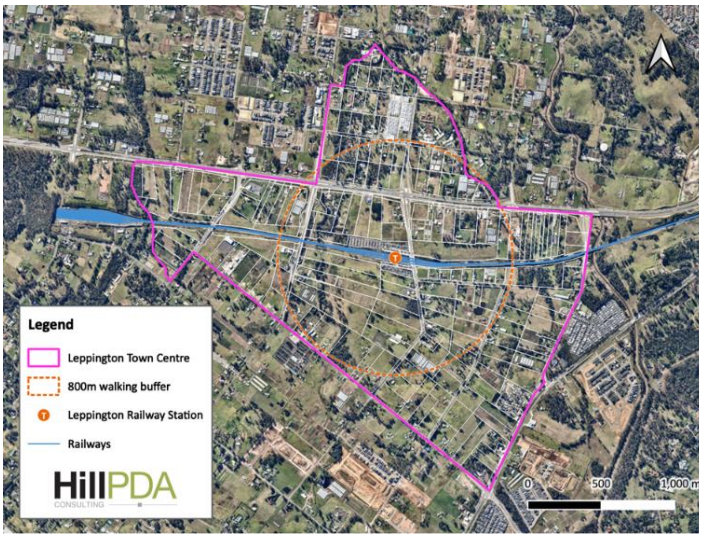
EXECUTIVE SUMMARY

HillPDA was engaged by Camden Council (Council) to undertake two studies of the Leppington Town Centre (LTC) – a housing market assessment and a retail and employment assessment. The objective of these studies was to assist Council with the delivery of the masterplan for the LTC. Development has been slow to date and Council seeks to understand the market appetite for, and the feasibility of, employment uses and mixed-use (residential and commercial) buildings with varying heights and density. This study provides an assessment of the residential and employment-population of the town centre and recommends solutions to safeguard Leppington's role as an emerging strategic centre.

Background

LTC has been identified as a Strategic Centre in both the Region Plan, the District Plan and Camden Council's draft Local Strategic Planning Statement (LSPS). The town centre will be connected to the new Western Sydney Airport via an extension of the existing rail line (identified in Future Transport Strategy 2056). The Greater Sydney Commission (GSC) lists Leppington as a Planning Priority, to have the potential to grow investment in business opportunities with a target of up to 12,500 jobs by 2036.

Figure 1: Leppington town centre study area



Source: HillPDA 2020

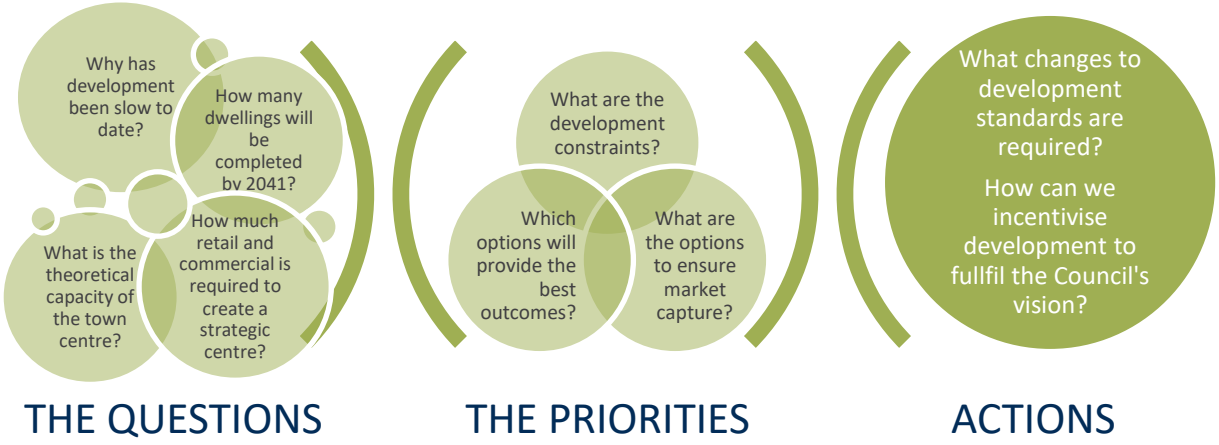
Unlike the neighbouring growth centres in the South West Growth Area, such as Oran Park and Edmondson Park, LTC has been very slow to develop to date. There are several reasons for this, including fragmentation of land ownership and the lack of a lead developer to establish a town centre with a range of retail services and amenity. Other factors include development uncertainty and project feasibility relating to land value expectations and development standards.

LTC has a number of competitive advantages including its natural amenity with some highpoints such as views to the Blue Mountains. It also has and railway station between Liverpool and the future Western Sydney Airport (WSA) at Badgerys Creek. Given the success of the neighbouring new community in Edmondson Park there are opportunities for the LTC to follow suit and develop as a larger, denser community with a centre focused masterplan. The future airport creates opportunities for the LTC to cater for retail, commercial, entertainment, recreation and community facilities and services for a growing population catchment that draws from the surrounding growth centre precincts.

The approach to the study

In developing the masterplan for the LTC, a considered and evidence-based approach was taken to form a clear strategic vision for the centre that outlines its role within the network of strategic centres in the Western City and its relationship with the Aerotropolis.

The approach included consultation with key stakeholders, a review of development proposals, assessment of market activity, feasibility testing and a forecast of the housing demand and the required level of employment lands to support the community.



The important questions and our findings

Stakeholder's vision

A number of the larger land owners were consulted to understand their visions and their short to long term strategies of their land. It was not a full engagement of all landowners which would come later in the planning process. The objective of this task was to gather feedback regarding the opportunities and challenges they have experienced in the development process. The key themes were:

- Opportunity to create a mixed-use, high amenity and high-density community
- Higher density and building height limits would allow more flexibility in design and ensure the viability of development
- Edmondson Park as a role model for the flagship masterplan development
- The B3 Commercial Core zoned land is too large and would result in a poorly integrated land use mix and inefficient use of land
- Preference for industrial lands to be rezoned to IN1 – allows greater flexibility in land uses
- Excess B7 zoned land east of the LTC
- Uncertainty regarding the development standards and outcomes from the planning review

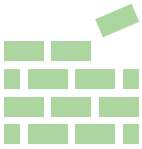
Development controls and contributions:

The Greater Sydney Commission's District and Region plan has identified the LTC as an emerging strategic centre which would provide high-density housing as well as a as a mix of other land uses to support the residents. The Council is obligated to give merit to the abovementioned reports when making strategic planning decisions. For this reason, the Council has identified the need for **rezoning** and changes to **development standards** to developing a design-led masterplan to deliver Council's vision for the town centre.

The feasibility of various building typologies, FSR, height and land uses were tested. Additional tipping point analysis was undertaken to establish the bonus FSR that may be adopted to incentivise the delivery of affordable housing, the participation in design excellence and low carbon mechanisms.

We would recommend that the Council consider the following **Development Controls** and **Contributions:**

Increased density via introduction of FSR controls



For R3 Medium Density Residential zoned lands, three-storey walk-up townhome development (as built in the Ed Square masterplan) and a 4 to 5 storey low to medium-rise apartment building. The three storey walk-up townhome showed a tipping point of **1.2:1** whereas the medium-rise apartment building scheme showed a FSR of **2:1.**

Development in the **B4 Mixed Use** zoned land with ground floor retail and residential above has a tipping point of **3:1** or **8 to 9 storeys.** The same development but with 3 levels of commercial requires an FSR of **5:1** or **13 to 14 storeys** to make it viable. These results show that the viability deteriorated as additional floors of non-residential were added, therefore requiring additional density to achieve a viable development.

FSR transfer for open space

Properties affected by proposed open space reservations would not have the option of the transfer of floor space rights on the balance of the site as the owner would be fully compensated under the Just Terms Act. However, Council may need to give special attention to specific sites where owners have submitted development applications that are incompatible with the draft zone such as offering additional incentives if hardship is likely to occur.

Flexibility in building height limits

Recommendation to Council to have a preference for FSR controls rather than building height limits provided there are appropriate overshadowing and set back controls applied. This has a number of benefits as it allows flexibility in design for towers with smaller floorplates affording district views to the higher floors, allow light permeability between towers and improve visual privacy (adjacent properties use their private spaces without being overlooked). This may need to form part of the design excellence process. Height controls can be considered by solar access and shadowing control for public spaces. It also allows flexibility in design as the development of the LTC progresses and overshadowing becomes an issue, built-forms with varying heights will allow light permeability.

Bonus FSR for Design excellence

We suggest a **bonus FSR of 0.25:1** in return for the participation and achievement of a Design Excellence scheme across all precincts with the exception of IN1 & B5 as there are limited development options for these zones. This is on the condition that the development satisfies the criteria of the design review panel and low carbon building rating.
If Council prefers design excellence to be a mandatory requirement (rather than an incentive) it may consider an increase in the base FSR of 0.25:1 to reduce the likelihood of supply slowing.

Permit podium parking

To be sleeved by retail and commercial uses that front the main street. The ability to bring parking above ground without impacting lettable floor area might also apply to the B4 zone where 2 or more levels of commercial use is sought in development.

Bonus FSR for Low carbon building

As similarly shown in the Design Excellence results, the bonus FSR also vary and we would recommend a **standardised bonus FSR of 0.25:1** in return for achieving a Low Carbon Building standard. We would hope over time this bonus will not be required as low carbon emission will be the standard for development. LTC can play a significant role in making this a standard form for development.

Bonus FSR for Affordable housing

We would recommend a bonus FSR of 0.25 to 0.75:1, adequate to absorb the cost of dedicating 3% of affordable housing to the Council at no cost to a community housing provider or equivalent monetary contribution.

What are the tipping points?

Based on the results of our feasibility analysis, the following base FSRs and incentive FSRs are recommended:

	Leppington Town Centre Core			Leppington Town Centre Middle						Leppington Town Centre Fringe			
Land Use Zone	**R4**	**B3**	**B4**	**R3**	**R4**	**B3**	**B4**	**B5**	**IN1**	**R3**	**B4**	**B5**	**IN1**
Minimum FSR (Tipping Point)	2:1	2.5:1	4.5:1	2:1	2:1	2.5:1	3:1	1:1	1:1	2:1	3:1	1:1	1:1
Recommended FSR	3.5:1	4.5:1	4.5:1	2:1	2.5:1	3:1	3.5:1	1.5:1	1.5:1	2:1	3:1	1.5:1	1.5:1
Maximum FSR (Overstimulated)	4:1	5:1	5:1	3:1	2.75:1	3.5:1	3.75:1	1.5:1	1.5:1	2.5:1	3.5:1	1.5:1	1.5:1
FSR bonus 3% Affordable Housing	+0.25:1		+0.75:1	+0.25:1	+0.25:1		+0.5:1			+0.25:1	+0.5:1		
FRS bonus Design Excellence	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1			+0.25:1	+0.25:1		
FSR bonus Low Carbon Development	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1	+0.25:1			+0.25:1	+0.25:1		

[1] Core is generally defined as the main retail precinct and transit boulevard

[2] Middle is generally defined as within 800metre radius from the railway station

[3] Fringe is generally defined as outside of 800metre radius from the railway station

Key findings

- If FSRs lower than the tipping point are adopted, this would hamper development as developers would adopt a 'wait and see' approach. Therefore, LTC would struggle with achieving strategic centre status
- The results showed viability deteriorated as additional floors of non-residential uses were added, therefore requiring additional residential floorspace (i.e. density) to subsidise this commercial space. Future proofing options might include adaptable use options for level 1 or for larger masterplan sites where a portion of the site is quarantined for future commercial additions when demand warrants.
- There is no market for a freehold commercial building in the foreseeable future, although we would expect market conditions would improve over time as the LTC grows into a regional or strategic centre. Future proofing options include Council acquiring land designated as B3 and quarantining the land over the long-term until demand for commercial floorspace strengthens and/or opportunities for a government and/or other institutional uses such as a hospital, school, tertiary education campus is realised.

Bonus FSR take-up

Affordable housing

The take-up rate for affordable housing would initially be slow. The land value and construction cost ratio is currently very low compared to established markets. Therefore, it is unlikely that a developer would take up the bonus FSR until the LTC develops into a strategic centre resulting in higher end sale revenue and more favourable development margins are achievable.

Low Carbon footprint

Developers would also be reluctant to take up 'low carbon' incentives as additional time, construction costs and professional fees would need to be considered.

Design excellence

Developers may also be reluctant to take up 'design excellence' incentives as additional time, and professional fees would need to be allowed for. If Council prefers design excellence to be a mandatory requirement rather than an incentive it may result in a slower take-up of development, delaying LTC to reach strategic centre status. To reduce the likelihood of this scenario an additional FSR of 0.25:1 could be added to the above base FSRs.

The bonus FSR is likely to change over time as the LTC develops and is recognised as a centre and the Leppington market strengthens. We would recommend the Council to periodically review the bonus FSRs

Housing demand and supply 2020-2041

10,500 dwellings by 2041

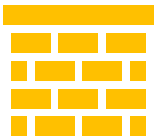
Demand for apartments is based on a range of variables including overall household growth and the availability of stock at price points lower than comparable investment in large detached housing and townhouses. The price points are adjusted for quality of amenity and access to transport and employment. Other factors include household mix. Generally smaller households, particularly lone-person households, have a higher demand for apartment living. Other market/social trends are also increasing the market share of apartments including the growing demand for rental properties for investment, the institutional market for "build to rent" and a user preference shift for amenity/location over house size.

The propensity of households to live in apartments is expected to increase over time as the supply of land diminishes and the price of detached housing increases. The majority of apartments in Camden is expected to be taken up in LTC given that it is, and for some time will continue to be, the only rail station in the LGA. An analysis of historical uptake of apartments confirmed the forecast of a potential market capture post-2021 of around 200 apartments per annum increasing to around 400 post 2026 and to 550 or so per annum post-2031. By 2041 we would expect the LTC to have around 10,000 completed apartments.

Year	2026	2031	2036	2041
Forecast Apartments in the LTC	1,200	3,300	6,500	10,000

There is potential for a further 500 to 1,000 town houses by 2041 in the fringe areas of the LTC. Total population by then is expected to be 23,000 to 24,000.

2041+



sufficient supply of land to meet market demand to around 2061

The earlier estimates of the capacity of the LTC were modest. Under the Camden Growth Areas Contributions Plan the LTC was expected estimated to have an ultimate population of only 5,142 living in 2,112 dwellings. This modest estimate is despite the current planning controls allowing low to medium-rise residential apartments with a height limit of 21metres in R3 zoned lands.

Council testing of current planning controls found there is actual capacity for around 9,500 dwellings.

However, from the feasibility assessment, higher density levels would be required to achieve feasibility based on current market prices. If recommended FSRs from table 27 were applied to the draft ILP there would be capacity for approximately 27,000 to 30,000 dwellings which would provide sufficient supply to meet market demand to around 2061. However, it should be noted that capacity potential does not translate to supply. Capacity must be viable for development for it to translate to supply. As noted above, by 2041 we would expect LTC to have around 10,500 dwellings.

Forecast demand for retail and other employment

Demand for retail and other employment spaces is generated by population growth in the locality. Population forecast is detailed in Chapter Part B.8. Due to the nature of centres, hierarchy demand for retail and commercial space in LTC will increase at a faster rate than population growth in the LTC or Leppington suburb. LTC will initially commence as a local centre with a single supermarket serving a local population of 10,000 to 20,000. However, as an emerging strategic centre, it has the potential to grow over time so that by 2041 it could have a wide main trade area (the South West Growth Centre and the suburbs of Liverpool west of the M7) of more than 350,000 residents.

Trade Area Population	2021	2026	2031	2036	2041
Local Centre Trade Area pop.*	10,500	23,800	43,000	69,900	77,900
District Trade Area population**	36,500	78,400	113,200	131,800	143,900
Main Trade Area population***	128,100	176,000	248,200	313,500	367,500

* Largely the Leppington and Leppington North Precincts

** Includes Austral, Edmondson Park and Hoxton Park

*** The SWGC plus the existing suburbs of Liverpool west of the M7

Demand for gross leasable floorspace retail (GLAR) or shopfront space in the LTC is forecast as follows:

	2026	2031	2036	2041
Gross leasable area retail (sqm)	15,000	70,000	130,000	155,000

By 2036 to 2041 LTC could provide as much as 160,000sqm of GLAR or shopfront space. This would rival the current Liverpool and Campbelltown/Macarthur CBDs in size.

A large regional centre of this size would include department stores, fashion stores and bulky goods. Traditionally we would expect a national department store (e.g. Myer or David Jones) to anchor the centre, but these retailers have lost

considerable market share over the past couple of decades. If not a national department store, then the centre could have a wide range of "category killers" and other new formats to replace the role of the department store. We would also expect at least one if not two discount department stores. Again Target and Big W have lost some market share and some of these stores have been closing but there is plenty of size and depth in the trade area to support at least 2 of these stores. We would also expect at least two large full-line supermarkets as well as several metro-style supermarkets near the train station. Finally, there would be somewhere between 400 and 600 shop front businesses providing a wide range of retail stores, fast foods, restaurants and other services.

A centre of this size would also generate strong demand for non-retail commercial spaces to accommodate a range of businesses and government services. This would include financial and insurance, health and medical, training and educational, real estate, administrative and other professional, personal and business services. It is also likely that there will be some market need for incubator spaces for start-up businesses with common meeting rooms, amenities and the like as part of the employment mix.

As Leppington grows, there will be opportunities for some government and other institutional uses such as a hospital, TAFE, university campus or the like. The option of including these land uses longer-term can be protected by quarantining government land north of the railway corridor such as commuter car parking areas for future commercial-only development and in the current B7 land.

Other uses in a centre of this size would include a police station and courthouse, several childcare centres, one or two vertical schools, main library, one or two youth centres, at least two neighbourhood centres, performing arts and cultural centre, three or four clubs and hotels, a multi-screen cinema complex and possibly ten-pin bowling, ice rink or other similar recreation facilities.

The working draft ILP has removed the Business Park as it was recognised that it would sterilise the land in the foreseeable future given the announcement of the airport and the Aerotropolis. The Aerotropolis Core precinct immediately southeast of the airport will have a metro station to the airport and will provide 55,000 jobs and 22,000 residents. Market demand for a business park is therefore likely to gravitate towards the airport and so the need for a business park in Leppington diminishes meaning that Leppington could have a stronger resident and retail focus as recognised in the District Plan.

Notwithstanding, the extension of the rail line to the airport will be important to provide strong public connections between transit orientated centres and between where people are likely to live and work. It would also give Leppington a potential role in providing services relating to the airport, including visitor accommodation and services. There is a good opportunity for Leppington to leverage from the airport – particularly given that it is starting from a clean canvas. With good design and appropriate planning controls it could develop as destination place – particularly for transient stayers and airport related workers much in the same way that Green Square is to Mascot Airport. Given the 24 hour nature of the airport there is an opportunity for LTC to provide the commercial services that meet the demands for these residents, tourists and workers – 18-24

hour clubs, food services, personal and commercial services and the like. These uses can be accommodated in the B3 zone and on the main street in the B4 zone.

Other recommendations

Based on the above assessments it is recommended that Council consider the following strategies (further details may be found in Chapter 11).

Implementation of a **Marketing Strategy** to better inform the private sector of the masterplan vision and the intended town centre shaping development.

Create an identity

- Engage a Place Manager to organise community events
- Food events & festivals through all the stages to promote market awareness and attraction to the area **to put it on the Map**
- **Masterplan** and promote **Eat Street(s)** as a vibrant part of the emerging new urban centre
- Commit to an early release of Eat-Street and form a new Entertainment Quarter to promote and fast track higher density development and **where Amenity supports density.**
- Encourage and if necessary, **invest in town centre services** (childcare; gymnasiums; restaurants and small bars; short term stays) to meet the demand for employment growth in emerging knowledge industries and creative uses.

A reason to stay longer

- Promote the place through outdoor activities including open-air cinema and festivals in the early stages
- Promote special events (Shakespeare/Opera/Jazz in the domain;) to raise awareness and lift the cultural awareness of this new place and nightlife benefits
- Ensure an appropriate mix of retail and amenities to support **both a day and night economy**
- Look at ways to promote the entertainment aspect (food stalls; live entertainment, rooftop bars) for both day and night use by promoting entertainment venues that activate open space such as public events. Examples include night cinema, formal and informal learning outdoors (e.g. pottery lessons), public art, delivering learning on display, and attract a diverse group of visitors to the area. We would recommend that a place manager is appointed to manage these community events.

Work n play

- Brand the Leppington Town Centre as a **low emission precinct** as a standout from competing markets. This may attract institutes to re-locate or expand in a new strategically located precinct
- Provide a suitable **balance between commercial and residential floorspace** that support the population catchment and market demand. This may require quarantining future land for commercial or permitting adaptable uses to match demand. Rouse Hill Town Centre has recognised this need for flexibility of use by permitting short term box retailing and open-air parking lots with a view for redevelopment later with more intense development. Shopfront street character and town centre focal point was designed from the start of development to provide confidence in the centre vision.
- Promote the town centre for its night-time economy as an attractive place to visit and live
- Promote a range of community services as an emerging urban centre. (A place to get things done! More than just a shopping centre to buy things)

Leppington Town Centre provides an exciting opportunity to create a masterplan community that encapsulates design excellence in a sustainable low carbon precinct, a model for future development. A place to get things done in the town centre, to work from home in a customised designed home office with short access to open spaces and recreation facilities. A neighbourhood to be entertained-in at night and dine with a wide range of choices. The 10-minute neighbourhood demanded by post-Covid-19 generation. Encouraged by consultation with the large landowners, NSW Government and Council we consider there is recognition and capability to get this vision to a reality.

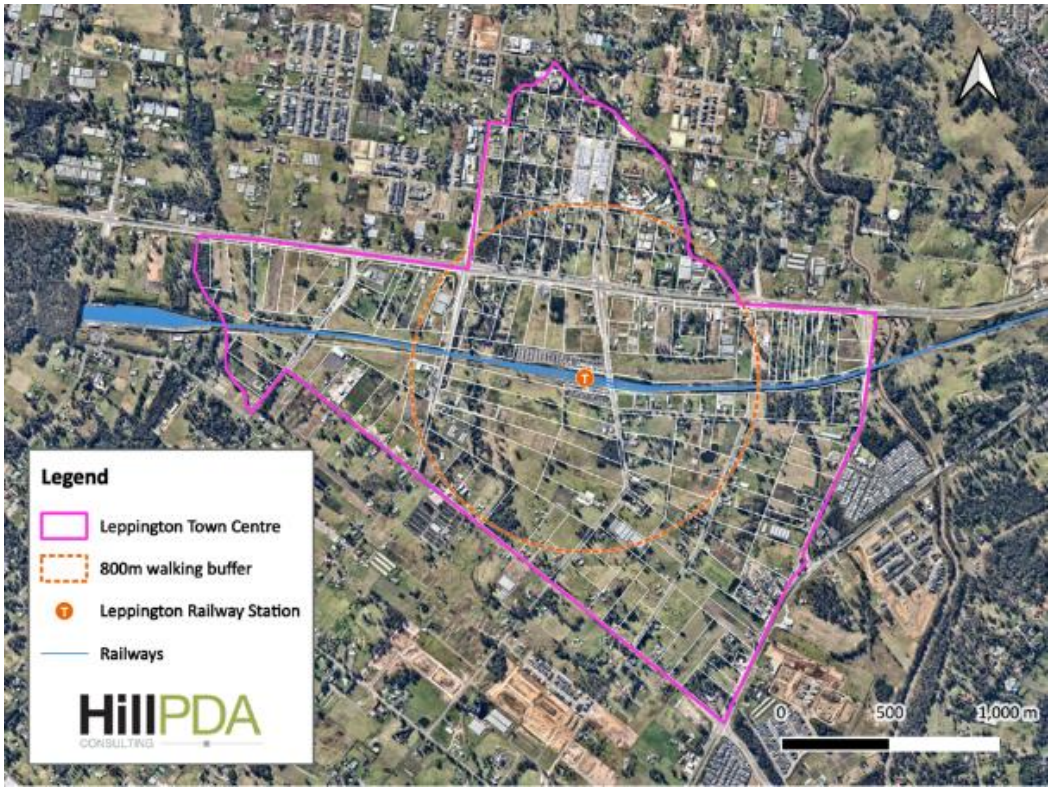
INTRODUCTION

HillPDA was engaged by Camden Council (Council) to provide a two part study for the Leppington Town Centre (LTC), identified as an emerging strategic centre in the South West Growth Area. Two separate but related studies were undertaken as follows:

- **PART A: HOUSING MARKET DEMAND ANALYSIS** to understand the economics and demand for higher density housing in the location which is currently a greenfield area on the edge of the Sydney metropolitan
- **PART B: RETAIL AND EMPLOYMENT LAND DEMAND ANALYSIS** to have an understanding of the economics and demand for retail and employment uses in an area that is identified for higher residential density. This is to ensure that there is sufficient non-residential floorspace to support a mixed-use, high amenity and high-density community in the LTC.

The study area is defined in Figure 2 immediately below.

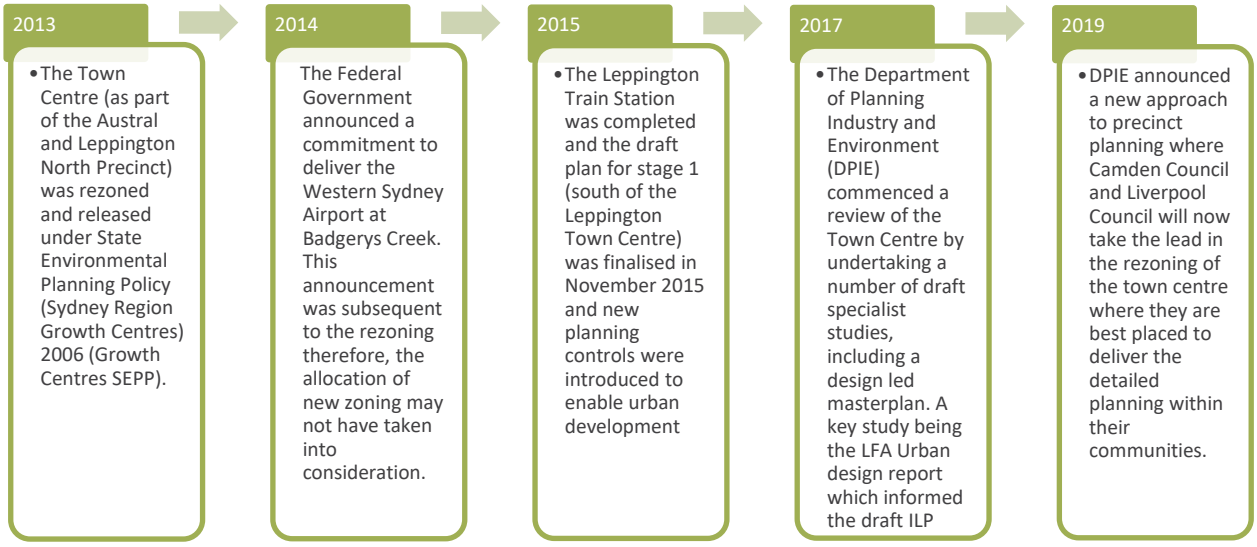
Figure 2: Leppington town centre study area



Source: HillPDA 2020

Background

The LTC has been slow to develop with no development occurring to date. Summarised below are key milestones that relate to the LTC:



Brief and purpose of the study

The purpose of this study is to support the delivery of a new masterplan for the Town Centre and to ensure that the objective of the Camden Local Strategic Planning Statement 2020 (LSPS) to safeguard Leppington's potential to provide potential as a professional hub is achieved. A further purpose is to provide higher-density housing to offer housing diversity, affordability and social/wellbeing benefits to the community.

Council seeks to understand:

- Development feasibility to determine development standards for the various building typologies designated for the LTC such as recommendations on FSR and building height limits. This development feasibility analysis will advise Council on potential bonus FSRs to incentivise developers to provide affordable housing and participate in Design Excellence and Low Carbon Building schemes. These recommendations will build on previous studies and support the Council in developing a design-led masterplan
- Demand for higher density housing to understand market share capture and the theoretical dwelling capacity based on the resultant FSRs
- The forecast demand for retail, commercial and other employment land uses generated by, and to support, the trade area population.

Report structure

This study was structured in the following manner:

EXECUTIVE SUMMARY

INTRODUCTION

PART A: HOUSING MARKET DEMAND ANALYSIS

- **Chapter Part A.1 | Planning & Strategic context** This Chapter provides a summary of the relevant strategic policies and existing planning controls to provide guidance on the strategic directions and inputs in our housing and employment land analysis
- **Chapter Part A.2 | Stakeholders** This Chapter provides an overview of stakeholder's view of the current planning controls and their view of opportunities and constraints in the LTC. An analysis of recent DAs submitted to the Council are also included
- **Chapter Part A.3 | Indicative Layout Plan** This Chapter provides an overview of the current ILP and working draft Indicative Layout Plan
- **Chapter Part A.4 | Housing supply and demand analysis** This Chapter will analyse historical residential take-up and determine the residential and employment population of the town centre
- **Chapter Part A.5 | Market research** This Chapter provides a snapshot of the achieved sale prices of development sites and end sale revenue for residential and non-residential in the Study Area, the wider LGA and surrounding LGAs
- **Chapter Part A.6 | Residential feasibility testing** This Chapter outlines our tipping point analysis, where the base case building height or FSR for a specific development scheme was not found to be viable and further feasibility testing was undertaken to determine the tipping point. This analysis also established bonus FSRs to incentivise the participation of affordable housing, design excellence and low carbon building

PART B: RETAIL AND EMPLOYMENT MARKET DEMAND ANALYSIS

- **Chapter Part B.7 | The Camden economy** This Chapter provides a summary of the Camden Economy, growth in employment by industry, industry specialisation and employment trends. It shows how Camden suffers from a low job containment ratio and identifies opportunities for improvement
- **Chapter Part B.8 | Retail and employment supply and demand analysis** This Chapter forecasts the demand for retail and other employment land uses based on the population growth of LTC
- **Chapter Part B.9 | Market research** This Chapter provides a snapshot of non-residential in the Study Area, the wider LGA and surrounding LGAs
- **Chapter Part B.10 | Non-residential feasibility testing** This Chapter outlines our additional tipping point analysis with a focus on additional levels of non-residential and commercial only development

CHAPTER 11 | RECOMMENDATIONS This Chapter provides recommendations on proposed zones, marketing strategy and development standards to incentivise the advancement of the town centre.

APPENDIX A: Stakeholder Engagement
APPENDIX B: Development application analysis
APPENDIX C: Market Research
APPENDIX D: Green Infrastructure market research
APPENDIX E: Case studies – New communities and town centres
APPENDIX F: Recommended draft ILP

PART A – HOUSING MARKET DEMAND ANALYSIS

PART A.1 PLANNING CONTEXT

The Environmental Planning and Assessment Amendment Act 2017 (EPA Act 1979) recognises the critical role of Councils in the strategic planning for their local area. It is the Council's responsibility to give merit to the following reports when making strategic planning decisions, in particular the direction from the Greater Sydney Commission's District and Region plans.

1.1 A Metropolis of Three Cities - Greater Sydney Region Plan (2018)

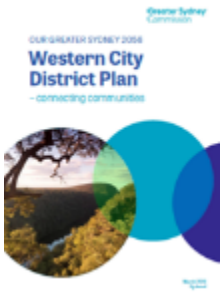
The Region Plan sets the vision for the metropolis of three cities: Western Parkland City, Central River City and Eastern Harbour City. Leppington is located in the Western Parkland City. The population of the Western Parkland City is projected to grow from 740,000 in 2016 to 1.1 million by 2036.

The Region Plan states:

"*Councils are to investigate opportunities for supply and a diversity of housing particularly around centres to create more walkable neighbourhoods. For councils, the main tool for understanding the need and planning for housing and infrastructure delivery is housing strategies. Council housing strategies will need to address the 0–5 and 6–10 year local (when agreed) or district housing targets as well as 20-year strategic district targets outlined in this Plan*."

The objectives of this study align with the strategic intent of the Region Plan and assist in implementing the objectives. The vision for the Western Parkland City highlights Leppington as an emerging Strategic Centre and forms part of the "Western Economic Corridor" with consideration to providing an extension of the rail line from Leppington to the Badgerys Creek Aerotropolis and Western Sydney Airport.

1.2 Western City District Plan



The Western City District covers the Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly local government areas. The Western City District Plan is a 20–year plan to manage growth in the context of economic, social and environmental matters to achieve the 40–year vision for Greater Sydney.

To achieve this vision, the Plan sets out the planning priorities that will shape the District's future and guide policy decisions. Key relevant Planning Priorities relevant to LTC are listed in Table 1.

Table 1: Summary of Relevant District Planning Priorities

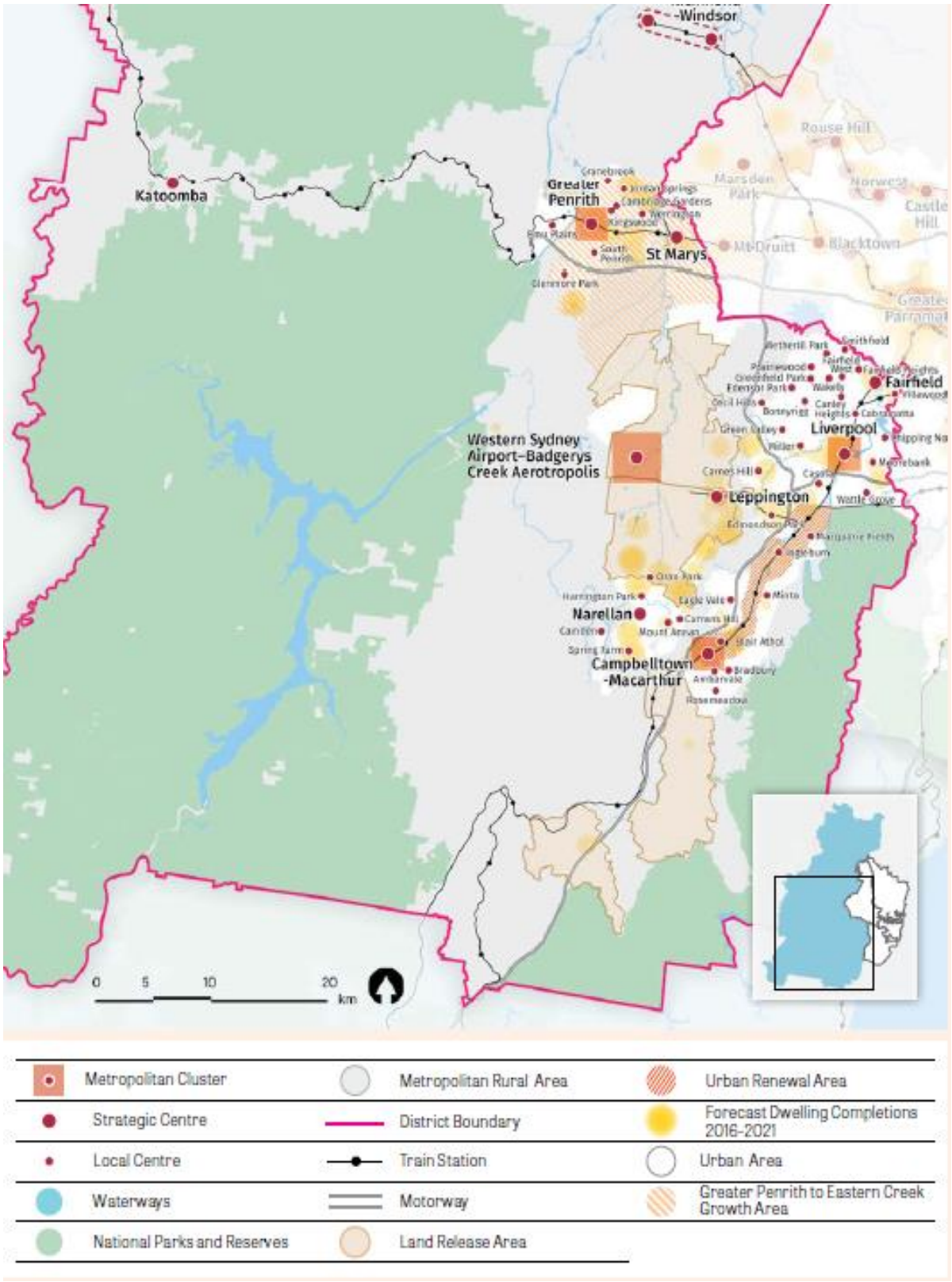
Directions	Western Sydney District Planning Priorities	Comment
Housing	Providing housing supply, choice and affordability, with access to jobs and services	A Metropolis of Three Cities sets out objectives to deliver housing supply and affordability. The NSW Department of Planning and Environment's projections of population and household growth in the Western City District translate to a need for an additional 184,500 homes between 2016 and 2036 The Plan cites more compact housing, either on smaller land lots or through smaller apartments of clever design to support moderate income households, particularly key workers and skilled workers. The Plan has allocated Camden LGA a five-year housing target of 11,800 dwellings. Leppington is identified as a priority precinct. A potential new transport corridor is referred to in the Plan that would link Leppington to Western Sydney Airport – Badgerys Creek Aerotropolis train link.
Jobs and skills for the city	Growing and strengthening the metropolitan city cluster	Leppington is identified within the Plan as a Strategic Centre and the Plan refers to strengthening Leppington through approaches that coordinate the release and rezoning of land for residential, employment and other development. The baseline target (2036) is 7,000 jobs to a higher target of 12,500 jobs. The DPIE has been working with both Camden and Liverpool City councils on the planning of the new centre on the T2 Inner West and Leppington and T5 Cumberland lines. Leppington Station services a catchment covering precincts such as Leppington, Leppington East, Austral and Edmondson Park within the South West and Western Sydney Airport Priority Growth Areas.[1] With Bringelly Road to serve as one of the major gateways to the Western Sydney Airport, Leppington is expected to be a prominent town centre in the future.[2] Recognising Leppington as Strategic Centres which will provide the focus for commercial and retail investment, and provide local employment.

Source: Western City District Plan

The Region Plan also highlights the Glenfield to Macarthur corridor as an opportunity for urban renewal which could be a competing market to the LTC. The Western Sydney Airport is envisioned to be the primary driver of growth in the region.

[1] Greater Sydney Commission. "Western City District Plan". October 2017. Page 100
[2] Ibid

Figure 3: Western City District future housing supply



Source: GSC Western City District Plan

1.3 Proposed housing diversity SEPP

The NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect for a proposed new Housing Diversity State Environmental Planning Policy (Housing Diversity SEPP) which aims to deliver a planning framework that:

- will assist the State's economic recovery following COVID-19
- will consolidate three housing-related SEPPs into a single instrument, this includes:
  - State Environmental Planning Policy (Affordable Rental Housing) 2009
  - State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004
  - State Environmental Planning Policy No 70 – Affordable Housing (Revised Schemes).
- is in a format capable of being expanded and amended as future needs may require
- will facilitate the delivery of housing that meets the needs of the State's growing population.

The proposed new SEPP will provide new definitions and amend some state-level planning provisions that relate to build-to-rent and boarding, student, senior and social housing.

The proposed SEPP recommends that Build to rent (BTR) housing is a compulsory permitted use in R4 - High Density Residential, B3 – Commercial Core, B4 - Mixed Use and B8 – Metropolitan Centre zones. It will also be permitted in R3 – Medium Density Residential where residential flat buildings are permitted.

What is Build to rent (BTR)?

'Build to rent' may address some aspects of affordable housing and provides a number of benefits to both developers and the community, by :

- Supply to fulfil any gaps in rental properties
- As an alternative investment vehicle that is perceived to be safer than commercial
- Tax benefit such as a new land tax discount for new build-to-rent housing projects until 2040, depreciation deductions, not paying GST post 5 years and low vacancy factor (dependent on location and market appetite)
- Provide alternative housing options and a different way of living by creating a sense of community by providing services (i.e. concierge services, dry cleaning, parcel delivery service and discounted bundled bulk utilities (internet, electricity/gas, cable television etc) and amenities (i.e. pools, gyms, recreational/gathering spaces, movie rooms, quiet working spaces)

- Although BTR has recently gained traction in the market due to recent planning reforms. There have been a limited number of developers who have entered this market and this includes Meriton who has developed this type of asset for a number of years as a way to weather a downturn in the market. Another developer is Fortis Development which have projects in Zetland and Double Bay and the obstacles they encountered was premature understanding of the product which resulted in a low loan to value ratio (LVR) from financiers and the scarcity of sites due to competition with traditional developers with a 'buy, build and sell' strategy

What does this mean for LTC?

- BTR may provide additional housing options to the LGA.
- Additional implications of this change of permissibility will allow residential use, in particular, B3 Commercial Core zoned land, which Council has reserved to be commercial use only and may allow for loopholes around providing active street frontages to key streets and/or pedestrian links in B4 & B3 zoned lands. The risk of this may result in lost opportunities for government and other institutional uses such as a hospital, TAFE, university campus or the like that could develop in the B3 zone as Leppington grows.

1.4 Making the Western Parkland City - Initial Place based Infrastructure Compact (PIC) area

The PIC is an initial implementation pathway to achieve the visions of the district plan. There are five proposed actions of which the LTC is mentioned in three of them. The sequencing plan reflects the findings that southern precincts are uniquely placed to grow primarily new high value jobs, skills and training leveraging the 24/7 international airport, existing urban services land uses, with some new residential communities along the existing rail from Glenfield to Leppington and the Fifteenth Avenue transit corridor.

The main action that concerns the LTC is that it is identified as a place for high-density housing as well as a mix of other land uses to support the residents, while the Aerotropolis is identified as the main area for employment uses.

However, there will be a strong need to connect the main employment areas with the main residential areas and the PIC identifies a strong need for the 8.5km extension of the railway from LTC to the Aerotropolis Core and on to the airport.

The Airport, the Aerotropolis and the extension of the railway line from Leppington to the airport are important components that will transform Leppington from its sleepy fringe location to a major centre with strong market appeal.

1.5 Camden Local Strategic Planning Statement 2020 (LSPS)

The LSPS identifies the following key points:

- **Local Priority I1 - Aligning infrastructure delivery with growth**

  Infrastructure Action in the short term for the Council to deliver future local infrastructure required for the Leppington area

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

  Recognises that land fragmentation creates development and infrastructure coordination issues and limits the ability to facilitate the early delivery of key local infrastructure. This is a key barrier to the delivery of housing. Early delivery of enabling infrastructure such as water services, enhanced contributions frameworks and forward funded infrastructure are methods to potentially unlock development in areas of high land fragmentation

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

  Identifies Leppington Town Centre, with Oran Park as accommodating a large percentage of the business serving office space in the Local Government Area

- **Local Priority P3 - Strengthening the Strategic Centres of Narellan and Leppington**

  Leppington Town Centre is located within the South West Growth Area. The land was originally rezoned for urban development in 2014, with the Leppington train station opening in 2015. Since the town centre was rezoned, the surrounding economic and structural context has changed due to the significant investment opportunities created by WSA and Aerotropolis. In light of this significant change to the local market, in 2017 DPIE commenced a review of Leppington Town Centre. The review includes investigating a new vision for the town centre, with altered land use controls that potentially change the quantity and mix of new homes and jobs within close proximity to the train station.

In developing Leppington Town Centre, it is important that a considered and evidence-based approach is taken that forms a clear strategic vision for the centre that outlines its role within the network of strategic centres in the Western City and its relationship with the Aerotropolis.

It is also important that a suitable balance between commercial and residential floorspace is achieved.

- **Local Priority S5 -Reducing emissions, managing waste and increasing energy efficiency**

  Council will advocate for the development of low carbon precincts within the South West Growth Area, with Leppington Town Centre as a pilot precinct.

1.6 Future transport 2056

Future Transport Strategy 2056 (2018) provides an update of the NSW's Long-Term Transport Master Plan. It outlines the vision, strategic directions and customer outcomes desired over the next 40 years. The Future Transport Strategy identifies six state-wide outcomes, two of which are of particular importance to housing delivery:

- Successful places – The liveability, amenity and economic success of communities and places are enhanced by transport
- Activating centres with a new movement and place framework
- Encouraging active travel and using public transport
- Strengthening local partnerships.
- Accessible Services – Transport enables everyone to get the most out of life, wherever they live and whatever their age, ability or personal circumstances
- Connecting people to jobs, goods and services in our cities and regions
- A fully accessible network that enables barrier-free travel for all
- Inclusive customer service and information.

Connecting people to goods, jobs, and services are core to the aims of the Strategy to achieve the 30-minute City. The Strategy supports the application of movement and place principles to create successful places – such as having an integrated view of the strategic significance of roads and streets in their role of moving people and goods, and land use adjacent to roads and streets.

The State and Federal Governments have also committed funding to investigate the further extension of the North South Rail from the Airport through to Campbelltown/Macarthur via Oran Park and Narellan, including a South West Rail Link Extension connecting Leppington.

Aligning with *Future Transport Strategy 2056*, this study seeks to align and facilitate residential growth with appropriate local employment options. Leppington has significant infrastructure opportunities to optimise transport infrastructure enabling access to jobs, health, education and recreation facilities that align with State and local government infrastructure priorities.

1.6.1 Future rail infrastructure

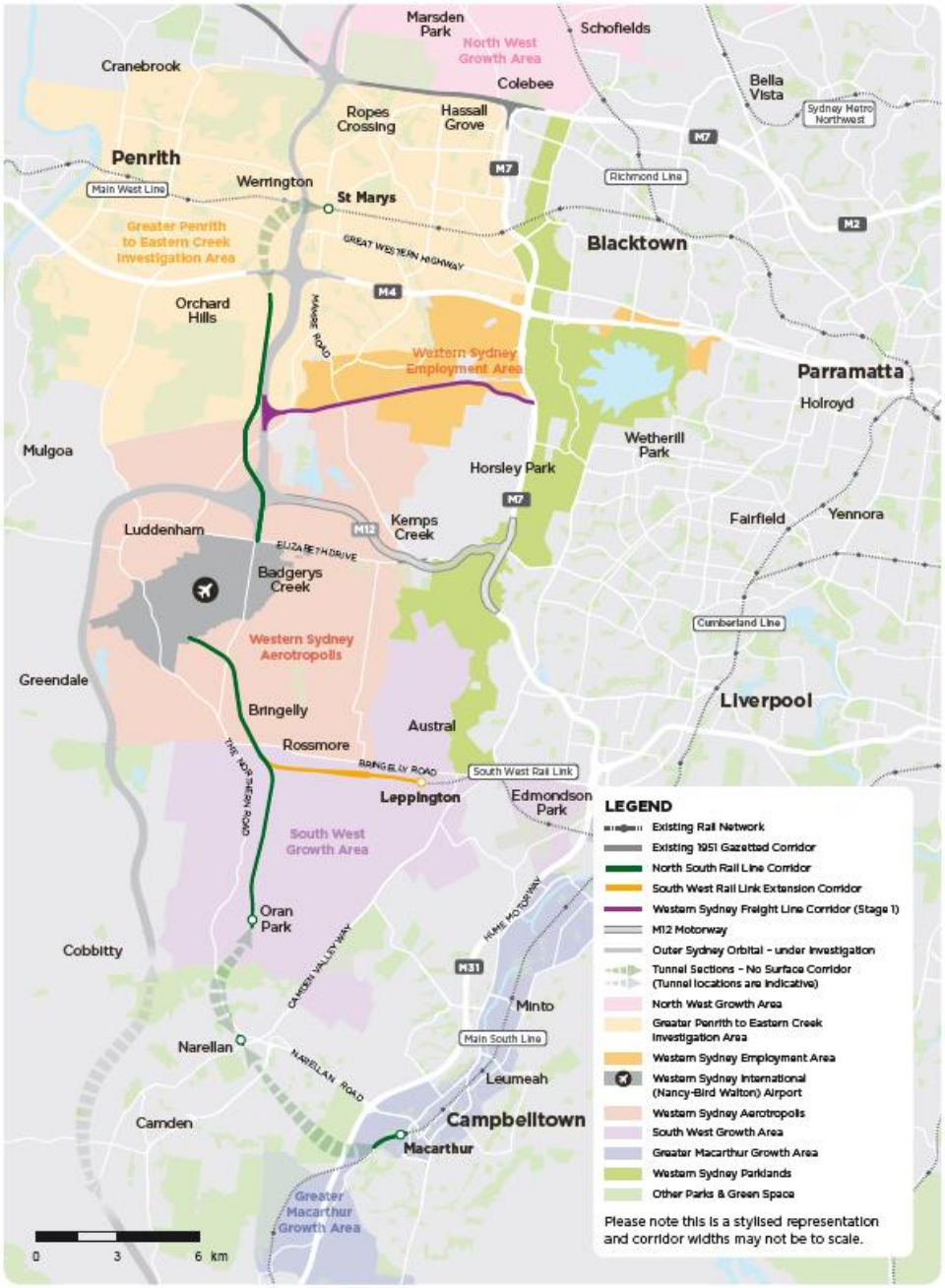
The NSW Government recently announced the corridors that would deliver the proposed Sydney Metro – Western Sydney Airport project, South West Rail Link Extension and Western Sydney Freight Line.

The North South Rail Line Corridor, which will connect Oran Park to Western Sydney Aerotropolis will support the delivery of both Stage 1 and future stages of Sydney Metro – Western Sydney Airport and run from St Marys, with a tunnel to Orchard Hills, through to the new Western Sydney Airport, Aerotropolis and Macarthur, with a tunnel from Oran Park.

The South West Rail Link Extension Corridor will run from the Aerotropolis through Kelvin Park and Rossmore to connect with Leppington.

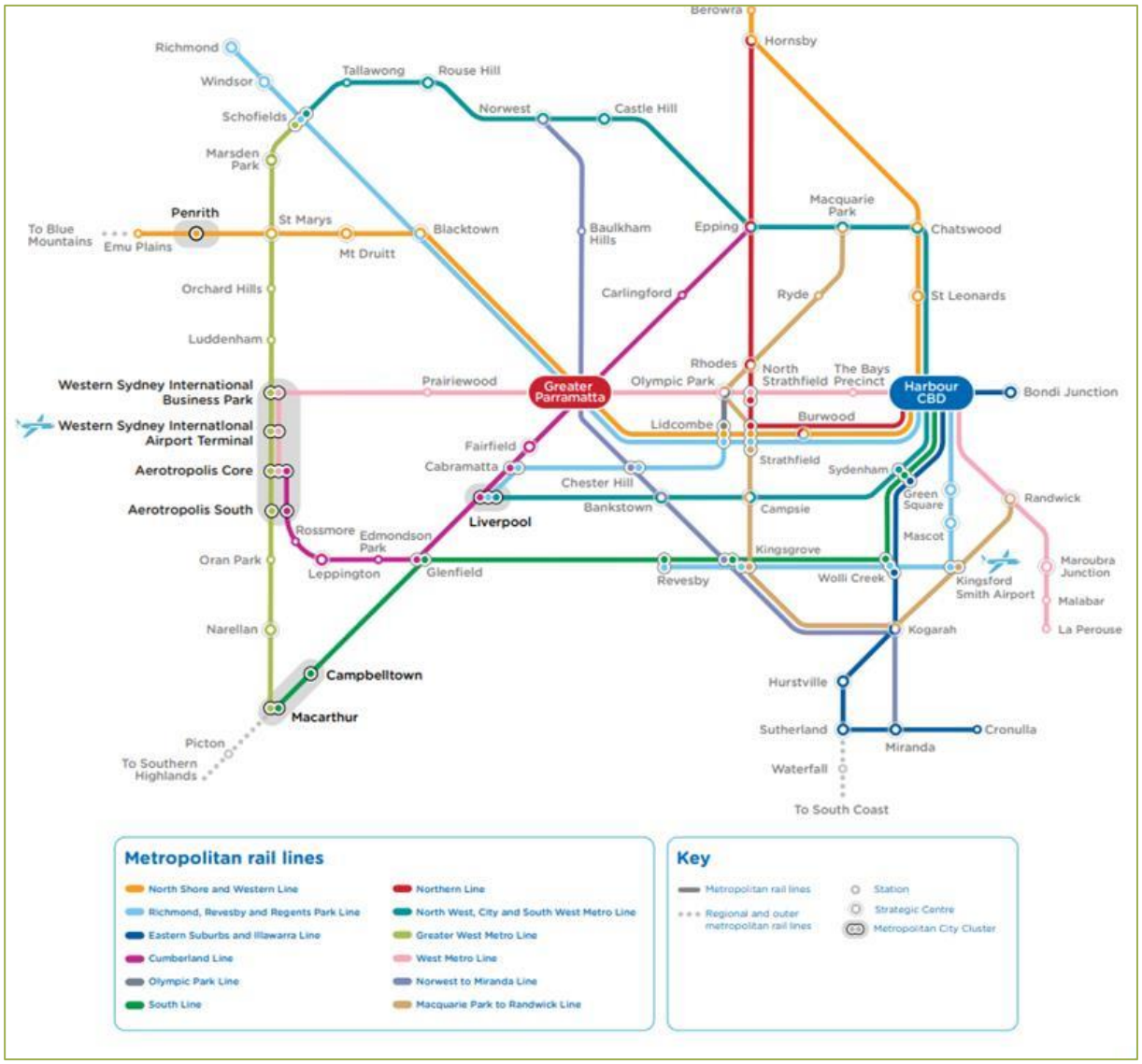
The proposed new rail links are illustrated in the figures immediately below.

Figure 4: Future transport links – Western Sydney



Source: NSW Government

Figure 5: Future rail network

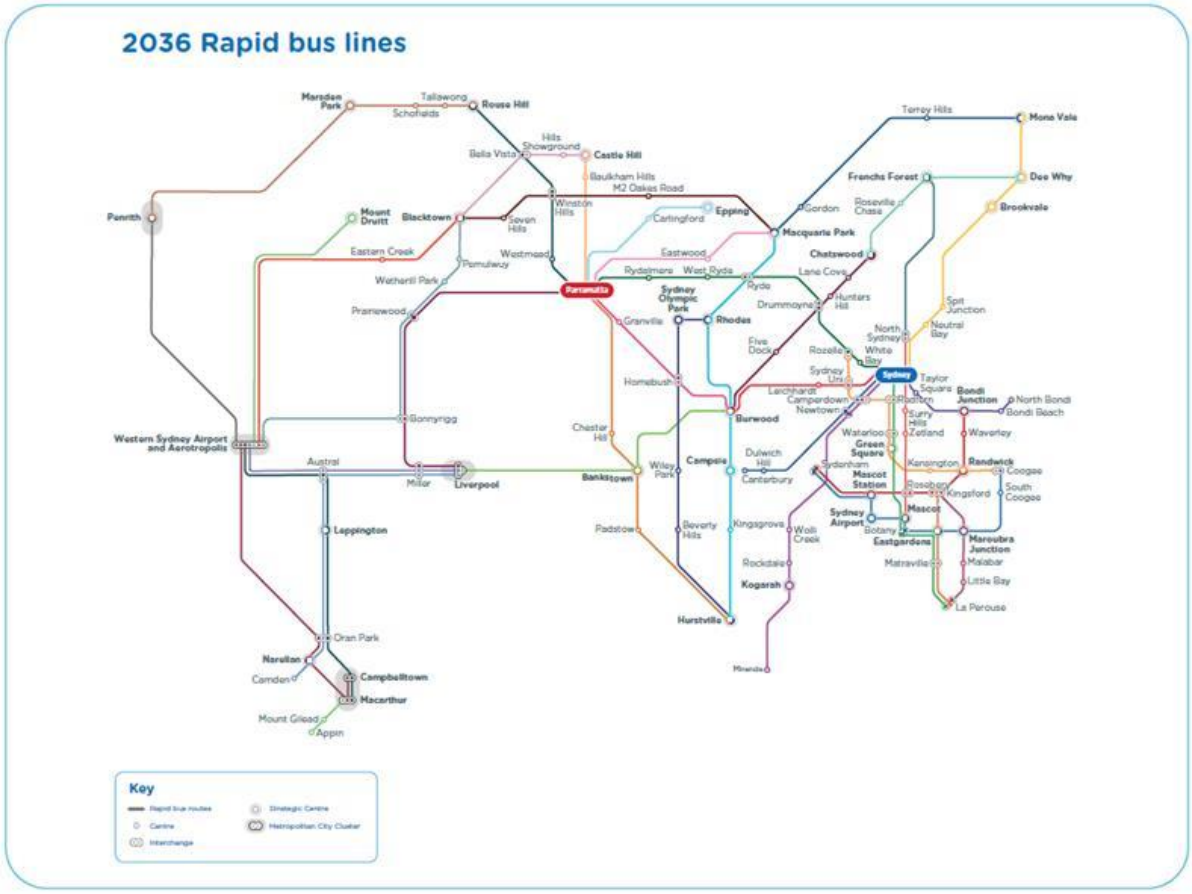


Source: Greater Sydney 2056 indicative future rail network

1.6.2 Rapid bus

The Future Transport Strategy 2056 also proposes 39 rapid bus lines across the Greater Sydney which link metropolitan city centres, metropolitan city clusters and strategic centres. This would include Leppington which will connect Narellan to Macarthur to the south and Western Sydney Airport and Aerotropolis and Liverpool to the north. The rapid bus is defined as a 'turn-up and go' service with service frequency of 5 minutes or less.

Figure 6: Proposed rapid bus lines



Source: Greater Sydney 2056 indicative future rapid bus network

1.7 Planning context

Planning controls that are influencing housing delivery in the Leppington Town Centre are divided between two frameworks:

- South West Growth Centre (SWGC) controls set out in *State Environmental Planning Policy (Sydney Region Growth Centres)* (SEPP Growth Centres) and related development control plans (DCPs)
- Camden Local Environmental Plan 2010 (CLEP 2010) and related DCPs
- Liverpool Local Environmental Plan 2008 (LLEP 2008) and related DCPs.

This section examines the relevant framework and outcomes related to the LTC.

1.7.1 State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Leppington is located within the SEPP Growth Centres which identifies the zoning, permissible uses, minimum lot sizes and other planning considerations.

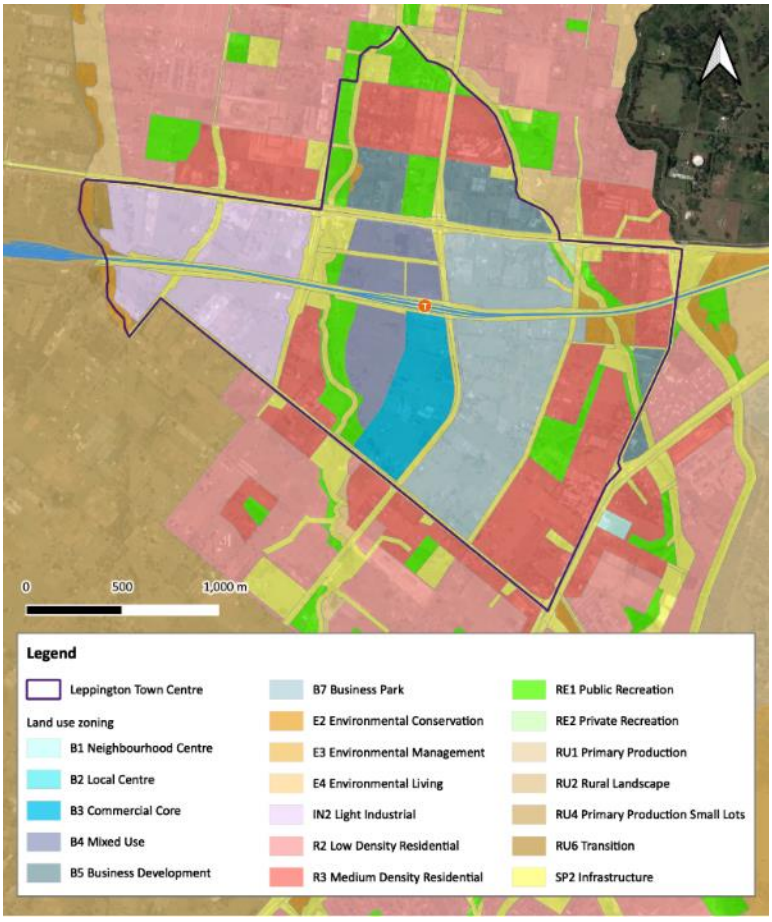
Existing land zoning

The LTC is broadly made up of 'B3 Commercial Core' and 'B4 Mixed Use' zoned land centrally located around the railway station. Bordered by 'IN2 Light Industrial' to the west and 'B7 Business Park' to the east. Pockets of 'R3 Medium Density Residential' are located on the outer edges.

The 'B3 Commercial Core' zoned land is concentrated on the southern side of the railway corridor. This zone provides for extensive commercial and high-density residential development, in close proximity to public transport. The type of uses permissible under this zone includes commercial premises, office, shops and shop top housing.

'B4 Mixed Use' zoned land lies on both north and south of the railway corridor and Bringelly Road to provide compatible land use to contribute to the vitality of the local centre.

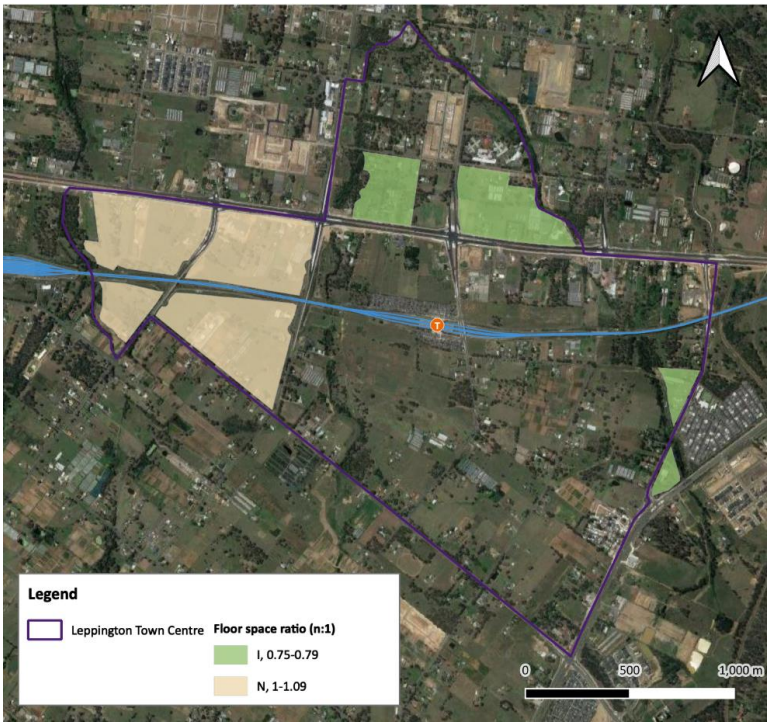
Figure 7: Current zoning



Existing floor space ratio

The Floor Space Ratio (FSR) within the LTC is largely not specified with the exception of land situated within the Liverpool LGA and the industrial zoned land which allows a FSR of 1:1 marked by the colour beige. The green shaded land allows a FSR of 0.75:1.

Figure 8: Current floor space ratio

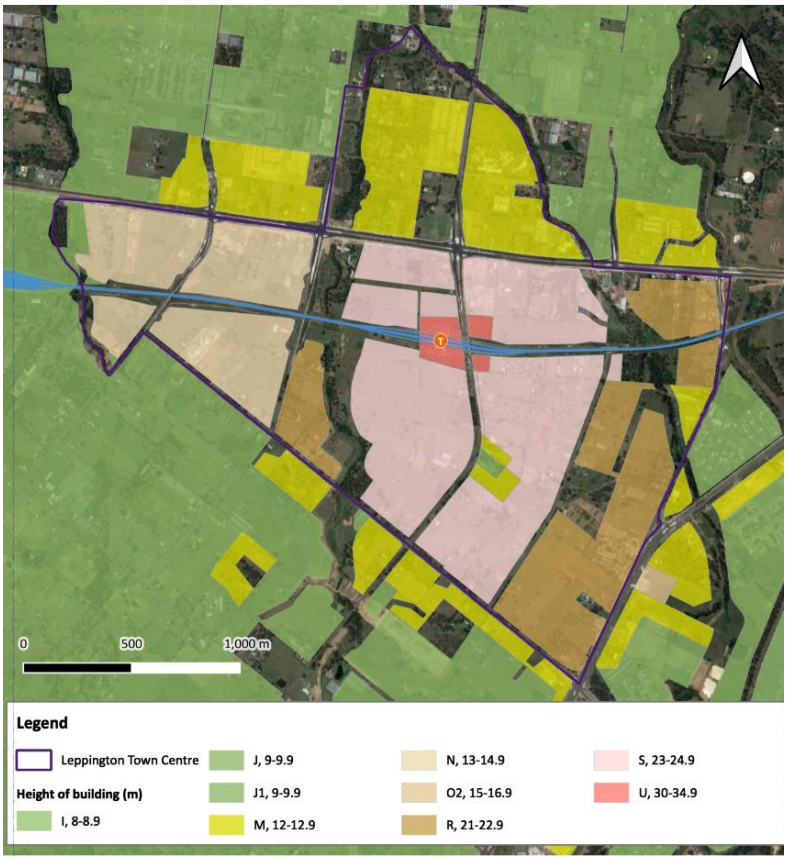


Existing building height limits

SEPP Growth Centres currently permits development heights of up to 30m (equivalent to 10 storeys) on lands within the town centre.

Based on the building height limit, density allocation is focused on the intersection of the railway corridor and Rickard Road marked red and allows a building height limit of 30m. Stepped down to 24m marked as light pink. Transition area in brown allows 21 metres and industrial area marked in beige allows 13m.

Figure 9: Current building height limit



In November 2019, DPIE released 'A new approach to precincts,' indicating a shift away from the State-led planning of precincts to a more collaborative approach for many precincts. Notably, the Leppington Town Centre has been identified as a Council-led rezoning. The purpose of the rezoning is to ensure development feasibility and the delivery of the future major centre.

1.7.2 Development control plans (DCP)

The Camden Growth Centre Precincts DCP - Schedule 2 Leppington Major Centre provides specific development controls for the LTC and provides prescriptive measures for the development and design outcomes anticipated to be delivered.

The LTC is envisaged to be the primary focus for employment, retailing, entertainment and community services in the South West Growth Centre. The study area is currently greenfield land and will grow progressively to become a strategic town centre, consistent with the centre typology established by the Metropolitan Plan for Sydney 2036.

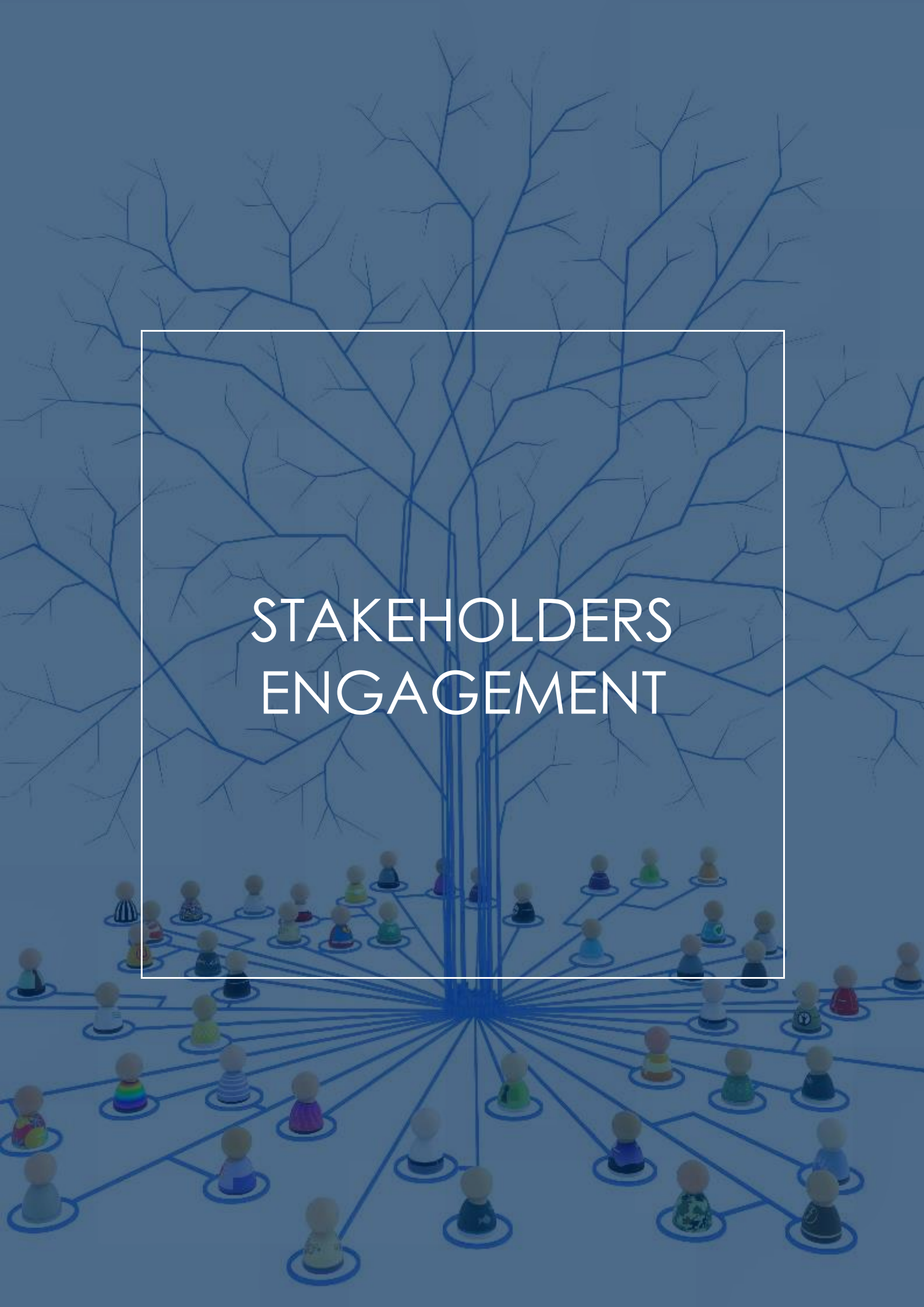
LTC will be concentrated around the Leppington train station and will provide public domain comprising a network of active streets, parks and plazas to activate the public domain by encouraging the use of open space for walkability, recreation and socialisation.

Table 2: Summary of relevant controls – Camden Growth Centre Precincts DCP - Schedule 2

Chapter	Topic	Summary of relevant current control
Part 4 – Development in Residential Areas & Part 5 - Centres Development Controls	Off-street car parking rates/requirements	• Residential flat buildings: – R2, R3 zones (shop top housing only): 1 car space per 1-2 bedroom dwellings and 2 car spaces per 3 or more bedroom dwellings – R3, R4 zones (residential flat buildings): 1 car space per dwelling plus 0.5 per 3 or more bedroom. 1 visitor per 5 apartments – B1, B2, B3 and B4 zones: 1 car space per dwelling plus 0.5 per 3 or more bedroom. 1 visitor per 5 apartments. • Commercial retail: – Business premises/office premises: 1 space per 40sqm GFA – Retail premises (less than 200m² GFA): 1 space per 30sqm GFA – Retail premises (greater than 200m² GFA): 1 space per 22sqm GFA – Food and drink premises: 1 space per 30sqm GFA.
Part 4 – Development in Residential Areas	Site coverage(maximum)	R2, R3 zones (shop top housing only): 50% R3, R4 zones (residential flat buildings): 50% B1, B2, B3 and B4 zones: N/A

Source: Camden City Council Growth Centre Precincts DCP - Schedule 2 Leppington Major Centre

As our feasibility analysis is focused on the Camden LGA, we have relied upon the above controls only in our feasibility modelling.



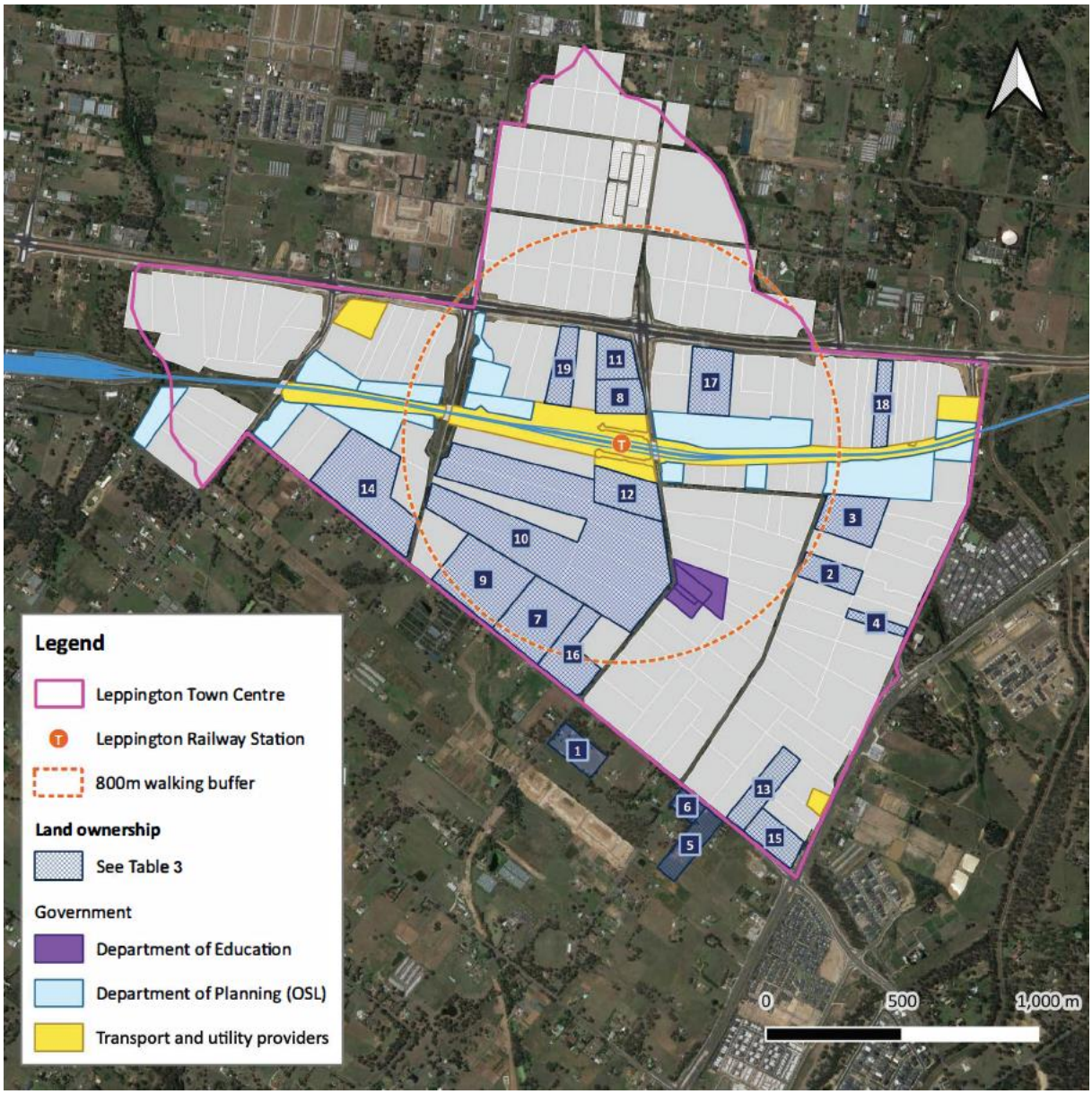
STAKEHOLDERS ENGAGEMENT

PART A.2 STAKEHOLDERS

It is recognised that land fragmentation creates development and infrastructure coordination issues and limits the ability to facilitate the early delivery of key local infrastructure.

As illustrated below major landowners includes Government and one major landowner (notation 10 illustrated below) south of the railway corridor who may act as a catalyst to the delivery of housing.

Figure 10: Land ownership and DAs



Source: HillPDA 2020 & LandIt

2.1 Summary of DAs and major land ownership

Detailed below is an extract of the development applications that have been submitted within the Camden LGA.

Table 3: Summary of DAs and major land ownership

ID	Address	Area (ha)	Status	Dwelling Yield*	DA FSR*	Current zone	Proposed zone as per draft ILP
1	76 Rickard Road	2.02	Approved	216	1.34	R3, SP2	Outside of ILP
2	182 Byron Road	2.0	Lodged	368	2.68	R3	R3
3	202 Bryon Road	3.59	Approved	534	1.98	R3, SP2, RE1	R3, SP2, RE1
4	23 Cowpasture Rd	0.8	None	-	-	R3	R3
5	35 Ingleburn Road	2.28	Lodged	97	-	R3	Outside of ILP
6	47 Ingleburn Road	0.87	Lodged	146	0.58	R3	Outside of ILP
7	120 Ingleburn Road	5.52	Lodged	169	2.22	RE1, B4, B3	RE1, R3
8	215 Rickard Road	2.19	Lodged	78 (part)	1.54	B4	B3
9	146 Ingleburn Road	4.56	None	-	-	R3, RE1, SP2	R3, RE1, SP2
10	Dickson Street & Rickard Rd	28.13	None	-	-	R3, B4, RE1	B4, RE1
11	283 Bringelly Road	2.18	Lodged	529	2.67	B4	B3
12	183 Rickard Road	1.64	None	-	-	B3	B4
13	28 Ingleburn Road	2.68	Lodged	307	1.8-1.86	R3	R3
14	186 – 224 Ingleburn Rd	8.71	None	Industrial	-	IN2	B5 & IN2
15	1423 Camden Valley Way	2.31	Planning proposal	Tavern, liquor, motel	0.3	R3	R3
16	108-116 Ingleburn Road	3.66	Lodged	Retail	0.48	B3	R3
17	243-251 Bringelly Road	3.98	None	-	-	B7	B3
18	183-185 Bringelly Road	1.77	Refused	254	2.09	R3, RE1	R3, RE1
19	297 Bringelly Road	2.33	Lodged	280 (part)	2.87 (part)	B4	B3

*Estimated based on the available information provided in the DA register at the time of our assessment and based on our understanding of the provided information

Source: Camden Council DA register

The DAs tabulated above show that developers of residential and mixed-use projects within the study area are seeking a FSR within the range of 1.57 to 2.68:1, although no FSRs currently apply to their site.

2.2 Stakeholder views

Stakeholder consultation was undertaken to identify industry views of the current ILP and planning controls. Other issues that have emerged during the discussions include their plans for the land, obstacles and opportunities for the town centre.

HillPDA had initiated contact with a sample of landowners or their representatives which had lodged a development application to the Council within the study area (Camden LGA). The intent of the engagement was to have a high level understanding of issues that relate to this study, and we understand that at some time in the future Council will undertake further stakeholder engagement to cover all issues. A total of five landowners or their representatives had shown interest in participation and were consulted via teleconference. A consolidated summary of feedback is contained in Appendix A. The key themes that emerged from the discussions are summarised below. It is noted that the themes represent the views of the stakeholders contacted. They may not represent the views of the Council or adopted policy.

Key findings are summarised below.

Planning controls and current ILP

- The majority of landowners are broadly supportive of the current zoning and the land was purchased on this basis. However, higher density and building height limits would allow more flexibility in design and ensure the viability of development
- A substantial landowner, an industrial developer highlighted that the current road overlay indicated in the current ILP is not suitable to deliver an efficient industrial precinct. This owner also expressed a preference for IN1 zoned land due to its flexible range of uses or a clause to allow high-tech manufacturing and/or low impact (noise, environmental and odour emittance) manufacturing
- Some landowners have voiced that the B7 zoned land located east of the LTC is very large and this allocation was prior to the announcement of the future Airport at Badgerys Creek and the Aerotropolis. In addition, the relatively "narrow" nature of the B7 zoning will inhibit take up. More strategic employment-related land uses are now more likely to gravitate towards the Aerotropolis Core precinct in the Western Sydney Aerotropolis
- A landowner has expressed the view that the B3 Commercial Core zoned land is too large and will result in a poorly integrated land use mix and inefficient use of land. There was a suggestion that the B3 Commercial core is consolidated closer to the station, and potentially oriented east-west along the rail corridor to connect to Scalabrini Creek. There is a preference for B4 Mixed Use zoning over the B3 Commercial Core
- A landowner had expressed a view that the current building height limits are conservative. Building heights of up to 30 metres should be permitted on key sites in areas close to Scalabrini Creek, Leppington Station and Rickard Road
- All landowners view Edmondson Park as the flagship masterplan development therefore, higher density or building heights are sought.

Constraints

- Uncertainty regarding the outcomes and results of the planning review
- All landowners highlighted the need for additional 'trunk' infrastructure such as road widenings & drainage, many landowners also questioned the capacity of the water and sewerage infrastructure.

Opportunities

- There is an opportunity to create a mixed-use, high amenity and high-density community in the LTC. It is critical that the town centre provides a good mix of retail, commercial, transport nodes and amenities (parks, open space, entertainment & recreation) in order to support high-density living
- The role of Leppington will be to cater for retail, commercial, entertainment, recreation and community facilities and services for a growing population catchment that draws from surrounding growth centre precincts
- A major landowner is investigating “outside the box” ideas and will consider local and international examples of best practice approaches to new town centres
- Flexibility in development applications to facilitate "first movers" or "catalyst" developments
- Ensure an appropriate mix of retail and amenities to support both a day and night economy
- Improve the accessibility for both vehicular and pedestrian traffic
- Opportunity for a major supermarket to have a metro-style format store close to the station as the centre matures
- Improve accessibility to the town centre, not focusing only on the railway station but also road connectivity and bus links to Liverpool.

Market appetite

- Most landowners are keen to progress in their development process as soon as possible. As some landowners have held on to their land for some time
- Leppington is still a greenfield suburb and therefore the retail and commercial market is still in its infancy.

More detailed comments may be found in Appendix A.

PART A.3 INDICATIVE LAYOUT PLAN

In November 2019, DPIE released 'A new approach to precincts,' indicating a shift away from the State-led planning of precincts to a more collaborative approach for many precincts. Notably, the Leppington Town Centre has been identified as a Council-led rezoning.

For this reason, the Council identified that the study area would require a rezoning in order to fulfil LTC's potential as an emerging strategic centre within the South West Growth Area

The Indicative Layout Plan (ILP) shows the general structure and arrangement of land uses which includes street and subdivision pattern.

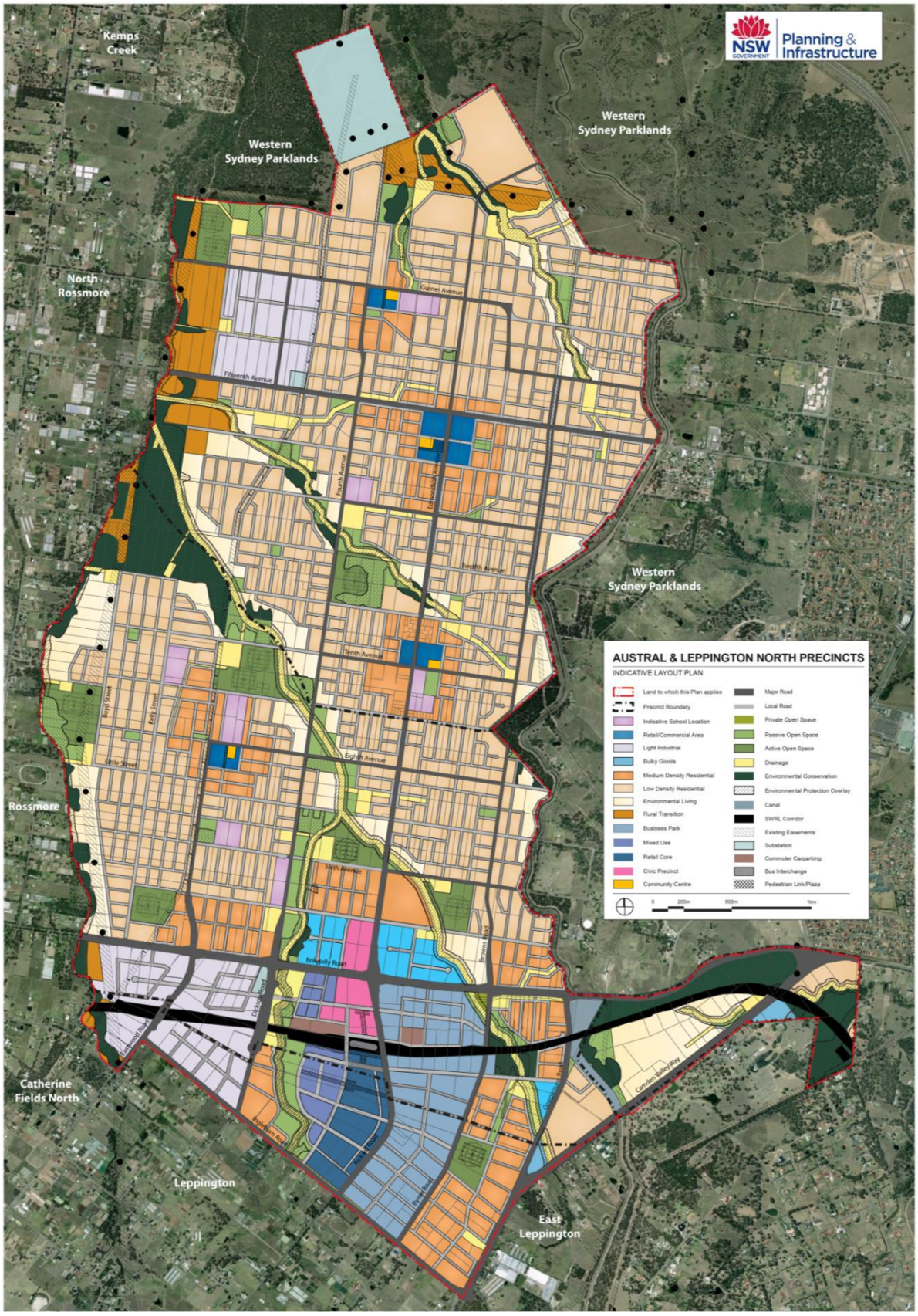
Summarised below is the current ILP and working draft ILP.

3.1 Current indicative layout plan

Shown below is an extract of the Austral and Leppington North - Indicative Layout Plan with the study area outlined.

The current ILP shows the retail core located south of the railway corridor, bounded by B4 Mixed Use to the west and B7 Business Park to the east. The Civic Precinct is located to the north of the railway corridor bounded by B4 Mixed Use to the west and B7 Business Park to the east. The Civic Precinct continues to the north of the Bringelly Road and is bounded by retail/commercial area and is located within the Liverpool LGA. Located further to the west is Light Industrial zoned land.

Figure 11: Austral and Leppington North – current indicative layout plan – LTC outlined



3.2 Earlier urban design study

An Urban Design Report, prepared by the LFA in 2017 outlined a vision, urban design principles, land use scenarios and a working draft ILP. The working draft ILP was further refined by Camden Council, Liverpool Council, DPIE and LFA to provide more open space to meet projected population needs which this study has sought to clarify.

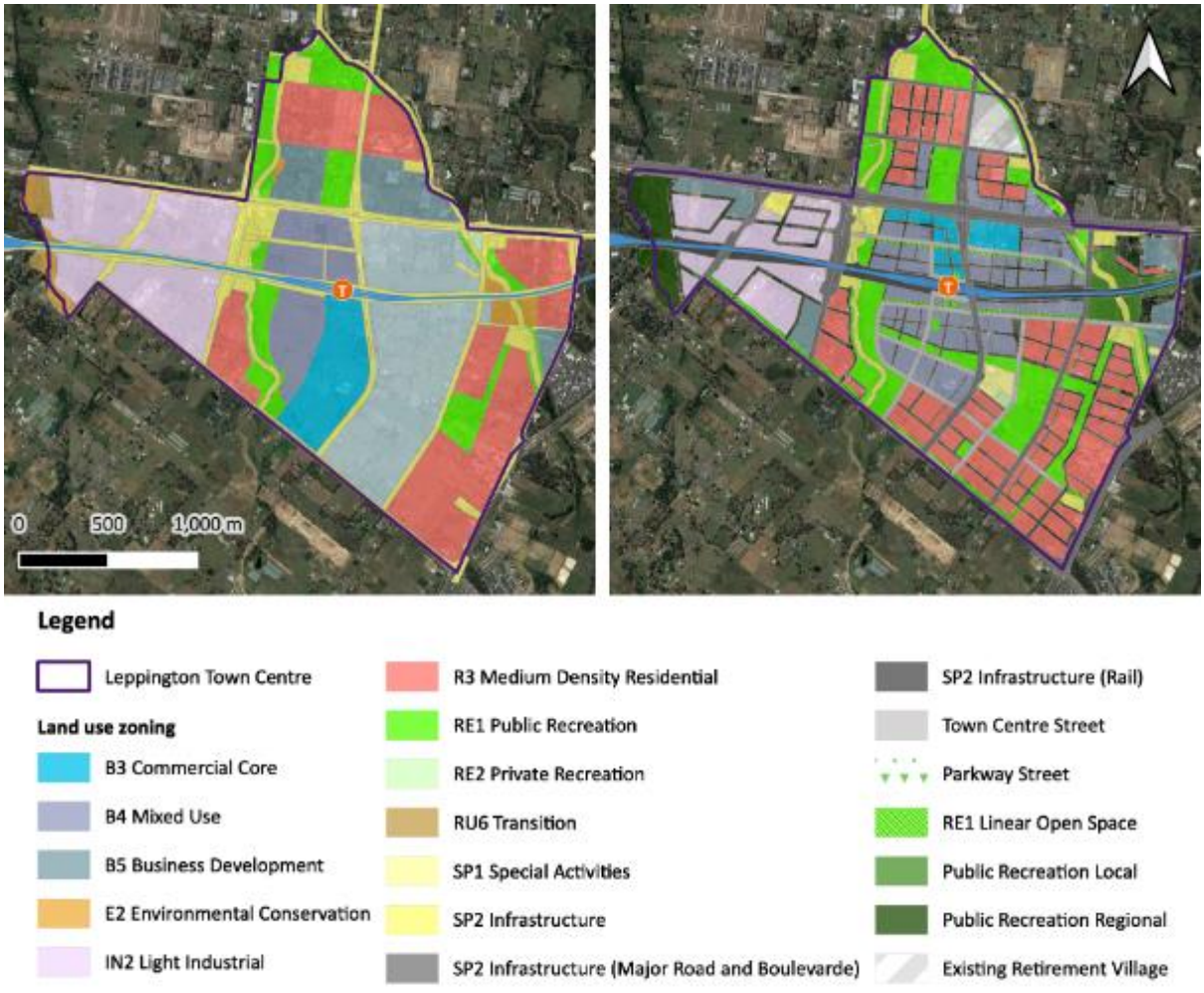
3.3 Proposed working draft indicative layout plan

The design of the working draft ILP is an iterative process and is the product of LFA's urban design study (noted above) followed by changes from specialist studies and advice. The purpose of this report is to test the feasibility of the working draft ILP on market demand and to test FSRs.

The working draft ILP broadly shows B3 Commercial Core zoned land located north of the railway corridor, bounded by B4 Mixed Use to the east and west. Additional, B4 Mixed Use is located to the south of the railway corridor and is bounded by open space and R3 Medium Density Residential zoned land to the east and west. B5 Business Development and IN2 Light industrial is located west of Dickson Street and on the far east along Bringelly Road.

Illustrated below is a side by side comparison of the current ILP and working draft ILP.

Figure 12: Current zoning vs working draft ILP



Source: Camden Council & HillPDA 2020

As illustrated above, key changes recommended in the working draft ILP includes the repositioning of the B3 Commercial Core from the southern side to the northern side of the railway corridor as well as a decrease of the overall B3 Commercial Core within the LTC.

It also shows the current B7 Business Park zoned land is rezoned to largely R3 Medium Density Residential and a smaller portion of B4 Mixed Use zoned land closer to the southern side of the station and further north to Bringelly Road.

There is a higher proportion of open space that includes plazas and parklands that connect the existing creek lines (Bonds Creek, Kemps Creek and Scalabrini Creek).

One of the main advantages of the working draft ILP over the current ILP is that it removes the large area of B7 Business Park land as this was likely to stifle development in the foreseeable future. The large area of B7 zone was made to accommodate a business park for the SWGC which will probably be required some time in the future. However, the current ILP was made prior to the announcement of the airport. More recently the masterplan for the Aerotropolis was prepared which identified an Aerotropolis Core precinct that will have a metro station. This precinct is 1,382 hectares and will provide 55,000 jobs and 22,000 residents. There is also an opportunity to provide a business park of 200 or more hectares on the airport land itself. Market demand for a business park is likely to gravitate towards the airport and so the need for a business park in Leppington diminishes meaning that Leppington could have a stronger residential and retail focus. Notwithstanding, the extension of the rail line to the airport will be important to provide strong public connections between transit orientated centres and between where people are likely to live and work. It would also give Leppington a potential role in providing services relating to the airport including transit and temporary accommodation.

One of the major issues with the working draft ILP is the conversion of the land north of the train station from B4 to B3 combined with the exclusion of shop top housing in the B3 zone. The owners of these sites are likely to argue economic hardship as a result of the 'down zoning' of the land (defined in terms of land value and marketability). It may sterilise the land for a significant period of time and it does little to encourage short term delivery of an active town centre. Recommendations to the working draft ILP are provided in the recommendations chapter to overcome these limitations.

PART A.4 MARKET SUPPLY AND DEMAND

This chapter provides an assessment of the ultimate yields and take-up of residential development in the Leppington town centre over the next several decades.

4.1 Population forecasts

There are several sources of population projections for Camden LGA, Southwest Growth Centre, Leppington North Austral precinct, Leppington suburb and the town centre. The projections are summarised below in the following sub-sections beginning with Camden LGA and drilling down geographically to the town centre.

4.1.1 Camden LGA

The three main sources of population projections for Camden LGA are NSW Department of Planning, Industry and Environment, Transport for NSW and Forecast.ID.

Table 4: Population forecasts for Camden LGA

Source	2016	2021	2026	2031	2036	2041	Change pa 2016-36
DPIE (2019)	80,264	127,647	153,299	180,071	236,255	307,727	5.55%
Transport for NSW (2019)	80,099	108,272	145,782	181,839	221,161	237,486	5.21%
Forecast.ID	80,477	122,926	161,448	197,705	233,299		5.47%

Source: DPIE 2019, Transport for NSW TPA 2019 and Forecast.ID 2020

In 2020 the population of Camden is estimated at 114,971 (Forecast.ID). Transport for NSW projection is low in 2021 at 108,272 although it catches up to DPIE forecast in 2031. DPIE has a very strong growth forecast post 2031. All three forecasts show growth at around 7,000 to 7,800 new residents every year or between 5.21% to 5.55% per annum which is much greater than the Sydney growth rate of 1.5% per annum.

Council's Draft Housing Strategy in October 2020 forecasts a population of 233,950 by 2036 which is very close to the Forecast.ID forecast.

Note that all three forecasts were pre-COVID 19 pandemic. COVID 19 is reducing migration intake into negative territory – the first time since 1946. For the 2020-21 and 2021-22 financial years the forecast is negative 71,600 and negative 21,600, respectively. It will be 2022-23 before we see a return to a net positive intake.[3] As a result, the rate of dwelling completions is likely to slow down over the next several years particularly as current housing supply across Sydney is quite strong. Forecast.ID is the preferred forecast in the above table but it is likely that population numbers in 2026, 2031 and 2036 will be 7,000 to 8,000 lower. For the purpose of the study we have adopted the following forecast.

[3] www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview202021/Immigration

Table 5: Forecast population in private dwellings

Source	2016	2021	2026	2031	2036	2041
Forecast.ID	80,477	122,926	161,448	197,705	233,299	278,893
Adjustment (COVID 19)		119,300	153,970	190,227	225,821	271,415
Population not in private dwellings*	664	977	1,253	1,611	2,234	3,049
Population in private dwellings	79,813	118,324	152,717	188,616	223,587	268,366

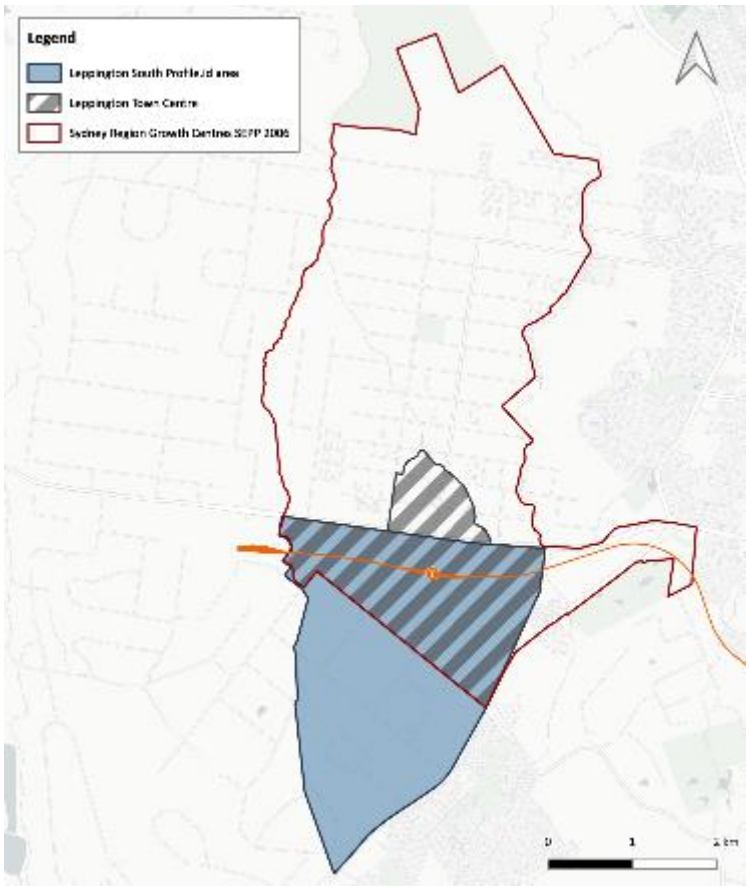
* Refers to institutionalised persons and persons in hospitals and nursing homes

Source: Forecast.ID and HillPDA

4.1.2 Current ILP for Austral and Leppington North

The Austral and Leppington North ILP was an early rezoning stage of the South West Growth Centre. The northern half (Austral), north of Bringelly Road is in the Liverpool LGA and the area to the South of Bringelly Road is in Camden LGA. The geographical area is shown by a red border in the figure immediately below

Figure 13: Defined geographical boundaries



Source: HillPDA 2020

Under the current ILP Austral and Leppington North is to contain the following urban uses[4]:

- Leppington Major Centre and nearby employment land, with capacity for up to 13,000 jobs in retailing, light industrial, business park, human services and entertainment sectors
- Approximately 17,350 dwellings and a population of approximately 54,000
- A Town Centre in Austral with retail floor space of around 30,000 square metres
- Three Neighbourhood Centres each with retail floor space in the order of 10,000 square metres

[4] Camden Growth Areas Contributions Plan Amendment 1 - Technical Document

- 6-7 primary schools and 1-2 high schools
- 99.4 hectares of light industrial land for local jobs and local services
- A new TAFE college and Regional Integrated Primary Health Care Centre located in Leppington Major Centre
- Regional level community and cultural facilities in Leppington Major Centre.

4.1.3 Leppington North – Leppington precincts (forecast.ID)

The Leppington North – Leppington Precincts as defined in Forecast.ID is that part of the Austral and Leppington North Precinct east of Kemps Creek and south of Bringelly Road in the Camden LGA. It is depicted in the figure above in blue shade. There are two sources of population forecast for this area – Transport for NSW and Forecast.ID. Both forecasts are similar although Forecast.ID is a little higher as shown in the table below.

Table 6: Forecast population for Leppington North Precinct

Source	2016	2021	2026	2031	2036	2041
Transport for NSW (2019)	1,191	3,067	8,289	16,067	24,094	26,452
Forecast.ID	1,139	4,430	10,833	18,533	26,301	

4.1.4 Leppington town centre

The Leppington Town Centre is the geographical area shown in the figure above with the grey stripes. Under the Camden Growth Areas Contributions Plan expected development in that part of the Leppington North Precinct south of Bringelly Road (Camden LGA) will be characterised by the following[5]:

- Civic, cultural, health, education and other public uses in a civic precinct to the north of the railway station
- Retail shopping centre forming the commercial core of the Leppington Major Centre to the south of the railway station
- Mixed use retail / commercial and residential development on the western flanks of the civic precinct and retail core
- Commercial / business park immediately to the east of the civic precinct and retail core
- Open space and drainage facilities along the Scalabrini Creek, Bonds Creek and Kemps Creek corridors
- Medium density residential interfacing with the Scalabrini Creek corridor, and to the east of the business park
- A light industrial area to the west of Dickson Road
- Approximately 2,112 dwellings (including existing dwellings) and a total population of approximately 5,142 persons.

Expected population at 5,142 was based on 1,677 medium density (1-2 storey attached housing) at 2.6 persons per dwelling and 435 apartments at 1.8 persons per apartment.

The expected number of apartments was clearly conservative at the time these plans were prepared. Average occupancy of apartments at 1.8 may also have been conservative given that average occupancy in the Southwest corridor (Fairfield to Wollondilly) was 2.2 at the last Census in 2016. Transport for NSW forecast for Camden side of the town centre is higher with 8,085 persons by 2036, 9,500 persons by 2046 and almost 10,200 by 2056. A further 1,000 people are expected to live on the Liverpool side of the LTC by 2036. By 2056 the population would reach 12,000 in the LTC on both sides of Bringelly Road. The population may well be higher (discussed below) and, if so, it would require a review of the contributions plan.

[5] Camden Growth Areas Contributions Plan Amendment 1 - Technical Document

4.2 Household forecasts

Both Forecast.ID and DPIE provide household forecasts by household type in the Camden LGA. Interestingly there are differences and even from the base year the household mix is different between ABS Census 2016 Community Profile. This is shown in the table below.

Table 7: Forecasts of household type as a percentage of total households in Camden LGA

Household Type	ABS 2016	Forecast.ID 2016	DPIE 2016	Forecast.ID 2026	DPIE 2026	Forecast.ID 2036	DPIE 2036
Couple families with dependents	50.6%	45.8%	47.9%	45.1%	46.6%	43.5%	44.3%
Couples without dependents	24.6%	27.6%	22.7%	29.0%	23.0%	30.0%	23.5%
Group households	1.5%	1.9%	1.3%	2.2%	1.2%	2.1%	1.3%
Lone persons	11.0%	12.5%	13.0%	12.0%	14.1%	12.7%	15.6%
One parent family	11.4%	9.1%	10.7%	9.5%	10.9%	9.7%	11.2%
Other families	0.9%	3.1%	4.4%	2.2%	4.2%	1.9%	4.2%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: ABS Census 2016, DPIE 2019 and Forecast.ID

The table shows some growth in lone person households as well as some modest growth in couples without children. This is indicative of Greater Sydney generally and is resulting in the decline in the average household size.

The number of households was estimated from population forecasts and average household size and the above percentages were used to forecast the number of households by household type. The results are shown in the table below.

Table 8: Forecast households by household type in Camden LGA

	2016	2021	2026	2031	2036	2041
Persons in private dwellings	79,813	118,324	152,717	188,616	223,587	268,366
Average Household Size	3.07	2.99	2.98	2.97	2.91	2.88
Household Types						
Couple with children	12,461	18,696	23,860	28,915	33,987	41,334
Couple only	6,413	10,028	13,330	16,881	20,742	25,412
Group Households	390	594	768	954	1,151	1,399
Lone person households	2,993	4,650	6,143	7,887	9,818	12,314
Single parent	2,863	4,392	5,734	7,188	8,745	10,728
Multiple and Other family households	904	1,212	1,358	1,782	2,264	2,101
Total Households	**26,024**	**39,572**	**51,192**	**63,608**	**76,707**	**93,287**

Source: DPIE 2019, Camden Draft Housing Strategy 2020 and HillPDA

The above forecast households by household type is consistent with both NSW DPIE 2019 forecast and Council's Draft Housing Strategy 2020 with a slight adjustment to account for the COVID 19 impact.

4.3 Demand for apartments

Demand for apartments is based on household growth and household mix. Generally smaller households, particularly lone person households have a higher demand for apartment living. Across Greater Sydney 45% of lone persons lived in apartments in 2016 and that percentage is expected to increase as Sydney grows. 55% of

group households also lived in apartments as well as 32% of couples without dependents. Using these rates suggest that the demand for apartments in Camden in 2016 was around 6,700 yet there were only 195 occupied apartments. It shows how Camden is very out-of-line with the rest of Sydney with apartments making up less than one per cent of total housing stock compared to 28% in Greater Sydney.

Over time as Sydney grows and land becomes increasingly scarce, we can expect further shifts towards apartment living. The table below provides assumed capture rates for apartments for new households by household type.

Table 9: Assumed apartment capture rates by household type for new households in Camden LGA

Household Type	2021-26	2026-31	Post 2031
Couple with children	4%	8%	11%
Couple only	12%	21%	30%
Group Households	20%	35%	50%
Lone person households	32%	56%	80%
Single parent	9%	16%	23%
Multiple and Other family households	12%	21%	30%
Weighted Total (% of growth)	**11%**	**19%**	**27%**

Source: HillPDA forecast from ABS Community Profiles of Camden LGA and Greater Sydney 2006 - 2016

The above table shows for example that 32% of new lone person households in the Camden LGA between 2021 and 2026 will occupy an apartment whereas only 4% of couples with children households will occupy an apartment. The weighted total across all households is 11%.

This of course a forecast of demand and it assumes that the supply of apartments will meet that demand. If supply is constrained, for whatever reason, then these capture rates will not be achieved. The propensity for all household types to occupy apartments is forecast to increase overtime as land becomes increasingly scarce and the price of detached housing increases. So for example post 2031, it is expected that 80% of all new lone person households will occupy apartments. The weighted total of all new households that will occupy apartments is expected to be 27%.

Multiplying the above new households by the assumed capture rates provides the resultant demand for apartments as follows:

Table 10: Forecast demand for apartments in Camden LGA

	2021-26	2026-31	2031-36	2036-41
New households suitable for apartments	1,239	2,353	3,600	4,589
Proportion to total new dwellings	11%	19%	27%	28%
Demand for new apartments*	1,304	2,477	3,790	4,830
Growth per annum	261	495	758	966
% of apartments to total dwellings in the LGA	2.9%	6.1%	9.8%	13.0%

* Assumes 5% vacancy (ABS Census 2016)

Source: HillPDA

The majority of the apartments in Camden is expected to be taken up in the Leppington Town Centre given that it is, and for some time will continue to be, the only heavy rail station in the LGA. Assuming a 75% capture it suggests that post-2021 around 150 to 200 apartments per annum would be delivered in the strategic town centre increasing to around 350 to 400 post-2026 and to 550 or so per annum post-2031. The balance of apartments in the LGA will locate in other centres such as Oran Park and Narellan.

4.3.1 Comparison to draft housing strategy

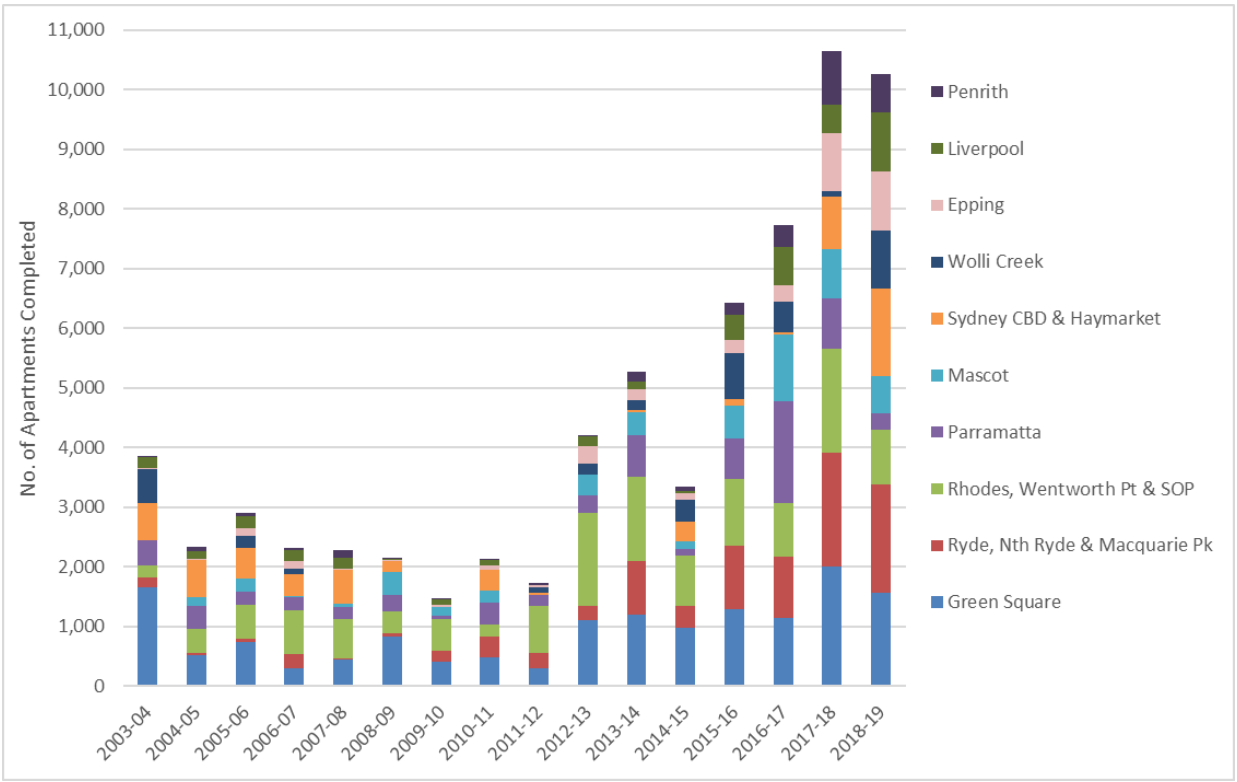
The Draft Housing Strategy is considerably more conservative with its forecast of apartments. We believe the rate of supply could be more than double the high forecast for the following reasons:

- Increasing scarcity of land – Camden LGA will have no more land available for low density housing sometime before 2046[6]
- Declining affordability of detached homes in Sydney's growing metropolitan which is related to the first point
- Growth in smaller households and the increasing desire for place rather than space
- Considerable interest in the industry to develop apartments in the Leppington Town Centre
- Proven success with Edmondson Park and other similar projects
- Proposed infrastructure such as the rapid bus services and the greater confidence of the implementation of the extension of the railway line to new Western Sydney Airport and Aerotropolis
- Remains relatively modest to total dwelling production in the LGA

4.3.2 Benchmarking apartment completions to other localities

More than 500 apartments per annum is very high in comparison to historic take up in the other local government areas of Sydney. The chart below provides some comparison of dwelling completion rates in selected suburbs from 2003 to 2019.

Figure 14: Dwelling completion by selected suburbs/localities in Greater Sydney



Source: Department of Planning Infrastructure and Environment

Over this 16 year period Green Square averaged 937 new apartments per annum. Rhodes averaged 506 over eight consecutive years from 2006-07. There were other localities with strong peaks such as Sydney Olympic Park and Wentworth Point with 1,928 new apartments over three years from 2012 and 4,040 new apartments in Parramatta over five years from 2013 to 2018.

[6] NSW Growth Centres

In the four years from 2015 to 2019 there was an enormous growth in apartment completions right across Sydney. Average annual completions included:

- Green Square 1,501
- Ryde, North Ryde and Macquarie Park 1,458
- Rhodes, Wentworth Point and Sydney Olympic Park 1,160
- Parramatta 879
- Mascot 779
- Liverpool suburb 630
- Epping 616
- Wolli Creek 587
- Penrith suburb 529

Many of the above localities are middle ring suburbs. Nevertheless, Liverpool and Penrith suburbs, which are stronger comparables, achieved 688 and 588 apartments average per annum respectively over the three consecutive years to 2018-19. Campbelltown achieved 289. The Thornton estate in Penrith has been consistently selling around 200 apartments per annum since the first stage of apartments were constructed. Edmondson Park achieved around 140 per annum. Rouse Hill has been more moderate with around 130 new apartments per annum. This suggests that 500 apartments per annum post-2031 in Leppington is achievable. Even at this rate, it is likely that total apartments in the LGA by 2041 will make up less than 13% of total dwelling stock. Furthermore, as land becomes increasingly scarce this will drive up the price of detached homes. The Growth Centres are expected to run out of land by 2046 in supplying low density housing. More and more new households will have to settle for apartment living or will choose apartment living due to cost and location reasons – place over space.

Therefore, by 2041 we would expect the LTC to have around 10,000 completed apartments and a population of around 20,000.

Year	2026	2031	2036	2041	2046
Forecast Dwellings in the LTC	1,200	3,300	6,500	10,000	13,500

In addition to apartments there is likely to be some development of town houses or mixed forms of town houses and apartments largely in the fringe area of the LTC (beyond 800m from the train station). Assuming 20% of dwellings in the R3 zone is in the form of town houses then we could expect around 500 to 1,000 more town houses by 2041.

4.3.3 Competition from other centres

As mentioned above the forecast of demand for apartments in Leppington Town Centre was based on household forecasts and assumed capture rates into apartment living. Across the wider LGA and the Growth Centre some of the demand will be taken up in other centres such as Oran Park. There will be added competition between apartment suppliers from emerging new centres such as Glenfield (The Hurlstone Agricultural site with around 180 gross hectares of land) and the station precincts from Glenfield to Campbelltown. The Aerotropolis land and the Fifteenth Avenue Liverpool to Airport corridor may also provide some added competition. It is important to recognise that actual apartment numbers in the Leppington Town Centre could be impacted in either direction depending on the outcomes from these competing areas. Factors would include proximity and accessibility to place of work, amenities, affordability and connectivity.

From a developer's point of view, the use of bonus FSR on top of tipping point FSR would encourage investment in the LTC in comparison to the neighbouring localities.

4.3.4 Capacity of Leppington town centre

The capacity of the town centre depends on the ultimate floor space ratios that are adopted. The table below provides a possible scenario from adopting the zoning under the working draft ILP (August 2020) and height controls under the SEPP and assuming no residential apartments in the B3 zone.

Table 11: Dwelling and employment capacity in LTC –development scenario under the working draft ILP (Aug 2020) and building heights under the current SEPP

	B3 Comm. Core	B4 Mixed Use*	B5 Business Dev	IN2 Light Industrial	R3 Medium Density Residential	TOTAL
Net Site Area	92,728	449,913	139,930	343,142	885,381	1,911,094
FSR	2.5	2.0	1.0	0.5	1.0	
Commercial	231,820	224,957	139,930			596,707
Industrial				171,571		171,571
Residential	0	674,870	0	0	885,381	1,560,251
TOTAL	**231,820**	**899,826**	**139,930**	**171,571**	**885,381**	**2,328,528**
No. Dwellings	0	7,499			8,049	15,547

* Assumes 25% of the mix is non-residential

Source: Working draft ILP (August 2020) prepared by Camden and Liverpool Councils, DPIE and LFA, as well as building heights under the current SEPP.

In the above table it is assumed that the R3 zone will develop a combination of town houses and apartments and that residential would be prohibited in the B3 Commercial zone. The table above shows an ultimate yield of around 15,500 dwellings and around 390,000 square metres of commercial floor space in the Commercial core and mixed use zones.

At first glance the amount of commercial floor space is well above the level that the market could absorb for decades. Also, the tipping point analysis undertaken by HillPDA suggests that these building heights and densities are a little too low to ensure development feasibility, although we would expect the market to strengthen over time, particularly as Sydney will grow and land will become increasingly scarce. As a result, we modelled a higher density option in line with the feasibility results of the tipping point analysis which is provided in the table immediately below.

Table 12: Dwelling and employment capacity in LTC –development scenario under the Working draft ILP (Aug 2020) and recommended FSRs

	B3 Commercial Core	B4 Mixed Use	B5 Business Dev	IN2 Light Industrial	R3 Medium Density Residential*	TOTAL
Net Site Area (ha)	9.27	44.99	13.99	34.31	88.54	191.10
FSR	4.5	3.0	1.0	0.5	1.2	
Commercial	417,276	224,957	139,930			782,163
Industrial				171,571		171,571
Residential	0	1,124,783	0	0	1,062,457	2,187,240
TOTAL	**417,276**	**1,349,739**	**139,930**	**171,571**	**1,062,457**	**3,140,973**
No. Dwellings	0	12,498			10,625	23,122

* Average size dwelling in the R3 zone is slightly smaller than in the low scenario option due to larger proportion of apartments

Building heights are ignored and instead FSR's are adopted based on the tipping point analysis

Source: Working draft ILP (August 2020) prepared by Camden and Liverpool Councils, DPIE and LFA.

The table shows considerably more dwellings – more than 23,000 which is more consistent to the vision of a major centre. First observation suggests that there is too much B4 mixed-use zone and probably too much commercial floor space for the size of the market. This is discussed further in Part B of the study Section 8.5.

PART A.5 MARKET RESEARCH

This Chapter analyses trends and factors influencing the property market in the study area and the surrounding locality. It also investigates the sale prices of a range of uses including residential apartments, retail shops and development sites. The research is based on our discussions with market and industry experts as well as a review of relevant property databases. These factors, in turn, inform the feasibility modelling discussed in Chapter Part A.6 and Part B.10.

5.1 Residential market commentary

The Greater Sydney residential market had been experiencing strong capital growth this decade with a recent downturn during 2018. Recent price declines during 2018 and early 2019 were driven by changes to financial regulations and lending practices and a reduction in foreign investment.

Fears of an oversupply in the Greater Sydney apartment market were present for a number of years however a slowdown in construction over the past couple of years in the context of continuing population growth may position the market for a price rebound over the next few years.

The market stabilised during the fourth quarter of 2019 with signs of price recovery emerging. The continued quantitative easing by the RBA of the cash rate supported the increase in market confidence and prices across Greater Sydney. Reasonable employment conditions, low sustained interest rates and strong population growth were also key factors underpinning demand.

However, the COVID-19 pandemic has sent shockwaves across the globe spooking debt and equity markets. While ramifications of the COVID-19 pandemic are too early to predict, the magnitude of its impact on the property market has started to show. Recent data released by CoreLogic show sharp falls in auctions clearance rates, buyer interest and consumer sentiment.

While recent Government led restrictions have managed to stem the rapid spread of COVID-19 across Australia, it seems the Greater Sydney property market has the potential to experience ongoing growth but in the current market conditions are likely to see declines or stagnation in the short term.

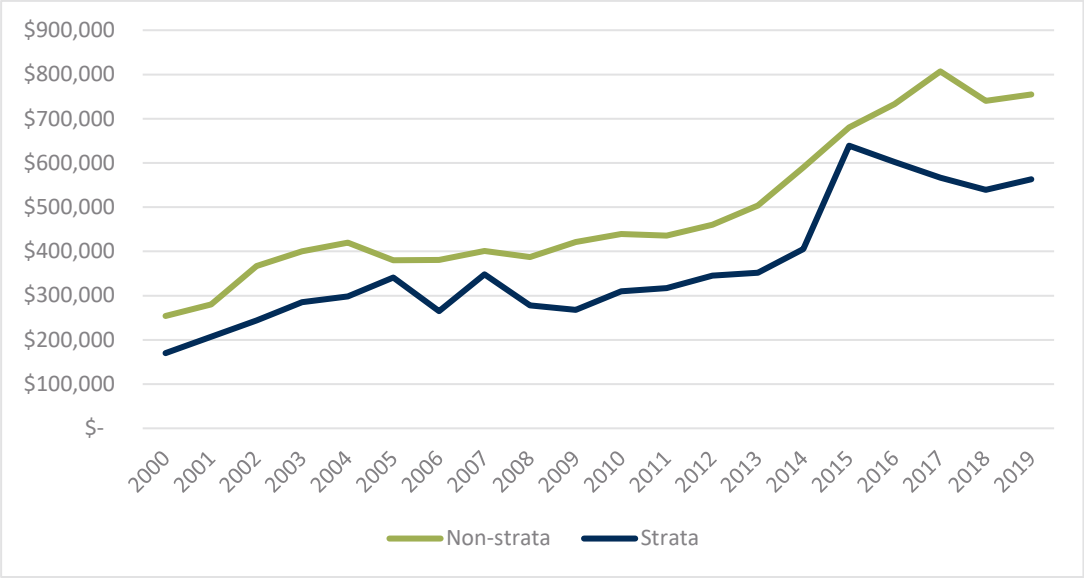
The NSW Government has introduced measures to support the construction sector and the market housing by providing stamp duty relief for first home buyers purchasing newly built properties worth up to $1 million. Other measures include the NSW Government's package of measures to help boost the growth of the 'build-to-rent' sector, including the introduction of a land tax discount for newly build-to-rent housing projects until 2040 and a proposed new Housing Diversity SEPP to provide more housing options.

Median residential sale values

Core Logic reported in May 2020, the median sale value for a non-strata dwelling (house) within the Camden LGA was $709,000. With respect to strata-titled properties, the median price within the Camden LGA was $577,500. It is important to note that strata refers to all strata titled dwellings including units, townhouses, terraces, and semi-detached dwellings.

Trends in residential median capital growth for houses and units in the Camden LGA over the last 10 years have been analysed and the LGA provided sufficient data points to understand the spread. Despite the limitations of the data, the analysis in the figure below shows there is an increasing spread between the median house and unit price. An increasing spread between units and houses suggests a pent-up demand for units based on its affordability threshold. There is an opportunity to provide housing diversity opportunities where higher density living will increase the population and safeguard Leppington as a strategic centre.

Figure 15: Historical trend of the Median Capital Growth in Camden LGA



Source: FACS December 2019

As shown in the figure immediately above, there has been an increase in house prices in the Camden LGA from approximately $439,000 in 2011 to $755,000 in 2019, representing a 72% increase. During that same time, apartments increased from approximately $310,000 to $563,000, representing an 82% increase. While both types of housing have fallen during 2017/2018, the gap between houses and apartments continues to be large, representing a continued willingness to pay more for a separate house than other housing typologies.

This is particularly noteworthy as this will determine the threshold that a buyer would be prepared to pay for a strata titled dwelling in comparison to freehold dwelling. This stresses the importance of providing high urban amenity as an alternative living lifestyle providing convenience and accessibility. This is important in order to compete with typical land and house packages and leverage off the railway station to ensure strong market absorption.

5.2 'Off the plan' apartment sales

Tabulated below are a summary of 'off the plan' sales located within Edmondson Park, Liverpool and Campbelltown and illustrated in Figure 16: 'Off the plan' sales rate map - $/sqm of residential NSA**.** Further details of the specific project sales are contained in Appendix C.

Table 13: Summary of 'off the plan' sales

Suburb	Type	Sales range	Sales rate ($/sqm NSA)	Take up rates
Edmondson Park	1 BR	$460,000 - $580,000	$9,200 - $10,545	Ed. Square project averaged 200 units per annum
	2 BR	$610,000 - $697,000	$7,875 - $8,713	
	3 BR	$730,000 - $790,000	$7,300 - $7,524	
Liverpool	1 BR	$385,000 - $500,000	$7,000 - $8,636	Papermill project averaged 200 units per annum
	2 BR	$525,000 - $645,000	$6,267 - $8,600	
	3 BR	$580,000 - $680,000	$5,859 - $7,389	
Campbelltown	1 BR	$432,750	$7,868	
	2 BR	$499,500 - $542,250	$6,660 - $7,230	-
	3 BR	$566,250 - $580,500	$5,960- $6,111	

Figure 16: 'Off the plan' sales rate map - $/sqm of residential NSA

Source: HillPDA Research

5.3 Englobo land sales

High-level market research was undertaken for englobo lands in Leppington and surrounding areas. We have examined recent market activity and have had particular regard to the following sales evidence, which we consider set the market parameters by which to establish the land purchase price of the nominated sites may be determined.

The market research showed 'B4 Mixed Use' & 'B3 Commercial Core' zoned land showed a rate of $3,189,762 to $5,795,517 per hectare while 'R3 Medium Density Residential' zoned land showed a rate $3,189,762 to $4,038,997 per hectare which represent englobo land value rates. 'IN2 Light Industrial' zoned land showed a rate of $3,201,970 to $3,926,521 per hectare. The sale rates differ due to a number of reasons which includes the timing of sale, proportion of developable land, land characteristics, location and proximity to the railway station.

In order to establish an appropriate land purchase rate for B4 Mixed Use and B3 Commercial Core zoned land, the most relevant sale is the large sale which sold for a rate of $3.190m per hectare encompassing a substantial landholding and is considered to set the lower limit. We have also considered the sale of 215 Rickard Road, Leppington which showed a sale rate of $4.566m per hectare. We consider the sale of 108 & 116 Ingleburn Road which shows a sale rate of $5.795m per hectare to be skewed by their business model, therefore has not been entirely relied upon.

In regard to the R3 Medium Density Residential zoned land we have relied upon the sale of 23 Glenfield Road, Glenfield which showed a sale rate of $3.6m per hectare (developable land) and the sale of 76 Rickard Road, Leppington showed a rate of $3.737m per hectare.

Figure 17: Englobo sales rate map with relevant sales indicated - $/ha of land area

Source: HillPDA 2020

Key findings

- Our market research revealed a disparity in values between houses and apartments which shows a preference for buyers who are willing to pay more for a separate house than other housing typologies. This is a critical ceiling value for strata titled dwellings
- The preference for freehold over strata shows the importance of providing high urban amenity as an alternative living lifestyle providing convenience and accessibility. This is important in order to compete with typical land and house packages and leverage off the railway station to ensure strong market absorption
- Based on our market research we have adopted the following land purchase price as follows:

Zoning	Superlot Size	Land purchase (exclusive of GST)
B3 Commercial Core	1 Ha	$6,000,000
B4 Mixed Use	1 Ha	$6,000,000
R3 Medium Density Residential	1 Ha	$4,000,000

PART A.6 RESIDENTIAL FEASIBILITY ANALYSIS

This Chapter outlines our tipping point analysis, where the base case building height or FSR was not found to be viable and further feasibility testing was undertaken to determine the tipping point. This tipping point is the minimum FSR required to achieve a financially viable development based on the established land purchase price. Additional tipping point analysis has been undertaken to establish the bonus FSR that may be adopted to incentivise a developer to construct and dedicate to the Council at no cost affordable housing. Incentivise the participation in design excellence and low carbon building planning mechanism. The Chapter also further outlines the assumptions for the financial modelling and provides a summary of the results.

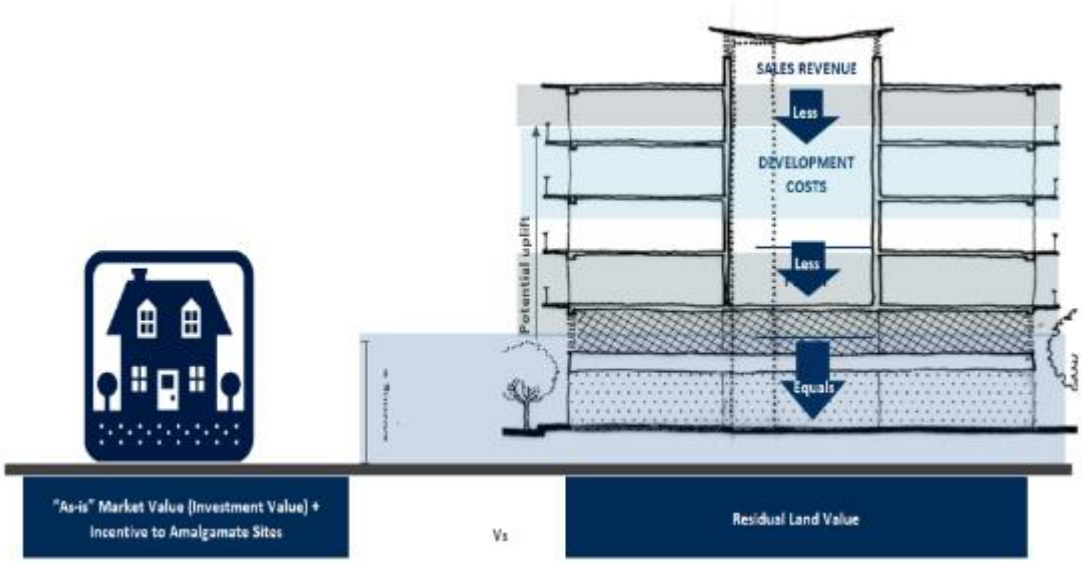
6.1 Feasibility methodology

To undertake the feasibility modelling, we used the propriety software EstateMaster which is an industry benchmark used by developers, financers and property valuers. This method calculates the Residual Land Value (RLV) of a hypothetical development by subtracting, from the anticipated net sales revenue, the anticipated costs of development plus a margin for profit and risk (see Figure 18).

Any unpredicted change, such as an increase in developer contributions or development costs in the short term could have a notable effect on development feasibility unless it can be absorbed by either making allowances in the project contingency or increases in market sale values for the developed product.

The RLV calculated from the hypothetical feasibility is the maximum price that a developer would pay for the site and generate their required return given the levels of risk associated with redevelopment.

Figure 18: RLV assessment criteria



Source: HillPDA 2020

Tipping point analysis

The tipping point is the minimum FSR required to achieve a financially viable development. The steps to undertake the analysis is as follows:

6. HillPDA will initially establish the Base Case based on the underlying planning controls which in this study is the existing permissible building heights.
7. Where development options were found not to be viable based on the adopted land purchase price, further feasibility testing was undertaken to determine the tipping point. Typically, the land purchase price is based on the highest and best use of the property, being the higher of either the current value based on its existing use or its residual land value based on its planning controls. For this exercise the highest and best use for the hypothetical sites is based on its development potential.

6.2 Performance criteria

A feasibility assessment is based on profit and risk factors. These two factors are subjective elements that determine the minimal level a developer is willing to purchase a site for. For our hypothetical modelling, regard has been given to the following;

- **Development Margin (DM):** it is the net profit expressed as a percentage of development costs. Typically, the Development Margin (DM) is set at 14% to 20% depending on the type of development and its risk profile.
- **Project Internal Rate of Return (IRR):** is the actual return on the investment on an annualised basis and expressed as a percentage. This approach takes into account the cost of time in its calculation within a cash flow and indicating average returns over a period of time. Typically, this is 13% for small scale residential projects, 16% for commercial office buildings and 18% for residential high-rise towers.
- **Net Present Value (NPV):** is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in capital budgeting and investment planning to analyse the profitability of a projected investment or project.
- **Residual Land Value (RLV):** is the maximum price that a hypothetical developer would pay for the land to achieve acceptable hurdle rates (such as IRR or margin).

To test the viability of the proposed development, HillPDA views the IRR and DM as the appropriate performance measures to understand the viability of each option.

Leppington is a greenfield locality that typically provides house and land packages, however there is an opportunity for Leppington to be a master planned transit-oriented town centre. The high-density housing and commercial/retail market are in its infancy in comparison to established markets such as Liverpool and Campbelltown, in addition due to market disruptions caused by COVID-19 there is a higher degree of risk for developers to invest in the area. Therefore, slightly higher hurdle rates have been adopted.

In light of the criteria established above, the sites were assessed against either or both the target hurdles of **Development Margin of 18% to 20%** and **Project IRR of 16% to 18%**.

Table 14: Industry standard performance indicators

Performance	Large projects		Small projects	
	Project IR	Development Margin	Project IRR	Development Margin
Feasible	> 18%	> 20%	> 16%	> 18%
Marginally feasible	14%-17%	15%-19%	13%-15%	14%-18%
Not feasible	< 14%	< 15%	< 13%	< 14%

Source: HillPDA 2020

A large project is defined by B3 Commercial Core or B4 Mixed Use zoned land which would accommodate a medium to high rise mix use development whilst a small project is defined as a low to medium rise apartment building or walk-up townhome developments.

6.3 Land purchase assumptions

Typically, the land purchase price is based on the highest and best use of the property being the higher of either the current value based on its existing use or its residual land value based on its planning controls.

For this exercise, the highest and best use for the hypothetical sites is based on its development potential and is assumed to be paid upfront. We have relied upon comparable market evidence to understand the dollar rate per hectare rate being paid by developers. This is based on the planning controls afforded to the site at the time of purchase and does not include price speculation.

The market research showed 'B4 Mixed Use' & 'B3 Commercial Core' zoned land showed a rate of $3,189,762 to $5,795,517 per hectare while 'R3 Medium Density Residential' zoned land showed a rate of $3,189,762 to $4,038,997 per hectare which represent englobo land value rates. The sale rates differ due to a number of reasons which includes the size of the land, timing of sale, proportion of developable land, land characteristics, location and proximity to the railway station.

In order to establish an appropriate land purchase rate for 'B4 Mixed Use' and 'B3 Commercial Core' zoned land, the most relevant sale is the substantial purchase by a developer for a rate of $3.190m per hectare encompassing a considerable landholding which would require the staging of development and is considered to set the lower limit. We have also considered the sale of 215 Rickard Road, Leppington which showed a sale rate of $4.566m per hectare and the Woolworths site which shows a sale rate of $5.795m per hectare. However, we consider this to be skewed by their business model, therefore has not been entirely relied upon.

In regard to the R3 Medium Density Residential zoned land, we have relied upon the sale of 23 Glenfield Road, Glenfield which showed a sale rate of $3.6m per hectare and the sale of 76 Rickard Road, Leppington showed a rate of $3.737m per hectare.

A standard sized englobo parcel of land in Leppington is approximately 2Ha and would require a staged development of 2 or more stages. To simplify our feasibility analysis, we have assumed that the land is further subdivided into superlots of 1 Ha and a single staged development would occur. A critical assumption is that 1 Ha superlots are sold at a premium (higher than the above-mentioned analysed sales) to account for servicing costs, construction of local roads, preliminary consultation fees, holding costs, financial cost and to factor the risk associated with land banking. Therefore, it is likely that a higher land value would be applicable to the subject sites on the assumption that the land is fully serviced to the boundary. However, this does not include the costs of servicing / reticulation within the site, embellishment works, local roads, additional professional fees, etc and has been included as a cost in our feasibility modelling.

The land value purchase price adopted in our feasibility modellings are as follows:

Table 15: Land purchase price assumptions

Zoning	Superlot Size	Land purchase (exclusive of GST)
B3 Commercial Core	1 Ha	$6,000,000
B4 Mixed Use	1 Ha	$6,000,000
R3 Medium Density Residential	1 Ha	$4,000,000

These rates do not take into account future uplift in land values in the scenario of a rezoning and uplift in FSR as a result of the planning review.

6.4 Sites & built-forms

Each site has different development parameters, the sites have been selected on the basis that the sites vary in zoning, location, built-form scale and bulk and commercial/retail ratio mix. Furthermore, the sites were chosen to provide a range of development options.

The hypothetical sites across the town centre have been identified for feasibility testing which are representative of the different development built-form, which we have assumed to be constructed over a single stage development and are described as follows:

- **Fringe precinct (1):** 'R3 Medium Density Residential' superlot located within the fringe precinct that would accommodate three storey walk up townhome development
- **Fringe precinct (2):** 'R3 Medium Density Residential' superlot located within the fringe precinct that would accommodate low to medium rise residential apartment buildings
- **Middle precinct:** 'B4 Mixed Use' superlot located within the middle precinct that would accommodate a mixed-use development that would comprise ground floor retail with residential above
- **Core precinct:** 'B4 Mixed Use' superlot located within the core precinct that would accommodate a mixed-use development that would comprise ground floor retail, first and second floor of non-residential and residential above

6.5 Development options

HillPDA tested the following development options:

Base case: The hypothetical development scheme was based on the existing zoning and building height restrictions, as a FSR currently does not apply. More specifically, 'R3 Medium Density Residential' zoned land has a building height limit of 21metres which translates to 6-7 storeys and a base FSR of 2:1. Whilst 'B4 Mixed Use' zoned land has a building height limit of 24metres and 'B3 Commercial Core' has a building height limit of 24 to 30metres, we have assumed this translates to 7-8 storeys and a base FSR of 2.5:1.

Tipping Point: When the above option is found to be not viable, further feasibility testing was undertaken to determine the uplift in FSR and building heights as required to make development viable.

Tipping point variations: The additional scenarios that have been tested include:

- **Affordable housing:** The tipping point or bonus FSR were established on the proviso that affordable housing (i.e. apartments) are dedicated to an affordable housing provider at no cost; 3%, 5% and 10% of total residential GFA were tested.
- **Design Excellence:** This is on the expectation that the development scheme is "…the highest standard of architectural, urban and landscape design" which will include a review by a Design Review Panel which will be determined by standards set by the panel. The tipping point or bonus FSR was established to absorb the additional professional fees costs associated with design estimated as an additional 1%, additional construction cost of 5% and allow an additional time to the development application process of 6 months as confirmed from our conversations with architects (on a National level).
- **Low Carbon Building:** The Camden Local Strategic Planning Statement 2020 highlights that the "Council will advocate for the development of low carbon precincts within the South West Growth Area, with Leppington Town Centre as a pilot precinct – Short Term". Thus, the tipping point were established to absorb additional construction cost of 5% which erred on the conservative side as revealed in our Green Our City Action Plan (GOCAP) study for the City of Melbourne, further details may be found in Appendix D. This showed that the cost increase in construction cost varied between 5.3% to 9.9% for residential and mixed-use development to obtain Greenstar & BESS (Built Environment Sustainability Scorecard) Certification.

6.6 Feasibility assumptions

Construction cost and time estimates assumptions were sourced from Rawlinsons Construction Handbook and our professional experience and are summarised as follows:

Table 16: Feasibility input assumptions

Category	
Gross realisation	
Average sized unit	Residential unit: 93sqm of GFA Residential townhome: 130sqm of GFA
Average end sale revenue[1]	**Residential – Core** 1 bedroom: $470,000 to $530,000, inclusive of GST 2 bedroom:$640,000 to $760,000, inclusive of GST 3 bedroom: $730,000 to $875,000, inclusive of GST The range in the end sale values accounts for the potential views afforded to units on the higher levels. The upper limit was on the assumption of a 30 storey ceiling. **Townhome** 1 bedroom:$500,000, inclusive of GST per dwelling 2 bedroom: $625,000, inclusive of GST per dwelling 3 bedroom: $725,000, inclusive of GST per dwelling **Retail/commercial** Retail: $7,500 to $8,000/sqm of NLA Commercial: $5,000 to $7,000/sqm of NLA
Take-up rates	**Residential :** 100-200 units p.a. over a single stage development
Project costs	
Professional Fees	Design and masterplan: 1% of Construction costs. DA && CC: 1% of Construction costs. Consultants 4.5% of Construction costs. Development Management 1.5% of project costs (excluding land, finance & tax).
Escalation[2]	Construction cost escalation of 2.5% p.a. End sale revenue (i.e. apartments) escalation of 3% p.a. from year 2022.
Construction Costs	As per Rawlinsons & RBL we adopted the following average construction costs net of GST: **Residential & mixed use:** $310,000 to $365,000 per equivalent unit, inclusive of demolition, basement car parking and balconies **Townhome:** $345,000 per dwelling **Commercial**: $2,500/sqm of GBA (cold shell – no fitout) **Podium car parking:** $25,000 per car space
Ancillary costs	2% of constructions costs for landscaping and additional service connections
Construction Period	14-24 month construction period (each stage). We have allowed for a 9 month lead-in period for development approval and an additional 1 to 5 months to achieve the required level of pre-sales prior to construction.
Strata building bond[3]	2% of Construction Costs (on the assumption that the cost is non-recoverable)
Contingency	5% of Construction Costs

Category	
Statutory Fees	Long Service Levy of 0.35% of Construction Cost. Developer contribution: $19,085 per dwelling plus $511,089 per hectare of developable land.
State Infrastructure Contributions (SIC)	$217,343 per hectare
Selling Costs	**Sales Commissions:** Residential: 2.5% of Gross Revenue **Other Costs:** Marketing 1.0% of Gross Sales Legal $1,500 per unit
Land Holding Costs	Statutory costs (Council rates, water rates and land tax) to be paid diminishing with settlements based on a Statutory Land Value. Land tax is paid annually with Council and water rates are paid quarterly in the cash flow.
Financing	
Equity	Assuming 20% of Net Cash Flow to be Funded by the developer.
Loan	5% per annum compounded (Large sized projects – B3 & B4 zoned land)
Feasible Project Hurdle Rates	18% Target IRR and 20% Developer's Margin was used for large projections. 16% Target IRR and 18% Developer's Margin was used for smaller projections.

Source : HillPDA 2020

We are not Quantity Surveyors and have therefore relied on construction cost rates and benchmarks such as Rawlinsons Construction Handbook and RLB Digest to assist in cost estimation.

Explanation of assumptions:

1. As detailed above in the land purchase assumptions, we have adopted superlot values as the land purchase price which includes a premium to account for servicing costs, construction of local roads, preliminary consultation fees, holding costs, financial cost and to factor the risk associated with land banking
2. We are of the opinion that the residential end sale revenue in the core precinct is equivalent or slightly higher than the prices achieved in Edmondson Park by Frasers. This is due to a number of reasons which includes:
   - Our hypothetical development schemes have an upper limit of 30 storeys which are more elevated than Ed. Square, therefore slightly higher revenues have been adopted for the more elevated development
   - Its proximity to the railway station and public amenity
   - Consideration to potential views over the 100metre ridge has also been considered in the sale price adoption.
3. Residential end sale revenue in the fringe precinct is equivalent to Campbelltown & Liverpool small project prices as it is located further from the core and its benefits
4. The cost escalation of 2.5% p.a. is consistent with the inflation target is set by the RBA in view of the long run performance of the Australian economy. Presently this inflation target is set at 2-3% p.a. on average over time. The sale revenue escalation of 3% has been established as a conservative p.a. growth as generally speaking property growth are several points higher than inflation. We have assumed that this increase in sale revenue would apply in 2022 as we have made a critical assumption of a market stabilisation post-COVID to occur at this time

5. The Strata building bond is a requirement to pay a building bond to NSW Fair Trading equal to two percent of the building contract price. This scheme is a result of recent media coverage of major defects found in residential towers such as the Mascot Towers apartment complex and Opal Tower.

6.7 Development scheme specification for the Base Case

The hypothetical built form is based on the planning controls contained within the Growth Centres SEPP & DCP and below is our assumption of the development scheme for the **base case only**:

Table 17: Development scheme for the base case

Precinct	Fringe (1)			Fringe (2)			Middle			Core		
Development type	**Multi-dwelling residential**			**Medium rise residential**			**Medium to high density mixed use**			**Medium to high density mixed use**		
Site Area	10,000sqm			10,000sqm			10,000sqm			10,000sqm		
Zone	R3 medium residential density			R3 medium residential density			B4 Mixed use			B4 Mixed use		
Permissible building heights	21metres			21metres (5 to 6 storeys)			24metres (7 to 8 storeys)			24metres (7 to 8 storeys)		
Type	Walk-up townhome			Low rise residential apartment building			Mixed use – Ground floor retail and residential above			Mixed-use - Grd floor retail,1st and 2nd floor commercial and residential above		
Base FSR[7]	1.2:1			2:1			2.5:1			2.5:1		
Building Areas	12,000sqm of GFA			22,500sqm of GBA 20,000sqm of GFA 18,450sqm of NSA			27,500sqm of GBA 25,000sqm of GFA 20,880sqm of NSA			27,500sqm of GBA 25,000sqm of GFA 20,280sqm of NSA		
Dwelling Mix	**1 BR**	**2 BR**	**3 BR**	**1 BR**	**2 BR**	**3 BR**	**1 BR**	**2 BR**	**3 BR**	**1 BR**	**2 BR**	**3 BR**
Yield	9	28	55	46	140	46	43	129	43	16	48	16
Av. Unit Size (NSA)	85	105	130	55	80	100	55	80	100	55	80	100
Retail[8] NLA	-			-			3,780sqm (equivalent to 50 units)			3,780sqm (equivalent to 50 units)		
Commercial[9]	-			-			-			10,200sqm (equivalent to 136 units)		
Total Yield	**93 dwellings**			**232 residential units**			**265 equivalent units**			**266 equivalent units**		
Car Spaces	147 on grade garaging			301 basement car spaces			480 basement car spaces			604 basement car spaces		

[7] Base FSR is based on our estimate of FSR achievable under the building height limits as per the LEP
[8] Average retail shop of 75sqm
[9] Average commercial suite 75sqm

6.8 Table of results

Below are the outputs for our analysis for each scenario as prescribed in Section 6.4 and one variance as described in Section 6.5:

Table 18: Results Table

Precinct		Fringe (1)	Fringe (2)	Middle	Core
Variance		**R3 Superlot**	**R3 Superlot**	**B4 Mixed use Superlot**	**B4 Mixed use Superlot**
Details	**Development type**	Walk-up townhome	Medium rise residential apartment building	Mixed use – Ground floor retail and residential above	Mixed-use - Grd floor retail,1st and 2nd floor commercial and residential above
	Site area (sqm)	10,000	10,000	10,000	10,000
	Purchase price	$4m	$4m	$6m	$6m
Base Case (Current planning controls)	**FSR**	1.2:1	2:1	2.5:1	2.5:1
	Storeys	3 storeys	5- 6 storeys	7 -8 storeys	7 -8 storeys
	Results	Feasible	Feasible	Not Feasible	Not Feasible
Tipping point	**FSR (variance +/- from base case)**			3:1 (↑0.5:1)	5:1 (↑2.5:1)
	Storeys			8-9 storeys	13-14 storeys
	Results			Feasible	Feasible
3% AFH	**FSR (variance +/- from tipping point)**	-	2.25: 1 (↑0.25:1)	3.4:1 (↑0.4:1)	6.5:1 (↑1.5:1)
	Storeys	-	6-7 storeys	9-10 storeys	19-20 storeys
	Results	-	Feasible	Feasible	Feasible
	No. AFH units	-	8	10	16
5% AFH	**FSR (variance +/- from tipping point)**		3:1 (↑1:1)	5.5:1 (↑2.5:1)	10:1 (↑5:1)
	Storeys		8-9 storeys	15-16 storeys	25-26 storeys
	Results		Feasible	Marginally feasible	Marginally feasible
	No. AFH units		18	28	46
10% AFH	**FSR (variance +/- from tipping point)**	-	7.25:1 (↑5.25:1)	9:1 (↑6:1)	12:1 (↑7:1)
	Storeys	-	21-22 storeys	25-16 storeys	>30 storeys
	Results	-	Marginally feasible	Marginally feasible	Marginally feasible
	No. AFH units	-	86	96	116

Precinct		Fringe (1)	Fringe (2)	Middle	Core
Variance		R3 Superlot	R3 Superlot	B4 Mixed use Superlot	B4 Mixed use Superlot
Design Excellence	FSR (variance +/- from tipping point)		2.25:1 (↑0.25:1)	3.25:1 (↑0.25:1)	6.25:1 (↑1.25:1)
	Storeys		6-7 storeys	9-10 storeys	18-19 storeys
	Results		Marginally feasible	Marginally feasible	Marginally feasible
Low carbon building rating	FSR (variance +/- from tipping point)	-	2.25:1 (↑0.25:1)	3.5:1 (↑0.5:1)	6.25:1 (↑1.25:1)
	Storeys		6-7 storeys	10-11 storeys	18-19 storeys
	Results	-	Marginally feasible	Marginally feasible	Marginally feasible

Source : HillPDA 2020

6.9 Results summary

> We recommend that the bonus FSR are periodically reviewed. A conservation bonus FSR should be adopted as we would expect market conditions to improve as LTC grows into a strategic centre.

As anticipated the financial analysis varied from one development parcel to another due to differences in built-form, non-residential to residential ratio, acquisition and site costs and locational attributes. For example, the varying FSR tipping point is a result of the higher land purchase price of B4 Mixed Use and B3 Commercial Core zoned land in comparison to R3 Medium Density Residential zoned land.

6.9.1 R3 Medium density residential tipping point for a viable development project

The above results demonstrate that the current building height limit of 21 metres for R3 Medium Density Residential allows for a viable redevelopment to accommodate three storey walk-up townhome development (as built in the Ed Square masterplan) or a 4 to 5 storey medium rise apartment building.

The tipping point FSR for three storey walk-up townhome development is 1.2:1 and a 4 to 5 storey low to medium rise apartment building development showed a tipping point FSR of 2:1.

The main reason for the disparity in the tipping point FSR is due to the additional cost associated with basement car parking and lift access for a low to medium rise apartment building. These costs are significant in comparison to on-grade garaging provided in a three storey walk-up townhome development.

6.9.2 B4 Mixed Use tipping point for a viable development project

The current building height limits afforded to B4 Mixed Use are not sufficient to achieve a viable mixed use development.

The tipping point for **B4 Mixed Use** zoned land assuming a development scheme of ground floor retail and residential above has a tipping point of **3:1** or **8 to 9 storeys.** Whilst the tipping point for a development scheme of ground floor retail, first and second floor of commercial and residential above has a tipping point of **5:1 or 13 to 14 storeys**. These results show that the viability deteriorated as additional floors of non-residential were added, therefore requiring additional density to achieve a viable development.

6.10 Affordable housing

We understand that Council's LSPS Principle for Housing Growth in Camden No. 11 identifies a short term action to establish an evidence base study outlining a 20 year housing demand and capacity, including affordable housing demand. It more specifically states the development of an Affordable Housing Strategy and Affordable Housing Contribution Scheme. In addition to this, the Council's Draft Local Housing Strategy, dated October 2020 specifies Objective 12: Facilitate the delivery of affordable rental housing by way of inclusionary zoning or incentive schemes. Council proposes to use the incentive scheme which are voluntary and offers bonus density in return for the delivery of affordable housing.

For this purpose, we have investigated the impact of an affordable housing FSR in the Leppington Town Centre and identified the uplift in density required, and still achieve a satisfactory project return. The number of affordable housing dwellings that could be dedicated to an affordable housing provider is contingent on a number of factors such as the cost of construction versus the cost of land. The results shown in Table 18 vary significantly and this is due to the non-residential and residential mix. We would recommend a standardised **bonus FSR of 0.25 to 0.75:1**, this uplift is adequate to absorb the cost of dedicating **3% of affordable housing** to Council at no cost. We would recommend that this bonus FSR would apply to B4 Mixed use land and/or proposed R4 High Density Residential zoned land located within or close to the core precinct where higher end sale revenues are achievable and able to absorb the cost.

We have also undertaken feasibility testing for a 5% affordable housing FSR bonus which show results vary widely between 1:1 to 5:1, this was highly dependent on the development scheme.

We would not recommend the adoption of 5% or 10% of affordable housing in the short term as the land value vs construction costs ratio is currently very low in comparison to markets with proposed or established affordable housing policies such as Chatswood and St Leonards. In these markets any uplift in FSR would result in a higher residual land value. Sufficient to absorb the cost of the construction associated with providing affordable housing to the Council at no cost by the developer.

As the residential market increases over time, more favourable development margins may be achievable, increasing a project's likelihood of absorbing a higher affordable housing levy (i.e. 5%) in the development margin. It is recommended that this result is reviewed periodically as development feasibility will vary over time as the town centre is developed and property market drivers vary altering the pricing trends for sites and units.

6.11 Design excellence

The varying tipping point FSRs shown for the design excellence and low carbon building rating scenario differ widely and is a result of the variable ratio of non-residential and residential. We would recommend a lower bonus FSR than our results on the anticipation that as the LTC matures and higher end sale values are achievable, any uplift in FSR would result in a higher residual land value than at present.

We would recommend a bonus FSR of **0.25:1** in return for the participation and achievement of a **Design Excellence** scheme across all precincts (core, middle and fringe) with the exception of IN1 & B5 as there are limited development options for these zones

6.12 Low carbon building

As similarly shown in the Design Excellence results, the bonus FSR also varies and we would recommend a standardised bonus FSR of 0.25:1 across all precincts (core, middle and fringe) with the exception of IN1 & B5 in return for achieving **a Low Carbon Building standard.**

6.13 Supplementary feasibility analysis

HillPDA has undertaken additional financial analysis in relation to open space FSR transfer and alternative parking by way of podium parking.

6.13.1 Open space transfer

The working draft ILP layout has significant new open space which includes linear parks and plazas. A number of parcels of land are affected resulting in further setbacks and smaller building footprints. In the scenario that the FSR is transferred to the balance of the land after the open space land is dedicated, full utilisation of the FSR would result in higher construction costs associated with the higher built-form. The results showed a potential bonus FSR of 0.25:1 or an increase of <10% to the tipping point FSR of 3:1 for 'B4 Mixed Use' zoned superlot.

The impact of the linear parks and plazas will vary from site to site; however we would recommend a standardised bonus FSR of 0.25:1 to ensure greater acceptance by developers of the working draft ILP.

6.13.2 Podium parking

The Council could consider podium car park levels that are appropriately screened (i.e. green walls, facade screening, apartment sleeving or similar as illustrated in Figure 23: Stamford cosmopolitan) and form part of an integrated facade and sleeved by other uses such as retail, commercial or other non-residential uses.

We have undertaken additional testing of a 'B4 Mixed Use' zoned hypothetical site based on a mixed-use development scheme and car parking was provided by way of podium. The results showed that the developer would achieve favourable returns of an IRR in the vicinity of 24% and DM of 26%. The results also showed that the base case FSR of 2:1 was adequate to achieve a viable development not requiring a tipping point FSR of 3:1.

This option has a number of benefits which includes lower construction cost and permitting the residential apartments above more elevated views resulting in higher project returns. However, higher building height limits would be required to achieve the same FSR.

PART B – RETAIL AND EMPLOYMENT LAND DEMAND ANALYSIS

PART B.7 THE CAMDEN ECONOMY

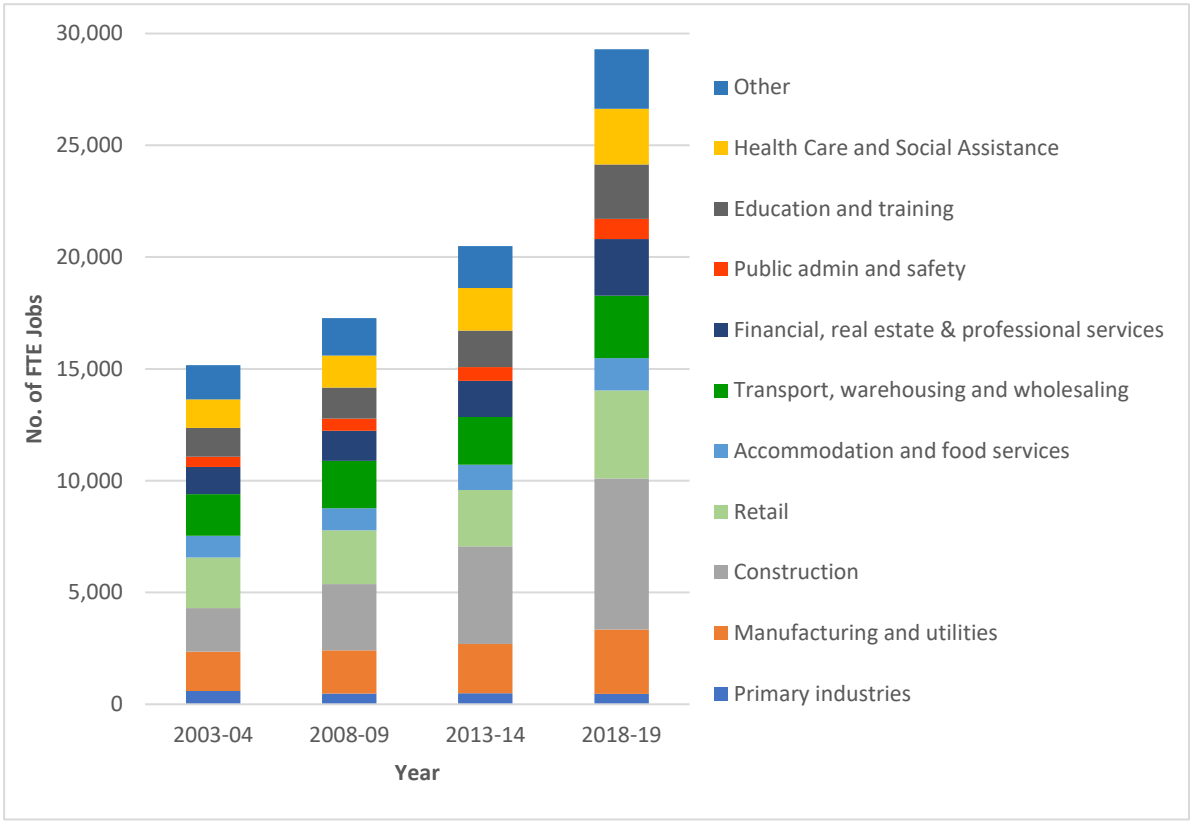
This Chapter undertakes a review of the current and historic economic and employment trends of the Camden LGA. Information in this Chapter has been sourced from the Australian Bureau of Statistics (ABS), Australian Business Registry and Community/Economy.id.

Where relevant, economic performance indicators of the Study Area have been benchmarked against Greater Sydney to further identify any industry specialisation or opportunities for the Leppington.

7.1 Job growth in the LGA economy

This section refers to jobs based in the LGA. The source of the data is Economy.ID which procures statistics modelled by NIEIR to correct for the known undercount of jobs recorded in the Census. Also the data is more up to date than Census. They estimate the total number of persons employed in an industry sector (full-time and part-time) in the LGA regardless of where they live. Jobs by industry since 2003 in the LGA are shown in the chart immediately below.

Figure 19: Total jobs by industry in the LGA 2002-2018



Source: Economy.id

Overall job numbers have almost doubled in the LGA since 2003-2004. The strongest areas of growth have been in:

- Construction with 4,800 more jobs (two and half fold increase)
- Retail trade with 1,685 more jobs (a 75% increase)
- Professional, scientific and technical services with 851 more jobs (135% increase)
- Health care and social assistance with 1,212 more jobs (almost double).

Other 'white-collar' services such as public administration, real estate services and education achieved 90% to 95% growth generally in line with population growth. The only industry that experienced negative growth was agriculture with 170 fewer jobs – a 31% decline.

7.2 Location quotient

Location quotient (LQ) is a simple way of assessing which are the main industries in an area relative to a comparable area or wider region or State.

- Where LQ=1, the identified industry is as prevalent as in the comparable area
- An LQ greater than 1.2 indicates a significant specialisation of the industry in the study area – indicating possibly a key economic strength. Higher numbers indicate a greater specialisation with anything exceeding 2 being a major specialisation
- An LQ between 0.8 and 1.2 means the industry is broadly similar in importance in the study area compared to the comparison region and could be seen as representative
- An LQ under 0.8 indicates an industry which is more important in the comparable area than the study area and may represent an economic weakness or opportunity for growth[10].

The table and chart are shown immediately below

[10] Economy id

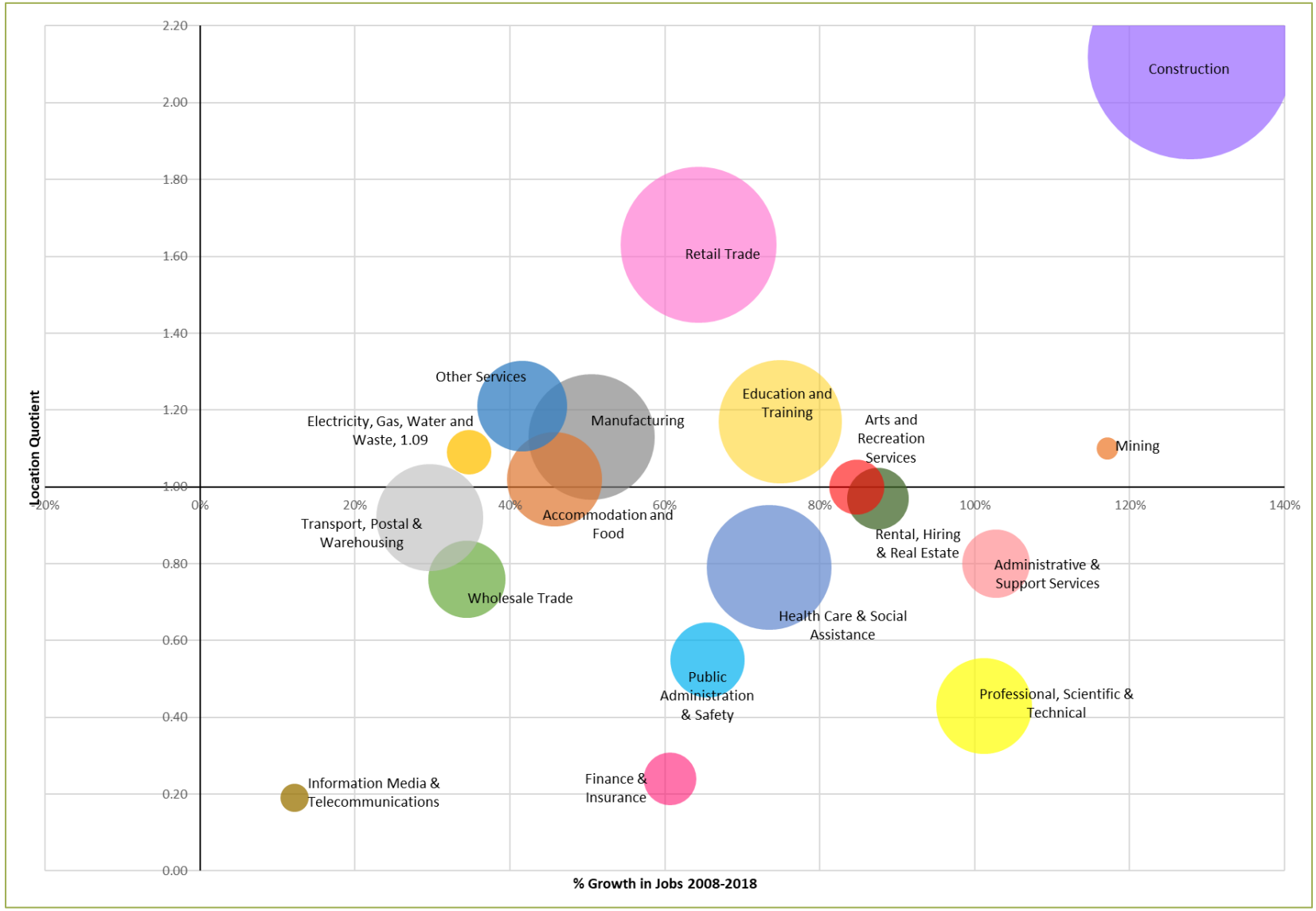
Table 19: Camden LGA FTE Jobs Location Quotient 2019

Industry (ANZSIC)	Camden LGA % in 2019	Greater Sydney in 2019 %	Location Quotient Greater Sydney	Camden LGA % in 2008	Greater Sydney in 2008 %	Location Quotient Greater Sydney	2018/19 - 2007/08*
Agriculture, Forestry and Fishing	1.3	0.4	3.42	2.1	0.4	4.95	-0.31
Mining	0.3	0.2	1.1	0.2	0.2	0.64	0.72
Manufacturing	7.4	6.5	1.13	8.7	9.4	0.93	0.22
Electricity, Gas, Water and Waste Services	0.9	0.9	1.09	1.2	1	1.25	-0.13
Construction	19.8	9.4	2.12	13.5	8.4	1.61	0.32
Wholesale Trade	3.2	4.2	0.76	3.9	5.4	0.73	0.05
Retail Trade	16.1	9.9	1.63	15.7	10.2	1.55	0.05
Accommodation and Food Services	6.8	6.6	1.02	7.4	6.1	1.2	-0.14
Transport, Postal and Warehousing	5.0	5.5	0.92	7.4	6.2	1.21	-0.24
Information Media and Telecommunications	0.5	2.9	0.19	0.7	3.3	0.22	-0.16
Financial and Insurance Services	1.6	6.5	0.24	1.6	6.5	0.25	-0.03
Rental, Hiring and Real Estate Services	1.7	1.7	0.97	1.9	1.8	1.05	-0.08
Professional, Scientific and Technical Services	4.7	11.1	0.43	4.3	9.2	0.46	-0.08
Administrative and Support Services	2.7	3.4	0.8	2.4	3.4	0.7	0.14
Public Administration and Safety	3.2	5.8	0.55	3	5.7	0.54	0.03
Education and Training	9.5	8.1	1.17	9.4	7.1	1.31	-0.11
Health Care and Social Assistance	9.0	11.4	0.79	9.7	9.9	0.97	-0.19
Arts and Recreation Services	1.8	1.8	1	1.8	1.6	1.12	-0.11
Other Services	4.4	3.7	1.21	4.9	3.9	1.25	-0.03
Total Industries	100	100	1	100	100	1	0

* Refers to the shift in location quotient – i.e. change in LQ from 2008 to 2019 divided by the LQ in 2008

Source: Economy.ID

Figure 20: Camden LGA FTE jobs location quotient 2019



Source: Economy.ID, HillPDA

The bubble chart above shows three performance indicators for each of 19 industries (ANZSIC). The size of the bubble relates to the number of workers in the industry and its position to the right of the origin shows growth over the past 10 years. The position of the bubble above the origin shows strong specialisation in that particular industry and below the origin shows underrepresentation as benchmarked against Greater Sydney.

Construction shows strong specialisation and is a reflection of the level of construction work currently undergoing in the LGA. Retail also shows strong specialisation notwithstanding that the LGA currently has no major regional centre. While this may suggest that there is little room to expand the industry it will need to continue to grow to match population growth.

There is an underrepresentation of professional, health and other white-collar industries in the LGA and there is an opportunity to expand some of these industries – particularly with expansion of base industries in the sub-region as the airport and aerotropolis expands over the next several decades.

7.3 Journey to work

In 2016 there were around 40,000 working residents living in Camden LGA but only 24,400 jobs. This is job containment ratio of around 61% - one of the lowest of any of the LGAs in NSW. Only 30% of working residents work in Camden. 16% work in Campbelltown, 11% in Liverpool and 7% in Sydney[11]. The table below shows the job containment ratio by industry in 2016.

Table 20: Job Containment Ratio in Camden LGA by industry 2016

Industry	Working Residents	Jobs in Camden	Job containment ratio
Agriculture, Forestry and Fishing	379	535	1.41
Mining	194	78	0.40
Manufacturing	3,058	1887	0.62
Electricity, Gas, Water and Waste Services	444	273	0.61
Construction	4,904	5781	1.18
Wholesale Trade	1,460	894	0.61
Retail Trade	4,252	2739	0.64
Accommodation and Food Services	2,075	1277	0.62
Transport, Postal and Warehousing	2,681	1681	0.63
Information Media and Telecommunications	489	106	0.22
Financial and Insurance Services	1,490	366	0.25
Rental, Hiring and Real Estate Services	765	496	0.65
Professional, Scientific and Technical Services	2,022	1161	0.57
Administrative and Support Services	1,142	594	0.52
Public Administration and Safety	2,773	697	0.25
Education and Training	3,714	2021	0.54
Health Care and Social Assistance	4,135	2185	0.53
Arts and Recreation Services	540	361	0.67
Other Services	1,603	1102	0.69
Industry not classified	1,908		
Total Persons	**40,028**	**24,234**	**0.61**

Source: ABS Census 2016 and Economy.ID

[11] Journey to Work (Census) 2016

The table above shows the underrepresentation of jobs in Camden in particular industries. Professional and other white collar industries including financial services, medical services, education, communications and public administration are particularly underrepresented. There may be a good opportunity to target some of these industries for Leppington given that Leppington is currently the only centre in the LGA with a train station. Target industries should be State Government authorities, a hospital and/or other health services and a possible tertiary education campus. These uses would assist in addressing these levels of low specialisation (as benchmarked to Greater Sydney) as well as reversing the low levels of job containment.

PART B.8 FORECAST SUPPLY AND DEMAND OF EMPLOYMENT USES

This Chapter has relied upon our findings in Part A – Housing market demand analysis which forecast population and dwelling numbers, thus chapter will now forecast the required levels of retail, commercial and other employment land uses generated by, and to support, the trade area population.

New suburbs and fringe growth areas do generate a need for local jobs in retail, personal services, schools, etc but typically will meet no more than around one third of jobs for the working residents. Apart from population this chapter will consider the strategic positioning of Leppington in the Southwest corridor and its relationship to the new airport and aerotropolis as well as other factors that may influence the demand for employment uses in the town centre.

8.1 Demand for shop front space

The demand for retail and commercial space that is largely population serving will increase as the population increases in the locality. Demand is likely to increase at a faster rate than population due to the hierarchical nature of centres. In the early years it is expected that Leppington will have a supermarket (most likely the proposed supermarket on the corner of Ingleburn Road and Rickard Road) and a range of specialty stores to serve a local catchment which will largely be the suburb of Leppington. During this period Edmondson Park will provide some additional services including the cinema but residents in the Growth Centre will need to travel to the larger centres of Liverpool CBD, Narellan or Campbelltown/Macarthur to do fashion, leisure and other comparative goods shopping. It will be some time before the wider trade area population reaches a critical mass that can support a major or regional centre in Leppington. Hence Leppington will grow over time to be a strategic centre that will rival the size of Liverpool and Campbelltown.

In its early years LTC will be equivalent in scale and function to a local centre with a trade area most likely restricted to the suburb of Leppington or the Forecast.ID small areas of Leppington North and Catherine Field North and to a certain extent Leppington East. This is an area with a current population of around 9,000 but is expected to grow significantly over the next 20+ years.

Over time Leppington would grow and extend its trade area into the Austral precinct as well as Edmondson Park and Hoxton Park. Eventually it will expand into a strategic centre with a trade area that includes the whole of the South West Growth Centre, the suburbs of Liverpool LGA west of the M7 (Hoxton Park, Horningsea, Cecil Hills and Middleton Grange) and the Aerotropolis lands. Potentially it can further expand its role in providing support services for the airport and Aerotropolis lands and/or providing housing for the workers in this area.

Residential and future residential land for low-density housing in the SWGC will run out by 2050 meaning that production of new detached housing will virtually cease. However, production of apartments and mixed use developments in the Leppington Town Centre is expected to continue for a further 20 plus years. Post 2050 as new centres are developed and supported with public transport infrastructure some low density residential areas could be redeveloped for apartment living. Forecast population for these trade areas is shown in the table immediately below.

Table 21: Leppington trade area population forecast

Trade Area Population	2021	2026	2031	2036	2041
Town Centre Population	1,200	3,400	7,400	13,200	20,500
Local Centre Trade Area population*	10,500	23,800	43,000	69,900	77,900
District Trade Area population**	36,500	78,400	113,200	131,800	143,900
Main Trade Area population***	128,100	176,000	248,200	313,500	367,500

* Largely the Leppington and Leppington North Precincts

** Includes Austral, Edmondson Park and Hoxton Park

*** The SWGC plus the existing suburbs of Liverpool west of the M7

Sources: DPIE 2019, Forecast.ID and HillPDA

With a population of more than 10,000 next year the local trade area can already support a full-line supermarket with a range of specialty stores – predominantly food and grocery and other regular or 'chore' shopping services such as chemist, newsagency, etc. Such centres are usually between 5,000sqm and 10,000sqm gross leasable area retail (GLAR) in size and the anchor supermarket space would occupy half or, in some cases, more than half the floor area.

By 2030 the population in the district area will reach 100,000 which is sufficient to support a district size centre (regional centre as defined by PCA) of around 40,000sqm to 60,000sqm. By this stage Leppington would pass Edmondson Park as the main centre. Traditionally such a centre would have one or even two discount department stores although the recent performances of DDSs have been poor and a number of Target, Country Target and Big W stores have been closing. Kmart is the only DDS that has improved its performance over the past decade. Nevertheless, with a population of 100,000 in the trade area we would expect at least one DDS or some new format retailer to substitute. By 2030 there would be more than 20,000 people in the local trade area which would support a second full line supermarket and/or fresh food hall. A centre of this size would also begin to introduce a range of entertainment, educational, financial, medical and other non-retail services such as a library, cinemas and the like.

The above table shows that by 2036 the population in the wider main trade area will reach 300,000 which is sufficient to support a large regional centre including department stores, fashion stores and bulky goods. Traditionally we would expect a national department store (e.g. Myer or David Jones) to anchor the centre but again these retailers have lost considerable market share over the past couple of decades. If not a national department store, then the centre could have a wide range of category killers and other new formats to replace this role. By 2041, with a wide trade area of more than 350,000 the centre could accommodate as much as 160,000sqm of GLAR.

As the Major Centre, Leppington should also provide a range of non-retail employment uses including commercial buildings, government departments, possibly a second Council administration building, Council library, town square and entertainment uses.

Entertainment uses could include a mega-cinema complex, ice rink or ten-pin bowling. The fringe of the retail centre should comprise other associated land uses such as RSL or sports club, sports ground and aquatic centre. Other possible uses for a Major Centre could include a performing arts centre, university campus or TAFE, museum and hospital.

Across Australia there is around 2.2sqm to 2.3sqm of shop front space per person. In a wide trade area of 350,000 persons we would normally plan for around 780,000sqm although it this case we would expect some net escape expenditure[12] in the order of 7% to 10%. Hence around 2sqm per person should be planned for.

[12] Refers to expenditure by residents outside the main trade area

In the retail hierarchy an appropriate mix would be as follows:

Table 22: Suggested retail hierarchy and shop front floor area in the main trade area* by 2041

Centre	% of Total	No. of centres	Sqm	Avg Size
Regional (or Strategic) Centre	21%	1	160,000	160,000
District (or sub-regional) Centres	21%	4	160,000	40,000
Local Centres	22%	20	170,000	8,500
Neighbourhood	9%	50	70,000	1,400
Bulky goods / out-of-centre	20%		150,000	
TOTAL	**100%**		**710,000**	

* Defined as the SWGC plus the suburbs of Liverpool west of the M7 motorway

Source: HillPDA

Shop front space is mostly retail space and food services but around 12% to 15% is likely to be occupied by non-retailers such as travel, financial, real estate and some medical services. The above figures also allow for some level of vacancies – say 3% to 5% which is considered a healthy level. Approximate demand for shop front space or gross leasable area retail[13] in Leppington town centre in the timeline is as follows:

Table 23: Demand for GLAR in Leppington town centre (sqm)

	2021	2026	2031	2036	2041	2046
Gross leasable area retail (sqm)	6,500	15,000	70,000	130,000	155,000	170,000

Source: HillPDA

8.2 Demand for office space

Forecasting the demand for commercial office space in the Leppington town centre is more vexed, particularly with the current COVID 19 impacts. On the one hand major centres of this size such as Campbelltown, Liverpool and Penrith CBDs have a strong supply of office space in dedicated office buildings and above shop front space in mixed-use buildings. Total floor area of office space is similar to total shop front space. However much of this space was developed in the 1970s and 1980s. There has been little addition to supply post 1991 largely due to lack of feasibility – that is the market rents and end values of new office space in these suburban locations have been insufficient to make development viable and residential apartments including shop top housing have outperform office space.

Quite likely the COVID 19 impacts and an increasing number of people working from home in the long run could reverse this long-term trend. Nevertheless, it is likely that in an expanding centre such as Leppington there will be a market need for incubator spaces, meeting rooms and the like as part of the employment mix. Space will be required, but it may be more flexible rather than permanent. These spaces can provide facilities and services for local resident workers without the need for them to travel into Sydney CBD.

[13] Or GLAR as defined by the Property Council of Australia. This refers to shop front space generally occupied by retailers but in some cases occupied by non-retail service providers including medical, financial, real estate and travel. It excludes office space that is not suitable for retailing.

Closer to the commercial core area some mixed use buildings are likely to incorporate above ground level commercial space to accommodate a range of services such as educational, medical, financial, accounting, professional, personal, business and the like. This would also include some entertainment uses, childcare and a potential range of other employment uses. First level employment space and/or minimum percentage of non-residential FSR could be included in the planning controls to ensure a reasonable supply of employment floor space and maintain a healthy job containment ratio in the LGA. We would recommend such development standards on properties fronting the main street through the B4 zone within say 400m of the train station.

8.3 Demand for other uses

Demand for community and entertainment uses will expand as the LTC grows. A centre of this size rivalling Liverpool CBD and Campbelltown would have around 3 or 4 clubs and hotels. There is potential for Leppington to have additional hotels if it expands further into the aerotropolis market. Other possible uses in the entertainment industry would include an ice rink and ten pin bowling alley.

Generally, a primary school is required for every 5,000 persons and a high school for every 8,000 to 18,000 persons, although a high proportion of apartments in the town centre is likely to lower these thresholds as household sizes would be smaller than the LGA average. Nevertheless, a vertical primary and high school in the town centre is a further land use that would have strong support. Finally, with a population of 350,000 in the main trade area a TAFE college, a university campus and hospital are all possible and viable land uses that would make a strong contribution to the vitality of the centre.

8.4 Demand for industrial lands

Estimating demand for industrial lands is vexed because of the number of variables involved. Industrial lands vary by zoning and type of industrial (light, heavy, mixed, waterfront, manufacturing, transport and warehouse related, etc) and locational attributes. Some industrial uses required proximity and access to ports, airports, major motorways, labour source/population, or specific markets.

The other important consideration is competition between industrial precincts. Some business can locate in any number of estates and in some cases can even decide between cities and States. Its proposed to have an industrial precinct within the LTC but this estate is likely to face some competition with some of the surrounding industrial precincts such as Prestons, Ingleburn, Austral and the Aerotropolis. There is 41 hectares of Light Industrial zoned land in Austral which is likely to be a strong competitor given the timing of development. The Aerotropolis will be somewhat differentiated given its size and its proximity to the airport.

The likely role of the industrial precinct in the LTC will be population servicing – providing urban services for residents and businesses in the locality. This will include a wide range of services such as auto servicing and repairs, auto rentals, depots, food and other light manufacturing, self-storage, storage and distribution, dark stores, engineering services, building, hardware, landscaping and timber supplies, contractors, administration and support services, places of public worship, sex premises, childcare, educational services, recreation and fitness facilities, etc.

Given its location the LTC could attract new industries post 2030 such as healthcare (bio-medical, eHealth and allied services), intelligence industries (ICT design, consultancy and management services) and communications and media (software, gaming, media, entertainment, design and arts management). There may be some opportunities for services related to the airport although most airport related businesses will locate in the Aerotropolis.

The NSW Employment Lands Development Monitor 2019 prepared by DPIE shows 7,065 hectares of developed IN1 zoned land and 1,834 hectares of developed IN2 zoned land in Greater Sydney. This calculates to 14.1sqm and 3.7sqm per person, respectively. Developed IN2 zoned land may provide a useful benchmark to measure

the demand for urban services although urban services can be found in some IN1 zoned precincts. If we adopt a rate of 4.0 hectares per capita then the district area of Leppington, Leppington North, Austral and Edmondson Park would generate a demand for almost 60 hectares of land by 2041. Austral and Leppington combined will provide around 70 to 75 hectares suggesting that the amount of land planned for is satisfactory.

We expect the area would be developed at an average FSR of around 0.75:1 and market take-up would align with population growth. The industrial precinct should be fully developed by 2041. The precinct could advance earlier with an aggressive marketing drive.

8.5 Capacity of Leppington town centre under working draft ILP

Capacity of the town centre depends on the zonings of land and the ultimate floor space ratios that are adopted. The floor areas shown in the table immediately below is based on working draft ILP.

Table 24: Dwelling and employment capacity in LTC –development scenario under the Working draft ILP (Aug 2020) and recommended FSRs

	B3 Commercial Core	B4 Mixed Use	B5 Business Dev	IN2 Light Industrial	R3 Medium Density Residential*	TOTAL
Net Site Area (ha)	9.27	44.99	13.99	34.31	88.54	191.10
FSR	4.5	3.0	1.0	0.5	1.2	
Commercial	417,276	224,957	139,930			782,163
Industrial				171,571		171,571
Residential	0	1,124,783	0	0	1,062,457	2,187,240
TOTAL	**417,276**	**1,349,739**	**139,930**	**171,571**	**1,062,457**	**3,140,973**
No. Dwellings	0	12,498			10,625	23,122

* Average size dwelling in the R3 zone is slightly smaller than in the low scenario option due to larger proportion of apartments
Building heights are ignored and instead FSR's are adopted based on the tipping point analysis
Source: Working draft ILP (August 2020) prepared by Camden and Liverpool Councils, DPIE and LFA.

First observation suggests that there is too much B4 mixed-use zone. Also, with more than 570,00sqm of commercial floor space in the B3 and B4 zones and a further 140,000sqm in the Business Park zone it is likely to take well over five decades for the market to absorb this amount of space. By comparison, Norwest Business Park currently has a little over 500,000sqm.

Based on current market values a commercial development in the B3 zone would not be viable under any density – certainly not on a speculative basis. It would require a pre-commitment from a major tenant. As Leppington grows there will be possible opportunities for some government and other institutional uses such as a hospital, TAFE, university campus or the like that could develop in the B3 zone.

There are some other factors that undermine Leppington's ability to become a major business centre. This includes strong competition from other areas including Liverpool CBD, Campbelltown, the Airport and the Aerotropolis. The COVID 19 period may be a short-term impact on the economy but there are views in the industry that it would have longer term impacts in reshaping the place of work with greater numbers of people working entirely or partially from home. All this may result in some reduced need for commercial office space.

PART B.9 MARKET RESEARCH

This Chapter should be read in conjunction with the market research in Part A: Housing market demand analysis which focuses on the residential market. The market research includes 'off-the-plan' sales and resales of established residential apartments within Edmondson Park, Campbelltown and Liverpool. Englobo land sales in Leppington were also analysed and summarised in the chapter.

To support Part B: Employment land analysis, we have undertaken additional market research of the retail and commercial market in the surrounding locality.

9.1 Commercial market commentary

Leppington does not have an established retail and commercial market. Emerging market Oran Park shows the importance of providing the right mix of amenity, services, well planned public space and public transport to ensure the sustainability and a greater share of the office demand generated by the surrounding population growth over the next 20 years.

In accordance with a Knight Frank agency report March 2020, there is continued uncertainty in relation to the outbreak of COVID-19 and its impacts on the global economy that are impacting assumptions to short-term outlooks.

The Paramatta prime commercial office market reported a vacancy of 0.4% as at January 2020 and the impending compulsory acquisitions of various sites to make way for the Sydney Metro West project may see tenant displacement in mainly C and D grade office space from mid-2021. Knight Frank anticipates seeing an increase in tenant activity in the South West; more specifically Bankstown and Liverpool as they also offer tenants more affordable office space. However, the timing will be influenced by the ongoing climate of uncertainty.

Although the above comments do not directly relate to the Leppington market, there would be opportunity in the future once the commercial market matures and Leppington is recognised as a strategic centre and tenants seek more affordable commercial space.

HillPDA also undertook market research of strata titled retail and commercial properties within the surrounding LGAs that would be used as end sale revenue inputs in our feasibility modelling. Our sales evidence indicates that a rate of $2,620 to $9,722 per sqm of NLA was achieved based on recent sale evidence.

Table 25: Commercial sales

Address	Sale price Sale date	Int. area $/sqm int	Comments
Shop R3, 4 Hyde Parade, Campbelltown	$3,200,000 July 20	550sqm $5,818	Initially sold as an investment tenanted by Pancakes on the Rocks which has since surrendered the lease. Sold to an owner-occupier by medical group of $450/sqm net. Reduced pre-Covid price of $3.35m (4.5% discount).
18/58 Bathurst Street Liverpool	$410,000 Jan. 20	52sqm $7,885	Ground floor retail or office with single car space. Partitioned offices with reception area provided.
Lots 101 & 102, 1-11 Spencer Street, Fairfield,	$862,500 March 20	186sqm $4,637	Two adjoining ground floor retail/commercial strata units in modern mixed use building. Located opposite the Court House.
Lot 1 ,3 & 4, 11 Elizabeth Street, Liverpool	$2,625,000 Jun-Dec 18	485sqm $5,412	A-Grade commercial suites located close to Liverpool Hospital. 6 secure car spaces.
211 Northumberland Street, Liverpool	$52,500,00 Nov. 19	7,645sqm $6,867	Freehold 4-storey commercial building with 179 car spaces. Situated on 3,030sqm of land. Fully - tenanted to Department of Human Services at $452/sqm net. Sale represents a yield of 6.6%.

Address	Sale price Sale date	Int. area $/sqm int	Comments
Woolworths, 176 The Boulevarde, Fairfield Heights	$23,800,000 Nov. 19	3,703sqm $6,427	Freestanding full-line Woolworths Supermarket with two supporting specialty shops situated on 5,145sqm of land. Secured by 15 year initial term expiring 2033 with 4 x 10 year options with est. net income of $1,338,753 pa. Sale reflects a yield of 5.62%.
Grd, 360-364 The Horsley Drive Fairfield	$5,000,000 Oct.19	1,281sqm $3,903	Large ground floor office and forms part of a mixed use development.
1/13 Blaxland Road Campbelltown	$700,000 Dec. 19	72sqm $9,722	Café sold leased for $50,895 p.a. gross (or $601/sqm net) for a remainder of 2 years plus 4 year option. Sale equates to 6.18% yield.
G05-G09, 4 Hyde Parade, Campbelltown	$2,370,000 Dec. 18	483sqm $4,907	Consolidated 5 strata titled lots. Sold leased for $184,000 p.a. gross (or $381/sqm net) to a radiology practice. Provides 16 under cover basement parking. Sale equates to 6.6% yield.
171 Queen Street, Campbelltown	$19,315,000 April 19	7,371sqm $2,620	Freehold commercial building sold full-tenanted at $262/sqm net (under-rented) which reflects a passing yield of 10%.

9.2 Commercial rents

1 Oran Park Drive, Oran Park

This development was completed circa 2015 and achieved pre-commitment of the majority of retail and part of the commercial prior to completion. The development comprises a mix of ground retail premises and commercial office accommodation above. The office suites range from 88sqm to 500sqm, with achieved rents ranging from $400/sqm to $450/sqm gross. Level of interest have been mainly from professionals such as accountants and lawyers. Take up rate for majority of the remainder of the commercial suites took approximately 12 months post completion.

Figure 21: 1 Oran Park Drive, Oran Park

Source: HillPDA Research 2019, realcommercial.com.au and Google Street view

Discussions with the local leasing agents revealed that 307/1 Oran park Drive recently (September 2019) leased for $450/sqm gross for a 101 sqm office. There is currently one office suite currently being market for $450/sqm gross for an area of 120sqm.

TRN house - 100 Podium Way, Oran Park

Recently completed (2020) A grade office building over six storeys. In late 2019 the leasing agent indicated that 65% of the building has already been sold/ leased. The suites range from 92sqm to 320sqm, with achieved rents ranging from $450/sqm to $500/sqm gross.

Discussions with the local leasing agents revealed that a 63sqm commercial suite was recently leased to commence in September 2020 for a 5 year lease term for $444/sqm net. A 3 month equivalent fitout incentive was negotiated.

However, there are commercial suites currently on the market at a reduced net rent of $350 to $450 per sqm of NLA.

Figure 22: 100 Podium Way, Oran Park

Source: realcommercial.com.au

9.3 Market key findings

For the purpose of our financial modelling we have adopted an end sale value rate range of $5,000 to $7,000/sqm of NLA for brand new commercial space and end sale value rate range of $7,500 to $8,000/sqm of NLA for brand new retail space.

PART B.10 NON-RESIDENTIAL FEASIBILITY ANALYSIS

This Chapter should be read in conjunction with the feasibility analysis chapter in Part A: Housing market demand analysis which is focussed on residential only and mixed-use development and includes details of our feasibility assumptions.

In this Chapter we have undertaken additional feasibility analysis of mixed-use development with one and three levels of non-residential and commercial only development.

10.1 Sites & built-forms

Each site has different development parameters, the sites have been selected on the basis that the sites vary in zoning, location, built-form scale and bulk and commercial/retail ratio mix. Furthermore, the sites were chosen to provide a range of development options.

The hypothetical sites across the Town Centre has been identified for feasibility testing which are representative of the different development built-form, which we have assumed to be constructed over a single stage development and are described as follows:

- **Middle precinct (1):** 'B4 Mixed Use' superlot located within the middle precinct that would accommodate a mixed-use development that would comprise ground floor retail with residential above
- **Middle precinct (2): '**B4 Mixed Use' superlot located within the middle precinct that would accommodate a mixed-use development that would comprise ground floor retail and first floor of non-residential and residential above
- **Core precinct (1):** 'B4 Mixed Use' superlot located within the middle precinct that would accommodate a mixed-use development that would comprise ground floor retail, first and second floor of non-residential and residential above
- **Core precinct (2):** 'B3 Commercial Core' superlot located within the core precinct that would accommodate full commercial office building.

Please note that Middle precinct (1) and Core precinct (1) are repeats of scenarios in Part A: Housing market demand analysis, and have been included due to its relevance in relation to Part B – Retail and employment demand analysis.

10.2 Development options

Similarly to the feasibility analysis in Part A: Housing market demand analysis, HillPDA also tested the following development options:

Base case: The hypothetical development scheme was based on the existing zoning and building height restrictions. More specifically, 'B4 Mixed Use' zoned land has a building height limit of 24metres and 'B3 Commercial Core' has a building height limit of 24 to 30metres, we have assumed this translates to 7-8 storeys and a base FSR of 2.5:1.

Tipping Point: When the above option is found to be not viable, further feasibility testing was undertaken to determine the uplift in FSR and building heights as required to make development viable.

Tipping point variations: The additional scenarios that have been tested include:

- **Design Excellence:** This is on the expectation that the development scheme is "…the highest standard of architectural, urban and landscape design" which will include a review by a Design Review Panel which will be determined by standards set by the panel. The tipping point or bonus FSR was established to absorb the additional professional fees costs associated with design estimated as an additional 1%, additional construction cost of 5% and allow an additional time to the development application process of 6 months as confirmed from our conversations with architects (on a National level)
- **Low Carbon Building :** The Camden Local Strategic Planning Statement 2020 highlights that the Council is an advocate for the development of low carbon precincts within the South West Growth Area, with Leppington Town Centre as a pilot precinct. Thus, the tipping point were established to absorb additional construction cost of 5% which erred on the conservative side as shown in our recent Green Our City Action Plan (GOCAP) study for the City of Melbourne which showed that the cost increase in construction cost varied between 5.3% to 9.9% for residential and mixed-use development to obtain Greenstar & BESS (Built Environment Sustainability Scorecard) Certification.

10.3 Development scheme specification for the Base Case

The hypothetical built form is based on the planning controls contained within the Growth Centres SEPP & DCP and below is our assumption of the development scheme for the **base case only**:

Table 26: Development scheme for the base case

Precinct	Middle (1)	Middle (2)	Core (1)	Core (2)
Development type	**Medium to high density mixed use**	**Medium to high density mixed use**	**Medium to high density mixed use**	**Full commercial**
Site Area	10,000sqm	10,000sqm	10,000sqm	5,000sqm
Zone	B4 Mixed use	B4 Mixed use	B4 Mixed use	B3 Commercial Core
Permissible building heights	24metres (7 to 8 storeys)	24metres (7 to 8 storeys)	24metres (7 to 8 storeys)	24metres (7 to 8 storeys)
Type	Mixed use – Ground floor retail and residential above	Mixed-use - Grd floor retail,1st floor commercial and residential	Mixed-use - Grd floor retail,1st and 2nd floor commercial and residential	Full commercial
Base FSR[14]	2.5:1	2.5:1	2.5:1	2.5:1
Building Areas	27,500sqm of GBA 25,000sqm of GFA 20,880sqm of NSA	27,500sqm of GBA 25,000sqm of GFA 20,580sqm of NSA	27,500sqm of GBA 25,000sqm of GFA 20,280sqm of NSA	27,500sqm of GBA 25,000sqm of GFA

Dwelling Mix	1 BR	2 BR	3 BR	1 BR	2 BR	3 BR	1 BR	2 BR	3 BR	-
Yield	43	129	43	29	88	29	16	48	16	-
Av. Unit Size (NSA)	55	80	100	55	80	100	55	80	100	-
Retail[15] NLA	3,780sqm (equivalent to 50 units)			3,780sqm (equivalent to 50 units)			3,780sqm (equivalent to 50 units)			-
Commercial[16]	-			5,100sqm (equivalent to 68 units)			10,200sqm (equivalent to 136 units)			21,250sqm
Total Yield	**265 equivalent units**			**264 equivalent units**			**266 equivalent units**			**-**
Car Spaces	480 basement car spaces			540 basement car spaces			604 basement car spaces			625 basement car spaces

[14] Base FSR is based on our estimate of FSR achievable under the building height limits as per the LEP
[15] Average retail shop of 75sqm
[16] Average commercial suite 75sqm

10.4 Table of results

Below are the outputs for our analysis for each scenario as prescribed in Section 10.1 and one variance as described in Section 0:

Table 27: Results Table

Precinct		Middle (1)	Middle (2)	Core (1)	Core (2)
Variance		**Medium to high density mixed use**	**Medium to high density mixed use**	**Medium to high density mixed use**	**Full commercial**
Details	**Development type**	**Mixed use – Ground floor retail and residential above**	**Mixed-use - Grd floor retail,1st floor of commercial and residential**	**Mixed-use - Grd floor retail,1st & 2nd floors of commercial and residential**	**Full commercial (assumes 70% tenant pre-committed)**
	Site area (sqm)	10,000	10,000	10,000	5,000
	Purchase price	$6m	$6m	$6m	$6m
Base Case (Current planning controls)	**FSR**	2.5:1	2.5:1	2.5:1	**2.5:1**
	Storeys	7 -8 storeys	7 -8 storeys	7 -8 storeys	7 -8 storeys
	Results	Not Feasible	Not Feasible	Not Feasible	Marginal
Tipping point	**FSR (variance +/- from base case)**	3:1 (↑0.5:1)	4.5:1 (↑2:1)	5:1 (↑2.5:1)	
	Storeys	8-9 storeys	12-13 storeys	13-14 storeys	Feasible if podium parking was provided
	Results	Feasible	Marginally feasible	Feasible	
Design Excellence	**FSR (variance +/- from tipping point)**	3.25:1 (↑0.25:1)	5.75:1 (↑1.25:1)	6.25:1 (↑1.25:1)	
	Storeys	9-10 storeys	15-16 storeys	18-19 storeys	
	Results	Marginally feasible	Marginally feasible	Marginally feasible	
Low carbon building rating	**FSR (variance +/- from tipping point)**	3.5:1 (↑0.5:1)	5.75:1 (↑1.25:1)	6.25:1 (↑1.25:1)	
	Storeys	10-11 storeys	15-16 storeys	18-19 storeys	
	Results	Marginally feasible	Marginally feasible	Marginally feasible	

Source : HillPDA 2020

10.5 Results summary

The results tabulated above show a similar trend as Part A, where the financial analysis varied from one development parcel to another due to differences in built-form, non-residential to residential ratio, acquisition and site costs and locational attributes.

B4 Mixed tipping point (mixed use)

The current building height limits afforded to B4 Mixed Use are not sufficient to achieve a viable mixed-use development.

The tipping point for **B4 Mixed Use** zoned land assuming a development scheme of ground floor retail and residential above has a tipping point of **3:1** or **8 to 9 storeys.** Whilst the tipping point for a development scheme of ground floor retail, one to two floors of commercial and residential above has a tipping point of **3 to 5:1** or 12 to 14 storeys. These results show that the viability deteriorated as additional floors of non-residential were added, therefore requiring additional density to achieve a viable development.

It should be emphasised that the cost of construction on a sqm basis of GBA of non-residential is similar to residential, however the end sale value for non-residential is lower and a longer take-up period is expected.

B3 Commercial Core tipping point (commercial only)

The tipping point for a development scheme of a freehold commercial building showed a marginal return at the base FSR of 2.5:1 on the critical assumption that there is 70% lease pre-commitment prior to construction and a S 7.12 contribution of 1% would apply. The results improve significantly if podium car parking is a development option.

A freehold commercial office building development site requires a significant proportion of lease pre-commitment before construction. In the current market conditions, there is no demand for office space in a greenfield locality. Therefore this assessment is on a speculative basis only, it is unlikely to be viable because the net market rent is insufficient to cover the amortisation of capital costs.

We believe that there is no market for a freehold commercial building in the foreseeable future, although we would expect market conditions would improve over time as the LTC grows into a regional or strategic centre.

Design excellence

The varying tipping point FSRs shown for the design excellence and low carbon building rating scenario differ widely and is a result of the variable ratio of non-residential and residential. We would recommend a lower bonus FSR than our results on the anticipation that as the LTC matures and higher-end sale values are achievable, any uplift in FSR would result in a higher residual land value than at present.

We would recommend a bonus FSR of **0.25:1** in return for the participation and achievement of a **Design Excellence** scheme.

Low carbon building

As similarly shown in the Design Excellence results, the bonus FSR also vary and we would recommend a standardised bonus FSR of 0.25:1 in return for achieving **a Low Carbon Building standard**

RECOMMENDATIONS

11 RECOMMENDATIONS

HillPDA recommends the Council respond to the stakeholder consultation feedback and some of the study findings to promote the vision of the LTC. This feedback and the findings are summarised below.

11.1 Strategic considerations

This is a long-term town centre shaping project of 40 to 60 years. Being a long-term project, it is imperative to stage the development which will influence long term outcomes for the centre, therefore a considered approach should be implemented to:

- Masterplan strategy
- Marketing strategy
- Development controls and FSR bonuses.

11.1.1 Masterplan considerations

This masterplan will need to be periodically reviewed along with its guiding principles as property strategies evolve and adapt to the changing community demand, employment, residential outcomes and expectation of Council and State Government legislation. The masterplan is a living vision to best serve the needs of the community and protection of the environment such as the existing creek lines (Bonds Creek, Scalabrini Creek and Kemps Creek) and natural landscape elements.

In HillPDA's project experience, the following considerations should be made for the masterplan:

- Secure commercial floorspace for the future by ensuring a minimum percentage of the floorspace is allocated to the town centre. This is essential for securing jobs close to homes, maintaining the viability of the centre and stimulating the daytime retail economy. A balance of both commercial and residential within the catchment can extend centre activation both during the day and in the evening
- Provide quality and diversity of tenancy mix in order to define the identity and desirability of the centre, creating an attractive place to do business and visit. A centre should cater to the daily and weekly needs of residents and workers, specialise in a dining and/or boutique retailing element, as well as provide social gathering opportunities
- Active street frontages can increase the perceived vibrancy of a centre and optimise surveillance. Where commercial floorspace is over delivered, however, tenancies can be left vacant, having the opposite effect
- We applaud the initiative to provide useful and attractive green and public spaces to enhance the public domain and create break out areas for workers, residents and visitors to the town centre. These passive spaces enhance the amenity of the environment and can be used for other purposes such as public markets and events. Tenancies fronting the public spaces i.e. linear plazas also receive extra benefits in terms of favourable outlooks, enhanced foot traffic and potential passing trade
- Seek opportunities for entertainment venues such as activating parks for both day and night use by leveraging public parks as more active community spaces not only for the daytime but for the night-time as well. Creating an opportunity for shared use, public events like night cinema, formal and informal learning outdoors, delivering learning on display, and attract a diverse group of visitors to the area
- Enhancing the legibility and pedestrian movement capacity within a centre improves convenience for patrons and enhances the pedestrian experience. Creating pedestrian connections that respond to consumer desire lines and reduce the bulk of blocks can increase patronage and the appeal of the centre
- Should provide adequate provision of community facilities progressive to the life of the project which will act as a catalyst to development and investment to the area. This will significantly improve the lives

of residents, workers and visitors to a centre. Community facilities are uniquely placed to play a strong role in a centre, acting as intergenerational facilities to encourage interaction and enhanced community cohesion or providing for the day to day needs of a local community

- The local character and amenity of a place can affect the enjoyment and desirability of the environment, visitation numbers and trends, and consequently the economic activity of a commercial centre and the businesses located there
- Amenity is generally associated with the pleasantness of an area or business environment but also has a physical (or tangible) component. This includes the character and appearance of buildings, proximity to commercial or recreational facilities, quality infrastructure and absence of noise, unsightliness or offensive odours. It also has a psychological or social component. Improving the pedestrian experience can increase centre visitation and attract further investment
- Collaborate and investigate with Transport NSW for other modes of transport such as bus links to Liverpool CBD and Western Sydney Airport and improving the capacity of roads.

11.1.2 Marketing strategy

Council should consider the implementation of a marketing strategy to better inform the private sector of the masterplan vision and the intended town centre shaping development. This will assist in attracting business and investment interest, and ideally competitive tension from developers allowing for a mix of eclectic structures adding to the visual attractiveness (i.e. engage a Place Manager to organise community events).

To support and capitalise on the new masterplan, we have provided the following recommendations that Camden Council could lead with a partner like Landcom or form a special development corporation underwritten by major landowners like the past Rouse Hill Development Consortium to:

Create an identity

- Food events & festivals through all the stages to promote market awareness and attraction to the area to **put it on the Map**
- **Masterplan** and promote **Eat Street(s)** as a vibrant part of the emerging new urban centre
- Commit to an early release of Eat-Street and form a new Entertainment Quarter to promote and fast track higher density development and **where Amenity supports density.**
- Encourage and if necessary, invest to town centre services (childcare; gymnasiums; restaurants and small bars; short term stays) to meet demand for employment growth in emerging knowledge industries and creative uses.

A reason to stay longer

- Promote the place through outdoor activities including open-air cinema and festivals in the early stages
- Promote special events (Shakespeare/Opera/Jazz in the domain;) to raise awareness and lift the cultural awareness of this new place and nightlife benefits
- Look at ways to promote the entertainment aspect (food stalls; live entertainment, rooftop bars).

Work n play

- As part of the identity brand the Leppington Town Centre as a **low emission precinct** as a standout from competing markets. This may attract institutes to re-locate or expand in a new strategically located precinct. The office market preference for green infrastructure is marginal, however it is often packaged with amenities such as childcare centres, gyms, retail, restaurants a high NABERS and Green Star rating or views as part of a premium and A-grade product. Most of the existing stock with green infrastructure assets are single-tenanted or owner-occupied buildings. Often, they are occupied by blue-chip institutions and this may be a strategy to attract institutes to re-locate or expand in a new strategically located precinct.
- Foster relationships with state government agencies and local agents to attract key business to the area, focusing on government or private services that may attract an industry to co-locate or expand such as universities, government bodies and childcare operators.
- Provide a suitable balance between commercial and residential floorspace that support the population catchment and market demand. This may require quarantining future land for commercial or permitting adaptable uses to match demand. Rouse Hill Town Centre has recognised this need for flexibility of use by permitting short term box retailing and open-air parking lots with a view for redevelopment later with more intense development. Shopfront street character and town centre focal point was designed from the start of development to provide confidence in the centre vision.
- Promote the town centre for its night-time economy as an attractive place to visit and live
- Promote a range of community services as an emerging urban centre. (A place to get things done! More than just a shopping centre to buy things)
- Market a start. The transformation of the town centre into a vibrant strategic centre is a 40 to 60 year project. Encourage “first movers" or "catalyst" developments on strategic key sites to bring people to the area. This will also encourage more development to occur later. The development of the other stages of Leppington will also bring demand to the town centre.

11.1.3 Leveraging from Western Sydney Airport

As mentioned above Western Sydney Airport and the Aerotropolis will compete as well as possibly have complementary impacts for LTC. On the one hand the Aerotropolis is better positioned to provide airport related employment being on the future metro-line and with close proximity to the airport itself. The timing of the extension of the Leppington line remains uncertain. There is also likely to be some competition advantages with Liverpool CBD which is a very established centre.

Nevertheless there is a good opportunity for Leppington to leverage from the airport – particularly given that it is starting from a clean canvas. With good design and appropriate planning controls it could develop as destination place – particularly for transient stayers and airport related workers much in the same way that Green Square is to Mascot Airport. Green Square is strategically located between Mascot Airport and Sydney CBD making it attractive for permanent and transient residents, tourists and airport workers. Leppington could duplicate a similar role given its strategic position between Western Sydney Airport and Liverpool CBD. Again good public transport connection to the airport is important.

Given the 24 hour nature of the airport there is an opportunity for LTC to provide the commercial services that meet the demands for these residents, tourists and workers – 18-24 hour clubs, food services, personal and commercial services and the like. These uses can be accommodated in the B3 zone and on the main street in the B4 zone.

The industrial precinct may provide some airport related businesses, but it is likely that these businesses would attract to the Aerotropolis itself. Nevertheless some businesses that meet the needs of residents, workers and travellers in the LTC may locate in the industrial area including for example car rentals and courier services.

Accommodating airport related businesses and services including accommodation is made with the inclusion of the B3 zone land near the train station (discussed in the next section). This could be reviewed in the future based on market achievement.

11.2 Development controls and contributions

HillPDA makes the following recommendations to the planning controls, however early communication would be highly recommended to avoid speculative land purchases and ensure full understanding of expected contributions.

11.2.1 Floor space ratio versus building height controls

We would recommend that the Council to have a preference for FSR controls rather than building height limits. Building height limits may have a role in achieving urban design objectives and minimising overshadowing. However flexibility in height controls enables flexibility in design solutions. Sydney City Council recently endorsed changes to planning controls in Sydney's CBD by removing a 235 metre cap. This has a number of benefits as it allows flexibility in design for towers with smaller floorplates affording district views to the higher floors, minimise the risk of overshadowing and improve visual privacy (adjacent properties use their private spaces without being overlooked). It also allows flexibility in design as the development of the LTC progresses and overshadowing becomes an issue, built-forms with varying heights will allow light permeability.

This will also prevent scenarios such as the DA for 182 Byron Road Leppington which appears to have taken advantage of the topography of the land and lowered part of the ground floor apartments to satisfy the building height limits which is not an ideal planning outcome.

FSR controls simplify development appraisal and the provision of planning incentives (bonus floorspace) for the delivery of planning benefits such as affordable housing, energy efficiency or design excellence (discussed below). The methods could be implemented through VPAs or planning controls similar to the Green Square model where floor space bonuses are granted for the delivery of a range of public benefits.

11.2.2 Transfer of floor space for open space dedication

On properties that will be affected by a new open space reservation we do not recommend the transfer of floor space rights to the balance of the site. This is because:

- The owner will be fully compensated for the loss of that part of their site under compulsory acquisition under the Just Terms Act
- The reservations will be made at the same time as increases in FSRs throughout the town centre are proposed. Hence those owners will benefit from the 'up zoning' of the balance of their site
- There is likely to be some betterment to the balance of the land from the open space corridor given the improvement in amenity.

There is some possibility that some landowners will argue hardship where they have submitted a development application prior to, and incompatible with, the draft rezoning of their land. While the above benefits would be recognised by the owner there may be costs in withdrawing their DA in terms of redesign, holding costs and

general planning risk and uncertainty. Council may need to give special attention to these specific sites and possibly offer additional incentives to encourage owners to withdraw their applications.

11.2.3 Street activation

The planning controls for LTC should include the requirement for street activation on both sides of the defined 'main street' which is the street that runs north-south through the train station. Combined with minimum non-residential floor space controls this will ensure fine grain retail and other land uses on the ground floor that will activate the main street as well as delivering essential services for local residents and workers.

Good design needs to be ensured through other measures such as a DCP and/or master planning. This includes for example that rear access is provided for car parking and deliveries. Footpath widths should be sufficient to accommodate outdoor dining and other street activities and the foyers of multi-level buildings should not be excessive to the point that they disrupt the continuity of shop front activity along the main street.

11.2.4 Flexibility in road overlay for industrial use

Allowing the flexibility to make changes to the road overlay in order to achieve an efficient designed industrial precinct or turning points for heavy vehicles to access loading bays

11.2.5 Podium parking

HillPDA would recommend that the Council would investigate alternative means of providing car parking such as podium car parking, provided above ground floor retail and accommodated between floors 1 to 4. This design has a number of benefits which include lower construction costs and reduced construction times resulting in more favourable project profits and permitting the residential apartments above with more elevated views resulting in higher end sale revenue. However, higher building height limits will be sought to accommodate the additional floors of podium car parking positioned above ground level. The picture immediately below illustrates this type of car parking.

Figure 23: Stamford cosmopolitan (car parking behind waffled façade)

Source: http://pview.com.au/project037.asp

11.2.6 FSRs and building height limits

HillPDA recommends the following FSR tipping points to ensure an economical viable development.

The results show the tipping point for R3 Medium Density Residential zoned land of 1.2:1 of FSR for three storey walk up townhome development (as developed in Ed. Square, Edmondson Park and illustrated below) and 2:1 for low to medium rise (5-6-storey) apartment buildings.

Development in the **B4 Mixed Use** land with ground floor retail and residential above has a tipping point of **3:1** or **8 to 9 storeys.** The same development but with 3 levels of commercial requires an FSR of **5:1** or 13 to 14 storeys to make it viable. These results show that the viability deteriorated as additional floors of non-residential were added, therefore requiring additional density to achieve a viable development.

Tabulated below are FSR scenarios that the Council may investigate; the Tipping point FSR where the FSR is sufficient for development to be viable, Incentive FSR is where the FSR is attractive enough for the developer to start development immediately and Over-stimulated FSR is where the FSR may trigger over development and impact on orderly development.

Table 28: FSR scenarios

	Leppington Town Centre Core			Leppington Town Centre Middle						Leppington Town Centre Fringe			
Land Use Zone	**R4**	**B3**	**B4**	**R3**	**R4**	**B3**	**B4**	**B5**	**IN1**	**R3**	**B4**	**B5**	**IN1**
Minimum FSR (Tipping Point)	2:1	2.5:1	4.5:1	2:1	2:1	2.5:1	3:1	1:1	1:1	2:1	3:1	1:1	1:1
Recommended FSR	3.5:1	4.5:1	4.5:1	2:1	2.5:1	3:1	3.5:1	1.5:1	1.5:1	2:1	3:1	1.5:1	1.5:1
Maximum FSR (Overstimulated)	4:1	5:1	5:1	3:1	2.75:1	3.5:1	3.75:1	1.5:1	1.5:1	2.5:1	3.5:1	1.5:1	1.5:1

[1] Core is generally defined as the main retail precinct and transit boulevard

[2] Middle is generally defined as within 800metre radius from the railway station

[3] Fringe is generally defined as outside of 800metre radius from the railway station

It is critical to highlight that although the FSR may be sufficiently high to attract development, this will not always occur as this is driven by demand and market absorption. This is demonstrated in the earlier stages of Thornton where the land was quarantined until the market improved to a level essential for adequate take -up.

11.2.7 Affordable housing

- We would recommend a bonus FSR of 0.25 to 0.75:1, adequate to absorb the cost of dedicating 3% of affordable housing to an accredited affordable housing provider (at no cost) or an equivalent monetary contribution to Council. We would recommend that this bonus FSR would apply to B4 Mixed use land and/or proposed R4 High Density Residential zoned land located within or close to the core precinct where higher end sale revenues are achievable and able to absorb the cost
- To ensure a wide acceptance to the concept of affordable housing, we would recommend the following:
  - Adequate transition period to ensure current DAs are not affected
  - Early communication to the industry to ensure the cost of providing AFH are priced into development site acquisition. This is to avoid unrealistic owner expectations.
- As the residential market increases over time, more favourable development margins may be achievable, increasing a project's possibility of absorbing the contribution rate levy in the developer margin. It is recommended that this result is reviewed periodically as the development feasibility will vary over time

as the town centre is developed and property market drivers vary altering the pricing trends for sites and units

- We would also recommend that the Council explores the option to allocate land to a Community Housing Provider for the development of affordable housing to meet Council's objectives.

11.2.8 Design excellence

The varying tipping point FSRs shown for the design excellence and low carbon building rating scenario differ widely and is a result of the variable ratio of non-residential and residential. We would recommend a lower bonus FSR than our results on the anticipation that as the LTC matures and higher end sale values are achievable, any uplift in FSR would result in a higher residual land value than at present.

We suggest a bonus FSR of **0.25:1** in return for the participation and achievement of a **Design Excellence** scheme across all precincts with the exception of IN1 & B5 as there are limited development options for these zones. This is on the condition that the development satisfies the criteria of the design review panel and low carbon building rating.

11.2.9 Low carbon building

As similarly shown in the Design Excellence results, the bonus FSR also vary and we would recommend a standardised bonus FSR of 0.25:1 across all precincts with the exception of IN1 & B5 in return for achieving a **Low Carbon Building standard.**

11.2.10 Development contributions

Contribution rates in the contribution plan are driven by assumed household occupancy rates. The Camden Contribution Plan dwellings are assumed to have an occupancy rate of 3.1 persons per dwelling, multi-dwelling housing are assumed to have 2.0 persons per dwelling, and residential flat buildings are assumed to have 1.8 person per dwellings. However, the contributions rates apply on a per dwelling basis could be one factor that does not encourage developers to provide a suitable mix of unit typologies rather they would select a mix that would be most cost effective to the developer. This would also have an impact on where a developer may choose to develop, preferring a neighbouring LGA such as Liverpool and Campbelltown which have lower contribution rates and this would inhibit development activity within the study area. We would recommend that the contributions rates are proportioned to the occupancy rates.

Alterative means to apply infrastructure contributions include applying a Section 7.12 contribution or supplementary infrastructure contribution above a base FSR of say 2.5:1 to assist with the funding of infrastructure.

11.2.11 Inform the public of the infrastructure strategy

The early delivery of enabling infrastructure such as water and sewerage services are methods to potentially unlock development in areas of high land fragmentation. This will prevent delays that impact supply and affordability. We understand that this is currently underway, but we encourage the Council to better inform the private sector and to remove development barriers currently expressed by developers.

Potential collaboration between the Council and Landcom to forward fund critical infrastructure such as roads, drainage, water and sewer in line with the staging of development. The Council could investigate the option of Low Cost Loans Initiative which could assist the Council with the cost of new infrastructure by funding 50% of the interest paid on borrowings related to infrastructure. In order to bring forward the delivery of infrastructure that would support new housing supply.

11.2.12 Development standards to encourage flexible design of commercial

The retail and commercial market is in its infancy therefore it should be purposely built to be flexible in design to allow large format showrooms or university labs as suggested by a developer during the stakeholder engagement. Where non-residential space has the flexibility to be adapted to a more traditional use as the market matures such as medical facilities and co-working space.

11.3 Changes to the working draft ILP

Changes to the working draft ILP are recommended mainly to reduce the amount to commercial floor area to align better with market demand over the next 20+ years. The table immediately below is based on the working draft ILP but the area of B3 Commercial Core and B4 Mixed Use zones is reduced and a new R4 High Density Residential zone is introduced.

When LTC is completely developed the following yields would be achieved based on the suggested net site areas and recommended floor space ratios as illustrated in Appendix F.

Table 29: Dwelling and employment floorspace capacity in Leppington Town Centre

Zone	B3 Comm. Core	B4 Mixed Use	B5 Business Dev.	IN2 Light Industrial	R4 High Density Residential	R3 Medium Density Residential	TOTAL
Hectares	6.5	30.0	14.0	34.2	20.0	84.5	189.2
Total FSR	4.00	3.60	1.00	1.00	3.50	2.00	2.23
Employment FSR	4.00	0.60	1.00	1.00	0.00	0.00	0.49
Residential FSR	0.00	3.00	0.00	0.00	3.50	2.00	1.74
Take-up	80%	80%	80%	80%	80%	80%	80%
Employment (sqm)	208,000	144,000	112,000	273,600	0	0	737,600
Residential (sqm)	0	720,000	0	0	560,000	1,352,000	2,632,000
Total Dwellings*		8,000			6,200	12,900	27,100
Apartments		8,000			6,200	10,320	24,520
Town houses**		0			0	2,580	2,580
Resident Population	0	17,600	0	0	13,600	29,300	60,500
Job density (sqm/worker)	26	28	50	120			42
No. of Workers	8,000	5,100	2,200	2,300	0	0	17,600

* Average size dwelling assumed 90sqm in the B4 and R4 zones and 105sqm in the R3 zone

** Assumes 20% of dwellings in the R3 zone are town houses

The table shows a dwelling yield of around 27,000 which is sufficient to meet market demand well beyond 2061. It should be noted that capacity potential does not translate to supply. Capacity must be viable for development for it to translate to supply. It should also be noted that total dwelling numbers could be higher (perhaps exceeding 30,000) if developers take-up the floor space bonuses.

11.4 Suggested land use mix in the LTC and forecast jobs

Based on the above demand modelling the suggested mix of employment uses and estimated job numbers in the LTC is as follows.

Table 30: Suggested employment uses and estimated jobs in the LTC

Land Use	Pop. Threshold	No.	Avg Size (sqm)	Total (sqm)	Estimated Jobs
Retail (Regional centre)				150,000	5,000
Commercial Office				80,000	5,000
Education					
Long day & multi-purpose childcare centres	5,000	6	300	1,800	60
Primary School	10,000	2	5,000	10,000	200
High School	30,000	1	12,500	12,500	200
Tertiary campus		1	15,000	15,000	150
Health					
Private / Primary Services Hospital		1		15,000	250
Community Health Centre	30,000	1	800	800	20
Community Care Hub	30,000	1	1,000	1,000	25
Medical Centres	10,000	5	1,000	5,000	150
Other				5,000	125
Community Services					
Police station and courthouse	30,000	1	6,000	6,000	100
Branch Library	40,000	1	1,200	1,200	15
Youth centre	30,000	2	500	1,000	15
Neighbourhood/community centres	20,000	2	700	1,400	15
Entertainment / Tourism					
Performing arts and cultural centre	100,000	1	3,000	3,000	30
Clubs and hotels		4-5	5,000	22,000	300
Multi-screen cinema	150,000	1	6,000	6,000	40
Gymnasiums		3	1,000	3,000	25
Other				7,500	80
TOTAL				347,200	11,800
Other					
Business Development				112,000	2,200
Industrial Lands				270,800	2,300
Residents working at home*					1,500
TOTAL				730,000	18,500

* Assumes 6% of occupied dwellings has one working resident working from home
Source: DPIE, Southeast Queensland Social Infrastructure Plan and HillPDA

Not shown in the above figures are jobs in construction which is likely to be around a further 1,000 or so at any one time, although jobs in this industry fluctuate considerably at a local level depending on the number and size of projects.

11.5 Recommendation on rezoning

We recommend some changes to the working draft ILP. The working draft ILP has one or two limitations - the main issue being the conversion of current B4 land to B3 to the north of the train station and the exclusion of shop top housing in the B3 zone. The owners of these sites are likely to argue economic hardship as a result of the 'down zoning' of the land (defined in terms of land value and marketability). It may sterilise the land for a significant period of time.

The working draft ILP shows a 'mainstreet' where retail activity will be concentrated in the B4 zone that is likely to be delivered in the short to medium term as the market is ready now for apartment living as evident by the success of sales in Edmondson Park.

To ensure this 'main street' can come to fruition we recommend that there be a B4 zone fronting the main street and to have an active street frontage on the ground floor with a minimum FSR of 0.35:1 for non-residential uses. Closer to the station and to the north of the station we recommend residential uses be prohibited on the ground floor and first-floor and a minimum non-residential use with a FSR of 0.75:1 on the whole of the site. Both mixed use developments and residential flat buildings without commercial space should be allowed in the B4 zoned lands that do not directly front the main street. Should Council be concerned about possible oversupply of retail space with a spatial distribution that is too wide and disperse then the amount of B4 could be limited further.

We recommend a revised working draft ILP to be generally consistent with that illustrated in Appendix F.

Leppington Town Centre provides an exciting opportunity to create a masterplan community that encapsulates design excellence in sustainable low carbon footprint, a model for future development. A place to get things done in the town centre, to work from home in a customised designed home office with short access to open spaces and recreation facilities. A centre for post-COVID 19 residents within 10 minutes to be entertained in at night and dine with a wide range of choices. Encouraged by our consultation with the large landowners, Landcom and Council we consider there is recognition and capability to get this vision to a reality.

APPENDICES

APPENDIX A : STAKEHOLDER ENGAGEMENT

[Commercial in Confidence]

A.1 ESR Australia – 186 – 224 Ingleburn Road, Leppington

- ESR is a logistics real estate platform which includes development, fund management and investment and owns 186 – 224 Ingleburn Road, Leppington as well as the ESR Bringelly Road Business Hub located within the Liverpool LGA
- The landowner currently does not have a development application on the land; however they envisage a similar concept to ESR Bringelly Road Business Hub. To produce an industrial facility that would provide 4,000 to 5,000sqm industrial sheds expected to be completed circa 2023/24
- ESR secured the following tenants for the ESR Bringelly Road Business Hub; Steelforce (manufacturer and distributor), Construction Equipment Australia (workshop, showroom and distributor) and Bunnings retail. Demand has been largely for freight and distribution purposes, however they also experienced demand from small operators which require a small manufacturing component for example a paint room. For this reason, ESR would prefer IN1 zoning which is more flexible in land uses or a clause to allow high-tech manufacturing and/or low impact (noise, environmental and odour emittance) manufacturing
- Current constraints to the development process are poor road infrastructure which includes the upgrade and widening of Dickson Street and Ingleburn Road for better connectivity to main transit corridors such as Cowpasture Road and Bringelly Road
- The current road overlay indicated in the current ILP is not suitable to deliver efficient industrial precincts and the option for the flexibility to amend internal roads is sought
- Increased density would allow flexibility.

A.2 Woolworths - 108 & 116 Ingleburn Road, Leppington

- Woolworths is supportive of the current ILP and current zoning of B3 Commercial Core, however they are of the opinion that there is too much B7 to the east of their site. This is based on the likelihood of significant competition for "B7-type" uses closer to the airport, and the relatively "narrow" nature of the B7 zoning, both of which could inhibit the take-up of that land for development
- Woolworths would not be supportive of the idea of a land swap as their selection of the site was deliberate due to its B3 Commercial Core zoning and strategic location within the wider Leppington catchment
- Short term plans for the land is the construction of the proposed development as per the submitted DA and in the medium to long term the development (either by Woolworths or separate developer) on the residual land for mixed-use development to include such uses as retail, health, recreational, open space and residential to service the growing community and provide synergies with the short term development plans
- Woolworths have lodged a DA for part of their land holdings for a two storey development comprising a shopping centre with a Woolworths supermarket and BWS liquor shop, specialty shops, a kiosk and business/office premises. First floor commercial may accommodate medical uses, gym and/or professionals
- Woolworths intention is to commence construction next year if approval is granted. Woolworths view their project - a $35m investment creating more than 150 jobs - as a catalyst for the Town Centre and as an anchor to the southern end of the Town Centre

- Preliminary concept Plans for Woolworths residual lands include additional retail, first floor commercial and an additional 2 to 5 storeys of residential
- Barriers Woolworths have come across in the development stage includes:
  - Uncertainty regarding the timing and outcomes of the planning review for the Leppington Town Centre
  - Uncertainty regarding the road widening along Rickard Road, the design of which seems to be a work-in-progress by Council and thus is now proposed to be different to that specified in the DCP, upon which their proposal was based on.
  - Requirement for street activation along Rickard Road which is inconsistent with Woolworth's sound retail planning and the emergent nature of the town centre.
  - The DCP is a document that envisages how the town centre will look in the medium to long term. Flexibility in its application is required to facilitate "first movers" or "catalyst" developments.
- Opportunities for the town centre include:
  - Day and night economy
  - More residential
  - Increased building heights to more reflect the growing South West, particularly densification near public transport
  - Opportunity for Woolworths to have a smaller, metro-type supermarket close to the station as the centre matures.

A.3 iPlan Projects (Consultant Town Planner) - 120 Ingleburn Road, Leppington

- Developer is keen to commence development if approval is granted and subject to market conditions
- Opinion that a significant residential component/ unit yield for each stage improves the viability of retail and counter cost impact of the drainage requirement for the first stage DA lodged
- Retail is envisioned to have a mini major of >1,500sqm as an anchor with a frontage to Ingleburn Road and to complement the Woolworths development and catalyse the town centre main street. This could be supported by smaller retail and food premises that need residential foot traffic that can create an active edge along the Main (North-South) Street
- The developer is supportive of the current ILP and their DA is consistent with this layout
- Opportunities for Council to develop their planning controls around desired Urban Design outcomes rather than prescribe more restrictive height limits and FSR
- No plan to significantly revise their DA after the Woolworths submission. Both sites complement and support each other, subject to addressing the transition/interface between
- Second stage of the development is likely to propose a similar density up to 24m in height.

A.4 GrandviewCo – 215 Rickard Road, Leppington

- Planning proposal submitted prior proposed an FSR of 0.8:1 of commercial, 60 metre height (18 to 20 storey) tied to a commercial podium. Communal open space on the rooftop to free up the ground floor for retail
- There is currently a low demand for commercial in the current market conditions
- Development may propose a staging of 50 to 100 units per stage at approximately 8 apartments per level
- The reason for the delay for Grandview's development application is the uncertainty of the planning review and the unresolved issue of the site earmarked for Council acquisition for the facilitation of a Community facility. The land was not purchased on this basis but on its current zoning
- If Council still seeks for a community facility on this, then the developer would be interested in negotiating the dedication of GFA in return for an uplift in density
- The developer is keen to commence development as soon as possible.

A.5 LMFA, Dickson Street & Rickard Road, Leppington

The Vision

- LMFA is keen to collaborate with the Council to create a place to live, provide more job opportunities and attract people to the town centre
- LMFA's vison is to create a sense of place with integrated transport oriented development for mixed-use high density housing. It is critical that the town centre provides a good mix of retail, commercial, transport nodes and amenities (parks, open space, entertainment & recreation) in order to support high density living
- The vision should be flexible to adapt to market changes and pressures for example the impact of the Aerotropolis
- LMFA is interested in investigating "outside the box" ideas and will consider local and international examples such as
  - Success of Chatswood's retail around the metro railway station
  - Hong Kong's outlet stores near the airport as a potential destination while transit taking advantage of proposed railway line extension
  - University's interest in the town centre for a campus
- LMFA has a long-term strategy but is keen to commence. Their site has the potential to act as a catalyst for development.

LMFA's planning proposal and opinion on current planning controls

- LMFA's preliminary concept plans would include non-residential (comprising small component of commercial and largely of retail). LMFA are still undertaking feasibility testing and the volume of proposed residential is currently unknown
- LMFA's consultants believes that the current planning controls are currently "undercooked" and views Fraser's Edmondson Park development as a model development
- The current Commercial core is viewed to be too large.

Barriers and opportunities

- Barriers to the development process
  - Uncertainty with the planning review and unclear vision and direction by the Council
  - Uncertainty of critical infrastructure such as transport and utility strategies such as water and sewerage. Whether capacity/volume is in line with the staging of development and location of the sewerage plant
- Opportunities
  - Council to provide a structure plan consistent with the Council's vision and LMFA to develop a small scale development of a medium density to demonstrate quality, typology and test price points.
  - Improve accessibility to the town centre, not focusing only on the railway station but also road connectivity and bus links to Liverpool
  - Council to deliver public domain
  - To relocate B7 zoned land as the allocation was prior to the announcement of the Aerotropolis and identify Leppington as more of a "population centre".

ETHOS URBAN

14 August 2020

2190693

Mr Ron Moore
General Manager
PO Box 183
Camden NSW 2570

Attention: Martin Cooper

Dear Martin

Commercial in Confidence: Leppington Town Centre Precinct Plan

You would recall our meeting with Council's strategic planning team on 16 March 2020 in relation to the process and progress of planning for Leppington Town Centre. Last week, we were invited to discuss planning and development in Leppington Town Centre with Hill PDA, who we understand are engaged by Council to provide advice in relation to development feasibility and related issues, to inform finalisation of a draft precinct plan. LFMA had an informative discussion with Hill PDA and the meeting concluded with an undertaking by LFMA to provide more information, in writing, to assist Hill PDA to finalise their work.

As you are aware, LFMA is the largest land owner in Leppington Town Centre, with 28 hectares of land that is centrally located south of Leppington Station. LFMA is committed to working collaboratively with Council to create a high-quality place for people to live and work. We are encouraged by Council's commitment to engaging with land owners to understand development ambitions, program and issues. Early engagement with developers like LFMA will lead to a robust, practical and implementable precinct plan.

This letter sets out LFMA's current thinking in relation to development of its land holdings in Leppington, including:

- A preliminary vision for the town centre and LFMA land specifically
- Indications of overall yield for different land uses.
- Potential development staging, and how planning controls could facilitate appropriate outcomes as the centre develops over years and decades to come.

LFMA Vision for Leppington Town Centre

Leppington is the only centre in Camden and the South West and Aerotropolis Growth Areas with an existing train station. It therefore has significant advantages over other locations in the short to medium term, ahead of the establishment of planned new stations on the Western Sydney Airport Metro line. It will provide a highly accessible and high amenity location for new housing, with opportunities for workers to live close to the airport and take advantage of public transport connections to other parts of metropolitan Sydney. Clarity and certainty of the planning framework is required to enable development to commence and these advantages to be realised.

Leppington is a Strategic Centre, and one of a cluster of centres that will have important functional relationships with the Western Sydney (Nancy Bird Walton) Airport and the Western Sydney Aerotropolis. Since the Austral and Leppington North Precinct Plan was finalised in 2013, much has changed in south-western Sydney, and the decision to proceed with a new airport at Badgerys Creek has been the most significant of those changes for Leppington town centre. The current precinct plan has more than 70 hectares of land zoned for business park, along with a large commercial core, civic precinct and mixed use zones. LFMA considers that the kinds of large scale and more strategic employment related land uses that were envisaged when the current precinct plan was finalised are now more likely to gravitate towards the Aerotropolis Core precinct in the Western Sydney Aerotropolis.

The role of Leppington will be to cater for retail, entertainment, local employment, recreation and community facilities and services for a large population catchment that draws from surrounding growth centre precincts. Oran Park, Narellan and the Aerotropolis Core are likely to be the other major centres in this part of south-western Sydney. Leppington will complement but not compete with these other centres.

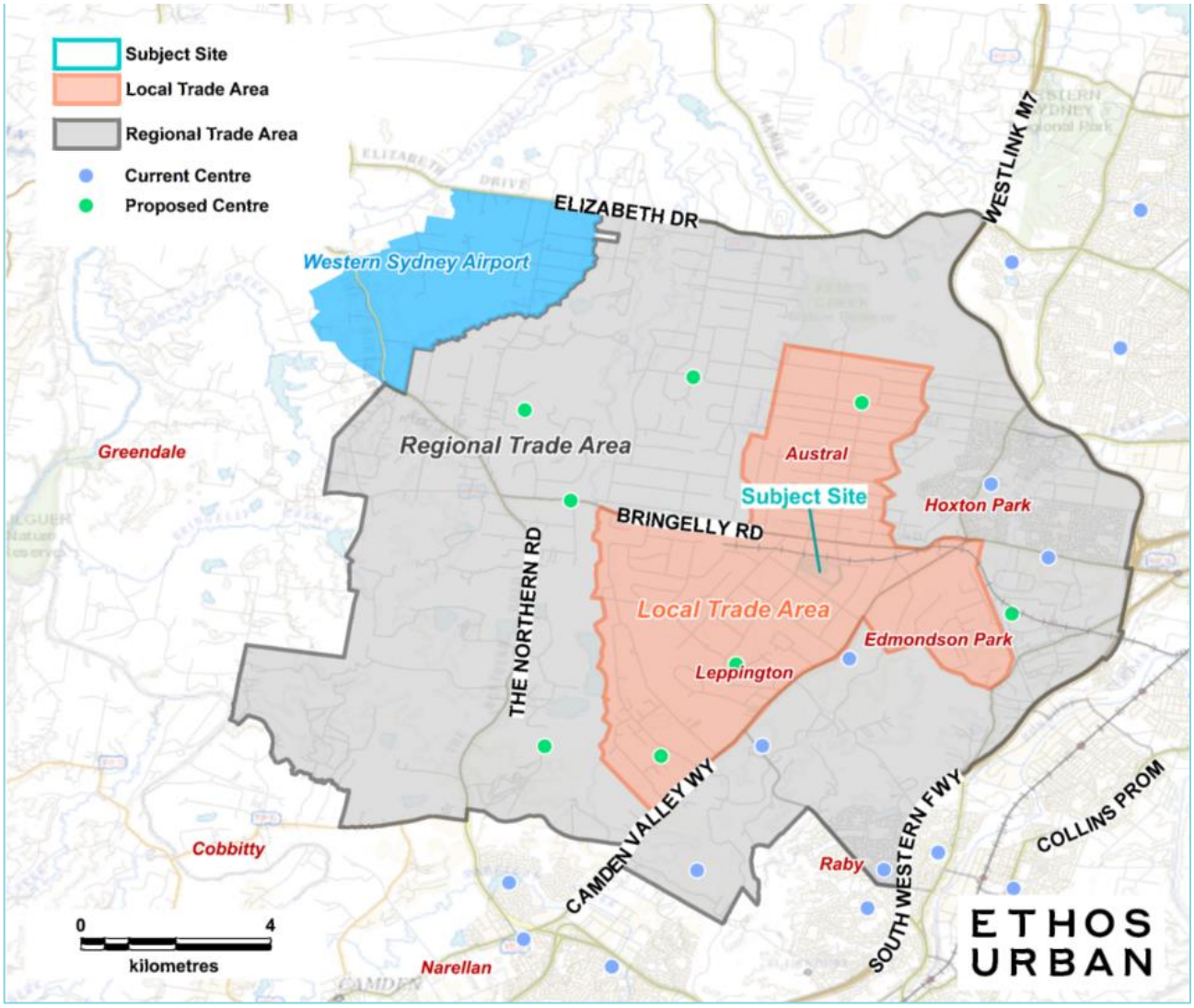
LFMA has a vision to create a sense of place and unique identity and character through a mixed use, high amenity and high-density community at Leppington town centre. The vision for Leppington includes high quality public spaces including parks, streets and squares. It is critical that the town centre provides a good mix of retail, commercial, transport nodes and amenities (parks, open space, entertainment & recreation) in order to support high density living. There are opportunities to enhance and expand the blue and green grid through the Scalabrini Creek open space corridor, and to connect the train station and creek corridor through a permeable, pedestrian friendly street network. While Leppington won't replicate other existing centres, there are lessons to be learnt from them. We are investigating other centres that are exemplars of best practice approaches to new town centres, in particular those that have a close relationship to airports.

Potential development yields

Ethos Urban has prepared a preliminary economic analysis to understand likely retail trade area and demand, requirements for commercial floorspace, and demand for residential development as the town centre and surrounding growth centre precincts develop. Local and regional retail trade areas have been defined (see below) and we estimate that, by 2036, the local retail trade area population will grow to approximately 130,000 people. This population growth means that, over time, demand for retail will grow substantially and Leppington will play an important role, supported by smaller local centres, in delivering retail and related services for residents over a very large area. This demand translates to between 70-95,000 square metres of retail floorspace. The bulk of this retail floorspace should be accommodated around Leppington train station as this is the best location for a retail core to service demand which will predominantly come from south of the rail line and Bringelly Road, and take advantage of public transport accessibility. Centres like Chatswood have done this successfully, utilising the station as a focal point for activation of the town centre.

Camden has one of the highest targets for new dwellings in Greater Sydney. Population forecasts released by DPIE in January 2020 also estimate that Camden Council will continue for at least the next 20 years to be one of the fastest growing Sydney council areas. In addition, there is a strong focus from Camden Council on addressing the imbalance between population and jobs growth in Camden. Leppington is one of two strategic centres identified in Camden under the Greater Sydney Region Plan and it is appropriate that Leppington provides a mix of housing, retail, services and employment opportunities for Camden residents. Leppington is the only location in Camden that currently has a passenger rail station, and the potential for connections to the Western Sydney Airport and other key employment and economic hubs across Sydney is better in Leppington than any other location in Camden.

Ethos Urban has undertaken preliminary urban design and masterplanning analysis to consider appropriate built form, public domain and amenity outcomes to support a high density, mixed use precinct. We tested yields based on a scheme that is compliant with the current masterplan layout. A revised masterplan layout was also tested to optimise development outcomes, and demonstrates that building heights can be increased while achieving the same amenity outcomes (including SEPP 65 compliance), with yields up to 50% more than the complaint scheme. Urban design work is continuing, and we are not in a position to provide specific information on planned development yields. LFMA would prefer to work with Council to achieve an agreed outcome that reflects Leppington's status as a strategic centre. We are looking to other centres across Sydney to provide guidance on density, dwelling mix and typologies, including Green Square, Edmondson Park, and key centres on the Sydney Metro North West corridor. While these centres have progressed further and have more mature markets, they provide good indicators of the potential at Leppington, with the right planning framework and a long term vision.



The ultimate capacity of the LFMA land holdings depends on creating a high quality, attractive and integrated precinct where residents can access facilities, services and amenities that meet their daily needs. The LFMA land holdings are the only location in the town centre where a single developer can meet all these needs.

Development staging and planning controls

LFMA is keen to commence development at Leppington, but recognise that all stages of the development must be aligned with Council's vision and plans for the town centre. LFMA's land holding is large, and consequently will be developed in stages. Demand for retail, residential and other uses will grow and change over time and LFMA is currently considering the best approach to the initial stages of development, so that the type and mix of dwellings, retail and other uses meets current market expectations and is consistent with long term plans for the town centre. Ideally, the first stage of development would occupy a location that:

- Has direct road access and is close to the train station
- Can accommodate a mix of uses, including a first stage of retail, and dwellings that are appropriate to market demand in the early stages of the town centre's growth.
- Enables the urban structure and public domain to take shape, with the creation of street blocks, streets and public spaces that create a quality urban environment from day one for residents and visitors.

The current Leppington Town Centre masterplan does not facilitate the right development outcomes for the LFMA land holdings or the precinct as a whole. We therefore recommend:

- The street network and hierarchy is adjusted so there are clearer connections to the station and across the rail line, and between the main roads (Rickard Road and Dickson Road) and the green and blue spine formed by Scalabrini Creek. Within the LFMA land holdings there are opportunities to re-orient streets and create public plazas at street level, to improve urban amenity and increase development potential. The current road layout predominantly responds to fragmented land holdings and limits the potential for taller buildings because of overshadowing impacts, but a modified grid network could better respond to the characteristics of the site and enable a more activated, mixed use centre.
- The B3 retail core is consolidated closer to the station, and potentially oriented east-west along the rail corridor to connect to Scalabrini Creek. The current extent of B3 zoned land is too large and will result in a poorly integrated land use mix and inefficient use of land.
- Building heights are increased substantially, particularly in areas close to Scalabrini Creek (on both sides of the open space corridor) and closer to Leppington Station and Rickard Road. The current building heights are in our view reflective of very conservative expectations of the demand for high density residential development, which were appropriate when the precinct was rezoned in 2013, but have quickly become redundant. Our view is that, while market demand is likely to preference low to medium scale residential buildings in the early stages of development, ultimately building heights of up to 30 storeys can be accommodated on some key sites near the station and Scalabrini Creek corridor. A diversity of building heights and forms would be appropriate for the town centre.
- While not directly related to the LFMA land holdings, the area of land that is zoned B7 Business Park is substantially reduced, as demand for these uses is transitioning to locations in the Aerotropolis Growth Area. As stated above, the role of Leppington should be a high density, mixed use, population serving centre rather than a location for substantial strategic employment activity. Uses such as education, health care, aged care, entertainment, recreation and open space will be important and should be catered for in Leppington town centre.

Conclusion

LFMA requests the opportunity to engage with Council to provide input to Council's planning process for Leppington, and to coordinate plans for the first stage of development to ensure they are aligned with Council's revised town centre masterplan and planning controls. We are confident that a collaborative planning process can accelerate the finalisation of the precinct plan for Leppington Strategic Centre, resulting in a planning framework that recognises the future potential of the Centre and enables the delivery of new homes, jobs, services and amenities to meet the needs of the rapidly growing Camden community.

We appreciate Hill PDA and Camden Council giving us the chance to express our vision and intent. LFMA looks forward to working constructively, openly and transparently with Council to realise a collective vision for Leppington.

Yours sincerely,

Paul Robilliard
Director
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APPENDIX B : DEVELOPMENT APPLICATION ANAYSIS

Tabulated below is a summary of the analysed development application located within the study area that have been lodged with Council between 2015 and 2020

No.	Property	Site area (ha)	Current zone	Updated IPL	DA Status	DA details	No. unit	Retail GFA	Resi. GFA	Total GFA	FSR
1	**120 Ingleburn Roa**	5.52	RE1, B4, B3	RE1, R3	2019/991/1 Lodged	Part development only - Block 1 (8,075.8sqm). Construction of a mixed use 6-7 storey development containing retail & 169 apartments. Three basement levels. Ground floor retail component is roughly 4,100-4,200sqm GFA. The residential component will be a mix of one, two, three & four-bedroom units.	169	4,100	13,900	18,000	2.23
2	**283 Bringelly Road**	2.17	B4	B3	2019/538 Lodged	Staged construction of a mixed-use development containing 529 apartments in six, seven and eight storey buildings, commercial floor space, including a childcare centre & basement carparking.	529	6,085	51,768	57,853	2.67
3	**215 Rickard Road**	2.19	B4	B3	2015/1404 Withdrawn	Part development (4,796.2sqm) - Construction of an 8 storey mixed use development comprising 6 retail tenancies, 78 apartments & basement car parking.	78	778	6753.2	7531.2	1.57
4	**297 Bringelly Road**	2.33	B4	B3	2018/694 Lodged	Part development - 10,702sqm. Construction of a staged 5 -7 mixed use development containing commercial/retail space, 280 apartments, basement and at grade car parking.	280	2,532	28,234	30,766	2.87
5	**182 Byron Road**	2.01	R3	R3	2020/62 Lodged	Net site area - 10,790.9sqm. Residential Flat Buildings consisting of 368 units over the two (2) proposed lots, with three (3) main building clusters, each building up to seven (7) storeys, and 2-3 levels of basement car parking.	368		28,988	28,988	2.69
6	**28 Ingleburn Road**	2.86	R3	R3	2019/597 Lodged	Lot 3 - 6565sqm - Construction of two levels of basement parking, three x six storey and one x two storey residential flat buildings, containing 105 units, upon proposed Lot 3 in approved subdivision of Lot 84 DP 8979.	105		12,249	12,249	1.87

No.	Property	Site area (ha)	Current zone	Updated IPL	DA Status	DA details	No. unit	Retail GFA	Resi. GFA	Total GFA	FSR
					2019/596 Lodged	Lot 1 - 5572sqm. Construction of two levels of basement parking, one x two storey and three x six storey residential flat buildings, containing 93 units, upon proposed Lot 1 in approved subdivision of Lot 84 DP 8979.	107		10,056	10,056	1.8
					2019/598 Lodged	Lot 2 - 5,148sqm. Construction of two levels of basement parking, two x six storey residential flat buildings, containing 95 units, upon proposed Lot 2 in approved subdivision of Lot 84 DP 8979.	95			Unknown	
8	**Woolworths, 108 & 116 Ingleburn Roa**	1.63	B3	R3	2020/211 Lodged	Construction of a mixed use two storey development comprising a shopping centre with a Woolworths supermarket and BWS liquor shop, specialty shops, a kiosk, business/office premises, signage and associated site works. 334 car spaces, comprising 225 basement spaces & 109 ground level spaces.		7,807		7,807	
9	**183-185 Bringelly Road**	1.762	R3, RE1	R3, RE1	2018/1478/1 Refused	Part development - 9,560sqm. Remediation of land, demolition of existing structures, tree removal, Torrens title subdivision to create three lots, construction of new roads, construction of two levels of basement carparking and 4 x 7 storey residential flat buildings, containing 254 apartments, drainage, services, landscaping and associated site works.	254		20,000	20,000	2.1
10	**202 Byron Road**	3.59	R3, SP2, RE1	R3, SP2, RE1	2016/866/1 Approved	Part development - 18,720sqm. Construction of a staged 6-7 storeys mixed use development of five(5) buildings, comprising residential flat buildings, shop top housing and one neighbourhood shop, basement car parking, road construction, open space embellishment, subdivision and associated site works.	436 units & 83 TH	86.5	36,162	36,248	2.0
11	**23 Cowpasture Road**	0.8	R3	R3	2018/1152/1 Withdrawn	Construction of a multi-dwelling housing development comprising 24 two storey dwellings with Strata title subdivision and associated site works.	24	-	-	-	-

No.	Property	Site area (ha)	Current zone	Updated IPL	DA Status	DA details	No. unit	Retail GFA	Resi. GFA	Total GFA	FSR
12	**182 Byron Road**	**2.01**	R3, RE1	R3	2020/62/1 Lodged	Construction of 368 apartments, road construction, subdivision and associated site works	368	-	-	-	-
13	**1423 Camden Valley Way**	**2.31**	R3	R3	Gateway Approved	The planning proposal will enable the redevelopment for a new 3,115sqm tavern, 1,570sqm Dan Murphy's liquor outlet and a 2,790sqm motel with 80 rooms. The proposed redevelopment will encompass 7,475sqm of floorspace serviced by 256 carparking spaces.	-	-	-	-	-

APPENDIX C : MARKET RESEARCH

This section provides an assessment of 'off-the-plan' sales and resales of established residential apartments within Edmondson Park, Campbelltown and Liverpool. The information was obtained through various property data sources and confirmed through discussions with local agents.

The below projects were selected for the following reasons, 'Ed Square', Edmondson Park is the most relevant project and is a flagship development which many stakeholders are using as a benchmark. The Paper Mill Precinct, Liverpool is a masterplan development and is located in a market with an established high density housing market. 'Evolve' and 'The Emerald' have been analysed to assess smaller sized projects located away from the town centre.

The following residential projects were analysed:

- 'Ed Square', Edmondson Park
- The Paper Mill Precinct, Liverpool
- 'Evolve', 1-5 Bathurst Street, Liverpool
- 'The Emerald', 30-36 Warby Street, Campbelltown

C.1 'Ed Square', Edmondson Park

Ed. Square is located in the suburb of Edmondson Park, a large greenfield estate situated in Sydney's South West growth corridor. Ed. Square is a major transit-oriented development by Frasers Property Australia which will provide a Town Centre comprising approximately 40,000 sqm of retail/commercial space, with a full-line Coles supermarket, a Liquorland store and Event Cinemas complex. The community will also provide a variety of housing built-forms comprising 991 apartments, and 893 terraces and townhouses, benefiting from six hectares of open space. The first stage provides 427 dwellings comprising 155 x 1 bed (36%), 253 x 2 bed (59%) & 19 x 3 bed (19%).

Notably, the townhouse configuration has been designed to provide three storey townhouses along the main street. A side street provides above ground car parking for a second row of townhouses with a street frontage to pedestrian walkway. This design has the benefit of not having visible driveways from the street as car parking is concealed from the street.

The buyer profile was a combination of owner occupiers and investor due to the varying unit typology. The buyers are from the surrounding LGAs from Bankstown to Wollondilly.

We have been advised by the selling agent that marketing commenced in mid-2018 and approximately 90% have been sold since. This represents a sales rate of 15 -20 units per month or 200 units on average per annum.

Ed Square

Type	Price range	Internal (sqm)	$/sqm of NSA
Apartments			
One bedroom	$460,000 - $580,000	50-55	$9,200 - $10,545
Two bedroom	$610,000 - $697,000	76-80	$8,026 - $8,713
Two bedroom + study	$630,000 - $695,000	80-85	$7,875 - $8,176
Three bedroom	$730,000 - $790,000	100-105	$7,300 - $7,524
Townhome			
One bedroom	$490,000 - $510,000	51	$9,608 - $10,000
One bedroom + study	$560,000 - $580,000	60	$9,333 - $9,667
Two bedroom + study	$675,000 - $695,000	97	$6,959 - $7,165
Three bedroom	$730,000 - $740,000	110	$6,636 - $6,727
Three bedroom + study	$755,000 - $790,000	121	$6,240 - $6,529

Source: Selling agent, Domain and Cordell Connect

C.2 The Paper Mill Precinct, Liverpool

A nearing completed 2.3 hectare development project comprising repurposed 19th-century heritage mill building to provide 882 apartments. Comprising of buildings that range from six to 24 levels across four precincts and townhouses. Connected through pedestrian walkways and river walk pathways. Provided on site is 1,200sqm premium retail and food precinct.

The project is the redevelopment of a heritage listed industrial site located along the Georges River and approximately 1.2 kilometres from the railway station.

The Bindery at no. 28-30 Shepherd Street is a completed residential flat buildings of 18 and 21 storeys comprising 140 apartments (containing 2 x studio, 53 x 1, 78 x 2 & 7 x 3 bedroom) built over 2 levels of basement car parking for 161 vehicles.

The Gild at 26 Shepherd is a completed residential flat buildings comprising 14 storeys that will provide 83 apartments.

Conversations with the selling agent indicates that 90% have been sold to date which shows an average sale rate of 200 units per annum.

The Paper Mill Precinct

Type	Price range	Internal (sqm)	$/sqm of NSA
The Bindery			
One bedroom	$385,000 - $475,000	55	$7,000- $8,636
Two bedroom	$535,000 - $600,000	75-80	$7,133 - $7,833
Three bedroom	$680,000	95	$7,158
The Gild			
One bedroom	$430,000 - $500,000	55	$7,818- $9,091
Two bedroom	$525,000 - $645,000	75	$7,000 - $8,600
Three bedroom	$665,000	90	$7,389

Source: Selling agent, RPData, Domain and Cordell Connect

C.3 ‘Evolve’, 1-5 Bathurst Street, Liverpool

Proposed development for a 9 storey residential flat building containing 94 apartments (comprising 11 x 1, 71 x 2 & 12 x 3 bedroom) built over 2 levels of basement car paring for 116 vehicles, 42 bicycles & 6 motorcycles.

‘Evolve’, 1-5 Bathurst Street, Liverpool

Type	Price range	Internal (sqm)	$/sqm of NSA
One bedroom unit	$424,000 - $450,000	54	$7,852 - $8,333
Two bedroom unit	$470,000 - $573,000	75-81	$6,267 - $7,074
Three bedroom unit	$580,000 - $654,000	99	$5,859 - $6,606

Source: Selling agent, Domain and Cordell Connect

C.4 'The Emerald', 30-36 Warby Street, Campbelltown

Proposed development for 6/7 storey residential flat building containing 101 apartments (16 x 1, 59 x 2 & 26 x 3 bedroom) built over 2 levels of basement for 131 vehicles.

'The Emerald', 30-36 Warby Street, Campbelltown

Type	Price range	Internal (sqm)	$/sqm of NSA
One bedroom unit	$432,750	55	$7,868
Two bedroom unit	$499,500 - $542,250	75	$6,660 - $7,230
Three bedroom unit	$566,250 - $580,500	95	$5,960- $6,111

Source: Selling agent, Domain and Cordell Connect

C.5 Leppington englobo land sales evidence

We have examined recent market activity and have had particular regard to the following sales evidence, which we consider set the market parameters by which the value of the subject property may be determined.

In summary the below sales evidence shows:

- B4 Mixed Use & B3 Commercial Core zoned land showed a rate of $3,189,762 to $5,795,517 per hectare
- R3 Medium Density Residential zoned land showed a rate $3,189,762 to $4,038,997 per hectare
- IN2 zoned land showed a rate of $3,201,970 to $3,926,521 per hectare.

Table 31: Englobo land sales

Address	186 – 224 Ingleburn Road, Leppington
Purchase date	April-May 2020
Purchase price	$34,200,000
Site Area	8.71ha
Zoning	'IN2 Light Industrial' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$3,926,521/hectare

A consolidated irregular shaped parcel of land located on the north-western corner of the intersection of Ingleburn Road and Dickson Road. Located opposite R3 zoned land. Located within 1 kilometre of the Leppington railway station. There is currently no planning proposal or DA submitted and we have been advised that the purchaser is awaiting road infrastructure. The land permits an FSR of 1:1.

Purchased by ESR an industrial logistics developer with the intention of developing an industrial business estate to provide 4,000sqm to 5,000sqm industrial units.

Address	116 & 108 Ingleburn Road, Leppington
Purchase date	May 2019
Purchase price	$21,200,000
Site Area	3.658ha
Zoning	'B3 Commercial Core' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$5,795,517/hectare

A near regular shaped parcel of land located on the northern corner of the intersection of Ingleburn Road and Rickard Road. Located within 800 metres of the Leppington railway station. The current planning controls permits a building height limit of 24 metres.

The land has been purchased by Woolworths and has subsequently lodged a development application for the construction of a mixed use two storey development comprising a shopping centre with a Woolworths supermarket and BWS liquor shop, specialty shops, a kiosk, business/office premises, signage and associated site works. Total GFA of 7,807sqm for No. 108. Sale equates to $1,213/sqm of GFA.

Address	LMFA site, Dickson Street & Rickard Road, Leppington
Purchase date	November 2018 – July 2019
Purchase price	$89,728,000
Site Area	28.13ha
Zoning	Part 'R3 Medium Density Residential', 'RE1 Public Recreation', 'B4 Mixed Use' and 'SP2 Infrastructure' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$3,189,762/hectare

A consolidated irregular shaped parcel of land located south of the railway corridor with dual street frontages to Richard Road and Dickson Road. Affected by 'RE1 Public Recreation' and 'SP2 Infrastructure' zoned land reducing the developable land area. There is currently no planning proposal or DA submitted on the property. Purchased by a Chinese developer from a local developer which have consolidated the site. The current planning controls permits a building height limit of 21 to 24 metres.

Address	244 Ingleburn Road, Leppington
Purchase date	August 2018
Purchase price	$6,500,000
Site Area	2.03ha
Zoning	'IN2 Light Industrial' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$3,201,970 /hectare

A near regular shaped parcel of land located on the northern side of Ingleburn Road. Backs onto the railway corridor. Located within 1 kilometre of the Leppington railway station. There is currently no planning proposal or DA submitted on the property.

Address	76 Rickard Road, Leppington
Purchase date	February 2018
Purchase price	$7,550,000
Site Area	2.02ha
Zoning	'R3: Medium Density Residential' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$3,737,623 /hectare $34,954/unit (approved) $279/sqm of GFA

A near regular shaped parcel of land located on the eastern side of Rickard Road. Located outside of the Leppington Town Centre and approximately 1.2 kilometres of the Leppington railway station. The owner has subsequently gained approval for 216 unit development with an approved FSR of 1.34:1.

Address	202 Byron Road, Leppington
Purchase date	September 2018
Purchase price	$14,500,000
Site Area	3.59ha
Zoning	'RE1 Public Recreation', 'SP2 Infrastructure' and 'R3 Medium Density Residential' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$4,038,997/hectare

A slightly irregular shaped parcel of land located on the bend of Byron Road and located within close proximity to the railway corridor. Located within 700metres of the Leppington railway station. The purchaser has subsequently lodged a part development for the construction of a staged 6-7 storeys mixed use development of five(5) buildings, comprising residential flat buildings, shop top housing and one neighbourhood shop and basement car parking. This DA shows an FSR of 1.98:1. On the assumption that this FSR applies to the whole site equates to a rate $204/sqm of GFA or $18,758/unit (STCA). The current planning controls permits a building height limit of 21 metres.

Address	120 Ingleburn Road, Leppington
Purchase date	March 2016
Purchase price	$10,520,000
Site Area	5.59ha 4.5ha developable (approximately)
Zoning	Part 'B4 Mixed Use', 'B3 Commercial Core', 'RE1 Public Recreation' and 'SP2 Infrastructure (Classified Road and Local Drainage) under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$1,881,932/hectare (total) $2,337,778/hectare (developable)

A near regular shaped allotment located on the northern side of Ingleburn Road. Approximately 50% of the land is zoned B3, 20% is zoned B4 and 25% is zoned RE1. The current planning controls permits a building height limit of 24 metres on the developable land.

Located within the Leppington urban release area and within 1 kilometre south from Leppington railway station. The purchaser has lodged a DA for a staged mixed use development containing commercial/retail space, 672 apartments, basement car parking which has since been withdrawn. Subsequently, the purchaser has lodged a part development only for a mixed use 6-7 storey development containing retail premises of 4,100 to 4,200sqm and 169 apartments which shows a FSR of 2.23:1. On the assumption that this FSR applies to the whole site equates to a rate $105/sqm of GFA or $7,763/unit (STCA).

Address	215 Rickard Road, Leppington
Purchase date	May 2015
Purchase price	$10,000,000
Site Area	2.19ha
Zoning	'B4 Mixed Use' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$4,566,210/hectare

A near regular shaped parcel of land located north of the commuter car parking and Leppington railway station, and west of Richard Road. Subject to Clause 5.1 of SEPP2006, mapped for the purpose of a community facility and to be acquired by Council. The current planning controls permits a building height limit of 24 metres.

The purchaser has subsequently lodged a part development for the construction of an 8 storey mixed use development comprising 6 retail tenancies, 78 apartments and basement car parking, which has since been withdrawn. DA showed a FSR of 1.57:1. On the assumption that this FSR applies to the whole site equates to a rate $291/sqm of GFA.

Supplementary market evidence

HillPDA also undertook additional market research of properties in the surrounding suburbs for context and whether the sales rates achieved in Leppington were reasonable. The sales evidence tabulated below shows a rate of $2,201,835 to $4,000,842 per hectare for multi-dwelling development and $3,939,076 to $5,202,702 per hectare for B4 Mixed use zoned land. This supports the sales rates being achieved in Leppington and the below rates allow a lower permissible building height.

Table 32: Supplementary market evidence – Englobo and superlot

Address	132-150 Croatia Avenue, Edmondson Park
Purchase date	December 2019
Purchase price	$19,592,500
Site Area	4.04ha (total) 2.59ha (developable)
Zoning	Part 'RE1 Public Recreation', 'R1 General Residential' & 'SP2 Infrastructure' under the Liverpool Local Environmental Plan 2008.
Analysis	$4,849,629/hectare $612/sqm of GFA (potential) $48,981/dwelling (potential)

Regular shaped parcel of land located on the northern side of the railway corridor. The current land zoning allows an FSR of up to 1.5:1 and building height range of 12- 21 metres. Sold with a marketing concept of 300+ units and townhouses. As per the current planning controls the estimated GFA is 32,000sqm. Our online enquiry does not reveal that a development application was lodged.

Address	50 Brennan Way, Edmondson Park
Purchase date	April 2019
Purchase price	$8,580,000
Site Area	0.8162ha
Zoning	'R1 General Residential' under the Liverpool Local Environmental Plan 2008.
Analysis	$10,512,129/hectare $1,051/sqm of GFA $81,714/unit

Regular shaped superlot located on the northern side of the railway corridor. The current land zoning allows a FSR of 1:1 and building height of 15metres. Sold with approval for the construction of three 4 storey residential flat buildings containing one hundred and five (105) residential apartments above two levels of basement car parking (DA 765/2016).

Address	170 Croatia Avenue, Edmondson Park
Purchase date	June 2015
Purchase price	$9,100,000
Site Area	2.27ha
Zoning	Part 'B4 Mixed Use', 'R1 General Residential' and 'RE1 Public Recreation' under the Liverpool Local Environmental Plan 2008.
Analysis	$4,008,810/hectare $242/sqm of GFA (potential) $19,362/unit (potential)

Irregular shaped parcel of land located immediately north of the railway corridor. The current land zoning allows an FSR of up to 2:1 and building height range of 21 to 24metres. The current planning controls permits a GFA of 37,600sqm.

Address	500 Bringelly Road, Austral
Purchase date	February 2019
Purchase price	$4,800,000
Site Area	2.18ha
Zoning	'R3 Medium Density Residential' under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.
Analysis	$2,201,835/hectare

Regular shaped parcel of land located on the northern side of Bringelly Road and approximately 2 kilometres from the Leppington railway station. Sold with concepts plans for 26-lot development. Our online enquiry does not reveal that a development application was lodged.

The land has a building height limit of 12metres and a minimum dwelling density of 25 dwellings per hectare.

Address	23 Glenfield Road, Glenfield
Purchase date	November 2018
Purchase price	$4,040,000
Site Area	2.22ha (total) 1.12ha (developable)
Zoning	'R2 Low Density Residential' and 'RE1 Public Recreation' under Campbelltown LEP 2015
Analysis	$1,819,820/hectare (total) $3,607,143/hectare (developable) $87,826/dwelling

Regular shaped parcel of land located on the southern side of Glenfield Road. Approximately 50% of the land is zoned 'RE1 Public Recreation'. Sold with approval for 46 x 3-bedroom townhouses with 46 garage parking spaces. The land has no applicable FSR but specifies a building height limit of 8.5metres.

Address	31 Pembroke Parade, Wilton
Purchase date	June 2017
Purchase price	$2,280,000
Site Area	0.3808ha
Zoning	'B4 Mixed Use' under the Wollondilly Local Environmental Plan 2011.
Analysis	$3,939,076/hectare (unimproved)

Sale and leaseback of the Lendlease information centre and café for the Bigarra Gorge estate project. Two storey commercial brick building with a gross floor area of 472sqm and 21 onsite car parking. Located opposite the Wilton Plaza Neighbourhood Shopping Centre. On a summation basis, the sales reflect an underlying land value of $1,500,000. The land has no applicable FSR but specifies a building height limit of 9metres.

Address	19-23 Avondale Road, Dapto
Purchase date	February 2017
Purchase price	$1,900,000
Site Area	0.4749ha
Zoning	'R2 Low Density Residential' under Wollongong Local Environmental Plan 2009.
Analysis	$4,000,842/hectare $172,727/dwelling

An irregular shaped allotment located on the southern side of Avondale Road and backs and sides onto a green corridor. Located approximately 2 kilometres from Dapto railway station.
The property was sold with development approval for demolition of existing buildings and construction of multi dwelling housing and strata subdivision for 11 lots.

Address	Lot 4212, Benson Avenue, Shellharbour City Centre
Purchase date	February 2016
Purchase price	$5,775,000
Site Area	1.11ha
Zoning	'B3 Commercial Core' under the Shellharbour Local Environmental Plan 2013.
Analysis	$5,202,702/hectare

A regular shaped allotment located on the southern side of Benson Avenue and located on the fringe of Shellharbour City Centre. Located in close proximity to Stockland Shellharbour Shopping Centre.
The land is zoned 'B3 Commercial Core' with a maximum building height limit of 15 metres.
The purchaser has since gained approval for five storey shop top housing for 157 residential apartments and three commercial tenancies.

APPENDIX D : GREEN INFRASTRUCTURE MARKET RESEARCH

Literature and existing market research have been reviewed to assess the possible property value impacts of green infrastructure and to specifically examine whether previous research has found a link between a price premium paid for properties with green infrastructure and/or energy-efficient design that would lower ongoing costs for the buyer.

A summary of the findings is below.

D.1 Residential

Green infrastructure price variation in existing literature

- Greenery and sustainability both contributed to increased property values and reduced property spend. Proximity to green spaces was found to generally uplift property prices with the addition of tree canopy accounting for a 10% to 15% uplift in property value in Subiaco, Western Australia[17]
- Along with increased property value, there were economic benefits through costs savings due to the ESD designs. Green Star certified buildings were found to use 66% less electricity than the average Australian building
- A US report highlighted the implementation of green roofs in Washington D.C. would add an estimated $10 of value per square foot of green roof (and $13 when applied nationally).[18] The increased aesthetic of properties with greenery often results in more positive perceptions and in turn, increased value and sale prices
- Another report found that building improvements such as increased insulation, double glazed windows and ceiling fans amongst a variety of alterations could help reduce 19-25% of the energy required to deliver net-zero energy. Other benefits of sustainable design and greenery were noise reductions for residents, with one report finding that proximity to greenery and tree canopies contributed to sound-dampening effects
- The Arup *San Francisco Living Rod Cost-Benefit Study* in 2016 highlighted that inaccessible green roofs would add an estimated $27 of value per square foot (net 0.96%).
- Other reports discussing the financial benefits of providing green infrastructure within developments showed improvements of 7-20% in value.

Research Paper	Green Infrastructure Element	Estimated Premium
Valuing Green Guide: green roofs, walls and facades in the City of Melbourne	Inaccessible green roof	$172.56/sqm of roof (7-20%)
	Accessible green roof	$234.32/sqm of roof (7-20%)
	Walls and facades	1.4-3.9% of property value
Environmentally Efficient Design Planning Policies Pitt & Sherry (2013)	Energy efficiency, water efficiency, stormwater, urban ecology, innovation	$105/sqm GFA of large multi-unit residential buildings

[17] Yew, 2012
[18] United States General Services Administration, 2011

D.2 Green Infrastructure price variation examples

'Breese Street' 58 Breese Street, Brunswick (estimated completion September 2020)

Breese by Milieu is a collection of 1, 2 and 3-bedroom apartments designed by DKO Architecture and Brunswick locals Breathe Architecture. The development is inspired by other local, sensitively designed projects, and answers the community feedback received via Milieu's Liveability Survey.

The development will be fossil fuel-free, with a 7.9-star sustainability rating and a maximum of five neighbours per floor, it is a building designed for a daily life in easy synergy with our environment. The design includes pragmatic apartment layouts and a communal rooftop garden with veggie patches, while the architecture draws on Brunswick's local contact and contemporary village character to inform the building anatomy and materiality. Breese Street has been conceptualised with sustainability at its core.

This sustainability philosophy extends to the finishes and interior of each apartment ranging from the sustainable palette of recycled timber flooring, brick and terrazzo to the selection of induction cooktops instead of gas.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$485,000-$495,000	58	$8,362-$8,534
2 bedrooms	$750,000-$855,000	76-86	$9,868-$9,942
3 bedrooms	$1,025,000-$1,150,000	115-120	$8,913-$9,583

Comparison with similar sales				
Address	Bedrooms	Sale price	Sqm (internal)	$/sqm (internal)
204A/58 Breese St, Brunswick	1 bedroom	$495,000	58	$8,534
313/288 Albert Street, Brunswick	1 bedroom	$390,000	51	$7,647
414/8 Logon St Brunswick East	1 bedroom	$360,000	52	$6,923
215/300 Victoria St, Brunswick	1 bedroom	$496,000	51	$9,725
306A/58 Breese St, Brunswick	2 bedrooms	$855,000	87	$9,868
207/300 Victoria St, Brunswick	2 bedrooms	$515,000	62	$8,306
309/8 Lyon St, Brunswick East	2 bedrooms	$708,000	75	$9,440
401A/58 Breese Street, Brunswick	3 bedrooms	$1,150,000	125	$9,200
905/288 Albert Street, Brunswick	3 bedrooms	$830,000	102	$8,137
506/11-15 Brunswick Road, Brunswick East	3 bedrooms	$963,000	120	$8,025
Average Premium for Green Infrastructure				**5-14%**

Source: RPData 2020

‘Little Miller’ 55-63 Nicholson Street, Brunswick East (completed 2020)

East Brunswick's Little Miller is one of the most sustainable residential developments in Victoria with a 7.5-star average NatHERS thermal performance rating. From the abundant green spaces to the 100% fossil fuel-free building operations, Little Miller is a benchmark for environmentally conscious design.

Little Miller is a collaboration between ClarkeHopkinsClarke Architects, interior design masterminds Breathe Architecture and landscaping visionaries Openworks.

Little Miller is a building for the future, using a largely renewable materials palate that also creates a healthier environment for its inhabitants. These homes also utilise an embedded energy network in conjunction with a renewable energy supplier.

Electricity at Little Miller will be supplied via an embedded network which will use a variety of renewable energy sources to power all apartments as well as common areas. This ensures that all residents are supplied with green power, contributing to a fossil fuel-free development. Energy-saving LED light fittings will be used to reduce costs as LEDs use 25% to 30% less energy and last eight to 25 times longer than halogen incandescents.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$558,372	55	$10,152
2 bedrooms	$648,472-$700,884	68-72	$9,536-$9,735
3 bedrooms	$833,869-$953,936	90-91	$9,265-$10,482

Comparison with similar sales

Address	Bedrooms	Sale price	Sqm (internal)	$/sqm (internal)
305/55 Nicholson Street	1 bedroom	$558,372	55	$10,152
601/240-250 Lygon St	1 bedroom	$410,000	45	$9,111
103/100 Nicholson Street, Brunswick East	1 bedroom	$340,000	37	$9,189
403/55 Nicholson Street	2 bedrooms	$700,884	72	$9,735
606/240-250 Lygon St	2 bedrooms	$535,000	57	$9,386
505/100 Nicholson St	2 bedrooms	$610,000	65	$9,384
506/55 Nicholson Street, Brunswick East	3 bedrooms	$953,936	91	$10,482
706/240-250 Lygon St	3 bedrooms	$1,050,000	115	$9,130
408/26 Lygon Street	3 bedrooms	$864,000	86	$10,046
Average Premium for Green Infrastructure				**3-11%**

Source: RPData 2020

‘One Central Park’ 28 Broadway, Chippendale (completed 2013)

One Central Park is an award-winning mixed-use building located in Sydney, Australia in the suburb of Chippendale. Developed as a joint venture between Frasers Property and Sekisui House, it was constructed as the first stage of the Central Park urban renewal project. It was designed by Jean Nouvel and PTW Architects and has won numerous awards for ESD and architecture. Strata fees are approximately $10,000 p.a.

The building itself comprises two residential apartment towers, an east and west tower, in addition to a six-level retail shopping centre at the base of the towers. In 2013, One Central Park was awarded a 5 Star Green Star – ‘Multi-Unit Residential Design v1’ Certified Rating by the Green Building Council of Australia, making it the largest multi-residential building (by net lettable area) in Australia to receive such a designation.

One Central Park is characterised by its low-emission central thermal tri-generation power plant, water recycling plant, light reflecting heliostat, rooftop gardens, smart metering systems and wide-open green spaces. The building is coated in green walls which moderate temperature. It is located 200m from Central Station and is on a major bus route.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$750,000-$900,000	55-65	$13,636-$13,846
2 bedrooms	$765,000-$990,000	72-83	$10,625-$11,928
3 bedrooms	$865,000-$1,205,000	83-94	$10,422-$12,819

Comparison with similar sales				
Address	Bedrooms	Sale price	Sqm (internal)	$/sqm (internal)
1202/3 Carlton Street, Chipendale	1 bedroom	$750,000	59	$12,712
814/349-357 Bulwara Road, Ultimo	1 bedroom	$585,000	47	$12,447
1310/8 Park Lane, Chippendale	1 bedroom	$565,000	52	$10,865
402/3 Park Lane, Chippendale	1 bedroom	$575,000	50	$11,500
512/3 Carlton Street, Chippendale	2 bedrooms	$990,000	83	$11,928
709/178 Thomas Street, Haymarket	2 bedrooms	$870,000	74	$11,757
404/8 Park Lane, Chippendale	2 bedrooms	$800,000	84	$9,524
1207/178 Thomas Street, Haymarket	2 bedrooms	$984,900	83	$11,866
Average Premium for Green Infrastructure				**8-10%**

Source: RPData 2020

‘Illura’ 87-101 Roden Street, West Melbourne (completed 2013)

This Architecturally designed modern apartment building is located in an older inner-city suburb of West Melbourne. The contemporary mixed with old suburban buildings works well with the vertical garden plus a deep soil zone in the rear courtyard of the property complementing the design. The vertical garden is made up of four sections and used as a street view making a powerful impact. The series of elevated sections of the gardens face north east hence they are all drought tolerant and sun hardy species.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$415,000-$435,000	45	$9,222-$9,667

Comparison with similar sales				
Address	Bedrooms	Sale price	Sqm (internal)	$/sqm (internal)
211/89 Roden Street, West Melbourne	1 bedroom	$415,000	45	$9,222
215/89 Roden Street, West Melbourne	1 bedroom	$435,000	45	$9,667
202/118 Dudley Street, West Melbourne	1 bedroom	$365,000	44	$8,295
402/118 Dudley Street, West Melbourne	1 bedroom	$400,000	44	$9,091
111/97-103 Flemington Road, North Melbourne	1 bedroom	$335,000	42	$7,976
Average Premium for Green Infrastructure				5%

Source: RPData 2020

‘Triptych’ 8 Kavanagh Street, Southbank (completed 2011)

The unique collaboration of designers, including Carr architects and public spaces designer team from Patio results in a living space that provides unique features such as its vertical villages and living walls. Doing away with dark and the disorientating effect of enclosed corridors, at Triptych each apartment opens out onto a vertical village featuring a nine-metre high glass atrium with a live green living wall and communal space for residents to enjoy.

Every three storeys at Triptych forms a vertical village, comprising between 10 and 27 apartments, these open spaces provide open-air atrium with views toward Port Phillip Bay. “Vertical villages with their three-storey open foyers bring swathes of light into the apartment’s entry points while the living walls, featuring growing vines, bring a calming experience directly into each space.

The concept has arisen from the European idea of community living where one doorway leads to an enclave featuring five or six homes and becomes its own life force where neighbours can choose to interact or enjoy the open space.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$745,000	81	$9,198
2 bedrooms	$861,000	90	$9,567

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
1707/8-10 Kavanagh Street, Southbank	1 bedroom	$745,000	81	$9,198
1111/118 Kavanagh Street, Southbank	1 bedroom	$406,000	44	$9,227
1209/135 City Road, Southbank	1 bedroom	$435,000	53	$8,207
1208/9 Power Street, Southbank	1 bedroom	$580,000	55	$10,545
1209/8-10 Kavanagh Street, Southbank	2 bedrooms	$861,000	90	$9,567
1305/118 Kavanagh Street, Southbank	2 bedrooms	$605,000	69	$8,768
1803/135 City Road, Southbank	2 bedrooms	$715,000	70	$10,214
1304/241-243 City Road, Southbank	2 bedrooms	$689,000	84	$8,202
Average Premium for Green Infrastructure				**-1-10%**

Source: RPData 2020

D.6 Findings

- Price premiums below 5% may not be directly attributed to the green infrastructure products and may be attributed to small variations in location, NSA, fixtures and fittings, views or design quality
- Properties with green infrastructure tended to have a larger NSA and higher quality fittings, indicating that green infrastructure is often part of a high-end or luxury apartment product
- The Triptych apartments in Southbank saw conflicting price variations. The apartment sizes in Triptych are larger than the comparable developments, and they did not sell for proportionally higher under a luxury branding. Southbank had a large supply of apartments during this period, which may have led purchasers elsewhere. While this was only a marginal variation of -1-10%, this example shows that green infrastructure is often associated with higher NSA apartments, which at the time sold for lower per sqm
- One Central Park, Chippendale was a landmark building designed by an award-winning architect, and therefore a premium can be attributed to design excellence when compared to comparable sales
- Notwithstanding some outlying results, premiums achievable are expected to be between 3-8%.

APPENDIX E : CASE STUDIES – NEW COMMUNITIES

The following section provides case studies of land release and other greenfield developments. The case studies have been informed by site visits, quantitative and qualitative research and published information. The case studies were selected to understand market absorption.

E.1 Thornton Central

North Penrith, also known as Thornton Central is a 50 ha site that comprises a future retail centre, small lot dwellings of various typologies and residential apartments located adjacent to Penrith Rail Station at Thornton. The site was originally owned by the Department of Defence. The masterplan was coordinated by Landcom NSW, with redevelopment undertaken in partnership with private developers.

Following rezoning approval, Landcom acquired the site and acted as a head developer. Stage one to three have sold out. Due to market demand a portion for the site was quarantined for stage four – apartments up to 10 storeys near the railway station.

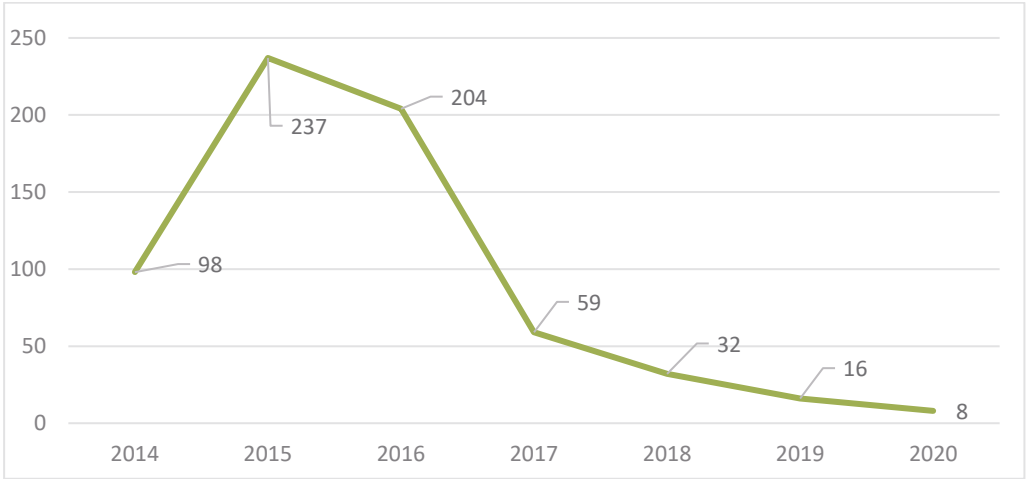
Minimum dwelling target of 900 and 1,000 dwellings are envisaged across the whole precinct. Market research indicated a strong demand from potential buyers for more compact low maintenance homes, preferably Torrens titled.

Figure 24: North Penrith, Masterplan

Source: Penrith Development Control Plan 2014

Our analysis of apartment sale transactions that have occurred within the precinct revealed that between December 2014 to June 2020, 654 apartments have settled which shows a market absorption of 130 units per annum. The figure below shows that at its peak 200 to 250 units were sold p.a.

Figure 25: No. of settled apartment sales - Thornton Central, North Penrith



Source: RPData 2020

The majority of apartment buildings are near completion. There remain around three sites still to be developed near the station. One of these sites is proposed for a mixed-use development with ground floor retail that will include a mid-size metro style supermarket. This building was delayed when the market went into a quiet period after the last upturn in 2014-17 upturn.

E.2 Rouse Hill

Named 'The New Rouse Hill', the development comprises of a master planned neighbourhood of approximately 123 ha located in Sydney's North-West Growth Centre. The site was identified as a major centre for the North West Growth Sector and purchased by the NSW Government in the 1980s for this purpose. The town centre was delayed until the surrounding population reached the level necessary to ensure financial viability. The land was rezoned in 2001 and Landcom sought expressions of interest from the private sector in 2002 to undertake construction. Lend Lease was selected as the master developer and General Property Trust as responsible for the development and on-going management of the Town Centre.

The aim of developing a regional centre has been pursued through the up-front provision of retail and services followed by housing. As such, the residential development is being developed in concert with the existing town centre and the centre will effectively comprise of two components: the Rouse Hill Town Centre being an established regional shopping and commercial centre that also includes residential apartments; and the new residential development which includes both low and medium density housing and which also includes a primary school and high school, child care centre, community facilities, and open space.

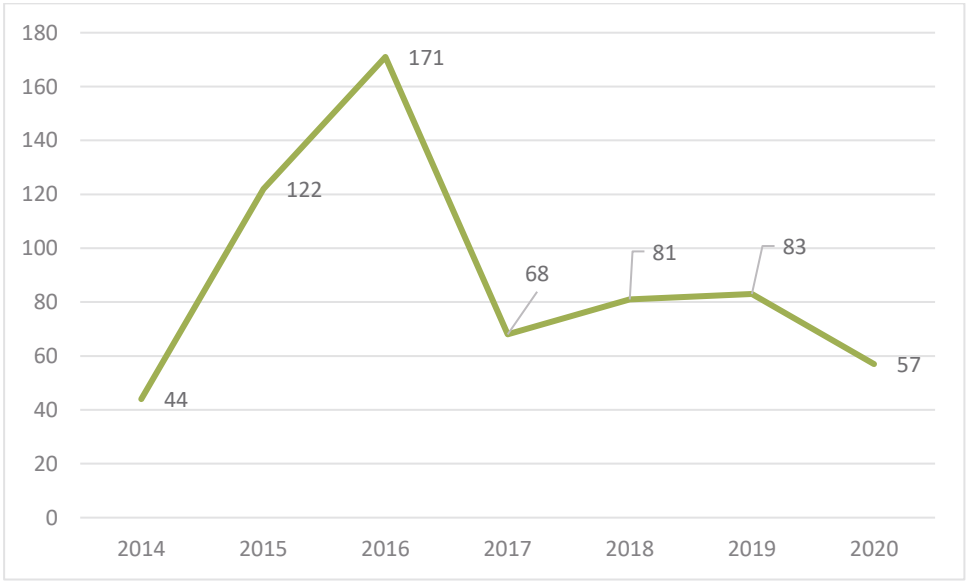
On completion, the development will comprise up to 1,800 dwellings, 200,000 sqm of retail and commercial space, and 32 hectares of public open space. Medium density housing will be incorporated within and adjoining the Centre. The development will feature a range of dwelling types including apartments, terraces and freestanding homes – across B4 Mixed Use, R1 General Residential, R3 Medium Density Residential and R4 High Density Residential zoning.

Figure 26: Rouse Hill Masterplan

Source: www.rhtc.com.au

Our analysis of apartment sale transactions that occurred within the precinct revealed that between September 2014 to June 2020, 626 apartments have settled which shows a market absorption of 125 units per annum (excluding year 2020 and assuming a 5 year term). The figure below shows that at its peak 120 and 170 units were sold per annum.

Figure 27: No. of settled apartment sales



Source: RPData 2020

Unlike many shopping centres in Australia, Rouse Hill Town Centre was designed on 'new urbanism' principles with streets, a Town Square, outdoor dining and a mix of indoor and outdoor spaces. The centre features high ceilings and has no doors between indoor and outdoor sections. The centre is divided into four quadrants. Each quadrant has its own distinct range of stores, and all four quadrants meet at an area known as the Town Square. From the Town Square, the Main Street and Civic Way branch out to separate the four quadrants.

The main street and the retail spaces are on the ground level above a one and half level of car parking Entry from the car park is via travelators and lifts. The town centre also includes some shop top housing and office suites to provide a little more day time and night activation. It had the benefit of a 'main street' town centre with the convenience of car parking of the indoor centres.

Rouse Hill was the ninth highest trading 'big gun' centre (centres above 50,000sqm) amongst the 81 'big gun' centres with reported trading levels in Australia in 2019 in terms of $/sqm. Its trading level was $8,880/sqm - 23% above the national median.

E.3 Edmondson Park

Edmondson Park precinct is a major land release area in the southwest growth area of Sydney, approximately 24km from Parramatta and approximately 45km from Sydney CBD. Edmondson Park precinct is straddling the local government areas of Campbelltown and Liverpool.

The Edmondson Park study area was historically envisaged as a low-density residential market characterised by house and land releases. In the 2016 Census, separate houses accounted for 96% of dwellings in the Edmondson Park study area compared to 58% of households in Greater Sydney. Edmondson Park has rapidly developed since it was rezoned for urban development in 2008 and was one of the first areas to be planned in the NSW Government's South West Sydney Priority Growth Area (formerly the South West Growth Centre).

Edmondson Park is no longer part of the South West Sydney Priority Growth Area. However, the Department maintains a role in regional infrastructure co-ordination and delivery in the area through a Special Infrastructure Contribution (SIC).

The Department is responsible for administration of the planning framework for Edmondson Park South as it falls within the State Environmental Planning Policy (State Significant Precincts) 2005 and the Concept Plan. The plan making, the planning delivery and consent roles for areas outside of Edmondson Park South are administered by Liverpool and Campbelltown Councils.

The concept plan site has an area of 413 hectares. It is located north and south of Campbelltown Road, with 260 hectares in Liverpool and 153 hectares in Campbelltown. At the time of the Concept Plan approval the site was owned by the Commonwealth Department of Defence and then UrbanGrowth NSW. The site has been sold for urban development and development is occurring in stages. The first residential lots were for sale in Bardia in 2012.

Edmondson Park is a staged development that provides a range of high, medium and low-density housing types at different price-points. The masterplan locates the higher density buildings close to the train station and low-rise areas further away from the station.

To support the new development, Edmondson Park railway station opened in February 2015 and connects residents to Liverpool, Parramatta and the Sydney CBD. The South West Rail Link plans to extend residents' transport connections to the north and south as well as connecting to the new Western Sydney Airport.

Upon completion (around 2023) Edmondson Park will be supported by a Town Centre named Ed.Square. Ed.Square will comprise a shopping centre with more than 120 shops, a tavern and a cinema, and be surrounded by approximately 1,900 apartments, terraces and townhouses. A 68-metre tower will become the centrepiece of the centre and the suburb. The development is also supported by schools, community facilities, recreation areas and a regional park.

Figure 28: Edmondson park concept plan

We have been advised by the selling agent that marketing commenced in mid-2018 and approximately 90% have been sold since. This represents a sales rate of 15 -20 units per month or 200 units on average per annum.

The land was controlled and developed by Landcom and the centre built by Frasers in a single stage using 'new urbanism' design principles. The centre will include a six-screen Event Cinema inclusive of two Vmax auditoria, fresh food market hall, eat street and medical centre, with a full line 4,200sqm Coles and 166sqm Liquorland.

E.4 Summary of findings

The case studies were selected as comparable transit oriented development and good examples of master planning. Tabulated below are identified similarities and differences and the lessons learnt that may apply to the LTC.

Table 33: Case study comparative assessment

Similarities	Differences	Lessons learnt
– All localities benefit from good accessibility to public transport – In all localities Landcom, the NSW Government property developer has been involved in some capacity in the delivery of housing. Either as lead developer, joint venture or master planning. – Large parcel of land in single ownership and lead developer	– All localities with the exception of Rouse Hill had the benefit of an existing railway station – The Rouse Hill Town Centre was developed once the neighbouring areas were established. The town centre was delivered in conjunction with the residential apartments. This was a single stage development comprising of car parking with main retail street above. In addition to this, the area benefits from proposed 30,000sqm shopping precinct adjoining the Tallawong train station. This will be the second major shopping precinct servicing the area. – Similarly, within Edmondson Park the delivery of retail and commercial was in conjunction with residential apartments. – In contrast, Thornton is predominately residential and benefits from existing retail facilities located in the Westfield Penrith Shopping Centre. Earlier stages in development was sold out, however due to market demand a portion for the site was quarantined until favourable market conditions were achievable.	– LTC would benefit from a retail spine – The importance of providing a mixed-use and high levels of amenity to support a high-density living. The town centre needs to provide a good mix of retail, commercial, transport nodes and amenities (parks, open space, entertainment & recreation) in order to support the community – The delivery timing of retail and commercial to create a presence

APPENDIX F : RECOMMENDED DRAFT ILP

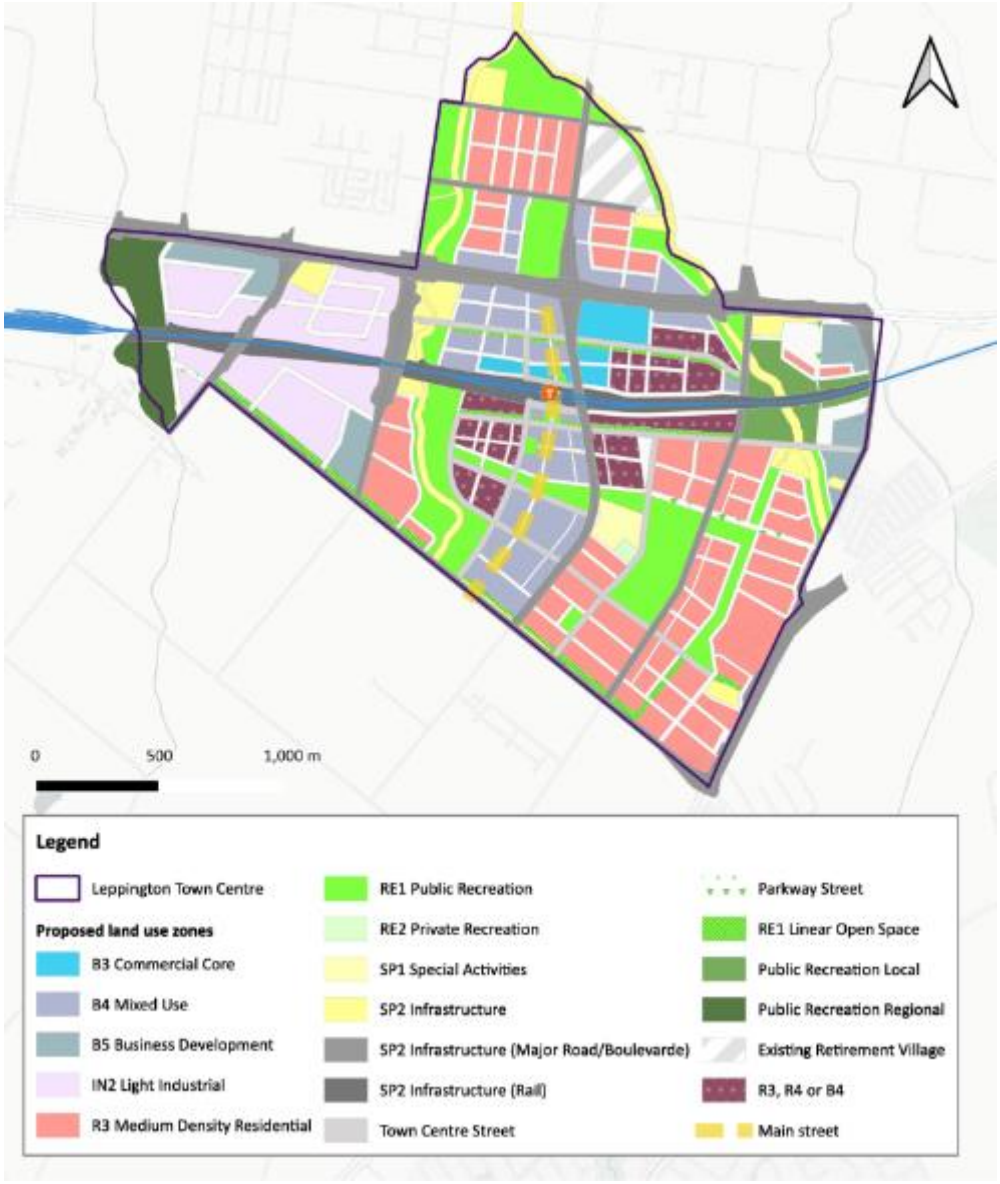
As a collaborative effort with the Council, we would recommend that the Council considers the following proposed zoning as shown in the below figure, subject to further urban design analysis.

We suggest some amendments to the working draft ILP to protect commercial uses and to advance and focus retail development along an activated retail strip or main street at the train station in the masterplan.

The working draft ILP has the current B4 land to the north of the train station being rezoned to B3 - the planning merit being to promote and protect commercial only development. However, the amount provided in the current zone is excessive to meeting long term demand. It further potentially, undermines the objective of advancing the town centre in the short term and is likely to create some hardship to existing owners that expect to develop their lands for mixed but predominantly residential uses.

We recommend changing the working draft ILP so that the B3 zone is positioned next to the station on the commuter parking sites and across Rickard Road in the current B7 zoned area as shown in the figure immediately below. Commercial floorspace can be enforced in the B4 zone retained to the north of the station which is viable to develop in the short term. This we believe will achieve the objectives of promoting an orderly and economic development of the LTC and advance the main street with a mix of retail, commercial and residential uses. This should also avoid serialisation of land in the retail core.

Figure 29: Recommended draft ILP



We also have suggested a main street to be defined in the masterplan in the B4 zone. In this precinct, the LEP will prescribe a land use mix and design requirement for an enhanced focus on active retail frontages to the main street with public spaces and pedestrian friendly access to public parking.

We have also suggested some of the B4 land be rezoned to R3 and/or proposed R4 so that retail/commercial is focused to the main and secondary streets and these fringe areas remain residential only. If the fringe is forced to provide retail/commercial floorspace it is likely to be vacant for periods post completion and/or compete with lower rents to the emerging town centre and potentially undermine its viability. Demand and supply for retail is best controlled by the market within the desired masterplan area with future-proofing provided by redevelopment and staged development.

There are several advantages with the above recommended draft ILP namely:

- There is B3 land to accommodate possible longer term civic and other land uses that are generally or increasingly found in regional centres such as a hospital, university campus, airport related commercial businesses etc
- There is no 'down zoning' of land. The B3 Commercial Core zone affects only State Government owned land and/or existing B5 zoned land where residential is currently prohibited. The new B3 zone will allow a three or four fold increase over current levels
- The B3 zone can be reviewed in say 10 to 20 years from now. The option to amend the LEP to allow residential could be made in the future should the market fail to deliver any significant development
- The plan identifies a 'mainstreet' where retail activity will be concentrated. Being in the B4 zone it is likely that it will be delivered in the short to medium term as the market is ready now for apartment living as evident by the success of sales in Edmondson Park.

In the B4 zone fronting the main street we recommend that it is mandatory to have an active street frontage on the ground floor and a minimum FSR of 0.35:1 for non-residential uses. Closer to the station and to the north of the station we would recommend residential uses be prohibited on the ground floor and first-floor and a minimum non-residential use with a FSR of 0.75:1 on the whole of the site. Both mixed use developments and residential flat buildings without commercial space should be allowed in the B4 zoned lands that do not directly front the main street. Should Council be concerned about possible oversupply of retail space with a spatial distribution that's too wide and disperse then the amount of B4 could be limited further.

APPENDIX G : CONTRIBUTION REQUIREMENTS

Table 34: Forecast dwelling numbers and employment land floorspace – Year 2041 & Theoretical Capacity

Theoretical capacity by year 2061+								By year 2041							
Zone	B3 Comm. Core	**B4 Mixed Use**	**B5 Business Dev.**	**IN2 Light Industrial**	**R4 High Density Residential**	**R3 Medium Density Residential**	**TOTAL**	**Zone**	**B3 Comm. Core**	**B4 Mixed Use**	**B5 Business Dev.**	**IN2 Light Industrial**	**R4 High Density Residential**	**R3 Medium Density Residential**	**TOTAL**
Hectares	6.5	30.0	14.0	34.2	20.0	84.5	189.2	**Hectares**	6.5	30.0	14.0	34.2	20.0	84.5	189.2
Total FSR	4.00	3.60	1.00	1.00	3.50	2.00	2.23	**Total FSR**	4.00	3.60	1.00	1.00	3.50	2.00	2.23
Employment	4.00	0.60	1.00	1.00	0.00	0.00	0.49	**Employment**	4.00	0.60	1.00	1.00	0.00	0.00	0.49
Residential	0.00	3.00	0.00	0.00	3.50	2.00	1.74	**Residential**	0.00	3.00	0.00	0.00	3.50	2.00	1.74
Take-up	80%	80%	80%	80%	80%	80%	80%	**Take-up**	27%	45%	40%	40%	32%	21%	31%
Employment (sqm)	208,000	144,000	112,000	273,600	0	0	737,600	**Employment (sqm)**	70,000	85,000	56,000	136,800	0	0	347,800
Residential (sqm)	0	720,000	0	0	560,000	1,352,000	2,632,000	**Residential (sqm)**	0	405,000	0	0	225,000	348,750	978,750
Total Dwellings		8,000			6,200	12,900	**27,100**	**Total Dwellings**		4,500			2,500	3,750	**10,750**
Apartments		8,000			6,200	10,320	24,520	**Apartments**		4,500			2,500	3,000	10,000
Townhouses		0			0	2,580	2,580	**Town houses**		0			0	750	750
Resident Population	0	17,600	0	0	13,600	29,300	60,500	**Resident Population**	0	9,900	0	0	5,500	8,500	23,900
No. of Workers	8,000	5,500	2,200	2,300	0	0	18,000	**No. of Workers**	2,700	3,300	1,100	1,100	0	0	8,200

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