LIVERPOOL

HOUSING MARKET NEEDS ANALYSIS

LIVERPOOL CITY COUNCIL
SEPTEMBER 2018

aecgroupltd.com

OUTCOME DRIVEN

DOCUMENT CONTROL

Job ID:	J891
Job Name:	Liverpool Housing Market Needs Analysis
Client:	Liverpool City Council
Client Contact:	Allan Campling
Project Manager:	Esther Cheong
Email:	esther.cheong@aecgroupltd.com
Telephone:	02 9283 8400
Document Name:	Liverpool Housing Market Needs Analysis final
Last Saved:	5/12/2018 1:18 PM

Version	Date	Reviewed	Approved
Draft	02/11/2018	JV	EC
Final	4/12/2018	JV	EC

EXECUTIVE SUMMARY

BACKGROUND AND OVERVIEW

Liverpool LGA spans over 300 kilometres in area and situated approximately 35 and 18 kilometres southwest of the Sydney and Parramatta CBDs. The Liverpool LGA is a major urban area of metropolitan Sydney and is anchored by the Liverpool City Centre which is a major commercial, civic, cultural and employment centre for South-West Sydney. The future Western Sydney Airport is located immediately west of the Liverpool City Centre.

The Liverpool LGA is forecasted to experience significant population and employment growth over the coming two decades. In support of Liverpool's economic and population growth pursuant to strategic objectives, Liverpool City Council (Council) is carrying out a review of the Liverpool Local Environmental Plan (2008).

AEC Group (AEC) is commissioned to carry out a Housing Market Needs Analysis to understand:

- Nature and patterns of housing supply and demand.
    - Supply and demand of housing in respective parts of Liverpool LGA and environs.
    - Trends and drivers of housing demand, their impacts on future demand and whether existing housing stock will meet these demands.
    - The nature and quantum of development that is ongoing and the drivers for that development activity.
    - The socio-demographic profile of the Liverpool LGA the likely influence of this on capacity to pay, and housing choice and preferences.
- Alignment (or non-alignment) of housing supply with housing need and preference, as well as effective demand (what people can afford to pay).
    - Affordability factors considering incomes and housing price points (sale prices and rents).
    - Accommodation requirements considering demographic characteristics and preference.
- Constraints to housing supply and if they are related to the current planning framework or more broadly due to market and economic factors, which are beyond the control of planning authorities.

The analysis of patterns of supply and demand will assist Council understand the nature of and extent to which housing need is met in Liverpool. This Study does not consider the Liverpool City Centre which is subject to a separate investigation by Council.

SOCIO-DEMOGRAPHIC PROFILE

In order to understand the nature of demand for housing in the Liverpool LGA, regard is had to the existing socio-demographic of the LGA and how this has changed over the 10 years to 2016. A snapshot of the Liverpool LGA socio-demographic profile is detailed below:

- Strong population growth was observed across the Liverpool LGA over the 2006-2016 period at 2.3% per annum, well-exceeding that observed in the broader Western City District at 1.7% per annum.
- Comparatively, dwelling growth in the LGA was slower compared to population growth at 2.0% over the 2006-2016 period.
- Concurrent with population growth outpacing dwelling growth, average household occupancy rates increased from 3.0 persons (2011) to 3.1 persons per dwelling (2016).
- Residents in the Liverpool LGA are predominantly young families with over 50% of residents under 35 years of age. The average age in Liverpool is 34 years, compared to 36 years in the Western City District.
- Almost 60% of all lone person households in the Liverpool LGA are residents aged 55 years and older.
- The Liverpool LGA is ethnically diverse with circa 46% of all residents born overseas.

- Whilst residents in the Liverpool LGA are becoming more affluent and educated (as observed over the 2006-2016 period), the LGA retained a relatively high level of social disadvantage in 2016.
- Detached housing is the primary form of dwelling typology in the Liverpool LGA, accounting for almost three quarters of dwellings. The number of medium-density (townhouses, villas, etc) and apartments is increasing.
- Dwelling ownership rates fell over the 2006-2016 period whilst the proportion of those renting have increased.

These trends ultimately underpin demand for a variety of housing types across the Liverpool LGA.

MARKET CONTEXT

There are two key factors driving a shift in the nature of demand in Liverpool - housing affordability and demographic need. The housing affordability issue is acutely observed in the Liverpool LGA with many households highly price sensitive. Demand for smaller, denser housing formats (townhouses, apartments) has increased as many households compromise on size for lower prices. Conversely, ageing couples and retirees seeking to downsize and look for smaller, maintenance-friendly accommodation are also driving demand for these typologies.

Purchaser interest and demand across the Liverpool LGA over the course of 2018 is predominantly observed from owner occupiers, particularly first-home buyers. Investors who were a particularly active buyer cohort over the course of 2015-2017 have largely withdrawn from the market given the increasing difficulty in obtaining finance. Those investors who remain active in the market are generally seeking detached houses on larger blocks to allow for granny flat additions.

While many owner occupier purchasers typically already reside in the local area (including the areas of Campbelltown and Camden), there is strong anecdotal evidence that increasing numbers of residents of Bankstown LGA are moving into Liverpool due to the relative affordability of dwellings in the Liverpool LGA.

The ongoing revitalisation of the Liverpool City Centre is generating strong demand for new product therein as buyers anticipate the improved amenity offering. A number of new apartment projects (some over 20 storeys) have experienced good demand albeit a softening in interest over the past 6-9 months.

The development pipeline in the Liverpool LGA is significant with just over 13,000 dwellings proposed over the coming decade, the bulk of these being within the suburb of Liverpool and within the City Centre. Appetite for higher-density development is observed to be expanding into the outer suburbs although medium-density typologies remain the most commonly delivered product. Development in general remains fragile as land values have increased paramount with apartment/townhouse values placing pressure on developers to economically secure sites. Higher-density development in many areas of the LGA remains unviable.

Overall, the Liverpool LGA housing market is observed to be playing a multi-faceted role in response to an array of affordability and lifestyle preferences. The continued revitalisation of the Liverpool City Centre is expected to further raise the profile of the broader Liverpool LGA.

IMPLICATIONS FOR HOUSING IN LIVERPOOL

The Liverpool residential market is a distinctly layered market. Market preference, income levels and location dynamics cumulatively influence the built form and dwelling types that are progressed and sought after.

Housing Typologies

Purchasers (and renters) seeking traditional detached housing have an array of options. Households with larger budgets typically target modern homes in more affluent suburbs like Moorebank and Chipping Norton, whereas purchasers with tighter budgets typically target the suburbs grouped in this study as Liverpool Central.

Notably, in many lower priced suburbs, the value placed on a granny flat (or allotment that is large enough for one) is significant. This is important to the owner occupier market for a number of reasons - they are able to accommodate a larger or extended, and intergenerational family. It also represents a potential source of rental income. To the investor, the annual gross yield on this type of dwelling is attractive, as high as 5.5% in some cases.

Demand for medium-density typologies (townhouses, villas, etc) remains buoyant across the Liverpool LGA largely due to their inherent affordability compared to traditional detached housing. That said, the preference for medium density product is not always borne out of affordability reasons, rather owing to lifestyle and convenience factors. Smaller format housing is associated with lower maintenance and while households may pay the same price as they would for a larger detached home, the price allows access to a new and attractively designed townhouse.

Market appetite for units and apartments is strongest in the Liverpool City Centre and other locations in and around transport nodes and in proximate to retail and other urban support services. In some R4 High Density Residential areas, even though residential units are permitted, there would appear to be a market preference for medium density product.

Townhouse and medium density typologies do not respond to density and height, consequently are able to occur as infill development where a smaller number of sites are available. This type of development activity is ongoing across the LGA and is being met by good market demand.

While poor feasibility at lower densities would appear to suggest that higher densities are required to displace existing uses (particularly in the City Centre), higher density mixed development is as yet unviable in many suburbs across the LGA (although this has gradually begun to shift in some areas).

Issues for Housing Supply

Landowner expectations generally shift with planning controls, i.e. higher expectations accompany higher permissible densities and higher order uses. As a result, areas that retain a low-density zoning that permit townhouse/villa developments will over time, be redeveloped with this form of infill development as existing dwellings reach the end of their economic useful life.

Median household incomes in Liverpool suggest a detached, freestanding house is out of reach to many households. The following assist with housing options that households can access:

- Sharing of accommodation by multiple households (either extended family or intergenerational families). Detached homes with granny flats or dual occupancies are suitable for this.
- Supplement to income by leasing a granny flat to the rear.
- Purchase of 2 bedroom townhouse for under $500,000. While most townhouses and villas are proposed for 3 or 4 bedrooms, 2 bedroom townhouses represent an excellent entry point for young families.
- Availability of unit accommodation for or under the critical price capacity of $550,000. Increased residential densities in and around town centres where public transport and other retail and non-retail support services are available alleviates pressure on housing budgets.

TABLE OF CONTENTS

1. INTRODUCTION

1.1 BACKGROUND

In support of Liverpool's economic and population growth pursuant to strategic objectives, Liverpool City Council (Council) is carrying out a review of the Liverpool Local Environmental Plan (2008).

AEC Group (AEC) is commissioned to carry out a Housing Market Needs Analysis to understand:

- Nature and patterns of housing supply and demand.
  - Supply and demand of housing in respective parts of Liverpool LGA and environs.
  - Trends and drivers of housing demand, their impacts on future demand and whether existing housing stock will meet these demands.
  - The nature and quantum of development that is ongoing and the drivers for that development activity.
  - The socio-demographic profile of the Liverpool LGA the likely influence of this on capacity to pay, and housing choice and preferences.
- Alignment (or non-alignment) of housing supply with housing need and preference, as well as effective demand (what people can afford to pay).
  - Affordability factors considering incomes and housing price points (sale prices and rents).
  - Accommodation requirements considering demographic characteristics and preference.
- Constraints to housing supply and if they are related to the current planning framework or more broadly due to market and economic factors, which are beyond the control of planning authorities.

The analysis of patterns of supply and demand will assist Council understand the nature of and extent to which housing need is met in Liverpool. "Liverpool" and "the LGA" are used interchangeably to refer to the Liverpool local government area. This Study does not consider the Liverpool City Centre which is subject to a separate investigation by Council.

AEC's work is carried out in two parts:

1 Liverpool Housing Market Needs Analysis (this report)

2 Liverpool Residential Development Feasibility Analysis which examines the financial feasibility of new development in select parts of Liverpool.

1.2 APPROACH

In order to undertake the Housing Market Needs Analysis, AEC undertook the following tasks:

- Desktop analysis of the general locality to understand:
  - Current built form, offer and amenity and existing market dynamics between land uses.
  - Principal land use opportunities and constraints that influence viability of future development and growth.
- Socio-demographic analysis to understand:
  - Socio-demographic characteristics of residents in Liverpool LGA.
  - Employment and incomes to ascertain households and their capacity to pay for housing.
  - Dwelling types and composition in Liverpool and how they have changed over time.
  - Population and dwelling projections to ascertain how Liverpool LGA is expected to grow toward 2036.
- Market assessment of the various area groupings in Liverpool LGA to understand the market for residential uses:

  - Grouping of suburbs into area groupings reflective of locational and market characteristics.
  - Research to identify patterns of supply and demand, understand market and development activity and purchaser preferences and requirements.
  - Review of development pipeline (developments approved and in those in planning) to understand the drivers and nature of new residential development.
  - Analysis of existing-use values compared to the prices paid for development sites.
  - Analysis of the competitive environment in which the LGA operates.
- Consideration of the types of development that are financially feasible to undertake, and how market need/demand is being met by new and existing supply.
- Principles and recommendations to facilitate and accommodate future housing growth in Liverpool.

1.3 STRUCTURE OF THE STUDY

The Study is structured in the following chapters:

- Chapter 2 considers the locational context of the Liverpool LGA (or Study Area) and environs, also considering the types of dwellings and socio-demographic profile of its residents.
- Chapter 3 examines property and market trends in the Study Area, specifically the nature of purchaser activity and investor interest in residential accommodation. Liverpool's market appeal (or lack thereof) ultimately underpins its ability to renew and grow sustainably. The chapter also investigates market trends for development activity. Demographic trends and market attitudes cumulatively influence the type of product that is successfully delivered and taken up.
- Chapter 4 considers future growth expectations and their implications for dwelling demand. The chapter also considers the existing supply pipeline and development activity, and how well placed Liverpool may be to respond to future demand and need.

1.4 LIMITATIONS OF THE STUDY

AEC acknowledges a number of limitations associated with the study.

- Desktop appraisal of existing-use values ('as is' values) without the benefit of internal inspections.
- Research findings and assumptions are approached on an 'aggregate basis', intended to be representative of the Study Area. In reality though, there will be site circumstances where the aggregate findings may not apply. For example, even though at an aggregate level, existing house prices in Chipping Norton may exceed a certain threshold, there may indeed be properties that are in poor condition that are cheaper to consolidate into a development site.
- Feasibility testing is not undertaken in this study (carried out in the Liverpool Residential Development Feasibility Analysis). Conclusions are made based on a high-level analysis of existing-use values and prices recorded to be paid for development sites.

Notwithstanding the limitations above, the approach is considered appropriate for the purposes of reviewing if housing need/demand is adequately catered to in the Study Area.

2. LOCATIONAL AND STRATEGIC CONTEXT

2.1 LOCAL CONTEXT AND STUDY AREA

Liverpool LGA spans over 300 kilometres in area and situated approximately 35 and 18 kilometres southwest of the Sydney and Parramatta CBDs. Liverpool LGA is bounded by Penrith and Fairfield LGAs in the north, Bankstown LGA in the east, Sutherland Shire in the southeast, Campbelltown and Camden LGAs in the south and Wollondilly Shire in the west.

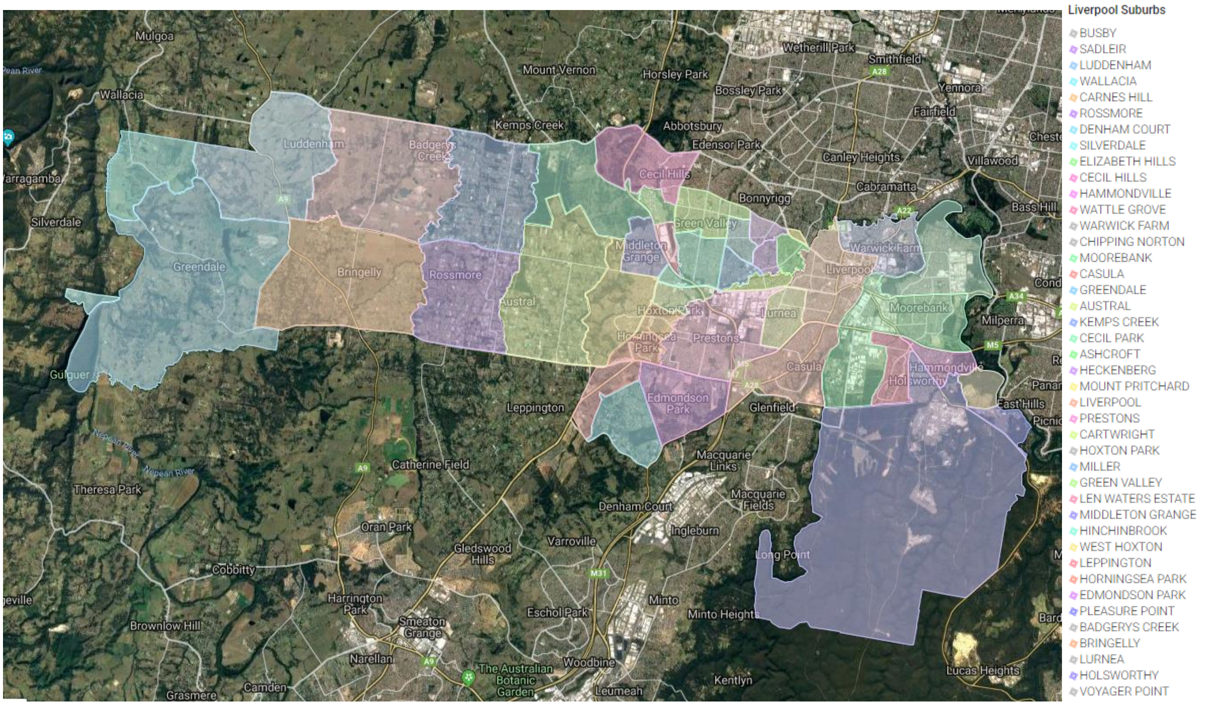
Liverpool is serviced by local bus services and a heavy rail line. Situated along the Main South rail line, Liverpool Station is served by a converging of three rail lines: the T2 Inner West & Leppington service, T3 Bankstown and T5 Cumberland services. The South West Rail Link completed in 2015 additionally provides services between Edmondson Park and Leppington.

The former South West Growth Centre was approximately 17,000ha in size and straddled the local government areas of Liverpool, Camden and Campbelltown. A large proportion of lands in Liverpool LGA's western jurisdiction falls within the newly-realigned South West Growth Area (South West GA), which was formed following a commitment of Government funding to the Western Sydney Airport in 2017.

The South West GA now comprises circa 10-13 precincts, with parts of Bringelly, Rossmore and Leppington North falling within the new boundaries however it is understood that detailed alignment of both Growth Areas is still under review.

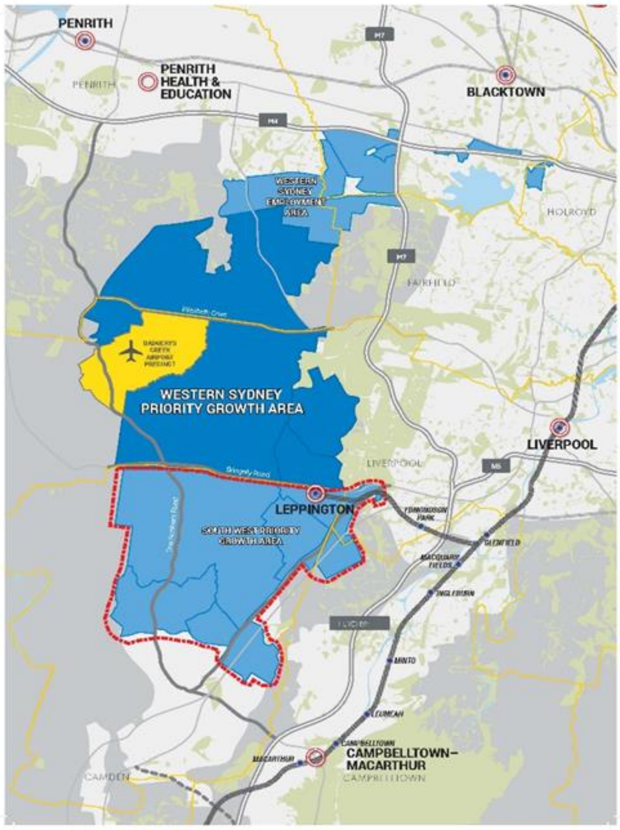
Figure 2.1 depicts the extent of the Liverpool LGA boundaries and the suburbs contained therein, and Figure 2.2 shows the newly formed South West Growth Area.

Figure 2.1: Liverpool LGA by Suburb



Source: LCC

Figure 2.2: Boundary Realignment, South West Growth Area



Source: DPE

The Liverpool LGA is a diverse and layered market, influenced by a plethora of factors which ultimately form the drivers shaping the patterns of supply and demand of dwellings. For a holistic understanding of the various markets and sub-markets which subsist in the LGA, suburbs have been grouped by geographical location where they, in aggregate, comparable characteristics and market perception.

Table 2.1: Liverpool LGA Suburbs and Dwelling Composition (2016)

Suburb	Detached		Semi-Detach., Townhouses		Flats, Unit, Apartments		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Liverpool East										
Pleasure Point	160	100.0%	0	0.0%	0	0.0%	0	0.0%	160	100.0%
Voyager Point	475	93.2%	34	6.8%	0	0.0%	0	0.0%	509	100.0%
Chipping Norton	2,505	81.4%	359	11.7%	210	6.8%	3	0.1%	3,078	100.0%
Warwick Farm	551	20.9%	181	6.9%	1,889	71.7%	13	0.5%	2,633	100.0%
Hammondville	755	61.7%	375	30.7%	90	7.3%	3	0.2%	1,223	100.0%
Moorebank	2,816	85.6%	412	12.5%	62	1.9%	0	0.0%	3,290	100.0%
Holsworthy	1,230	80.0%	304	19.8%	3	0.2%	0	0.0%	1,537	100.0%
Wattle Grove (NSW)	2,802	96.0%	83	2.9%	0	0.0%	34	1.2%	2,919	100.0%
Total	**11,293**	**73.6%**	**1,749**	**11.4%**	**2,254**	**14.7%**	**53**	**0.3%**	**15,349**	**100.0%**
Liverpool City Centre										
Liverpool	2,903	28.9%	1,105	11.0%	6,013	59.8%	31	0.3%	10,052	100.0%
South Liverpool										
Casula	3,697	72.5%	1,287	25.2%	108	2.1%	6	0.1%	5,098	100.0%
Prestons	4,068	95.8%	180	4.2%	0	0.0%	0	0.0%	4,248	100.0%
Total	**7,764**	**40.0%**	**2,572**	**13.3%**	**6,121**	**31.6%**	**37**	**0.2%**	**19,398**	**100.0%**

Suburb	Detached		Semi-Detach., Townhouses		Flats, Unit, Apartments		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Liverpool Central										
Ashcroft	909	73.9%	22	1.8%	299	24.3%	0	0.0%	1,230	100.0%
Busby	1,237	89.5%	112	8.1%	33	2.4%	0	0.0%	1,382	100.0%
Cartwright	579	59.4%	41	4.2%	356	36.4%	0	0.0%	976	100.0%
Heckenberg	842	85.0%	77	7.8%	72	7.3%	0	0.0%	991	100.0%
Miller	828	65.5%	50	4.0%	385	30.5%	0	0.0%	1,263	100.0%
Lurnea	2,325	75.6%	702	22.8%	50	1.6%	0	0.0%	3,077	100.0%
Sadleir	941	85.5%	28	2.6%	131	11.9%	0	0.0%	1,101	100.0%
Total	**7,661**	**76.5%**	**1,032**	**10.3%**	**1,327**	**13.2%**	**0**	**0.0%**	**10,020**	**100.0%**
Liverpool West										
Edmondson Park	654	97.9%	10	1.5%	0	0.0%	4	0.6%	668	100.0%
Middleton Grange	1,405	88.3%	168	10.5%	19	1.2%	0	0.0%	1,592	100.0%
Cecil Hills	1,847	95.4%	89	4.6%	0	0.0%	0	0.0%	1,936	100.0%
Horningsea Park	1,036	99.7%	3	0.3%	0	0.0%	0	0.0%	1,039	100.0%
Hoxton Park	1,093	87.7%	149	11.9%	0	0.0%	4	0.3%	1,246	100.0%
Green Valley	2,924	81.8%	650	18.2%	3	0.1%	0	0.0%	3,577	100.0%
Hinchinbrook	2,800	87.9%	383	12.0%	3	0.1%	0	0.0%	3,186	100.0%
West Hoxton	2,571	94.5%	146	5.4%	0	0.0%	3	0.1%	2,720	100.0%
Cecil Park	233	100.0%	0	0.0%	0	0.0%	0	0.0%	233	100.0%
Denham Court	591	89.9%	0	0.0%	17	2.5%	50	7.6%	658	100.0%
Total	**15,154**	**89.9%**	**1,598**	**9.5%**	**42**	**0.2%**	**61**	**0.4%**	**16,855**	**100.0%**
South West Growth Area*										
Kemps Creek	695	99.1%	3	0.4%	0	0.0%	3	0.4%	701	100.0%
Austral	1,004	98.1%	8	0.8%	3	0.3%	9	0.9%	1,024	100.0%
Leppington	1,201	96.8%	17	1.4%	0	0.0%	22	1.8%	1,241	100.0%
Badgerys Creek	74	100.0%	0	0.0%	0	0.0%	0	0.0%	74	100.0%
Bringelly	773	98.4%	9	1.2%	0	0.0%	3	0.4%	785	100.0%
Rossmore	718	99.6%	0	0.0%	0	0.0%	3	0.4%	721	100.0%
Greendale	113	100.0%	0	0.0%	0	0.0%	0	0.0%	113	100.0%
Luddenham	548	99.4%	3	0.6%	0	0.0%	0	0.0%	551	100.0%
Wallacia	504	85.0%	3	0.5%	57	9.7%	28	4.8%	593	100.0%
Total	**5,630**	**97.0%**	**43**	**0.7%**	**61**	**1.0%**	**69**	**1.2%**	**5,803**	**100.0%**

*Not all suburbs within the South West Growth Area fall within the boundaries of the Liverpool LGA
Source: ABS (2017a)

*While the Liverpool City Centre is excluded from the Study Area, in the interest of context and completeness dwelling composition is included here.

These area groupings reflect broad comparable locational and market characteristics to enable market profile analysis by group.

2.2 STATE PLANNING POLICY

2.2.1 Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (the Region Plan) is built on a vision to transform Greater Sydney into a metropolis anchored by three cities: Western Parkland City, Central River City and Eastern Harbour City. A set of directions and objectives provide guidance to achieving the outcomes:

- Infrastructure and collaboration;
- Liveability;
- Productivity;
- Sustainability.

Local government areas (LGAs) of Liverpool and those adjacent/proximate to it (Camden, Campbelltown, Fairfield, Wollondilly) are amongst those instrumental in delivering the aspirations of the Western Parkland City in supporting growing communities with their commercial and population services, and health and education assets.

The Region Plan's objectives of relevance to this Study are outlined in Table 2.2.

Table 2.2: Greater Sydney Region Plan, Relevant Objectives

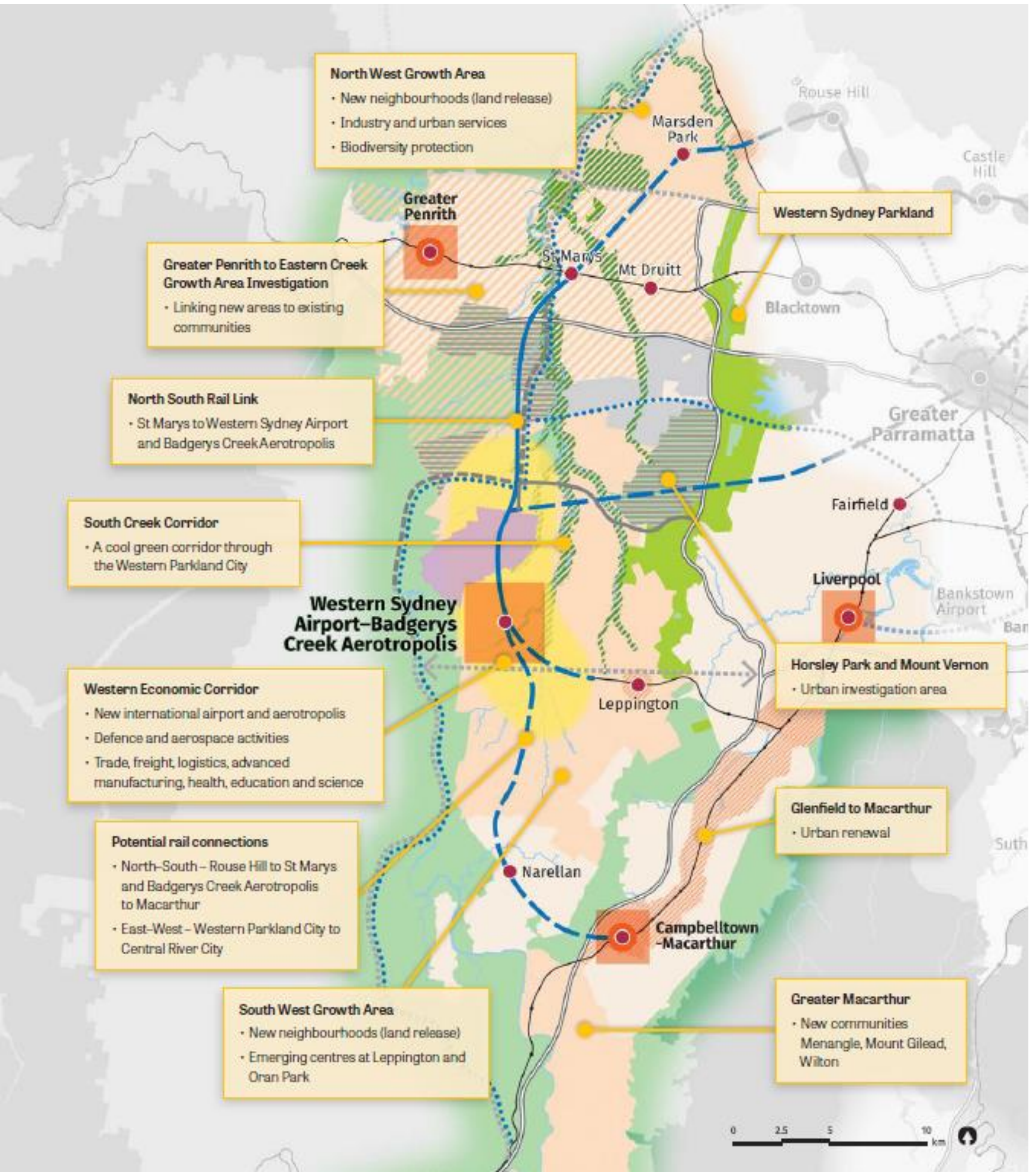
Objective	Description
Objective 10: Greater housing supply	A range of housing types, tenures and price points, supported by local amenity and infrastructure is required to meet supply constraints and support a growing population in the Western Parklands City. Local planning authorities are responsible for investigating and considering areas for urban renewal in and around existing centres and/or good access to public transport. The Region Plan's housing supply targets provide a focus for delivery of dwellings and infrastructure, and inform the housing strategies for councils. For the Western Parklands City, the 0-5 years (2016-2021) and 20-year (2016-2036) targets are 39,850 and 184,500 dwellings, respectively.
Objective 21: Internationally competitive health, education, research and innovation precincts.	Liverpool CBD has been identified as a health and education precinct, due to the significant presence of health and education facilities, as identified in section 2.1. Health and education precincts are significant contributors to Greater Sydney's economy, and have the potential to drive and support international competitiveness whilst creating significant local opportunities for direct and ancillary jobs. The draft Region Plan intends to facilitate the continued co-location of health and education facilities to support the growth of the precinct, and attract associated businesses and industries to foster economic productivity created through agglomeration benefits.
Objective 22: Investment and business activity in centres	The Region Plan identifies Liverpool CBD as a Metropolitan Centre. Metropolitan centres are the economic focus of Greater Sydney, fundamental to growing its global competitiveness and where government actions and investment, including transport, will be focused. The intent of these centres is to deliver very high levels of development and amenity. The Western Parklands City accommodates three metropolitan centres (Liverpool, Penrith, Campbelltown-Macarthur) and will in the future accommodate the Western Sydney Airport and Badgerys Creek Aerotropolis to form the Western Parkland City Metropolitan Cluster. These centres are important as they provide metropolitan functions - concentrating higher order jobs and a wide range of goods and services. The draft Region Plan affirms Liverpool's economic significance, and the associated focus of government investment in the area.

Source: GSC (2017a)

*Liverpool CBD, whilst excluded from the Study Area, is described here due to its status as a Metropolitan Centre of the Western Parklands City.

As mentioned prior, part of the Liverpool LGA is identified as part of the South West Growth Area. The South West GA is designated for growth and urban development to support the growing demand for housing, and access to employment and community and neighbourhood facilities.

Figure 2.3 South West Growth Area



Source: GSC (2018a)

2.2.2 Western City District Plan

The Western City District Plan (the District Plan) is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the vision for Greater Sydney at a district level.

In achieving the directions of the Region Plan, the District Plan will focus on its relevant Planning Priorities:

Table 2.3: Planning Priorities, Western City District Plan

Priority	Description
Planning Priority W5: Providing housing supply, choice and affordability, with access to jobs, services and public transport	Adequate planning and co-ordination must be undertaken to ensure that population growth is met with suitable housing types, tenures and price points. New housing must be integrated with local infrastructure to ensure that liveable, well-connected neighbourhoods with access to amenity and public transport are created.

Priority	Description
	The District Plan has set out housing supply targets to address the delivery of new dwellings in Liverpool LGA over a five-year period (2016-2021). They are minimum targets and reflect the delivery potential under existing planning controls. The District Plan has determined a target of 8,250 dwellings for the Liverpool LGA.
Planning Priority W6: Creating and renewing great places and local centres, and respecting the District's heritage	The District Plan states that adopting a place-based and collaborative approach through planning, design and development to integrate social infrastructure is key to supporting connectivity and providing a community hub in the Liverpool CBD. The unique character and distinctive mix of land uses, activities, social connectors and functions of Liverpool provides social and physical connectivity, local diversity and cultural richness, all of which contribute to the liveability of Liverpool's residents and enhancing their quality of life.

Source: GSC (2017b)

2.2.3 State Environmental Planning Policy (Sydney Growth Centres)

The State Environment Planning Policy (Growth Centres SEPP) establishes the land use zoning and development controls for all land within the Growth Centres (now referred to as Growth Areas). Consent authorities (including local councils) must apply the provisions and consider the objectives of the Growth Centres SEPP when making planning decisions within the Growth Areas.

2.3 LOCAL PLANNING POLICY

2.3.1 Liverpool Residential Development Strategy (2007)

A Residential Development Strategy was prepared prior to the making of the LEP (2008). The Strategy sought to establish the direction for housing in Liverpool (excluding areas falling within the South West Growth Centre), identifying opportunities to accommodate new residential development, and highlighting a need for a shift in supply away from larger accommodation typologies to alleviate housing stress.

A number of recommendations were made for Liverpool's residential lands over the following 25 years, particularly in regard to 12 investigation areas that were identified for analysis.

- Consolidate medium density residential zones to areas around activity centres (200m-800m) and major transport nodes and down-zone fringe areas.
- Introduce new high density residential zone nodes adjacent to main town centres and major transport nodes.
- Encourage modest affordable private housing types within medium density zones, particularly around main town centres at Moorebank, Casula, Miller and Green Valley.
- Group all high density residential zones (including mixed use residential) into one zones and utilise additional uses and development standards to create distinctive characters.
- Introduce new location specific development standards (minimum lot size, floor space ratio and building height) to respond to specific capacity or existing or desired urban characters of different areas.

The recommendations with respect to the 12 investigation areas are to:

- Establish a medium density zone varying between 400m and 800m (5 minute and 10 minute walk) in the 12 difference centres.
- Introduce new high density residential nodes, totaling 100ha in Moorebank, Casula, Miller, Green Valley, Liverpool West, Liverpool West North, Cartwright and to a lesser extent Chipping Norton and Holsworthy.
- Provide generally for four and five storey residential buildings and three storey buildings on any new interfaces with lower density zones.
- Facilitate street improvements and pedestrian connections to centres and facilities.

2.3.2 Liverpool Local Environmental Plan (2008)

The Liverpool Local Environmental Plan (2008) (LEP) and Liverpool Development Control Plan (2008) (DCP) govern land use and development in the Liverpool LGA. A review of the local planning instruments and local policy relevant to the Study Area is provided in Table 2.4.

Table 2.4: Land Use Zones and Objectives

No Zones	Objectives
Residential Zones	
R1 General Residential	• To provide for the housing needs of the community. • To provide for a variety of housing types and densities. • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To ensure that housing densities are broadly concentrated in locations accessible to public transport, employment, services and facilities. • To facilitate development of social and community infrastructure to meet the needs of future residents.
R2 Low Density Residential	• To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area. • To encourage employment opportunities in accessible locations. • To maximise public transport patronage and encourage walking and cycling. • To allow for residential and other accommodation while maintaining active retail, business or other non-residential uses at street level. • To facilitate a high standard of urban design and a unique character that contributes to achieving a sense of place for the local community.
R3 Medium Density Residential	• To provide for the housing needs of the community within a medium density residential environment. • To provide a variety of housing types within a medium density residential environment. • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To provide for a concentration of housing with access to services and facilities. • To provide for a suitable visual transition between high density residential areas and lower density areas. • To ensure that a high level of residential amenity is achieved and maintained.
R4 High Density Residential	• To provide for the housing needs of the community within a high density residential environment. • To provide a variety of housing types within a high density residential environment. • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To provide for a high concentration of housing with good access to transport, services and facilities. • To minimise the fragmentation of land that would prevent the achievement of high density residential development.
Business Zones	
B1 Neighbourhood Centre	• To provide a range of small-scale retail, business and community uses that serve the needs of people who live or work in the surrounding neighbourhood. • To provide the opportunity for small scale supermarkets that will provide goods for the day-to-day needs of people who live and work in the surrounding neighbourhood. • To allow for residential and other accommodation while maintaining active retail, business or other non-residential uses at street level.
B2 Local Centre	• To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area. • To encourage employment opportunities in accessible locations. • To maximise public transport patronage and encourage walking and cycling. • To allow for residential and other accommodation while maintaining active retail, business or other non-residential uses at street level. • To facilitate a high standard of urban design and a unique character that contributes to achieving a sense of place for the local community.
B4 Mixed Use	• To provide a mixture of compatible land uses. • To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling. • To allow for residential and other accommodation in the Liverpool city centre, while maintaining active retail, business or other non-residential uses at street level. • To facilitate a high standard of urban design, convenient urban living and exceptional public amenity.

No Zones	Objectives
B6 Enterprise Corridor	• To promote businesses along main roads and to encourage a mix of compatible uses. • To provide a range of employment uses (including business, office, retail and light industrial uses). • To maintain the economic strength of centres by limiting the retailing activity. • To provide primarily for businesses along key corridors entering Liverpool city centre, major local centres or retail centres. • To ensure residential development is limited to land where it does not undermine the viability or operation of businesses. • To provide for residential uses, but only as part of a mixed use development.

Source: LCC (2008)

LEP density and height controls refer to the maximum limits that may be achieved on a site. Floorspace ratios (FSRs) in residential and business zones range from FSR 0.5:1 to FSR 1.7:1 in suburban locations and up to FSR 10:1 in the Liverpool City Centre.

Liverpool Local Environmental Plan 2008 (Amendment No 52)

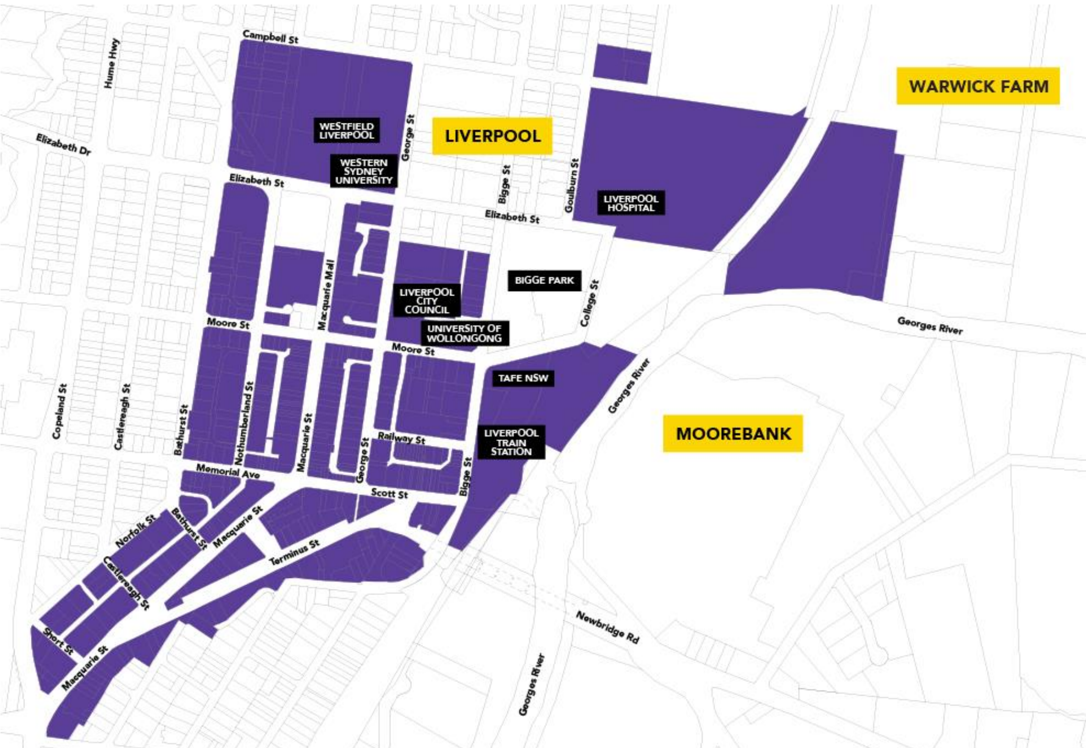
Under Amendment No 52, approximately 25 hectares of land in the Liverpool City Centre was proposed to be rezoned from B3 Commercial Core to B4 Mixed Use to encourage mixed use development, business growth and an '18-hour economy' in the City Centre.

The purpose of the amendment to the LEP was to incentivise greater private sector development and encourage greater densities on large key sites based on a range of criteria related to public domain, facilities and amenity.

In August 2018, Amendment No 52 was formally approved by the NSW State Government.

The areas of the Liverpool City Centre which Amendment No 52 were applied to are illustrated in Figure 2.4

Figure 2.4: Areas Covered Under Amendment No 52



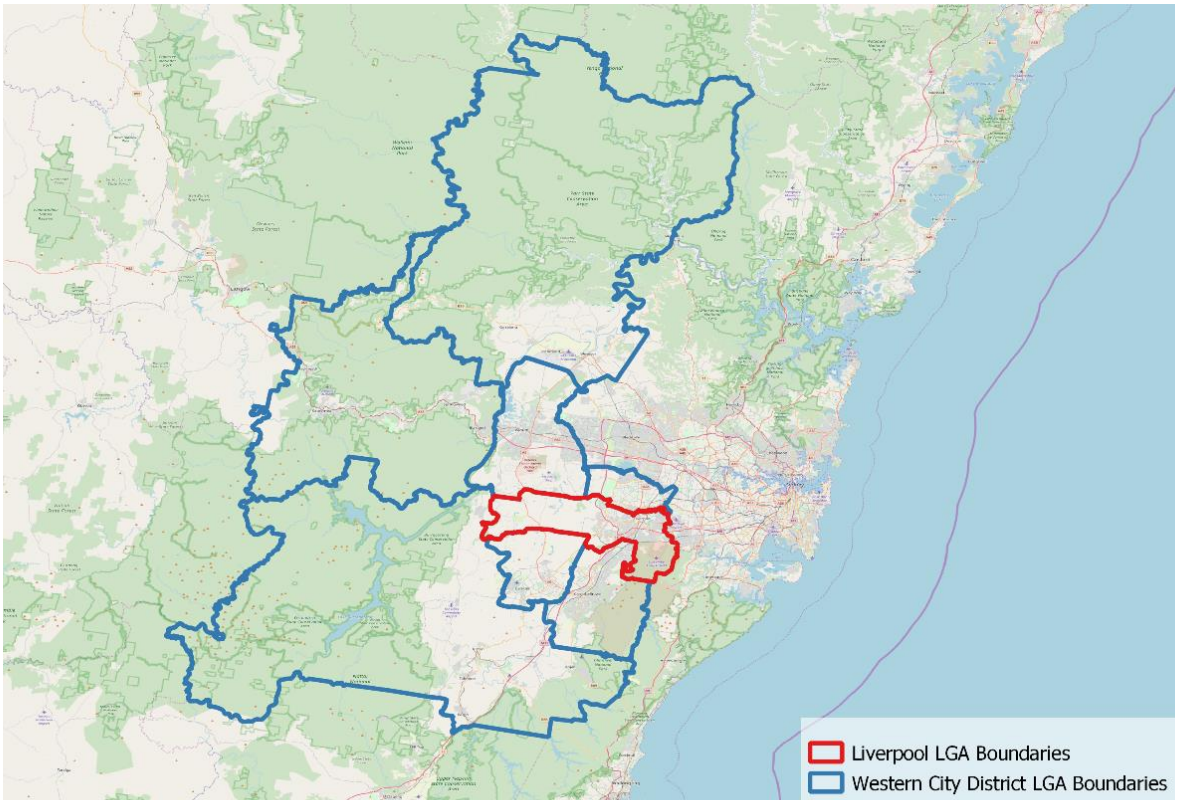
Source: LCC

2.4 SOCIO-DEMOGRAPHIC PROFILE

Understanding the socio-demographic profile of an area is useful in understanding the growth dynamics and trends over time, and facilitate an understanding in how the existing profile may grow given the strategic and economic context.

This section considers the socio-economic profile of Liverpool LGA residents, benchmarked against those of the Western City District (which comprises the LGAs of Liverpool, Penrith, Hawkesbury, Blue Mountains, Camden, Campbelltown, Fairfield and Wollondilly).

Figure 2.5: The Study Area



Source: AEC

ABS Census data is predicated on residents responding and completing the ABS Census. Unfortunately, it is impossible to obtain responses from all residents for a variety of reasons. Accordingly, ABS Census data is invariably an undercount given not all residents within a geography complete the Census. AEC takes a nuanced approach to analysing ABS Census data by redistributing unanswered responses by proportion. This is undertaken to enable a more conclusive understanding of an areas socio-demographic profile. Accordingly, AEC analysis differs from raw data presented by ABS.

2.4.1 Population and Households

Historic Population Growth

The Liverpool LGA has experienced strong population growth between 2006 and 2016, increasing by 42,115 residents (approximately 25% growth). Growth over the 2011-2016 period is observed to have been the strongest with an annual average growth rate of 2.6% (compared to 2.1% over the 2006-2011 period). In comparison, the Western City District achieved 2.0% average annual growth over the 2011-2016 period.

Table 2.5: Historical Population Growth, 2006-2016

Area	2006	2011	2016	Average Annual Growth	
				2006-2011	2011-2016
Liverpool LGA	169,868	188,088	211,983	2.1%	2.6%
Western City District	907,512	966,281	1,056,120	1.3%	2.0%

Source: ABS (2018a), DPE (2016a)

Projected Population Growth

Relative to supply, the key driver of any housing market is population growth. The population of Liverpool LGA is projected to increase by 55% between 2016 and 2036, equating to over 116,000 residents.

Table 2.6: Population Growth Projections, Liverpool LGA

Year	Liverpool LGA		Western City District	
	Projected Population	Average Annual Growth (%)	Projected Population	Average Annual Growth (%)
2016 (recorded)	211,983	-	1,056,120	-
2021	239,909	2.5%	1,157,810	1.9%
2026	272,538	2.6%	1,281,282	2.0%
2031	298,622	1.8%	1,396,451	1.7%
2036	328,275	1.9%	1,524,122	1.8%
2016-2036	**54.9%**	**1.5%**	**44.3%**	**1.9%**

Source: ABS (2018a), DPE (2016a)

Age Demographic

Analysis of age demographics is useful in understanding the appropriate dwelling types and infrastructure required to support a growing population.

The distribution of age groups is outlined in Table 2.7 and highlights that the majority of residents in the Liverpool LGA are relatively young (0-14 years) and in their early schooling years. The population is expected to grow still at a steady rate, with a large proportion of residents in the reproductive and working age groups (25-64 years).

Table 2.7: Age Profile (2006-2016), Liverpool LGA

Age Bracket	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
0-14 years	24.5%	22.9%	22.8%	22.8%	21.4%	21.3%
15-24 years	14.7%	14.9%	14.7%	15.2%	14.9%	14.2%
25-34 years	15.6%	15.2%	15.1%	14.2%	13.9%	14.5%
35-44 years	16.0%	14.9%	14.4%	14.9%	14.1%	13.5%
45-54 years	12.6%	13.6%	13.0%	14.0%	13.9%	13.0%
55-64 years	8.5%	9.4%	9.9%	9.8%	11.2%	11.3%
65-74 years	4.8%	5.5%	6.1%	5.2%	6.2%	7.4%
75-84 years	2.6%	2.9%	3.1%	3.0%	3.2%	3.5%
85+ years	0.7%	0.8%	1.0%	0.9%	1.1%	1.3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ABS (2017a,b)

Broadly speaking, the general population of Liverpool is observed to be relatively young overall, with over 50% of residents under 35 years of age. The average age in Liverpool is 34 years, compared to 36 years in the Western City District.

Place of Birth

The majority of residents in the Liverpool LGA were born in Australia as at 2016, though this has decreased in the last ten years. A growing number of immigrants from Iraq, Vietnam and India have been observed over the same period.

Table 2.8: Place of Birth (2006-2016), Liverpool LGA

Place of Birth	2006	2011	2016
Australia	58.7%	57.5%	55.9%
Iraq	2.2%	3.6%	5.2%
Vietnam	3.0%	3.1%	3.5%
Fiji	3.5%	3.8%	3.5%

Place of Birth	2006	2011	2016
India	1.7%	2.5%	2.8%
Lebanon	2.2%	2.1%	2.2%
Philippines	2.1%	2.1%	2.1%
New Zealand	1.7%	1.8%	1.8%
Italy	2.1%	1.7%	1.4%
China (excludes SARs and Taiwan)	1.1%	1.1%	1.4%
Born elsewhere	21.6%	20.6%	20.2%
Total	**100%**	**100%**	**100%**

Source: ABS (2017a)

Household and Family Composition

Table 2.9 highlights the dominance of family households persisting in the Liverpool LGA as at 2016, with over three-quarters of household types being family households, followed by lone persons households (14.6%). As illustrated, little change has occurred in the household composition since 2006.

Notably, the proportion of family households is high in Liverpool, with the average number of persons per household increasing from 3.15 persons (2006) to 3.25 (2016).

Household composition in the Western City District is generally aligned with that of the Liverpool LGA with family households as the dominant household type.

Table 2.9: Household Composition (2006-2016), Liverpool LGA

Type	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Family Households	77.4%	77.9%	77.1%	76.8%	76.6%	75.9%
Lone Persons	15.1%	15.2%	14.6%	16.9%	17.5%	17.0%
Group Households	1.8%	1.7%	1.6%	2.1%	2.1%	2.1%
Other	5.7%	5.1%	6.6%	4.2%	3.8%	5.0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ABS (2017a)

Couple families with children were the largest family cohort within the Liverpool LGA, accounting for well over half of all family households in 2016. Couples without children also comprised a significant proportion, representing over a fifth of all family households.

In the Western City District, a greater proportion of couples without children is observed (just over a fifth), and just over the families are couples with children.

Table 2.10: Family Composition (2006-2016), Liverpool LGA

Type	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Couple family with no children	22.5%	21.9%	21.2%	26.1%	26.7%	26.7%
Couple family with children	58.8%	58.8%	59.2%	54.1%	52.9%	52.9%
One parent family	17.3%	18.0%	17.9%	18.4%	18.9%	18.9%
Other	1.5%	1.4%	1.6%	1.5%	1.5%	1.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: ABS (2017a)

Overall, the proportions of family compositions have experienced little change between 2006 and 2016 in both the Liverpool LGA and broader Western City District.

Household and Family Composition by Age Profile

Further disaggregation of the household and family composition profile by age provides an even greater understanding of the demographic characteristics and needs of an area.

Table 2.11 analyses the age profile of select household types and family types within the Liverpool LGA using the age of the family reference person recorded at Census as the primary indicator of household age.

Table 2.11: Household and Family Composition by Age Cohort (2016), Liverpool LGA

Age Cohort	Couple families with no children	Couple families with children	One parent family	Other family	Lone person household	Group household
15-19	0.2%	0.0%	0.4%	2.8%	0.4%	0.4%
20-24	2.8%	0.7%	2.1%	11.2%	2.5%	8.5%
25-29	10.4%	4.0%	5.0%	14.2%	4.7%	13.9%
30-34	10.6%	11.5%	7.9%	9.6%	6.3%	10.4%
35-39	5.4%	15.3%	10.6%	6.5%	6.1%	6.7%
40-44	3.9%	16.5%	13.5%	4.9%	6.2%	8.4%
45-49	4.2%	15.6%	14.0%	5.2%	6.8%	8.6%
50-54	5.4%	14.2%	14.0%	6.4%	9.1%	11.1%
55-59	9.8%	9.7%	10.2%	7.4%	10.8%	8.5%
60-64	11.5%	5.7%	6.8%	8.2%	9.4%	7.7%
65+	36.5%	6.8%	15.4%	23.6%	37.6%	15.7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ABS Customised Data and Information (2018)

A number of observations can be drawn from the analysis in Table 2.11:

- Almost 60% of couples with no children are aged 55 years and older while almost a quarter of couples with no children are below 34 years old.
- The majority of families with children are aged between 30 and 50 years old at circa 60%. Couple families with children aged below 29 years account for almost 5% of all families with children.
- Similarly, the majority of one parent families are aged between 30 and 50 years at just over 60% of all lone person households.
- Other families (group of related individuals living in the same household) comprise a major diverse age profile.
- Residents aged 55 years and older comprise the majority of lone person households at just under 60% of all lone person households.
- Similar to other family households, group households comprise a diverse age profile with the 25-29 age cohort the largest at just under 14%.

Household Income and Housing Costs

Table 2.12 demonstrates that median incomes in Liverpool LGA and Western City District have both increased at just over 40% between 2006 and 2016.

Since 2006, Liverpool residents are spending comparatively less on mortgage repayments (approx. 5% decrease since 2006), whilst rental payments as a proportion of income have increased approximately 6% since 2006.

Households that encounter ‘mortgage stress’ are generally referred to as those who devote close to a third of their income to mortgage repayments. Whilst the proportion of income spent on mortgage repayments has decreased over the 2006-2016 period, the Liverpool LGA recorded a high proportion of income spent on mortgage payments at just over 31%.

Table 2.12: Household Income and Housing Costs (2006-2016), Liverpool LGA

Household Income and Costs	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Median weekly household income	$1,090	$1,296	$1,548	$1,086	$1,292	$1,549
Median mortgage repayment	$1,733	$2,167	$2,123	$1,598	$1,977	$1,996
Median rent	$195	$295	$370	$196	$286	$365
% of income spent on mortgage	36.7%	38.6%	31.6%	34.0%	35.3%	29.7%

% of household income spent on rent	17.9%	22.8%	23.9%	18.1%	22.2%	23.6%

Source: ABS (2017a,c)

Education Levels

In Liverpool LGA, residents have notably been attaining higher levels of education since 2006. This is evident in the increase in those completed high school (approx. 10%) as well as those attaining Bachelor's Degrees (approx. 2%) and Postgraduate Degrees (approx. 2%).

Residents in the Western City District are also becoming more educated, though the increase is less pronounced compared to Liverpool LGA.

Table 2.13: Education Levels (2006-2016), Liverpool LGA

Education Levels	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Secondary Education						
Completed High School	46.7%	52.0%	57.0%	42.0%	46.3%	46.3%
Did Not Complete High School	53.3%	48.0%	43.0%	58.0%	53.7%	53.7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Post School Qualifications						
Postgraduate Degree Level	1.4%	2.1%	3.0%	1.5%	2.0%	2.0%
Graduate Diploma & Graduate Certificate Level	0.6%	0.7%	0.8%	0.8%	0.9%	0.9%
Bachelor's degree Level	8.8%	10.0%	11.4%	8.4%	9.3%	9.3%
Advanced Diploma & Diploma Level	7.2%	7.9%	8.7%	6.9%	7.6%	7.6%
Certificate Level	18.3%	17.6%	16.6%	19.3%	19.3%	19.3%
No qualification	63.6%	61.8%	59.5%	63.2%	60.9%	60.9%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ABS (2007), ABS (2012), ABS (2017c)

Labour Force Participation

Table 2.14 shows that labour force participation has decreased between 2006 and 2016 for both Liverpool LGA and the Western City District. Participants of the labour force are defined as those employed or actively seeking employment. Students, housewives and those over 64 years are considered as non-participants in the labour force.

As the majority of the residents in the Liverpool LGA are quite young, it is not unusual that the participation rate has decreased as a majority of residents are in the life stage where they may choose to undertake tertiary study or conduct domestic duties full time instead of working/searching for work.

Table 2.14: Labour Force Participation (2006-2016), Liverpool LGA

Employment Type	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Participation Rate	64.2%	62.2%	61.7%	65.2%	64.0%	64.0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ABS (2007), ABS (2012), ABS (2017c)

Social Disadvantage

In 2016, the Liverpool LGA scored 952 on the SEIFA Index of Disadvantage. By comparison, Sydney has a higher SEIFA score (1027) and an affluent area such a Mosman has a score of 1115. The lower the score the higher the disadvantage. The index is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations.

2.4.2 Dwellings

This section provides an overview of the dwellings growth and typologies which subsist in the Liverpool LGA to facilitate an understanding of the evolution of housing stock over the years.

Dwelling Growth and Structure

Between 2006 and 2016, total occupied private dwelling numbers in Liverpool LGA increased by 20%, from 52,248 to 62,933. This is representative of approximately 2% average annual growth. Growth over the 2011-2016 period is observed to have been the strongest with an annual average growth rate of 2.2% (compared to 1.6% over the 2006-2011 period).

Of these total dwellings, almost 75% were separate houses, 11% were apartments and 10% were townhouses/semi-detached. Whilst proportion of separate houses has decreased since 2006 (-3% approx.), the proportion of townhouses and apartments have trended upwards over the years.

Across the Western District, the proportion of separate houses is significantly higher (over 80%), though a slight decrease in separate houses (-2%) resulted in a corresponding rise in medium-density typologies (2%).

Table 2.15: Dwellings Structure (2006-2016), Liverpool LGA

Dwellings	Liverpool LGA			Western City District		
	2006	2011	2016	2006		2016
Separate house	77.0%	74.4%	74.3%	83.1%	81.0%	81.0%
Semi-detached, row/terrace, townhouse	10.0%	11.8%	10.7%	9.3%	11.0%	11.0%
Flat, Unit or Apartment	12.6%	13.6%	14.7%	7.0%	7.5%	7.5%
Other dwelling	0.4%	0.2%	0.3%	0.6%	0.5%	0.5%
Total	**100%**	100.0%	100%	100%	100.0%	100%
Total Dwellings	**52,248**	**56,471**	**62,933**	**294,183**	**308,618**	**335,427**

Source: ABS (2017a)

Population growth has outpaced dwellings growth in the Liverpool LGA over the 2006-2016 period; population growth recorded at 2.2% per annum compared to average annual dwelling growth at 2.0% over the same period.

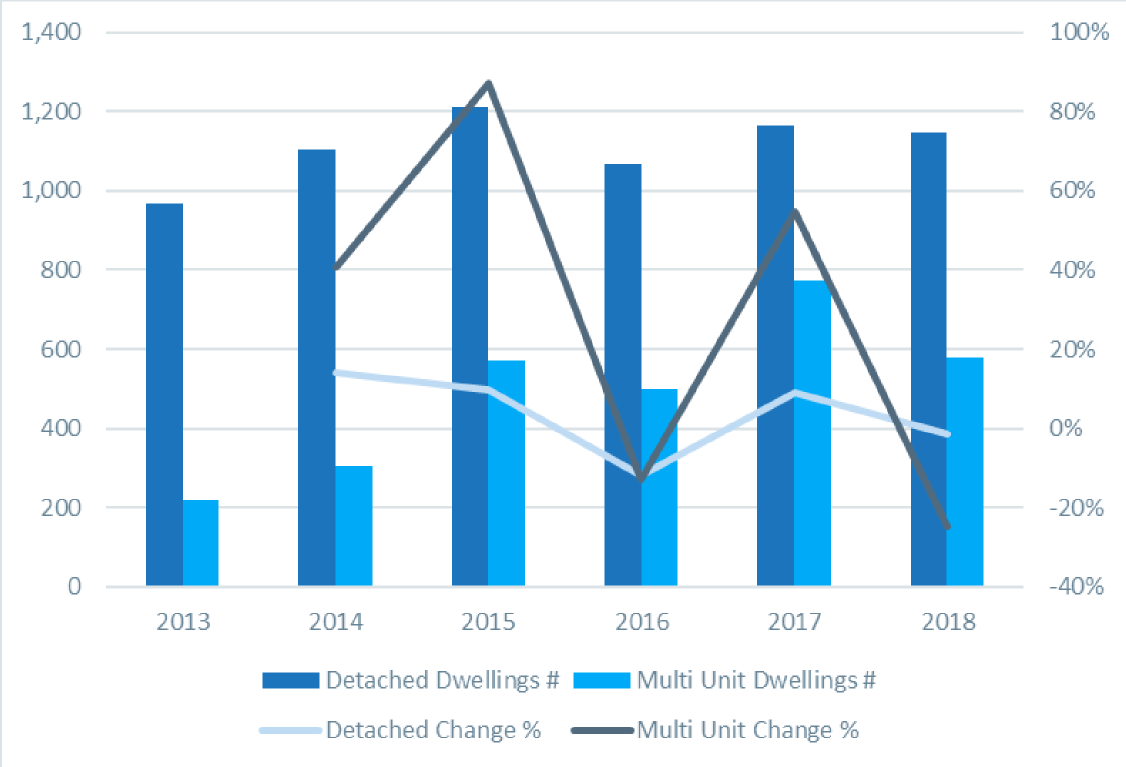
Dwelling Completions

Dwelling completions for the Liverpool LGA were examined between financial years between 2012/13 and 2017/18. Overall, completions for the number of detached dwellings is outstripping that of multi-unit dwellings.

However, the staggering difference in dwelling completions between the product types is shrinking. In 2012/13, number of completions for detached dwellings were over four times that of multi-unit dwelling completions. By 2017/18, detached dwellings completions as a proportion of multi-unit dwelling completions is less than double.

Dwelling completion and year-on-year growth is illustrated in Figure 2.6. In the short to medium term, it appears that annual growth in multi-unit completions have been volatile, reflective of uncertain market conditions, tightening of credit and waning investor interest.

Figure 2.6 Liverpool Residential Building Completions, 2013-2018



Source: DPE (2018)

Dwelling Ownership

Analysis of dwelling ownership indicates that as at 2016 the majority of residents in Liverpool LGA owned their home with a mortgage (approx. 41%). About one third of Liverpool LGA residents rented their home and approximately a quarter fully owned their home.

Between 2006 and 2016 the proportion of those who owned their own home outright and with a mortgage remained relatively stable, though the proportion of renters increased more notably by almost 2%.

Table 2.16: Dwelling Ownership (2006-2016), Liverpool LGA

Dwellings Type	Liverpool LGA			Western City District		
	2006	2011	2016	2006	2011	2016
Owned outright	25.0%	24.8%	24.8%	29.5%	29.1%	29.1%
Owned with a mortgage	42.8%	43.1%	41.2%	42.0%	42.5%	42.5%
Rented	31.7%	31.5%	33.2%	28.0%	27.8%	27.8%
Other tenure type	0.5%	0.6%	0.8%	0.6%	0.7%	0.7%
Total	**100%**	100.0%	100%	100%	100.0%	100%

Source: ABS (2017a)

Household Occupancy

Comparison of population and dwellings data indicates that there are approximately 3.15 persons per dwelling in the Liverpool LGA at 2016. Household occupancy has increased over the 2006-2016 period with 3.15 residents per dwelling recorded in 2006 and 3.19 in 2011.

This level of household occupancy is much higher than that observed in the broader Western City District at 3.05.

2.5 IMPLICATIONS FOR STUDY AREA

Relative to dwelling supply, population growth and characteristics form a key driver in the demand for housing. Key observations of the Liverpool LGA derived from this section include:

- Strong population growth is observed across Liverpool LGA, averaging 2.3% annual growth between 2006 and 2016. Comparatively, the Western City District grew at an average annual rate of 1.6%.
- Residents of the Liverpool LGA are becoming more educated, as observed in the greater proportion of residents completing secondary education and Bachelor Degrees.
- Analysis of the age demographics indicates the majority of residents in the Liverpool LGA are quite young (under 30), with a strong presence of family households – couple families with children and those without children.
- Persons per household in the Liverpool LGA is 3.25 as at 2016, this is commensurate with the high presence of family households and young children. The household occupancy rate has increased from 3.19 persons per dwelling in 2011.
- The presence of separate houses declined between 2006 and 2016 by just under 3% Whilst still the dominant housing type in the Liverpool LGA, the proportion of medium to higher density housing products has seen an increase (almost 3% collectively).
- Dwelling ownership levels experienced a downward trend, whilst the proportion of those renting have increased.
- Between 2006 and 2016, mortgage repayments as a portion of income has decreased by 4% however remain above the threshold for mortgage stress (households that encounter mortgage stress are devoting close to a third of their income to finance mortgage repayments). Conversely, the proportion of income spent on rent has increased by 6%.

Analysis of the socio-demographic profile of Liverpool LGA suggest that while income and education levels are improving, the LGA continues to exhibit a relatively high level of social disadvantage (as measured by the 2016 ABS SEIFA index). Existing housing stock is dominated by detached houses with just under a quarter of housing stock of the medium and higher-density product type. The relatively young age profile of the Liverpool LGA suggests that detached housing product, whilst attractive to families with children, may not be affordable for many younger residents in the LGA.

The next section provides an overview of the residential market in the Liverpool LGA.

3. RESIDENTIAL MARKET APPRAISAL

This chapter investigates market dynamics influencing the supply and demand of residential property in the Liverpool LGA.

3.1 TRENDS AND DRIVERS OF DEMAND

A range of trends and drivers influence demand for housing. Many of these factors are broad, macroeconomic influences; general market conditions, population and wage growth and monetary policy impact all property markets. Other influences are more market or location specific, referred to as microeconomic trends.

This section briefly discusses the macro and micro trends observed to be influencing demand for housing across both metropolitan Sydney and in the Liverpool LGA.

3.1.1 Macroecnomic Trends

Population Growth

Demand for housing is fundamentally driven by population growth. Population growth within NSW has been significant over the 2006-2016 period with just under 1 million new residents recorded over this period to a total population of 7.7 million, indicative of a 14.8% increase (ABS, 2017a). Greater Sydney has accommodated the vast majority of this growth, currently recording a population of just over 5 million residents, reflective of an 18.2% increase (ABS, 2017a).

Population growth across Greater Sydney is forecasted to continue over the coming 25 years, with an additional 1.7 million forecasted by 2036, increasing to 3.2 million residents by 2056 (Greater Sydney Commission, 2018a). This has obvious repercussions for Greater Sydney's housing market.

General Market Conditions

Metropolitan Sydney's housing market has continued to cool in most regions over past 12-18 months. Auction clearance rates across Sydney were recorded at 50.7% in October 2018, down from 58.3% recorded 12 months prior in October 2017 (CoreLogic RP Data, 2018). In the South West region of Sydney, a lower clearance rate of just over 31% was recorded in October 2018.

In conjunction with falling auction clearance rates, median house values across metropolitan Sydney have fallen by 7.6% over the 12 months to September 2018 (CoreLogic RP Data, 2018). This is in line with Australia's combined national cities median house price falling 0.7% in the same period for the first time in six years.

With softening market conditions, purchasers are acting more prudently with many preferring to negotiate via private treaty rather than participate at public auctions. Most selling agents across metropolitan Sydney highlight vendors are struggling to accept the new conditions and setting reserve prices based on market conditions more readily observed during the 2016-17 period.

We note general market sentiment plays a fundamental role in the health of residential property markets. The state of metropolitan Sydney's housing market has been subject to intense media speculation over the past 12 months, with widespread commentary regarding a potential downturn in prices likely also feeding into the above described conditions.

Wage and Inflation Growth

Wage growth within Australia has been sluggish for several years with little real wage growth (i.e. net of inflation) observed since 2013. Recent data from the ABS indicates national wage growth (seasonally adjusted) rose by 2.1% over the 12 months to June 2018, slightly above previous quarter results (ABS, 2018b). This can be largely attributed to the 3.3% increase in national minimum wage rates commencing in July 2017 as opposed to any meaningful wage increase.

There is consensus regarding the future outlook for wage growth in coming years, that wage growth will remain relatively flat in the short-term after which the spare capacity in the labour market will deliver some modest wage growth in the medium term (Business Insider, 2017).

The inflation rate is currently recorded at 2.1% as at June 2018 having risen 0.2% since March 2018 (RBA, 2018). Whilst inflation has generally ranged from 1.8% to 2.1% over the past six quarters to March 2017 (which falls in the lower end of the Reserve Bank of Australia's target inflation band of 2% to 3%), inflation has overall been consistently low over the past three years and remained below 2% until March 2017 (RBA, 2018). This has had direct implications on monetary policy as set by the Reserve Bank of Australia.

Monetary Policy and Lending Requirements

Monetary policy, more specifically the cash rate, has significant implications for asset valuations including residential property. The cash rate is the base interest rate used by all major Australian financial lenders in setting commercial interest rates and thus invariably influences the borrowing capacity of households and investors.

The Reserve Bank of Australia (RBA) held the cash rate at 1.5% in November 2018, the 27th consecutive month of no change since a 25 basis point cut in August 2016. Low inflation and subdued private investment are providing little scope to raise interest rates in the short-term.

While the official cash rate setting undoubtedly influences local mortgage rates, recent rate hikes by Australian lenders illustrate it is not the only driver of funding costs. ANZ, Westpac and CBA each raised by their variable mortgage interest rates by circa 0.14 to 0.16 basis points in September 2018 due to an increase in the cost of short-term financing. It is largely expected that NAB will also raise variable interest rates in the short-term also.

The impact of the Australian Prudential Regulatory Authority's (APRA) tighter macro-prudential measures for Australian financial landers has been significant; the overall mortgage market has fallen by circa 8% over the 12 months to August 2018. This decline has been predominantly driven by a fall in with interest-only lending with the value of interest-only loans falling by almost $100 billion over the 12 months to August 2018, or a 23% fall (ABS, 2018c). Market intelligence indicates investor interest has fallen across much of the North Coast housing market.

The Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry has further exacerbated current conditions as banks tighten lending standards amidst the high level of public scrutiny around poor lending practices. Stricter financing requirements has reduced the borrowing capacity of the overall market which has in turn reduced the overall buyer pool and potential for price growth observed over the 2013-2016 period.

Warnings on commercial lending practices issued by APRA in early 2017 have resulted in most lenders seeking higher pre-sale requirements from developers prior to drawdown of construction finance. These have cumulative impact on project risk and holding costs.

3.1.2 Microeconomic Trends

Housing Affordability

Australia's east coast housing boom over 2012-2017 resulted in strong growth in capital values across most regions across metropolitan Sydney. Coinciding with soft wage growth, the housing boom has resulted in many buyers being priced out of many housing markets, particularly first home buyers (FHBs). Consequently, a growing contingent of buyers have shifted their preference towards smaller lot product.

With affordability becoming a key consideration for many younger households or first home buyers, the shift towards smaller dwellings and lot sizes in many greenfield precincts such as the North West Growth Area and South West Growth Area has gained momentum over the past 12-24 months. Developers have responded in-kind within the South West; numerous residential subdivisions progressed over the course of 2017 comprising high proportions of lots sized under 350sqm which have been met with strong demand evidenced by strong take-up.

South West Growth Area

The South West Growth Area (South West GA) has experienced a large volume of new housing development (subdivisions) in recent years. Affordability and level of surrounding infrastructure drives market preference and compromise in the South West GA; anecdotal evidence from local agents notes lots sub-350sqm lots are particularly appealing to first home buyers given their more 'manageable' price points (sub-$700,000).

This shift in demand towards smaller lot product has also transcended into appeal for medium-density style product such as villas and townhouses with strong interest for dwellings on lots circa 200sqm observed. For example, the recent release of townhouse product at Arcadian Hills (Cobbitty) in mid-2017 was met with swift take-up from the FHB contingent. Many developers are increasingly incorporating medium-density product in new phases to provide a greater variety of affordable product to an increasingly price conscious market.

Liverpool LGA

There are two key factors driving a shift in the nature of demand in Liverpool - housing affordability and demographic need. Completion of the South West Rail Link (SWRL) has also driven demand for dwellings particularly in Edmondson Park. Even though Leppington benefits from a train service, development activity is much slower given the lot and ownership patterns which make it difficult for developers to assemble sites.

Purchaser interest and demand across the Liverpool LGA over the course of 2018 is predominantly observed from owner occupiers, particularly first-home buyers who are subject to affordability constraints. Buyers typically look to purchase what they can afford, potentially compromising on requirements such as size, location and amenity. Investors who were a particularly active buyer cohort over the course of 2015-2017 have largely withdrawn from the market given the increasing difficulty in obtaining finance. Those investors who remain active in the market are generally seeking detached houses on larger blocks to allow for granny flat additions.

While many owner occupier purchasers typically already reside in the local area (including the areas of Campbelltown and Camden), there is strong anecdotal evidence that increasing numbers of residents of Bankstown LGA are moving into Liverpool due to the relative affordability of dwellings in the Liverpool LGA.

Medium-density typologies such as townhouses and villas remain a particularly popular format in the Liverpool LGA attracting a wide variety of buyers. First home buyers often opt for townhouse product due to affordability reasons given many new townhouses can be purchased at prices below the First Home Buyer Stamp Duty threshold. Older buyers seeking to downsize are also particularly active in the townhouse market.

While the South West GA is gaining in market profile and acceptance, the relative distance remains a factor for buyers. Our enquiries reveal that many purchasers considering Stockland's Willowdale Estate in East Leppington are those priced out of Liverpool and Hoxton Park following recent price gains therein. These purchasers are price sensitive, with the range of lots offered (from 280sqm-450sqm) suiting a number of budgetary requirements, ranging from $270,000 for a 280sqm lot to $350,000-$450,000 for 350sqm to 450sqm lots. While all of the lots which are currently being developed comprise detached dwellings and some duplexes in Willowdale Estate, there are future plans to incorporate medium density typologies to respond to a shift in market preference and demand.

The implementation of State Government's housing diversity package which resulted in an amendment to the Growth Centres SEPP in 2014 has facilitated a supply response to demand for a more diverse residential typology.

Demographic analysis undertaken in section 2.4.2 indicates the majority of dwellings in the Liverpool LGA are detached houses (74%) followed by semi-detached typologies (11%) and apartments (7%). Higher-density residential apartments over the 2011-2016 period increased in their proportional share of total dwellings (from 12.6% in 2006 to almost 15% in 2011).

3.2 MARKET ACTIVITY

This section seeks to investigate property market conditions to understand:

- Local property market dynamics in Liverpool, in particular current market activity, ongoing and new projects, buyer profiles, product, price points and take-up.
- Existing-use ('as is') values of single lot dwellings in each of the area groupings. This is important to understand potential realisation if sold 'as is' but also if new development (e.g. into townhouses or units) is attractive enough to displace the existing uses in favour of redevelopment.
- How various site characteristics such as distance from train station, site area, etc. likely impact on sales values.

3.2.1 Existing Residential Areas

The following section identifies recent sales transactions of various housing types. Our investigations also consider individual area groupings within the LGA (as outlined in section 2.1).

Liverpool East

Liverpool East accommodates a number of more desirable and affluent suburbs, such as Pleasure Point and Voyager Point due to the modern constructs of the dwellings and proximity to parklands and river. Housing in these suburbs attract distinct premiums compared to other suburbs in the LGA; recent sales two storey houses attracting sale prices from $1.2m to $2m depending on size, location, water views (if any) and age of improvements.

Other suburbs in Liverpool East such as Moorebank and Chipping Norton similarly achieve strong prices (albeit less than those observed at Pleasure Point and Voyager Point). Recent sales evidence shows houses in these suburbs is generally ranging from $900,000 to $1.1m.

Housing in the remaining suburbs of Hammondville, Holsworthy, Wattle Farm and Warwick Farm are typically older stock, often single storey and comprise three bedrooms and one bathroom. Such product is generally priced between $800,000 to $900,000, set on blocks ranging from 500sqm to 600sqm.

Liverpool (suburb)

A large drawcard to the suburb of Liverpool is the high amenity associated with retail facilities and transport connections close to the Liverpool train station. This offering is observed to have strengthened in recent times given the significant investment proposed through the revitalisation of the City Centre (e.g. Liverpool Hospital expansion, multiple university campuses, etc).

While older style freestanding homes may have a price point of $700,000-$825,000 (older style), new medium density product is achieving prices in the same order. A new townhouse development at 164-166 Memorial Avenue is currently on the market with 3 bedroom, 2 bathroom townhouses priced from $700,000 to $760,000.

Whilst the housing market has undoubtedly softened over the course of 2018, many selling agents still comment that demand remains relatively steady with the revitalisation of the City Centre providing confidence to the market. The proximity of Liverpool to public transport facilities and town centre amenity is valued by the market and accordingly carries a premium. That said, affordability remains a key driver behind demand for new apartment product in the City Centre with prices paid for detached housing still providing a ‘price ceiling’ for new apartments.

A premium is reflected in prices paid for new residential units, for example existing (older style) two bedroom units can range from $350,000 to $475,000 whereas new two bedroom units are currently pricing off-the-plan at $540,000 up to $750,000.

South Liverpool

Casula and Prestons are typically considered less desirable to home buyers and investors. Nevertheless, newer, modern housing stock at more affordable prices is often enticing home buyers who are price sensitive.

There appears to be a growing popularity with medium density dwellings in Casula, also reflected in the development pipeline. While freestanding home are still sought after, price sensitivity suggests a cap of $800,000 on these houses unless they have development potential.

Townhouses are notably performing well (2, 3 and 4 bedrooms) as they offer a low maintenance option and entry point both to investors and owner occupiers. A number of modern, two bedroom townhouses are available for sale across Casula with asking prices ranging from $550,000 to $600,000. This is comparable to the price of a new residential unit in the City Centre. Depending on their lifestyle objectives, purchasers weigh up the trade-off between an older townhouse in a suburban location and a new unit in a city centre location.

Liverpool Central

The suburbs of Ashcroft, Busby, Cartwright, Heckenberg, Miller, Sadleir and Lurnea are collectively perceived as offering a cheaper product. Market activity is understood to be steady with interest primarily from new migrants seeking their first home. These suburbs generally incorporate a high concentration of social housing, from 17% of total dwellings in Lurnea to over 40% in Miller.

A new/renovated home in Busby achieves $600,000-$700,000 while an older style home in the area may be priced at $500,000-$600,000. Dwellings at price points below $600,000 are generally understood to be competitively sought after, despite their proximity to social housing clusters. Comparative to say Liverpool, where an older style home may be priced at $700,000-$800,000, these areas offer a compelling value proposition.

Anecdotal information from discussion with selling agents suggest attitudes of some migrants does not discourage them from considering housing in these areas despite the high concentration of social housing tenants.

A distinct observation in this area grouping is the popularity and prevalence of the granny flat. Detached houses that incorporate a granny flat are highly sought after by both investors and owner occupiers. They offer an attractive return to investors (in some cases 5.5% gross yield) and offer a flexible accommodation option to large families or inter-generational families.

Owing to their lower price points and size of accommodation, detached houses are the dominant type of housing with market appeal. There are few new townhouse or other medium density developments progressed in the area for this reason.

Liverpool West

Recent sales activity in Edmondson Park is primarily being driven by first home buyers and local upgraders as opposed to investors (who dominated sales activity over 2016-2017). A number of new land estates are currently marketing for sale with vacant blocks ranging from $450,000 to $600,000 with lots ranging from 350sqm to 700sqm. Demand for housing in Edmondson Park is primarily being driven the accessibility provided by Edmondson Park train station and the future amenity offering to be provided from the Edmondson Park Town Centre (currently under construction).

3.2.2 Summary of Existing-use Values

Dwellings in Liverpool are improved by a variety of built forms including fibro, weatherboard and brick homes. Some properties have undergone refurbishments which have resulted in higher sale prices. Sales values also depend on size, location and quality of improvements with properties in a state of disrepair achieving lower prices.

It is important to understand existing-use values as they underpin how much a developer will have to pay to consolidate a development site. If the existing buildings are in good condition and provide functional utility, the existing-use value of the property may too valuable for a developer to pay.

The following analysis is of freestanding homes in various area groupings across the Study Area.

Table 3.1: Sales of Detached Dwellings, Liverpool LGA

Address	Improvements	Site Area (sqm)	Sale Price (Sale Date)	$/sqm site area
Liverpool East				
36 Wolverton St Chipping Norton	Single storey brick house comprising four bedrooms, three bathrooms and inground pool. Good condition.	821	$910,000 (Sep 2018)	$1,100
164 Longstaff Ave Chipping Norton	Modern, single storey four bedroom, three bathroom house located proximate to new shopping centre.	664	$860,000 (Aug 2018)	$1,300
10 Aylsham Cl Chipping Norton	Modern, two storey brick house comprising six bedrooms and three bathrooms with double door garage located in close proximity to Georges River.	731	$1,450,000 (July 2018)	$2,000
54 Riverview Rd Pleasure Point	Double storey brick house comprising three bedrooms, three bathrooms and in-ground pool. Recently renovated and in close proximity to Georges River.	923	$1,390,000 (Nov 2017)	$1,500
25 Orland Cres Voyager Point	Modern, double storey brick house comprising four bedrooms and two bathrooms.	704	$1,250,000 (Aug 2018)	$1,775
76 Lawrence Hargrave Rd Warwick Farm	Single storey brick house comprising three bedrooms and one bathroom.	560	$670,000 (Sep 2018)	$1,200

Address	Improvements	Site Area (sqm)	Sale Price (Sale Date)	$/sqm site area
Liverpool				
25 McLean St Liverpool	Recently renovated single storey brick cottage comprising three bedrooms and two bathrooms.	695	$695,000 (Sep 2018)	$1,000
3 Cullens Pl Liverpool	Recently renovated single storey brick cottage comprising three bedrooms and two bathrooms.	556	$730,000 (July 2018)	$1,300
92 Atkinson St Liverpool	Federation-style single storey brick and weatherboard cottage comprising three bedrooms and one bathroom.	633	$765,000 (July 2018)	$1,200
33 O'Brien Pde Liverpool	Single storey weatherboard house comprising four bedrooms and three bathrooms. Well maintained.	632	$880,000 (June 2018)	$1,400
25 Christie St Liverpool	Single storey fibro-clad brick cottage comprising three bedrooms and one bathroom. Poor condition.	800	$745,000 (June 2018)	$950
South Liverpool				
16 Dee Cl Prestons	Modern, two storey brick house comprising five bedrooms and three bathrooms.	794	$1,120,000 Sep 2018)	$1,400
14 Jaspers Crt Prestons	Single storey brick house comprising four bedrooms and one bathroom. Good condition.	419	$630,000 (Oct 2018)	$1,500
4 Niland Way Casula	Modern, single storey brick house comprising four bedrooms and two bathrooms with inground pool.	786	$840,000 (Aug 2018)	$1,075
8 Casula Rd Casula	Aged, single storey weatherboard cottage comprising three bedrooms and two bathrooms.	708	$685,000 (July 2018)	$975
8 Gibb St Casula	Aged, single storey weatherboard cottage comprising three bedrooms and one bathroom.	565	$680,000 (July 2018)	$1,200
Liverpool Central				
50 Strickland Cres Ashcroft	Single storey weatherboard house comprising four bedrooms and two bathrooms. Good condition.	613	$640,000 (Sep 2018)	$1,050
34 South Liverpool Rd Heckenburg	Aged, single storey brick cottage comprising three bedrooms, one bathroom and car port.	664	$665,000 (Sep 2018)	$1,000
98 Webster Rd Lurnea	Aged, single storey weatherboard house comprising four bedrooms and one bathroom.	664	$750,000 (Sep 2018)	$1,150
5 Naranghi St Busby	Single storey brick house comprising three bedrooms and one bathroom. Recently renovated.	664	$630,000 (Aug 2018)	$950
7 Strathdarr St Miller	Aged, single storey brick cottage comprising three bedrooms and one bathroom.	595	$665,000 (July 2018)	$1,100
101 Sadlier Ave Ashcroft	Aged, single storey weatherboard house comprising four bedrooms and two bathrooms.	645	$615,000 (June 2018)	$950
144 Maxwells Ave Sadlier	Aged, single storey weatherboard cottage comprising three bedrooms and one bathroom.	556	$640,000 (May 2018)	$1,150
Liverpool West				
3 Burgundy Cl Cecil Hills	Modern, single storey brick house with three bedrooms and three bathrooms.	605	$888,360 (Sep 2018)	$1,450
7 Gran Sasso Ave Edmondson Park	Recently constructed two storey brick house comprising four bedrooms and two bathrooms.	458	$1,176,500 (Sep 2018)	$2,250
7 Nicholas Cres Cecil Hills	Modern, double storey brick house with four bedrooms and two bathrooms.	412	$860,000 (Aug 2018)	$2,100
48 Gallipolli Dr Edmondson Park	Modern, double storey brick house with four bedrooms and three bathrooms. Close to EP station.	600	$840,000 (Aug 2018)	$1,400

Source: AEC/CoreLogic RP Data

A number of observations can be made of the sales evidence of detached dwellings in Liverpool.

- In many locations a single detached dwelling in an R2, R3 or R4 zone is rarely distinguished on price based on the zone.
- Sale prices in Table 3.1 suggests they are underpinned by individual dwelling characteristics, e.g. location and proximity to shopping facilities, site area, whether a property is of an older style and basic accommodation or if it has been updated, size of internal accommodation (e.g. number of bedrooms), etc.
- Due to their lower price points (<$1,000/sqm of site area), houses in more modestly priced areas of Casula, Lurnea, Miller, Sadleir, Ashcroft are frequently marketed as development opportunities.

- In most cases where improvements are modern and/or well located in a sought after locality (e.g. Chipping Norton, Moorebank, Edmondson Park), price points when viewed on a price per square metre of site area are in excess of $1,500/sqm and in cases exceeding $2,000/sqm.

The analysis of existing-use values ('as is' values) is relevant for understanding the development potential of an area. Existing-use values that exceed the price tolerance for development sites suggest those properties are not ripe for development, i.e. the existing use represents a higher and better use than a development use. The next section investigates development activity in the respective area groupings and prices paid for development sites.

3.3 DEVELOPMENT ACTIVITY

3.3.1 Development Pipeline

There is a notable residential development pipeline in the Liverpool LGA, these projects in various stages of planning or development, with the potential to deliver just over 13,000 dwellings over the next decade. Some are in the initial stages of planning and may not be approved or eventuate into delivered development.

The nature of development activity is distinct across the LGA, with high density development focused in and around the City Centre. This is influenced by planning permissibility, i.e. what the current planning framework permits, but is also influenced by market dynamics.

The nature and quantum of development activity is useful in understanding market preference as well as market capacity, i.e. residential types that have requisite market acceptance and are financially feasible to develop. This section highlights key observations of development projects proposed in each residential area grouping.

Liverpool East

The comparatively affluent suburbs of Pleasure Point and Voyager Point have minimal development activity. There is notable development activity in Moorebank, Warwick Farm and Chipping Norton. Just over 1,800 dwellings are collectively proposed and in various stages in the pipeline in this area grouping.

- **Moorebank**
  A mix of development types are proposed, including lot subdivisions, townhouses/attached dwellings and 4 to 7 storey residential flat buildings.
- **Warwick Farm**
  Proposals are dominated by apartment buildings ranging from 6 to 14 storeys.
- **Chipping Norton**
  Proposals are generally for small scale townhouse developments, where demolition of existing dwelling is proposed for construction of 4-8 townhouses.

Liverpool (suburb)

Development activity is overwhelmingly focused in the City Centre where proposals are characterised by unit developments of varying building heights. There are more than 6,100 dwellings in various stages of the development pipeline in the suburb of Liverpool which includes the City Centre.

The largest potential development in the City Centre is observed to be the 27-storey mixed use development at 26-28 Elizabeth Street and 148 George Street which, if approved, could comprise over 600 apartments and circa 40,000sqm of commercial and retail floorspace.

Further afield in the Liverpool (suburb), there are a number of infill developments wherein several detached homes may be consolidated for redevelopment into townhouses and villas. Similar to Chipping Norton, these developments typically propose 4-8 townhouses.

South Liverpool

There is a notable pipeline of medium-density development proposed in Casula, totalling more than 400 dwellings. Many of the development sites are assembled from one or several detached blocks for redevelopment into townhouses, many of whom have been owned for a number of years by a landowner. Few apartment developments are proposed with the exception of 30-38 Ironbark Avenue (5 storeys; 63 units), 624-628 Hume Highway (4 storeys; 36 units) and 2 Kurrajong Road (5 storeys; 30 units).

There is unsurprisingly minimal residential development activity in Prestons which is characterised by industrial uses as well as some valuable existing dwellings.

Liverpool Central

The grouping of suburbs in the geographic centre of the LGA is considered the lowest priced in the LGA. Comparative to the other areas and the number of suburbs which are comprised in this area, there is a modest amount of development activity in Liverpool Central.

- **Ashcroft**
  Majority of building activity comprises refurbishment work by LAHC of social housing units. The largest proposed development in the suburb is a 7-townhouse project at 13 Maxwells Avenue and 4 Devlin Street, wherein two cottages were assembled for redevelopment. A DA for the development was refused in late-2017 and the project remains deferred.
- **Busby**
  Two medium-density developments (6 townhouses and 3 townhouses) are currently being progressed.
- **Cartwright**
  There are several unit developments (4 and 6 storeys) ongoing in Cartwright. One of the development sites was assembled by the purchase of two detached social housing homes from LAHC.
- **Miller**
  Like Ashcroft, majority of building activity comprises refurbishment work by LAHC of social housing units. A large mixed-use development is proposed at the Miller Central Shopping Centre; the proposal envisages up to 145 apartments with ground commercial space to replace the existing buildings.
- **Sadleir**
  A single townhouse development yielding five dwellings is currently being progressed.

Liverpool West

Development activity in this area grouping is dominated by activity in Edmondson Park (Frasers Property and UrbanGrowth) and in Middleton Grange (Defence Housing). Subdivisions progressed by UrbanGrowth are significant, however there is also pipeline activity by developers who have purchased superlots from UrbanGrowth.

There are several townhouse developments in progress in Green Valley and Hoxton Park and residential subdivisions in Hinchinbrook.

South West Growth Area/Future Development Areas

The precincts of Austral and Leppington have been released/rezoned for urban development with a significant number of subdivision applications received since 2016 with almost 1,900 dwellings/lots in the pipeline.

3.3.2 Development Site Sales

The price paid for a development site can vary substantially depending on whether a site has the benefit of development consent. Sites that are approved for development typically achieve at least 25% more than sites that are appropriately zoned but without development consent. In comparison, sites that require a rezoning achieve even lower prices.

The price paid for a development site is directly related to the development potential of the site, in turn underpinned by permissibility of uses as under the planning framework. For example, all things being equal, a high density residential site will sell for more than a low density residential site.

This section examines development site transactions that have occurred in the various area groupings. This analysis is useful as it underscores the amount each type of development (e.g. townhouses, units) can afford to pay for a development site.

Townhouses

The following site transactions represent a sample of development sites sold in each of the area groupings. Strong market conditions were observed over the 2015-2017 period however have moderated over the past 12 months.

Table 3.2: Townhouse Development Site Sales

Address	Site Area (sqm)	Sale Price (Date)	Analysis		Comments
			$/sqm of site area	$/unit	
Liverpool East					
39-41 Brallos Ave Holsworthy	1,124	$1,630,000 (May 2018)	$1,450	$272,000	Single storey detached house acquired for construction of 6x2 storey townhouses.
89 Jack O'Sullivan Rd Moorebank	677	$920,000 (Oct 2017)	$1,350	$307,000	Aged single storey cottage sold for construction of 3x2 storey townhouses.
122 Alfred Rd Chipping Norton	669	$915,000 (Oct 2017)	$1,375	$305,000	Aged single storey cottage sold for construction of 3 townhouses.
256 Epsom Rd Chipping Norton	664	$817,500 (Oct 2015)	$1,231	$204,000	Single level cottage since submitted for DA for 4 townhouses (2b and 3b).
City Centre					
164-166 Memorial Ave Liverpool	1,393	$2,450,000 (June 2017)	$1,750	$306,000	Two single storey detached houses sold for construction of 8x2 storey townhouses.
16-18 Mainsbridge Ave Liverpool	1,392	$1,3450,000 (Feb 2017)	$975	$192,000	Two single storey detached houses sold for construction of 7x2 storey townhouses.
10-12 Tobruk Ave Liverpool	3,997	$4,150,000 (Dec 2016)	$1,050	$244,000	Two single storey detached houses sold for construction of 17 townhouses.
16-18 Dale Ave Liverpool	1,392	$2,140,000 (Nov 2016)	$1,550	$214,000	Two single storey detached houses sold for construction of 10x2 storey townhouses.
119 & 121 Flowerdale Rd Liverpool	1,754	$1,790,000 (June 2015)	$1,025	$256,000	Two single storey detached houses sold for construction of 7x2 storey townhouses.
Liverpool Central					
2 Wilshire St Miller	626	$660,000 (Jan 2018)	$1,050	$220,000	Aged, single storey detached house sold for construction of 3x2 storey townhouses.
7 Aberdeen Rd Busby	664	$560,000 (Apr 2016)	$850	$187,000	Aged, single storey detached house sold for construction of 3x2 storey townhouses.
13 Maxwells Ave 4 Devlin St Ashcroft	1,246	$1,210,000 (Jun 2015)	$971	$172,900	2 cottages subsequently submitted for DA for 7 townhouses (2b and 3b).
39 Heckenberg Ave Sadleir	1,777	$1,419,000 (Nov 2014)	$798	$177,375	Vacant block sold with approval for 8 townhouses (2b and 3b).
Liverpool South					
25 Box Rd Casula	1,291	$1,700,000 (Apr 2018)	$1,300	$243,000	Single storey house acquired for construction of 7x2 storey townhouses.
11-13 Marsh Pde Casula	1,392	$2,100,000 (Aug 2017)	$1,500	$263,000	Two cottages acquired for construction of 8x2 storey townhouses.
15 Casula Rd Casula	1,176	$1,340,000 (June 2017)	$1,150	$223,000	Single storey detached house on large block acquired for construction of 6x2 storey townhouses.
46-48 Fitzpatrick Cr	1,113	$1,405,000 (Aug 2016)	$1,250	$281,000	Two aged, single storey houses acquired for construction of 5x2 storey townhouses.
15 Timbillica Cl Prestons	1,007	$1,000,000 (Mar 2016)	$1,000	$250,000	Single storey detached house acquired for construction of 4x2 storey townhouses.

Source: AEC

A number of observations are drawn from the analysis in Table 3.2.

- **Hierarchy of prices**
  Prices paid for townhouse development sites varies according to the likely end sale values of completed product. For example, a townhouse site is Chipping Norton expectedly sells for a higher rate per townhouse/site (circa $300,000 per townhouse) compared to say Ashcroft (circa $200,000 per townhouse) where the end sale values of completed townhouses will be lower.

On a rate per square metre of site area, townhouse sites achieve between $1,350/sqm and $1,750/sqm of site area in the Liverpool East and City Centre sub-markets, while townhouse site sales in Liverpool Central have been demonstrated to achieve $800/sqm to $1,050/sqm of site area.

- **Strengthening of prices paid**
  It is evident from the prices paid that market conditions strengthened significantly over the course of 2014-2017. For instance, 119 and 121 Flowerdale Road, Liverpool sold for circa $250,000 per townhouse/site in June 2015 compared to 164-166 Memorial Avenue, Liverpool which sold for just over $300,000 per townhouse/site in June 2017; both sites yielding a similar number of townhouses.

Residential Units

The market for residential units is increasing in prominence, particularly in and around the Liverpool and Warwick Farm train stations. As with townhouse development sites, the market has benefited from a strong increase in sale prices over the 2014-2017 period however prices paid have moderated over the past 12 months.

Table 3.3: Unit Development Site Sales

Address	Site Area (sqm)	Sale Price (Date)	Analysis		Comments
			$/sqm of site area	$/unit	
Liverpool East					
118 Nuwarra Rd Moorebank	820	$1,030,000 (July 2018)	$1,250	$79,000	Two storey brick house in good condition acquired by local developer-builder for construction of a 4-storey RFB with 13 units.
61-65 Lucas Ave, 36 McKay Ave & 31 Harvey Ave Moorebank	3,656	$5,955,000 (July 2017)	$1,625	$78,500	Five detached houses sold in one-line for construction of a 5-storey RFB comprising 76 apartments.
87-91 Nuwarra Rd Moorebank	2,013	$3,600,000 (July 2017)	$1,775	$86,000	Three detached houses acquired in one-line for construction of a 6-storey RFB comprising 42 apartments.
24-26 Mckay Ave Moorebank	1,387	$2,340,000 (Mar 2017)	$1,700	$90,000	Two detached houses sold for development of a 5-storey RFB comprising 26 units.
4-6 Browne Pde Warwick Farm	1,311	$4,000,000 (Apr 2016)	$3,084	$111,100	Site sold with approval for 36 units in a 9 storey building.
9 Goulburn St Warwick Farm	936	$2,040,000 (Aug 2015)	$2,180	$156,900	Sold with DA approval for 13 residential units in a 4 storey building
City Centre					
41-43 Forbes St Liverpool	1,188	$4,450,000 (June 2018)	$3,750	$101,000	Single storey detached house and adjoining vacant block directly north of Liverpool Hospital sold for construction of a 9-storey mixed use development with 45 units.
311 Hume Hwy Liverpool	4,631	$22,500,000 (Sep 2017)	$4,850	$73,000	DA approved site for construction of a 34-storey mixed used development comprising 307 units and ground floor retail.
387-397 Macquarie St Liverpool	2,931	$13,100,000 (Nov 2016)	$5,475	$81,000	Existing commercial building with DA approval for construction of 24 storey mixed use development comprising 162 units and 6 ground floor tenancies.
1-5 Bathurst St Liverpool	2,744	$9,100,000 (Feb 2016)	$3,300	$94,000	Two double storey, brick 'walk up' freehold unit blocks and a single storey detatched dwelling acquired for development of a nine storey RFB comprising 97 units.
88-92 Elizabeth Dr Liverpool	2,421	$2,535,000 (Mar 2015)	$1,050	$52,000	Three aged weatherboard cottages acquired by developer for construction of a five storey RFB comprising 49 apartments.
Liverpool Central					
6-8 Wanganella St Miller	1,361	$1,820,000 (Oct 2017)	$1,350	$73,000	Two aged, single storey houses acquired for construction of a 5-storey RFB with 25 units.
71-75 Cabramatta Ave Miller	1,728	$2,670,000 (Feb 2017)	$1,550	$68,500	Three single storey houses acquired for an Affordable Housing development with 39 units.

Address	Site Area (sqm)	Sale Price (Date)	Analysis		Comments
			$/sqm of site area	$/unit	
12-22 Willan Dr Cartwright	3,313	$4,825,000 (Sep 2016)	$1,450	$75,500	Six houses acquired for construction of a 3-storey Affordable Housing development with 64 untis.
11-15 Woolnough Pl Cartwright	1,723	$2,250,000 (Feb 2016)	$1,300	$98,000	Three houses acquired for construction of a 5-storey RFB with 23 apartments.
71 Hill Rd Lurnea	1,303	$1,610,000 (Dec 2014)	$1,235	$70,000	Site subsequently submitted for DA for 23 units in a mixed use development with 350sqm retail floorspace
South West Growth Area					
245 Croatia Ave Edmondson Park	8,000	$10,250,000 (July 2016)	$1,275	$98,000	Large rural-residential site acquired by local developer for construction of 3x4 storey RFBs with a total of 105 apartments.
190 Croatia Ave Edmondson Park	20,200	$10,400,000 (June 2016)	$500	$77,000	Large rural-residential site acquired by local developer for construction of 3x6 storey RFBs with a total of 135 apartments.
5-15 Rynan Ave Edmondson Park	40,400	$11,000,000 (Dec 2015-June 2016)	$270	$100,000	Large rural-residential site progressively acquired by local developer for construction of 3xRFBs with a total of 110 units.

Source: AEC

A number of observations can be drawn from the above analysis:

- **Strengthening of market**
  Residential development sites have generally increased in value (particularly in the City Centre) between the 2015-2018 period. For instance, 88-92 Elizabeth Drive sold for $52,000 per unit/site in March 2015 whereas a similar yielding development at 41-43 Forbes Street recently sold for just over $100,000 per unit/site in June 2018. This affirms the increasing momentum being generated by the revitalisation program of the City Centre.
- **Premium paid for development consent**
  Site that have the benefit of development consent typically attract a premium, planning risk conceivably at a minimum with a developer only having to manage market and financial risk. This can be witnessed in the price paid for 9 Goulburn Street ($156,900 per unit/site) compared to 4-6 Browne Parade ($111,100 per unit/site).
- **Comparison to townhouse sites**
  On a rate per square metre of site area, with the exception of unit sites in Liverpool and Warwick Farm where demand for higher density product is mature, overall, townhouse and unit sites achieve similar rates on a dollar per square metre.

The analysis of development site sales suggests that townhouse and higher-density unit developments are often similarly attractive to pursue. Prices paid for apartment sites has strengthened considerably over the 2015-2018 period and has thus made townhouse or unit development equally compelling for developers. That said, little unit development is observed to be occurring in key sub-markets away from the City Centre (Liverpool Central, South Liverpool) suggesting a market preference for medium density product in many locations within the LGA, particularly in more suburban locations.

Therefore, even if the planning framework permitted residential units in a multi-storey residential building, given end sale values of residential units and the cost to construct high density buildings there is limited market capacity to take-up this type of development. This is the observed case in Liverpool Central (e.g. Ladleir, Lurnea) and South Liverpool (e.g. Casula) where there may be little incentive for residential developers to target sites for unit development over medium density product.

It is expected that current market factors may further influence housing supply across the Liverpool LGA and reinforce current market trends. For instance, stricter lending practices for higher-density apartment development may result in developers opting to progress medium-density development across the LGA which is seen as less risky by lenders given their inherently smaller scale (and overall project costs).

3.4 IMPLICATIONS FOR THE STUDY AREA

The Liverpool residential market is a distinctly layered market. Market preference, income levels and location dynamics cumulatively influence the built form and dwelling types that are progressed and sought after.

- **Detached dwellings**
  Purchasers (and renters) have an array of options. Those with larger budgets typically target modern homes in more affluent suburbs like Moorebank and Chipping Norton as well as areas like Edmondson Park and Green Valley.

  Purchasers with tighter budgets typically target the suburbs grouped in this study as Liverpool Central. Many of these suburbs have a higher concentration of social housing units therein, and consequently prices and growth have been somewhat inhibited. Informal discussions with real estate agents suggests new migrants are less sensitive to the presence of a high number of social housing and show less resistance to these locations.

  Notably, in many lower priced suburbs, the value placed on a granny flat (or allotment that is large enough for one) is significant. This is important to the owner occupier market for a number of reasons - they are able to accommodate a larger or extended, and intergenerational family. It also represents a potential source of rental income. To the investor, the annual rental yield on this type of dwelling is attractive, as high as 5.5% in some cases.

  As a result of the high and attractive rental returns, many detached dwellings (with granny flats) in the lower priced suburbs (e.g. in Liverpool Central suburbs of Ashcroft, Busby, Ladleir) are marketed as development opportunities with a holding income. Many an investor are known to have purchased these properties with a view for future development.

- **Medium density residential** (townhouses, villas, duplexes)
  This form of dwelling is increasing its proportional share of total dwellings, increasing from 10% of total dwellings (2006) to just under 11% in 2016. This type of dwelling is perceived by the market to represent a compromise on space, yet still offering a back yard and more space than a unit. With the availability of 2 bedroom townhouses (albeit limited), many young families are able to enter the market for under $550,000.

  In some instances the preference for medium density product is not borne out of affordability reasons, rather owing to lifestyle and convenience factors. Smaller format housing is associated with lower maintenance and while households may pay the same price as they would for a larger detached home, the price allows access to a new and attractively designed townhouse.

- **Units and apartments**
  Units have increased their proportional share of total dwellings in the Liverpool LGA, rising from just under 12% in 2006 to almost 15% in 2016. Market appetite for units and apartments is strongest in the Liverpool City Centre and other locations in and around transport nodes and in proximate to retail and other urban support services. In some R4 High Density Residential areas, even though residential units are permitted, there would appear to be a market preference for medium density product. Accordingly, the prices a developer might be able to sell completed residential units for do not justify the higher cost of constructing them however this trend is gradually shifting as demand for apartments in outer locations of the LGA increases.

The nature of new development being pursued can also be profiled by market sector and location.

- **Availability of development sites below critical price thresholds**
  Owing to a strong residential market, there are limited opportunities for developers to secure development sites at a price that would facilitate financially feasible development.

  The analysis in Table 3.2 indicates a development can afford to pay between $800/sqm and $1,700/sqm of site area for a townhouse site (depending on location). Referring however to the analysis of existing-use values in Table 3.1, it is evident that development site opportunities are limited, particularly in higher priced suburbs where existing-use values are in excess of $1,500/sqm of site area.

  It is worthwhile noting that in many instances, landowners would expect a premium paid over and above market value to incentivise them to part with their property.

- **Market appetite for product**
  Market ability to pay for housing is constrained, with resistance generally displayed to residential units in suburban locations. As a consequence, the prices paid for unit development sites can be less than prices paid for townhouse development sites (compare analysed prices in Table 3.2 and Table 3.3). This is a direct function of market appetite for product and location.

The next chapter considers demand for housing against the ability of the market to deliver new housing.

4. RESIDENTIAL DEMAND AND SUPPLY ANALYSIS

Drawing together the findings of the analysis of likely retail/commercial demand and property market assessment, this chapter evaluates potential development types that could accommodate future growth in the LGA.

4.1 FINANCIAL FEASIBILITY OF NEW DEVELOPMENT

The capacity of urban zoned land to accommodate new development can be thought of as two-fold: planning capacity and market capacity.

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

In some instances, the lack of development could be as a result of market capacity, relating to market and economic factors, in which case those impediments are beyond the control of planning authorities.

Section 4.3 assesses the 'market capacity' of various development typologies and investigates the pre-requisites for feasible development.

Factors affecting the Financial Feasibility of Development

There are a considerable number of factors affecting the feasibility of individual sites for redevelopment and rarely is a single factor the only cause of poor development feasibility. It is important to understand that urban land is subject to pressures for redevelopment which directly affect their land values and the feasibility of developing into higher and better uses.

The following are a selection of common factors that affect the feasibility of development in the Study Area.

Land Value and Site Assembly

In order to economically acquire and develop land, the proposed use must translate into a higher value than the existing use including any improvements on it (or 'As Is' value). Development will only occur if the proposed use is valuable enough to displace existing uses. While existing improvements may be dated and due for replacement, in many instances they may still be providing a good level of functional utility and thereby still be relatively valuable.

As a consequence, the acquisition of land can be a high-risk and high-resource activity for developers, particularly in established urban areas where numerous lots have to be amalgamated prior to development.

Where numerous lots are required to be assembled, the payment of incentives over and above market value is often required to incentivise individual landowners. This analysis assumes a 20% premium incentive is necessary for site assembly.

When sites are upzoned to higher densities landowner expectations often increase in tandem, unrealistic landowner expectations can thwart site assembly efforts.

In the case of the Study Area, analysis of sites sales reveals that even though zoned for high density development, development of medium density product is pursued, or in some cases no new development. This suggests that in some areas, new development is insufficient to displace existing uses - there being little incentive to redevelop.

Effective Demand

Residential markets are diverse. Market acceptance for higher density product is good within most inner suburbs of Sydney, hence end sale prices of the completed product justify the higher cost of construction.

Effective demand, rather than underlying demand, is relevant for development feasibility. The ability of households to pay for housing underpins the type and nature of development the market can respond with.

While market attitudes in the LGA are shifting and smaller residential product is enjoying increasing market acceptance, prices achieved for residential units are nevertheless limited by prices paid for detached dwellings. For example, if a 3 bedroom detached dwelling is available for $750,000-$800,000, it is unlikely a 3 bedroom unit will be able to achieve the same level of pricing.

Construction Costs

The cost of construction can increase substantially as buildings become taller. Service requirements will dictate that more lifts will be required so that vertical transportation times are not compromised. Service shafts and fire escapes are correspondingly wider too.

In deciding the amount of capital to apply to a site, i.e. how intensely the site should be developed, developer capital will be applied to the point where incremental revenue is equal to incremental cost.

Table 4.1 outlines the potential cost and revenue differential as buildings become taller in the Study Area. For comparison purposes, indicative revenue differential observed in Sydney CBD is also provided.

Table 4.1: Indicative Cost v Revenue Comparison

No. of Storeys	Liverpool ($/sqm)		Sydney CBD ($/sqm)	
	Ave. Cost	Ave. Revenue	Ave. Cost	Ave Revenue
<3 storeys	$2,100	$6,000	$2,100	$12,000
4-7 storeys	$2,500	$7,000	$2,500	$15,000
7-20 storeys	$3,000	$8,000	$3,000	$25,000
21-35 storeys	>$3,800	$10,000	>$3,800	$30,000

Source: Rawlinsons (2018), RLB (2018), AEC

Tall buildings will only be developed in locations where developers can expect to offset the increased cost of construction (taller buildings and more basement levels) and risk with higher revenue levels. It is therefore no surprise that residential towers are feasible to develop in limited markets, particularly in the Sydney CBD.

Planning/Development Controls

Planning and development controls have the ability to affect feasibility through changes in land use zoning and densities but also through the costs associated with design requirements and securing planning approvals.

Codes for parking, open space, sustainability, etc. all have the ability to influence the cost of development. As an example of the influence of development controls, an increase in density will increase height and cost of construction but may also impact on code-based requirements such as car parking areas.

The cost of code compliance could have a disproportionate impact on cost, e.g. where additional basement parking is required, and could severely undermine the economics/ feasibility of development.

Summary

In established urban areas in close proximity to transport networks and major centres, site amalgamation and assembly is arguably the largest challenge for development and renewal. In some instances redevelopment into higher densities is sufficient to displace existing uses and facilitate site assembly for development, however landowner objectives are not always financial in nature and do not always align to enable development.

In areas further away from train stations, effective demand (i.e. what the market is prepared to pay for a type of product) will dictate what is financially feasible to develop. In many locations in Western Sydney, the market for higher density product is immature, in large part due to the capacity of households to pay for the higher cost associated with tall building construction. Townhouses and villas are a cost effective typology to deliver, offering more living space than a unit and more economical to construct (i.e. without the need for basement carparking and building code requirements that are associated with multi-storey buildings).

There is considerable residential development ongoing in Liverpool, however typically confined to areas where existing buildings are nearing the end of their economic useful lives or where vacant blocks of land are available. Existing-use values, small lot patterns and ownership fragmentation issues in the LGA are all significant challenges for new development to overcome.

4.2 DEMAND FOR DWELLINGS

Liverpool is generally characterised by single detached dwellings with an observed increase in the amount of medium density dwellings being developed in recent times. Many a large residential block is observed to be redeveloped to accommodate medium density residential dwellings (e.g. villas, townhouses and duplexes).

Informal discussions with selling agents reveal that Liverpool is an area which historically attracts a wide range of buyers, equally of owner occupiers and investors (although interest from investors has softened significantly over the past 12 months). Owner occupiers are anecdotally observed to have some connection with the locale, whether previously living or renting nearby. Many agents have observed a growing number of people from Bankstown moving into Liverpool, the area perceived as being more affordable.

As with many markets, the Liverpool residential market is characterised by a two-tier market. While almost 40% of households earn less than $78,000 per annum, more than 20% of households earn more than $130,000 per annum.

Drivers of Demand

The demand for dwellings in Liverpool is broadly driven/shaped by the following factors:

- Space and lifestyle requirements.
- Housing affordability.
- Need to supplement income.
- Proximity to town centre facilities (e.g. shopping, public transport, etc.).

Each of these factors is examined in detail following.

House Prices and Typologies

Traditionally, and still an area providing large blocks and single detached housing, Liverpool has in recent years witnessed a number of medium density developments (villas, townhouses and duplexes) occur.

The traditional detached dwelling and granny flat has wide acceptance in the modest suburbs of Ashcroft, Busby, Heckenberg, these formats allowing either an additional income source or facilitating accommodation of large, or intergenerational families within the same property. Investors are also drawn to this dwelling type as it allows a higher annual yield (>5%). The increase in average number of persons per household to 3.1 influences the need for large accommodation.

In some cases (for example in Moorebank and Liverpool), new medium density dwellings are not significantly cheaper than existing detached dwellings, they are however sought after owing to new and attractive design, also influenced by lifestyle and convenience offered by a smaller dwelling. In other areas (e.g. Casula) a townhouse is affordable and serves many sections of the market, for example, a 2b townhouse may sell for $450,000-$485,000, a 3b townhouse for $525,000-$575,000 and a 4b townhouse for $590,000-$620,000.

Medium density typologies are understood to be highly sought after by young families, single and couple households. Considering more than 50% of the LGA’s residents are aged under 35 years this is not surprising.

While small units may offer an affordable price point, leasing agents comment that small units (1 bedroom) typically experience prolonged marketing periods due to the limited market demand for them.

The growing market acceptance of smaller house formats is in some areas borne more out of changing lifestyle and convenience needs, however in some areas it is due to affordability issues. Smaller formats allow developers to optimise use of a site.

Notwithstanding the focus of developers on medium density product, developers are typically targeting residential zones where there are large vacant blocks available or where a aged detached cottages and houses are nearing the end of their economic useful life.

Housing Affordability

Affordability is a function of property prices, income levels and interest rates. As property prices increase amid stagnant or falling income levels, affordability declines, i.e. fewer people are able to afford to purchase a home.

To better understand the issue of housing affordability in the Precinct, Table 4.2 profiles household income bands and measures how much households can afford to spend on housing cost, whether rental or mortgage cost.

Table 4.2: Household Incomes and Housing Affordability

Household Income		Rental (% of Income)	Weekly Rental	Ownership (% of Income)	Monthly	Principal	Deposit	Home Affordability
Annual	Weekly							
$55,000	$1,058	30%	$317	40%	$1,833	$305,785	$30,578	$336,363
$60,000	$1,154	30%	$346	40%	$2,000	$333,583	$33,358	$366,942
$65,000	$1,250	30%	$375	40%	$2,167	$361,682	$36,138	$397,520
$70,000	$1,346	30%	$404	40%	$2,333	$389,180	$38,918	$428,098
$75,000	$1,442	30%	$433	40%	$2,500	$416,979	$41,698	$458,677
$80,000	$1,538	30%	$462	40%	$2,667	$444,778	$44,478	$489,255
$85,000	$1,635	30%	$490	40%	$2,833	$472,576	$47,258	$519,834
$90,000	$1,731	30%	$519	40%	$3,000	$500,375	$50,037	$550,412
$95,000	$1,827	30%	$548	40%	$3,167	$528,173	$52,817	$580,991
$100,000	$1,923	30%	$577	40%	$3,333	$555,972	$55,597	$611,569
$105,000	$2,019	30%	$606	40%	$3,500	$583,771	$58,377	$642,148
$110,000	$2,115	30%	$635	40%	$3,667	$611,569	$61,157	$672,726
$115,000	$2,211	30%	$663	40%	$3,833	$639,368	$63,937	$703,305
$120,000	$2,308	30%	$692	40%	$4,000	$667,166	$66,717	$733,883
$125,000	$2,404	30%	$721	40%	$4,167	$694,965	$69,497	$764,462
$130,000	$2,500	30%	$750	40%	$4,333	$722,764	$72,276	$795,040
$135,000	$2,596	30%	$779	40%	$4,500	$750,562	$75,056	$825,618
$140,000	$2,692	30%	$808	40%	$4,667	$778,361	$77,836	$856,197

*Note that proportion of income for home ownership is increased for higher income bands, higher income households having the ability to contribute a larger proportion of their income to mortgage payments without compromising on their quality of life.
AEC assumptions: 10% deposit, 6% interest rate, 30 year loan term
Source: BTS (2014)

The highlighted rows indicate the affordability thresholds associated with the LGA's median household income band ($80,496 per annum), households having the capacity to purchase dwellings priced between $489,000 and $520,000. This is marginally lower than the median unit price in Liverpool of $500,000 but well below the median house price of $790,000 (FACS, 2018).

The following observations emerge:

- There is some capacity for the market to pay for higher density dwellings, e.g. shop top housing in excess of $500,000.
- Median household tolerance to house prices is within the $489,000 to $520,000 price band.
- Median household tolerance to rents is within the $460 to $490 per week bracket.

In order to respond to community needs as they evolve, the issues of housing choice and diversity need addressing. Smaller housing formats, with fewer bedrooms are increasingly sought after, due to housing need but also due to a limited extent to affordability reasons. Lifestyle and preference are also contributing factors for focus on smaller dwelling types. Notwithstanding, cohabiting lifestyle choices of large and inter-generational families means larger format houses will still be needed at critical affordable price points.

While there is theoretical capacity for increased dwellings in the R4 High Residential zone, owing to market attitudes and capacity to pay for completed dwellings (shop top housing or high rise residential), there is unlikely to be large scale take-up of development opportunities in this zone, unless in proximate location to train stations and in an amenity-rich environment.

4.3 SUPPLY OF DWELLINGS

The property market has a role to play through provision of quality buildings and places. Any impediments in the process should be identified and reviewed. This section outlines various influences that underpin the ability of the market to supply dwellings that align with market need/demand.

4.3.1 Drivers of Supply

The supply of dwellings is a question of market capacity, i.e. whether new development is financially attractive to incentivise private investment. There is anecdotal information to suggest parts of the market in Liverpool are resistant to purchasing off-the-plan. In these instances, developers will have to fund development from their own balance sheet. This accordingly limits the scale of development that occurs.

As highlighted previously, the capacity of residential zoned land to accommodate new dwellings can be thought of as two-fold: planning capacity and market capacity.

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

In some instances constraints to housing supply could be as a result of market capacity, relating to market and economic factors, in which case those impediments are beyond the control of planning authorities.

Future Expectations

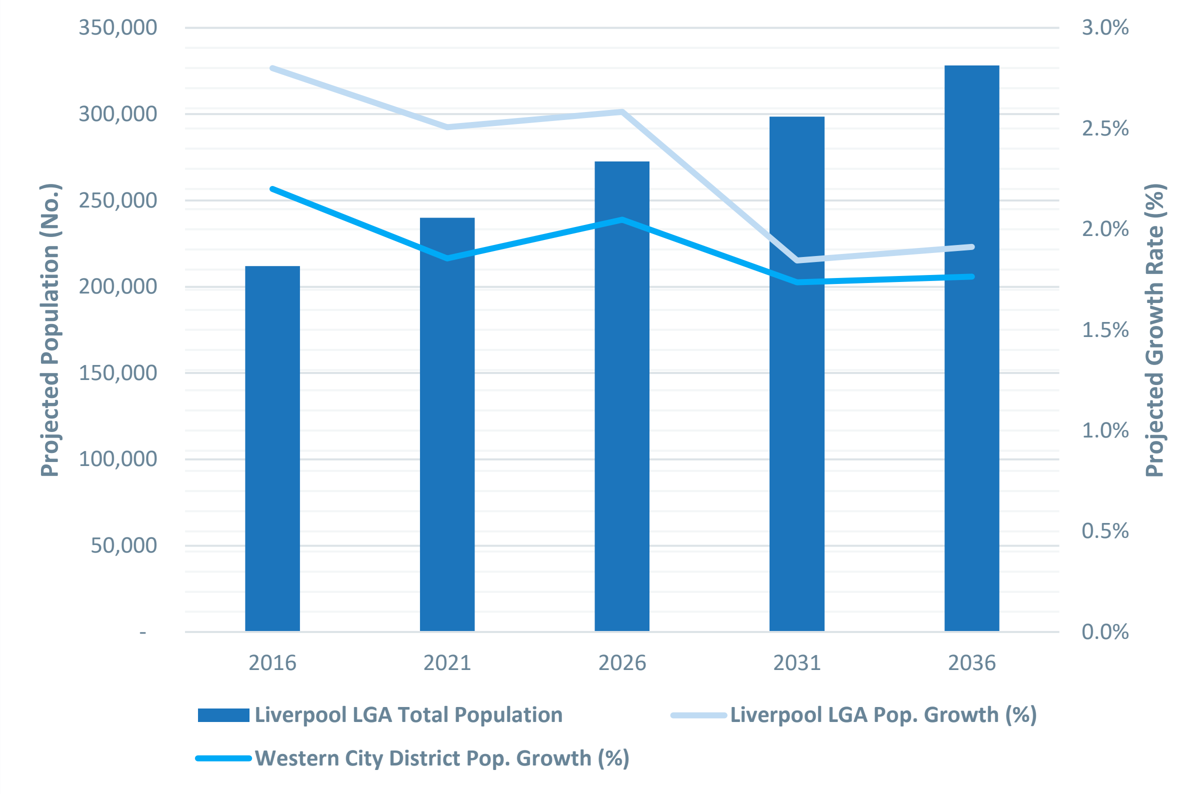
The market's future expectations of population growth are a major factor that will drive housing supply. Our research suggests despite market conditions having moderated in recent months, enquiries from purchasers shows no sign of abating. Though, properties over $800,000 in some suburbs and over $1m in other suburbs may face prolonged marketing periods. That said, properties below those price points are reportedly met with good market acceptance.

Population Projections

Based on population forecasts by the NSW Department of Planning and Environment, Liverpool LGA's total population is expected to grow considerably over the timeframe from 2016-2036 at an average annual growth rate of 2.2%. By 2036, it is expected that the population will grow to nearly 330,000, an increase of circa 116,000 in the 20 years to 2036.

This significant rate of growth has consequent implications for the role of the property market to deliver needed housing supply.

Figure 4.1: Population Projections, Liverpool LGA (2016-2036)



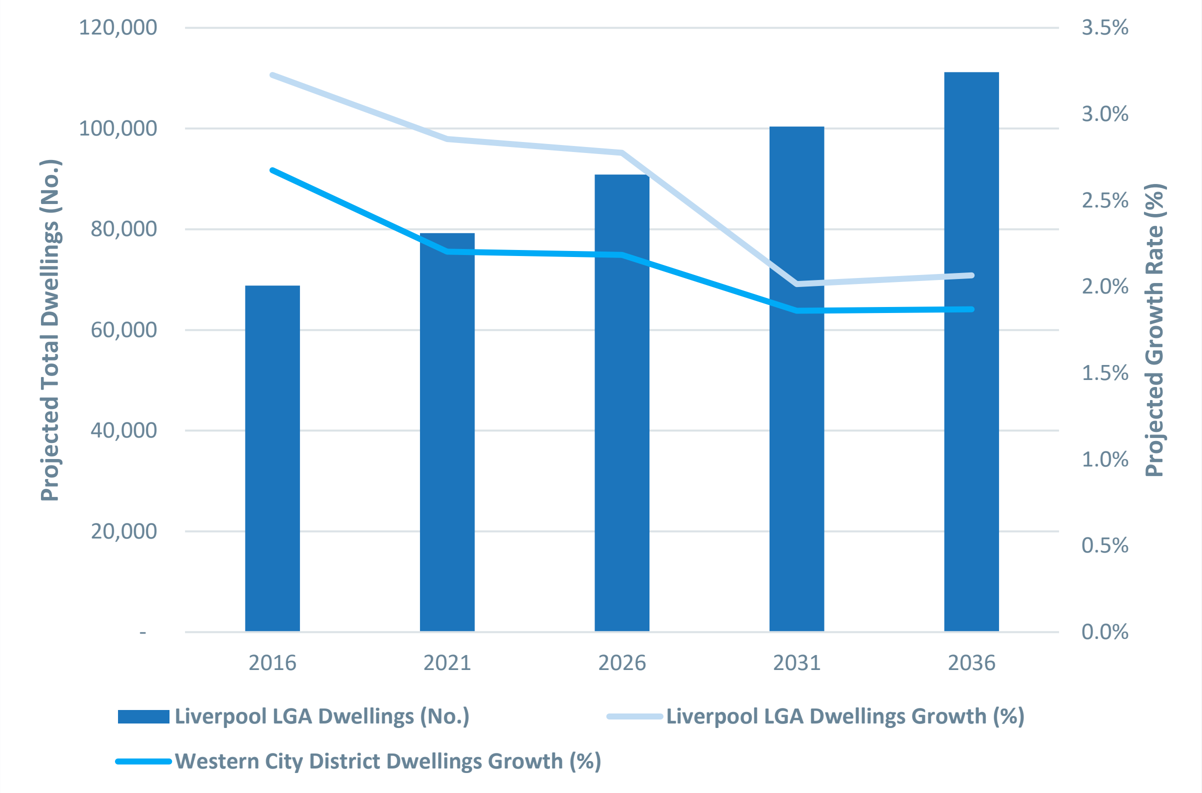
Source: ABS (2018)/DPE (2016)

Strong growth is forecasted to occur over the 2016-2026 period after which growth moderates over the 10 years to 2036. This growth trend matches that which is expected for the broader Western City District.

Dwelling Projections

Based on dwelling forecasts by the NSW Department of Planning and Environment, Liverpool LGA's total dwelling stock is expected to grow considerably over the timeframe from 2016-2036, averaging 2.4% over 2016-2036 period. By 2036, it is expected that total dwellings will number just over 111,000, an increase of circa 42,000 in the 20 years to 2036.

Figure 4.2: Dwelling Projections, Liverpool LGA (2016-2036)



Source: ABS (2018)/DPE (2016)

Dwelling growth is expected to moderate over the coming 15 years to 2031 after which growth is expected to rise moderately to 2036. This growth trend matches that which is expected for the broader Western City District.

4.3.2 Constraints to Supply

In the case of new housing in the LGA, any perceived impediment to supply is more a land cost issue rather than a demand issue. There appears to be a healthy demand for new, well designed and good quality medium density residential product, however the market imposes the following constraints on the ability for new development to be delivered.

Modest End Sale Values

The level of end sale values for a new townhouse ($550,000 to $750,000) means developers can only afford to pay no more than $800/sqm-$1,000/sqm of site area for a townhouse development site in Liverpool Central and $1,200/sqm-$1,450/sqm of site area for a site in Liverpool East (refer to section 3.3.2).

Analysis of detached houses in the LGA indicate existing-use values generally in excess of $1,000/sqm of site area with those in the more affluent suburbs in excess of $1,500/sqm-$2,000/sqm of site area. Accordingly, developers are more generally observed to seek out development opportunities where properties are priced under the $1,000/sqm-$1,200/sqm threshold or where there are vacant blocks of land.

Cost of Higher Density Construction

Residential flat buildings and shop top housing are more expensive to construct. At present end sale values ($450,000-$750,000), development feasibility of this type of dwelling is fragile particular in areas where town centre amenity is poor. In locations such as the Liverpool City Centre or Warwick Farm, market demand and pricing underpins the financial feasibility of the higher cost of construction.

In suburban locations (not the City Centre), higher density development is less readily observed however developers are progressing smaller scale developments in areas such as Moorebank.

Table 4.3: Indicative Cost of Residential Typologies

Dwelling Type	Building Area (sqm)	Indicative Cost*	Indicative Sale Price
Detached house	150	$300,000-$400,000	$750,000-$1,300,000
Medium density (e.g. townhouse, villa)	120	$250,000-$300,000	$600,000-$750,000
Walk-up residential unit (3 storeys)	90	$225,000-$275,000	$400,000-$500,000
Residential unit (6 storeys with lift)	90	$250,000-$300,000	$500,000-$750,000
Residential unit (10-20 storeys with lift)	90	$300,000-$380,000	$550,000-$900,000

*build cost only, excludes land and margin
Source: Rawlinsons (2018), RLB (2018), AEC

Difficulties of Site Assembly

Some sites are feasible to redevelop at the designated densities if they are in single ownership, i.e. no premium payment is necessary to incentivise numerous landowners to sell. The reality of brownfield or infill development though, is that sites are typically small in size and owned by a number of parties, necessitating payment over and above market value.

4.4 IMPLICATIONS FOR HOUSING IN LIVERPOOL

Townhouse and medium density typologies do not respond to density and height, consequently are able to occur as infill development where a smaller number of sites are available. This type of development activity is ongoing across the LGA, typically confined to areas where old and dilapidated cottages can be assembled cheaply and do not have the potential for higher density development.

While poor feasibility at lower densities would appear to suggest that higher densities are required to displace existing uses (particularly in the City Centre), higher density mixed development is as yet unviable in suburbs like Ashcroft, Busby and Casula. We note that a number of high-density Affordable Housing developments are currently being progressed in these locations; these developments differ from traditional market housing given operators are able to achieve cheaper finance, tax incentives and planning concessions.

Over the course of 2016-2018, increasing demand for higher-density product proximate to transport nodes has resulted in the feasibility of development in such as Moorebank and Warwick Farm continuing to improve with several developments being progressed under current planning controls. Development in these areas remains fragile however as land values have increased paramount with apartment values placing pressure on developers to economically secure sites.

Landowner expectations generally shift with planning controls, i.e. higher expectations accompany higher permissible densities and higher order uses. As a result, areas that retain a low-density zoning that permit townhouse/villa developments will over time, be redeveloped with this form of infill development as existing dwellings reach the end of their economic useful life.

Median household incomes in Liverpool suggest a detached, freestanding house is out of reach to many households. The analysis in Table 4.2 suggests that households at the median household income of $80,496 can afford to purchase house at $489,000-$520,000 or rent at $460-$490 per week. Our research and anecdotal information suggests that a critical price capacity for many households to be in the order of $550,000.

The following assist with housing options that households can access:

- Sharing of accommodation by multiple households (either extended family or intergenerational families). Detached homes with granny flats or dual occupancies are suitable for this.
- Supplement to income by leasing a granny flat to the rear.
- Purchase of 2 bedroom townhouse for under $600,000. While most townhouses and villas are proposed for 3 or 4 bedrooms, 2 bedroom townhouses represent an excellent entry point for young families.
- Availability of unit accommodation for or under the critical price capacity of $550,000. Increased residential densities in and around town centres where public transport and other retail and non-retail support services are available alleviates pressure on housing budgets.

REFERENCES

ABS (2018a). *Regional Population Growth, Australia*, 2017. Cat no. 3218.0. Australian Bureau of Statistics, Canberra.

ABS (2018b). *Wage Price Index, Australia, June 2018*. Cat. No. 6345.0. ABS, Canberra.

ABS (2018c). *Lending Finance, Australia, June 2018*. Cat. No. 5671.0. ABS, Canberra.

ABS (2017a). *Census of Population and Housing*, 2016. Cat no. 2003.0. Australian Bureau of Statistics, Canberra.

ABS (2017b). *Population by Age and Sex, Regions of Australia*, 2016. Cat no. 3235.0. Australian Bureau of Statistics, Canberra.

ABS (2017c). *Census of Population and Housing*, 2016. Cat no. 2071.0. Australian Bureau of Statistics, Canberra.

ABS (2012). *Census of Population and Housing*, 2011. Cat no. 2001.0. Australian Bureau of Statistics, Canberra.

Business Insider (2017). *Here's what economists are saying about Australia's latest wage report.* 15 November 2017.

CoreLogic RP Data (2018). *Preliminary Auction Results Show 50.2% Clearance Rate Across The Combined Capital Cities*. CoreLogic RP Data. Available from: https://www.corelogic.com.au/news/preliminary-auction-results-show-502-clearance-rate-across-combined-capital-cities.

DPE (2018a). Liverpool LEP 2008 Amendment No 52 Proposal Details. LEP Online System. Department of Planning and Environment, Sydney.

DPE (2018b). *Sydney Housing Activity, June 2018*. DPE, Sydney.

DPE (2016a). *2016 NSW Population Projections Data*. Department of Planning and Environment, Sydney.

DPE (2016b). *2016 NSW Household and Dwelling Projections Data*. Department of Planning and Environment, Sydney.

FACS (2018). *Rent and Sales Report March Quarter 2018*. Family and Community Services, Housing NSW.

GSC (2018a). *Greater Sydney Region Plan*. Available at: https://www.greater.sydney/metropolis-of-three-cities.

GSC (2018b). *Western City District Plan*. Available at: https://www.greater.sydney/western-city-district-plan.

LCC (2007). *Liverpool Residential Development Strategy*. Prepared by Liverpool City Council.

LCC (2008). *Liverpool Local Environment Plan (2008)*. Prepared by Liverpool City Council.

Rawlinsons (2018). *Rawlinsons Australian Construction Handbook*. Rawlinsons.

Reserve Bank of Australia (2018). *Measures of Consumer Price Inflation*. Available from: https://www.rba.gov.au/inflation/measures-cpi.html.

THIS PAGE INTENTIONALLY LEFT BLANK

BRISBANE
Level 5, 131 Leichhardt Street
Spring Hill QLD 4000
Australia
T: +61 (0)7 3831 0577

MELBOURNE
Level 13, 200 Queen Street
Melbourne VIC 3000
Australia
T: +61 (0)3 8648 6586

SYDNEY
Level 3, 507 Kent Street
Sydney NSW 2000
Australia
T: +61 (0) 2 9283 8400

BANGKOK
2024/129-130 Sukhumvit 50
Prakanong Klongtoey,
Bangkok, Thailand 10260
T: +66 2 107 0189

DARWIN
Level 1, 48-50 Smith Street
Darwin NT 0800
Australia
T: 1300 799 343

PERTH
Level 2, 580 Hay Street
Perth WA 6000
Australia
T: +61 (0) 8 6555 4940

TOWNSVILLE
233 Flinders Street East
Townsville QLD 4810
Australia
T: +61 (0)7 4771 5550

SHANGHAI
46F Hongkong New World Tower
300 Huahai Road Central
200021 China
T: +8621 6135 2310

aecgroupltd.com

OUTCOME DRIVEN

AEC

OUTCOME DRIVEN