Riverstone Town Centre Masterplan

Economic and Feasibility Analysis

Blacktown City Council

November 2015
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AECgroup
Outcome Driven

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Executive Summary

In 2015, AEC Group was part of a consultant team led by Elton Consulting engaged on behalf of Blacktown City Council to undertake and co-ordinate a masterplan for an area which includes the Riverstone Town Centre. AEC's role was to undertake an Economic and Feasibility Analysis to inform development of the masterplan. A draft Economic and Feasibility Analysis was provided to Council in mid-2016.

In December 2017, Elton Consulting subsequently advised that Council had approved Option 2 and to proceed to finalise the Riverstone Town Centre Masterplan. The draft Economic and Feasibility analysis utilised market research and analysis undertaken in 2015-16. As such, we highlight this finalised Economic Feasibility Analysis is premised on market investigations undertaken over the course of late 2015 to early 2016 and any changes in market activity since this time are not reflected. New draft strategic land use and transport plans subsequently released by the NSW Government have not been captured and will require careful consideration through any subsequent planning proposal.

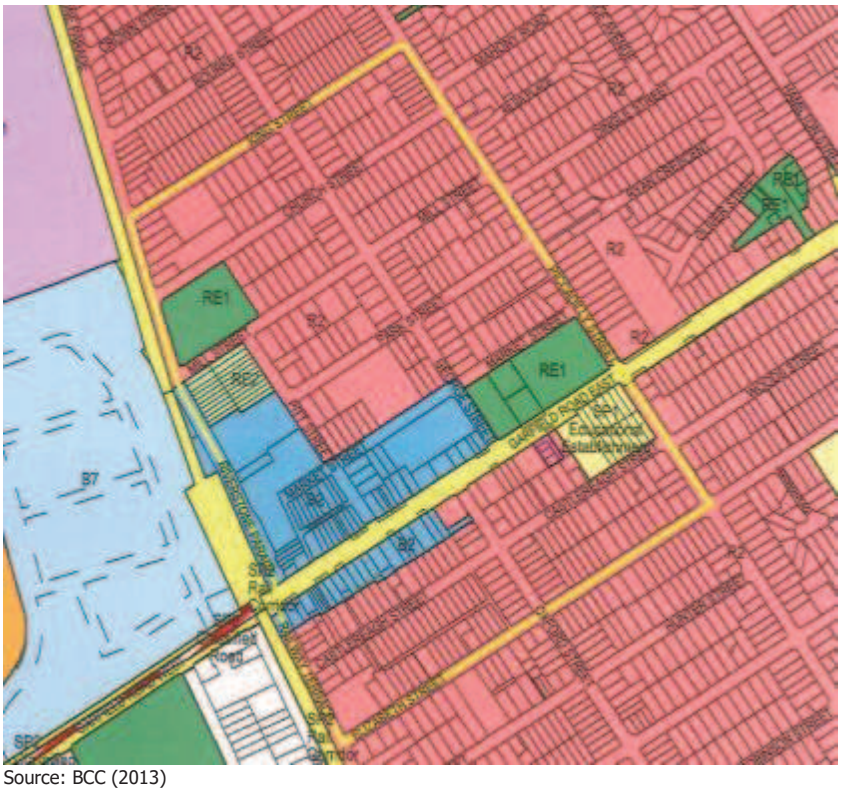
Context and Purpose of the Study

Riverstone Town Centre is centrally located within the North West Growth Centre (NWGC) and sits within the Blacktown local government area. The Riverstone Town Centre sits immediately west of the Riverstone Precinct. The Riverstone Precinct was rezoned in May 2010, however, the Riverstone Town Centre (the subject of this investigation) was excluded from this rezoning, subject to local planning controls.

Blacktown City Council (Council) has ambitious plans for Riverstone town centre. Planned Council investment into community facilities and public domain works will undoubtedly lift the profile of the town centre, making it a destination in its own right and drawing in visitors from beyond a local catchment.

A multi-disciplinary consultant team led by Elton Consulting on behalf Blacktown City Council carried out research and analysis that led to the development of a masterplan for an area which includes the Riverstone Town Centre (or Study Area), defined as the area outlined in yellow in **Figure 1.1**, also referred to as the area zoned B2 Local Centre.

Figure ES.1.1: Study Area



Source: BCC (2013)

Socio-economic Analysis

Observations of the present composition of Study Area's employment structure indicate the nature of its growth in the context of the broader NWGC.

- **Employment growth in Riverstone Town Centre has been minimal**
  Between 2006 and 2011 the number of jobs in the Study Area increased modestly by 82 jobs or 11.8%.

  The largest growth industries by number of jobs were: education and training (23 jobs or 17.5%), health care and social assistance (17 jobs or 34.4%), construction (16 or 18.4%) and retail trade (14 or 18.5%).

- **Population growth in NWGC**
  Overall between 2001 and 2011 population in the NWGC increased from 20,890 persons to 29,244 persons, equating to an increase of 8,354 or 40% over the period. This represents an annual average increase of 1.2%.

  It is understood that dwelling completions in Riverstone precinct were fewer than 50 in 2011-2014, equating to an average of fewer than 15 dwellings per year.

- **Dwelling approvals in NWGC**
  The volume of dwelling approvals in NWGC has increased by 2,007 dwellings since 2010, this equates to a rate of 500 dwellings per year over a 4-year period.

Mesh block data analysis suggest the Riverstone area (Blacktown LEP) and Riverstone Precinct (SEPP boundary) had a combined population of 7,902 in 2011.

Despite the modest historical growth in dwellings and employment, BTS future projections for the Study Area are optimistic, population and employment growth expected to outstrip that in Blacktown LGA and the subregion.

Demand for Retail and Commercial Uses

It is well accepted that retail land uses and demand for floorspace are driven by population growth. With regard to commercial type activities these are typically reliant on local business as a generator of demand for their services. Population growth is also a driver for local business services, e.g. home alarms, printing services, home appliance service and repairs, etc.

Based on structure planning targets (currently under review), the NWGC is expected to accommodate 70,000 new dwellings and 200,000 people by 2031. The Riverstone Precinct alone has a dwelling and population capacity estimate of 9,000 and 27,000 respectively. Achievement of these capacities would equate to growth of 450 dwellings and 1,350 people each year toward 2031, equivalent to annual average growth rates of 5.6% and 6.3% respectively (using 2011 ABS data as the starting point).

Despite modest population growth in the Study Area local catchment, future expected population growth in the broader NWGC, Council investment into a range of community facilities and work to improve the public domain, combined with the close proximity of the Riverstone train station would present demand opportunities for new retail/commercial development in the Town Centre.

While significant population and dwelling growth in the broader NWGC is expected to occur, the ability of the Study Area to accommodate new dwellings is more challenged. This is due principally to the already built-up nature of the Study Area which incorporates an array of existing buildings in multiple landownership. The established and built-up nature of the Study Area (with relatively high existing-use values) combined with fragmented landownership patterns has implications for the cost to a developer to assemble a development site.

Property Market Apprasial

Existing land values have important implications for the future development potential of the Study Area. The price paid by a developer to assemble a development site would depend on the type of development that can feasibly be accommodated on a site. The

following transactions indicate what developers can afford to pay for a development site to certain residential typologies.

- **Residential subdivisions**
  A number of residential subdivision sites are observed to have been assembled in Riverstone and neighbouring Schofields. Vacant sites that are appropriately zoned are generally acquired at prices ranging from $160/sqm to $270/sqm of site area. The Eden Grange Estate (11 Piccadilly Street, 90 Brighton Street) is among these development sites.
- **Attached dwellings** (townhouses, villas)
  Several development sites for medium density product have been assembled, with prices paid ranging from $330/sqm to $400/sqm of site area for development sites without approval.

  Sites with development approval sell for more, e.g. the site at 33 St Albans Road (approved for 9 townhouses) was acquired at $840/sqm of site area, this higher price paid indicative of the value placed on a development site with minimal planning risk.
- **Residential units** (5 storeys)
  A site in a B1 Local Centre zone at 111 Railway Terrace in Schofields was acquired for $1,457/sqm of site area. The site benefits from development approval for 32 residential units and 2 commercial units in a 5 storey building (FSR 3.6:1).

The above analysis indicates that low density residential development can least afford to pay for development sites, prices paid ranging from $160/sqm to $270/sqm of site area. In comparison, development of higher density product (attached dwellings and residential units) can afford to pay more for a development site (prices paid range from $330/sqm to nearly $1,500/sqm).

Due to the established nature of the Study Area with existing buildings in multiple landownership, higher density development is required in order to displace existing uses and provide sufficient incentive for landowners to sell land for development.

Feasibility testing affirms this observation, demonstrating that at current planning controls (height controls of 9m) do not facilitate feasible development. This is due primarily to the existing-use values that subsist as well as the fragmented lot and ownership patterns which then necessitate the payment of premiums over and above market value. These factors cumulatively contribute to the high cost of consolidating a development site, resulting in a need for intervention to amend planning controls to assist with feasible development outcomes.

Accommodating Future Growth

Masterplan Options

Group GSA prepared four masterplan options for the Study Area, these included:

- Option 1 Hub: a concentration of mixed uses around a 'community hub'.
- Option 2 Main Street: an elongation of Market Street from the train station in the west to Piccadilly Street in the east.
- Option 3 Precincts: land uses configured in 'precincts', retail uses, community and mixed uses within discrete 'blocks'.
- Option 4 Central Community Precinct: concentration of retail and community uses around a 'community hub' with greater focus on higher-density residential typologies.

Following iterative team workshops and financial feasibility analysis, Group GSA refined Masterplan Option 2 to form the preferred option.

The refined option envisages Market Street as the 'main street' of the Town Centre, extending from the train station in the west to Piccadilly Street in the east. Land uses (and number of storeys have been refined as follows:

Table ES.2. Masterplan Option 2, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	FSR	Storeys	Land Use	FSR	Storeys
Mixed use	3:1	9	Mixed use	3:1	9
Mixed use	2.2:1	6	Mixed use	2.2:1	6
High density residential	2.8:1	9	High density residential	2:1	6
			Med density residential	0.8:1	3

Source: Group GSA (2015)

Development typologies envisaged are mainly 6 and 9 storey mixed use buildings along Market Street and Garfield Road East. This recognises the role of residential uses to cross-subsidise the provision of non-residential floorspace. The provision of higher densities and taller buildings also recognises greater densities are required in the existing B2 zone to displace existing-use values which are higher than those in the R2 zone.

Residential buildings surround the mixed use buildings, densities and heights 'stepping down' away from the village green and 'core' of Market Street. This aligns with the lower existing-use values in the R2 zone where lower (6 storey) residential buildings would likely be sufficient to displace existing uses.

Lower density residential, i.e. 3 storey townhouses are envisaged along extreme north and south fringes of the Study Area. Owing to existing lot patterns and values-in-use, new development is unlikely to occur.

Development yields that result from the preferred masterplan option are:

- Retail floorspace (12,373sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (9,373sqm).
- Residential floorspace (475,561sqm or 3,804 units).
- Community/recreation floorspace (5,000sqm).

Future of the Town Centre

The Riverstone Town Centre contains many of the attributes of a successful centre, i.e. it is accessible by public transport, contains parking and has exposure to passing vehicular traffic. It however suffers from a poor layout and configuration and lacks a retail anchor which impedes its ability to attract other retailers, which in turn affects the amount of pedestrian foot traffic.

Council's aspirations for the town centre which are to be reflected in investment into community facilities and the quality of the public domain will undoubtedly result in a lifting of the town centre's profile as well as making it an attractive place to visit and spend time in.

Notwithstanding the existing poor retail offer in the Riverstone Town Centre, as the broader Riverstone precinct and indeed the NWGC grows and the Town Centre establishes itself as a community hub, existing retailers will be benefit from increased patronage from beyond the local catchment and conceivably attracting new retailers once a critical mass of patronage is established.

In line with an increased desirability as a place to be, in the medium-long term there could emerge a market for shop-top housing. New residents within the Town Centre will contribute to local demand for retail services, thereby enhancing centre vitality and sustainability.

The potential for growth in the Study Area will be primarily underpinned by local residential growth, supplemented by outside visitation and patronage.

- **Local resident catchment**
  Unlocking of development opportunities within the Study Area will assist in growing the local resident catchment, which will contribute to driving demand for retail facilities and associated floorspace.

As a critical mass of residents establishes, demand for retail services will flow naturally as retailers seek to capture a greater proportion of local expenditure (and preventing escape expenditure).

- **Visitation from beyond local catchment**
  Initiatives to attract visitation and patronage from beyond the Riverstone local catchment will contribute to sustaining a viable town centre offer. Council investment into civic and community facilities as well as improvements to the public domain will cumulatively contribute to the ability of the Town Centre to attract and sustain visitation and patronage from beyond the local catchment.

It is well accepted that population growth drives the need for social and community infrastructure provision. Community infrastructure has a role to play in servicing the needs of the local community as well as drawing in people from outside the local catchment who may not have access to the same community facilities. Council's commitment to investing in a community hub and recreational facilities is important for meeting the needs of the local population, but equally important for drawing visitors to the Town Centre.

Overall, businesses in the Town Centre will continue to experience pressures from competing centres and online retailers. Notwithstanding, if the centre presents a unique offer incorporating a combination of community/recreational facilities as well as a pleasant and inviting retail experience it can position itself as a destination in a burgeoning North West Priority Growth Area.

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1. Introduction

1.1 Study Background and Overview

In 2015, AEC Group was part of a consultant team led by Elton Consulting engaged by Blacktown City Council to undertake and co-ordinate a masterplan for an area which includes the Riverstone Town Centre. AEC Group were engaged to undertake an Economic and Feasibility Analysis to inform development of the masterplan. A draft Economic and Feasibility Analysis was provided to Council in mid-2016.

In December 2017, Elton Consulting subsequently advised that Council had approved Option 2 and to proceed to finalise the Riverstone Town Centre Masterplan. The draft Economic and Feasibility analysis utilised market research and analysis undertaken in 2015-16. As such, we highlight this finalised Economic Feasibility Analysis is premised on market investigations undertaken over the course of late 2015 to early 2016 and any changes in market activity since this time are not reflected. New draft strategic land use and transport plans subsequently released by the NSW Government have not been captured and will require careful consideration through any subsequent planning proposal.

Riverstone Town Centre is centrally located within the North West Growth Centre (NWGC) and sits within the Blacktown local government area. The Riverstone Town Centre sits immediately west of the Riverstone Precinct. The Riverstone Precinct was rezoned in May 2010, however, the Riverstone Town Centre (the subject of this investigation) was excluded from this rezoning, subject to local planning controls. Note the Riverstone Town Centre is referred to interchangeably as 'Town Centre'.

The Town Centre contains a range of retail/commercial land uses which primarily serve a local catchment. Despite this, the Town Centre is considered to be underperforming and has seen minimal development activity in recent years.

Whilst there is need to ensure there is adequately zoned land available within the Riverstone Town Centre for it to remain economically sustainable and accommodate anticipated growth - it is no longer simply a case of 'rezone it and they will come'.

Blacktown City Council (Council) has ambitious plans for Riverstone town centre. Planned Council investment into community facilities and public domain works will undoubtedly lift the profile of the town centre, making it a destination in its own right and drawing in visitors from beyond a local catchment.

Council recognises the need to incorporate flexibility into the planning framework, to allow the Town Centre to grow and develop over time having regard to changes in population and lifestyle characteristics, trends in employment, retail and community service provision. As a result, a careful assessment of the many factors that influence the success of the Town Centre and its development over time is required.

Critical to the success of planning for the Town Centre is a thorough understanding of the development and investment market, and in particular those fundamental elements which can attract or discourage private sector investment.

1.2 Context and Purpose of the Study

A team led by Elton Consulting has been engaged by Blacktown Council to undertake and co-ordinate a masterplan for an area which includes the Riverstone Town Centre. AEC Group have been engaged to undertake an economic and feasibility analysis to inform development of the masterplan.

The Study Area

The Study Area is defined as the area outlined in yellow in **Figure 1.1**. "Riverstone Town Centre" is used to refer to the area zoned B2 Local Centre.

Figure 1.1: Study Area

Source: BCC (2013)

The Study Area is located in the Blacktown local government area on the north-western periphery of the Sydney Metropolitan region, some 40km north-west of the Sydney CBD and 11km north of Blacktown. The Study Area sits within the broader North West Growth Centre catchment and occupies a geographically central location within the North West Growth Centre.

The North West Growth Centre is made of 16 precincts which are progressively being released and rezoned for development. In total the NWGC precincts are estimated to accommodate 70,000 new dwellings and 200,000 people by 2031. Since early planning commenced in 2005 to streamline the supply of greenfield land for urban development, various milestones have been achieved and 11 precincts have been rezoned for urban development.

The Study Area (of which the Riverstone Town Centre is part) is located immediately west of the Riverstone Precinct (which is subject to the Growth Centres SEPP). The North West Growth Structure Plan (Edition 3) designates the Riverstone Town Centre to operate as a "Town Centre" serving interfacing precincts.

Riverstone Precinct was rezoned in May 2010, however, the Study Area (the subject of this investigation) was excluded from this rezoning. As such, the Study Area is subject to the Blacktown LEP (2013) rather than SEPP (Sydney Growth Centres).

Riverstone Town Centre

The Town Centre contains a range of retail/commercial land uses which serve the local residents. The Market Town Shopping Centre is located along Riverstone Parade and provides an IGA and speciality stores i.e. delicatessen, newsagent etc. Garfield Road East contains strip shops i.e. real estate agents, solicitors, hairdresser etc. Market Street contains a family medical practice, Riverstone Schofields Memorial Club and childcare facilities. Park Street contains accommodates a senior citizens centre. The centre incorporates the Riverstone train station.

The Town Centre is bounded by low density residential to the north, east and south and is bounded by Riverstone Parade and Riverstone Train Station to the west.

1.3 Methodology and Approach

In order to understand the range of uses that could be viably developed in the Town Centre, AEC carried out the following tasks:

- Market appraisal to understand the trends, drivers and market context for commercial, retail and residential development within the Study Area and surrounds.
- Consider various development typologies that could accommodate various land uses in the Study Area.
- Review and test the financial feasibility and appropriateness of current planning controls (including FSRs and building heights) to deliver identified development typologies.
- From the market appraisal and feasibility analysis, make recommendations (as appropriate) to areas where planning policy (FSR, height etc.) can help facilitate development and renewal of the Study Area.
- Contribute to preparation of four masterplan scenarios (specifically advising on land use splits, appropriate development typologies based on earlier testing of the controls) considering assessed demand as well as trends and drivers for various land uses.
- Evaluate developed masterplan options based on specified criteria and contribute to selection and refinement of a preferred masterplan option.

The overarching objective of the analysis is a clear understanding of the market appeal and viability and nature of sustainable development in the Study Area.

1.4 Study Structure

The analysis firstly considers the economic and market structure of the Riverstone Town Centre, which is influenced by growth in the local catchment as well as development activity in the broader NWGC.

In the context of historical and expected growth, the analysis then considers the potential role the Study Area could play. These findings contribute to the development of masterplan options by Group GSA.

The analysis is structured in the following chapters:

Chapter 2 analyses key State and local government policies as are relevant.

Chapter 3 analyses the employment profile of the Town Centre, providing insight into the profile of current employment.

The chapter also analyses the socio-demographic profile of Riverstone Town Centre and Blacktown LGA to understand historical housing and population growth.

In considering Riverstone's future growth prospects, the Chapter also provides population, dwelling and employment projections.

Chapter 4 outlines the context and position of the Riverstone Town Centre, its population catchment and outlook for growth which cumulatively impact on the Town Centre's future role.

Chapter 5 carries out a property market appraisal of Riverstone Town Centre and surrounds to investigate patterns of supply and demand, prices paid and the nature of development activity.

Chapter 6 identifies various development typologies that could accommodate growth in the Study Area and tests is they are feasible to develop under existing planning controls.

Chapter 7 evaluates each masterplan option developed by Group GSA and makes recommendations to enable selection and refinement of a preferred masterplan option.

2. Policy and Legislative Context

This Chapter undertakes a review of State and local planning documents as at early 2016. New draft strategic land use and transport plans subsequently released by the NSW Government have not been captured and will require careful consideration through any subsequent planning proposal.

2.1 State Planning Policy

2.1.1 A Plan for Growing Sydney (2014)

A Plan for Growing Sydney (DPE, 2014a) (the Plan) sets the strategic direction for Sydney towards 2031. The overarching vision is that by 2031, Sydney will be "a strong global city, a great place to live". The Plan is built around four key goals:

- A competitive economy with world-class services and transport.
- A city of housing choice with homes that meet our needs and lifestyles.
- A great place to live with communities that are strong, healthy and well connected.
- A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

The Plan outlines a series of directions and actions which are of relevance to the Study Area.

The Plan sets out directions and actions relevant to the North West Growth Centre, of relevance to the Study Area are:

- **Direction 1.4**: Transform the productivity of Western Sydney through growth and investment

  A productive, liveable Western Sydney is pivotal to Sydney's long-term prosperity. Expanding the economic role of Western Sydney's key centres, particularly Greater Parramatta, and improving the scale and mix of job opportunities will benefit Sydney's overall productivity.

  In 20 years, 900,000 more people will live in Western Sydney than today. Within 25 years, Western Sydney will be home to more than half of all Sydneysiders. Significant population growth will occur in the North West and South West Growth Centres and around Parramatta.

  Western Sydney will require new jobs close to centres and transport, improved access to knowledge jobs in strategic centres, and upgraded transport links to Western Sydney centres and between Western Sydney and Sydney CBD.
- **Direction 2.1**: Accelerate housing supply across Sydney
- **Direction 2.2**: Accelerate urban renewal across Sydney – providing homes closer to jobs
- **Direction 2.3**: Improve housing choice to suit different needs and lifestyles
- **Direction 2.4**: Deliver timely and well planned greenfield precincts and housing

The Blacktown local government area is located with the West Central Subregion in accordance with the Plan. The Plan sets out a series of priorities for the West Central Subregion, the following are of relevance to the Study Area:

A Competitive Economy

- Leverage investment and economic development opportunities for the whole subregion generated by the growth of Greater Parramatta and the Global Economic Corridor extension.
- Plan for a corridor for a potential extension of the North West Rail Link from Cudgegong Road towards Marsden Park.

- Recognise and strengthen the subregion's role in Sydney's manufacturing industries, particularly in Bankstown.

Accelerate Housing Supply, Choice and Affordability and Great Places to Live

- Work with councils to identify suitable locations for housing and employment growth coordinated with infrastructure delivery (urban renewal), including around Priority Precincts, established and new centres, and along key public transport corridors including the North West Rail Link, the Western Line, the Cumberland Line, the Carlingford Line, the Bankstown Line, Sydney Rapid Transit and bus T-Ways.
- Plan for continued delivery of housing in the North West Growth Centre with planning focused on infrastructure delivery when needed, housing choice, affordability and sustainability.
- Work with councils to identify opportunities to revitalise suburbs and reduce concentrations of disadvantage.

Strategic Centres

Marsden Park and Rouse Hill are located in and on the fringe of NWGC respectively and are designated as Strategic Centres in accordance with *A Plan for Growing Sydney*. The priorities for these centres are outlined below.

Marsden Park

- Work with council to plan for a concentration of high value economic activity in Marsden Park in the area zoned for business and industrial activities.
- Work with council to plan for integration of Marsden Park employment precinct with Marsden Park town centre, including walking and cycling connections.
- Plan for transport connections from Marsden Park to the North West Rail Link.

Rouse Hill

Rouse Hill sits on the periphery of the NWGC and is also designated as a strategic centre. The proprieties for this centre are set out below.

- Work with council to implement the Rouse Hill Structure Plan in the North West Rail Link Corridor Strategy to provide additional capacity around the future Rouse Hill train station for mixed-uses including offices, retail, services and housing, and to plan for outward expansion of the centre.
- Work with council to improve walking and cycling connections to the future Rouse Hill train station.

Centres Hierarchy

The current metropolitan planning strategy *A Plan for Growing Sydney* does not contain a centres hierarchy. However, the draft Metropolitan Plan for Sydney 2036 (DoP, 2010a) designated Riverstone as a town centre. According to the Department of Planning & Infrastructure a Town Centre is to have:

- 800m walking catchment.
- 4,500-9,500 dwellings.
- 1-2 supermarkets.
- Community facilities.
- Medical Centre.
- Schools.

2.1.2 State Environmental Planning Policy (Sydney Growth Centres)

The Growth Centres SEPP is an environmental planning instrument prepared under the plan making provisions in the EP&A Act. The SEPP establishes the land use zoning and development controls for all the land within the Growth Centres. Consent authorities, such

as local councils, must apply the provisions and consider the objectives of the Growth Centres SEPP when they make planning decisions about land within the Growth Centres.

Where a precinct has not yet been released for urban development and zoned under the Growth Centres SEPP the local planning controls contained within the relevant Council local environmental plan (LEP) apply. The Growth Centres SEPP also requires consent authorities to consider the intended future use of land as described by the Structure Plans and Explanatory Notes when assessing certain development applications within the Growth Centres to ensure development proposed to proceed in advance of precinct planning does not affect the future delivery of the Growth Centres.

Over time, as precincts are released and precinct planning is completed, land within the Growth Centres will be rezoned by making amendments to the SEPP. This will occur after the preparation of a Precinct Plan that is guided by the Growth Centres Structure Plans and the Development Code.

A number of mechanisms, plans and policies apply in conjunction with the Growth Centres SEPP to facilitate delivery of housing in Sydney's Growth Centres.

Structure Plans

Structure Plans have been prepared for both the North West and South West Growth Centres which form part of the Growth Centres SEPP. The Growth Centres Structure Plans are indicative regional land use plans that will guide the detailed planning for precincts when they are released. They also establish the general pattern of development within the Growth Centres over the next 30+ years.

Growth Centres Development Code

The Growth Centres Development Code is prepared in accordance with the EP&A Regulation. It outlines the precinct planning process and the requirements for preparing an Indicative Layout Plan (ILP) and Development Control Plan (DCP) for a precinct.

The Development Code informs and establishes environmental and urban form requirements to determine the future urban footprint of each precinct during precinct planning. The Development Code establishes policies at the regional and neighbourhood levels to promote best practice urban design by increasing housing choices, providing for employment, facilities and services at a local level and improving public transport access, maintaining the natural environment and providing, protecting and maintaining a range of open space opportunities throughout a precinct.

Special Infrastructure Contributions

A Special Infrastructure Contribution (SIC) applies to development within the North West and South West Growth Centres to contribute to the funding of infrastructure in the Growth Centres.

Sections 94ED to 94EM of the EP&A Act enable the collection of a SIC as a contribution towards the funding of regional infrastructure. It is based on the anticipated need for and cost of infrastructure. The types of infrastructure include: education; roads; emergency services and justice; health services; and conservation lands. The contribution applies to developable lands within the Growth Centres resulting in the costs of regional infrastructure, including conservation, being equitably shared across the Growth Centres.

Housing Diversity Package

In 2014 the Department of Planning and Environment introduced new planning controls to increase housing choice and improve affordability in the Growth Centres. The Department amended the Growth Centres State Environment Planning Policy (Growth Centres SEPP) and Growth Centre Precinct Development Control Plans (DCP) to provide consistent planning controls for the assessment and delivery of small lot housing.

The new controls seek to:

- Broaden the range of permissible housing types across the residential zones.
- Standardise and align minimum lot size and residential density controls.
- Include new definitions for studio dwellings and manor homes.

- Introduce new subdivision approval pathways that will make smaller lot housing products more price-competitive and commercially viable.

2.1.3 North West Growth Centre Precinct Plan

The North West Growth Centre was established in 2005 to accommodate new communities, homes, employment areas, health and education facilities and key infrastructure facilities. Before releasing and rezoning areas for urban development, Government undertakes a process known as precinct planning.

The process of precinct planning coordinates the planning and delivery of water, wastewater, recycled water, power, roads, transport and other services to ensure orderly and sustainable growth.

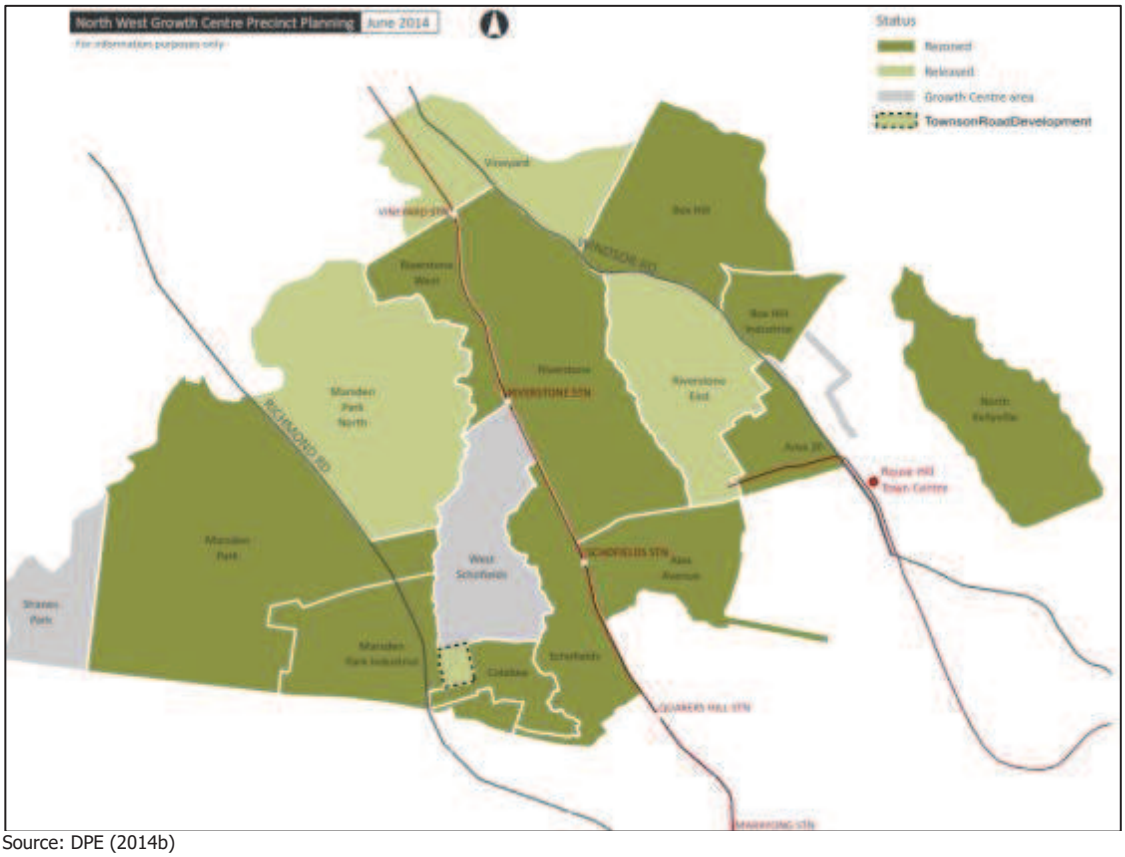
North West Growth Centre

The North West Growth Centre (NWGC) comprises 16 precincts. The planning status of these precincts can be one of three categories:

- **Rezoned**
  If, after relevant planning and consultation Ministerial approval is granted, a precinct is rezoned to allow for urban development to occur.
- **Released**
  A precinct is released by the Minister for Planning to allow DPE to undertake studies and consultation to prepare it for future urban development.
- **Not yet released**
  The potential of these precincts has not yet been investigated.

Figure 2.1 shows the status of each precinct within the NWGC.

Figure 2.1: NWGC Precinct Status



Source: DPE (2014b)

Table 2.1 outlines the progress of planning for delivery of the NWGC.

Table 2.1: Progress of Planning of NWGC

Precinct	Date	Dwelling Target*
Rezoned		
Colebee	Under Council's LEP prior to SEPP	1,000
North Kellyville	19.12.08	4,500
Riverstone West	07.08.09	Employment only
Riverstone	17.05.10	9,000
Alex Avenue	17.05.10	6,300
Marsden Park Industrial	18.11.10	1,200
Area 20	21.10.11	2,500
Schofields	11.05.12	2,950
Box Hill and Box Hill Industrial	5.05.13	9,652
Marsden Park	4.10.13	10,300
Total		**47,402**
Released for Precinct Planning		
Riverstone East		5,300
West Schofields (part)		400
Vineyard		2,500
Marsden Park North		4,000
Total		**12,200**
Not Released		
Shanes Park		500
West Schofields		1,600
Total		**2,100**

Source: DPE

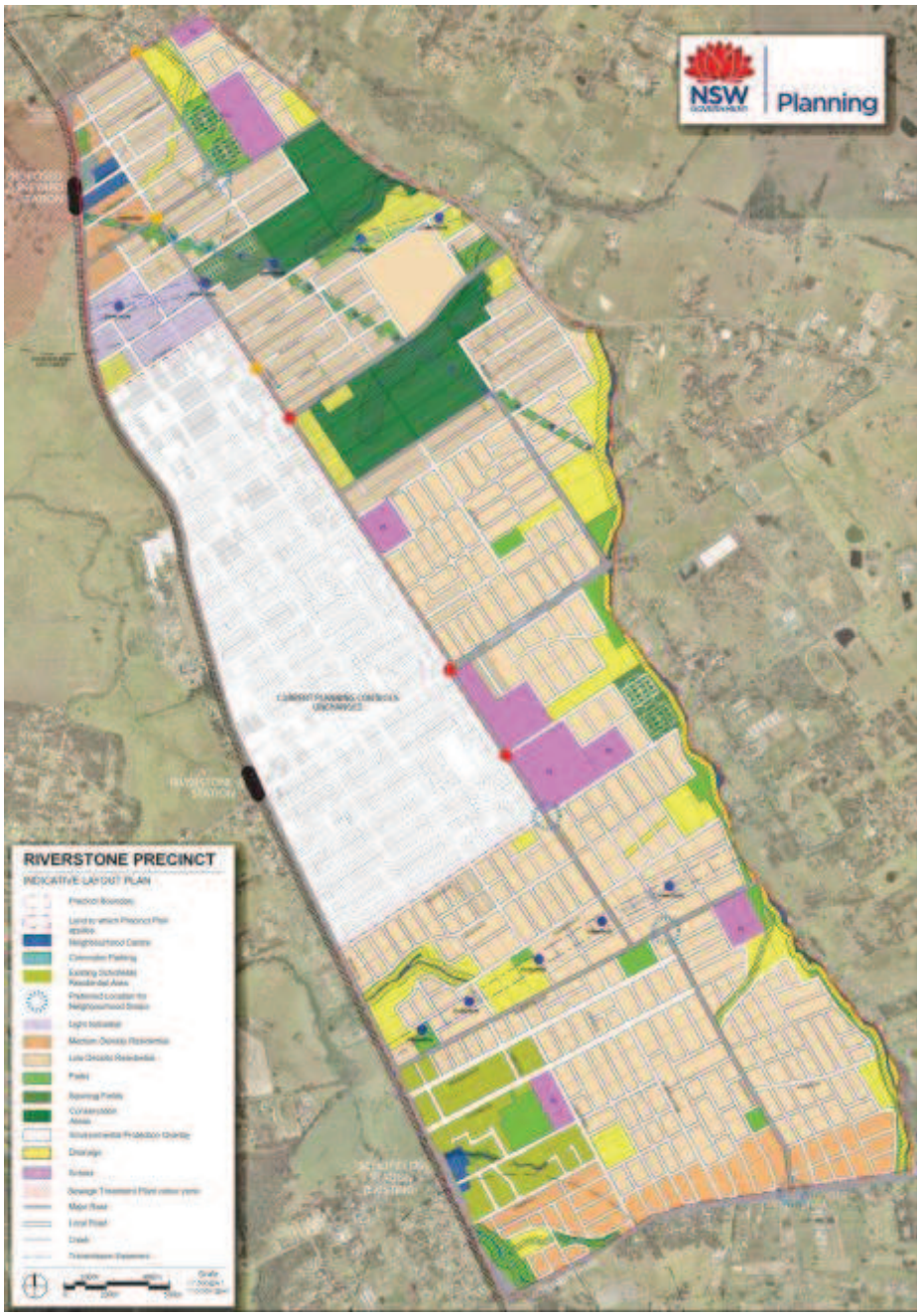
2.1.4 Riverstone Precinct Indicative Layout Plan

The Riverstone Precinct was rezoned in 2010. It is 975 hectares in size and has a dwelling capacity estimate of 9,000 and population capacity estimate of 27,000. It should be noted than when the precinct was rezoned in 2010, it did not include the Riverstone Town Centre (which is the subject of this investigation). As such, planning for the Riverstone Town Centre is administered by Blacktown Council rather than State Government.

Additionally, the Riverstone Precinct is planned to contain the following:

- 58 hectares of open space.
- 57 hectares of conservation reserves.
- 14 hectares of employment land.
- Three new primary schools and a new K-12 school.
- Rail duplication.
- A new railway station at Vineyard with a commuter car park.
- Neighbourhood centres at Vineyard and Schofields.
- A new community services hub at Riverstone.
- Upgrades to major roads.
- Walking and cycle paths along major roads and open space corridors.

Figure 2.2: Riverstone Precinct Indicative Layout Plan



Source: DoP (2010c)

2.2 Local Planning Legislation

2.2.1 Blacktown Local Environmental Plan (2015)

The Riverstone Town Centre is zoned B2 Local Centre in accordance with the Blacktown Local Environmental Plan (2015). It has a height control of 9 metres.

The following uses are permitted in accordance with the B2 Local Centre land use zoning: boarding houses, child care centres, commercial premises, community facilities, educational establishments, entertainment facilities, function centres, information and education facilities, medical centres, passenger transport facilities, recreation facilities (indoor), registered clubs, respite day care centres, restricted premises, roads, service stations, shop top housing, tourist and visitor accommodation and water reticulation system.

The area surrounding the Town Centre is zoned R2 Low Density Residential. It has a height control of 9m and has a minimum lot size of 450sqm.

Figure 2: Riverstone Town Centre Land Use Zoning

Source: BCC (2015)

2.3 Background Documents

Blacktown Commercial Centres Analysis (SGS, 2007)

In 2007 SGS undertook a commercial centres analysis of the Blacktown LGA to ensure that the size, location and distribution of centres provide competitive and convenient facilities that integrate with the surrounding neighbourhoods.

At the time, the Riverstone Town Centre was defined as a Village Centre in accordance with the NSW Department of Planning's definition. When the analysis was undertaken the Riverstone Town Centre had 14,262sqm of occupied commercial floorspace and had an excellent retail mix with supermarket anchor (SGS, 2007). Along the centre's main arterial road a KFC and Subway had recently opened.

The analysis stated that the area had a moderate population density, with moderate levels of working age population and high levels of low-income households. The area to the south east of Riverstone station was noted to have a high unemployment rate. There was also observed a low level of available expenditure for retail spend ($21 million pa). The centre had 21% of its total turnover sourced from the same travel zone and captured 27% of the retail expenditure of residents in the same travel zone. The centre has an retail turnover density (RTD) of $5,767/sqm, which was higher than the benchmark for a town centre of $5,000/sqm. The analysis recommended that Riverstone be zoned B2 Local Centre.

Garfield Road Overpass

Over the past 20 years, Government agencies have examined numerous options to remove the Garfield Road railway level crossing. The removal of the level crossing aims to increase the efficiency of traffic flow in the area as well as effectively serve public transport.

In October 2012, Transport for New South Wales (TfNSW) announced Garfield Road (Option 8) as the preferred option for the removal of the level crossing at Riverstone. This Garfield

Road option involves providing a new four lane road overpass on the existing alignment of Garfield Road.

Following this announcement, and a subsequent Ministerial commitment to identify any additional options that were equal to or exceed that of the announced preferred option, Roads and Maritime in coordination with a stakeholder group comprising the Department of Planning and Environment, Blacktown City Council and TfNSW, reviewed all options that had been considered for the Riverstone railway crossing. This resulted in two additional options being identified for further consideration (Options 12 and 5).

3. Socio-Economic Profile

3.1 Economy and Employment

In order to understand the employment and economic activity occurring in the Study Area BTS data was analysed. **Figure 3.1** depicts the ABS statistical areas analysed.

The BTS travel zone boundaries do not align exactly with B2 Local Centre zone that comprises Riverstone Town Centre. However, the employment profile provides a contextual indication of the employment structure of Riverstone Town Centre.

This section considers the employment profile of workers in the centre by analysing types of employment categorised under Australian and New Zealand Standard Industrial Classification (ANZSIC). The ANZSIC has been developed jointly by the Australian Bureau of Statistics and Statistics New Zealand to improve the comparability of industry statistics between the two countries and the rest of the world.

The ANZSIC is a hierarchical classification of industry with four levels, namely Divisions (the broadest level), Subdivisions, Groups and Classes (the finest level). At the Divisional level (referred to as 1-digit ANZSIC), the main purpose is to provide a limited number of categories which provide a broad overall picture of the economy.

Figure 3.1: Precinct Employment Analysis

Source: BTS (2014), AEC, Google Pro

Employment Profile

Key employment data for the Study Area highlights:

- Estimated employment of approximately 770 people in 2011.
- Education and training (20.2%), construction (13.7%), retail trade (11.5%) and accommodation and food services (9.7%).
- Key occupations include professionals (20.3%), labourers (14.3%) and community & personal service workers (14.1%).

Table 3.1: Employment Profile Overview, Riverstone Town Centre

Indicator	Riverstone
Total Employment (Number)	
2011	770
Key Industries (2011, % of Total Employment)	
Education and Training	20.2%
Construction	13.7%
Retail Trade	11.5%
Accommodation and Food Services	9.7%
Key Occupations (2011, % of total)	
Professionals	20.3%
Labourers	14.3%
Community and Personal Service Workers	14.1%

Source: BTS 2014

The following sections investigate at a finer grain the composition of employment.

Employment by Industry

In 2011, the Study Area employed 770 workers, the main industries of employment comprised education and training (20.2%), construction (13.7%), retail trade (11.5%) and accommodation and food services (9.7%). Other industries represented include health care and social assistance (8.9%) and transport and postal warehousing (7.9%). This highlights a broad industry mix, comprising white collar, blue collar and service based industries.

Table 3.2 demonstrates that between 2006-2011 the number of jobs in the Study Area increased minimally (by 82 or 11.8%). The largest growth industries by number of jobs were: education and training (23 jobs or 17.5%), health care and social assistance (17 jobs or 34.4%), construction (16 or 18.4%) and retail trade (14 or 18.5%).

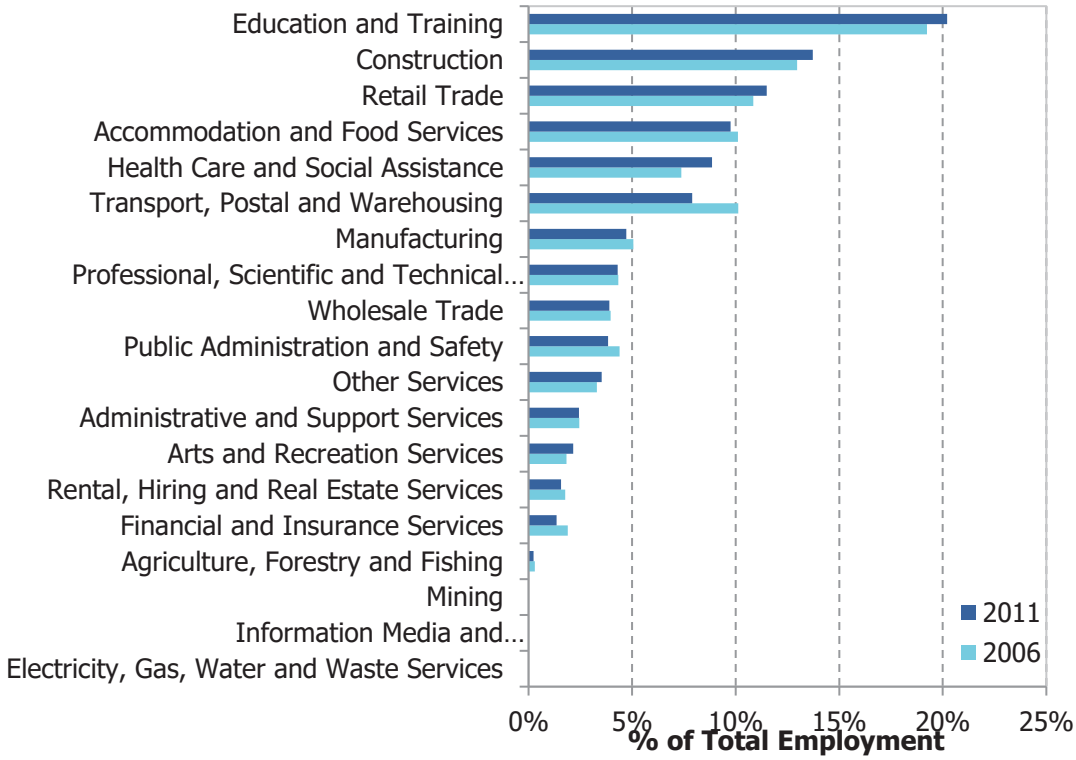
Table 3.2: Employment by Industry, 2006-2011 (19 Sector – 1 Digit ANZSIC)

Industry	2006		2011		Change (2006-2011)	
	No.	%	No.	%	No.	%
Agriculture, Forestry and Fishing	2	0.3%	2	0.2%	0	-11.4%
Mining	0	0.0%	0	0.0%	0	-100.0%
Manufacturing	35	5.1%	36	4.7%	1	4.2%
Electricity, Gas, Water and Waste Services	0	0.0%	0	0.0%	0	0.0%
Construction	89	13.0%	106	13.7%	16	18.4%
Wholesale Trade	27	4.0%	30	3.9%	3	10.3%
Retail Trade	75	10.9%	89	11.5%	14	18.5%
Accommodation and Food Services	70	10.1%	75	9.7%	5	7.8%
Transport, Postal and Warehousing	70	10.1%	61	7.9%	-9	-12.8%
Information Media and Telecommunications	0	0.0%	0	0.0%	0	-100.0%
Financial and Insurance Services	13	1.9%	10	1.3%	-3	-20.4%
Rental, Hiring and Real Estate Services	12	1.8%	12	1.6%	0	-1.3%
Professional, Scientific and Technical Services	30	4.3%	33	4.3%	3	11.0%
Administrative and Support Services	17	2.5%	19	2.4%	2	11.1%
Public Administration and Safety	30	4.4%	30	3.8%	-1	-2.3%
Education and Training	133	19.2%	156	20.2%	23	17.5%
Health Care and Social Assistance	51	7.4%	68	8.9%	17	34.4%
Arts and Recreation Services	13	1.8%	17	2.2%	4	31.5%

Industry	2006		2011		Change (2006-2011)	
	No.	%	No.	%	No.	%
Other Services	23	3.3%	27	3.5%	4	19.8%
Total	689	100.0%	770	100.0%	82	11.8%

Source: BTS 2014

Figure 3.2: Employment by Industry, 2006-2011



Source: BTS 2014

Employment by Occupation

The employment profile of the Study Area comprises professionals (20.3%), labourers (14.3%) and community and personal service workers (14.1%), reflecting a mix of jobs across white collar, key worker and blue collar industries.

Table 3.3: Employment by Occupation, 2011 (1-digit ANZSIC)

Occupation	2006		2011	
	No.	% of Total	No.	% of Total
Managers	59	8.6%	63	8.1%
Professionals	138	20.0%	158	20.3%
Technicians and Trades Workers	95	13.8%	106	13.6%
Community and Personal Service Workers	82	11.9%	110	14.1%
Clerical and Administrative Workers	98	14.2%	104	13.4%
Sales Workers	55	8.0%	59	7.5%
Machinery Operators and Drivers	53	7.7%	66	8.5%
Labourers	108	15.7%	111	14.3%
Total	**689**	**100.0%**	**778**	**100.0%**

Source: BTS 2014

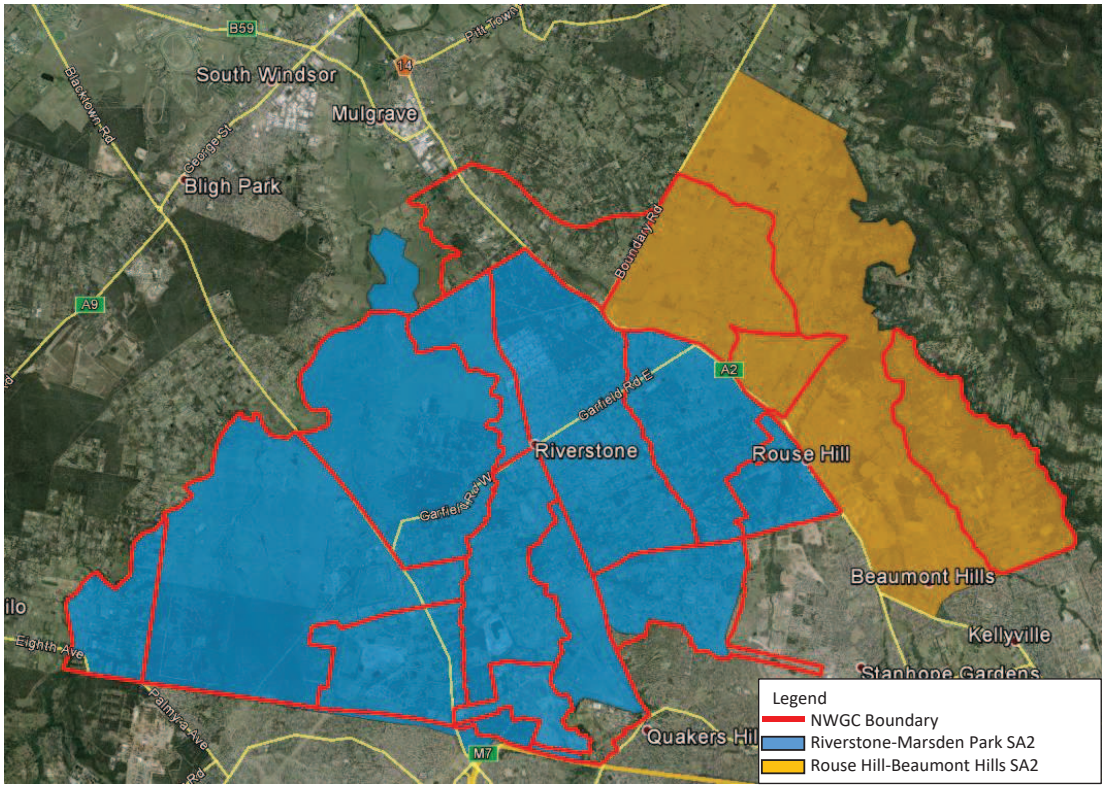
3.2 Population Profile

In order to understand the growth dynamics of an area, it is useful to consider both the current and historical socio-demographic profile of residents of the broader context within which an area is contained. This is important as it provides insight into the current profile

of residents and facilitates an understanding of how that profile might have evolved over time.

This section provides a snapshot of the socio-demographic profile of the NWGC in comparison to the broader region within which the priority growth area is located, specifically the LGAs of Blacktown, Hawkesbury and The Hills Shire.

Figure 3.3: NWGC Analysis Area



Source: ABS, Google Earth Pro, AEC

The basis of the demographic analysis is the Australian Bureau of Statistics (ABS) geographical level known as Statistical Area Level 2 (SA2), which broadly comprises 2-3 suburbs.

Whilst the two SA2s chosen (Riverstone-Marsden Park and Rouse Hill-Beaumont Hills) do not directly align with the boundary of the NWGC, these geographies have been chosen as they represent the smallest unit at which the ABS provides time series data. In order to provide a broader set of comparisons where possible the SA2s have been compared to the Local Government Areas (LGAs) which the NWGC straddles. Accordingly, the limitations of non-aligned boundaries of the data and analysis areas are acknowledged.

3.2.1 Historical Population Growth

Overall between 2001 and 2011 population in the NWGC increased from 20,890 persons to 29,244 persons, equating to an increase of 8,354 or 40% over the period. This represents an annual average increase of 1.2%.

In comparison, the Blacktown LGA is experienced the greatest annual average increase of 2.1% followed by the Hills Shire LGA (1.3%). The Hawkesbury LGA experienced the lowest annual average rate of growth at 0.4%.

Table 3.4: Historical Population Growth (2001-2011)

NWGC and LGAs	2001	2006	2011	Change (2001-2011)		
				No.	%	Avg. Annual
North West Growth Centre	20,890	27,576	29,244	8,354	40.0%	1.2%

NWGC and LGAs	2001	2006	2011	Change (2001-2011)		
				No.	%	Avg. Annual
Blacktown LGA	256,364	272,329	301,894	45,530	17.8%	2.1%
Hawkesbury LGA	61,073	60,921	62,218	1,145	1.9%	0.4%
The Hills Shire LGA	139,404	158,737	169,521	30,117	21.6%	1.3%

Source: ABS (2012)

The average age of residents within the NWGC is 35 years. The dominant age group is 0-14 years (25.4%), followed by those aged 30-44 (24.1%). This trend is replicated across the Blacktown, Hawkesbury and Hills Shire LGAs, demonstrating there is a relatively young population residing in these areas.

A count of dwellings (and population) in each of the rezoned precincts using 2011 ABS mesh block data suggests that as at 2011 there were some 2,644 dwellings (and more than nearly 7,000 residents) in the rezoned precincts of NWGC. In the Riverstone Study Area there were a total of 2,080 dwellings and 5,468 people.

Table 3.5: NWGC Dwellings and Population by Precinct (2011)

Rezoned Precincts	Dwellings (2011)	Population (2011)
Colebee	46	166
North Kellyville	323	837
Riverstone West	74	189
Riverstone (SEPP boundary)	936	2,416
Riverstone "Study Area" (area governed by Blacktown Council)*	2,080	5,468
Alex Avenue	164	424
Marsden Park Industrial	207	337
Area 20	235	574
Schofields	268	787
Box Hill	281	873
Box Hill Industrial	61	186
Marsden Park	49	157
Total Rezoned Precincts (excluding the Study Area)	**2,644**	**6,946**
Total Rezoned Precincts (including the Study Area)	**4,724**	**12,414**

*Note the mesh block data covers a larger area than the BTS travel zones (section 3.1)
Source: ABS (2011)

3.2.2 Household and Dwelling Structure

Table 3.6 below demonstrates that overall the NWGC contains a high proportion of family households (80.7%) followed by lone households (13.9%) and group households (1.8%). This demonstrates that families attracted to the NWGC are broadly consistent with the Blacktown and The Hills Shire LGAs and notably more than the Hawkesbury LGA.

Table 3.6: Household Composition (2011)

Household Type	NWGC	Blacktown LGA	Hawkesbury LGA	The Hills Shire LGA
Family households	80.7%	79.3%	74.0%	84.5%
Lone person households	13.9%	15.7%	19.6%	11.7%
Group households	1.8%	2.2%	2.3%	1.6%
Other households	3.6%	2.8%	4.1%	2.2%
Total	100.0%	100.0%	100.0%	100.0%

Source: ABS (2012)

Table 3.7 demonstrates the majority of houses in the NWGC are separate houses (93%), with small proportions of semi-detached (2.2%) houses and apartments (1.3%).

Table 3.7: Dwelling Structure (2001-2011)

House Type	2001		2006		2011		Change (2001-2011)	
	No.	%	No.	%	No.	%	No.	%
Separate house	6,254	92.3	8,299	94.8	8,678	93.0	2,424.0	38.8%

House Type	2001		2006		2011		Change (2001-2011)	
	No.	%	No.	%	No.	%	No.	%
Semi-detached, row or terrace house, townhouse	118	1.7	128	1.5	201	2.2	83	70.3%
Flat, unit or apartment	70	1.0	18	0.2	117	1.3	47	67.1%
Other dwelling	336	5.0	314	3.6	336	3.6	0	0.0%
Total	6,778	100.0	8,759	100.0	9,332	100.0	2,554	37.7%

Source: ABS (2012)

NWGC Building Approvals Data

Building approvals data can be a useful indication for expected dwelling supply, recognising that not all dwellings approved will be delivered. **Table 3.8** details the number of residential building approvals from 2010-2015 (February 2015) in NWGC.

Table 3.8: Residential Building Approvals

Precincts	2010-11	2011-12	2012-13	2013-14	2014-15*	Total (2011-15)
North West Growth Centre	211	158	243	569	826	2,007

*to February 2015
Source: ABS (2015)

Acknowledging that not all dwellings approved will eventuate into construction and eventual completion, the number of residential building approvals is a useful indicator for trends in historical supply activity. The volume of dwelling approvals has increased by 2,007 dwellings since 2010, this equates to a rate of 500 dwellings per year over a 4 year period.

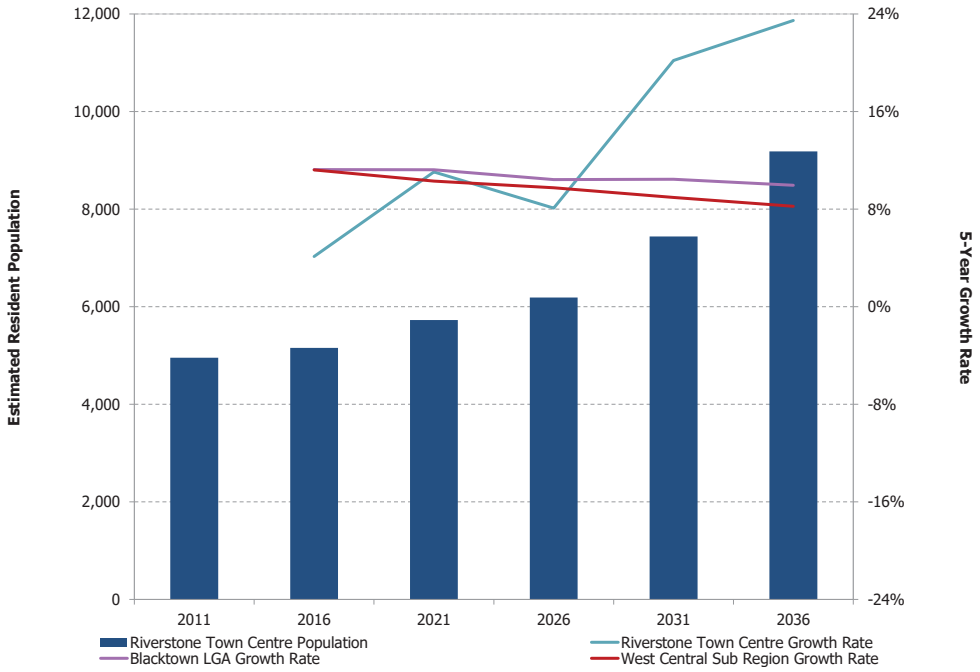
3.3 Employment, Population and Dwelling Projections

This section provides an analysis of projections for key indicators in the Study Area: population, dwellings and employment.

3.3.1 Population Projections

Based on population forecasts by the BTS, the Study Area's total population is expected to grow considerably over the timeframe from 2011-2031. By 2031, it is expected that Study Area's population will grow to 9,184, an average annual increase of 2.5% in the 20 years to 2036. This rate is greater than the projected rate for the Blacktown LGA (2.0%) and even higher than that compared to the West Central Subregion (1.9%) over the same timeframe.

Figure 3.4: Projected Population Growth, 2011 - 2036



Source: BTS (2014)

Table 3.9: Projected Population Growth, 2011-2036

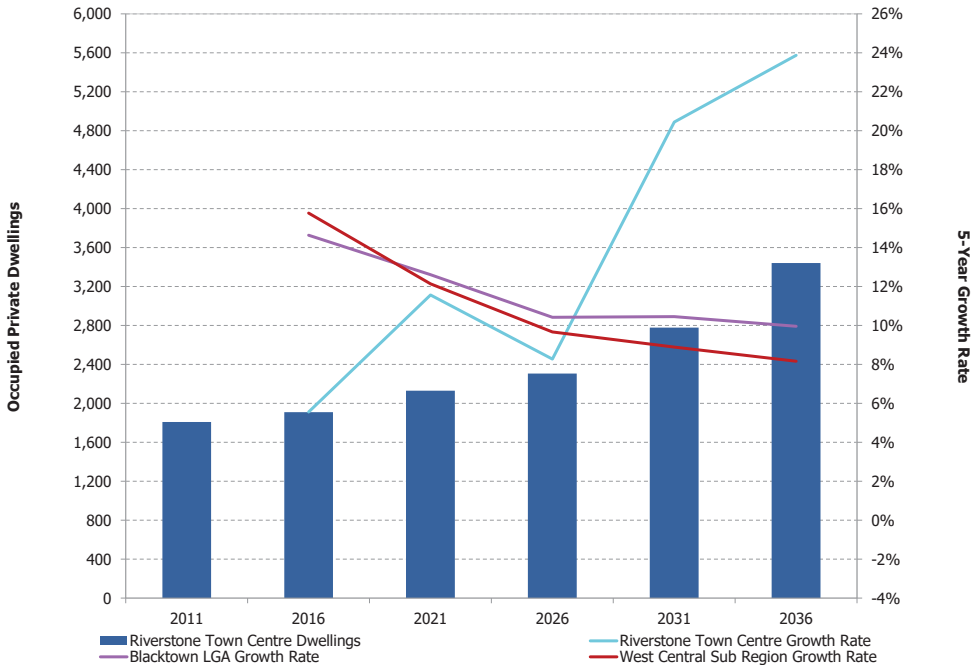
Reference Year	Unit	Projected Population Growth		
		Riverstone Town Centre	Blacktown LGA	West Central Sub Region
2011	No.	4,953	312,346	1,036,852
2016	No.	5,157	347,454	1,153,069
2021	No.	5,727	386,480	1,271,792
2026	No.	6,190	426,761	1,395,753
2031	No.	7,439	471,377	1,520,780
2036	No.	9,184	518,338	1,645,973
2011-2016	Ann. Av. % Growth	4.1%	11.2%	11.2%
2016-2021	Ann. Av. % Growth	11.1%	11.2%	10.3%
2021-2026	Ann. Av. % Growth	8.1%	10.4%	9.7%
2026-2031	Ann. Av. % Growth	20.2%	10.5%	9.0%
2031-2036	Ann. Av. % Growth	23.5%	10.0%	8.2%
2011-2036	**Ann. Av. % Growth**	**2.5%**	**2.0%**	**1.9%**

Source: BTS (2014)

3.3.2 Dwelling Projections

Based on dwelling forecasts by the BTS, the total number of dwellings in Riverstone is expected to grow over the timeframe from 2011-2036. By 2036, it is expected the total number of dwellings in Riverstone will grow to 3,441, an average annual increase of 2.6% in the 20 years to 2036. This rate is greater than that projected for the Blacktown LGA (2.2%) and even higher than that compared to the West Central Subregion (2.1%) over the same timeframe.

Figure 3.5: Projected Dwelling Growth, 2011-2036



Data is presented for Occupied Private Dwellings
Source: BTS (2014)

Table 3.10: Projected Dwelling Growth, 2011-2036

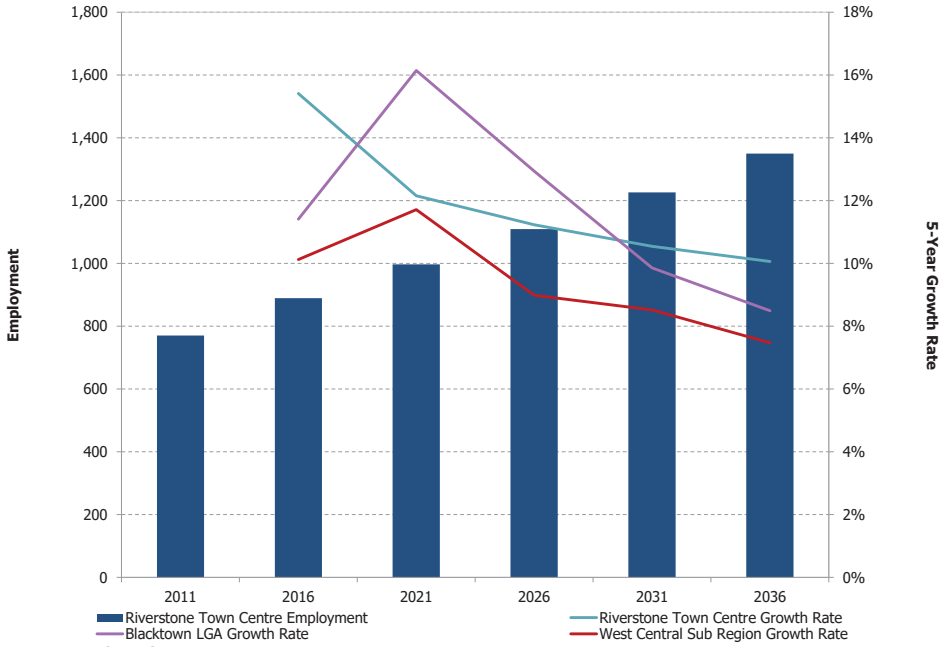
Reference Year	Unit	Projected Dwelling Growth		
		Riverstone Town Centre	Blacktown LGA	West Central Sub Region
2011	No.	1,809	92,547	312,369
2016	No.	1,909	106,089	361,640
2021	No.	2,130	119,462	405,521
2026	No.	2,306	131,913	444,729
2031	No.	2,778	145,704	484,283
2036	No.	3,441	160,220	523,830
2011-2016	Ann. Av. % Growth	5.6%	14.6%	15.8%
2016-2021	Ann. Av. % Growth	11.6%	12.6%	12.1%
2021-2026	Ann. Av. % Growth	8.3%	10.4%	9.7%
2026-2031	Ann. Av. % Growth	20.4%	10.5%	8.9%
2031-36	Ann. Av. % Growth	23.9%	10.0%	8.2%
2011-2036	**Ann. Av. % Growth**	**2.6%**	**2.2%**	**2.1%**

Note: Data is presented for Occupied Private Dwellings
Source: BTS (2014)

3.3.3 Employment Projections

Based on BTS employment forecasts, total employment in Riverstone is expected to continue to grow over the timeframe from 2011-2036. By 2036, it is expected that employment in Riverstone will grow to 1,350 jobs, an average annual increase of 2.3% from 2011. This rate is slightly higher than the Blacktown LGA and the West Central Subregion.

Figure 3.6: Projected Employment Growth, 2011-2036



Source: BTS (2014)

Table 3.11: Projected Employment, 2011-2036

Reference Year	Unit	Projected Employment Growth		
		Riverstone Town Centre	Blacktown LGA	West Central Sub Region
2011	No.	770	96,225	416,064
2016	No.	889	107,206	458,189
2021	No.	997	124,513	511,870
2026	No.	1,109	140,625	557,865
2031	No.	1,226	154,491	605,385
2036	No.	1,350	167,613	650,615
2011-2016	Ann. Av. % Growth	2.9%	2.2%	1.9%
2016-2021	Ann. Av. % Growth	2.3%	3.0%	2.2%
2021-2026	Ann. Av. % Growth	2.2%	2.5%	1.7%
2026-2031	Ann. Av. % Growth	2.0%	1.9%	1.6%
2031-2036	Ann. Av. % Growth	1.9%	1.6%	1.5%
2011-2036	**Ann. Av. % Growth**	**2.3%**	**2.2%**	**1.8%**

Source: BTS (2014)

3.4 Implications for the Study Area

Observations of the present composition of Study Area's employment structure indicate the nature of its growth in the context of the broader NWGC.

- **Employment growth in Riverstone Town Centre has been minimal**
  Between 2006 and 2011 the number of jobs in the Study Area increased modestly by 82 jobs or 11.8%.

  The largest growth industries by number of jobs were: education and training (23 jobs or 17.5%), health care and social assistance (17 jobs or 34.4%), construction (16 or 18.4%) and retail trade (14 or 18.5%).

- **Population growth in NWGC**
  Overall between 2001 and 2011 population in the NWGC increased from 20,890 persons to 29,244 persons, equating to an increase of 8,354 or 40% over the period. This represents an annual average increase of 1.2%.

  It is understood that dwelling completions in Riverstone precinct were fewer than 50 in 2011-2014, equating to an average of fewer than 15 dwellings per year.

- **Dwelling approvals in NWGC**
  The volume of dwelling approvals in NWGC has increased by 2,007 dwellings since 2010, this equates to a rate of 500 dwellings per year over a 4-year period.

Mesh block data analysis (**Table 3.5**) suggest the Riverstone area (Blacktown LEP) and Riverstone Precinct (SEPP boundary) had a combined population of 7,902 in 2011.

Despite the modest historical growth in dwellings and employment, BTS projections for the Study Area (albeit for an area smaller than the mesh block analysis in **Table 3.5**) are optimistic, population and employment growth expected to outstrip that in Blacktown LGA and the subregion.

The next chapter investigates the rate of growth occurring in the Riverstone Town Centre and consequent implications for retail/commercial floorspace demand.

4. Demand for Retail/Commercial Uses

4.1 NWGC Retail/Commercial Centres

4.1.1 Existing Retail/Commercial Centres

Existing retail/commercial centres service the needs of existing residential areas in the NWGC and surrounds. In the absence of State Government strategic planning policy which defines the hierarchy of centres, the Property Council Shopping Centre Directory definitions are used to categorise each centre.

It is acknowledged that *A Plan for Growing Sydney* designates both Rouse Hill and Marsden Park as Strategic Centres. This is detailed in **Chapter 2.**

Table 4.1: NWGC Existing Centres

Centre	Distance from Riverstone	Floorspace (GLAR)	Major Tenants
Super Regional			
Castle Hill Towers Shopping Centre	19km	100,506sqm	• Myer (20,260sqm) • David Jones (16,070sqm) • Kmart (7,427sqm) • Target (7,276sqm) • Coles (4,366sqm) • Bi-Lo (4,256sqm)
Regional			
Rouse Hill Town Centre	8.5km	38,137sqm	• Bunnings Warehouse (8,008sqm) • Kmart (5,838sqm) • Coles (4,083sqm) • Woolworths (3,800sqm) • Target Country (1,500sqm) • ALDI (1,428sqm)
Sub-regional centre			
Stockland Baulkham Hills	23km	18,534sqm	• Big W (6,150sqm) • Target (5,973sqm) • Woolworths (2,940sqm)
Stanhope Village (Stanhope Gardens)	9km	14,965sqm	• Kmart (5,060sqm) • Coles (3,500sqm)
Richmond Marketplace	16.5km	25,124sqm	• Target (3,795sqm) • Coles (3,497sqm) • Reading Cinemas (2,841sqm)
Neighbourhood Centre			
Rouse Hill Village Centre	7km	2,500sqm	• Franklins (600sqm)
Castle Hill Shopping Mall	18km	8,243sqm	• Trade Secret (2,265sqm) • Franklins (1,821sqm)
Oakhill Village (Castle Hill)	22km	1,558sqm	N/A
Windsor Marketplace	10km	5,118sqm	• Woolworths (3,652sqm)
Richmond Mall	16km	4,414sqm	• Coles (3,079sqm)
Kellyville Plaza	14km	4,196sqm	• Coles (2,967sqm)
Beaumont Hills Shopping Centre	10km	386sqm	N/A
CircaRetail (Bella Vista)	17km	4,879sqm	• Woolworths (3,045sqm)
Riverstone Town Centre	0km	2,283sqm	• IGA (1,340sqm)
Quakers Court Shopping Centre	10km	5,142sqm	• Woolworths (3,844sqm)

Source: PCA (2013)

Other Retail Provision

In the precinct of Alex Avenue there is a Woolworths supermarket comprising some 3,328sqm of retail floorspace.

Other Existing Centres

There are some existing centres which fall outside of the NWGC, however provide a significant amount of retail floorspace. As such, they have been provided for context and are outlined in the table below.

Table 4.2: Other Existing Centres

Centre	Type of Centre	Distance from Riverstone	Floorspace (GLAR)	Major Tenants
Blacktown (Westpoint)	Super regional	14km	84,898sqm	• Myer (15,405sqm) • Big W (8,418sqm) • Target (6,511sqm) • Woolworths (4,456sqm) • Coles (4,209sqm) • Franklins (1,836sqm)
Plumpton Marketplace	Sub-region	10km	15,046sqm	• Target (7,078sqm) • Ritchies Supa IGA Plus (2,458sqm)

Source: PCA (2013)

4.1.2 Future/Planned Centres

There are a number of retail/commercial centres planning for in the NWGC. These are predicated on expected growth in local population catchments as well as the respective envisioned employment roles for each centre.

Table 4.3 outlines the size and type of the primary centres to be located in rezoned precincts of the NWGC.

Table 4.3: NWGC Future/Planned Centres

Centre	Precinct Population Estimate	Centre Type	Indicative Retail Floorspace	Retail/Commercial Floorspace (GFA)
Rezoned Precincts				
North Kellyville	14,000	1 Local Centre 2 Neighbourhood Centres	Local Centre (15,000sqm) Neighbourhood Centres (4,000sqm)	Total Retail: 19,000sqm
Box Hill	29,700	1 Town Centre 3 Village Centres	Town Centre (9.2ha) 3 Village Centres (5.2ha)	Total Retail: 48,429sqm
Marsden Park	30,000	1 Strategic Centre 2 Village Centres	Strategic Centre (12.9ha) 2 Village Centres (3.3ha)	Strategic Centre to comprise: 25,000sqm retail and 15,000sqm commercial
Riverstone	27,000	1 Town Centre	Town Centre (4.7ha)	Total Retail: 5,000sqm
Alex Avenue	18,000	1 Town Centre	Town Centre (11.8ha)	Total Retail: 25,000sqm – 35,000sqm
Schofields	8,000	2 Local Centres 1 Neighbourhood Centre	Local Centre (2.7ha, 1.6ha) Neighbourhood Centre (0.4ha)	N/A
Rouse Hill*	N/A	Strategic	100,000sqm+	100,000sqm+

*This centre is not located within NWGC
Source: DoP (2008-2014)

4.2 NWGC and Riverstone Population and Dwelling Growth

Chapter 3 demonstrated that a count of dwellings (and population) in each of the rezoned precincts using 2011 ABS mesh block data suggests that as at 2011 there were some 4,724 dwellings (and 12,414 residents) in the rezoned precincts of the NWGC.

Table 4.4: NWGC Population and Dwelling Count (2011)

Rezoned Precincts	Dwellings (2011)	Population (2011)
Colebee	46	166
North Kellyville	323	837

Rezoned Precincts	Dwellings (2011)	Population (2011)
Riverstone West	74	189
Riverstone (SEPP boundary)	936	2,416
Riverstone (area governed by Blacktown City Council)	**2,080**	**5,468**
Alex Avenue	164	424
Marsden Park Industrial	207	337
Area 20	235	574
Schofields	268	787
Box Hill	281	873
Box Hill Industrial	61	186
Marsden Park	49	157
Total Rezoned Precincts (excluding Study Area)	2,644	6,946
Total Rezoned Precincts (including Study Area)	4,724	12,414

Source: ABS (2012)

It is understood there has been fewer than 50 dwelling completions in the Riverstone Precinct between 2011 and 2014, equating to a completion rate of less than 15 dwellings per year. Comparatively the NWGC as a whole has experienced just under 800 dwelling completions between 2011-2014, equating to a completion rate of 200 dwellings per year. At this rate, it is unlikely the Riverstone precinct will reach its dwelling and population target estimates by 2031. The slower than expected rate of growth has implications for retail and commercial floorspace demand.

4.3 Population Catchment and Retail Floorspace Demand

Retail Demand per Capita

Retail demand modelling is commonly undertaken using either expenditure per capita or floorspace per capita estimates.

- The expenditure per capita approach involves estimating the amount of retail expenditure generated in an area and applying an estimated turnover per square metre rate for different types of retail floorspace.
- The floorspace per capita approach applies an average rate of floorspace demand per capita and applies this to projected population growth to determine demand.

For the purposes of this analysis, floorspace demand per capita is the preferred approach. It is simpler than the expenditure method and more appropriate for a high level retail study for long term planning. It is an approach advocated by FSDAs (floorspace supply and demand assessments) to provide an evidence-based approach to planning for retail growth based on future demand (DoP, 2009).

For the purposes of this analysis, a rate of 2.2sqm per capita is assumed as the base level industry standard. Of this, around 1.7sqm is devoted towards retail floorspace typically found in commercial centres and 0.5sqm is for bulky goods floorspace.

A starting base of 1.7sqm per capita is therefore used. Of this, some 0.35sqm per capita is assumed to be attributable to supermarket floorspace. This is on the basis that a full-line supermarket normally ranges from 3,000sqm to 4,000sqm in metropolitan locations and is typically sustained by approximately 10,000 residents.

Capture Rates

To estimate the quantum of retail floorspace demand for planning purposes, it is necessary to apply capture rates equivalent to the proportion of demand which local facilities could capture. This demand assessment is concerned with retail floorspace demand in centres only, bulky goods related demand has not been considered.

The capture rates assumed are influenced by:

- The focus of retail provision on convenience goods and services with an absence of higher order shopping facilities in Riverstone. Most comparison goods spending by residents will therefore leave the Town Centre, i.e. a high amount of escape expenditure is likely.

- Modest historical growth in local population catchment, historically and projected.

Based on the above, a capture rate of 50% is considered reasonable. Applying this capture rate, overall retail facilities in the Town Centre are assumed to retain around half of total retail demand generated by residents. The residual demand will be captured by predominately larger centres elsewhere in the region.

Using a per capita base rate of 1.7sqm and capture rate of 50%, **Table 4.5** details the population catchment required to support varying quantum of retail floorspace captured.

Table 4.5: Population Catchment and Potential Capture of Retail Floorspace Demand

Population Catchment	Retail Floorspace Demand* (sqm)	Potential Capture of Floorspace Demand** (sqm)
2,000	3,400	1,700
4,000	6,800	3,400
6,000	10,200	5,100
8,000	**13,600**	**6,800**
10,000	17,000	8,500
12,000	20,400	10,200
14,000	23,800	11,900
16,000	27,200	13,600
18,000	30,600	15,300
20,000	34,000	17,000
22,000	37,400	18,700
24,000	40,800	20,400
26,000	44,200	22,100
28,000	47,600	23,800
30,000	51,000	25,500
32,000	54,400	27,200
34,000	57,800	28,900
36,000	61,200	30,600
38,000	64,600	32,300
40,000	68,000	34,000
42,000	71,400	35,700
44,000	74,800	37,400
46,000	78,200	39,100
48,000	81,600	40,800
50,000	85,000	42,500
52,000	88,400	44,200
54,000	91,800	45,900
56,000	95,200	47,600
58,000	98,600	49,300
60,000	102,000	51,000

*applied with 1.7sqm floorspace per capita
**applied with 50% capture rate
Source: AEC

Capture of Retail Floorspace Demand

Mesh block data analysis (**Table 3.5**) suggest the Riverstone area (Blacktown LEP) and Riverstone Precinct (SEPP boundary) had a combined population of 7,902 in 2011. *Assuming 100% capture* of retail demand by the Riverstone Town Centre, 13,600sqm of retail floorspace demand is the result.

Centres are not self-contained, invariably expenditure and resident spend will 'escape' to other centres, drawn either by higher order comparison shopping or when residents travel to other centres for work or leisure. At an assumed capture rate of 50% by the Town Centre would result in floorspace demand in the order of 6,800sqm.

In line with the draft Metropolitan Plan for Sydney to 2036 (DoP, 2010a) a town centre is typified by a local catchment with 4,500-9,500 dwellings. At a household occupancy rate of 2.6 persons, this would be equivalent to 11,700-24,700 residents. Based on per capita retail floorspace benchmark rates and 50% capture, a centre in the order of 20,000sqm could potentially be sustained by a local population catchment of at least 24,000 residents.

Retail/Commercial Centres Benchmarking Analysis

A benchmarking analysis is undertaken to identify a range of existing shopping centres, their status, retail/commercial provision and estimated population catchment/trade areas.

The analysis demonstrates that centres of strategic importance (i.e. regional centre or CBD) require a core population catchment in the order of 100,000-200,000 in order to be viable. These larger centres typically benefit from greater retention rates (i.e. less escape expenditure) as well as 'rogue expenditure' (i.e. expenditure from outside the trade area).

Table 4.6: Retail/Commercial Centres Benchmarking Analysis

Centre	Status	Retail/ Commercial Floorspace	Major Tenants	Estimated Population Catchment
Parramatta	CBD	192,500sqm	***Major Shopping Centres*** Westfield Parramatta, Parramatta Entrada ***Major Tenants*** Westfield Parramatta: Myer (28,272sqm), David Jones (12,905sqm), Target (8,438sqm), Kmart (6,592sqm), Woolworths (4,177sqm), Coles (2,637sqm) Parramatta Entrada: Coles (2,232sqm)	Primary Trade Area: 113,200 Secondary Trade Area: 245,000 Main Trade Area: 358,750
Rouse Hill	Regional Centre	69,060sqm	Major Tenants: Big W (8,660sqm), Target (6,820sqm), Woolworths (4,610sqm) and Coles (4,120sqm)	Strategic Centre
Narellan Town Centre	Town Centre	29,180sqm Proposed expansion to c. 90,000sqm	Major Tenants: Big W (6,535sqm), Woolworths (3,831sqm) and Coles (3,398sqm)	Primary Trade Area: 50,697 Secondary Trade Area: 36,399 Main Trade Area: 87,096
Stanhope Gardens	Town Centre	14,965sqm	Major Tenants: Kmart (5,060sqm), Coles (3,500sqm)	
Quakers Hill	Neighbourhood Centre	5,142sqm	Major Tenants: Woolworths (3,844sqm)	

Source: PCA 2013, Urbis (2013), Deep End (2012)

The current retail/commercial floorspace in the Riverstone Town Centre is approximately 14,000sqm. Current population numbers and benchmarking analysis would suggest this is not sustainable. Furthermore, 14,000sqm is a large amount of retail floorspace anchored only by an IGA supermarket (2,300sqm).

4.4 Implications for Study Area

It is well accepted that retail land uses and demand for floorspace are driven by population growth. With regard to commercial type activities these are typically reliant on local business as a generator of demand for their services. Population growth is also a driver for local business services, e.g. home alarms, printing services, home appliance service and repairs, etc.

Based on structure planning targets (currently under review), the NWGC is expected to accommodate 70,000 new dwellings and 200,000 people by 2031. The Riverstone Precinct alone has a dwelling and population capacity estimate of 9,000 and 27,000 respectively. Achievement of these capacities would equate to growth of 450 dwellings and 1,350 people each year toward 2031, equivalent to annual average growth rates of 5.6% and 6.3% respectively (using 2011 ABS data as the starting point).

Despite modest population growth in the Study Area local catchment, future expected population growth in the broader NWGC, Council investment into a range of community facilities and work to improve the public domain, combined with the close proximity of the

Riverstone train station would present demand opportunities for new retail/commercial development in the Town Centre.

While significant population and dwelling growth in the broader NWGC is expected to occur, the ability of the Study Area to accommodate new dwellings is more challenged. This is due principally to the already built-up nature of the Study Area which incorporates an array of existing buildings in multiple landownership. The established and built-up nature of the Study Area (with relatively high existing-use values) combined with fragmented landownership patterns has implications for the cost to a developer to assemble a development site.

The ability of Study Area to accommodate new retail/ demand floorspace is subject to a myriad of factors. The next two chapters investigate property market dynamics in the Study Area and if current planning controls facilitate feasible development and growth.

5. Property Market Appraisal

This Chapter outlines the findings of property market analysis and investigations undertaken in late 2015 to early 2016 during the original masterplan commission. We highlight that any changes in market activity since this time are therefore not reflected in this Chapter.

5.1 Residential Land Uses

5.1.1 Trends and Drivers

The long term outlook for the Sydney residential market is good, underpinned by strong fundamentals including:

- Strong population growth.
- Low interest rates.
- Relatively low unemployment rates.
- Historic undersupply resulting in significant housing shortfall and pent up demand.

These core fundamentals ultimately form the core drivers to demand. It is widely accepted that dwelling completions over the last decade have fallen well below the number needed to meet underlying demand. This has resulted in rapidly rising house and rental prices as competition is fierce between purchasers and renters alike.

The growing housing affordability issue in Sydney has been the subject of much commentary and analysis. The changing dynamic of housing affordability has evoked responses from both households and the development industry with respect to demand and supply respectively.

Recognising the finite ability of households to pay for housing, industry innovation has assisted with the challenges of housing affordability. Research into the supply responses to changes in affordability identifies a notable shift to smaller dwellings and lot sizes, also occurring amid rising land prices and more widespread development contributions (NHSC, 2013).

North West Growth Centre

More specific to the NWGC, housing affordability has been a key driver underpinning its success as buyers find it difficult to secure suitable housing at a price they can afford elsewhere in metropolitan Sydney. Strong demand and limited supply have propelled property prices particularly in the inner and middle ring suburbs of Sydney, resulting in many buyers forced to seek housing in more affordable areas, including the NWGC.

Enquiries and discussions with selling agents suggest strong buyer demand is outstripping available supply in NWGC. New subdivisions are generally met with overwhelming response, subdivided blocks generally selling immediately and well ahead of schedule. This has led to strong price growth and keen competition as land is released for off-the-plan sale.

These keen market conditions have led to commensurate developer interest and activity to assemble blocks for development. The price of englobo parcels of land has increased many fold and are in some instances impeding the feasibility of development. High landowner expectations and fragmented ownership patterns have cumulatively affected the cost to acquire development sites, thereby necessitating a more intensive subdivision and use of land that results in higher revenue per square metre of site area.

Implementation of State Government's housing diversity package resulted in an amendment to the Growth Centres SEPP in August 2014 - this policy intended at assisting with the supply of housing, placing downward pressure on house prices and facilitating greater housing choice for residents. In the context of site assembly issues and the high cost of land, this amendment to the Growth Centres SEPP has been welcomed and well received by the market.

Purchaser interest and demand in NWGC is reportedly from owner occupiers and investors alike and are very much subject to affordability constraints. Buyers typically look to purchase what they can afford, potentially compromising on requirements such as size, location and amenity.

5.1.2 Market and Development Activity

There are a number of developments at various stages across the NWGC. Development activity is observed to be gathering momentum as a range of developments including several large planned communities are progressed. There is notably an increase in the provision of small lot housing and medium density development, conceivably reflective not only of the current level of confidence in the market but also present and growing market acceptance and capacity for multi-dwelling living in a Greenfield environment.

Alex Avenue, Area 20, Marsden Park and North Kellyville currently witness the highest volume of development activity (number of dwellings).

Development take-up has historically been 8-10 lots per month (per development) with rates of sale higher in larger developments where sales occur on several fronts. In recent times, development take-up has been more akin to 20-40 lots per month, indicative of the strength in the market as momentum and interest in the NWGC continues to build.

Riverstone Precinct

Development activity in the Study Area has been minimal, however, development has been progressing in the broader Riverstone Precinct.

Developments in Riverstone Precinct are progressed on a mix of Greenfield and infill sites, some 1,200 dwellings observed to be in the pipeline. Owing to the existing lot patterns, site assembly and consequently development activity is observed to be more sporadic and on a smaller scale (less than 15 dwellings a year in 2011-2014).

Residential product is mostly dominated by residential lot subdivisions (350sqm-450sqm) with several unit developments proposing 5-6 storey apartment buildings. Two developments currently underway are Eden Grange Estate and Grantham Estate.

- **Eden Grange Estate**
  Progressed over 3 stages, this development is now marketing Stage 3. Take-up of the lots is commented to be strong with a distinct increase in sale prices achieved in Stage 1 and Stage 3 (e.g. 480sqm block in Stage 1 sold for $250,000 while a 420sqm block in Stage 3 achieved $430,000).

- **Grantham Estate**
  This development is progressing well with all 283 lots understood to have been sold, all three stages reportedly selling swiftly (within 3 weeks of marketing). Price points have increased strongly between stages - Stage 1 ($275,000-$315,000), Stage 2 ($325,000-$345,000) and Stage 3 (circa $365,000). It is further understood that Stage 3 lots are being on-sold in the secondary market for $420,000 (circa 15% increase on the original sale price).

  The purchaser profile is varied, a large proportion of purchasers already living in the local area and who work locally. Marketing agents once again identify affordability issues driving the product sought and prices paid.

Owing to lot and ownership patterns (1ha-2ha), site assembly activity in the Riverstone precinct is observed to be moderate with prices paid for Greenfield sites in the order of $1.5m/ha to $2.0m/ha. Several infill development projects are also observed to be progressed in the Riverstone precinct, where a large single dwelling may be acquired for construction of townhouses/villas.

Overall, there are more than 11,000 dwellings in the development pipeline across the zoned precincts of the NWGC, of which 1,200 are proposed in Riverstone precinct. Around 50% of these dwellings are either in early planning or have been submitted for approval. It is reasonable to conclude that only a proportion of the 11,000 dwellings in the pipeline will eventually be delivered.

Existing-use Residential Values

Sales evidence of properties in the R2 zone indicates detached houses are generally of an older style and sell for between $600,000 and $800,000 ($800/sqm-$900/sqm of overall site area). These have direct implications for their development potential.

5.2 Commercial Land Uses

5.2.1 Trends and Drivers

The development industry is dynamic and constantly reinventing commercial formats to meet the ever-changing demands of consumers. The transformation of development is the result of a combination of social, economic, technological and policy trends. However, the rate at which development occurs can be significantly countered by planning constraints (e.g. statutory requirements, difficulties with infrastructure provision, fragmentation of ownership), site and capacity constraints (e.g. bushfire, flooding, slope and landslip), lack of infrastructure and commercial pressures.

If residential growth is stagnant due to any of the reasons mentioned above, it impacts on population growth. Population growth is one of the key drivers of demand for commercial and retail land uses. Without population expansion, economic growth stalls as a consequence of less demand for commercial and retail floorspace.

The North West Growth Centre is reflective of the above mentioned trends. Established in 2005 by the NSW Government, the North West Growth Centre was envisioned to become a new community for up to 20,000 people by 2031 - development has occurred at differing rates across the North West Growth Centre due to a range of factors, which has impacted the quantum and type of land uses in demand.

5.2.2 Market and Development Activity

Owing to a number of factors, the Riverstone Town Centre is not performing to its intended role. The centre contains very limited retail and commercial offer and serves a small local catchment, which has been constrained by limited residential growth. As such, the centre struggles to compete with newer and larger centres such as Rouse Hill Town Centre and a larger supermarket in Schofields.

Following the stalling of the Market Town DA which proposed to redevelop the centre and provide additional retail floorspace, businesses owners feel uncertain as to the future of the town centre. Another factor that is seen as a constraint to future development is the Garfield Overpass, with business owners uncertain as to the alignment of the overpass and the impact it might have on their businesses. These factors have had a combined negative impact on overall business confidence in the Town Centre.

Despite the underperformance of the centre and uncertainty around the overpass and consequent access/visibility, anecdotal evidence suggests that the centre nevertheless caters to current local demand, albeit to a limited extent. While presently catering to local demand, the Riverstone Town Centre is in need of a significant redevelopment in order to attract visitation from beyond the local catchment.

Owing to the subdued nature of the commercial/retail market, there have been minimal sales of properties within the Town Centre over the past few years. Despite the poor performance of the Town Centre, land values in the B2 Local centre zone are still substantially higher if compared with low-density residential land (in the R2 zone).

Our research demonstrates that there is a large price range ($/sqm of site area) disclosed by what purchasers are willing to pay for commercial properties in the Town Centre. This variation in prices depends on the type of commercial premise (i.e. 1 or 2 storey) as well as site specific characteristics (i.e. location) of each property.

Existing-use Retail/Commercial Values

Existing-use values in the B2 zone are subject to location and existing buildings.

- 1 storey shop (less desirable location) - $800/sqm-$1,000/sqm of overall site area.
- 2 storey shop (more desirable location) - $1,400/sqm-$1,700/sqm and as high as $2,200/sqm of overall site area.

Existing-use values are significant as they directly impact on development potential.

5.3 Implications for the Study Area

Existing land values have important implications for the future development potential of the Study Area. The price paid by a developer to assemble a development site would depend on the type of development that can feasibly accommodated on a site. The following transactions indicate what developers can afford to pay for a development site to certain residential typologies.

- **Residential subdivisions**
  A number of residential subdivision sites are observed to have been assembled in Riverstone and neighbouring Schofields. Vacant sites that are appropriately zoned are generally acquired at prices ranging from $160/sqm to $270/sqm of site area. The Eden Grange Estate (11 Piccadilly Street, 90 Brighton Street) is among these development sites.
- **Attached dwellings** (townhouses, villas)
  Several development sites for medium density product have been assembled, with prices paid ranging from $330/sqm to $400/sqm of site area for development sites without approval.

  Sites with development approval sell for more, for example the site at 33 St Albans Road (approved for 9 townhouses) was acquired at $840/sqm of site area, this higher price paid indicative of the value placed on a development site with minimal planning risk.
- **Residential units** (5 storeys)
  A site in a B1 Local Centre zone at 111 Railway Terrace in Schofields was acquired for $1,457/sqm of site area. The site benefits from development approval for 32 residential units and 2 commercial units in a 5 storey building (FSR 3.6:1).

The above analysis indicates that residential subdivisions (detached dwellings) can least afford to pay for development sites, prices paid ranging from $160/sqm to $270/sqm of site area.

Medium density product (attached dwellings) can generally afford to pay more for a development site ($330/sqm to $400/sqm of site area, or as much as $840/sqm if approved) with residential unit developments with the ability to pay the most for a development site (circa $1,457/sqm as observed at Railway Terrace in Schofields).

By applying the above analysis to the Study Area and its subsisting land values ($800/sqm-$900/sqm in R2 zone and up to $2,200/sqm in B2 zone), it would suggest that current density controls at 9m (which allow 2-3 storey buildings) are insufficient for feasible redevelopment, as prices paid for townhouse sites are much lower, i.e. $330/sqm to $400/sqm of site area.

The opportunity for development and revitalisation to occur in the Town Centre, specifically if the existing planning controls support feasible development in the Study Area, is examined further in the next chapter.

6. Accommodating Future Growth

This chapter draws together the findings of the property market appraisal and analysis of the existing planning framework to evaluate potential development types that could accommodate future growth in the Study Area. The chapter also investigates if these development typologies could be provided under the current planning framework or if amendments to the planning controls are required. These findings inform the evaluation of masterplan scenarios in Chapter 7.

6.1 Feasibility of New Development

6.1.1 Introduction

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

- **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, the lack of retail/commercial 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.

This section assesses the 'market capacity' of various development typologies and suggests pre-requisites for feasible development types to be accommodated.

The Hypothetical Development or Residual Land Value (RLV) approach has been adopted as the method of assessment, utilising development feasibility software Estate Master. The RLV approach involves assessing the value of the end product of the development, allowing for development costs, and making a further deduction for the profit and risk that a developer would require to take on the project.

The Residual Land Value (RLV) can be defined to be the maximum price a developer would be prepared to pay for a site in exchange for the opportunity to develop the site, whilst achieving target hurdle rates for profit and project return. This approach involves assessment of the value of the completed product, making a deduction for development costs and further deduction for profit and risk whilst ensuring the development achieves the target project margin and return.

6.1.2 Factors affecting 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, particularly 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 centres 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.

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 NWGC 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 $650,000-$700,000, 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 6.1 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 6.1. Indicative Cost v Revenue Comparison

No. of Storeys	Riverstone		Sydney CBD	
	Ave. Cost	Ave. Revenue	Ave. Cost	Ave. Revenue
<3 storeys	$1,900	$6,000	$1,900	$12,000
4-7 storeys	$2,100	$7,000	$2,100	$15,000
7-20 storeys	$2,700	$8,000	$2,700	$25,000
21-35 storeys	$3,500	$9,000	$3,500	$30,000

Source: Rawlinsons (2015), RLB (2015), 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.

There is considerable residential development ongoing in NWGC, however generally confined to areas where large swathes of land are in single or majority developer control. Existing-use values, small lot patterns and ownership fragmentation issues in the Riverstone Town Centre are all significant challenges for new development to overcome.

6.2 Generic Feasibility Testing

This section provides an overview of generic feasibility testing carried out to assess the appropriateness of current planning controls to accommodate employment floorspace (i.e. retail/commercial uses) and future employment growth. Notional development schemes premised on specific densities and land use types are tested for development feasibility.

This section approached generic feasibility testing in a two-step process:

- Testing of various development typologies on a hypothetical site of 4,000sqm.
- Testing of current planning controls on two sites in the Study Area.

Prevailing property prices ('as is' values) are a key factor to development feasibility. Sites with significant and valuable buildings will expectedly have higher property values and therefore cost more to amalgamate into a development block.

In some instances the redevelopment of these (more valuable) sites can be incentivised with higher densities. That said, not all land uses and locations respond to density, as evidenced by the cost-revenue equation as outlined in **Table 6.1**.

Notional Development Typologies

A hypothetical site of 4,000sqm is used to test the generic feasibility of a range of development types. The development types tested are:

- Mixed use residential building/shop top housing (2-3, 5-6 and 8-9 storeys).
- Residential flat building (2-3, 5-6 and 8-9 storeys).

In order to be considered feasible to develop, the RLVs of each development type must exceed the 'as is' value of a site in order to displace its existing uses. Based on the market evidence analysed in Chapter 5, site values in the Study Area are valuable, achieving rates of up to $2,200/sqm of site area in B2 zone and $800/sqm to $900/sqm in R2 zone.

Existing-use values in the Study Area are higher in comparison to the prices paid for development sites in Riverstone Precinct of $1.5m/ha-$2.0m/ha (which equates to $150/sqm-$200/sqm of site area). As a consequence, greater density of development is required to displace the existing uses in the Study Area.

Table 6.2. Generic Feasibility Testing Outcomes of Development Types

Description	2-3 storeys		5-6 storeys		8-9 storeys	
	Mixed Use	RFB	Mixed Use	RFB	Mixed Use	RFB
Land Use Split	Grd retail	100% resi	Grd retail	100% resi	Grd retail	100% resi
Assumed Total FSR	1:1	1:1	2:1	2:1	2.5:1	2.5:1
Average Revenue ($/sqm)[1]	$5,484	$5,673	$5,817	$6,087	$5,897	$6,171
Average Cost ($/sqm)[2]	$3,746	$3,795	$3,801	$3,944	$3,827	$3,925
Residual Land Value (RLV) ($/sqm of site area)	$825	$925	$1,625	$1,750	$2,125	$2,375

Notes: 1 - based on net saleable area, 2- based on gross building area, Source: AEC

Overall the financial feasibility results vary according to development type. Development types that incorporate 100% residential uses perform better, residential uses effectively cross-subsidising provision of non-residential uses.

Comparison of the RLVs against existing-use values in the Study Area (B2 and R2 zones) indicate whether or not certain development typologies would be feasible to develop. If the RLVs exceed existing-use values by at least 20% (allowing for a 20% premium to be paid as an incentive to individual landowners over and above market value) they are considered feasible.

The following observations can be made from the generic feasibility testing:

- **Mixed use/shop top housing**
    - This typology returns a lower RLV owing to the lower end sale values of retail/ commercial space compared to residential-only floorspace.
    - A mixed use development to 5-6 storeys would only be feasible in the Town Centre where existing-use values are less than $1,354/sqm of site area (after deducting for 20% premium for site assembly).
    - A mixed use development of at 8-9 storeys would be required to displace existing retail/commercial uses in the Town Centre as these result in RLVs that are $2,125/sqm-$2,375/sqm, which are at the upper end of existing-use values in the Town Centre.
    - Mixed use developments will only be sustainable in locations that lend themselves to good pedestrian visibility and access, otherwise ground floor retail/commercial suites can suffer from prolonged periods of vacancy.
- **Residential flat buildings**
    - This typology is more financially attractive than mixed use developments, buildings to 5-6 and 8-9 storeys are likely feasible to develop in the Town Centre.
    - Owing to lower existing-use values in the R2 zone of the Study Area, 2-3 and 5-6 storey buildings would be feasible to develop.
- **Low-rise residential buildings (3 storeys)**
  Depending on the inclusion of non-residential uses, this typology returns a RLV comparable to that of existing-use residential values ($825/sqm to $925/sqm) before any allowance for 20% premium for site assembly. This implies low rise (2-3 storey) residential buildings are not feasible to develop in the Study Area unless a vacant site can be secured.

  Sales analysis in section 5.3 is consistent with this finding, i.e. prices for townhouse development sites achieving $330/sqm to $400/sqm of site area. Considering the existing-use values in the Study Area, this form of residential product is not feasible.

6.3 Implications for the Study Area

The role of residential uses in cross-subsidising the development of non-residential uses (retail/commercial floorspace) is evident from the RLV results in **Table 6.2**, RLVs are inversely related to the inclusion of non-residential floorspace in a development. This observation is not unique, often case in suburban and non-CBD settings. As a consequence, unless a vacant site is available, infill/brownfield sites which are already improved are typically not feasible to redevelop into 100% commercial/retail uses.

The generic feasibility testing demonstrates that at current planning controls (height controls of 9m) do not facilitate feasible development. This is due primarily to the existing-use values that subsist as well as the fragmented lot and ownership patterns which then necessitate the payment of premiums over and above market value. These factors cumulatively contribute to the high cost of consolidating a development site, resulting in a need for intervention to amend planning controls to assist with feasible development outcomes.

Future Growth in Riverstone Town Centre and Study Area

The Riverstone Town Centre contains many of the attributes of a successful centre, i.e. it is accessible by public transport, contains parking and has exposure to passing vehicular traffic. It however suffers from a poor layout and configuration and lacks a retail anchor which impedes its ability to attract other retailers, which in turn affects the amount of pedestrian foot traffic.

Council's aspirations for the town centre which are to be reflected in investment into community facilities and the quality of the public domain will undoubtedly result in a lifting of the town centre's profile as well as making it an attractive place to visit and spend time in.

Notwithstanding the existing poor retail offer in the Riverstone Town Centre, as the broader Riverstone precinct and indeed the NWGC grows and the Town Centre establishes itself as a community hub, existing retailers will be benefit from increased patronage from beyond the local catchment and conceivably attracting new retailers once a critical mass of patronage is established.

In line with an increased desirability as a place to be, in the medium-long term there could emerge a market for shop-top housing. New residents within the Town Centre will contribute to local demand for retail services, thereby enhancing centre vitality and sustainability.

The potential for growth in the Study Area will be primarily underpinned by local residential growth, supplemented by outside visitation and patronage.

- **Local resident catchment**
  Unlocking of development opportunities within the Study Area will assist in growing the local resident catchment, which will contribute to driving demand for retail facilities and associated floorspace.

  As a critical mass of residents establishes, demand for retail services will flow naturally as retailers seek to capture a greater proportion of local expenditure (and preventing escape expenditure).

- **Visitation from beyond local catchment**
  Initiatives to attract visitation and patronage from beyond the Riverstone local catchment will contribute to sustaining a viable town centre offer. Council investment into civic and community facilities as well as improvements to the public domain will cumulatively contribute to the ability of the Town Centre to attract and sustain visitation and patronage from beyond the local catchment.

It is well accepted that population growth drives the need for social and community infrastructure provision. Community infrastructure has a role to play in servicing the needs of the local community as well as drawing in people from outside the local catchment who may not have access to the same community facilities. Council's commitment to investing in a community hub and recreational facilities is important for meeting the needs of the local population, but equally important for drawing visitors to the Town Centre.

Overall, businesses in the Town Centre will continue to experience pressures from competing centres and online retailers. Notwithstanding, if the centre presents a unique offer incorporating a combination of community/recreational facilities as well as a pleasant and inviting retail experience it can position itself as a destination in a burgeoning North West Priority Growth Area.

7. Masterplan Options Analysis

Group GSA developed four masterplan options for the Study Area. This Chapter evaluates each option against a set of criteria.

7.1 Considerations for Town Centre Viability

Based on industry experience, there are critical factors/attributes that underpin viable and successful retail/commercial centres.

The Ability to Cluster

Retail/commercial centres are most successful when clustered/consolidated in one location, thereby creating a vibrant and active area. The location of major tenants, therefore, requires considered thought to ensure a strong specialty component.

Major tenants are key customer generators with specialty stores feeding off the customer flows of major tenants. The Market Town centre has the potential to anchor the Study Area on the west, and with potential community facilities on the east, the clustering of retail facilities could occur in-between along Market Street.

Focal points along Market Street would ensure economic activity is not diluted along a spine that is too lengthy.

Mixed Use Developments

In mixed use developments, creating active street frontages is important, however, noting that not every building will be able to sustain retail at ground level. The consolidation of retail space is more important than active frontages to every building in one area.

The provision of commercial space within mixed use developments needs to have regard to the ability of its location to facilitate pleasant worker amenity.

Facilitating Growth from Within

Availability and access to a local and broader catchment ultimately influences whether there is critical mass of residents, which is essential for town centre viability.

In order for the Riverstone Town Centre (and the Study Area) to grow and be sustainable, it is necessary for masterplan options to be able to facilitate renewal and redevelopment of existing uses. A residential community within the Study Area creates a captive market for retail goods and services.

7.2 Masterplan Option 1: Hub

This option envisages a concentration of mixed uses around a 'community hub'. The following land uses (and number of storeys) are observed:

Table 7.1. Masterplan Option 1, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	FSR	Storeys	Land Use	FSR	Storeys
Retail/commercial	1.5:1	4	Mixed use	2:1	6
Community	N/A		High density residential	2:1	6
			Med density residential	0.8:1	3
			Community	N/A	3

Source: Group GSA (2015)

Development typologies envisaged are mainly 4 storey retail/commercial buildings along Garfield Road East and a mixture of 6 storey mixed use and residential buildings along Market Street and Park Street, as well as on the southern side of Garfield Road East.

Lower density residential, i.e. 3 storey townhouses are envisaged along the fringe of the Study Area along George Street and Mill Street. **Figure 7.1** depicts Masterplan Option 1.

Figure 7.1: Masterplan Option 1

Source: Group GSA (2015)

Development yields that result from Masterplan Option 1 are:

- Retail floorspace (15,481sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (21,382sqm).
- Residential floorspace (179,277sqm or 1,595 units).
- Community/recreation floorspace (5,000sqm).

Comment is made on Option 1 from the perspective of its likely ability to deliver sustainable growth in the Study Area.

- **Development feasibility**
  Development of 4 storey retail/commercial buildings and 3 storey townhouses are not feasible, considering existing-use values in the Study Area. 6 storey mixed use and residential buildings could be feasible in certain parts of the Study Area depending on existing-use values.
- **Delivery timeframe**
  The quantum of retail, particularly commercial floorspace will likely be difficult to sustain *even if* 4 storey retail/commercial buildings are feasible to develop. It is likely that this theoretical amount of commercial floorspace (21,382sqm) will remain unrealised.

  Majority of the retail floorspace is provided for in Market Town with some space in mixed uses adjacent on Pitt Street. From a delivery standpoint, this is positive as a smaller number of lots are required.

  Residential yield within 3 storey townhouse developments are unlikely to be realised.

- **Layout of uses**
  The option provides for concentration of retail activity around Market/Pitt Street. A redevelopment/upgrade of Market Town that interacts with Pitt Street is required to facilitate through pedestrian flows between the train station and community hub.

Overall we do not consider this option to align with commercial realities, many development types (e.g. 4 storey retail/commercial, 3 storey townhouses, etc.) that would be insufficiently attractive to displace existing, valuable uses.

7.3 Masterplan Option 2: Main Street

This option envisages an elongation of Market Street from the train station in the west to Piccadilly Street in the east. The following land uses (and number of storeys) are observed:

Table 7.2. Masterplan Option 2, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	**FSR**	**Storeys**	**Land Use**	**FSR**	**Storeys**
Retail/commercial	1.5:1	4	Mixed use	2:1	6
Specialty retail	0.6:1	1	High density residential	2:1	6
Community	N/A		Med density residential	0.8:1	3

Source: Group GSA (2015)

Figure 7.2: Masterplan Option 2

Source: Group GSA (2015)

Development typologies envisaged are mainly 4 storey retail/commercial buildings along Garfield Road East and a mixture of 6 storey mixed use and residential buildings along Market Street and Park Street, as well as on the southern side of Garfield Road East.

Lower density residential, i.e. 3 storey townhouses are envisaged along the fringe of the Study Area along George Street and Mill Street on the northern side of Garfield Road East and along Castlereagh Street to the south of Garfield Road East. **Figure 7.2** depicts Masterplan Option 2.

Development yields that result from Masterplan Option 2 are:

- Retail floorspace (28,132sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (31,948sqm).
- Residential floorspace (202,105sqm or 1,711 units).
- Community/recreation floorspace (5,000sqm).

Comment is made on Option 2 from the perspective of its likely ability to deliver sustainable growth in the Study Area.

- **Development feasibility**
  Development of 4 storey retail/commercial buildings and 3 storey townhouses are not feasible, considering existing-use values in the Study Area. In addition, 1 storey retail buildings would effectively represent existing built form, not offering any incentive for redevelopment. 6 storey mixed use and residential buildings could be feasible in certain parts of the Study Area depending on existing-use values.
- **Delivery timeframe**
  The quantum of retail, particularly commercial floorspace will likely be difficult to sustain *even if* 4 storey retail/commercial buildings are feasible to develop. Like Option 1, it is likely this theoretical amount of commercial floorspace (31,948sqm) will be unrealised.

  Residential yield within 3 storey townhouse developments are unlikely to be realised.

  A large proportion of retail floorspace is envisaged at ground level of mixed use buildings along Market Street and Garfield Road East. Comment on the sustainability of retail space in all mixed use buildings is made following.
- **Layout of uses**
  The option provides for elongation of retail activity along Market Street as well as along the southern side of Garfield Road East. Retail uses operate most successfully when they have the ability to cluster and co-locate. By 'stretching' the location of retail uses to Piccadilly Street in the east, retail and pedestrian activity could be diluted. Unless there is a significant catchment/density of population, this poses a challenge for vibrant and sustainable retail activity in the Study Area.

Overall we do not consider this option to align with commercial realities, many development types (e.g. 4 storey retail/commercial, 1 storey retail, 3 storey townhouses, etc.) that would be insufficiently attractive to displace existing, valuable uses. Furthermore, the elongation of Market Street could make it difficult to sustain economic activity.

7.4 Masterplan Option 3: Precincts

This option envisages land uses configured in 'precincts', retail uses, community and mixed uses within discrete 'blocks'. The following land uses (and number of storeys) are observed:

Table 7.3. Masterplan Option 3, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	**FSR**	**Storeys**	**Land Use**	**FSR**	**Storeys**
Retail/commercial	1.5:1	4	Mixed use	2:1	6
Specialty retail	0.6:1	1	High density residential	2:1	6
Community	N/A		Med density residential	0.8:1	3
			Specialty retail	0.6:1	1
			Community hub	N/A	4

Source: Group GSA (2015)

Development typologies envisaged are mainly 4 storey retail/commercial buildings along Garfield Road East and 1 storey specialty retail along Market Street in close proximity to Market Town.

A mixture of 6 storey mixed use and residential buildings are along Market Street on the eastern side of the Study Area around George Street, as well as on the southern side of Garfield Road East.

Lower density residential, i.e. 3 storey townhouses are envisaged along the fringe of the Study Area along George Street and Mill Street. **Figure 7.3** depicts Masterplan Option 3.

Figure 7.3: Masterplan Option 3

Source: Group GSA (2015)

Development yields that result from Masterplan Option 3 are:

- Retail floorspace (22,000sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (26,253sqm).
- Residential floorspace (152,370sqm or 1,380 units).
- Community/recreation floorspace (5,000sqm).

Comment is made on Option 3 from the perspective of its likely ability to deliver sustainable growth in the Study Area.

- **Development feasibility**
  The feasibility of 4 storey retail/commercial buildings and 3 storey townhouses are likely to be negative, considering existing-use values in the Study Area. In addition, 1 storey

retail buildings would effectively represent existing built form, not offering any incentive for redevelopment. 6 storey mixed use and residential buildings are likely to be feasible.

- **Delivery timeframe**
  The quantum of retail, particularly commercial floorspace will likely be difficult to sustain *even if* 4 storey retail/commercial buildings are feasible to develop. Like Options 1 and 2, it is likely that this theoretical amount of commercial floorspace (26,253sqm) will remain unrealised.

  Residential yield within 3 storey townhouse developments are unlikely to be realised.

  A large proportion of retail floorspace is envisaged within 1 storey retail buildings along Market Street in close proximity to Market Town, this yield unlikely to be realised.

- **Layout of uses**
  For many retail and commercial type uses to be viable it is important that these uses benefit from being able to leverage high levels of visibility/exposure and have the ability to accommodate cluster of occupiers.

  In this option, the retail and commercial offer is dispersed throughout the centre. A dispersed retail/commercial within the centre would dilute retail spend and consequent economic activity and should be avoided. A design that is conducive to 'drawing in' of visitors and retail trade will contribute to the successful activation of the area.

Overall we do not consider this option to align with commercial realities, many development types (e.g. 4 storey retail/commercial, 1 storey retail, 3 storey townhouses, etc.) that would be insufficiently attractive to displace existing, valuable uses. Furthermore, the dispersal of retail uses across the centre would not facilitate 'active clustering' and co-location, crucial to retailer viability.

7.5 Masterplan Option 4: Central Community Precinct

Similar to Option 1, this option focuses mixed uses around a 'community hub' with a new main street along Market Street whilst focuses on provision of high-density residential typologies as opposed to medium-density residential or mixed-use. The following land uses (and number of storeys) are observed:

Table 7.4. Masterplan Option 4, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	FSR	Storeys	Land Use	FSR	Storeys
Retail/commercial	1.5:1	4	High density residential	1.4:1-2:1	6
Specialty retail	0.6:1	1	Med density residential	0.8:1	3
Community	N/A		Community hub	0.93:1	2-4

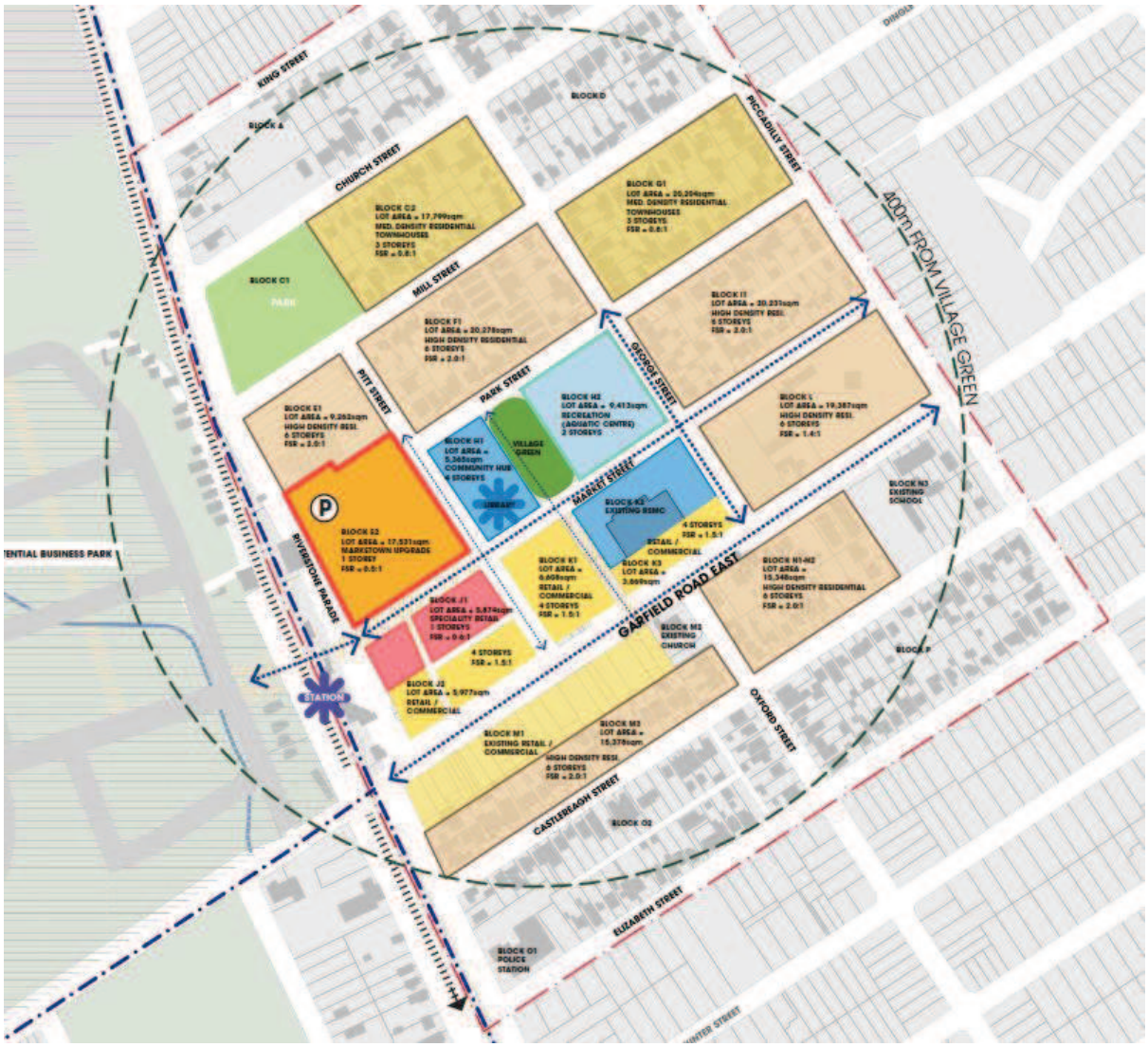
Source: Group GSA (2015)

Development typologies envisaged are mainly 4 storey retail/commercial buildings along Garfield Road East and 1 storey specialty retail along Market Street in close proximity to Market Town.

Residential flat buildings (6 storeys) are proposed along Market Street and Park Street, as well as on the southern side of Garfield Road East. Lower density residential, i.e. 3 storey townhouses are envisaged along the northern fringes of the Study Area on Mill Street.

Figure 7.4 depicts Masterplan Option 4.

Figure 7.4: Masterplan Option 4



Source: Group GSA (2018)

Development yields that result from Masterplan Option 4 are:

- Retail floorspace (14,700sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (18,000sqm).
- Residential floorspace (217,500sqm or 1,954 units).
- Community/recreation floorspace (12,700sqm).

Comment is made on Option 4 from the perspective of its likely ability to deliver sustainable growth in the Study Area.

- **Development feasibility**
  Development of 4 storey retail/commercial buildings and 3 storey townhouses are not feasible, considering existing-use values in the Study Area. Residential flat buildings (6 storeys) could be feasible in certain parts of the Study Area depending on existing-use values.
- **Delivery timeframe**
  Whilst the quantum of retail and commercial floorspace proposed is substantially lower than the other options, development would be difficult to sustain *even if* 4 storey retail/commercial buildings are feasible to develop. It is likely that the theoretical amount of commercial floorspace (18,000sqm) will remain unrealised.

  The majority of the retail floorspace is provided for in Market Town which from a delivery standpoint is positive as a smaller number of lots are required to facilitate development.

Residential yield within 3 storey townhouse developments are unlikely to be realised owing to existing use values.

- **Layout of uses**
  The option provides for concentration of retail activity around Market/Pitt Street. A redevelopment/upgrade of Market Town that interacts with Pitt Street is required to facilitate through pedestrian flows between the train station and community hub.

From a financial feasibility perspective, the greater concentration of high-density residential proposed would likely have greater redevelopment prospects compared to the other options where mixed-use developments are envisaged. The focus of retail and community uses around Marketown and Market Street is also considered an attractive opportunity for retailers to cluster and for activity to be focused in a 'node'.

Similar to the other options, Option 4 in many respects will unlikely result in large scale redevelopment as many of the development types proposed would be insufficiently attractive to displace existing, valuable uses. Additionally, a lack of mixed-use development typologies could potentially constrain pedestrian activation on the fringes of the Study Area and result in a less diverse overall mix of housing typologies.

7.6 Preferred Masterplan Option

Following the provision of feedback based on market appraisal and feasibility analysis findings, Group GSA refined Masterplan Option 2 to form the preferred option.

The refined option envisages Market Street as the 'main street' of the Town Centre, extending from the train station in the west to Piccadilly Street in the east. Land uses (and number of storeys have been refined as follows:

Table 7.5. Masterplan Option 2, Proposed Land Uses

Existing B2 Zone			Existing R2 Zone		
Land Use	**FSR**	**Storeys**	**Land Use**	**FSR**	**Storeys**
Mixed use	3:1	9	Mixed use	3:1	9
Mixed use	2.2:1	6	Mixed use	2.2:1	6
High density residential	2.8:1	9	High density residential	2:1	6
			Med density residential	0.8:1	3

Source: Group GSA (2015)

Development typologies envisaged are mainly 6 and 9 storey mixed use buildings along Market Street and Garfield Road East. This recognises the role of residential uses to cross-subsidise the provision of non-residential floorspace. The provision of higher densities and taller buildings also recognises greater densities are required in the existing B2 zone to displace existing-use values which are higher than those in the R2 zone.

Residential buildings surround the mixed use buildings, densities and heights 'stepping down' away from the village green and 'core' of Market Street. This aligns with the lower existing-use values in the R2 zone where lower (6 storey) residential buildings would likely be sufficient to displace existing uses.

Lower density residential, i.e. 3 storey townhouses are envisaged along extreme north and south fringes of the Study Area. Owing to existing lot patterns and values-in-use, new development is unlikely to occur.

Figure 7.5 depicts the preferred Masterplan option.

Figure 7.5: Preferred Masterplan Option

Source: Group GSA (2015)

Development yields that result from the preferred masterplan option are:

- Retail floorspace (12,373sqm), supermarket floorspace (3,500sqm).
- Commercial floorspace (9,373sqm).
- Residential floorspace (475,561sqm or 3,804 units).
- Community/recreation floorspace (5,000sqm).

Comment is made on the preferred option from the perspective of its likely ability to deliver sustainable growth in the Study Area.

- **Development feasibility**

The feasibility of the envisaged development types is broadly positive, subject to successful site assembly. Townhouses on the fringe of the Study Area are unlikely to be realised, unless vacant sites can be assembled.

The availability of high density residential built form will be financially most attractive to deliver in the immediate term, subject to market certainty that retail and community facility provision will follow.

- **Delivery timeframe**
  The delivery of high density residential uses (particularly in the current R2 zone as existing-use values are lower) will allow critical mass of residents to build. Development of mixed use buildings that then provide for retail uses on the ground in response to the growing local population is likely a natural progression.

  Given the fragmented nature of the Study Area, delivery is entirely predicated on the ability of developers to successfully assemble sites from multiple landowners.

  The provision of retail and commercial floorspace within mixed use buildings allows residential uses to cross-subsidise non-residential floorspace. The envisaged development yield is likely more sustainable given the contextual scale of growth (past and envisaged) for the Study Area.

  As with Options 1-3, residential yield within 3 storey townhouse developments is unlikely to be realised.

- **Layout of uses**
  For many retail and commercial type uses to be viable it is important that these uses benefit from being able to leverage high levels of visibility/exposure and have the ability to accommodate cluster of occupiers.

  In this option, the retail and commercial offer is focused along Market Street with some along Garfield Road East. Should Garfield Road East be upgraded and become unsuitable for pedestrian/foot traffic, the mixed use buildings could conceivably accommodate more commercial-type uses that do not depend as much on exposure and visibility to be viable.

In instances where lot and ownership patterns are fragmented, it is necessary to recognise that, even though they may be financially feasible to develop, the envisaged yield is unlikely to be 100% realised and some lots will remain undeveloped. This could be due to landowner objectives that are not financial and not aligned to development outcomes. This is a common and major issue where built form is already established. That being the case, it is prudent to 'over-provide' for opportunities to renew within the precinct.

Overall we consider the preferred option to generally reflect market and commercial realities, with the exception of low density residential product in the fringe of the Study Area. Notwithstanding, we acknowledge that masterplans are not entirely based on commercial imperatives, but incorporate a range of considerations including good urban design principles and traffic generation/management implications.

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Appendix A: Feasibility Modelling Assumptions

Project Timing

Development application is assumed to be progressed immediately upon settlement with pre-sales occurring shortly thereafter. The number of stages is dependent on the scale of the development option, construction to begin in Month 12 and span for 12-18 months depending on the size of each stage.

Development Yield Assumptions

Residential units:

- Internal unit area: 1 bedroom unit (65sqm), 2 bedroom unit (75sqm), 3 bedroom unit (100sqm).
- Unit mix: 1 bedroom: 2 bedroom: 3 bedroom (15%: 70%: 15%).
- Parking rates: 1 bedroom unit (1 space), 2 bedroom unit (1 space), 3 bedroom unit (2 spaces), visitor (0.4 spaces).
- Efficiency factor of 85% (converting GFA to internal unit area), resulting in average of 97sqm GFA per unit).

Revenue Assumptions

- Residential end sale values:
  - 1 bedroom units from $420,000 ($7,000/sqm).
  - 2 bedroom units from $506,250 ($6,750/sqm).
  - 3 bedroom units average of $650,000 ($6,500/sqm).
- Revenue was assumed to escalate at 3.0% per annum.
- It was assumed that 50% of apartments would be pre-sold prior to construction and the balance would be settled after construction at the rate of 5-10 units per month.
- Retail/commercial end sale values: $4,000/sqm.
- Other revenue assumptions:
  - GST is included on the residential sales.
  - Sales commission was included at 2.0% of gross residential sales and 1.5% of retail/commercial sales.
  - Marketing costs at 1% of gross sales.
  - Legal costs at 0.25% of gross sales.

Cost Assumptions

- Demolition and clearing costs were costed at $80 per square metre of building area, assumed to comprise 50% of total site area.
- Construction of residential units was assumed at $2,100/sqm of GBA (6, 9 storeys) and $1,900/sqm of GFA (3 storeys), with balconies assumed at $600/sqm.
- Construction of retail floorspace was assumed at $2,000/sqm.
- Basement car parking was included at $40,000 per space.
- Cost escalation of 3% per annum was assumed to commencement of construction.
- Other construction costs include:
  - Site work and preparation at 1% of construction cost.

  - Services infrastructure at 1% of construction cost.
  - Landscaping at $200/sqm of 50% of site area.
  - A further 5% construction contingency allowance was included.
  - Professional fees and application fees at 10% of construction costs, 5.5% expensed prior to construction and 4.5% pro-rated with construction.
  - Development management fee at 1% of project cost (excluding land and finance).
- Statutory fees include:
  - DA and CC fees at scheduled rates.
  - Strata titles fees at $800 per unit.
- Section 94 contributions as per current schedule rates:
  - 1 bedroom unit at $6,992 per unit.
  - 2 bedroom unit at $11,072 per unit.
  - 3 bedroom unit at $15,733 per unit.
  - $164,839/developable hectare for traffic management.
- Land holding costs assumed at statutory rates.
- Other cost assumptions include:
  - Developer's equity is assumed at land purchase cost. Equity is progressively injected when required.
  - The balance of project cost is assumed to be debt funded with interest capitalised monthly (nominal 7% per annum).

*cost assumptions are sourced from industry experience and construction cost publications (Rawlinsons Construction Cost Handbook and Riders Digest, 2015)

Hurdle Rates and Performance Indicators

Target hurdle rates are dependent on the perceived risk associated with a project (planning, market, financial and construction risk). The more risk associated with a project, the higher the hurdle rate. Key performance indicators for this feasibility analysis are:

- Development margin is the profit divided by total development costs (including selling costs).
- Discount Rate refers to the project internal rate of return (IRR) at which the net present values of an investment becomes zero.

Adopted hurdle rates are 18% development margin and 18% discount rate, in line with industry expectations.

If the resulting profit from this feasibility analysis is large enough to meet the target hurdles, the project is considered feasible.

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