



# *Penrith Urban Study*

## Managing growth to 2031

This Document has been prepared by Penrith City Council and HASSELL in 2008-2009 and is based on the 2006 ABS Data.

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# EXECUTIVE SUMMARY

## A. OVERVIEW

The Penrith Local Government Area (LGA) forms the western fringe of the Sydney Metropolitan area, providing the boundary between the Sydney Plains and the Blue Mountains Escarpment.

In 2006, Penrith LGA accommodated 172,103 persons in 62,160 dwellings within its 407 square kilometres. Population projections anticipate that in a high growth scenario, by 2031, Penrith LGA could grow to a population of 233,560 persons living in 86,503 dwellings, which is similar to the State Government's Metropolitan Strategy (2005) target of an additional 25,000 new dwellings by 2031.

The Penrith Urban Study and Strategy identifies issues, opportunities and constraints associated with accommodating this growth in existing urban and new release areas. The Penrith Urban Study and Strategy develops guiding principles and a sustainable centres framework to inform the extent and intensity of future development within the Penrith LGA.

## B. GUIDING PRINCIPLES

External and Internal Reference Groups have developed principles to guide future urban development in the Penrith LGA to 2031.

### Penrith 2031 - Guiding Principles for Future Development

Penrith 2031 will be a Sustainable City that ensures it is diverse, creative, accessible, healthy and embraces it's regional and cultural role. Penrith City will be:

1. **A Diverse City** meeting the needs of the people (in housing, built form, urban and rural uses), the economy and the environment.
2. **A Healthy and Vibrant City** with quality spaces and recreation areas. A city that is connected and whose residents experience well being. A city comprising strong neighbourhoods that build social capital.
3. **An Accessible City** that is integrated and interconnected, where communities have access to shops, services, education, employment and transport.
4. **A Cultural City** that is a creative place with self sustaining arts and culture.
5. **A Regional City** that embraces its economic and service role for the region with strong links to the surrounding regions and metropolitan area.
6. **A Safe City** where people feel confident living.
7. **A Lifestyle City** that is attractive and well designed, fun for all ages and abilities and creates cohesive communities.
8. **A City with a Unique Identity** that enables lifelong learning, research and development and has a viable economy.

## C. SUSTAINABILTY ELEMENTS

In the preparation of the Urban Study a range of issues were identified to be addressed in accommodating urban development within the Penrith LGA to 2031. These issues are listed below and are referred to as Key Sustainability Elements.

### Key Sustainability Elements:

1. Residential Capacity and Diversity
2. Retail and Commercial
3. Community Services and Infrastructure
4. Public Transport
5. Active Transport
6. Environment
7. Open Space and Recreation
8. Affordable Housing

## D. APPROACH

Penrith residential strategy in the past has sought to focus development both within the existing urban area (through infill development) and in new release areas. As identified through this Study, Penrith LGA has the capacity to accommodate the dwelling target established by the Department of Planning of an additional 25,000 dwellings. This future development will be distributed approximately 50% within existing urban areas and approximately 50% in new release areas. A detailed breakdown of these future dwelling types is provided below.

Table A: Additional dwellings to 2031

	Separate dwellings	Medium/high density dwellings	Total dwellings
2006 dwellings	49,943	8,569	62,160
Additional dwellings to 2031	+10,000	+15,000	+25,000
Total	59,943	23,596	87,160
% of Total	70%	30%	100%

Source: HASSELL 2008

The Urban Study and Strategy recommends that the Sydney Metropolitan Strategy model of centre based planning be adopted which focuses increased densities and development around local centres which are retail and service centres/key activity nodes.

The Penrith Urban Study has identified strategic centres across the Penrith LGA which will provide the focus of activity in terms of community services, retail, employment, and housing, in concentration with key transport nodes. Such an approach enhances the community's accessibility to a range of services and facilities while also providing a vibrant focus for community activity.

Building upon the Council's adopted Interim Centre's Hierarchy, the Urban Study and Strategy recommends that centres develop their own character and level of service

provision in accordance with the needs of their catchment area, thus minimising competition between centres and maximising individual centre success.

The Penrith Urban Study and Strategy centres based planning approach seeks to:

- Ensure all future high density development in existing urban areas will be centre based development and located within 800 metres of a centre;
- Create a strong mix of housing types and densities that meets future community needs, to be determined by the centre designation;
- Create strong communities with a high level provision of transport; access to retail, commercial, community and recreation services to be determined by centre designation;
- Facilitate community development by providing opportunities for neighbourhood interaction and high amenity in the public domain; and
- Guide future development with a Key Sustainability Elements Checklist (a best practice guide to future service provision, housing mix and densities and staging of future development).

The Penrith Centres Hierarchy has been revised to reflect the future role and function of centres to meet the dwelling target and projections. The revised hierarchy is outlined below.

Hierarchy	Hierarchy 2008	Hierarchy 2031	
<b>Regional City</b> 2km radius	<ul style="list-style-type: none"> <li>▪ Penrith City Centre</li> </ul>	<ul style="list-style-type: none"> <li>▪ Penrith City Centre</li> </ul>	
<b>Specialised Centre</b> 1km radius	<ul style="list-style-type: none"> <li>▪ Kingswood</li> </ul>	<ul style="list-style-type: none"> <li>▪ Kingswood</li> </ul>	
<b>Town Centre</b> 800m radius	<ul style="list-style-type: none"> <li>▪ St Marys</li> </ul>	<ul style="list-style-type: none"> <li>▪ St Marys</li> </ul>	
<b>Village</b> 600m radius	<ul style="list-style-type: none"> <li>▪ Emu Plains (Lennox Centre)</li> <li>▪ Glenmore Park</li> <li>▪ South Penrith (Southlands)</li> <li>▪ St Clair Shopping Centre</li> </ul>	<ul style="list-style-type: none"> <li>▪ Emu Plains (Lennox Centre)</li> <li>▪ Glenmore Park</li> <li>▪ South Penrith (Southlands)</li> <li>▪ St Clair Shopping Centre</li> </ul>	<ul style="list-style-type: none"> <li>▪ Werrington Station</li> <li>▪ Penrith Lakes Precinct Centre</li> <li>▪ WELL Precinct Centre</li> </ul>
<b>Small Village</b> 400m radius	<ul style="list-style-type: none"> <li>▪ Claremont Meadows</li> <li>▪ Cranebrook</li> <li>▪ Emu Plains Station</li> <li>▪ Erskine Park</li> <li>▪ Werrington County</li> </ul>	<ul style="list-style-type: none"> <li>▪ Claremont Meadows</li> <li>▪ Cranebrook</li> <li>▪ Erskine Park</li> <li>▪ Werrington County</li> <li>▪ Emu Plains Station</li> </ul>	<ul style="list-style-type: none"> <li>▪ Jordan Springs Village Centre (St Marys Release Area)</li> <li>▪ Central Precinct Village Centre (St Marys Release Area)</li> <li>▪ Glenmore Park Stage 2 Precinct Centre</li> <li>▪ North Penrith Urban Precinct Centre</li> </ul>

Hierarchy	Hierarchy 2008	Hierarchy 2031
<b>Neighbourhood Centre</b> 150m radius	<ul style="list-style-type: none"> <li>▪ Cambridge Gardens (Star Court)</li> <li>▪ Cambridge Park</li> <li>▪ North St Marys</li> <li>▪ Smith Street (South Penrith)</li> <li>▪ Werrington Station</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cambridge Gardens (Star Court)</li> <li>▪ Cambridge Park</li> <li>▪ North St Marys</li> <li>▪ Smith Street (South Penrith)</li> </ul>

Based on the detailed analysis of each local centre / suburb, the following staging is recommended for centres investigated as part of the Penrith Urban Strategy.

Local Centre / Neighbourhood	Development Timing (Years)					
	0-5	5-10	10-15	15-20	20-25	25+
Caddens	✓	✓	✓	-	-	-
Cambridge Park					✓	✓
Cambridge Gardens - Werrington County - Werrington Downs					✓	✓
Claremont Meadows					✓	✓
Claremont Meadows Stage 2 (CM2)	✓	-	-	-	-	-
Colyton					✓	✓
Cranebrook Centre		✓	✓	✓	✓	✓
Cranebrook Neighbourhood					✓	✓
Emu Heights					✓	✓
Emu Plains Lennox Centre				✓	✓	✓
Emu Plains Station						✓
Emu Plains Neighbourhood					✓	✓
Erskine Park					✓	✓
Glenmore Park					✓	✓
Glenmore Park Stage 2	✓	✓	✓	-	-	-
Jamisontown					✓	✓
Kingswood Centre	✓	✓	✓	✓	✓	✓
Kingswood Neighbourhood				✓	✓	✓
Leonay					✓	✓
North Penrith Urban Area		✓				
North St Marys					✓	✓
Oxley Park				✓	✓	✓
Penrith City Centre	✓	✓	✓	✓	✓	✓



Local Centre / Neighbourhood	Development Timing (Years)					
	0-5	5-10	10-15	15-20	20-25	25+
Penrith Lakes		✓	✓	✓	-	-
Regentville					✓	✓
South Penrith (Southlands) and Smith Street Local Centre		✓	✓	✓	✓	✓
South Penrith Neighbourhood					✓	✓
South Werrington Urban Village (SWUV)	✓	✓	-	-	-	-
St Clair				✓	✓	✓
St Marys Town Centre	✓	✓	✓	✓	✓	✓
St Marys (Area adjacent to Town Centre - Glossop Street)	⊛	⊛	⊛	⊛	✓	✓
St Marys Release Area (Jordan Springs Village Centre and Central Precinct Village Centre)	✓	✓	✓	-	-	-
Waterside (Lake Environs)	✓	✓		-	-	-
WELL Precinct (excludes WMUA, CM2, CADDENS, SWUV)	✓	✓	✓	-	-	-
Werrington Mixed Use Area (WMUA)	✓	-	-	-	-	-
Werrington Station (Local Centre)		✓	✓	✓	✓	✓
TOTAL						

**KEY**

- ✓ Development Starts
- ⊛ Council and Department of Housing (DOH) owned land. There is a potential for Council and DOH to advance re-development of this area.

## E RECOMMENDATIONS FOR THE URBAN STRATEGY

The Urban Study has identified the guiding principles and a planning philosophy to guide future urban development within Penrith. The Urban Study identifies the residential capacity of Penrith's existing centres and suburbs and eleven key issue areas to be addressed prior to increasing densities and development.

The Penrith Urban Strategy will provide a vision and strategic direction for the development of existing urban areas within the Penrith Local Government Area (LGA) to 2031. It will utilise a centres based framework to build Penrith's existing centres and to guide the location and density of future urban development. Central to this strategy will be the sustainability checklist containing strategic principles and elements guiding requirements for sustainable development.

The implementation of the Penrith Urban Study and Strategy will result in the fulfilment of the following measures according to the key issues areas and will develop a structure for the implementation of the key sustainability elements:

Key Sustainability Element	Measures
1. <i>Residential Capacity and Diversity</i>	<p>50% of all new growth within existing urban areas. Of this development 60% will be medium to high density and 40% will be low to medium development.</p> <p>No additional growth areas released other than those identified in the Urban Study.</p> <p>25% of all development in new release areas to be medium density.</p>
2. <i>Retail and Commercial</i>	<p>Network of key centres and nodes of activity that service the needs of residents and workers within their catchment area, in accordance with Council's Centre Hierarchy.</p>
3. <i>Community Facilities and Infrastructure</i>	<p>Equitable and accessible provision of community facilities across the Penrith LGA, which meets the criteria of Community Facilities in the Centres Hierarchy.</p> <p>Water, energy, stormwater, sewerage and road infrastructure is programmed and upgraded to provide appropriate levels of service provision in a timely and appropriate manner to meet future demands.</p>
4. <i>Public Transport</i>	<p>Development of a new train station between Werrington and Kingswood.</p> <p>Regional Centre, Specialised Centre and Town Centre designations to achieve 24 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 5-10 minute frequency and off peak hour services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections</p> <p>Village, small village and neighbourhood centre to achieve 14 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 10-15 minute frequency and off peak hour services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections.</p>
5. <i>Active Transport</i>	<p>In existing areas, all residential roads to have a universally accessible pedestrian footpath of minimum 1.2 m width on at least one side of the road wherever physically possible.</p> <p>In new urban areas, all residential roads should have a universally accessible footpath wherever physically possible on both sides of the road, of a minimum width of 1.5 metres.</p> <p>All roads within centre catchment/radius to have universally accessible footpaths on both sides of the road, of a minimum width of 1.5 metres wherever physically possible.</p> <p>Consider the inclusion of a different standard for commercial strips. e.g. full boundary to kerb pavement in front of land zoned for commercial and retail purposes.</p> <p>All centres should be accessible by a safe cyclist route and include bicycle infrastructure.</p>
6. <i>Environment</i>	<p>Future development will have minimal impact on Penrith LGA's environmental assets.</p>
7. <i>Open Space and Recreation</i>	<p>Creation of quality open spaces which are integrated and connected into district wide open space networks and create high quality landscape environment for Penrith LGA's centres and suburbs.</p>
8. <i>Affordable Housing</i>	<p>Any future large scale development within Local Centre catchment/radius should provide for a minimum of 3% affordable housing.</p> <p>Any future large scale development within new urban release areas should continue to provide for a minimum of 3% affordable housing.</p> <p>Review these figures and the success/failure of the provision of affordable housing in the next review of the Local Environmental Plan.</p> <p>Affordable housing will be provided in a range of dwelling types and tenures.</p> <p>Affordable housing will be targeted at special needs groups, such as essential workers, students, older people and very low and low income earners.</p>



**01**

**INTRODUCTION**



# 01 INTRODUCTION

## 1.1 FORMAT OF THE URBAN STUDY

This report is divided into 5 sections:

*01 Introduction:* Highlights the objectives of the Urban Study and Strategy report;

*02 Policy and Strategic Context:* Presents an overview of the key state and local policies and documents that are relevant to the development of the urban study and strategy. This section also outlines the consultation strategy undertaken in the development of the Urban Study and Strategy.

*03 The City:* Provides an overview of key elements influencing future urban development and is broken down into several sections including:

- *Profiles and Trends:* Provides an overview of the demographic and housing profiles and trends which will influence the type and diversity of future housing needs in Penrith LGA
- *Key Issues:* Considers key issues associated with affordable housing, sustainable housing, urban context and environmental context which provide opportunities and constraints to future urban development in the Penrith LGA.

*04 Building a Sustainable Penrith:* Provides a summary of the key issues, development philosophy and strategic directions to inform the Urban Strategy.

*05 Local Centres:* Provides the key characteristics of all of Penrith's centres and neighbourhoods and their capacity for future development

## 1.2 PURPOSE OF THE STUDY

The Penrith Local Government Area (LGA) forms the western fringe of the Sydney Metropolitan area, providing the boundary between the Sydney Plain and the Blue Mountains World Heritage Area and Escarpment. The Penrith LGA accommodates a mix of urban and rural areas, significant landscapes and natural features and character.

Within the Penrith LGA, population projections and targets identify the need to accommodate approximately 25,000 new dwellings by 2031 to meet the changing household needs.

In recognition of the diverse uses and its significant landscapes the Penrith Urban Study and Strategy seeks to develop a strategic planning framework to guide and manage urban development to 2031.

The overarching aim of this project is to achieve:

- Greater housing choice and diversity;
- Affordable, accessible and adaptable housing opportunities; and
- Improved connectivity to key land uses, such as community facilities, public transport services and public open space.

## 1.3 BACKGROUND TO THIS STUDY

The Penrith Urban Study and Strategy has been informed by a suite of documents and current studies, which have identified the housing, population, transport, statutory and environmental context for the Penrith LGA. While a range of references were utilised in

the development of the Urban Study and Strategy, the following documents represent the key sources of information for this report.

- I.D. (2007) Dwelling Opportunities Analysis for Penrith City Council, September 2007
- NSW Department of Planning (2005) City of Cities: A Plan for Sydney's Future - Sydney Metropolitan Strategy, December 2005.
- NSW Department of Planning (2007) Draft Northwest Sub Regional Strategy
- Penrith Integrated Transport and Land Use Strategy (2008) (PITLUS)
- Penrith City Council (2007) Interim Centres Hierarchy
- Urbis JHD (2004) Established Residential Areas Infrastructure Facilities and Services Strategy - People's Lifestyle, Aspirations and Needs Study, Prepared in association with Stratacorp Consulting on behalf of Penrith City Council, Adopted 15 March 2004
- Travis McEwen Group Pty Ltd and Brian Elton & Associates (1997) Penrith Residential Strategy prepared on behalf of Penrith City Council.
- Penrith Local Environmental Plan 1998 (Urban Land)
- Penrith City Council Geographic Information Systems
- Information from these studies is summarised throughout the Urban Study and Strategy.

In addition to these studies, the Urban Study and Strategy was also informed by a Council Stakeholder Reference Group and an External Stakeholders Reference Group. These reference groups assisted in the identification of key issues and strategies as well as the development and application of the Urban Strategy to local centre case studies.

This Urban Study identifies the issue, opportunities, pressures and constraints influencing urban development in the Penrith LGA now and into the future up to 2031. The Urban Strategy provides the strategic framework to address the opportunities and constraints to accommodate the anticipated household requirements to 2031.

## **1.4 OBJECTIVES OF THE URBAN STUDY**

The objectives of the urban study are to:

- Identify past, contemporary and emerging policy influences on local residential and urban outcomes;
- Identify the range of housing types required to meet the City's current and projected demographic profile;
- Identify limits to growth such as existing urban character, existing density, access to support services and environmental constraints;
- Identify centres, suburbs and locations where residential densities could be increased in the future;
- Consider how areas identified as having potential for increased residential densities will integrate with existing neighbourhoods and communities;
- Identify the infrastructure, including transport and community facilities, that would be required by increasing residential densities in specific areas;
- Identify the current and future context for affordable housing in the City;
- Identify the current and future context for sustainable housing in the City; and
- Identify other non-residential uses in the urban areas and consider how these will integrate with existing neighbourhoods..

An aerial photograph of a valley with a mix of green and autumn-colored trees. In the background, there are mountains and a body of water. A cable car cable is visible in the top right corner. A large blue square with the number '02' in white is overlaid on the right side of the image.

# 02

## POLICY AND STRATEGIC CONTEXT





## 02 POLICY AND STRATEGIC CONTEXT

This section of the report outlines contemporary strategies, policies and regulations that inform the preparation of the Urban Study and Strategy.

State and local planning strategies, policies and plans shape the location and type of housing that will be built, renovated and redeveloped in the City of Penrith. They provide the context of the metropolitan and local housing issues and principles of relevance to the Urban Study and Strategy.

An overview is also provided of the external and internal stakeholder consultation that was undertaken throughout the Study. This input has been central to shaping the directions of the study.

### 2.1 STATE PLANNING

#### 2.1.1 NSW State Plan: A new direction for NSW 2006

The NSW State Plan, released in November 2006, sets out priorities for Government action, with targets to guide decision making and resource allocation. The Plan also sets out the implementation process to deliver on the targets made under the Plan.

The Plan is set out in terms of five areas of activity of the NSW Government. Relevant priorities for this study include Priority E6 - Housing Affordability - ensure a supply of land and a mix of housing that meets demand.

The Urban Study and Strategy should explore:

- Expanding the role of Community Housing with future growth in this sector assisting in providing affordable housing stock for households who are experiencing housing stress. It is intended that growth in this sector will rely principally on long term private investment.
- Achieving a broader approach to housing affordability that considers the role of public housing, rent assistance, land release and other policy levers in achieving positive outcomes.

#### 2.1.2 The City of Cities: A Metropolitan Strategy for Sydney (The Sydney Metropolitan Strategy, 2005)

The Sydney Metropolitan Strategy, 2005 (Metro Strategy) is a major planning initiative of the Department of Planning to meet the challenges associated with increasing population and development in the Sydney metropolitan region.

The Metropolitan Strategy identifies that Sydney's population will grow by a further 1.1 million people between 2004 and 2031. With Sydney's population growing to 5.3 million by 2031 and average household sizes anticipated to fall from 2.65 to 2.36 people per dwelling, Sydney will have a total of 2.2 million dwellings, requiring around 640,000 dwellings in total by 2031.

The Metropolitan Strategy provides a centre-based planning approach aiming to concentrate development and to strengthen centres, towns, villages and neighbourhoods. This philosophy establishes a balanced approach to accommodating more residential growth in new release areas and existing urban areas over the next 25 years (30-40 and 60-70 per cent respectively). The strategy sets housing targets for ten subregions to address:

- Dwindling land supply and the need to contain growth to protect conservation areas and agricultural land.
- Improvements in infrastructure, particularly public transport.
- More effective use of natural resources, particularly energy and water.

The Metropolitan Strategy determines where the key centres in the Sydney Metropolitan area are located to determine opportunities for growth and employment generation. The Strategy also provides a series of aims and objectives for Sydney's centres and corridors to plan the future of Sydney up until the year 2031. One of the key aims has been to identify a hierarchy of city centres throughout Sydney and Penrith CBD has been identified as one of six Regional Centres for Sydney, which will 'provide for more lifestyle and work opportunities close to the growing parts of Sydney'.

Penrith's role in fulfilling the strategy is two-fold:

- The Strategy identifies Penrith as one of three regional 'river cities' intended to provide a focus for cultural, shopping and business services.
- The existing urban area contains potential for redevelopment (or continued development) for housing up to 25,000 new dwellings, as well as business centres, corridors and employment land.

### **2.1.3 Cities Taskforce**

The Cities Taskforce project has been designed to encourage the increase in employment, housing and lifestyle opportunities in regional cities to enable them to become key drivers of the NSW economy. The project identifies Penrith as being a regional city, with Wollongong, Liverpool, Parramatta, Gosford and Newcastle identified as the other regional cities.

The Cities Taskforce project focuses on delivering a vision, detailed planning and civic improvement strategies for the six regional cities.

The facilitation of Penrith as a key economic and strategic centre through the Cities Taskforce project has a significant impact on the future planning for Penrith and the location of housing.

The following highlights some of the key directions for the Penrith Regional Centre (Penrith City Centre):

- 10,000 new jobs by 2031 with a focus on high growth industries such as business services, health, education, retail, tourism and cultural activities;
- 10,000 new residents in the city centre by 2031;
- Reconnecting Penrith to the Nepean River to create a riverfront leisure and entertainment precinct;
- Developing education precincts, including Nepean Hospital and the University of Western Sydney;
- Increased residential and commercial floor space in the city centre; and
- Architectural design competitions for key sites.

### **2.1.4 Draft North-West Sub-regional Strategy, 2007**

The Draft North West Subregional Strategy was released in December 2007 and includes the Penrith Local Government Area. This provides a more detailed study of the potential

of the sub region for future growth and employment. Some of the key objectives of the Draft North West Subregional Strategy are as follows:

The Metropolitan Strategy established a target of 140,000 additional homes within the North West Subregion to 2031 to accommodate the needs of the existing and future population.

The Draft Strategy states that between 2004 and 2031 Penrith is estimated to absorb another 25,000 dwellings.

The Draft Strategy states that as a regional city Penrith is expected to experience significant growth including 10,000 new jobs and 10,000 additional residents within the city centre.

The Draft Subregional Strategy has classified local government areas according to centres. Each centre has been classified to form part of a hierarchy based on their size and function. In descending order these include: Regional City; Specialised Centre; Major Centre; Town Centre; Villages; Small Villages; and Neighbourhood Centres. For each centre the draft sub regional strategy identifies indicative population and service targets in accordance with its designation in the hierarchy. The Department of Planning has identified the following centres in Penrith LGA (in Figure 2.1), which differs slightly to that adopted by the Penrith Urban Study and Strategy.

Figure 2.1: Draft North West Sub Regional Strategy Centres Hierarchy for Penrith LGA

Centres Hierarchy	Penrith Centres
Regional City	Penrith
Town Centre	St Marys
Villages	Cranebrook, Glenmore Park, South Penrith, St Clair
Small Villages	Claremont Meadows, Emu Plains, Erskine Park, Kingswood, Werrington Station
Neighbourhood Centres	Australia Street - St Marys, Banks Drive - St Clair, Cambridge Park, Colyton, Derby Street - Penrith, Emu Heights, Kemps Creek, Kingswood Park, Leonay, Llandilo, Londonderry, Luddenham, Mulgoa, North St Marys, Oxley Park, Smith Street - St Marys, Stafford Street, South Penrith, Wallacia, Werrington County.

Source: Department of Planning, Draft North West Sub Regional Strategy

### 2.1.5 State Environmental Planning Policies

The State Environmental Planning Policies (SEPPs) that influence Penrith LGA and in particular housing are outlined in Table 2.2 below.

Figure 2.2: Summary of Relevant SEPPs

Policy	Key Issues for Penrith LGA
<i>State Environmental Planning Policy (SEPP) 10: Retention of Low Cost Rental Accommodation</i>	Seeks to retain existing sources of low-cost accommodation (boarding houses, hostels and low-cost rental dwellings), within the Greater Metropolitan region of Sydney, Newcastle and Wollongong.
<i>State Environmental Planning Policy (SEPP) Housing for Seniors or People with a Disability 2004</i>	Aims to ensure a sufficient supply of accommodation for older people and people with a disability by relaxing local residential development controls, subject to strict location and design criteria to ensure that such housing is of a high quality, well located, and consistent with the character and feel of local neighbourhoods.

Policy	Key Issues for Penrith LGA
<i>State Environmental Planning Policy (SEPP) 21: Caravan Parks</i>	Ensures that development consent is required for new caravan parks and camping grounds and for additional long term sites in existing caravan parks.
<i>State Environmental Planning Policy (SEPP) 32: Urban Consolidation (Redevelopment of Urban Land)</i>	Focuses on the redevelopment of urban land that is no longer required for the purpose it is currently zoned or used, and encourages local councils to pursue their own urban consolidation strategies to help implement the aims and objectives of the policy
<i>State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65)</i>	Seeks to improve the design quality of residential flat developments by introducing a series of design principles and providing for the establishment of Design Review Panels to provide independent expert advice to Councils on applications for residential flat developments.
<i>State Environmental Planning Policy Infrastructure</i>	Allows for the development, redevelopment or disposal of Government owned land. Pertinent to this study are the opportunities for authorities such the Department of Housing, Sydney Water and Penrith Council (to name a few) whereby residential or commercial developments are allowed on surplus lands whereby a 'site compatibility certificate' has been obtained by the Department of Planning prior to the development of those lands. The SEPP also allows for a public authority or a social housing provider to carry out multi-dwelling housing developments with consent within 800 metres of 18 key metropolitan railway stations in prescribed zones (e.g. certain residential or mixed use zones). For the Penrith LGA, the applicable railway stations include Penrith, however, it has been identified that additional railway stations may be added to the list such as St Marys.
<i>SEPP (Building Sustainability Index: BASIX) 2004</i>	This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure the effective introduction of BASIX in NSW.
<i>Draft SEPP 66 - Integration of land use and transport</i>	The Draft SEPP aims to improve integration between land uses and transport planning to be implemented at the local level.

## 2.2 LOCAL PLANNING

### 2.2.1 VISION FOR PENRITH - PENRITH REGIONAL CITY STRATEGIC PLAN 2031

Penrith's Vision is one of a sustainable and prosperous region with a harmony of urban and rural qualities with a strong commitment to environmental protection and enhancement.

It would offer both the cosmopolitan and cultural lifestyles of a mature city and the casual character of a rural community.

### 2.2.2 EXISTING LOCAL ENVIRONMENTAL PLAN(S)

The Penrith Local Environmental Plan 1998 (Urban Land) (PLEPUL) is the principal statutory document that applies to all urban land in the Penrith LGA to ensure a consistent approach is adopted to control residential development in urban zones.

The major relevant zones under the PLEPUL 1998 of relevance to this study include:

- Zone No. 2(a1) Residential (Urban and Landscape Protection – Emu Plains)
- Zone No. 2(a) Residential (Urban and Landscape Protection)
- Zone No. 2(b) Residential (Low Density)
- Zone No. 2(c) Residential (Low-Medium Density)
- Zone No. 2(d) Residential (Medium Density)
- Zone No. 2(e) Residential (Medium-High Density)
- Zone No. 3(f) Mixed Uses
- Zone No. 10(a) Mixed Use – Residential

The current regime of zoning and development controls demonstrates a dispersed growth approach to housing in which a range of housing types and densities are permitted throughout the LGA. There are large areas throughout the LGA which allow town house development or flats and some of these areas are not well serviced by public transport, shops, parks, services or facilities.

### 2.2.3 LOCAL POLICY DOCUMENTS

A summary of the key local policy documents and how they influence urban development is provided in Table 2.2.3.

Table 2.2.3: Summary of Local Policy Documents

Local Policy Document	Key Issues for the Penrith LGA Urban Study and Strategy
<i>Penrith City Centre and St Marys Town Centre Strategy</i>	Outlines key actions required to deliver vital, viable and sustainable centres (Penrith and St Marys) into the future, with a focus on strengthening business investments and job growth, and the best use of the transport system. This document will continue to guide the development of Penrith and St Marys.
<i>Urban Release Areas &amp; Sustainability Blueprint</i>	Provides a guide for Council and developers involved in the future development of new release areas. Relevant to this study is a minimum of 3% of all residential allotments are to be provided for the purpose of affordable housing. Alternately, in some instances, a monetary contribution to enable housing units to be constructed elsewhere within the City of Penrith can be provided.
<i>Penrith City – Centres Hierarchy</i>	This interim policy reviews the objectives of the Metropolitan Strategy in the context of Penrith as a Local Government Area (LGA) that identifies the future potential and forecasted development for the identified centres. Overall, the policy provides a vision for the future role of the region and clarity on the future roles of the differing centres (discussed further in Chapter 03).
<i>Employment Planning Strategy 2007</i>	Outlines a number of objectives for employment lands which focus on the provision of zoned land and the opportunity for jobs, as well as, sustainability, appropriate access to jobs and making the most of Penrith's unique characteristics to provide a strong and viable local economy.

<i>Penrith Residential Strategy 1997</i>	Previous RDS which applied to the whole LGA sought to identify and preserve the built form of each suburb to provide an individual character that residents may wish to see protected and enhanced. It also identified that certain suburbs are particularly attractive for the development of medium density forms, typically those located close to major transport routes, commercial centres, and educational/medical facilities.
<i>WELL Concept Plan</i>	The WELL Concept Plan is a partnership between Penrith City Council, Landcom and the University of Western Sydney with the objective of delivering a unique, residential, educational, retail, and commercial project. The WELL precinct encompasses approximately 670 hectares of land, centrally located between the Penrith City Centre and St Marys Town Centre.
<i>Recreational and Cultural Study</i>	Evaluates previous planning of recreational, cultural and other urban services and facilities and establishes new plans and strategies through detailed assessment of community needs and aspirations to conserve and enhance Penrith residents' quality of life.
<i>Social Planning Framework</i>	Developed to assist Council in understanding and identifying current issues pertaining to the community. This includes identifying the ongoing needs of the community and addresses all activities within the council that hold social implications.
<i>Integrated Transport &amp; Land Use Strategy (PITLUS)</i>	Seeks to provide a more liveable and sustainable community environment for the Penrith Local Government Area. Key issues identified include: <ul style="list-style-type: none"> <li>-Need to increase residential densities and housing choice within the 1.6km school catchment within existing urban areas and new urban release areas.</li> <li>-Need for an improved housing choice within the area in order to accommodate the fluctuating needs of the immediate population.</li> <li>-Need for increased aged housing provision and medium/high residential housing.</li> </ul> PITLUS also provides detailed information on private, public and active transport.
<i>Social Service and Community Organisation Accommodation Needs Study</i>	Reviews the current spatial requirements of social services and community organisations within the Penrith City Centre, the St Marys Town Centre and the Penrith Valley Cultural Precinct (PVCP), and how any future development could sufficiently accommodate these needs. The key recommendation is to promote community hubs, consolidating all community facilities and social services into a co-facility.

## KEY ISSUES: POLICY CONTEXT

**Strategic Role:** Recognise that Penrith's role in fulfilling the Draft North West Sub Regional Strategy is two-fold:

The Strategy identifies Penrith as one of the three regional 'river cities' to provide a focus for cultural, shopping and business services;

The existing urban area contains potential for redevelopment (or new development) for housing up to 25,000 new dwellings, as well as business centres and corridors and employment lands.

**Higher Density development:** Recognise that certain suburbs are particularly attractive for the development of medium - higher density forms, typically those located close to major transport routes, commercial centres and educational/medical facilities.

**Housing Mix:** Encourage policies which promote a broader spread of medium to higher density housing, appropriate to the local area and planned to high urban design standards.

**Zoning Policies:** Avoid blanket zoning to encourage higher densities but look to Master Plans prepared by Council and community with a strong vision and stronger urban design controls.

**Lot Amalgamation:** Explore policies for lot assembly, look to amalgamating lots before permitting multi-density housing.

**Community and Cultural Facilities:** Promote co-location of community and cultural facilities to ensure the land use is maximised to its full potential and the maximum number of facilities is provided for. Secondly, the acquisition of non-Council land is recommended to continue so as to provide opportunities for the development of future community organisations and social services.

**Community Hubs:** Promote the concept of community hubs, consolidating all community facilities and social services into a co-facility. This would ensure that all facilities are within close proximity and land use could be fulfilled to its maximum potential, and the maximum number of community organisations and social services are able to cater for the urban area.

**Integrated Transport and Land Use Planning:** Seek to create transport oriented urban development to build the capacity and catchments of public transport and enhance accessibility for residents.

**Sustainable Development:** Facilitate highly accessible and well serviced development that utilise environmentally sustainable elements in building design. Ensure special needs groups' housing is addressed.

## 2.3 CONSULTATION APPROACH AND FINDINGS

### 2.3.1 THE CONSULTATION APPROACH

The objectives of the consultation strategy were:

- to engage key stakeholders in the identification of the future housing capacity potential of key precincts
- to educate and engage key stakeholders in the issues influencing accommodating the future housing needs for Penrith residents and workers
- to ensure key stakeholders have an intrinsic role in the development of the Urban Strategy
- to provide a range of communication techniques to attract key stakeholder engagement in the preparation of studies and,
- to provide stakeholders with feedback on the progress of consultation, input and outcomes arising from their involvement.

The detailed consultation strategy and findings are provided in Appendix A of the Urban Study.

Two stakeholder groups guided and informed the Urban Study and Strategy. Stakeholders involved in the project primarily represented community service providers who provide "on the ground" services to a wide range of sectors within the Penrith LGA community.

### 2.3.2 CONSULTATION FINDINGS

Key community and Council stakeholders were involved in the preparation of the Urban Study and Strategy. Their involvement was integral to the development of guiding principles, the identification of the key issues facing Penrith in 2031 and in the preliminary development of strategies to address these issues.

The guiding principles developed by these stakeholder groups are outlined below.

#### **PENRITH 2031 - THE GUIDING PRINCIPLES FOR FUTURE DEVELOPMENT**

Penrith 2031 will be a Sustainable City that ensures it is diverse, creative, accessible, healthy and embraces its regional and cultural role. Penrith City will be:

1. **A Diverse City** meeting the needs of the people (in housing, built form, urban and rural uses), the economy and the environment.
2. **A Healthy and Vibrant City** with quality spaces and recreation areas. A city that is connected and whose residents experience well being. A city comprising strong neighbourhoods that build social capital.
3. **An Accessible City** that is integrated and interconnected, where communities have access to shops, services, education, employment and transport.
4. **A Cultural City** that is a creative place with self sustaining arts and culture.
5. **A Regional City** that embraces its economic and service role for the region with strong links to the surrounding regions and metropolitan area.
6. **A Safe City** where people feel confident living.
7. **A Lifestyle City** that is attractive and well designed, fun for all ages and abilities and creates cohesive communities.
8. **A City with a Unique Identity** that enables lifelong learning, research and development and has a viable economy.



The key issues facing Penrith identified by the Internal and External Reference Groups are summarised below:

- Key Sustainability Elements
- Residential Capacity and Diversity
- Retail and Commercial
- Community Facilities and Infrastructure
- Public Transport
- Active Transport
- Environment
- Open Space and Recreation
- Affordable Housing

These issues formed the basis of the Sustainability Elements in the Sustainability Checklist in the Urban Strategy.

The stakeholder groups also identified key elements that each centre, according to its designation, should seek to achieve by 2031. These elements formed the majority of the sustainable centres framework and assisted in the identification of the urban capacity of local centres to accommodate future growth. The majority of the Urban Strategy document is formed by stakeholder recommendations.

### **2.3.3 Key findings from Multi Unit Resident Surveys**

To assist in the preparation of the Penrith Urban Study and Urban Strategy, surveys were undertaken with residents of multi unit developments and residents who had made a submission in response to a development application proposing a multi-unit development.

These surveys were undertaken in May 2008 to determine liveability of current developments and if the issues identified at the time of the development application remain current. The following summarises the key findings from these surveys. Appendix A provides the detailed survey reports.

#### *Locality Considerations*

- With regard to whether residents felt that their dwelling was within close proximity to a variety of services, the majority (94%) stated their dwelling was close to public transport, 92% stated their dwelling was close to shops and services (i.e. milk and bread), 78% stated their dwelling was close to a broad range of shops and services (i.e. banks, post office), and 75% stated their dwelling was close to schools and other community facilities. A majority of respondents (80%) also stated that their dwelling was within walking distance to services and facilities. However, a significant proportion of respondents (63%) disclosed that they were not within close proximity to parks and open space.
- Although an overall high proportion of residents were within close proximity to a variety of services, 40% of respondents were reliant on their car. 56% stated that they were not reliant on their car.
- A significant proportion of respondents (76%) revealed they liked the area they lived in, with almost half of respondents (49%) stating they felt the area to be attractive. On the other hand, 44% of respondents stated that they did not find the area attractive.

- 42% of respondents were unsure about whether their area of residence had a strong community and 37% felt that it did not have a strong community. Only 21% felt that their area of residence had a strong community. However, more than half of the respondents (55%) stated they felt safe within their area.

#### *Building Information*

- A significant proportion of residents (68%) felt the design of their building enhanced or matched the rest of the street and a majority of respondents (80%) felt the height of their building fit in with the surrounding buildings or houses. Just over half of respondents (53%) felt that the building materials used were of high quality.
- The majority of respondents (88%) stated they felt safe in their building.
- With regard to the elements of respondents' buildings, respondents stated that the following elements were good: sunlight/solar access into their building (41%), ventilation/cross breezes (45%), privacy/distance from other buildings' windows/screening (39%), garbage and recycling facilities/areas (54%), clothes drying facilities/areas (41%), cleanliness/maintenance of common areas (46%), private open space (47%), communal open space (39%), and on and off street parking (37%). On the other hand, respondents stated that both noise/sound proofing (35%) and day-to-day accessibility for moving items (37%) was fair. Almost half of respondents (47%) stated that there was poor disabled access.
- With respect to the facilities within respondents' buildings, respondents stated that clothes drying (85%), garbage (87%), recycling (86%), private open space (67%), onsite parking (75%), and storage (51%) all existing within their building. However, 61% of respondents stated that there was no visitor parking in their building.

#### *Building Design*

- Exactly half of respondents (50%) agreed that their building adds to the character of the surrounding area. A significant proportion (73%) of respondents felt that their building fits in with the height and bulk of the surrounding buildings.
- A majority of respondents (86%) felt that such dwellings as apartments, units, villas, and townhouses, provide an important housing alternative. Furthermore, 86% felt that these dwellings types provide a smaller housing option and 74% felt that these dwelling types provide a more affordable housing option.
- When considering the future location of such dwellings as apartments, units, villas, and townhouses, 66% of respondents felt that they should be located throughout the Penrith LGA and 73% felt they should be built within local centres and near train stations. 31% felt that townhouses should be encouraged more and that the future locations of these dwelling types should be Penrith (14%), Werrington (12%), Kingswood (11%) and St Marys (10%).

#### *Demographics*

- The key demographics of the survey respondents were that 60% of respondents were female, exactly one quarter (25%) were between the ages of 60 and 74 years of age, and just over half (53%) worked on a full time basis.

Overall the key findings for the residents who made submissions on multi unit developments' survey include:

- A significant proportion of respondents (68%) revealed that they lived in Oxley Park. 79% of respondents have lived at their current address for over 10 years and that 84% live in a separate house.

- In regards to the issues of concern that respondents raised in their submissions during the development approval stage; the issues focused on traffic (22% of respondents) and increasing social problems (22% of respondents). Other issues of concern included height/design out of character with the area (20% of respondents), insufficient parking (18% of respondents) and privacy issues (18% of respondents).
- Issues that were no longer of concern include insufficient parking (for 6 respondents); height/design out of character with the area (22%), traffic (20%), insufficient onsite parking (1 respondent) increasing social problems (1 respondent) and insufficient onsite parking (1 respondent).

The findings of both surveys will inform the key actions for future higher density housing in Penrith LGA.



03

THE CITY





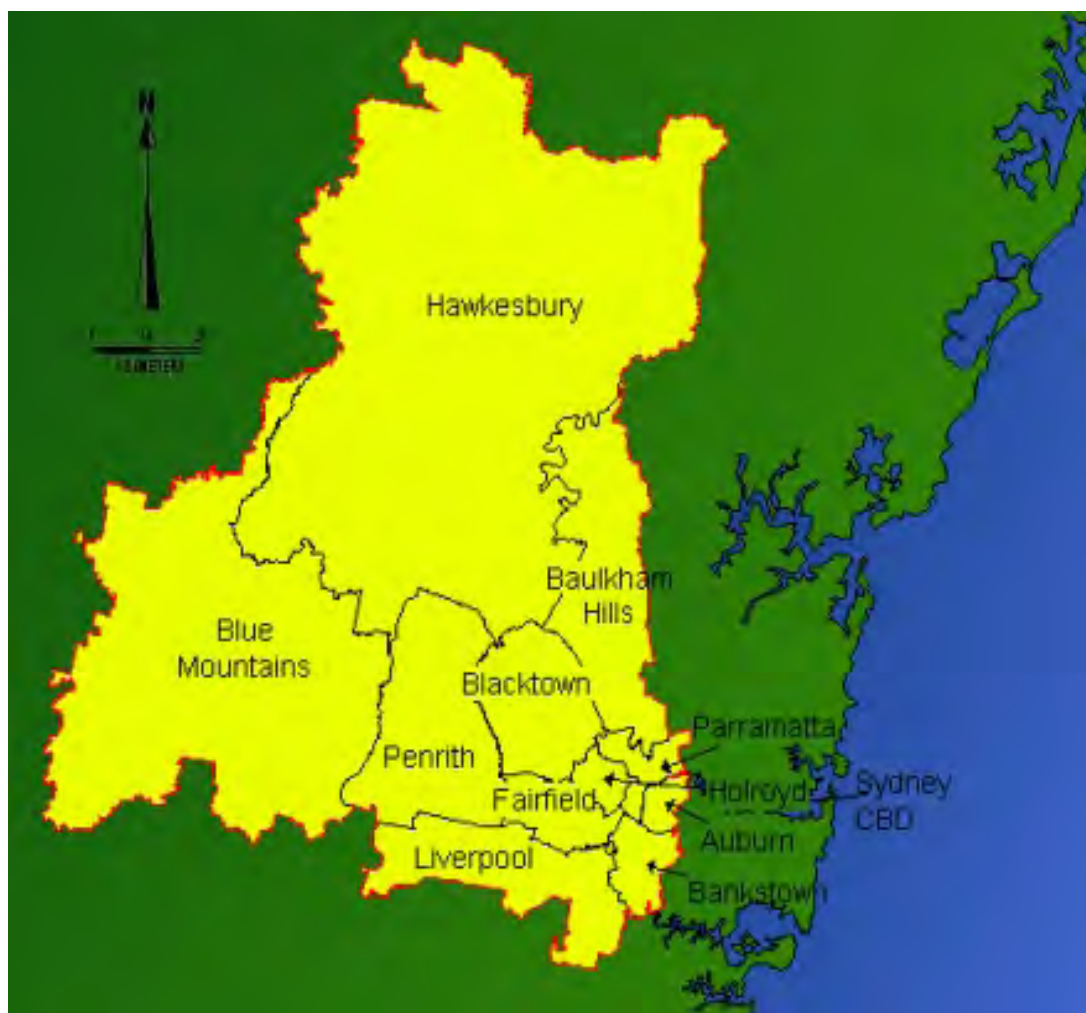
## 03 THE CITY

### 3.1 POPULATION PROFILE

The demographic characteristics of Penrith residents, in the Penrith Local Government Area (Penrith LGA), are outlined in the sections below. Information has been derived from the 1996, 2001 and 2006 Census produced by the Australian Bureau of Statistics (ABS) as well as from the Penrith City Council Community Profile 2007 (i.d. 2007). Comparisons have been made with the Western Sydney Region of Councils (WSROC) (Refer Figure 3.1), North Western Sydney Statistical Region (SR) (when WROSC data not available) and the Sydney Statistical District (SD) to provide context to the Penrith LGA characteristics. This analysis provides a snapshot of both current and future residents, up to 2031 in Penrith LGA.

Below is a summary of the key findings and copies of all tables are included in Appendix B.

Figure 3.1: WSROC Region



Source: WSROC (2006)

Accessed: <http://www.wsroc.com.au/page.aspx?pid=134&vid=1> (11/03/08)

### 3.1.1 POPULATION GROWTH

Penrith LGA as an urban fringe location has always been popular with young families looking to establish in the new residential areas. This trend began in the post war years, when industrial growth in the region spurred residential development. Since the 1960s the population has grown due to the release of land for urban development.

Between 1971 and 1981 the population of Penrith LGA doubled from 58,000 to 109,000 (i.d. 2007), a slower but consistently high rate of growth continued into the 1980s and through to 2000 as the outer urban areas have established and grown. For example, between 1991 and 2001 the population growth increased by 21,447 people, at a growth rate of 1.38% per annum.

However between 2001 and 2006 there has been a distinct change in this trend, with no significant population growth during this period. The growth rate during this period has been at -0.04% per annum. The population in this period has remained around 171,000 persons (excluding visitors).

### 3.1.2 AGE CHARACTERISTICS

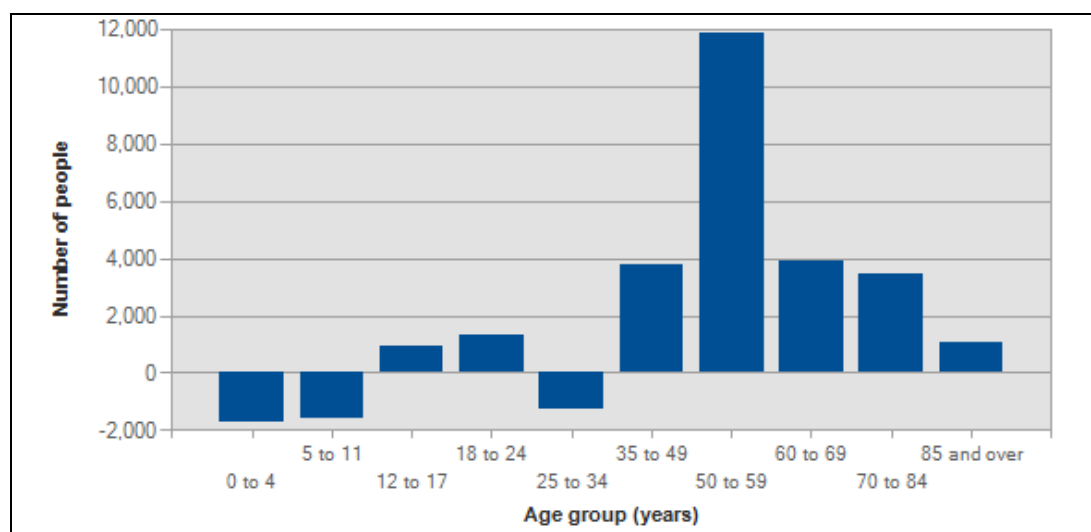
Having experienced a high level of growth through the 1980s, the Penrith LGA population is reaching a level of maturity.

While in comparison to the Sydney SD, the Penrith LGA population is relatively young with a higher proportion of children aged 0-17 years (27.7%) compared to Sydney SD at 23.6%. Penrith LGA also has a lower proportion of older people aged 60 years and over (11.9%) when compared to Sydney SD where 16.7% of the population are aged over 60 years. These trends are reflective of a fringe location and similar trends are found across the WSROC region.

However, between 1991 and 2006 Penrith LGA has aged at a faster rate than Sydney SD, this is representative of many of the younger families of the 1980s maturing. For instance the proportion of people over 50 years old has increased from 14.6% in 1991 to 24.5% in 2006. In the Sydney SD, the proportion of people aged 50 years and older has stayed relatively stable at around 25%. Figure 4.2, illustrates the ageing Penrith LGA.

For further information please refer to Table 3.1.2 of Appendix B.

Figure 3.1.2: Change in structure of Penrith LGA, 1991 to 2006



Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08



### 3.1.3 CULTURAL CHARACTERISTICS

When compared to the WSROC Region and Sydney SD, Penrith LGA has a smaller proportion of people born overseas. In 2006, countries of birth, other than Australia, with high concentrations of Penrith LGA residents include: United Kingdom, New Zealand, Philippines, India and Malta.

It should be noted, that the ABS Statistics may not represent the full cultural diversity of Penrith LGA. The Internal and External Stakeholder Groups have identified that the actual number of people not born in Australia is higher than that identified in the 2006 Census, possibly due to these people being new migrants with limited English and understanding to correctly fill in the census forms, or having arrived subsequent to the 2006 Census.

The majority of Penrith LGA residents speak English at home (81.9%). This figure is significantly higher, when compared with the WSROC Region where only 56.5% people speak English at home and also comparisons with the Sydney SD (63.9%). Arabic and Filipino (Tagalog) are the most common languages, other than English, which is spoken at home in Penrith LGA.

#### *Aboriginal and Torres Strait Islanders*

In 2006, 4,048 persons of the Penrith LGA were of Aboriginal or Torres Strait Islander descent. This proportion at 2.4% is higher than that in the Sydney SD (1.1%), while comparable that of the North Western Sydney SR at 2.5% (WSROC data unavailable). Of those residents in the Penrith LGA who are Aboriginal or Torres Strait Islanders, the majority are of Aboriginal descent, with 2.6% of persons being of Torres Strait descent.

People of Aboriginal and Torres Strait Islander descent primarily reside in the more established and lower socio-economic areas of St. Marys, Werrington and Cranebrook.

For further information please refer to Table 3.1.3 of Appendix B.

### 3.1.4 PENRITH LGA ECONOMIC CHARACTERISTICS

Workforce and economic characteristics of the Penrith LGA outlined below are derived from Penrith City Council's Community Profile (ID 2007) and the ABS Census of Population and Housing 2001 and 2006. These characteristics provide indicators for the types of industries residents in Penrith LGA work and how they access their place of work, which provides insight into movement patterns across Penrith LGA. For further information please refer to Appendix B.

#### 3.1.4.1 Income

In 2006, just under one quarter (23.2%) of all households in Penrith LGA had a low weekly household income (\$0-\$649 per week), another quarter (24.2%) of all households in Penrith LGA earned a medium to low annual salary (\$650-\$1,199) and 23.8% of households earned a medium to high weekly income (\$1,200-\$1,999). A smaller proportion (17.9%) earned a high weekly income (\$2,000+).

In comparison to WSROC and the Sydney SD a slightly higher number of households in Penrith LGA earn a medium to high salary and a slightly less number of households earned a low salary, when compared to the Sydney and WSROC average. For further information please refer to Table 3.1.4.1 of Appendix B.

### 3.1.4.2 SEIFA Index of Disadvantage

The SEIFA Index of Disadvantage 2006 provides a numerical value to describe the level of relative socio-economic disadvantage in a Local Government Area. A high SEIFA score indicates that the area has few households with low socio economic indicators and is generally not disadvantaged. A lower score indicates that many households are impacted by a socio-economic disadvantage.

In 2006, Penrith LGA had a SEIFA Index of 999 is slightly above the average for the WSROC region (1008). Table 3.1.4.2 below outlines the SEIFA Scores of WSROC LGAs.

Table 3.1.4.2 WSROC SEIFA Index LGA Scores

WSROC SEIFA Index LGA Scores			
Blacktown	983	Holroyd	989
Fairfield	925	Bankstown	970
Parramatta	1019	Baulkham Hills	1156
Liverpool	988	Blue Mountains	1059
Auburn	974	Hawkesbury	1025
Penrith	999	<i>WSROC Average</i>	<i>1008</i>

Source: ABS 2006

### 3.1.4.2 Qualifications

Within Penrith LGA a higher proportion of residents aged 15 years and over have a vocational qualification (18.8%) than a tertiary qualification (14.7%) The proportion of tertiary qualified residents in Penrith LGA is significantly lower than that for WSROC 20.7% and that of the Sydney SD (28.1%).

Just over half (52.7%) of residents within Penrith LGA aged 15 years and over have no qualifications, it is noted that a significant proportion of these residents may still be at school or studying. While, a similar proportion of residents in the WSROC region have no qualifications (49.2%) a significantly lesser proportion of Sydney residents are not qualified (42.8%). For further information please refer to Table 3.1.4.2 of Appendix B.

### 3.1.4.3 Employment Status

Penrith LGA enjoys a high level of employment. In 2006 the total labour force of Penrith LGA was 87,653 persons, with majority being in full time employment. 38,411 residents of Penrith LGA aged 15 years or older do not participate in the labour force.

In 2006 the proportion of unemployed residents in Penrith LGA was 5.3% (4,643 persons), this was a minor decrease from 2001 where 5.9% of residents were unemployed (5,116 persons). The unemployment rate for Penrith LGA is comparable to the Sydney average but lower than that of the WSROC region where 6.6% of the population were unemployed in 2006. For further information please refer to Table 3.1.4.3 of Appendix B.

### 3.1.4.5 Employment Characteristics

In 2006, just under one fifth of Penrith LGA residents (19%) were employed as Clerical and Administration workers, with significant proportions employed as Technicians and Trades Workers (15.9%), and Professionals (12.9%). These are also the principal occupations in the WSROC region and the Sydney SD. However, Penrith LGA has a lower proportion of people employed as professionals when compared with that in the WSROC region and in Sydney SD.

In 2006, the main industries for employment in Penrith LGA were manufacturing (13.2%), retail trade (12.2%) and health care and social assistance (8.9%). These are also the dominant industries in the WSROC region and across the Sydney SD. For further information please refer to Table 3.1.4.5a and Table 3.1.4.5b of Appendix B.

#### **3.1.4.6 Car Ownership and Journey to Work**

In 2006, the majority of households in Penrith LGA own at least one car (84.9%), with nearly a fifth of households owning 3 or more cars. Car ownership rates are comparable to the WSROC region (81.5%) but are significantly higher than that of the Sydney SD (78.1%). 8.7% of Penrith households did not own a car, which, while lower than that for the Sydney SD (12.6%) it equates to 5,105 households that do not have a car.

The car is the dominant mode of transport in the journey to work for Penrith LGA residents. In 2006, 68.3% of journeys to work were by car either as a driver or passenger, this was a 6.3% increase from 2001.

The dominant mode of public transport for journey to work for Penrith LGA residents is the train, with 9.4% or 7,786 residents travelling to work via train. Train patronage in the Penrith LGA has decreased by almost 1,000 people since 2001. For further information please refer to Table 3.1.4.6 of Appendix B.

#### **KEY ISSUES: DEMOGRAPHIC TRENDS**

**Recent Population Growth:** Recognise that in recent years the growth rate for Penrith has significantly decreased and the population has stabilised to around 170,000 persons.

**Age Structure:** Recognise that Penrith continues to have a relatively large proportion of children and young adults, evident of extensive fringe growth in the past. However these groups have begun to decline in recent years.

**Ageing Population:** Recognise that following decades of new growth, the Penrith population is reaching maturity and are beginning to age. As a result there has been increased growth in the older age groups.

**Household Change:** Recognise that while families with children are the dominant housing type for Penrith, in recent years the proportion of couples with children households have declined and the proportion of lone person households and couples without children households have increased.

**Special Housing Needs:** Ensure that the needs of cultural groups, including Aboriginal and Torres Strait Islanders are met.

**Special Housing Needs:** Ensure that the needs of disadvantaged households in Penrith LGA are met.

**Economic Status:** Recognise that there is diversity in the economic status of households in Penrith, the majority of residents earn a low to medium salary and there are very high levels of employment.

**Car Dependency:** Recognises that Penrith has very high levels of car ownership and the majority of journeys are taken by car.

#### **3.1.5 POPULATION PROJECTIONS**

The following provides a snapshot of the demographic and housing trends Penrith LGA in 2031. The data is primarily based upon the Penrith City Population and Household Forecasts 2001-2021 (I.D. 2007), referred to as the 2001-2021 Penrith LGA Forecast. This forecast provides projections between 2001 and 2021 but also takes into consideration the 2006 ABS Census Data for Penrith LGA and the Department of Planning's projections

for growth through to 2031 which were used in the North West Draft Subregional Strategy. This strategy establishes a dwelling target for an additional 25,000 dwellings or additional 66,250 people in Penrith LGA between 2004 and 2031 (based on an average household size estimates for 2031 of 2.65 people). The following provides an overview of key age and housing characteristics for Penrith LGA up to 2031.

Detailed tables of population projections are included in Appendix B.

### 3.1.5.1 Review of population projections to 2021

The 2001-2021 Penrith LGA Forecast is based upon the 2001 ABS Census data and built upon assumptions for residential development, net migration, fertility rates and death rates for the Penrith LGA which occurred between 1996 and 2001. The 2001-2021 Penrith LGA Forecast has been reviewed in the context of the 2006 ABS Census, which was released after the 2001-2021 Penrith LGA Forecast was completed. The review indicates that the actual 2001-2006 growth rate was substantially lower than that projected in the 2001-2021 Penrith LGA Forecast.

To account for these differences, this analysis has adopted two growth scenarios; the higher growth Scenario A and more conservative projections in Scenario B:

Scenario A	Scenario B
Based on the 2001-2021 Penrith LGA Forecast. Assumes relatively consistent growth from 2001 to 2021 with an average growth rate of 0.9%.	Correlates more strongly to slow population growth trends between 2001-2006 (ABS Census) and therefore applies a more conservative annual growth rate of 0.6%.

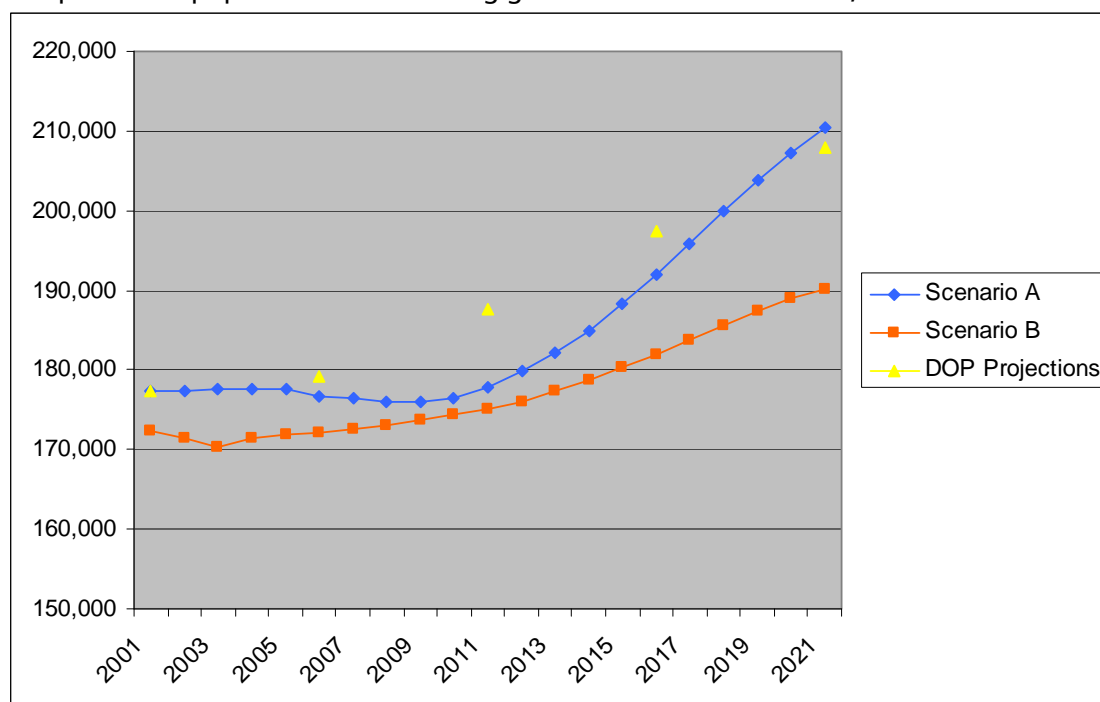
The projected population growth for both Scenarios plus, the projected growth rates of the Department of Planning is shown in Table 3.1.5.1 and Figure 3.1.5.1.

Table 3.1.5.1: Comparison of population and dwelling growth of Scenario A and B, 2001-2021

	Base population 2001	Base households 2001	2021 Population	Additional Population	2021 Households *	Additional Households
Scenario A	177,411	59,214	210,484	33,063	77,950	15,790
Scenario B	172,397	57,243	190,000	17,603	70,370	8,210

*\*Assumes a household density of 2.7 people per household*

Figure 3.1.5.1  
Comparison of population and dwelling growth of Scenario A and B, 2001-2021



Source: I.D Solutions 2007 and HASSELL 2008

### 3.1.5.2 Assumptions to 2031

As noted above the population projections build upon the 2001-2021 Penrith LGA by reviewing the projections against 2006 ABS Census data and extrapolating trends through to 2031. The only difference between the two growth scenarios is the change in growth rates between 2015 and 2021. The key assumptions for demographic change developed in the 2001-2021 Penrith LGA Forecast are as follows:

**Residential Development:** The forecast residential development in Penrith LGA is consistent with the 2001-2021 Penrith LGA Forecast and is based upon an analysis of 2006 census dwelling counts, historical ABS building approvals and a survey of each locality to determine potential of further development (infill, vacant lots, major redevelopment sites, greenfield developments etc).

**Migration:** The forecast migration movements in Penrith LGA presume the following: a low number of new dwellings being constructed during the period of 2001-2011 and the expectation that young adults and families will move elsewhere to establish. Lastly, little migration change is expected in the 70+ age group.

**Fertility rates:** The forecast number of births in Penrith LGA is consistent with the I.D. Profile and is a reflection on the fertility rates assumed for small areas. Fertility rates are assumed to decrease from 2.01 in 2001 to 1.99 in 2006 to match historical births, before gradually decreasing further to 1.90 by 2021. This is based on lower rates of births in younger ages and marginally higher rates in older ages.

**Death rates:** The forecast number of deaths in Penrith LGA is consistent with the I.D. Profile and is a reflection on the death rates assumed for small areas. These rates are based on historical estimates for Penrith City, which have been extrapolated into the future, assuming an increase in expectation of life in all age groups, except 85+. Although women are still forecast to outlive men, the increase in life expectancy over time for men is expected to be higher compared to women.

**Non-private dwellings:** The estimates for non-private dwellings are consistent with the I.D. Profile and anticipate that more than 2,400 people were estimated to be living in non-private dwellings in Penrith LGA in 2001. A significant share of the non-private dwellings in Penrith LGA is related to aged care and to a lesser extent, correctional facilities. It is assumed there is continued expansion of aged care services in the LGA with the number of persons in non-private dwellings increasing to 2,967 in 2011, 3,147 in 2016 and 3,327 in 2021.

### 3.1.5.3 Comparison of Scenario A and Scenario B population and household change to 2031:

The tables below outline the future projections in terms of population growth, age structure and households for Penrith LGA to 2031. Detailed tables for each scenario are in Tables 3.1.5.3 a-d of Appendix B.

	<b>Scenario A: Continued Growth</b>
Population Growth to 2021-2031	233,560 people by 2031 (+56,149 people) (Adopts an annual growth rate of 1.04% to meet Department of Planning population target to 25,000 additional dwellings by 2031)
Age Structure	Children (0-17 years) 20.2% Young Adult (18-34 years) 25.7% Adult (35-59 years) 42.0% Older person (60 years +) 16.1%
Households 2031	86,503 dwellings (+25,000 dwellings) The household structure to 2031 under Scenario A illustrates the proportion of couples with children households will continue to decline through to 2031 whilst the number of lone person households will increase. Couples with no children marginally increase during this period.

	<b>Scenario B: Conservative Growth</b>
Population Growth to 2021-2031	204,503 people by 2031 (+32,940 people) (Based on a growth rate of 0.7% between 2021-2031, which is consistent with the growth rate 2006-2021)
Age Structure 2031	Children (0-17 years) 20.2% Young Adult (18-34 years) 25.7% Adult (35-59 years) 42.0% Older person (60 years +) 16.1% (Note that the age structure is expected to be constant under both scenarios due to similarities between ABS and ID Data in 2006)
Households 2031	74,853 dwellings (+16,200 dwellings) Similar to that of Scenario A, it is assumed couples with children households will decline where growth will be experienced in lone person households.

Source HASSELL 2008

### 3.1.5.4 Discussion of Population Projections

The two adopted population projection scenarios to 2031 provide quite different growth projections for Penrith LGA in 2031. Scenario A is based upon the comprehensive demographic projections of the 2001-2021 Penrith LGA Forecast and

adopts a medium to high growth projection with a total of 233,560 people by 2031. Scenario B uses the same assumptions as the 2001-2021 Penrith LGA Forecast but considers the slower growth rates experienced between 2001 and 2006 to make a more conservative growth projection for 2021.

This study adopts the Scenario A projections for the period of 2006 to 2031. This is primarily as these projections align with the dwelling target of an additional 25,000 dwellings for the Penrith LGA by 2031 as established by the State Government's Draft North-West Sub Regional Strategy. In addition the Urban Strategy needs to ensure that should the higher growth scenario occur, Penrith LGA has the dwelling capacity to accommodate this growth.

However, like all demographic projections, both Scenarios are based upon a series of assumptions for future dwelling growth and population change and the final population total and structure in 2031 will be influenced by its own set of factors.

The Penrith Urban Strategy will be designed to be flexible enough to cater for either population growth under either Scenario A or Scenario B. As with all strategies, it is recommended that the population projections are reviewed and revised following the 2011 ABS Census.

#### **KEY ISSUES: POPULATION PROJECTIONS**

**Future Population Growth:** Ensure future policies are suitably flexible to cater for either a low or high population growth scenario. A low growth scenario envisages a population of 204,503 people and a high growth scenario envisages a population of 233,560 persons.

**Ageing Population:** Recognise that the proportion of older people in Penrith will continue to increase through to 2031.

**Household Structure:** Recognise that the proportion of couples with children households will decline by approximately 5 percentage points and the proportion of lone person households will increase by the same amount.

**Accommodating Future Population Growth:** Recognise that household size will continue to decrease through to 2031. Between 16,000 and 25,000 additional dwellings will be required to accommodate growth.

**Review of Population Projections:** Ensure population projections for Penrith LGA are reviewed following the 2011 Census.

## 3.2 HOUSING PROFILE

This section provides an overview of the existing housing stock in terms of volume, tenure characteristics, dwelling types and recent levels of housing production. This information is important in determining the housing structure of Penrith LGA and analysing how this meets the needs of current and future populations.

### 3.2.1 DEFINITIONS OF DENSITY

Density is a term that is often used in relation to housing and built form but it can often be used in a way that seeks to imply a visual, environmental or amenity impact that is misleading. In particular, the term 'medium-density' or 'high-density' is often used to denote a housing form with a lack of space, lack of privacy, excessive residents and poor amenity.

For the purposes of this Study we will predominantly use the term net density when talking about housing types. However, we will also seek to provide a gross density when comparing this to suburb-wide figures.

The definitions of net and gross density are as follows:

*Net developable land means land that is to be occupied by development, including internal streets plus half the width of any adjoining access roads that provide vehicular access, but excluding the following land:*

- *Land set aside for open space and recreation, community facilities, transport management facility, or water cycle management facilities and to be acquired through an contributions plan prepared under section 94EA of the Environmental Planning and Assessment Act 1979,*
- *Land occupying half the width of roads adjoining open space areas provided or to be provided under this Plan or another contributions plan prepared under section 94EA of the Environmental Planning and Assessment Act 1979,*
- *Flood affected land, below the 1 in 100 year flood level,*
- *Public open space,*
- *Core and buffer riparian zones,*
- *Biodiversity/environmental conservation areas,*
- *Public schools,*
- *Ambulance stations, fire stations and police stations,*
- *State/regional RTA roads,*
- *Existing roads to be included as part of the road network, and*
- *Bus/rail interchanges*

*Source: WELL Development Contributions Plan*

### 3.2.2 DWELLING TYPES AND LOCATION

The Penrith LGA housing landscape is generally characterised by one and two storey separate dwellings (as shown in Figure 3.2.1). This type of housing represents 85.2% of the housing stock which is slightly lower than that in the North Western Sydney SD (89.2%), but significantly higher than the Sydney SD (63.6%).



Figure 3.2.1: Examples of low density dwellings in Penrith LGA



Source: HASSELL 2008

Separate houses are distributed across the locality within the outer peripheral suburbs, particularly the newer suburbs such as Glenmore Park and Cranebrook where more than 95% of dwellings are separate houses, but also in areas of older housing stocks such as St. Clair.

8.1% (4,635 dwellings) of dwellings in the Penrith LGA are semi-detached, row or terrace houses. This is substantially less than the Sydney SD average of 11.8% but higher than the average for North Western Sydney SD at 3.1%.

Flats, units and apartments account for 6.0% of the occupied housing stock in Penrith LGA, which is a marginal decrease since 2001 (6.2%). Again, the proportion of flats, unit and apartments is significantly lower than the Sydney SD average (23.9%) but comparable to North Western Sydney (5.2%).

Figure 3.2.2: Examples of medium density housing stock (left) and high density housing stock (right) in Penrith








Source: HASSELL 2008

Review of the distribution of dwellings indicate that generally higher density housing types, such as flat, units and apartments are clustered around the inner Penrith LGA areas, near the Penrith City Centre and along the Great Western Highway.

According to the 2006 Census on Population and Housing, the average household size in Penrith LGA was 2.9 persons per household. This is consistent with the North Western Sydney SD region but slightly higher than that for the Sydney SD. The following figure illustrate various density ranges.

Figure 3.2.2a: Illustration of various density ranges

				
10-15 dw/ha	25-30dw/ha	50 dw/ha	75dw/ha	100 dw/ha
Low Density	Low-Medium Density	Medium Density	Medium-High Density	High Density

### 3.2.3 CURRENT HOUSING TRENDS

Penrith LGA has traditionally been a typical 'urban fringe' area with high rates of growth and development in new housing estates and a high influx of young families with mortgages. Most of this growth was fuelled by the property boom in the late nineties to early 2000s.

#### 3.2.3.1 Dwelling Types

In the 2006 Census there were 62,160 private dwellings in Penrith LGA, with approximately 3,248 (5.2%) of these dwellings vacant. Between 2001 and 2006, the number of dwellings in Penrith LGA increased by 3.7% (2,212 dwellings), which is significantly less than the dwelling growth rate in the WSROC region at 6.3% and Sydney SD at 6.9%.

Separate dwellings have also remained the most dominate dwelling type with an additional 260 separate dwellings approved between 2006 and 2008. For further information please refer to Table 3.2.3.1 of Appendix C.

#### 3.2.3.2 Tenure

Mortgages are the primary tenure type in Penrith LGA accounting for 41.8% or 24,639 dwellings. This is a large portion of private households being purchased when compared to WSROC and the Sydney SD and appears to be a symptom of a younger housing market. In comparison, only 26.5% or 15,624 dwellings are fully owned within Penrith LGA.

Renters account for 25.9% or 12,639 households within Penrith LGA. The main group of renters rent private dwellings (21.0% of all households). Private renters are primarily located in the inner suburbs of Kingswood and Werrington, however there is also a substantial private rental market in Glenmore Park.

The other rental group are those who rent from the Government generally through the NSW Department of Housing. This group accounts for 4.5% of all households (2,547 households) which is a lesser percentage than that of the WSROC region (6.4%) or Sydney SD (5.1%).

For further information please refer to Table 3.2.3.2 of Appendix C.

### 3.2.3.3 Housing Costs

In 2006, the median housing loan repayment for a dwelling in Penrith LGA was \$1,560 per month, which was slightly lower than the Sydney SD average (\$1,833). Similarly the median rent for Penrith LGA was \$210 per week was less than the median rent for the Sydney SD at \$250 per week. This indicates that Penrith LGA is relatively affordable when compared to the Sydney SD, however both the average housing loan repayment and weekly rent in Penrith LGA is comparable to the North Western Sydney SR.

Between 2001 and 2006 the median housing loan repayment and weekly rental costs have substantially increased. Median housing loan repayments have increased by \$361-\$560 per month and weekly rent has increased by \$11-\$60 per week. Similar increases are evident in both North Western Sydney SR and Sydney SD and are reflectively of the decline of housing affordability.

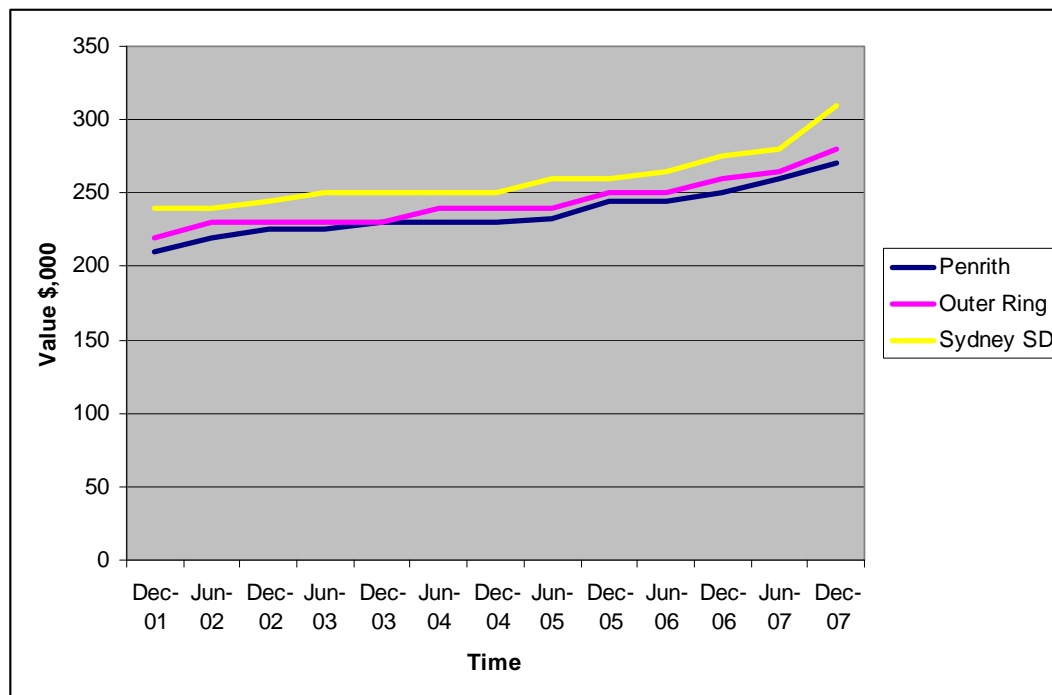
For further information please refer to Table 3.2.3.3 of Appendix C.

### 3.2.3.4 Housing Values

Between 2001 and 2007 purchase prices of separate houses and apartments in Penrith LGA have steadily increased. This trend has also been apparent in the Outer Ring LGAs and Sydney SD.

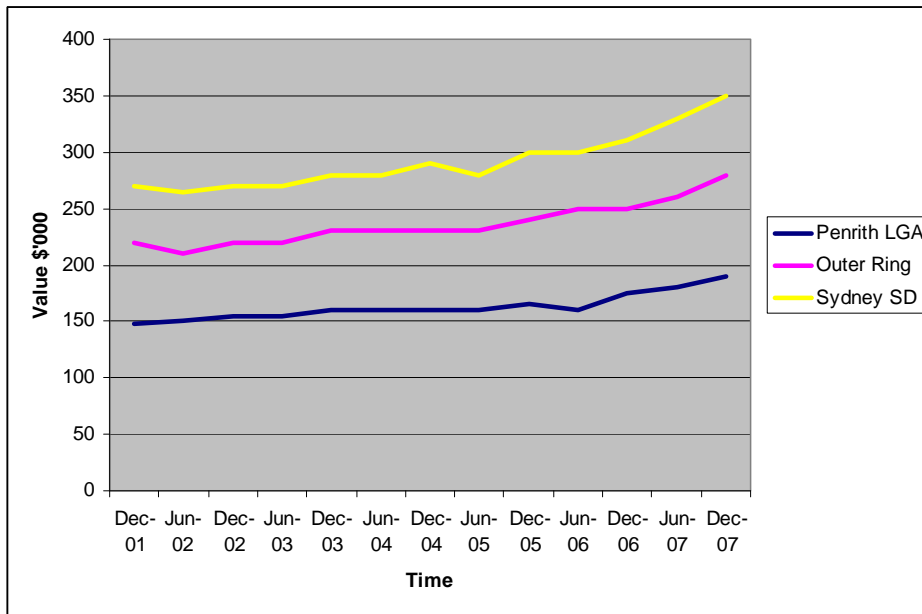
The average price of a three bedroom separate dwellings in Penrith LGA (\$270,00) is slightly more affordable than the Outer Ring LGAs (\$280,000) and the Sydney SD (\$310,000). However, apartments in Penrith LGA remain a more affordable option when compared to the Outer Ring LGAs and Sydney SD. For further information please refer to Table 3.2.3.4 of Appendix C.

Figure 3.2.3: Average purchase price for 3 bedroom separate houses 2001-2007



Source: NSW Department of Housing, Time series of median weekly rents 2001-2007

Figure 3.2.4: Average purchase price for 2 bedroom apartments 2001-2007



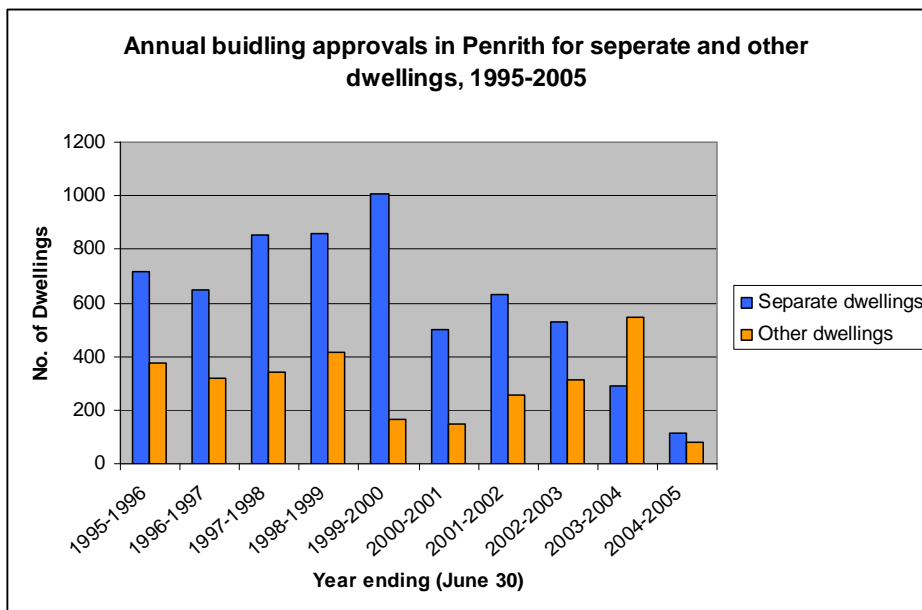
Source: NSW Department of Housing, Time series of median weekly rents 2001-2007

### 3.2.3.5 Local Property Market

The most recent property data available from 2006 to 2008 illustrates the slowing of this property boom and resultant residential growth. Similar trends are evident in the previous demographic analysis which project population losses in Penrith LGA between 2006 and 2011.

Building activity in Penrith LGA has been relatively slow with only 563 dwellings approved between 2006 and 2008. This equates to approximately 280 per year which is substantially lower than the preceding years. For further information please refer to Tables 3.2.3.5 a/b of Appendix C.

Figure 3.2.3.5. Building Approvals in Penrith LGA 1995-2006



Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/0

## KEY ISSUES: HOUSING TRENDS

**Affordable Housing:** Recognise that Penrith LGA plays an important role in providing a source of affordable housing to the Sydney SD housing market.

**Affordable Housing:** Recognise that Penrith has an important stock of public housing units with a total of 2,500 dwellings which needs to be protected into the future.

**Residential Development:** Recognise that the Penrith LGA housing market is diversifying, with recent strong growth in multi-unit developments within existing areas and slower growth for separate dwellings particularly in new suburbs.

**Residential Development:** Recognise that recent trends suggests that the existing inner areas of Penrith LGA have been the focus of new development with double the amount of development than that experienced in new fringe suburbs.

### 3.2.4 CURRENT SUPPLY AND DEMAND

Penrith Council has previously investigated new growth areas to assist in satisfying housing demand up to 2021. The following provides a review of this information to inform housing options up to 2031.

#### 3.2.4.1 Residential Supply in Penrith LGA

The supply of residential land in local government areas located on the urban fringe generally refers to the stocks of greenfield land that has been identified for future residential development. However, Penrith LGA contains a number of significant infill development sites and there is also potential to increase densities within established areas, which assists in consolidating the urban area. The following provides an overview of both greenfield and brownfield (infill) residential stocks in Penrith LGA.

##### *Existing supply of greenfield land*

Penrith Council has identified urban release areas to accommodate a substantial proportion of residential growth. These areas are planned to provide between 13,000-16,000 new dwellings up to 2021. The final dwelling estimate is dependent on the outcomes of detailed studies for a number of sites, with 13,000 dwelling considered a realistic outcome. These dwelling estimates are consistent with the Metropolitan Development Program, which monitors the supply of greenfield land across the Sydney metropolitan region.

Table 3.2.4.1a Identified Urban Release Areas in Penrith LGA, 2007

	Release Area	Size (ha)	Planned Dwellings	Planned Job Numbers *	Planned Population	Planned Employment Areas (ha)**	Plans Endorsed by Council
1	Werrington Enterprise Living and Learning Precinct (WELL)	645 (incl 2,3,4,5,14)	466	2596	1258	135 (incl 2,4,5,14)	P[s.94]
2	Werrington Mixed Use Area (in WELL)	22	240	incl. WELL	648	8	[LEP,DCP]
3	Claremont Meadows Stage 2 (in WELL)	63	511	incl. WELL	1500	n/a	[LEP,DCP,s.94]
4	Caddens Release Area including WELL Precinct Centre (in WELL)	127	1,247	incl. WELL	2700	1	[LEP,DCP]
5	South Werrington Urban Village (in WELL)	48	414	incl. WELL	1178	19	[LEP,DCP]
6	Penrith Lakes	1937	4,900	5260	14000	60	
7	Waterside	70	701	tba	2150	17	
8	Glenmore Park Stage 2	225	1,628	VPA	4600	n/a	[LEP,DCP,S94]
9	St Marys Release Area ( <i>Western and Central Precinct</i> ) ( <i>Dunheved Employment Precinct - Penrith</i> )	1011	3,420	<i>3460</i> <i>(240)</i>	8,900	<i>43.3</i> <i>(11.9)</i>	Precinct Plans
10	North Penrith Urban Area	50	850	950	2000	9.5	[LEP,DCP]
	<b>Totals</b>		<b>14,377</b>		<b>38934</b>		

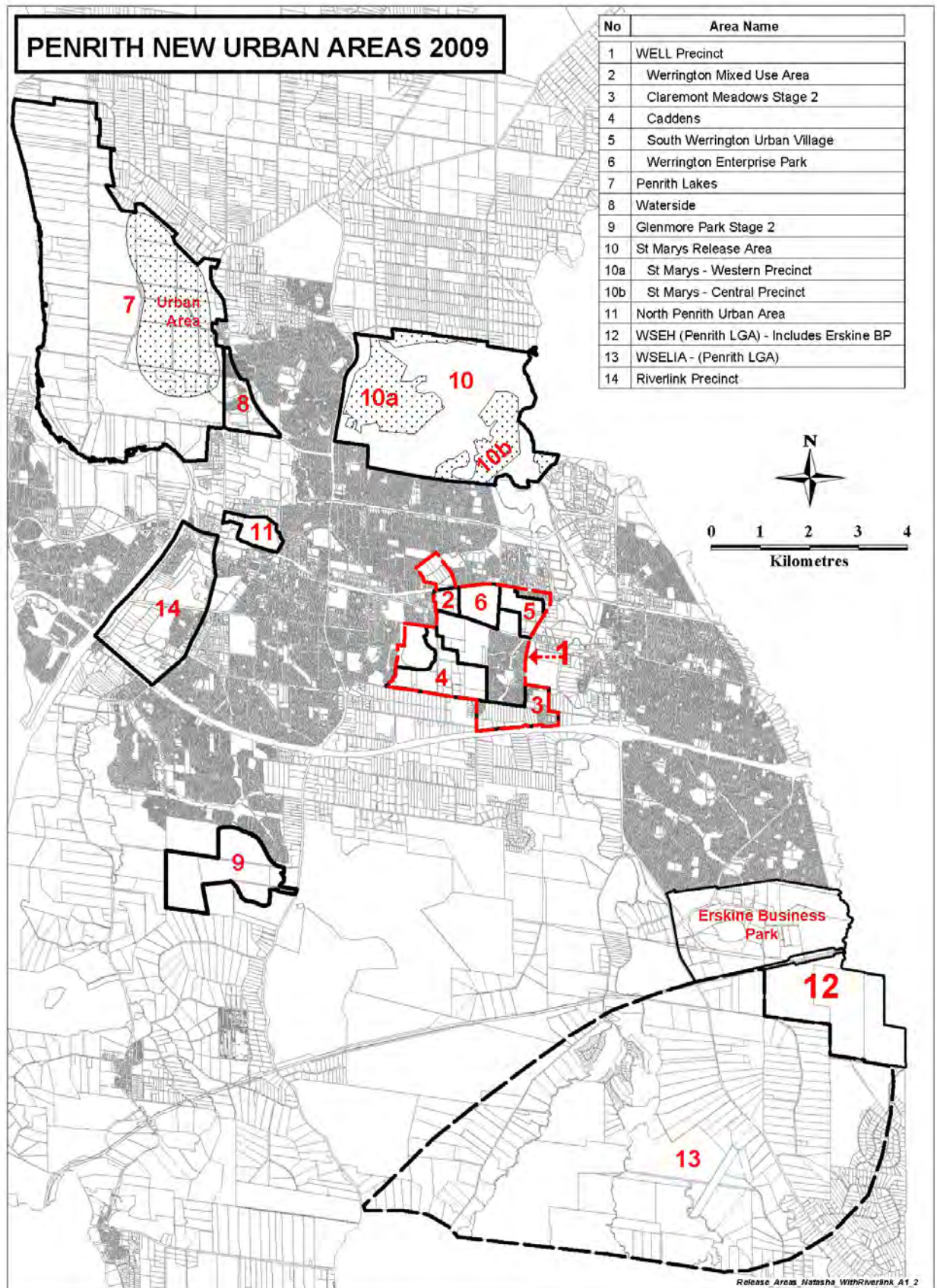
	Release Area	Size (ha)	Planned Dwellings	Planned Job Numbers *	Planned Population	Planned Employment Areas (ha)**	Plans Endorsed by Council
11	Erskine Business Park	525	n/a	6000		324	SEPP
12	Western Sydney Employment Hub <i>(Penrith - Sector 8 Lands South of SCA pipeline)</i>	369 (Penrith)	n/a	tba			
13	Western Sydney Employment Lands Investigation Area	5268	n/a	tba			
14	Werrington Enterprise Park (in WELL)	58	tba	6134		58	
	<b>Totals</b>			<b>24400</b>			

\* includes on and off site jobs

\*\* includes gross and net developable areas

The location of these new urban areas are shown in Figure 3.2.4.1.

Figure 3.2.4.1 Distribution of new urban areas in Penrith LGA, 2008





### *Existing supply of infill sites*

As part of the Penrith Population and Housing Forecast, ID Profile (2006) undertook a review of all suburbs within Penrith LGA and identified their potential for development. This data is particularly useful when identifying the number and potential lots of infill sites within Penrith LGA.

The data identifies that there is opportunity for between 11,100 additional dwellings available through a combination of in-centre, infill and development sites within existing Penrith LGA areas (Refer Table 3.2.4.1b). The variance is dependent upon the site specific densities for each future site suitable for development.

It should be noted this assumes all significant forms of supply and lots are able to be developed. It is likely that a substantial proportion will be unsuitable for development due to site constraints and market forces. Therefore, some areas will remain unchanged for a long period of time.

For further detail on how each of these have been determined please refer to ID Dwelling Opportunities Analysis for Penrith City Council, September 2007 and Tables 3.2.4.1 c-g of Appendix C.

Table 3.2.4.1b: Dwelling Opportunity in Existing Areas

Type	Dwelling Opportunity	Proportion of Opportunity	Key Areas (potential dwellings)
In-centre Development	6,826 dwellings	62%	Penrith City Centre (4,808 dwellings) St Marys Town Centre (1,430 dwellings) Kingswood (388 dwellings) South Penrith (172 dwellings)
Large Residential Lots	2,609 dwellings	23%	St Clair (411) South Penrith (289) St Marys (255) Colyton (243)
Development Sites	587 dwellings	5%	North Penrith Urban Area (524) Claremont Meadows (39) Werrington Centre (24)
Vacant Land	1,077 dwellings	10%	Glenmore Park (339) Cranebrook (135) Emu Plains (106) St Marys (81)
TOTAL	11,100 dwellings	100%	-

*Source: I.D Dwelling Opportunities Analysis for Penrith City Council, September 2007*

### 3.2.4.2 Demand for housing

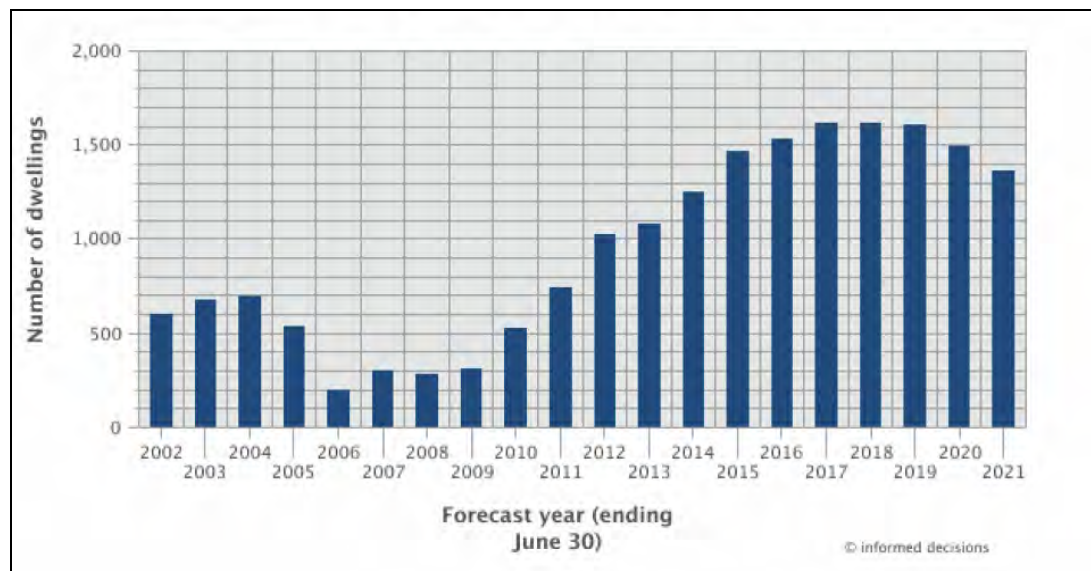
The demand for housing in Penrith LGA through to 2031 is largely centred on population projections and the growth target established for Penrith LGA in the Draft North Western Sub Regional Strategy, produced by the Department of Planning. The Urban Study and Strategy therefore establishes a target for an additional 25,000 dwellings between 2007-2031. As noted previously, this equates to an additional 57,181 persons and is consistent with the growth projections for Penrith LGA.

An additional 25,000 dwellings to 2031 would bring to the total number of dwellings up to 88,121 dwellings or 233,520 persons calculated by 2.65 persons per household.

The Penrith Population Projections (ID Data 2006) have provided a greater level of detail for housing projections up to 2021. These estimates equate to an additional 15,398 dwellings up to 2021. Figure 3.2.4.2 below illustrates the anticipated pattern of take up between 2002 and 2021. It shows that demand for dwellings will be low up to 2009 and peak at around 1,600 dwellings per annum around 2017-2018.

Based on these trends, it is likely that demand for dwellings will decline from 2021 and through to 2031 and the remaining 10,000 dwellings would be provided during the period of 2021-2031 at a rate of approximately 1,000 dwellings per annum which is consistent with historic and projected take up rates.

Figure 3.2.4.2: Penrith LGA assumed new dwelling gain (per annum) 2002-2021



Source: Penrith City Population and Housing Forecasts, (ID Profile)

### 3.2.4.3 Adequacy of Existing Supply

The location of future dwellings is anticipated to be divided into 12,000 dwellings within established areas and 13,000 dwelling within greenfield sites. These assumptions presume that all greenfield sites and infill sites are able to be converted for residential use.

The purpose of the Penrith Urban Strategy is to consider whether these lots are appropriate for development and whether the residential opportunities meet the diverse needs of the Penrith LGA community in terms of a range of dwelling types, household needs and housing choice. These issues are examined in the following sections.

Some additional considerations are noted:

- The current split in dwelling potential is 48% of future development in existing areas and is therefore contrary to the objective of the Draft North Western Sub Regional Strategy which envisages that 60-70% of new housing will be accommodated in existing urban areas, focused around centres and corridors. Therefore, further consideration is required to determine whether there is further opportunity to intensify the level of development within existing areas and to review the proposed densities within the release areas.
- With potential for 52% of future development to be in Greenfield areas, policies requiring a suitable mix of dwelling types are required to ensure the mix of dwellings is compatible with the future needs of Penrith LGA's community.

Table 3.2.4.3: Summary of potential lot sizes within established areas

Density	Lot Size/ Form	Greenfield	In Centre	Development Sites	Large Lots	Vacant Lots	Total
15/ha	660sqm						
20/ha	500sqm	13,000*		36		73	13,109
25/ha	400sqm		573	551			1124
37.5/ha	265sqm				2609	480	3089
50/ha	200sqm		988			80	1068
75/ha	135sqm		2567				2567
100/ha	100sqm		3423				3423
120/ha	83sqm					444	444
Total		13,000	7,551	587	2,609	1,077	24,788

Source: Adapted from i.d. Dwelling Opportunity Analysis for Penrith City Council, 2007 \* Approximate yield of future greenfield sites based on NSW Metropolitan Strategy target for 15 lots per hectare in new release areas.

#### KEY ISSUES: CURRENT RESIDENTIAL LAND SUPPLY

**Land Supply:** Recognise that desk top analysis of dwelling capacity in Penrith LGA reveals that there are sufficient dwelling opportunities to meet the target of an additional 25,000 dwellings by 2031.

**Dwelling Capacity:** Recognise the dwelling capacity analysis presumes that there is potential for 13,000 new dwellings on the fringe and that a third of all new development will be medium to high density.

**Dwelling Capacity:** Ensure sites identified in the Dwelling Opportunity Analysis 2007 are suitable for development and review dwelling opportunities analysis once ground truthing of key sites is complete.

**Dwelling Densities:** Ensure that the densities of identified sites, particularly medium and high densities, are compatible to the physical constraints of the sites and the surrounding context of the site.

#### 3.2.5 HOUSING NEEDS AND CHOICE

At a Council level, housing needs are a reflection of the age groups, household types and housing choices of the population. These elements determine the various kinds of housing needs across the local area.

Housing choice refers to the propensity for households to choose the type of dwelling which is most compatible to their needs. However, their needs are generally not just a reflection of size or type of household but also reflect income and the ability to access employment, education and the like. For example, Randolph (2003) found within Penrith LGA there was a mismatch between the available housing stock and demand, as older people and smaller households are not necessarily living in smaller houses.

### **3.2.5.1 Housing trends 1991-2006**

As noted through the demographic analysis, while Penrith LGA is ageing, it remains primarily a young and family oriented area. In 2006, this was strongly reflected through a high proportion of families with children (51.7%) and relatively lower proportion of lone person households (18.02%).

A review of the trends on household types by dwelling types in Penrith LGA between 1991 and 2006 highlights a number of key trends and housing preferences by different household groups:

- There has long been a prevalence of households residing in separate houses, regardless of their household size and formation. In 1991, 86% of all households resided in separate dwellings, by 2006 this had slightly declined to 84%. This appears to be due to a minor decrease in the proportion of couples and one parent families residing in separate dwellings.
- The number of semi-detached dwellings doubled between 1991 to 2006 and now account for 5% of the housing stock. In 2006 lone person households had the largest representation accounting for 32% of semi-detached dwellings. One parent families also had a large representation at 21%.
- The 2006 ABS Census Data shows no growth in the number of flats and units (for both less and more than 4 in a block) and therefore there has been no change in the trends for household types, although building approvals may challenge this data. Lone person households are the most represented household groups in flats and units for both less and more than 4 units in a block. One parent families in 2006 accounted for between 13-15% of flats and units, and couples without children represented approximately 12% of households.

Figure 3.2.5.1a: Household type by dwelling type in Penrith LGA, 1996

Household Type	Separate house		Semi-detached		Flat/unit in a block under 4 storeys		Flat/unit in a four or more storey block		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	
Couple with children	23,817	96%	488	2%	328	1%	57	0%	47	0%	24,737
Couple with no children	9,198	90%	458	4%	469	5%	48	0%	51	0%	10,224
One parent household	5,411	81%	612	9%	509	8%	90	1%	27	0%	6,649
Lone person household	4,849	65%	684	9%	1,602	21%	204	3%	167	2%	7,506
Group household	1,044	68%	221	14%	215	14%	42	3%	20	1%	1,542
Other	580	67%	76	9%	139	16%	25	3%	42	5%	862
<b>Total</b>	<b>44,899</b>	<b>87%</b>	<b>2,539</b>	<b>5%</b>	<b>3,262</b>	<b>6%</b>	<b>466</b>	<b>1%</b>	<b>354</b>	<b>1%</b>	<b>51,520</b>

Source: 2006 ABS Census, Time Series Profile, Penrith LGA

Figure 3.2.5.1.b: Household type by dwelling type in Penrith LGA, 2006

Household Type	Separate house		Semi-detached		Flat/unit in a block under 4 storeys		Flat/unit in a four or more storey block		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	
Couple with children	22,546	95%	827	3%	328	1%	19	0%	43	0%	23,763
Couple with no children	11,058	89%	851	7%	469	4%	28	0%	67	1%	12,473
One parent household	6,813	81%	1,017	12%	509	6%	34	0%	21	0%	8,394
Lone person household	6,629	65%	1,583	16%	1,603	16%	126	1%	206	2%	10,147
Group household	971	66%	267	18%	215	15%	10	1%	6	0%	1,469
Other	1,428	76%	250	13%	139	7%	37	2%	29	2%	1,883
<b>Total</b>	<b>49,445</b>	<b>85%</b>	<b>4,795</b>	<b>8%</b>	<b>3,263</b>	<b>6%</b>	<b>254</b>	<b>0%</b>	<b>372</b>	<b>1%</b>	<b>58,129</b>

Source: 2006 ABS Census, Time Series Profile, Penrith LGA

### 3.2.5.2 Drivers of Housing Needs and Choice

Housing needs and choices of communities change and evolve over time in response to the changing economic and social contexts, as well as changing consumer preferences. The following identifies the issues which will shape housing needs and choices through to 2031:

#### *Demographic Change*

As noted in Chapter 4, Penrith LGA is facing significant changes to the structure of the population up to 2031 which has implications on the types of dwellings in Penrith LGA:

- Couples with children will remain the dominant housing type and expected grow by 6,827 families by 2031.
- The proportion of lone person households will substantially increase in Penrith LGA.
- The Penrith LGA population is ageing, primarily as the boom of families during the 1980s and early 1990s mature. This is providing more demand for diversified housing types such as young couple and lone households and older couple and lone households.

Whilst there are an increased proportion of smaller household types, these groups have traditionally not demanded smaller dwelling types. The majority of smaller household types currently reside in 3 bedroom separate dwellings in Penrith LGA. A greater diversity of housing choices is required in Penrith LGA to meet the demands of these groups.

#### *Availability of Housing Stock*

The Penrith LGA housing landscape is dominated by separate dwellings which represent 85.2% of all housing stock. Medium density housing represents 14.1% of housing stock and provides a variety of semi detached, flats, units and apartments. When compared to Sydney SD there is little diversity in the Penrith LGA housing stock.

More recently in Penrith LGA (between 2006 and 2008) there were more dwellings created out of multi dwelling developments than that of separate dwellings, increasing the supply of medium density housing stock and increasing the diversity of housing stock in Penrith.

#### *Housing Preferences*

Within the Penrith LGA, studies have been undertaken by Terry Burke (2004), Randolph (2003) and i.d. consulting (2007) to determine the housing choices and preferences of the local population. Some key trends emerged from this work:

- Older people and smaller households are not necessarily living in smaller houses.
- Households with lower incomes tend to live in smaller housing types (units and apartments) where higher income households tend to live in separate houses.
- In all age groups, residents of Penrith LGA have a significantly lower propensity to live in higher density dwellings when compared to the Sydney average.

### 3.2.5.3 Future Housing Trends

From the analysis of the Penrith LGA existing demographic trends and population projections through to 2031 above, the following key trends and issues have been identified:

#### *High Proportion of Couples with Children*

Couples with children have long been considered the dominant housing type in the Penrith LGA (Burke 2004) and are representative in the new urban areas within the Penrith LGA, which are marketed towards families. However, between 1991 and 2006 the proportion of couples with children declined from 49.3% of households to 40.7% of households in 2006. The projections through to 2031 illustrate that couple families with

dependents will remain the dominant household group in Penrith LGA representing 37.4% of housing types or 32,352 families. One parent families are also an important component of families with Penrith LGA. In 2006 this group represented 14.5% of all households, but by 2031 it is anticipated that the proportion of one parent families will decline. Some key trends of these groups have been noted:

Separate houses have consistently been the preferred housing type for both couples with children and one parent families.

- Research by I.D. (2007) suggests that there has been a trend for couples with children to live in increasing larger homes.
- Greenfield developments are generally marketed towards couples with children and these new suburbs have also been observed to have a disproportionately large representation of families with children and some of these suburbs, have been described as having a 'monoculture' where there is little diversity in terms of age and socio-economic status (Randolph 2005).
- Renewal of older established suburbs provide an opportunity to re-introduce couples with children into the inner areas of Penrith LGA (Randolph 2005).
- Young couples with children are in the early stages of their housing career and are prepared to accept high levels of housing stress to enter the housing market (Burke 2004).
- One parent families have also primarily reside in separate dwellings however a substantial proportion reside in other forms of dwellings such as semi detached, units and flats as these housing types provide a more affordable housing option.

#### **KEY ISSUES: HOUSING FOR FAMILIES WITH CHILDREN**

**Services and Facilities:** Ensure that outer suburbs provide a sufficient range of services to suit the needs of families, both young and old.

**Open Space:** Recognise that couples with children will continue to be attracted to new residential developments on the fringe particularly where estates provide high amenity parkland areas and facilities.

**Affordable Housing:** Provide a variety of affordable housing for both couples with children and single parent households. This type of housing needs to be located and equipped to cater for children and be suitable for both first home buyers and private renters.

**Affordable Housing:** Recognise that some families with children are in the early stages of their housing career and are prepared to accept high levels of housing stress to enter the housing market.

#### *Ageing Population*

While Penrith LGA has a large portion of families with children, some of these families are maturing as result of growth during the 1980s and early 1990s when young families were attracted to the new residential areas of Penrith LGA. These families have since grown older, many of the children have left home and are starting their own families. Many parents (primarily of the 'baby boomer generation) are downsizing their homes or becoming 'empty nesters' (Randolph, 2005).

The trends here illustrate that the Penrith LGA population is ageing at a faster rate than the Sydney average and the proportion of younger people 0-24 has declined from 45% in 1991 to 38.5% in 2006. The demographic projections for Penrith LGA up to 2031 indicate that the population will continue to age but at a slower rate than experienced between 1991 and 2006.

An ageing population has unique demands for housing within Penrith. This group represents primarily people aged 65+ who are facing the end of their housing career. They are facing decisions whether to continue to reside in the family home, move to a smaller home or to aged care accommodation.

Ageing households have a variety of needs and a few key trends of this group have been noted:

- Within Penrith LGA the majority of older households continue to reside in separate dwellings, many of which are the family home. This may be a reflection of preferences for larger format dwelling but also may suggest that there is a lack of smaller format housing options within Penrith LGA for older households.
- Within Penrith, there is less demand for smaller dwellings, such as semi-detached and attached dwellings, however these smaller format dwellings provide diversity and respond to a variety of needs.
- There is a need for a variety of dwellings to respond to a range of groups such as retirees who are looking to downsize to a smaller home, older people on low incomes and pensioners who require affordable housing and those who require aged care accommodation, whether it be retirement villages, hostels or high care accommodation.

#### **KEY ISSUES: HOUSING FOR AN AGEING POPULATION**

**Housing Choice:** Recognise that a large proportion of older households in Penrith LGA continue to reside in separate houses. The provision of adaptable housing may assist older people to continue living in their dwellings if they so choose.

**Housing for Older People:** Ensure housing older for people responds to the variety of needs for aged care accommodation and affordable housing options.

**Housing Choice and Location:** Provide sufficient choice of location, quality, size and design of smaller format housing options for older people, to provide them opportunities to move to smaller dwellings if they so choose.

**Services and Facilities:** Ensure an appropriate range and level of infrastructure and services are available for older people.

#### *Increase in Smaller Household Types*

A key outcome of an ageing population is a declining household size. As families mature, children leave the home and generally move to smaller households until they wish to start their own family. Similarly, their parents will generally live in smaller households as either a couple or lone person. However the demand for smaller household types is also driven for a variety other factors such as the decrease in household size, presence of tertiary students attending local institutions, essential workers, increased housing costs and change in household preferences.

As a result the proportion of smaller households types such as couples without children and lone person households has increased from 28.7% in 1991 to 40.4% in 2006. This is in an increase of 9,459 smaller households during this period.

This significant change needs to be considered in the context of the following trends:

- Between 1991-1996 there was a negligible increase in the number of small dwelling types such as semi detached, flats and units in Penrith LGA.
- Past trends suggest that local residents have a lower propensity to live in higher density dwellings in Penrith LGA, when compared to metropolitan Sydney (i.d 2007 and Randolph 2005). This has primarily been due to previous affordability of larger free standing dwellings in Penrith LGA's urban release areas.



While this trend may be a reflection of housing preferences, it also infers that there is not sufficient choice and variety of the Penrith housing market for smaller housing formats. The Internal and External Stakeholder Groups have identified that some of the higher density dwellings within Penrith LGA are of poor design and quality and do not contribute to quality of residential areas within Penrith LGA. Whilst this has resulted in cheaper dwellings which have provided affordable housing, there are concerns that this poor quality housing is creating concentrations of low income households and a lack of social diversity. Such trends will reduce the likelihood of investment in poor amenity areas.

The proportion of smaller households will continue to increase through to 2031. It is anticipated that smaller households will represent almost half of all household types.

#### **KEY ISSUES: HOUSING FOR SMALLER HOUSEHOLDS**

**Housing Choice:** Provide a variety of smaller dwelling types opportunities for small households currently residing in separate dwellings, to down size if they so choose to.

**Affordable Housing:** Recognise that smaller dwellings provide an important source of affordable housing, but such housing should be at an appropriate quality and design.

**Housing Forms and Scale:** Ensure smaller dwellings are of a design, density and scale appropriate to Penrith LGA.

#### **3.2.5.4 Special Needs**

Future housing in the Penrith LGA needs to be cognisant of groups within the population who have particular housing needs.

##### *Public Housing*

Within Penrith LGA, 2,547 households (4.5% of all households) rely on public housing provided by the State Government. However, the number of low income households has dramatically increased in recent years and there is increasing demand for social housing. While the State Government is promoting more private sector involvement in the public housing; there is a need to ensure that future housing meets the need of low income households.

##### *Tertiary Students*

Penrith LGA has a large proportion of students who require low cost housing while studying at the various tertiary institutions within Penrith LGA. This type of housing needs to be close to the university and local centres in order to provide part time employment for students, as well as be close to transport networks as many students do not own a car. Previous studies in Penrith LGA have indicated that a large proportion of this group live in 3 bedroom separate houses and 2 bedroom apartments which may be due to young people with intentions to partner and have families (id, 2007).

##### *Essential Workers*

Occupations such as nurses, teachers, construction workers and shop assistants are central to supporting communities and providing essential services within Penrith LGA. Many of these occupations are relatively low paying thus creating difficulties for these groups to live and therefore work in the local area.

##### *Short Term / Itinerant Residents*

Short term and itinerant residents such as construction workers require affordable and temporary housing within Penrith LGA, as do teachers working on a temporary basis at local tertiary institutions. These also need to be close to existing services and transport.

### *Aboriginal and Torres Straits Islanders*

The 2006 Census identified 4,048 Aboriginal and Torres Strait Islanders within Penrith LGA. These groups generally require a high level of assistance to secure housing, whether it be rental accommodation or entry into the private housing market.

### *Multi-Cultural Groups*

Penrith LGA is less culturally diverse compared to other municipalities within the WSROC Region. However, it is important that these groups and particularly, new immigrants are provided with suitable and affordable housing in locations with linkages to similar ethnic groups. The Internal and External Stakeholder Groups identified that the actual number of people not born in Australia is higher than that stated within the 2006 Census, this is primarily as many of the new migrants and limited English to correctly fill in the census forms.

### **KEY ISSUES: SPECIAL HOUSING NEEDS**

**Special Housing Needs:** Ensure that the unique housing needs of particular groups in Penrith LGA are met. These include low income earners, tertiary students, essential workers, short term and itinerant residents, Aboriginal and Torres Strait Islanders and multi-cultural groups.

### **3.2.5.5 Summary of household housing preferences and trends**

Table 3.2.5.5 below provides a summary of the housing preferences of groups in Penrith LGA. This is based upon survey work completed by I.D. Solutions (2007):

Table 3.2.5.5: Housing preferences by groups in Penrith LGA, 2001

Group	Characteristics and Groups	Housing Trends (2001)
Families with Children	Willing to accept high housing costs to enter market. Some are 2nd and 3rd time purchasers. Will require more diversified housing as they age.	3-4 bedroom separate dwellings. New suburbs, master planned areas.
Young lone-person households	Students living in the area to access the University of Western Sydney. Young homebuyers/renters accessing affordable housing options.	High proportion lives in 3 bedroom separate houses and 2 bedroom apartments. These may be due to young people with intentions to partner and have families. Proximity to university and jobs.
Young couples without children	Recognises that Penrith is providing an entry point into the housing market for young home buyers/renters. Will compromise on dwelling format to achieve affordability. High propensity to have children in future. Attracted to older, established areas and therefore help to diversify areas.	High proportions live in 3-4 bedroom separate dwellings. Very small proportions live in medium to high density dwellings. Increased variety of services (particularly for children) in established areas. Need to diversify housing stock to provide larger medium/high density dwellings.
Older couple without children	Includes an increasing proportion of empty nesters. Some may choose to down size but others wish to retain a larger, family	Primarily live in 3 bedroom houses (i.e. continuing to reside in family home). Small proportion in higher density

Group	Characteristics and Groups	Housing Trends (2001)
	house. Require affordable options to downsize. Have new age specific requirements for services and housing.	housing which is most likely aged care accommodation. Demand for greater diversity in housing stock to allow for downsizing.
Older lone person household	Growing demographic as population ages. Generally older than 'older couples without children'. Under pressure to down size and move to age appropriate accommodation.	Primarily in 3 bedroom houses (i.e. continuing to reside in family home). Small proportion in higher density housing which is most likely aged care accommodation. Demand for greater diversity in housing stock to allow for downsizing.

*(Adapted from I.D 2007)*

### 3.2.6 PROJECTED HOUSING NEEDS TO 2031

The projected housing needs to 2031 have been established through an understanding of the types of households in Penrith LGA, but more importantly what their housing needs will be in 2031 taking into account the housing choice outlined in the previous section.

Table 3.2.6 outlines the breakdown of the key household types in 2031.

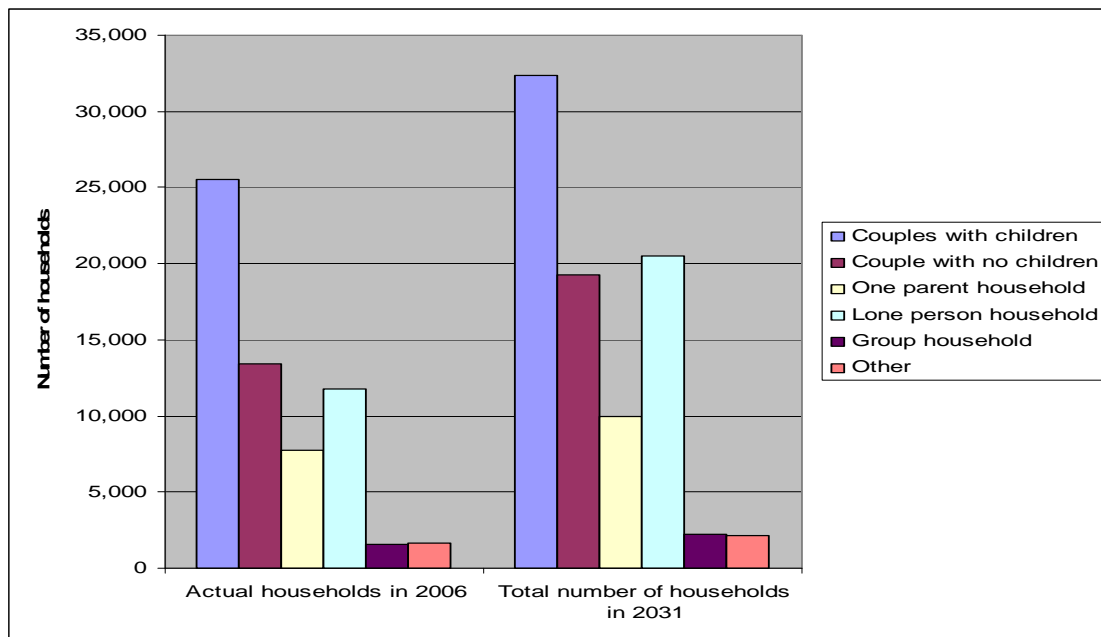
Table 3.2.6: Projected and change in household types to 2031

Household Type	Households in 2006	Total number of households in 2031	Additional households to 2031	% in 2031
Couples with children	25,525	32,352	+8,460	37.4%
Couple with no children	13,401	19,290	+6,167	22.3%
One parent household	7,703	9,948	+5,033	11.5%
Lone person household	11,773	20,501	+9,924	23.7%
Group household	1,584	2,249	+846	2.6%
Other	1,613	2,163	+410	2.5%
Total	61,606	86,503	24,897	100%

*Source: HASSELL 2008*

Compared to 2006 data, the projected 2031 household types in Figure 6.15 represent a significant change in the structure of households between 2007 and 2031. For instance, the proportion of families with dependents will decrease by 4% and the proportion of households without children (lone person households and couple families without children) will increase to represent 46% of Penrith LGA households.

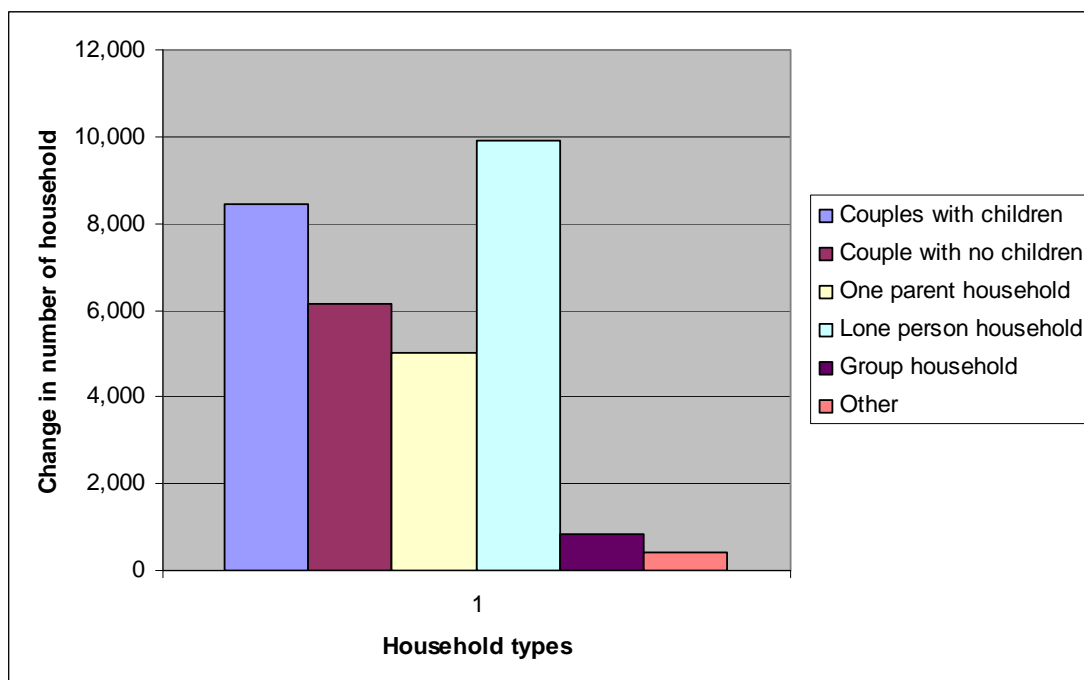
Figure 3.2.6a: Household structure in Penrith LGA 2006 compared to 2031



Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08 and HASSELL 2008

The greatest change will occur to lone person households which will increase by almost 10,000 dwellings by 2031. There will be lesser growth of couples with children (+8,460), couples with no children (+6,167) and one parent families (+5,033). The change in households by household type is shown in Figure 6.16.

Figure 3.2.6b: Household structure in Penrith LGA 2006 compared to 2031



Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08 and HASSELL 2008

### 3.2.7 DWELLING REQUIREMENTS TO 2031

The mix of new dwellings to 2031 needs to take into account the following:

- Penrith LGA currently has a large supply of separate dwellings which will continue to satisfy demand for this dwelling format as new households occupying existing dwellings, renovating existing dwellings or demolishing and rebuilding new separate dwellings.
- Household size in Penrith LGA is decreasing. The current average persons per dwelling is 2.96 (2001 Data) and it is anticipated to fall to approximately 2.6 persons per household by 2031. This is due to an ageing population and an increase in lone-person households.
- There is a relatively low supply of medium to high density dwellings in Penrith LGA, which has constrained housing choice particularly for older and smaller household types.
- Dwellings in Penrith LGA are decreasing in terms of affordability. New separate houses on the fringe are no longer considered affordable for first home buyers and low to moderate income earners. Affordability issues will continue to increase demand for smaller, cheaper homes.

The Metropolitan Strategy and sustainable planning philosophy promotes new housing to be primarily located around existing centres and transport nodes. This ensures people can access a variety of services, reduce car reliance and to revitalise older centres. The Metropolitan Strategy states that 60-70% of new development should be within existing areas. This form of development results in smaller dwelling size as separate dwellings would not yield sufficient housing around centres.

Based on the above, it assumed that an appropriate and sustainable mix of new dwellings would be that 60% of all new dwellings would be medium density and 40% would be separate dwellings. This assumes that some demand for separate dwellings will occur in existing areas where existing buildings are renovated or rebuilt, therefore the 40% figure is for new dwellings only.

This mix of new dwellings would satisfy the changing household structure outlined in Figure 6.16, which sees substantial increase in the proportion of smaller household types such as lone person households and couples with no children. Retaining 40% of new stock for separate dwellings will, combined with the existing stock of separate dwellings, continue to meet demand of families and those households which prefer to reside in separate dwellings.

Table 3.2.7 shows that this would result in a total of an additional 10,000 separate dwellings and 15,000 medium/high density dwellings. As the Penrith LGA is currently dominated by separate dwellings, the proposed high proportion of new medium density dwellings would not substantially transform the dwelling landscape of the Penrith LGA. However, it would ensure greater choice and variety to meet the needs of the changing household structure and would also result in a more sustainable urban form.

Table 3.2.7: Additional dwellings to 2031

	Separate dwellings	Medium/high density dwellings	Total dwellings
2006 dwellings	49,943	8,569	62,160
Additional dwellings to 2031	+10,000	+15,000	+25,000
Total	59,943	23,596	87,160
% of Total	70%	30%	100%

Source: HASSELL 2008

### 3.2.7.1 Mixture of high and medium density dwellings

As outlined previously, medium density dwellings in Penrith are regarded as semi-detached and dual occupancy dwellings, whereas high densities are generally flats and units to around four storeys. Dwellings at higher densities are generally not compatible with the urban form or market preferences of the Penrith LGA.

As the Penrith LGA is a primarily low density area, new high and medium density dwellings need to be integrated into areas where a higher form of density is most appropriate. There are a number of determinants to the suitability of increased residential density, however focusing around nodes of activity where there are generally denser building forms is considered the most sustainable approach.

Medium and higher density dwellings also need to be supported by a greater concentration of services, transport and activity. These are important to attract people to live in these areas but also ensure there are sufficient services to meet the needs to increased households.

Therefore, the location of new high and medium density dwellings in the Penrith LGA will be based upon the general principle that the centre designation, as defined by the Metropolitan Strategy, will define the density of new medium and high density dwellings.

For example, high density dwellings are generally only suitable when they are supported by a concentration of services, transport and activity which are generated by regional cities (i.e. Penrith) and major centres (i.e. St Marys).

Medium density dwellings such as semi-attached and dual occupancy dwellings are of a scale which generally suit local centres, such as town centres and villages. These local centres also do not provide sufficient services, retail areas and transport links to support a higher concentration of households.

### 3.2.7.2 Review against dwelling supply

As outlined in previously in this chapter, a desk top analysis of dwelling opportunities in Penrith LGA was undertaken by I.D. in 2007. Further investigation to the actual development capacity of these sites forms part of the Penrith Urban Strategy and may revise the dwelling opportunities within these areas.

Table 3.2.7.2: Dwelling Opportunity in Penrith LGA

Type	Dwelling Opportunity (dwellings)	Dwelling Density
<b>Existing Areas:</b>		
In-centre Development	6,826	Medium/high
Large Residential Lots	2,609	Medium/high
Development Sites	587	Medium/high
Vacant Land in established areas	1,077	Medium/high
<b>Greenfield:</b>		
New lots	13,000	Separate
<b>TOTAL</b>	<b>24,099</b>	

Source: ID: Dwelling Opportunities Analysis for Penrith City Council, September 2007 and HASSELL 2008

As shown in Table 3.2.7.2, there is potential for 11,099 medium/high density dwellings within the existing areas of Penrith LGA. These are available through a variety of in-centre development, large residential lots, development sites and vacant lands in established areas.

Committed greenfield land may yield approximately 13,000 dwellings. These calculations are based upon the assumption that all dwellings in greenfield sites will be separate dwellings with a general net residential of approximately 15 dwellings per hectare. Within greenfield areas there is a need to provide a variety of housing types to ensure people have choice through out the life cycle and also importantly, to ensure there is an element of social diversity within greenfield sites. There is a strong perception that many of the new housing estates in Penrith LGA are dominated by couples with children and have become a form of 'mono culture' (Randolph, 2005).

As such, investigation is required into providing a requirement for a proportion of new dwellings in greenfield areas to be medium or high density. A proportion of 25% would provide housing choice and also substantially increase the supply of medium/high density housing over 3,000 dwellings by 2031. This would also assist in achieving the 60/40 split between separate and medium/high density new dwellings in Penrith LGA and support ancillary services, shops and public transport infrastructure.

#### KEY ISSUES: FUTURE DWELLING DEMAND

**Future Housing Provision:** Ensure 60% of all new dwellings in established areas are medium/high density to respond to the change in household size, issues of affordability and to provide a more sustainable urban form. This will result in 15,000 new medium/high density dwellings.

**Medium/High Density:** Locate all medium/high density development within proximity to centres and transport. Determine the location of medium/high density developments by the designation of the centre in the Sydney Metropolitan Strategy. Medium density development should be located around town centres and villages, where as high density is suited towards regional cities and major centres.

**Low Density:** Recognise that demand for separate dwellings through to 2031 will primarily be satisfied by existing separate dwellings, plus an additional 10,000 separate dwellings. Recognise that there are sufficient greenfield sites identified for future development to satisfy demand for new separate dwellings through to 2031.

**Medium/High Density in Greenfield Developments:** A proportion (25%) of all new dwelling on greenfield sites to be medium/high density to ensure housing choice and diversity is desired.



### 3.3 AFFORDABLE HOUSING

The affordability of housing refers to the ability of individual households to secure housing which is appropriate to their individual needs and within their means to pay. Once housing costs exceed a household's means to pay, housing stress is experienced by that household.

When households can not secure affordable housing, there can be a variety of implications on the social and economic well being of residents. For instance, households paying increased housing costs can face financial stress, with a disproportional amount of the budget being used to cover housing, which in turn limits spending on other necessities such as food, health and education, as well as placing households at risk of losing their current accommodation.

At a community level, an adequate supply of affordable housing can generate positive social outcomes by enhancing social cohesion in a community by allowing people to remain in an area through all stages of life. The availability of affordable housing sometimes results in coping techniques for households facing affordability issues (such as frequently moving house) and assists in allowing people to remain in an area and on a variety of incomes which can contribute to vibrant living communities.

From an economic perspective there are numerous incentives for the provision of affordable housing as identified by Centre for Affordable Housing (2008) and Yates and Milligan (2007), which include:

- ensuring there is housing for a diverse local workforce and accommodating people with the different skills required to serve and support communities, such as shop assistants, bus drivers, nurses, teachers, and construction workers,
- meeting the needs of a growing number of smaller households living in high cost areas and particularly within inner urban areas,
- providing direct economic benefits to the local community, including increased demand for goods and services, which in turn increases local employment opportunities, and
- promoting economic and social integration- ensuring that communities housing costs are not so high that they can't afford to meet education, transport and health costs.



### 3.3.1 DEFINITIONS OF HOUSING AFFORDABILITY

Part 1 Clause 4 of the *NSW Environmental Planning and Assessment Act 1979* defines 'affordable housing' as meaning:

*'housing for very low income households, low income households or moderate income households, being such households as are prescribed by the regulations or as are provided for in an environmental planning instrument.'*

Those with higher incomes are generally viewed to have some degree of choice in the location, type and cost of their housing. The terms, very low incomes, low incomes or moderate incomes, have been used as a benchmark for affordable housing research in NSW. The NSW Centre of Affordable Housing have numerically defined these very low to moderate incomes, which are incomes up to 120% of the median household income may experience housing affordability issues depending on their circumstances (Centre for Affordable Housing 2008).

The NSW Centre for Affordability measures of affordability differ from the commonly accepted approach established by the National Housing Strategy 2008, which identifies that housing stress is experienced where moderate to low income households (those in the bottom 40% of household income quartiles) spend more than 30% of their income on housing costs.

For the purpose of this study, the NSW Centre of Affordable Housing definition of very low, low and moderate household incomes will be used to provide consistency with NSW data and the Environmental Planning and Assessment Act 1979.

### 3.3.2 HOUSING AFFORDABILITY IN PENRITH LGA

Penrith Council is committed to providing affordable housing opportunities throughout the City. Council recognises while the Federal and State Governments are the principal bodies responsible for delivering affordable housing outcomes, Council should maintain a facilitation role and exercise leverage through partnerships to achieve affordable housing opportunities.

Various initiatives undertaken by Penrith Council in achieving affordable housing outcomes are summarised as follows:

- Council has a Memorandum of Understanding (MOU) with Housing NSW (formerly NSW Department of Housing) and has intentions to partner with the NSW Centre for Affordable Housing to assist in the delivery of affordable rental housing opportunities.
- This partnership provides Council the opportunity to provide affordable housing to a range of target groups. The partnership also provides opportunities to be involved in the NSW Centre for Affordable Housing Debt Equity and other programs and initiatives. Council through these initiatives can contribute affordable housing contributions to the fund on the basis that funds are used for an affordable housing project in Penrith City Council.
- Council's Sustainability Blueprint for New Release Areas documents the current policy position in relation to affordable housing in new release areas. The Blueprint currently states that "a minimum of 3% of all residential allotments in new release areas to be provided for the purpose of affordable housing". Alternatively, in some instances a monetary contribution to enable affordable housing dwellings to be constructed elsewhere in Penrith is possible through the implementation of a negotiated voluntary planning agreement. At the time of writing this report, Council is currently negotiating three draft voluntary planning agreements. However, greater policy advice is required to guide negotiating future Voluntary Planning Agreements.

- Key actions in the City Centres Strategies for Penrith and St Marys seek to encourage a variety of housing choice and mixed use developments as well as identifying opportunities for affordable housing.

### Housing Affordability Measures for Penrith LGA

An assessment of housing affordability has been undertaken to allow future implementation strategies to address housing affordability in existing areas and ensure the suitable provision of affordable housing in new development areas.

The following sections measure the extent of affordability in Penrith and also outline how Penrith is impacted on by housing stress and the demography of people living in these areas. This information will assist in developing tailored strategies to alleviate housing affordability issues in Penrith.

It should be noted, that when compared to the Sydney SD and LGAs within the Outer Ring, the Penrith housing market is considered as 'affordable' and offers some of the most affordable housing stock within the metropolitan region (Refer Table 3.3.2a).

Table 3.3.2a: Sydney Median House and Rental Prices for Penrith, Outer Ring LGA's and Sydney SD

	Median House Price	Median Rental Price	
		2 bedroom dwelling	3 bedroom dwelling
Penrith	\$311,000	\$200	\$270
Outer Ring LGA's*	\$375,000	\$270	\$290
Sydney SD	\$435,000	\$350	\$350

Source: *Housing NSW Rent and Sales Report No. 82*

\*Outer Ring LGA's: *Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Penrith, Pittwater, Sutherland, Warringah, Wollondilly, Wyong*  
*Measures of Housing affordability*

Four measures have been used to determine the affordability of housing in Penrith and how many household areas impacted by affordability issues, these are summarised in Table 3.3.2b below:

Table 3.3.2b: Housing Affordability Indicators

Affordability Measure	Definition
Mortgage Stress	Homes facing mortgage stress are defined as those households spending more than 30% of their income on mortgage repayments. Those calculated for housing stress have a gross weekly income below 120% of the median weekly household income for Penrith in 2006 (\$1,147 per week).
Rental Stress	Homes facing rental stress are defined as those households spending more than 30% of their income on rent. Those calculated for housing stress have a gross weekly income below 120% of the median weekly household income for Penrith in 2006 (\$1,147 per week).
Threshold Income	The threshold income establishes the income required to repay a mortgage within a certain area as so the mortgage repayments do not exceed 30% of the household budget. From this an affordable housing stock and housing market entry point can be identified.
Proportion of Rental and Purchase stock that is affordable	Identifies the proportion of rental and purchase housing stock which is affordable (not exceeded 30% of weekly household income) for households on a very low, low or moderate income.

*Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08 and HASSELL 2008 (Please note 2006 figures were not available at the time of the study)*

### 3.3.2.1 Mortgage Stress

Following the NSW Centre for Affordable Housing methodology, mortgage stress is calculated for households with a gross weekly income below 120% of the median weekly income in Penrith for 2006, which was \$1,147. Incomes below this threshold have been divided in to very low, low and moderate incomes. The ranges for these income brackets are shown in Table 3.3.2.1a below.

Table 3.3.2.1a Distribution of Incomes in Penrith

	Definition (% of median income)	Penrith Weekly Income Range	Penrith Annual Income Range	General Impacts
Very Low Income	0-50%	\$0- \$573.50	\$0-\$29,822	This group has a high and significant need for affordable housing and historically relied on institutional forms of housing. Any housing offered should be linked to support services and community networks.
Low Income	50%-80%	\$574- \$917.60	\$29,848 - \$47,715	This group is highly segmented by life stage and local housing market conditions. Some will need short term support to secure entry into the housing market whilst others will need assistance for a longer period of time as their situation is unlikely to improve.
Moderate Income	80%-120%	\$918- \$1,376. 40	\$47,736- \$71,572.80	Generally those whose incomes place them below the margin for entry into the local housing market, particularly in higher cost locations. May require some short term assistance to get established in to the housing market.

Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08, ABS Census 2006 and HASSELL 2008

As shown in Tables 3.3.2.1b and 3.3.2.1c, housing affordability is a significant issue in Penrith LGA. In total, 3,841 households are in rental stress and 5,125 households are in mortgage stress, in total 8,699 households or 15.2% are in housing stress in Penrith paying over 30% of their income on housing costs; this is higher than the Sydney SD average where only 13.64% of households are in housing stress.

Table 3.3.2.1b Number of very low, low and moderate households in rental stress

	Penrith			Sydney		
	No. in stress	% impacted by rental stress	Total	No. in stress	% impacted by rental stress	Total
Very Low Income	2,254	95	2,436	58,448	97	62,478
Low Income	1,452	54	2,712	40,471	66	62,411
Moderate Income	135	5	2,801	15,553	22	70,477
<b>Total</b>	<b>3,841</b>	<b>48.32%</b>	<b>7,949</b>	<b>114,472</b>	<b>58.59%</b>	<b>195,366</b>

Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08

Table 3.3.2.1c Number of very low, low and moderate households in mortgage stress

	Penrith			Sydney		
	No. in stresses	% impacted by mortgage stress	Total	No. in stress	% impacted by mortgage stress	Total
Very Low Income	959	83	1,347	21,587	86	29,692
Low Income	1,615	68	2,557	28,643	72	43,633
Moderate Income	2,551	51	5,339	41,205	55	80,899
<b>Total</b>	<b>5,125</b>	<b>55.45%</b>	<b>9,243</b>	<b>91,435</b>	<b>59.29%</b>	<b>154,224</b>

Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08

In Penrith, housing stress is especially an issue for very low income households where 84.8% of these households are in housing stress. Housing stress in this group impacts both renters (95%) and purchasers (83%). Low income earners in Penrith LGA are both renters and purchasers, with approximately 58.2% facing housing stress.

A higher proportion of moderate income earners are purchasing a property rather than renting and 51% of moderate income purchasers are in housing stress. It is common that these moderate income earners place themselves in mortgage stress to enter the housing market.

### 3.3.2.2 Threshold Income

The Rent and Sales Report (No. 82 ISSN-1440-0049) published by the Department of Housing provides sales data for the September quarter of 2007. During this period the median price a dwelling in Penrith was \$311,000.

The calculations for housing affordability uses a 'threshold income' which is based on the value of housing stock within a suburb and the income required to buy a house in an area, so as the mortgage repayments do not exceed 30% of the household budget. This

approach is used by the National Housing Strategy 1991 and is a common affordability measure. The calculations assume a 25 year mortgage. This is portrayed in Table 3.3.2.2 below.

Table 3.3.2.2 Threshold Incomes for 2 and 3 Bedroom Dwellings in Penrith, September 2007

Dwelling	Median Price	Minus 20% deposit	Interest Rate 2007	Monthly repayment	Threshold Monthly Income	Threshold Weekly Income	Threshold Annual Income
1st Quartile	\$270,000	\$216,000	6.50%	\$1,458	\$4,861	\$1,121	\$58,332
Median	\$311,000	\$248,800	6.50%	\$1,680	\$5,600	\$1,300	\$67,200
3rd Quartile	\$367,000	\$293,600	6.50%	\$1,983	\$6,603	\$1,523	\$79,240

Source: *Housing NSW Rent and Sales Report No. 82 and Reserve Bank of Australia*

The threshold annual income required to purchase a median dwelling in Penrith is \$67,200. However, households on an annual income of \$58,332 would be able to purchase a lower income dwelling, 1st quartile dwelling.

To make a comparison for affordability, the threshold incomes are compared against the very low to moderate incomes for Penrith LGA. Very low to low income households would not be able to purchase a median priced dwelling in Penrith LGA and therefore would require either a below median priced property (subject to availability), rental property or financial assistance to allow them to enter the local property market. Some very low to low income households may be forced to move to another locality to be able to purchase a home.

Only some moderate income earners would be able to purchase a median dwelling in the Penrith LGA, presuming their income is above \$1,300 per week (the moderate income range is \$918 to \$1,376). However, these households may face difficulties in entering their housing market of choice subject to local market conditions.

### 3.3.2.3 Proportion of Affordable Rental and Purchase Stock

The NSW Centre for Affordable Housing provides data illustrating the proportion of rental and purchase housing stock that is considered affordable. A dwelling is regarded as affordable if the rent or mortgage charged is no more than 30% of household income. These calculations are based on very low, low and moderate income households.

#### *Penrith LGA Rental Housing Market*

In June 2007, 21% of rental housing stock in Penrith LGA was affordable to very low income earners, 67% available to low income earners and 85% available to moderate income earners. This represents a general decline from housing affordability since June 2005 when 26% of rental housing stock was affordable to very low income earners.

Rental housing stock in Penrith LGA is generally more affordable than Sydney SD housing stock for very low to moderate income earners. In June 2007 11% of rental housing stock in Sydney SD was affordable to very low income earners, 35% available to low income earners and 69% available to moderate income earners.

Table 3.2.2.3a below compares the percentage of affordable rental dwellings in Penrith and Sydney SD.

Table 3.2.2.3a Percentage of rental dwellings which are affordable to very low, low and moderate incomes in Penrith LGA and Sydney SD.

	June 2005		June 2006		June 2007	
	Penrith LGA	Sydney SD	Penrith LGA	Sydney SD	Penrith LGA	Sydney SD
Very Low Income	26%	13%	28%	14%	21%	11%
Low Income	77%	39%	74%	39%	67%	35%
Moderate Income	93%	72%	87%	72%	85%	69%

Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08

#### Penrith Purchase Housing Market

As Table 3.2.2.3b explains, entry into the housing market is not affordable to any low income earners (0%) and only affordable to 4% of low income earners and 31% of moderate income earners.

Table 3.2.2.3b Percentage of purchase dwellings which are affordable to very low, low and moderate incomes in Penrith LGA and Sydney SD

	June 2005		June 2006		June 2007	
	Penrith LGA	Sydney SD	Penrith LGA	Sydney SD	Penrith LGA	Sydney SD
Very Low Income	0%	0%	0%	0%	0%	0%
Low Income	3%	1%	4%	15	4%	2%
Moderate Income	20%	9%	29%	13%	31%	13%

Source: Centre for Affordable Housing, Local Government Housing Kit Data Base Accessed 11/03/08

In general the Penrith purchase housing market has become slightly more affordable since June 2005, when only 20% of moderate income earners could enter the housing market.

However, in comparison to the Sydney SD purchase market, the Penrith LGA market is quite affordable. In June 2007, no low income earners could enter the market and only 2% of low income earners and 13% of moderate income earners could enter the Sydney SD purchase market.

#### 3.3.2.4 Location of Affordable Housing Issues in Penrith

Within Penrith LGA, affordability issues are more pronounced in some areas over others. Table 8.9 identifies the locations within Penrith LGA with a high proportion of very low income earners, with incomes of less than \$500 per week.

Table 3.3.2.4 Location of very low income earners in Penrith LGA

Locality Ranking	Number of households with incomes less than \$500 per week	% of households with income less than \$500 per week
1. Penrith	1,711	36.4%
2. St Marys	1,235	34.1%
3. Kingswood	905	29.9%
4. South Penrith	801	19.5%
5. Cranebrook	674	16%

Source: Penrith City Council Community Atlas, (ID Profile) Accessed 26/03/08

Penrith, St Marys and Kingswood have a large proportion of households that rent. This suggests that affordability issues are more aligned to renting households. Conversely, South Penrith and Cranebrook have a larger proportion of households with a mortgage and an affordability strategy will need to be focussed towards providing responses to mortgage stress.

### 3.3.3 SUMMARY OF AFFORDABLE HOUSING IN PENRITH

Housing affordability is a significant issue in Penrith with 15.2% (8,955 households) facing housing stress.

Those most vulnerable to housing affordability are those households with very low incomes (earning \$0-\$573.50 per week), nearly all renters and purchasers within this group are facing housing stress. Significantly, the purchase of an average dwelling in Penrith is not affordable to this group and therefore a large majority of low income households rely on rental housing stocks. This trend is evident in areas such as Penrith, St Marys and Kingswood where there is a high proportion of low income earners and almost half of all households rent. These groups may need assistance in securing long term and suitable rental accommodation.

Very low income earners are also found in newer growth areas such as Cranebrook and to a lesser extent, South Penrith. Very low income earners have limited choice in housing and some may require financial assistance to ensure their housing and living needs are met.

Low income earners (earning \$574-\$917.60 per week) are also significantly impacted by housing affordability in Penrith LGA. Only 4% of low income earners can enter the current Penrith housing market without facing housing stress, however almost half of low income earners are purchasing a dwelling and half of those are currently in mortgage stress. Mortgage stress may be a result of changing household structure, change in income or a desire to enter the housing market. Almost half of low income households which rent are also facing housing stress, reinforcing that low income households also have limited options for affordable housing within the current market.

The Penrith LGA housing market is affordable to 31% of moderate income earners. However, almost two thirds of moderate income earners in Penrith are purchasers, indicative of aspiration and cultural preferences for homeownership. Over half of moderate income purchasers are in mortgage stress to cover housing costs.



### 3.3.4 APPROACHES TO ADDRESSING HOUSING AFFORDABILITY

There are opportunities where local governments can help to influence the provision of affordable housing.

Many of the issues influencing the cost of housing are associated with the current economic climate such as interest rates and investment demand. Clearly Local Governments have very little or no influence on these factors. Federal government and state government have some influence over land supply, government taxes, levies and charges and economic growth and therefore have established a number of higher level policies to improve housing affordability.

Local Government's influence on the cost of housing is primarily through land use planning decisions which impact the availability of residential land, preservation of existing sources of low cost accommodation and the design and configuration of new housing. It also extends to approval times for Development Applications which may impact holding costs of land and therefore costs of land.

Local Government may also enter into to partnerships with the emerging sector of not-for-profit community housing developers to stream line and facilitate the delivery of affordable housing. (Armstrong, 2007) The outcomes of these land use planning decisions can also have a positive impact on household costs by locating housing closer to services, infrastructure and public transport.

While there is an increasing understanding that Local Governments can play an important role in the provision of affordable housing, Local Governments are restricted by state planning legislation, which has historically provided little support for councils to implement housing affordability strategies effectively (Milligan, Phibbs, Fagan and Gurran 2004). For example, within New South Wales the current proposed Local Environmental Plan template does not include affordability provisions and therefore may further constrain local government's ability to respond to affordability issues.

As noted previously, housing affordability policies need to respond to the unique and individual needs of four specific groups: low income earners and private renters, first home buyers and those who can not access the private housing market and require public housing.

#### 3.3.4.1 Affordability Tools for NSW Local Governments

##### *Statutory Framework for affordable housing*

In 2000 the NSW Environmental and Planning Assessment Act (1979) was amended to provide Local Governments with a greater ability to provide affordable housing, but also to provide councils with a responsibility to respond to the challenges of affordable housing. There have also been amendments to various SEPPs to promote increased provision of affordable housing. They key legislation relevant to Local Governments is summarised below:

##### *Environmental Planning and Assessment Act 1979*

The key mechanisms incorporated into the Act which are designed to promote the provision of affordable housing are:

- An objective of the Act is to 'encourage the provision and maintenance of affordable housing' (Clause 5 (a) (viii)).
- Local instruments may contain measures for providing, maintaining and retaining, and regulating any matter relating to, affordable housing,(Clause 26(1)(d))
- S94 Contributions and Planning Agreements may provide for the provision of (or the recoupment of the cost of providing) affordable housing through contributions or land for affordable housing. In addition the Act also allows contributions for the

funding of recurrent expenditure relating to the provision of public amenities or public services, affordable housing or transport or other infrastructure. To enact any of these provisions, a consent authority must first have a local plan containing affordable housing provisions approved by the Minister and supported by an amendment to State Environmental Planning Policy – Affordable Housing (SEPP 70).

*Local Government (General) Regulations 2005*

Clause 200 of the Local Government (General) Regulations requires Local Governments to prepare Social Plans that promote the wellbeing of their local communities. A key indicator of such wellbeing may be the provision of a diversity of housing to meet community needs, including affordable housing.

*State Environmental Planning Policies (SEPPs)*

The Environmental and Planning Assessment Act is also supported by a number of State Environmental Planning Policies (SEPPs) which seek to promote and secure affordable housing. A summary of these are provided below:

Table 3.3.4.1: Summary of SEPPs

SEPP	Key Controls
SEPP (Senior Living) 2004	Aims to encourage the creation of housing that is appropriate to the ageing of the population by allowing Seniors Living developments to be located on land zoned for urban purposes.
SEPP (Infrastructure) 2007	Replaced SEPP 9: Group Homes and allows multi-dwelling housing to be located within 800m of a railway station and owned by public agencies without consent. A site compatibility assessment is required.
SEPP 10: Retention of Low- Cost Rental Accommodation	Aims to protect existing supplies of affordable housing by requiring State government concurrence for the demolition, alteration or change the use of a boarding house or strata-subdivide a low cost residential flat building or boarding house.
SEPP 70	Introduced to allow affordable housing programs be established in the Ultimo/Harris Street area, Green Square Area (both through City West) and in Willoughby.

Source: HASSELL 2008

**3.3.4.2 Affordable Housing Options for Councils**

There are numerous options for Councils when it comes to affordable housing. These both include Council providing affordable housing itself and Council using developers to contribute funds towards, or to develop affordable housing.

Johnston (2008) has identified three ways for Councils in the provision of affordable housing:

- protecting existing supplies of affordable housing from loss, such as demolition, change of use, or change of socioeconomic status of residents,
- promoting supply of affordable housing by establishing appropriate zonings, and through research, information and advocacy, and
- producing affordable housing indirectly from Council resources, alone or in partnership.

Each of these are explored in the following sections.

### *Protecting existing supplies*

Gosford City Council and Murrumbidgee Council are examples where the local planning policies have been changed to require consideration of affordable housing in development applications and to use Council resources to preserve existing affordable housing sites.

### *Promoting supplies*

Within New South Wales, Councils can use land use zoning to promote the supply of affordable housing. For example, Leichhardt Council contains controls to encourage diversity of housing type and the provision of affordable rental and boarding house accommodation by requiring all multi unit housing developments to include a variety of dwelling sizes and capacity for adaptable housing.

Councils can also be an important source of information to developers and community housing suppliers regarding the provision of affordable housing. This information and advocacy role has been adopted by a number of Councils in New South Wales.

Several Councils promote the retention of existing affordable housing developments such as boarding houses and caravan parks.

### *Producing affordable housing*

There are three ways that Councils can use their development assessment powers to require developers to contribute to, or provide affordable housing:

- Planning agreements under s93F of the Act with developers to provide a certain contribution towards, or, component of, affordable housing.
- Obtaining developer levies through s94F of the Act through conditions of development consent (inclusionary zoning).
- Providing developer incentives (offsets/bonuses) in return for developers contributing or providing affordable housing.

These can assist Council to generate funds towards providing affordable housing. Alternatively, Councils can also pursue partnerships with affordable housing providers to use a combination of contribution funds and other sources to produce stocks of affordable housing, such as Housing Debt Equity Programs to facilitate provision of affordable housing through community housing groups.

#### A. Planning agreements with housing developers

Voluntary Planning Agreements (VPAs) are administered under s93F of the Act and may be used to negotiate contributions towards to the provision, recoupment or funding of recurrent expenditure to provide affordable housing. Therefore they can be used to provide funds to finance or produce affordable housing. As they require complex negotiations, they are most useful for developments that are large in scale, have long timeframes, are likely to be developed in stages or are developments where the developer has a key interest in delivering public infrastructure. (Source: Johnston, 2008)

Canada Bay and Randwick Councils have used VPAs around major development sites to provide a number of affordable housing units.

To ensure transparency in the VPAs, Councils should have policy and procedures for use the use and applications of VPAs. Similarly, policies on affordable housing will ensure that VPA's work towards wider LGA targets.

#### B. Developer levies (inclusionary zoning)

Developer levies can be used to fund and provide affordable housing when an LEP has prescribed a minimum proportion affordable housing be provided in a housing development. Where the developer can not provide the affordable housing units on site, levies are used to provide affordable housing units elsewhere. Generally between 3-4% of the total floor space of a housing development will be levied for affordable housing.

Developer levies are considered most appropriate in high growth areas, particularly where there is medium density housing (Johnston 2008).

The use of inclusionary zoning or developer levies is a particularly complicated process both in administrating and establishing. This is primarily due to section 94F of Act, which has a series of stringent requirements that must be addressed before a council can levy developers. Notably, a number of these requirements must be signed off by the Minister. These include the approval of proposed amendments to a LEP and an amendment to a SEPP to recognise the local government area has a need for affordable housing.

For the Minister to consider the above, the Council must have undertaken appropriate strategic work such as housing needs study and an affordable housing strategy. To date, only two levy schemes for affordable housing have been fully signed off by the Minister, which reflects the high degree of complexity associated with this approach.

#### C. Developer incentives Offsets and bonuses

Council's Development Control Plans (DCPs) can be an effective tool for providing affordable housing. Unlike planning instruments, amendments to DCPs do not require sign off from the Minister and therefore they provide greater flexibility to administer an affordable housing scheme. However a DCP is to be consistent with an LEP and therefore the LEP should generally contain objectives for affordable housing.

Using DCPs to provide affordable housing involves providing a degree of flexibility into the DCP controls. By negotiating on controls in the DCP, a Council can provide bonuses in terms of lot size, floor space, height, setbacks etc in return for the provision of, or contribution to, affordable housing. However, planning offsets are only appropriate when it can be demonstrated that the development will not compromise the overall planning standard or reduce local amenity.

#### D. Partnerships with affordable housing providers

As an alternative to Council's using their planning and assessment powers, there is a significant role for local government to assist with and partner these not-for-profit companies through brokerage and facilitation of projects. The City West Housing organisation provisions developed from the local Development Control Plan and developer contributions collected by Council continue to fund new affordable housing projects. As noted above, the recent changes to the NSW planning legislation have provided local councils opportunities to greater utilise their planning powers and discretion to provide affordable housing.

The Forest Glade Smart Housing project at Parklea is an example of a successful collaboration between Landcom and the developers, Cosmopolitan Developments. The aim was to provide 20% of its 64 dwellings for sale to those on moderate incomes, by providing at between 50-60% below market purchase price. Landcom and the developer established a number of requirements and restrictions on purchasing the property such as the purchasers had to be first home buyers and have a household income between \$48,000-\$69,000. The project went on sale in June 2002 and the designated moderate income homes were over subscribed by a ratio of 25 to 1.

A critical element of this project was the collaboration with the Blacktown City Council who conditioned affordable housing in return for a more flexible approach to planning, design and construction.

### 3.3.5 Summary Strategic Planning Tools

Local government role	Relationship to housing outcomes
<b>Corporate planning</b>	
Resource allocation	May include: <ul style="list-style-type: none"> <li>• council resource allocation to support housing initiatives</li> <li>• different rates and charges for low-cost or community housing providers</li> <li>• grants to local housing groups or initiatives</li> </ul>
<b>Urban Planning</b>	
Land use zoning	<ul style="list-style-type: none"> <li>• availability of residential land</li> <li>• location of housing in relation to transport, services, and employment opportunities</li> <li>• cost/value of residential land</li> <li>• configuration of residential development, density</li> </ul>
Setting development controls	<ul style="list-style-type: none"> <li>• appropriateness of housing for community needs (household size, adaptability to life stage) and community expectations (amenity, cultural heritage protection)</li> <li>• cost of new housing and renovations</li> <li>• environmental impact of housing</li> <li>• protection of existing housing stock</li> </ul>
Development application processes	<ul style="list-style-type: none"> <li>• efficiency of approval processes</li> <li>• consideration of housing impacts as part of social and economic impact assessment for development proposals</li> </ul>
<b>Infrastructure planning</b>	
Levying contributions for infrastructure	<ul style="list-style-type: none"> <li>• cost of housing</li> </ul>
Planning and providing infrastructure	<ul style="list-style-type: none"> <li>• timely availability of appropriate services</li> <li>• value of housing</li> </ul>
<b>Social Planning</b>	
Preparation of Social Plan	<ul style="list-style-type: none"> <li>• identify community housing needs regarding access, equity, participation and rights (many councils include a specific housing needs assessment and identify strategies to address these housing needs)</li> </ul>
Provision of local community services	<ul style="list-style-type: none"> <li>• support groups with particular housing needs (youth, homeless people, the aged)</li> <li>• support people to remain in existing housing</li> <li>• coordinate support, provide access to information about available services</li> </ul>
Research	<ul style="list-style-type: none"> <li>• maintain data on local housing needs</li> </ul>
<b>Integrated community building activities</b>	
Master planning	<ul style="list-style-type: none"> <li>• work with private/public developers to encourage appropriately designed and affordable housing and address diverse community needs in urban release or renewal areas</li> <li>• ensure this housing is located near services, transport, and employment opportunities</li> </ul>
Neighbourhood renewal	<ul style="list-style-type: none"> <li>• work with private/public property owners, developers, and residents to enhance amenity, appropriateness, safety and sense of community in residential areas, through physical design and community building.</li> </ul>

*Source: Centre for Affordable Housing, NSW Local Government Housing Affordability Kit*

## KEY ISSUES: AFFORDABLE HOUSING

**Affordability:** Recognise that approximately 15% of households within Penrith are facing housing stress, this equates of 8,966 households. Of this, 5,125 households are facing mortgage stress and 3,841 are facing rental stress.

**Purchasers:** Recognise that many of those facing mortgage stress may have chosen to place themselves in mortgage stress to gain entry to the local housing market and therefore may have alternate cheaper housing options available to them. This housing stress may be short term.

**Renters:** Recognise that renters generally have little alternate housing choice and therefore have greater pressures of housing stress. In Penrith, renters are generally on lower incomes and the highest proportion of low income households are in the inner and established areas of Penrith LGA such as Penrith, Kingswood and St Marys.

**Public Housing:** Recognise that public housing stock in Penrith LGA is concentrated within Penrith, Cranebrook, St Marys, Kingswood and North St Marys. It is notable that 20.5% of housing stock in North St Marys is government rentals.

**First Home Buyers:** Recognise that within new housing release areas of Penrith, there is a low proportion of first home buyers, those purchasing in these areas are generally people more advanced in the housing cycle and are usually 'up grading' to a newer, larger home.

**Protecting Existing Stocks of Affordable Housing:** Explore opportunities for new planning instruments to contain an overall planning objective to retain or protect existing sources of affordable housing. These provisions are useful on a legal basis and also provide a basis to encourage developments to contribute towards affordable housing. Explore options to require social impact assessments to be conducted for development that could impact the current supply of affordable housing or increase demand for affordable housing. Introduce requirements for diverse housing forms and for diverse housing types or for affordable housing.

**Promoting New Stocks of Affordable Housing:** Explore options to ensure that existing State controls under SEPP 10 are used effectively and to ensure Council's understand when SEPP 10 can be triggered.

**Promoting New Stocks of Affordable Housing:** Explore options to facilitate the supply of appropriately supplied residential land to avoid artificial supply constraints and identify potential housing opportunities on under-utilised land, vacant State or Council land and land areas in need of urban renewal. Ensure that zone and locality provisions are sufficiently flexible to promote new affordable housing opportunities in as many places as possible. Explore options for the Local Environmental Planning instruments to explicitly permit the conversion or adaptation of appropriate existing dwellings for use by dependent family members as a form of supported aged housing or for adult children.

### Past experience and future directions

The Sustainability Blueprint for new urban areas provides for 3% which has been difficult to achieve to date. Council has been able to negotiate 1% considering that the remaining 2% will be provided through the mix of dwelling types. It should also be recognised that the current planning statutory framework has limitations in providing affordable housing. Affordable housing therefore has to be delivered through a range of strategies – i.e. percentage targets for large scale developments plus incorporating dwelling mix requirements in the DCP to encourage a variety of housing products and forms targeted to low and moderate incomes.

### 3.4 Sustainable Housing

This section explores best practice examples of sustainable housing design, which could be incorporated into the design of future dwellings. It reviews both environmental design aspects and socially sustainable housing models such as adaptable housing and provides an overview of affordable housing design.

#### 3.4.1 ENVIRONMENTAL HOUSING DESIGN

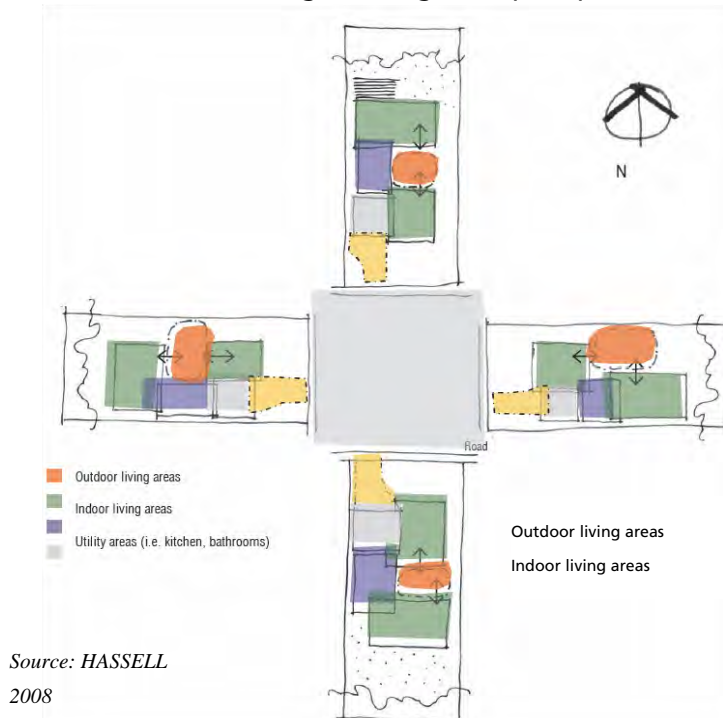
All new dwellings within NSW are required by BASIX to meet minimum criteria for sustainable design. However, there is an opportunity to integrate controls within the Penrith LGA's Development Controls Plans which go beyond the requirements of BASIX to provide the highest standards of environmentally sustainable design while being mindful of cost implications and impacts on housing affordability.

The following outlines some design aspects which can enhance the energy efficiency and environmental sustainability of a home:

##### *Orientation*

The location and siting of a dwelling on a lot will provide good access to the northern sun and allow for passive heating of the main living areas. Conversely, it is beneficial to shield the hot, summer westerly sun. Controls should seek to ensure that new dwellings are correctly located on a lot to maximise solar access and to minimise overshadowing to neighbours. Controls should also seek to accommodate microclimate considerations.

Figure 3.4.1a: Guide to orienting dwelling and open space areas to the north.

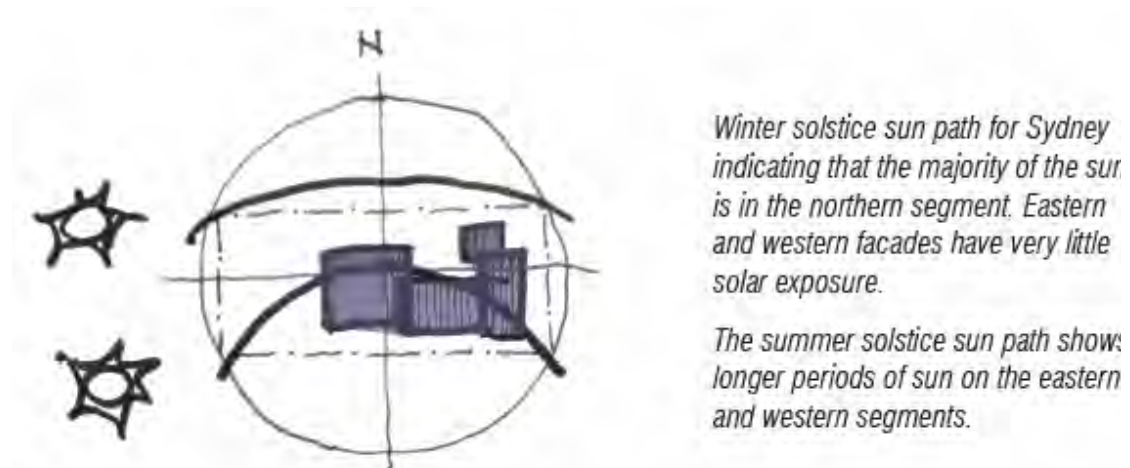


##### *Dwelling Layout for Passive Heating and Cooling*

The internal layout of rooms within a dwelling has significant impact on a dwelling's ability for passive heating and cooling. A dwelling which embraces passive design principles requires less mechanical heating and cooling, which results in significant energy and cost savings. The objective for solar access is to ensure passive solar gains to the rooms which are the most used, such as living areas. The general principle for passive cooling is to allow breezes to pass through the dwelling and ventilate the main living areas.

Controls can dictate the location of main living areas within a dwelling so as they utilise passive heating. Similarly, as bedrooms are used primarily in the evening they require less heating and can be located on sides of the dwelling which receive less sunlight. Utility, service areas and garages can be located on the western side of a dwelling to act as a buffer to the afternoon sun. Controls can also be developed to ensure dwellings provide for cross ventilation by orienting the dwelling for exposure to cooling breezes and locating windows to provide for breeze paths through the dwelling.

Figure 3.4.1b: Summer solstice sun path



Source: HASSELL 2008

#### *Size and location of open space*

The size and location of open space contributes to the amenity of a dwelling but if properly located, it can enhance solar access to a dwelling. For example private open space located on the northern / north-eastern elevation optimises solar access to that area of open space as well as into the main living areas of a dwelling.

#### *Site Coverage*

Site coverage relates to the footprint of the dwelling and associated structures on the allotment, such as hard surfaces, garages and shed. Minimising site coverage allows stormwater to naturally infiltrate into the ground and reduces increased overland flow from new development. Numerical controls can be developed for site coverage but these must be cognisant of densities.

#### *Site Levels*

Dwellings should be designed to respond to the natural topography and reduce the overall amount of disturbance to the site. This ensures dwellings are sensitively sited in the landscape and importantly, minimise the need to change the natural form of the land. Increased cut and fill results in increased drainage and stability problems including increased cost of excavation, as well as houses that are visually obtrusive and incompatible with neighbouring dwellings. Controls should seek to minimise cut and fill, particularly around existing trees.



### *Garages*

Garages can be located to protect the dwelling from the afternoon sun and therefore improve the internal climate of the dwelling. Controls can require, where possible, for garages to be located on the western side to protect the dwelling or private open space from the afternoon sun.

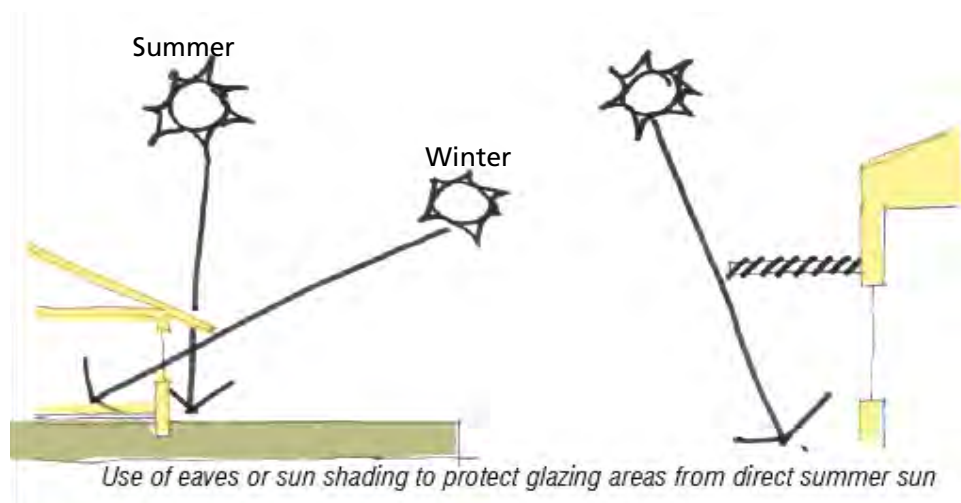
### *Building Setbacks*

The location of a dwelling on an allotment can have an impact upon the amenity of neighbouring dwellings and also on the visual presentation of a street. Reasonable setbacks of dwellings from boundaries also reduce the visual impact of the dwelling on the surrounding landscape and provide opportunities for the integration of planting with the natural landscape. Building setback controls can be developed for different allotment types to ensure they respond to the surrounding area.

### *Windows and Shading*

The location of windows is important to allow the sunlight and heat into the house. However, the windows need to be located and shaded correctly to ensure that the summer sun is kept out of the dwelling and the winter sun let in. Along the eastern and western facades, the angle of the sun is the closest to horizontal in the morning (east) and in the late afternoon (west) which exposes the dwelling to a high level of solar penetration. By contrast on the northern and southern facades the angle of the sun is higher which provides sufficient sunlight into the dwelling with reduced heat. These principles can be adapted into controls.

Figure 3.4.1c: Sun Shading



Source: HASSELL  
2008

### *Insulation and Thermal Mass*

The use of insulation and thermal mass can provide a more constant internal temperature, without relying upon mechanical heating or cooling. Insulation is important to retain heat in the dwelling during winter and prevent heat entering the dwelling during summer. Whereas thermal mass is the use of materials with a high capacity to retain heat, usually from sunlight during the day, and release the heat to warm the dwelling at night. Examples of high thermal mass materials include brick, concrete and tiles.

Controls should seek to recommend levels and types of insulation for all dwellings and promote the use of thermal mass.

Figure 3.4.1d: Thermal Mass



Source: HASSELL 2008

#### *Roof Design*

Roof design can contribute to passive heating and cooling of the dwelling, but is also important to provide design articulation and interest to dwellings. The use of skillion roofs allows solar access during winter and to provide cross ventilation. Similarly, eaves significantly reduce the solar penetration to both the walls and windows of the dwelling.

Controls should seek to promote pitched roofs, skillion roofs and to specify a minimum overhang width for eaves.

#### *Landscaping*

Landscaping around the dwelling can have a significant impact on the micro-climate of the site and energy efficiency of the dwelling. Landscaping around the dwelling can also screen winter and summer prevailing winds, deflect cooling breezes into the building, provide cooling air through leaf transpiration, reduce glare and generally modify ambient temperatures throughout the year. Controls should be developed to realise these objectives. Consideration must be given to the planting of endemic and native plant species and sustainable materials.

#### *Additional considerations for medium and high density dwellings*

In addition to the above, medium and high density dwellings need to consider how the new building integrates into a denser urban form and provides suitable visual and acoustic privacy to occupants and neighbours. Some additional provisions for medium and high density dwellings include:

#### *Acoustic Privacy*

Acoustic privacy for occupants of future development is paramount considering the overriding objective of locating increased populations proximate to more animated places.

Buffers may be used to protect a building, or part of a building, from disturbance produced in another part of the development or street. Buffers help maintain good levels of acoustic and visual privacy, thereby ensuring the privacy and comfort of all occupants. Consideration should also be given to sound proofing/double glazing methods to reduce noise levels.

### *Vehicular Access*

Vehicular access and car parking areas in medium and high density dwellings should be integrated with the overall building design, to avoid large expanses of garage doors and poorly located access points. Locating access to dwellings from side and rear streets can improve the presentation to the street and improve safety for other users.

### *Safety*

Medium and high density dwellings are usually located in places of activity and therefore can provide an important role in providing passive surveillance to surrounding areas. Crime Prevention Through Environmental Design (CPTED) principles such as planting kept below knee height or over head canopy trees, and avoiding solid walls and fences should be the basis of such controls.

### *Entrances and Street Orientation*

The location of entrances and the orientation of medium and high density dwelling responds to the street by providing visual interest, decorative features, modulation, rhythm and texture, in addition to a safe environment for all users.

Medium and high development should be oriented towards streets and other public spaces, with active frontages, overlooking windows immediately above ground floor, and high-quality architecture. This principle is reflected in the SEPP 65 Design Guidelines for Residential Flat Buildings.

## **KEY ISSUES: ENVIRONMENTAL DESIGN**

**Environmental Housing Design:** Ensure future dwellings utilise features of environmental design to improve resource efficiency of the dwelling and to contribute to a sustainable Penrith. Recognise that medium and high density dwellings can also utilise features of environmental design to improve the environmental performance of such buildings.

### **3.4.2 ADAPTABLE HOUSING DESIGN**

Adaptable housing refers to housing that is designed with basic accessible features which can easily be complemented with further features to meet individual needs over time. The dwelling can be easily adapted, if required, to cater for an older or disabled occupant, and then be readapted to a conventional configuration if that person moves out (Hill, 1999).

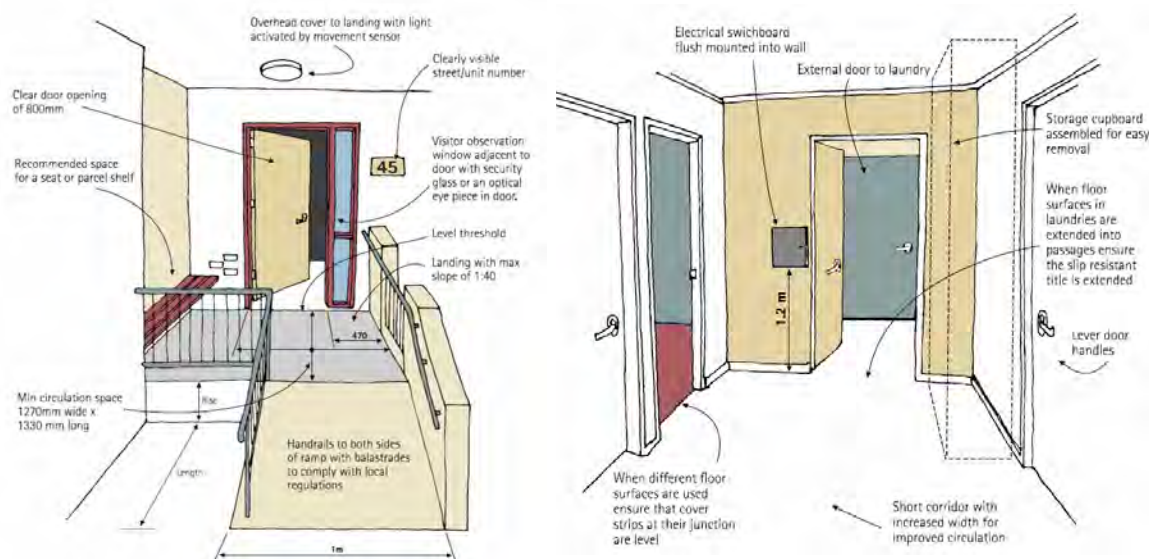
Adaptable housing is designed to meet the needs of people across a range of abilities and ages. For example adaptable housing allows people to remain in their homes longer or can accommodate people with disabilities.

Adaptable housing can also allow for different generations of a family to reside in a single home, this is important to meet the needs of different cultural groups but also may be an affordable housing option for some households. Integrating adaptable housing features into a home at the design stage can also provide cost efficiencies when compared to retro-fitting a home.

The Australian Network for Universal Housing Design (Starr 2005) has developed the following design features for inclusion into an adaptable dwelling:

<i>Accessible entrances</i>	All home occupants should have easy access from the car parking area and to the entrance of the dwelling.
<i>Level entry</i>	Dwelling should feature at least one level entrance to encourage ease of access for home occupants.
<i>Essential living areas on the entrance level</i>	Entrance should feature a living area, bathroom and toilet, and a bedroom on the entrance level.
<i>Bathroom capable for future adaptation</i>	Bathrooms should accommodate a spatial profile which could accommodate future adaptation if required.
<i>Reinforcement of bathroom walls</i>	Walls around the toilet and shower to be reinforced to enable future installation of grab rails.
<i>Kitchen access</i>	Should provide for easy access to and within kitchen. U-shape, L-shape and parallel galley style kitchens encourage easy access.
<i>Easy access doors and corridors</i>	Should provide good circulation at doorways as well as a generous internal corridors to make it easier to move furniture, carry groceries and for children.
<i>Consistent installation of switches, power points and window controls</i>	This allows for intuitive positioning of light switches at the same level as door hardware and raising power points from skirting level.
<i>Easy operable door and window hardware</i>	Most adaptable options include lever door hardware and lower level windows to encourage natural surveillance.
<i>Straight stairways</i>	Generous landings at the top and bottom of the stairs enhance accessibility and are easier to install an access lift if required.

Figure 3.4.2: Adaptable housing design



Source: *Housing for Life*, Master Builders Association of the ACT March 2001

## KEY ISSUES: ADAPTABLE DESIGN

**Adaptable Housing Design:** Encourage future dwellings to incorporate the principles of adaptable housing design to ensure dwellings meet the needs of people and families of all ages and abilities.

### 3.4.3 DESIGN PRINCIPLES FOR AFFORDABLE AND SUSTAINABLE HOUSING

As discussed in Chapter 3.3 Affordable Housing the provision of affordable housing is essential to ensure households have access to suitable housing which is within their financial means. This section outlines some design principles for affordable housing and then also reviews a examples of affordable housing design, Adaptable Housing Units (AHUs).

Housing SA (2008) has developed design principles which underpin the design, construction and management of affordable housing:

#### *Sustainability*

Affordable housing designs need to consider the long-term costs in addition to the up-front costs of buying a house. Long-term costs can be reduced through building a house that has environmentally sustainable design (ESD) techniques in place. ESD can reduce the demand for resources such as electricity and water, helping residents to save money on their living expenses.

#### *Well located development*

Well located affordable housing development increases both access to services and facilities, and long-term affordability aspects for residents. A concentrated form of medium to high density development around transit-oriented locations (such as train stations and frequent bus routes) and centres improves access for residents, increases the viability of public transport services and also enables a greater diversity of dwellings.

Improved access reduces the high costs of private car use as a transport method, increases land efficiency and increases the vitality and 'liveability' of neighbourhoods. Given the close proximity to public transport, there is less dependence on private car parking.

Residents have the ability to choose the type and size of house that suits them, and can 'trade-off' conventional housing elements (such as large gardens and excessive off-street parking) for the good access and easy maintenance that higher density living offers. With an ageing population and busier lifestyles the demand for well located and low maintenance properties presents a market opportunity.

#### *Adaptable housing*

Designing for adaptability can improve the long term affordability of a home and should be considered because of the need to suit a diversity of residents, the changing nature of household compositions, and adapt to consumer demands as consumer needs change over a lifetime.

#### *House form*

A choice of housing should be provided to suit the needs of a diverse population to promote sustainable communities, a wider social mix and be socially inclusive. All groups have different needs for housing, some beyond the conventional housing form. The different designs and housing forms needed to achieve this diversity can be compatible.

Higher densities can be accommodated across urban areas as they promote sustainable urban design and transport options. These areas are best suited for affordable housing as they provide a diversity of housing forms and as such a complementing affordable housing policy should also be adopted alongside this increased development capacity to ensure affordable housing opportunities are created.

#### *Integrating into the streetscape*

A key aim for the design of any housing is to achieve an attractive and desirable streetscape - this is no different for affordable housing. However the implications for the design of affordable housing are even more important because of the nature of affordable housing (such as smaller homes). Efforts must be made to integrate the design of different forms of dwellings from the street, so that affordable housing is not identifiable from other housing forms. This enables residents to feel a part of the neighbourhood and pride in the appearance of their dwelling.

#### *Design to facilitate community*

The design of neighbourhoods with affordable housing should consider the importance of residents being supported by well connected communities. Involvement in the community should be encouraged so that all residents feel they can contribute to the neighbourhood, increasing a sense of connectedness and social inclusion. Also, streetscapes need to be well connected so that individual dwellings should contribute to and be a part of the residential landscape, rather than looking 'out of place'

#### *Land and lot arrangements*

As the key component to housing costs, efficient land usage must be maximised in creating an affordable housing product. This can be achieved in ways which are sensitive to adjoining developments and community expectations for the area. Planning policy guidelines for affordable housing recommend that Councils consider providing differential planning provisions to permit higher dwelling yields in certified affordable housing developments.

#### *Titling and ownership*

Consideration should be given to titling that does not compromise an affordable housing product. Using small, individually titled blocks is a key element in creating long term affordability, compared to the traditional approach of a community title covering a number of dwellings. Advantages in using individually titled property rather than a community title include:

- Reduced ongoing costs such as corporation fees;
- Each owner has full control of use of space and a greater sense of ownership; and
- The timing of maintenance and capital expenditure can be determined taking into account their immediate financial position.

#### *Parking considerations*

Parking is an important consideration in the design of affordable housing. Minimum car parking requirements vary across Development Control Plans, and for most suburban residential zones, 1 to 2 off-street car parks are usually required. This should not be different for affordable housing in most suburban residential zones.

However areas that are well accessible (within walking distance of public transport or centres) should have a reduced requirement, to reflect less dependence on the private car. In this situation, residents can choose to trade-off features such as reduced car parking for an accessible, quality location. Residents may find long-term affordability benefits in using public transport more attractive than the increasing costs of owning and running a car or be able to have fewer cars for the household.

Also, smaller households may have less parking requirements. A reduced parking requirement can contribute to the affordability of the dwelling through more efficient use of the space available.

Figure 3.4.3: Affordable housing designs



Source: HASSELL 2008

### 3.4.3.1 Accessory Dwelling Units

Landcom has investigated an alternate dwelling design to meet affordable housing needs, particularly in new development areas. Accessory Dwelling Units (ADUs) are defined as "A self contained, but not separately titled, dwelling that is not larger than 60 square metres or 40% of the total floor area (excluding enclosed garage space) of the existing principle dwelling (which ever is greater) and is located within, attached to, or detached from, an existing or proposed principle dwelling." (Landcom, May 2006)

ADUs are designed primarily for low density areas where they can be integrated into the design of a larger dwelling. ADU's are essentially a self contained unit, similar to a 'granny flat' and assist in the provision of socially sustainable and affordable housing by:

- Increasing the supply of affordable rental accommodation available to low to moderate-income earners,
- Increasing access to independent housing opportunities for a variety of contemporary households,
- Encouraging more efficient use of the existing housing stock,
- Providing supplementary income for dwelling owners on limited incomes, and
- Contributing to the creation of socially sustainable neighbourhoods.

Currently, local planning provisions are generally restrictive in regard to ADUs, with only a few councils permitting them in residential areas. Recently some councils in NSW such as Parramatta, Camden, Hurstville and Kogarah Councils have amended their Local Environmental Plan's to allow ADU's, usually under the definition of 'granny flats'. The LEPs will be supported by design standards incorporated into Development Control Plans.

Figure 3.4.3.1: Examples of Adaptable Housing Units (ADUs)



*Source: Landcom 2006*

#### **KEY ISSUES: AFFORDABLE DESIGN**

**Providing Affordable Housing:** Use the principles of affordable housing to guide the location and form of affordable housing projects.

**Providing Affordable Housing:** Investigate opportunities to integrate Accessory Dwelling Units (ADUs) into new housing projects within Penrith.

### **3.5 URBAN CONTEXT**

Penrith's urban areas comprise a range of land uses, transport infrastructure, open space and recreation and services and facilities. The Urban Study identifies the various elements comprising the Penrith urban context and summarises the issues to be addressed in managing Penrith's future growth and development.

#### **3.5.1 Penrith City Local Government Area and Suburbs**

The patterns of urban growth in the existing urban areas of the Penrith LGA focus on an east west alignment, which corresponds with major transport infrastructure as well as a north south corridor also focused on transport linkages.

In addition to the existing suburbs, there are numerous residential urban release areas, an education precinct and an employment precinct in the Penrith Local Government Area, including:

1. Werrington Enterprise Living and Learning (WELL) Precinct
2. Werrington Mixed Use Area (part of the WELL Precinct)
3. Claremont Meadows Stage 2 (part of the WELL Precinct)
4. Caddens Release Area (part of the WELL Precinct)
5. South Werrington Urban Village (part of the WELL Precinct)
6. Penrith Lakes
7. Waterside (Lakes Environs)

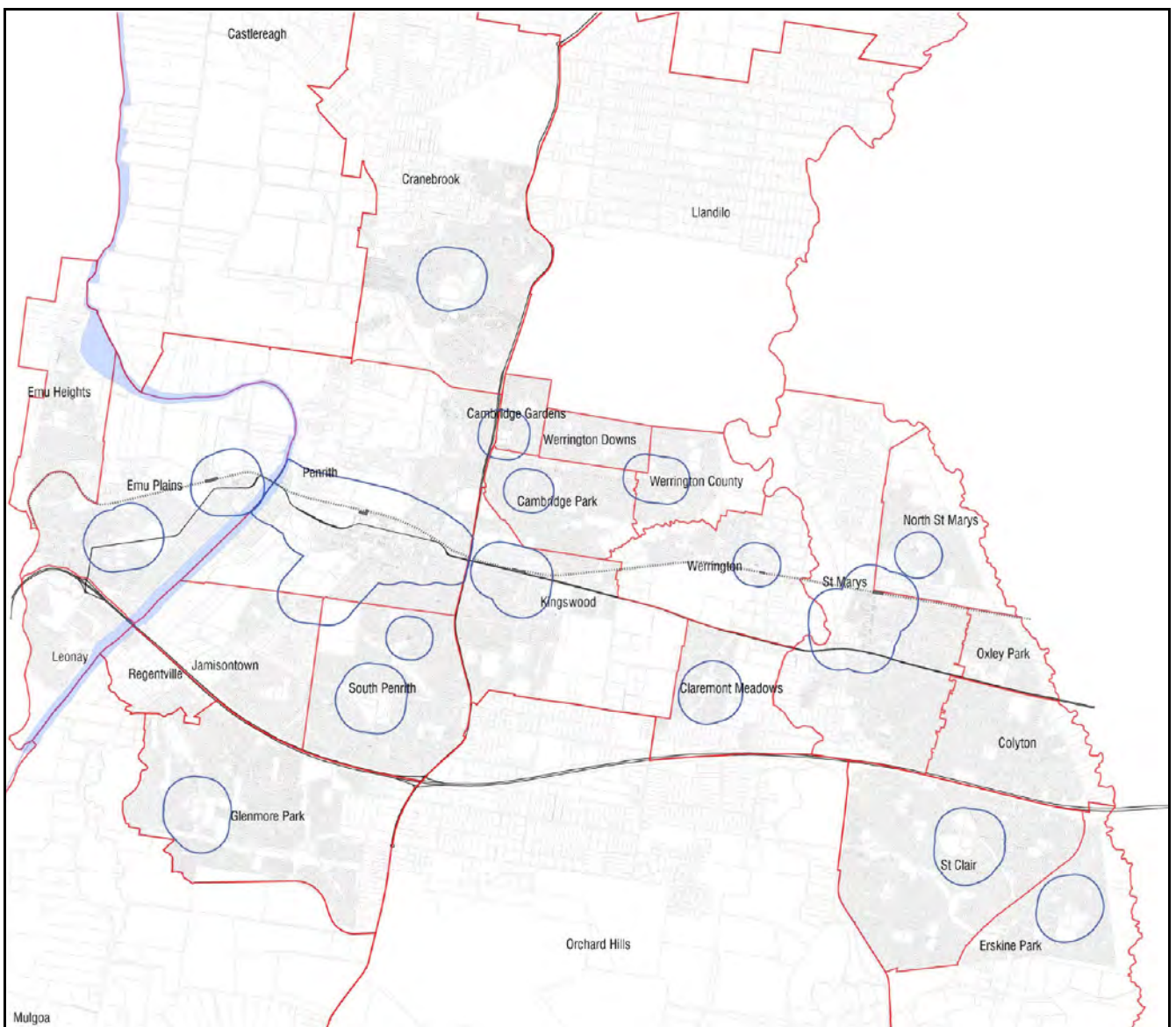


- 8. Glenmore Park Stage 2
- 9. St Marys Release Area (former ADI site)
- 10. North Penrith Urban Area
- 11. Erskine Business Park

The majority of Penrith's suburbs are serviced by a centre, as depicted in Figure 3.5.1 below. These centres radius or catchment areas, circled in blue, correlate to their primary walking catchments for each of the business zones in each suburb.

A challenge facing future development within the Penrith LGA is the ongoing function and role of these and proposed new centres associated with the new release areas and the ability of these centres to meet the current and future resident needs and demands.

Figure 3.5.1: Key Suburb boundaries and Existing Centres, Penrith LGA



Source: Council GIS Mapping, April 2008

### 3.5.2 PRIVATE TRANSPORT AND ROADS

Council has adopted the Penrith Integrated Transport and Land Use Strategy (2008) (referred to as 'PITLUS Report'), which details transport issues, needs and strategies to meet current and future demands on the transport network and infrastructure associated with increasing population and jobs growth in the Penrith LGA. This Study will highlight the key issues from the PITLUS Report (2008) that relate to urban growth and development.

Penrith has access to several of the Sydney Metropolitan Region's key road systems. The key road hierarchy for the Penrith LGA is shown in Figure.3.5.2. This includes:

In an east-west direction:

- The M4 Motorway; and
- The Great Western Highway.

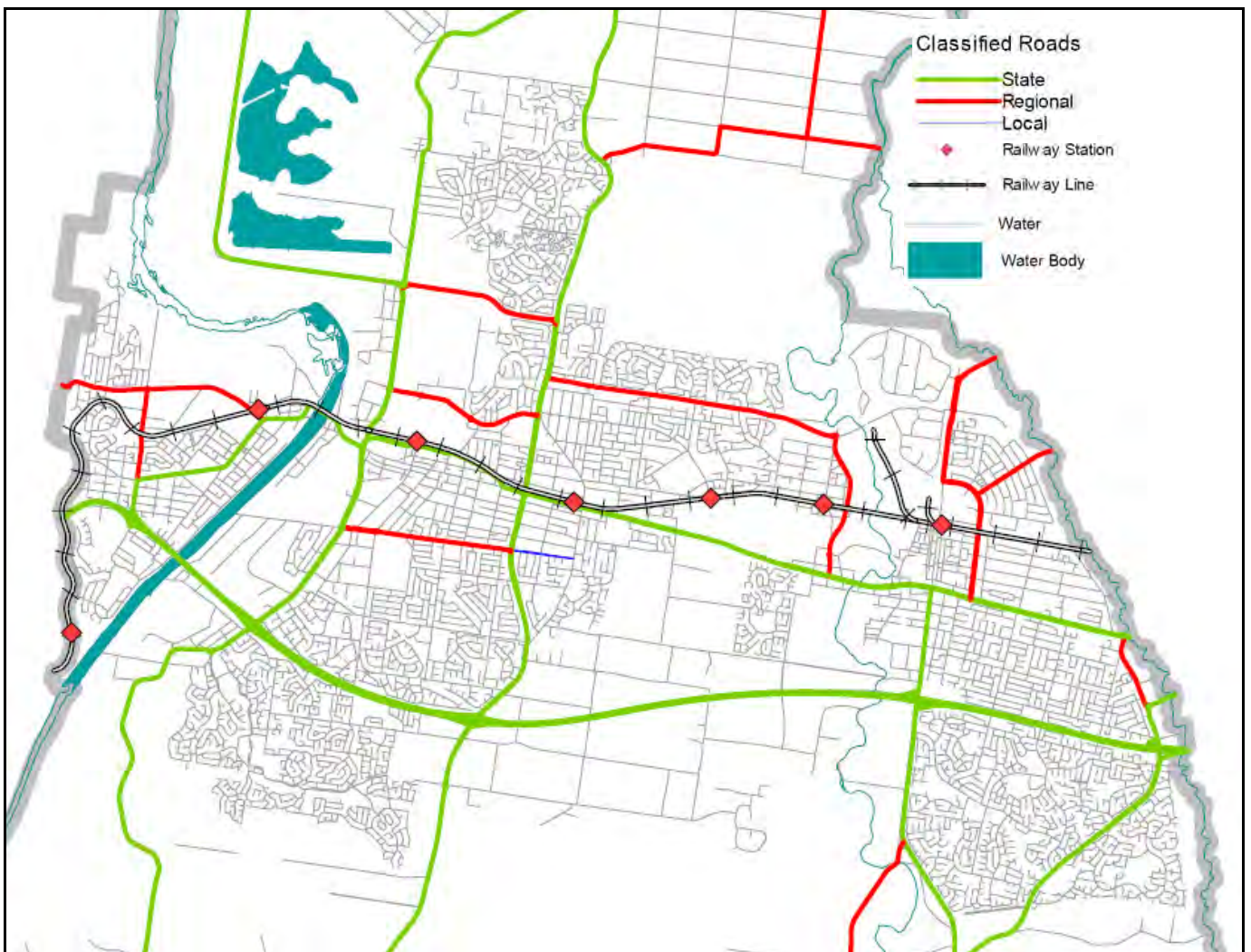
In a north-south direction:

- Castlereagh Road - Mulgoa Road;
- The Northern Road;
- Mamre Road; and
- Erskine Park Road-Carlisle Avenue

The M4 is the primary motorway linking Penrith with the eastern and western areas. This links to the M7 Motorway, which is a major motorway running north-south in close proximity to the eastern boundary of the LGA and linking the M2 and M5 Motorways.

The key authorities responsible for the road network are the Roads and Traffic Authority ('RTA') who are responsible for State and Regional Roads; and Penrith City Council ('Council') who are responsible for Local Roads.

Figure.3.5.2: Hierarchy of roads (and the Western Rail Line) through Penrith LGA



Source: PITLUS Figure 5.2 - Road Classification by Responsibility

Despite the extensive road infrastructure, there are numerous deficiencies in the local arterial road networks, identified in the PITLUS Report (2008:3-3), specifically:

- meeting natural traffic growth,
- meeting traffic growth anticipated in the future population projections,
- need for increased funding to enable short and long term transport infrastructure and network programs, and
- augmentation to meet the needs of future populations.

With increasing demands on the road infrastructure there is a need to ensure future development is suitably located in relation to a functional road hierarchy, with particular needs associated with adequacy of feeder roads into and out of residential areas, need for maintenance and upgrade of neighbourhood roads to address deterioration and management of through traffic.

Section 3.1.4.6 of the Urban Study identifies the extent of car ownership and demonstrates that the car is the primary mode of transport in Penrith LGA. With such high car ownership and reliance on the private motor vehicle there is a need to address

inadequacies in the road network and infrastructure to meet current and ongoing transport needs.

#### **KEY ISSUES: PRIVATE TRANSPORT AND ROADS**

**Road Hierarchy and Integration of Land Uses:** Need to formalise and maintain a functional road hierarchy for all roads within the LGA, particularly due to anticipated future demand on road networks.

**Road Infrastructure Capacity:** Address deficiencies in existing road infrastructure and address existing and proposed future urban growth and development.

**Implementation:** Opportunities and constraints identified in the PITLUS Report relating to private transport and roads should be addressed as part of the Urban Strategy and integrated into all relevant Council policies.

**Sustainable Development:** Provide viable transport alternatives to the dominance of private vehicle use as a mode of transport in order to minimise potential impacts on the integration of transport and land uses and the resulting environmental, social and economic sustainability of the Penrith LGA

### **3.5.3 PUBLIC TRANSPORT**

Access to regular and reliable public transport is a key issue for existing and future residents in the Penrith LGA. The key providers of public transport in the Penrith LGA are:

- Rail: Cityrail (RailCorp) and
- Bus: Westbus (Private Operator).

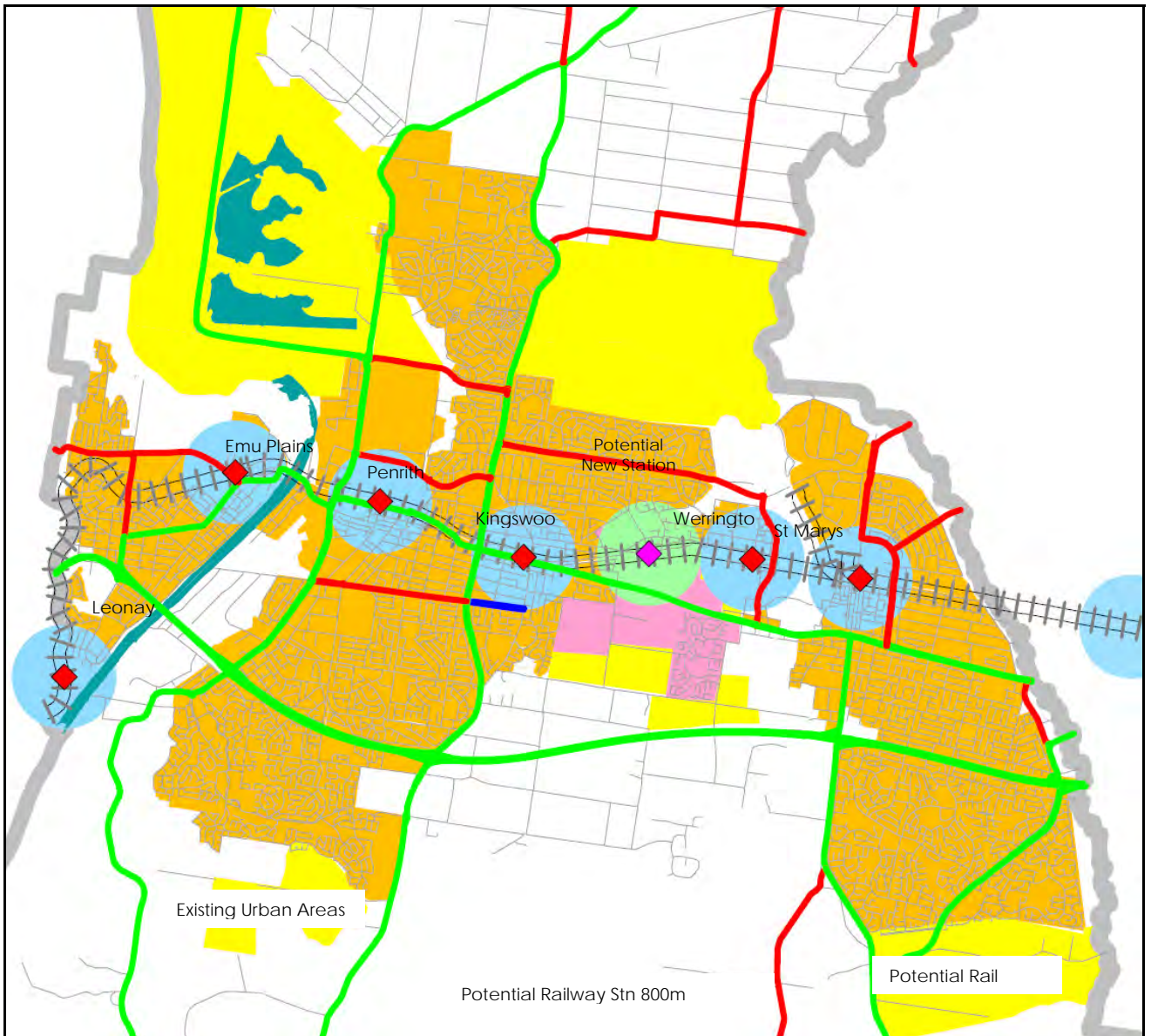
Community bus services are provided for key target and special needs groups by Penrith City Council, community service providers and not for profit groups. It is noted that the University of Western Sydney and Penrith Panthers provide shuttle buses for students and customers and there has also been shuttle buses provided for shoppers at peak Christmas shopping periods. Taxis are another mode of public transport within Penrith LGA.

#### **3.5.3.1 Existing and Proposed Rail**

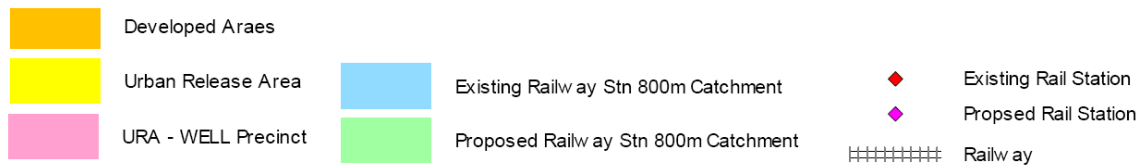
The main western railway line extends from Lithgow in the west through Penrith to Parramatta and the Sydney CBD. Key railway stations in the Penrith LGA are shown in Figure.3.3.3 below. On average, train stations are located 2-3 kilometres apart, with some stations ranging from approximately 1.7km apart between St Marys and Werrington through to nearly 3.8km apart between Werrington and Kingswood.

Express services on the Lithgow to Sydney Central route stop at Penrith but no other stations (generally) in the Penrith LGA. Most other Western Line services stop at all stations in the Penrith LGA before continuing either as an express or regular stop service into Sydney Central.

Figure.3.5.3:1 Western rail line and 800m catchment from existing and potential rail stations and its correlation to existing and proposed urban areas



Source: PITLUS Report, Figure 5.5



It is generally accepted that an appropriate walking distance from key transport nodes such as rail is approximately 800m (approximately 10 minutes walking time) with a reduced distance of 400m (~5 minutes walking time) for reasonable-frequency bus stops/routes. This may vary as a result of a number of factors (e.g. topography, directness of path of travel etc). While people may choose to walk greater distances, the greatest densities of residences and employment should be within this catchment to promote use of public transport and minimise use of private vehicles.

There are limited extensions of the existing rail system proposed to service new or existing areas, with potential location of a new station (shown in Figure.3.5.3.1) between Werrington and Kingswood to service the University of Western Sydney and Werrington Enterprise Living and Learning ('WELL') Precinct..

Extensions of the rail line should also be considered for significant new release areas such as the St Marys ADI site (with potential re-use of the rail spur near North St Marys), if densities are sufficient to support a rail extension. The potential would need to be discussed with RailCorp and key landholders.

### **3.5.3.2 Existing Bus Routes**

The majority of the Penrith LGA is serviced by an extensive private bus network, provided by Westbus. The key Westbus routes are shown in Figure.3.5.3.2 below. The bus routes generally seek to maximise the catchment and provide public transport connections to key commuter rail stations (particularly Penrith and St Marys).

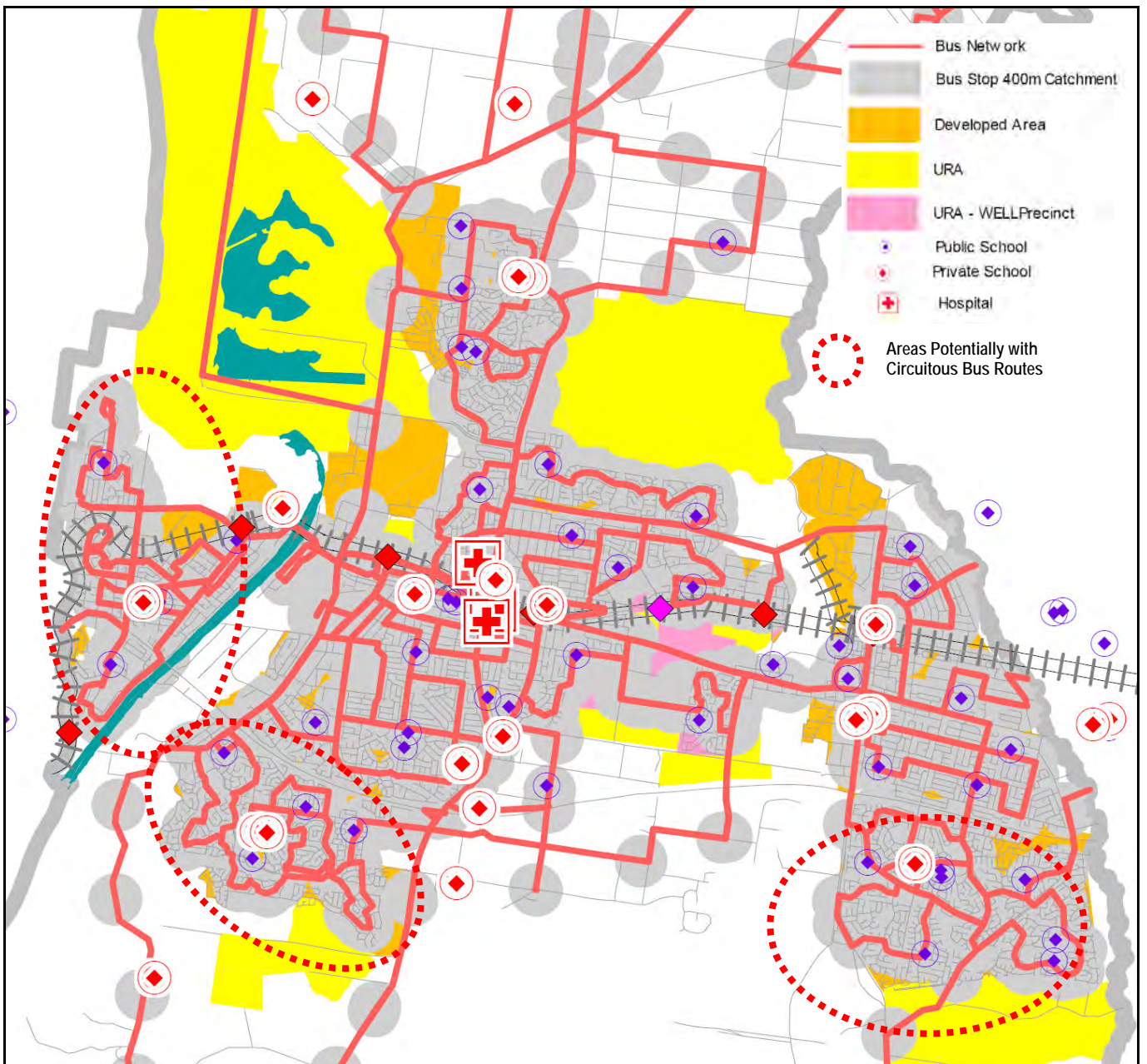
Figure 3.5.3.2 identifies that 88% percent of the existing urban areas is located within 400m of bus stops on key bus routes within the existing Penrith urban areas. The areas in yellow are not within 400m of a key bus route including parts of the employment areas in North St Marys, parts of St Marys South, employment lands in North Penrith, and the new Waterside development. Whilst the new release areas are not currently serviced it is expected that bus routes would be integrated into any proposed development of these areas and also expand the coverage and services within existing adjoining areas.

Issues influencing the adequate provision of bus public transport services include:

- regularity and reliability of services,
- limited timetables and hours of service,
- the circuitous nature of many bus routes, particularly in suburbs without grid-street patterns (e.g. Glenmore Park, St Clair and perhaps Emu Plains),
- the lack of integration with rail timetables,
- the time delay associated with changing transport modes, and
- the perception of safety and amenity for users (particularly at night in areas outside key centres).

These issues are likely to generate lower levels of patronage and, as a result, less likely to encourage improvement to service provision.

Figure.3.5.3.2: 400m walking distances from public bus stops and correlation with schools and hospitals and developed areas.



Source: PITLUS Report, Figure.5.7

## KEY ISSUES: PUBLIC TRANSPORT

**Integrated Transport and Land Use Planning:** Need to promote urban development in close proximity to existing and proposed public transport nodes to enhance viability of higher levels of service.

**Integrated Transport Service Provision:** Need to enhance the integration between different public transport modes and between public and private transport modes to reduce the time delay in changing transport modes and make it more attractive (e.g. park and ride options; integrated bus and rail timetables; integrated ticketing).

**Enhanced Public Transport Services:** Need to enhance public transport coverage, directness of service, frequency, quality/amenity and safety to align with potential urban growth areas and population growth patterns.

**Implementation:** Opportunities and constraints identified in the PITLUS Report relating to public transport should be addressed as part of the urban growth strategy and integrated into all relevant Council policies.

**New Release Areas:** Public transport provision should be integrated with new release area strategies.

### 3.5.4 ACTIVE TRANSPORT (CYCLING AND WALKING)

Active transport includes modes where people are active when travelling such as cycling and walking. These modes are considered to be an equitable, cost effective and healthy mode of transport and environmentally the most sustainable mode of transport. Identified needs for active transport include the provision of safer footpaths and cycleways. Existing pedestrian network is considered to be indirect, limited and unpleasant. Council's Established Residential Areas Infrastructure Facilities and Services Strategy (Mar 2004) states that there is a need to provide universal access and design of facilities.

#### 3.5.4.1 Cycling

Penrith City Council has prepared the 1996 Penrith City Council Bike Plan ('Bike Plan') with the aim of providing safe and convenient cycling within the Penrith LGA. The Bike Plan, portrayed in Figure 3.5.4.1 identifies the existing and proposed cycle connections for recreation, commuting, journey to school, and bicycle tourism.

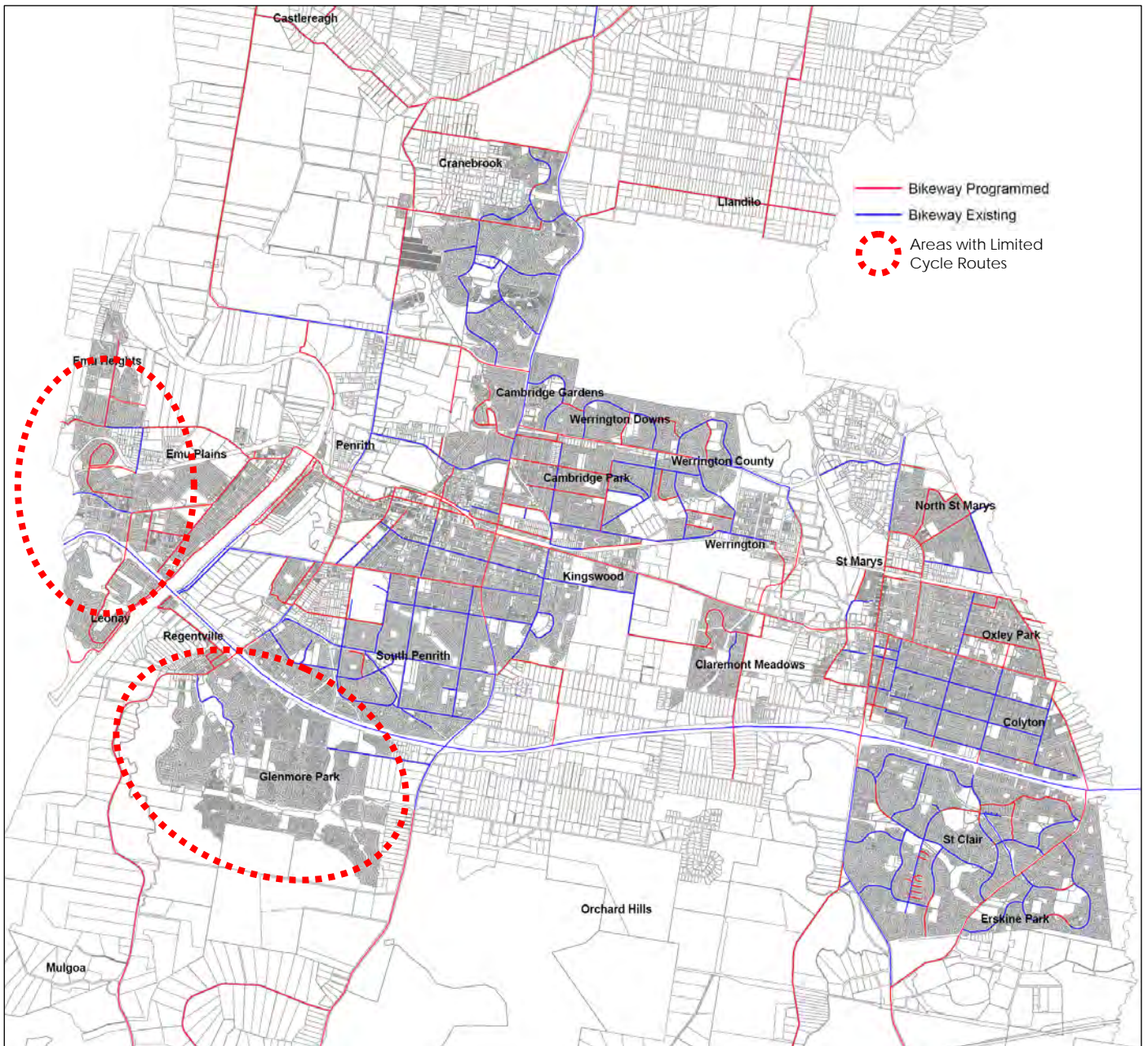
Key issues limiting active transport by bicycle and facing the existing bicycle network include:

- there is limited formal bike paths within Penrith LGA,
- there is a lack of connectivity or clear routes between the residential areas and major attractors (such as residential areas, employment centres, commercial centres, hospitals, education facilities and rail stations),
- the designation of cycle ways does not necessarily reflect the actual level of facilities on the ground, with some designations unmarked or signposted,
- there is a dominance of on-road cycle ways and limited separated cycle ways, and
- there is limited provision of facilities that allow secure parking and showers/change rooms to improve amenity.

Opportunities to enhance cycling opportunities include the development of a hierarchy of cycle routes that link key attractors and clear provisions to guide planning for new roads and for retro-fitting existing roads. There is an opportunity to significantly enhance the cycle network and improving cycling as an active transportation choice.



Figure 3.5.4.1 Existing and proposed cycle ways in Penrith's urban area



Source: Council GIS, April 2008

### 3.5.4.2 Walking and Footpaths

Walking is generally preferred for recreation or for travel over shorter distances and is an important part of multi-modal transport trips (e.g. connections between bus stops, railway stations and surrounding land uses).

For walking routes to be accessible to the wider community (including wheelchairs and prams) there needs to be a provision of quality, well-lit footpaths and ramps connecting key land uses and attractions.

Investigations into existing footpath provision in some of the key centres of the Penrith urban area has found that footpath provision is relatively limited in many centres, particularly in key locations such as within 800m of key rail stations. In addition, there is a need to review pedestrian facilities such as crossing, pram ramps etc to ensure they are in good condition and meet requirements for wheelchair access.

#### KEY ISSUES: ACTIVE TRANSPORT - WALKING AND CYCLING

**Connecting Key Attractors:** There is a need to enhance bicycle and pedestrian connections between residential areas (existing and proposed) and key attractors (such as retail, education and employment) to increase walking and cycling as an active transportation choice.

**Infrastructure Provision:** Existing cycleway and walking facilities will need to be improved to increase pedestrian and cyclist safety, navigation and amenity.

**Vehicle Safety:** Roads should be designed to incorporate safe walking and cycle routes where possible, particularly in new release areas, with an emphasis on separated cycle paths (off or on road) and clear crossings.

**Crime and Safety:** Pedestrian and cycle routes should, where possible, be located where there is casual surveillance from neighbouring properties and there is appropriate lighting to improve safety.

**Bicycle Facilities:** Key attractors such as commercial and education facilities should, where possible, incorporate facilities that promote use of bicycles.

**Amenity:** Key routes should be supplemented with public domain improvements such as street trees for shade to improve amenity for pedestrians.

### 3.5.5 RESIDENTIAL LAND USES

One of the key demands resulting from population growth in the Penrith LGA is the need for an adequate supply of appropriately located and serviced residential lands to meet the growth and demographic requirements of Penrith.

As Figure 3.5.5 below shows, the greatest portion of Penrith's urban area is taken up by land zoned for residential use. Residential growth is likely to comprise the greatest percentage of the total urban growth. The additional 25,000 new dwellings anticipated in the Penrith LGA by 2031 will be spread relatively evenly across both the existing infill areas and the proposed new release areas.

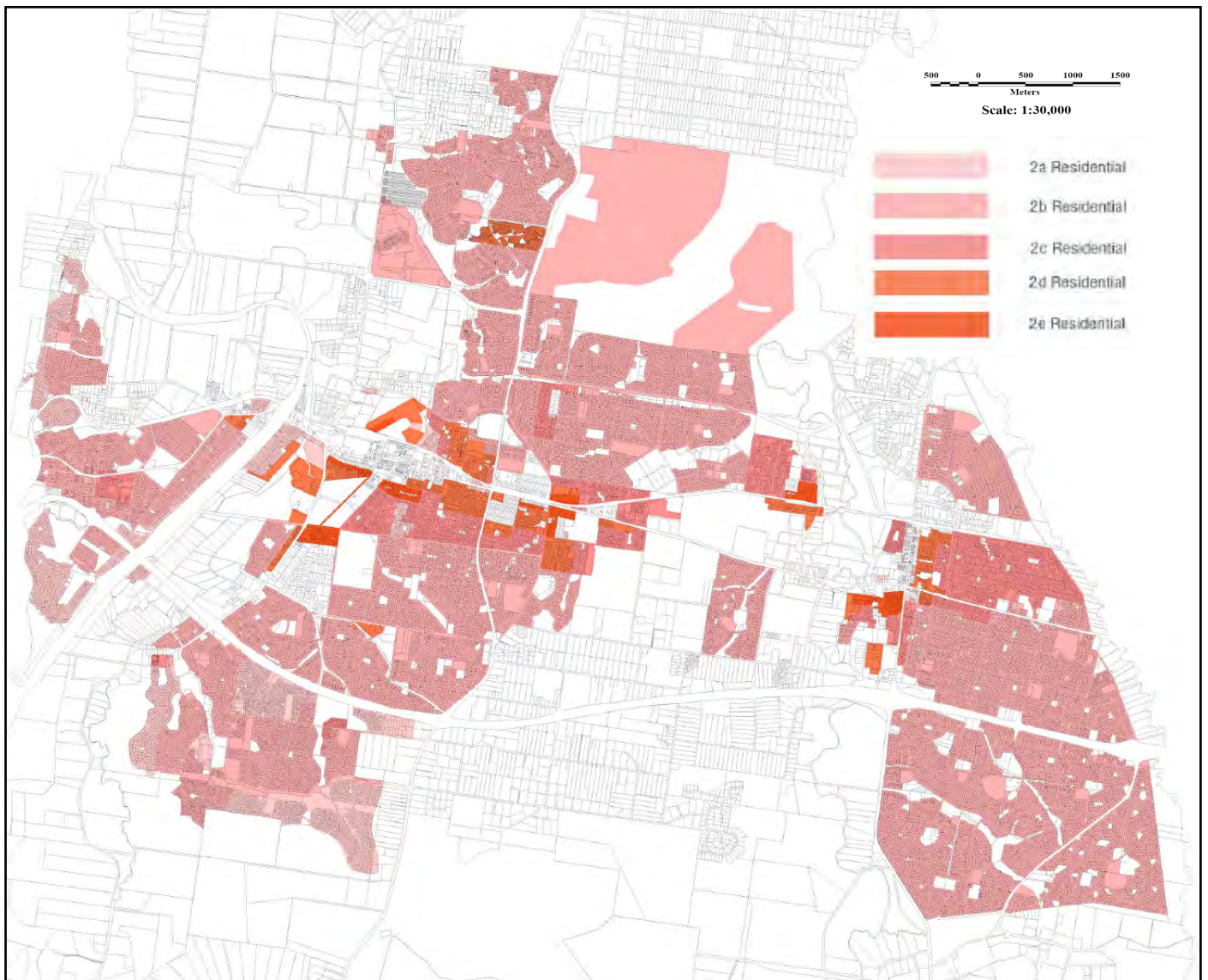
Issues for urban growth include:

- minimising land use conflicts with other land uses (especially industrial and environmental zones/ uses),
- minimising the impact of increased residential densities on the desirable character for each key area,
- providing an appropriate range of dwelling types to meet the needs of existing and future household types and demands,
- providing accessible and affordable housing to meet future population needs, and

— balancing the need for additional supply with the cost of servicing new release areas or upgrading existing infrastructure capacities in existing areas including utilities, transport and services. There needs to be a correlation between urban growth strategies and infrastructure strategies.

This Urban Study will seek to review the key issues for urban growth and development, with a focus on residential land uses (see summary of issues below) and provide recommendations for appropriate strategies to manage these issues as Penrith grows.

Figure 3.5.5 Existing Residential Zones in Penrith's urban area



*Source: Council GIS, April 2008*

## KEY ISSUES: RESIDENTIAL LAND

**Sufficient Land:** Need to ensure a sufficient supply of appropriately located and serviced residential lands (balanced with provision of other land uses) to meet the growth and demographic requirements of Penrith both now and in the future.

**Land Use Conflicts:** Appropriate location of residential land uses to minimise conflicts with other land uses (especially industrial and environmental zones/uses).

**Dwelling Types:** Provision of appropriate dwelling types that provide affordable and accessible options to meet the needs of existing and future households.

**Infrastructure & Supply:** Balance the need for additional supply with the cost of servicing urban expansion with infrastructure, transport, utilities and services;

**Infrastructure & Densities:** Appropriate densities of residential development that improve the viability of providing these services;

**Higher Densities & Amenity:** There is a greater need for clearer design objectives and controls to guide future development to ensure compatibility with the character of area and minimise impacts on the amenity of adjacent properties.

**Access & Transport:** Residential areas (both existing and proposed) need to ensure that they are located in close proximity to public, active and private transport routes for accessibility.

### 3.5.6 RETAIL / COMMERCIAL LAND USES

Retail/commercial nodes or centres need to provide the necessary services for the residential areas as well as local employment opportunities. This section identifies the key elements required for the design and development of successful centres, while Chapter 4 will outline some of Penrith's centres' characteristics and opportunities and constraints in more detail.

Whilst the focus of this study is on the residential capacity of Penrith's urban areas, higher densities or dwellings are likely in the centre catchment/radius which need to be integrated with retail and commercial functions to create successful neighbourhoods. One aspect of this Study is the integration of compatible land uses in centres to enhance centre activity and vitality, reduce the need for use of private vehicles, increase accessibility, integrate transport and lands uses, and improve the sustainability of these centres.

Some other key aspects of the design of successful centres include:

- Location - takes advantage of topography and passing trade, e.g. near a railway station,
- Co-location - locates compatible activities (trip generators) together to reduce the extent of travel needed to complete essential tasks,
- Consolidation - increases densities around the centre, reinforces the advantages of co-location and increases the local catchment (and hence viability) of shops,
- Street system - neighbourhood centres are best located close to, but not on, arterial routes,
- Sufficient space for retail and commercial uses within centres and zoning,
- Minimising potential conflicts between retail and commercial development and sensitive land uses, and

— Street design - the street must be attractive, with passing traffic at low speed and bicycle and car parking convenient (bicycle racks and parallel on street car parking).

Penrith City Council has an adopted Interim Centres Hierarchy (2007) which identifies for each centre its role and function in the local government hierarchy (detailed in the Table below). In the preparation of the Metropolitan Strategy, the NSW State Government nominated a centres hierarchy which differed slightly to that adopted by Council as shown in Table 3.5.3a below. The difference in designation would appear to be based on definition and consideration of the local rather than regional context.

Table 3.5.6a: Existing Centres Hierarchy (2007) for the Penrith urban area

Existing Hierarchy	Existing Centres / Suburbs	New Release Areas	Metropolitan Strategy Hierarchy
Regional City	Penrith City Centre	North Penrith Urban Area	Penrith City Centre
Specialised Centre	Kingswood (incl. Medical Precinct)	Werrington WELL Precinct Claremont Meadows Stage 2 Werrington Mixed Use Area Caddens Release Area South Werrington Urban Village	None in Penrith LGA
Major Centre			None in Penrith LGA
Town Centre	St Marys	N/A	St Marys
Village	Emu Plains Glenmore Park South Penrith (South Lands) St Clair Shopping Centre	Penrith Lakes Precinct Centre WELL Precinct Centre	Cranebrook Glenmore Park South Penrith St Clair
Small Village	Claremont Meadows Cranebrook Emu Plains (at station) Erskine Park Werrington County	ADI Central Precinct Centre ADI Western Precinct Centre Glenmore Park Stage 2 Precinct Centre North Penrith Urban Precinct Centre	Claremont Meadows Cambridge Gardens Emu Plains Erskine Park Kingswood Werrington Station
Neighbourhood Centre	Cambridge Gardens (Star Court) Cambridge Park Mulgoa Village North St Marys Smith Street (South Penrith) Werrington (at station)	N/A	Australia Street, St Marys Cambridge Park Banks Drive, St Clair Derby Street, Penrith Emu Heights Kingswood Park Leonay Monfarville Street, St Marys North St Marys Oxley Park Smith Street, St Marys Stafford Street, South Penrith Werrington County

Source: Council's Interim Centres Hierarchy (2007) and Department of Planning (2007)

In addition to the centres the Council's Interim Centres Hierarchy identified the following employment lands, in Table 3.5.6b, in existing urban areas and new release areas:

Table 3.5.6b: Employment Lands in Penrith LGA 2008

Existing Hierarchy	Existing Centres / Suburbs	New Urban Areas
Employment Land	Dunheved Emu Plains Jamisontown Kingswood (east) Kingswood (north) North Penrith North St Marys	Penrith Lakes St Marys Release Area (Central Precinct) St Marys Release Area (Western Precinct) Waterside

*Source: Council's Interim Centres Hierarchy (2007)*

While it is not part of this study to conduct a detailed review of other employment land uses such as industrial land uses, it is relevant to summarise the key locations of industrial development across the Penrith urban areas because these are a key employment generator and are both a significant opportunity and constraint on future urban development.

In particular, the location of existing and proposed industrial lands may impact on the development of existing infill areas as well as proposed new release areas. In addition, many new release areas will incorporate some form of employment generating uses, some of which may include industrial land uses (but most likely of the low-impact / technology / business park type). Urban growth needs to integrate employment opportunities into existing and new release areas by permitting compatible land use types in mixed-use zones and separating non-compatible land use types, especially from residential and key centres.

The issue of the appropriate centres hierarchy for Penrith's urban centres will be considered in more detail in the suburb chapters.

#### **KEY ISSUES: COMMERCIAL /RETAIL/EMPLOYMENT LAND**

**Sufficient Supply:** Supply of appropriately located and serviced commercial/retail/employment lands to meet the growth and demographic requirements of Penrith both now and in the future.

**Hierarchy & Location:** Creation of a clear hierarchy of centres in appropriate locations that meets the needs of each catchment, provides complementary land uses, avoids conflicts between centres and provides ease of access.

**Land Use Conflicts:** Appropriate location of commercial/retail land uses to minimise conflicts with other land uses (especially industrial, environmental and residential zones/uses).

**Building Types:** Provision of appropriate building types to meet the needs of existing and future businesses while meeting sustainability objectives;

**Integrated Land Use & Transport:** Achieving an appropriate land use mix with co-location of compatible uses, integration of residential uses into Local Centres, employment generation, and access to key transport routes to create vitality for each Employment Area whilst minimising conflicts.

**Access & Transport:** Commercial/retail and employment areas (both existing and proposed) need to ensure that they are located in close proximity to public, active and private transport routes for accessibility.

### 3.5.7 PUBLIC PARKS AND OPEN SPACES

Public parks and open spaces play a significant role in the provision of recreation areas (both passive and active), meeting places, provision of open space, landscape character, and environmental outcomes for the Penrith urban area. Use of public open space is not just about size and location, but also about the quality of the spaces and safety.

Penrith LGA has a significant provision of parks and open spaces, as shown in Figure 3.5.7. In 2002, Council identified that it managed 1,241 hectares of open space, consisting of 412 hectares of parks, 340 hectares of sporting fields, 228 hectares for community use and 261 hectares as natural area. This provision equated to 7.20 hectares:1000 people, which exceeded the benchmark standard of 2.83 hectares: 1,000 people. The provision of sporting fields also exceeded the benchmark of between 1.21 and 1.8 hectares:1000 people overall. However the provision of sporting fields in new release areas was identified as being deficient.

The location of open space and recreation resources appear to correspond with the location of drainage corridors, rather than the location of the local centres.

Key issues identified in the background documentation associated with parks and open space include:

- While extensive in provision the size, usability, maintenance and quality in open space and parks varies,
- Equity in distribution remains an issue for new release areas,
- Safety and security issues apply to parks with low levels of informal surveillance,
- There is a need for more active spaces as well as passive spaces with facilities such as BBQs areas, seating, walking trails and shelters,
- Accessible scenic locations and river corridors attract higher usage than natural bushland reserves which are less accessible and more remote in nature,
- There is a need to embellish the district level open space and recreational areas, and
- Parks and open space also significantly contribute to semi-rural character and landscape characteristics.

Figure 3.5.7: Key parks / public open spaces throughout Penrith's urban area



Source: Council GIS, April 2008



## KEY ISSUES: PUBLIC PARKS AND OPEN SPACE

**Open Space Provision:** Ensure sufficient parks / open space is provided for increased population growth and to provide communal open space for areas of higher urban density to compensate for reduced private open space. Public parks and open space play an important role in building social/community capital.

**Quality/Useability:** Ensure public parks and open space are of appropriate size, quality and useability to meet the needs of future populations passive and active recreational needs.

**Landscape Character:** Need to recognise the importance of parks in the provision of landscaped areas that are vital to the rural and landscaped character of the Penrith LGA.

**Integration with Active Transport Routes:** Ensure there is accessibility of parks/ open space in proximity to public transport and pedestrian/cycle linkages and proximity to areas of high urban densities and key Local Centres.

**Connection of Open Spaces:** Need for connectivity between public open spaces / parks both for ecological outcomes and the promotion of active recreation and alternative active transport solutions (especially cycling).

**Environmental Buffers:** Conflicts between human and environmental aims for parks / open spaces when parks are located along key waterways or ecological corridors.

**Active Recreation Opportunities:** Need to provide for increasing number of youth with greater active recreation needs.

**Passive Recreation Opportunities:** Need to provide for increasing ageing society with greater passive recreation needs.

**Maintenance/Contributions:** Costs of provision and maintenance / watering of public open space areas (limitations of Section 94 contributions). Future costings need to consider whole of life replacement costs as well as annual maintenance costs

### 3.5.8 LANDSCAPE CHARACTER

Landscape character within the urban areas is considered important to protect and maintain existing character and amenity of Penrith's urban areas. Landscape character contributes to the existing 'green' character of some suburbs, significant environmental features and settings, and the rural setting for Penrith's urban areas.

Penrith LGA's landscape character and amenity is associated with significant plant and tree species, such as significant Cumberland Plain Woodland vegetation. However, the location of such vegetation also correlates with areas at risk of bushfire. Planning of future residential areas, or increasing the density of existing residential areas in bushfire prone locations needs to be mindful of the extent of risk and the ability for emergency evacuation.

In addition to the native vegetation, street tree plantings further enhance the landscape character and "green" amenity. Some existing urban areas are devoid of significant landscape vegetation and would benefit from planting and improvement programs to upgrade their landscape character. This is particularly pertinent in areas undergoing transition to higher densities where the landscape character becomes even more important in reducing the apparent bulk and scale of buildings, providing passive solar design (energy savings) and providing amenity for residents and neighbours.

#### **KEY ISSUES: LANDSCAPE CHARACTER**

**Landscape Character:** There is a need for identification and retention of significant plant and tree species that are important to a suburb's landscape and heritage character in the Penrith urban areas (particularly with the redevelopment of land and increases in urban densities).

**Ecological Corridors:** Recognition of the environmental importance of significant landscape corridors in providing habitat and ecological corridors for native species, soil stability and reduced erosion and reducing salinity.

**Residential Amenity:** Recognition of the improved residential amenity provided by provision of landscaped areas to residential development both for useable open space with shade and character.

**Bushfire/Storm Protection:** Attempts to recognise the bushfire and storm protection issues associated with conflicts between significant tree species in close proximity to buildings by adopting appropriate setbacks or species selection.

#### **3.5.9 CULTURAL AND ARCHAEOLOGICAL HERITAGE**

Penrith LGA has a significant cultural and archaeological heritage, with the extent of known sites and areas identified in Figure 3.5.9. At the urban area scale it is clear that there are a number of large sites identified as having either potential heritage value or archaeological value, particularly adjacent to existing urban areas and in areas identified as future release areas. At this scale it is difficult to show the smaller heritage sites that are integrated into existing urban areas, however these sites need to be managed if there is to be urban development and increased urban densities in these areas.

Heritage items and conservation areas as well as archaeological sites pose both an opportunity and a constraint to future development of Penrith's urban areas. Cultural and archaeological heritage adds substantially to the character and attraction of suburbs. However, any growth of these suburbs needs to be managed to ensure appropriate densities and urban form occur adjacent to heritage items to preserve their integrity and significance.

There is a need to recognise all known significant sites and areas through statutory planning instruments. Future development needs to be cognisant of and responsive to items or areas of archaeological and heritage significance.

#### **KEY ISSUES: CULTURAL AND ARCHAEOLOGICAL HERITAGE**

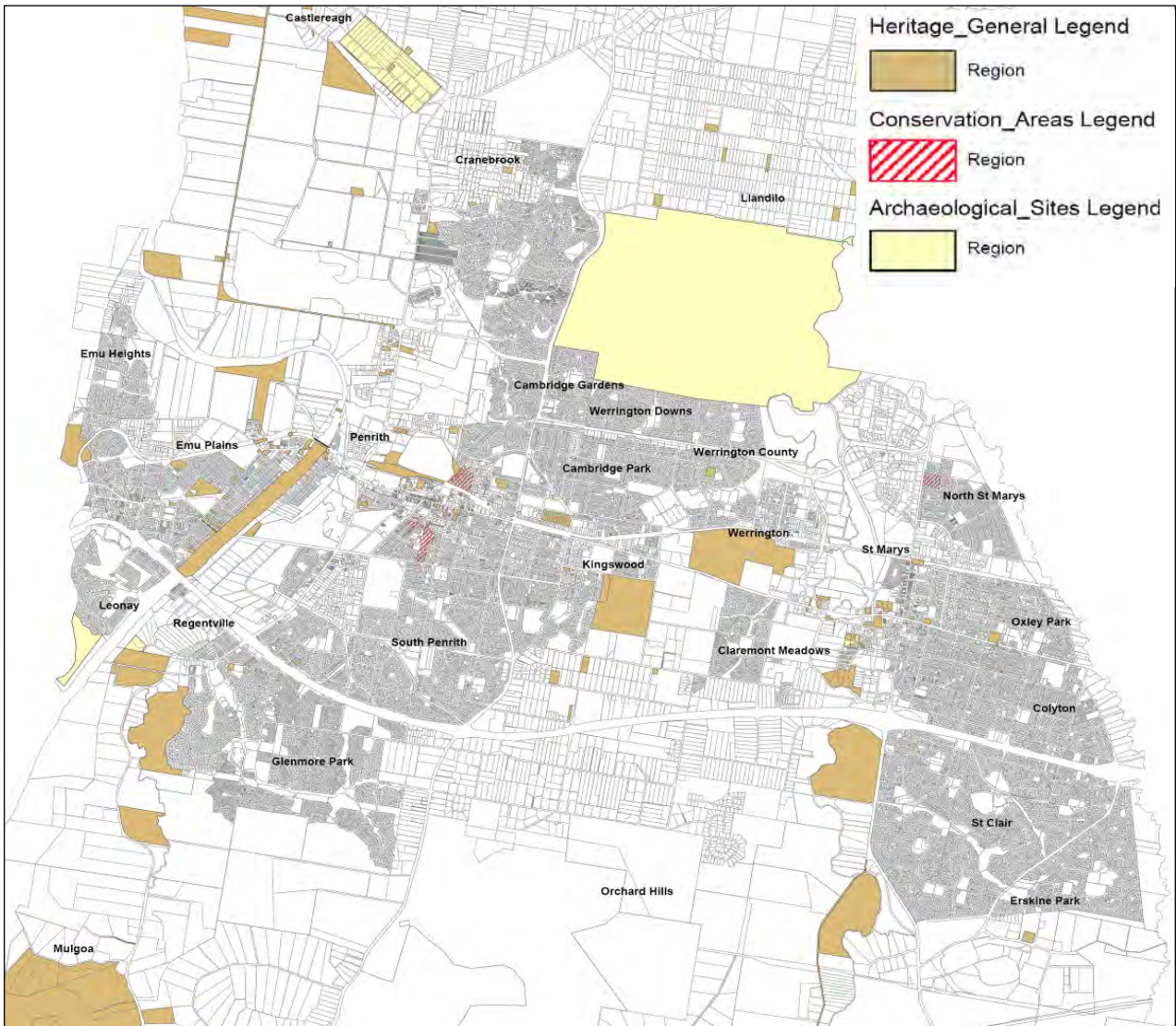
**Cultural And Archaeological Heritage Protection:** There is a need to address management of the competing needs of heritage protection and urban growth.

**Cultural And Archaeological Heritage Character:** Identification and protection of heritage character of certain suburbs (potentially linked to landscape character).

**Sensitive Infill Development:** Protection of heritage items, areas and their curtilage through appropriately located and sensitive urban development and adjacent urban form and densities.

**Cultural And Archaeological Heritage Incentives:** Appropriate incentives for protection of heritage items and potential adaptive re-use of certain heritage items to fund restoration without compromising heritage values. There is a need to adapt the recommendations of the Penrith Heritage Study 2008, adopted by Council.

Figure 3.5.9: Diagram showing all key heritage items across Penrith's urban area (as listed by the Davies Heritage Study)



Source: Council GIS, April 2008

### 3.5.10 EDUCATIONAL FACILITIES

Penrith provides a wide range of educational facilities and levels of education across the LGA. This includes preschools, primary, secondary, and tertiary facilities (both public and private) as well as technical and other colleges and training facilities.

There are a number of different stakeholders involved with provision of educational facilities including, but not limited to:

- Department of Education (e.g. public schools),
- University of Western Sydney,
- TAFE,
- Other Colleges,
- Independent and Private Schools (including Church owned schools), and
- Community based and privately run preschools.

Figure 3.5.10 portrays there is a good distribution of educational facilities (particularly primary and secondary schools) throughout the urban area with an effective correlation between educational facilities and local centres and suburbs.

The primary tertiary education facilities are the University of Western Sydney ('UWS') and the Technical and Further Education College ('TAFE') located in Penrith, Werrington and Claremont Meadows. These facilities are essential to urban growth and community development in Penrith and the greater Western Sydney region, and are a major attractor and trip generator for the area.

Unlike primary and secondary schools, the majority of the tertiary education facilities are not located in close proximity to the key local centres or rail stations, resulting in a heavy reliance on private transport and little interaction with the surrounding community.

In liaison with the Department of Education, there needs to be an assessment of the current capacity of all educational facilities to determine if they have capacity to expand or meet increased demand to address future urban and population growth, particularly in new release areas. Despite the anticipated ageing of the population, Penrith LGA is anticipated to maintain its relatively young profile and young families and therefore the importance of educational facilities remains a focal point for existing urban areas as well as new release areas.

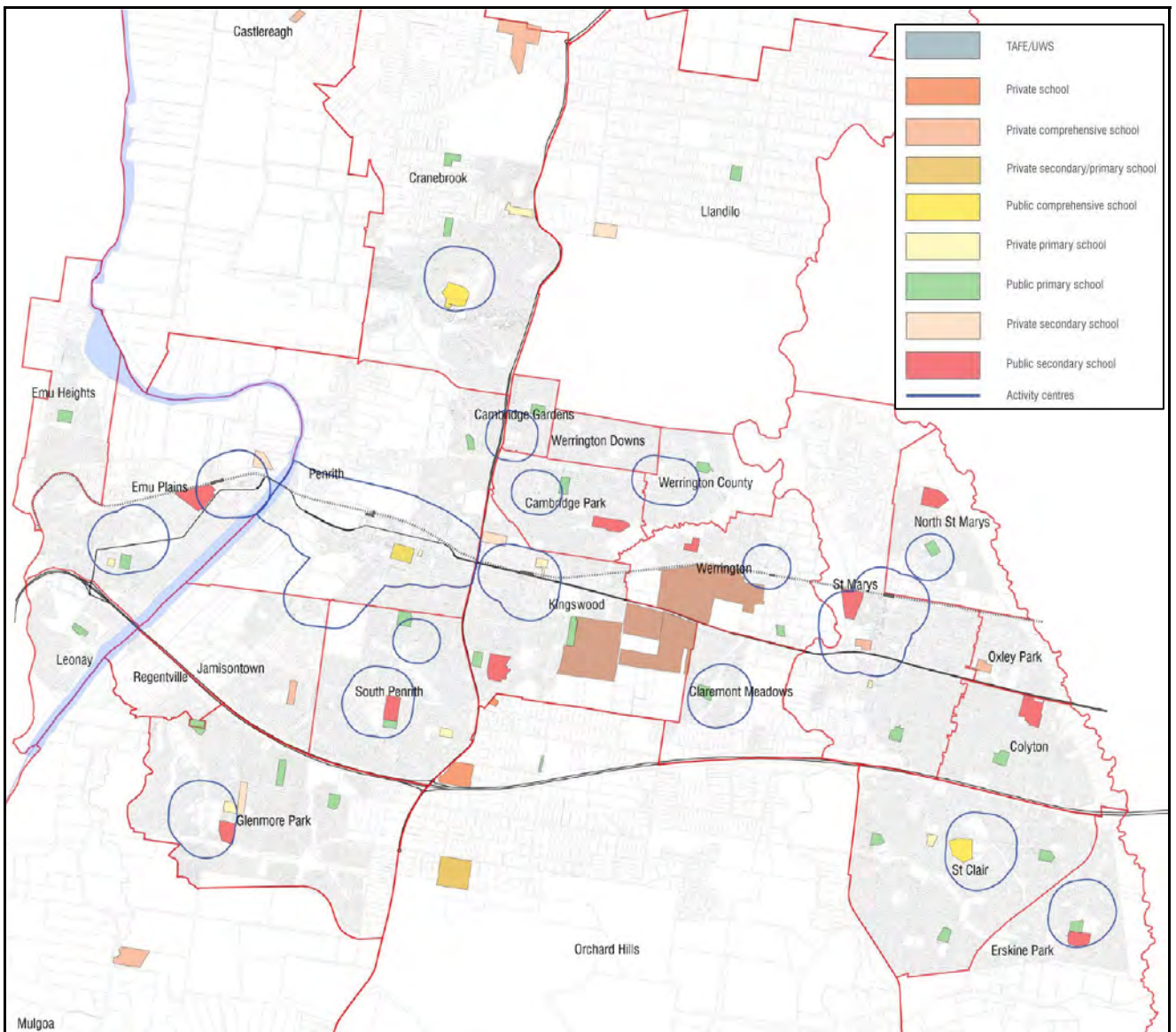
#### KEY ISSUES: EDUCATION FACILITIES

**Projected Demand:** Provision of sufficient educational facilities at all levels to meet the potential population growth and employment and training needs for the City of Penrith.

**Sufficient Land:** Provision of sufficient suitably zoned, well-located, suitably-sized, and affordable land for educational land uses

**Access:** Ensuring that existing and proposed educational facilities are located to improve accessibility to local centres, public transport and key cycleways to reduce reliance on private vehicles and enhance interaction with local community.

Figure 3.5.10: Correlation between existing educational facilities and Local Centres in Penrith's urban area



Source: Council GIS, April 2008

### 3.5.11 COMMUNITY, HEALTH AND CULTURAL FACILITIES

Community, health and cultural facilities in Penrith LGA include:

- Libraries
- Neighbourhood community centres
- Youth facilities
- Seniors Centres
- Cultural facilities such as art galleries, exhibition and performance spaces
- Halls
- Child care centres
- Sport and Recreational facilities
- Public and private hospitals, and
- Public health centres.

Key community, health and cultural facility providers include, but are not limited to Department of Community Services, Department of Education, Department of Health, Penrith City Council and Non Government Organisations. These facilities are a mix of for profit and not for profit facilities.

Figure 3.5.11 indicates the extent of provision of these facilities throughout the Penrith LGA.

The location of these facilities, while in some instances correlating with local centres, primarily are associated with public owned lands and as such do not connect with other community focal points. Another factor influencing the location of community, health and cultural facilities over the past 15 years is developer contributions and the focus of facilities funded under Section 94 of the Environmental Planning and Assessment Act within the areas of development.

Utilising industry benchmarks to determine the level of existing provision of community and cultural facilities in the Penrith, Urbis (2004) identified:

*“Penrith LGA has a sufficient quantity of community centres, community halls and youth centres.*

*Penrith LGA could support additional 2-3 art galleries.*

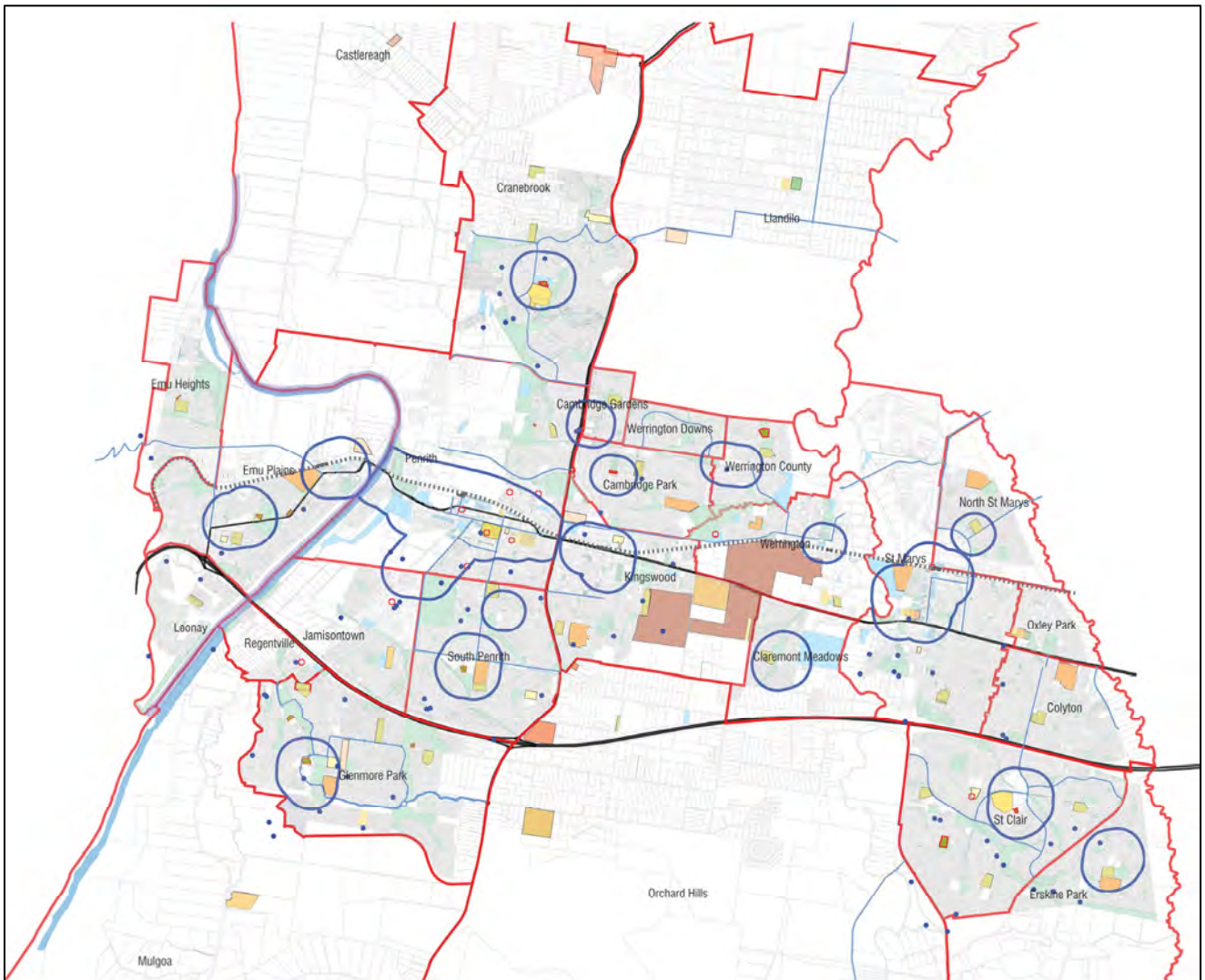
*Penrith LGA has a sufficient provision of regional performing arts centres.*

*Penrith LGA could support an additional 3 - 4 smaller performing arts centres.”*

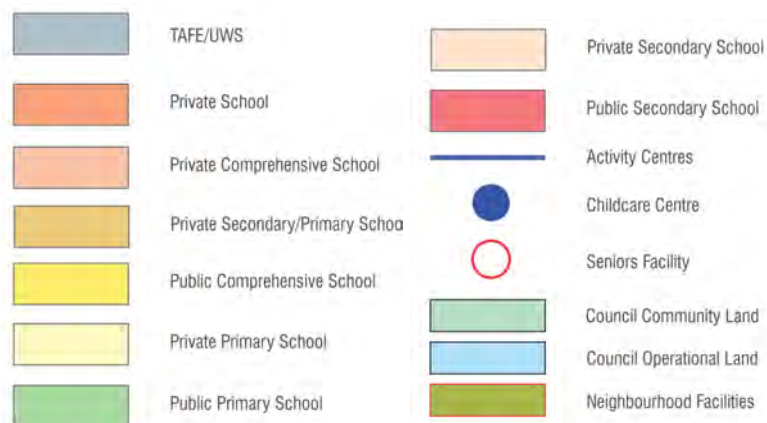
Any additional facilities to meet existing gaps in service provision or increasing needs for future communities need to be integrated into local centres where there are complementary uses, sufficient catchments of people, and transport options that will enhance access to and activate these services.

The supply and distribution of these facilities will need to be reviewed in light of potential urban growth opportunities across the LGA. A review of Council’s Section 94 contribution plans will also be required to ensure future population needs are identified and appropriately planned.

Figure 3.5.11: Community Lands within Penrith LGA



Source: Council GIS 2008



### **3.5.11.1 Health and Medical Facilities**

The primary health care facility in Penrith is the Nepean Hospital located adjacent to the Great Western Highway and Kingswood and in close proximity to the Penrith City Centre. Over time, Council has promoted the area surrounding the hospital as a key medical precinct that has attracted medical centres, medical suites and other related health facilities to make this a key employment centre. There is also a substantial health facility currently approved for the site adjacent to the hospital on the highway that will supplement this precinct.

The creation of a strong medical precinct will bring together complementary uses and strengthen this centre's role as a key medical provider and attraction. However, to make this precinct function more effectively it will need improved pedestrian and cycle linkages with key public transport and active transport routes, better access to retail services in Kingswood, and an improved public domain.

The key aspect of this proposal is that employment generation will increase demand for a range of services as well as residential needs and residential densities would be expected to increase in this mixed-use area. One difficulty will be ensuring that this precinct does not conflict with Penrith City due to its proximity. Another issue is that the traffic capacity will need to be reviewed to protect the residential amenity of the adjacent areas and ensure safety for vehicles and pedestrians alike.

There is also a need to ensure that smaller, more local medical centres are supported in local centres around Penrith to improve access and minimise the need for private transport to the Nepean Hospital Precinct. There are numerous other medical facilities located throughout the Penrith urban areas, however these are not distributed evenly across all suburbs.

### **3.5.11.2 Cultural and Arts Facilities**

There are a number of cultural and arts facilities in the Penrith urban area. The main facility is the Joan Sutherland Performing Arts Centre located near the Council offices and Westfield Shopping Centre in Penrith City. There is also a range of small art galleries but these are not always associated with local centres. It has been identified in past studies that there is a need for additional cultural and arts facilities based on industry benchmarks and Penrith's importance as a Regional City.

The location of any future cultural and arts facilities needs to be cognisant of:

- Established cultural and arts precincts within the Penrith LGA
- Access and equity for all residents and therefore proximity to good public transport networks and services
- The importance of co locating cultural and arts facilities with similar uses within local centres, and
- Opportunities to incorporate culture and art into the urban landscape.

### **3.5.11.3 Libraries, Community Centres and Neighbourhood Centres**

Across the Penrith urban area there are approximately twenty-two (22) neighbourhood facilities and community centres. Community centres and neighbourhood centres tend to be distributed evenly across the Penrith urban area and usually alongside other community facilities such as child care centres. The co-location of community facilities provide opportunities for incidental meeting and gathering.

Despite the extensive provision of community and neighbourhood centres access to such centres is identified as being low. To meet current residents and future resident needs for community and neighbourhood centres there is a need to ensure future planning creates:



- well located community facilities, adjacent to other neighbourhood and district services such as shops, sports and recreation facilities or schools,
- easily accessible facilities by different modes of transport such as public transport, pedestrian pathways and private vehicle ensuring maximum access,
- physically accessible facilities to ensure equity for all users, and
- affordable facilities further addressing equity for all users.

The location of libraries is focused within the existing urban area and tends to be concentrated in the Regional Centre of Penrith around existing Council facilities (such as the Penrith District Library) with branch libraries located in local centres such as Emu Plains and St Clair. The current provision of library services is considered to meet current population needs. However with an anticipated increase in residents, particularly older people who are high library users, there may be a need to identify measures to meet growing needs and demands overtime.

#### **3.5.11.4 Child Care Facilities**

Penrith LGA has a high provision and relatively even distribution of child care facilities, as shown in Figure.3.5.11.4 below. The following issues are relevant for future planning of childcare services and facilities in Penrith LGA:

They are in higher numbers in Penrith, St Marys, Glenmore Park and St Clair and slightly lower in some established areas such as North St Marys, Emu Plains, Werrington and Cambridge Park;

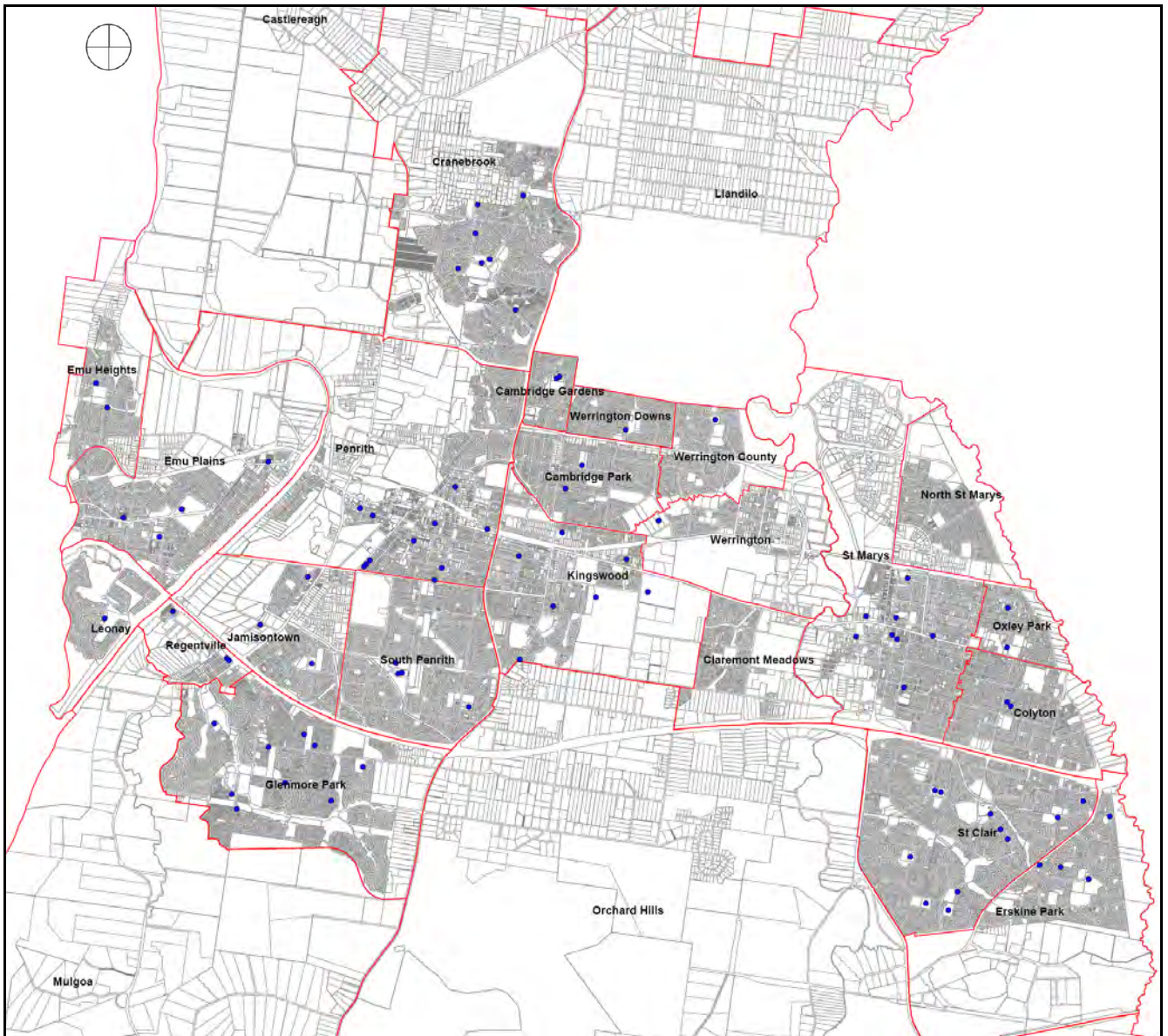
There is some correlation between child care centres and existing local centres but often these facilities are integrated into residential areas;

There is some correlation between child care centres and existing transport nodes/routes but it would appear that they are accessible within walking distance of residential catchments (though this may not avoid the use of private vehicles to transport children);

Not all of the existing urban areas are within 1km of a child care centre so there is potential for expansion of services subject to demand;

There will need to be a review of current capacities and future needs of childcare services within existing urban areas and expansion of child care services in new release areas.

Figure 3.5.11.4: Child care centres in Penrith's urban area



Source: Council GIS, April 2008

#### **KEY ISSUES: COMMUNITY, HEALTH AND CULTURAL FACILITIES**

**Projected Demand:** Provision of community facilities to meet the changing population profile of the Penrith LGA and the changing recreational and cultural participation patterns and aspirations of Penrith residents (ERIAFSS), especially younger and older sectors of the community.

**Section 96 Contributions:** Review Section 96 Contributions for new development, to ensure that satisfactory community services can be provided to meet additional demand.

**Integrated Land Uses:** Provision of sufficient suitably zoned, located, and affordable land for community purposes with integration of compatible and complementary land uses (especially if sharing of facilities).

**Integrated Land Uses:** Need for further enhancement of medical services (and other complimentary land uses such as mixed-use and residential development) around Nepean Hospital and Kingswood Railway Station with complementary medical uses.

**Access:** Location of community facilities to service existing and new release areas in close proximity to public transport nodes and key centres to reduce need for private transport usage. Ensure all community facilities have universal access.

**Affordability:** Equitable and affordable access to community facilities and activities for all sectors and target groups within the community (ERIAFSS).

#### **3.5.12 SAFETY AND SECURITY**

Safety and security are key aspects in the design and success of a community. While design and planning do not dictate whether crime will occur, it has an influential role in creating places where it can occur easily. Actual safety and security can be measured by crime statistics in particular areas. However, it is often not just the statistics, but the perception of whether a 'place' feels safe and secure that is a key driver for its use and its success, particularly at night.

Future planning for growth and development will need to adopt the principles of Crime Prevention Through Environmental Design (CPTED) to increase safety and security in both the public and private domain. Activation and intensification of uses surrounding key nodes, such as centres will also contribute to enhancing safety and security in the urban environment.

#### **KEY ISSUES: SAFETY AND SECURITY**

**Perception of Crime:** Distinguishing between the incidence of 'crime' in an area and the 'perception of crime' through the creation of places that appear unsafe.

**Crime Prevention through Environmental Design ('CPTED'):** Ensure that the principles of CPTED are integrated into planning controls and design methodology throughout the urban area, particularly for new release areas.

**Activity:** Maximise the potential for activity (particularly at nights) along key pedestrian routes and in key public spaces by integrating mixed-use developments and complementary land uses in order to improve safety and casual surveillance.

**Diversity:** Maximise the potential for communities to integrate allowing for both social and economic diversity to avoid segregation which may foster stigmas for certain areas and as a result - a perception of poor safety and security in those areas.

### 3.5.13 UTILITY INFRASTRUCTURE

Urban growth places significant pressure on existing infrastructure, including the provision of service utilities such as water, sewer, electricity, gas and telephone. The provision of these utilities is expensive and needs to be co-ordinated to maximise efficiency and minimise cost with each of the relevant authorities. This is particularly relevant when considering potential future growth areas, particularly infill development where there may not be sufficient capacity in the existing systems and upgrade of those systems may be particularly difficult or expensive (e.g. Sewage Treatment Plants).

This Study does not conduct a detailed review of the capacities of utility infrastructure across the Penrith urban area, however it does seek to identify key issues that may limit growth potential so these issues can be raised with the relevant utility provider to discuss future provision. Most of these issues relate to the need to upgrade capacity and the extent of service networks with priority for older areas where infrastructure is outdated/aged (e.g. Penrith, Oxley Park and Kingswood) and for new release areas. Urban growth strategies need to be integrated with infrastructure strategies and Section 94 Contribution Plans to address these issues.

In addition, there are a number of sustainability benefits that can be gained from reviewing infrastructure needs against urban growth strategies. This includes the opportunities for treatment and re-use of water, recycling of sewage, energy generation, and co-generation - particularly for new release areas where localised systems can be integrated into urban design and building design. This should also be tied to opportunities for treatment of stormwater and drainage/run-off into natural systems through Water Sensitive Urban Design mechanisms.

Council has already addressed many of these issues through its policy entitled 'Sustainability Blueprint for Urban Release Areas' (2005) and its suite of Action Plans relating to Sustainability, Greenhouse Gas Reduction, Water Conservation, Water Savings, Biodiversity and Energy Savings.

#### KEY ISSUES: UTILITY INFRASTRUCTURE

**Projected Demand:** Need for key service providers to assess capacity of their networks to allow amplification of key services to be aligned with key growth areas, demand, and the age of existing services and timed to be provided in advance of these demands.

**Section 96 Contributions:** Review Section 96 Contributions for new development, particularly in new release areas, to ensure that satisfactory infrastructure/utilities can be provided to meet additional demand.

**Sustainability:** Opportunity to improve the environmental outcomes for urban growth areas by utilising infrastructure strategies that recycle and re-use water and generate their own energy to minimise additional demand on existing systems and impacts on the environment

### 3.5.14 PUBLIC OWNED LAND

Ownership patterns of land are important in identifying where there may be consolidated ownership of allotments in growth areas that would be highly suitable for investigation for future redevelopment. In particular, surplus lands held by public authorities offer the added potential of being held for public interest and redevelopment opportunities can be initiated even without private landholder investment.

Some of the key public authority land holders in the Penrith LGA, identified in Figure 3.5.14 below include:

- Housing NSW
- Sydney Water
- Penrith City Council
- Department of Education and
- Department of Defence.

Penrith LGA has significant landholdings by key public authorities, with many of these lands located in proximity to existing and proposed centres (Please note that this map does not include Department of Defence land holdings which are significant e.g. North Penrith).

As these lands are in public ownership there is potential to utilise sites that are located in proximity to key centres as a catalyst for growth by providing viable development alternatives that meet community needs. A good example of this is the proposed release of land by Ministry of Defence at North Penrith which would allow the activation of the entire northern side of Penrith Railway Station (for improved Transport and Land Use Integration) with a mixed-use precinct that can meet employment generation and residential needs.

This in no way suggests that sites held by these authorities are not sometimes already used for a valuable purpose. However, a review of these lands may identify sites that are either surplus to the needs of each public authority or sites where there is the potential to relocate the public services without any significant detriment to the authority's operations or the local community.

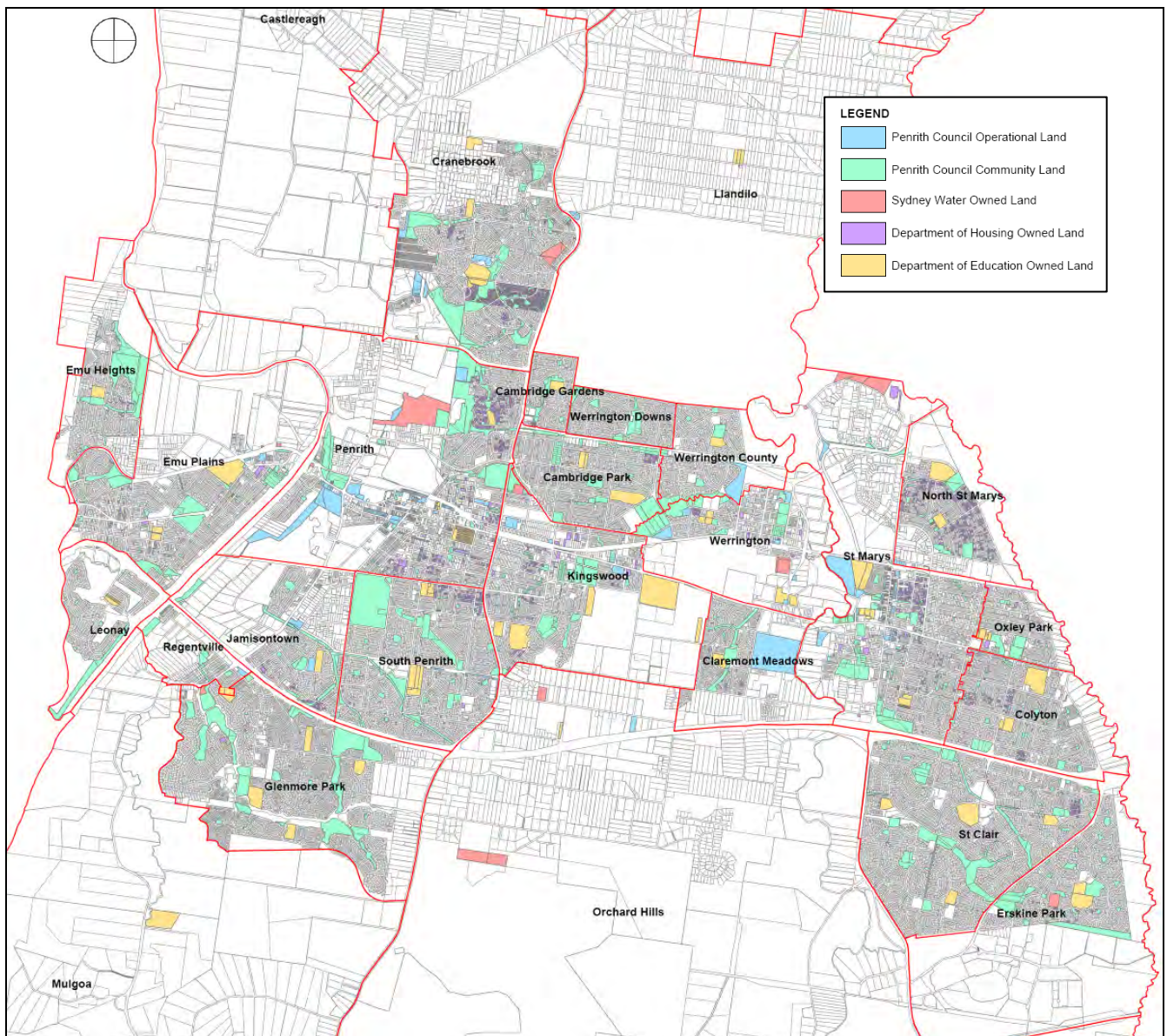
Council should also be mindful that the recent introduction of State Environmental Planning Policy (Infrastructure) 2007 that provides a limited opportunity for key public authorities that own land to develop or sell surplus land zoned for infrastructure uses for a range of other uses that do not conflict with adjacent properties including multi-unit housing and other residential land uses. These provisions will only remain available until Council has completed its new Local Environmental Plan.

#### **KEY ISSUES: PUBLIC OWNED LAND**

**Land Use Conflicts:** Appropriate location of public authority services and land uses to maximise access to these services without causing undue land use conflicts.

**Development Catalyst:** Potential to utilise surplus public authority land (or relocate existing services) to provide developable land to cater for growth of key centres.

Figure.3.5.14: Key lands in Penrith's urban area held by public authorities



Source: Council GIS, April 2008

### 3.5.15 SUMMARY - LIMITS TO GROWTH

It is not possible to summarise all of the limitations to growth for Penrith. However, this chapter of the Urban Study has sought to highlight some of the key aspects that may provide opportunities or constraints to future urban growth in Penrith.

Some of the key urban constraints to development that will be reviewed in more detail for specific growth suburbs later in this Study include:

- Access to transport, particularly public and active transport alternatives,
- Capacity of existing infrastructure and services (roads, water, sewerage, health services/hospitals etc),
- Access to services and shopping that reduces the need for private vehicle usage,

- The impact of existing zoning patterns and the current centres hierarchy on growth patterns,
- Access to public open space and recreational opportunities,
- Access to community facilities, health facilities and educational facilities,
- Opportunities and constraints posed by retention of built form and archaeological heritage,
- Opportunities and constraints posed by retention of landscape and suburban character, and
- Opportunities and constraints posed by existing public authority land and land uses.

### **3.6 Environmental Context**

This section will seek to identify all key environmental considerations influencing future urban growth and development within Penrith LGA and identify the key issues from an environmental context.

#### **3.6.1 SUSTAINABLE DEVELOPMENT**

One of the key aims of this Urban Study is to ensure that urban development responds to the environmental opportunities and constraints of an area and aims to become more sustainable in the long-term.

'Sustainable development' seeks to address not only environmental sustainability, but also economic and social sustainability, and to manage these in an integrated manner. This section of the study seeks to focus on the core aspects of the environment in Penrith that should be considered in deciding the best approach to urban development and urban growth. This includes the management of air, water, land/soil resources and native flora and fauna.

Ecosystems are complex and humans do not have perfect information about the causes and effects within an ecosystem. Therefore, we should aim to avoid impacts on the environment where there is even a chance that it could have substantial effects on the ecosystem (the 'precautionary principle'). We should also be seeking to ensure that the opportunities provided to us by the environment are maintained for future generations (the principle of 'inter-generational equity').

#### **3.6.2 AIR AND CLIMATE**

Air quality is an important issue to both human health and amenity as well as to environmental sustainability. However, the effects of impacts on air quality are often difficult to measure (for example, the complex relationship between greenhouse gases and climate change and the relationship between certain pollutants and human health). Regardless, there is increasing recognition that the impacts of air quality can be costly to fix or ameliorate.

All urban activities have an impact on air quality and potentially climate change and this should be considered as part of any urban growth strategy. There are a number of potential impacts including, but not limited to:

- emission of pollutants such as lead through vehicle and industry emissions,
- increases in greenhouse gases (especially carbon dioxide) through vegetation removal, energy generation and usage, and vehicle emissions,

- increases in air particulates such as ash through wood fires, burning of waste products and industry,
- increases in air particulates such as dust due to vegetation removal, poor agricultural and urban practices and wind erosion, and
- impacts on air temperature through uses of heating and cooling mechanisms and changes to the thermal properties through urban development.

Whilst it is acknowledged that current air quality in the Sydney air shed/region are not an absolute constraint to residential growth, provided that appropriate management measures are employed, it should be recognised that air quality will play an increasing role in human health (particularly for people suffering from asthma and other respiratory afflictions), has substantial impacts in terms of amenity and quality of life, and may have impacts at much higher levels, across much greater areas and with significant long-term ramifications than we are aware of e.g. climate change. This is an area where the 'precautionary principle' would need to be applied.

Penrith LGA and Western Sydney has a distinct microclimate which differs from the rest of the Sydney Metropolitan Region, resulting in the LGA being hotter and drier in summer and colder with frosts in winter. In the past, development styles and materials have not differed significantly in Penrith to other practices within the Sydney Metropolitan area, resulting in housing that is not designed to meet microclimatic conditions of the Penrith LGA.

#### KEY ISSUES: AIR AND CLIMATE

**Vegetation Management:** Need to protect significant vegetation to avoid additional release of carbon dioxide by tree removal, capture additional carbon dioxide and improve air quality.

**Sustainable Design:** Promote sustainable building design and construction that seeks to minimise energy and, therefore, fossil fuel consumption and the resulting air impacts.

**Land Management:** Promote appropriate land use practices that minimise erosion and air-borne dust particles.

**Design for Climate:** Ensure future planning and development incorporate climatic considerations to ensure more appropriately designed houses and communities.

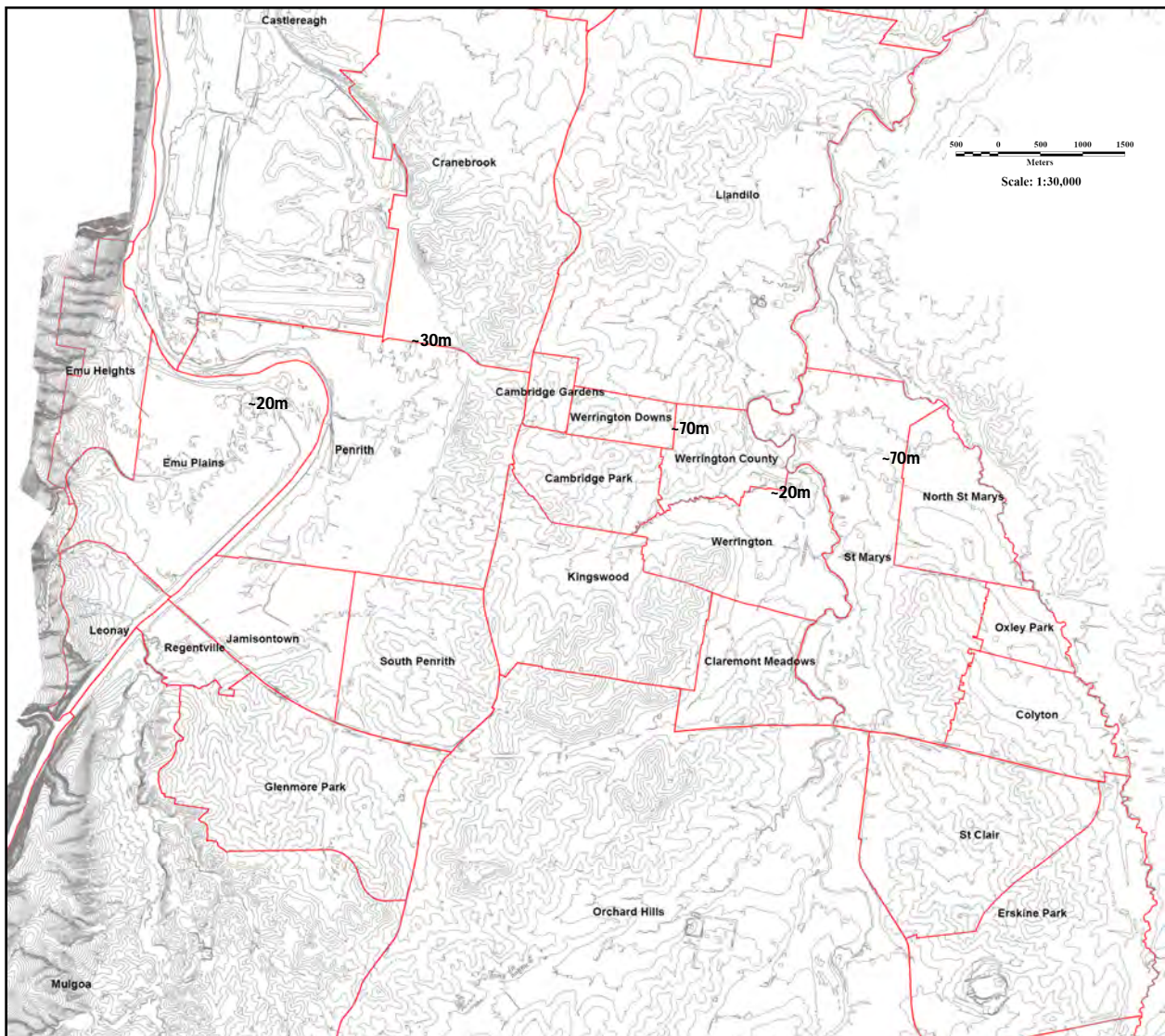
### 3.6.3 TOPOGRAPHY AND VIEWS

The topography of the Penrith LGA, shown in Figure 3.6.3 below, is an important element of its character, setting and visual interest. Land throughout Penrith is predominantly flat or gently sloping with localised moderate slope. These slopes provide a distinctive character to residential development - particularly when associated with substantial stands of mature trees. Escarpment areas to the west remain undeveloped, and provide a scenically significant setting for the City of Penrith.

The 10m contours for the Penrith urban area are shown in Figure.3.6.3 below. Land forms range from approximately 10-20m AHD near the Nepean River and South/Ropes Creeks, up to 30-60m AHD across most of the urban areas near the Western Railway Line (with a higher point of around 70m AHD near St Marys and Oxley Park), with higher areas rising to 100m AHD in the southern LGA areas near Luddenham and greater than 200m AHD in the Blue Mountains Escarpment. The majority of the area is located on gently undulating hills with no significant areas of steep slopes (greater than 15%) as a constraint on development within the urban areas east of the Nepean River.



Figure 3.6.3: Diagram showing topography of urban areas



Source: Council GIS, April 2008

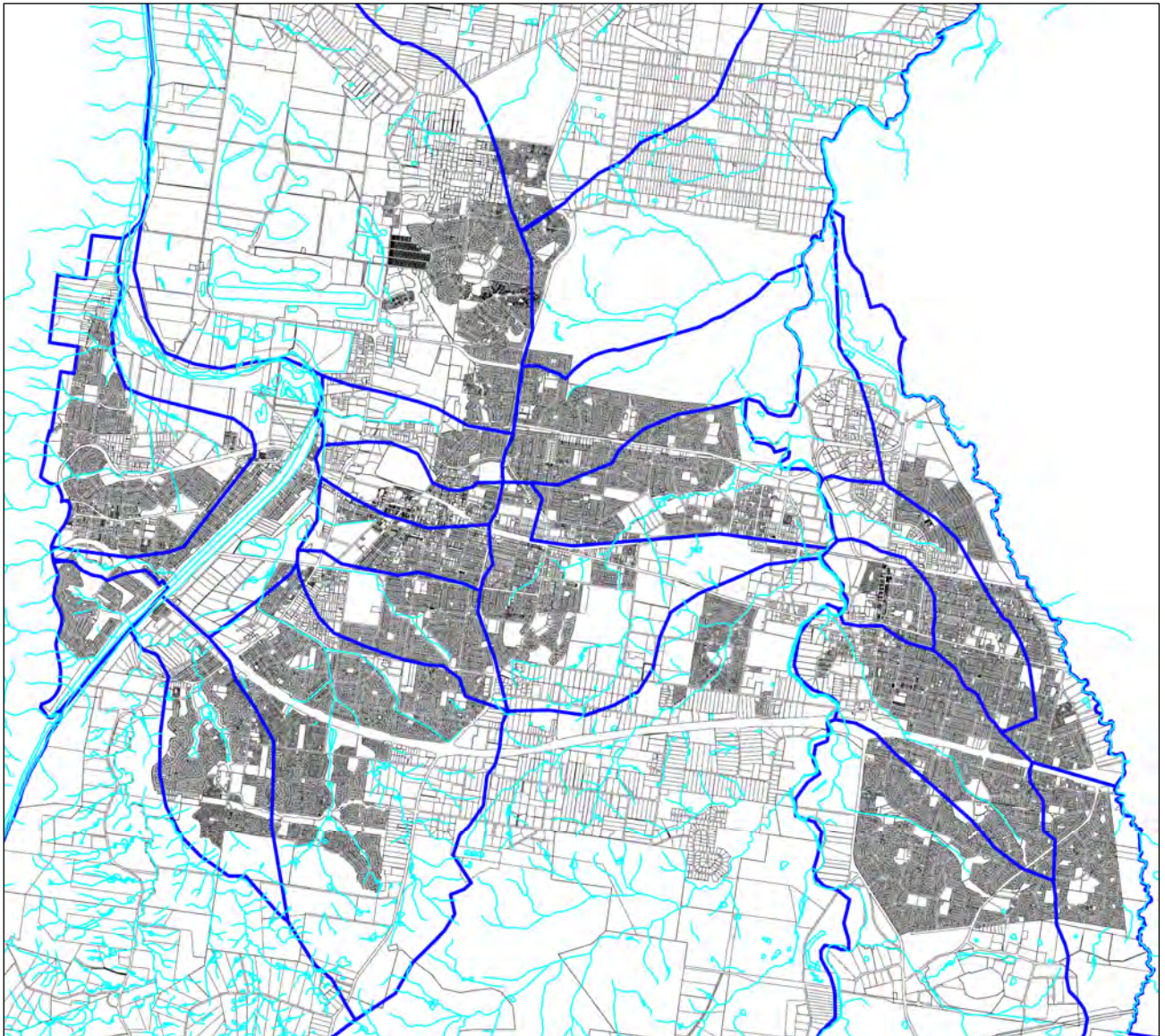
### 3.6.4 WATERWAYS, FLOODING AND DRAINAGE

#### 3.6.4.1 Hawkesbury-Nepean Catchment

A key environmental constraint affecting urban areas of Penrith is its location between two significant waterways, the Hawkesbury-Nepean River, South Creek and Ropes Creeks, along with all of their tributaries. Figure.3.6.4 below identifies that these waterways and their tributaries cover a significant proportion of the urban lands and potential release areas.

A significant portion of the Penrith LGA forms part of the Nepean-Hawkesbury Catchment which is managed by the Nepean-Hawkesbury Catchment Management Trust / Sydney Water. Therefore, urban development has the potential to significantly impact on water quality within this catchment. Current and future development within Penrith LGA needs to minimise adverse impacts on the water quality of this catchment area as well as its riparian areas and utilise best practice management of wastewaters to ensure no further decline in current levels of water quality.

Figure 3.6.4.1: Waterways in Penrith's urban areas (light blue) and the catchment areas for each waterway (dark blue)



Source: Council GIS 2008

### 3.6.4.2 Flooding and Drainage

As a result of the low-lying nature of many urban areas in Penrith, a substantial proportion of the Penrith LGA has the potential to be flood affected, especially along the Nepean River and South and Ropes Creeks (See Figure 3.6.4.2). This is a significant barrier to urban growth and expansion. It also impacts on building design and access. The 1 in 100 flood contour is generally accepted as a planning standard below which substantial urban development is generally unsuitable. Development in proximity to flood affected areas should address the requirements of the State Government's "Floodplain Development Manual 2005", "Flood Prone Land Policy" and Council's policies.

Even if areas are above the 1 in 100 flood level, flooding can cut off access and exits to these areas causing a risk to life and property so emergency exits needs to be available. An example is the Emu Plains area. However, for the purpose of this Study we have assumed that alternative exits will be provided when an area is identified for substantial urban growth.

In addition, there is the issue of provision of adequate drainage to areas. No specific issues of drainage have been raised by Council as key constraints to urban development and growth. However, it would be expected that both new release areas and infill areas will need to be assessed to determine if sufficient drainage infrastructure has been provided. Drainage requirements should also be assessed against the principles of Water Sensitive Urban Design to identify opportunities where overland flows and stormwater can be recycled or treated through on-site mechanisms to improve water quality and reduce consumption.

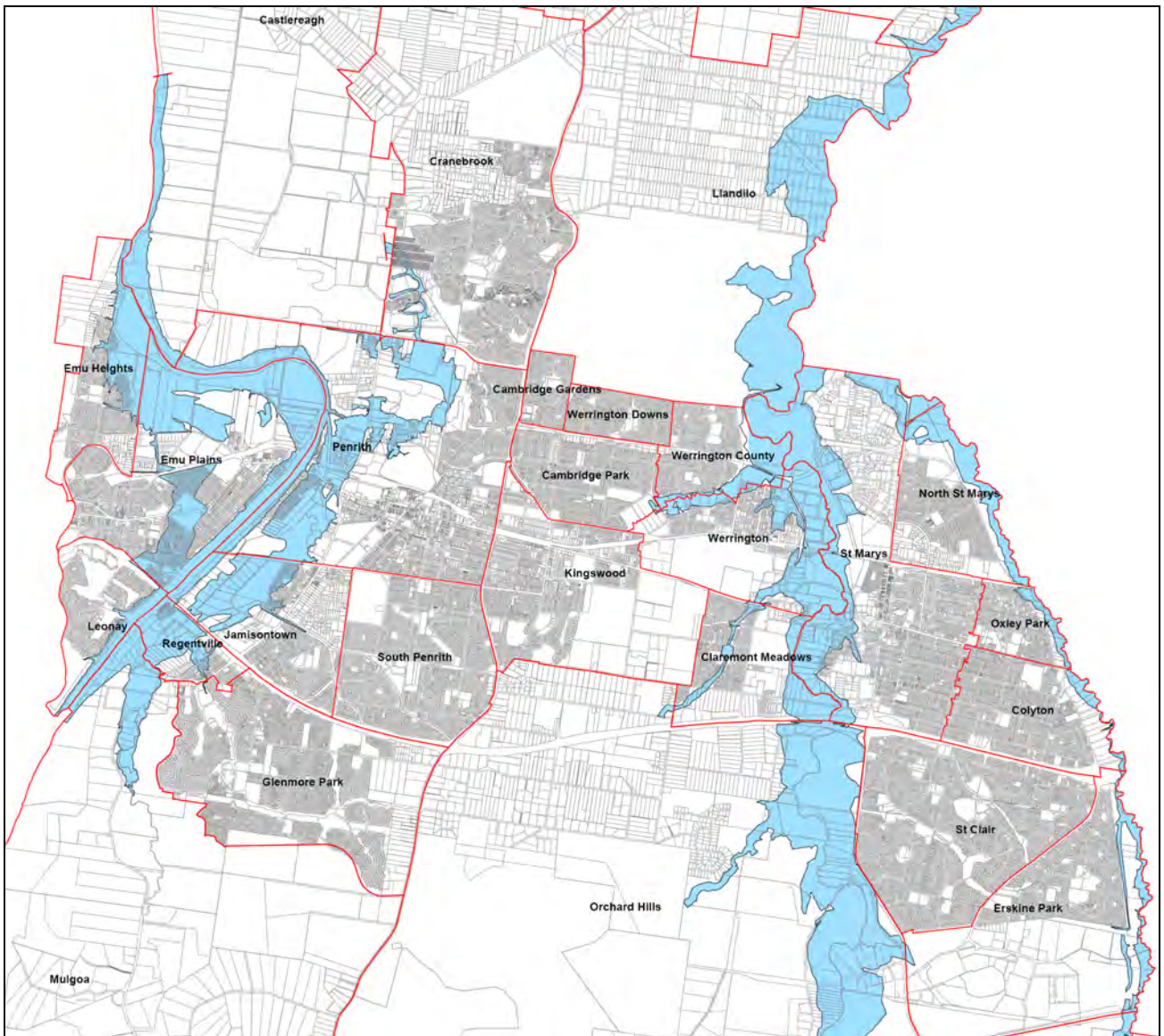
#### KEY ISSUES: WATER MANAGEMENT

**Water Management:** Minimising impacts on water catchment areas and enhancing water quality and stormwater and drainage run-off into these catchments. Identifying opportunities to integrate Water Sensitive Urban Design principles into drainage design of new release areas and large-scale infill developments.

**Flood Management:** Minimising risk of loss of life or property damage by flooding through appropriately locating urban development and urban growth.

**Water and Vegetation Management:** Providing an integrated response to management of waterways to balance the need for enhanced riparian corridors, flood conveyance and urban development.

Figure.3.6.4.2: Diagram showing Draft 1 in 100 flood level for Penrith Urban Area (to be confirmed with Council)



Source: Council GIS, April 2008

### 3.6.5 VEGETATION MANAGEMENT

Penrith has some significant stands of native vegetation, including Cumberland Plain vegetation, as shown in Figure 3.6.5. Remnant bushland and indigenous vegetation has a wide range of values including but not limited to preservation of endangered species, habitat for indigenous fauna, recreational opportunities, and as a distinctive component within the urban landscape.

As Figure 3.6.5 shows, significant vegetation (predominantly Shale Plains Woodlands and Alluvial Woodland) occurs not only in the rural areas, but also along key waterway corridors and in pockets across the existing urban areas and new release areas. Key areas of vegetation occur across Cambridge Gardens, Werrington Down and Cambridge Park with smaller pockets across South Penrith, Kingswood, St Clair, Glenmore Park and Oxley Park. There is also significant vegetation in new release areas such as St Marys ADI site and south of Glenmore Park that will be a factor for consideration in future urban development. Council has developed sensitive urban development processes for urban development in areas where native vegetation occurs.

In order to maintain the key ecological and landscape elements provided by existing significant vegetation, an objective of the urban strategy should be to preserve the significant vegetation - with a particular focus on retaining key ecological and riparian corridors between substantially vegetated areas and ecosystems. For this reason, any proposed urban development should preserve and enhance existing vegetation or corridors and avoid areas of ecological significance if possible.

Urban pressures on vegetation may result in the need to identify and protect key corridors, which could include:

- the riparian corridor along the Nepean River,
- the riparian corridor along both South and Ropes Creeks (and their tributaries),
- the riparian corridor along Mulgoa Creek and the Mulgoa Nature Reserve around the south of Glenmore Park connecting into the Nepean River,
- the creek and supporting bushland through the proposed regional park in the St Marys Release Area, and
- the riparian corridor and supporting bushland along Blaxland Creek and Orchard Hills.

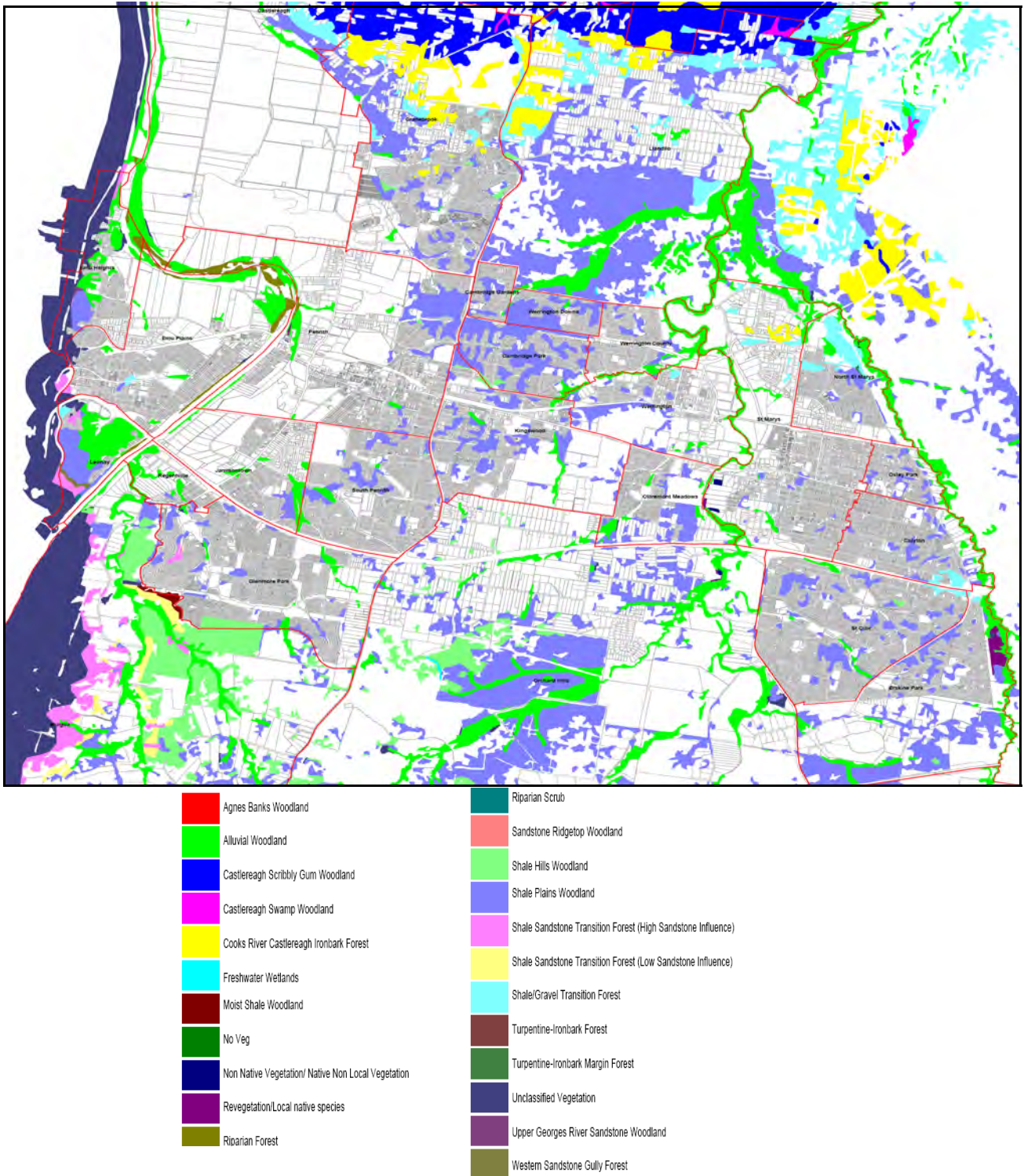
#### KEY ISSUES: VEGETATION

**Vegetation Management:** Need to protect areas of significant native vegetation. Avoid urban development that would compromise significant native vegetation, ecologically sensitive areas, or existing or proposed ecological or riparian corridors.

**Vegetation and Fauna Management:** Need to protect environmentally and ecologically sensitive areas.

**Vegetation Protection:** Build on existing measures and protect and enhance corridors of native vegetation that can enhance ecological connectivity, especially along riparian corridors.

Figure 3.6.5: Substantive non-urban vegetation (See LEP Ecologically Sensitive Lands Map) for Penrith's urban area.



Source: Council GIS, April 2008

### 3.6.6 LAND MANAGEMENT

There are a number of issues for land management in the Penrith LGA including, but not limited to:

- protection of viable agricultural lands and soils for cultivation and production and constraints on urban growth and sprawl,

- salinity due to vegetation removal and poor land use and irrigation practices that raise the water table level and impacts on both the natural environment as well as infrastructure,
- contamination of soils through past land use practices,
- acid sulphate soils, and
- erosion and sedimentation due to vegetation removal and poor land use practices.

It can be seen from this list that land management issues are closely associated with water management and vegetation management issues and they need to be addressed in a holistic manner.

These issues may pose a constraint on development, require remediation of land, or require better land management practices as part of urban development and growth. However, this Study does not look at these issues in detail as they are not significant constraints to development.

#### **KEY ISSUES: LAND MANAGEMENT**

**Protection of Agricultural Lands:** Need to buffer and protect areas of significant agricultural lands from urban development.

**Salinity:** Need to address urban salinity and minimise vegetation removal.

**Soil Contamination:** Need to identify contaminated soil and mitigate contamination.

**Acid Sulphate Soils:** Need to implement Council's Acid Sulphate Soils Strategy in all areas prioritised for future development.

**Erosion and Sedimentation:** Need to minimise vegetation clearance to minimise erosion and sedimentation.

#### **3.6.7 SUMMARY - LIMITS TO GROWTH**

In summary the key limitations to urban development and growth in the Penrith LGA relating to environmental factors can broadly be seen as:

- micro climatic considerations
- water courses and Flooding,
- significant Native Vegetation,
- land Management, and
- protection and enhancement of Ecological Corridors.





04

BUILDING A SUSTAINABLE PENRITH





## 04 BUILDING A SUSTAINABLE PENRITH

### 4.0 BUILDING A SUSTAINABLE PENRITH

This section summaries the key findings and recommendations for the Penrith Urban Strategy.

#### 4.1 GUIDING PRINCIPLES

External and Internal Reference Groups developed the following principles to guide future urban development in the Penrith LGA to 2031.

##### **Penrith 2031 - Guiding Principles for Future Development**

Penrith 2031 will be a Sustainable City that ensures it is diverse, creative, accessible, healthy and embraces it's regional and cultural role. Penrith City will be:

**A Diverse City** meeting the needs of the people (in housing, built form, urban and rural uses), the economy and the environment.

**A Healthy and Vibrant City** with quality spaces and recreation areas. A city that is connected and whose residents experience well being. A city comprising strong neighbourhoods that build social capital.

**An Accessible City** that is integrated and interconnected, where communities have access to shops, services, education, employment and transport.

**A Cultural City** that is a creative place with self sustaining arts and culture.

**A Regional City** that embraces its economic and service role for the region with strong links to the surrounding regions and metropolitan area.

**A Safe City** where people feel confident living.

**A Lifestyle City** that is attractive and well designed, fun for all ages and abilities and creates cohesive communities.

**A City with a Unique Identity** that enables lifelong learning, research and development and has a viable economy.

## 4.2 KEY ISSUES TO BE ADDRESSED

In the preparation of the Urban Study a range of issues were identified to be addressed in accommodating urban development within the Penrith LGA to 2031. These issues are listed below and are referred to as Key Sustainability Elements.

1. Residential Capacity and Diversity
2. Retail and Commercial
3. Community Facilities and Infrastructure
4. Public Transport
5. Active Transport
6. Environment
7. Open Space and Recreation
8. Affordable Housing

### 4.2.1 RESIDENTIAL CAPACITY AND DIVERSITY

The following considerations summarise the residential capacity and diversity issues identified in the Penrith Urban Study and Strategy:

**Population Projections and Housing Targets:** Suggest that Penrith LGA will need to accommodate up to 25,000 additional dwellings by 2031. Population projections identify that key characteristics of the increased population is an ageing population with an increase in smaller households such as lone person households and couples without children households.

**Housing Diversity:** With a change in the population characteristics there is a need for more choice and diversity in housing type. In 2006, 85% of housing in Penrith LGA was separate dwellings. With shrinking household size and ageing population there is a need to provide smaller housing types and more variety in housing types. More housing diversity also contributes to opportunities for affordable housing. The Urban Study and Strategy also recognises that couples with children will remain a significant housing group that will also need to be appropriately accommodated within future urban development.

**Housing supply:** The location of increased number of households needs to be managed to maximise access to services and facilities. The range of housing types needs to be distributed equitably across the Penrith LGA to ensure equity in access to a range of housing and also to allow for ageing in place.

**Dwelling Densities:** An increase in housing will, in some areas, result in increased densities, particularly medium and higher density. Therefore there is a need to ensure areas to accommodate the increase in density are well serviced are compatible to the character of the area and the physical and environmental constraints of the sites.

**Dwelling Capacity:** It is anticipated that approximately half of the future housing will be provided in new release areas and half within the existing urban area. Section 04 of the Penrith Urban Study identifies the dwelling capacity analysis of all local centres and suburbs and the ability of these centres and suburbs to accommodate additional growth.

**Special Housing Needs:** In order to retain and encourage essential workers (nurses, teachers, etc.) and tertiary students there is a need to provide for suitable housing to meet their needs within the Penrith LGA. Other key groups have particular housing needs which also need to be accommodated. These include older people, Aboriginal and Torres Strait Islanders, people with a disability and multi cultural groups. In addition, low income and middle income households also need a range of affordable housing options.

**Housing and Urban Design:** With an increase in development and the densities of development there is a need to ensure that the design and siting of such developments meet local microclimatic considerations as well as contribute to the streetscape and public domain as well as minimise impacts on adjoining development.

#### 4.2.2 RETAIL AND COMMERCIAL

The following considerations summarise the retail and commercial services issues identified in the Penrith Urban Study and Strategy:

**Sufficient Supply:** There is a need to ensure a supply of appropriate located and serviced commercial/retail/employment lands to meet the growth and demographic requirements of Penrith both now and in the future.

**Hierarchy & Location:** The Penrith Centres Hierarchy creates a clear hierarchy of centres in appropriate locations that meet the needs of each catchment, provides complementary land uses, minimises conflicts between centres and provides ease of access. There is a need to ensure that future development be consistent in location and intensity with this hierarchy.

**Land Use Conflicts:** There is a need to ensure the appropriate location of commercial/retail land uses to minimise conflicts with other land uses (especially industrial and environmental zones/uses). There is also a need to ensure that future residential land uses do not sterilise centre use and function.

**Building Types:** Retail and commercial services require the provision of appropriate building types to meet the needs of existing and future businesses while meeting sustainability objectives.

**Integrated Land Use & Transport:** Achieving an appropriate land use mix with co-location of compatible uses, integration of residential uses into local centres, employment generation, and access to key transport routes to create vitality for each Employment Area while minimising conflicts.

**Access and Transport:** Commercial, retail and employment areas (both existing and proposed) need to ensure that they are located in close proximity to public, active and private transport routes for accessibility.

#### 4.2.3 COMMUNITY FACILITIES AND INFRASTRUCTURE

Community services and facilities include educational uses, community and neighbourhood centres, libraries, cultural services (such as art galleries), and health and medical services and facilities. The following considerations summarise the community services issues identified in the Penrith Urban Study and Strategy:

**Meeting Projected Demand of Community Services:** There is a need to ensure sufficient provision of community facilities across the Penrith LGA to meet the potential population growth and employment and training needs for the City of Penrith. Services and facilities are also required to accommodate the changing population profile of the Penrith LG, particularly the younger and older sectors of the community

**Sufficient Land:** There is a need to provide sufficient suitably zoned, well-located, suitably-sized, and affordable land for community land uses

**Access:** Ensure that existing and proposed community facilities are located to improve accessibility to local centres. Public transport and key cycleways should be improved to reduce reliance on private vehicles and enhance interaction with local community. Ensure all community facilities have universal access.

**Section 96 Contributions:** Review Section 96 Contributions for new development, to ensure that timely and appropriate community services can be provided to meet additional demand.

**Integrated Land Uses:** Need for co location of community facilities to encourage synergies and shared use of facilities.

**Affordability:** There is a need to ensure equitable and affordable access to community facilities and activities for all sectors and target groups within the community.

*Infrastructure* encompasses roads, essential services and communication services. The following considerations summarise the infrastructure issues identified in the Penrith Urban Study and Strategy:

**Road Hierarchy and Integration of Land Uses:** Need to formalise and maintain a functional road hierarchy for all roads within the LGA, particularly due to anticipated future demand on road networks.

**Road Infrastructure Capacity:** Address deficiencies in existing road infrastructure and address existing and proposed future urban growth and development.

**Implementation of Road Improvements:** Opportunities and constraints identified in the PITLUS Report relating to private transport and roads should be addressed as part of the urban growth strategy and integrated into all relevant Council policies.

**Creating Sustainable Development:** There is a need to improve the environmental outcomes for urban development by utilising infrastructure strategies that recycle and re-use water and generate their own energy to minimise additional demand on existing systems and impacts on the environment. There is also a need to provide viable transport alternatives to the dominance of private vehicle use as a mode of transport.

**Projected Demand:** Need for key service providers to assess capacity of their networks to allow amplification of key services to be aligned with key growth areas, demand, and the age of existing services and timed to be provided in advance of these demands.

**Section 96 Contributions:** Review Section 96 Contributions for new development to ensure that timely and appropriate provision of infrastructure/utilities can meet additional demand.

**Land Use Conflicts:** Need to consider the appropriate location of public authority services and land uses to maximise access to these services without causing undue land use conflicts.

**Development Catalyst:** Opportunities exist for the potential to utilise surplus public authority land (or relocate existing services) to provide developable land to cater for growth of key centres.

#### 4.2.4 PUBLIC TRANSPORT

The following considerations summarise the public transport issues identified in the Penrith Urban Study and Strategy:

**Integrated Transport and Land Use Planning:** Need to promote urban development in close proximity to existing and proposed public transport nodes to enhance viability of higher levels of service.

**Integrated Transport Service Provision:** Need to enhance the integration between different public transport modes and operators, as well as between public and private transport modes to reduce the time delay in changing transport modes and make it more attractive (e.g. park and ride options; integrated bus and rail timetables; integrated ticketing).

**Enhanced Public Transport Services:** Need to enhance public transport coverage, directness of service, frequency, reliability, quality/amenity and safety to align with potential urban growth areas and population growth patterns.

**Implementation:** Opportunities and constraints identified in the PITLUS Report relating to public transport should be addressed as part of the urban growth strategy and integrated into all relevant Council policies.

**New Release Areas:** Public transport provision in new release areas should be integrated with new release area strategies and seek to achieve similar outcomes to urban areas.

#### 4.2.5 ACTIVE TRANSPORT

The following considerations summarise the active transport issues identified in the Penrith Urban Study and Strategy:

**Connecting Key Attractors:** There is a need to enhance bicycle and pedestrian connections between residential areas (existing and proposed) and key attractors (such as retail, education and employment) to increase walking and cycling as an active transportation choice.

**Infrastructure Provision:** Existing cycleway and walking facilities will need to be improved to increase pedestrian and cyclist safety, navigation and amenity.

**Vehicle Safety:** Roads should be designed to incorporate safe walking and cycle routes, where possible, particularly in new release areas, with an emphasis on separated cycle paths (off or on road) and clear crossings.

**Crime and Safety:** Pedestrian and cycle routes should, where possible, be located where there is casual surveillance from neighbouring properties and there is appropriate lighting to improve safety.

**Bicycle Facilities:** Key attractors such as commercial and education facilities should, where possible, incorporate facilities that promote use of bicycles.

**Amenity:** Key routes should be supplemented with public domain improvements such as street trees for shade to improve amenity for pedestrians.

#### 4.2.6 ENVIRONMENT

Environmental issues in Penrith encompass cultural and archaeological heritage, air and climate, water management, vegetation and land management. The following considerations summarise the environment issues identified in the Penrith Urban Study and Strategy:

**Cultural And Archaeological Heritage Protection:** There is a need to address management of the competing needs of heritage protection and urban growth. There is a need to identify and protect cultural and archaeological heritage sites and areas and the character of certain suburbs (potentially linked to landscape character).

**Sensitive Infill Development:** Protection of heritage items, areas and their curtilage through appropriately located and sensitive urban development and adjacent urban form and densities.

**Cultural And Archaeological Heritage Incentives:** There is a need to investigate appropriate incentives for protection of heritage items and potential adaptive re-use of certain heritage items to fund restoration without compromising heritage values.

**Vegetation Management:** Need to protect significant vegetation to avoid additional release of carbon dioxide by tree removal, capture additional carbon dioxide and improve air quality. There is a need to protect environmentally and ecologically sensitive areas. Avoid urban development that would compromise significant native vegetation, ecologically sensitive areas, or existing or proposed ecological or riparian corridors.

**Vegetation and Ecological Protection:** Build on existing measures and protect and enhance corridors of native vegetation that can enhance ecological connectivity, especially along riparian corridors. There is also a need to recognise the environmental importance of significant landscape corridors in providing habitat and ecological corridors for native species, soil stability and reduced erosion and reducing salinity.

**Sustainable Design:** Promote sustainable building design and construction that seeks to minimise energy and, therefore, fossil fuel consumption and the resulting air impacts.

**Land Management:** Promote appropriate land use practices that minimise erosion, sedimentation and air-borne dust particles.

**Design for Climate:** Ensure future planning and development incorporate climatic considerations to ensure more appropriately designed houses and communities

**Water Management:** Need to minimise impacts on water catchment areas and enhancing water quality and stormwater and drainage run-off into these catchments. There is also a need to identify opportunities to integrate Water Sensitive Urban Design principles into drainage design of new release areas and large-scale infill developments.

**Flood Management:** Need to minimise the risk of loss of life or property damage by flooding through appropriately locating urban development and urban growth.

**Water and Vegetation Management:** Provide an integrated response to management of waterways to balance the need for enhanced riparian corridors, flood conveyance and urban development.

**Water Management:** Protection of Agricultural Lands: Need to buffer and protect areas of significant agricultural lands from urban development.

**Salinity:** Need to address urban salinity and minimise vegetation removal.

**Soil Contamination:** Need to identify contaminated soil and mitigate contamination.

**Acid Sulphate Soils:** Need to implement Council's Acid Sulphate Soils Strategy in all areas prioritised for future development.

**Bushfire/Storm Protection:** Attempts to recognise the bushfire and storm protection issues associated with conflicts between significant tree species in close proximity to buildings by adopting appropriate setbacks or species selection.

#### 4.2.7 OPEN SPACE AND RECREATION

The following considerations summarise the open space issues identified in the Penrith Urban Study and Strategy:

**Open Space Provision:** There is a need to ensure sufficient parks / open space is provided for increased population growth and to provide communal open space for



areas of higher urban density to compensate for reduced private open space. Public parks and open space play an important role in building social/community capital.

**Quality/Useability:** Ensure public parks and open space are of appropriate size, quality and useability to meet the needs of future populations passive and active recreational needs.

**Landscape Character:** There is a need to recognise the importance of parks in provision of landscaped areas that are vital to the rural and landscaped character of the Penrith LGA.

**Integration with Active Transport Routes:** Ensure there is accessibility of parks/ open space in proximity to public transport and pedestrian/cycle linkages and proximity to areas of high urban densities and key Activity Centres.

**Connection of Open Spaces:** There is a need for connectivity between public open spaces / parks both for ecological outcomes and promotion of active recreation and alternative active transport solutions (especially cycling).

**Environmental Buffers:** Conflicts between human and environmental aims for parks / open spaces when parks are located along key waterways or ecological corridors.

**Active Recreation Opportunities:** There is a need to provide for increasing number of youth with greater active recreation needs.

**Passive Recreation Opportunities:** There is a need to provide for increasing ageing society with greater passive recreation needs.

**Maintenance/ Section 94 Contributions:** There is a need to review the costs of provision and maintenance / watering of public open space areas (limitations of Section 94 contributions). Future costings need to consider whole of life replacement costs as well as annual maintenance costs

**Landscape Character:** There is a need for identification and retention of significant plant and tree species that are important to a suburb's landscape and heritage character in the Penrith urban areas (particularly with the redevelopment of land and increases in urban densities).

#### 4.2.8 AFFORDABLE HOUSING

In 2006, approximately 15% of Penrith LGA households are facing housing stress, this equates to 8,966 households. Of this, 5,125 households are facing mortgage stress and 3,841 are facing rental stress. The following considerations summarise the affordable housing issues identified in the Penrith Urban Study and Strategy:

**Purchasers:** Recognise that many of those facing mortgage stress may have chosen to place them selves in mortgage stress to gain entry to the local housing market and therefore may have alternate cheaper housing options available to them. This housing stress may be short term.

**Renters:** Recognise that renters generally have little alternate housing choice and therefore have greater pressures of housing stress. In Penrith, renters are generally on lower incomes and the highest proportion of low income households in the inner and established areas of Penrith LGA such as Penrith, Kingswood and St Marys.

**Public Housing:** Recognise that public housing stock in Penrith LGA is concentrated within Penrith (568 dwellings), Cranebrook (410 dwellings), St Marys (305 dwellings), Kingswood (302 dwellings) and North St Marys (263 dwellings). It is notable that 20.5% of housing stock in North St Marys is government rentals.

**First Home Buyers:** Recognise that within new housing release areas of Penrith there are a low proportion of first home buyers. Those purchasing in these areas are generally people more advanced in the housing cycle and are usually 'up grading' to a newer, larger home.

**Protecting Existing Stocks of Affordable Housing:** Explore opportunities for new planning instruments to contain an overall planning objective to retain or protect existing sources of affordable housing. These provisions are useful on a legal basis and also provide a basis to encourage developments to contribute towards affordable housing. There is also a need to explore options to require social impact assessments to be conducted for development that could impact the current supply of affordable housing or increase demand for affordable housing.

**Promoting New Stocks of Affordable Housing:** Introduce requirements for diverse housing forms and for diverse housing types or for affordable housing. There is also a need to explore options to ensure that existing State controls under SEPP 10 are used effectively and to ensure Council understand when SEPP 10 can be triggered. In addition, Council should explore opportunities to facilitate the timely supply of residential land, to avoid artificial supply constraints and identify potential housing opportunities on under-utilised land, vacant State or Council land and land areas in need of urban renewal.

**Revise statutory provisions:** There is a need to ensure that zone and locality provisions are sufficiently flexible to promote new affordable housing opportunities in as many places as possible. In addition there is a need to explore options for the local environmental planning instruments explicitly permit the conversion or adaptation of appropriate existing dwellings for use by dependent family members as a form of supported aged housing or for adult children.

**Guiding Affordable Housing:** Use the principles of affordable housing to guide the location and form of affordable housing projects. In addition, there is a need to investigate innovative opportunities to integrate Accessory Dwelling Units (ADUs) into new housing projects within Penrith.

Sustainable housing is housing that is accessible, adaptable and adopts environmentally sustainable measures in design, siting and construction. The following considerations summarise the sustainable housing issues identified in the Penrith Urban Study and Strategy:

**Environmental Housing Design:** Ensure future dwellings utilise features of environmental design to improve resource efficiency of the dwelling and to contribute to a sustainable Penrith.

**Environmental Housing Design:** Recognise that medium and high density dwellings can also utilise features of environmental design to improve the environmental performance of such buildings.

**Adaptable Housing Design:** Encourage future dwellings to incorporate the principles of adaptable housing design to ensure dwellings meet the needs of people and families of all ages and abilities.

**Accessible Housing:** In recognition of the ageing community, there is a need to ensure that a significant proportion of future housing is fully accessible.

### 4.3 CORE PHILOSOPHY

Penrith residential strategies in the past have sought to focus development both within the existing urban area (through infill development) and in new release areas. The Urban Study and Strategy consider that future development will be distributed

approximately 50% within existing urban areas and approximately 50% in new release areas. The Urban Study and Strategy seek to adopt the Sydney Metropolitan Strategy model of centre based planning which focuses increased densities and development around local centres which are retail and service centres and key activity nodes.

The Penrith Urban Study and Strategy identifies strategic centres across the Penrith LGA which will provide the focus of activity in terms of community services, retail, employment, and housing, in concentration with key transport nodes. Such an approach enhances the community's accessibility to a range of services and facilities while also providing a vibrant focus for community activity.

Building upon the Penrith City Council's centre hierarchy, the Urban Study and Strategy seeks to encourage centres to develop their own character and level of service provision in accordance with the needs of their catchment area, avoiding competition between centres and maximising individual centre success.

The Penrith Urban Study and Strategy centres based planning approach seeks to:

- Ensure all future development in existing urban areas will be centre based development and located within 800 metres of a centre;
- Create a strong mix of housing types and densities that meets future community needs, to be determined by the centre designation;
- Create strong communities with a high level provision of transport; access to retail, commercial, community and recreation services to be determined by centre designation;
- Facilitate community development by providing opportunities for neighbourhood interaction and high amenity in the public domain; and
- Guide future development with a Key Sustainability Elements Checklist (a best practice guide to future service provision, housing mix and densities and staging of future development).

#### 4.4 RECOMMENDATIONS FOR THE URBAN STRATEGY

The Urban Study has identified the guiding principles and a planning philosophy to guide future urban development within Penrith. The Urban Study identifies the residential capacity of Penrith's existing centres and suburbs and eleven key issue areas to be addressed prior to increasing densities and development.

The Penrith Urban Strategy will provide a vision and strategic direction for the development of existing urban areas within the Penrith Local Government Area (LGA) to 2031. It will utilise a centres based model to build Penrith's existing centres and to guide the location and density of future urban development. Central to this strategy will be the sustainability checklist containing strategic principles and elements guiding requirements for sustainable development.

The following measures have been developed for each of the key issues areas and will develop a structure for the implementation of the key sustainability elements:

Key Sustainability Element	Measures
<i>1. Dwelling Capacity and Diversity</i>	50% of all new growth within existing urban areas. Of this development 60% will be medium to high density and 40% will be low to medium development. No additional growth areas released other than those

Key Sustainability Element	Measures
	identified in the Urban Study. 25% of all development in new release areas to be medium density.
<i>2. Retail and Commercial</i>	Network of key centres and nodes of activity that service the needs of residents and workers within their catchment area, in accordance with Council's Centre Hierarchy
<i>3. Community Facilities and Infrastructure</i>	Equitable and accessible provision of community facilities across the Penrith LGA, which meets the criteria of Community Facilities in the Centres Hierarchy Water, energy, stormwater, sewerage and road infrastructure is programmed and upgraded to provide appropriate levels of service provision in a timely and appropriate manner to meet future demands
<i>4. Public Transport</i>	Development of a new train station between Werrington and Kingswood. Regional Centre, Specialised Centre and Town Centre designations to achieve 24 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 5-10 minute frequency and off peak hour services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections Village, small village and neighbourhood centre to achieve 14 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 10-15 minute frequency and off peak hour services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections
<i>5. Active Transport</i>	In existing areas, all residential roads to have a universally accessible pedestrian footpath of minimum 1.2 m width on at least one side of the road wherever physically possible. In new urban areas, all residential roads should have a universally accessible footpath wherever physically possible on both sides of the road, of a minimum width of 1.5 metres. All roads within centre catchment/radius to have universally accessible footpaths on both sides of the road, of a minimum width of 1.5 metres wherever physically possible. Consider the inclusion of a different standard for commercial strips. e.g. full boundary to kerb pavement in front of land zoned for commercial and retail purposes. All centres should be accessible by a safe cyclist route and include bicycle infrastructure.
<i>6. Environment</i>	Future development will have minimal impact on Penrith LGA's environmental assets.
<i>7. Open Space and Recreation</i>	Creation of quality open spaces which are integrated and connected into district wide open space networks and create high quality landscape environment for Penrith LGA's centres and suburbs
<i>8. Affordable Housing</i>	Any future large scale development within Local Centre catchment/radius should provide for a minimum of 3% affordable housing. Any future large scale development within new urban release areas should continue to provide for a minimum of 3% affordable housing. Review these figures and the success/failure of the provision of

Key Sustainability Element	Measures
	<p>affordable housing in the next review of the Local Environmental Plan.</p> <p>Affordable housing will be provided in a range of dwelling types and tenures.</p> <p>Affordable housing will be targeted at special needs groups, such as essential workers, students, older people and very low and low income earners</p>



05

LOCAL CENTRES







## 05 LOCAL CENTRES

### A. OVERVIEW

This component of the study aims to 'ground-truth' the initial residential development opportunity analysis provided in the report by Informed Decisions entitled 'Dwelling Opportunities Analysis for Penrith City Council' (Sept. 2007) to be referred to as 'ID Report' (2007). ID Report (2007) has highlighted the fact that most residential development opportunities exist within close proximity to public transport and key retail centres.

The Sydney Metropolitan Strategy (2004) has adopted a hierarchy of centres across the metropolitan area. Penrith centres have been given a centre designation in accordance with those in the Metropolitan Strategy. The purpose of the following suburb analysis is to review how Penrith's centres perform against these designations in the Metropolitan Strategy centres hierarchy. This chapter further introduces the Penrith Urban Strategy Sustainability Checklist and assesses each centre's ability to meet the centre requirements by designation and to determine future needs for any additional development within each centre.

Ground truthing has been undertaken for each centre to determine:

- Key characteristics, opportunities and constraints of each centre; and
- To test the dwelling projection assumptions of the ID Report (2007).

### B. METHODOLOGY

The methodology adopted in identifying opportunities and constraints includes a review of:

- Suburb demographics, housing needs and projected growth trends to 2021 and 2031 (building on demographic analysis by Informed Decisions 2007) to assess the residential growth needs of the suburb;
- Key physical constraints and opportunities for the suburb to assess suitable areas for any future growth;
- Existing land use patterns and potential land use conflicts and opportunities to assess where it may be suitable for any required growth to be located;
- Access to private, public and active transport opportunities;
- Access to key services such as local shops, education (schools), community facilities and open space;
- Existing suburb character including the subdivision and road pattern, block sizes, lot sizes and types and styles of dwellings in the suburb; and
- Summary of opportunity and constraints that will impact the future growth and development of the centre and broader suburb.

### C. METHODOLOGY FOR GROUND TRUTHING DWELLING CAPACITIES

ID Report (2007) prepared a dwelling analysis and capacity assessment for each centre within the Penrith LGA. The ground truthing involved reviewing the dwelling capacity assessment with the opportunities and constraints identified for each centre and applied the projections to each centre. Ground truthing considered the dwelling capacity potential of each centre within its catchment or radius as well as the dwelling capacity potential within the surrounding suburb.

In accordance with the Metropolitan Strategy Centres Hierarchy, centre catchments or radius are:

Regional Centre                      2 km catchment/radius;

Specialised Centre	1 km catchment/radius
Town Centre	800 m catchment/radius
Village	600m catchment/radius
Small Village	400m catchment/radius
Neighbourhood Centre	150-200m catchment/radius

Ground truthing was undertaken in detail for all local centres. In determining dwelling capacity, assumptions were made on the area of future development within each centre, density of future development and likelihood of future development within each centre. These assumptions are portrayed in the analysis of each Local Centre.

#### D. KEY ISSUES AND ASSUMPTIONS

Some key issues and assumptions of future Dwelling Opportunities analysis for all suburbs are as following:

- **Location of Majority of Future Urban Growth:** The majority of increased development will be concentrated within the catchments or radius of centres, in close proximity to either transport and retail/commercial and community services.
- **Integrated Land Use and Transport:** The transport services will achieve higher levels of accessibility, servicing and frequency. Attain a 24 hour public transport service (bus or train) of 5-10 minute frequency during peak and 10-15 minute frequency off peak for the regional centre, town centre and specialised centres. For Villages, small villages and neighbourhood centres, attain 14 hour public transport services (bus to train) of 10-15 minute frequency. As such it is proposed that the majority of future additional dwellings should occur within a centre catchment/radius which has higher levels of access to transport.
- **Development Era:** ID Report (2007) identified the age of residential development for each suburb. Identification of development era provides an indication of the potential capitalisation levels of each allotment or precinct in the redevelopment of existing lots to a higher density or new housing stock. For example, newer houses generally have a higher capitalisation rate and will therefore cost more to redevelop.
- **Access to Services/Transport Score:** ID Report (2007) referred to this as a 'Classification Score' which provides a rating of 1 to 5 with 5 being highly accessible and 1 being less accessible. The assumptions behind this Classification Score are difficult to interpret so the ground truthing applied the sustainability checklist to determine the levels of access to services and transport.
- **Centre Radii:** One of the key assumption differences between the Urban Study and Strategy and the ID Report (2007) is the Centre radius/catchment. The Urban Strategy Centre radius has adopted centre hierarchy and catchment areas that are consistent with the Sydney Metropolitan Strategy. Therefore, in most instances the radii for Centres is larger than that considered by ID Report (2007).
- **Percentage of Developable Land:** It is important to note that ID report (2007) made an assumption about the potential of the assumed developable land that will be developed based on the Classification Score (i.e. the access to transport/services and urban qualities of the centre). Due to different approaches with the Urban Study and Strategy broad assumptions about the percentage of developable land are made.
- **Assumed Densities of Future Residential Areas:** The main assumption that will be reviewed in this chapter is the percentage of land at each density nominated by ID Report (2007). Findings are based on the centres proposed designation within the centres hierarchy and the application of the Sustainability Checklist.

## E. DETERMINING DWELLING DENSITY AND CAPACITY

The Urban Study and Strategy Sustainability Checklist identifies appropriate levels of density for future development within centre catchment/radius. For each centre an assumed range of density and application of the Sustainability Checklist criteria was applied to assist in determining additional dwelling gain. The larger, higher order centres, such as regional centre, town centre and specialised centre sought to accommodate higher levels of density, while other smaller, lower order centres sought to accommodate a mix of medium and lower density development. The following density and dwelling capacity table was applied to all centres, as shown in Table 4.1.2.

**Table 5.2: Assumed Density and Dwelling Capacity Indicator Table**

Centre and Designation	Number of dwellings @ 100 dwgs/ha	Number of dwellings @ 75 dwgs/ha	Number of dwellings @ 50 dwgs/ha	Number of dwellings @ 25 dwgs/ha	Additional Dwellings Created	Existing Dwellings lost to demolition	Net Dwelling Gain (not including MDP)

In addition to dwelling capacity within centres, the ground truthing identified dwelling opportunities outside of centres and within the wider suburb surrounding the centre. Dwelling opportunities outside of centres was focussed on two key opportunities: demolition and replacement of existing dwellings with new housing stock; and opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots. While it is considered desirable that the majority of residential development should occur within catchment/radius of centres, it is recognised that there will also be some infill development within surrounding residential areas.

It is important to note that the ID Report (2007) made some broad assumptions about both the potential for under-utilised or vacant allotments to redevelop and the potential yield from these allotments based on their average size groupings as follows:

### Vacant Land

The ID net dwelling gain assumptions for development of vacant allotments for all suburbs are:

- For lots less than 500 sqm, there is a net dwelling gain of 1 dwelling;
- For lots 500 - 799 sqm there is a net dwelling gain of 3 dwellings
- For lots greater than 1000 sqm there is a net dwelling gain of 12 dwellings

It is assumed that for lots from 500 sqm up to 999 sqm outside of the Centres, the ID Report (2007) assumptions that medium densities, of 40-60 dwellings per hectare, can be achieved in these allotments. For areas outside the Centre this is a reasonable assumption. However, if centres such as Kingswood are going to achieve the residential catchment necessary to support its level as a Specialised Centre then higher densities may still be required.

### Demolition & Replacement

The ID Report (2007) net dwelling gain assumptions for demolition and replacement of allotments for all suburbs are:

- One in ten lots within the size range of 500-799 square metres will provide for one additional dwelling (e.g. a dual occupancy);

- One in ten lots within the size range of 800-999 square metres will provide for two additional dwellings (e.g. 3-unit developments); and
- For lots larger than 1000 square metres, one in ten lots will provide for four additional dwellings.

It is considered that higher potential dwelling yields from demolition and replacement may be achieved, than those nominated by ID Report (2007). ID Report (2007) appear to have under-estimated the potential dwelling yield for redevelopment of existing allotments. For example, lots of 500-799 sqm are only assumed to achieve 2 dwellings (net densities of 25 to 40 dwellings per hectare); lots of 800-999 sqm are only assumed to achieve 3 dwellings (net densities of 30 to 40 dwellings per hectare); and lots greater than 1000 sqm are only assumed to achieve 4 dwellings (net densities of up to 40 dwellings per hectare). These are lower densities than those achieved by vacant land - even though redevelopment of existing allotments would often require a greater density incentive.

Further, it is anticipated that there may be a higher level of redevelopment, than the assumed one in ten allotments by ID (2007). Based on existing development activity in Penrith the figure may be a reasonable average for the next 5-10 year period across all suburbs. However, it may be an under-estimation of demand in the medium (10-15 years) and long (15-20 years) period depending on the suburb in question. This will be looked at in more detail for each of the suburbs.

## 5.1 Introduction

Of the 407 square kilometres that make up the Penrith City Council area, 18% (73 km<sup>2</sup>) is urban. The majority of this land (about 61 km<sup>2</sup>) comprises residential areas. Penrith's urban areas are located in a linear corridor bounded by rural and natural areas to the north and south, and dissected by creek and river corridors. Penrith City Centre and St Marys Town Centre represent the major centres and clusters of commercial and retail activity. Both suburbs have a mix of commercial and industrial uses but are predominantly retail orientated. A range of State Government service centres are located in the Penrith CBD.

The residential areas of Penrith are a mix of established and urban release areas. There are 33 suburbs within the Penrith Local Government Area (LGA) out of which 11 suburbs are located within rural areas. Following is a list of all suburbs within the LGA.

1. Agnes Banks
2. Berkshire Park
3. Cambridge Gardens
4. Cambridge Park
5. Castlereagh
6. Claremont Meadows
7. Colyton
8. Cranebrook
9. Emu Heights
10. Emu Plains
11. Erskine Park
12. Glenmore Park
13. Jamisontown
14. Kemps Creek
15. Kingswood
16. Leonay
17. Llandilo
18. Londonderry
19. Luddenham
20. Mt Vernon
21. Mulgoa
22. North St Marys
23. Orchard Hills
24. Oxley Park
25. Penrith
26. Regentville
27. South Penrith
28. St Clair
29. St Marys
30. Wallacia
31. Werrington
32. Werrington County
33. Werrington Downs

The following suburbs are covered in detail by the Rural Lands Strategy. Most city wide issues also apply to the rural areas.

- |                  |               |                 |
|------------------|---------------|-----------------|
| — Agnes Banks    | — Llandilo    | — Mulgoa        |
| — Berkshire Park | — Londonderry | — Orchard Hills |
| — Castlereagh    | — Luddenham   | — Wallacia      |
| — Kemps Creek    | — Mt Vernon   |                 |

Penrith City Centre and St Marys Town Centre are currently subject to separate planning processes and have been described in the following sections. The urban release areas are planned to deliver over 13,000 new dwellings over the next 15 years and will play a significant role in providing housing and employment lands across Penrith. These have also been described in the following sections.

This chapter details the dwelling and development potential of the following Local Centres:

- Penrith City Centre Precinct
- St Marys Town Centre Precinct
- Kingswood Specialised Centre
- Emu Plains Station and Lennox Centre
- South Penrith (Southlands) and Smith Street
- Glenmore Park
- St Clair
- Werrington Station
- Claremont Meadows
- Cranebrook
- Erskine Park
- Werrington County and Cambridge Gardens
- Cambridge Park
- North St Marys

This section also details the characteristics and future development of the neighbourhoods of:

- Colyton
- Emu Heights
- Leonay
- Oxley Park
- Jamisontown
- Regentville

An overview of New Release Areas is provided for:

- Glenmore Park Stage 2 Precinct Centre
- North Penrith Urban Area
- Penrith Lakes
- St Marys Release Area
- Waterside (lakes Environment)
- Werrington Enterprise Living and Learning (WELL)

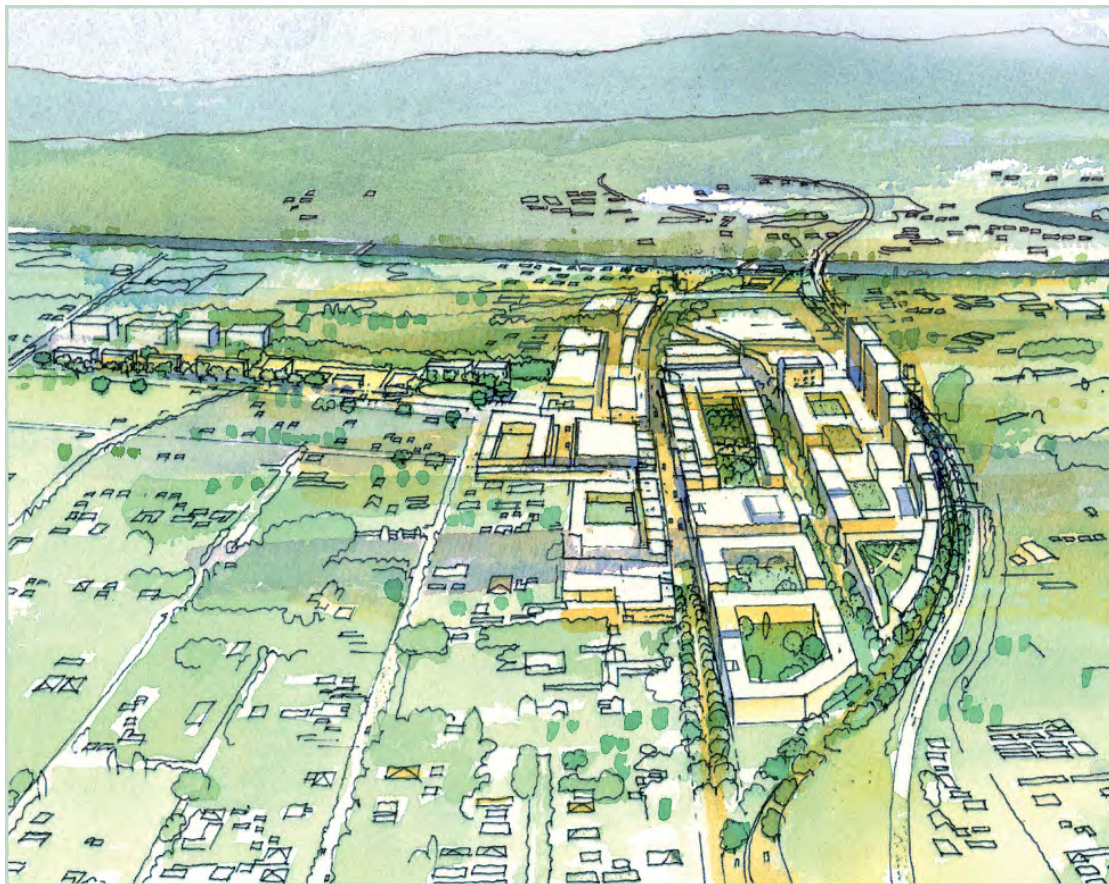
## 5.2 Penrith City Centre Precinct

### Penrith City Centre

The Penrith City Centre Precinct includes the Penrith City Centre and surrounding areas approximately within 2 km of the train station.

The Penrith City Centre is one of Sydney's major commercial centres, with some 100,000m<sup>2</sup> of commercial office space and 156,000m<sup>2</sup> of retail floor space. Its influence not only extends to the neighbouring local government areas of Blue Mountains and Hawkesbury, but much further to include the south-west corridor as well as Lithgow, Bathurst and beyond.

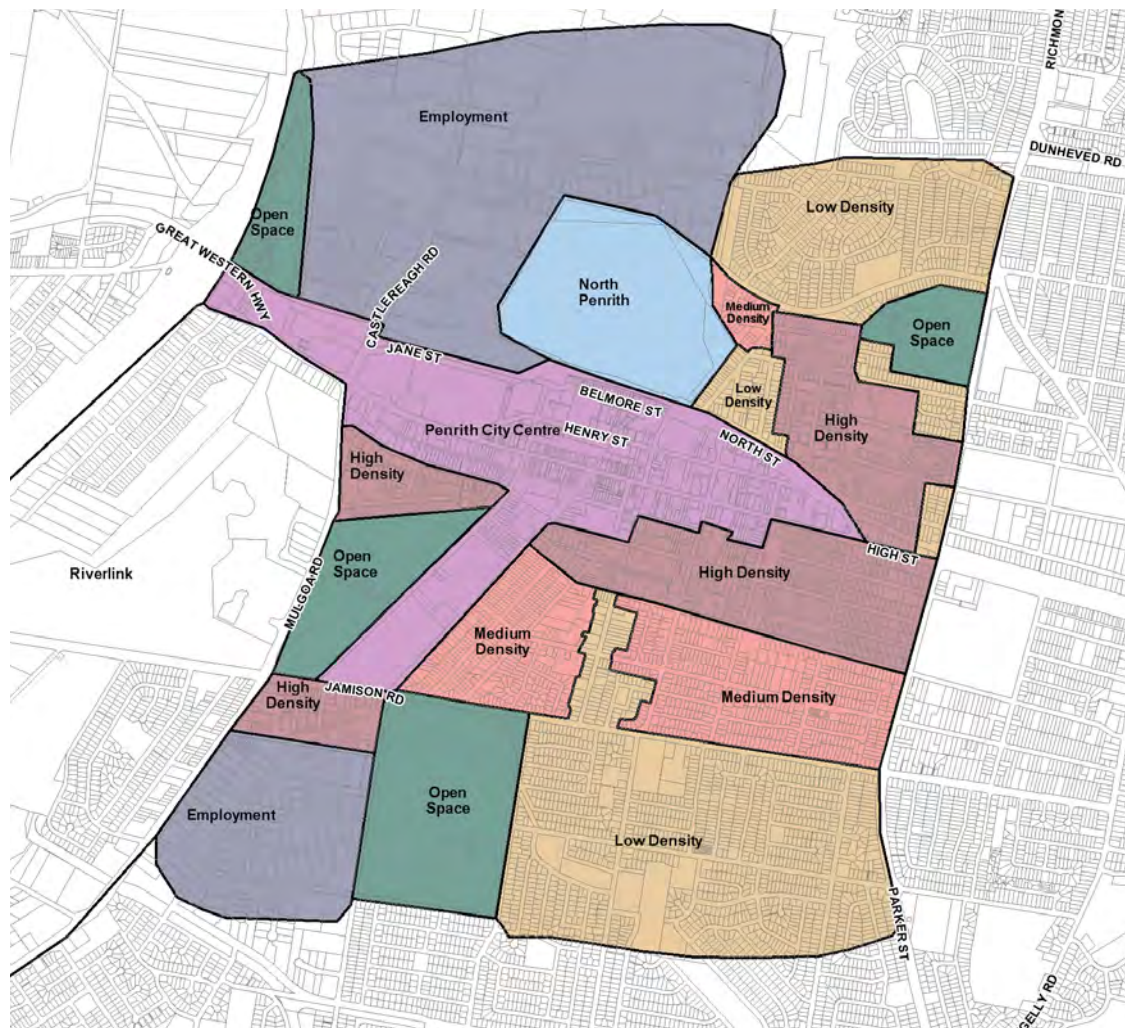
The Penrith City Centre will accommodate 10,000 new jobs and 10,000 new residents. The form of the city will protect Penrith's unique setting in the river valley at the foothills of the Blue Mountains by maintaining views of the escarpment by concentrating higher buildings along the railway line and closer to the railway station.



The Riverlink area is located on the eastern bank of the Nepean River. Much of the northern portion of the precinct is within the 2km radius of the Penrith City Centre and forms the City's connection to the Nepean River. The precinct comprises rural lands, two residential areas and the Penrith Panthers Rugby League Club as well as significant land holdings by Council. The Precinct has large areas of undeveloped and underdeveloped land. Much of the precinct is affected by complex flooding constraint and future development within the precinct must be compatible with flooding constraints and address evacuation issues. The visual sensitivity of the Precinct (adjacent the Nepean River and with the backdrop of the Blue Mountains) as well as its gateway role for the

City Centre also provides opportunities and constraints. Council has adopted a Precinct Plan for this area as an interim measure to provide preliminary concept guidelines. Further analysis will inform a master plan and LEP and DCP provisions Figure 5.1 shows a summary of key opportunities to urban development within the Penrith City Centre Precinct.

**Figure 5.1:** A summary of key opportunities and constraints to urban development within the Penrith City Centre Precinct.



The area bounded by Union Lane, Station Street and Mulgoa Road has an opportunity for high density given its close proximity to the City Centre, recreational facilities and the Penrith train station. There have been some recent high density developments in the area.

The area bounded by Jamison Road, York Road, Mulgoa Road and to the north of the employment area also has an opportunity for high density. This area is already developed into high density and is in close proximity to shops, recreational areas and other facilities.

The North Penrith Urban Land is generally bounded by Coreen Avenue to the north, the main Western Railway Line to the south, Castlereagh Road to the west, and Lemongrove residential area to the east. The site area is about 50 hectares and plans have already been developed for this land. The proposed development includes 9.5 hectares of



employment precinct, 1.5 hectares of urban village precinct, 29 hectares of residential home business precinct and 10 hectares of open space/community facilities. It is forecast to accommodate 850 dwellings with a population of 2,000 people. It is also estimated to generate about 950 onsite jobs.

The Lemongrove Estate is located to the north of the railway line and east of North Penrith Urban land. It retains a considerable number of residences of mixed materials and styles which collectively demonstrate the type of early suburban development in Penrith. It is recommended to retain the western part of the Lemongrove Estate as low density while conserving the existing dwellings. Any new development in the area should be complementary to the heritage significance of the estate. The eastern part of the estate and other surrounding areas has been developed into higher density. It is recommended that this area continue to develop into high density.

The area south of High Street and generally bounded by Lethbridge Street, Derby Street, Woodriff Street and Northern Road has a potential for high density given its close proximity to the City Centre and other community facilities.

The Warwick and Derby Street streetscape has a large group of weatherboard and brick cottages in the Victorian, Federation, California Bungalow and Post War styles which provide interesting representative examples of the period and provide a sense of a historic streetscape at the elevated south end of the town. These are generally well maintained and represent the type of working class housing built within Penrith during this important period of growth and consolidation. This area is recommended to be developed as low density while conserving the existing dwelling stock. Any new development should be complementary to the heritage significance of the area.

The existing Derby Street Conservation Area is based on groups of dwellings fronting Derby, Brown, Castlereagh and Warwick Streets. The weatherboard and brick cottages in the Victorian, Federation and California Bungalow and Modernist styles provide interesting representative examples of their periods, and collectively create high quality streetscapes with distinctive character at the elevated eastern edge of the town. This area is recommended to be developed as low density while conserving the existing dwelling stock. Any new development should be complementary to the heritage significance of the area.

### 5.3 St Marys Town Centre Precinct

The St Marys Town Centre Precinct includes the St Marys Town Centre and surrounding areas within walking distance to the train station.

St Marys Town Centre is the principal retail centre and public transport node for the eastern area of the City. St Marys will continue to grow and change to become a larger and more diverse commercial centre.

The future plans for the St Marys Town Centre includes the establishment of two distinct gateway precincts, which, coupled with the creation of a central town square precinct, aims to revitalise the heart of the town. To further

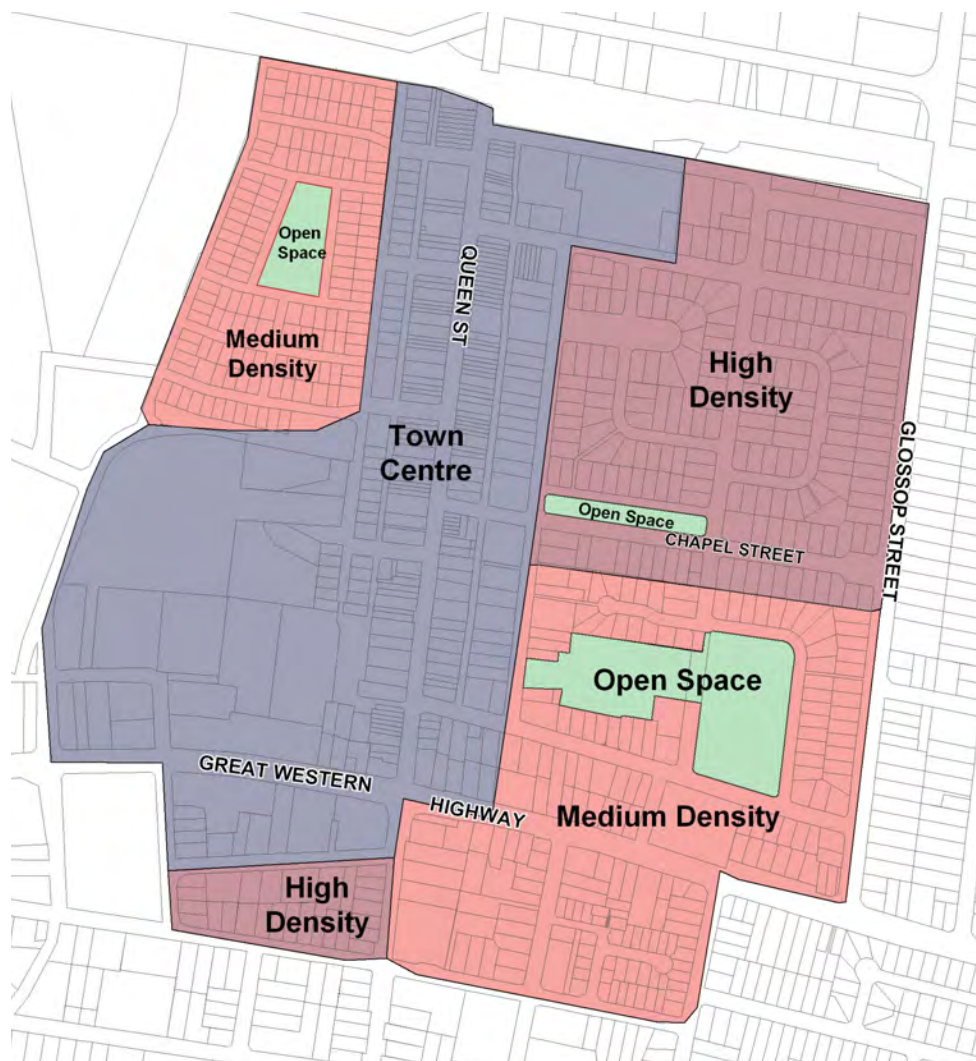


assist the continuing redevelopment of the area, the existing shopping centres are proposed to be expanded towards Queen Street to further animate the street. The inclusion of the shopping centres into the fabric of the Town Centre strikes a balance between the benefits of street retail life and the convenience of shopping centres.

There would be 1250 additional dwellings in St Marys with the built form proposed in the Master plan.

The Glossop Street precinct is strategically located in close proximity to the St Marys Town Centre and railway station providing the potential to support the positive urban design outcome that can be created in a transit oriented development. The precinct is generally bounded by the railway line to the north, Glossop Street to the east, Great Western Highway to the south and St Marys Town Centre to the west. This area has an opportunity for medium density development. There is an opportunity for high density for areas within this precinct and closer to the railway station. Any development within this area is to retain views to the west towards Blue Mountains escarpment at high points and along view corridors.

**Figure 5.2:** A summary of key opportunities and constraints to urban development within the St Marys Town Centre Precinct.



The Duration Cottages are located to the west and immediately behind the northern end of the commercial Queen Street precinct. The estate was created in 1942 to provide housing for the workers of families employed at the St Marys Munitions Factory (now Dunheved Industrial Estate) located to the north of the railway line. The subdivision comprises eight blocks of residential allotments with a park reserve at the centre. The area contains about 150 small lots with a predominant size of 373m<sup>2</sup>. This area is recommended to be developed as medium density after lot consolidation. Further planning investigations need to be carried out for the future use of this area given its strategic location close to the St Marys Railway Station, Queen Street commercial centre, schools and community facilities.

The area to the south of Great Western Highway and bounded by Sainsbury Street, Mamre Road and Princess Mary Street is recommended to be developed as high density given its close proximity to the train station and the number of existing residential flat buildings in the area.





5.4

Kingswood



## 5.4 Kingswood

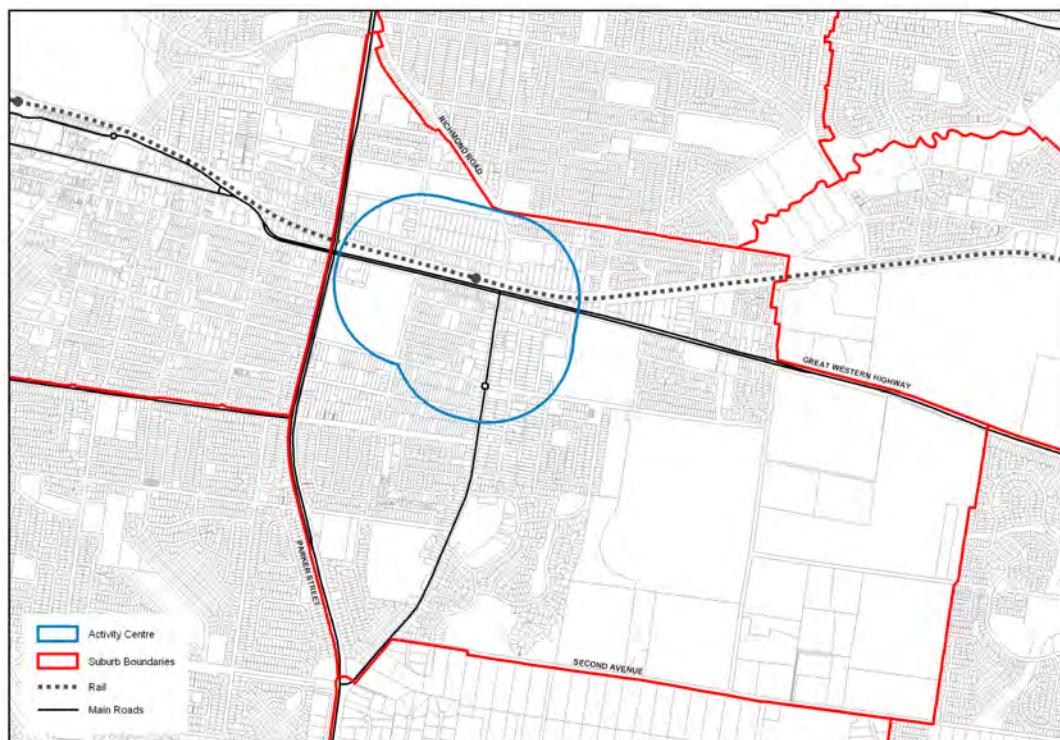
### 5.4.1. Suburb Overview

The statistical area of Kingswood is bounded by Richmond Road, Victoria Street and the Great Western Highway to the north, Parker Street to the west, O'Connell Street in the east and Second Avenue in the south, depicted in Figure 5.4.1.

The Kingswood Specialised Centre is located immediately to the east of, and in close proximity to, the Penrith City Centre.

The Kingswood Railway Station is a key transport node for the Kingswood Specialised Centre. Kingswood has business and retail strips along both the Great Western Highway and Bringelly Road. Kingswood owes its Specialised Centre status to the location of the Nepean Hospital and surrounding range of medical services and facilities within its boundaries, making it the primary medical centre for the Penrith LGA. Kingswood also accommodates the Kingswood Campus of the University of Western Sydney and the TAFE NSW Western Sydney Institute Nepean College, making it also the focus of tertiary institutions for Penrith LGA and further emphasising its specialised role.

Figure 5.4.1: Map of Kingswood



## 5.4.2. Suburb Demographics and Housing Trends

Kingswood is an established residential area and in 2006 had a total population of 8,703 people. The majority of Kingswood developed during the post war period, particularly in the 1960s.

### A Current Demographics

The population of Kingswood was relatively stable between 1991 and 2006, with a loss of only 200 persons.

#### *Age:*

The age structure of Kingswood is similar to that of the Penrith LGA and is experiencing characteristics of an ageing population. This is evident in the change in proportion of those aged 50+ years in 1991 (19.7%) to 2006 (27.4%). By 2006 there were a marginally larger proportion of people aged 50+ years than in the Penrith LGA.

#### *Income:*

The majority of households in Kingswood are on a low income or low to medium income. Less than 10% of households in Kingswood are on a high income.

#### *Car Ownership:*

Rates of car ownership in Kingswood are lower than that of Penrith LGA with three quarters (75.4%) of households owning a car as opposed to 84.8% in the Penrith LGA. A significant proportion of households in Kingswood (42.4%) own 1 vehicle. There are 574 households (17%) of who do not own a car.

#### *Households:*

Household structure in Kingswood has substantially changed since 1991 and as a result the household structure in 2006 differs to that of the Penrith LGA. Whilst couples with children are a dominant household type (41% of all households in 2006), there has been a loss of approximately 300 households (25%) in this group since 1991. The largest household increase has been for lone person households which gained an additional 483 households between 1991 and 2006, equating to 29% of all households in 2006.

There has also been growth in the other key household types. There is a higher proportion of one parent households in Kingswood (25%) compared to Penrith LGA (19%) and there has been minor growth since 1991 of an additional 68 one parent households. There are similar trends with couples without children households who represented around 22% of all households in 2006 and had gained an additional 100 households (18%) since 1991.

#### *Dwellings Type & Tenure:*

Kingswood contains a diverse mix of dwelling types, which largely differs from the dwelling types of the Penrith LGA. The dominant dwelling type is separate houses which account for 50.5% of all dwellings (compared to 80.3% across Penrith LGA).

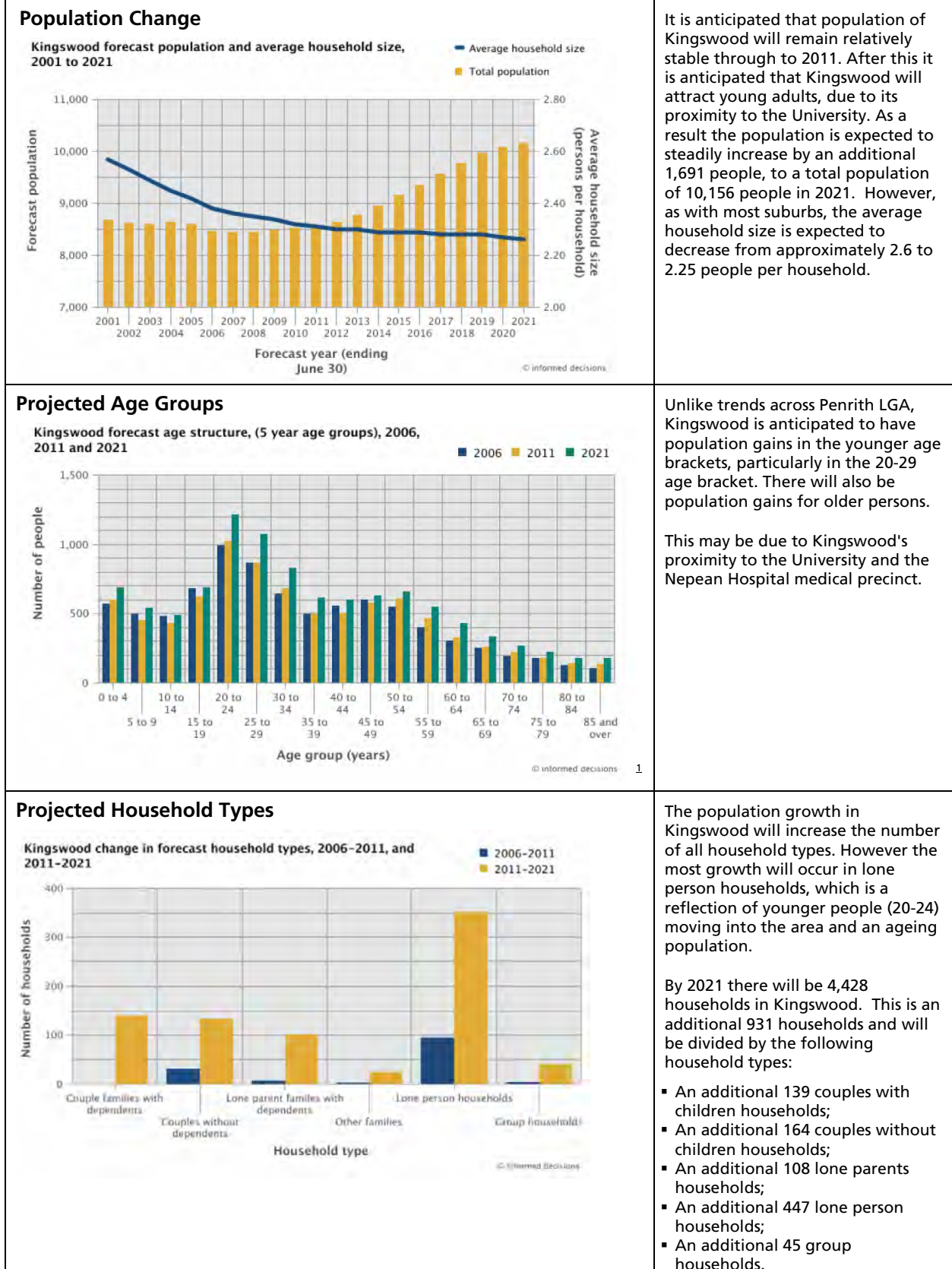
More than a quarter (28.7%) of all dwellings are medium density, the data shows that between 1991 and 2006 there has been significant development of an additional 836 medium density dwellings in Kingswood. High density dwellings accounted for 12% of all dwelling types in 2006, which was a decrease from 19% in 1991. This may have been due to a change in the classification of high density dwellings.

A high proportion of dwellings in Kingswood are rented (40.1%) which is higher when compared to Penrith LGA (24.6%).



## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.4.2: Projected demographics for Kingswood in 2021\*



### 5.4.3 Existing Zoning and Land Use Patterns

The primary retail business zone is located along the Great Western Highway and Bringelly Road in close proximity to the Kingswood Railway Station. The zoning pattern however does not reflect the location of retail and business along Bringelly Road. These development spines also include shop top housing and higher density residential development. Most of the stores provide local retail and grocery shopping. Within the Great Western Highway strip of shops there is an eclectic mix of businesses that provide for a wider range of uses such as art and craft shops, brewer supplies, pharmacies and food stores. There are no large supermarkets within Kingswood.

The Nepean Hospital utilises a Special Uses zone. There are a number of other medical facilities, day surgeries and home clinics spread through the surrounding 2(d) Residential Zone. The University of Western Sydney (and the new WELL Precinct) is also located in a Special Uses Zone to the east of Kingswood.

The Penrith General Cemetery comprises a large land parcel to the north in the Special Uses Zone. Similarly the school and church grounds to the north comprise significant land areas.

Bringelly Road also accommodates a range of community facilities including a community centre and preschool.

There is some provision of industrial zoned land to the north-west of the railway station and between the railway line and the Great Western Highway in the east of Kingswood. This includes a number of repair and trades shops and workshops as well as service stations. It is an important employment provider for the area.

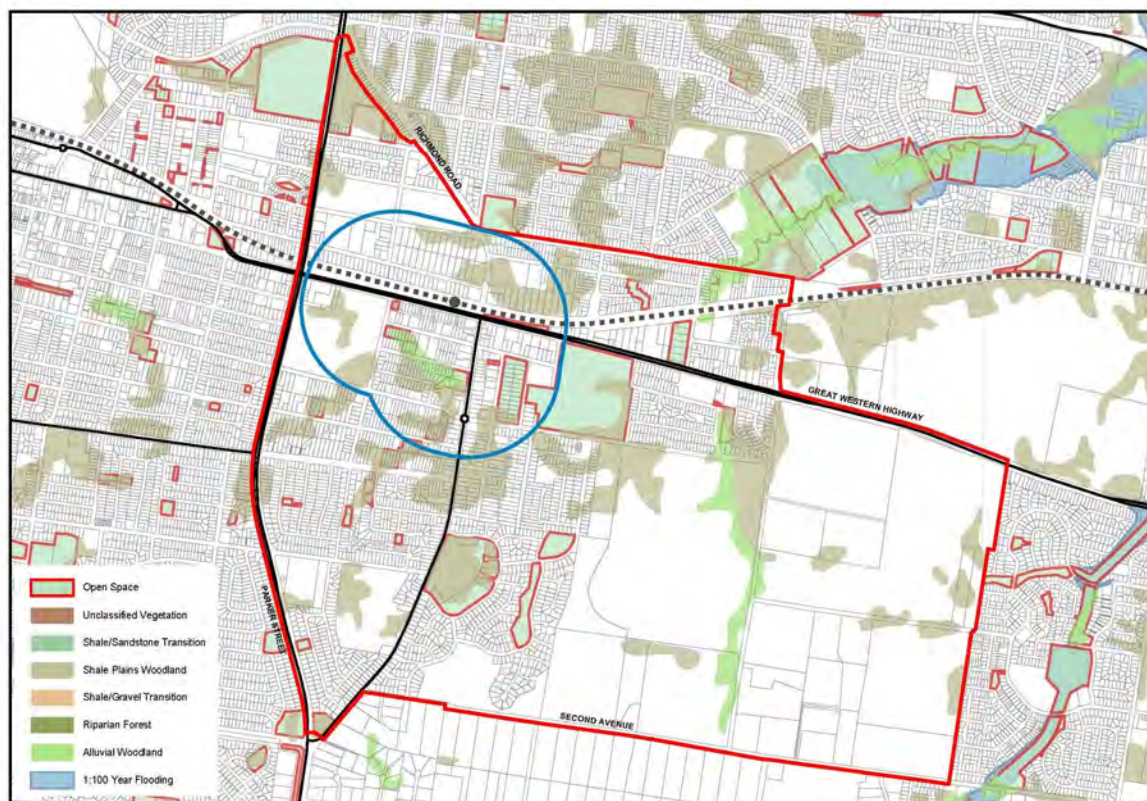
There is a mix of housing types through Kingswood that is promoted by the 2(e) Medium-High Residential Zone and the 2(d) Medium Density Residential Zone, resulting in a number of walk-up apartment blocks and some limited higher density apartment blocks around the centre, the hospital and just to the north-east of the railway station.

Kingswood has relatively good access to open space areas with the Chapman Gardens and Kingswood Park to the east of the main centre supporting significant playing fields, sporting clubs and recreational areas, Peppermint Reserve to the south on Bringelly Road, and a few pocket parks through the residential areas. Many of the open space areas are aligned with overland flow drainage requirements and low-lying lands.

## 5.4.4 Environmental Opportunities and Constraints

Figure 5.4.4 illustrates the key environmental constraints within Kingswood.

Figure 5.4.4: Environmental constraints for Kingswood



### A Topography, Flooding and Drainage

North of the railway line, Kingswood is undulating and rises to a peak, with extensive district views. To the south of the railway line, Kingswood is located on slightly rolling lowlands. As Figure 5.4.4 shows, there are no major constraints that would prevent urban development, there are a few permanent watercourses in the area, and flooding is not a significant constraint across the suburb. However, it is important to note that drainage is an important issue in the area, particularly overland flows which have generally been integrated into existing open space areas and parkland. Any urban growth may increase impermeable surfaces and drainage capacity may need to be reviewed to ensure it is not a constraint on future development.

### B Native Vegetation and Sensitive Ecological Areas

On the eastern boundary of the suburb of Kingswood, directly parallel to the railway line, there is a continuous band of Cumberland Plain Woodland. To the south-west of Kingswood, on the outskirts and within the University of Western Sydney, Kingswood Campus there is a significantly vegetated area. Most of this area is either shale plains woodland or alluvial woodland. Significant trees and ecological corridors should be preserved and enhanced as part of any urban development to retain biodiversity and amenity. However, overall, vegetation is not a significant constraint to urban growth or development in the area.

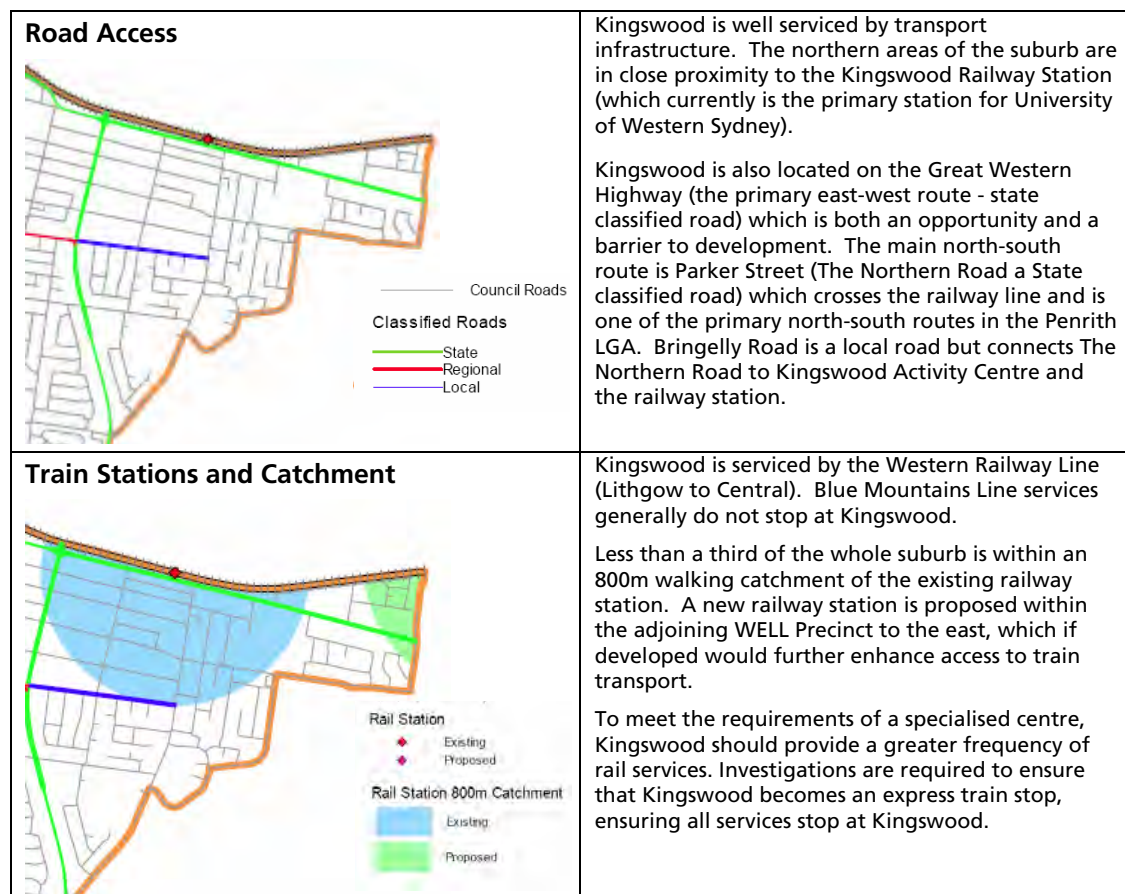
## 5.4.5 Access and Transport

The access and transport characteristics in Kingswood have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008<sup>2</sup>.



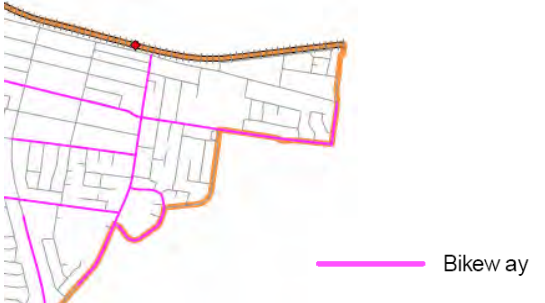
Kingswood as a Specialised Centre should provide a high level of access and transport, it achieves this to some degree with the train station. However additional improvements are required to ensure it meets the transportation needs (both within the suburb connecting the major activity generated and within the Penrith LGA) and sustainability targets for the future community.

Figure 5.4.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

**Figure 5.4.5: Access and Transport Characteristics of Kingswood**



<sup>2</sup> There are discrepancies in the area boundaries between the PITLUS Report (2008) and that of the ID Demographic Analysis (2007), therefore this section focuses on the area of Kingswood to the south of the railway. PITLUS has integrated this analysis with Penrith and South Penrith.

<p><b>Bus Network and Catchment</b></p>  <p>● Bus Stop  <span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> Bus Stop 400m Catchment</p>	<p>Bus routes and stops are primarily located along the Great Western Highway, Parker and Bringelly Streets, Second Avenue and Jamison Road. This ensures that nearly all of the residential areas of Kingswood are within 400m of a bus stop.</p> <p>However, as with all other suburbs, the frequency, reliability and directness of the bus routes would need to be reviewed to determine they are meeting the needs of the community.</p>
<p><b>Pedestrian Network</b></p>  <p>— Footpath Proposed  — Footpath Existing</p>	<p>Kingswood has quite a high level of pedestrian access with most main roads having either an existing or proposed footpath. There is also connectivity to key nodes such as the retail area, medical precinct, university and train station.</p> <p>To fulfil its requirements as a specialised centre, Kingswood should aim to have footpaths along both sides of all streets.</p>
<p><b>Cyclist Network</b></p>  <p>— Bikeway</p>	<p>The cycle network in Kingswood is rather limited but does provide cycle paths along key roads. Future planning should look to providing cycle paths along the Great Western Highway to provide access between Kingswood and Penrith, but also to key nodes within Kingswood.</p> <p>It is important that all cycleways are provided with formal clear markers and indications. Cycle facilities are also essential at all key nodes within Kingswood.</p>

All diagrams sourced from PITLUS Report 2008

## 5.4.6 Access to Services/ Employment Opportunities

### A Retail / Local Shopping

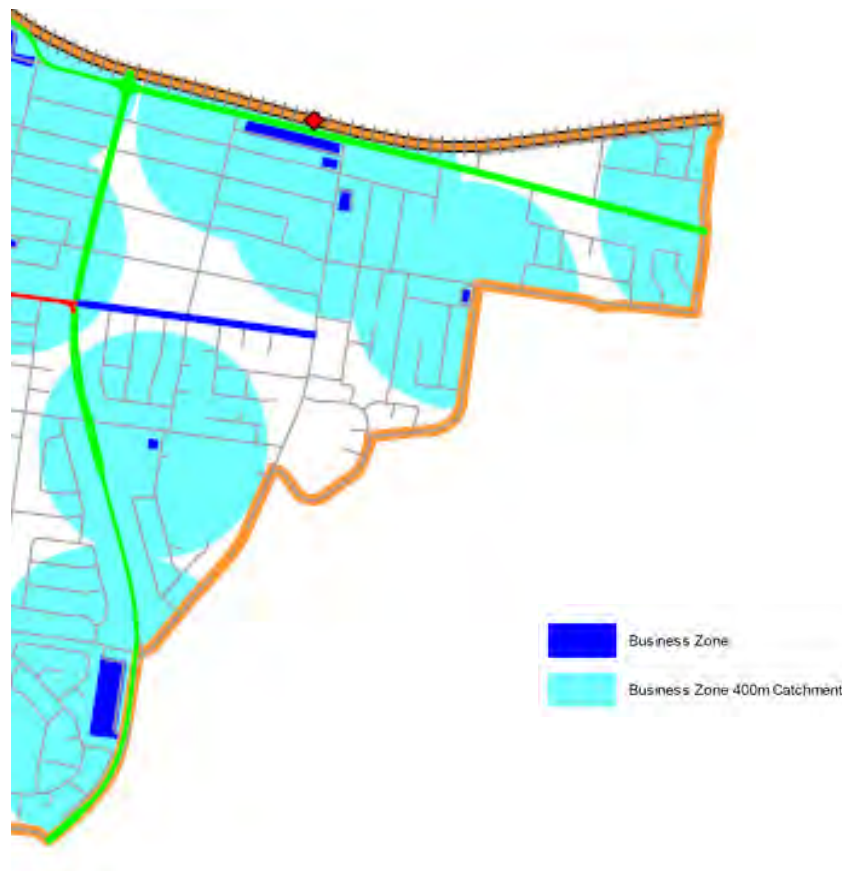
The primary retail business zone within Kingswood is located along the Great Western Highway and Bringelly Road in close proximity to the Kingswood Railway Station. However, not all of this is zoned purely for business as it includes residential flat buildings. While there is an eclectic mix of businesses, most of the stores provide limited local retail and grocery shopping. Businesses along Bringelly Road provide a mix of convenience retail and food outlets. Figure 5.4.6 provides an overview of the retail catchments within Kingswood.

It is noted that the hours of trade of many stores are limited and do not necessarily correspond to the 24 activity generated from the hospital or university.

Due to the fact that Kingswood is in such close proximity to the Penrith City commercial, retail and shopping area, there are currently no significant commercial space, large supermarkets or major retail stores in the Kingswood Centre. As Kingswood grows into a 'Specialised Centre', the provision of retail and commercial services/floor space will need to be considered to meet the criteria identified in the Sustainability Checklist. However, it is important to ensure that these services do not conflict with services in the adjacent Penrith City Centre.

There are also local shops in the residential areas to the south and east of the Centre that provide reasonable coverage for the local residential areas. As densities increase, these services will also need to be supplemented.

Figure 5.4.6: Retail catchments in Kingswood



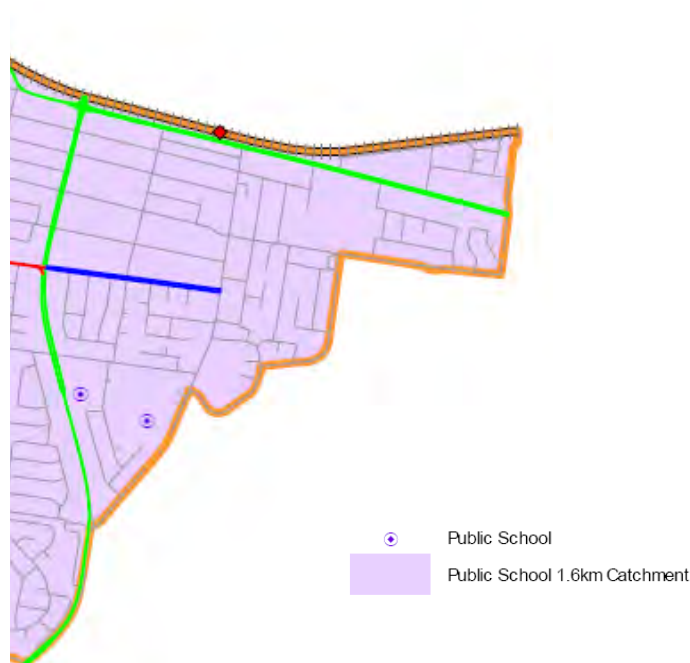
Source: PITLUS 2008

## B Education/ Schools

Figure 5.4.7 indicates that nearly 100% of Kingswood's urban areas (south of the rail line) are within 1.6km of a public school and, therefore, the area is well served by public schools. Schools in the local area include Kingswood Public School, Kingswood South Public School, Kingswood High School, St Joseph's Catholic Primary School and St Dominic's Catholic College.

Kingswood is also the focus of tertiary education facilities within Penrith LGA. It includes the University of Western Sydney (Penrith Campus) and the Western Sydney Institute Nepean College of TAFE, Kingswood Campus.

Figure 5.4.7: Public school catchments in Kingswood



Source: PITLUS 2008

## C Community Services

The potential Kingswood Specialised Centre currently contains limited community services with one pre-school and one child care centre and a single neighbourhood centre. In order to meet its Specialised Centre status, substantial investment is required into community facilities if Kingswood is to become a specialised centre and if it is to meet the Sustainability Checklist criteria.

The specialised centre designation is based upon the medical precinct located within Kingswood on the corner of the Great Western Highway and Parker Street. The precinct serves the whole LGA and surrounding areas and contains the Nepean District Hospital and Nepean Private Hospital. This medical precinct is surrounded by a number of smaller support medical facilities and provides a key focus for Kingswood as a specialised centre. The University of Western Sydney campus located in the eastern part of Kingswood also contributes to the specialised centre designation.

It is noted that the proposed adjoining WELL Precinct Section 94 Plan identifies a new community facility to be located in the WELL Precinct Centre, however such a facility is

anticipated to meet the needs of the community within the WELL Precinct rather than that of the Kingswood area.

#### **D Open Space**

The Kingswood Specialised Centre has significant provision of a range of open space and recreation facilities including Chapman Gardens and Kingswood Park ovals and facilities and the Kingswood District Bowling Club to the south of the Great Western Highway. Further to the south there is Peppermint Reserve. There are also numerous pocket parks, some with play equipment distributed throughout the southern part of the Kingswood Centre, some associated with overland stormwater flow paths. To the north of the Great Western Highway there is Devon Park, Lincoln Park and Kananga Reserve and Parker Reserve, with numerous pocket parks and overland stormwater flow paths also scattered throughout the northern part of the potential Kingswood Specialised Centre. In order to meet the anticipated needs of a specialised centre, Kingswood's open space and recreation facilities will need to be upgraded, augmented and expanded in accordance with the sustainability checklist.



### 5.4.7. Local Centre and Surrounding Suburb Character

Figure 5.4.8 identifies the key elements of the suburb character of Kingswood, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.4.8: Local Centre and Surrounding Suburb Character Analysis

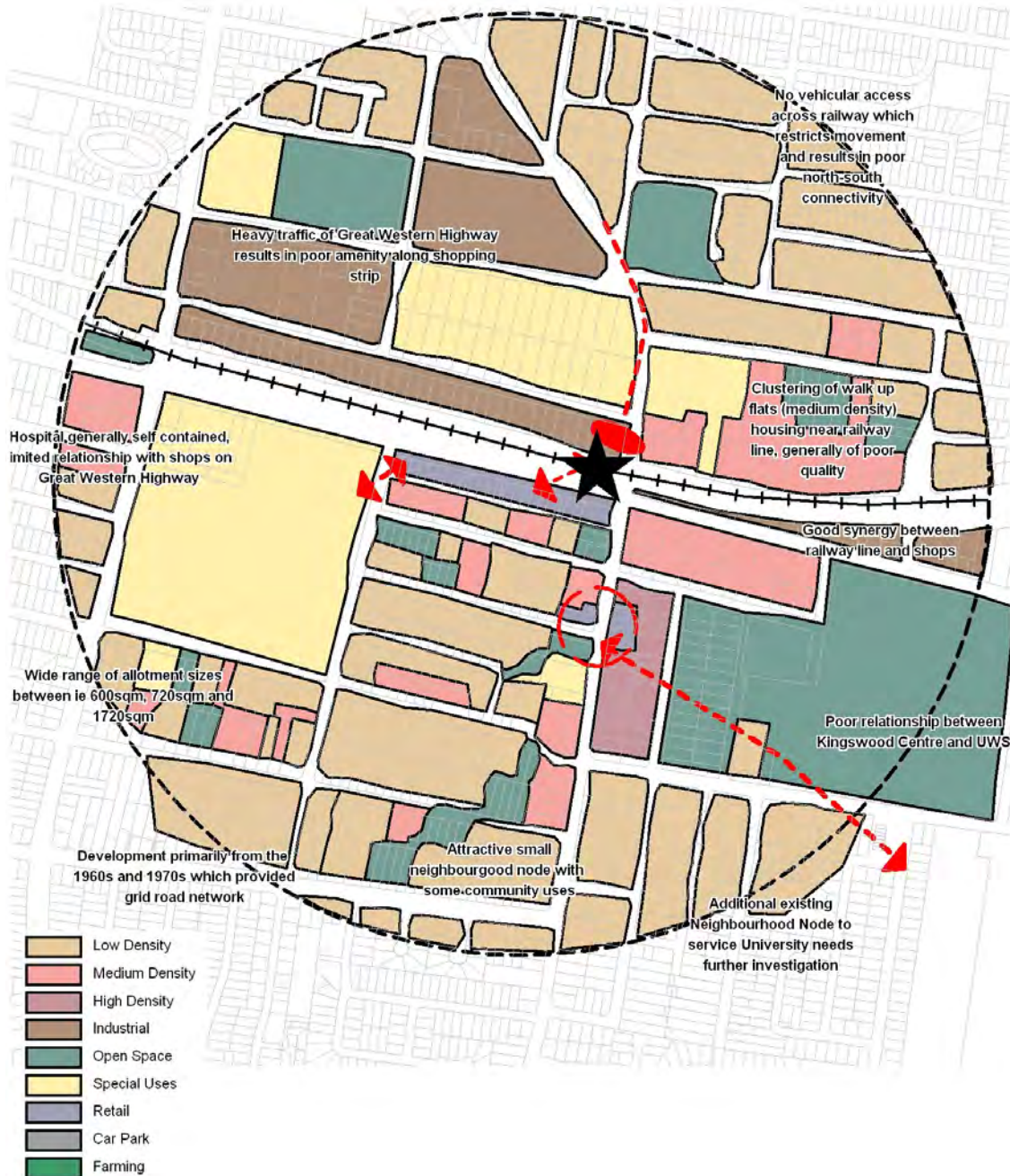


Figure 5.4.9: Examples of dwelling types in Kingswood



- Strong employment provision through the Nepean Hospital (and associated medical facilities), University of Western Sydney, and some supporting retail and industrial uses;
- Strong demand for housing from the employment demands noted above both within the hospital and university campus and surrounding areas;
- Good access to local services and schools;
- Under-utilisation of a number of sites in close proximity to the town centre where consolidation and redevelopment may be able to meet future mixed use and housing demand;
- Limited environmental constraints to urban growth.

The key constraints that will limit urban growth in the Kingswood Specialised Centre can be summarised as:

- Augmenting infrastructure and services to meet future urban growth at a level suited to a 'Specialised Centre' (particularly retail and commercial opportunities);
- Proximity to Penrith City Centre and potential conflicts between commercial/retail growth;
- Poor north south movement across the railway line which limits pedestrian and car movement and therefore impacts on the catchment of the area;
- Limited growth opportunities to the north of the railway station due to the cemetery, industrial land uses, strata development and lack of retail services and facilities;
- Existing strata development, particularly townhouses, to the south of the hospital precinct;
- Limited vacant and under-utilised land which is constrained by special issues and to a lesser extent environmental issues or;
- Drainage paths through the area that are currently integrated into open space areas.

These opportunities and constraints are portrayed in Figure 5.4.10.

There is a need to look at consolidation and redevelopment of sites to allow greater heights, densities and more mixed-uses to meet the future needs of this centre and address the criteria of a 'Specialised Centre' under the Sustainability Checklist. As part of the translation of zoning categories from the existing LEP to Penrith LEP 2012 there is potential to recognise some existing commercial and community areas in an appropriate zone; up-zone some limited areas and promote more mixed-use development.

Figure 5.4.10: Summary of key opportunities and constraints impacting on urban growth in Kingswood Centre.



### 5.4.9 Future Dwelling Opportunities

#### A Within Kingswood Specialised Centre

- ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Kingswood Specialised Centre.
- Table 5.4.1 summarises the key assumptions made for Kingswood Specialised Centre potential future dwelling capacity.

Table 5.4.1: Assumed densities for Kingswood Specialised Centre 2031

Assumed Probability of Redevelopment and Proposed Development Densities									
Kingswood	Current Centres Hierarchy Level	Development Era	Access to Services / Transport Score	Radii (m)	% of land development assumption	Land @ 100 dwellings / hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	Specialised Centre (by 2031)	1960's High Opportunity	2.5	400 m	18.8% (6.22ha)	25%	25%	25%	25%
Urban Study and Strategy Assumptions (see below)	Specialised Centre (by 2031)	1960's High Opportunity	See Sustainability Checklist	1km	30% (9.93ha)	30%	30%	30%	10%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

Table 5.4.2 applies these assumptions and identifies that the Kingswood Specialised Centre may achieve between approximately 344 and approximately 612 additional

dwelling, based on site constraints, rates of growth and anticipated density of development.

**Table 5.4.2: Estimated additional dwellings for Kingswood Specialised Centre 2031**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Kingswood	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Specialised Centre (by 2031)	155	117	78	39	388	44	344
Urban Study and Strategy Assumptions (see below)	Specialised Centre (by 2031)	298	223	166	25	712	100	612

*Source: ID Report (Sept 2007) as well as findings of this Urban Study and Strategy*

The potential for growth within the Kingswood Specialised Centre considers:

- Greater potential of Kingswood to provide a higher level of access to transport and services;
- A doubling or more of developable area;
- A significant increase in the percentage of developable land being developed; and
- Slightly higher densities than assumed by ID Report (2007).

The proposed figure of 344 additional dwellings is anticipated to be met in the medium term of 10-15 years. Table 5.4.2 identifies that in the long term (20-25 years), the dwelling capacity within the Kingswood Specialised Centre could be as high as 600 (likely range of 400-600) additional dwellings based on a higher percentage of developable area and higher densities.

Future development assumes the availability of a wide range of services, infrastructure and facilities required for a Specialised Centre as defined in the Sustainability Checklist designation, by 2031, to ensure that all of the services/infrastructure necessary to meet the needs of future residents and workers are available.

## **B Outside Kingswood Specialised Centre**

The calculations to determine future dwelling gains in Kingswood outside of the Kingswood Specialised Centre radius (400 metres) is based this on two key opportunities:

demolition and replacement of existing dwellings with new housing stock; and the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

A review of the areas of Kingswood outside the Specialised Centre radius identifies that the majority of lots are of 500 to 799 sqm in size, with significant numbers of larger lots also in the suburb. The development potential of these lots is high as many were built in

the 1960's and are predominantly single detached dwellings that may be an under-utilisation of the land in the future.

There are few vacant allotments outside the Kingswood Specialised Centre, with approximately 10 vacant lots identified in 2007 that may result in a net gain of 40 dwellings.

In addition out of approximately 1,578 existing utilised allotments there is potentially a net gain of 175 dwellings in the median term through demolition and replacement with additional dwellings. Higher yields may be achieved through demolition and replacement at higher densities in the order of 300-500 dwellings.

These figures do not include potential for student accommodation within UWS Kingswood Campus.

### C Summary of Dwelling Opportunity (Long Term)

The ground truthing in Kingswood Specialised Centre correlates with the population projections that future total dwellings at 2031 may range from 900 to 1300 additional dwellings.

**Table 5.4.3: Potential net dwelling gains for Kingswood**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain
Within Activity Centre (400m)	344	400-600
Outside Activity Centre Vacant Land	40	Agreed
Outside Activity Centre Demolition & Replacement	175	400-700
<b>TOTAL</b>	<b>559</b>	<b>800 - 1300</b>

*As calculated by ID Report (Sept 2007) and this Urban Strategy*

### 5.4.10 Kingswood Application to the Sustainability Checklist

The following sustainability checklist in Table 5.4.4, provides an assessment as to the suitability of Kingswood Specialised Centre to meet future growth as a Specialised Centre.

**Table 5.4.4: Kingswood Specialised Centre Assessment against Sustainability Checklist**

KINGSWOOD				
Strategy Element	Current Centre Classification - Small Village	Future Centre Classification Specialised Centre	Additional services/actions needed	Priority
Population Size Penrith strategy target 4,450 dwellings in catchment 3,646 dwgs in Kingswood suburb 4,228 in 2021	✓✓✓	✓	Increase in density to meet Specialised Centre size.	Short (1-5 years)

KINGSWOOD				
Strategy Element	Current Centre Classification - Small Village	Future Centre Classification Specialised Centre	Additional services/actions needed	Priority
Dwelling Type and Mix	✓✓✓	✓	Need for greater range of housing types and densities to meet future needs of hospital, university and wider community.	Short to Medium (1-5 years)
Road Access	✓✓✓	✓✓✓	Railway and Great Western Highway create barrier. Improved accessibility to be investigated.	Medium to Long term
Active Transport	✓✓	✓	Extension of footpaths in all streets. Extension of cycle ways in open space network required to connect nodes, uni & hospital with surrounding areas.	Medium (5-10 years)
Public Transport	✓✓✓	✓✓	Need for Bus Junction to enhance connection with wider LGA. Need for shuttle bus between uni and hospital. Need for higher frequency of service. Need for extended hours of service. Blue Mountains trains to stop more frequently at Kingswood Station.	Short to Medium (1-5 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity in Penrith Infrastructure Strategy.	
Environmental Considerations	✓✓✓	✓✓✓	Flood prone areas protected with open space. High environmental amenity in parts.	
Access to retail and commercial services	✓✓✓	✓	Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs. Need for a supermarket and more convenience shopping services (such as fruit shop, butcher, etc). WELL Precinct will service the University and land to the east to an extent, however there is an opportunity to expand neighbourhood centre between centre and University to meet the needs of the residents to the	short to medium (1-5 years)

KINGSWOOD				
Strategy Element	Current Centre Classification - Small Village	Future Centre Classification Specialised Centre	Additional services/actions needed	Priority
			<p>immediate west of the university.</p> <p>Need to formalise zoning of retail, commercial and community uses.</p> <p>Need to expand floorspace to create more diversity of uses.</p>	
Access to community services and Facilities	✓✓✓	✓	<p>Strong community infrastructure available.</p> <p>Audit existing infrastructure and needs and identifying future needs.</p>	Short to Medium (1-5 years)
Public Domain and Open Space	✓✓	✓	<p>Need central focus/town square/meeting space.</p> <p>Amenity on Great Western Highway requires enhancement.</p> <p>With increased population there is a need to embellish existing open space provision and create additional spaces with redevelopment.</p> <p>Safety and surveillance in open space</p>	Short to medium (1-5 years)
Housing Sustainability	✓	✓	<p>Investigate opportunities for community/affordable housing on council, State Government and university owned sites.</p> <p>Investigate opportunities for range of housing to meet hospital and uni needs.</p>	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.4.11 Future Actions

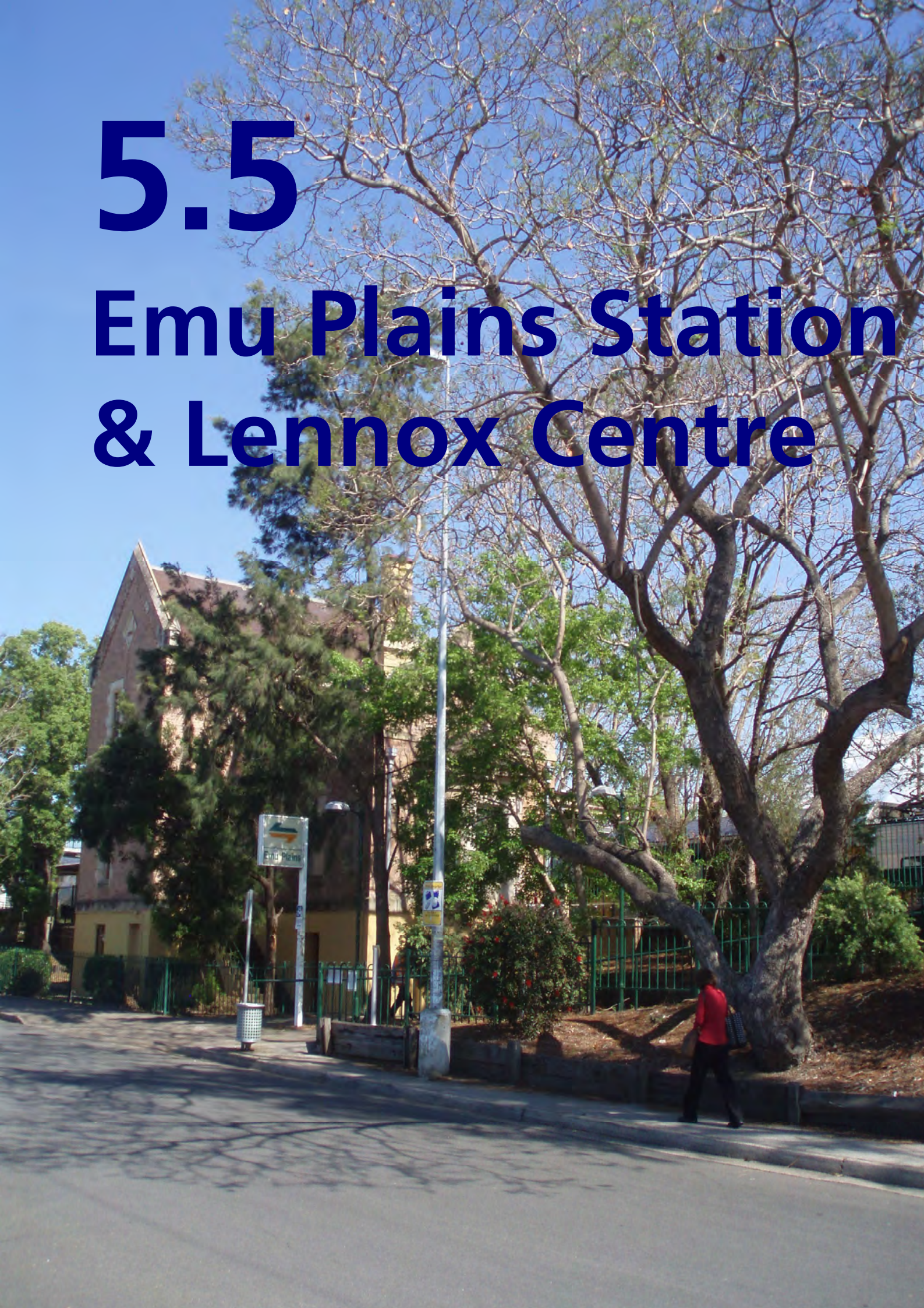
Key Actions to develop Kingswood into a Specialised Centre are summarised as

- Increase in density to meet Specialised Centre size and provide a greater range of housing types and densities to meet future needs of hospital, university and wider community.
- Investigate opportunities to improve north-south accessibility as the Railway and Great Western Highway create a significant barrier. Upgrade and extend the footpath and cycle path network across the suburb. Cycle paths should connect nodes, university and hospital with surrounding areas.
- Identify an appropriate location and create a bus junction, adjacent to the Kingswood Railway Station or major shopping areas. Investigate improved public transport services through higher frequency and extended hours of service plus the viability of a shuttle bus between the university and hospital.
- Review and investigate the capacity of infrastructure to support future development.
- Continue to preserve flood prone land for open space and maintain a high environmental amenity.
- Expand existing retail and commercial zones along the key roads and expand floor space to create greater diversity in retail and commercial uses (ie supermarket and more convenience shopping services). Future retail and commercial expansion must be cognisant of the potential impacts on the Penrith Regional Centre.
- Review the opportunity to expand the existing neighbourhood centre on the western side of the university to cater towards the university and surrounding residents.
- Formalise zoning of retail, commercial and community uses.
- Maintain the high level of community infrastructure in the suburb and undertake community infrastructure audits to ensure community infrastructure meets future needs.
- Undertake public domain works in the centre including the provision of a central focus/town square/meeting space and upgrades to the pedestrian areas along the Great Western Highway.
- Across the suburb, improve the quality of existing open space, cognisant of the needs of the future population and create additional open spaces with redevelopment. All open space areas should be safe and have passive surveillance.
- Investigate opportunities for community/affordable housing on council, State Government and university owned sites.
- Investigate opportunities for range of housing to meet hospital and university needs.



# 5.5

## Emu Plains Station & Lennox Centre





## 5.5 EMU PLAINS STATION AND LENNOX CENTRE

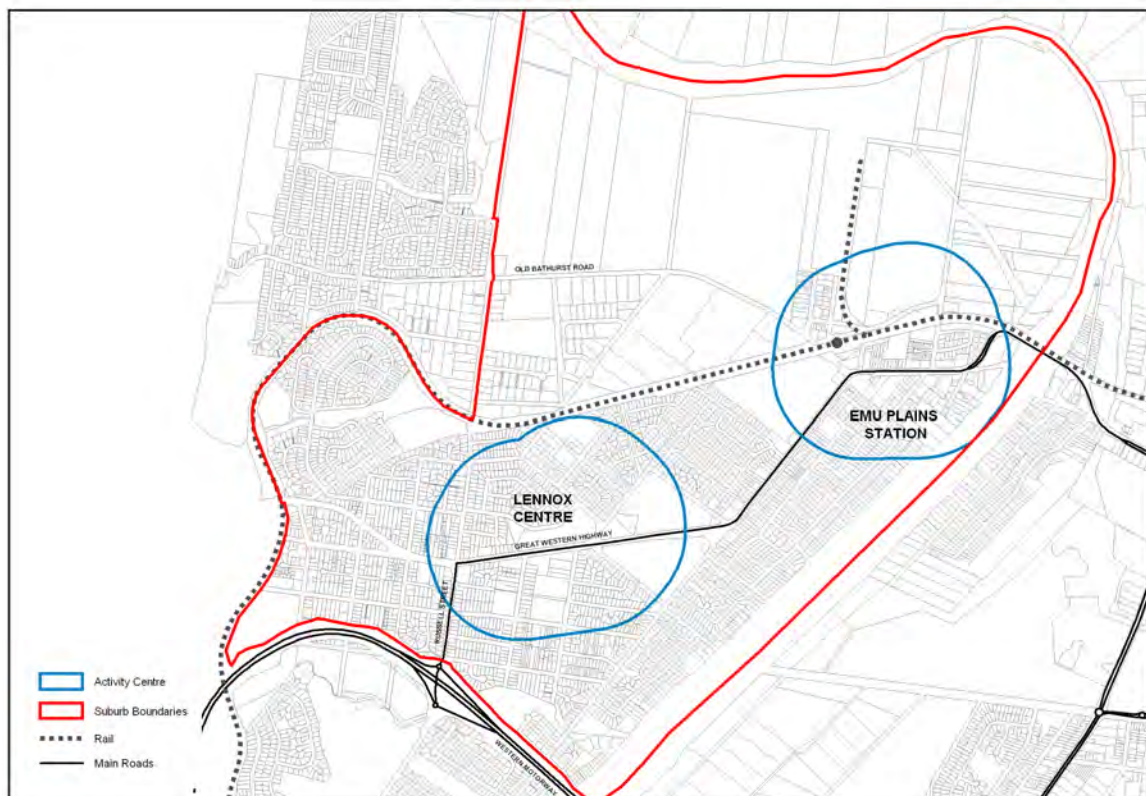
### 5.5.1 Suburb Overview

Emu Plains is bounded by the Nepean River in the north and east, the Western Motorway in the south and the Western Railway line and Russell Street in the west (See Figure 5.5.1). This study area does not include the areas of Emu Heights and Leonay.

Emu Plains is an established residential area with an industrial area in the north and commercial areas along the Great Western Highway.

Two Centres are located within Emu Plains, including Lennox Centre and that at the Emu Plains Railway Station. Lennox Centre is a designated village under the Penrith Council Centres Hierarchy. It is intended that the Lennox Centre will remain as a Village Centre. Emu Plains Station is currently designated a Small Village Centre. Its location adjacent to the train station and employment lands provides an opportunity to expand its role to a Village Centre but is restricted by the flooding of the Nepean River.

Figure 5.5.1: Map of Emu Plains Station Centre and Lennox Village Centre



## 5.5.2. Suburb Demographics and Housing Trends

Emu Plains is an established residential area and has some industrial areas to the north. The total population in 2006 was 7,866 persons. Urban development commenced in Emu Plain initially between 1870s and 1880s with the construction of the railway line. More significant growth occurred during the post war period.

### A Current Demographics

Between 2001 and 2006, Emu Plains has experienced population loss equivalent to 284 people. The change in population is largely attributed to an ageing population.

#### *Age:*

The dominant age group in Emu Plains are middle aged (35-49 years). Since 2001, the age structure has shown signs of ageing with losses in the younger age groups, particularly those aged 18-24 years and gains in older age groups, most notably 60-69 years.

#### *Income:*

There is a variety of household incomes within Emu Plains and almost a third of households earn a medium to high wage.

#### *Car Ownership:*

The majority of households in Emu Plains own at least two cars, with almost a fifth owning 3 or more cars. 8.3% or 237 households do not own a car which is consistent with the Penrith LGA average.

#### *Households:*

The dominant household type in Emu Plains is couples with children who account for 36.5% of all households. Compared to the household structure of Penrith LGA, Emu Plains has a proportionally higher amount of couples without children (28.5%) and lone person household (20.9%). One parent families are less represented in Emu Plains than across Penrith LGA.

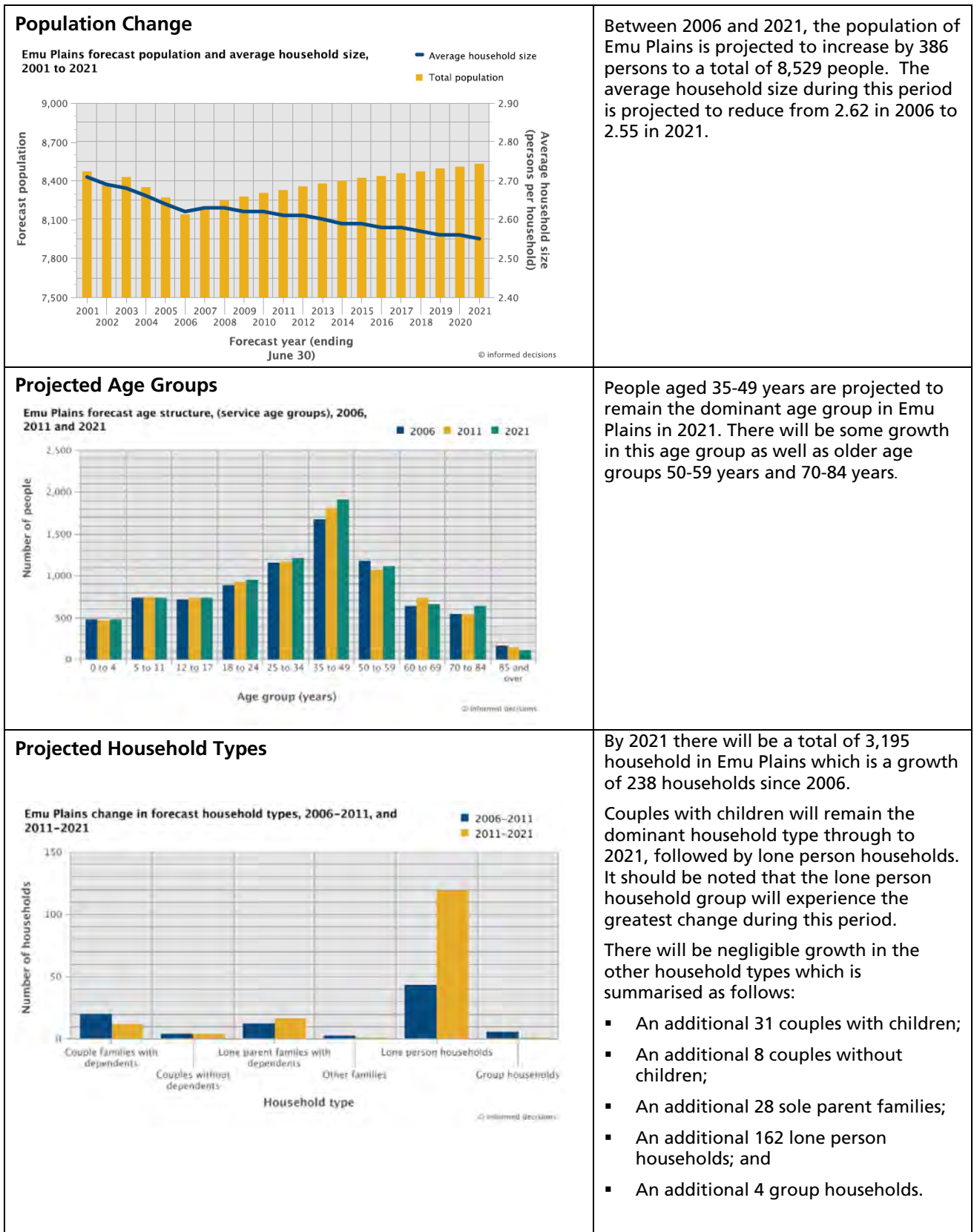
#### *Dwelling Type & Tenure:*

Detached dwellings represent over 80% of all dwelling types in Emu Plains. Medium density dwellings represent 11.9% which is marginally above the average for the Penrith LGA.

Over one third of households (37.2%) own their dwelling, with a similar proportion purchasing their dwelling (38.3%). In total there are 84 social housing dwellings in Emu Plains.

## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.5.2: Projected Demographic and Household Characteristics in 2021



\*The projections and graphs are derived from ID Population and Household Forecast for Emu Plains, September 2007. It is noted these numbers are projections undertaken in 2007 and may change subject to development overtime

### 5.5.3 Existing Zoning and Land Use Patterns

Emu Plains contains a variety of land use zones. There are two key business zones - Zone 3(a) and Zone 3(d) which comprise the Emu Plains Station Centre and Zone 3(a) comprises the Lennox Village Centre. The Lennox Village Centre provides a standalone large retail shopping centre, while the Emu Plains Station Centre is made up of various retail strips consisting of small to medium stores.

The dominant residential zoning is Zone 2(a) Residential (Urban and Landscape Protection) or Zone 2(b) Residential (Low-Density) which generally only permit dwelling houses (and some dual occupancies). There is a Zone 2(c) Residential (Low-Medium Density) near Lennox Village Centre and a Zone 2(d) Residential (Medium Density) near Emu Plains Station Centre which both allow multi-unit housing - generally attached housing such as townhouses and villas.

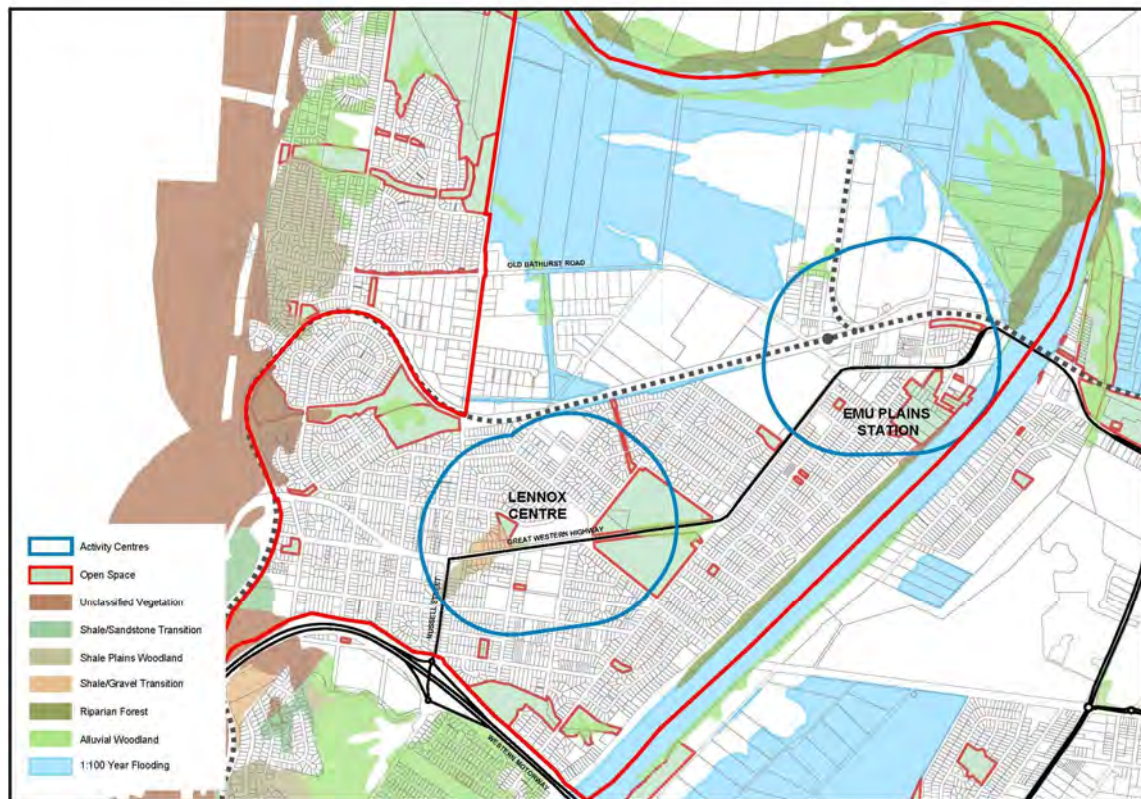
The area to the north of the railway line is dominated by Zone 4(a) Light Industrial land uses (including a quarry and concrete batching plant and some small vehicle repair and equipment businesses) and a Zone 5(a) Special Uses (Prison). The noise, dust and operations associated with the existing industrial land uses, are not considered to be conducive to residential land uses and pose constraints to future development of these areas for residential purposes. The significance of these employment resources and retention of the key industry uses within the area may take priority and need further investigation prior to the encouragement of any residential development to the north of the railway line. Within the northern area there is also a Catholic School and a caravan park.

Within Emu Plains there is limited available land for substantial urban growth. As a result, the majority of any urban growth in this suburb is likely to be infill development unless the industrial land uses to the north are relocated or there is a change in the types of uses in this area.

## 5.5.4 Environmental Opportunities and Constraints

Figure 5.5.4 illustrates the key environmental constraints within Emu Plains.

Figure 5.5.4: Environmental constraints for Emu Plains



### A Topography, Flooding and Drainage

Emu Plains is located immediately adjacent to the Blue Mountains escarpment. The adjacent area of Emu Heights has significant changes in topography as the Blue Mountains escarpment falls towards the east and the Nepean River. Emu Plains is a relatively low lying area along the Nepean River and, as a result, it is potentially impacted by floods.

As Figure 5.5.4 above indicates the topography of Emu Plains and the 1 in 100 year flood line. It can be seen that a large percentage of the area is below the 1 in 100 year flood line and, therefore, the probability of flooding in these areas is high.

Therefore, flooding is likely to be a significant constraint to urban growth and development in the Emu Plains area. It is noted that there are areas within 400m of Emu Plains Station Centre which are less flood affected but are constrained in terms of evacuation routes during flooding.

### B Native Vegetation and Sensitive Ecological Areas

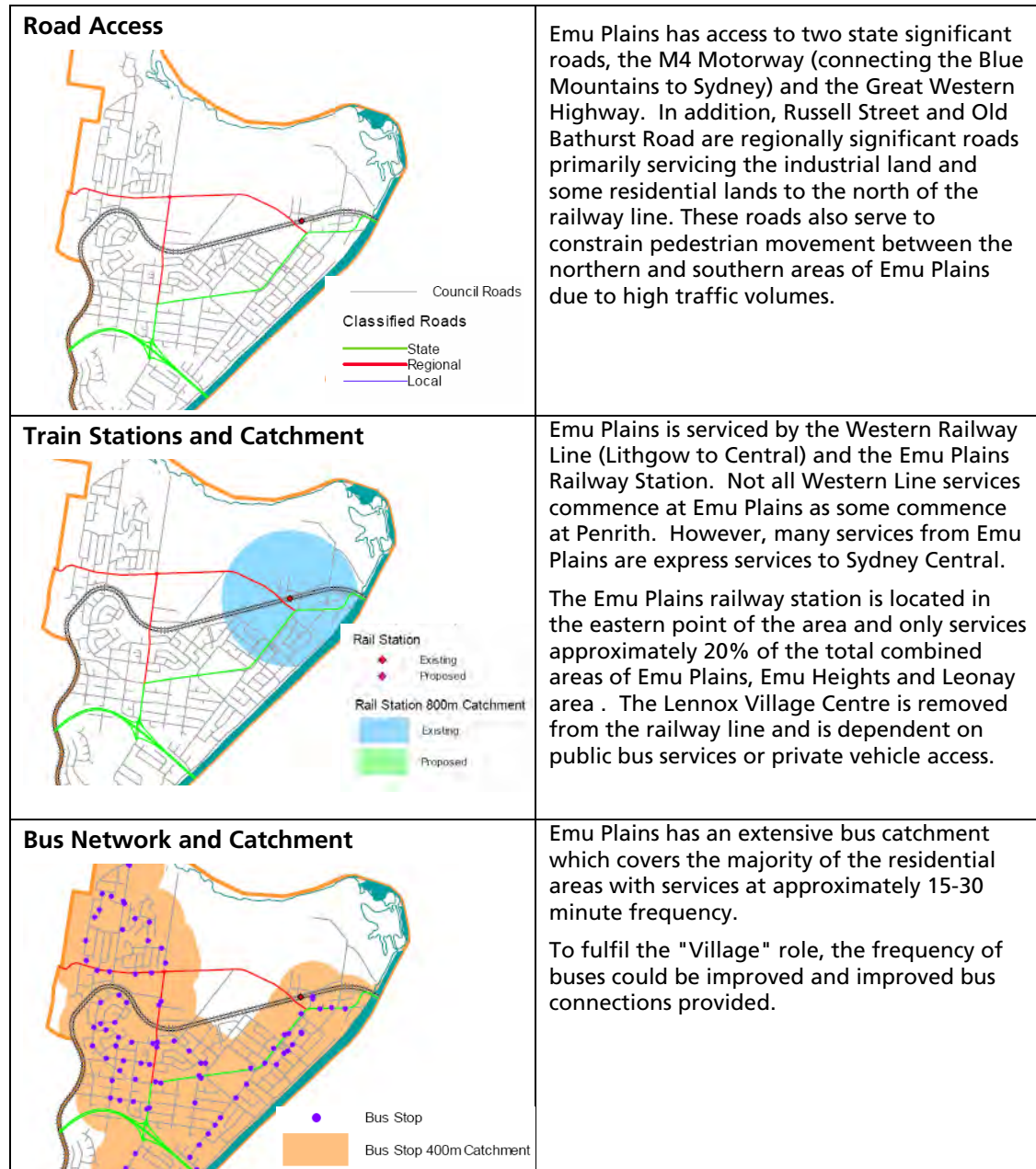
The majority of the significant native vegetation in the Emu Plains area is located either along the Nepean River or in the Blue Mountains escarpment. There are some limited areas of Alluvial Woodland and Shale Plains Woodland in the urban areas, which should be protected, however these areas are not considered to be a significant constraint to urban growth or development to the overall Emu Plains area.

### 5.5.5. Access and Transport



The access and transport characteristics of Emu Plains have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008.

To meet the Village classification transport requirements for the Lennox Centre, additional improvements may be required to ensure that this centre meets the transportation needs and sustainability targets for the future community. Figure 4.5.5 provides an overview of the current access and transport characteristics within Emu Plains.

Figure 5.5.5: Emu Plains Access and Transport Characteristics.





<p><b>Pedestrian Network</b></p>  <p>— Footpath Proposed — Footpath Existing</p>	<p>Only 9% of roads within Emu Plains currently have a footpath. This results in a poor pedestrian environment and reduces opportunities for walking in the local area.</p> <p>There is a need to provide footpaths on both sides of the road within the Village Centre catchment.</p> <p>The major roads at Emu Plains Station Centre and the Lennox Village Centre result in poor pedestrian connections between the north and south of each centre.</p>
<p><b>Cyclist Network</b></p>  <p>— Bikeway</p>	<p>The cyclist network in Emu Plains is very limited with only three dedicated cycle routes and no continuous network. There are substantial opportunities to provide cyclist paths along the Nepean River and also connecting key nodes such as the retail areas and train stations.</p>

All diagrams sourced from PITLUS Report 2008

## 5.5.6. Access to Services

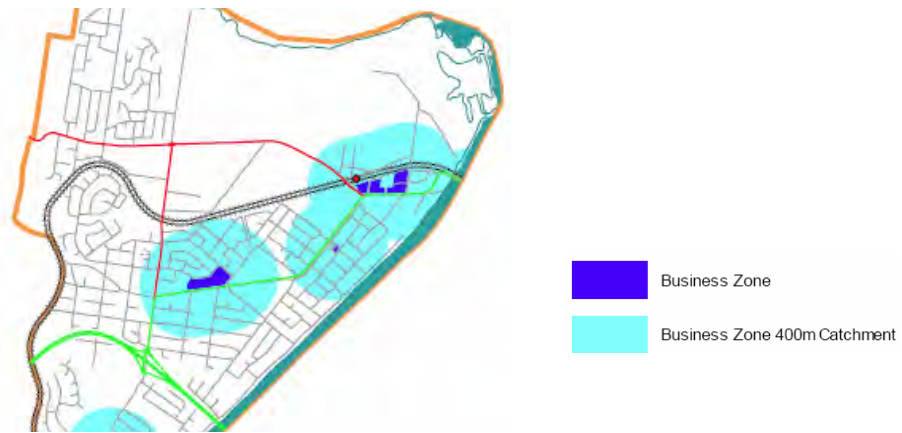
### A Retail/Local Shopping

The suburb of Emu Plains contains three retail and local shopping locations. The largest retail facilities and services are provided in the Lennox Village Centre, followed by Emu Plains Station Centre, with a small Neighbourhood Centre near Sheppard Lane, as portrayed in Figure 5.5.6.

Lennox Village Centre (Centro Lennox) is the main retail centre and is an enclosed shopping centre containing two supermarkets and 39 speciality shops. This village centre has quite a large catchment serving the surrounding suburbs as well as the Blue Mountains. The Lennox Village Centre currently exceeds the requirements for retail in a village.

Emu Plains Station Centre contains a small collection of shops fronting the Great Western Highway and surrounding streets, which generally service commuters and local residents. Any future retail services at Emu Plains Station Centre will need to complement, not compete with Lennox Centre and meet the needs of residents in its catchment.

**Figure 5.5.6: Retail catchments in Emu Plains**

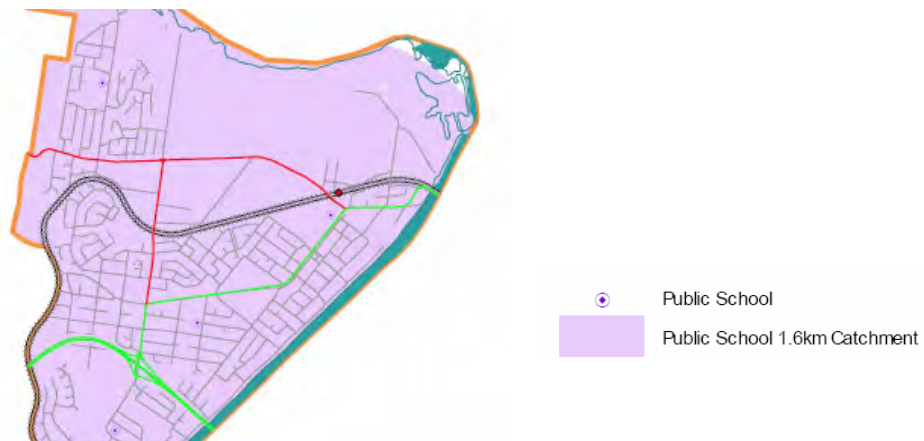


*Source: PITLUS Report 2008*

### **B. Education / Schools**

Emu Plains contains four primary schools and two high schools. As shown in Figure 5.5.7, the entire residential area is within 1.6km of a school. Therefore Emu Plains is considered to be well serviced by schools.

**Figure 5.5.7: School catchments in Emu Plains**



*Source: PITLUS Report 2008*

### **C. Community Facilities**

Community facilities within Emu Plains include the Emu Plains Community Centre, Blue Emu Community Centre and Library. In addition Emu Plain has some cultural facilities such as the Penrith Regional Art Gallery and the Arms of Australia Inn Museum

To fulfil requirements under the centres hierarchy, Lennox Village Centre, should have a minimum range of community facilities to support local catchment such as a community/ neighbourhood centre, small branch library and child care. Whilst Lennox Village Centre is already provided with such facilities, any facilities provided to Emu Plains Station Centre should be cognisant of the community facilities at Lennox Village Centre.

## **D Open Space**

Emu Plains has significant open space provision in the eastern and southern parts of the suburb associated with the linear park along the Nepean River and Regatta Park. Emu Park provides a significant recreation and open space resource for the central parts of the suburb. Significant recreation reserves are located in the southern and northern areas within Emu Plains associated with water courses.

A review of open spaces and recreation facilities may be required to determine if they meet future demands and needs.

## 5.5.7 Existing Suburb Character

Figure 5.5.8 identifies the key elements of the character of areas within the Emu Plains Station Centre 600 metre radius, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.5.8: Suburb Character Analysis for Emu Plains Station Centre

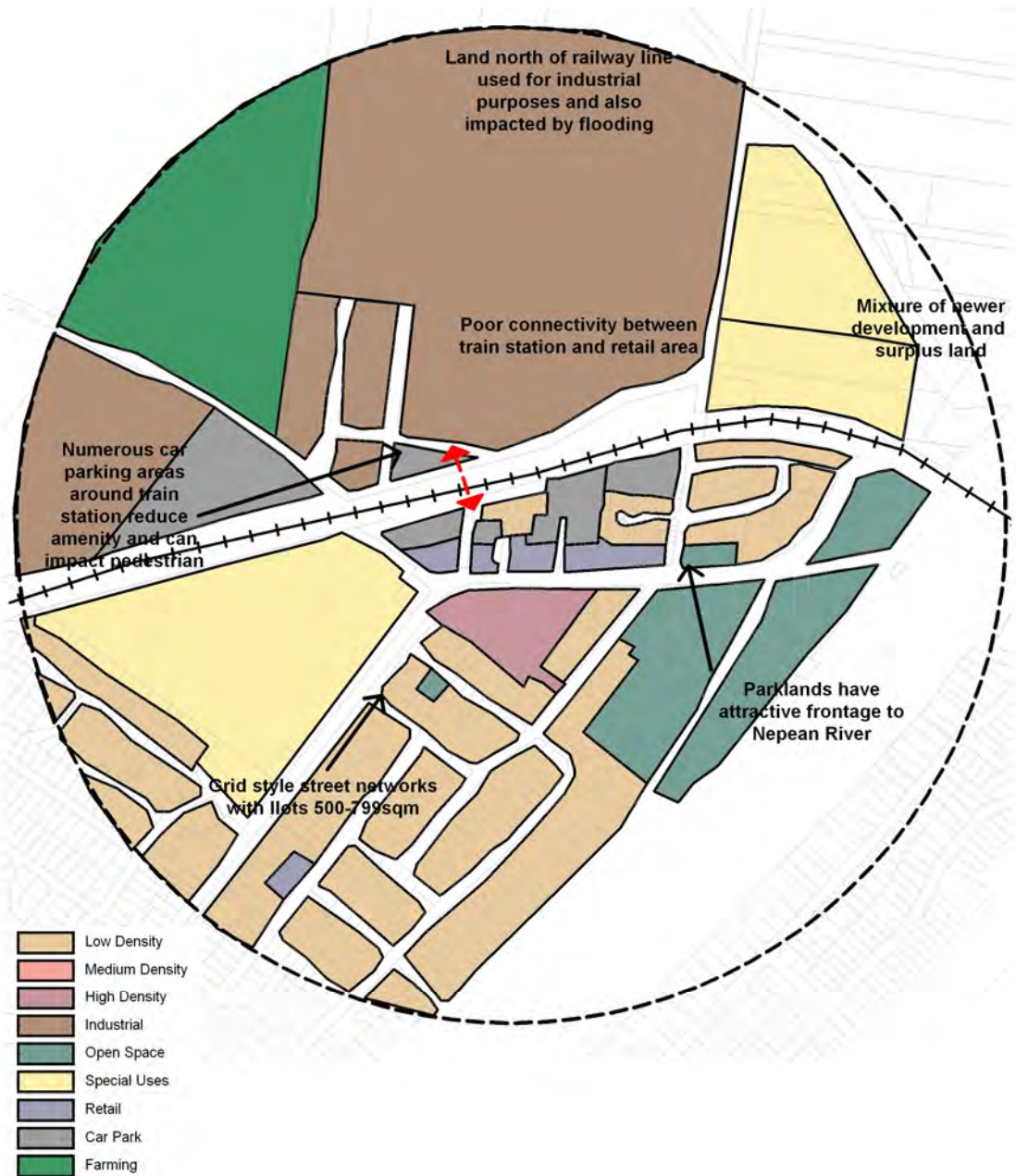


Figure 5.5.9: Examples of dwelling types in and around Emu Plains Station



Figure 5.5.10 identifies the key elements of the suburb character of Lennox Village Centre 600 metre radius, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.5.10: Suburb Character Analysis for Lennox Centre

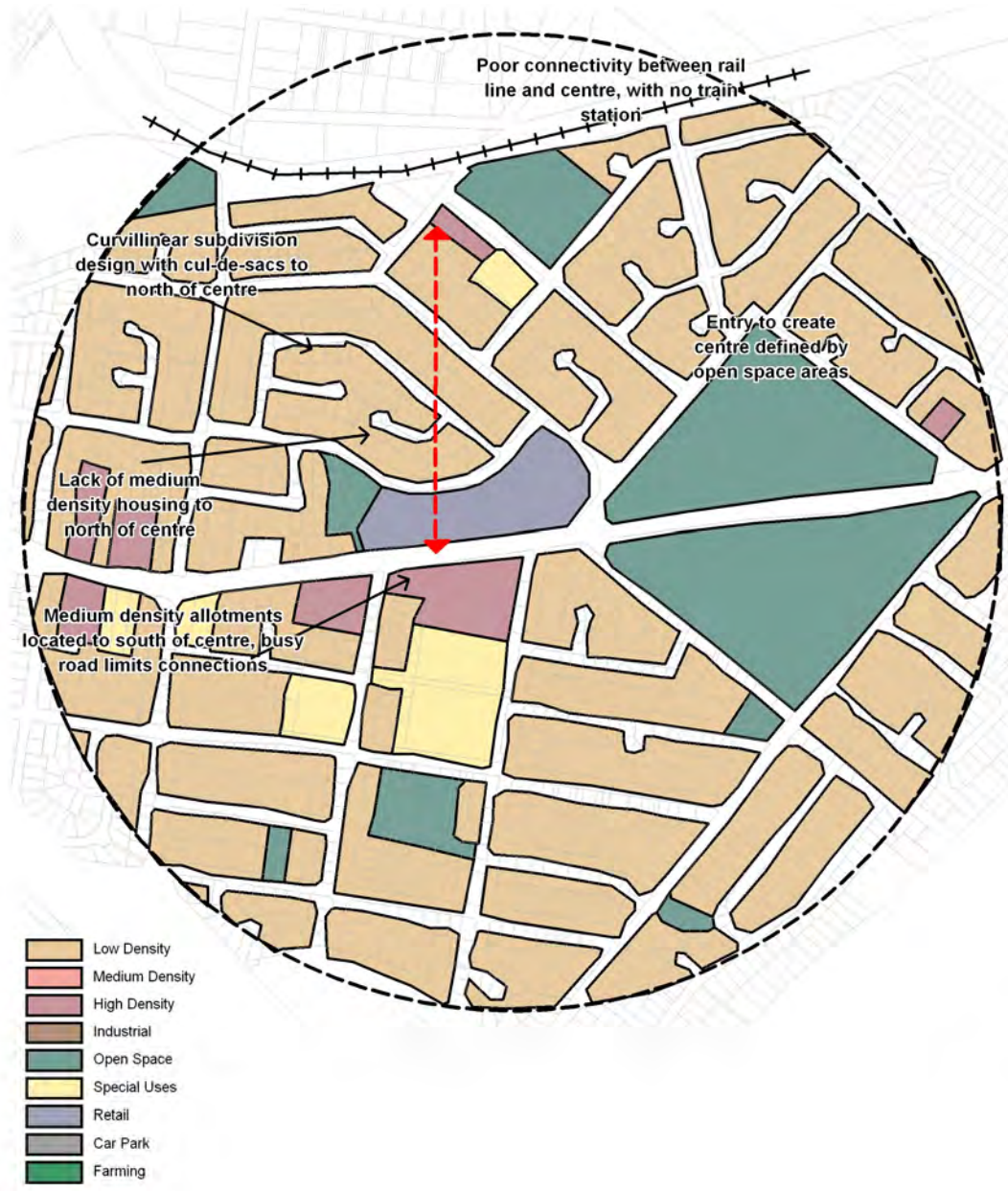


Figure 5.5.11: Examples of dwelling types in and around Lennox Centre



### 5.5.8. Summary of Key Opportunities and Constraints

The Emu Plains Station Centre is limited in growth due to flooding evacuation route constraint. The key growth opportunities that will drive urban growth in Lennox Village Centre are:

- Good access to transport, particularly Emu Plains Railway Station;
- Strong employment provision through the employment lands to the north, proximity to Penrith City Centre, localised employment in retail and commercial nodes and schools;
- Strong demand for housing from the local employment demands;
- Good access to local services and schools;
- Under-utilisation of a number of sites in close proximity to the town centre where consolidation and redevelopment may be able to meet future mixed use and housing demand;

The key constraints that will limit urban growth in Emu Plains Station Centre and Lennox Village Centre are:

- There are significant environmental constraints (flooding) to urban growth.
- Providing adequate services to meet future urban growth at a level suited to a 'Village' designation;
- Proximity to Penrith City Centre and potential conflicts between commercial/retail growth; and
- Limited growth opportunities to the north of the railway station due to the employment land uses.

### 5.5.9 Future Dwelling Opportunity

#### A. Within Emu Plains Station Centre and Lennox Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Emu plains station Centre and Lennox Village Centre.

Tables 5.5.1 and 5.5.2 summarises the key assumptions made by ID (2007) for Emu Plains to determine its potential future dwelling capacity within Lennox Village Centre and Emu plains station Centre.

**Table 5.5.1: Assumed densities for Lennox Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Lennox Village Centre	Current Centres Hierarchy Level	Development Era	Access to Services / Transport Score	Radii (m)	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	Village	1970's - 1980's	1.5	400m	11.3% (5.16ha)	0%	0%	25%	75%
Urban Study and Strategy Assumptions (see below)	Village	1970's - 1980's Medium Opportunity	See Sustainability Checklist	600m	15% (6.86ha)	0%	0%	35%	65%

*Source: ID Report (Sept 2007) as well as assumptions of this Urban Study and Strategy.*

**Table 5.5.2: Assumed densities for Emu Plains Station Centre**

<b>Assumed Probability of Redevelopment and Proposed Development Densities</b>									
Emu plains station Centre	Current Centres Hierarchy Level	Development Era	Access to Services / Transport Score	Radii (m)	% of land development assumption	Land @ 100 dwellings / hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	Small Village		1.5	400m	15%	0%	0%	50%	50%
Urban Study and Strategy Assumptions (see below)	Small Village	Depending upon any change to the Flood Evacuation Route	See Sustainability Checklist	600m	0%	0%	0%	0%	0%

Source: ID Report (Sept 2007) as well as assumptions of this Urban Study and Strategy.

## **B Total Future Dwellings in each Centre**

Table 5.5.3 applies these assumptions and identifies that Lennox Village Centre may achieve between approximately 108 and 192 additional dwellings, based on site constraints, rates of growth and anticipated density of development. The assumptions identify that Emu Plains Station Centre may not accommodate any additional dwellings because it is constrained by the evacuation route in the case of flooding. This Centre will need to be reviewed based on any changes to the flooding constraint or the evacuation route in the case of flooding.

**Table 5.5.3: Assumed Future Dwellings for Lennox Village Centre and Emu plains station Centre**

Lennox Village Centre	Type	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain
ID Assumptions	Village	0	0	64	96	161	53	108
Urban Study and Strategy Assumptions (see below)	Village	0	0	120	112	232	40	192
Emu plains station Centre								
ID Assumptions	Small Village	0	0	93	46	139	24	115
Urban Study and Strategy Assumptions (see below)	Small Village	0	0	0	0	0	0	0

Source: ID Report (Sept 2007) as well as findings of this Urban Study and Strategy.

The potential dwelling gain for Lennox Village Centre considers:

- Environmental constraints (flooding) limit future development in both Emu plains station Centre and Lennox Village Centre;
- Some limited potential to increase the amount of medium density in the area in the medium and long term; and
- Slightly higher densities than assumed by ID Report (2007).

Assumptions estimate a higher potential net dwelling capacity for Lennox Village Centre by 2031, based on the provision of the services/infrastructure necessary for Lennox Village Centre to become a Village will be provided and there will be the market demand to balance the potential residential supply.

## **B Outside Lennox Village Centre and Emu plains station Centre**

The calculations to determine future dwelling gains in Emu Plains outside of the Centre radius (of 600 metres) are based on two key opportunities:

1. Demolition and replacement of existing dwellings with new housing stock; and
2. The opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

The majority of lots in Emu Plains are from 500 to 799 sqm, providing some limited numbers of larger lots. The development potential of these underutilised lots is medium as many were built in the 1970's and 1980's.

It is calculated that there are approximately 24 vacant lots in Emu Plains, resulting in a potential net gain of 106 dwellings. It is further calculated that of the approximately 1,244 existing utilised allotments that there is potentially a net gain of 115 dwellings through demolition and replacement with additional dwellings.

The Urban Study and Strategy, recommend that the catchment for a Village is 600m, which align with the standards for a 'walkable catchment' to key services and transport nodes. It is projected that in at least the next 10-15 years (medium term) development demand will increase around centres with good access to services. Emu Plains still has a large number of single detached dwellings in reasonable proximity to the two centres but outside the Village centres and these may achieve gains of 115 dwellings outside the Village centres in the medium term and there may be even higher yields by the year 2031 in the order of 200-300 dwellings.

## **C Summary of Dwelling Opportunity (Long Term)**

Table 5.5.4 summarises the opportunities from the sections above to determine a potential total additional dwelling capacity within the Emu Plains suburb by 2031.

Table 5.5.4: Table summarising net dwelling gains for Emu Plains

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain
Within Lennox Village Centre	108	150-200
Within Emu plains station Centre	115	0
Outside Village Centre Vacant Land	106	Agreed
Outside Village Centre Demolition & Replacement	115	200-300
<b>TOTAL</b>	<b>444</b>	<b>450-600</b>



*Source: ID Report (Sept 2007) and HASSELL 2008*

Population forecasts are slightly lower than dwelling forecasts which anticipate:

- Total population from 2006 to 2021 (15 years) is expected to increase by 386 (which extrapolates approximately to 650 by 2031);
- Total households from 2006 to 2021 (15 years) is expected to increase by 238 (which extrapolates approximately to 400 by 2031); and
- Total dwellings from 2006 to 2021 (15 years) is expected to increase by 228 (which extrapolates approximately to 380 by 2031).

In order to achieve the residential catchment of 2,100 - 5,500 dwellings in a 600m radius for a Village there will need to be a slight increase in dwelling numbers in Lennox Village Centre which may be in the order of additional 150-300 dwellings within the 600m radius of the centre within the next 15-20 years.

All future residential development, both existing and proposed is subject to flood investigations to ensure properties are outside of the 1:100 year flood line and have suitable emergency access arrangements.

#### **5.5.10 Emu Plains Villages Assessment against Sustainability Checklist**

Emu Plains Villages have been assessed against the Penrith Urban Strategy Checklist to determine its suitability for future development, future actions required to meet future needs and priority for actions to occur, detailed in Table 5.5.5 and 5.5.6.

Table 5.5.5: Emu Plains Station Assessment against Sustainability Checklist

EMU PLAINS STATION CENTRE				
Strategy Element	Current Centre Classification - Small Village (400m radius)	Future Centre Classification Small Village (400m radius)	Additional services/actions needed	Priority
Population Size 2,974 dwgs in Emu Plains Suburb, 3,195 dwgs in 2021	✓	✓	No current increase in density but need to be reviewed if there is any change to the flooding levels and evacuation routes	Long (10+ years)
Dwelling Type and Mix	✓✓	✓✓	Need for greater range of housing types to meet future needs	Long (10+ years)
Road Access	✓✓	✓✓	Major road infrastructure creates barrier. North and southern parts poor access Redevelopment provides opportunities to enhance road linkages and more direct access	Long term (10+ years)
Active Transport	✓	✓	Extension of footpaths in all streets. Extension of cycle ways in open space network required to connect nodes	Medium (5-10 years)
Public Transport	✓✓✓	✓✓✓	Need for higher frequency of service Need for extended hours of service Need enhanced connectivity to station from south	Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity in Penrith Infrastructure Strategy.	
Environmental Considerations	✓	✓	Significant areas with potential for development are flood prone. Investigation on addressing flooding required before future housing densities can increase.	
Access to retail and commercial services	✓✓✓	✓✓✓	Possibility for retail centre on existing site and adjoining sites to grow to continue to cater for existing and future needs	Medium (5-10 years)
Access to community services and Facilities	✓	✓	Limited community infrastructure available. Audit existing infrastructure and needs.	Medium (1-5 years)
Public Domain	✓✓	✓✓	Town centre improvements need central focus/town square/meeting space. Amenity on major road corridor requires enhancement. Safety and surveillance in open space park embellishments	Medium (5-10 years)
Housing Sustainability	✓	✓	Implement Sustainable housing initiatives	Medium (5 - 10 years)

Table 5.5.6: Emu Plains Lennox Village Centre Assessment against Sustainability Checklist

EMU PLAINS (LENNOX VILLAGE CENTRE)				
Strategy Element	Current Centre Classification - Village (600m radius)	Future Centre Classification Village (600 m radius)	Additional services/actions needed	Priority
Population Size 2,974 dwgs in Emu Plains Suburb, 3,195 dwgs in 2021	✓✓	✓✓	Increase in density to meet needs	Medium (5-10 years)
Dwelling Type and Mix	✓✓	✓✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓	✓✓	Major road infrastructure creates barrier. North and southern parts poor access. Redevelopment provides opportunities to enhance road linkages and more direct access.	Medium (5-10 years)
Active Transport	✓✓	✓✓	Extension of footpaths in all streets. Extension of cycle ways in open space network required to connect nodes	Medium (5-10 years)
Public Transport	✓✓	✓✓	Need for bus junction. Need for higher frequency of service Need for extended hours of service Need enhanced connectivity to south	Short to Medium (1-5 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity in Penrith Infrastructure Strategy.	
Environmental Considerations (Flood Evacuation)	✓•	✓•	Some areas with potential for development are flood prone. Investigation on addressing flooding required before future housing densities can increase.	
Access to retail and commercial services	✓✓✓	✓✓✓	Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs	Medium (5-10 years)
Access to community services and Facilities	✓✓	✓✓	Strong community infrastructure available. Audit existing infrastructure and needs. Investigate facilities for older persons.	Short to Medium (1-5 years)
Public Domain and Open Space	✓✓	✓✓	Town centre improvements Need central focus/town square/meeting space. Amenity on major road corridor requires enhancement. Safety and surveillance in open space Park embellishments	Medium (5-10 years)
Housing Sustainability	✓	✓	Implement Sustainable housing initiatives	Medium (5 - 10 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.5.11 Future Actions

The key actions arising for Emu Plains Station Centre and Emu Plains Lennox Village Centre to expand their residential capacity as a Village include:

- Increase in housing density and range of dwelling types in and around Lennox Centre to meet Village residential target (2,100-5,500 dwellings). Should be noted that the northern areas of Emu Plains Station centre are business and employment zones therefore have limited residential potential;
- The railway line is a major barrier to north-south movement within the suburb, opportunities to enhance north-south connections should be investigated;
- Upgrade and extend the footpath and cyclepath network across the suburb. Cycle path network should provide connect key nodes and areas of open space;
- Investigate improved public transport services through higher frequency and extended hours of service. Around Emu Plains, investigate opportunities for enhanced connectivity to station from the south. Within Lennox Centre, investigate the opportunity for a bus junction;
- Review and investigate the capacity of infrastructure to support future development across the suburb;
- Around Emu Plains Station and Lennox Centre, significant areas with potential for development are flood prone. Flooding issues should be addressed before future housing densities can increase;
- Support and promote growth within and immediately around both existing retail centres by way of mixed use developments/ range of floor space to continue to cater for existing and future needs;
- Improve the level of community infrastructure provision, particularly around Emu Plains Station. An audit of all community infrastructure should be undertaken to ensure community infrastructure meets future needs;
- Undertake public domain works in the around both Emu Plains and Lennox Centre including the provision of a central focus/town square/meeting space;
- Undertake public domain works along the Great Western Highway to improve amenity;
- Ensure all parks are safe and have passive surveillance.; and
- Ensure all future housing incorporate sustainable housing initiatives.



**Southlands**  
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Woolworths

**5.6**

**South Penrith  
Southlands and  
Smith Street**



## 5.6 SOUTH PENRITH SOUTHLANDS AND SMITH STREET

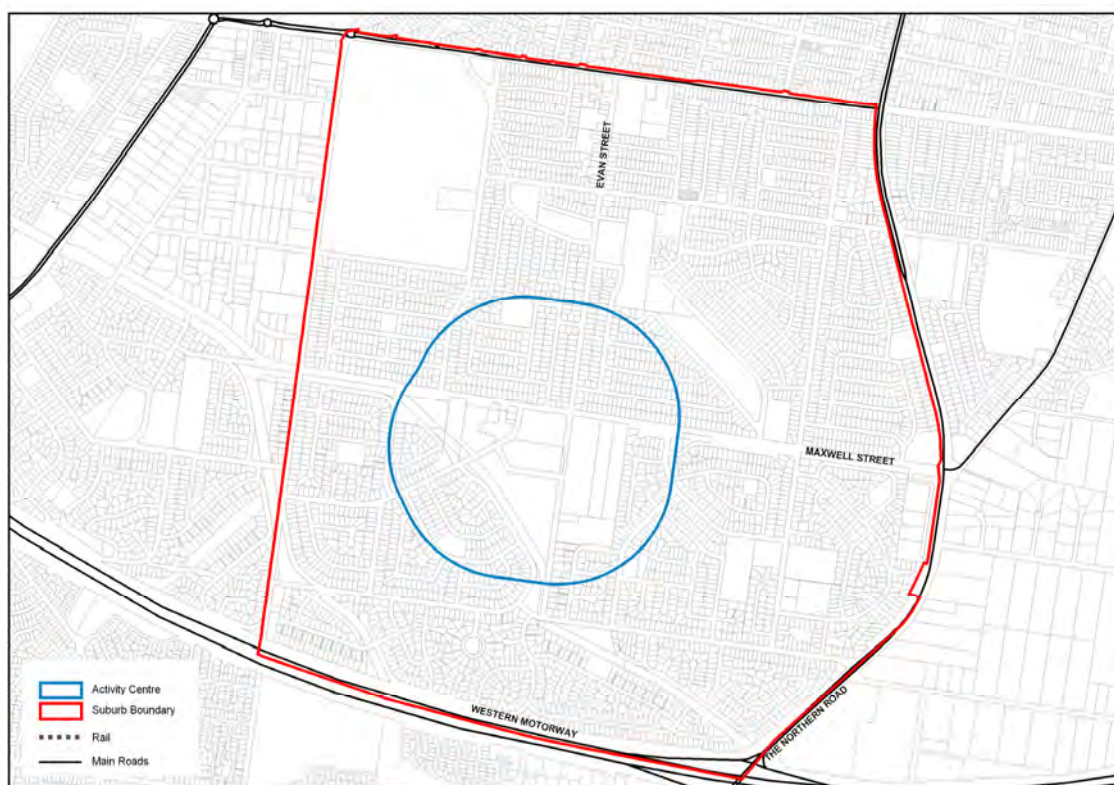
### 5.6.1 Suburb Area

South Penrith extends between Jamison Road and the Western Motorway and is bounded by Parker Street and The Northern Road in the east and York Road to the west (shown in Figure 5.6.1). South Penrith is an established residential area located directly to the south of the Penrith Town Centre. South Penrith has a total area of 507ha.

The key features of South Penrith include three primary schools, Jamison High School, Southlands and Smith Street Shopping Centres and Jamison Park.

Two Centres are located within South Penrith. The Southlands Shopping Centre is a designated village under the Penrith Council Centres Hierarchy. It is intended that the Southlands Centre will remain as a Village Centre. The Smith Street centre is located in the northern part of the locality and is currently designated a Neighbourhood Centre. It is unlikely to change its status.

Figure 5.6.1: Map of South Penrith – Southlands and Smith Street Centres



## 5.6.2. Suburb Demographics and Housing Trends

South Penrith is an established residential area, with a total population of 11,475 people, in 2006. The majority of South Penrith developed during the post war period, particularly in the 1970s.

### A Current Demographics

South Penrith has experienced population loss between 1991 and 2006 of around 2000 persons at a rate of -1% per year. Whilst population loss has been across all age groups, this loss has primarily been attributed to a significant loss of young families and empty nesters (people aged 50-69 years).

#### *Age:*

The age structure of South Penrith is similar to that of the Penrith LGA however there is marginally larger proportion of people aged 65+ years (9.4% in South Penrith compared to 8.1% in Penrith LGA). Between 1991 and 2006 there has been population loss in younger- middle age people (0-50 years) and population gain in those older than 50 years. This is evident of an ageing population where families have matured.

#### *Income:*

Almost a third of households in South Penrith have very low incomes (less than \$500 per week) this makes groups within South Penrith particularly vulnerable to issues of housing affordability.

#### *Car Ownership:*

The majority of households in South Penrith own at least one car, with more than a third owning two cars.

#### *Households:*

Household structure in South Penrith is comparable to that of the Penrith LGA; however there are a slightly higher proportion of couples without children. Between 1991 and 2006 the number of families with children has decreased by 732 couples. The number of smaller households such as couples without children and lone person households has increased.

In 2006 there were 4,161 households in South Penrith. The dominant household type is couples with children (38%) followed by couples without children (27%), lone person households (17%) and sole parent families (14%).

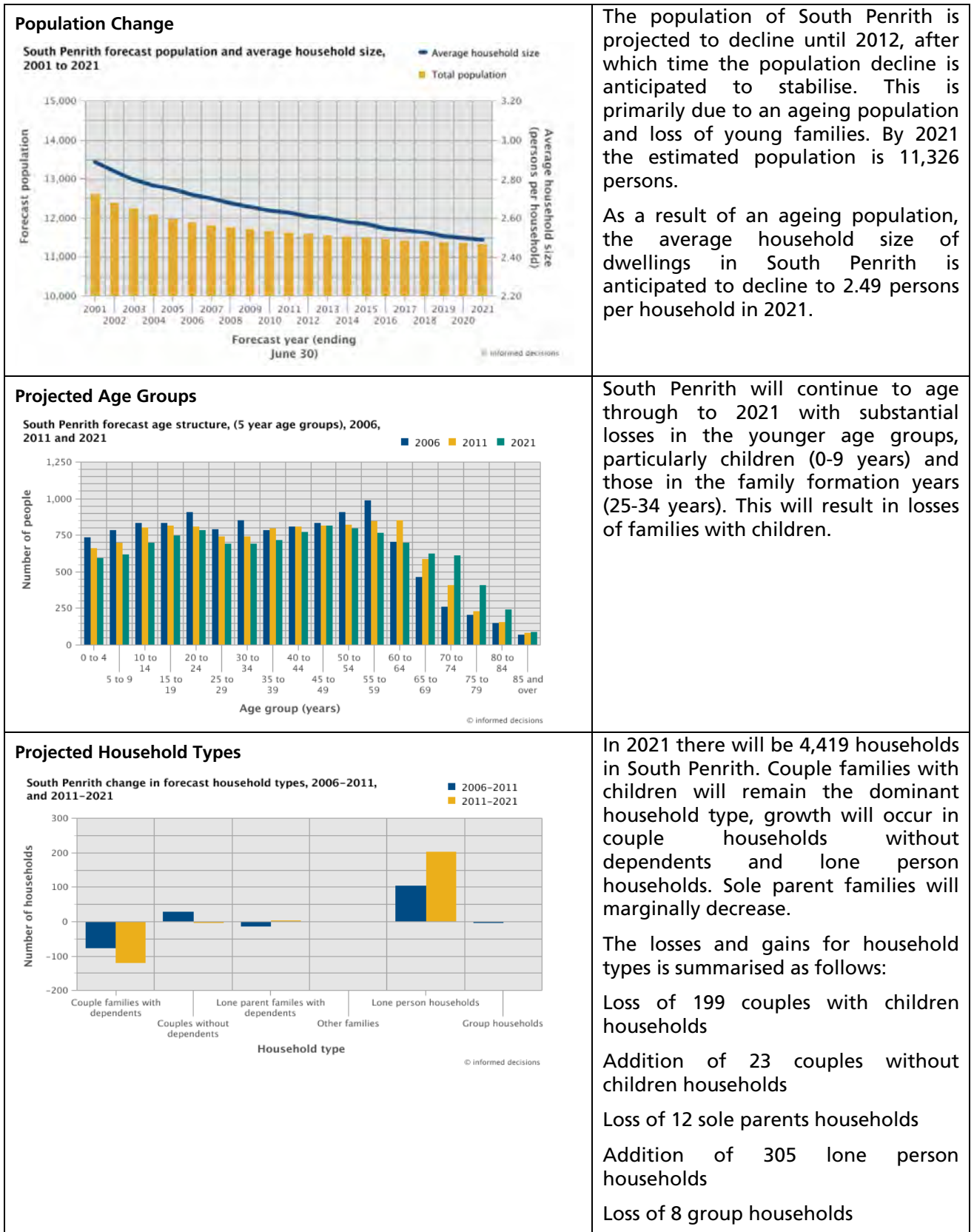
#### *Dwellings Type & Tenure:*

Like Penrith LGA, South Penrith is characterised by separate dwellings with 90.3% of all dwellings of this type. Medium density dwellings account for 5.8% of all dwellings or 252 dwellings. There are no recorded high density dwellings in South Penrith.

A significant proportion of households in South Penrith have mortgages (39.3%) and a third of all households (33.3%) fully own their home. Renting is the least common form of tenure South Penrith (20.6%) but is quite high when compared to Penrith LGA (14.8%).



Figure 5.6.2 Demographic and Household Characteristics 2021



\*The projections and graphs are derived from ID Population and Household Forecast for South Penrith Southlands, September 2007. It is noted these numbers are projections undertaken in 2007 and may change subject to development overtime

### 5.6.3. Existing Land Use and Zoning Pattern

The majority of the land use within South Penrith reflects the zoning patterns. South Penrith is primarily zoned for 2B residential, which is a low density residential zone. The residential lands to the west of South Penrith Southlands Village Centre, the key centre for South Penrith, is zoned at a higher density and much of this area has been constructed. There is also another pocket of medium density development on the corner of Wardell Drive and Fragar Road.

South Penrith Southlands Village Centre is located in the 3(a) Commercial Zone. Permissible uses in this zone include commercial, dwellings, childcare and health care. The shops along the Northern Road are also zoned 3(a).

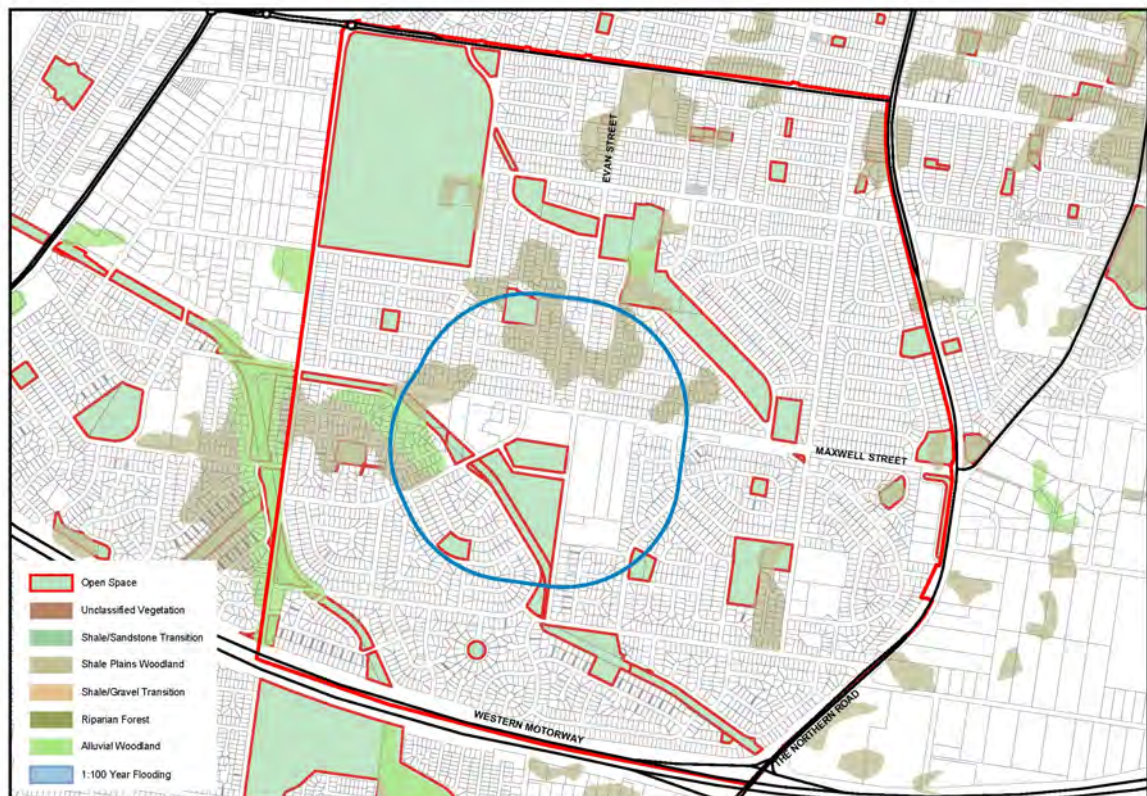
The Smith Street activity centre is located on Smith Street (between Taloma Street and Penrose Crescent) in the 3(c) zone under Penrith Planning Scheme Neighbourhood Business Zone and IDO 35 which allows for commercial uses. The retail floor space is approximately 300 square metres.

Open space is primarily located along drainage corridors and zoned 6(a). However there are also a number of pocket parks evenly distributed across the residential area.

### 5.6.4 Environmental Opportunities and Constraints

Figure 5.6.4 illustrates the key environmental constraints within South Penrith and these are discussed below.

Figure 5.6.4: Environmental constraints for South Penrith



## A Topography, Flooding and Drainage

As shown in Figure 5.6.4 South Penrith is relatively flat and therefore the topography is not a constraint to future development. Whilst flooding is also not an issue, open space within the suburb has primarily been allocated along drainage lines. Increased development may have implications on increased overland flow.

## B Native Vegetation and Sensitive Ecological Areas

As shown on Figure 5.6.4 above, South Penrith has minimal environmental constraints. The area has previously contained precincts of Alluvial Woodlands however these have been previously removed for farming and then residential subdivision.



## 5.6.5 Access and Transport



Under the centres hierarchy South Penrith is classified as a Village and it is proposed to retain this classification into the future. Future transport services and facilities will need to ensure they can deliver services suitable for a village.

The access and transport characteristics of the Village of South Penrith have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008.

Figure 5.6.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

Figure 5.6.5: Access and Transport Characteristics

<p><b>A Road Access</b></p>  <p>Classified Roads</p> <ul style="list-style-type: none"> <li>— State</li> <li>— Regional</li> <li>— Local</li> </ul>	<p>South Penrith has access to state significant roads, including the M4 Motorway (connecting the Blue Mountains to Sydney) and to Parker Road/The Northern Road which provides access between Richmond and Narellan. South Penrith is also bound to the north by Jamison Road which is of regional significance.</p>
<p><b>B Bus Network and Catchment</b></p>  <p>Bus Stop</p> <p>Bus Stop 400m Catchment</p>	<p>South Penrith benefits from an extensive bus network, with a significant amount of the suburb within 400m of a bus stop. There is a higher density of bus routes to the north of the suburb compared to the south.</p> <p>To fulfil the Sustainability Checklist criteria of a village, buses should be provided at a higher frequency and a bus junction located at the key retail area, South Penrith Southlands Village Centre. In addition, few bus services that service South Penrith appear to pass the Village Centre.</p>

<p><b>C Pedestrian Network</b></p> 	<p>South Penrith is moderately serviced by walking and cycling paths. Walking paths are primarily located along main neighbourhood roads and within open space linkages.</p> <p>The large open space corridors within South Penrith provide significant opportunity to enhance the pedestrian network, and in particular provide connections between Penrith and the Southlands and Smith Street centres.</p>
<p><b>D Cyclist Network</b></p> 	<p>Cycle paths generally follow the same route as the footpaths in South Penrith, however the PITLUS report (2008) observed that there is a lack of continuity leading to the shopping centre, railway stations and other key locations.</p> <p>Cycle paths and pedestrian paths are provided along and within the open space network. Cycle facilities were not evident at South Penrith Southlands Village Centre and the Smith Street Neighbourhood Centre.</p>

All diagrams sourced from PITLUS Report 2008

## 5.6.6 Access to Services

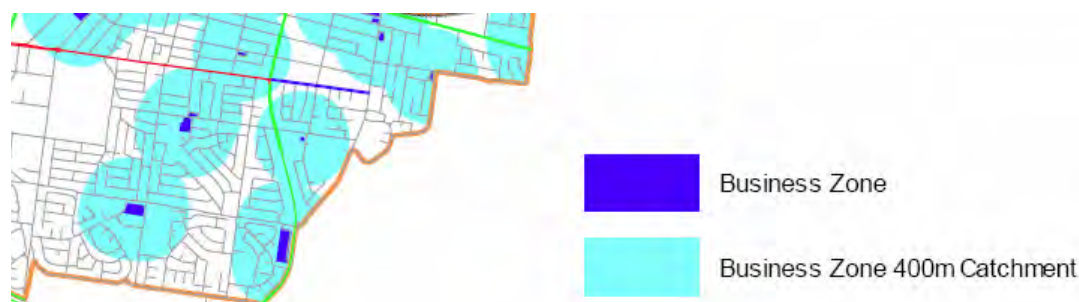
### A Retail / Local Shopping

South Penrith contains three local shopping centres. As shown in Figure 5.6.6, these are quite well distributed across the suburb and more than half of all houses are within 400m of a local centre.

South Penrith Southlands Village Centre is the main retail destination in South Penrith and is identified as a Village under the centres hierarchy. This stand alone shopping centre contains a small supermarket plus 26 speciality shops. It is intended that South Penrith Southlands Village Centre will be the retail, commercial and community focus of any future development within South Penrith.

The remaining two retail areas are a Neighbourhood Centre on Smith Street and a service centre on the corner of the Northern Road and Maxwell Street.

Figure 5.6.6 Shopping catchments, South Penrith



Source: PITLUS 2008

## B Education / Schools

Figure 5.6.7 shows that all residents in South Penrith are within 1.6km of a public school and therefore the area is considered to be well serviced by public schools. Schools in the area include Penrith South Public School, Jamison High School, York Public School and Mary MacKillop Catholic Primary School.

Figure 5.6.7: Public school catchments, South Penrith



Source: PITLUS 2008

## C Community Facilities

South Penrith contains a variety of community facilities designed to meet the needs of a population with many children. For example, there are four child care centres within South Penrith.

A cluster of community facilities is located around Southlands Shopping Centre which include a neighbourhood centre, childcare/afterschool care/preschool and maternal health care. These facilities may need to be upgraded to meet the needs of the future population. Additional aged care services and facilities may be required to meet the needs of the ageing population.

## D Open Space

South Penrith is benefited by Jamison Park which is a large sports and recreation facility. It contains multiple sporting fields and netball courts for the use of the wider community.

There are numerous reserves and parks located throughout South Penrith which align with drainage lines. These parks and reserves contain walking and cycle paths, playing fields and ovals. South Penrith also contains numerous pocket parks scattered throughout the suburb, some contain play equipment and seating, others provide green relief.

## 5.6.7 Existing Suburb Character

Figure 5.6.8 identifies the key elements of the suburb character of South Penrith around the Southlands village centre, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.6.8: Suburb Character Analysis in the vicinity of Southlands Village Centre

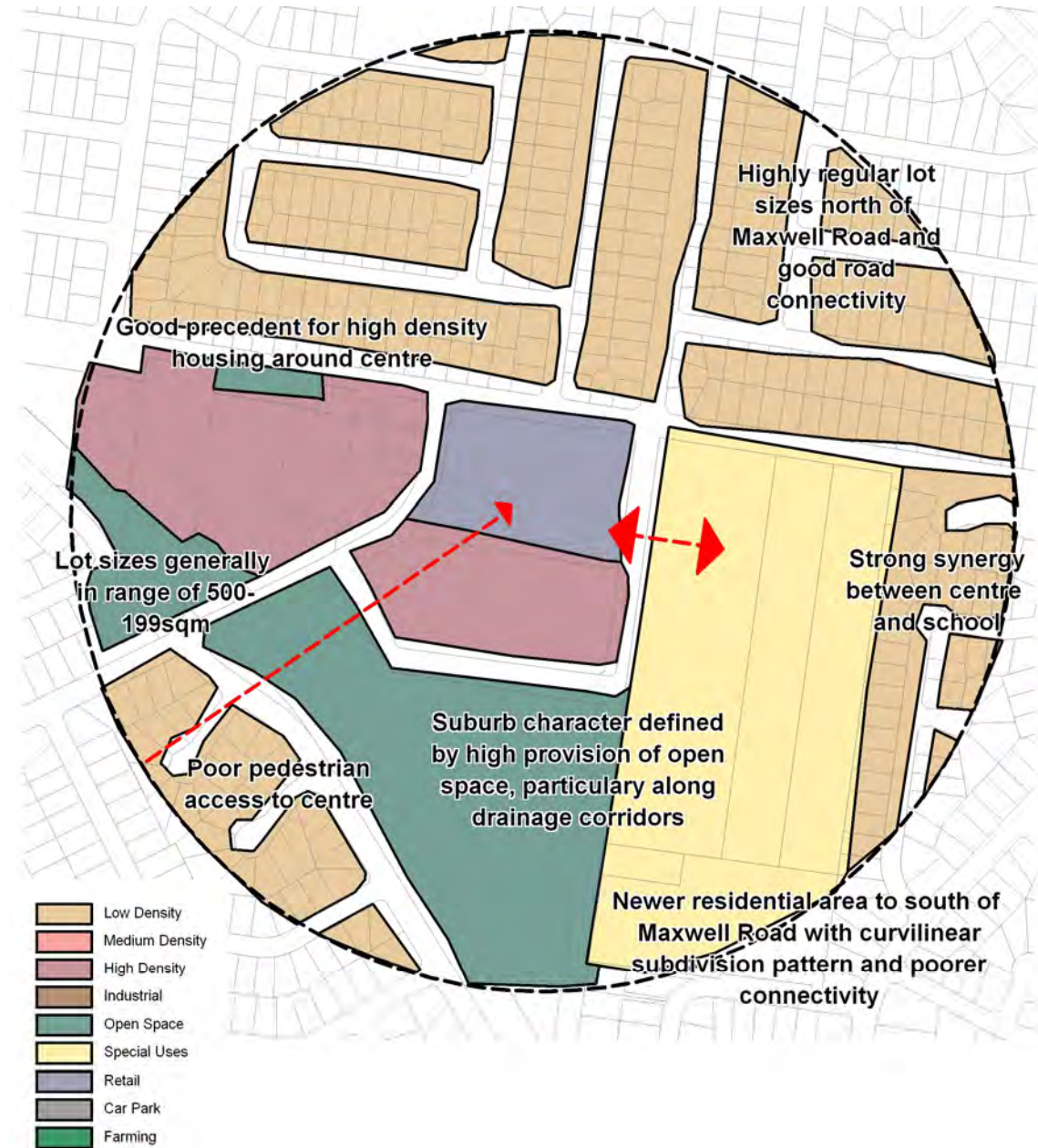


Figure 5.6.9: Examples of dwelling types in South Penrith



Figure 5.6.10 identifies the key elements of the suburb character of South Penrith around the Smith Street shopping centre, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.6.10 Suburb Character Analysis in the vicinity of Smith Street



### 5.6.8 Summary of Key Opportunities and Constraints

Based on the above analysis, the key growth opportunities and constraints that will influence urban growth in South Penrith can be summarised as follows:

- Substantial under utilised lands around the both the Southlands and Smith Street centres resulting in opportunity for medium and higher density housing;
- Opportunity to replace ageing community infrastructure to the south of the Southlands centre;
- Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported).
- Good access to local services and schools;

- Under-utilisation of a number of sites in close proximity to the activity centres where consolidation and redevelopment may be able to meet future mixed use and housing demand;
- Limited environmental constraints to urban growth.

The key constraints that will limit urban growth in South Penrith that can be summarised from the above analysis are as follows:

- Limited access to frequent and multiple public transport services;
- A population decrease and limited projected growth that will decrease the demand for additional dwellings over the next 20-25 years;
- Drainage paths through the area that are currently integrated into open space areas.
- Existing housing stock was built in last 20-30 years, is of reasonable quality, and is unlikely to support large-scale redevelopment in short to medium term.
- Existing redevelopment is evident throughout the suburb of South Penrith in the low density dwelling stock; and
- There is limited provision of medium density development within the 400 metre radius of both the South Penrith (Southlands) Village Centre and the Smith Street Neighbourhood Centre.

As such, growth in residential areas is likely to be limited to infill development or mixed-use development in proximity to the centres.

## 5.6.9 Future Dwelling Opportunities

### A Within South Penrith (Southlands) Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the South Penrith (Southlands) Village Centre (within a 600 metre radius of the village centre) .

Table 5.6.1 summarises the key assumptions made for South Penrith (Southlands) Village Centre potential future dwelling capacity.

**Table 5.6.1: Assumed densities for South Penrith (Southlands) Village Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
South Penrith (South-lands)	Current Centres Hierarchy Level	Development Era	Access to Services / Transport Score	Radii (m)	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	Village	1970's Medium Opportunity	1.5	600m	11.3% (5.53ha)	0%	0%	25%	75%
Urban Study and Strategy Assumptions (see below)	Village	1970's Medium Opportunity	See Sustainability Checklist	600m	15% (7.34ha)	0%	0%	35%	65%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.



Table 5.6.2 applies these assumptions and identifies that South Penrith (Southlands) Village Centre may achieve between 100 and approximately 168 additional dwellings, based on site constraints, rates of growth and anticipated density of development.

**Table 5.6.2: Estimated Dwelling capacity for South Penrith (Southlands) Village Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
South Penrith (Southlands)	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Village	0	0	69	103	172	61	110
Urban Study and Strategy Assumptions (see below)	Village	0	0	129	119	248	80	168

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for South Penrith (Southlands) Village Centre considers:

- Some limited potential to increase the amount of medium density in the area in the medium and long term;
- Opportunity to create mixed use development in areas surrounding the South Penrith (Southlands) Village Centre;
- Opportunities to incorporate affordable housing initiatives in any future redevelopment of community services land in South Penrith (Southlands) Village Centre;
- Land within the South Penrith (Southlands) Village centre is relatively unconstrained from environmental constraints, when compared to some other centres, therefore conducive to future development;
- Strong community infrastructure within the Village centre;
- A slight increase in the percentage of developable land being developed; and
- Slightly higher densities than assumed by ID Report (2007).

The long term (20-25 years) dwelling capacity within the South Penrith (Southlands) Village Centre could be as high as 170 (likely range of 150-200) additional dwellings based on a higher percentage of developable area and higher assumed densities.

Future development assumes the availability of all the services/infrastructure necessary to allow South Penrith (Southlands) Village Centre to function as a Village.

## **B      Within South Penrith – Smith Street Neighbourhood Centre**

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the South Penrith – Smith Street Neighbourhood Centre (within a 400 metre radius of the neighbourhood centre).

Table 5.6.1 summarises the key assumptions made for South Penrith - Smith Street Neighbourhood Centre potential future dwelling capacity.

**Table 5.6.3: Assumed densities for South Penrith - Smith Street Neighbourhood Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
South Penrith – Smith Street	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares))	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1970's - 1980s Medium Opportunity	1.5	400	22.1	3.8%	0%	0%	0%	100%
Urban Study and Strategy	1970's - 1980s Medium Opportunity	<b>See Sustainability Checklist</b>	400	22.1	3.8%	0%	0%	20%	80%

Source: ID Report (Sept 2007) as well as findings of this Urban Study and Strategy.

Table 5.6.4 below applies these assumptions and identifies that South Penrith - Smith Street Neighbourhood Centre may achieve between 10 and 14 additional dwellings.

**Table 5.6.4: Estimated Dwelling capacity for South Penrith - Smith Street Neighbourhood Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
South Penrith (Smith Street)	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Neighbourhood Centre	0	0	0	21	21	11	10
Urban Study and Strategy Assumptions (see below)	Neighbourhood Centre	0	0	8	17	25	11	14

The potential net dwelling gain for South Penrith (Smith Street) Neighbourhood Centre considers:

- Opportunity to create some shop top housing;
- Opportunity for some villa/townhouse development adjoining the commercial used land.
- Land within the South Penrith (Smith Street) Neighbourhood Centre area is relatively unconstrained from environmental constraints, when compared to some other centres, therefore conducive to future development;

### **C Outside Key Activity Centres**

The calculations to determine future dwelling gains in South Penrith outside of the South Penrith (Southlands) Village Centre radius is based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

There are few vacant allotments within South Penrith and therefore minimal opportunities for future dwelling gain anticipating an additional 24 dwellings from the existing vacant allotments.

The majority of lots in South Penrith are between 500 to 799 m<sup>2</sup> in size and there are significant numbers of larger lots. The development potential of these lots is high as many were built in the 1960's and are predominantly single detached dwellings that may be an under-utilisation of the land in the future.

ID Report (2007) have also calculated that out of approximately 2,864 existing utilised allotments, there is a potential net gain of 289 dwellings through demolition and replacement with additional dwellings.

Future development within the suburb of South Penrith is anticipated to achieve 289 dwellings outside the Village Centre, in the medium to long term (15-20 years).

#### **D Summary of Dwelling Opportunity (Long Term)**

While the total number of households in South Penrith is projected to increase by 175 households by 2031 and the total number of dwellings are projected to increase by 160 by 2031, the potential dwelling capacity for both South Penrith (Southlands) Village and Smith Street Neighbourhood Centre by 2031 is summarised in Table 5.6.5.

**Table 5.6.5: Net dwelling gains for South Penrith (Southlands) Village Centre and Smith Street Neighbourhood Centre**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centre (400m)	120	150-200
Outside Activity Centres Vacant Land	24	24
Outside Activity Centre Demolition & Replacement	289	289
<b>TOTAL</b>	<b>433</b>	<b>450-500</b>

*As calculated by ID Report (Sept 2007) and this study.*

## 5.6.10 South Penrith Southlands Assessment against Sustainability Checklist

The following sustainability checklist in Table 5.13.4 provides an assessment as to the suitability of the Southlands (Village) Centre and Smith Street Neighbourhood Centres to meet future growth as a Village and Neighbourhood Centre respectively.

**Table 5.6.6: South Penrith Southlands Village Centre and Smith Street Neighbourhood Centre Assessment against Sustainability Checklist**

SOUTH PENRITH (SOUTHLANDS) & (SMITH STREET)				
Strategy Element	Current Centre Classification - Village	Future Centre Classification Village	Additional services/actions needed	Priority
Population Size Penrith strategy target 2,000 -6,900 dwgs in catchment 4161 dwgs in Sth Penrith suburb	✓	✓	Increase in density to meet village size	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓✓	✓✓✓	Redevelopment provides opportunities to enhance road linkages and more direct access	Medium to Long term
Active Transport	✓✓	✓✓	Extension of footpaths in all streets. Extension of cycleway in open space network required to connect nodes	Medium (5-10 years)
Public Transport	✓	✓	Need for Bus junction Need for higher frequency of service Need for extended hours of service	Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity	
Environmental Considerations	✓✓	✓✓	Flood prone areas protected with open space	
Access to retail and commercial services	✓✓✓	✓✓✓	Possibility for retail centres on existing sites and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs.	short to medium (1-5 years)
Access to community services and Facilities	✓✓✓	✓✓✓	Strong community infrastructure available. Audit existing infrastructure and needs.	Short to Medium (1-5 years)
Public Domain and Open Space	✓✓	✓✓	Town centre improvements (private land) Safety and surveillance in open space Park embellishments	Medium (5-10 years)
Housing Sustainability	✓	✓	Investigate opportunities for community/affordable housing on council owned sites	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.6.11 Future Actions

The key actions arising for South Penrith to maintain the village and neighbourhood centre designations:

- Increase in housing density and range of dwelling types in and around Southlands to meet Village residential target (2,100-5,500 dwellings);
- Consider enhancing road linkages and improving road access when reviewing redevelopment opportunities around the centre;
- Upgrade and extend the footpath and cycle path network across the suburb. Cycle path network should provide connect key nodes and areas of open space;
- Investigate improved public transport services through higher frequency and extended hours of service throughout the suburb including the opportunity for a bus junction at Southlands;
- Review and investigate the capacity of infrastructure to support future development across the suburb;
- Continue to preserve flood prone land for open space;
- Support and promote growth within and immediately around the existing retail centres by way of mixed use developments/ range of floor space to continue to cater for existing and future needs;
- Maintain the high level of community infrastructure in the suburb and undertake community infrastructure audits to ensure community infrastructure meets future needs;
- Enhance the public domain and amenity of Southlands and Smith Street commercial centres.
- Improve the quality of existing open space and ensure all parks are safe and have passive surveillance; and
- Investigate opportunities for community/affordable housing on council owned sites.





**5.7**  
**Glenmore Park**





## 5.7 GLENMORE PARK

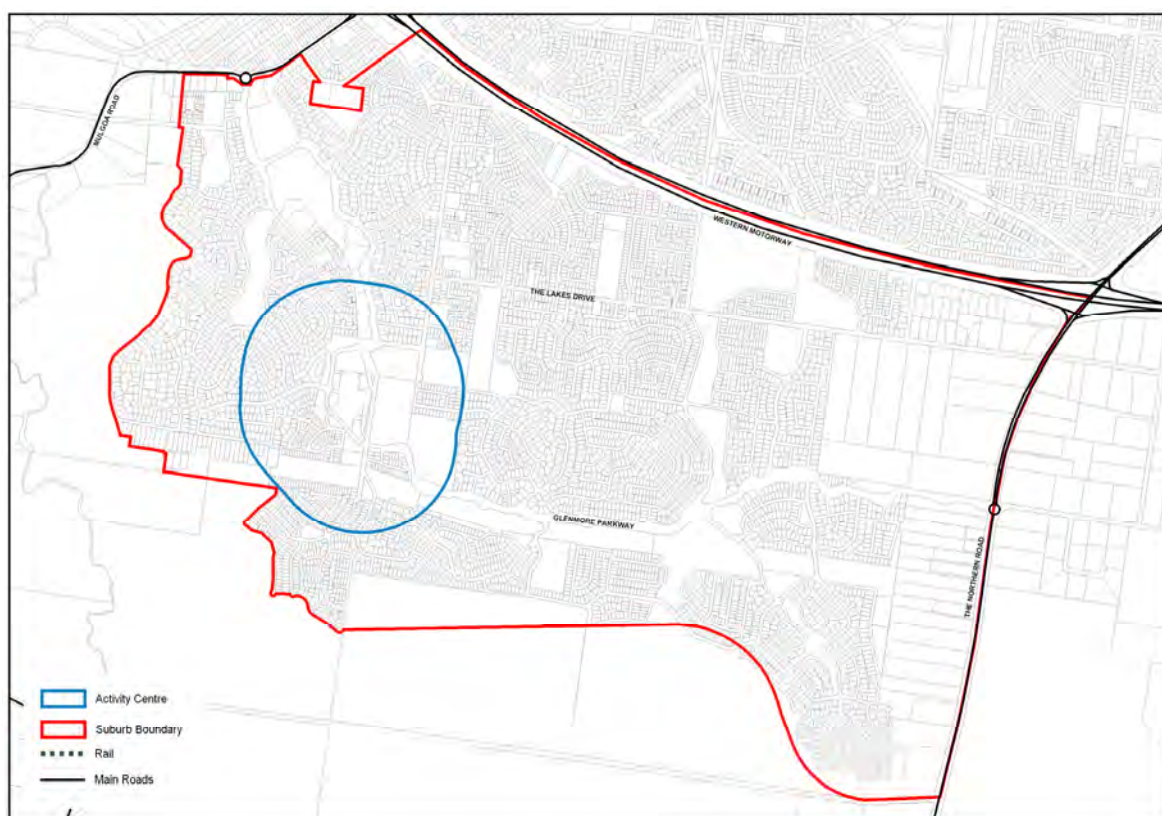
### 5.7.1 Suburb Overview

Glenmore Park is bounded by the Western Motorway in the north, the Northern Road in the east, the locality of Mulgoa in the south and south-west and Mulgoa Road and School House Road in the west. Mulgoa Nature Reserve also forms part of the southern and western boundaries (See Figure 5.7.1). Glenmore Park is named after an original cottage in the area.

Development of the area dates from 1805 when the first land grant was made. Land remained largely rural until the 1980s. Significant development occurred from 1990 when an estate was developed as part of the South Penrith Release Area. Glenmore Park nearly doubled in population between 1996 and 2001. In 2006 Glenmore Park had a total population of 19,063 people.

Major features of the area include four primary schools, two high schools, Glenmore Park Shopping Centre, Penrith Golf Club, Blue Hills Wetland, Glenmore Loch, Laguna Lake, Apple Gum Reserve, Blue Hills Park, Ched Towns Reserve, Forest Redgum Reserve, Mulgoa Nature Reserve, Rotary Park, Surveyors Creek Recreation Area and Windmill Park.

Figure 5.7.1: Map of Glenmore Park.



## 5.7.2. Suburb Demographics and Housing Trends

### A Current Demographics

#### *a) Population:*

Glenmore Park experienced a significant increase in population between 1996 and 2001, the result of the area being developed as a new release area. In 2006, the total population was 19,063.

#### *b) Age:*

The age structure of Glenmore Park in 2001 was characterised by couple families with children aged fifteen years and under. Those aged in their mid 30's to late 40's were the most dominant, followed by those aged between 5 to 11 years. The smallest age groups were those aged 60 and above.

In 2006 Glenmore Park experienced greatest growth in the age groups 35 to 49, 50 to 59, and 12 to 17 years old, reflecting the continuing prevalence of couple families with children in the area.

Analysis of the age structure of Glenmore Park in 2006 compared to Penrith City shows that there was a larger proportion of people in the younger age groups (0 to 17) but a smaller proportion of people in the older age groups (60+). Overall, 33.7% of the population was aged between 0 and 17, and 5.9% were aged 60 years and over, compared with 27.7% and 11.9% respectively for Penrith City.

#### *c) Income:*

In 2006 there were a larger proportion of individuals earning a high income (those earning \$1,000 per week or more) and a smaller proportion of low income persons (those earning less than \$400 per week). Overall, 27.6% of the population earned a high income, and 31% earned a low income, compared with 17.9% and 37.9% respectively for Penrith.

At a household level there was also a larger proportion of high income households (those earning \$1,700 per week or more) and a smaller proportion of low income households (those earning less than \$500 per week). Overall, 40.5% of the households in Glenmore Park earned a high income, and 6.1% were low income households, compared with 25.7% and 14.8% respectively for Penrith.

#### *d) Car Ownership:*

An analysis of the car ownership of the households in Glenmore Park in 2006 shows that a larger proportion owned two cars (49.9%) compared to 16% in Penrith. When compared to Penrith a smaller proportion owned 1 car (24.9% compared to 36%) and a similar proportion owned 3 or more cars (18.5% compared to 17.2%).

The largest change in the household car ownership in Glenmore Park between 2001 and 2006 was with those who owned 3 cars or more (+ 400 households) and 2 cars (+ 378 households).

#### *e) Households:*

An analysis of households in Glenmore Park in 2006 shows a larger proportion of family households, with couple families with children being dominant (62.9%) and a small proportion of one-parent families (12.2%). This compares to Penrith in general which comprised 51.7% couple families with children and 18.5% one-parent families. This reflects Glenmore Park being a relatively new growth area in Penrith and its housing and facilities making it an attractive area for families.

Comparing household types between Glenmore Park and Penrith in 2006 reveals a larger proportion of family households (86.6% compared to 76.6%) but a smaller proportion of lone person households (9.1% compared to 18.0%).

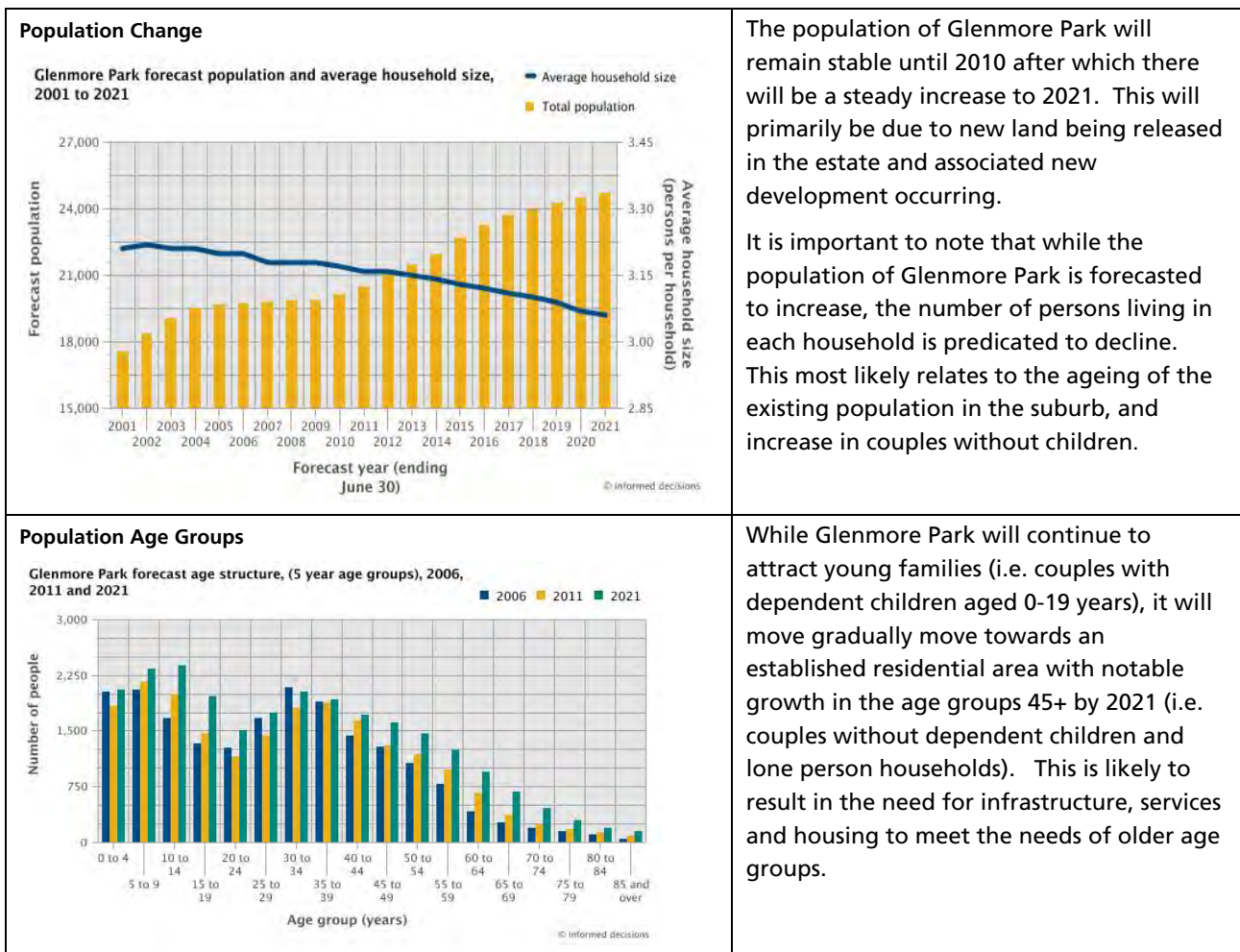
f) *Dwellings:*

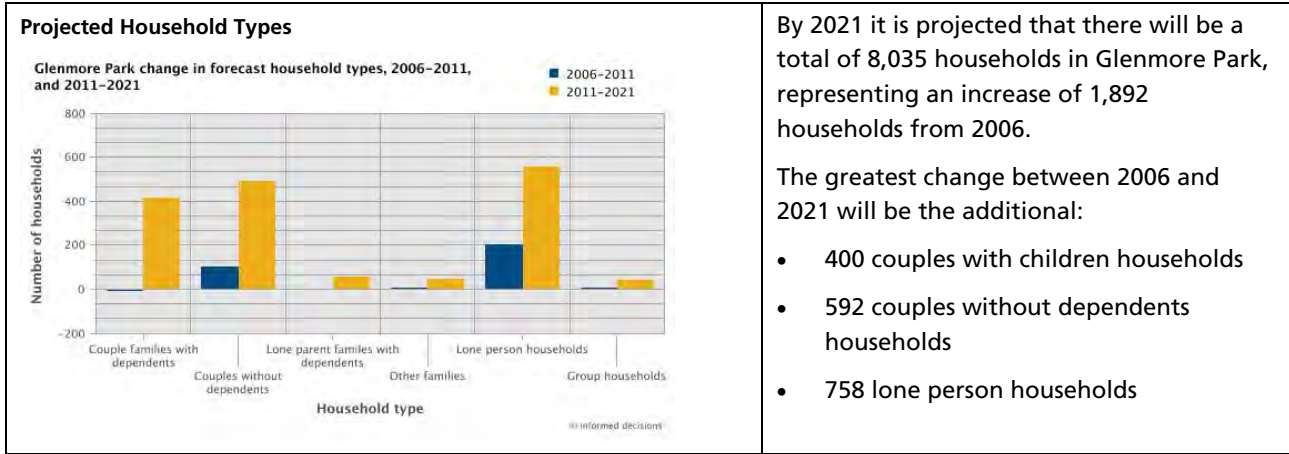
Separate houses are the dominant housing form in Glenmore Park. In 2006, 92.5% of households in Glenmore Park occupied a separate house compared to 80.3% in the Penrith LGA. The higher % of detached dwellings correlates with the area’s appeal to families.

In 2006, more than half of all households in Glenmore Park were purchasing their home (58.1%), 22.2% were renting and 16.2% owned their dwelling, compared with 41.8%, 25.9% and 26.5% respectively for the Penrith LGA.

**B Projected Demographics and Household/Dwelling Needs to 2021**

**Figure 5.7.2 Demographic and Household Characteristics 2021**





### 5.7.3. Existing Zoning and Land Use Patterns

The majority of Glenmore Park comprises detached dwellings zoned Residential 2(a) Urban and Landscape Protection and Residential 2(b) Low Density. Land along The Northern Road, M4 Motorway and Mulgoa Road frontages of Glenmore Park, which has a semi-rural character and provides a gateway to the City, is zoned 2(r) Rural-Residential.

The Glenmore Park Town Centre is zoned No. 2 (Urban Zone). Detailed guidelines about preferred land use distribution and development are provided in the Development Control Plan provisions for the Glenmore Park Town Centre and have determined the current land use arrangements and built form of the Town Centre.

The playing fields are zoned for open space 6(a) and perform a dual function for active recreation and drainage. Mulgoa Nature Reserve is zoned 8(b) under Sydney Regional Environmental Plan No. 13 (Mulgoa Valley). Penrith Golf and Recreation Club, located near The Northern Road, is zoned 6(c) Private Recreation.

With the exception of Glenmore Park Stage 2, there is limited available land for substantial urban growth in Glenmore Park. Any potential opportunities around the Glenmore Park Town Centre are constrained by residential development.

Glenmore Park (Stage 2) comprises an expansion to the existing suburb. The area, approximately 168ha, is generally bounded by Mulgoa Nature Reserve and the existing Glenmore Park residential area; rural lands; The Northern Road; and Mulgoa Tip and rural lands to the north, south, east and west respectively.

Planning for Glenmore Park (Stage 2) aims to:

- allow the urban development;
- provide for an extension to the Mulgoa Nature Reserve;
- provide a biodiversity corridor between remnant bushland units;
- ensure diverse housing opportunities are provided as part of the development of the release area;
- to provide opportunities for affordable housing.

The proposal provides for a mix of residential, rural residential, roads, community and sporting facilities, employment, open space and conservation land. It is forecasted that when developed it will provide for around 1,750 new dwellings, with an estimated population of around 4,700 persons.

## 5.7.4 Environmental Opportunities and Constraints

Figure 5.7.4 illustrates the key environmental characteristics of Glenmore Park and these are discussed below.

Figure 5.7.4: Environmental characteristics



### A Topography, Flooding and Drainage

The topography of the suburb is undulating hills with a network of creeklines comprising Surveyors Creek and its numerous tributaries, and tributaries of School House Creek. Both creeks drain west to the Nepean River. The few remaining timbered areas are confined to a few parks and the banks of the creeks.

### B Native Vegetation and Sensitive Ecological Areas

Most of the significant native vegetation, predominantly shale hills woodland, is located within the Mulgoa Nature Reserve. There are significant stands of shale plains woodland throughout the open space, parklands and drainage network. Other vegetation communities include moist shale woodland, shale sandstone transition forest and alluvial woodland along creek lines.


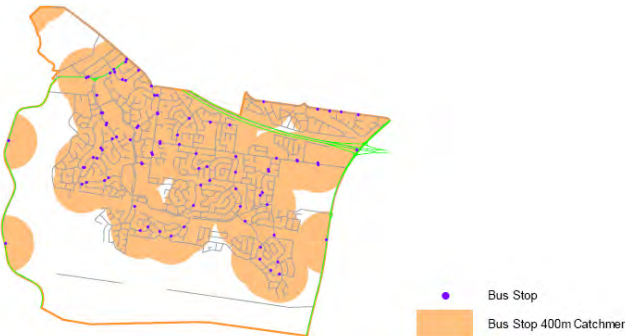

Future urban development should seek to protect and enhance native vegetation and ecological corridors along the Nepean River and up into the Blue Mountains escarpment and integrate this with recreational uses.


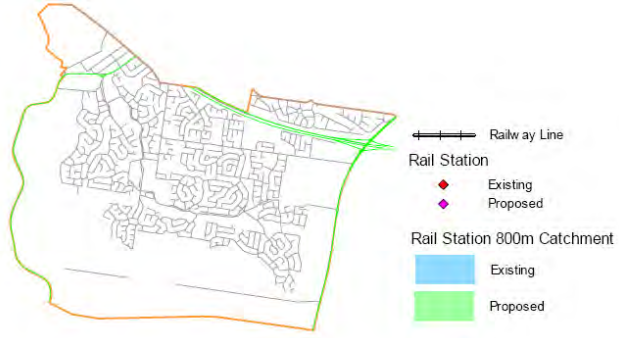
## 5.7.5 Access and Transport

This section is based upon the findings of the Penrith Integrated Transport and Land Use Strategy (PITLUS Report) 2008. As stated previously, Glenmore Park is classified as a 'Village' under the Centres Hierarchy and it is envisaged that it will remain as a 'Village' in the future.

Figure 5.7.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

**Figure 5.7.5: Access and Transport Characteristics**

<p><b>A Road Access</b></p>  <p>— Council Roads          Classified Roads          — State          — Regional          — Local</p>	<p>Glenmore Park is bounded by the Western Motorway in the north, the Northern Road in the east and Mulgoa Road and School House Road in the west. These roads are arterial roads and provided good access to the Penrith CBD and beyond. A limited number of internal collector roads provide access to these arterial roads.</p>
<p><b>B Bus Network and Catchment</b></p>  <p>• Bus Stop          ■ Bus Stop 400m Catchment</p>	<p>The figure below shows the areas of Glenmore Park which are within the 400m walking catchment of a bus stop. It shows that the developed areas largely (95%) have good access to bus stops. Small pockets of land in the residential areas lack coverage.</p> <p>Glenmore Park SLA has 4 different bus routes serving the SLA:</p> <ul style="list-style-type: none"> <li>• 3 bus routes serve the SLA on weekends;</li> <li>• only 1 route is in service during pre peak and night time periods; and</li> <li>• the bus routes recorded route directness factors ranging from 1.04 – 1.17.</li> </ul> <p>It is noted that direct routes have a factor of 1.00 and less direct routes have increasingly greater values.</p>
<p><b>C Pedestrian Network</b></p>  <p>— Footpath Proposed          — Footpath Existing</p>	<p>The figure below shows the extent that footpaths are provided within Glenmore Park SLA. Only 14% of all roads within the SLA have footpaths.</p>

<p><b>D Cyclist Network</b></p>  <p style="text-align: right;">— Bikeway</p>	<p>The PITLUS Report indicates that, there is significant lack of cycle provisions in Glenmore Park.</p> <p>Given the lack of shopping within walking distances, cycle networks must be provided to broaden the opportunity for residents to gain access to key areas by other active transport means such as cycling.</p>
<p><b>E Train</b></p>  <p style="text-align: right;">     ← Railway Line      Rail Station      Existing (red diamond)      Proposed (purple diamond)      Rail Station 800m Catchment      Existing (blue square)      Proposed (green square)   </p>	<p>Due to the distance of Glenmore Park from the Main Western Railway Line, no part is located within the pedestrian catchment of a railway station. Glenmore Park residents must rely on buses for public transport needs.</p>

All diagrams sourced from PITLUS Report 2008

Based on the analysis outlined above, Glenmore Park is considered to have limited potential to accommodate further growth primarily due to the poor access network and public transport servicing the estate.

Glenmore Park has a low level of provision of bikeways on classified roads and only negligible proportions of footpaths on classified roads. Footpaths on local roads are particularly critical as a prerequisite for encouraging local walking and a mode shift from the car for local trips, therefore the amount and quality of footpaths will need to increase dramatically to address this desired mode shift.

Analysis in the PITLUS Report suggests that around 63% of the existing developed area within Glenmore Park is outside the 400m walking distance of the Glenmore Park Town Centre. It is suggested that the provision more neighbourhood centres could potentially address this accessibility problem.

The level of provision of footpaths and cycleways in Glenmore Park is considered low. There is little connectivity between residential areas and the Glenmore Park Town Centre.

## 5.7.6 Access to Services

### A Retail / Local Shopping

Figure 5.7.6 identifies that Glenmore Park contains one local shopping centre located on Glenmore Parkway opposite Ched Towns Reserve.

The figure below shows the 400m walking catchment areas for business zones (shopping centres) within Glenmore Park. Only 9% of the developed areas are within these catchment areas. This is considerably lower than the urban area average of 26%, and has the least coverage of all suburbs with the Penrith local government area. This means that over 90% of the area is more likely to choose to drive rather than walk to the shops due to the distances. Cycle networks must be enhanced as an alternative to driving these longer distances. Consideration should also be given to providing more decentralised shopping facilities within the suburb.

Figure 5.7.6 Shopping catchment Glenmore Park



Source: PITLUS 2008



## B Education / Schools

Figure 5.7.7 shows that all residents in Glenmore Park are within 1.6km of a public school and therefore the area is considered to be well serviced by public schools.

Figure 5.7.7: Public school catchments, Glenmore Park



Source: PITLUS 2008

## C Community Facilities

The provision of community facilities within Glenmore Park include:

- Four primary school and two high schools;
- Two community centres;
- Two pre-schools

## D Open Space

Glenmore Park is characterised by fewer, but high quality, open space areas that are well embellished in comparison to some of the older areas of the City. The PLANS research identified a shortfall in the provision of quality active open space, which has resulted in the inadequate provision of local training facilities to cope with the sporting demands of the local community.

The open space in Glenmore Park is characterised as follows.

Parks Network	Number	Area (hectares)	Play - grounds
Cluster Area		936	
District Parks	0	0	0
Neighbourhood Parks	1	7.5	0
Local Parks	8	50.6	3
Pocket Parks	9	3.3	5
Natural Areas	3	3.3	0
Linear Drainage	6	9.9	2
Totals	27	74.6	10

Source: Open Space Action Plan 2007

### 5.7.7 Existing Suburb Character

Glenmore Park is a new suburb. Significant development occurred from 1990 when an estate was developed as part of the South Penrith Release Area. Glenmore Park nearly doubled in population between 1996 and 2001.

Figure 5.7.7 identifies the key elements of the suburb character of Glenmore Park, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.7.7 Suburb Character Analysis

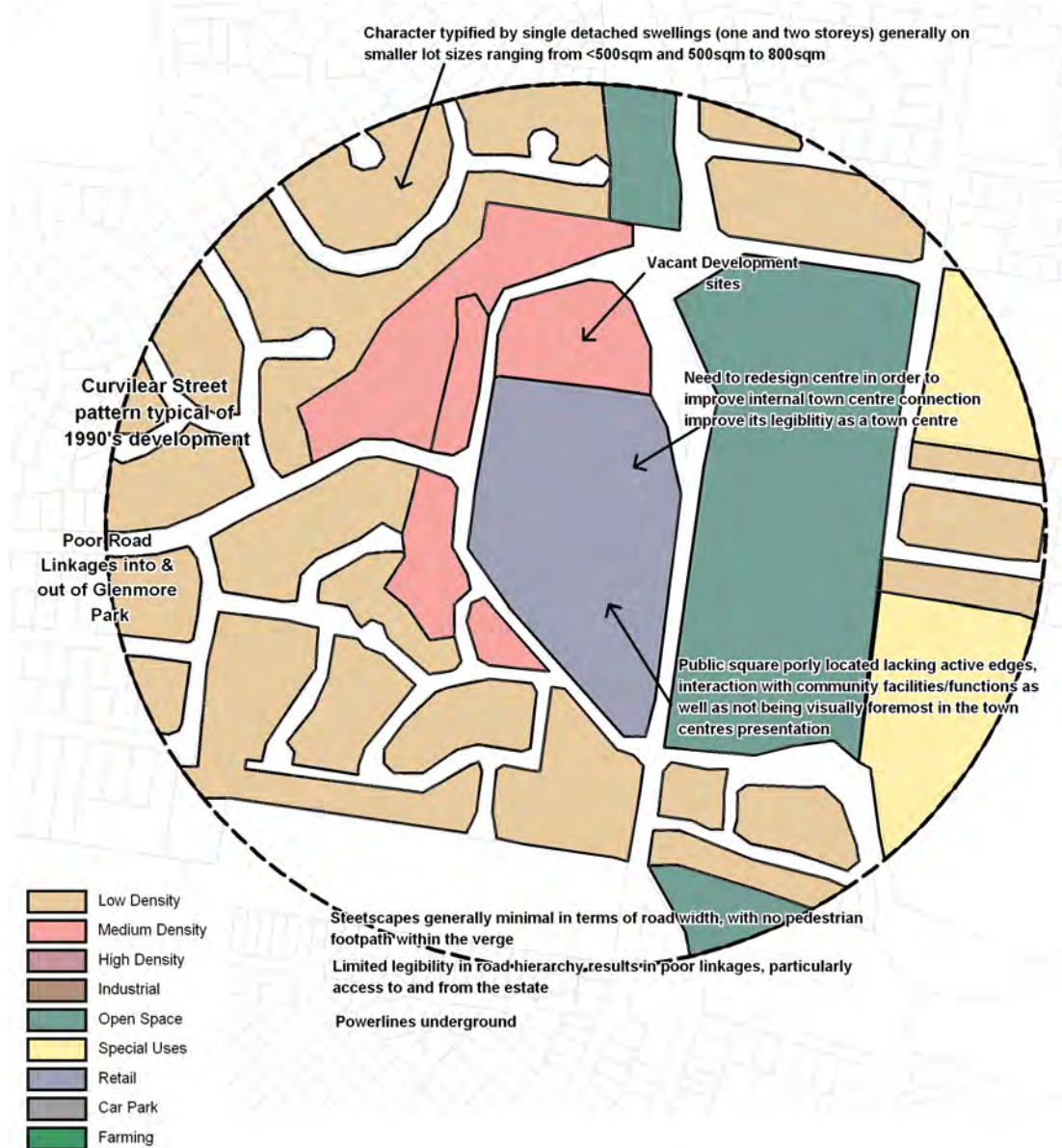


Figure 5.7.8: Examples of dwelling types in Glenmore Park



The key growth opportunities that will drive urban growth in Glenmore Park include:

- Glenmore Park Stage 2 is a future urban release area located to the south of the existing urban area of Glenmore Park. An anticipated 1600 dwellings will be constructed in the new 225 hectare urban release area to the year 2021.
- Future development should continue to protect the heritage values of the neighbouring localities of Mulgoa Valley and Orchard Hills. This can primarily be achieved by continuation of the buffer zones of the Mulgoa Nature Reserve and the strip of semi-rural allotments on the margin of The Northern Road.

The key constraints that may limit urban growth in Glenmore Park include:

- Access to and within the estate is poor. Current access to surrounding arterial network is via a few collector roads, especially Glenmore Parkway;
- Significant distance from the main western railway line and limited access to frequent and multiple public transport services;
- Limited provision of infrastructure and routes for active transport options;
- Existing housing stock was built during the last 2 decades and is of good quality. Given these facts, redevelopment of established residential areas is not likely in the short to medium term; and
- Very limited availability of vacant and underdeveloped lots for development.

## 5.7.9 Future Dwelling Opportunities

### A Within Glenmore Park Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Glenmore Park Village Centre (within a 400 metre radius of the village centre).

Table 5.7.1 summarises the key assumptions made for Glenmore Park Village Centre's potential future dwelling capacity.

**Table 5.7.1: Assumed densities for Glenmore Park Village Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Glenmore Park	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares)	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings/hectare	Land @ 50 dwellings/hectare	Land @ 25 dwellings/hectare
ID Assumptions	1990's – 2000's Low Opportunity	1.0	400	20.7	7.5%	0	0	25	75
Urban Study and Strategy	1990's – 2000's Low Opportunity	See Sustainability Checklist	400	20.7	7.5%	0	0	25	75

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

A closer inspection of the lot sizes and the existing housing stock within 400 metres of the Glenmore Park Village Centre indicates that ID assumptions are satisfactory.

Table 5.7.2 identifies that Glenmore Park Village Centre has a potential growth of 45 new dwellings to the year 2031.

The increase in potential dwelling densities is subject to the Glenmore Park Village Centre meeting the Sustainability Checklist criteria for a village.

**Table 5.7.2: Estimated Dwelling capacity for Glenmore Park Village Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Glenmore Park	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Village Centre	0	0	19	29	48	3	45
Urban Study and Strategy Assumptions (see below)	Village Centre	0	0	19	29	48	3	45

*Source: ID Report (Sept 2007) as well as findings of this study.*

The age of the housing stock in Glenmore Park is relatively new, dating back to the 1990s to present. New stages of the estate are currently being constructed. The subdivision pattern is circuitous with numerous 'cul-de-sacs' and average lot sizes small, which limits the permeability of the estate and potential for lot consolidation and redevelopment. Overall the area has a low to medium opportunity for redevelopment based on age and allotment arrangement.

The potential net dwelling gain for Glenmore Park Village Centre is limited due to the assumption that there will be a minimal increase in the amount of medium density in the area in the medium and long term. The long term (20-25 years) dwelling capacity within the Glenmore Park Village Centre could be 45 dwellings. Future development assumes the availability of all the services/infrastructure necessary to allow Glenmore Park Village Centre to function in accordance with its designation.

## **B Outside Key Activity Centres**

The calculations to determine future dwelling gains in Glenmore Park outside of the Village Centre radius are based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

ID Report (2007) have also calculated that out of approximately 1,262 existing utilised allotments, there is a minimal potential net gain of 9 dwellings through demolition and replacement with additional dwellings. This is due to the relative new age and good building quality of the existing dwellings.

There are a significant number of vacant allotments within Glenmore Park and therefore a medium opportunity for future dwelling gain. It is estimated that there are 80 vacant allotments in Glenmore Park. It should be noted these estimates relate to areas outside of the Glenmore Park Activity Centre.

## C Summary of Dwelling Opportunity (Long Term)

The total number of households in Glenmore Park is projected to increase by 35% to 2021. This represents an increase of 2091 households. The total number of dwellings is projected to increase by 2002 by 2021.

The potential dwelling capacity for Glenmore Park by 2021 is summarised in Table 5.7.3.

A significant component of dwelling gain will come from the development of vacant land outside the 400 m activity centre radius.

**Table 5.7.3: Net dwelling gains for Glenmore Park Village Centre**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centre (400m)	45	45
Outside Activity Centre Vacant Land	339	339
Outside Activity Centre Demolition & Replacement	9	9
<b>TOTAL</b>	<b>393</b>	<b>393</b>

*As calculated by ID Report (Sept 2007) and this study.*

### 5.7.10 Glenmore Park Village Centre Assessment against Sustainability Checklist

The following sustainability checklist in Table 5.7.4 provides an assessment as to the suitability of Glenmore Park Village Centre to meet future growth as a Village Centre.

**Table 5.7.4: Glenmore Park Centre Assessment against Sustainability Checklist**

GLENMORE PARK				
Strategy Element	Current Centre Classification – Village Centre	Future Centre Classification – Village Centre	Additional services/actions needed	Priority
Population Size 6133 dwgs in Glenmore Park in 2006 8135 dwgs in Glenmore Park in 2021	✓ 6133 (2006)	✓ 8135 (2031)	Given the large increase in population to 2021 there will be a need for infrastructure, services and housing to meet the needs of older age groups as the suburb matures.	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓	✓✓	Access into and out of Glenmore Park is an important issue for residents as the number of access points is limited. Some traffic congestion can be alleviated by intersection upgrades both on Mulgoa and the Northern Roads.	Medium (5-10 years)
Active Transport	✓	✓	Given the lack of shopping within walking distances from the majority of residences in Glenmore Park, cycle networks must be provided to broaden the opportunity for residents to gain access to key areas by other active transport means such as cycling.	Medium (5-10 years)
Public Transport	✓	✓	Need for higher frequency and extended hours of service	Medium (5-10 years)

GLENMORE PARK				
Strategy Element	Current Centre Classification – Village Centre	Future Centre Classification – Village Centre	Additional services/actions needed	Priority
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity	
Environmental Considerations	✓✓	✓✓	Future urban development should seek to protect and enhance native vegetation and ecological corridors linking to the Nepean River and up into the Blue Mountains escarpment and integrate this with recreational uses.	Medium (5-10 years)
Access to retail and commercial services <u>Typical Retail Area</u> 3,000sqm-7,500sqm (inc supermarkets/s @ 1,500-4500sqm) <u>Typical Commercial Area</u> 250sqm-750sqm	✓✓	✓✓	There is some potential for growth of retail and commercial uses to the north of the existing car parking area adjoining the existing shopping centre. Development of Glenmore Park Stage II may restrict redevelopment or additions to existing shopping centre due to the new commercial centre providing competition for a limited market.	short to medium (1-5 years)
Access to community services and facilities	✓✓	✓✓	Existing services are satisfactory in comparison with other parts of Penrith.	Short to Medium (1-5 years)
Public Domain and Open Space	✓	✓	Research has identified a shortfall in the provision of quality active open space, which has resulted in the inadequate provision of local training facilities to cope with the sporting demands of the local community.	Medium (5-10 years)
Housing Sustainability	✓	✓	Implement sustainable housing initiatives	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.7.11 Future Actions

The key actions arising for Glenmore Park to maintain a village designation include:

- Upgrade and extend the footpath and cycle path network across the suburb. Cycle path network should provide connect key nodes and areas of open space. Also improve the pedestrian and cycle connectivity between shopping village and residential areas.
- Given the large increase in population to 2021 there will be a need for infrastructure, services and housing to meet the needs of older age groups as the suburb matures.
- Access into and out of Glenmore Park is an important issue for residents as the number of access points is limited. Some traffic congestion can be alleviated by intersection upgrades both on Mulgoa and the Northern Roads.
- Investigate improved public transport services through higher frequency and extended hours of service.
- Improve the provision of local training facilities on open space lands to cope with the sporting demands of the local community.



**5.8**

**St Clair**





## 5.8 ST CLAIR

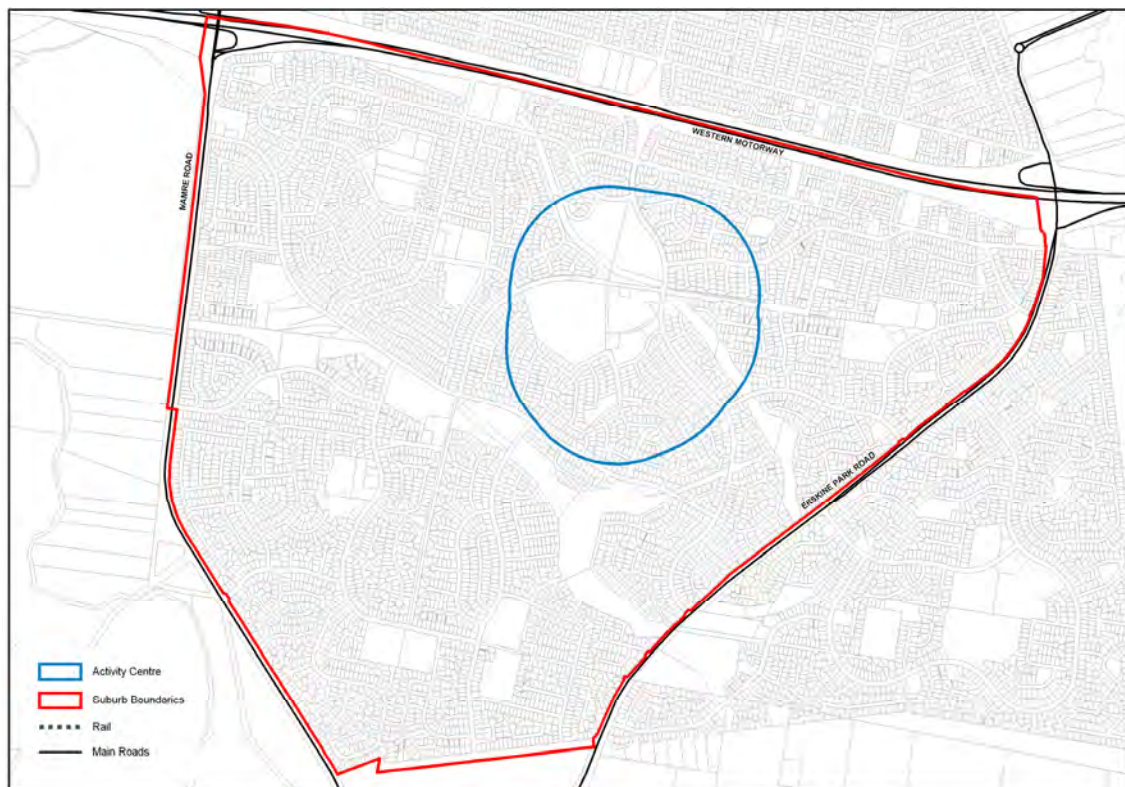
### 5.8.1 Suburb Overview

St Clair is situated towards the eastern boundary of Penrith LGA, directly to the south of the M4 Motorway. The area is generally bounded by Erskine Park Road and Ropes Creek in the east, the water supply pipeline in the south and Mamre Road in the west, as shown in Figure 5.8.1.

St Clair experienced the majority of its development in the 1980's. Residential development has extended south of St Clair with Erskine Park. A future employment area has been identified on the lands south of Erskine Park.

The key features of St Clair include the five primary schools, St Clair High School, St Clair Shopping Centre, St Clair Leisure Centre, Mark Leece Sport Complex, Dorothy Radford Reserve and Peter Kearns Reserve.

Figure 5.8.1: Map of St Clair



## 5.8.2 Suburb Demographics and Housing Trends

St Clair, is a relatively new suburb, with residential development primarily commencing in the 1980s. In 2006, St Clair had a total population of 20,100 people.

### A Current Demographics

Between 1991 and 2006 the population of St Clair marginally declined by 900 people.

#### *Age:*

The age structure of St Clair is comparable to that of the Penrith LGA, however, there are slightly fewer older people, which reflects the suburb's more recent development during the 1980s and its attraction for younger families.

However, comparison of the age structure of St Clair in 1991 and 2006 shows that the population is ageing, with a declining proportion of younger people (0-17) and middle aged people. The proportion of older people has increased in this period from 6.8% in 1991 to 20.5% in 2006.

#### *Income:*

The majority of households in St Clair earn a medium to high annual income (\$59,986 to \$107,006) and compared to Penrith LGA, a smaller proportion had a low income.

#### *Car Ownership:*

St Clair has high proportion of car ownership, with more than 90% of households owning at least one car. Compared to Penrith LGA, over one fifth of households in St Clair (22.6%) own 3 or more cars and more than one quarter (26.2%) own one car.

#### *Households:*

St Clair is dominated by couples with children who account for 60.1% of all household types. This is significantly higher than that within Penrith LGA (51.7%), however this proportion has significantly reduced since 1991 when couples with children households represented nearly three quarters (73.5%) of all households.

The reduction in this household group has primarily been due to the substantial increase of sole parent households in St Clair between 1991 and 2006, which almost doubled to 1000 households during this period. The proportion of couple without children households (23.2%) and lone person households (9.2%) have remained relatively constant during this period.

#### *Dwelling Type & Tenure*

St Clair is dominated by separate houses which account for 95.5% of all household types. This is a significantly higher proportion of separate houses than that of Penrith LGA (80.3%). There are only 26 medium density dwellings in St Clair with no high density dwellings.

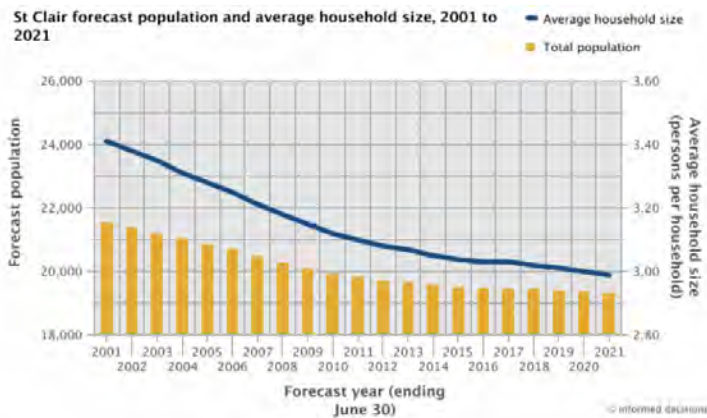
Therefore, there is a limited mix of dwellings in St Clair which this may cause issues for 'ageing in place', providing down-sized dwellings for 'empty nesters', providing affordable smaller units for first home buyers and addressing the needs of lone person households.

More than half of all households in St Clair are purchasing their home (54.2%) and one quarter (25.9%) are renting. The proportion of mortgagees is slightly higher than that of Penrith LGA (41.8%).

## B Projected Demographics and Household/Dwelling Need to 2021

Figure 5.8.2 Projected Demographic and Household Characteristics to 2021

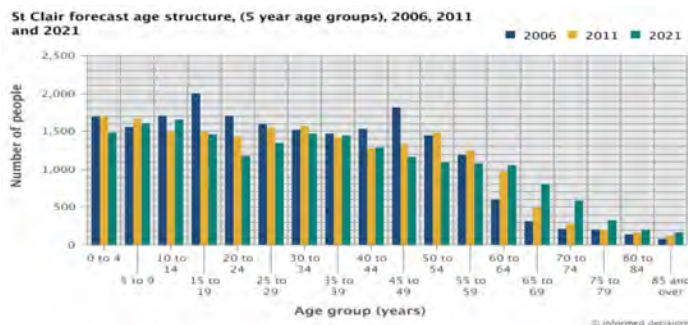
### Population Change



The population of St Clair will continue to experience a steady decline. This is primarily due to an ageing population and loss of mature families and young adults. By 2021, it is estimated population of St Clair will be 19,804 persons. Therefore, urban growth is unlikely to be driven by population growth in St Clair.

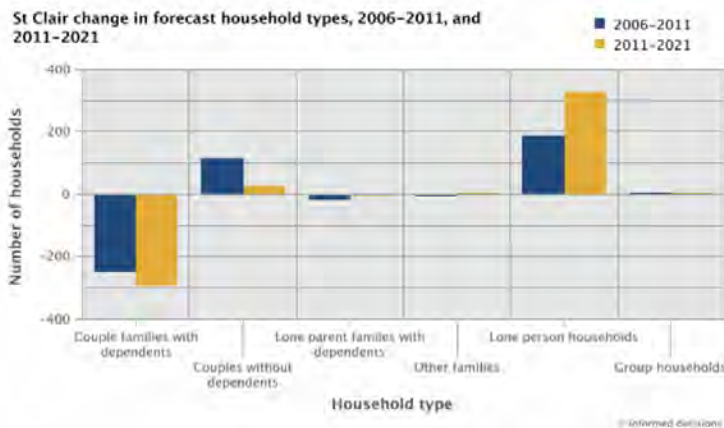
It is important to note that the new development of Erskine Park immediately to the south of St Clair may have a future impact on demand in the area through provision of employment opportunities and this may not have been taken into account in the ID demographic study (2007). However, most of the residential need may be taken up in Erskine Park itself.

### Projected Age Groups



St Clair will continue to age through to 2021 with losses in people between 0-50 and growth in those over 50, particularly in age groups 60-79. This is likely to result in the need for infrastructure and services that meets the needs of older age groups with the provision of more seniors housing and medical facilities.

### Projected Household Types



By 2021 it is projected that there will be a total of 6,445 households in St Clair, this is an increase of only 81 households since 2006.

Couple families with children will continue to be the dominant household type, representing almost 50% of households. However, this group will experience losses.

The greatest change between 2006 and 2021 will be with lone person households. This is summarised as follows:

- Loss of 546 couples with children households;
- Additional 138 couples without children households;
- Loss of 29 sole parents households;
- Additional 515 lone person households;
- Additional 8 group households.

\*The projections and graphs are derived from ID Population and Household Forecast for St Clair, September 2007. It is noted these numbers are projections undertaken in 2007 and may change subject to development overtime

### 5.8.3 Existing Zoning and Land Use Pattern

The majority of St Clair is covered by Zone 2(b) Residential Low Density. This has resulted in an area being dominated by single detached dwellings with very little dwelling diversity.

There are three areas that are zoned for business uses within St Clair including a service station, tavern and restaurant at the corner of Mamre Road and Banks Drive; the Erskine Park Village shopping centre near Peppertree Reserve and the primary St Clair Village Centre at the intersection of Bennett Road and Endeavour Avenue (governed by Interim Development Order 75).

Most of the remaining land is zoned for open space 6(a) and provides open space areas along drainage and vegetation corridors through St Clair as well as active and passive recreation areas (sportsgrounds and parks). The urban area is constrained by the watercourse corridors bordering the suburb on both the west and east, which are within the Special Use 5(d) Zone.

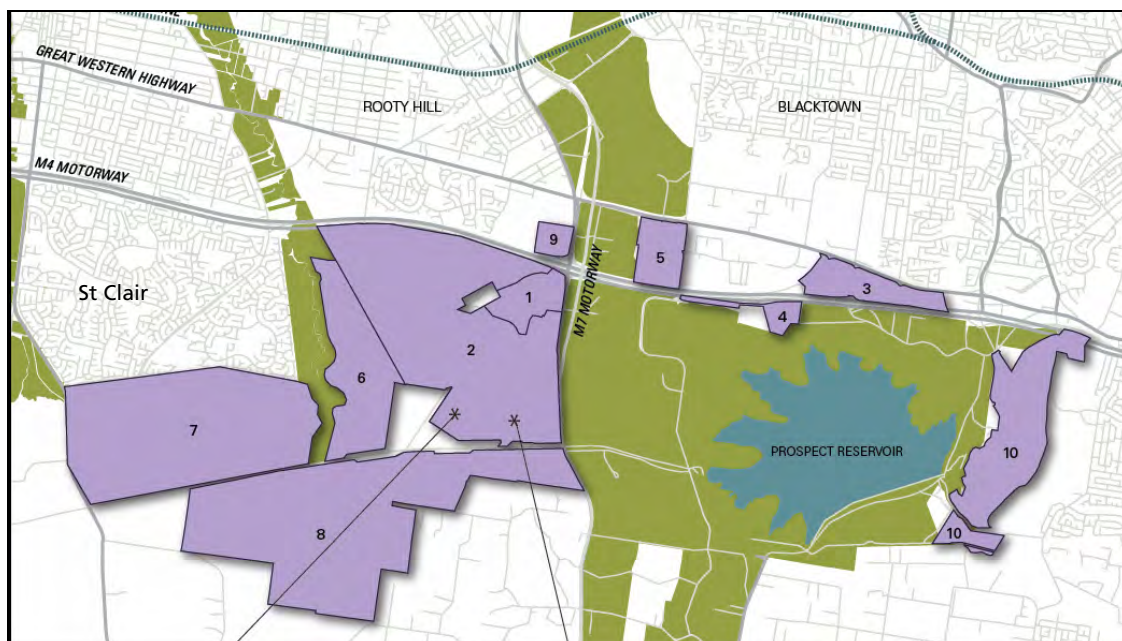
It is important to note that the land to the south of St Clair has been zoned for industrial uses and is identified as future employment lands of the Western Sydney Employment Hub (WSEH). Any heavy industrial activities will need a buffer to existing and future residential uses. However, this area is likely to be used for light industry and business park activities.

#### 5.8.3.1 Western Sydney Employment Hub

As noted above, St Clair sits directly to the north of Area 7 Erskine Park and the Western Sydney Employment Hub, identified in Figure 5.8.4. This area is over 500ha and anticipated to provide employment for 5000 people.

This study will not review the impact of the proposed future employment areas. However, if the Erskine Park development proceeded then there may be some opportunity for urban growth within St Clair, depending on the provision of residential lands as part of the employment hub. This could impact on demand and dwelling types needed for the area.

Figure 5.8.4: Western Sydney Employment Hub



Source: Sydney Metropolitan Strategy, 2007

## 5.8.4 Environmental Opportunities and Constraints

Figure 5.8.5 illustrates the key environmental constraints within St Clair, which are discussed below.

Figure 5.8.5: Environmental constraints for St Clair



### A Topography, Flooding and Drainage

The area of St Clair and Erskine Park is constrained by the catchments of two key watercourses - South (Winnamatta) Creek and its tributaries to the west and Ropes Creek to the east. However, as Figure 5.8.5 above shows, the urban area between Mamre Road in the west and Erskine Park Road in the east remains unaffected by the 1 in 100 year flood level. This is more likely to be an issue in the east towards Ropes Creek. However, there is very little additional land available, except towards the new Erskine Park Employment Area to the south, for future urban growth of St Clair.

Drainage will also be a potential constraint for the area. Most of the drainage paths have been incorporated into the open space corridors through St Clair, which are understood to work effectively for the current density of development. Any change in dwelling types and densities would need to review impacts and infrastructure requirements for drainage.

### B Native Vegetation and Sensitive Ecological Areas

St Clair is an established residential area, therefore, native vegetation is confined to areas not impacted by urban development and primarily used for open space, parklands and along the potential floodways. The main vegetation categories in St Clair are the Shale Plains Woodland and Alluvial Woodland. Remnant native vegetation should continue to be protected and enhanced as part of any development of this suburb, particularly through landscaping of existing allotments.

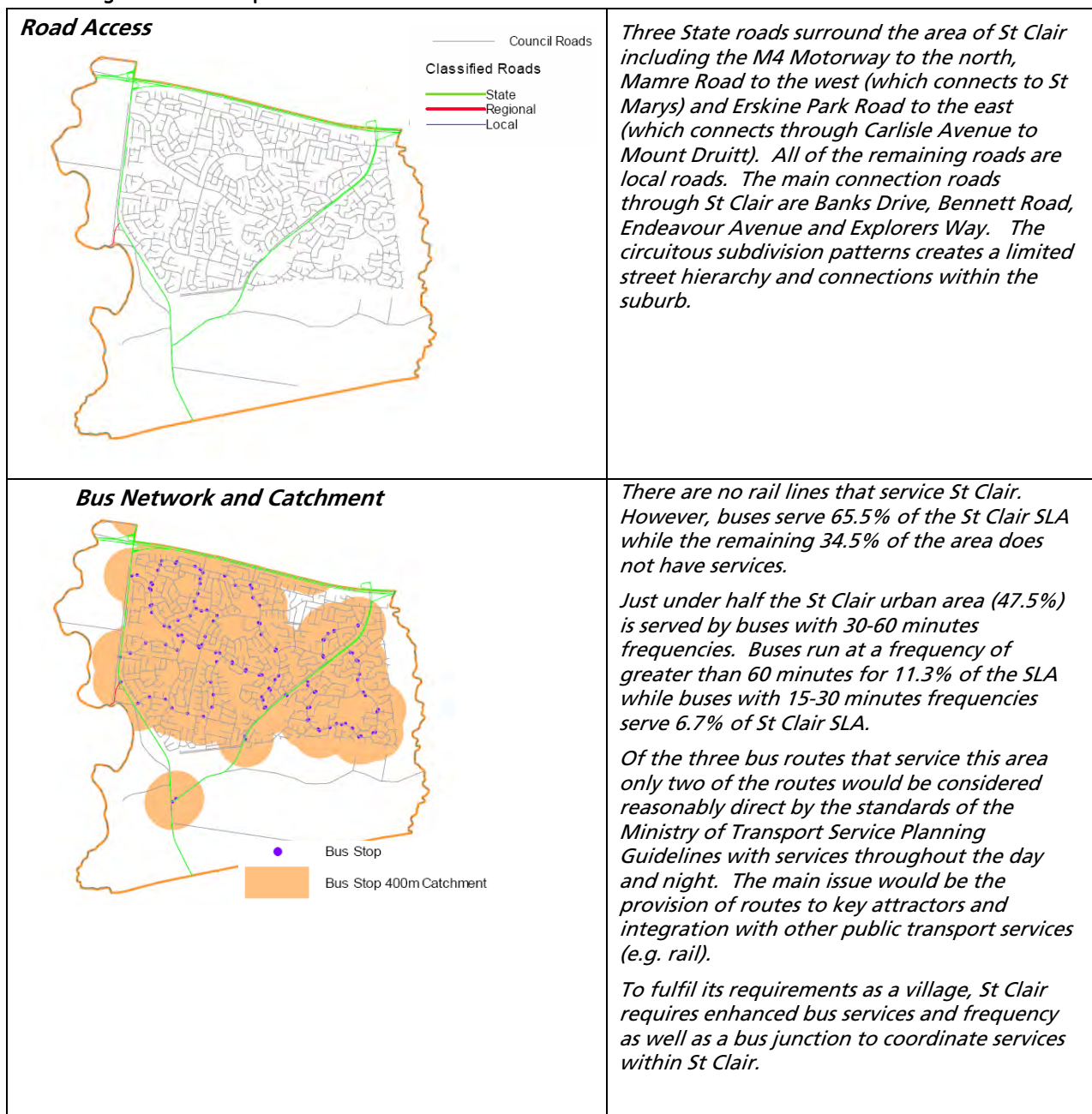
### 5.8.5 Access and Transport

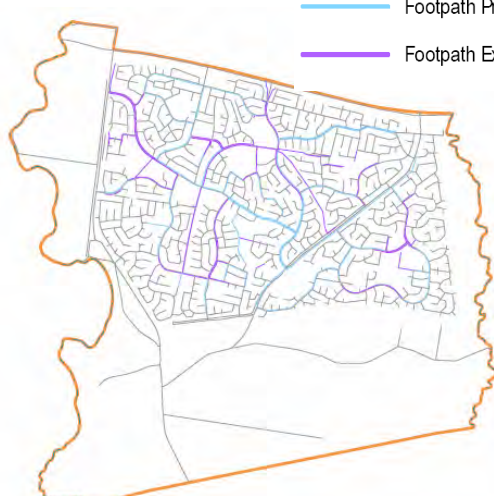

The access and transport characteristics in St Clair have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008<sup>3</sup>.

Improvements will be required to the transportation infrastructure to achieve sustainability targets and retain the village classification for the future community. Based on the analysis outlined below, St Clair is considered to have a limited provision of public transport and a medium provision of active transport.

Figure 5.8.6 provides an overview of the current access and transport characteristics within St Clair.

**Figure 5.8.6: Transport and Access Characteristics**



<p><b>Pedestrian Network</b></p> <p>— Footpath Proposed — Footpath Existing</p> 	<p><i>St Clair has a limited footpath network, with only 6% of roads with footpaths. The footpath network provides a reasonable degree of access to the St Clair shopping centre and this will be further complemented by the proposed footpaths highlighted in blue.</i></p> <p><i>In terms of meeting the requirements of a Village, St Clair requires upgrades to the footpath network to provide continuous paths linking key nodes.</i></p>
<p><b>Cyclist Network</b></p> <p>— Bikeway</p> 	<p><i>The bicycle network in St Clair is reasonably extensive but there is a lack of continuity leading to the key centres such as the St Clair Shopping Centre and limited inter-suburb connections or connections along key open space and watercourse corridors limiting this mode of transport for more than local activities.</i></p> <p><i>Enhanced connectivity should be provided with a focus on linking key nodes. In addition cycle facilities should be provided at these key nodes.</i></p>

All diagrams and information sourced from PITLUS Report 2008

## 5.8.6. Access to Services

### A Retail / Local Shopping

Figure 5.8.7 identifies that St Clair contains three retail centres with the main centre being St Clair Village Centre located on the corner of Bennett Road and Endeavour Avenue. This centre is the focus of retail and commercial services. Other smaller centres include small neighbourhood centres on Mamre Road and Melville Road.

St Clair Village Centre is a standalone shopping centre and contains a large supermarket and 37 specialty shops.

Figure 5.8.7: Retail catchments in St Clair



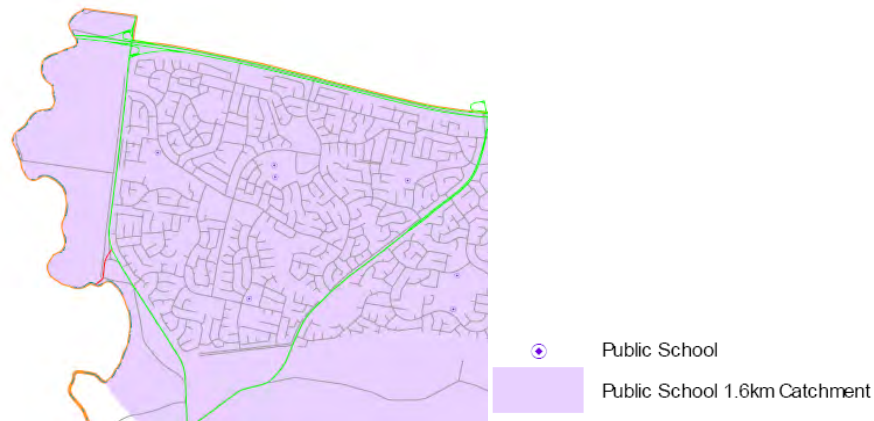
Source: PITLUS Report 2008

### B Schools / Education

As shown in Figure 5.8.8, all residences within St Clair are within the 1.6km public school catchment and therefore well served by public schools.

Public Schools in the area include Bank Primary School, Blackwell Primary School, Clairgate Primary School, St Clair High School, St Clair Holy Spirit Primary School and St Clair Primary School. There is also the Holy Spirit Catholic Primary School within the suburb

Figure 5.8.8: School catchments in St Clair



Source: PITLUS Report 2008



### **C Community Facilities**

There is a high provision of community facilities within St Clair, which are primarily focussed within the St Clair Village Centre. Within this cluster is the St Clair Leisure Centre, Health Centre and Medical Centre. Whilst these facilities meet the requirements of a Village they should be reviewed to meet the needs of the future population.

### **D Open Space**

St Clair has significant open spaces and recreation facilities. There are significantly large recreational areas/reserves associated with overland stormwater paths. There are some sporting areas which include the Mark Leece Sport Complex and the netball courts. The western parts of the suburb contains Peter Kearns Reserve and significant drainage reserves. Other significant reserves and the St Clair Tennis Centre are provided in the southern parts of the suburb.

### 5.8.7. Existing Suburb Character

Figure 5.8.9 identifies the key elements of the suburb character of St Clair, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.8.9: Suburb Character Analysis

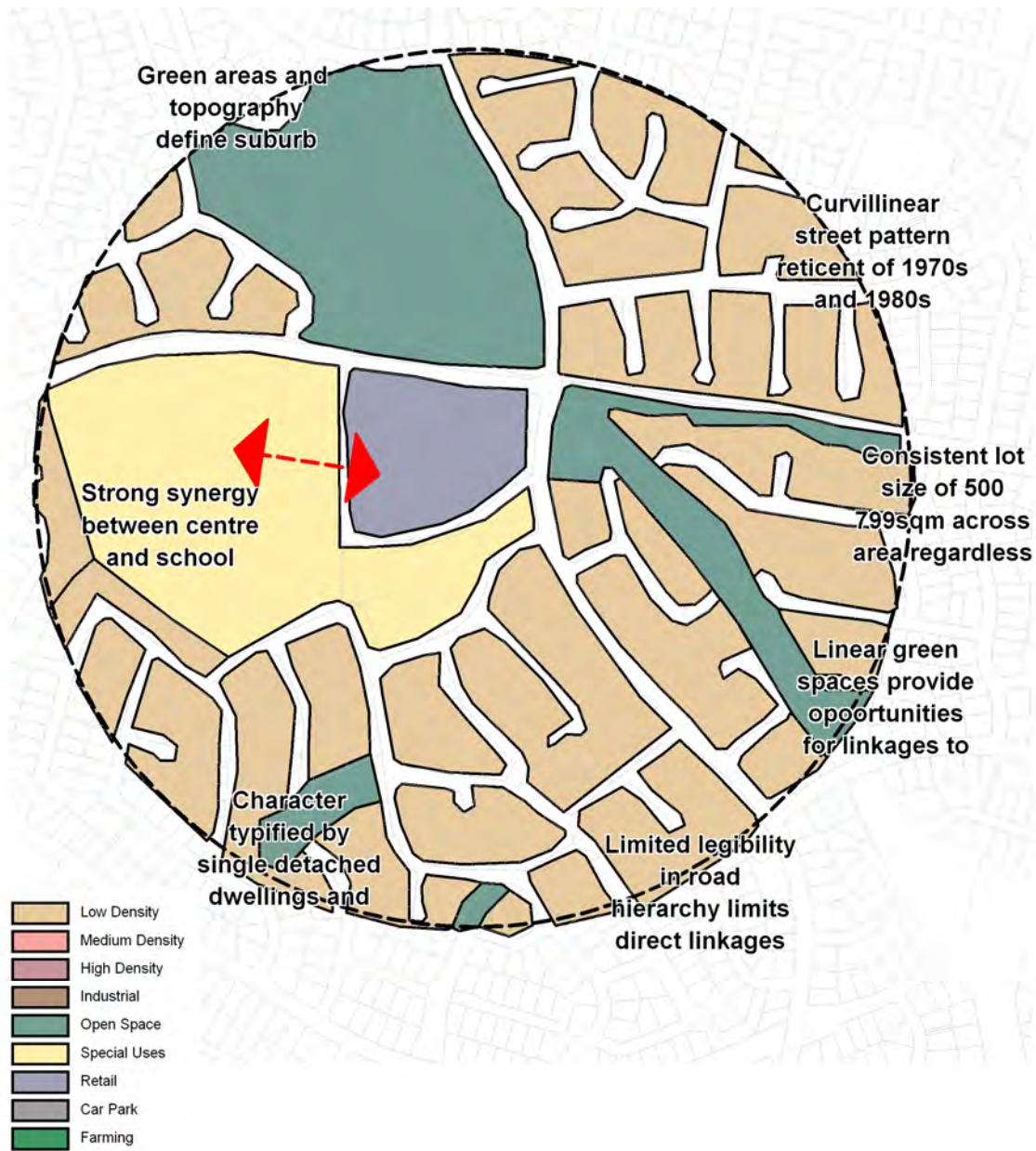


Figure 5.8.10: Examples of dwelling types in St Clair



### 5.8.8. Summary of Key Opportunities and Constraints

The key growth opportunities that will drive urban growth in St Clair include:

- Future development of Western Sydney Employment Area including the adjacent Erskine Business Park may substantially increase employment prospects in the area and this may increase demand for housing in proximity to employment (if this is not already catered for in the employment areas);
- Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported).

There is a need to review the densities proposed in and around the St Clair Village Centre to ensure more diversity can be achieved.

The key constraints that may limit urban growth in St Clair, until Erskine Park Employment Area is developed include:

- limited access to public transport,
- need for public transport to provide enhanced linkages to Erskine Park employment area,
- a population decrease that may decrease the demand for additional dwellings over the next 20-25 years, however smaller households will increase,
- constrained development to the west and east due to watercourses and flooding,
- constrained development to north from M4 Motorway and to south with development of Erskine Park employment area,
- limited availability of large vacant lots that are not used for drainage and open space purposes, and
- existing housing stock was built in last 20-30 years is unlikely to support large-scale redevelopment in short to medium term

Therefore, residential growth is likely to be limited to infill development or mixed-use development in Erskine Park Employment Area

## 5.8.9 Dwelling Opportunity for St Clair Village Centre

### A. Within Key St Clair Village Centres

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the St Clair Village Centre.

Table 5.8.1 summarises the key assumptions made for St Clair Village Centre potential future dwelling capacity. Table 5.8.2 applies these key assumptions to determine its potential future dwelling capacity within St Clair Village Centre.

Table 5.8.1: Assumed densities for St Clair Village Centre

Assumed Probability of Redevelopment and Proposed Development Densities									
St Clair	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares))	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1980's	1.0	400	51.7	7.5%	0%	0%	25%	75%
Urban Study and Strategy	1980's Medium-Low Opportunity	See Sustainability Checklist	600	51.7	10%	0%	0%	35%	65%

(Source: ID Report (Sept 2007)) as well as assumptions by this Urban Study and Strategy.

Table 5.8.2 applies these assumptions and identifies that St Clair Village Centre may achieve between approximately 75 and 115 additional dwellings, based on site constraints, rates of growth and anticipated density of development.

Table 5.8.2: Assumed densities for St Clair Village Centre

St Clair	Type	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain
ID Assumptions	Village	0	0	48	73	121	46	75
Urban Study and Strategy Assumptions	Village	0	0	91	84	175	60	115

Source: ID Report (Sept 2007) as well as findings of this Urban Study and Strategy.

The net dwelling gain is based on the following assumptions:

- Some limited potential to increase the amount of medium density in the area in the medium and long term;
- Dependent on the development of the Erskine Park employment area and the Western Sydney Employment Areas, increased opportunities for increasing densities may result in changing density assumptions in the medium to long term;
- St Clair, comparatively, has fewer environmental constraints which may facilitate increased urban development once land is zoned and serviced adequately; and

- Slightly higher densities than assumed by ID (2007).

The Urban Study and Strategy estimates a higher potential net dwelling capacity for St Clair by 2031. However, this assumes that all of the services/infrastructure necessary to allow St Clair to become a Village will be provided and there will be the market demand to balance the potential residential supply.

**B      Outside Key St Clair Village Centres**

The calculations to determine future dwelling gains in St Clair outside of the Village Centre radius (of 600 metres) is based this on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

The majority of lots in St Clair are from 500 to 799 sqm, however there are significant numbers of larger lots. The development potential of these lots is high as many were built in the 1980's and are predominantly single detached dwellings that may be an under-utilisation of the land in the future.

In 2007 there were approximately 17 vacant lots in St Clair outside of the Village Centre, predominantly of 500-799 sqm, that could result in a net potential gain of 47 dwellings. However, the assumed dwelling yield may be slightly high as many of the vacant allotments identified are at the periphery of the suburban area and are likely to only produce low density single or dual occupancy outcomes. Therefore a dwelling yield of approximately 20-25 is more likely.

In St Clair out of approximately 4,183 existing utilised allotments there is potentially a net gain of 411 dwellings (based on 1 in 13 allotments being redeveloped) through demolition and replacement with additional dwellings. This is based upon the grouping of allotments into size ranges, an assumed dwelling capacity per lot size, and an assumed percentage of each type of allotments being redeveloped based. A higher rate of replacement may result in a higher level of redevelopment in the order of 200-300 dwellings.

**C      Summary of Dwelling Opportunity (Long Term)**

Table 5.8.3 summarises the opportunities from the sections above to determine a potential total additional dwelling capacity within St Clair by 2031.

Table 5.8.3 Summary of net dwelling gains for St Clair by 2031

<i>Total Dwelling Capacity</i>	<i>ID Calculations of Net Dwelling Gain</i>	<i>Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain</i>
<i>Within St Clair Village Centre (600m)</i>	<i>75</i>	<i>85-120</i>
<i>Outside St Clair Village Centre Vacant Land</i>	<i>47</i>	<i>20-25</i>
<i>Outside St Clair Village Centre Demolition &amp; Replacement</i>	<i>411</i>	<i>200-300</i>
<b>TOTAL</b>	<b>533</b>	<b>300-450</b>

*As calculated by ID Report (Sept 2007) and this Urban Strategy*

Population forecasts identify that the total population for St Clair in 2021 will decrease while household numbers will increase:

- Total population from 2006 to 2021 (15 years) is expected to decrease by 1,380 person (which extrapolates approximately to a decrease of 2,300 persons by 2031);
- Total households from 2006 to 2021 (15 years) is expected to increase by 81 households (which extrapolates approximately to 135 households by 2031); and
- Total dwellings from 2006 to 2021 (15 years) is expected to increase by 82 dwellings (which extrapolates approximately to 140 dwellings by 2031).

Future development and demand within St Clair is anticipated to be generated from expansion of the Erskine Park employment area, rather than natural increase within the suburb. St Clair offers significant opportunity to increase dwelling density capacity to meet future population projection requirements, however it is future demand is not anticipated until the medium to longer term.

In conclusion, the predicted population growth and dwelling demand of St Clair may not be as high as the potential residential capacity for the suburb.

## 5.8.10 St Clair Assessment against Sustainability Checklist

St Clair Village Centre has been assessed against the Penrith Urban Strategy Checklist to determine its suitability for future development, future actions required to meet future needs and priority for actions to occur.

Table 5.8.4 St Clair Village Centre Assessment against Sustainability Checklist

<i>ST CLAIR</i>				
<i>Strategy Element</i>	<i>Current Centre Classification - Village (600m radius)</i>	<i>Future Centre Classification Village (600 m radius)</i>	<i>Additional services/actions needed</i>	<i>Priority</i>
<i>Population Size</i> <i>6,380 dwgs in St Clair Suburb with 2,000 in Village catchment, 6,445 dwgs in 2021</i>	✓✓	✓✓	<i>Increase in density to provide housing diversity and meet village size</i> <i>Northern areas of centre are business and employment zones limited residential potential.</i>	<i>Medium to Long (10-15 years)</i>
<i>Dwelling Type and Mix</i>	✓	✓	<i>Need for greater range of housing types to meet future needs, particularly older persons.</i>	<i>Medium to long (10-15 years)</i>
<i>Road Access</i>	✓✓	✓✓	<i>Redevelopment provides opportunities to enhance road linkages and more direct access.</i>	<i>Medium (5-10 years)</i>
<i>Active Transport</i>	✓✓	✓✓	<i>Extension of footpaths in all streets. Extension of cycle ways in open space network required to connect nodes.</i>	<i>Medium (5-10 years)</i>
<i>Public Transport</i>	✓	✓	<i>Need for Bus Junction</i> <i>Need for higher frequency of services.</i> <i>Need for extended hours of services.</i> <i>Need enhanced connectivity to LGA.</i>	<i>Medium to Long Term (10 - 15 years)</i>
<i>Physical Utilities/Infrastructure</i>	<i>TBC</i>	<i>TBC</i>	<i>Need to review capacity in Penrith Infrastructure Strategy 2008.</i>	<i>Short to Medium (1 to 5 years)</i>
<i>Environmental Considerations</i>	✓✓	✓✓	<i>Few constraints</i>	
<i>Access to retail and commercial services</i>	✓✓✓	✓✓✓	<i>Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs.</i>	<i>Medium (5-10 years)</i>
<i>Access to community services and Facilities</i>	✓✓✓	✓✓✓	<i>Strong community infrastructure available.</i> <i>Audit existing infrastructure and needs.</i>	<i>Short to Medium (1-5 years)</i>

<i>ST CLAIR</i>				
<i>Strategy Element</i>	<i>Current Centre Classification - Village (600m radius)</i>	<i>Future Centre Classification Village (600 m radius)</i>	<i>Additional services/actions needed</i>	<i>Priority</i>
<i>Public Domain and Open Space</i>	✓✓	✓✓	<i>Town centre improvements Need central focus/town square/meeting space. Safety and surveillance in open space Park embellishments</i>	<i>Medium (5-10 years)</i>
<i>Housing Sustainability</i>	✓	✓	<i>Implement Sustainable housing initiatives</i>	<i>Medium (5 - 10 years)</i>

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.8.11 Future Actions

The key actions arising for St Clair to expand its residential capacity as a Village include

- Increase in housing density in and around St Clair Centre to meet Village residential target (2,100-5,500 dwellings). Should be noted that the northern areas around the centre are business and employment zones therefore have limited residential potential;
- Provide for greater range of housing types to meet future needs, particularly older persons;
- Consider enhancing road linkages and improving road access when reviewing redevelopment opportunities around the centre;
- Upgrade and extend the footpath and cycle path network across the suburb. Cycle path network should provide connect key nodes and areas of open space;
- Investigate improved public transport services through higher frequency and extended hours of service including the opportunity for a bus junction at St Clair Village and greater connectivity to the remainder of the LGA;
- Review and investigate the capacity of infrastructure to support future development across the suburb;
- Support and promote growth within and immediately around the existing retail centres by way of mixed use developments/ range of floor space to continue to cater for existing and future needs;
- Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs;
- Maintain the high level of community infrastructure in the suburb and undertake community infrastructure audits to ensure community infrastructure meets future needs; and
- Ensure all future housing incorporate sustainable housing initiatives.





5.9

Werrington  
Station



## 5.9 WERRINGTON STATION

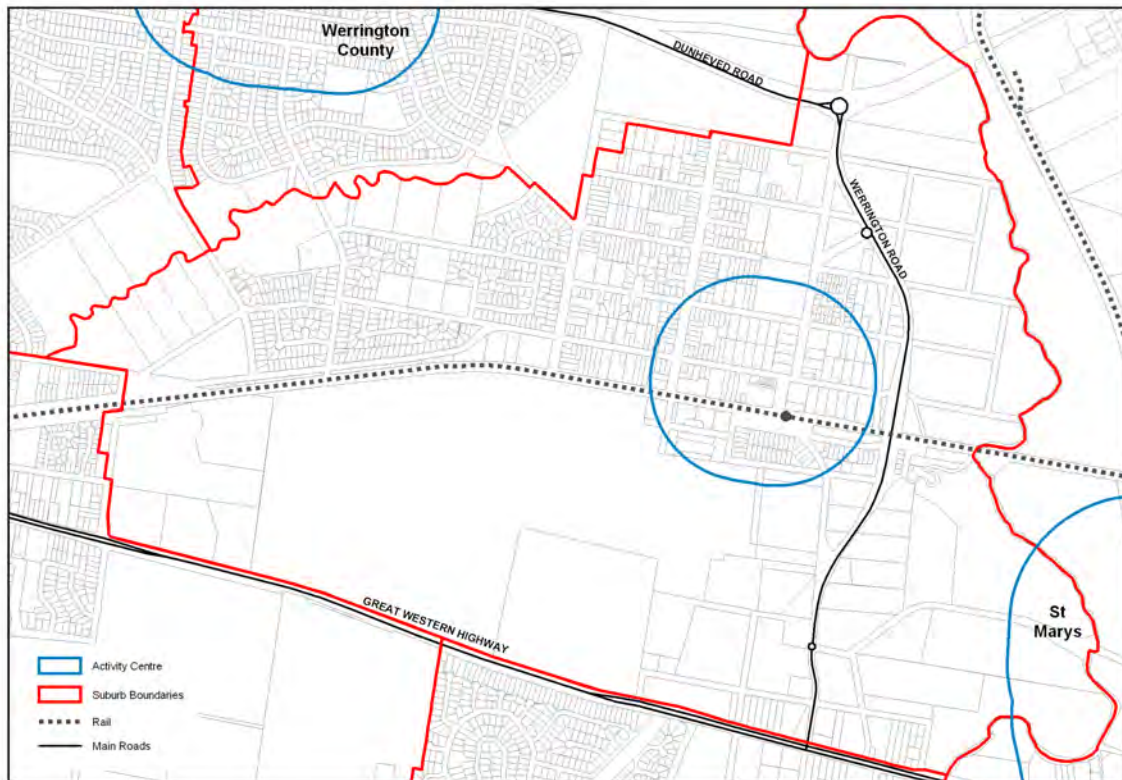
### 5.9.1 Suburb Overview

The suburb of Werrington (as distinct from Werrington County to the north) is located to the west of St Marys and is bounded by the Great Western Highway to the south, Werrington Creek to the north and west, and South (Wianmatta) Creek to the east. The suburb has a total area of 445ha and is portrayed in Figure 5.9.1.

Werrington's main centre is located around the Werrington Railway Station with local shops to the west and north of the railway station on Victoria Street. Other key features include Werrington Public School, Kurrabee School, Thorndale School, Colonial Golf Course, Cobham Remand Centre, Croatia Park, Ellison Reserve, Kingsway Playing Fields, South Creek Park and Werrington Lakes Flora & Fauna Reserve.

The University of Western Sydney Penrith Campus Werrington North site occupies the majority of the land between the railway line and the Great Western Highway. Other significant land uses in the southern parts of the suburb include the Cobham Remand centre and Sydney Water land.

Figure 5.9.1: Map of Werrington Suburb

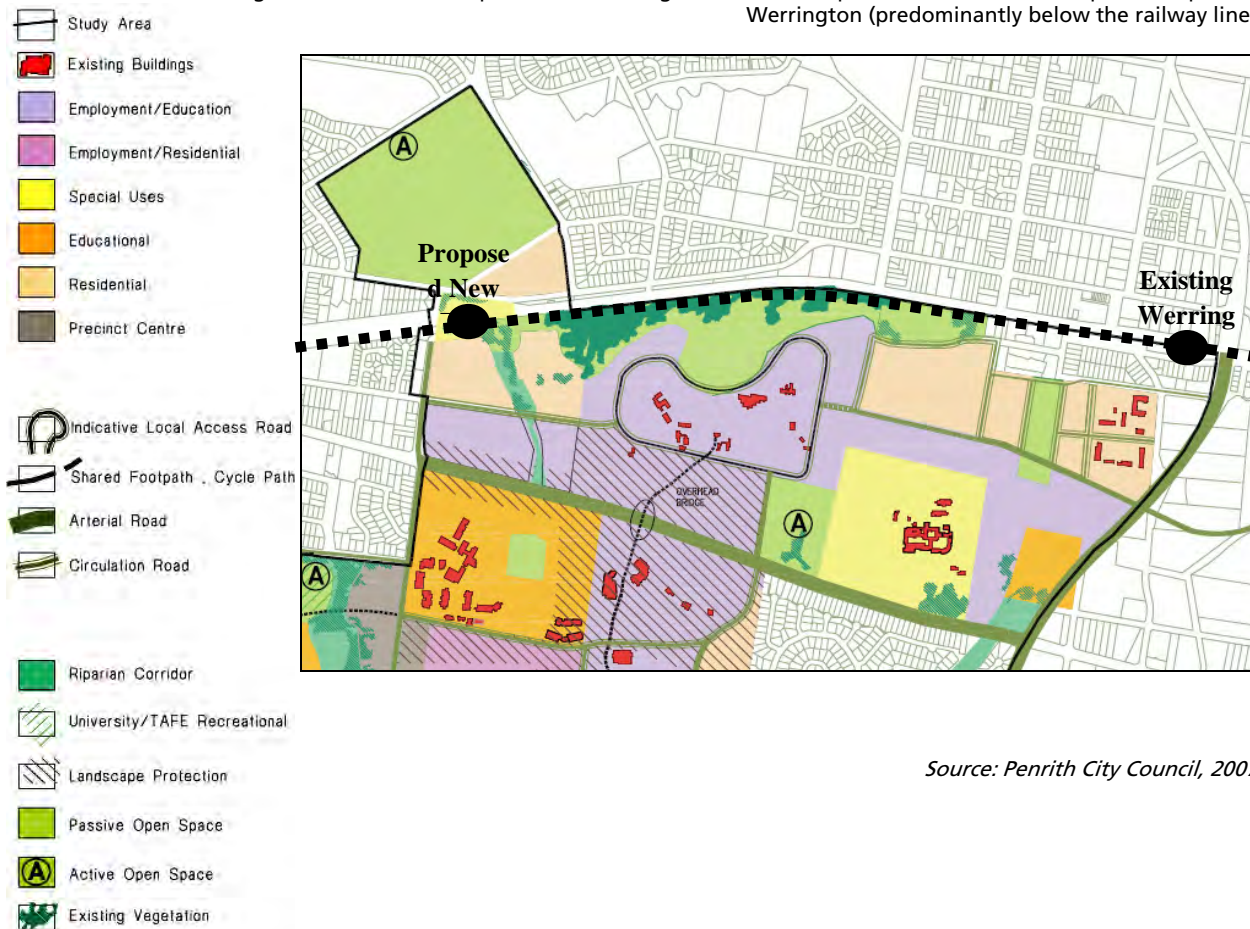


It is noted that a significant proportion of the current University of Western Sydney lands to the south of the railway line are designated within the Werrington Living and Learning Precinct ('WELL Precinct'), which is proposed to contain its own rail station and village centre. The WELL precinct is also proposed to take in some lands to the north of the railway line, where a significant proportion of Werrington community facilities are located. The creation of this additional centre will have a significant impact on Werrington Station Village.

Figure 5.9.2 illustrates the extent and future uses of the proposed WELL Precinct, anticipated to commence development around 2010. The WELL Concept Plan addresses the under-utilisation of a great deal of the land owned by the University of Western

Sydney and neighbouring land owners (particularly with its proximity to the Western Rail Line) and to develop new employment areas and residential development that build upon the educational and employment uses of the University.

Figure 5.9.2 WELL Concept Plan for Werrington to show the potential future redevelopment of part of Werrington (predominantly below the railway line)



Source: Penrith City Council, 2007

Currently Werrington Station is designated as a 'Neighbourhood Centre' under Council's Interim Centre's Hierarchy Policy. However the location of Werrington Station on the railway line would suggest its transport infrastructure enables this centre to provide higher order services and access to transport. In addition, the development of the WELL Precinct Plan has the potential to reinvigorate development in the area and attract increased urban development for people needing access to the improved University Precinct and ancillary services/employment opportunities. This development provides a significant opportunity to elevate Werrington Station from being a Neighbourhood Centre to a Small Village or Village in the Centres Hierarchy as it grows over time.

### 5.9.2 Suburb Demographics and Housing Trends

Werrington is an established residential area with the majority of the population growth occurring during the post war period.

#### A Current Demographics

In 2006, Werrington had a total population of 3,494 people. Between 1991 and 2006 Werrington experienced marginal population growth. The population grew by an additional 300 people during this 15 year period.

### *Age:*

The age structure of Werrington is similar to that of the Penrith LGA and trends between 1991 and 2006 indicate that the Werrington population is ageing. Evidence of this was a minor decrease in the younger age groups and increases in the older age groups. Notably, there was a significant increase in the proportion of people aged 50-59 years which increased from representing 6.5% of the Werrington population in 1991 to 14.4% by 2006.

### *Income:*

The majority of households in Werrington earn a low to medium income (average weekly income in 2006 of \$890). Significantly, between 1991 and 2006 the amount of low and medium-low incomes in Werrington has increased whilst the proportion of high income earners has decreased. Therefore, the suburb's socio-economic status is decreasing over time.

### *Car Ownership:*

Werrington has a lower rate of car ownership compared to Penrith LGA. Comparatively high proportions of Werrington households do not own a car (15%) when compared with that in Penrith LGA (9%) households which do not own a car. This may indicate a higher reliance on public transport and less ability to purchase private vehicles.

### *Households:*

Werrington has a diverse household structure which varies significantly to that of the Penrith LGA. The two dominant household groups are lone person households and couples with children which comprise over one quarter (27%) of all households. However there is a lower proportion of couples with children households in Werrington, when compared with Penrith LGA.

Couples without children represent 20% of the local population and there is a higher proportion of one parent families (18%) compared to that of the Penrith LGA. Between 1991 and 2006 there has been a significant loss of couples with young children from Werrington and the most significant growth has occurred in the lone person households.

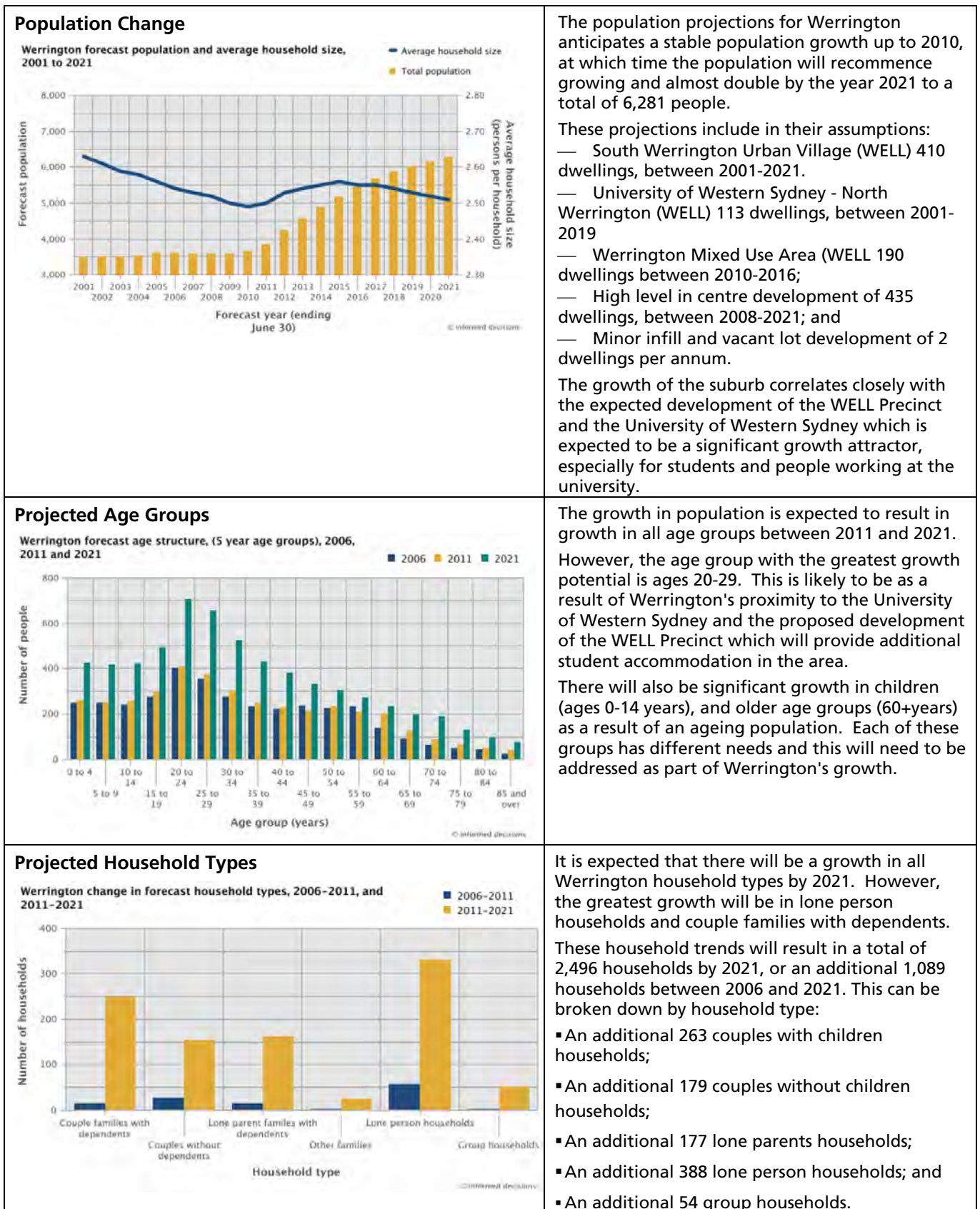
### *Dwelling Type & Tenure:*

The dwelling types and tenure of Werrington in 2006 are also substantially different to that of Penrith LGA with only 46% of dwellings being separate dwellings (compared to 85% for Penrith LGA). Werrington has a very high proportion of medium and higher density dwellings (47% compared to only 14% across the Penrith LGA).

There is also diversity in the tenure of dwellings in Werrington. In Werrington a significant proportion (39%) of households are in private rental (compared to the Penrith LGA where this figure is 25%). In Werrington, 32% of households have mortgages and 21% of households are fully owned. There are also 76 social housing units in Werrington.

## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.9.3: Werrington Projected Characteristics



\*The projections and graphs are derived from ID Population and Household Forecast for Werrington Station, September 2007. It is noted these numbers are projections undertaken in 2007 and may change subject to development overtime

### 5.9.3 Existing Zoning and Land Use Pattern

Unlike most other suburbs, Werrington is dominated by the Special Use Zones which identifies the University of Western Sydney and the Cobham Remand Centre.

The lands to the east of Werrington Road along the South Creek corridor are Special Use 5(d) Corridors Zone permitting recreation and environmental outcomes. This area is unlikely to ever be developed for urban uses as it is subject to flooding and is suitable mainly as a riparian and ecological corridor and for recreation purposes. This is a significant constraint to urban growth to the east of Werrington.

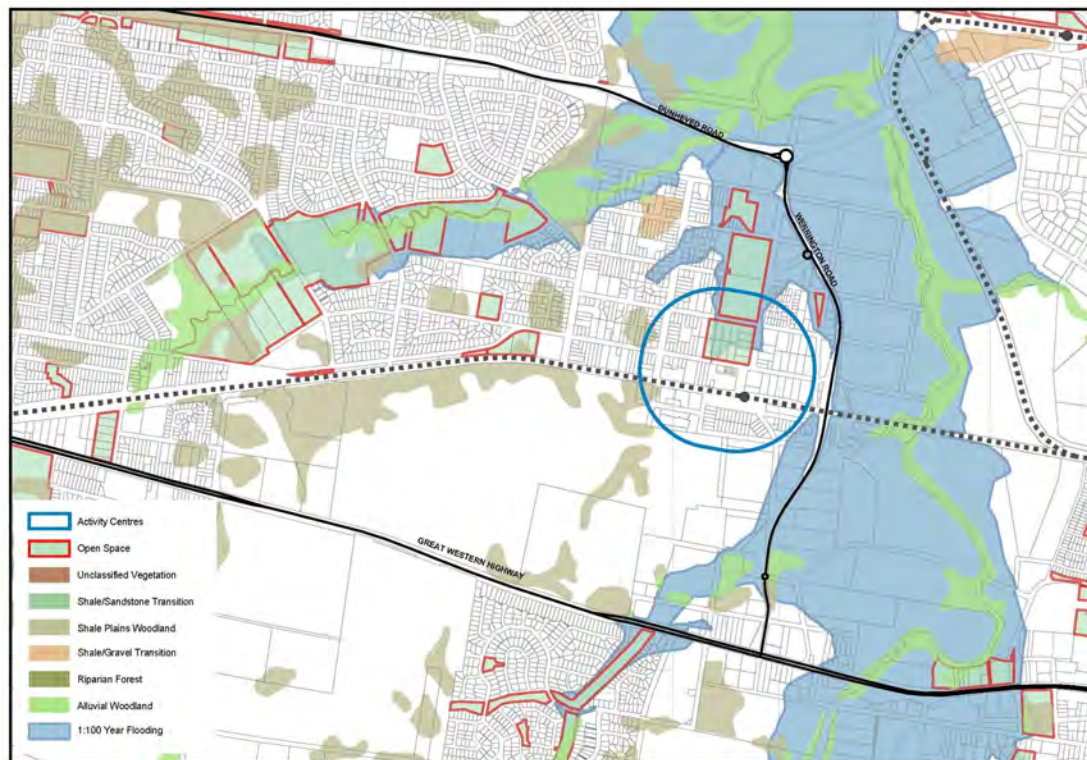
Residential areas are generally confined to the lands north of the railway lands except for a small area of Residential 2(d) Medium Density land just south of the railway station which is dominated by attached housing such as townhouses. There is further opportunities to redevelop the Sydney Water site to the south of the railway station, currently zoned 1(d), to higher density residential, if appropriately zoned.

The residential area west of Lethbridge Avenue is zoned Residential 2(b) (Low Density) and it contains predominantly single detached dwellings. The residential area to the east of Lethbridge Avenue is mainly zoned Residential 2(c) (Low to Medium Density), which includes a mix of detached dwellings and attached dwellings such as townhouses. Immediately to the north of Werrington Station there is a small area zoned Residential 2(e) (Medium to High Density) which consists of a mix of dwellings including residential flat buildings.

### 5.9.4. Environmental Opportunities and Constraints

Figure 5.9.4 illustrates the key environmental constraints within Werrington, which are discussed below.

Figure 5.9.4: Environmental constraints for Werrington



## **A. Topography, Flooding and Drainage**

Werrington Station Village is located on low-lying lands along the catchment of two creeks, South (Wianmatta) Creek to the east and Werrington Creek to the north-west. The lands to the south of the railway line are undulating with a high point located centrally on the UWS site.

A substantial area of the low-lying land along these creeks are potentially subject to a 1 in 100 year flood. Existing residential development is predominantly located outside these flood prone areas, with flood prone land generally overlapping with open space areas. Lands to the east of Werrington Road are also constrained by flooding and therefore are not suitable for urban development.

It is important to note that two of the primary access routes into Werrington, Dunheved Road and Werrington Road, are potentially subject to flooding - limiting emergency egress to Victoria Street to the west. Emergency access is also a serious issue for properties to the north of Princess Street because all of the access roads have the potential to flood. These lands are constrained against significant urban growth unless this issue can be addressed.

On this basis, urban growth in Werrington would be considered to currently have a high level of constraint by environmental factors. Flooding can be ameliorated by regional water management techniques and detention systems and future development of Werrington is not recommended to occur until these significant constraints are suitably resolved.

## **B Native Vegetation and Sensitive Ecological Areas**

As Werrington is an established suburb, significant native vegetation is generally confined to areas primarily used for open space, parklands and along the potential floodways / watercourses. The main species present include alluvial woodland and shale plains woodland (see Figure 5.9.5). Ecological corridors are particularly important along the watercourses and any urban growth should be setback to provide sufficient riparian corridors and enhanced connections through linear parks.

Another area with significant vegetation is the sparsely developed University site, particularly along the rail corridor. The proposed development of this area as part of the WELL Precinct should be zoned to protect significant areas of native vegetation and, where possible, link it to other areas of native vegetation to enhance ecological corridors. It is understood that environmental protection zones are proposed under draft LEP 2008 for these areas.

## **5.9.5 Access and Transport**

The access and transport characteristics in Werrington Station Village Centre have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008

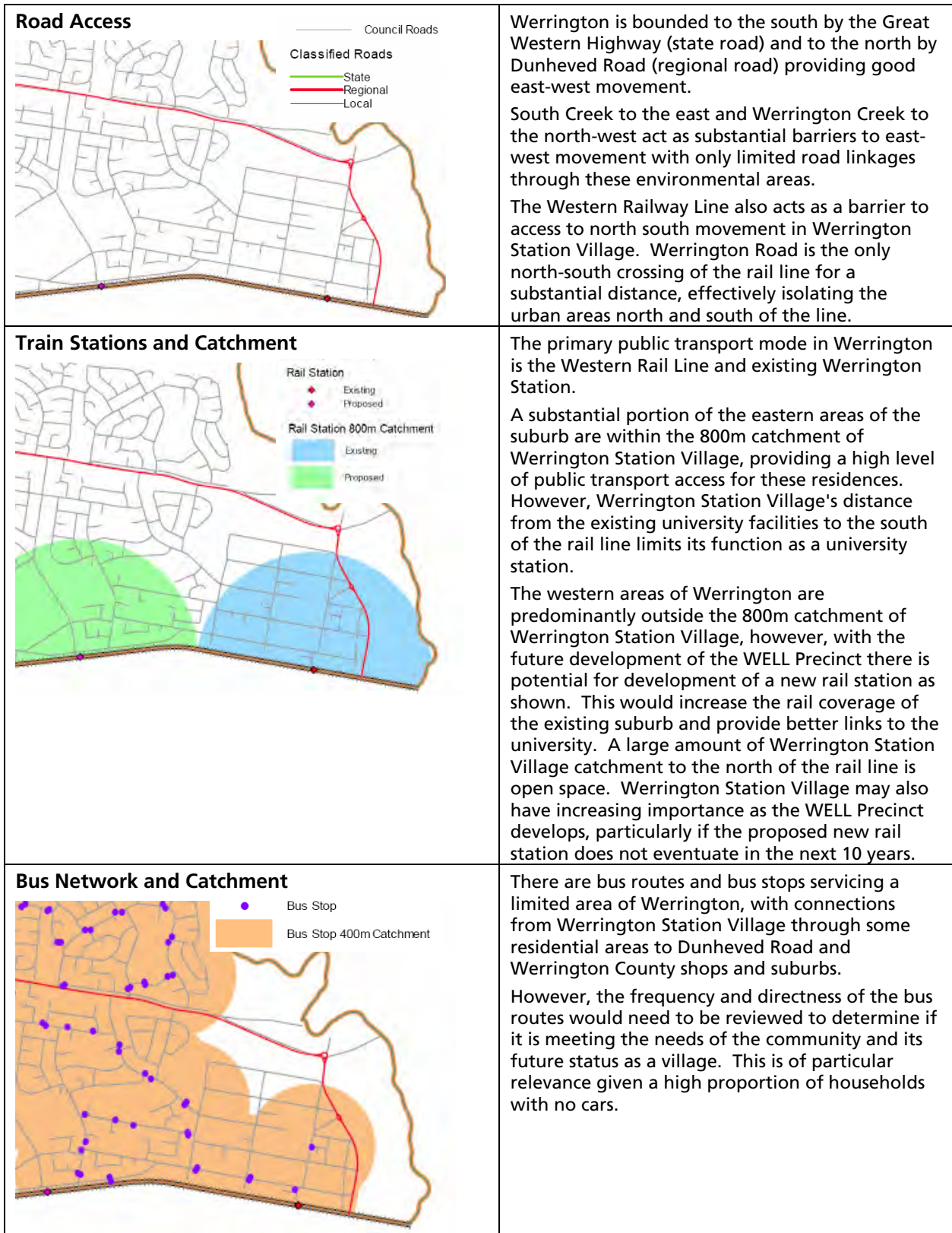
As Werrington is located on the train line, it has been identified to have the potential to move from a neighbourhood centre to a village. Enhancement of the active transportation environment (ie walking paths and cyclist networks) is required to ensure Werrington fulfil the requirements of a village.



The following provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

Where there are discrepancies in the area boundaries between the PITLUS Report (2008) and that of the ID Report (2007) this section focuses on the available PITLUS mapping for the North Werrington area where the dominant area of existing urban development has taken place.



Figure 5.9.5: Transport and Access Characteristics



<p><b>Cycle Network</b></p> 	<p>The cycle path network provides a limited level of coverage.</p> <p>There is a lack of continuous links approaching Werrington Station which may limit the number of people combining cycling with train services. Off-road links should be investigated where possible, particularly to provide access to the southern areas and across to the WELL Precinct, as well as cycle connections across to South Creek, a key recreational corridor for Werrington.</p> <p>The railway line provides a barrier of integration to cycleways in wider Penrith LGA.</p>
<p><b>Pedestrian Network</b></p> 	<p>There are few existing footpaths in Werrington, even in close proximity to the train station, and the proposal for additional footpaths will assist in creating continuous and accessible routes. There needs to be provision of good footpaths on both sides of the street within 800m of the Station providing linkages to key nodes. In addition, all new urban development should require footpaths and connections to key networks.</p> <p>The railway line provides a significant barrier to pedestrian linkages between northern and southern areas of Werrington.</p>

All diagrams sourced from PITLUS Report 2008

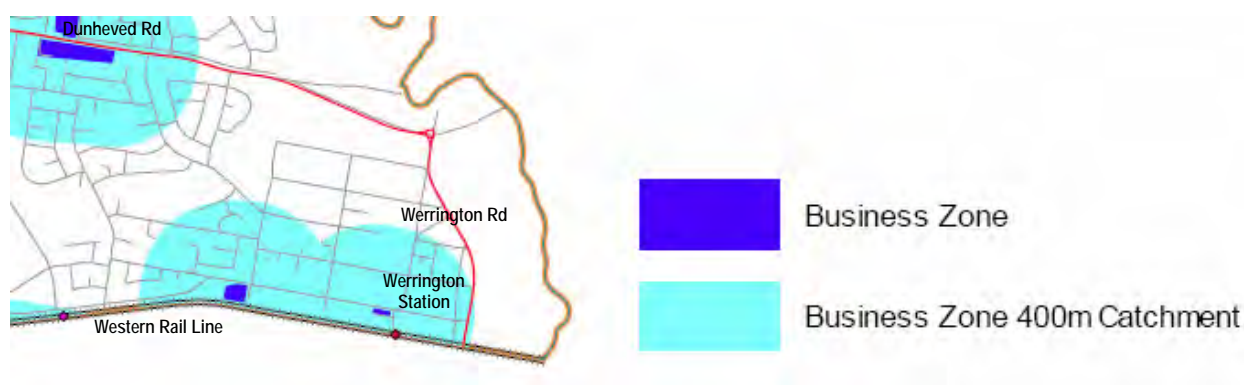
## 5.9.6 Access to Services / Employment Opportunities

### A Retail / Local Shopping

There are two shopping/retail locations within Werrington. Within the Werrington Station Village radius there is a small strip of local shops (with some vacancies) and towards the west further along Victoria Street there are a some limited shops associated with the Colonial Hotel.

These two shopping locations have a catchment that includes a large percentage of the residential areas north of the railway line (See Figure 5.9.6) except for the area towards Dunheved Road. However, both centres only provide a very limited range of local services. The nearest significant retail centre is at Werrington County to the north-west (shown in Figure 5.9.6) where there are more services including a Franklins supermarket, Bank, Australia Post and Bottle Shop.

Figure 5.9.6: Retail Catchments in North Werrington



Source: PITLUS Report 2008

Currently these services may be suitable (and even under-utilised) for the current Neighbourhood Centre designation, however, there is expected to be an increased need for additional services associated with the predicted urban growth of Werrington Station Centre to a Village designation and the development of the WELL Precinct in the future. The WELL Precinct will have its own retail services. However, until the new rail station is built, Werrington Station and Kingswood Rail Stations will remain the main commuter access points to this facility. Therefore, retail that predominantly serves local resident needs (as well as passing commuter/student trade) may need to increase over the next 5-10 years.

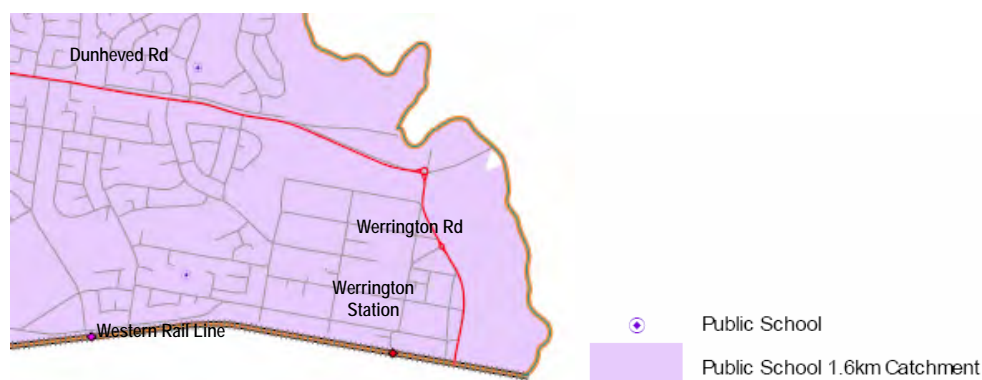
Expansion of the business zone and introduction of mixed use zones, adjoining the existing business zones, may facilitate the provision of additional shops and services and enable larger footprints to encourage a small supermarket to establish in the Village. Enhancement of existing retail along with additional retail floor space will increase the local provision of services and reduce trip generation of residents to other surrounding areas.

## B Education / Schools

All dwellings to the north of the rail line are within 1.6km of a public school, as shown in Figure 5.9.7, and therefore the area is considered to be well serviced by public schools. This includes, but is not limited to, Werrington County Public School, Werrington Public School, Werrington Primary School, Kurrambee Special School, and Thorndale School. There are also a number of schools in the adjacent areas of St Marys, Cambridge Park and Kingswood that service this area.

In addition, there is the University of Western Sydney, the Western Sydney Institute (Nepean Institute), and TAFE in close proximity to Werrington providing tertiary education opportunities. On this basis, there is currently high access to education facilities in Werrington and in this regard it is serviced at a level above that of a normal Neighbourhood Centre. However, as the suburb grows, Council will need to liaise with the NSW Department of Education to ensure that capacity of these schools grows at a similar rate to continue to provide a high level of access to education.

**Figure 5.9.7: Public school catchments in North Werrington**



*Source: PITLUS Report 2008*

### **C Community Services**

A significant range of community services are located in Werrington adjacent to Werrington Creek that includes Yoorami Children's Centre, Harold Corr Community Hall, Werrington Youth Centre, and Victoria Street Community Cottage. The Thorndale Centre in Rance Street provides employment services. These provide a range of community services for the area. However, none of these services are focussed around Werrington Station Village retail/business centre, limiting access primarily to private vehicles and bus services. It is noted that service providers identify potential users of these facilities have difficulty accessing the existing facilities due to lack of transport in close proximity to these services

Assuming there is sufficient capacity for the current population, there is currently a medium level of access to community services in Werrington. This level would need to be maintained by growth in services as Werrington grows. There may also need to be an increase in student services and services for older age groups as these two age groups have the greatest potential to grow with proximity to the university and an ageing population.

It is noted that a new community centre is proposed within the WELL Precinct to meet the needs of the residents and students within that precinct

### **D Open Space**

Werrington Station Village is well serviced by a range of local and regional open space and recreation facilities. Those facilities within the immediate village centre catchment include Parkes Avenue Sports Complex, Rance Oval, Arthur Neave Tennis Centre and Hall and basketball courts in the north.

The flood prone lands to the east contain the significant regional sport and recreation facilities including the Colonial Golf Course, archery and the Kingsway Playing Fields and associated facilities. There are also numerous linear parks and reserves located along the Claremont, Wianamatta and Werrington Creeks. Further to the west of Werrington Station Village is the Werrington Lakes Flora and Fauna Reserve as well the Penrith Sports Stadium, Harold Corr Oval and Shaw Park.

## 5.9.7 Existing Suburb Character

Figure 5.9.8 identifies the key elements of the suburb character of Werrington, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.9.8: Suburb Character Analysis

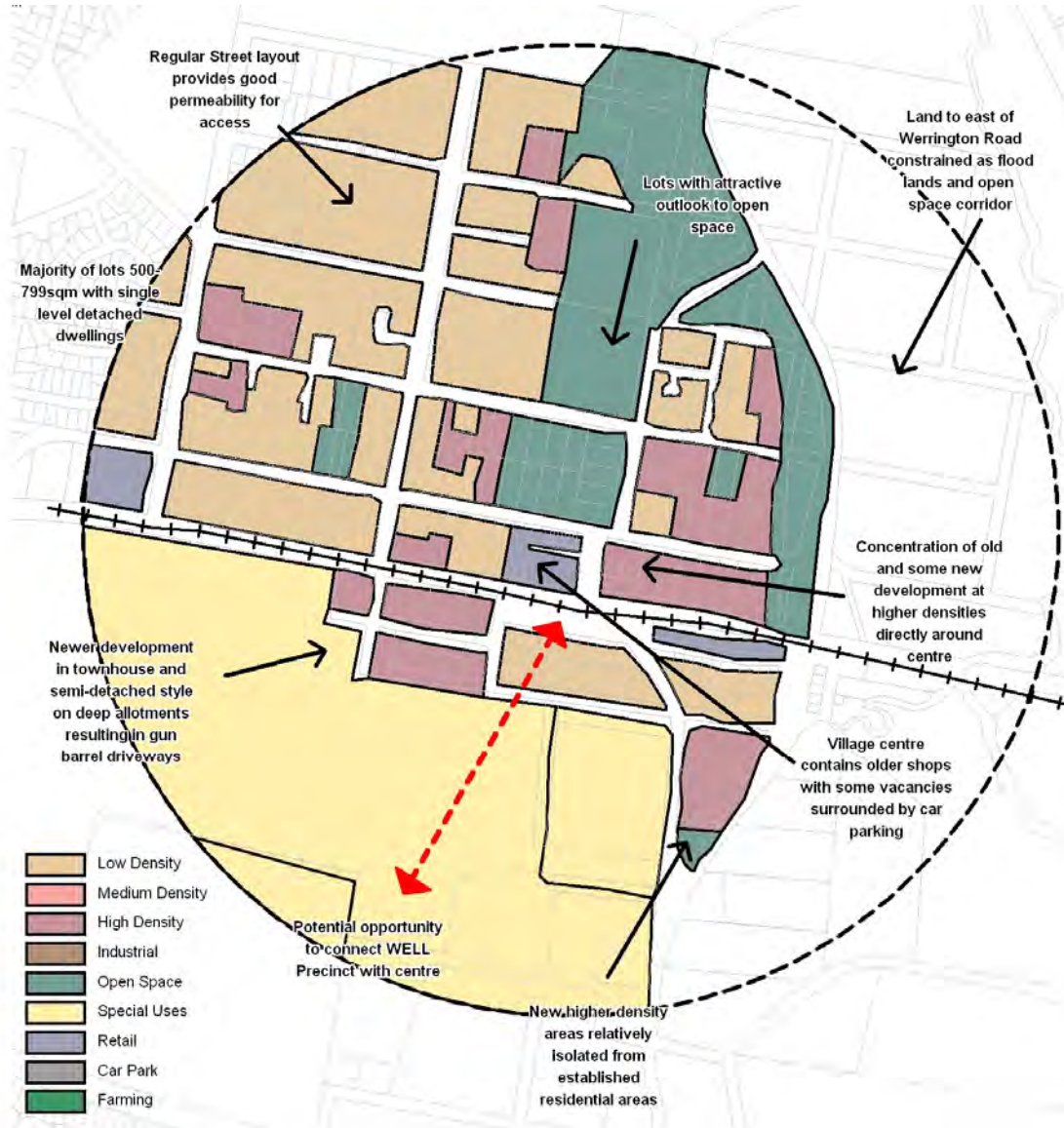


Figure 5.9.9: Examples of dwelling types in Werrington



### 5.9.8 Summary of Key Opportunities and Constraints

The key growth opportunities that will drive urban growth in Werrington that can be summarised from the above analysis are as follows:

- Reasonable access to transport, particularly Werrington Railway Station, which was recently upgraded (in 2008) and is accessible;
- Good access to local public schools;
- A mix of housing types (compared to the Penrith LGA) to meet the needs of a wider cross section of the community and promote ageing in place;
- Under-utilisation of a number of sites, often up to 800 sqm in area and containing single detached dwellings. These sites are in close proximity to the Werrington Station Village Centre where consolidation and redevelopment may be able to meet future mixed use and housing demand.
- Extensive open space and recreation facilities within and in close proximity to Werrington Station Village Centre.

Werrington Station Village Centre is likely to be the focus for future development to provide convenient access and transportation. There is opportunity to significantly upgrade the existing neighbourhood centre and provide stronger connectivity to the rail station.

The key constraints that will limit urban growth in Werrington Station Village Centre include:

- Significant environmental constraints to urban growth, particularly along South Creek and Werrington Creek with the associated flooding issues and need to protect native vegetation that will require substantial buffers;
- Poor road, pedestrian and cycle connections in/out of Werrington (particularly in the event of a major flood);
- Poor pedestrian and cycle connections between the rail station and adjacent residential areas and key attractions;
- Poor connections between Werrington Station Village and the proposed South Werrington Village (within WELL Precinct) to the south;
- Limited employment opportunities within and in close proximity to the Werrington Station Village Centre through the lack of any industry, significant retail or commercial development, and poor connections to University of Western Sydney;
- Limited provision of local retail services, including land zoned to permit a small supermarket;
- Some sterilisation of land through strata development for attached housing and apartment blocks on the limited land available near the station;
- Some sterilisation of land by the need for buffers around the Cobham Remand Centre.

## 5.9.9 Dwelling Opportunities for Werrington Station Village Centre

### A. Within Werrington Station Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Werrington Station Village Centre.

Table 5.9.1 summarises the key assumptions made for Werrington Station Village Centre potential future dwelling capacity.

The following tables summarise the key data from the report entitled 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) prepared by Informed Decisions.

**Table 5.9.1: Assumed densities for Werrington Station Village Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Werrington Station	Current Centres Hierarchy Level	Development Era	Access to Services/ Transport Score	Radii (m)	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	Neighbour-hood Centre	1950's - 1970's	1.5	300m	11.3% (1.21ha)	0%	0%	50%	50%
Urban Study and Strategy Assumptions (see below)	Future Village	1950's - 1970's High Opportunity	See Sustainability Table	300m	20% (2.14ha)	0%	20%	80%	0%

*Source: ID Report (Sept 2007) as well as assumptions of this Urban Study and Strategy.*

Excluding Metropolitan Development Sites, Table 5.9.2 identifies that Werrington Station Village Centre may grow between 35 to 98 additional dwellings. However, an increase in centre designation and potential dwelling densities is subject to Werrington meeting the Sustainability Checklist criteria for a Village.

**Table 5.9.2: Assumed Dwelling Numbers for Werrington Station Village Centre**

Werrington Station	Type	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain
ID Assumptions	Neighbour-hood Centre	0	0	30	15	45	10	35
Urban Study and Strategy Assumptions (see below)	Future Village	0	32	86	0	118	20	98

*Source: ID Report (Sept 2007) as well as findings of this Urban Study and Strategy.*

Future dwelling opportunities Strategy assumes Werrington Station Village has:

- The potential to increase from a Neighbourhood Centre to a Village in 10-15 years;
- A significant increase in the residential catchment with centre's radius increasing from 300m to 600m;
- A doubling or more of developable area;

- A significant increase in the percentage of developable land being developed; and
- Significantly higher densities potentials than assumed by ID (2007).

### **B      Outside Werrington Station Village Centre**

The calculations to determine future dwelling gains in Werrington outside of the Werrington Station Village Centre radius is based this on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

A review of the areas of Werrington outside the Village Centre radius identifies that the majority of lots are of 500 to 799 sqm in size. The development potential of these lots is high as many were built in the 1960's and are predominantly single detached dwellings that may be an under-utilisation of the land in the future.

In 2007 there were only 3 vacant allotments identified, resulting in a potential net gain of 27 dwellings. It has also been calculated that out of approximately 475 existing utilised allotments that there is potentially a net gain of 56 dwellings through demolition and replacement with additional dwellings. It is anticipated that there may be higher density yields from these existing allotments, particularly given the current zoning designations.

In addition, the location of Metropolitan Development Sites and the WELL Precinct will create additional development opportunities outside of the Werrington Station Village radius, within the suburb of Werrington.

Due to environmental factors and timing of development of the WELL Precinct there may be limited redevelopment in Werrington in the short term, the next 5-10 years. However, it is expected that in the medium term, the next 10-15 years, development demand will increase around key rail stations and centres with good access to services. Werrington still has a large number of single detached dwellings in reasonable proximity to the Werrington Station Village Centre and these may achieve higher levels of redevelopment than one in ten. This would significantly increase dwelling capacities from redevelopment of existing lots. Therefore, gains of 56 dwellings outside the Village Centre may be achieved in the medium term and there may be even higher yields by the year 2031 in the order of 100-150 dwellings.

### **C      Summary of Dwelling Opportunity (Long Term)**

Table 5.9.3 summarises the potential total additional dwelling capacity within Werrington suburb by 2031.

**Table 5.9.3: Net dwelling gains for Werrington 2031**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain
Within Village Centre (600m)	35	50-100
Outside Village Centre Vacant Land	27	Agreed
Outside Village Centre Demolition & Replacement	56	100-150
<b>TOTAL</b>	<b>198</b>	<b>200-300</b>



*As calculated by ID Report (Sept 2007) and this Urban Strategy.*

When comparing demographic forecasts with dwelling capacity analysis it would appear that projected population exceeds dwelling capacity. ID (2007) have made the following forecasts for Werrington to 2021:

- Total households from 2006 to 2021 (15 years) is expected to increase by 1,089 households (which extrapolates to approximately 1800 households by 2031); and
- Total dwellings from 2006 to 2021 (15 years) is expected to increase by 1,178 dwellings (which extrapolates to approximately 2000 dwellings by 2031).

In conclusion, the predicted population growth of Werrington is significantly higher than the dwelling capacity of the suburb (without including the WELL Precinct) mainly due to flood constraints.

However, in order to achieve the residential catchment of 2,100 - 5,500 dwellings in a 600m radius for a Village there will need to be a significant increase in dwelling numbers in Werrington in the order of an additional 500-1,000 dwellings within the 600m radius in the next 15-20 years. It is anticipated that the dwelling opportunity may not meet the projected population for Werrington. There should be significant up-zoning of land in the Werrington centre (particularly within 600m of the rail station) to occur concurrently with the development of the WELL Precinct.

## 5.9.10 Werrington Station Village Centre Application to the Sustainability Checklist

The following sustainability checklist in Figure 4.8.4 provides an assessment as to the suitability of Werrington Station Village Centre to meet future growth as a Village Centre.

Table 5.9.4: Werrington application to the Sustainability Checklist

WERRINGTON STATION VILLAGE CENTRE				
Strategy Element	Current Centre Classification - Small Village (400m radius)	Future Centre Classification Village (600 m radius)	Additional services/actions needed	Priority
Population Size 1,488 dwgs in Werrington Suburb with 2496 dwgs projected in 2021	✓	✓	Increase in density to meet village size Significant potential in Sydney Water land and WELL Precinct.	Medium (5-10 years)
Dwelling Type and Mix	✓✓✓	✓✓	Need for greater range of housing types to meet future needs, particularly older persons and students	Medium (5-10 years)
Road Access	✓✓	✓	Poor access north to south Redevelopment provides opportunities to enhance road linkages and more direct access. Some access roads are flood prone, emergency access and egress must be resolved prior to additional development opportunities.	Medium (5-10 years)
Active Transport	✓✓	✓	Extension of footpaths in all streets. Extension of cycle ways in open space network required to connect nodes Enhance linkages between north and south across railway line.	Short to Medium (5-10 years)
Public Transport	✓✓✓	✓✓	Need for Bus Junction to enhance connectivity to WELL precinct and University Need for higher frequency of service need for extended hours of service Need enhanced connectivity to LGA	Short to Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Review capacity in Penrith Infrastructure Strategy 2008.	
Environmental Considerations	✓	✓	Significant areas are flood prone Emergency access issues in times of flood	
Access to retail and commercial services	✓✓	✓	Possibility for retail centre on existing site and adjoining sites to grow by	Short to Medium (1-5 years)

WERRINGTON STATION VILLAGE CENTRE				
Strategy Element	Current Centre Classification - Small Village (400m radius)	Future Centre Classification Village (600 m radius)	Additional services/actions needed	Priority
			<p>way of mixed use developments/ range of floor space to continue to cater for existing and future needs.</p> <p>Work with current retailers to enhance and expand retail offering.</p>	
Access to community services and Facilities	✓	✓	Limited community infrastructure available. Audit existing infrastructure and needs.	Short to Medium (1-5 years)
Public Domain and Open Space	✓✓	✓✓	<p>Town centre improvements</p> <p>Need central focus/town square/meeting space, on the northern side of the station. Safety and surveillance in open space</p> <p>Park embellishments.</p> <p>Need to central focus on the southern side of station.</p> <p>Build on and enhance existing strong open space and recreation infrastructure.</p>	Medium (5-10 years)
Housing Sustainability	✓	✓	Implement Sustainable housing initiatives	Medium (5-10 years)

✓ Meets some criteria

✓✓ Meets most criteria

✓✓✓ Meets all criteria

### 5.9.11 Future Actions

Key actions to develop Werrington Station into a Village are summarised as:

- Increase in housing density in and around Werrington Station to meet Village residential target (2,100-5,500 dwellings). There is considerable potential in land owned by Sydney Water and WELL Precinct to assist meeting this target;
- Provide for greater range of housing types to meet future needs, particularly older persons and students;
- The railway line is a major barrier to north-south movement within the suburb, redevelopment to the south of the railway line provides significant opportunity to enhance north-south connections. Some access roads are flood prone, emergency access and egress must be resolved prior to additional development opportunities;
- Upgrade and extend the footpath and cycle path network across the suburb. Cycle path network should provide connect key nodes and areas of open space;
- Investigate improved public transport services through higher frequency and extended hours of service including the opportunity for a bus junction to enhance connectivity to WELL precinct and University and greater connectivity to the remainder of the LGA;
- Review and investigate the capacity of infrastructure to support future development across the suburb;
- Quarantine flood prone land from future development and ensure emergency access in times of flood;
- Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs. Work with current retailers to enhance and expand retail offering;
- Improve the level of community infrastructure provision. An audit of all community infrastructure should be undertaken to ensure community infrastructure meets future needs;
- Undertake public domain works in the around the centre including the provision of a central focus/town square/meeting space to the north of the station. Provide a central focus on the southern side of the station;
- Ensure all parks are safe and have passive surveillance; and
- Ensure all future housing incorporate sustainable housing initiatives.

# 5.10

# Claremont Meadows





## **5.10 CLAREMONT MEADOWS**

### **5.10.1 Suburb Overview**

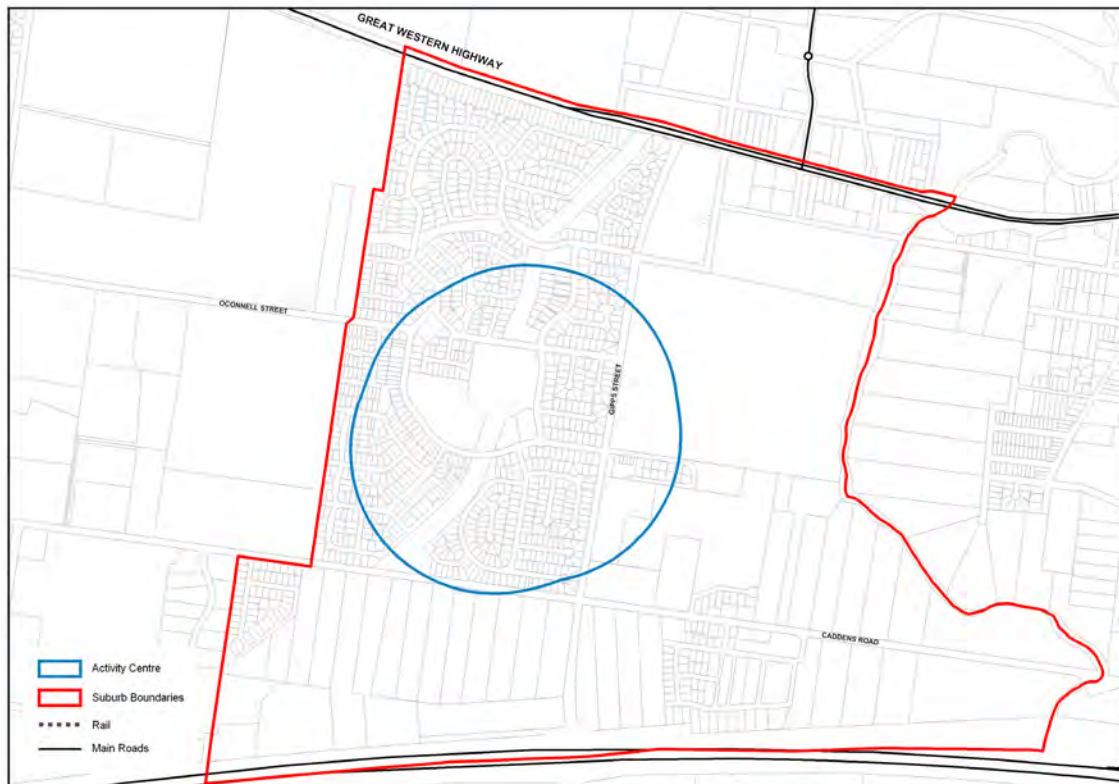
Claremont Meadows is bounded by the Great Western Highway in the north, South Creek in the east, the M4 Motorway in the south and the rural areas of Orchard Hills in the west. The land is relatively flat, with some undulations. A large area of remnant bushland, predominantly Cumberland Plain Woodland exists in the eastern part of the precinct adjacent to South Creek, and around Claremont Creek. Both these areas, but particularly the bushland in the east have been identified as having substantial biodiversity value.

Landcom developed the suburb of Claremont Meadows as a residential estate in the 1980s. It was aimed at first home buyers and young families and this group continues to represent the dominant demographic, with a very low proportion of residents over 50 years of age (2001 census). An extension to Claremont Meadows was planned with the original estate, however once the demand was established valuable remnant bushland had been identified. An extended planning process was undertaken with all key stakeholders, and after a number of years an alternate development pattern was agreed, which has since allowed additional residential development to occur in to the south and east of the original estate.

The area has approximately 1700 dwellings. The original suburb is dominated by predominantly single dwellings on 'traditional' lots of around 600 square metres, though more recent residential development aims to achieve a broader range of housing types. The precinct includes a primary school, community centre and local shops. A drainage reservation incorporating Claremont Creek runs from the north east corner to the south west corner. The width of this reserve varies, with its widest point incorporating the playing fields close to the shops.

The site is dissected by the road corridor for the future Werrington Arterial, which will carry traffic north from the M4 through Werrington and beyond. This road will be a significant source of noise for properties in close proximity, as will the M4 motorway on the southern boundary.

Figure 5.10.1: Map of Claremont Meadows



## 5.10.2 Suburb Demographics and Housing Trends

### A Current Demographics

#### a) Population:

Claremont Meadows had 3564 people in 2006, spread among 1110 households. These numbers are expected to grow to 4911 people by 2021, in 1664 households. These comparatively high levels of growth reflect the release of new residential land to the south and east of the existing suburb.

#### b) Age:

Claremont Meadows has historically been dominated by young families, and this is reflected in a higher proportion of children under 15, when compared to Penrith as a whole. The nature of the land available suggests that this area will remain very attractive to young families, thus it is expected that the proportion of children and young adults will continue to be high.

#### c) Income:

A comparison of household income between Claremont Meadows and Penrith City in 2006 indicated similar income levels, though Claremont Meadows had incomes on average slightly higher than Penrith City. This may reflect the lack of older persons in Claremont Meadows, who traditionally have lower incomes.

#### d) Car Ownership:

Analysis of the car ownership of the households in Claremont Meadows in 2006 compared to Penrith City shows that 90.8% of the households owned at least one car, while 2.9% did not, compared with 84.9% and 8.7% respectively in Penrith City. There were a larger proportion of households in Claremont Meadows that owned two cars -



45.4% compared to 36.0%. Higher levels of car ownership reflect both the slightly higher levels of household income, but also the lack of alternative forms of transport and the isolation of Claremont Meadows from any major employment areas.

*e) Households:*

In 2006 57.6% of households in Claremont Meadows were couples with children, and 18.5% were one parent families. These proportions are greater than those for Penrith City as a whole, though interestingly Claremont Meadows has a lower proportion of families with children over 15 years (10.8% compared to 17.2% in Penrith) but a much higher proportion of families with children under 15 years (46.8% in Claremont Meadows compared to 34.6% in Penrith).

Although the overall number of families in Claremont Meadows is expected to rise over the next 5 – 10 years, the proportion of couple families with children as part of the whole population will fall. This is because much of the new growth is expected to be other household types, including couples without children and lone person households. This is consistent with an ageing population.

It is critical that new dwellings in Claremont Meadows support the anticipated household mix. This will require a range of dwelling types and sizes beyond the traditional three to four bedroom detached dwelling.

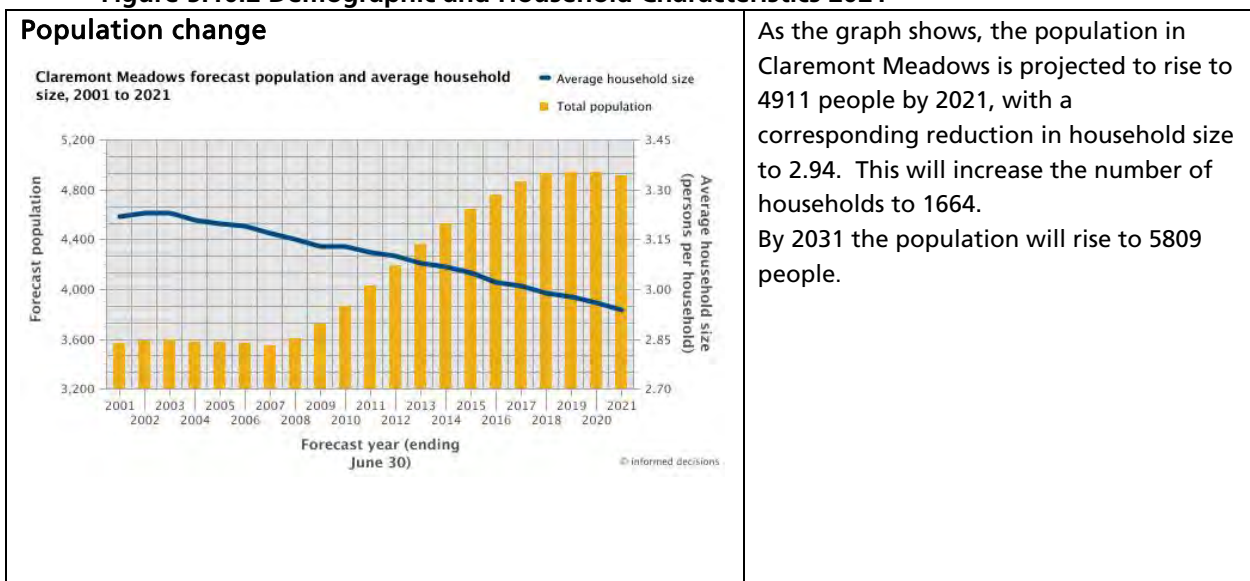
*f) Dwellings:*

Claremont Meadows is dominated by single, detached dwellings, which make up over 90% of the housing stock. There are no high density dwellings at all (flats etc.) and only 7.3% of people live in medium density housing (villas, townhouses). Again, this is consistent with a population dominated by young families in a homogeneous new suburban development. , It is likely that this area will continue to be attractive to families. The proportion of detached dwellings is greater than that for Penrith as a whole, and the proportion of medium density dwellings is lower than that for Penrith as a whole.

There are a much higher proportion of people purchasing their homes in Claremont Meadows than in Penrith as a whole – 62.9% compared to 41.8%. Again this is consistent with a population dominated by young families.

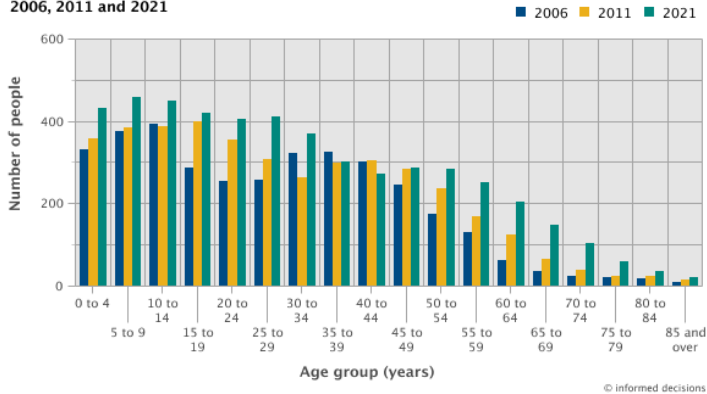
**B Projected Demographics and Household/Dwelling Needs to 2021**

**Figure 5.10.2 Demographic and Household Characteristics 2021**



### Projected age groups

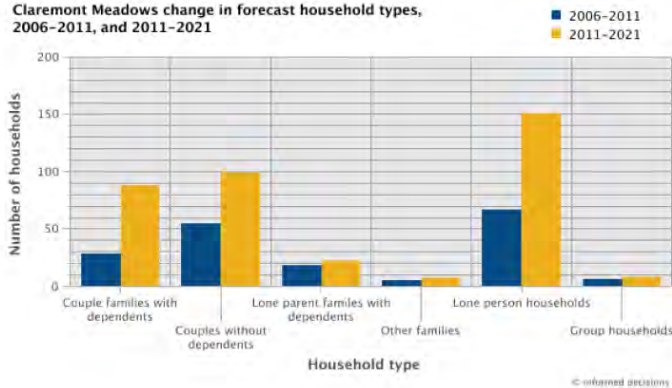
Claremont Meadows forecast age structure, (5 year age groups), 2006, 2011 and 2021



It is expected that the proportion of children under 15 will fall, with a corresponding increase in children over 15 and young adults. This reflects the lifecycle of existing families. The proportion of the population over 45 is also expected to increase, with a substantial growth in persons aged over 60. This reflects overall ageing of the population both in Penrith and in Sydney as a whole.

### Projected Household Types

Claremont Meadows change in forecast household types, 2006-2011, and 2011-2021



Claremont Meadows is currently dominated by couples with children, and this domination is expected to continue, though to a lesser extent. By 2021 families with children (one or two parent) combined with couples without children will make up over 75% of all household types in Claremont Meadows. This means that there will continue to be a need for larger dwellings – minimum 3 bedrooms – for the foreseeable future. There will, however, still be a need for smaller dwelling to both cater to couples without dependents and lone person households which are predicted to increase markedly.

### 5.10.3. Existing Zoning and Land Use Patterns

Land in Claremont Meadows is zoned predominantly for residential uses and open space / drainage, with a small pocket of commercially zoned land along Sunflower Drive. There are no industrial uses or major employment generating areas.

The shops along Sunflower Drive are limited in scope, serving the local community only. They include a supermarket, bakery, real estate agency, pharmacy, video store and take away food outlets. Given the overall layout of Claremont Meadows and limited through traffic, there is no real scope for this commercial area to grow beyond its current purpose of serving the local community. Some expansion may be possible (1- 2 shops) when the eastern precinct is fully developed, but any significant growth due to increase in population is more likely to translate into growth in the commercial areas of St Marys and the WELL precinct.

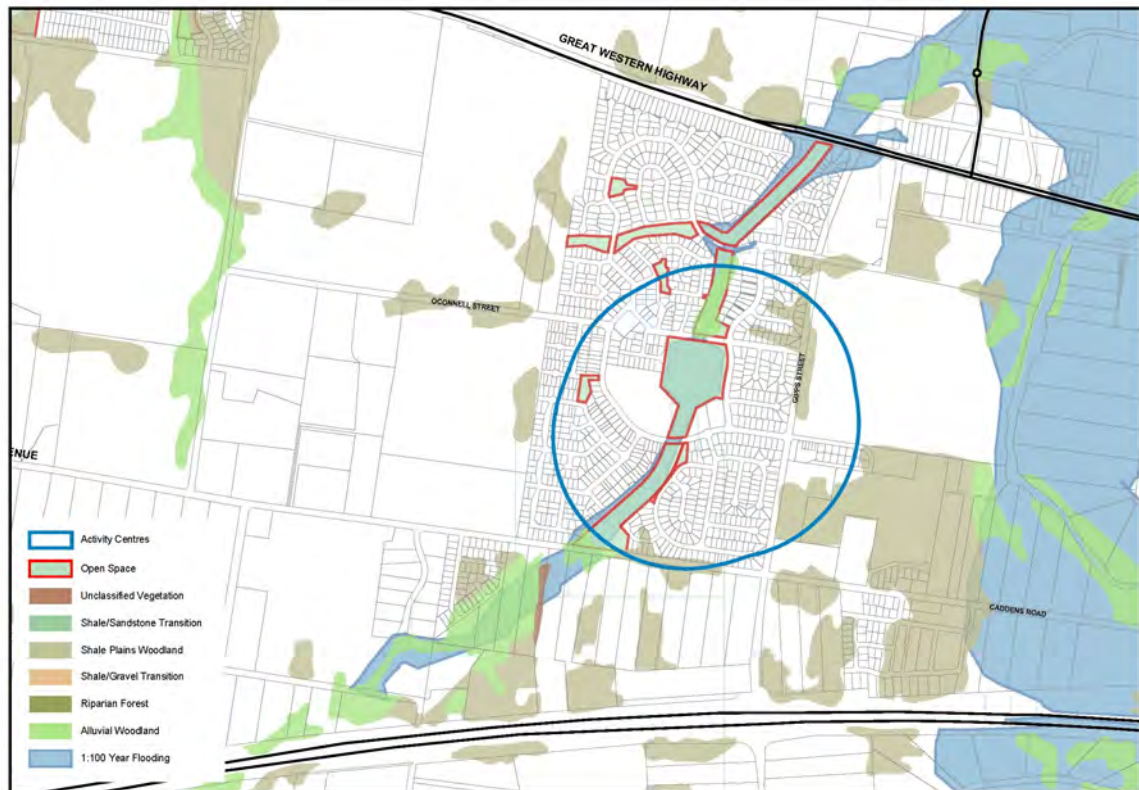
The dominant residential zoning is Zone 2(b) Residential (Low-Density) which generally permits dwelling houses (and some dual occupancies). There is a small area zoned for higher densities (Zone (d) Residential (Medium Density)) on Gipps Street, immediately opposite the entrance to Sunflower Drive. There are also pockets in the Eastern Precinct, surrounding the proposed park, which will allow integrated housing on smaller lots. These areas of higher density reflect access to the shops or areas of higher amenity

around parkland. There is little scope beyond these for increasing the densities in this area.

### 5.10.4 Environmental Opportunities and Constraints

Figure 5.10.4 illustrates the key environmental constraints within Claremont Meadows and these are discussed below.

Figure 5.10.4: Environmental constraints for Claremont Meadows



#### A Topography, Flooding and Drainage

Claremont Meadows lies along Claremont Creek and adjacent to South Creek. Both of these creek lines have the potential to impact on Claremont Meadows in an event which exceeds the 1% AEP. There is also significant remnant vegetation along South Creek which needs to be protected from urban development.

The existing drainage reserve along Claremont Creek outlines the area required to store and transport flood waters in a 1% AEP flood event. This land cannot be developed for any urban purpose. Similarly, the area zoned for bushland protection to the east of Claremont Meadows along the South Creek corridor cannot be developed for urban purposes. These constraints have been identified during the rezoning process for both the original estate and the more recent expansion. There are, therefore, no unknown constraints.

#### B Native Vegetation and Sensitive Ecological Areas

There is significant vegetation in Claremont Meadows located in the eastern precinct, close to South Creek, and along Claremont Creek south of Caddens Road. These areas are remnant Cumberland Plain Woodland, an endangered ecological community. They also contain colonies of the Large Land Snail, also endangered, and commonly

associated with Cumberland Plain Woodland. These areas have been zoned to protect these natural attributes.

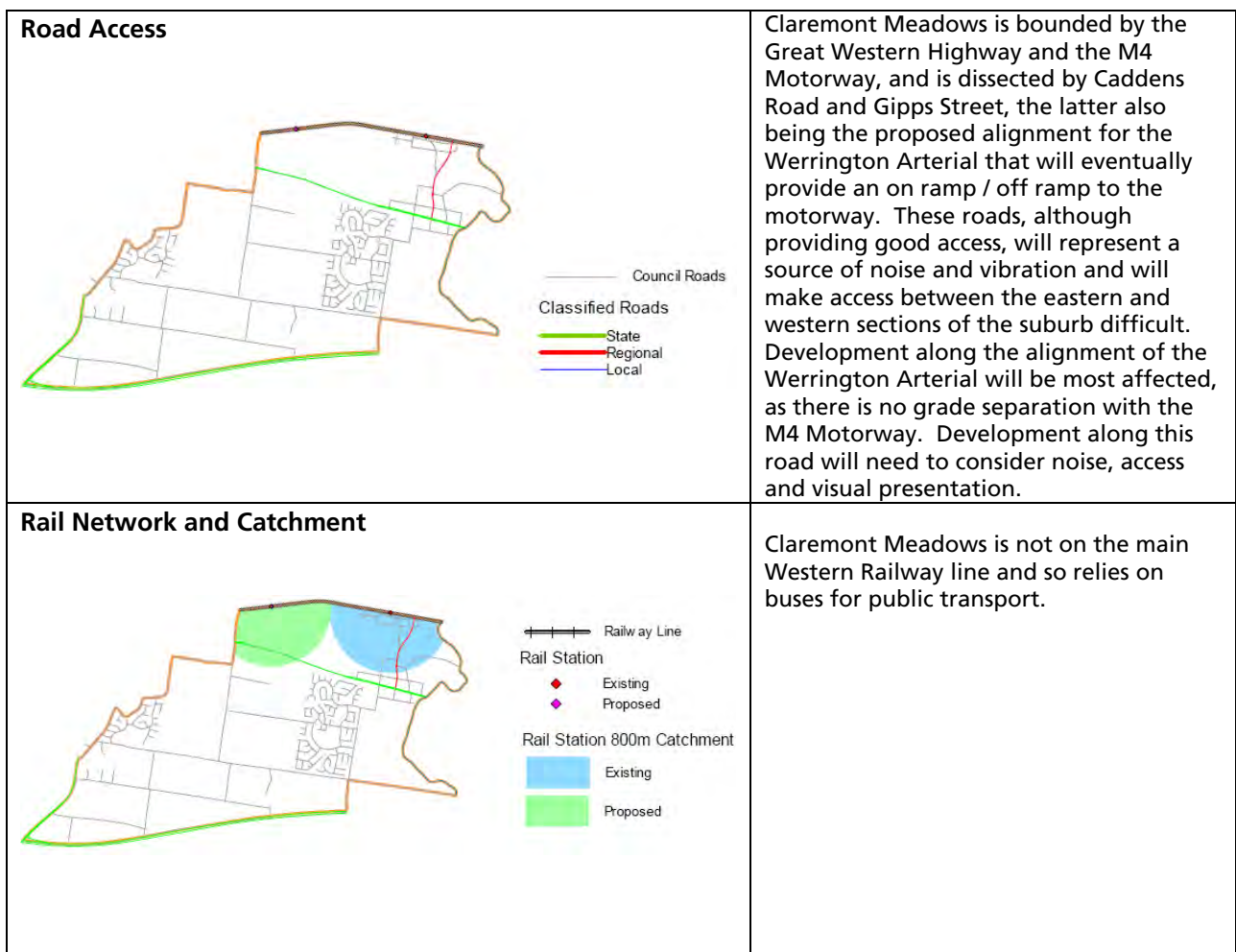
The native vegetation near South Creek and Claremont Creek also creates a high bushfire hazard. There is a need for asset protection zones to be incorporated into subdivision layouts or development proposals that adjoin these bushland areas. In some cases this may reduce the yield, either of individual lots or dwellings, in these areas.




### 5.10.5 Access and Transport

This section is largely drawn from the findings of the Penrith Integrated Transport and Land Use Strategy (PITLUS Report) prepared by Cardno Eppell Olsen, Geoplan and AQ Planning (2008). However, as there are differences in the area boundaries between the PITLUS Report and those of the ID Demographic Analysis (2007), some comments in this section are general or approximate in nature.

The Claremont Meadows shopping centre off sunflower Drive is currently classified as a Small Village Centre under the Centres Hierarchy. It is envisaged that it will remain as a Small Village Centre into the future. Based on the analysis outlined below, Claremont Meadows shopping centre is considered to have reasonable access to public transport and a reasonable pedestrian network; however the bicycle network needs improvement particularly to create connections to other key features such as the railway station, schools and surrounding employment/industrial areas.

**Figure 5.10.5: Access and Transport Characteristics**



<p><b>Bus Network and Catchment</b></p>  <p>— Bus Network</p> <p>• Bus Stop</p> <p>■ Bus Stop 400m Catchment</p>	<p>Currently there is a bus route which runs up Gipps Street and along Sunflower Drive and Myrtle Street, entering / exiting the suburb at O’Connell St in the west and Gipps Street in the east. This bus route serves the school and shops, but does not provide good access to residents in the south western corner of the suburb, though the majority of the developed areas to the north of Caddens Road are within 400m of a bus stop. The 790 bus travels between Penrith Station and St Marys Station, and runs roughly every 30 mins for most of the day, with a slight increase in frequency during peak hour. It is likely that with the expansion of residential development to the south and east additional bus routes will be developed, however the location of these is not known at this stage.</p>
<p><b>Pedestrian Network</b></p>  <p>— Footpath Proposed</p> <p>— Footpath Existing</p>	<p>Claremont Meadows currently has a dedicated footpath / cycleway which runs through the central open space area. It connects to the school and the shops, and provides a reasonable alternative access route. Major roads around the suburb have footpaths at least on one side, though most minor roads and cul-de-sacs do not.</p>
<p><b>Cyclist Network</b></p>  <p>— Bikeway</p>	<p>There are no cycleways through the suburb except for the one running through the open space. There is a commuter cycleway along the M4 Motorway, although at present there is no on ramp at Claremont Meadows to allow residents to access it. The construction of the Werrington Arterial in the next ten years will provide access, and should include a hard shoulder cycle lane as well. This will improve opportunities for cycle commuting, which is currently not well catered for.</p>

*All diagrams sourced from PITLUS Report 2008*

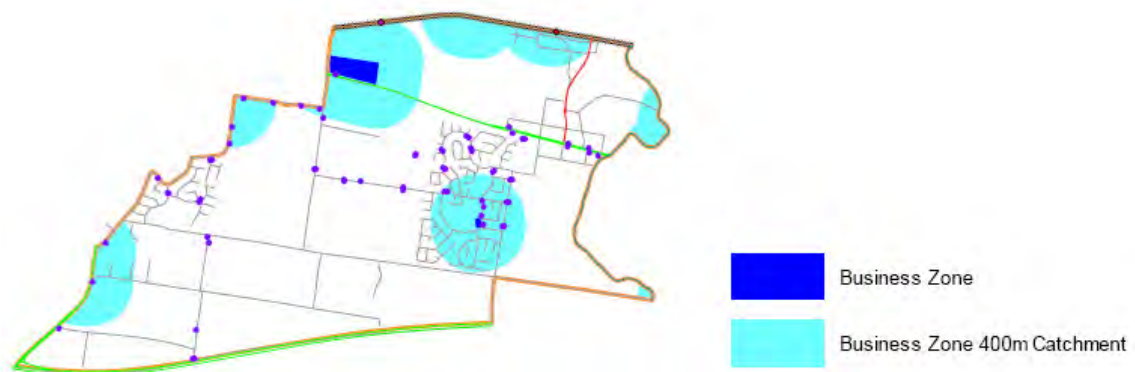
## 5.10.6 Access to Services

### A Retail / Local Shopping

Claremont Meadows has a small, local shopping centre, located on the corner of Sunflower Drive and Myrtle Road. Claremont Meadows is also within 2 km of the St Marys Town Centre, which provides a full range of shopping and commercial services.

Claremont Meadows shops are bounded by Myrtle Road, Sunflower Drive, the community centre and the playing fields, and have no logical space for substantial expansion. The proximity to St Marys means that substantial expansion is unlikely to be viable, even with the proposed expansion of residential development to the south and east. Instead, it is likely that the existing shops in the centre will experience an increase in local trade as population increases.

Figure 5.10.6 Retail catchments in Claremont Meadows



*Sourced from PITLUS Report 2008*

### B Education / Schools

The majority of Claremont Meadows is within 1.6km of Claremont Meadows public school, with the existing estate being predominantly within 1 km. The far south eastern area of the proposed residential expansion (near South Creek) is the only exception, and although these students would potentially be eligible for a bus pass it is unlikely that a bus service will operate in this area.

This means that the majority of the students attending Claremont Meadows Public School from within the suburb itself will either walk, cycle or be driven to school. Clearly, from a sustainability perspective, walking or cycling are the preferred options, particularly for older students. Bikeways and footpaths should be provided which lead to the school along all main roads, and a safe crossing point should be provided for Caddens Road and Gipps Street.

Figure 5.10.7 School catchments in Claremont Meadows



*Sourced from PITLUS Report 2008*

### **C Community Facilities**

The Claremont Meadows community centre is located adjacent to the shops and open space lands, on the corner of Sunflower Drive and Myrtle Road.

The community centre provides a venue for a number of programs including:

- Playgroups
- Youth drop in
- Community development such as “heart moves”, information sessions and the like; and
- Offices for community based endeavours.

### **D Open Space**

The open space in Claremont Meadows is elongated in nature and occupies drainage depressions. The open space has a dual function in that it provides an area of active open space as well as a drainage path during storm events.

As part of rehabilitating the old Gipps Street landfill site, located to the immediate east of the existing residential area, Council has a vision as follows:

- 1 Revegetate the site to establish a new open space area, with both passive open space opportunities (walking and cycling paths, picnic and playground areas) and sports fields.
- 2 Investigate the feasibility of establishing a regional sports facility.
- 3 Establish off-road connections and ‘green’ corridors to Kingsway Playing Fields and the South Creek linear bushland corridor.

## **5.10.7 Existing Suburb Character**

The street pattern of the existing residential area of Claremont Meadows is dominated by curving streets and cul-de-sacs. In some areas there are narrow share ways providing access between streets, but these are limited. This is consistent with the era during which this area was developed – the 1980s. The newer areas to the south and east are being developed on a grid pattern, which generally provides better through access and a

more walkable neighbourhood. Again, this is consistent with current thinking in land use layout.

The existing areas have a mix of lot sizes, mostly within the range of 500 square metres to 799 square metres. These lots in some cases have potential for dual occupancy development, but the majority are most likely to stay as single dwellings.

Dwellings are predominantly single storey, detached dwellings with some two storey. This style is being carried through from the existing areas to the newer subdivisions, though as many of these areas are not developed there is the potential for them to develop a character different to the existing suburb. Given the nature of the estate and its appeal to families, it is quite possible that residential character will be dominated by contemporary project homes, which are generally larger and more formal than the existing dwelling houses. It remains to be seen whether this character develops in the new areas, and, if so, whether it will have a marked impact on the existing areas through the 'knock down rebuild' market.

Figure 5.10.7: Suburb Character Analysis

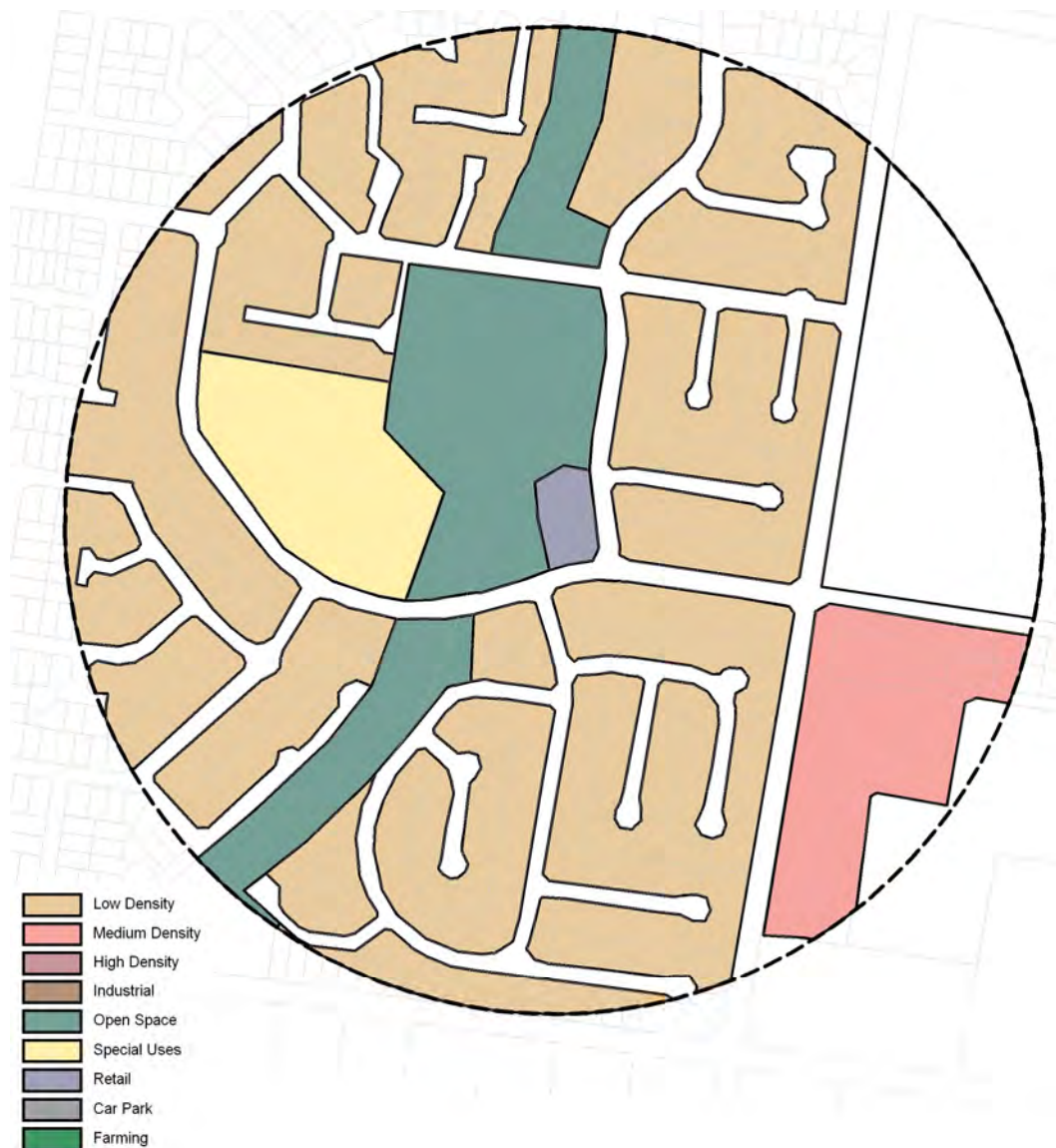




Figure 5.10.9: Examples of dwelling types in Claremont Meadows



### 5.10.8 Summary of Key Opportunities and Constraints

The key opportunities which will promote growth in Claremont Meadows are:

- New residential areas proposed to the south and east, which have yet to be subdivided and can therefore provide opportunity for diversity in housing.
- Good access to transport, particularly when the Werrington Arterial is constructed.
- Good access to services through proximity to St Marys Town Centre.

The key constraints to urban growth in Claremont Meadows are:-

- Constrained land to the east in the form of the South Creek floodplain, and associated ecological communities.
- The M4 Motorway and the Great Western Highway present barriers to the south and north, respectively.
- Very few vacant lots in the established areas mean that there are few opportunities for varied housing types.

These opportunities and constraints are portrayed in Figure 5.10.8

### 5.10.9 Future Dwelling Opportunities

#### A Within Claremont Meadows Small Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Claremont Meadows Small Village Centre (within a 400 metre radius of the centre).

Table 5.10.1 summarises the key assumptions made for Claremont Meadows Small Village Centre potential future dwelling capacity.

**Table 5.10.1: Assumed densities for Claremont Meadows Small Village Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Claremont Meadows	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares)	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings/hectare	Land @ 50 dwellings/hectare	Land @ 25 dwellings/hectare
ID Assumptions	1980's	0.5	400	4.4	3.8%	0%	0%	0%	100%
Urban Study and Strategy	1980's Medium-Low Opportunity	<b>See Sustainability Checklist</b>	400	4.4	3.8%	0%	0%	0%	100%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

It is noted that Council's Interim Centres Hierarchy Policy refers to Claremont Meadows as a 'Small Village Centre'. The Urban Study and Strategy considers that Claremont Meadows is likely to remain as a Small Village Centre in the medium to long-term (10-20 years) but this does not mean that it does not have some capacity for further dwelling opportunities.

The age of the housing stock in Claremont Meadows is relatively recent (1980's to current day) and there is little incentive to knock down existing dwelling houses and replace them with a higher density residential development. The activity centre is considered to have a low opportunity for redevelopment based on age and allotment arrangement.

ID (2007) has assumed that 3.8% of the total developable land will actually be developed. The Urban Study and Strategy also assumes the above rate given the characteristics listed above.

**Table 5.10.2: Estimated Dwelling capacity for Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre									
North St Marys	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)	
ID Assumptions	Small Village Centre	0	0	0	4	4	1	3	
Urban Study and Strategy Assumptions (see below)	Small Village Centre	0	0	0	4	4	1	3	

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for Claremont Meadows Small Village Centre is very limited due to newness and type of housing stock as well as limited lot size.

The long term (20-25 years) dwelling capacity within the Claremont Meadows Small Village Centre has been estimated to be 3 dwellings.

## **B Outside Key Activity Centres**

The calculations to determine future dwelling gains in Claremont Meadows outside of the Small Village Centre radii is based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and

- the opportunity for residential development on vacant land.

In assessing the potential future dwelling gains in the areas of Claremont Meadows outside the activity centre, ID has identified that the majority of lots (excluding the new release areas to the south of Caddens Road) have a lot size of 500m to 799m, and that there are only a few larger lots which may be capable of redevelopment.

There is a limited amount of vacant land in Claremont Meadows, not including the release area to the south and east. The majority of the vacant lots are less than 800 square metres in area, and are likely to be developed for single dwellings only. There is only one larger lot, which has the potential for a dual occupancy or multi unit housing.

### C Summary of Dwelling Opportunity (Long Term)

The potential residential capacity for the suburb is shown in Table 5.10.3.

**Table 5.10.3: Net dwelling gains for Claremont Meadows Small Village Centre till 2031.**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain
Within Activity Centre (300m)	3	3
Outside Activity Centre – Vacant Land	2	2
Outside Activity Centre – Demolition & Replacement	0	0
<b>TOTAL</b>	<b>5</b>	<b>5</b>

*As calculated by ID Report (Sept 2007) and this study.*

- ID forecasts that the total population for Claremont Meadows by the year 2021 will increase while household size will decrease:
- Total population from 2006 to 2021 (15 years) is expected to increase by 1347 (which extrapolates approximately to a increase of 2245 by 2031);
- Total households from 2006 to 2021 (15 years) is expected to increase by 554 (which extrapolates approximately to 923 by 2031);
- Total dwellings from 2006 to 2021 (15 years) is expected to increase by 550 (which is the estimated number of dwellings in Claremont meadows Stage II)).

In conclusion, the population increase in Claremont Meadows will be due to new release areas growth (i.e. Claremont Meadows Stage II).

### 5.10.10 Claremont Meadows Small Village Centre Assessment Against Sustainability Checklist

CLAREMONT MEADOWS				
Strategic Element	Current Centre Classification – Small Village	Future Centre Classification – Small Village	Additional services / actions needed	Priority
Population size  Penrith Strategy target 1,000 – 5,400 dwellings in catchment  Currently 1700 dwellings. 2250 expected by 2021	✓✓✓  3564 people	✓✓✓  5809 people	Type of dwelling provided needs to allow options for smaller household sizes, aging population requirements and non traditional family units.	<b>Medium (5-10 years)</b>
Dwelling type and mix	✓✓  No shop top housing in core, minimal higher density areas.	✓✓  Unlikely shop top housing will eventuate.	Some possibility of higher densities around core.	<b>Medium (5-10 years)</b>
Road Access	✓✓  Great Western Highway provides good arterial access.	✓✓✓  Caddens Road will provide good access to services and facilities in WELL precinct.	Construction of Werrington Arterial will provide on / off ramp to M4 and better access to north.	<b>Medium (5-10 years)</b>
Active Transport	✓	✓✓  Core needs to be assessed for universal access.  Cycle facilities need to be provided at shops.	Increased provision of footpaths and cycleways. Links between new areas to south and east over major roads particularly important to ensure people can access shops and school by active transport.	<b>Medium (5-10 years)</b>
Public Transport	✓✓	✓✓✓	Service frequency needs to increase. Likely this will happen with growth to south and east. May also benefit from services in WELL precinct.	<b>Short to medium (1-5 years)</b>
Physical Utilities / Infrastructure	TBC	TBC	Need to review capacity	<b>Short (1 year)</b>
Environmental Considerations	✓✓✓  Development pattern of new and established areas protect high quality	✓✓✓	Environmental considerations have been accommodated in plans for original estate and expansion to south and east.	<b>Considered throughout</b>

	vegetation, riparian corridor and avoid flood prone land.			
Access to retail and commercial services	✓✓✓	✓✓✓	Improve access by all forms of transport to activity centre.	<b>Medium (5-10 years)</b>
Access to community services and facilities	✓✓	✓✓	Mobile pre-school only, no child care. Child care available in St Marys which is very close by.	<b>Short to medium (1-5 years)</b>
Public domain and open space	✓✓ Existing park near school and shops plus open space through estate provide ample active areas. Pocket parks also exist.	✓✓ Pocket parks planned for new areas to south and east to provide open space for new residents. Bushland area near south creek gives additional passive recreation opportunities. Former tip site to north east will potentially provide high level active recreation in very close proximity.	Opportunities for high quality informal meeting space located near school and shops. Alternatively, opportunity may arise in new areas to south and east.	<b>Medium (5-10 years)</b>
Housing sustainability	✓	✓✓ Greater variety of housing types proposed for new areas. Opportunity also to encourage adaptable, energy efficient housing designs in new areas.	Work needs to be done with planning for new areas and preparation of new residential DCP to encourage range of housing types, adaptable housing and energy efficient housing.	<b>Medium (5-10 years)</b>

✓ Meets some criteria

✓✓ Meets most criteria

✓✓✓ Meets all criteria

### **5.10.11 Future Actions**

The following key actions are recommended to maintain the small village centre designation:

- Encourage additional residential development within the core and catchment of the activity centre to support its role as a small village centre and increase housing diversity to better meet the needs of future residents, particularly lone person households and older people;
- Increase proportion of smaller dwellings slightly beyond that demanded by estimated household sizes to provide affordable housing options;
- Ensure that proposed zoning will allow for small pockets of higher density in areas where there is good access to services or higher amenity. These areas should be located along bus routes;
- All significant future urban development should seek to avoid urban growth in areas affected by the 1 in 100 flood zone and low-lying areas in proximity to South Creek and Claremont Creek;
- Similarly future urban development should seek to protect and enhance native vegetation and ecological corridors along South Creek and Claremont Creek;
- Increase provision of footpaths and cycleways, especially links between proposed new urban areas to south and east; and
- Enhance public transport by increasing the frequency of services.



**5.11**  
**Cranebrook**





## 5.11 CRANEBROOK

### 5.11.1 Suburb Overview

Cranebrook is an established residential area, with rural land in the north and residential land mainly in the south. Cranebrook is bounded by the locality of Londonderry in the north, The Northern Road in the east, Andrews Road in the south and generally by Cranebrook Road and Church Street in the west. To the north, more than half of the suburb has a general rural zone.

Development of the area dates from 1804 when the first land grant was made, with the land being used mainly for farming. Growth in the area was minimal until the 1970s when farming blocks were subdivided.

The higher ground of Cranebrook, which was mostly open forest, has been cleared and developed in stages from the 1980s for suburban development. Significant residential development occurred in the 1980s and 1990s. Urban growth began to slow in the mid 1990s, with relative stability in population and dwelling stock between 2001 and 2006. The Cranebrook residential area contains a 30 ha parcel of public housing.

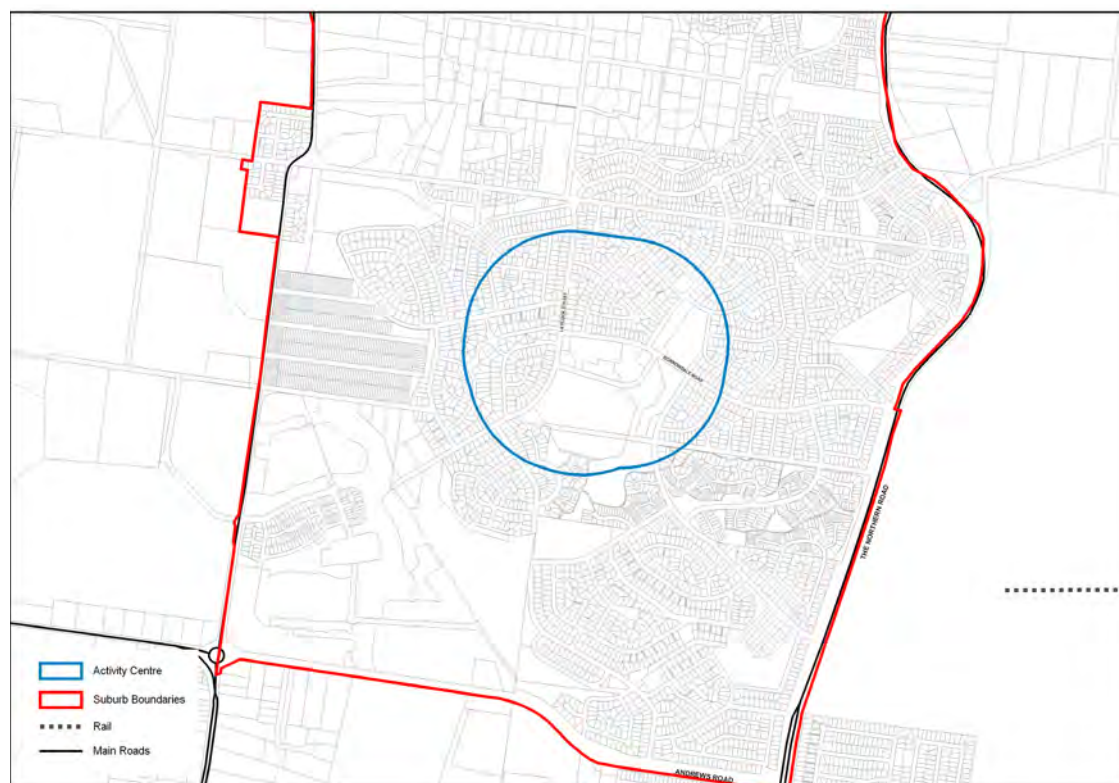
Major features of the area include Mount Pleasant Shopping Centre and Andromeda Drive Reserve.

Aside from the established urban areas in Cranebrook, a new urban development known as Waterside is currently being developed on land near the corner of Andrews Road and Cranebrook Road. The new residential development will accommodate an estimated population of 2,150 with approximately 700 dwellings.

Penrith Lakes and the Olympic Regatta Centre, immediately to the west of Cranebrook are a major landmark and regional recreational resource for the City of Penrith.

Land to the east of Cranebrook is known as the ADI Site and is currently being developed for urban purposes.

**Figure 5.11.1: Map of Cranebrook**



### 5.11.2. Suburb Demographics and Housing Trends

Cranebrook experienced a decrease of 62 people between 2001 and 2006 which is equivalent to a decrease of 0.5%. The population of Cranebrook in 2031 is estimated to be around 15, 743 people.

The dominant housing type is low density single dwellings. Cranebrook's population is car dependant and has a predominantly family profile.

#### A Current Demographics

##### *a) Population:*

Cranebrook experienced a decrease of 62 people between 2001 and 2006 which is equivalent to a decrease of 0.5%. The population of Cranebrook in 2006 was 13,799 people and in 2021 is estimated to be around 15, 366 people.

##### *b) Age:*

The age structure of Cranebrook in 2006 compared to Penrith City shows that there were a larger proportion of people in the younger age groups (0-17) but a smaller proportion of people in the older age groups (60+).

The largest changes in age structure in Cranebrook between the 2001 and 2006 census collection include an increase in the 50-69 age groups and a small decrease in the 5 to 11 and 0 to 4 age groups.

##### *c) Income:*

Generally, the household income in Cranebrook is of a similar level to that of Penrith City.

There is a larger proportion of high income households (those earning \$1700 per week or more) in Cranebrook compared to Penrith LGA, and a smaller proportion of low income households (those earning less than \$500 dollars a week).

Overall, 27.7% of the households earned a high income, and 12.2% were low income households, compared with 25.6% and 14.8% respectively for Penrith City.

##### *d) Car Ownership:*

Cranebrook has a high proportion of car ownership, with 87.6% of households owning at least one car. Compared to Penrith LGA, more people in Cranebrook own 3 vehicles or more, and this number is growing and less households own only 1 car. Only 5.6% of households had no vehicle.

##### *e) Households:*

A comparison of household types between Cranebrook and Penrith City in 2006 reveals a larger proportion of family households, but a smaller proportion of lone person households.

Family households accounted for 82.5% of total households in Cranebrook while lone person households comprised 12.6%, compared to 76.6% and 18.0% respectively for Penrith City.

##### *f) Dwellings:*

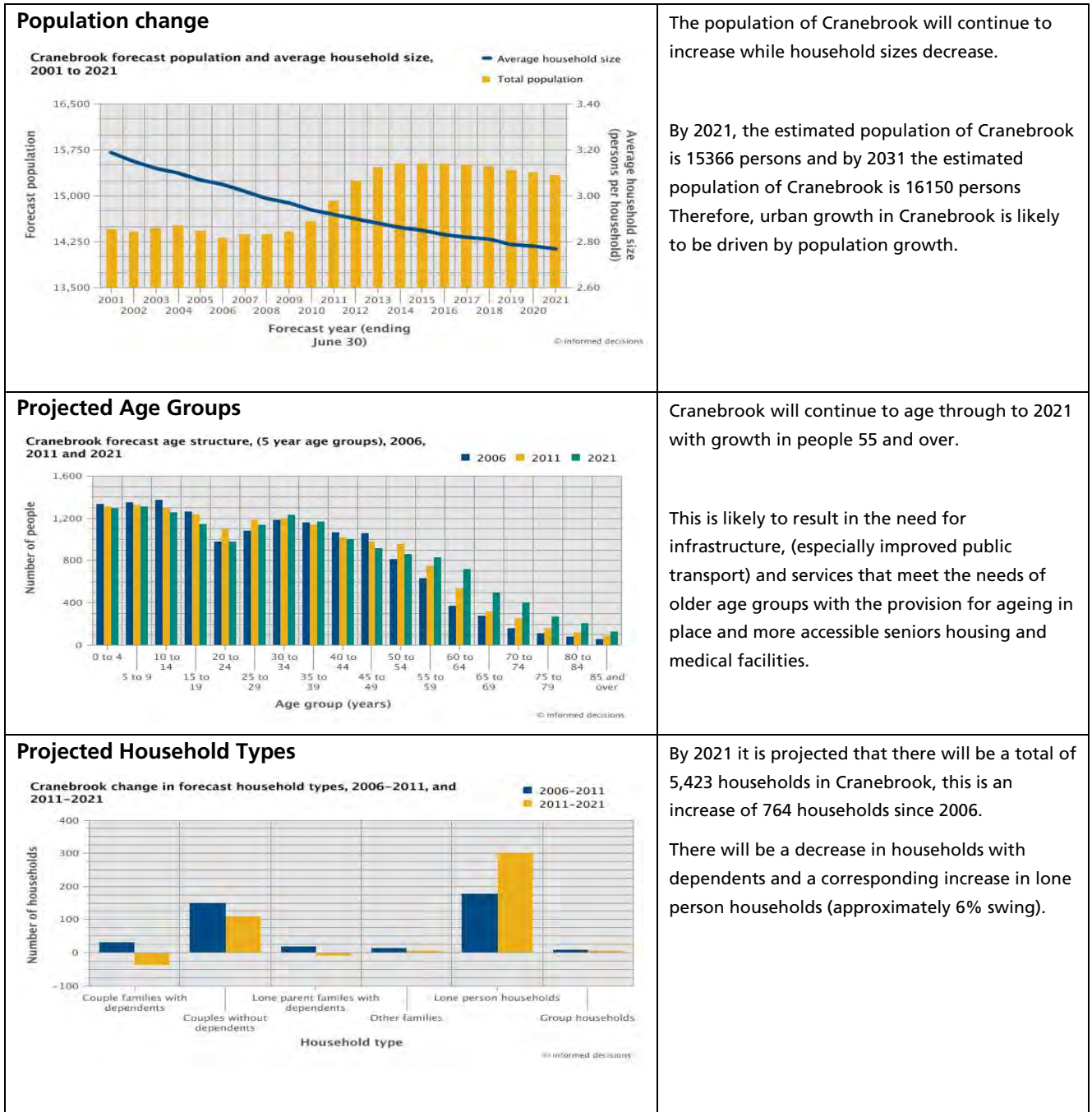
In 2006, 90.4 % of all dwellings types in Cranebrook were separate houses, 5.9% were medium density and there were no high density flats or apartments.

This limited mix of dwellings in Cranebrook may be problematic in the future as the population ages with the concurrent need for down sized dwellings for empty nesters and addressing the needs of lone person households.

In 2006, 17.5% of the population owned their own homes, 51.0% were purchasing and 26% were renting. This compares with 26.5%, 41.8% and 25.9% for the Penrith LGA.

## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.11.2 Demographic and Household Characteristics 2021



### **5.11.3 Existing Zoning and Land Use Patterns**

Approximately half of the land in Cranebrook is zoned for residential use with a significant proportion of land zoned for rural purposes in the north of the suburb.

The dominant residential zoning is Zone 2(b) Residential (Low-Density) which generally only permits dwelling houses (and some dual occupancies).

There is also a Zone 2(d) Residential (Medium Density) south of the activity centre which allows multi-unit housing (generally attached housing such as townhouses and villas). Medium density development in Cranebrook to date, has been primarily built by the Department of Housing.

Cranebrook Shopping Village is zoned for business uses. It contains a shopping centre comprising a small supermarket, hairdresser, newsagent, bakery, takeaway store, chemist, doctor's surgery and real estate agency.

The land located to the north of the Cranebrook urban area (bounded by the Northern Road, Cranebrook Road and Vincent Road) is zoned 'Special Uses 5(a) – Wireless Station' under Penrith Local Environmental Plan No. 201. This site has an area of 181.11 hectares, and possesses significant biodiversity values. The current zoning limits development to those land uses normally associated with its former use as a wireless station.

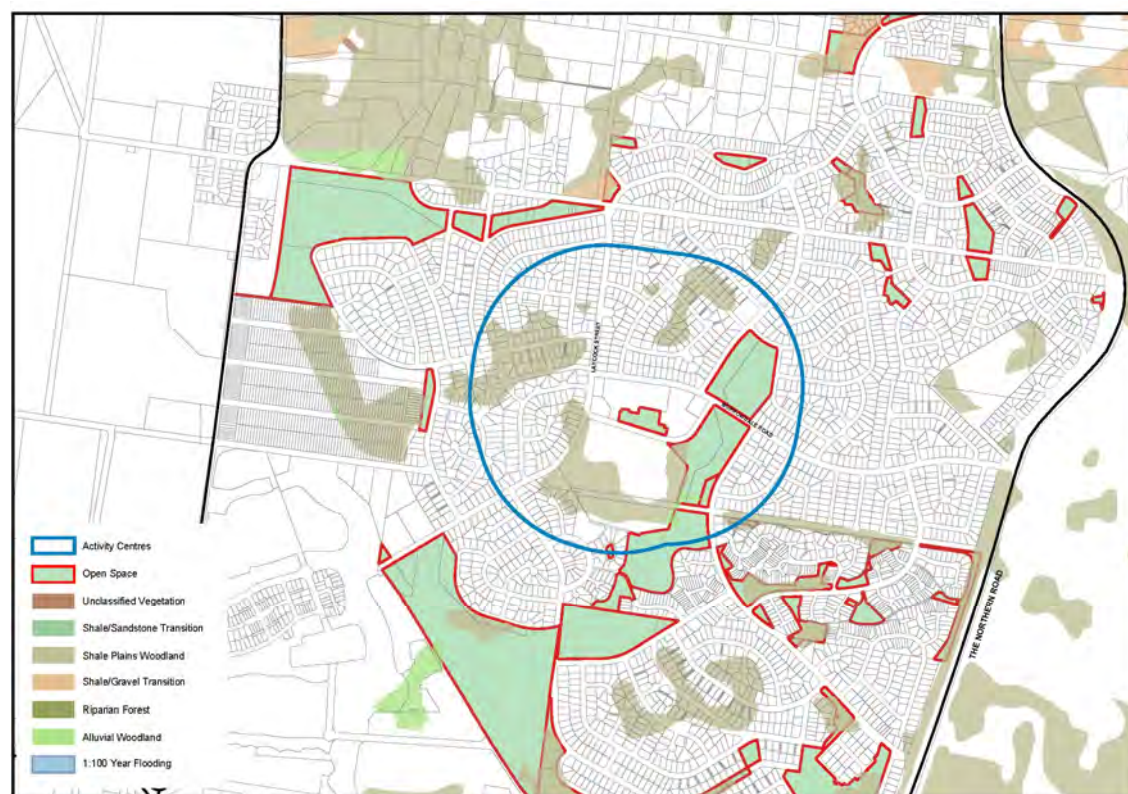
Air Services Australia sold this site to a land development company in 2004. Since then, key issues for Council and the State Government have involved the protection of the biodiversity and Aboriginal heritage values on the site. The new owners have been liaising with the State Government to consider this site for inclusion in the Metropolitan Development Program (MDP) program.

The area to the south eastern corner of Cranebrook contains a small industrial area.

### 5.11.4 Environmental Opportunities and Constraints

Figure 5.11.4 illustrates the key environmental constraints within Cranebrook and these are discussed below.

**Figure 5.11.4: Environmental constraints for Cranebrook**



#### **A Topography, Flooding and Drainage**

The topography in Cranebrook is characterised by undulating low-lying land rising to the north and east, with the low areas dissected by creeks and swamp at the south-west corner. Rickabys Creek rises in the higher ground at the north-east corner of the suburb.

Figure 5.11.4 above shows the 1 in 100 year flood line. Flooding is not a significant constraint for development in the activity zone, however it does impact on the development of land in the south west (Waterside) of the suburb.

Drainage could also be a potential constraint for the area. Any increase in densities and types, and any development within the activity centre would need to consider impacts on and requirements for drainage.

#### **B Native Vegetation and Sensitive Ecological Areas**

Most of the significant vegetation in Cranebrook is located to the north, outside of the activity centre and includes significant communities of Castlereagh Scribbly Gum Woodland and Cooks River Castlereagh Ironbark Forest.

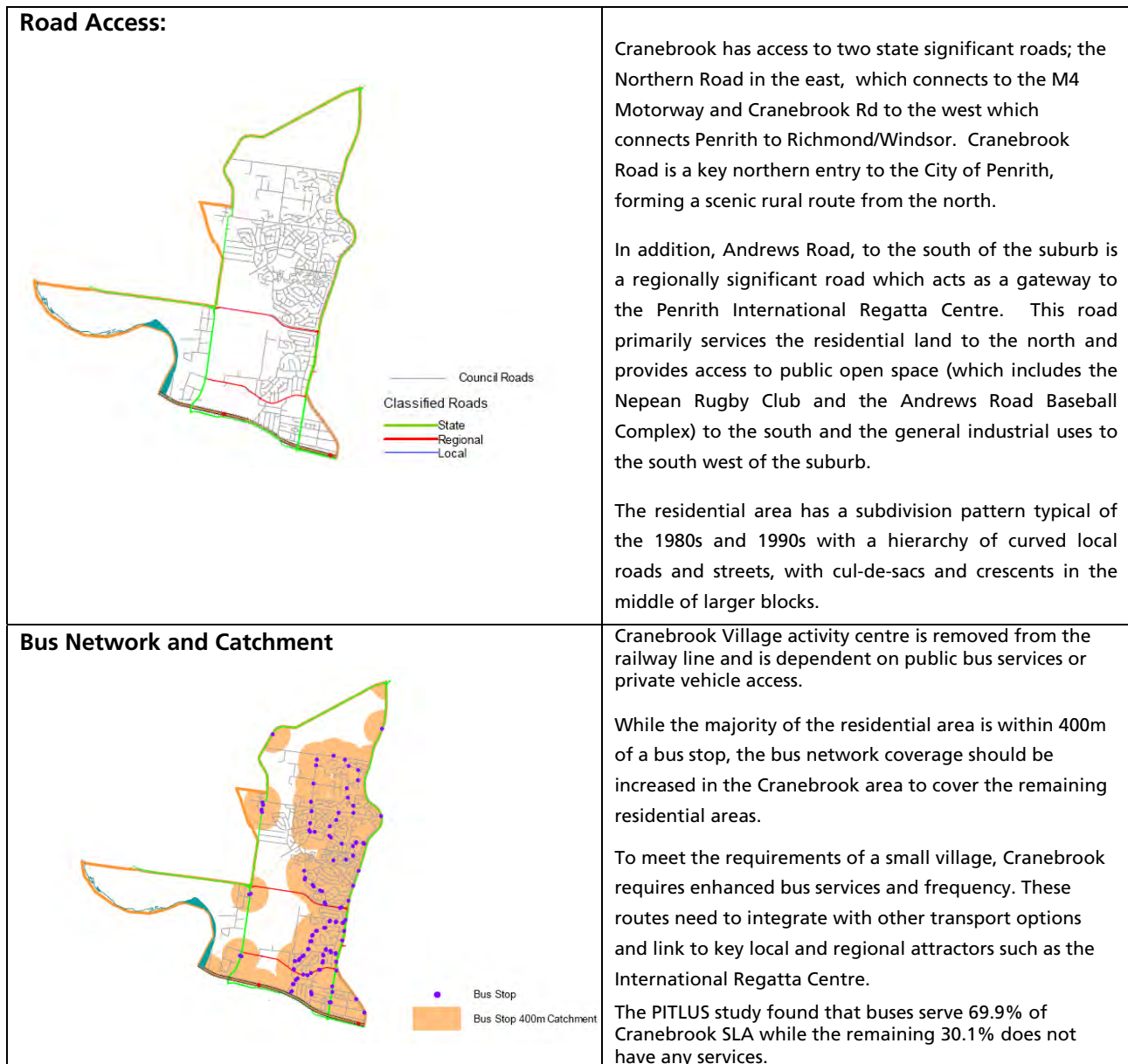
There are remnants of Shale Plains Woodland and Cooks River Castlereagh Ironbark Forest located within the residential area of the activity centre and at the rear of the Braddock Primary /Cranebrook High site which is largely owned by the Department of Education. While not a significant constraint to development, opportunities should be taken to protect these remnants, where possible.



### 5.11.5 Access and Transport

This section is drawn from the findings of the Penrith Integrated Transport and Land Use Strategy (PITLUS Report). There are differences in the area boundaries between the PITLUS Report and those of the ID Demographic Analysis (2007). Cranebrook for the purposes of the PITLUS study primarily incorporates the northern part of Penrith (north of the Great Western Highway) and the southern part of Cranebrook (south of Cranebrook Road). The inclusion of this land alters the public transport statistics for the Cranebrook suburb. As a consequence the data is sometimes skewed.

Cranebrook Village is currently classified as a small village under the Centres Hierarchy and it is envisaged that it will remain as a small village into the future. Based on the analysis outlined below, Cranebrook is considered to have a limited provision of public transport and a limited provision of active transport to support a higher position in the retail hierarchy.

**Figure 5.11.5: Access and Transport Characteristics**



<p><b>Pedestrian Network</b></p> 	<p>Only 13% of all roads within the Cranebrook SLA have footpaths. Cranebrook requires upgrades to the footpath network to provide continuous paths linking key nodes.</p> <p>These upgrades coupled with improved connections to the Cranebrook town centre and Penrith Station would improve pedestrian linkages to key nodes.</p>
<p><b>Cyclist Network</b></p> 	<p>The bicycle network in within Cranebrook SLA, demonstrate a lack of connections east-west and poor connectivity with Penrith Railway station.</p> <p>The Penrith train station is considered to be within a reasonable distance of cycling as long as there is a dedicated bike route from Cranebrook to Penrith Station.</p> <p>Enhanced connectivity and continuity should be provided with a focus on linking key nodes within Cranebrook, and to key nodes outside of Cranebrook (e.g. Penrith City centre, International Regatta Centre).</p>

*All diagrams sourced from PITLUS Report 2008*

### 5.11.6 Access to Services

#### A Retail / Local Shopping

Cranebrook Shopping Village is located on Borrowdale Way. This centre is classified as a Small Village in the Centres hierarchy

Cranebrook Village Shopping Centre is a stand alone shopping centre. It contains a small supermarket and several smaller specialty retailers. It's a one-stop shopping centre for the day-to-day needs of residents.

Figure 5.11.6 Shopping catchments, Cranebrook

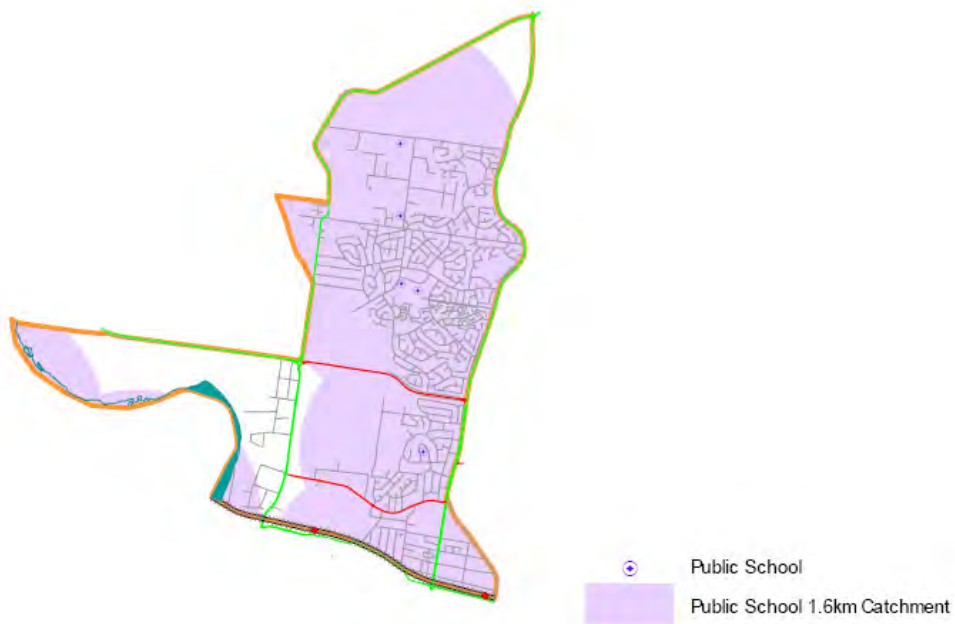


Source: PITLUS 2008

## B Education / Schools

Figure 5.11.7 shows that all residents in Cranebrook are within 1.6km of a public school and therefore the area is considered to be well serviced by public schools.

Figure 5.11.7: Public school catchments, Cranebrook



Source: PITLUS 2008



## **C Community Facilities**

There is a high provision of community facilities within Cranebrook and they are primarily focussed upon the Cranebrook Village Shopping Centre. Within this cluster is the Cranebrook Neighbourhood Centre, Tamara Children's Centre, Cranebrook Community Health Centre (Sydney West Area Health) and Penrith Barnardos Centre.

These facilities meet the requirements of a small village and should also meet the requirements of a future population.

The existing community facilities within the town centre do not operate at optimum levels. Therefore redevelopment opportunities exist for the co-location of these facilities to share resources.

## **D Open Space**

The principal area of open space in Cranebrook adjoins the shopping centre and trends in a north south direction. The open space has a dual function in that it provides an area of active open space as well as a drainage path during storm events. There is potential to provide improved pedestrian / cycleway access in the principal area of open space thereby linking the commercial part of the village to the extremities of the suburb and greater Penrith beyond.

Grey Gums Reserve is located in the southern part of Cranebrook and provides district athletics and AFL facilities depending upon the season.

### 5.11.7 Existing Suburb Character

Settlement of the area dates from 1804 when the first land grant was made, with land used mainly for farming. Growth was minimal until the 1970s when farming blocks were subdivided. Significant development occurred in the 1980s and early 1990s. Growth began to slow in the mid 1990s, with relative stability in population and dwelling stock between 2001 and 2006.

Major features of the area include Mount Pleasant Shopping Centre, Andromeda Drive Reserve, Cranebrook Park, Greygums Oval, St Pauls Grammar School and numerous other schools.

Figure 5.11.7: Suburb Character Analysis

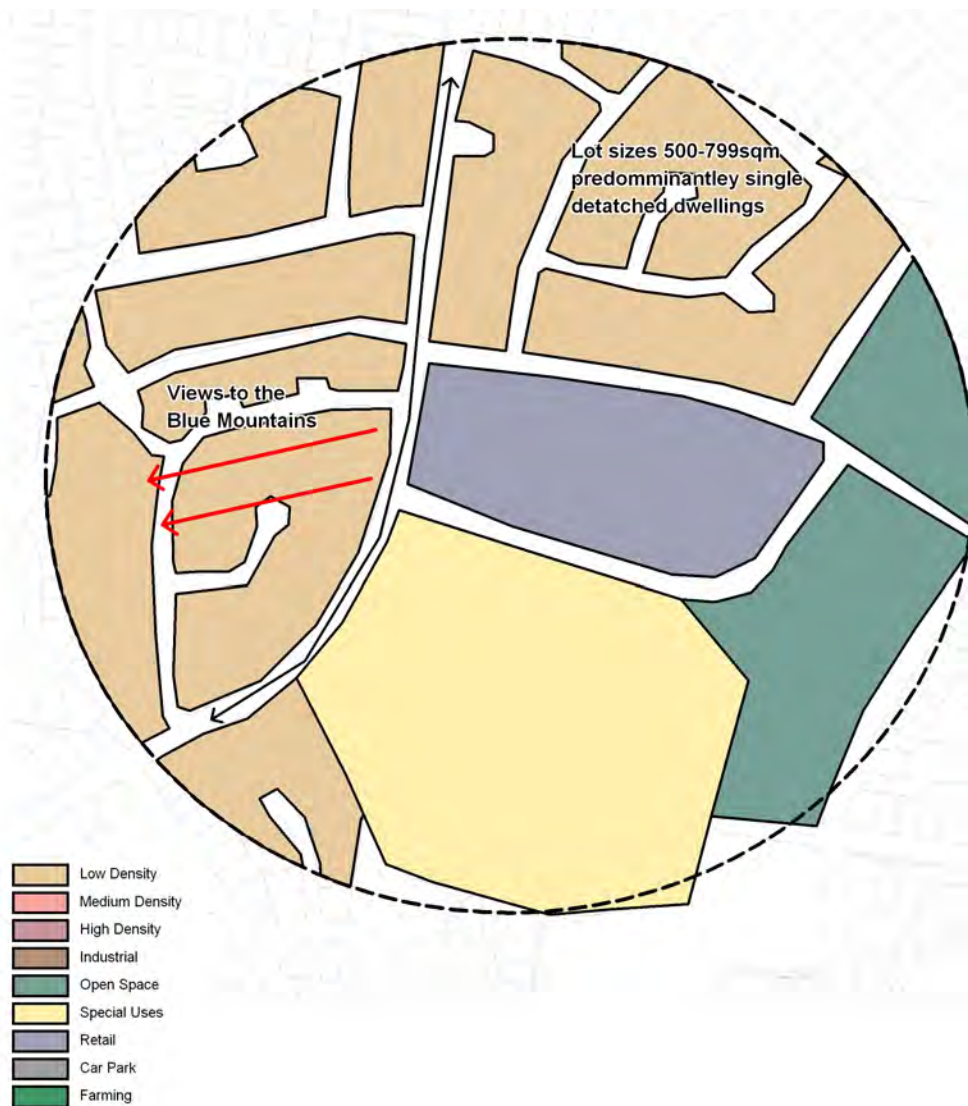


Figure 5.11.9: Examples of dwelling types in Cranebrook



### 5.11.8 Summary of Key Opportunities and Constraints

Based on the above analysis, the key growth opportunities that will influence urban growth in Cranebrook can be summarised as follows:

- A large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported).
- Good access to local schools and well used community facilities
- Limited environmental constraints to urban growth
- Underutilisation of a number of lots in the town centre where redevelopment may be able to meet future mixed use and housing demand
- A population increase that may slightly increase the demand for additional dwellings over the next 20-25 years

The key constraints that will limit urban growth in Cranebrook that can be summarised from the above analysis are as follows:

- Limited access to frequent and multiple public transport services
- Limited provision of infrastructure for active transport options
- Drainage paths through the area that are currently integrated into open space areas
- Limited availability of large vacant lots that are not used for drainage and open space purposes and
- Existing housing stock was built in last 20-30 years, is of reasonable quality, and is unlikely to support large-scale redevelopment in the short to medium term.

### 5.11.9 Future Dwelling Opportunities

#### A Within Cranebrook Small Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Cranebrook Village Centre (within a 400 metre radius of the village centre).

Cranebrook's existing role in the Centres Hierarchy is Small Village. This Study seeks to reinforce the integration of land use and transport access and provide higher densities around centres. As such, there is the potential to look at / improving housing mix and increasing densities at Cranebrook Village, subject to the key constraints (lack of adequate public transport).

Cranebrook's housing stock was built in the 1980s-1990s and contains predominantly detached dwellings. In 2006, there were 4214 detached dwellings and 274 medium density dwellings. There are only two vacant allotments in the Activity Centre.

The current Activity Centre boundary is designed around the 400m walking catchment from the retail area and this is the area most suited to higher densities of development where the opportunity for some villa/town house development could be provided.

Table 5.11.1 summarises the key assumptions made for Cranebrook Small Village Centre potential future dwelling capacity.

**Table 5.11.1: Assumed densities for Cranebrook (Small Village) Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Cranebrook	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares))	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1970's - 1980s Medium Opportunity	01.0	400	21.4	7.5%	0%	0%	25%	75%
Urban Study and Strategy	1970's - 1980s Medium Opportunity	See Sustainability Checklist	400	21.4	15%	0%	0%	40%	60%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

The majority of increased dwelling capacity should occur within the Activity Centres that have higher levels of access to transport. The amount of urban growth within the Cranebrook Town Centre would depend upon significant improvements in the provision of bus services (including accessibility, frequency and directness routes).

There is the opportunity to redevelop land for higher residential densities in and around the Cranebrook activity centre given the age of housing stock, the ownership characteristics (large parcels of land in public ownership) and the relatively large lot sizes.

**Table 5.11.2: Estimated Dwelling capacity for Cranebrook (Small Village) Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Cranebrook	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Small Village	0	0	20	30	60	17	33
Urban Study and Strategy Assumptions (see below)	Small Village	0	0	64	48	112	17	95

Source: ID Report (Sept 2007) as well as findings of this study.

The long term (20-25 years) dwelling capacity within the Cranebrook Village Centre could be 33-95 dwellings.

Future development assumes the availability of all the services/infrastructure necessary to allow Cranebrook Small Village Centre to function sustainably as a Small Village.

## **B Outside Key Activity Centres**

The calculations to determine future dwelling gains in Cranebrook outside of the Small Village Centre radii is based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

The potential future dwelling gains in the areas of Cranebrook outside the Activity Centre, identify that while the majority of lots in Cranebrook are from 500 to 799 m<sup>2</sup>, there are significant numbers of larger lots. The development potential of larger lots is high as many were built in the 1980's and are predominantly single detached dwellings which may be an under-utilisation of the land in the future.

ID (2007) have calculated that there are approximately 63 vacant lots in Cranebrook outside of the Activity Centre, predominantly 500-800 m<sup>2</sup>, that results in a net potential gain of 135 dwellings. However, the assumed dwelling yield may be slightly high as many of the vacant allotments are at the periphery of the suburban area and are likely to only produce low density single or dual occupancy outcomes.

### C Summary of Dwelling Opportunity (Long Term)

ID (2007) have adopted the assumptions of 75% of dwellings at 25 dwellings / hectare and 25% of dwellings at 50 dwellings / hectare as a likely redevelopment outcome.

The Urban Study has assumed a higher figure given the likelihood of the Department of Housing redeveloping their stock at a greater density (40% at 50dw/ha and 60% at 25dw/ha.) The Department of Housing site in Cranebrook could accommodate higher densities than estimated by I.D. in the next 25 years, given its favourable access to the Northern Road and the future ADI development (Western Precinct).

**Table 5.11.3: Net dwelling gains for Cranebrook (Small Village) Centre till 2031.**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centres (400m)	33	95
Outside Activity Centres Vacant Land	135	135
Outside Activity Centre Demolition & Replacement	16	16
<b>TOTAL</b>	<b>184</b>	<b>246</b>

*As calculated by ID Report (Sept 2007) and this study.*

The population of Cranebrook will continue to increase while household sizes decrease.

By 2021, the estimated population of Cranebrook is 15366 persons and by 2031 the estimated population of Cranebrook is 16150 persons. Therefore, urban growth in Cranebrook is likely to be driven by population growth. This figure excludes the Waterside site.

By 2021 it is projected that there will be a total of 5,423 households in Cranebrook, this is an increase of 764 households since 2006. There will be a decrease in households with dependents and a corresponding increase in lone person households (approximately 6% swing).

### 5.11.10 Cranebrook Assessment against Sustainability Checklist

The following sustainability checklist in Table 5.11.4 provides an assessment as to the suitability of Cranebrook (Small Village) Centre to meet future growth as a Small Village and Neighbourhood Centre respectively.

Table 5.11.4: Cranebrook Assessment against Sustainability Checklist

Cranebrook				
Strategy Element	Current Centre Classification – Small Village	Future Centre Classification - Small Village	Additional services/actions needed	Priority
Population Size 2,650 -14,310 persons	✓✓ 13,799 (2006)	✓✓ 16,150 (2031)	Greater mix of housing options needed for a changing demographic (Ageing population and lone person households increasing) Limited potential to significantly increase densities due to poor public transport access	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓	✓✓✓	Car dependant with good access to Northern and Andrews Roads.  Need to create a road hierarchy within suburb and particularly improve vehicle access to the town centre	Medium to Long term
Active Transport	✓	✓	Investigate cycle path and footpaths on both sides of street.  Improve pedestrian and cycle access routes based on desire lines within existing town centre.  High provision of open space surrounding the town, with the opportunity to create better pedestrian and cycle connections.	Medium (5-10 years)
Public Transport	✓	✓	Removed from train station.  Bus routes: Poor, need for higher frequency services.  Significant constraint to further residential development.	Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity	
Environmental Considerations	✓✓	✓✓	No major environmental constraints	
Access to retail and commercial services <u>Typical Retail Area</u> 3,000sqm-7,500sqm (inc supermarkets/s @ 1,500-4500sqm) <u>Typical Commercial Area</u> 250sqm-750sqm	✓✓	✓✓	Opportunity for redevelopment of existing shopping centre to provide vibrant mixed use town centre including retail, commercial, residential and community uses.	short to medium (1-5 years)

Cranebrook				
Strategy Element	Current Centre Classification – Small Village	Future Centre Classification - Small Village	Additional services/actions needed	Priority
Access to community services and facilities	✓	✓	Provision of these services is good and well utilised, but poorly accessed. Improved access is important.  Strong community infrastructure	Short to Medium (1-5 years)
Public Domain and Open Space	✓✓	✓✓	There is also the potential to look at improving on the quality of the public domain/town centre core and opening up the shopping centre to relate more to the surrounding streets.  Build on and enhance existing strong open space and recreation infrastructure	Medium (5-10 years)
Housing Sustainability	✓	✓	Need to implement sustainable, adaptable and affordable housing initiatives	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.11.11 Future Actions

Key actions to sustain Cranebrook as a small village are summarised as follows:

In the medium to long term, there is the potential for the introduction of low to medium densities around the town centre and medium density in the town centre in the form of a mixed-use development. However, these suggested actions rely on a vastly improved localised bus service.

- Enhance bus routes in terms of frequency and hours of usage (promote public transport in the area)
- Improve vehicular and pedestrian access in and around the town centre – road hierarchy needs to be established
- Create better pedestrian/cycle connections through the open space surrounding the centre and to link to key activity nodes e.g. train station, Penrith City Centre, International Regatta Centre, Penrith Lakes & Waterside.
- Investigate opportunities for redevelopment of Cranebrook shopping village to include a mixed-use development and enhance the level of retail and commercial services and facilities within the commercial core.
- Undertake town centre improvements and create a good quality public domain and ensure heightened safety and surveillance
- Build on existing strength of social infrastructure through community consultation.
- Increase housing diversity to better meet the needs of future residents (smaller households, ageing population)
- Encourage the Department of Housing to take advantage of the intent of the 2(d) Residential (Medium Density) zone and redevelop their land at a higher density.
- Upgrade all footpaths on both sides of the road
- Investigate the existing infrastructure capacity
- Improve on the significant open space surrounding the centre.





5.12

Erskine Park



## 5.12 ERSKINE PARK

### 5.12.1 Suburb Overview

Erskine Park is located at the eastern edge of Penrith local government area, south of the M4 Motorway. The suburb is generally bounded by the M4 Motorway & Erskine Park Road in the north, Mamre Road in the west, the Sydney Water Pipeline in the south and Ropes Creek in the east. Erskine Park Road defines the Ropes Creek corridor which also marks the eastern boundary of the City of Penrith (with adjoining Blacktown City).

The northern section of Erskine Park is predominantly residential and was developed in the 1980s and 1990s. Key features of this residential area are Erskine Park Shopping Village, James Erskine Primary School, Erskine Park High School, Peppertree Reserve, Erskine Park Neighbourhood Centre, Chameleon Reserve (including netball courts). The north-west boundary of Erskine Park adjoins the larger residential suburb of St Clair.

The southern section of the suburb, formerly rural land, is zoned for employment lands and contains an establishing employment area known as Erskine Business Park. This area is included in the draft State Environmental Planning Policy (Western Sydney Employment Hub) which provides employment opportunities to a regional catchment.

Figure 5.12.1: Map of Erskine Park.



## 5.12.2. Suburb Demographics and Housing Trends

Erskine Park is a relatively new suburb, with residential development primarily occurring in the late 1980s and early 1990s. In Erskine Park at the time of the 2006 census there were 6923 people, 1950 households and 2000 dwellings.

### A Current Demographics

#### *a) Population:*

The population of Erskine Park increased by 1688 people (a 25% increase) from 1991 to 2001. During this period an additional 423 dwellings were added to Erskine Park and households increased by 425. From 2001 to 2006 there was a small decrease in population by 84 people.

#### *b) Age*

The population of Erskine Park is younger than that of Penrith, with a higher proportion of middle age (35-49 years) and young people (5-11 and 12-17 years). The 25-34 and over 60 age groups are smaller proportions of the Erskine Park population, than in Penrith. This age profile is a reflection of the more recent development of the suburb and its attraction for younger families.

The key population trends are:

- decrease of very young children (under 12);
- decrease in the 25-34 age group; and
- increase in the over 50 age groups.

#### *c) Income*

Individual and household incomes in Erskine Park are higher than in Penrith. In Erskine Park, 21.6% of individuals earned a high income, and 34.4% earned a low income, compared with 17.9% and 37.9% respectively for Penrith City. When examined at a household level, 36.1% of Erskine Park households earned a high income, and 5.6% were low income households, compared with 25.6% and 14.8% respectively for Penrith City.

#### *d) Car Ownership*

Erskine Park is removed from the railway line and is dependent on public bus services or private vehicle access. Erskine Park has more motor vehicles per household than in Penrith City. Erskine Park has 25.3% of households with three motor vehicles (versus 17.2%), and 47.2% with two motor vehicles (versus 36.0%).

#### *e) Households*

Erskine Park is dominated by households with children (75% compared to 55% for Penrith). There is a high proportion of couples with children (63% of households, compared to 41% households in Penrith). There is also a low proportion of lone person households (5% compared with 18% for Penrith).

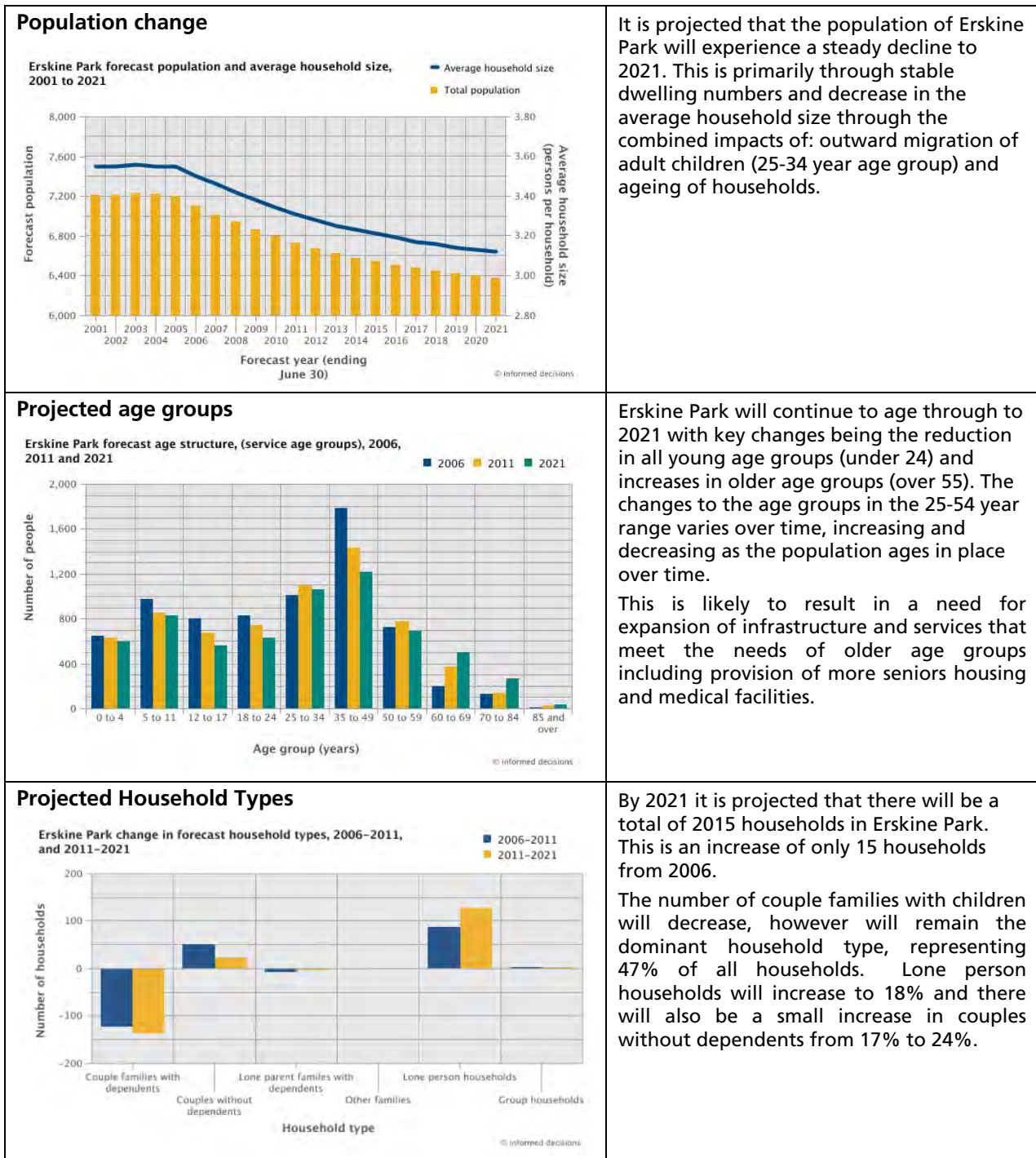
#### *f) Dwelling Type and Tenure*

The majority of dwellings in Erskine Park are single detached houses, which is very high compared to Penrith City. Data from the 2006 census shows that in Erskine Park, 96.9% of residents occupied a separate house; 0.7% occupied a medium density dwelling; while 0.0% occupied high density dwellings, compared with 80.3%, 10.9%, and 2.9% respectively in Penrith City.

There is a high proportion of houses in Erskine Park being purchased (60.9% compared with 41.8% in Penrith City) and a low proportion of houses being rented (13.7% compared with 25.9% in Penrith City). Mortgage repayments in Erskine Park are similar to that of Penrith City however rents paid were higher than average in Penrith.

## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.12.2 Demographic and Household Characteristics 2021



### 5.12.3. Existing Zoning and Land Use Patterns

The land use pattern in Erskine Park is comprised primarily of residential and employment areas. The southern portion of the suburb (around 63% of the suburb area) is zoned employment with the northern residential section comprising the remaining 37% of the suburb. A transmission easement forms the boundary between the southern employment and northern residential areas.

In the northern part of the suburb approximately two thirds is zoned for residential and almost one third as parkland or corridor zone. The majority of Erskine Park is zoned as 2(b) Residential (Low Density) which generally only permits single dwelling houses (and some dual occupancies). Development across the residential area is fairly homogenous. Dwelling diversity is low and there is a predominance of single detached dwellings.

A small shopping centre known as Erskine Park Village is located in the centre of the residential area. The centre provides retail shopping stores which include a child care centre, supermarket (Franklins), pizza shop, real estate agent, pool shop, mortgage financier, lolly shop, tanning centre, medical centre, pharmacy, women's fitness centre, chemist, butcher, tobacconist, take-away, real estate agent, florist, delicatessen, hairdresser, newsagent, take-away, ATM (St George), baker, restaurant, Community Centre and hall.

A primary school and a high school are also located in Erskine Park.

There is very limited availability of land for urban expansion in the Erskine Park Residential Area. There is an opportunity to investigate the area within the activity centre, particularly adjacent the Erskine Park Village to provide increased diversity of housing including villa type development suitable for seniors living. Further opportunities for urban growth are likely to occur through infill development such as dual occupancies.

The southern section of Erskine Park is currently being developed as employment land. The area is approximately 510 hectares and is generally bounded by the Erskine Park residential area in the north, the Sydney Water supply pipeline to the south, Ropes Creek to the east and Mamre Road to the west. A transmission easement of approximately 140m width is located within the employment area along the boundary with the residential area and provides a buffer between the land uses.

The developable area is approximately 326 hectares. It is anticipated that the Erskine Park Employment Area will provide employment for up to 6,000 people.

The Erskine Park Employment Area is part of the Western Sydney Employment Hub, an area of 2450 hectares proposed or currently zoned for employment, which straddles the three local government areas of Penrith, Blacktown and Fairfield. The WSEH is anticipated to provide up to 36,000 jobs and, as a state significant project, planning for this area being undertaken by the NSW Department of Planning. An arterial road network for the Employment Hub, including connecting the Erskine Park Employment Area to the Western Sydney Orbital (M7 Motorway), has been identified as a major project. It is anticipated that development in the Employment Hub will accelerate once the final route alignment, timing and funding for the arterial road network has been determined.

It is not the role of the Urban Study and Strategy to investigate opportunities for proposed employment areas. However, ongoing development in Erskine Park and the wider Employment Hub is likely to affect surrounding suburbs, including the Erskine Park residential area which is well positioned to provide housing for those employed in

the Hub. Future development is likely to increase overall demand for housing and particularly for dwelling variety.

### 5.12.4 Environmental Opportunities and Constraints

Figure 5.12.4 illustrates the key environmental constraints within Erskine Park and these are discussed below.

Figure 5.12.4: Environmental constraints for Erskine Park



#### A Topography, Flooding and Drainage

Erskine Park has gently undulating terrain, with a high point in the southern part of the residential area (occupied by Sydney Water reservoir tank) with the land sloping gently eastward to Ropes Creek and westward to South Creek. This undulating terrain provides expansive views west to the Blue Mountains escarpment and across the rural landscape south of Erskine Park.

Ropes Creek is the eastern boundary of Erskine Park, with a variable riparian corridor ranging from 100 – 500m separating the current creek channel from residential development. Sections of the riparian corridor are flood prone and bushfire prone and constrain this area from consideration of further development.

The topography, flooding and bushfire hazard are not generally constraints to further development within the existing residential area of Erskine Park. Drainage is a potential constraint to the area. Changes to dwelling types and densities would require an assessment of the impacts to drainage infrastructure and receiving ecosystems, including assessment of infrastructure capacity and investigation of opportunities for on site water management.

## **B Native Vegetation and Sensitive Ecological Areas**

The land along Ropes Creek in the east of the suburb has been identified as a Flora and Fauna Corridor and is therefore a constraint to eastward expansion of the suburb. The corridor has an area of approximately 65 hectares and is adjacent to the residential area of Erskine Park. The corridor is degraded in part but does contain ecologically endangered communities. Approximately 15 hectares of the corridor is designated as Revegetation / Local Native Species.

The Ropes Creek corridor is a significant asset for Erskine Park. It contributes to the views and vistas from the residential area, and adds to the character of the suburb. The large area of vegetation also provides habitat for native fauna and opportunity for residents to enjoy a natural setting and there are a number of informal tracks throughout the corridor indicating current usage of the area. The corridor is within a 500m radius of the retail centre and within 800m walking distance via the existing road network. However, there are no visitor facilities within the corridor, and the predominance of lots (rear boundaries) directly adjoining the corridor result in very limited access to the corridor.

There are numerous parks and open space areas throughout the residential area of Erskine Park. The predominant vegetation is Shale Plains Woodland – mostly in open space areas and along drainage lines however some vegetation is retained on private properties. Remnant native vegetation should continue to be protected and enhanced as part of any development of this suburb, through retention and enhancement of open space and landscaping of existing allotments.

## **B Native Vegetation and Sensitive Ecological Areas**

### **5.12.5 Access and Transport**

Under the current centres hierarchy, Erskine Park Shopping Village is designated as a Small Village and it is anticipated that it will remain as a Small Village into the future.

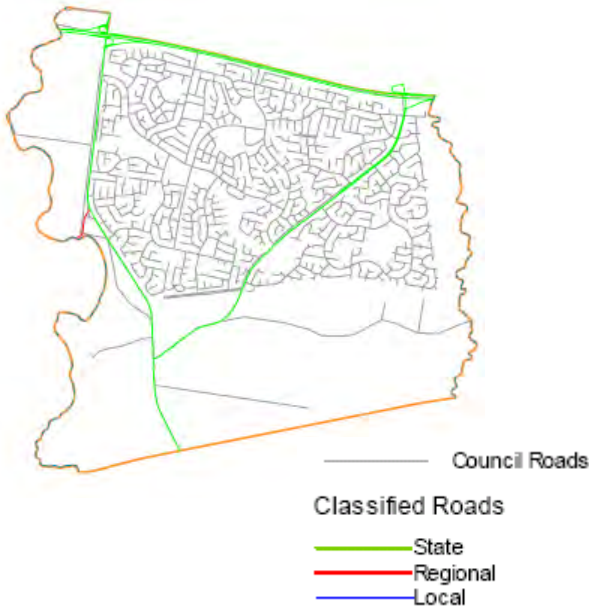
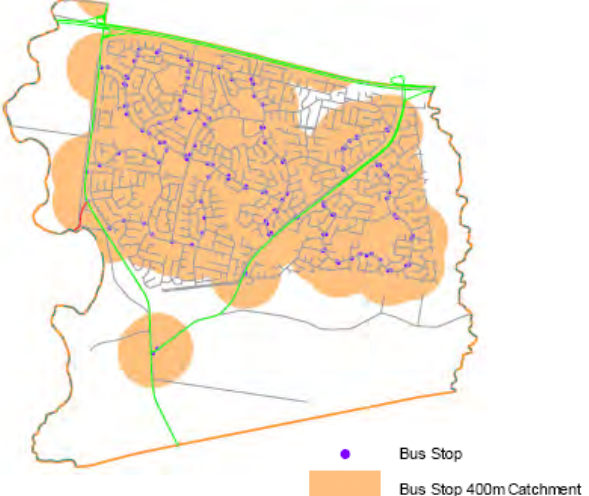
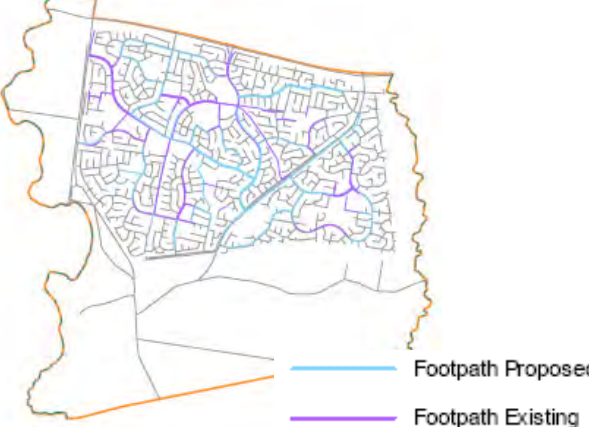
The access and transport characteristics of both local centres have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008.

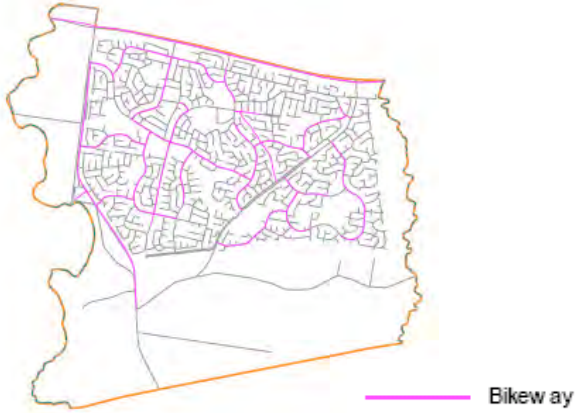
Erskine Park is removed from the railway line and is dependent on public bus services or private vehicle access. In Erskine Park, as with most of the Penrith urban area, the dominant form of transport is either as a car driver or a car passenger for most activities except education where public bus, walking or cycling is the form of transport utilised by school children. Nearly 98% of Erskine Park residential areas are within 1.6km of a public school, therefore, school children attending their local school would be ineligible for a state issued bus pass.

Figure 5.12.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.



**Figure 5.12.5: Access and Transport Characteristics**

<p><b>Road Access</b></p>  <p>— Council Roads</p> <p><b>Classified Roads</b></p> <ul style="list-style-type: none"> <li>— State</li> <li>— Regional</li> <li>— Local</li> </ul>	<p>Erskine Park has direct access to two state significant roads, Erskine Park Road and Mamre Road, both of which connect to the M4 Motorway (connecting the Blue Mountains to Sydney). Erskine Park Road connects to the M4 Motorway to and from the east, with Mamre Road providing connection in both directions.</p> <p>The Erskine Park residential area has access to Erskine Park Road at three points (Peppertree Drive, Swallow Drive and Chameleon Drive). The area has a subdivision pattern typical of the 1980s and 1990s with a hierarchy of curved local roads and streets, with cul-de-sacs and crescents in the middle of larger blocks. The primary connector roads are Chameleon Drive, Swallow Drive and Peppertree Drive.</p> <p>The primary access for the employment lands is Erskine Park Road, via Lenore Lane. James Erskine Drive has direct access to Mamre Road, however this only serves a small section of the employment lands. Erskine Park Road is the main route used by heavy vehicles travelling between the employment lands and the M4 Motorway.</p>
<p><b>Bus Network and Catchment</b></p>  <p>● Bus Stop</p> <p>■ Bus Stop 400m Catchment</p>	<p>Erskine Park is removed from the railway line and is serviced by one bus route (Westbus 772) connecting Erskine Park to Mt Druitt and St Marys train stations. The majority of the residential area is within 400m of a bus stop. There are two services in each direction, each hour during the week, with one per hour in each direction on weekends. The bus service does not continue after 7pm (6pm on Sundays).</p> <p>There are currently no bus services connecting the Erskine Park Employment Area to surrounding areas or to other public transport.</p> <p>To meet the requirements of a small village, Erskine Park requires enhanced bus services and frequency. These routes need to integrate with other transport options and link to key local and regional attractors.</p>
<p><b>Pedestrian Network</b></p>  <p>— Footpath Proposed</p> <p>— Footpath Existing</p>	<p>Erskine Park has a limited footpath network, with footpaths existing at the entrances to the schools and the retail centre. These sections of footpath do not connect to form continuous off-road pedestrian facilities. Extension of the pedestrian footpaths to form a continuous path along Swallow Drive, Peppertree Drive and Chameleon Drive, as well as footpaths along Erskine Park Road would improve pedestrian linkages to key nodes.</p> <p>It is also relevant to consider the existing and proposed pedestrian routes in the neighbouring suburb of St Clair to ensure that there is connectivity between the suburbs. The intersections of the main access roads of St Clair and Erskine Park with Erskine Park Road are offset by several hundred metres. If the pedestrian routes were to follow the main roads then the linkage between the two suburbs would be long and circuitous.</p>

Cyclist Network	
	<p>Erskine Park is a 5km radius and 8-10km road route from the nearest railway stations (St Marys and Mt Druitt). Based on a 5 minute cycle of 1.5km and 10 minute cycle of 3km, these stations are a 20-30 minute cycle ride from Erskine Park. However, there are no dedicated or shared cycle facilities linking Erskine Park with either of these stations.</p> <p>Enhanced connectivity and continuity should be provided with a focus on linking key nodes within Erskine Park, and to key nodes outside of Erskine Park (e.g. St Clair activity centre). Provision of cycle facilities should be augmented at these key nodes.</p> <p>Investigate the creation of a dedicated cycle path from Erskine Park residential area to Mt Druitt Train Station.</p> <p>Investigate opportunity to use open space networks and riparian corridors to provide off-road, less circuitous pedestrian/cycle routes.</p>

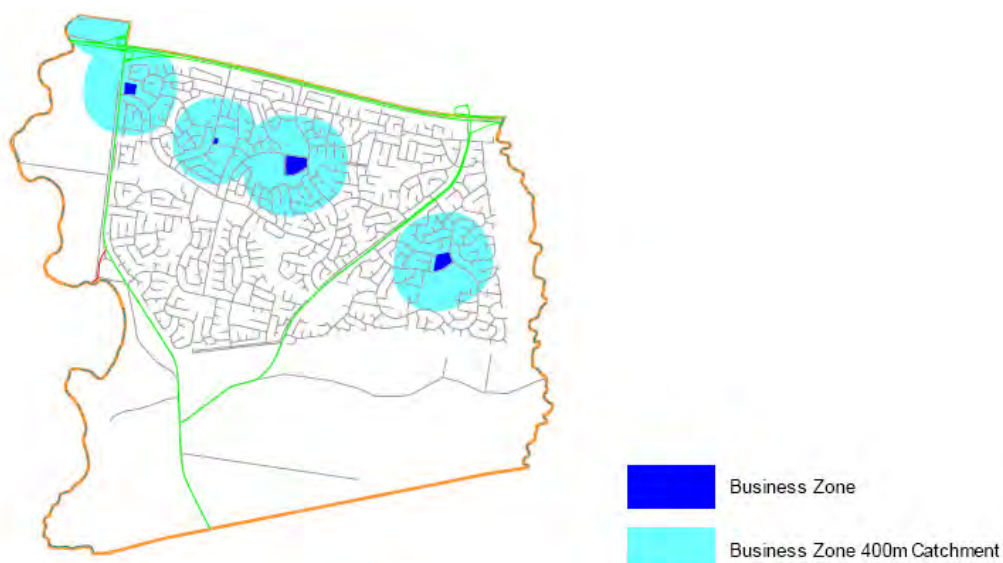
### 5.12.6 Access to Services

#### A Retail / Local Shopping

The key urban centre of Erskine Park is located at Erskine Park Shopping Village on Peppertree Drive. The Shopping village includes a child care centre, supermarket (Franklins), pizzeria, real estate agent, pool shop, mortgage financier, lolly shop, tanning centre, medical centre, women’s fitness centre, chemist, butcher, tobacconist, take-away, real estate agent, florist, delicatessen, hairdresser, newsagent, take-away, ATM (St George), baker, restaurant, Community Centre and hall.

The shops are set back behind the car parking area. Landscaping is situated along the verge and amongst the sealed car parking area. There is very limited pedestrian access to the shops, and there is a need to improve pedestrian access and circulation to engage the centre’s shop fronts.

Figure 5.12.6 Shopping catchments, Erskine Park



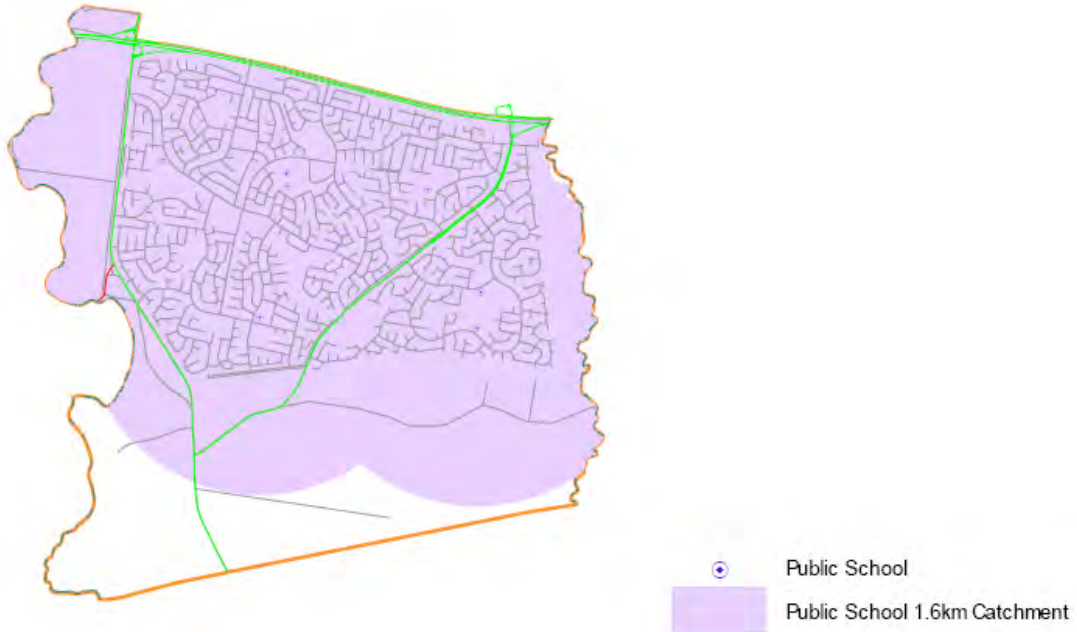
Source: PITLUS 2008

## B Education / Schools

The figure below shows that nearly all of Erskine Park/St Clair SLA urban areas are within 1.6km of a public school and, therefore, the area is well served by public schools. The schools within the locality are James Erskine Primary School and Erskine Park High School.

Mamre Anglican College, which caters for students from kindergarten to Year 12 is located in Bakers Lane. This school has a greater catchment area than the abovementioned state schools.

Figure 5.12.7: Public school catchments ,Erskine Park



Source: PITLUS 2008

## C Community Facilities

Erskine Park has a reasonable level of community facilities, which are primarily focussed around the Erskine Park Shopping Village.

These include the Erskine Park Neighbourhood Centre and a medical centre containing approximately 10 consulting rooms on the shopping village. The local church runs youth groups from neighbourhood centre

There is a high proportion of families in Erskine Park and there are 5 different children's services that seek to meet the needs of the current population.

## D Open Space

Erskine Park has considerable open space, with one third of the northern residential area being open space. Formalised sporting fields and courts are located in Peppertree & Chameleon Reserves. There are 17 (seventeen) pocket parks in Erskine Park.

The Ropes Creek Corridor to the east of the residential area is a substantial area of open space (almost 67 hectares).

### 5.12.7 Existing Suburb Character

The northern, residential section of Erskine Park was developed during the 1980s and 1990s. The neighbourhood is similar to other residential areas of the era with an irregular subdivision pattern and a hierarchy of curved roads and streets with cul-de-sacs. In addition to the substantial riparian corridor to the east of Erskine Park, and large local parks and drainage reserves, there are numerous pocket parks located throughout the area. The irregular subdivision pattern and further subdivision of lots gives rise to a large range of allotment sizes ranging from 300m<sup>2</sup> to 1000m<sup>2</sup>, however lots are predominantly in the range of 500 m<sup>2</sup>-700m<sup>2</sup> (approximately 70% of lots).

The residential development in Erskine Park is predominantly single dwelling houses of brick veneer construction. The dwelling houses tend to be medium to large in size with garages prominent along the street frontage. Dwellings generally have minimal separation from side boundaries with small to medium front and rear private gardens. There are some remnant Eucalypts scattered throughout the suburb.

The residential area of Erskine Park has a net density of approximately 11 dwellings per hectare. This density is fairly homogenous across the residential area with no increase or mix of densities within the activity centre.

Figure 5.12.8 identifies the key elements of the suburb character of Erskine Park, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.12.7: Suburb Character Analysis

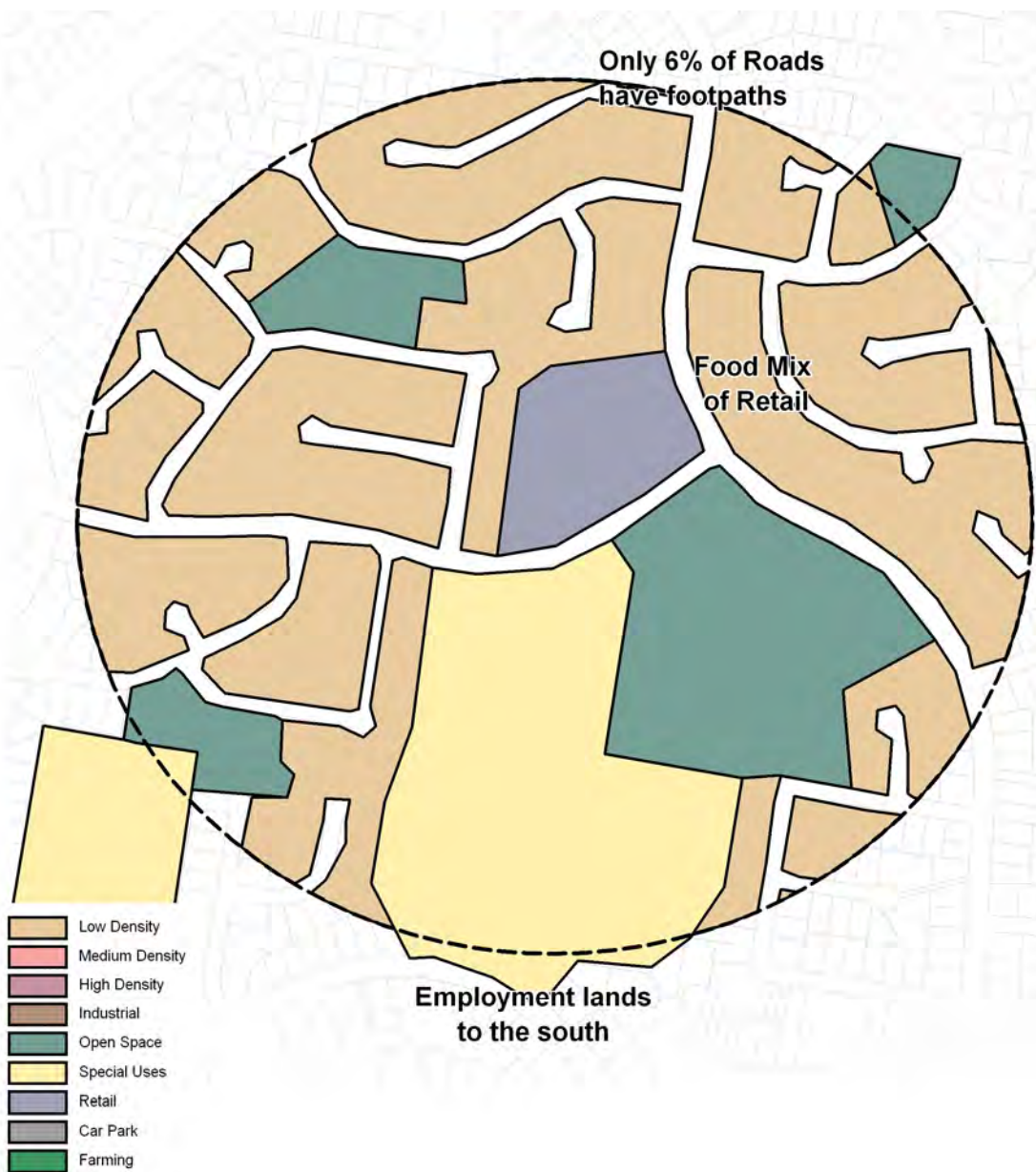


Figure 5.12.8: Examples of dwelling types in Erskine Park



### 5.12.8 Summary of Key Opportunities and Constraints

The key growth opportunities that will drive urban growth in Erskine Park include:

- Proximity to the Western Sydney Employment Hub may increase demand for housing in nearby suburbs (if this is not already catered for in the employment areas);
- Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated;
- One large underdeveloped lot (2.8 ha) in the south west of the residential area offers opportunity for development to increase dwelling diversity
- Larger range of services (e.g. tennis courts, library, leisure centre) offered in nearby St Clair augmenting the facilities in Erskine Park.

There is an opportunity to review the densities proposed in and around the Activity Centre of Erskine Park to ensure more diversity in dwelling type.

The key constraints that may limit urban growth in Erskine Park are as follows:

- Distance from the main western railway line and limited access to frequent and multiple public transport services
- Limited provision of infrastructure and routes for active transport options;
- Existing housing stock was built in the last 20-30 years, is of reasonable quality and is unlikely to support large-scale redevelopment in the short to medium term.
- Current and future trends of decreasing household sizes leading to a natural decline in population size.
- Further expansion beyond current urban boundaries is highly unlikely, as the suburb is constrained by:
  - o Riparian/biodiversity corridor in east (also subject to bushfire and flooding)
  - o Employment land to south
  - o Major roads (Mamre Road, Erskine Park Road and M4 Motorway) along the western, north-western and northern boundaries.
- Very limited availability of vacant and underdeveloped lots for development
- Residential development is limited to infill development or mixed use development.

Therefore, residential growth is likely to be limited to infill development, mixed use development in proximity to the town centre and the possibility of some villa/townhouse development in close proximity to the Erskine Park Shopping Village and Neighbourhood Centre.

### 5.12.9 Future Dwelling Opportunities

#### A Within Erskine Park Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Erskine Park Small Village Centre (within a 400 metre radius of the village centre).

Table 5.12.1 summarises the key assumptions made for Erskine Park Small Village Centre potential future dwelling capacity.

**Table 5.12.1: Assumed densities for Erskine Park (Small Village) Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Erskine Park	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares)	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1980's	1.0	400	3.3	7.5%	0	0	25	75
Urban Study and Strategy	1980's Medium-Low Opportunity	1.0	400	3.3	10%	0	0	25	75

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

A closer inspection of the existing housing stock within 400 metres of the Erskine Park Village Centre indicates that there is slightly more land available for redevelopment as indicated in the ID Assumptions.

Table 5.12.2 identifies that Erskine Park Village Centre has a potential growth of between 7-9 new dwellings to the year 2031.

**Table 5.12.2: Estimated Dwelling capacity for Erskine Park (Small Village) Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Erskine Park	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Small Village	0	0	3	5	8	1	7
Urban Study and Strategy Assumptions (see below)	Small Village	0	0	4	6	10	1	9

Source: ID Report (Sept 2007) as well as findings of this study.

## B Outside Key Activity Centres

The potential future dwelling gains in the areas of Erskine Park outside the Activity Centre identify that while the majority of lots in Erskine Park are from 500-799 m<sup>2</sup> there are significant numbers of larger lots. The development potential of these lots is higher, and is likely to be developed through dual occupancy development. The number of additional dwellings provided through further development of large lots is low, providing approximately 5 additional dwellings.

There is one large lot of 2.8 hectares located in the south west section of the suburban area that has significant potential for additional dwellings. This lot is currently has the same zoning as the rest of the residential area (low density residential), has one dwelling on it with the remainder of the land used for rural industries. Although this lot is approximately 1.8km from the Erskine Park Activity Centre (and the St Clair Activity

Centre), it adjoins Chameleon Reserve and a large (over 5ha) local park. The proximity to this open space provides opportunity for higher density development with good amenity. A density of 25-50 dwellings per hectare would be appropriate for this site. Based on the density of 25-50 dwellings per hectare, this lot would yield 70-140 dwellings.

### C Summary of Dwelling Opportunity (Long Term)

ID (2007) forecasts that the average household size will decrease to 2021 with the total population decreasing and household numbers increasing.

- Total population from 2006 to 2021 (15 years) is expected to decrease from 6923 people to 6379 people (which extrapolates approximately to a decrease to 6249 people by 2031). This equates to a decrease of 10 % over 25 years.
- Total households from 2006 to 2021 (15 years) is expected to increase from 1950 to 2015 (which extrapolates approximately to 2025 households by 2031)
- Total dwellings from 2006 to 2021 (15 years) is expected to increase to 2033 dwellings (which extrapolates to approximately 2043 dwellings by 2031)

Future development and housing demand within Erskine Park is anticipated to be generated from external influences (such as development of the Erskine Park Employment Area) rather than natural increase within the suburb. Erskine Park offers sufficient scope to increase dwelling capacity within Erskine Park to meet future population projection requirements.

In conclusion, the projected population growth and dwelling demand in Erskine Park may not be as high as the potential residential capacity for the suburb.

**Table 5.12.3: Net dwelling gains for Erskine Park till 2031.**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centres (400m)	7	9
Outside Activity Centres Vacant Land	5	5
Outside Activity Centre Demolition & Replacement	1	1
<b>TOTAL</b>	<b>13</b>	<b>15</b>

*As calculated by ID Report (Sept 2007) and this study.*



## 5.12.10 Erskine Park Assessment Against Sustainability Checklist

ERSKINE PARK				
Strategy Element	Current Centre Classification – Small Village	Future Centre Classification – Small Village	Additional services/actions needed	Priority
Population Size	✓✓	✓✓	Promote densities within centre and provision of dwellings of a nature and size that would encourage smaller households to vacate larger homes.	Med
Dwelling Type and Mix	✓	✓	Promote provision of wider range of dwelling mix, especially for smaller household sizes (1-2 persons) with the flexibility to meet the needs of particular demographic groups (e.g. empty nesters, seniors housing, young couples without children).	HIGH
Road Access	✓✓	✓✓✓	Issues with peak hour congestion + increasing heavy vehicle traffic due to employment development in Erskine Business Park (warehouse/logistics/distribution centre). Direct connection to M7 proposed for EBP (within timeframe of 2031). Capacity on Mamre Rd is currently being expanded by duplication of bridge over M4.	Low
Active Transport	✓	✓	Strengthen links to neighbouring St Clair and Erskine Business Park.  Improve district-level cycle/pedestrian routes including to/from destinations in neighbouring Blacktown LGA.  Improve facilities at destination points.	Medium
Public Transport	✓	✓	Strengthen within centre links and links to neighbouring St Clair and Erskine Business Park.  Evaluate trip destinations to determine whether current transport network is serving or is capable of serving these destinations.	Medium

<b>ERSKINE PARK</b>				
<b>Strategy Element</b>	<b>Current Centre Classification – Village</b>	<b>Future Centre Classification – Small Village</b>	<b>Additional services/actions needed</b>	<b>Priority</b>
<b>Physical Utilities/Infrastructure</b>	✓✓✓	✓✓	Erskine Park is currently well supported by utilities and infrastructure. Opportunities to improve sustainability performance include: increased water reuse/recycling and improved stormwater treatment train.	Low-med
<b>Environmental Considerations</b>	✓✓	✓✓	Enhancement and rehabilitation of creek corridors, especially Ropes Creek.	Medium
<b>Access to retail and commercial services A small strip of shops for daily shopping (e.g. butcher, hairdresser, café, restaurants and take-away food)</b>	✓✓✓	✓✓✓	Retail provision is more than adequate for local centre. Limited range of commercial services is also available. Potential to augment both, but particularly commercial services. Redevelopment of retail centre provides opportunity to improve public domain	Low-med
<b>Access to community services and Facilities</b>	✓✓	✓✓	Community Hub near shopping centre would be beneficial to enable co location of community facilities. Need for aged care services will increase.	Low-med
<b>Public Domain</b>	✓	✓	There is a need for active urban spaces of high design quality which allow for public art and are safe day and night Identify unique and individual centre character and characteristics and provide a high quality public domain which reflects the distinct character of the centre.	HIGH
<b>Housing Sustainability</b>	✓	✓	Provision of dwellings of a nature and size that would encourage smaller households to vacate larger homes.	HIGH

### **5.12.11 Future Actions**

The following key actions are recommended to maintain the small village designation:

- Promote densities within centre and provision of dwellings of a nature and size that would encourage smaller households to vacate larger homes.
- Promote provision of wider range of dwelling mix, especially for smaller household sizes (1-2 persons) with the flexibility to meet the needs of particular demographic groups (e.g. empty nesters, seniors housing, young couples without children).
- Improve district-level cycle/pedestrian routes including to/from destinations in neighbouring Blacktown LGA.
- Strengthen links to neighbouring St Clair and Erskine Business Park.
- Improve facilities at destination points.
- Promote direct connection to M7 proposed for the Erskine Business Park (within timeframe of 2031).
- Promote a Community Hub near the shopping centre to enable co location of community facilities.
- There is a need for active urban spaces of high design quality which allow for public art and which are safe day and night



# 5.13

## Werrington County, Werrington Downs and Cambridge Garden





## **5.13 WERRINGTON COUNTY - WERRINGTON DOWNS - CAMBRIDGE GARDENS**

### **5.13.1 Suburb Overview**

Werrington County - Werrington Downs - Cambridge Gardens is an established residential area and is bounded by the locality of Llandilo in the north, South Creek, Reid Street, Lethbridge Avenue and John Oxley Avenue in the east, generally by Werrington Creek, Francis Street and Dunheved Road in the south and The Northern Road in the west. Werrington County and Werrington Downs are named after an original homestead in the area.

The area was developed as a residential estate in the 1970s. Werrington County – Werrington Downs - Cambridge Gardens is generally laid out in an irregular street pattern with a number of collector roads such as Trinity Drive, Greenbank Drive and Henry Lawson Avenue linking to Dunheved Road an arterial road between Penrith and St Marys.

Werrington County, Werrington Downs and Cambridge Gardens have a combined total area of approximately 418 hectares.

Significant development occurred in the post-war years, especially from the late 1970s to the mid 1980s. The population has declined slightly since the early 1990s, a result of little change in dwelling stock and a decline in the average number of persons living in each dwelling.

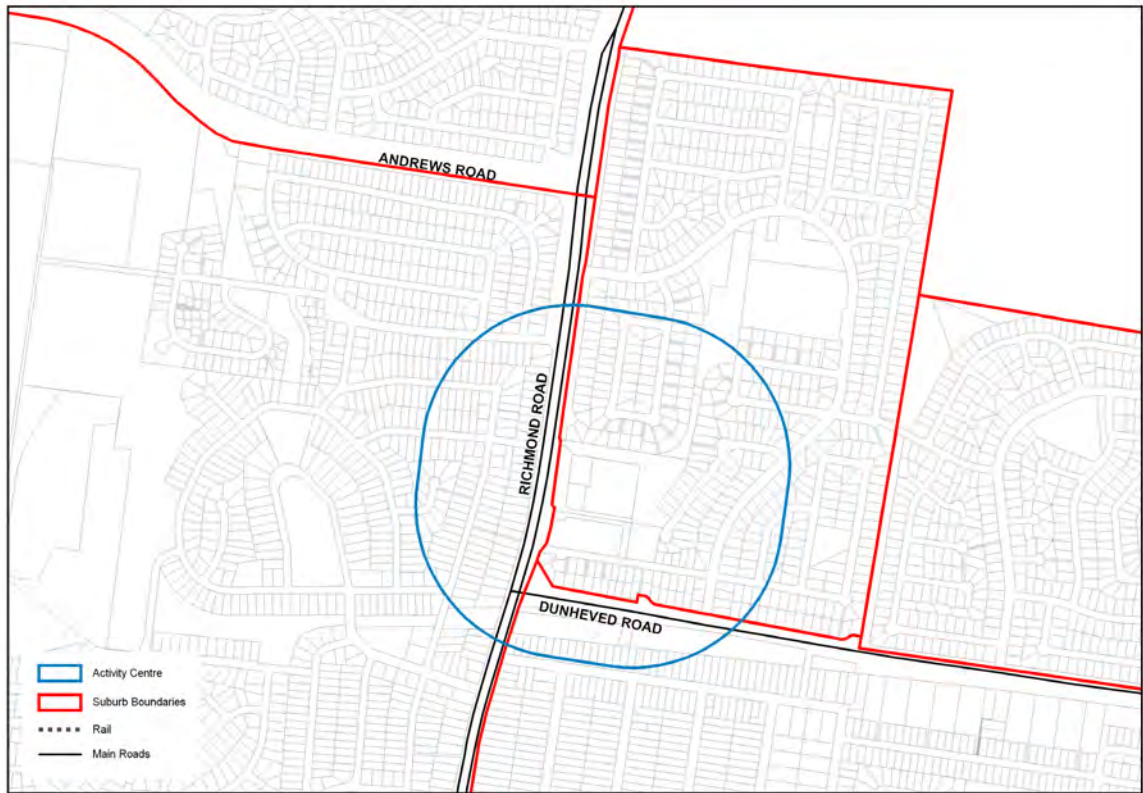
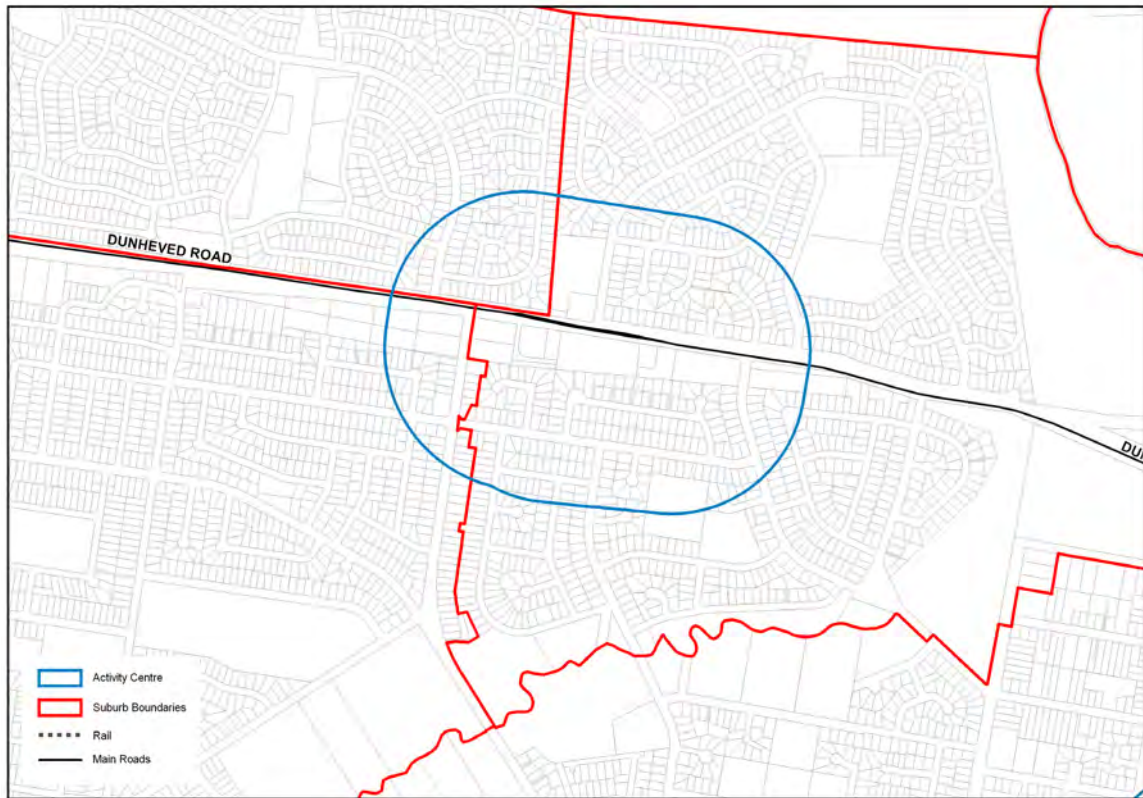
Major features of the area include two shopping centres, four schools, three child care centres and five parks.

Two Local Centres are located within this area. These are known as the Werrington County Shopping Village and the 'Star Court' local shopping centre. Figure 5.13.1 shows the location of the centres

Under the current centres hierarchy, Werrington County Shopping Village is designated as a Small Village and it is anticipated that it will remain as a Small Village into the future.

The 'Star Court' local shopping centre is designated as a Neighbourhood Centre and this designation is unlikely to change in the near future.

Figure 5.13.1: Map of Werrington Downs/Werrington County/Cambridge Gardens





### 5.13.2 Suburb Demographics and Housing Trends

Werrington County - Werrington Downs - Cambridge Gardens are relatively new suburbs, with residential development primarily commencing in the late 1970's and extending into the 1980s, with a total population of 9,091 people (2006). Population in 2021 forecast to be 9049.

#### A Current Demographics

##### *a) Population:*

Werrington County - Werrington Downs - Cambridge Gardens experienced only a small decrease in population between 2001 and 2006, the result of no new dwellings being added and a decline in the average number of persons living in each dwelling. In 2006, the total population was 9,091 people. In 2031 the population is projected to be 9049.

##### *b) Age:*

The age structure of Werrington County - Werrington Downs - Cambridge Gardens in 2006 was characterised by family groups. Those aged in their mid 30's to late 40's were the most dominant, followed by a relatively even distribution across age groups between 5 and 34. The smallest age groups were those aged below 4, and above 60.

The major differences between the age structure of Werrington County - Werrington Downs - Cambridge Gardens and Penrith City were:

- a larger percentage of 50 to 59 year olds (15.5% compared to 12.6%), and
- a larger percentage of 18 to 24 year olds (12.6% compared to 10.8%).

##### *c) Income:*

Analysis of household income levels for Werrington County - Werrington Downs - Cambridge Gardens in 2006 compared to Penrith City shows that there was a larger proportion of medium-high income households (those earning \$60,000 per year or more) but a smaller proportion of low income households (those earning less than \$30,000 per year).

##### *d) Car Ownership:*

The share of motor vehicles per household in Werrington County - Werrington Downs - Cambridge Gardens was higher as compared to the overall rate of car ownership for Penrith City in 2006. The major differences between the car ownership of the households in Werrington County - Werrington Downs - Cambridge Gardens and Penrith City were:

- a larger percentage of households with 2 vehicles (41.9% compared to 36.0%), and;
- a larger percentage of households with 3 or more vehicles (22.5% compared to 17.2%).

##### *e) Households:*

Comparing household types between Werrington County - Werrington Downs - Cambridge Gardens and Penrith City in 2006 reveals a larger proportion of family households, but a smaller proportion of lone person households. Family households accounted for 85.3% of total households in Werrington County - Werrington Downs - Cambridge Gardens while lone person households comprised 11.5%, (76.6% and 18.0% respectively for Penrith City).

Between 2001 and 2006 in Werrington Downs - Werrington County - Cambridge Gardens, there was a decrease in the number of family households (-57), an increase in lone person households (52) and an increase in group households (15).

Overall, families continue to dominate the household characteristics of Werrington Downs - Werrington County - Cambridge Gardens.

*f) Dwellings:*

There is a significant concentration of detached dwellings in Werrington County - Werrington Downs - Cambridge Gardens (95.8%).

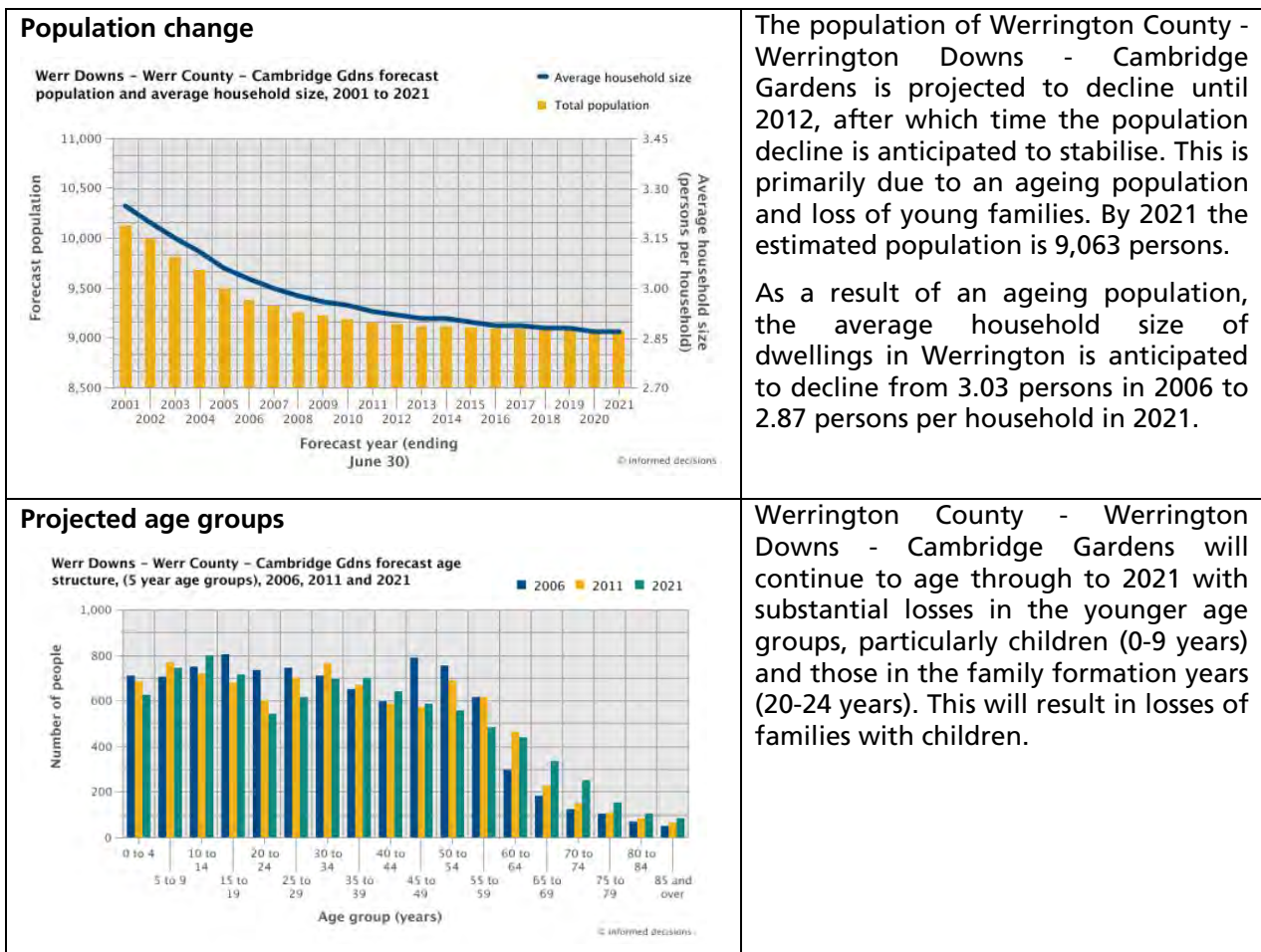
In 2006, there were 2,953 households who occupied a separate house in the area, while 26 occupied medium density dwellings. There were no occupied high density flats or apartments in Werrington.

The limited mix of dwellings in Werrington County - Werrington Downs - Cambridge Gardens may cause issues for 'ageing in place', providing down-sized dwellings for 'empty nesters', providing affordable smaller units for first home buyers and addressing the needs of lone person households.

More than half of all the households in Werrington County - Werrington Downs - Cambridge Gardens (have a mortgage (52.6%). Around 13% are renting, which significantly less than that of the Penrith LGA (25.9%). Home ownership of homes is also slightly higher in Werrington than that of the Penrith LGA.

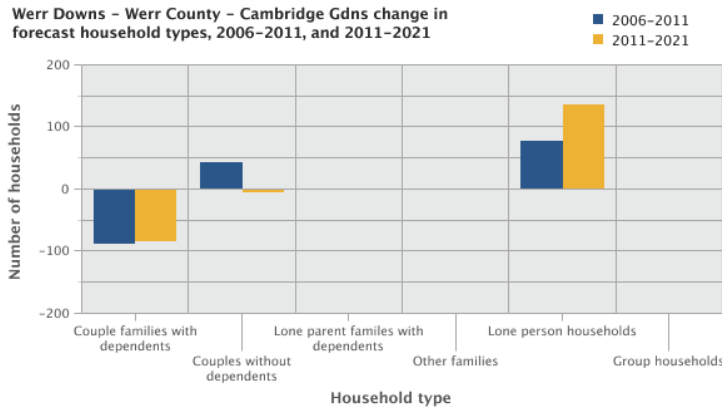
**B Projected Demographics and Household/Dwelling Needs to 2021**

**Figure 5.13.2 Demographic and Household Characteristics 2021**



### Projected Household Types

Werr Downs - Werr County - Cambridge Gdns change in forecast household types, 2006-2011, and 2011-2021



In 2021 there will be 3,141 households in Werrington Downs/County and Cambridge Gardens. Couple families with children will decrease over time, however they will remain the most dominant household type, while growth will occur in lone person households.

### 5.13.3 Existing Zoning and Land Use Patterns

The majority of the land use within Werrington County - Werrington Downs - Cambridge Gardens reflects the zoning patterns. The dominant residential zone is Zone 2(b) Residential (Low-Density) which permits dwelling houses and dual occupancies, but precludes multi unit housing. As no other type of residential zone applies, the area is dominated by single detached dwellings with very little housing diversity. There are several parcels of land zoned for public recreation and community uses. There are also a number of pocket parks evenly distributed across the residential area.

There are two commercially zoned areas in the locality. These are known as the Werrington County Shopping Village and the 'Star Court' local shopping centre.

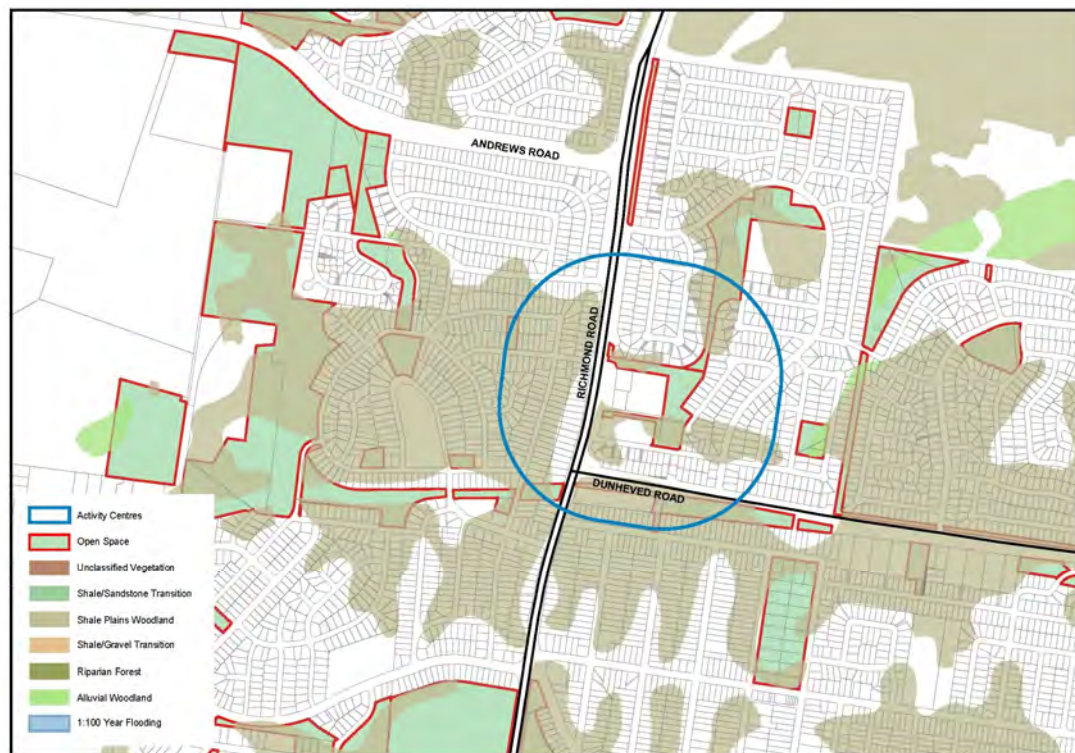
Werrington County Shopping Village is located on Dunheved Road in the Special Business (Highway Service Centre Centre) zone - IDO 27. Permissible uses in this zone include car-washing stations; clubs; convenience store; drive-in bottle shops; drive-in restaurants; hotels; motels; motor showrooms; open space; recreation buildings; refreshment rooms; roads; service stations; sports buildings; subdivision and utility installations.

The 'Star Court' local shopping centre is located on the western edge of Cambridge Gardens near the intersection of Dunheved Road and Richmond Road. This centre contains a supermarket, take away food outlets, a service station/convenience store and a hotel.

### 5.13.4 Environmental Opportunities and Constraints

Figure 5.13.4 illustrates the key environmental constraints within Werrington County - Werrington Downs - Cambridge Gardens and these are discussed below.

Figure 5.13.4: Environmental constraints for Werrington County - Werrington Downs - Cambridge Gardens



## A Topography, Flooding and Drainage

The topography of Werrington County - Werrington Downs - Cambridge Gardens is relatively flat and therefore the topography is not a constraint to future development. Flooding is not an issue in the both of the local centres however the southern boundary of Werrington County adjoins Werrington Creek which is fringed by a floodplain. All urban development in the locality is above the 1 in 100 year flood line.

## B Native Vegetation and Sensitive Ecological Areas

As shown on Figure 5.13.4 above, Werrington Downs and Cambridge Gardens abut the bushland of the ADI site on its northern border.

Werrington County contains Werrington Creek and Werrington Lake. Werrington Creek is a small creek that flows into South Creek. The creek is a catchment for a number of diverse urban land uses. It is capable of capturing high volumes of runoff from rainfall.

Werrington Lake was conceived as a solution to help relieve flooding around Werrington Creek. It was constructed in the early 1980's. Werrington Lake has become a recreational area for picnickers and sports enthusiasts. The area has naturally attracted a great variety of native birdlife.

The dominant vegetation classification within Werrington County - Werrington Downs - Cambridge Gardens is Shale Plains Woodland, a component of Cumberland Wood Plain. Remnant native woodland should continue to be protected and enhanced as part of any development in this suburb.

There are some small pockets of shale plains woodlands scattered throughout the suburbs. These pockets should be protected wherever possible.

## 5.13.5 Access and Transport

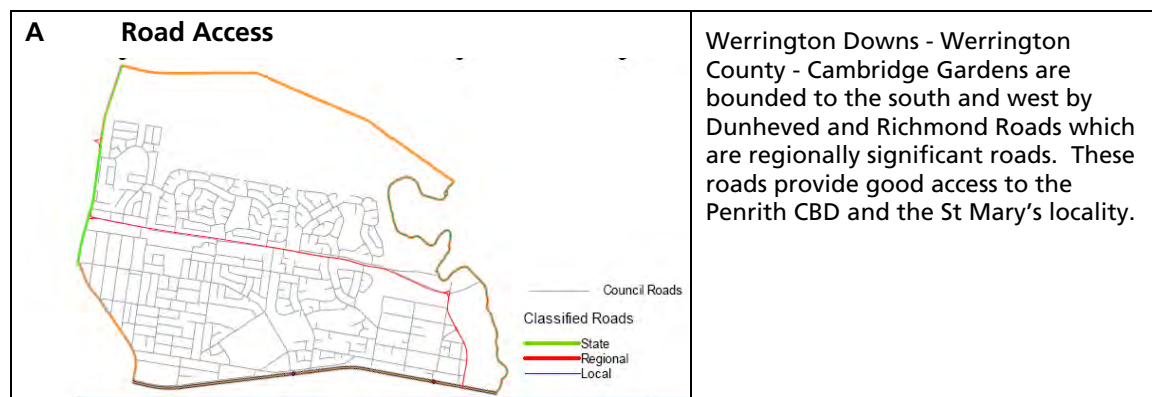
Under the current centres hierarchy, Werrington County Shopping Village is designated as a Small Village and it is anticipated that it will remain as a Small Village into the future.

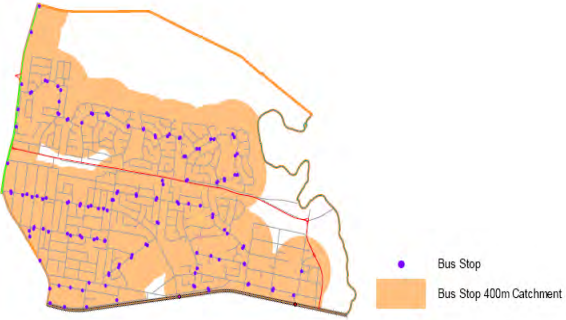



The 'Star Court' local shopping centre is designated as a Neighbourhood Centre and this designation is unlikely to change in the near future.

The access and transport characteristics of both local centres have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008.

Figure 5.13.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

**Figure 5.13.5: Access and Transport Characteristics**



<p><b>B Bus Network and Catchment</b></p>  <p>• Bus Stop  <span style="background-color: orange; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Bus Stop 400m Catchment</p>	<p>The figure shows the areas of North Werrington SLA which are within the 400m walking catchment of a bus stop. It shows that the developed areas largely (97%) have good access to bus stops.</p> <p>There are five different bus routes serving the locality. The majority of the area is serviced by buses with a frequency less than 30 mins.</p>
<p><b>C Pedestrian Network</b></p>  <p>— Footpath Proposed  — Footpath Existing</p>	<p>Werrington Downs - Werrington County - Cambridge Gardens is moderately serviced by walking and cycling paths. Walking paths are primarily located along main neighbourhood roads and within open space linkages.</p> <p>There is the opportunity to enhance the link to the lake/ADI site and strengthen the pedestrian network to the residential area to the north of the activity centre to provide for better connections between the residential area to the north.</p>
<p><b>D Cyclist Network</b></p>  <p>— Bikeway</p>	<p>The cycle network is located primarily along internal collector roads. Linkages are not well developed.</p>
<p><b>E Train</b></p>  <p>—+—+—+ Railway Line  ◆ Existing  ◆ Proposed  Rail Station 800m Catchment  <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Existing  <span style="background-color: lightgreen; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Proposed</p>	<p>The Western Railway Line is located to 2-3 kilometres to the south of the locality. Direct pedestrian and cycleway links are poor and need to be developed.</p>

### 5.13.6 Access to Services

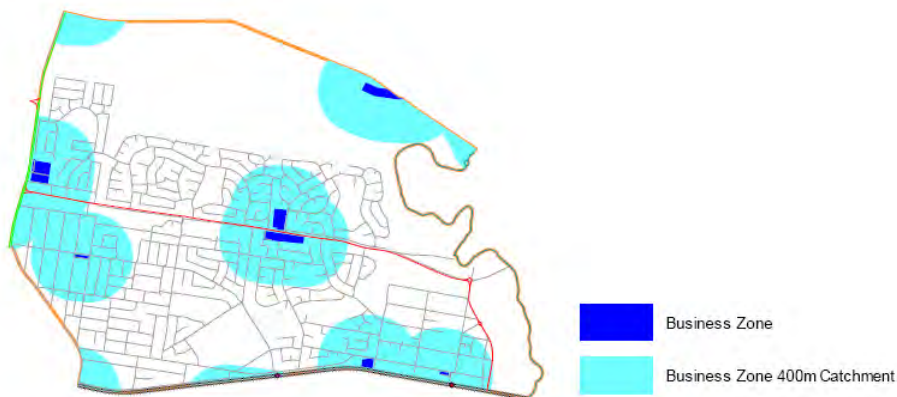
#### A Retail / Local Shopping

It is noted that the figure below shows the 400m walking catchment areas for all shopping centres within Werrington North Statistical Land Area (SLA). Over 42% of the developed areas are within these catchment areas. This is better than the LGA average of 37%. Walking facilities such as footpaths should be enhanced throughout these catchment areas, with cycle networks focused on in the areas less connected to shops.

Werrington County Shopping Centre is the main retail destination in Werrington County/Downs and is identified as a Small Village under the centres hierarchy. This stand alone shopping centre contains a small supermarket plus 26 speciality shops.

The 'Star Court' local shopping centre is located on the western edge of Cambridge Gardens near the intersection of Dunheved Road and Richmond Road. This centre contains a supermarket, take-away food outlets, a service station/convenience store and a hotel.

Figure 5.13.6 Shopping catchments, Werrington

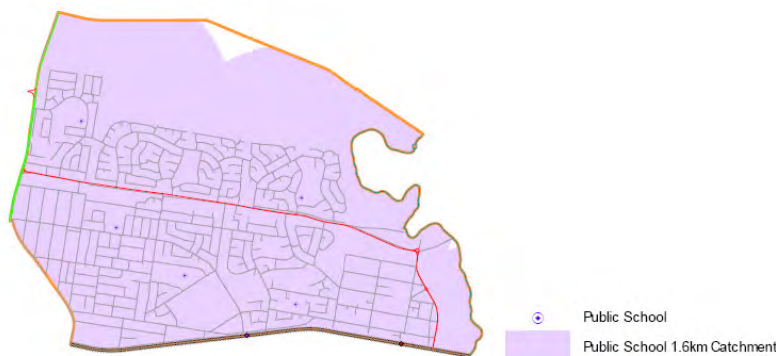


Source: PITLUS 2008

#### B Education / Schools

Figure 5.13.7 shows that all residents in Werrington County - Werrington Downs - Cambridge Gardens are within 1.6km of a public school and therefore the area is considered to be well serviced by public schools.

Figure 5.13.7: Public school catchments, Werrington



Source: PITLUS 2008

## C Community Facilities

Werrington contains several community facilities designed to meet the needs of a population with many children. For example, there are two child care centres within Werrington County/Downs and two neighbourhood centres. Both neighbourhood centres are located close to public parks and child care centres. However, the community infrastructure is fragmented and consolidation of (some of) these services closer to the town centre could be beneficial.

The provision of community facilities within Cambridge Gardens is limited to two child care centres.

## D Open Space

There are scattered reserves and pocket parks located throughout Werrington County - Werrington Downs - Cambridge Gardens. These parks and reserves contain walking and cycle paths, playing fields and ovals.

Werrington Lake is a great recreational facility for the local community. Werrington Lakes are a haven for students undertaking wetland and water conservation studies. It has also become a recreational area for picnickers and sports enthusiasts. The area has naturally attracted a great variety of native birdlife.

### 5.13.7 Existing Suburb Character

**Werrington County** is residential suburb with an expansive tract of former farmland located on its eastern boundary. The suburban area is located either side of Dunheved Road while the cleared land adjoins South Creek.

The highly suburbanised western half of the suburb starkly contrasts with the cleared and former farmlands lying to the east with its treed margin of South Creek.

The existing built environment predominantly demonstrates post 1970 housing stock and community buildings, with exception of Werrington House, the only Heritage Item in Werrington County.

**Werrington Downs** is a modern housing subdivision located to the northeast of Penrith. The housing stock in the areas was constructed in the 1980s. There is a park reserve at the geographic centre of the suburb. The suburb is laid out in a curvilinear street pattern with Greenbank Drive forming the main collector road.

**Cambridge Gardens** was developed as a residential estate in the 1970s, and gazetted as a suburb in 1981. Cambridge Gardens is generally laid out in an irregular street pattern with Trinity Drive forming the main arterial road.

The key features and facilities of the suburb include Cambridge Park Public School, two child care centres, three parks and the 'Star Court' local shopping centre.

Figure 5.13.8 identifies the key elements of the suburb character of Werrington County - Werrington Downs - Cambridge Gardens, including lot size, subdivision pattern, dwelling types and housing density.



Figure 5.13.8: Suburb Character Analysis



### 5.13.8 Summary of Key Opportunities and Constraints

Based on the above analysis, the key growth opportunities and constraints that will influence urban growth in Werrington County - Werrington Downs - Cambridge Gardens can be summarised as follows:

- Good access to local services and schools
- Limited environmental constraints to urban growth
- Pedestrian/cycle connections between the locality and future residential areas to the North can be improved
- Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported)
- Opportunity for some medium density Seniors Living type development on the Henry Lawson Club site
- Land zoned 6(a) in the central part of Werrington Downs could be used to locate future community facilities

The key constraints that will limit urban growth in Werrington County - Werrington Downs - Cambridge Gardens that can be summarised from the above analysis are as follows:

- A population decrease and limited projected growth that will decrease the demand for additional dwellings over the next 20-25 years
- Existing housing stock was built in the main 30 years ago, is of reasonable quality, and is unlikely to support large-scale redevelopment in the short to medium term

- There is limited provision of medium density development within the 400 metre radius of the two Local Centres, and as such, growth in adjoining residential areas is likely to be limited to infill development
- Community Infrastructure disconnected, not centralized
- Limited access to frequent and multiple public transport services

Figure 5.13.9: Examples of dwelling types in Werrington



### 5.13.9 Future Dwelling Opportunities

#### A Within Werrington County/Downs Small Village Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Werrington County/Downs Small Village Centre (within a 400 metre radius of the village centre).

Table 5.13.1 summarises the key assumptions made for Werrington County/Downs Small Village Centre potential future dwelling capacity.

Table 5.13.1: Assumed densities for Werrington County (Small Village) Centre

Assumed Probability of Redevelopment and Proposed Development Densities									
Werrington	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares)	% of land development assumption	Land @ 100 dwellings/hectare	Land @ 75 dwellings/hectare	Land @ 50 dwellings/hectare	Land @ 25 dwellings/hectare
ID Assumptions	1970's - 1980s Medium Opportunity	0.5	400	38.8	4%	0%	0%	25%	75%
Urban Study and Strategy	1970's - 1980s Medium Opportunity	See Sustainability Checklist	400	38.8	6%	0%	0%	30%	70%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

A closer inspection of the lot sizes and the existing housing stock within 400 metres of the Werrington County Small Village Centre indicates that there is slightly more land

available for redevelopment as indicated in the ID Assumptions and also this land contains a number of lots in the 800-1100m2 which have the potential to be redeveloped for medium density housing. There is also potential for more dwellings to be built on the "Henry Lawson Club" land.

Table 5.13.2 identifies that Werrington County Small Village Centre has a potential growth of between 30 -59 new dwellings to the year 2031.

The increase in potential dwelling densities is subject to the Werrington County Small Village Centre meeting the Sustainability Checklist criteria for a small village.

**Table 5.13.2: Estimated Dwelling capacity for Werrington County (Small Village) Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Werrington	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/hectare	No. dwellings @ 75 dwells/hectare	No. dwellings @ 50 dwells/hectare	No. dwellings @ 25 dwells/hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Small Village	0	0	18	27	45	15	30
Urban Study and Strategy Assumptions (see below)	Small Village	0	0	34	40	74	15	59

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for Werrington Small Village Centre is based on some limited potential to increase the amount of medium density in the area in the medium and long term;

The long term (20-25 years) dwelling capacity within the Werrington County/Downs Village Centre could be 30-59 dwellings.

Future development assumes the availability of all the services/infrastructure necessary to allow Werrington County Small Village Centre to function sustainably as a Small Village.

**B Within the Star Court (Cambridge Gardens) Neighbourhood Centre.**

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Star Court (Cambridge Gardens) Neighbourhood Centre (within a 400 metre radius of the village centre).

Table 5.13.3 summarises the key assumptions made for Star Court (Cambridge Gardens) Neighbourhood Centre potential future dwelling capacity.

**Table 5.13.3: Assumed densities for Star Court (Cambridge Gardens) Neighbourhood Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Cambridge Gardens	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares))	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1970's - 1980s Medium Opportunity	0.1	400	27.3	7.5%	0%	0%	25%	75%
Urban Study and Strategy	1970's - 1980s Medium Opportunity	See Sustainability Checklist	400	27.3	9%	0%	0%	30%	70%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

A closer inspection of the lot sizes and the existing housing stock within 400 metres of the Star Court (Cambridge Gardens) Neighbourhood Centre indicates that there is slightly more land available for redevelopment as indicated in the ID Assumptions and also this land contains a number of lots in the 800-1100m<sup>2</sup> which have the potential to be redeveloped for medium density housing.

Table 5.13.4 identifies that Star Court (Cambridge Gardens) Neighbourhood Centre has a potential growth of between 40 -56 new dwellings to the year 2031

The increase in potential dwelling densities is subject to the Star Court (Cambridge Gardens) Neighbourhood Centre meeting the Sustainability Checklist criteria for a neighbourhood centre.

**Table 5.13.4: Estimated Dwelling capacity for Star Court (Cambridge Gardens) Neighbourhood Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Cambridge Gardens	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Neighbourhood Centre	0	0	26	38	64	24	40
Urban Study and Strategy Assumptions (see below)	Neighbourhood Centre	0	0	37	43	80	24	56

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for Star Court (Cambridge Gardens) Neighbourhood Centre is based on some limited potential to increase the amount of medium density in the area in the medium and long term. The assumptions are very similar to the adjoining Werrington County Small Village Centre

The long term (20-25 years) dwelling capacity within the Star Court (Cambridge Gardens) Neighbourhood Centre could be 40-56 dwellings.

Future development assumes the availability of all the services/infrastructure necessary to allow the Star Court (Cambridge Gardens) Neighbourhood Centre to function sustainably as a Neighbourhood. Centre.

## C Outside Key Activity Centres

The calculations to determine future dwelling gains in Werrington County - Werrington Downs - Cambridge Gardens outside of the Small Village Centre and Neighbourhood centre radii is based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

There are few vacant allotments within Werrington County - Werrington Downs - Cambridge Gardens therefore minimal opportunities for future dwelling gain, anticipating an additional 5 dwellings from the existing vacant allotments.

The majority of lots in Werrington County - Werrington Downs - Cambridge Gardens are between 500 to 799 m<sup>2</sup> in size. There is medium development potential in this area as many houses were built in the 1970's –1980s and are predominantly single detached dwellings, which may be an under-utilisation of the land in the future.

ID Report (2007) have also calculated that out of approximately 2,230 existing utilised allotments, there is a moderate to high potential net gain of 222 dwellings through demolition and replacement with additional dwellings.

## D Summary of Dwelling Opportunity (Long Term)

ID (2007) forecasts a total population decrease in Werrington County - Werrington Downs - Cambridge Gardens however the total number of households will increase marginally by the year 2021.

- Total population from 2006 to 2031 (25 years) is expected to decrease from 9,091 to 9049 people.
- Total households from 2006 to 2031 (25 years) is expected to increase from 3076 households to 3175 households. An increase in "lone person" and "childless couple" households at the expense of "couples with children" households.

The impetus for future development and housing demand within is Werrington County - Werrington Downs - Cambridge Gardens has not been analysed however there is potential residential capacity for the suburbs as shown in Table 5.13.3.

**Table 5.13.3: Net dwelling gains for both Werrington County (Small Village) Centre and Star Court (Cambridge Gardens) Neighbourhood Centre till 2031.**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centres (400m)	70	115
Outside Activity Centres Vacant Land	5	5
Outside Activity Centre Demolition & Replacement	222	222
<b>TOTAL</b>	<b>297</b>	<b>342</b>

*As calculated by ID Report (Sept 2007) and this study.*

## 5.13.10 Werrington County - Werrington Downs - Cambridge Gardens Assessment against Sustainability Checklist

The following sustainability checklist in Table 5.13.4 provides an assessment as to the suitability of Werrington County (Small Village) Centre and Star Court (Cambridge Gardens) Neighbourhood Centres to meet future growth as a Small Village and Neighbourhood Centre respectively.

**Table 5.13.4: Werrington County - Werrington Downs - Cambridge Gardens Assessment against Sustainability Checklist**

WERRINGTON COUNTY- WERRINGTON DOWNS – CAMBRIDGE GARDENS				
Strategy Element	Current Centre Classification – Small Village/ Neighbourhood Centre	Future Centre Classification Small Village	Additional services/actions needed	Priority
Population Size 2,650 - 14,310 persons	✓ 9,091 (2006)	✓ 9049 (2031)	Greater mix of housing options needed for a changing demographic (Ageing population and lone person households increasing)	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓✓	✓✓✓	Redevelopment of shopping centre provides opportunities to provide more active frontage to Dunheved Road	Medium to Long term
Active Transport	✓	✓	Extension of pedestrian/bicycle paths in an east and west direction via Dunheved Rd and to the south to link with the Western Railway Line.	Medium (5-10 years)
Public Transport	✓	✓	Improve connections to bus stops along Dunheved Rd Need for higher frequency and extended hours of service	Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity	
Environmental Considerations	✓✓	✓✓	Flood prone areas to the south-east of activity centre are protected with open space. No other significant environmental constraints.	
Access to retail and commercial services <u>Typical Retail Area</u> 3,000sqm-7,500sqm (inc supermarkets/s @ 1,500-4500sqm) <u>Typical Commercial Area</u> 250sqm-750sqm	✓✓	✓✓	Possibility for retail centres on existing sites and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future local needs. Encourage increased mix of commercial uses	short to medium (1-5 years)
Access to community services and facilities	✓	✓	Consider consolidation of community services and facilities in activity centres	Short to Medium (1-5 years)
Public Domain and Open Space	✓	✓	Provide better pedestrian/ cycle access to open space –ADI/Werrington	Medium (5-10 years)
Housing Sustainability	✓	✓	Investigate opportunities for community/Seniors Living on Henry Lawson Club site.	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.13.11 Future Actions

The following key actions are recommended to maintain the small village and neighbourhood centre designations:

- Increase in housing density and range of dwelling types in and around the local centres to achieve more sustainable housing and to accommodate the changing demographic;
- Improve the pedestrian and cycle connectivity between shopping villages and residential areas (particularly to the North) and the railway line to the south.
- Upgrade and extend the footpath and cycle path network across the suburb. Cycle path network should provide connect key nodes and areas of open space
- Consider redevelopment opportunities on the Henry Lawson Club site for medium density development for Seniors Living.
- Investigate improved public transport services through higher frequency and extended hours of service including the opportunity for a bus junction at Werrington County
- Review and investigate the capacity of infrastructure to support future development across the suburb;
- Continue to preserve flood prone land for open space in the south-eastern parts of the suburbs;
- Support and promote growth within and immediately around the existing retail centres by way of mixed use developments/ range of floor space to continue to cater for existing and future needs;
- Undertake community infrastructure audits to ensure community infrastructure meets future needs especially to address fragmentation of community infrastructure in the locality
- Enhance the public domain and amenity of Werrington County Shopping Village
- Improve the quality of existing open space and ensure all parks are safe and have passive surveillance







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5.14

Cambridge Park



## 5.14 CAMBRIDGE PARK

### 5.14.1 Suburb Overview

Cambridge Park is located in the centre of the Penrith local government area. It is bound by the suburbs of Penrith to the west, Cambridge Gardens and Werrington Downs to the north, Werrington County to the east and Kingswood to the south.

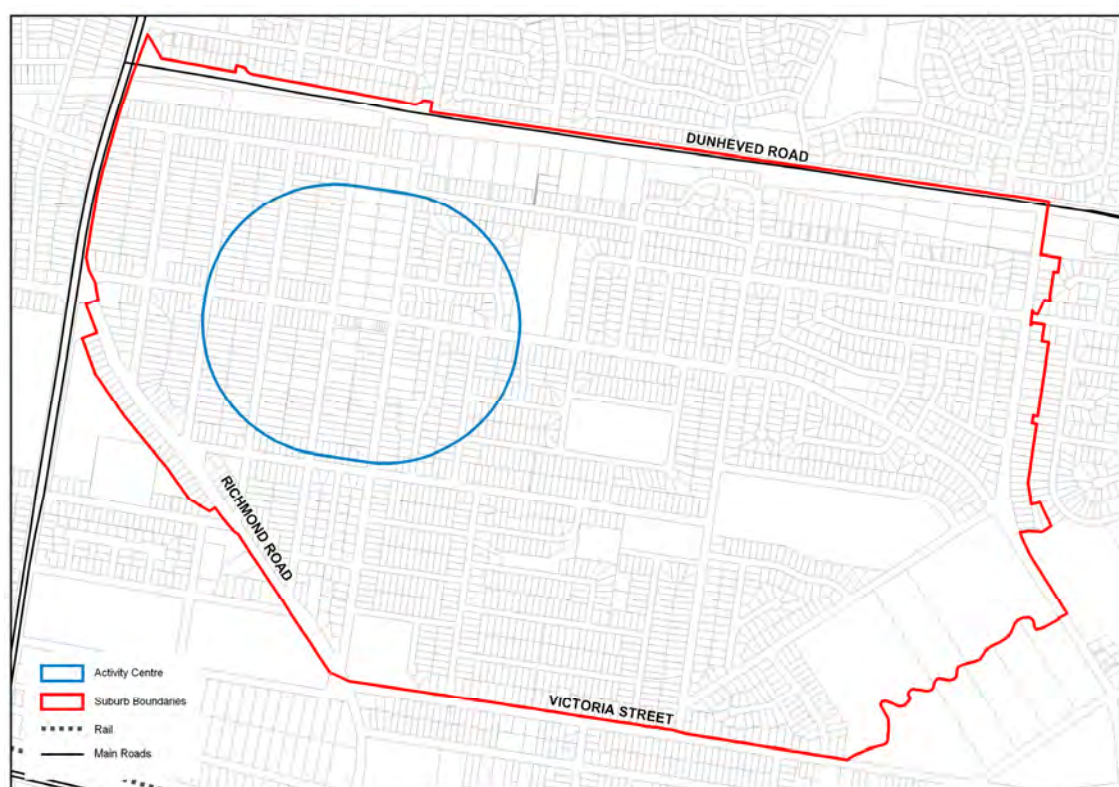
Cambridge Park is a post World War II housing subdivision generally laid out in a regular gridded street pattern. The built environment is characterised by housing stock constructed from the 1950s - 1970s.

Land adjacent to Werrington Creek at the south-east corner of the suburb is reserved as open space, supporting passive and active recreational facilities. There is also a large active space area (Allsop Oval) directly to the north of the local centre.

Key features and facilities within the suburb include a local shopping centre on Oxford Street, opposite Allsop Oval, Cambridge Park Primary and High Schools, a community centre, pre-school, sports stadium, Patterson Oval, Allsop and Harold Corr Ovals, Devon, Lincoln, Shaw and Werrington Creek Parks.

In 2006 Cambridge Park had a total population of 6014 people.

Figure 5.14.1: Map of Cambridge Park



## 5.14.2 Suburb Demographics and Housing Trends

Cambridge Park is a post World War II housing development generally laid out in a regular gridded street pattern. The built environment is characterised by housing stock constructed from the 1950s - 1970s.

The population has declined slightly since the mid 1990s due to a decline in the average number of persons living in each dwelling.

### A Current Demographics

#### *a) Population:*

Cambridge Park experienced only a small decrease in population between 2001 and 2006, the result of a marginal increase in the number of dwellings being added and a decline in the average number of persons living in each dwelling. In 2006, the total population was 6014 people. In 2031 the population is projected to increase slightly to 6380.

#### *b) Age:*

The age structure of Cambridge Park is generally comparable to that of the Penrith LGA. An analysis of the age structure of Cambridge Park in 2006 compared to Penrith City shows that there was a similar proportion of people in the younger age groups (0 to 17) but a larger proportion of people in the older age groups (60+).

Overall, 26.7% of the population of Cambridge Park was aged between 0 and 17, and 14.7% were aged 60 years and over, compared with 27.7% and 11.9% respectively for Penrith City.

The key differences between the age structure of Cambridge Park and Penrith City were:

- A *larger* percentage of 60 to 69 year olds (8.2% compared to 6.4%);
- A *smaller percentage* of 35 to 49 year olds (19.4% compared to 21.8%), and;
- A *smaller* percentage of 12 to 17 year olds (8.2% compared to 9.5%).

#### *c) Income:*

Analysis of household income levels in Cambridge Park in 2006 compared to Penrith City shows that there was a smaller proportion of high income households (those earning \$1,700 per week or more) but a larger proportion of low income households (those earning less than \$500 per week).

Overall, 18.4% of the households earned a high income, and 17.3% were low income households, compared with 25.6% and 14.8% respectively for Penrith City.

#### *d) Car Ownership:*

Car ownership in Cambridge Park is high with 85.2% of households owning at least one car. Overall, 38.9% of the households owned one car; 32.6% owned two cars; and 13.7% owned three cars or more, compared with 31.7%; 36.0% and 17.2% respectively for Penrith City.

#### *e) Households:*

Between 2001 and 2006 in Cambridge Park, there were slight increases in the number of family, lone person households (36) and group households. Couples with children were by far the most dominant family type in Cambridge Park in 2006.

A comparison of household types between Cambridge Park and Penrith City in 2006 reveals a similar structure.

In Cambridge Park, family households accounted for 77.2% of total households, lone person households comprised 18.5% and group households accounted for 3.2%. For Penrith City, the respective figures are 76.6%, 18.0% and 2.4%.

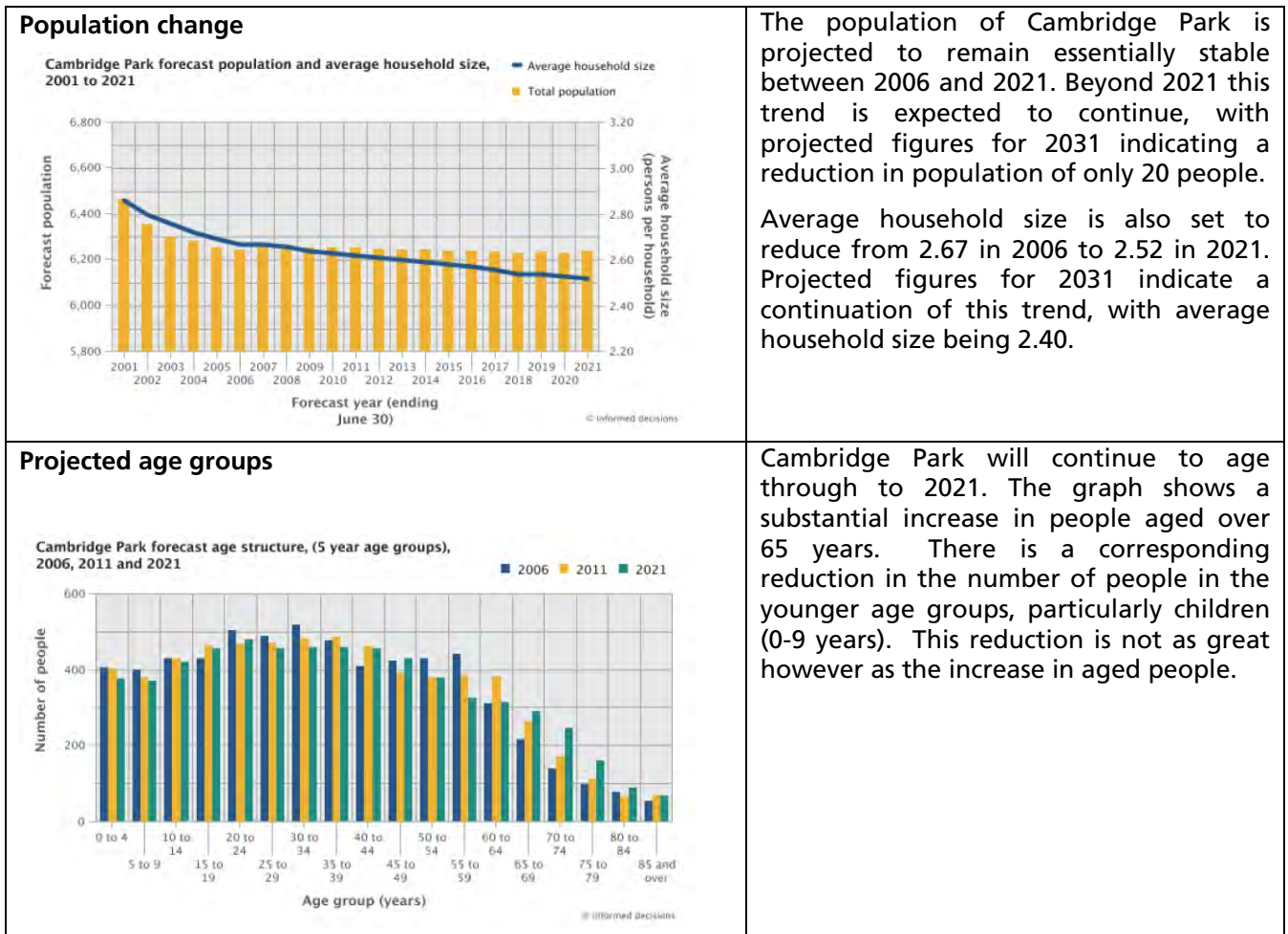
f) *Dwellings:*

Detached dwellings account for 89.35% of housing in Cambridge Park while medium density housing provided for only 5.2% of residential accommodation. This is indicative of the zoning pattern and consistent with the dominance of families within the household profile of the suburb. When compared to Penrith City, Cambridge Park has a higher share of detached dwellings and a significantly lower numbers of flats, apartments and semi-detached dwellings.

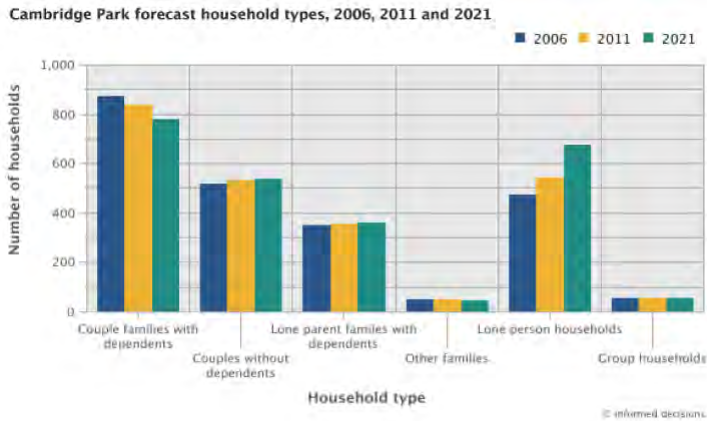
Analysis of the housing tenure of the population of Cambridge Park in 2006 compared to Penrith City shows that there was a larger proportion of households who owned their dwelling; a smaller proportion purchasing their dwelling; and a smaller proportion who were renters.

**B Projected Demographics and Household/Dwelling Needs to 2021**

**Figure 5.14.2 Demographic and Household Characteristics 2021**



### Projected Household Types



In 2021 there will be 2,453 households in Cambridge Park. Couple families with children will decrease over time, however they will remain the most dominant household type, while there will be a noticeable growth in lone person households.

### 5.14.3 Existing Zoning and Land Use Patterns

The dominant land use zone in Cambridge Park is Zone 2(b) Residential (Low Density) which permits dwelling houses and dual occupancies, but precludes multi unit housing. There is a precinct of Zone 2(c) Residential (Low-Medium Density) towards the western end of the suburb, extending from Cambridge Street north to Eton Road. This 2(c) land is located north and south of the local centre on Oxford Street. The size of lots in the 2(c) zone is generally 500m-600m in area. The 2(c) zone allows multi-unit housing - generally attached housing such as townhouses and villas.

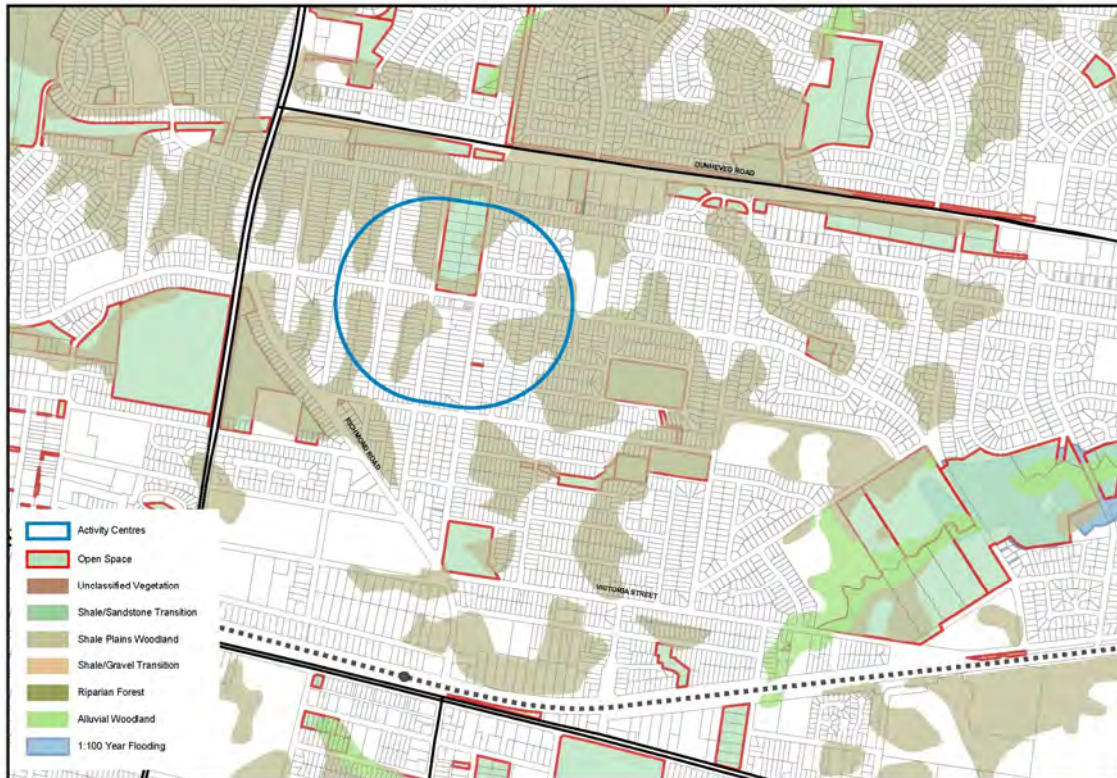
There is one small local centre located on Oxford Street opposite Cambridge Park. The range of shops and services is limited and provides for only daily needs. A number of local open space areas are scattered through the suburb including Patterson Oval, Allsopp and Harold Corr Ovals, Devon, Lincoln, Shaw and Werrington Creek Parks.

Overall, it is evident that there is limited available land for substantial urban growth in Cambridge Park. As a result, the majority of any urban growth in this suburb is likely to be infill development.

### 5.14.4 Environmental Opportunities and Constraints

Figure 5.14.4 illustrates the key environmental characteristics of Cambridge Park and these are discussed below.

Figure 5.14.4: Environmental characteristics



#### A Topography, Flooding and Drainage

Only a small portion of the suburb is below the 1 in 100 year flood line and therefore the probability of flooding, other than in that area, is low. The flood affected land is located at the southeast corner of Cambridge Park, adjacent to Werrington Creek, and is presently zoned as public open space.

Neither flooding nor topography is likely to be a significant constraint to urban growth and development in the Cambridge Park.

#### B Native Vegetation and Sensitive Ecological Areas

As shown on Figure 5.14.4 above, Cambridge Park borders Werrington Creek and Werrington Lake in the south-eastern corner of the suburb.

Werrington Creek is a small creek that flows into South Creek. The creek is a catchment for a number of diverse urban land uses. It is capable of capturing high volumes of runoff from rainfall.

Werrington Lake was conceived as a solution to help relieve flooding around Werrington Creek. It was constructed in the early 1980's. Werrington Lake has become a recreational area for picnickers and sports enthusiasts. The area has naturally attracted a great variety of native birdlife.

Prior to urbanisation, the dominant vegetation classification within Cambridge Park was Shale Plains Woodland, a component of Cumberland Wood Plain. The suburban development in Cambridge Park over the last 60 years has severely impacted upon the

indigenous vegetation. There are some trees and to a lesser extent shrubs scattered in back yards throughout the suburb that are representative of the vegetation class originally found in the area. This vegetation however is not extensive and is not significant in terms of habitat or wildlife corridors. Notwithstanding the above, there are some small pockets of shale plains woodlands scattered throughout the suburb. These pockets should be protected wherever possible.

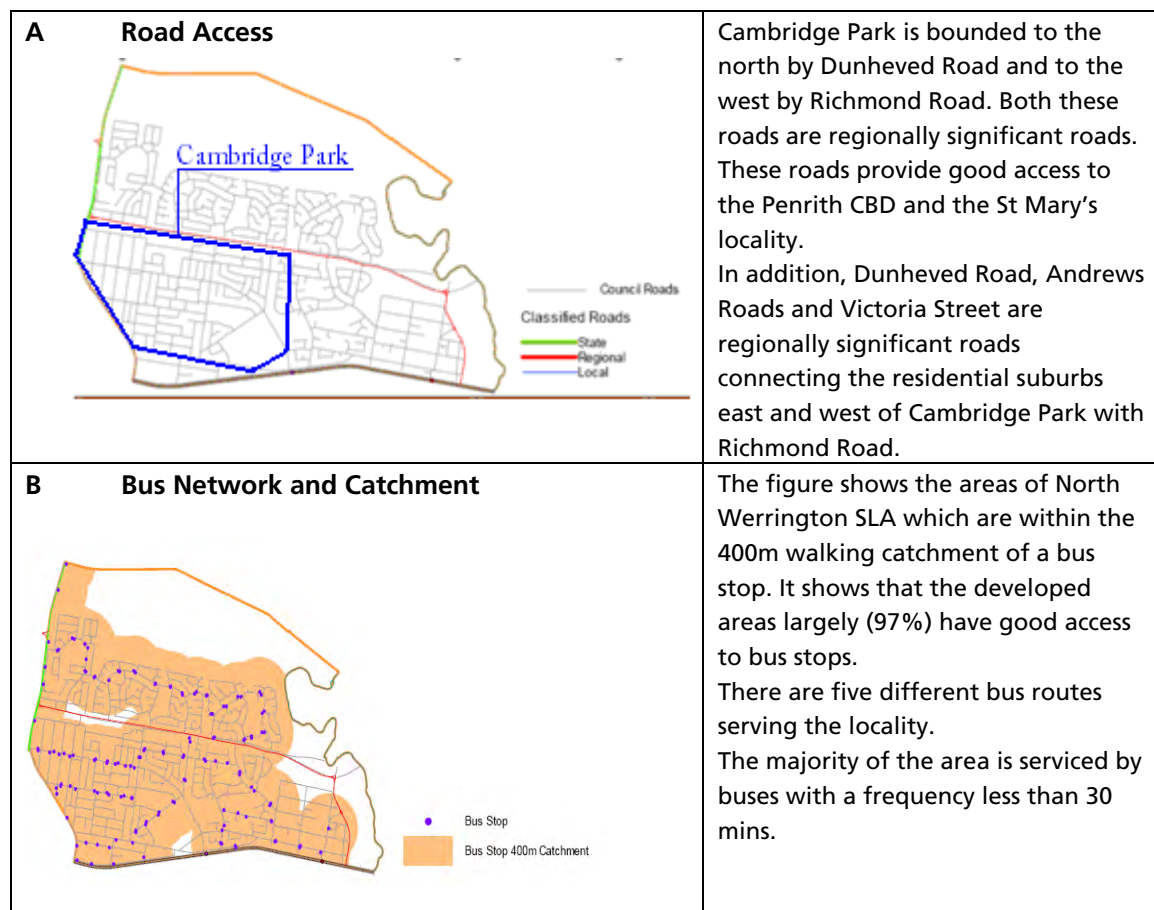
### 5.14.5 Access and Transport

Under the current centres hierarchy, Cambridge Park is designated as a Neighbourhood Centre and it is anticipated that it will remain as a Neighbourhood Centre into the future.



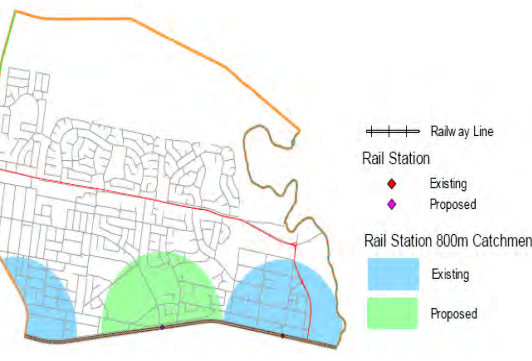
The access and transport characteristics of the local centre have been determined from the findings of the Penrith Integrated Transport and Land Use Strategy ('PITLUS Report') 2008.

Figure 5.14.5 provides analysis of road access, train and bus networks and catchments, pedestrian and cyclist networks.

**Figure 5.14.5: Access and Transport Characteristics**





<p><b>C Pedestrian Network</b></p> 	<p>Cambridge Park is moderately serviced by walking and cycling paths. Walking paths are primarily located along main neighbourhood roads and within open space linkages.</p> <p>Within Cambridge Park, footpaths are mostly limited to several key north/south and east /west roads, being College, Barlow, Wrench, Oxford, Herbert and Francis Streets. Planned footpaths along key routes will improve circulation within Cambridge Park and connections with adjacent suburbs.</p>
<p><b>D Cyclist Network</b></p> 	<p>The PITLUS Report indicates that 22% of all roads within the North Werrington SLA have dedicated cycle ways. Within Cambridge Park, the bicycle network is limited and needs to be extended and connected with other sections of the wider bikeway network to increase the value of this facility.</p> <p>The College Street bikeway running north-south the suburb provides satisfactory access to the railway station at Kingswood.</p>
<p><b>E Train</b></p> 	<p>The southern boundary of Cambridge Park is located some 200 metres from the Kingswood railway Station. Many residents drive to the station and park their cars in the commuter car park to the north of the railway station. Western Railway Line is located to 2-3 kilometres to the south of the locality. Improved pedestrian links to Kingswood Railway station from Cambridge Park need to be developed.</p>

All diagrams sourced from PITLUS Report 2008

### 5.14.6 Access to Services

#### A Retail / Local Shopping

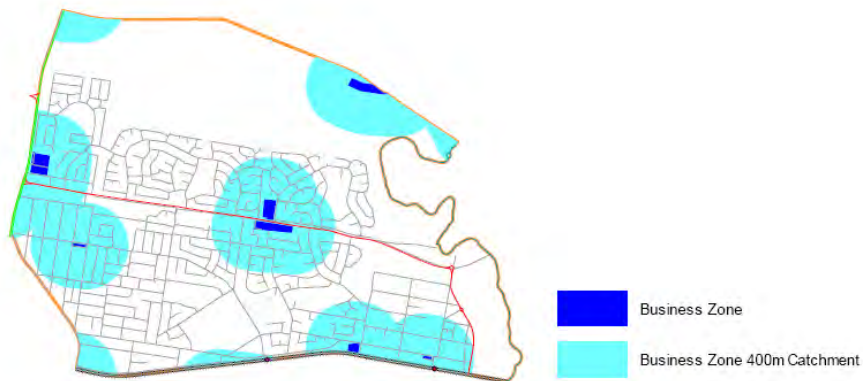
Figure 5.14.6 identifies that Cambridge Park contains one local shopping centre located on Oxford Street opposite Allsopp Oval and the community centre. The range of shops and services is limited and provides for only daily needs. The “strip” shopping centre contains approximately 20 retail outlets and is predominantly single storey in nature.

This centre is classified as a Neighbourhood Centre in the Centres Hierarchy and as such is the Activity Centre focus for Cambridge Park.

Certain sections of Cambridge Park are also within the catchments of four other local centres in adjoining suburbs.

It is noted that the figure below shows the 400m walking catchment areas for all shopping centres within Werrington North Statistical Land Area (SLA). Over 42% of the developed areas are within these catchment areas. This is better than the LGA average of 37%. Cycle networks and pedestrian footpaths should be enhanced throughout these catchment areas, with a focus on the local shopping centres.

Figure 5.14.6 Shopping catchments, Werrington

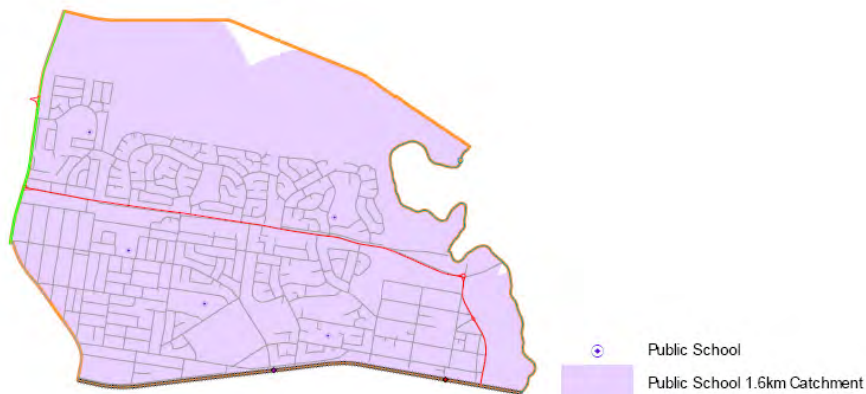


Source: PITLUS 2008

## B Education / Schools

Figure 5.14.7 shows that all residents in Cambridge Park are within 1.6km of a public school and therefore the area is considered to be well serviced by public schools.

Figure 5.14.7: Public school catchments, Werrington



Source: PITLUS 2008

## C Community Facilities

The provision of community facilities within Cambridge Park include:

- One primary school and one high schools;
- Community centre;
- Pre-school;
- Sports stadium;

## D Open Space

There are scattered reserves and pocket parks located throughout Cambridge Park. These parks and reserves include the following:

- Patterson Oval, Allsopp Oval, Shaw Park and Harold Corr Oval; and
- Kanangra reserve, Devon Park, Lincoln Park and Werrington Creek Park.

Werrington Lake adjoins the south-eastern boundary of the suburb and is a great recreational facility for the local community. Werrington Lake is a haven for students undertaking wetland and water conservation studies. It has also become a recreational area for picnickers and sports enthusiasts. The area has naturally attracted a great variety of native birdlife.

### 5.14.7 Existing Suburb Character

Cambridge Park is a post World War II housing development generally laid out in a regular gridded street pattern. The built environment is characterised by housing stock constructed from the 1950s - 1970s.

Figure 5.14.7 identifies the key elements of the suburb character of Cambridge Park, including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.14.7 Suburb Character Analysis



Figure 5.14.9: Examples of dwelling types in Cambridge Park



### 5.14.8 Summary of Key Opportunities and Constraints

Based on the above analysis, the key growth opportunities and constraints that will influence urban growth in Cambridge Park can be summarised as follows:

- A traditional grid street pattern providing a high level of intra-suburb connectivity and therefore good access to local services and schools.
- Limited environmental constraints to urban growth
- A broad range of lot sizes, generally 550m<sup>2</sup> – 930m<sup>2</sup> with some lots up to 1600m<sup>2</sup> in area
- The existing housing stock was built in the sixties and is reaching the end of its lifecycle with the result that there will be impetus to replace the housing stock
- Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported)
- Even distribution of open space throughout the suburb.

The key constraints that will limit urban growth in Cambridge Park that can be summarised from the above analysis are as follows:

- The population forecasts indicate that there will be no growth in the suburb with the result that there will be a decrease in the demand for additional dwellings over the next 20-25 years
- The lot pattern and lot sizes within the 400 metre radius of the Local Centre, are conducive for redevelopment for medium density housing. This is already occurring with a significant number of strata lots in the locality. The existence of the strata lots presents a constraint if land amalgamation is part of the redevelopment process
- No major development sites

### 5.14.9 Future Dwelling Opportunities

#### A Within Cambridge Park Neighbourhood Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the Cambridge Park Neighbourhood Centre (within a 400 metre radius of the neighbourhood centre).

Table 5.14.1 summarises the key assumptions made for Cambridge Park Neighbourhood Centre's potential future dwelling capacity.

**Table 5.14.1: Assumed densities for Cambridge Park Neighbourhood Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
Cambridge Park	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares)	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1950's	0.5	400	23.1	4%	0%	0%	0%	100%
Urban Study and Strategy	1950's Medium-Opportunity	See Sustainability Checklist	400	23.1	6%	0%	0%	30%	70%

Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.

A closer inspection of the lot sizes and the existing housing stock within 400 metres of the Cambridge Park Neighbourhood Centre indicates that there is slightly more land available for redevelopment as indicated in the ID Assumptions and also this land contains a number of lots in the 800-1100m<sup>2</sup> which have the potential to be redeveloped for medium density housing.

Table 5.14.2 identifies that Cambridge Park Neighbourhood Centre has a potential growth of between 14 -36 new dwellings to the year 2031.

The increase in potential dwelling densities is subject to the Cambridge Park Neighbourhood Centre meeting the Sustainability Checklist criteria for a small village.

**Table 5.14.2: Estimated Dwelling capacity for Cambridge Park Neighbourhood Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
Cambridge Park	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Neighbourhood Centre	0	0	0	23	23	9	14
Urban Study and Strategy Assumptions (see below)	Neighbourhood Centre	0	0	21	24	45	9	36

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for Cambridge Park Neighbourhood Centre is based on the premise that of limited potential increase in the amount of medium density in the area in the medium and long term.

The long term (20-25 years) dwelling capacity within the Cambridge Park Neighbourhood Centre could be 14-36 dwellings.

Future development assumes the availability of all the services/infrastructure necessary to allow Cambridge Park Neighbourhood Centre to function in accordance with its designation.

## **B** Outside Key Activity Centres

The calculations to determine future dwelling gains in Cambridge Park outside of the Neighbourhood Centre radius are based on two key opportunities:

demolition and replacement of existing dwellings with new housing stock; and

the opportunity for residential development on vacant land.

These calculations have been based on a number of factors including, but not limited to, lot sizes; the age of housing stock and its probability of redevelopment; and numbers of vacant lots.

There are very few vacant allotments within Cambridge Park and therefore minimal opportunities for future dwelling gain. It is estimated that there are 3 vacant allotments in Cambridge Park.

The majority of lots in Werrington County are between 500 to 799 m<sup>2</sup> in size. There is medium development potential in this area as many houses were built in the 1950's – 1960s and are predominantly single detached dwellings, which may be an under-utilisation of the land in the future.

ID Report (2007) have also calculated that out of approximately 1,591 existing utilised allotments, there is a moderate potential net gain of 176 dwellings through demolition and replacement with additional dwellings. It should be noted these estimates relate to areas outside of the Cambridge Park Activity Centre.

## **C** Summary of Dwelling Opportunity (Long Term)

The total number of households in Cambridge Park is projected to increase by 11% to 2021. This represents an increase of 249 households. The total number of dwellings is projected to increase by 162 by 2021.

The potential dwelling capacity for Cambridge Park by 2031 is summarised in Table 5.14.3.

**Table 5.14.3: Net dwelling gains for Cambridge Park Neighbourhood Centre**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Ground Truthing Dwelling Gain
Within Activity Centre (400m)	14	36
Outside Activity Centre Vacant Land	3	3
Outside Activity Centre Demolition & Replacement	176	176
<b>TOTAL</b>	<b>193</b>	<b>215</b>

*As calculated by ID Report (Sept 2007) and this study.*

## **5.14.10 Cambridge Park Assessment against Sustainability Checklist**

The following sustainability checklist in Table 5.14.10 provides an assessment as to the suitability of the Cambridge Park Neighbourhood Centre to meet future growth as a Neighbourhood Centre.

**Table 5.14.4: Cambridge Park Neighbourhood Centre Assessment against Sustainability Checklist**

CAMBRIDGE PARK				
Strategy Element	Current Centre Classification – Neighbourhood Centre	Future Centre Classification - Neighbourhood Centre	Additional services/actions needed	Priority
Population Size 2,650 -14,310 persons	✓ 6014 (2006)	✓ 6380 (2031)	Greater mix of housing options needed for a changing demographic	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater range of housing types to meet future needs	Medium (5-10 years)
Road Access	✓✓✓	✓✓✓	The traditional grid street pattern provides a high level of intra-suburb connectivity and therefore good access to local services and schools.	Medium to Long term
Active Transport	✓	✓	Within Cambridge Park, the bicycle network is limited and needs to be extended and connected with other sections of the wider bikeway network to increase the value of this facility. Extension of pedestrian/bicycle paths to north – south to link activity centre with Kingswood railway station.	Medium (5-10 years)
Public Transport	✓	✓	Improve connections to Kingswood railway station. Need for higher frequency and extended hours of service	Medium (5-10 years)
Physical Utilities/Infrastructure	TBC	TBC	Need to review capacity	
Environmental Considerations	✓✓	✓✓	Flood prone areas to the south of activity centre are protected with open space	
Access to retail and commercial services <u>Typical Retail Area</u> 3,000sqm-7,500sqm (inc supermarkets/s @ 1,500-4500sqm) <u>Typical Commercial Area</u> 250sqm-750sqm	✓✓	✓✓	Possibility for retail centre on existing site and adjoining sites to grow by way of mixed use developments/ range of floor space to continue to cater for existing and future needs. Encourage small range commercial uses	short to medium (1-5 years)
Access to community services and facilities	✓	✓	Consider consolidation of community services and facilities in activity centre	Short to Medium (1-5 years)
Public Domain and Open Space	✓	✓	Provision of a central focus/town square/meeting place probably on the open space land adjoining and north of the commercial centre.	Medium (5-10 years)
Housing Sustainability	✓	✓	Need to implement sustainable, adaptable and affordable housing initiatives	Short to medium (1-5 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### **5.14.11 Future Actions**

The following key actions are recommended to maintain the neighbourhood centre designation:

- Provide greater mix of housing options for a changing demographic.
- Redevelopment of land adjoining the shopping centre for medium density housing provides impetus for modernising the shopping centre.
- Extension of pedestrian/bicycle paths to north –south to link activity centre with Kingswood railway station.
- Investigate improved public transport services through higher frequency and extended hours of service. Also improve bus service to Kingswood railway station.
- Possibility for retail centre on existing site to grow by way of mixed use developments
- Enhance the public domain and amenity of Cambridge Park Shopping Centre.
- Provision of a central focus/town square/meeting place probably on the open space land adjoining and north of the commercial centre.



# 5.15

## North St Marys





## 5.15 NORTH ST MARYS

### 5.15 Suburb Overview

North St Marys is situated near the eastern boundary of the Penrith LGA. It is bounded by Forrester Road to the west and north, Ropes Creek to the east and the western railway line to the south.

The area was first inhabited by the Gomerrigal-Tongarra people, who were part of the Dharug-speaking Aborigines.

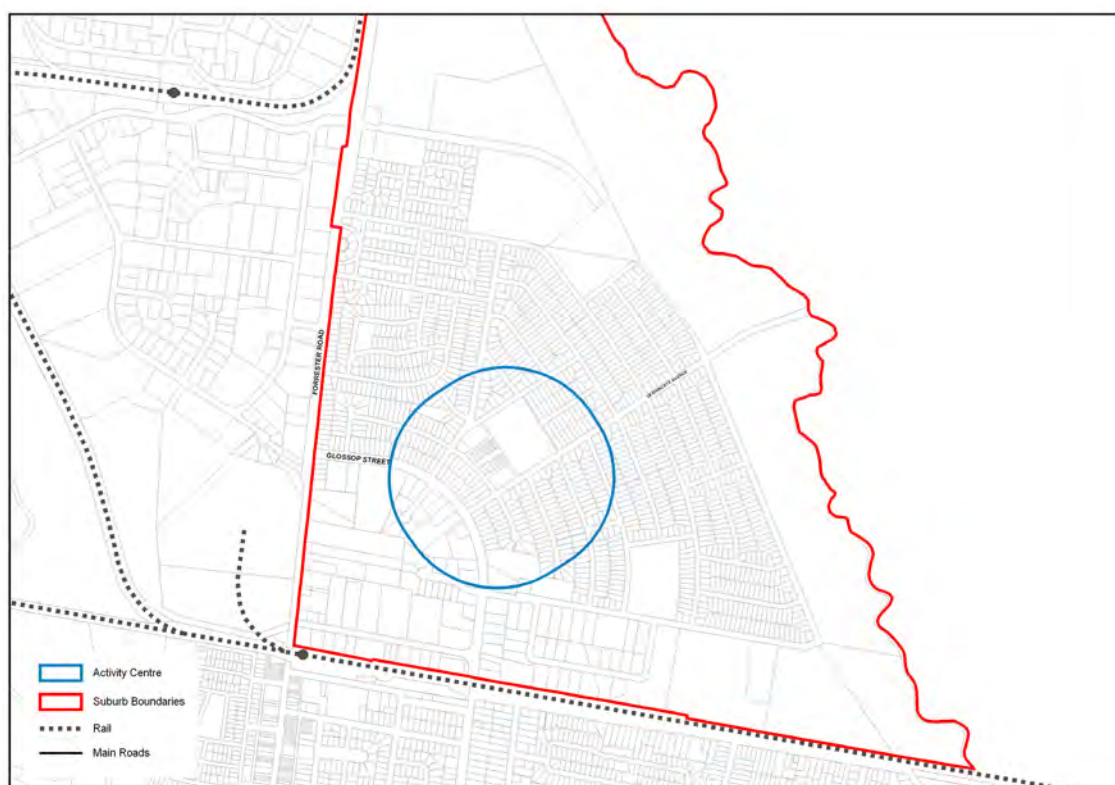
The suburb was later defined by the boundary of the grant of 650 acres made to Phillip Parker King in 1823.

In 1942, the Commonwealth of Australia resumed a portion of land immediately to the east of Forrester Road for residential accommodation for staff of the nearby munitions filling factory. In the following decade, that part of the suburb with a radial street pattern was developed by the NSW Housing Commission for a residential estate. The built environment of the residential area is characterised by housing stock primarily constructed in the 1960s, with the exception of the staff cottages mentioned above.

The industrial area to the south is characterised by large industrial units with expansive hard standing areas. The eastern boundary of the suburb is part of the Ropes Creek Corridor, which has both cleared areas and areas of open forest. To the north, there are additional areas of open forest.

The key features of the suburb include St Marys Rugby League Club, the Sports Stadium, St Marys North Public School, Chifley College (Dunheved Campus), Boronia Park, Poplar Park, Parklawn Place Shopping Centre and St Marys Railway Station.

Figure 5.15.1: Map of North St Marys



## 5.15.2. Suburb Demographics and Housing Trends

North St Marys is a predominantly post second world war housing subdivision. In 2006, North St Marys had a total population of 3,597 people.

### A Current Demographics

#### *a) Population:*

Between 1991 and 2006, the population of North St Marys declined by 695 people.

#### *b) Age:*

In 2006, North St Marys, compared to the Penrith LGA, had a larger proportion of people in the younger age groups (0-17), as well as a larger proportion of older people (60+). Between 1991 and 2006, the largest increase was in the 70-84 age group (+129), while the largest decreases were in the 18-24 (-247) and 25-34 (-194) age groups. These figures suggest that the suburb is characterised by older families with children in their teens, as well as households with one or two older people.

#### *c) Income:*

In 2006, household incomes in North St Marys were generally lower, compared to the Penrith LGA, with 23.9% of households earning less than \$500 per week (14.8% for the Penrith LGA) and 9.9% of households earning \$1,700 per week or more (25.6% in the Penrith LGA).

#### *d) Car Ownership:*

In 2006, the proportion of households in North St Marys that owned at least one motor vehicle was less than that for the Penrith LGA (75.8% in North St Marys compared with 84.9% in the Penrith LGA). Of those that owned at least one vehicle, 41.1% of households owned one vehicle, 25.9% owned two vehicles and 8.8% owned three or more vehicles. This compares with 31.7%, 36.0% and 17.2% respectively for the Penrith LGA.

#### *e) Households:*

In 2006, North St Marys had a smaller proportion of couples with child(ren), but a larger proportion of one-parent families compared to the Penrith LGA. Overall, 40.3% of total families were couples with child(ren), and 30.1% were one-parent families, compared with 51.7% and 18.5% respectively for the Penrith LGA.

Between 1991 and 2006, there has been a significant decrease in the number of couples with child(ren), particularly couples with child(ren) aged 15 years and under. Less significant increases occurred between 1991 and 2006 in the number of one-parent families and couples without child(ren).

#### *f) Dwellings:*

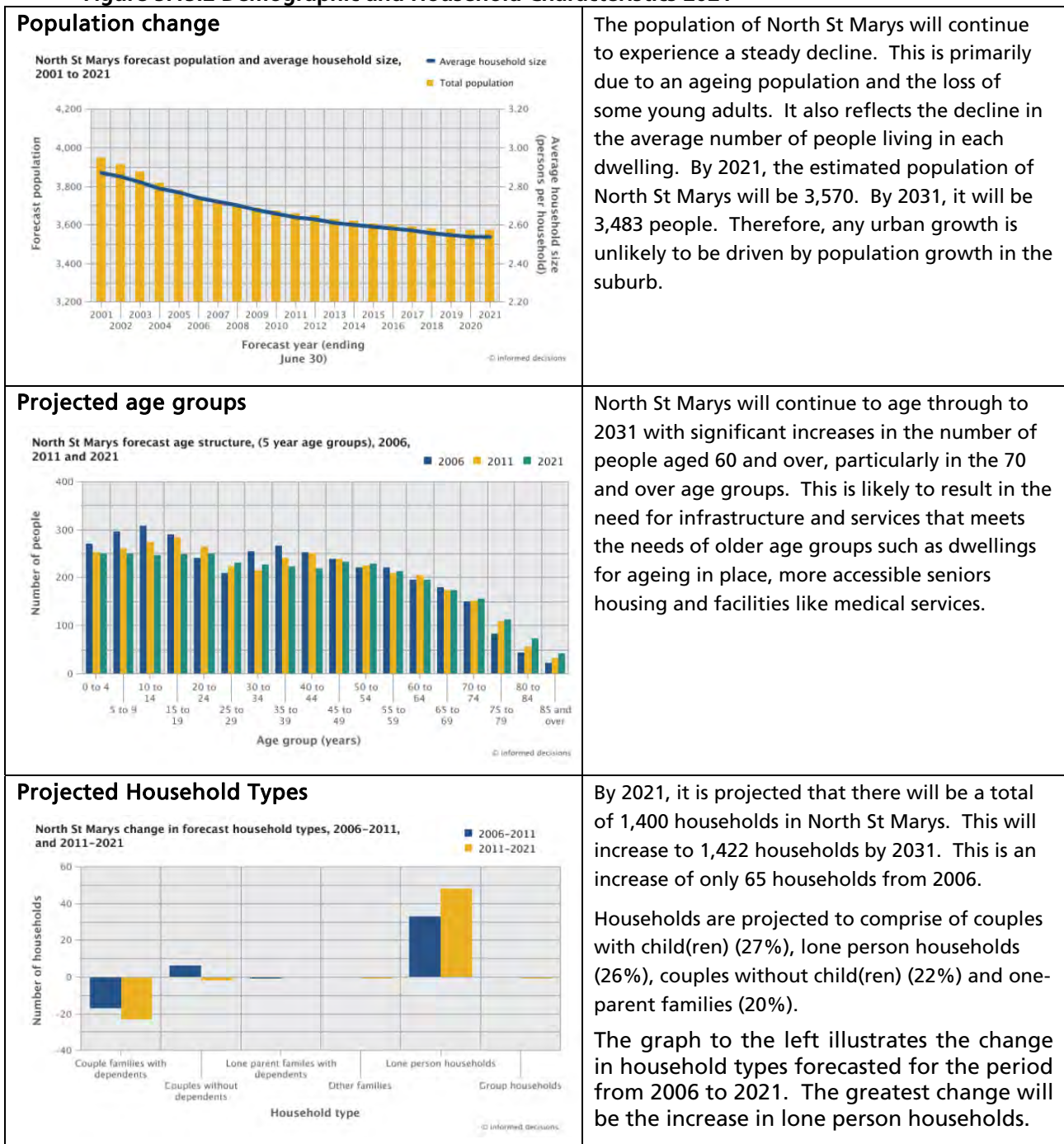
In 2006, 92.1% of all dwelling types in North St Marys were separate houses, 1.0% were medium density dwellings, and there were no high density flats or apartments. This compares with 80.3%, 10.9%, and 2.9% respectively for the Penrith LGA.

This limited mix of dwellings potentially raises issues for 'ageing in place', providing down-sized dwellings for 'empty-nesters', providing affordable smaller dwellings for first home buyers and addressing the needs of lone person households.

In 2006, 24.2% of the population owned their homes, 32.1% were purchasing and 38.8% were renting. This compares with 26.5%, 41.8% and 25.9% respectively for the Penrith LGA.

## B Projected Demographics and Household/Dwelling Needs to 2021

Figure 5.15.2 Demographic and Household Characteristics 2021



### 5.15.3. Existing Zoning and Land Use Patterns

About 40% of land in North St Marys is zoned for residential uses, 35% for parkland and recreational uses, and 25% for employment and industrial uses.

The dominant residential zone is 2(b) Residential (Low-Density) which generally only permits dwelling houses and dual occupancies. Around Short and Liddle Streets, land is zoned 2(a) Residential (Urban and Landscape Protection) which also only permits dwelling houses and dual occupancies. Consequently, the suburb is dominated by single detached dwellings and has little dwelling diversity.

There are two areas that are zoned for business uses within North St Marys. The shopping centre at Parklawn Place is zoned 3(c) Neighbourhood Business (under the Penrith Planning Scheme). The take away food outlet/restaurant and the plant nursery near the corner of Forrester and Boronia Roads are zoned 3(d1) Special Business (under Interim Development Order 81).

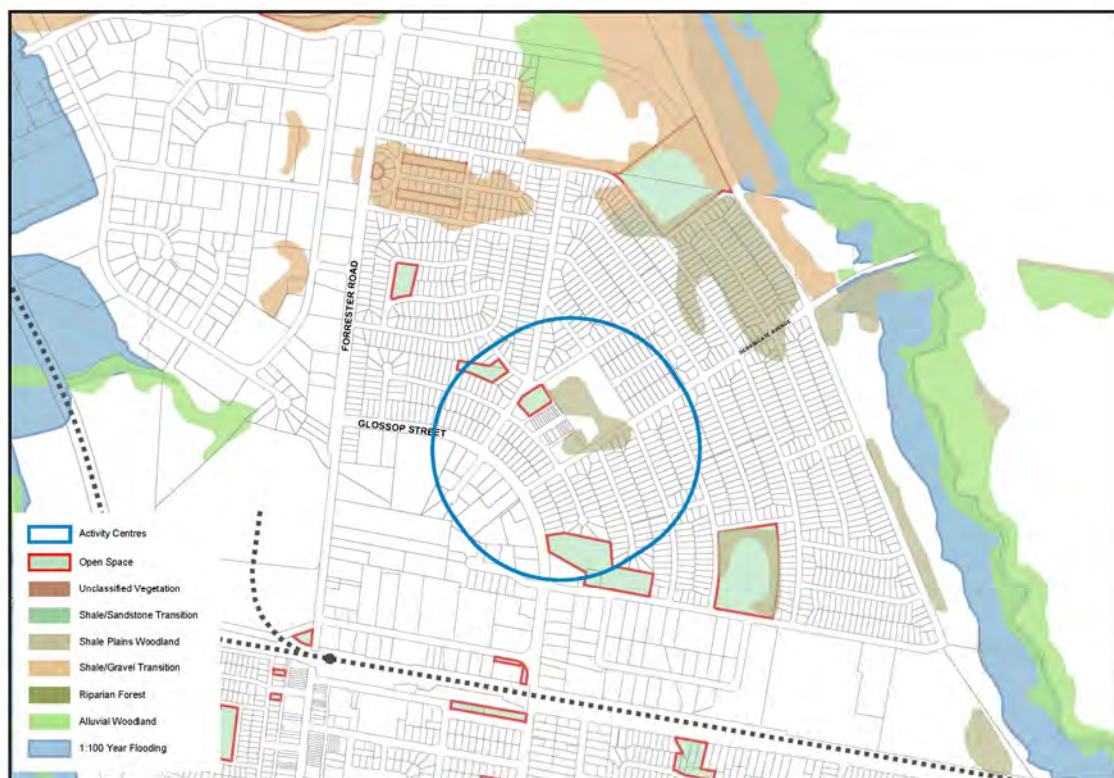
Parkland within the residential area is either zoned for existing or proposed public recreation and community uses. Similarly, land within the Ropes Creek corridor, including Boronia Park, is zoned 5(d) (Corridors Zone) for recreation and community purposes.

The area south of the residential area and north of the railway line is zoned 4(a) General Industry. This zone also applies to part of the land immediately north of the residential area along Boronia Road owned by the St Marys Rugby League Club.

### 5.15.4 Environmental Opportunities and Constraints

Figure 5.15.4 illustrates the key environmental constraints within North St Marys and these are discussed below.

**Figure 5.15.4: Environmental constraints for North St Marys**



#### A Topography, Flooding and Drainage

North St Marys varies in elevation from approximately 25 to 40 metres, AHD. Most of the residential area drains to the north and east into Ropes Creek, while the employment/ industrial areas generally drain to the west towards South Creek. As Ropes Creek flows into South Creek further to north, the suburb falls within the broader South Creek catchment.

As Figure 5.15.4 shows, land at or below the 1 in 100 year flood line (coloured in blue) is within the Ropes Creek corridor or owned by the St Marys Rugby League Club (the

extreme northern part of the map). Flooding is therefore not a significant constraint to development in the area (other than on the site of the Rugby League Club). Access to the suburb from the north along Forrester Road and Debrincat Avenue would, however, be cut in such a flood.

Drainage is a potential constraint for the area. Any increase in dwelling densities and types, and any development within the activity centre would need to consider impacts on and requirements for drainage.

## B Native Vegetation and Sensitive Ecological Areas

Most of the significant native vegetation in North St Marys is located within the Ropes Creek corridor or on land owned by the St Marys Rugby League Club and Chifley College. These vegetation communities include Alluvial Woodland, Shale Plains Woodland and Shale Gravel Transition Forest.

There are also remnants of Shale Plains Woodland and Shale Gravel Transition Forest within the residential area. Opportunities should be taken to protect these remnants in any future development of the area.

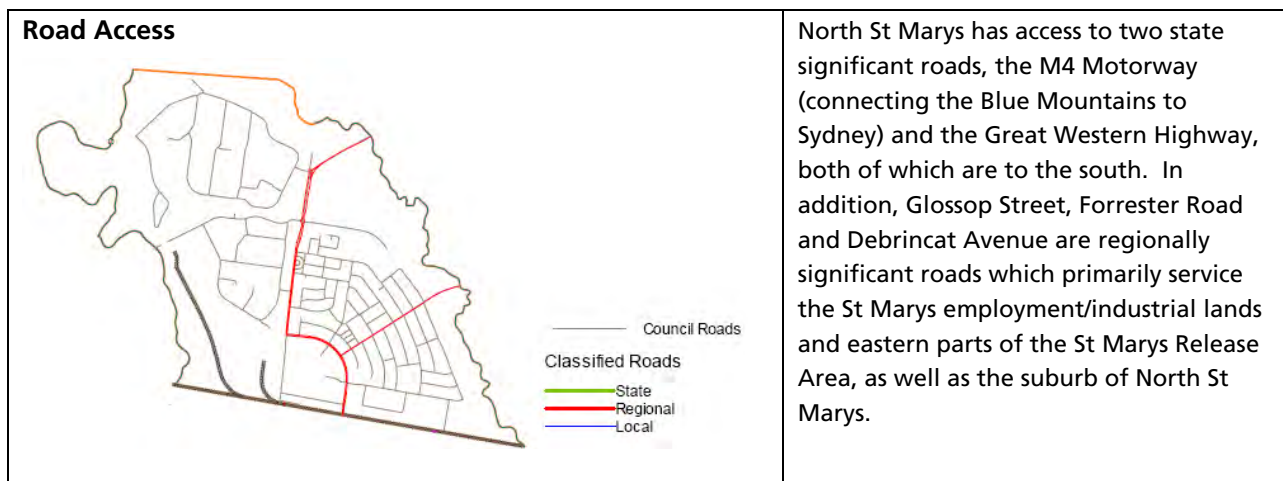
Within the activity centre, there are remnants of Shale Plains Woodland located on the site of St Marys North Primary School and in the Council park on the corner of Willow Road and Wattle Avenue. While not a significant constraint to development, opportunities should be taken to protect these remnants, where possible.

### 5.15.5 Access and Transport

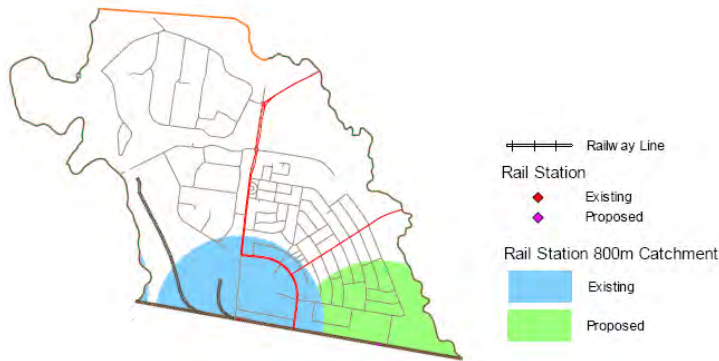
This section is largely drawn from the findings of the Penrith Integrated Transport and Land Use Strategy (PITLUS Report) prepared by Cardno Eppell Olsen, Geoplan and AQ Planning (2008). However, as there are differences in the area boundaries between the PITLUS Report and those of the ID Demographic Analysis (2007), some comments in this section are general or approximate in nature.

The North St Marys shopping centre in Parklawn Place is currently classified as a neighbourhood centre under the Centres Hierarchy. It is envisaged that it will remain as a neighbourhood centre into the future. Based on the analysis outlined below, North St Marys shopping centre is considered to have reasonable access to public transport and a reasonable pedestrian network; however the bicycle network needs improvement particularly to create connections to other key features such as the railway station, schools and surrounding employment/industrial areas.

**Figure 5.15.5: Access and Transport Characteristics**



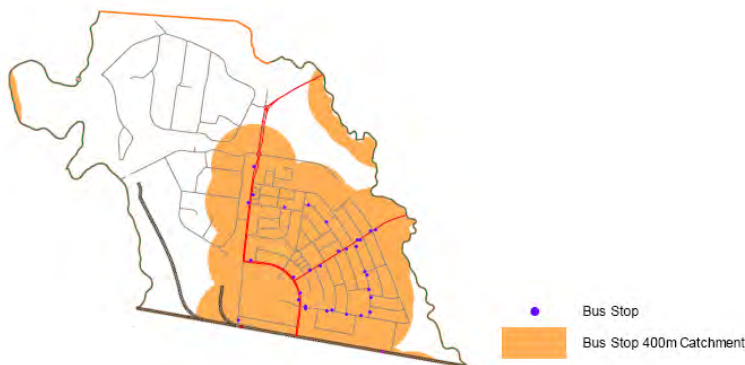
### Rail Network and Catchment



North St Marys is serviced by the Western Railway Line (from Lithgow to Central) and specifically St Marys Railway Station. The railway station, however, is located in the south western corner of the suburb, and as such, only about 20% is within the 800m walking catchment of the station. Much of the land within the 800m walking catchment is also industrial land. Therefore, the majority of residents would need to rely on public bus services, private vehicles or bicycles to access the station.

The PITLUS Report recommended that the provision of a public transport node in Oxley Park between St Marys and Mt Druitt Railway Stations should be investigated. The map to the left indicates that this would mean about another 20% of the suburb, including industrial land would be within the 800m walking catchment of the proposed station.

### Bus Network and Catchment





Generally all residential and most employment/industrial areas in North St Marys are within the 400m walking catchment of a bus stop. Of these areas, most are served by buses running at 15-30 minute frequencies, while the remaining areas have buses at 30-60 minute frequencies.

North St Marys has two different bus routes serving the area, both of which serve the area on Saturdays, but only one that serves the area during night time periods and Sundays.

The PITLUS Report found that both bus routes would be considered reasonably direct by the standards of the Ministry of Transport Service Planning Guidelines.



<p><b>Pedestrian Network</b></p> 	<p>While the footpath network provides a reasonable degree of access to the shopping centre, this will be enhanced by completing the proposed footpaths shown in blue.</p> <p>Completion of the proposed footpaths should also improve access to bus stops that link to the railway station and other key features of the suburb.</p>
<p><b>Cyclist Network</b></p> 	<p>Bikeways are identified in the PTLUS Report along parts of Forrester Road, Debrincat Avenue and Boronia Road, as well as along Kurrajong Road.</p> <p>There is a lack of continuity and no connections to the shopping centre, the railway station, schools and surrounding employment/industrial areas.</p>

*All diagrams sourced from PTLUS Report 2008*

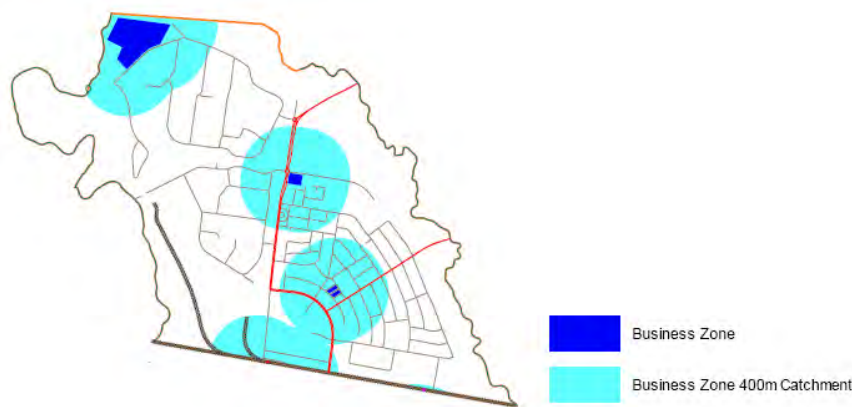
### 5.15.6 Access to Services

#### A Retail / Local Shopping

Figure 5.15.6 identifies two retail centres in North St Marys, the main centre being in Parklawn Place. The centre is classified as a neighbourhood centre in the Centres Hierarchy and as such is the activity centre focus of North St Marys. The other smaller centre near the corner of Forrester and Boronia Roads includes a take away food outlet/restaurant and a plant nursery.

The North St Marys activity centre in Parklawn Place includes two doctors, two takeaway food outlets, a bottle shop, pasta maker, laundrette, small supermarket, newsagent and chemist. The centre, however, has a high number of vacant shops and two vacant parcels of land. While the centre exceeds the requirements of a neighbourhood centre in terms of shops supplying daily needs, it is in poor condition, with extensive graffiti, poorly maintained buildings, the widespread use of shutters and no landscaping.

Figure 5.15.6 Retail catchments in North St Marys



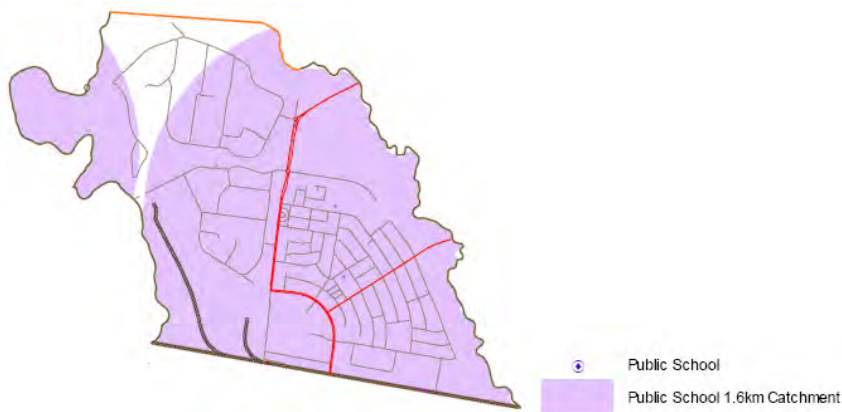
*Sourced from PITLUS Report 2008*

### **B Education / Schools**

Figure 5.15.7 illustrates that all developed areas in North St Marys are within 1.6km of a public school, and therefore, well served by public schools.

Schools in the area include St Marys North Public School and Chifley College (Dunheved Campus).

Figure 5.15.7 School catchments in North St Marys



*Sourced from PITLUS Report 2008*

### **C Community Facilities**

Within the North St Marys activity centre, Council operates a neighbourhood centre, which offers an information and referral service, and a range of social, recreational and educational groups, courses and activities. The centre also has links to the North St Marys Community Based Pre-school, South Creek Mobile Youth Services and particular programs of Nepean Interyouth Services.

While community facilities in North St Marys are limited, nearby St Marys has a high level of facilities including a library, two health centres, a number of children and family support services, and a senior citizens centre.

## **D Open Space**

There are scattered pocket parks located throughout in North St Marys.

The Ropes Creek corridor on the eastern side of the suburb provides the greatest area of open space in the locality.

The St Marys Rugby League Club located in the north of the suburb provides a major active sporting focus for the community.

### **5.15.7 Existing Suburb Character**

North St Marys is a predominantly post second world war housing subdivision. The residential area is characterised by modestly-scaled dwellings constructed in the 1960s, with the exception of the 1940s cottages in the vicinity of Commonwealth Crescent, Maple Road and Liddle, Griffiths and Short Streets, which were constructed for staff of the (then) nearby munitions filling factory.

The area has a radial street pattern with scattered parks and roadside trees. The majority of residential allotments range in size from approximately 500m<sup>2</sup> to 800m<sup>2</sup>. Allotments generally have relatively large front and rear private gardens that accommodate mature canopy trees.

The industrial area to the south is characterised by large industrial units with expansive hard standing areas.

The eastern boundary of the suburb is part of the Ropes Creek Corridor, which has both cleared areas and areas of open forest used for recreational purposes.

To the north, there are additional areas of open forest, as well as the St Marys Rugby League Club.

Figure 5.15.7 identifies the key elements of the suburb character of North St Marys including lot size, subdivision pattern, dwelling types and housing density.

Figure 5.15.7: Suburb Character Analysis

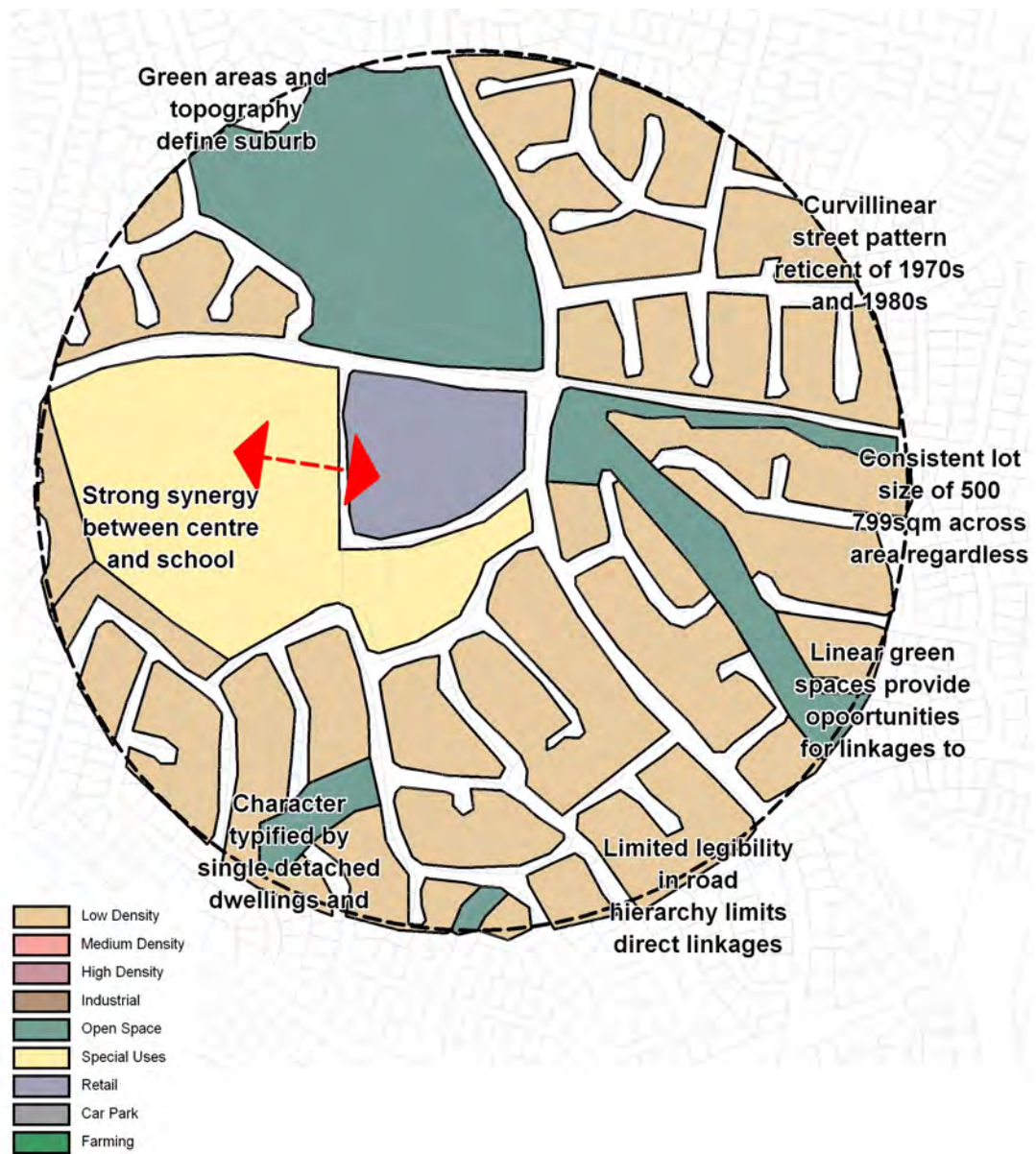


Figure 5.15.8: Examples of dwelling types in North St Marys



### 5.15.8 Summary of Key Opportunities and Constraints

The key growth opportunities to driving urban growth in North St Marys include:

- Access to public transport, particularly if the proposed railway station at Oxley Park is provided;
- Access to schools and local services given the suburb's proximity to St Marys Town Centre;
- Proximity to employment opportunities in adjoining employment/industrial lands;
- Under utilisation of sites in close proximity to the activity centre where redevelopment may be able to meet future housing needs;
- Limited environmental constraints to urban growth within the suburb itself.

The key constraints to limiting urban growth in North St Marys include:

- A population decrease over the next 20-25 years, although the demand for smaller dwellings may increase given the changing nature of households;
- Constrained development to the east and north due to Ropes Creek and associated flooding and native vegetation;
- Constrained development to the west and south due to existing employment/industrial lands;
- Limited availability of large vacant allotments.

Therefore, urban growth is likely to be limited to infill development or redevelopment in and around the North St Marys activity centre.

These opportunities and constraints are portrayed in Figure 5.15.9

### 5.15.9 Future Dwelling Opportunities

#### A Within St Marys Neighbourhood Centre

ID 'Dwelling Opportunities Analysis for Penrith City Council' (Sept 2007) and ground truthing comparisons were undertaken to identify the future dwelling opportunities within the North St Marys Neighbourhood Centre (within a 300 metre radius of the centre).

Table 5.15.1 summarises the key assumptions made for North St Marys Neighbourhood Centre potential future dwelling capacity.

**Table 5.15.1: Assumed densities for North St Marys Neighbourhood Centre**

Assumed Probability of Redevelopment and Proposed Development Densities									
North St Marys	Development Era	Access to Services / Transport Score	Buffer zone Radii (m)	Developable land within the buffer zone (hectares))	% of land development assumption	Land @ 100 dwellings/ hectare	Land @ 75 dwellings / hectare	Land @ 50 dwellings / hectare	Land @ 25 dwellings / hectare
ID Assumptions	1940-50's	0.5	300	26.4	3.8%	0%	0%	0%	100%
	Very high demolition and replacement (infill) opportunities								
Urban Study and Strategy	1940-60's	<b>See Sustainability Checklist</b>	300	26.4	7.5%	0%	0%	25%	75%
	High opportunity for redevelopment								

*Source: ID Report (Sept 2007) as well as assumptions by this Urban Study and Strategy.*

It is noted that Council's Interim Centres Hierarchy Policy refers to North St Marys as a 'Neighbourhood Centre'. The Urban Study and Strategy considers that North St Marys is likely to remain as a neighbourhood centre in the medium to long-term (10-20 years) but this does not mean that it does not have some capacity for further dwelling opportunities.

The age of the housing stock in North St Marys dates back to the 1940's (note: these cottages are part of a heritage conservation area); however most houses have been constructed in the 1950's-1960's. Most of the housing comprises detached dwellings. There are no vacant allotments within the activity centre. There has also been limited new dwelling development in the last 10-15 years (11 dwelling approvals from 1993-September 2007). The area has a radial street pattern with good connections and potential for consolidation of allotments to enable redevelopment. The activity centre is considered to have a high opportunity for redevelopment based on age and allotment arrangement.

The Urban Strategy Sustainability Checklist Table 5.15.10 identifies that North St Marys is meeting all the criteria in only one of the key categories (access to community services and facilities) that have been nominated to satisfy the requirements for a neighbourhood centre. It is not performing at a neighbourhood centre level in terms of active transport, public transport, access to retail and commercial services and public domain and open space. Therefore, to address the requirements of a neighbourhood centre, access to services and transport needs to increase in North St Marys, which will in turn encourage further urban growth both within the North St Marys activity centre and in areas outside the centre.

It is recommended that the majority of increased dwelling capacity occur within the activity centre where there are higher, albeit limited, levels of access to services and transport. The amount of urban growth within the activity centre particularly depends on improved linkages to St Marys town centre and the railway station for pedestrians and cyclists, and for public transport.

ID (2007) has assumed that 3.8% of the total developable land will actually be developed. This low probability is likely to be true based on the current development demand for North St Marys at this time. However, if redevelopment of the activity centre occurs to meet the requirements of a neighbourhood centre with some corresponding residential development both in the core and throughout the activity centre, then this percentage would be slightly higher. The Urban Study and Strategy assumes that 7.5% of the total developable land will be developed.

Although the activity centre is considered to have a high opportunity for redevelopment based on age and allotment arrangement, demand for redevelopment, while higher, is not likely to be strong. ID's (2007) redevelopment assumption of 100% of dwellings at 25 dwellings / hectare is considered to be an underestimation and a slight increase in density is provided in the table above.

**Table 5.15.2: Estimated Dwelling capacity for Centre**

Resulting No of Dwellings at each Density and Total Future Dwellings in each Centre								
North St Marys	Current Centres Hierarchy Level	No. dwellings @ 100 dwells/ hectare	No. dwellings @ 75 dwells/ hectare	No. dwellings @ 50 dwells/ hectare	No. dwellings @ 25 dwells/ hectare	Additional Dwellings created	Existing dwellings lost to demolition	Net dwelling gain (not incl. MDP)
ID Assumptions	Neighbourhood Centre	0	0	0	25	25	9	16
Urban Study and Strategy Assumptions (see below)	Neighbourhood Centre	0	0	25	37	62	9	53

Source: ID Report (Sept 2007) as well as findings of this study.

The potential net dwelling gain for the North St Marys Neighbourhood Centre is based on some limited potential to increase the amount of medium density in the area in the medium and long term;

The long term (20-25 years) dwelling capacity within the North St Marys Neighbourhood Centre could be 16-53 dwellings.

## **B Outside Key Activity Centres**

The calculations to determine future dwelling gains in North St Marys outside of the Neighbourhood Centre radii is based on two key opportunities:

- demolition and replacement of existing dwellings with new housing stock; and
- the opportunity for residential development on vacant land.

In assessing the potential future dwelling gains in the areas of North St Marys outside the activity centre, ID has identified that the majority of lots have an area of 500-799 m<sup>2</sup> with only a small number of lots 800m<sup>2</sup> or greater. The development potential of these lots is high given the age of housing development, allotment arrangement and the predominance of single detached dwellings.

ID (2007) has calculated that there are only two vacant allotments in North St Marys outside the activity centre, resulting in a net potential gain of six dwellings.

ID (2007) has calculated that out of the 1031 existing utilised allotments, there is potentially a gain of 106 dwellings through demolition and replacement with additional dwellings. This is based on the grouping of allotments into size ranges, an assumed dwelling capacity per lot size and as assumed percentage of each type of allotments being redeveloped.

ID (2007) has assumed that:

- one in ten lots with areas of 500-799m<sup>2</sup> will provide one additional dwelling;
- one in ten lots with areas of 800-999m<sup>2</sup> will provide two additional dwellings;
- one in ten lots with areas of 1000m<sup>2</sup> or greater will provide three additional dwellings.

These figures reflect the low current development activity in North St Marys and are likely to be true for areas outside the activity centre for the medium to long-term. However, it is anticipated that this would change if the proposed railway station at Oxley Park is provided.

### C Summary of Dwelling Opportunity (Long Term)

The potential residential capacity for the suburb is shown in Table 5.15.3.

**Table 5.15.3: Net dwelling gains for North St Marys Neighbourhood Centre till 2031.**

Total Dwelling Capacity	ID Calculations of Net Dwelling Gain	Urban Study and Strategy Review of Long Term (25 year) Dwelling Gain
Within Activity Centre (300m)	16	53
Outside Activity Centre – Vacant Land	6	6
Outside Activity Centre – Demolition & Replacement	106	106
<b>TOTAL</b>	<b>128</b>	<b>165</b>

*As calculated by ID Report (Sept 2007) and this study.*

ID forecasts that the total population for North St Marys in 2021 will decrease while household numbers will increase:

- Total population from 2006 to 2021 (15 years) is expected to decrease by 162 (which extrapolates approximately to a decrease of 250 by 2031);
- Total households from 2006 to 2021 (15 years) is expected to increase by 43 (which extrapolates approximately to 65 by 2031);
- Total dwellings from 2006 to 2021 (15 years) is expected to increase by 30 (which extrapolates approximately to 50 by 2031).

Therefore, there appears to be sufficient scope to increase dwelling density capacity within North St Marys to meet future population projection requirements.

In conclusion, the predicted population growth and dwelling demand of North St Marys may not be as high as the potential residential capacity for the suburb. However, to encourage the activity centre to meet all of the requirements for a neighbourhood centre, additional residential development in the core and within the 300m catchment should be supported through appropriate services and actions.



## 5.15.10 North St Marys Village Centre Assessment Against Sustainability Checklist

NORTH ST MARYS				
Strategic Element	Current Centre Classification – Neighbourhood Centre (300m radius)	Future Centre Classification – Neighbourhood Centre (300m radius)	Additional services/actions needed	Priority
Population Size Penrith strategy target 150 to 900 dwellings in catchment	✓✓✓ 1363 dwellings in North St Marys suburb	✓✓✓ 1427 dwellings in 2031	Need for greater housing diversity. Encourage additional residential development in core and catchment to support neighbourhood centre requirements.	Medium (5-10 years)
Dwelling Type and Mix	✓	✓	Need for greater housing diversity for future household types particularly lone person households and older people.	Medium (5-10 years)
Road Access	✓✓	✓✓	Radial street pattern provides good connections to regional roads. Need to extend and promote accessibility via additional roads/lanes in activity centre.	Medium (5-10 years)
Active Transport	✓	✓	Need to complete proposed footpaths to improve access to activity centre and bus routes linking to railway station and other key features of suburb. Provide cycleway connections to activity centre, railway station, schools and surrounding employment/ industrial areas.	Medium (5-10 years)
Public Transport	✓✓	✓✓	Need for higher frequency of services.	Short to medium (1-5 years)
Physical Utilities/ Infrastructure	TBC	TBC	Need to review capacity.	Short (1 year)
Environmental Considerations	✓✓	✓✓	Need to consider environmental constraints - flooding of access roads from the north, flooding of	Considered throughout

NORTH ST MARYS				
Strategic Element	Current Centre Classification – Neighbourhood Centre (300m radius)	Future Centre Classification – Neighbourhood Centre (300m radius)	Additional services/actions needed	Priority
			Rugby League Club site, drainage and significant remnant native vegetation.	
Access to retail and commercial services	✓✓	✓✓	Need to improve condition and attractiveness of retail/commercial services to discourage high vacancy rates, graffiti, etc. Consider redevelopment of activity centre to allow mixed use, promote accessibility and encourage connections to community facilities and parkland.	Medium (5-10 years)
Access to community services and facilities	✓✓✓	✓✓✓	Need to improve access, through active and public transport initiatives, to nearby services and facilities at St Marys town centre.	Short to medium (1-5 years)
Public domain and open space	✓	✓	Need to provide additional active space which facilitates informal and formal meeting and gathering places that is safe and of a high design quality. Consider in redevelopment of activity centre. Need to also improve passive spaces in existing parks.	Medium (5-10 years)
Housing sustainability	✓	✓	Need to implement sustainable, adaptable and affordable housing initiatives	Medium (5-10 years)

- ✓ Meets some criteria
- ✓✓ Meets most criteria
- ✓✓✓ Meets all criteria

### 5.15.11 Future Actions

The following key actions are recommended to maintain the neighbourhood centre designation:

- Encourage additional residential development within the core and catchment of the activity centre to support its role as a neighbourhood centre and increase housing diversity to better meet the needs of future residents, particularly lone person households and older people;
- Prepare an urban design concept/plan for the activity centre, particularly the retail/commercial area, public domain and open spaces, that includes the following principles/strategies:
  - Allows mixed use development;
  - Extends and promotes accessibility via additional paths, lanes and roads;
  - Relocates uses to encourage connections to community facilities and parks;
  - Provides additional active space that is safe and of a high design quality.
- Complete proposed footpaths to improve access to the activity centre and to bus routes that link to the St Marys railway station and other key features of the suburb such as schools;
- Provide cycleway connections to the activity centre, St Marys railway station, schools and surrounding employment/industrial areas;
- Enhance public transport by increasing the frequency of services;
- Improve access, through active and public transport initiatives, to nearby community services and facilities in the St Marys Town Centre;
- Improve the safety and design quality of existing out of centre parks;
- Investigate the capacity of existing infrastructure;
- Ensure environmental constraints including flooding, drainage and significant remnant native vegetation are considered; and
- Investigate opportunities for sustainable, adaptable and affordable housing initiatives.

## 5.16 COLYTON

The suburb of Colyton, with an area of 3.36 square kilometres, is bounded by the Great Western Highway in the north, Ropes Creek in the east, the Western Motorway in the south and generally by Marsden Road in the west. The name of the locality derives from an 1842 subdivision of an area now within Blacktown City Council. The present site of Colyton was traditionally known as St Marys.



Colyton is an established residential area with a small industrial area along Roper Road. The built environment of this suburb is generally characterised by free-standing single storey cottages and a small commercial area centred on the 1950s Colyton Hotel at the corner of the Great Western Highway and Roper Street. Much of the housing stock is of brick and fibrous cement constructed from the 1950s. There are no historic buildings. Significant development has occurred in the post-war years, with considerable residential and industrial growth in the 1960s.

### Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Colyton.

Summary data	2006	Forecast year	
		2011	2021
Total population	7,951	7,850	7,678
Resident population in non-private dwellings	46	46	46
Resident population in private dwellings	7,904	7,803	7,632
Households	2,772	2,810	2,850
Dwellings	2,822	2,846	2,886
Average household size	2.85	2.78	2.68

### 5.16.2 Environmental opportunities and constraints

There is some low lying flood prone land along the western bank of Ropes Creek which was originally intensely farmed as vineyards and orchards. This land now forms part of the Ropes Creek Corridor established in the early 1970 by the then State Planning Authority. While primarily an open space corridor, with a biodiversity and recreation function, it also accommodates utility services such as electricity lines.

### 5.16.3 Land use and zoning characteristics

The zoning pattern for Colyton reflects the dominance of residential development as the defining land use of this suburb. A 'corridors' zone along Ropes Creek is the most significant non-residential zone. Pockets of open space, commercial and 'non-urban' zones are also found across the suburb.

#### **5.16.4 Access and transport**

The principal means of access are the Great Western Highway and the Western Motorway (M4).

The *Penrith Integrated Transport and Land Use Study* (PITLUS) incorporated Colyton with the suburbs of St Marys, Oxley Park as part of the St Marys Statistical Local Area (SLA) when considering the transport impact of developments.

Key findings from that Study for that SLA are:

- 94.0% is served by buses and/or trains. The remaining 6.0% of the area does not have services.
- 54.1% is served by buses with <15 minutes frequencies.
- Over 50% of developed areas are within the catchment of a local shopping centre. This is better than the Penrith local government area (LGA) average of 37%.
- 7.5% of the area has no bus services.

The above figures are skewed to reflect a higher figure influenced by St Marys which is very well served by buses and trains. It should be noted that the levels of bus service that applies to Colyton as a Suburb is significantly less than that which applies to the wider area (St Marys Statistical Local Area).

#### **5.16.5 Access to services**

Major features of the area include Colyton Shopping Centre (consisting of around 9 shops; a doctor, dentist, butcher, chemist, newsagent, take-away, bottle shop, hairdresser, supermarket and TAB), Bennett Road Public School, Colyton High School, Life Education Centre, Potter Field, Roper Road soccer fields and Shepherd Street Park. There is also a small mini- mart and take-away on the Corner of Carpenter Street & Bennett Road.

#### **5.16.6 Development opportunities and considerations**

Future medium/high density residential development opportunities are limited in the short term due to its separation from railway stations or other primary public transport infrastructure. The area also lacks a major commercial or employment centre.

The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments. The average lot size is quite small (500m<sup>2</sup>-700m<sup>2</sup>) though there are some larger lots up to 1100m<sup>2</sup>.

In the short term there is an opportunity for shop top housing around the shopping centre as long as there are improved facilities. This will help revitalise the area.

The suburb still has some opportunity for infill. However a more detailed examination of Colyton is required in the longer term. In the medium to longer term, more sustainable outcomes for Colyton will be predicated on improved public transport.

## 5.17 EMU HEIGHTS

Emu Heights, with an area of 3.44 square kilometres, is located on the western side of the Nepean River, at the foot of the Blue Mountains. It is bounded by the suburb of Emu Plains, the Blue Mountains local government area, Russell Street and the Nepean River. The suburb is dissected in the south by the historic Old Bathurst Road.



Prior to land grants and the dedication of a town reserve in the 1830s, the area once formed part of a convict agricultural station. The history of the suburb is characterised by the development of small farms, mainly orchards, dairy farms and general farms, although attempts at residential subdivision were made in 1885 and the 1930s.

Improved rail links to Sydney and an emerging light industrial base at Penrith saw Emu Plains develop from the early 1960's into an outer metropolitan suburb of Sydney with subdivision of the original farm allotments for residential housing. With increasing numbers of new families living residing in the town a new school was completed in 1972.

### 5.17.1 Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Emu Heights:

Summary data	2006	Forecast year	
		2011	2021
Total population	3,395	3,237	3,093
Resident population in non-private dwellings	31	31	31
Resident population in private dwellings	3,364	3,206	3,062
Households	1,099	1,107	1,117
Dwellings	1,111	1,116	1,126
Average household size	3.06	2.90	2.74

### **5.17.2 Environmental opportunities and constraints**

Topography, vegetation, bushfire hazard, biodiversity and scenic quality of regional significance are key constraints to further development in Emu Heights.

### **5.17.3 Land use and zoning characteristics**

Emu Heights is a predominantly residential area, largely comprised of detached dwellings constructed from the 1980s onwards. Land in the south east however, where topography is level, supports light industrial development. These broad land use groupings are reflected in current zoning patterns.

### **5.17.4 Access and transport**

Although there is a railway station at neighbouring Emu Plains, the principal means of access to Emu Heights is via Old Bathurst Road, a key connection between the Great Western Highway at both Emu Plains and Blaxland in the Blue Mountains. Russell Street at Emu Plains provides a direct link to the Western Motorway (M4) at Leonay.

The Penrith Integrated Transport and Land Use Study (PITLUS) incorporated Emu Heights with the suburbs of Emu Plains and Leonay as part of the Emu Plains Statistical Local Area (SLA) when considering the transport impact of developments. Key findings from that Study for that SLA are:

- 87% of developed areas generally have good coverage in terms of bus services.
- 73.8% is served by buses and/or trains while the remaining 26.2% of the area does not have services.

### **5.17.5 Access to services**

With no local shopping centre, retail facilities are limited to a service station convenience store which is located at the south east corner of Emu Heights, some distance from the main residential area to the north west.

Community facilities and services in the area include Emu Heights Public School, Eva Bory Swimming Centre, Blue Emu Community Centre, Emu Green and Glissold Reserve.

### **5.17.6 Development opportunities and considerations**

While Emu Heights is well located to access facilities and services within the Penrith City Centre, and despite good connections to the state road network, the physical and environmental constraints are likely to significantly restrict opportunities for future residential expansion or consolidation.

The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments and topography. The average lot size is quite small (500m<sup>2</sup>-800m<sup>2</sup>).

## 5.18 LEONAY

The residential suburb of Leonay, with an area of 2.24 square kilometres, is located on the western bank of the Nepean River, south of Emu Plains. It is bounded by the Western Motorway to the north, the railway line to the west, Nepean River to the east, and is dissected by Leonay Parade. The naming of Leonay, in 1973, derives from a vineyard estate established in the 1920s by Leo Buring.



Although development of the area dates from 1826 when the first land grant was made, growth was minimal until the post-war years. Significant development occurred in the 1960s and 1970s.

Located at the foothills of the Blue Mountains, the topography is characterised by undulating hills. While large tracts of bushland forming part of the Blue Mountains, and Leonay golf course, remain the built environment is characterised by modern housing development with isolated pockets of earlier farmhouse stock.

### 5.18.1 Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Leonay:

Summary data	2006	Forecast year	
		2011	2021
Total population	2,470	2,390	2,369
Resident population in non-private dwellings	31	31	31
Resident population in private dwellings	2,439	2,359	2,338
Households	874	880	890
Dwellings	885	892	902
Average household size	2.79	2.68	2.63

### 5.18.2 Environmental opportunities and constraints

Topography, vegetation, bushfire hazard, biodiversity and scenic quality of regional significance are key constraints to further development in Emu Heights. Flooding of some areas closer to the river may also present limitations to development.

### 5.18.3 Land use and zoning characteristics

The dominant land use is low density residential housing which is partly bordered, and otherwise significantly fragmented, by numerous tracts of private and public open space. The northern boundary of the suburb is defined by a 'special use' zone over the railway corridor, while a 'non-urban' zone at the southern end of Leonay protects the Blue Mountains escarpment as it rises from the Nepean River. A small pocket of commercial land, centrally positioned along Leonay Parade, provides the only local centre within this suburb.

### 5.18.4 Access and transport

Direct access to Leonay is available from the Western Motorway (M4) or otherwise from the Great Western Highway via Russell Street Emu Plains.



The *Penrith Integrated Transport and Land Use Study* (PITLUS) incorporated Leonay with the suburbs of Emu Heights and Emu Plains in the Emu Plains Statistical Local Area (SLA) when considering the transport impact of developments. Key findings from that Study for that SLA in terms of public transport are:

- 87% of developed areas generally have good coverage in terms of bus services.
- 73.8% is served by buses and/or trains while the remaining 26.2% of the area does not have services.

#### **5.18.5 Access to services**

Community facilities within the suburb are limited to Leonay Public School and the River Road Reserve. Leonay also benefits from Leonay Golf Club, Emu Plains Sporting & Recreation Club, and a small neighbourhood centre on Leonay Parade which includes a child care centre, mini-mart, hairdresser, real estate agent, fitness centre and beautician.

#### **5.18.6 Development opportunities and considerations**

A built environment of detached low density housing, in conjunction with a lack of infill development sites creates a specific character and amenity that needs to be maintained.

The capacity of the existing road network, topography, vegetation, biodiversity, bushfire, scenic quality and flooding are additional constraints to further development in Leonay.

The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments. The average lot size is quite small (500m<sup>2</sup>-800m<sup>2</sup>). Those lots which are larger in Leonay are considerably constrained by topography.

## 5.19 OXLEY PARK

Oxley Park, a small established suburb 1.24 square kilometres, is located to the immediate east of St Marys. It is bounded by the railway line in the north, Ropes Creek in the east, the Great Western Highway in the south and generally by Sydney Street in the west.



Development of the area dates from 1823 when the first land grant was made. Oxley Park is named after the explorer and original land owner, John Oxley. Land was used mainly as a cattle run. Some growth took place in the interwar period, when land was subdivided. Significant development occurred in the post-war years, including the construction of soldier settlements and workingmen's housing in the 1930s.

The area is characterised by traditional single detached dwellings built in the 1950s, 1960s and 1970s, on large lots, in a regular grid layout. The character of the area, particularly in Oxley Park, is in transition resulting from a marked increase in multi-unit developments, predominately in the form of town houses and villa houses.

### 5.19.1 Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Oxley Park:

Summary data	2006	Forecast year	
		2011	2021
Total population	2,438	2,370	2,284
Resident population in non-private dwellings	15	15	15
Resident population in private dwellings	2,423	2,355	2,270
Households	954	972	993
Dwellings	989	999	1,019
Average household size	2.54	2.42	2.29

### 5.19.2 Environmental opportunities and constraints

Constraints to be considered in the expansion of areas able to be developed for multi unit housing, or an increase in densities within existing medium density precincts include noise from the railway and Great Western Highway, flooding, the capacity of the road network and access to public transport

Opportunities include the potential to capitalise upon existing public transport services (bus and rail), the high level of visual amenity and recreational opportunities provided at the interface with Ropes Creek and other various areas of open space across the suburb.

A key finding from the PITLUS study is the investigation of a new railway station in Oxley Park, opposite the intersection of Sydney Street & Hobart Street. This would allow for the consideration of increased densities within 800m walking distance from that location.

### **5.19.3 Land use and zoning characteristics**

Oxley Park is predominantly zoned residential, the majority of which is set aside for medium density development. A 'special use' zone over the Ropes Creek corridor is the other key land use feature. A significant tract of open space is provided at the southern boundary of the suburb, adjacent to the Great Western Highway, supplemented by several smaller pockets parks to the north and east.

### **5.19.4 Access and transport**

Direct access to Oxley Park is available from the Great Western Highway. The northwest corner of the suburb is 1km from St Marys railway station.

The *Penrith Integrated Transport and Land Use Study* (PITLUS) incorporated Oxley Park with the suburbs of St Marys and Colyton in the St Marys Statistical Local Area (SLA) when considering the transport impact of developments.

Key findings from that Study for that SLA in terms of public transport are:

- 94.0% is served by buses and/or trains. The remaining 6.0% of the area does not have services.
- 54.1% is served by buses with <15 minutes frequencies.
- Over 50% of developed areas are within the catchment of a local shopping centre. This is better than the Penrith local government area (LGA) average of 37%.
- 7.5% of the area has no bus services.

The above figures are skewed to reflect a higher figure influenced by St Marys which is very well served by buses and trains. It should be noted that the level of bus service that applies to Oxley Park as a suburb is significantly less than that which applies to the wider area (St Marys Statistical Local Area).

### **5.19.5 Access to services**

There is a small local centre to meet the daily needs of Oxley Park residents which includes around 10 local shops. Major features of the area Oxley Park Public School, Ridge Park and Cec Blinkhorn Oval.

### **5.19.6 Development opportunities and considerations**

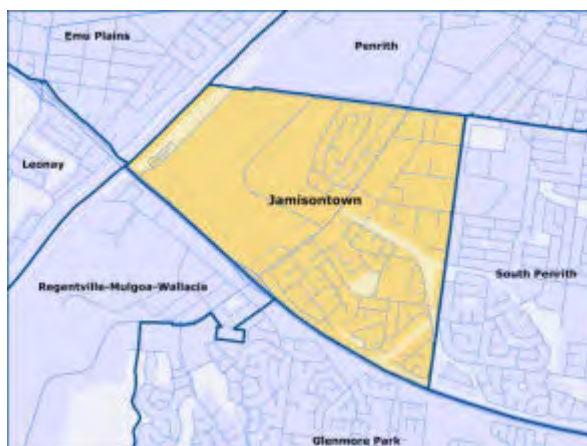
In the short term, given the age of the housing stock and existing zoning patterns, Oxley Park can continue being developed at medium density as long as quality urban design is achieved.

In the medium to longer term, there is the potential for the introduction of higher densities in suitable areas as long as a new railway station is built in Oxley Park. The average lot size in the area is quite large (around 1,000 square metres) making it favourable for higher density development. However, the narrow width of many of the allotments in Oxley Park poses restriction on the redevelopment of many sites.

In Oxley Park in the future, the opportunity for redevelopment of lots to medium/high density could occur if lots were able to be consolidated to achieve a greater width and the infrastructure was upgraded to include a train station in the area.

## 5.20 JAMISONTOWN

Jamisontown, with an area 8.14 square kilometres, is bounded by Jamison Road in the north, York Road in the east, the Western Motorway in the south and the Nepean River in the west. Jamisontown is named after Thomas Jamison, the holder of an original Crown grant in 1805.



This suburb comprises a mix of land uses, which in broad terms is split along an east-west divide. The eastern half comprises residential areas, a light industrial precinct and bulky goods outlet centre. This contrasts markedly with the semi rural allotments which occupy cleared former farmlands to the west with frontage to the Nepean River.

A key element of the suburb is Mulgoa Road, an important gateway entry to the City. Stands of Eucalyptus tereticornis (Forest Red Gums) located along the western edge of Mulgoa Road, and listed on Council's Significant Tree Register, are a significant visual and aesthetic feature of this location. Jamisontown is also dissected by the prominent and historically significant Surveyors Creek, which is tributary of the Nepean River.

### 5.20.1 Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Emu Heights:

Summary data	2006	Forecast year	
		2011	2021
Total population	4,908	4,784	4,701
Resident population in non-private dwellings	116	116	116
Resident population in private dwellings	4,793	4,668	4,586
Households	1,966	2,015	2,073
Dwellings	2,042	2,084	2,144
Average household size	2.44	2.32	2.21

### 5.20.2 Environmental opportunities and constraints

Key constraints to development are drainage issues associated with the primary creek systems of Peach Tree and Surveyors Creeks, flooding from the Nepean River, and consideration of the capacity of the road network, particularly Mulgoa Road.

### 5.20.3 Land use and zoning characteristics

In broad terms a little over half of the area east of Mulgoa Road supports residential development, the majority of which comprises low density housing positioned between the Western Motorway (M4) and Surveyors Creek. North of Surveyors Creek, extending to Preston Street, is a significant light industrial area. North of Preston Street, to Jamison Road, is a high density residential precinct. Land north of Surveyors Creek comprises a high density residential strip which extends to Jamison Road.

The western side of Mulgoa Road, between the Western Motorway and Surveyors Creek is a bulky goods precinct.

To the west of these precincts is the rural residential area around Blaikie Road and Wilson Lane, extending to Tench Reserve which defines the western bank of the Nepean River.

#### **5.20.4 Access to transport**

Jamisontown is readily accessed by various primary traffic routes within the broader road network including the Western Motorway (M4), Mulgoa, Jamison and York Roads.

The *Penrith Integrated Transport and Land Use Study* (PITLUS) incorporated Jamisontown with the suburbs of Penrith, South Penrith and Kingswood as part of the Penrith Statistical Local Area (SLA) when considering the transport impact of developments. Key findings from that Study for that SLA in terms of public transport are:

- 94.6% of the area is served by buses or trains, with 5.4 % having no service.
- 56.9% is served by buses with 15-30 minutes frequencies.

The above figures are skewed to reflect a higher figure influenced by Penrith and Kingswood which are very well served by buses and trains. It should be noted that the levels of bus service that applies to Jamisontown as a suburb is less than that which applies to the wider area (Penrith Statistical Local Area).

#### **5.20.5 Access to services**

With no local shopping centre, retail facilities are limited to those provided by service station convenience stores located along Mulgoa Road. However Jamisontown benefits from the immediacy of substantial bulky goods and light industrial precincts, which also include limited retail and leisure services.

Community facilities include an aged care centre, Jamisontown Public School, Tench Reserve and the Nepean River, Robinson Park and numerous smaller public reserves and Nepean Shores resort and conference centre.

Proximity to the Penrith city centre ensures excellent access to a range of community, cultural, recreational, sporting, commercial, medical and leisure services and facilities of regional significance.

#### **5.20.6 Development opportunities and considerations**

Opportunity for new infill residential development is limited as the proximity to the Penrith city centre has largely exhausted land supply. Any consideration of redevelopment opportunities within existing low density residential areas would need to have regard to constraints imposed by flooding, water table levels, traffic noise, noise from the industrial precinct and access to public transport.

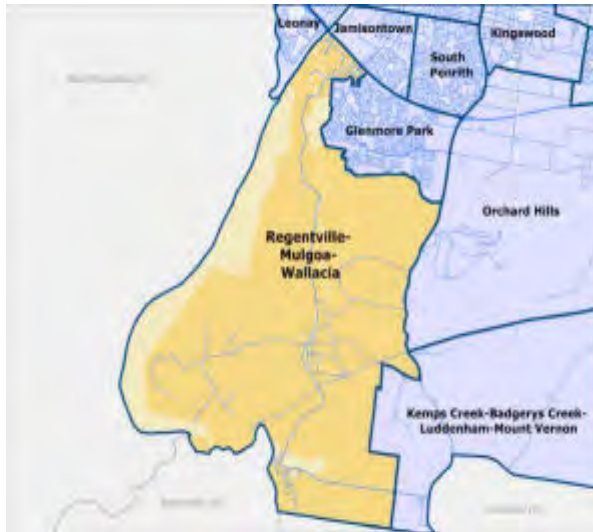
Redevelopment opportunities of the rural precincts in the western half of the suburb will be fundamentally determined by flooding patterns and associated issues such as flood evacuation routes. The redevelopment opportunities in this precinct are limited to some commercial and community/leisure development. Additional considerations would include visual impacts, capacity of the local road network and the interface with the Western Motorway and bulky goods precinct.

Due to Jamisontown's proximity to the Penrith city centre and access to various primary traffic routes, the existing residential area might have some potential for redevelopment to high densities in the longer term.

## 5.21 REGENTVILLE

Regentville is located east of the Nepean River, south of the Western Motorway (M4) and north of the suburbs of Glenmore Park and Mulgoa.

This small suburb of 1.22 square kilometres had its historic beginnings with a land grant to Sir John Jamison 1805 and the development of his property 'Regentville'. His many agricultural interests changed the landscape of the area with the construction of a tweed mill, the growing of grapes and the many small farms let out to mostly Irish tenants.



### 5.21.1 Demographics

The following table provides a broad snapshot of the existing and predicted future population and housing characteristics for Regentville:

Summary data	2006	Forecast year	
		2011	2021
Total population	3,882	3,775	3,625
Resident population in non-private dwellings	67	67	67
Resident population in private dwellings	3,815	3,707	3,558
Households	1,336	1,346	1,356
Dwellings	1,359	1,367	1,377
Average household size	2.86	2.75	2.62

### 5.21.2 Environmental opportunities and constraints

The topography of the precinct is relatively flat extending down to the Nepean River and back drop of the Blue Mountains escarpment. The area has been largely cleared except for the trees located along Mulgoa Creek. The area west of Martin Street extending to the Nepean River has a semi-rural character. A large proportion of this land has a significant flood hazard.

### 5.21.3 Land use and zoning characteristics

Regentville is predominantly zoned for rural purposes, with small precinct of residential development either side of Mulgoa Road immediately south of the Western Motorway (M4), and a pocket of residential development in the northwest corner of the suburb adjacent to the Motorway and the Nepean River.

### 5.21.4 Access and transport

Direct access is available from the Western Motorway (M4) and Mulgoa Road.

The *Penrith Integrated Transport and Land Use Study* (PITLUS) incorporated a small part of Regentville with the suburb of Glenmore Park in the Glenmore Park Statistical Local

Area (SLA) when considering the transport impact of developments. Key findings from that Study for that SLA in terms of public transport are:

- 73.3% of the area is served by buses or trains, while the remaining 26.3% has no such service.
- 37.6% of the area is served by buses with frequencies of < 30 minutes.
- 34.6% of the area is served by buses with frequencies of 30mins – 60 mins.
- 1.6% of the area is served by buses with frequencies of > 60 mins.

Given that the residential areas of Regentville are located on the southern fringe of the Glenmore Park SLA, it is likely that the levels of bus service would be less than that which applies to the wider area.

#### **5.21.5 Access to Services**

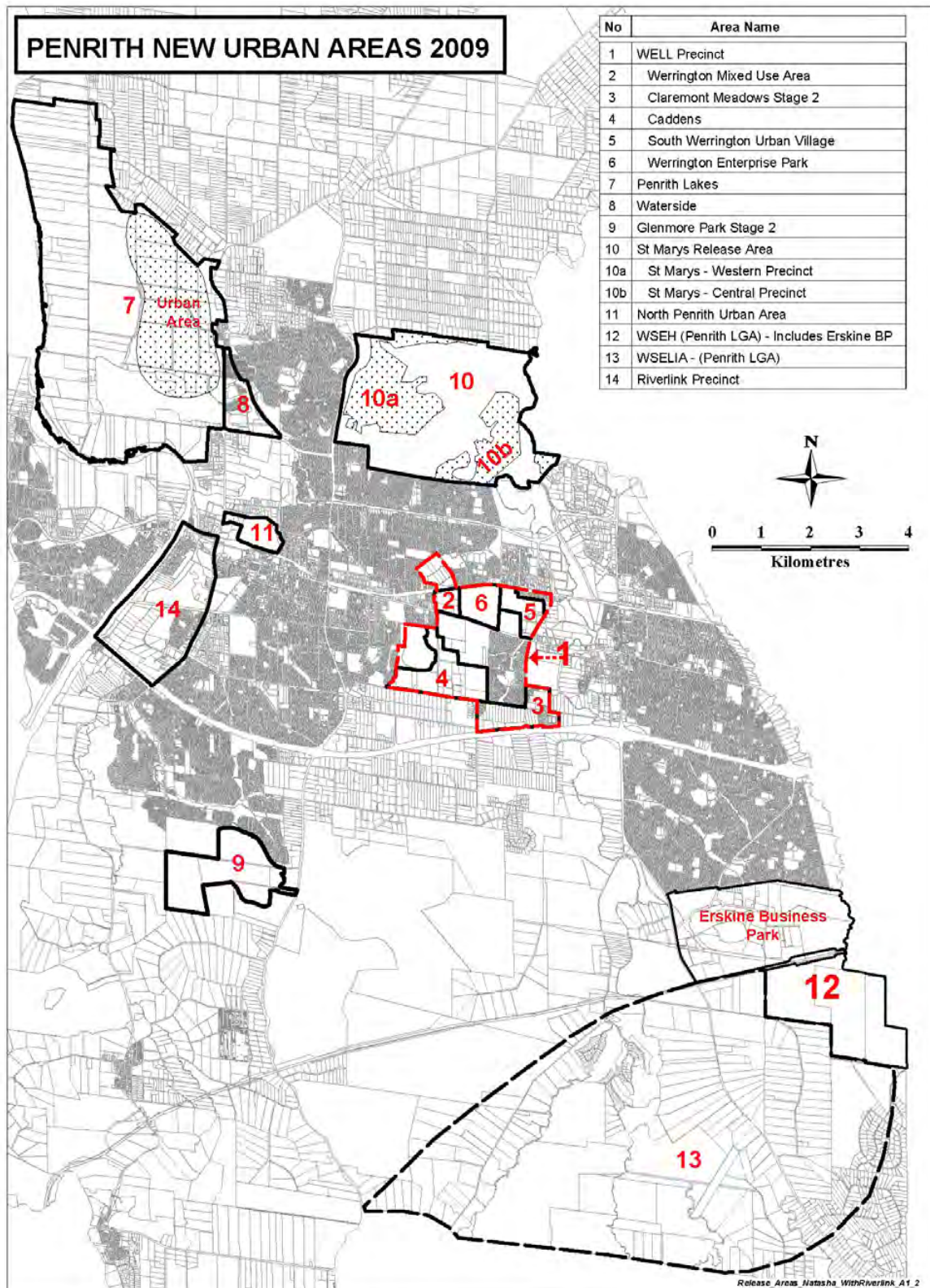
Services and facilities in Regentville are limited to a service station and single commercial building near Spencer Street, although these are not formalised by way of a commercial zoning. Various areas of open space, including Tench Reserve adjacent to the Nepean River, provide for primarily passive recreation opportunities.

#### **5.21.6 Development opportunities and considerations**

A lack of services, facilities, public transport options, flooding constraints and infill sites suggest that opportunities for the introduction of higher densities are limited.

## 5.22 URBAN RELEASE AREAS

The new urban release areas are being advanced as separate planning processes. These release areas are planned to deliver over 13,000 new dwellings over the next 15 years and will play a significant role in providing housing and employment lands across Penrith. The following map shows the new urban areas in Penrith.

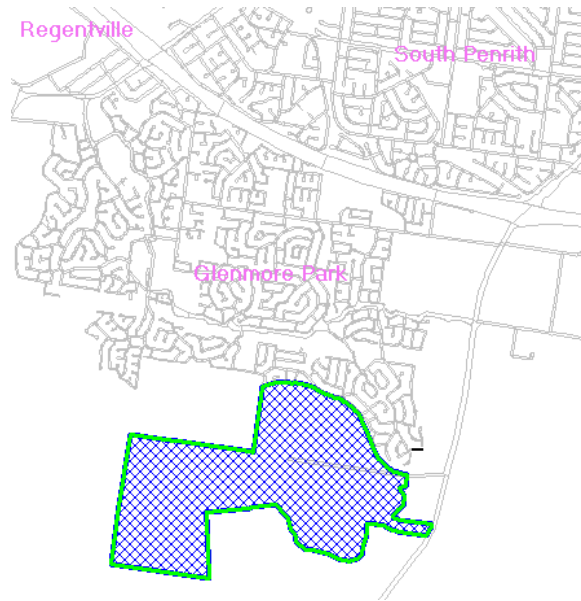




Following is a snapshot of the new urban release areas residential area.

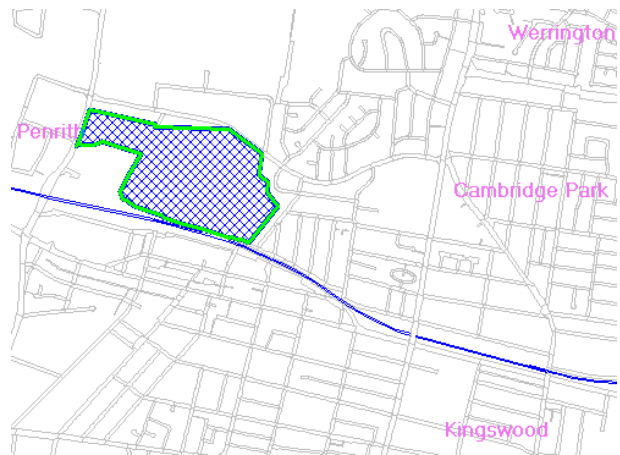
### 5.22.1 Glenmore Park Stage 2

The site is generally bounded by Mulgoa Nature Reserve and the existing Glenmore Park residential area; rural lands; The Northern Road; and Mulgoa Tip and rural lands to the north, south, east and west respectively. The total site area is about 168 hectares excluding the Cumberland Precinct (land designated by the Australian Heritage Commission on the register of the National Estate as forming part of the Mulgoa Natural Area). The proposed development includes mixed density residential, rural residential, roads, community and sporting facilities, employment, open space and conservation land. It is forecasted to accommodate around 1,750 dwellings and around 4,700 people. This area includes the Glenmore Park Stage 2 Precinct Centre which is to be developed into a “Small Village” within the Penrith Centres Hierarchy.



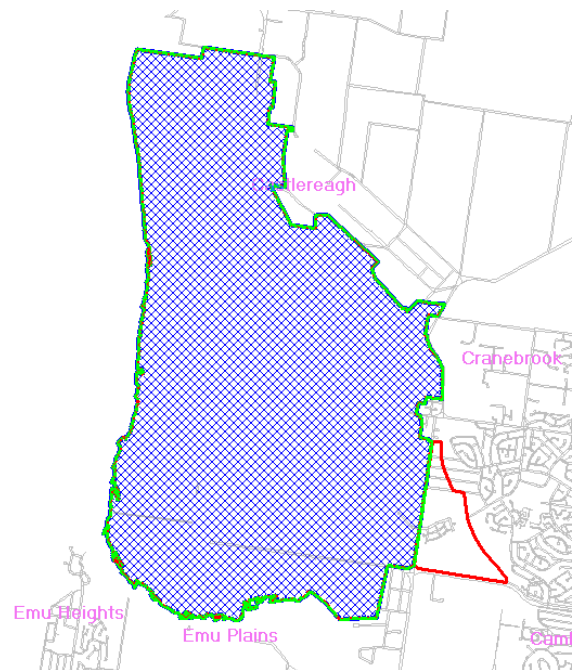
### 5.22.2 North Penrith Urban Area

The site is generally bounded by Coreen Avenue to the north, the Main Western Railway Line to the south, Castlereagh Road to the west, and Lemongrove residential area to the east. The site area is about 50 hectares. The proposed development includes 9.5 hectares of employment precinct, 1.5 hectares of urban village precinct, 29 hectares of residential home business precinct and 10 hectares of open space/community facilities. It is forecast to accommodate 850 dwellings with a population of 2,000 people. It is also estimated to generate about 950 onsite jobs. This area will be included in the broader Regional City designation with uses complementing the Penrith City Centre. This area also includes the North Penrith Urban Area Precinct Centre which is to be developed into a “Small Village” within the Penrith Centres Hierarchy.



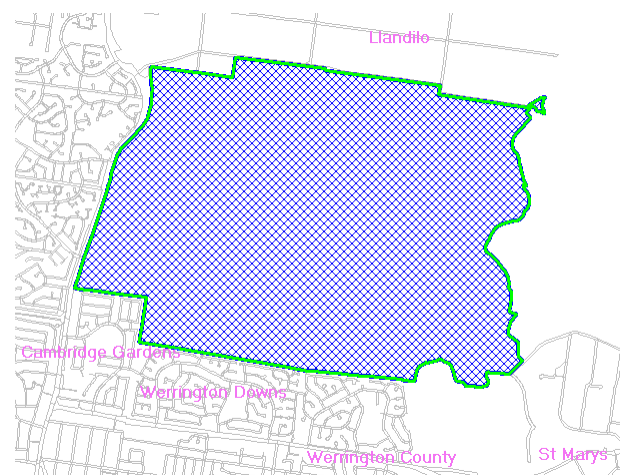
### 5.22.3 Penrith Lakes

Penrith Lakes is generally bounded by the Nepean River on the south and west, Smith Road to the north and the recently relocated Castlereagh, Church Lane and West Wilchard Road to the east. The total site area is about 1,940 hectares. The proposed development includes 804 hectares parkland, 702 hectares of lakes, 325 hectares of mixed use/residential, 25 hectares of rural/residential, 24 hectares for the relocation of Castlereagh Road and 60 hectares for employment uses. It is forecasted to yield up to 4,900 dwellings and accommodate up to 14,000 people. It is estimated to generate up to 5,260 jobs



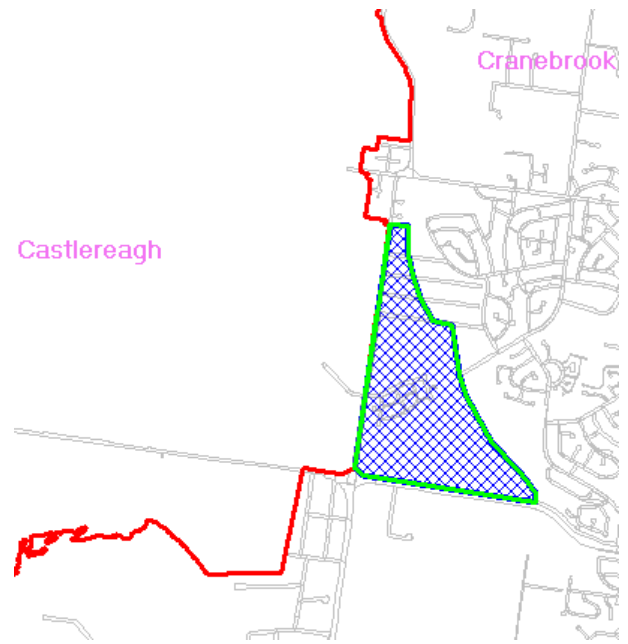
### 5.22.4 St Marys Release Area

The site is generally bounded by Ninth Avenue/Palmyra Avenue to the north, the urban areas of Cambridge Gardens, Werrington Downs, Werrington County, and St Marys to the south, Forrester Road/Palmyra Avenue to the east, and The Northern Road to the west. The site area is 1,545 hectares. The proposed development includes the Western Precinct (229 hectares of urban zoned land), the Central Precinct (133 hectares comprising 95 hectares of urban zoned land and 38 hectares of employment zoned land) and the South Dunheved Precinct (12 hectares comprising employment zoned lands). It is forecast to accommodate 3,420 dwellings with a population of 8,900. It is also estimated to generate 3,460 jobs. This area includes the Central and Western Precinct Centres which is to be developed into a "Small Village" within the Penrith Centres Hierarchy.



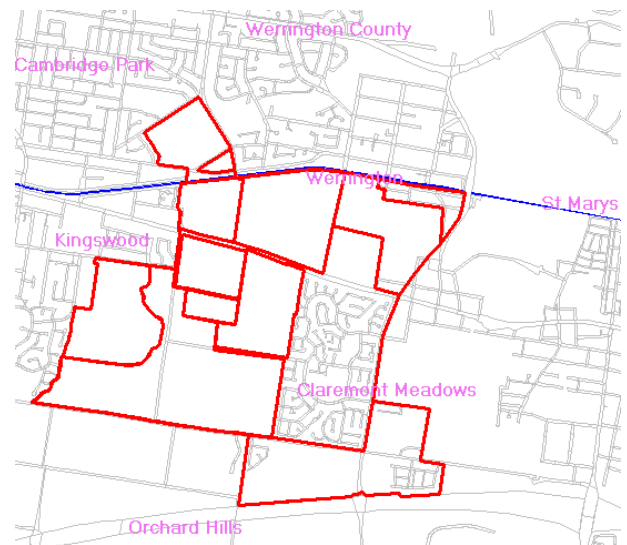
### 5.22.5 Waterside (Lakes Environs)

Waterside is generally bounded by Nepean Street to the north, Andrews Road to the south, the recently relocated Castlereagh Road to the west and Laycock Street and Greygums Oval to the east. The site area is about 71 hectares. The proposed development includes 694 residential dwellings to accommodate 2,150 people (in detached, multi-unit and apartments) and 17 hectares of land zoned to accommodate a range of employment generating uses.



### 5.22.6 Werrington Enterprise, Living and Learning (WELL) Precinct

The WELL Precinct is generally bounded by the Railway line to the north, Caddens Road to the south, Gipps Street to the east and the South Kingswood residential area to the west. The WELL Precinct comprises a number of sub precincts including Caddens Release Area, South Werrington Urban Village, Claremont Meadows Stage 2 and Werrington Mixed Use Area. The site area is about 670 hectares with a forecast of up to 3,000 dwellings (including 100 dwellings for student accommodation). It is estimated to accommodate around 8,400 people. The range of land uses identified for the WELL Precinct has the potential to generate up to around 7,800 jobs, including up to 6,000 jobs in the WELL Technology Park (currently the UWS land north of Great Western Highway) and around 350 jobs in the Precinct Centre. Whilst the WELL Precinct as a whole has been identified as a “Specialised Centre” within the Penrith Centres Hierarchy, its Precinct Centre is to be developed as a “Village” within the Penrith Centres Hierarchy.



## 5.23 SUMMARY OF FINDINGS

The following outlines the future strategies for suburbs investigated in the Penrith Urban Study and Strategy. Further detailed and analysis of each of the suburbs is provided in the individual Local Centre section.

### KINGSWOOD

Centre designation 2031	Kingswood Specialised Centre (1 km catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ Good access to transport, particularly Kingswood Railway Station;</li> <li>▪ Strong employment provision and activity focus through the Nepean Hospital (and associated medical services and facilities), University of Western Sydney, and some supporting retail and industrial uses;</li> <li>▪ Strong demand for housing for workers and students at the hospital and university;</li> <li>▪ Good access to local services and schools;</li> <li>▪ Under-utilisation of a number of sites in close proximity to the centre where consolidation and redevelopment may be able to meet future mixed use and housing demand;</li> <li>▪ Limited environmental constraints to urban growth.</li> </ul>
Dwelling opportunity <u>within</u> catchment	400-600 medium to high density dwellings and 25 low density dwellings.
Dwelling opportunity <u>outside</u> catchment	400-700 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, active transport, commercial and retail services, community facilities, public domain and open space and housing sustainability will need to be addressed before Kingswood fulfils the criteria for a Specialised Centre.

### EMU PLAINS (LENNOX CENTRE)

Centre designation 2031	Village for Lennox Centre (600m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ Good access to transport, particularly Emu Plains Railway Station;</li> <li>▪ Strong employment provision through the employment lands to the north, proximity to Penrith City Centre, localized employment in retail and commercial nodes and schools;</li> <li>▪ Strong demand for housing from the employment demands; noted above;</li> <li>▪ Good access to local services and schools;</li> <li>▪ Under-utilisation of a number of sites in close proximity to the village centre where consolidation and redevelopment may be able to meet future mixed use and housing demand;</li> <li>▪ There are significant environmental constraints (flooding) to urban growth.</li> </ul>

Centre designation 2031	Village for Lennox Centre (600m catchment)
Dwelling opportunity <u>within</u> catchment	Lennox Centre: 150-200 dwellings at a medium to low density. Emu Plains Station: No additional dwelling opportunity due to flood affectation. Flooding constraints may reduce the total capacity for both Lennox Centre and Emu Plains Station
Dwelling opportunity <u>outside</u> catchment	200-300 dwellings at a range of low to medium density. Flooding constraints may reduce the total capacity for the suburb of Emu Plains
Key actions to meet centre designation	For Lennox Centre, issues such as public domain and open space, environmental constraints and sustainability will need to be addressed before Lennox Centre fulfils the criteria for a Village. For Emu Plains Station, issues such as active transport, commercial and retail services, community facilities, public domain and open space, housing sustainability and environmental constraints will need to be addressed before Emu Plains Station fulfils the criteria for a Village.

## SOUTH PENRITH

Centre designation 2031	South Penrith Village (600m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ Substantial under utilised lands around the centre;</li> <li>▪ Opportunity to replace ageing community infrastructure to the south of centre and incorporate affordable housing;</li> <li>▪ Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported).</li> <li>▪ Good access to local services and schools;</li> <li>▪ Under-utilisation of a number of sites in close proximity to the centre where consolidation and redevelopment may be able to meet future mixed use and housing demand;</li> <li>▪ Limited environmental constraints to urban growth.</li> </ul>
Dwelling opportunity <u>within</u> catchment	150-200 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	300 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before South Penrith fulfils the criteria for a Village

## GLENMORE PARK

Centre designation 2031	Glenmore Park Village (600m catchment)
Key opportunities	<p>The key growth opportunities that will drive urban growth in Glenmore Park include:</p> <ul style="list-style-type: none"> <li>▪ Glenmore Park Stage 2 is a future urban release area located to the south of the existing urban area of Glenmore Park. An anticipated 1600 dwellings will be constructed in the new 225 hectare urban release area to the year 2021.</li> <li>▪ Future development should continue to protect the heritage values of the neighbouring localities of Mulgoa Valley and Orchard Hills. This can primarily be achieved by continuation of the buffer zones of the Mulgoa Nature Reserve and the strip of semi-rural allotments on the margin of The Northern Road.</li> </ul>
Dwelling opportunity <u>within</u> catchment	50 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	350 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Glenmore Park fulfils the criteria for a Village.

## ST CLAIR

Centre designation 2031	St Clair Village (600m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ Future development of Western Sydney Employment Area including the adjacent Erskine Business Park may substantially increase employment prospects in the area and this may increase demand for housing in proximity to employment (if this is not already catered for in the employment areas);</li> <li>▪ Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported).</li> </ul>
Dwelling opportunity <u>within</u> catchment	85-120 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	200-300 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before St Clair fulfils the criteria for a Village.

## WERRINGTON STATION

Centre designation 2031	Werrington Station Village (dependent on development of WELL Precinct) (600m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ Proximity to WELL Precinct located to south of suburb.</li> <li>▪ Reasonable access to transport, particularly Werrington Railway Station;</li> <li>▪ Good access to local public schools;</li> <li>▪ A mix of housing types (compared to the Penrith LGA) to meet the needs of a wider cross section of the community and promote ageing in place;</li> <li>▪ Under-utilisation of a number of sites in close proximity to the centre where consolidation and redevelopment may be able to meet future mixed use and housing demand.</li> </ul>
Dwelling opportunity <u>within</u> catchment	50-100 dwellings at a medium density.
Dwelling opportunity <u>outside</u> catchment	150-200 dwellings at a range of low to medium density
Key actions to meet centre designation	Issues such as dwelling mix and type, active transport, road access, commercial and retail services, community facilities, public domain and open space, environmental considerations and housing sustainability will need to be addressed before Werrington fulfils the criteria for a Village.

## CLAREMONT MEADOWS

Centre designation 2031	Claremont Meadows Small Village (400m catchment)
Key opportunities	<p>The key growth opportunities that will drive urban growth in Claremont Meadows include:</p> <ul style="list-style-type: none"> <li>▪ New residential areas proposed to the south and east, which have yet to be subdivided and can therefore provide opportunity for diversity in housing.</li> <li>▪ Good access to transport, particularly when the Werrington Arterial is constructed.</li> <li>▪ Good access to services through proximity to St Marys Town Centre.</li> </ul>
Dwelling opportunity <u>within</u> catchment	0-5 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	0-5 dwellings at a range of low to medium density. It should be noted that this figure does not include the development of Greenfield sites adjoining Claremont Meadows.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Claremont Meadows fulfils the criteria for a Small Village.

## CRANEBROOK

Centre designation 2031	Cranebrook Small Village (400m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ The key growth opportunities that will drive urban growth in Cranebrook include:</li> <li>▪ A large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be serviced).</li> <li>▪ Good access to local schools and well used community facilities</li> <li>▪ Limited environmental constraints to urban growth</li> <li>▪ Underutilisation of a number of lots in the town centre where redevelopment may be able to meet future mixed use and housing demand</li> <li>▪ A population increase that may slightly increase the demand for additional dwellings over the next 20-25 years</li> </ul>
Dwelling opportunity <u>within</u> catchment	100 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	150 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Cranebrook fulfils the criteria for a Small Village.

## ERSKINE PARK

Centre designation 2031	Erskine Park Small Village (400m catchment)
Key opportunities	<p>The key growth opportunities that will drive urban growth in Erskine Park include:</p> <ul style="list-style-type: none"> <li>▪ Proximity to the Western Sydney Employment Hub may increase demand for housing in nearby suburbs.</li> <li>▪ Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated.</li> </ul> <p>One large underdeveloped lot (2.8 ha) in the south west of the residential area offers opportunity for development to increase dwelling diversity.</p>



Centre designation 2031	Erskine Park Small Village (400m catchment)
Dwelling opportunity <u>within</u> catchment	10 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	5 dwellings at a range of low to medium density. It should be noted that this figure does not include the development of Greenfield sites adjoining Claremont Meadows.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Erskine Park fulfils the criteria for a Small Village.

#### WERRINGTON COUNTY - WERRINGTON DOWNS - CAMBRIDGE GARDENS

Centre designation 2031	Werrington County - Werrington Downs Small Village (400m catchment) Cambridge Gardens Neighbourhood Centre (400m catchment)
Key opportunities	<ul style="list-style-type: none"> <li>▪ The key growth opportunities that will drive urban growth in Werrington County - Werrington Downs - Cambridge Gardens include:</li> <li>▪ Good access to local services and schools</li> <li>▪ Limited environmental constraints to urban growth</li> <li>▪ Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported)</li> <li>▪ Opportunity for some medium density Seniors Living type development on the Henry Lawson Club site</li> <li>▪ Land zoned 6(a) in the central part of Werrington Downs could be used to locate future community facilities</li> </ul>
Dwelling opportunity <u>within</u> catchment	115 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	230 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Werrington County - Werrington Downs - Cambridge Gardens fulfils the criteria for a Small Village / Neighbourhood Centre.

## CAMBRIDGE PARK

Centre designation 2031	Cambridge Park Neighbourhood Centre (400m catchment)
Key opportunities	<p>The key growth opportunities that will drive urban growth in Cambridge Park include:</p> <ul style="list-style-type: none"> <li>▪ A traditional grid street pattern providing a high level of intra-suburb connectivity and therefore good access to local services and schools.</li> <li>▪ Limited environmental constraints to urban growth</li> <li>▪ A broad range of lot sizes, generally 550m<sup>2</sup> – 930m<sup>2</sup> with some lots up to 1600m<sup>2</sup> in area</li> <li>▪ The existing housing stock was built in the sixties and is reaching the end of its lifecycle with the result that there will be impetus to replace the housing stock</li> <li>▪ Large percentage of single detached dwellings and low density development means that the opportunity for consolidation of allotments and redevelopment for some medium density dwellings is more easily facilitated (assuming they can be supported)</li> </ul>
Dwelling opportunity <u>within</u> catchment	35 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	180 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Cambridge Park fulfils the criteria for a Neighbourhood Centre.

## NORTH ST MARYS

Centre designation 2031	North St Marys Neighbourhood Centre (400m catchment)
Key opportunities	<p>The key growth opportunities that will drive urban growth in North St Marys include:</p> <ul style="list-style-type: none"> <li>▪ Access to public transport, particularly if the proposed railway station at Oxley Park is provided.</li> <li>▪ Access to schools and local services given the suburb's proximity to St Marys Town Centre.</li> <li>▪ Proximity to employment opportunities in adjoining employment/industrial lands.</li> <li>▪ Under utilisation of sites in close proximity to the activity centre where redevelopment may be able to meet future housing needs.</li> <li>▪ Limited environmental constraints to urban growth within the suburb itself.</li> </ul>

Centre designation 2031	North St Marys Neighbourhood Centre (400m catchment)
Dwelling opportunity <u>within</u> catchment	55 dwellings at a medium to low density.
Dwelling opportunity <u>outside</u> catchment	110 dwellings at a range of low to medium density.
Key actions to meet centre designation	Issues such as dwelling mix and type, public transport and housing sustainability will need to be addressed before Cambridge Park fulfils the criteria for a Neighbourhood Centre.

## COLYTON

Centre designation 2031	Small Village
Dwelling opportunity summary	<p>Future medium/high density residential development opportunities are limited in the short term due to its separation from railway stations or other primary public transport infrastructure. The area also lacks a major commercial or employment centre. The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments. The average lot size is quite small (500m<sup>2</sup>-700m<sup>2</sup>) though there are some larger lots up to 1100m<sup>2</sup>.</p> <p>In the short term there is an opportunity for shop top housing around the shopping centre as long as there are improved facilities. This will help revitalise the area. The suburb still has some opportunity for infill. However a more detailed examination of Colyton is required in the longer term. In the medium to longer term, more sustainable outcomes for Colyton will be predicated on improved public transport.</p>
Priority for staging development	Medium

## OXLEY PARK

Centre designation 2031	Small Village
Dwelling opportunity summary	<p>In the short term, given the age of the housing stock and existing zoning patterns, Oxley Park can continue being developed at medium density as long as quality urban design is achieved.</p> <p>In the medium to longer term, there is the potential for the introduction of higher densities in suitable areas as long as a new railway station is built in Oxley Park. The average lot size in the area is quite large (around 1,000 square metres) making it favourable for higher density development. However, the narrow width of many of the allotments in Oxley Park poses restriction on the redevelopment of many sites.</p> <p>In Oxley Park in the future, the opportunity for redevelopment of lots to medium/high density could occur if lots were able to be consolidated to achieve a greater width and the infrastructure was upgraded to include a train station in the area.</p>

Priority for staging development	Medium
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### LEONAY

Centre designation 2031	Neighbourhood Centre
Dwelling opportunity summary	A built environment of detached low density housing, in conjunction with a lack of infill development sites creates a specific character and amenity that needs to be maintained. The capacity of the existing road network, topography, vegetation, biodiversity, bushfire, scenic quality and flooding are additional constraints to further development in Leonay. The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments. The average lot size is quite small (500m <sup>2</sup> -800m <sup>2</sup> ). Those lots which are larger in Leonay are considerably constrained by topography.
Priority for staging development	Low

### EMU HEIGHTS

Centre designation 2031	Neighbourhood Centre
Dwelling opportunity summary	While Emu Heights is well located to access facilities and services within the Penrith City Centre, and despite good connections to the state road network, the physical and environmental constraints are likely to significantly restrict opportunities for future residential expansion or consolidation. The redevelopment of lots to medium/high density within this suburb is further restricted due to small lot allotments and topography. The average lot size is quite small (500m <sup>2</sup> - 800m <sup>2</sup> ).
Priority for staging development	Low

## JAMISONTOWN

Centre designation 2031	Neighbourhood Centre
Dwelling opportunity summary	<p>Opportunity for new infill residential development is limited as the proximity to the Penrith city centre has largely exhausted land supply. Any consideration of redevelopment opportunities within existing low density residential areas would need to have regard to constraints imposed by flooding, water table levels, traffic noise, noise from the industrial precinct and access to public transport.</p> <p>Redevelopment opportunities of the rural precincts in the western half of the suburb will be fundamentally determined by flooding patterns and associated issues such as flood evacuation routes. The redevelopment opportunities in this precinct are limited to some commercial and community/leisure development. Additional considerations would include visual impacts, capacity of the local road network and the interface with the Western Motorway and bulky goods precinct. Due to Jamistown's proximity to the Penrith city centre and access to various primary traffic routes, the existing residential area might have some potential for redevelopment to high densities in the longer term.</p>
Priority for staging development	Low

## REGENTVILLE

Centre designation 2031	Neighbourhood Centre
Dwelling opportunity summary	<p>A lack of services, facilities, public transport options, flooding constraints and infill sites suggest that opportunities for the introduction of higher densities are limited.</p>
Priority for staging development	Low

## 5.24 CENTRES AND SUBURB STAGING PLAN

Based on the above analysis the following staging is recommended for centres investigated as part of the Penrith Urban Strategy.

Local Centre / Neighbourhood	Development Timing (Years)					
	0-5	5-10	10-15	15-20	20-25	25+
CADDENS	✓	✓	✓	-	-	-
Cambridge Park					✓	✓
Cambridge Gardens - Werrington County - Werrington Downs					✓	✓
Claremont Meadows					✓	✓
Claremont Meadows Stage 2 (CM2)	✓	-	-	-	-	-
Colyton					✓	✓
Cranebrook Centre		✓	✓	✓	✓	✓
Cranebrook Neighbourhood					✓	✓
Emu Heights					✓	✓
Emu Plains Lennox Centre				✓	✓	✓
Emu Plains Station						✓
Emu Plains Neighbourhood					✓	✓
Erskine Park					✓	✓
Glenmore Park					✓	✓
Glenmore Park Stage 2	✓	✓	✓	-	-	-
Jamisontown					✓	✓
Kingswood Centre	✓	✓	✓	✓	✓	✓
Kingswood Neighbourhood				✓	✓	✓
Leonay					✓	✓
North Penrith Urban Area		✓				
North St Marys					✓	✓
Oxley Park				✓	✓	✓
Penrith City Centre	✓	✓	✓	✓	✓	✓
Penrith Lakes		✓	✓	✓	-	-
Regentville					✓	✓
South Penrith (Southlands) and Smith Street Local Centre		✓	✓	✓	✓	✓
South Penrith Neighbourhood					✓	✓
South Werrington Urban Village (SWUV)	✓	✓	-	-	-	-

Local Centre / Neighbourhood	Development Timing (Years)					
	0-5	5-10	10-15	15-20	20-25	25+
St Clair				✓	✓	✓
St Marys Town Centre	✓	✓	✓	✓	✓	✓
St Marys (Area adjacent to Town Centre - Glossop Street)	✱	✱	✱	✱	✓	✓
St Marys Release Area	✓	✓	✓	-	-	-
Waterside (Lake Environs)	✓	✓		-	-	-
WELL Precinct (excludes WMUA, CM2, CADDENS, SWUV)	✓	✓	✓	-	-	-
Werrington Mixed Use Area (WMUA)	✓	-	-	-	-	-
Werrington Station (Local Centre)		✓	✓	✓	✓	✓
TOTAL						

KEY	
✓	Development Starts
✱	Council and Department of Housing (DOH) owned land. There is a potential for Council and DOH to advance re-development of this area.

Penrith City Centre and St Marys Town Centre are currently subject to separate planning processes. It is recommended that future actions required to ensure these centres can achieve the Regional Centre and Town Centre status as outlined in the Centres Sustainability checklist should be short term priorities.

Key Sustainability Element	Measures
<i>1. Dwelling Types and Densities</i>	50% of all new growth within existing urban areas. Of this development 60% will be medium to high density and 40% will be low to medium development. No additional growth areas released other than those identified in the Urban Study. 25% of all development in new release areas to be medium density.
<i>2. Retail and Commercial Services</i>	Network of key centres and nodes of activity that service the needs of residents and workers within their catchment area, in accordance with Council's Centre Hierarchy.
<i>3. Community Facilities and Infrastructure</i>	Equitable and accessible provision of community facilities across the Penrith LGA, which meets the criteria of Community Facilities in the Centres Hierarchy. Water, energy, stormwater, sewerage and road infrastructure is programmed and upgraded to provide appropriate levels of service provision in a timely and appropriate manner to meet future demands.
<i>4. Public Transport</i>	Development of a new train station between Werrington and Kingswood. Regional Centre, Specialised Centre and Town Centre designations to achieve 24 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 5-10 minute frequency and off peak hour

Key Sustainability Element	Measures
	<p>services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections.</p> <p>Village, small village and neighbourhood centre to achieve 14 hour public transport (rail and bus) services with high levels of frequency including peak hour services achieving 10-15 minute frequency and off peak hour services achieving 10-15 minute frequency. Public transport services to have strong intermodal connections.</p>
<i>5. Active Transport</i>	<p>In existing areas, all residential roads to have a universally accessible pedestrian footpath of minimum 1.2 m width on at least one side of the road wherever physically possible.</p> <p>In new urban areas, all residential roads should have a universally accessible footpath wherever physically possible on both sides of the road, of a minimum width of 1.5 metres.</p> <p>All roads within centre catchment/radius to have universally accessible footpaths on both sides of the road, of a minimum width of 1.5 metres wherever physically possible.</p> <p>Consider the inclusion of a different standard for commercial strips. e.g. full boundary to kerb pavement in front of land zoned for commercial and retail purposes.</p> <p>All centres should be accessible by a safe cyclist route and include bicycle infrastructure.</p>
<i>6. Environment</i>	<p>Future development will have minimal impact on Penrith LGA's environmental assets.</p>
<i>7. Open Space and Recreation</i>	<p>Creation of quality open spaces which are integrated and connected into district wide open space networks and create high quality landscape environment for Penrith LGA's centres and suburbs</p>
<i>8. Affordable Housing</i>	<p>Any future large scale development within Local Centre catchment/radius should provide for a minimum of 3% affordable housing.</p> <p>Any future large scale development within new urban release areas should continue to provide for a minimum of 3% affordable housing.</p> <p>Review these figures and the success/failure of the provision of affordable housing in the next review of the Local Environmental Plan.</p> <p>Affordable housing will be provided in a range of dwelling types and tenures.</p> <p>Affordable housing will be targeted at special needs groups, such as essential workers, students, older people and very low and low income earners</p>



# Appendices





## **APPENDICES**

- A    CONSULTATION STRATEGY AND FINDINGS**
- B    DEMOGRAPHIC TABLES**
- C    HOUSING TABLES**
- D    AFFORDABLE HOUSING BACKGROUND REVIEW**





# CONSULTATION STRATEGY AND FINDINGS



## **APPENDIX A: CONSULTATION STRATEGY AND FINDINGS**

### **1. OBJECTIVES OF THE CONSULTATION STRATEGY**

Key community and Council stakeholders were involved in the preparation of the Urban Study and Strategy. Their involvement was integral in the identification of key issues facing Penrith in 2031 and preliminary development of strategies to address these issues.

The objectives of the consultation strategy are:

- To engage key stakeholders in the identification of the future housing capacity potential of key precincts;
- To educate and engage key stakeholders in the issues influencing accommodating the future housing needs for Penrith residents and workers;
- To ensure key stakeholders have an intrinsic role in the development of urban residential strategies;
- To provide a range of communication techniques to attract key stakeholder engagement in the preparation of studies, and,
- To provide stakeholders with feedback on the progress of consultation, input and outcomes arising from their involvement.

#### **Who has been Consulted?**

Stakeholder involvement is considered integral in the preparation of the Penrith Urban Plan and Urban Strategy. In recognition of the range of studies and consultation approaches undertaken by Penrith City Council in the past it was agreed that the development of the Penrith Urban Study and Strategy would involve internal and external stakeholders.

Due to a range of studies occurring concurrently with the Urban Study and Strategy, it was considered that external stakeholders should focus on community service providers, who provide "on the ground" services to a wide range of sectors within the Penrith LGA community.

Internal stakeholders are Penrith City Council staff, who represent the various strategic planning, engineering, development and community sectors of the council.

Consultation and engagement with the wider community was considered to be more appropriate at the public exhibition stage.

#### **How have they been Consulted?**

A range of consultation techniques have been utilised in the preparation of the Penrith Urban Study and Strategy, which included:

- Internal and External Reference Group who will guide the development of strategies;
- Councillor Briefing Sessions at key milestones of the project;
- Council officer workshops;
- Urban Design Quality and Liveability Survey;
- Telephone proformas with key research, housing, local government representatives (if required), and,
- Community Forums/Information/Market Days during Exhibition.

The initial Reference Groups findings and recommendations are summarised below.

### **Consultation Findings and Strategies**

The reference groups, while advisory, set the direction in the identification of issues and preliminary development of strategies to guide the Urban Strategy.

The Reference groups met several times during the preparation of the Urban Study and Strategy. The first meeting identified a Vision for Penrith in 2031, issues to be addressed and strategic directions in which to achieve the vision. A second forum with the internal stakeholder group detailed the sustainable centre framework and the criteria required for each centre, by designation. A further forum was held with both internal and external stakeholder groups to provide feedback on the draft Urban Strategy.

## **2. THE GUIDING PRINCIPLES**

The guiding principles developed by the two reference groups is reproduced below:

### **Penrith 2031 – The guiding principles for Urban Development**

Penrith 2031 will be a Sustainable City that ensures it is diverse, creative, accessible, healthy, and embraces its regional and cultural role. Penrith City will be:

A Diverse City: meeting the needs of the people (in housing, built form and urban and rural uses), economy and environment

A Healthy and Vibrant City: with quality spaces and recreation areas. A city that is integrated and whose residents have well being. A city comprising strong neighbourhoods that build social capital

An Accessible City: that is integrated and interconnected, where communities have access to shops, services, education, employment and transport, etc.

A Cultural City: that is a creative place with self sustaining arts and culture

A Regional City: that embraces its economic and service role for the region with strong links to the surrounding regions and metropolitan area.

A Safe City: where people feel confident in living.

A Lifestyle City: that is attractive and well designed, fun for all ages and abilities and creates cohesive communities

### **A City with a Unique Identity**

An Innovative City: for the Future that enables lifelong learning, research and development and has a viable economy.

## **3. THE ISSUES FACING PENRITH**

The issues facing Penrith, identified by the Internal and External Reference Groups are summarised below:

- Health and Well Being and Access to Services
- Cultural Characteristics
- Housing
- Housing affordability
- Information on community
- Infrastructure
- Transport
- Environmental issues



- Employment/Education
- Quality of development design, standards of development – residential development, character, climate change

### **Health and Well Being and Access to Services**

The Reference Group identified the following health and well being issues:

- The need to address obesity and create a healthy city;
- Penrith has an ageing community, which is significant as unlike some inner city areas,
- Penrith has limited infrastructure to meet the older community's needs;
- Many health and allied health services are not available in the Penrith Local Government Area, with residents required to travel to Sydney CBD or other Council areas to access services and facilities;
- Many specialist services are being centrally located in key metropolitan nodes, outside of the Penrith LGA;
- Existing health service providers are overwhelmed, and,
- Regional service allocation results in neighbouring Councils receiving higher priority for services due to higher rates of growth or older age profile.

### **Cultural Characteristics**

Cultural Issues identified include the fact that some cultural groups are under represented in the ABS Census on Population and Housing and therefore there may be an unrecognised need. In addition, there has been an increase in migrants in Penrith LGA due to the cheaper housing and sponsorship by existing Penrith Residents. While there are comparatively smaller numbers and proportions of cultural groups when compared with surrounding LGA;s and the Sydney Metropolitan Area, Penrith has limited cultural community infrastructure to meet the existing and future community needs.

### **Housing and Housing affordability**

The Reference Groups identified that Penrith has comparatively high levels of housing stress, which is particularly significant as the cost of housing in Penrith, both to rent and purchase, is comparatively cheaper than other parts of the Sydney metropolitan area. It was considered that there was limited affordable housing stock available in Penrith and that available is poorly located in terms of access to services and facilities.

The reference groups also identified that:

- There is a need for housing that meets the changing needs of the population, such as older people;
- There are areas with concentrations of social disadvantage;
- Particular groups with high needs seeking social/affordable housing include older people, smaller households and houses for larger families, people with complex needs and disabilities;
- There is a need for accessible and adaptable housing;
- There is a need for rental housing;
- Future planning should not just create more housing but create sustainable communities that are linked into services and facilities, and,

- There is a need for better use of existing land for housing.

### **Information**

The Reference Groups identified the following issues associated with information:

- There is a lack of information on some of the minority groups within the community;
- There are gaps in information on the availability, accessibility and location of services and facilities service provision planning and access to funding is reliant on ABS statistics, however often demand on the ground for services and facilities becomes apparent before the demand is demonstrated in the Census. Services need to be flexible and responsive.

### **Infrastructure**

The Reference Groups identified the following issues associated with infrastructure:

- There needs to be an equitable contribution by developers for district level infrastructure and district level facilities in both new release and existing areas;
- There is a need to ensure that areas identified for future growth have the capacity within its infrastructure to meet increasing demands, and,
- There is a need for a linked and co-ordinated approach to the provision and location of services such as education, cultural and engineering.

### **Transport**

The Reference Groups identified the following transport issues:

- There is a lack of transport throughout the Penrith LGA and poor accessibility to transport services;
- There is poor connectivity across the Penrith LGA, in cycleways, public transport, etc;
- Transport will need to be a constant focus as Penrith grows;
- Poor transport results in poor access to services and employment;
- Public transport is limited in Cranebrook, St Claire, Londonderry, Llandilo, Wallacia, Glenmore Park, rural areas and new areas;
- Inner Penrith can be isolated if you cannot catch public transport;
- People with disabilities cannot utilise all public transport;
- The Werrington Employment Areas has no public transport and is reliant on private transport, and,
- Neighbourhood Centres have a bus to get people to services.

### **Environmental issues**

The Reference Groups identified the following environmental issues:

- Current development does not consider its environment and creates built form that is not appropriate for Penrith LGA climate or setting;
- Need to consider appropriate areas for development;
- Environmental degradation of concern;
- There are significant areas within the Penrith LGA that have flood prone land and bushfire prone land;

- There is a need for quality recreation spaces - need to look at the big picture rather than haphazard and small pocket approach to recreation and open space provision;
- Potential impacts of climate change need to be considered in urban and open space design. The vast urban lakes system may have impacts, as will climatic events;
- There is a need to consider water retention and reuse, and,
- There is a need to consider energy use and general efficiency.

### **Employment and Education**

Reference Groups identified the following issues for employment and education:

- Poor access to education and employment services;
- Long journeys to work and education;
- Need for more skilled workers in Penrith LGA;
- Need to maintain existing employment in the LGA and need to increase the proportion of people working in LGA, and,
- Need to increase opportunities for education and employment in LGA.

### **Quality Urban Design**

The Reference Groups identified the following issues for quality of urban design:

- The design of residential development provides standard solutions on smaller blocks, resulting in average development in some urban areas that are not innovative or attractive or respond to the site;
- Little consideration of Penrith climate and environment in current residential designs;
- Perception that high quality design results in affordability issues;
- A better design upfront will decrease costs in retrofitting in the future and extends the life of a dwelling and decreases the social costs down the track;
- Adaptable homes cost marginally more upfront but less down the track;
- There is a need to build on the character and identity of Penrith;
- Industry wide, few architects or design professionals are used in the building or design in Penrith LGA, and,
- Need to look at the unique opportunities in Penrith, to do something difference and no recreate someone else's place.

## **4. REFERENCE GROUP STRATEGIES TO ACHIEVE THE VISION**

### **Healthy Communities Strategies**

The Reference Groups' Healthy communities strategies developed include the need to develop criteria to ensure that development, in both existing communities and new release areas, creates healthy communities which:

- Create and encourage diversity;
- Have good access to services and facilities;
- Have high levels of amenity;
- Have community based facilities, spaces, gardens, recreation areas and facilities;

- Create informal leisure opportunities;
- Are active with lots of things to do and places to go;
- Are walkable and accessible;
- Provide walking tracks with destinations and interest points, such as a Hospital health track, biodiversity tracks./routes, linear river and lake tracks, and,
- Create opportunities for community integration and interaction.

### **Affordable Housing Strategies**

Reference Group strategies to address affordable housing issues included:

- Development of a range of affordable strategies and policies;
- Provision for the development of a range of housing types;
- Partnerships with social housing providers to advocate for increased provision for social housing;
- Council could identify appropriate areas where affordable and social housing may appropriately located;
- Council could lobby State Government to change the Local Environmental Plan template to enable affordable housing categories and provisions to "enforce" the provision of affordable housing;
- Council could lobby Federal Government to create affordable housing policy/funding to contribute to increased provision of affordable housing;
- Council could partner with local community housing providers to participate in the Federal Government's tax credit scheme for affordable rental housing;
- Creation of city-wide affordable housing targets which reflect the Penrith socio economic characteristics, for example if 15% of residents are in housing stress this may be a more appropriate target;
- Monetary contribution may be made toward such a target which will form a fund through which Council could partner with a community housing provider to ensure on the ground provision of affordable housing;
- Seek to create a range of affordable initiatives in the areas of home ownership and rental housing, and,
- Seek to develop partnerships with community housing service providers, consider co-operatives.

### **Housing Strategies**

Reference Groups suggestions for housing strategies include:

- The need for accessible housing to ensure all future housing is adaptable and accessible, which may require some lobbying for a change in the Australian Standards;
- The need for a range of housing types to enable ageing in place and housing for the lifespan;
- Need for a range of housing strategies which identify the appropriate location of meeting housing need, eg appropriate type and location of houses for older people (eg smaller, ground floor, well located, accessible, etc), and,

- Create integrated housing/communities which enable mixed income communities.

### **Information Strategies**

The Reference Groups suggestions for information strategies include:

- Creation of information kiosks on services and facilities in key nodes such as shopping centres, transport hubs, neighbourhood centres;
- Ensure information is provided in a range of appropriate languages;
- Utilise existing information resources such as Carelink, a Commonwealth Government one-stop-shop, and,
- Investigate Penrith City Council being a "refugee welcome zone".

### **Infrastructure Strategies**

The Reference Groups suggestions for infrastructure strategies include:

- All future development areas to investigate infrastructure current capacity and future capability to meet current and future demand needs;
- Infrastructure to be upgraded in accordance with growth areas and areas of increasing density;
- Educate developers on how their development feeds into and effects the wider context and therefore the need for their contribution to broader district level facilities;
- Develop infrastructure strategies that provide equity to established and new release areas, as currently established areas miss out on Public Private Partnerships;
- Important to know where infrastructure can be upgraded and direct development there;
- Provide incentives to encourage development in well serviced areas;
- Sell benefits in partnerships with imposed standards as benefits will ensure developer is a market leader, creation of communities, etc;
- Section 94 contributions require more creative ways to delivery community infrastructure - review current policy, and,
- Seek infrastructure targets to meet population targets.

### **Transport Strategies**

The Reference Groups suggestions for transport strategies include:

- The need to provide strong north-south and east-west access public transport routes;
- The need to increase growth around existing areas to increase the sustainability for current and future public transport services;
- Smartlink transport model could provide Penrith with a model for integrating the various forms of public and community transport to enhance service provision - it uses existing transport resources efficiently, it is web-based, provides transport brokerage and seeks to integrate services;
- The need to focus transport services to key activity nodes such as the Hospital, University, Werrington Employment Area, etc;

- The need to upgrade transport infrastructure and services with increasing density and new areas for development;
- Consider which train stations provide the highest levels of service and focus future development at these stations before other less serviced stations;
- Penrith City Council to lobby City Rail on which stations will need to be upgraded and services increased to meet future growth needs;
- Look to build north-south transport link;
- Utilise the Nepean River as a transport spine;
- Provide more transport options to enhance connectivity, and,
- Future development to be focused along railway or around key transport infrastructure, however transport infrastructure in areas such as St Clair and Glenmore Park need to be upgraded to meet current and future anticipated demands.

### **Environmental Strategies**

The Reference Groups suggestions for environment strategies include:

- Recognise the importance of the Nepean River, increase access to the River and enable development to address the River to enable its transformation;
- Ensure future development areas have the environmental and ecological capability for increasing densities and new areas;
- Ensure future development areas are not flood prone or bushfire prone land;
- Create district and centralised quality passive and active open spaces, and,
- Create a range of recreation facilities and spaces for different sectors of the community, such as skate parks, BMX parks, playgrounds, passive walkways, bicycle tracks, etc.

### **Urban Design Strategies**

The Urban Design Strategies identified by the Reference Groups include:

- Identify character statements for all existing and new growth areas to guide the future form and design of development;
- Landscape provisions required in LEP as currently such provisions are only able to be encouraged not enforced;
- Engage Australian Network for Universal Housing Design to advise on the principles for housing design elements to be incorporated into any new home recognise microclimate in design;
- Like SEPP 65, require architect/landscape architect to be involved once development reaches certain thresholds;
- Penrith City Council to lift the bar on design and to be more critical on quality outcomes;
- Encourage more green design - make BASIX the minimum not the maximum;
- Lobby to increase design controls on houses and complying development;

- Reduce reliance of design on the car, encourage the use of landscaping and better design outcomes in future housing and development, and,
- Penrith City Council to provide greater emphasis on the public domain and enhance streetscapes and kerbs as well as the public domain in key hubs and nodes - Council to lead the way in improving design outcomes.

### **Employment/Education Strategies**

The Employment/Education Strategies identified by the Reference Groups include:

- Increase the number of jobs and educational opportunities in Penrith LGA and therefore the ability for future residents to work locally and reduction in travel time to employment and education;
- Improve access to employment areas;
- Identify models of employment to meet the needs of those who are here now and those who may be coming into the LGA;
- Link employment and education with housing and seek to attract the "key workers" such as nurses, hospitality workers, school teachers, as well as seeking to attract students and accommodate them around centres and nodes;
- Foster apprenticeship schemes to build skilled workers in Penrith LGA. Ensure apprentices can access education and employment;
- Look to expand employment centres/industrial areas to enable large scale and small scale nodes with greater distribution across the LGA, and,
- Increase the number of workers within Penrith LGA.

## **5. SUSTAINABILITY GUIDELINES /CRITERIA- STRATEGIES FOR DEVELOPMENT OF NEW ESTATES AND EXISTING AREAS**

The Reference Group's suggested a list of criteria or a sustainability checklist that guided the appropriateness of increasing density or release of new areas. Suggestions to include in this criteria include:

All growth areas (including existing areas with increasing densities) to have a community hub/centre/focus;

All growth areas to have strong transport networks and infrastructure;

All areas to provide for a range of housing types, with higher densities located around town centres and key activity nodes (such as the Hospital and University, employment nodes);

All areas to have a civic or community or cultural/arts focus, with community workers in place at the commencement of development/increased density;

All areas to have appropriate open space and recreation services and facilities for a range of users;

All areas to provide safe and active environments, and,

Timing of infrastructure needs to be planned - staging of development will assist in identifying where the growth occurs, priority of service provision to these areas, where the future potential is and where growth should be absorbed overtime.

# SURVEY OF PERSONS WHO MADE A SUBMISSION IN RESPONSE TO A DEVELOPMENT APPLICATION

01	Introduction
02	Methodology
03	Survey Findings
04	Conclusion

## **01 INTRODUCTION**

### **1.1 Background**

To assist in the preparation of the Penrith Urban Study and Strategy, surveys were undertaken to determine the urban design quality and liveability of selected multi unit housing and residential flat buildings.

A survey of residents in multi unit housing and residential flat buildings and a separate survey was mailed to Penrith residents who had previously submitted comments in response to a development application proposing a multi-unit development or residential flat building.

This report provides an overview of the objectives, methodology and survey results of surveys received from residents who had made a submission on development applications proposing multi- unit developments of residential flat buildings. A separate report provides analysis of the results of the surveys received from residents in multi-unit developments.

The objective of the survey was to identify if the issues and concerns raised at the time of the development application towards multi-unit and residential flat buildings remained once the development was constructed.

The following section provides an overview of the methodology undertaken to conduct the surveys. This includes the survey target group.

## **02 METHODOLOGY**

### **2.1 Target Group**

Surveys were distributed to residents who had made a submission in response to a development application proposing a multi-unit or residential flat building development.

### **2.2 Survey Distribution and Collection**

In May 2008, 69 surveys were distributed by mail to residents of multi unit developments within the Penrith Local Government Area (LGA). The survey instrument was accompanied by a letter outlining the purpose and objectives of the survey. All correspondence is attached in Appendix A. All survey recipients were provided with a postage paid envelope or could complete the survey online.

Nineteen responses were received which provided an overall response rate of 28% (10% is considered the minimum benchmark level as an acceptable response rate for mail out surveys). While a good response rate the total number of responses is considered a small sample.



### **2.3 Survey timescale**

Surveys were drafted and mailed out on 16 May 2008. Survey recipients were given a two week period to complete the survey and return it to Council in a postage paid envelope, with the final date being 30 May 2008.

### **2.4 Privacy**

Survey participant's privacy was assured as no personal or identifying details were sought or provided within the survey. The survey instrument also stated,

"All answers remain confidential and the property of Penrith City Council and HASSELL Ltd."

### **2.5 Wording of Questions**

The questionnaire is divided into six questions comprising:

Information about the locality of residence;

Information on length of residency;

Information about the type of dwelling the respondent lives in;

Information on the issues raised during the development approval process;

The identification of the issues raised during the development application stage and whether these were still a concern or no longer a concern; and

Opportunity for the respondent to identify up to 3 outstanding concerns about the multi-unit or residential flat building development.

The survey questions were put in plain English, with the majority of the questions structured to be closed questions (tick-a-box), in order to simplify the process and to reduce the time required to complete the survey (approximately 10 minutes). This was done to maximise the return rate of the surveys. A pilot of the survey was undertaken to test language, complexity and timing to ensure the survey instrument was user friendly.

A Penrith City Council contact person and number was provided on all documentation (letters and survey forms) for any queries associated with the survey.

### **2.6 Survey Limitations**

The survey was only produced in English, therefore, any non English speaking persons would have required assistance to complete the survey.

While a Penrith City Council contact person and number was provided on all survey forms, the survey was completed solely by respondents and therefore if there was any uncertainty in any questions there was no immediate assistance available.

On the occasion where respondents provided multiple answers to a question demanding a single response, only the first answer/response was considered.

### 03 SURVEY FINDINGS

#### 3.1 Overview of respondents and dwelling characteristics

##### 3.1.1 Area of Residence

Respondents were asked to state what area they currently live in. Of the 19 responses received, the majority (13 respondents or 68%) revealed that they lived in Oxley Park.

— 4 respondents stated they live in Mulgoa Road and Jamison Road.

— Only 1 respondent lives in St Marys.

— Only 1 respondent lives in Werrington.

**Table 3.1: Area Currently Living In**

<i>Area currently Living in</i>	<i>Number</i>	<i>Percentage %</i>
<i>St Marys</i>	1	5
<i>Oxley Park</i>	13	68
<i>Mulgoa Road &amp; Jamison Rd</i>	4	21
<i>Werrington</i>	1	5
<i>Other</i>	0	0
<b>TOTAL</b>	<b>19</b>	<b>99</b>

##### 3.1.2 Length of Time at Current Address

— This question asked respondents how long they have lived at their current address. The majority of respondents (15 respondents or 79%) stated that they have lived at their current address for over 10 years. 4 stated that they have lived at their current address for up to half a year.

**Table 3.2: Length of Time at Current Address**

<i>Length of time at current address</i>	<i>Number</i>	<i>Percentage %</i>
<i>0 - 6 months</i>	4	21
<i>6 - 12 months</i>	0	0
<i>1 - 3 years</i>	0	0
<i>3 - 5 years</i>	0	0
<i>6 - 10 years</i>	0	0
<i>10 years +</i>	15	79
<b>TOTAL</b>	<b>19</b>	<b>100</b>

##### 3.1.3 Type of Housing

Respondents were asked what type of housing they live in. Of the 19 responses received:

— The majority of respondents (16 respondents or 84%) revealed they live in a separate house.

— 2 live in an apartment or unit.

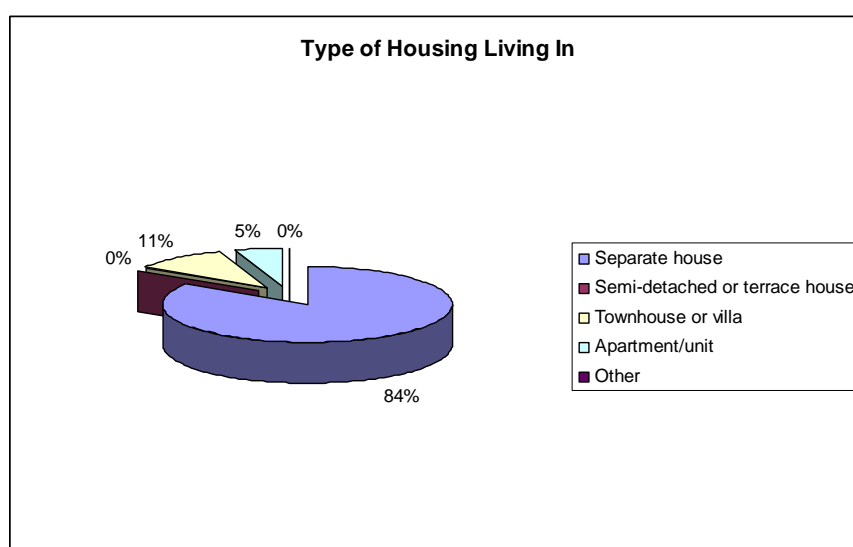
— 1 lives in a townhouse or villa.

Table 3.3 and Figure 3.1 below present the breakdown of these figures in numbers and percentages.

**Table 3.3: Type of Housing Living In**

<i>Type of housing living in</i>	<i>Number</i>	<i>Percentage %</i>
<i>Separate house</i>	16	84
<i>Semi-detached or terrace house</i>	0	0
<i>Townhouse or Villa</i>	2	11
<i>Apartment</i>	1	5
<i>Other</i>	0	0
<b>TOTAL</b>	<b>19</b>	<b>100</b>

**Figure 3.1: Type of Respondent Housing**



### **3.1.4 Issues of Concern Raised in Submission**

Respondents revealed their issues of concern as identified in their submission during the development approval stage. Table 3.4 shows these issues of concern and the number and percentage of respondents. From this table, the Top 5 issues were analysed. These included the following:

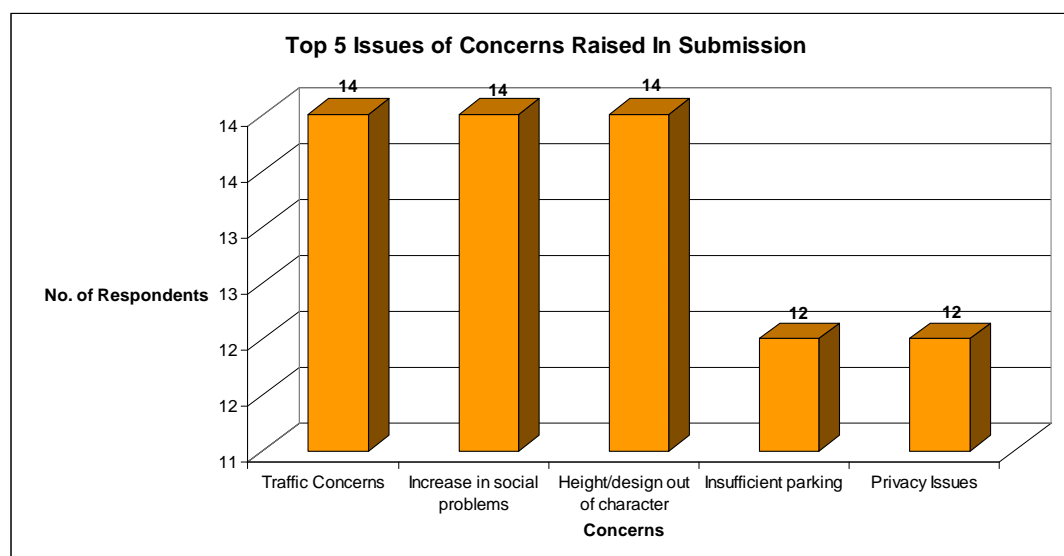
- Equal amounts of respondents revealed that traffic (14 respondents), an increase in social problems (14 respondents), and height and/or design of the developments (14 respondents) were their major concerns raised in their submission.
- 12 respondents considered that insufficient parking would be an issue.
- 12 respondents felt there would be privacy issues as a result of the developments.

**Table 3.4: Issues of Concern Raised in Submission**

<i>Top five issues raised in submission</i>	<i>Number</i>	<i>Percentage %</i>
<i>Traffic Concerns</i>	14	21
<i>Increase in social problems</i>	14	21
<i>Height / Design of character</i>	14	21
<i>Insufficient parking</i>	12	18
<i>Privacy issues</i>	12	18
<b>TOTAL</b>	<b>66</b>	<b>99</b>

Figure 3.2 shows these Top 5 issues of concern at the time of the development proposal in graphical format.

**Figure 3.2: Issues of Concern Raised in Submission**



### **3.1.5 Issues of Concern Raised in Submission**

#### **3.1.5a Still a Concern**

Respondents were asked to reveal whether the issues that they had raised in their submission during the development approval stage were still considered to be issues of concern. In total, there were 135 responses that were received for a total of 14 issues of concern, the top 5 issues of concern include:

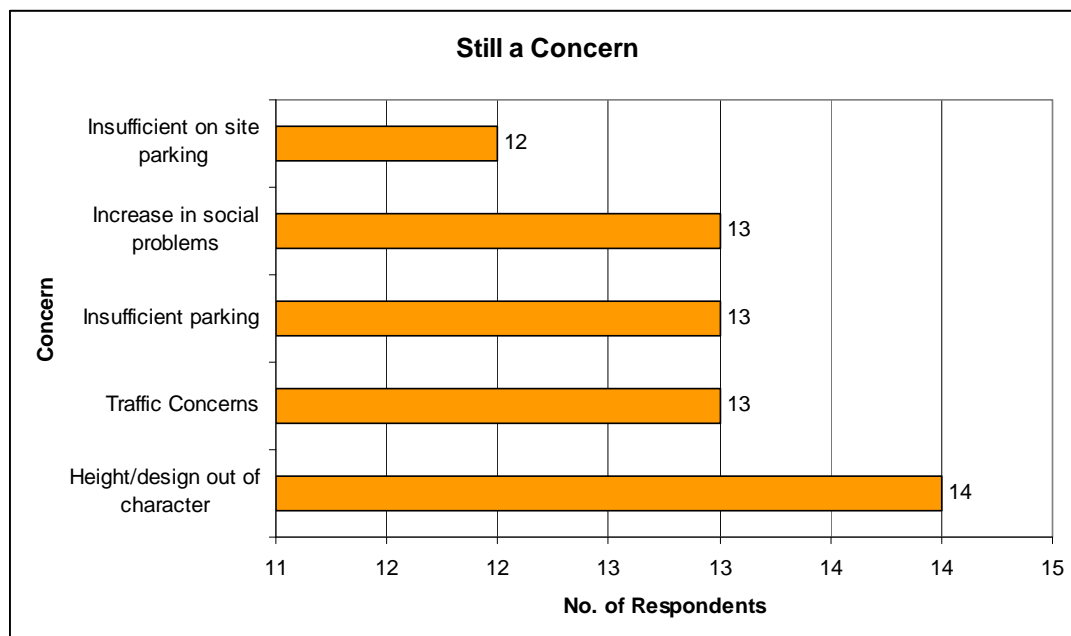
- 14 respondents (22%) revealed that they still felt that height and/or design of the developments would be out of character,
- 13 respondents (20%) revealed they still felt that there would be traffic concerns,
- 13 respondents (20%) revealed they still felt there would be insufficient parking, and
- 13 respondents (20%) revealed they still felt there would be an increase in social problems.

- 12 respondents (18%) revealed they still felt that there would be insufficient onsite parking.

**Table 3.5: Issues of Concern Raised in Submission Still a Concern**

<i>Top five issues of concern raised in submission</i>	<i>Still a concern</i>	<i>Percentage %</i>
<i>Height / Design out of character</i>	14	22
<i>Traffic concerns</i>	13	20
<i>Insufficient parking</i>	13	20
<i>Increase in social problems</i>	13	20
<i>Insufficient on site parking</i>	12	18
<b>TOTAL</b>	<b>65</b>	<b>100</b>

**Figure 3.3: Issues of Concern Raised in Submission Still a Concern**



### **3.1.5b No Longer a Concern**

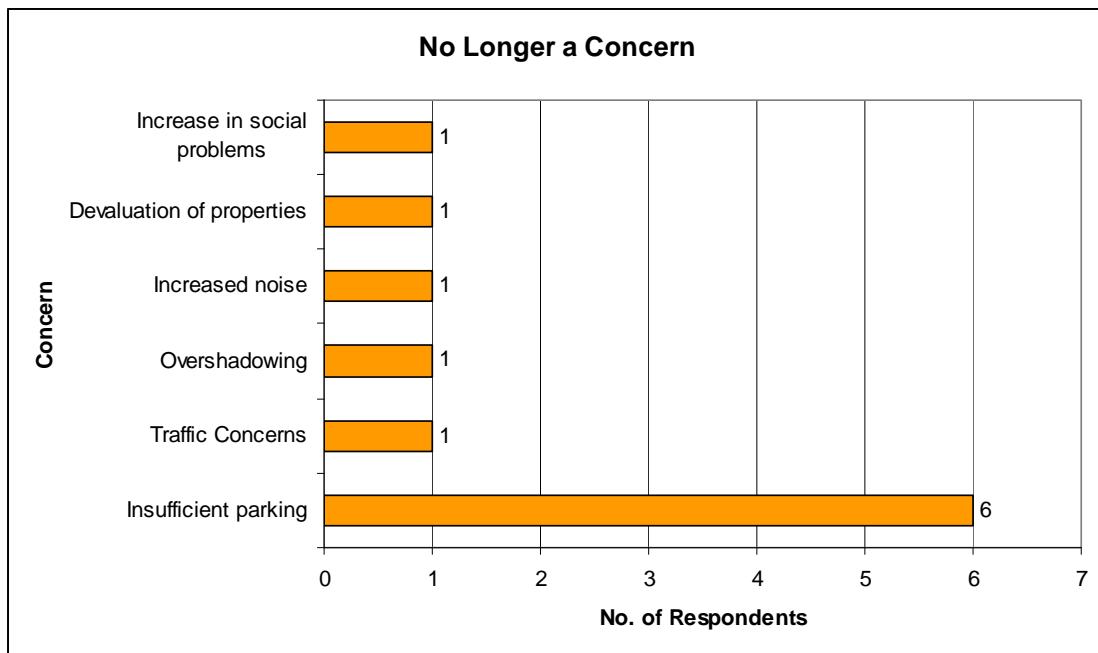
Respondents were also asked to reveal whether the issues that they had raised in their original submission were no longer a concern for them. A total of 11 respondents revealed that some of the issues were no longer a concern for them. These are presented in Table 3.6 and Figure 3.4.

- 6 respondents stated that insufficient parking was no longer a concern for them.
- 1 respondent for each of the other concerns (traffic, overshadowing, increased noise, devaluation of properties, and increase in social problems) stated that these were no longer considered concerns for them.

**Table 3.6: Issues of Concern Raised in Submission No Longer a Concern**

<i>Issues of concern raised in submissions</i>	<i>No longer a concern</i>	<i>Percentage %</i>
<i>Insufficient parking</i>	<b>6</b>	<b>55</b>
<i>Traffic concerns</i>	<b>1</b>	<b>9</b>
<i>Overshadowing</i>	<b>1</b>	<b>9</b>
<i>Increased noise</i>	<b>1</b>	<b>9</b>
<i>Devaluation of properties</i>	<b>1</b>	<b>9</b>
<i>Increase in social problems</i>	<b>1</b>	<b>9</b>
<b>TOTAL</b>	<b>11</b>	<b>100</b>

**Figure 3.4: Issues of Concern Raised in Submission No Longer a Concern**



## 04 CONCLUSION

### Overall the key findings for this survey include:

- A significant proportion of respondents (68%) revealed that they lived in Oxley Park. 79% of respondents have lived at their current address for over 10 years and that 84% live in a separate house.
- In regards to the issues of concern that respondents raised in their submissions during the development approval stage, the issues focussed on traffic (22% of respondents) and increasing social problems (22% of respondents). Other issues of concern included height/design out of character with the area (20% of respondents), insufficient parking (18% of respondents) and privacy issues (18% of respondents).
- Issues that were no longer of concern include insufficient parking (for 6 respondents); height/design out of character with the area (22%), traffic (20%), insufficient onsite parking (1 respondent) increasing social problems (1 respondent) and insufficient onsite parking (1 respondent).

Our Ref: 1654310  
Contact: Abdul Cheema  
Telephone: 4732 8120

14 May 2008

«Title»  
«Address1»  
«Address2»

PENRITH MULTI- UNIT HOUSING SURVEY –  
FEEDBACK SURVEY ON MULTI-UNIT HOUSING DEVELOPMENT

Dear Sir/Madam,

Penrith City Council, together with HASSELL planning and urban design are currently undertaking a survey on the liveability of residential multi-unit buildings in Penrith. This survey is a component of Council's Urban Study and Strategy which is currently being prepared.

Council records show that in the past you have made a submission in response to a development application that proposed a residential multi unit development. Council is seeking your assistance in providing feedback on these buildings now that they have been built and occupied. Your feedback will assist in developing housing standards and guidelines for future multi unit housing.

Could you please spare 5-10 minutes to answer this survey. If you choose to fill in a written survey, a reply paid envelope to Council has been enclosed for your convenience. Alternatively, you can complete this survey online at the following web address:  
<http://www.penrithcity.nsw.gov.au/index.asp?id=5037>

All answers remain confidential and the property of Penrith City Council and HASSELL Ltd. Should you have any questions regarding this survey, please contact Abdul Cheema on 4732 8120.

Please return this survey within two weeks of receiving this mail to:  
Local Plan Team  
Penrith City Council  
PO BOX 60  
PENRITH NSW 2751

Yours faithfully

**Ruth Goldsmith**  
**Local Planning Manager**



# PENRITH MULTI UNIT HOUSING SURVEY

## Feedback Survey on Multi Unit Housing Development



### Survey

Council records indicate that in the past you have made a submission in response to a development application that proposed a multi-unit development. Council is seeking your assistance in providing feedback on these buildings now that they have been built and have people living in them. An online version of this survey can be located at: <http://www.penrithcity.nsw.gov.au/index.asp?id=5037>

Your feedback will help to ensure that Council are aware of any issues you may have and contribute to the improvement of multi-unit housing design in the future. All answers remain confidential and the property of Penrith City Council and HASSELL Ltd.

#### 1 What area do you currently live in ?

- St Marys (area bounded by Wilson, Atchison, Hall and Barker Streets)
- Oxley Park (area bounded by Lethbridge, Hobart, Melbourne, Adelaide St and Great Western Hwy)
- Mulgoa Rd & Jamison Rd (area bounded by Jamison Rd, York Rd, Preston St & Mulgoa Rd)
- Werrington (area bounded by Lethbridge Avenue, Reid Street, Phillips Street & Walker Street)
- Other, please specify \_\_\_\_\_

#### 2 How long have you lived at your current address for?

- 0 - 6 months
- 6 - 12 months
- 1 - 3 years
- 3 - 5 years
- 6 - 10 years
- More than 10 years

#### 3. What type of housing do you live in?

- Separate House
- Semi-detached or terrace house
- Townhouse or Villa
- Apartment/unit
- Other, please specify \_\_\_\_\_

#### 4. Please identify which of the following issues of concern you raised in your submission during the development approval stage.

- Traffic concerns
- Height and/or design out of character with area
- Overshadowing
- Insufficient parking
- Privacy issues
- Loss of amenity
- Increased noise
- Overcrowding
- Devaluation of properties
- Overdevelopment of site
- Impact on heritage
- Impact on services
- Insufficient on site parking
- Increase in social problems

#### 5. Of the issues you identified during the development approval stage, please identify if these issues are either still a concern or no longer a concern to you.

Issue	Still of Concern	No longer of Concern
Traffic concerns	<input type="checkbox"/>	<input type="checkbox"/>
Height and/or design out of character with area	<input type="checkbox"/>	<input type="checkbox"/>
Overshadowing	<input type="checkbox"/>	<input type="checkbox"/>
Insufficient parking	<input type="checkbox"/>	<input type="checkbox"/>
Privacy issues	<input type="checkbox"/>	<input type="checkbox"/>
Loss of amenity	<input type="checkbox"/>	<input type="checkbox"/>
Increased noise	<input type="checkbox"/>	<input type="checkbox"/>
Overcrowding	<input type="checkbox"/>	<input type="checkbox"/>
Devaluation of properties	<input type="checkbox"/>	<input type="checkbox"/>
Overdevelopment of site	<input type="checkbox"/>	<input type="checkbox"/>
Impact on heritage	<input type="checkbox"/>	<input type="checkbox"/>
Impact on services	<input type="checkbox"/>	<input type="checkbox"/>
Insufficient on site parking	<input type="checkbox"/>	<input type="checkbox"/>
Increase in social problems	<input type="checkbox"/>	<input type="checkbox"/>

#### 6. If you still have concerns about the development, please state up to 3 outstanding concerns.

Thank you for your assistance. If you have any queries please contact Abdul Qreema on 4732 8120. Please return this survey within two weeks of receiving this mail to:

Local Plan Team  
 Penrith City Council  
 PO Box 60  
 PENRITH NSW 2751  
 or Fax: 4732 7958



## SURVEY OF RESIDENTS OF MULTI UNIT HOUSING IN SELECTED AREAS

01	Introduction
02	Methodology
03	Multi Unit Housing Liveability Survey Findings
04	Conclusion

### 01 INTRODUCTION

To assist in the preparation of the Penrith Urban Study and Urban Strategy, surveys were undertaken with residents of multi unit developments and residents who had made a submission in response to a development application proposing a multi-unit development.

A survey of residents in multi unit flat buildings was undertaken in May 2008 to determine liveability of current developments. This report provides an overview of the objectives and methodology of the survey and detailed analysis of the survey findings and results. A separate report provides analysis of the feedback received on the submissions survey.

#### 1.1. Objective of Multi Unit Development Survey

The objectives for residents involved in the Multi Unit Development Survey included:

- To determine the characteristics of residents in multi unit housing;
- To determine reasons for their housing choice and location;
- To determine quality and liveability of residential flat buildings in the Penrith Local Government Area

### 02 METHODOLOGY

The following section provides an overview of the methodology undertaken to conduct the surveys. This includes the survey target group.

#### 2.1 Target Group

The multi unit resident liveability survey targeted current residents of residential flat buildings, specifically in the areas outlined below:

- St Marys (area bounded by Wilson, Atchinson, Hall and Barker Streets)
- Oxley Park (area bounded by Lethbridge, Hobart, Melbourne, Adelaide Streets and Great Western Highway)
- Mulgoa Road and Jamison Road (area bounded by Jamison Road, York Road, Preston Street and Mulgoa Road)
- Werrington (area bounded by Lethbridge Avenue, Reid Street, Phillips Street and Walker Street).

The multi unit resident liveability surveys were also made available to the wider Penrith LGA population via the Council website, to elicit feedback from the general public.

## 2.2 Survey Distribution and Collection

In May 2008, 1613 surveys were distributed by mail to residents of multi unit developments within the Penrith Local Government Area (LGA). The survey was also posted on Council's website to enable online survey response.

The large number of surveys were distributed to ensure that if a response rate of 10% was received (which is considered significant for a mail out survey) then a representative sample could be achieved.

Date of survey distribution 16th May 2008

	<i>Total number of surveys distributed</i>	<i>Total number of surveys received (hard copy)</i>	<i>Total number of surveys received (online)</i>	<i>Response rate</i>
<b>Multi-Unit Liveability Survey</b>	1613	215	14	14%

The survey instrument was accompanied by a letter outlining the purpose and objectives of the survey. All correspondence is attached in Appendix A. All survey recipients were provided with a postage paid envelope or could complete the survey online.

## 2.3 Survey timescale

Surveys were drafted and mailed out on 16th May 2008. Survey recipients were given a two week period to complete the survey and return it to Council in a postage paid envelope, with the final date being 30 May 2008.

## 2.4 Privacy

Survey participants' privacy was assured as no personal or identifying details were sought or provided within the survey. The survey instrument also stated,

"All answers remain confidential and the property of Penrith City Council and HASSELL Ltd."

## 2.5 Wording of Questions

A copy of the survey questionnaire is provided in Appendix A. The questionnaire is divided into five discrete components:

Information about the respondents dwelling in terms of dwelling type, number of residents, locality of residence, length of residence, tenure, reason for choosing dwelling, size and age of building.

Information about the locality in which the respondents live.

Information about the respondents building in terms of amenity, liveability and on site services and facilities.

Building design and multi unit housing considerations.

Demographic information about the respondent to determine the representativeness of the survey sample and to provide an overview of the people living in multi unit residential buildings.

The survey questions were written in plain English, with the majority of the questions structured to be closed questions (tick-a-box), in order to simplify the process and to reduce the time required to complete the survey (approximately 10 minutes). This was done to maximise the return rate of the surveys. A pilot of the survey was undertaken to test language, complexity and timing to ensure the survey instrument was user friendly.

A Penrith City Council contact person and number were provided on all documentation (letters and survey forms) for any queries associated with the survey.

## 2.6 Survey Limitations

The survey was only produced in English, therefore, any non English speaking persons would have required assistance to complete the survey.

While a Penrith City Council contact person and number was provided on all survey forms, the survey was completed solely by respondents and therefore if there was uncertainty with any questions there was no immediate assistance available.

If respondents provided multiple answers to a question demanding a single response, only the first answer/response was considered.

## 2.7 Assumptions

The following assumptions were applied to data entry and survey analysis

Where the question required a single response and multiple responses were given, only the first response was recorded.

## 03 MULTI UNIT HOUSING LIVEABILITY SURVEY FINDINGS

### 3.1 Overview of respondents and dwelling characteristics

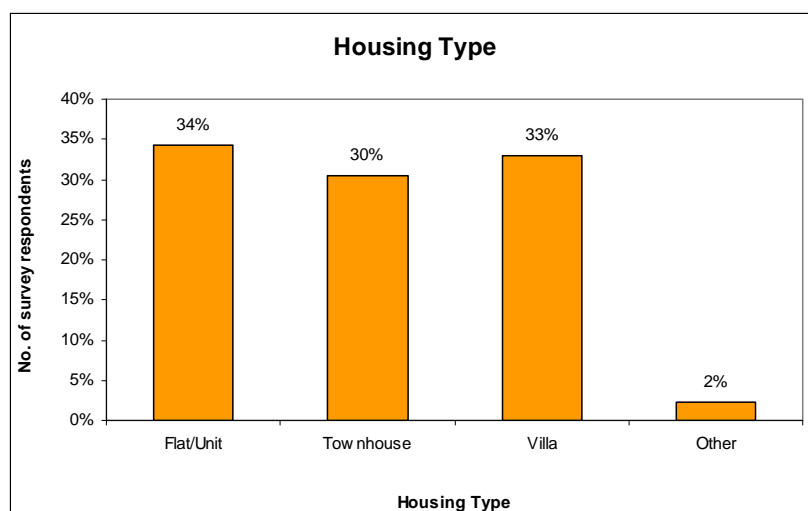
#### 3.1.1 Building Types Surveyed

The first survey question asked respondents about the type of dwelling that they lived in. As Table 3.1 below shows, approximately one third of respondents (34%) live in flats/units, villas (33%) and just under one third lived in town houses (30%).

**Table 3.1: Respondent Dwelling Characteristics**

<i>I live in a :</i>	<i>Number</i>	<i>Percentage %</i>
<i>Flat / Unit</i>	<b>78</b>	<b>34</b>
<i>Townhouse</i>	<b>69</b>	<b>30</b>
<i>Villa</i>	<b>75</b>	<b>34</b>
<i>Other</i>	<b>5</b>	<b>2</b>
<b>TOTAL</b>	<b>227</b>	<b>100</b>

**Figure 3.1: Respondent Dwelling Characteristics**



### 3.1.2 Household Size

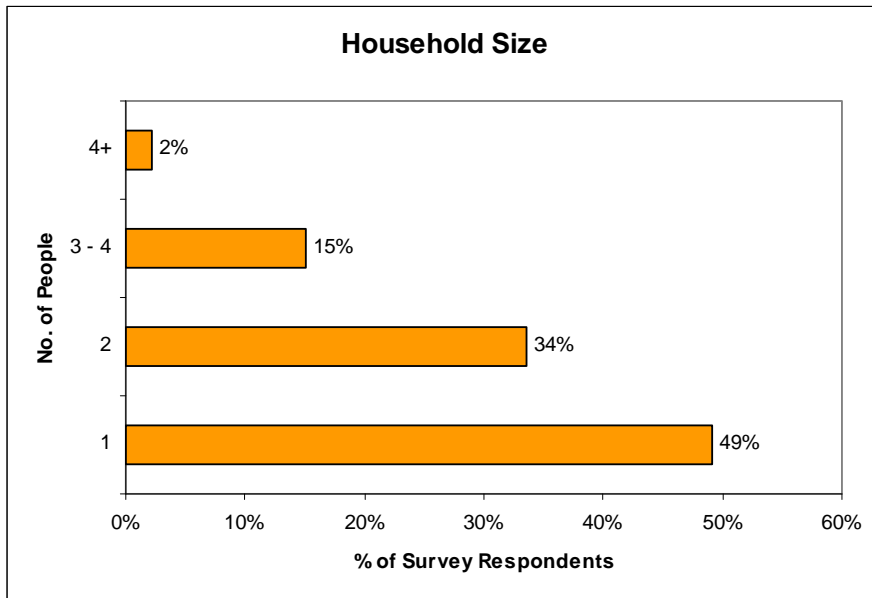
Respondents were asked how many people lived in their home (including themselves). In all, 226 responses were received. The findings are identified in Table 3.2 and Figure 3.2 and are summarised below:

- Just under half of respondents (49% or 111) indicated that they lived on their own.
- Over one third of respondents (34%) indicated that they lived with another person in their home (i.e. 2 persons living in the home).
- 34 of the 226 respondents (15%) indicated 3-4 people (including themselves) lived in their home.
- Only 5 respondents (2%) indicated that 4 or more people (including themselves) lived in their home.

**Table 3.2: Household Size**

<i>How many people reside at your address</i>	<i>Number</i>	<i>Percentage %</i>
<b>1</b>	<b>111</b>	<b>49</b>
<b>2</b>	<b>76</b>	<b>34</b>
<b>3 - 4</b>	<b>34</b>	<b>15</b>
<b>4+</b>	<b>5</b>	<b>2</b>
<b>TOTAL</b>	<b>226</b>	<b>100</b>

**Figure 3.2: Household Size**



### 3.1.3 Localities Surveyed

Respondents were asked to indicate the area that they currently live in. A summary of responses is shown in Table 3.3 and Figure 3.3.

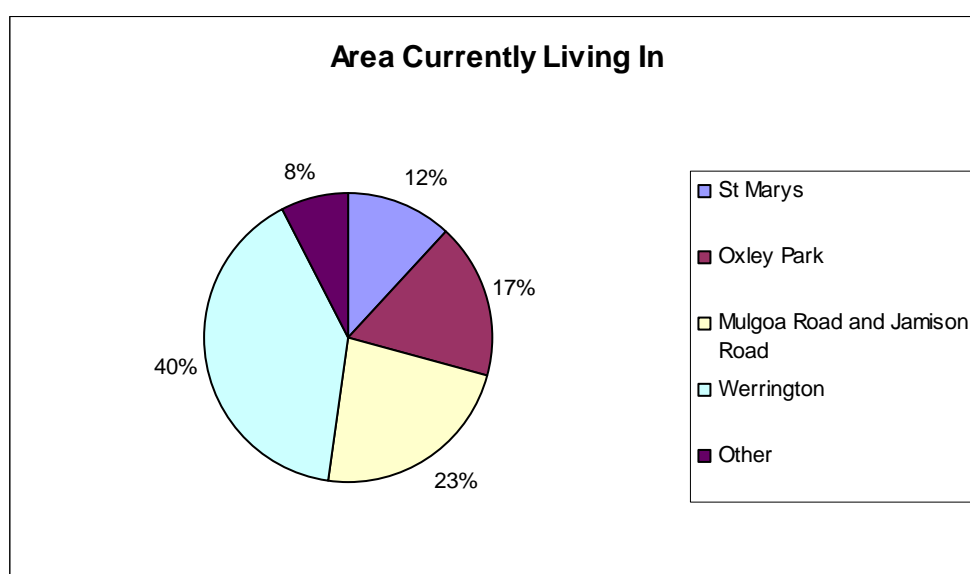
- A significant proportion (40%) indicated that they live in Werrington.

- Just under one quarter (23%) indicated that they live in the area of Mulgoa Road and Jamison Road.
- 17% or 39 respondents stated that they live in Oxley Park.
- 12% or 27 respondents stated they live in St Marys.
- 8% or 17 respondents indicated that they live outside of these areas. Of respondents living outside of Penrith, the Top 3 responses were Cambridge Park, Kingswood and Blue Mountains.

**Table 3.3: Area of Current Residence**

<i>What area do you currently live in?</i>	<i>Number</i>	<i>Percentage %</i>
<i>St Marys</i>	27	12
<i>Oxley Park</i>	39	17
<i>Mulgoa Road and Jamison Road</i>	52	23
<i>Werrington</i>	91	40
<i>Other</i>	17	8
<b>TOTAL</b>	<b>226</b>	<b>100</b>

**Figure 3.3: Area of Current Residence**



### **3.1.4 Length of Residence**

Respondents were asked how long they had lived in their dwelling. As indicated in Table 3.4 and Figure 3.4:

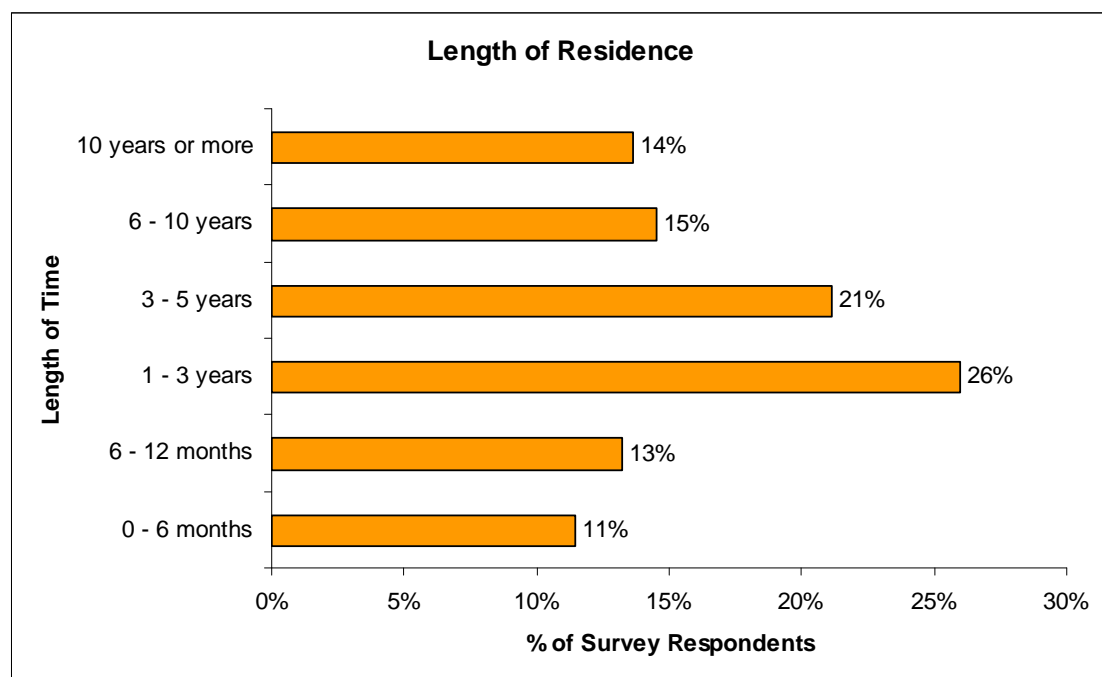
- Over one quarter of respondents (26%) indicated that they have lived at their current address between 1 and 3 years.
- Over one fifth of respondents (21%) indicated that they have lived at their current address between 3 and 5 years.
- Fewer respondents (15%) indicated that they had lived there between 6 and 10 years and 14% stated that they lived at their current address for over 10 years.

— A total of 15% (56) of respondents indicated that they had lived at their current address for up to 1 year.

**Table 3.4: Length of Residence**

<i>How long have you lived at your current address</i>	<i>Number</i>	<i>Percentage %</i>
<i>0 - 6 months</i>	26	11
<i>6 - 12 months</i>	30	13
<i>1 - 3 years</i>	59	26
<i>3 - 5 years</i>	48	21
<i>6 - 10 years</i>	33	15
<i>10 years or more</i>	31	14
<b>TOTAL</b>	<b>227</b>	<b>100</b>

**Figure 3.4: Length of Residence**



### **3.1.5 Housing Tenure**

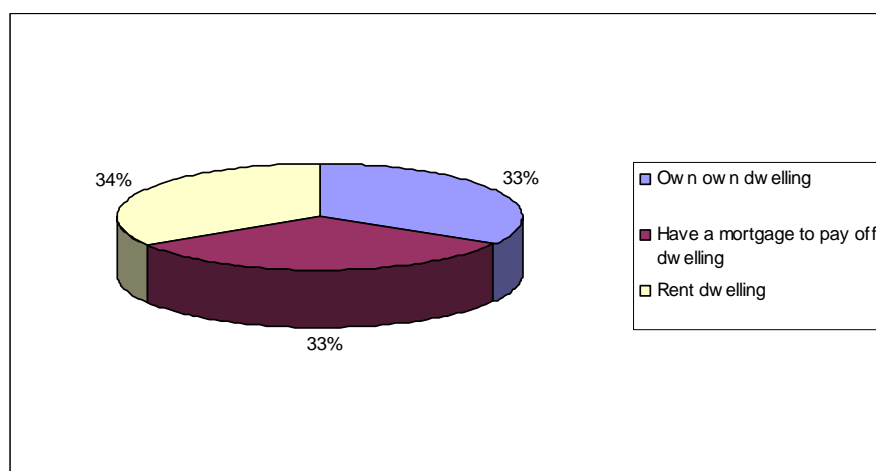
Respondents were asked whether they owned the dwelling they lived in outright, whether they had a mortgage to pay off or if they were renting. The housing tenure question relates to all dwelling types (including flats/units, townhouses and villas).

**Table 3.5: Housing Tenure**

<i>Do you ?</i>	<i>Number</i>	<i>Percentage %</i>
<i>Own own dwelling</i>	75	33
<i>Have a mortgage to pay off dwelling</i>	73	33
<i>Rent dwelling</i>	76	34
<b>Total</b>	<b>224</b>	<b>100</b>

As identified in Table 3.5 above and Figure 3.5 below, 224 responses were received and it is evident responses were spread fairly evenly between those owning their home outright (33%), those with a mortgage (33%), and those renting (34%).

**Figure 3.5: Housing Tenure**



### ***3.1.6 Reason for Choosing To Live At Current Address***

Respondents were asked to indicate why they chose to live at their current address. The survey allowed respondents to nominate multiple reasons. As a result, the 226 respondents for this question provided a total of 610 responses as to why they had selected to live at their current address. The top 10 reasons are shown in Table 3.6 and Figure 3.6 below. In summary:

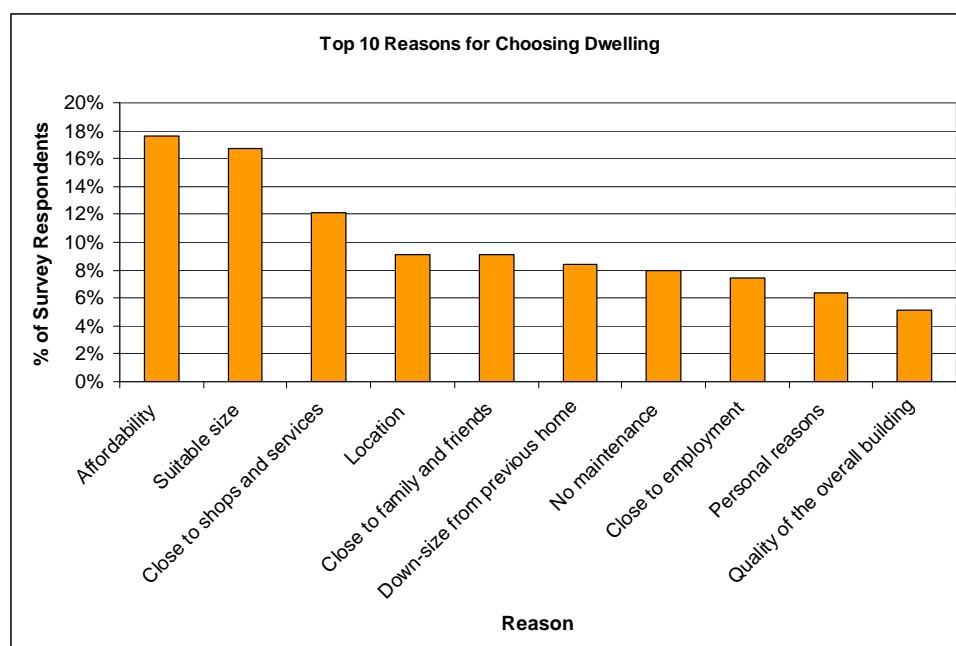
- Affordability was the most common reason for choosing their current dwelling.
- The second most common reason for choosing to live at a particular address was that the dwelling was of a suitable size, with 95 respondents (17%) stating that this was a major reason for choosing their current address.
- Being close to shops and services was a reason for choosing to live at their current address by 69 respondents or 12%.
- The remaining top 10 responses included being close to family and friends, liking the location, down-sizing from a larger previous home, the current address requiring no maintenance, being close to employment, personal reasons, and the quality of the overall building.



**Table 3.6: Reason for Choosing Dwelling**

<i>What is your reason for choosing to live at your current address?</i>	<i>Number</i>	<i>Top 10</i>
<i>Affordability</i>	100	18
<i>Suitable size</i>	95	17
<i>Close to shops and services</i>	69	12
<i>Location</i>	52	9
<i>Close to family and friends</i>	52	9
<i>Down-size from previous home</i>	48	8
<i>No maintenance</i>	45	8
<i>Close to employment</i>	42	8
<i>Personal reasons</i>	36	6
<i>Quality of the overall building</i>	29	5
<i>Total (from the Top 10)</i>	<b>568</b>	<b>100</b>
<i>Overall Total</i>	<b>610</b>	

**Figure 3.6: Reason for Choosing Dwelling**



### **3.1.7 Number of Bedrooms**

In this question, respondents were asked how many bedrooms were in their home. The findings below (Table 3.7 and Figure 3.7) are based on the 223 responses received.

Just under half of homes (52%) contained 2 bedrooms. This was closely followed by 45% of homes having 3 bedrooms.

There were very few 1 bedroom homes (3%), and no dwellings containing 4+ bedrooms. It is worth noting at this point that the overwhelming majority of respondents indicated that they live on their own, yet only 3% of dwellings contain only 1 bedroom.

**Table 3.7: Number of Bedrooms**

<i>How many bedrooms does your dwelling have?</i>	<i>Number</i>	<i>Percentage %</i>
<i>1</i>	6	3
<i>2</i>	116	52
<i>3</i>	101	45
<i>4+</i>	0	0
<b><i>TOTAL</i></b>	<b>223</b>	<b>100</b>

**3.1.8 Age of Building**

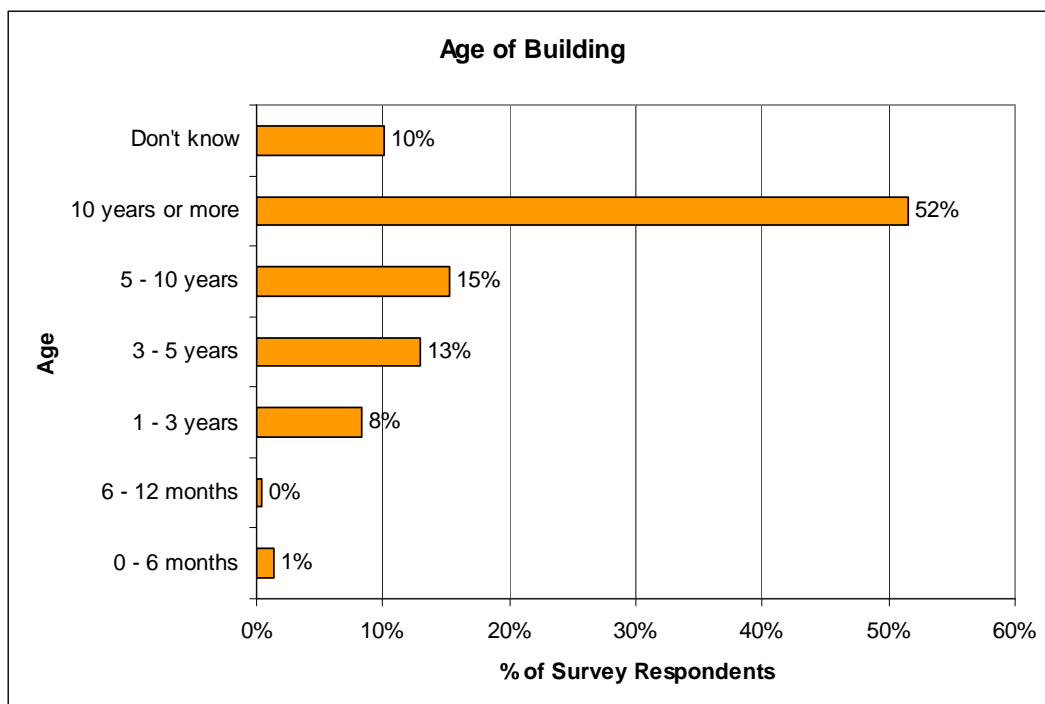
Respondents were asked to comment on the age of the building that they live in. Table 3.8 and Figure 3.7 indicate there were 217 respondents in total and approximately half of the respondents (52%) indicated that their building was over 10 years old.

- 33 respondents (15%) stated that their building was between 5 and 10 years old, and 18 respondents (8%) stated that their building was between 1 and 3 years old.
- Only 1% of respondents stated that their building was under a year old.
- 10% of respondents indicated that they did not know how old their dwelling was.

**Table 3.8: Age of Building**

<i>How old is your building?</i>	<i>Number</i>	<i>Percentage %</i>
<i>0 - 6 months</i>	3	1
<i>6 - 12 months</i>	1	0
<i>1 - 3 years</i>	18	8
<i>3 - 5 years</i>	28	14
<i>5 - 10 years</i>	33	15
<i>10 years or more</i>	112	52
<i>Don't know</i>	22	10
<b><i>Total</i></b>	<b>217</b>	<b>100</b>

**Figure 3.7: Age of Building**



### 3.2 Resident Mobility

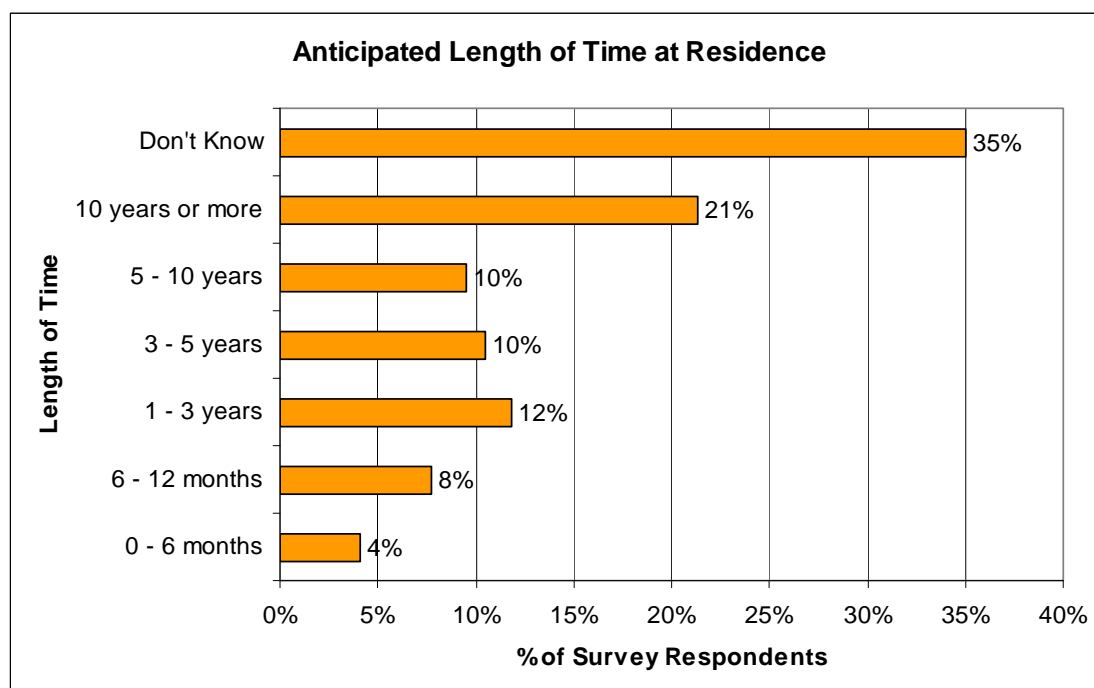
#### 3.2.1 Anticipated Length of Time at Residence

Of the 220 respondents, over a third of respondents (35%) stated that they did not know how long they anticipated on living at their current address and 21% of respondents advised that they anticipated living at their current address for 10 years or more as portrayed in Table 3.9 and Figure 3.8 below.

**Table 3.9: Anticipated Length of Time at Residence**

<i>How long do you anticipate staying at your current address?</i>	<i>Number</i>	<i>Percentage %</i>
<i>0 - 6 months</i>	9	4
<i>6 - 12 months</i>	17	8
<i>1 - 3 years</i>	26	12
<i>3 - 5 years</i>	23	10
<i>5 - 10 years</i>	21	10
<i>10 years or more</i>	47	21
<i>Don't Know</i>	77	35
<b>TOTAL</b>	220	100

**Figure 3.8: Anticipated Length of Time at Residence**



### 3.2.2 Likely Reason for Moving if Planning on Moving within next 6 Months

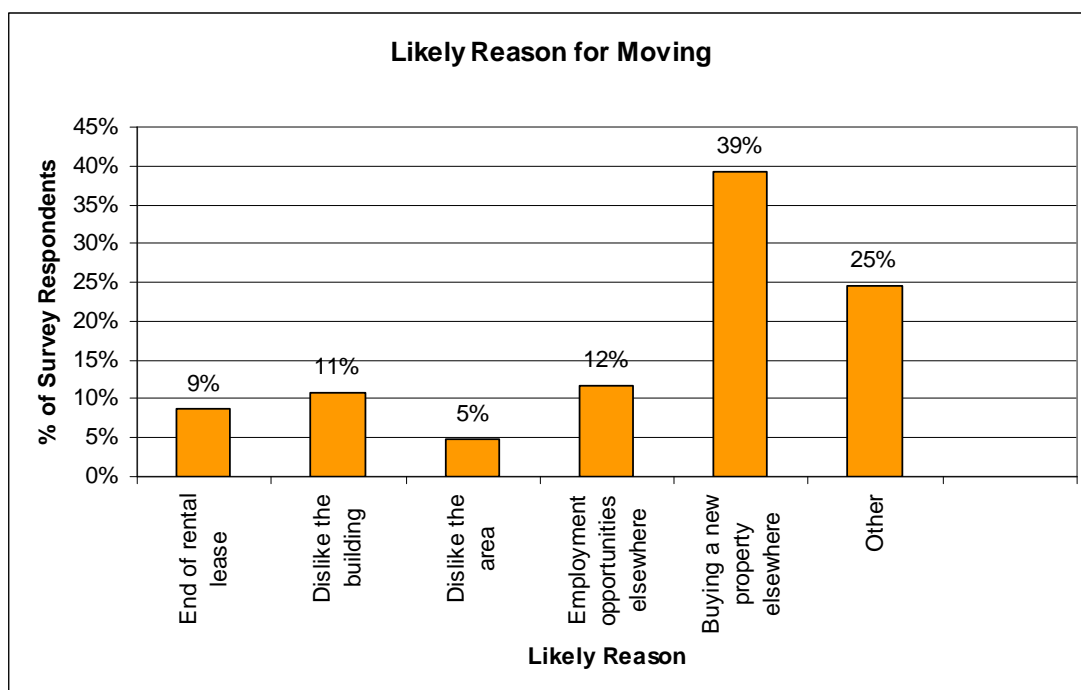
Respondents were asked what their likely reason for moving might be if they were planning on moving within the next 6 months. There were 102 respondents to this question, with results provided in Table 3.10 and Figure 3.9 below.

- Of the 102 respondents, 39% stated that the likely reason for moving was because they would be buying property elsewhere.
- 25 respondents (25%) stated that they would likely be moving for 'other' reasons, such as lack of privacy, special needs care, rent increases, and unemployment.
- 12% of respondents indicated that employment opportunities elsewhere would be the likely reason for moving.
- 11% of respondents indicated a dislike of their building would be the reason for moving.

**Table 3.10: Likely Reason for Moving**

<i>If you plan on moving in the next 6 months, what is your likely reason for moving?</i>	<i>Number</i>	<i>Percentage %</i>
<i>End of rental lease</i>	9	9
<i>Dislike the building</i>	11	11
<i>Dislike the area</i>	5	5
<i>Employment opportunities elsewhere</i>	12	12
<i>Buying a new property elsewhere</i>	40	39
<i>Other</i>	25	26
<b>TOTAL</b>	<b>102</b>	<b>100</b>

**Figure 3.9: Likely Reason for Moving**



### 3.2.3 Previous Area of Residence

Respondents were asked to indicate where they had lived prior to moving into their current address. Overall, 222 respondents answered the question; the top 10 places are shown below in Table 3.11.

- The majority of respondents (108 or 49%) previously lived outside of Penrith City Council Local Government Area (LGA).
- Respondents of 14 or 7% who had previously lived within Penrith City Council LGA came from the suburb of Penrith.

**Table 3.11: Previous Area of Residence**

<i>What area did you live in before your current address?</i>	<i>Number</i>	<i>Percentage of total</i>
<i>Outside of Penrith City Council</i>	108	49
<i>Penrith</i>	14	6
<i>St Clair</i>	11	5
<i>St Marys</i>	10	5
<i>Cranebrook</i>	9	4
<i>Cambridge Park</i>	8	4
<i>Glenmore Park</i>	8	4
<i>Colyton</i>	7	3
<i>Emu Plains</i>	7	3
<i>Werrington</i>	7	3

*Note 1. Shown as % of total 222 responses*

Nearly half of respondents (49%) came from outside of the Penrith LGA. To understand where these respondents had come from, the survey asked for the name of the place (beyond Penrith where respondents had formerly resided). A vast array of responses was given. Table 3.12 shows (for those respondents who had come from outside of Penrith) the five areas most commonly quoted by respondents as being where they had formerly lived.

The Blue Mountains area (including Springwood, Blackheath, Winmalee, Katoomba and Blaxland East) followed by Blacktown were the most common areas.

**Table 3.12: Previous Area of Residence outside of Penrith**

<i>Top 5 Areas (outside of Penrith LGA) where respondents had formerly lived</i>	<i>Number</i>
<i>Mount Druitt</i>	6
<i>Parramatta (includes North Parramatta)</i>	6
<i>Campbelltown</i>	3
<i>Blacktown</i>	8
<i>Blue Mountains (includes Springwood, Blackheath, Winmalee, Katoomba, Blaxland East)</i>	9
<i>TOTAL</i>	<b>32</b>

### 3.3 Locality considerations

Respondents were asked to answer questions regarding their locality in regards to such considerations as proximity to public transport, everyday shops and services, schools and other community facilities, as well as parks and open space. Respondents were asked to nominate whether they agreed, disagreed or were unsure about each question.

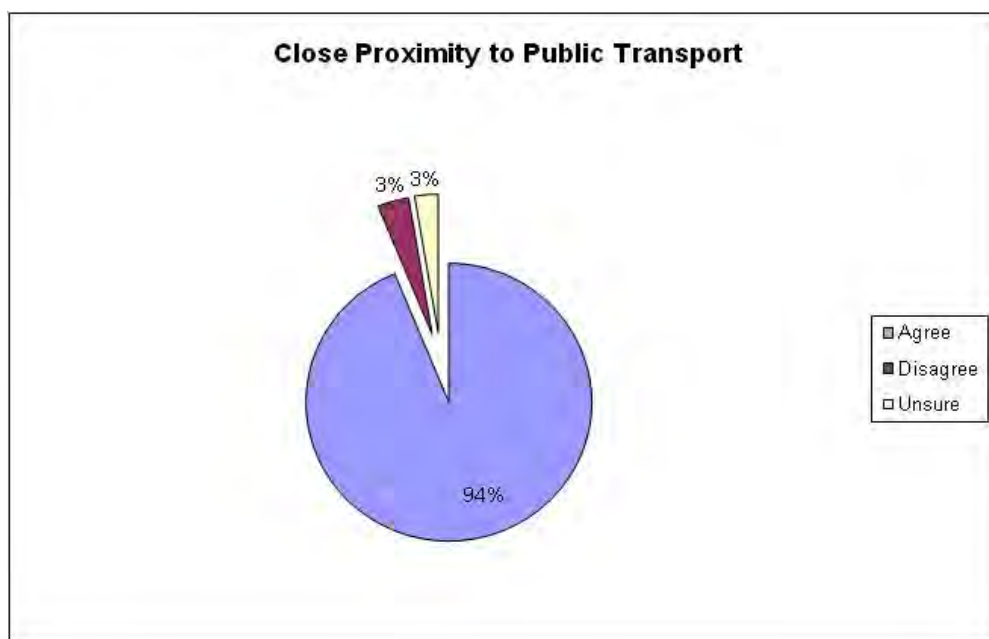
#### 3.3.1 Close Proximity to Public Transport

Of the 226 respondents who answered this question, the majority (212 or 94%) stated that they lived close to public transport. As shown below in Table 3.13 and Figure 3.10, a small percentage (4%) stated that they did not live within close proximity to public transport while 3% were not sure.

**Table 3.13: Close Proximity to Public Transport**

<i>My dwelling is close to public transport (train, bus)</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	212	93
<i>Disagree</i>	8	4
<i>Unsure</i>	6	3
<i>TOTAL</i>	<b>226</b>	<b>100</b>

**Figure 3.10: Close Proximity to Public Transport**



### 3.3.2 Close Proximity to Everyday Shops and Services

Respondents were asked to consider whether they lived within close proximity to everyday shops and services for such purposes as milk and bread. Of the 225 responses received, 207 respondents (92%) agreed that everyday shops and services are close to their dwelling.

**Table 3.14: Close Proximity to Everyday Shops and Services**

<i>Everyday shops and services are close to my dwelling</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	207	92
<i>Disagree</i>	14	6
<i>Unsure</i>	4	2
<b>TOTAL</b>	<b>225</b>	<b>100</b>

### 3.3.3 Close Proximity to a Broader Range of Shops and Services

Respondents were asked to consider whether they lived within close proximity to a broader range of shops and services such as banks, post office, supermarket, chemist, and butcher. 222 responses were received with 173 (78%) stating that they agreed with the statement that they reside within close proximity to a broad range of facilities and services. Just under one fifth (43 or 19%) did not agree.

**Table 3.15: Close Proximity to Broader Range of Shops and Services**

<i>My dwelling is close to a broader range of shops and services that provide a range of facilities and services</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	173	78
<i>Disagree</i>	43	19
<i>Unsure</i>	6	3
<b>TOTAL</b>	<b>222</b>	<b>100</b>

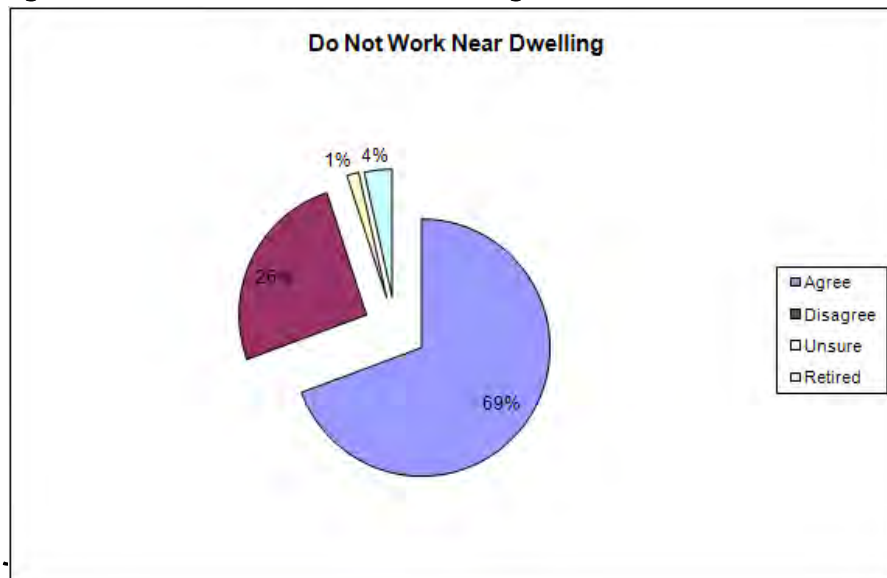
### 3.3.4 Do not Work near Dwelling

Table 3.16 shows that 199 respondents responded to this question with over two thirds (69%) indicating that they did not work near their dwelling. Just over a quarter (26%) of the respondents indicated that they worked near their dwelling.

**Table 3.16: Do not Work near Dwelling**

<i>I do not work near my dwelling</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	138	69
<i>Disagree</i>	51	26
<i>Unsure</i>	3	2
<i>Retired</i>	7	3
<b>TOTAL</b>	<b>199</b>	<b>100</b>

**Figure 3.11: Do not Work near Dwelling**



The survey requested respondents to indicate whether they lived within close proximity to schools and other community facilities. 216 responses were received to this question. Of these, 163 (75%) agreed with the statement that "schools and community facilities are near my dwelling". 24 respondents (11%) were unsure.

**Table 3.17: Close Proximity of Schools and Other Community Facilities**

<i>Schools and other community facilities are near my dwelling</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	163	75
<i>Disagree</i>	29	14
<i>Unsure</i>	24	11
<b>Total</b>	<b>216</b>	<b>100</b>



### 3.3.6 Proximity to Parks and Open Space

In this question, respondents were asked to indicate if they lived far from parks and open space, some 216 responses were received. Responses are summarised below and in Table 3.18

- 63% of respondents disagreed with the statement "parks and open space are not located close to my dwelling".
- 34% of respondents agreed that they did not live near parks and open space.
- A small portion (3%) were unsure.

**Table 3.18: Proximity to Parks and Open Space**

<i>Parks and open space are not located close to my dwelling</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	74	34
<i>Disagree</i>	136	63
<i>Unsure</i>	6	3
<i>Total</i>	<b>216</b>	<b>100</b>

### 3.3.7 Like the Area Living In

Respondents were asked if they liked the area in which they lived. 170 respondents (79%) agreed that they like the area in which they live, while 11% did not. Table 3.19 shows a breakdown of these numbers and percentages.

**Table 3.19: Like the Area Living In**

<i>I like the area in which I live</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	170	76
<i>Disagree</i>	24	11
<i>Unsure</i>	29	13
<i>TOTAL</i>	<b>223</b>	<b>100</b>

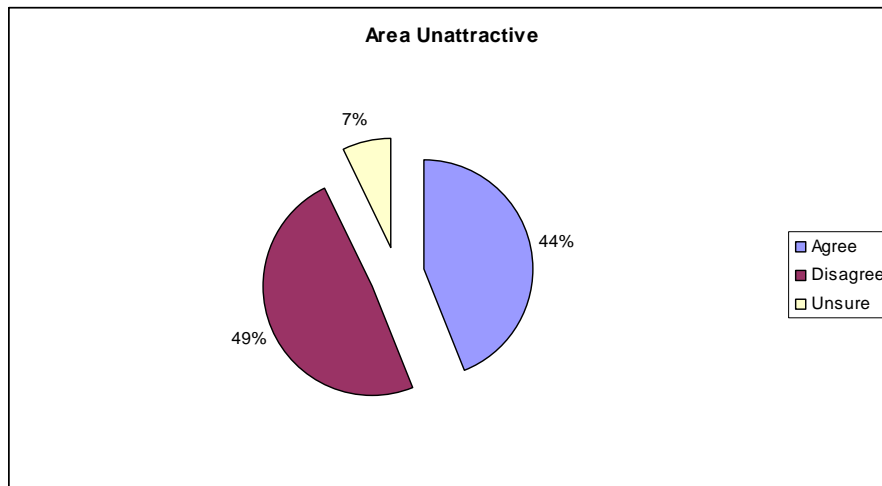
### 3.3.8 Area Unattractive

Respondents were asked to agree or disagree with the statement "the area in which I live is not very attractive". 209 responses were received and fairly evenly split between those who felt their area was attractive (49%) and those who did not (44%). Table 3.20 presents these numbers and percentages and Figure 3.12 shows percentages in a graphical form.

**Table 3.20: Area Unattractive**

<i>The area in which I live is not very attractive</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	92	44
<i>Disagree</i>	102	49
<i>Unsure</i>	15	7
<i>TOTAL</i>	<b>209</b>	<b>100</b>

**Figure 3.12: Area Unattractive**



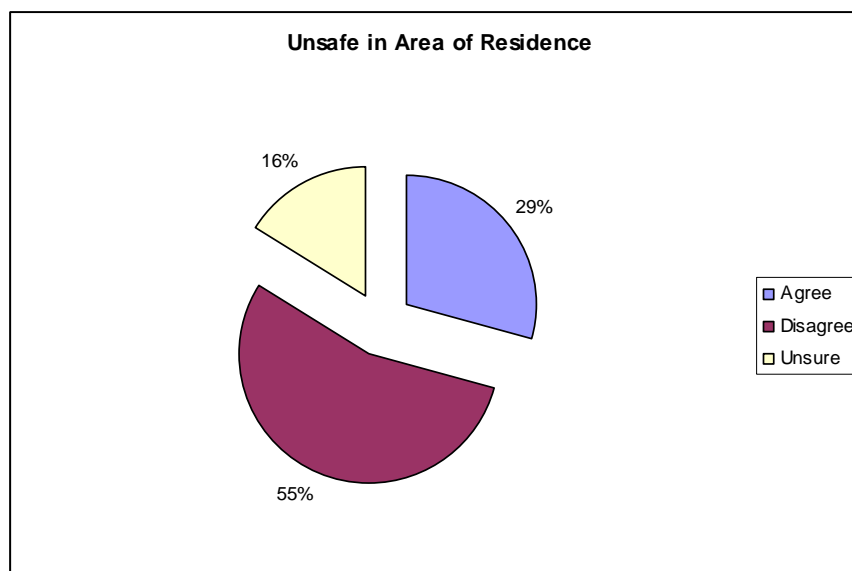
**3.3.9 Safety in Area**

Respondents were asked to agree or disagree with the statement "I do not feel safe in the area in which I live. More than half (55%) stated that they disagreed and did in fact feel safe in their area. Just under one third of responses (29%), on the other hand, stated that they agreed and did not feel safe in their area. 16% were unsure.

**Table 3.21: Safety in Area**

<i>I do not feel safe in the area in which I live</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	61	29
<i>Disagree</i>	115	55
<i>Unsure</i>	34	16
<b>TOTAL</b>	<b>210</b>	<b>100</b>

**Figure 3.13: Safety in Area**



### 3.3.10 Strong Community in Area

Respondents were asked to indicate whether they felt that the area in which they lived had a strong community. 213 responses were received to this question. Of the 213 responses, one fifth (21%) agreed while 37% did not. A significant proportion (42%) were not sure.

**Table 3.22: Strong Community in Area**

<i>The area in which I live has a strong community</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	45	21
<i>Disagree</i>	78	37
<i>Unsure</i>	90	42
<b>TOTAL</b>	<b>213</b>	<b>100</b>

### 3.3.11 Walking Distance to Services and Facilities

Respondents were asked to indicate whether they could walk to a range of services and facilities. Of the 217 responses received, a vast majority (173 respondents or 80%) stated that they agreed. 37 respondents (17%) disagreed and felt they could not walk to such services and facilities.

**Table 3.23: Walking Distance to Services and Facilities**

<i>I can walk to a range of services and facilities</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	173	80
<i>Disagree</i>	37	17
<i>Unsure</i>	7	3
<b>TOTAL</b>	<b>217</b>	<b>100</b>

### 3.3.12 Reliance on Car

More than half (56%) of the respondents indicated that they did not rely on their car to get to local services and facilities. However, 40% indicated that they relied on their car, while 4% were not sure. Table 3.24 presents this breakdown in numbers and percentages.

**Table 3.24: Reliance on Car**

<i>I am reliant on my car to get to local services and facilities</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	83	40
<i>Disagree</i>	117	56
<i>Unsure</i>	8	4
<b>TOTAL</b>	<b>208</b>	<b>100</b>

### 3.4 Building Information

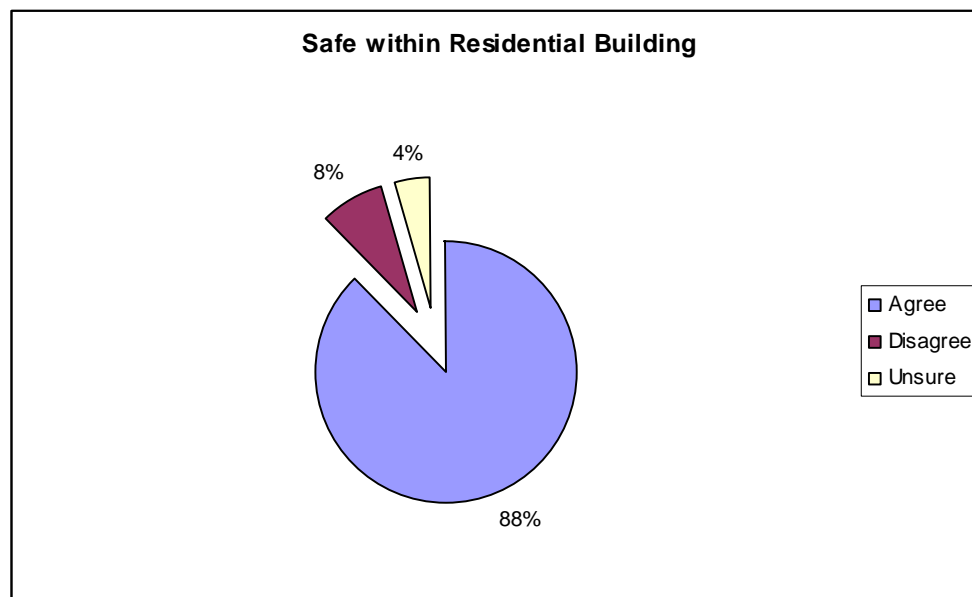
#### 3.4.1 Safety within Building

In this question, respondents were asked to state whether they felt safe within their building. The vast majority (196 respondents or 88%) stated that they did in fact feel safe within their building, only 8% stated that they did not feel safe within their building.

Table 3.25: Safety within Building

<i>I feel safe within the building in which I live</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	196	88
<i>Disagree</i>	17	8
<i>Unsure</i>	10	4
<i>TOTAL</i>	<b>223</b>	<b>100</b>

Figure 3.14: Safety within Building



#### 3.4.2 Design of Building

Respondents were asked to state whether the design of their building enhances or matches the rest of the street. 214 responses were received. Of these:

- 145 (68%) stated that they agreed with this statement.
- 46 (21%) stated that they disagreed with this statement.
- 23 (11%) stated that they were unsure with this statement.

**Table 3.26: Design of Building**

<i>The design of my building enhances or matches the rest of the street</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	145	68
<i>Disagree</i>	46	21
<i>Unsure</i>	23	11
<b>TOTAL</b>	<b>214</b>	<b>100</b>

**3.4.3 Height of Building**

This question asked respondents if they thought that the height of their building did not fit in with the surrounding buildings or houses. The majority of respondents (80%) disagreed with the statement "the height of my building does not fit in with surrounding buildings or houses". On the other hand, 15% stated that they agreed and 5% were unsure.

**Table 3.27: Height of Building**

<i>The height of my building does not fit in with surrounding buildings or houses</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	33	15
<i>Disagree</i>	170	80
<i>Unsure</i>	10	5
<b>TOTAL</b>	<b>213</b>	<b>100</b>

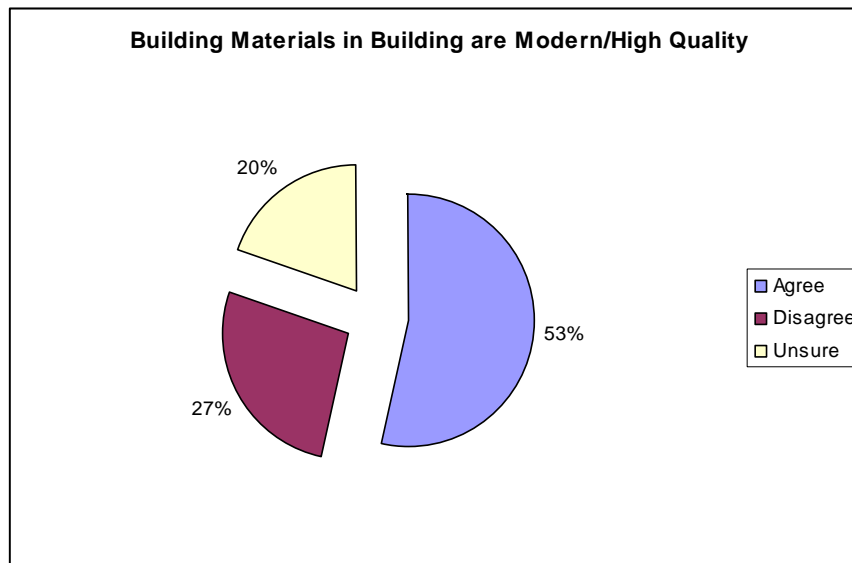
**3.4.4 Building Materials Used**

Respondents were asked to comment on whether they felt that the building materials used in their building or home are modern and/or of a high quality. 217 responses were received and of these, more than half (53%) agreed and felt that the materials used were modern and/or of a high quality. On the other hand, 27% disagreed and 20% were unsure of what sort of building materials were used.

**Table 3.28: Building Materials Used**

<i>The building materials used in my building or home are modern and/or of a high quality</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	116	53
<i>Disagree</i>	58	27
<i>Unsure</i>	43	20
<b>TOTAL</b>	<b>217</b>	<b>100</b>

**Figure 3.15: Building Materials Used**



### **3.4.5 Building**

Respondents were asked to state whether particular elements of their building were excellent, good, fair or poor. These elements included:

- Whether the building is well designed.
- Whether the building does not have high quality building materials.
- Whether the building is well located in terms of services, transport and/or employment opportunities.
- Whether the building fits in with the surrounding buildings in terms of height and bulk.
- Whether the building adds to the character of the surrounding area.

Table 3.29 shows the breakdown of the numbers and percentages. From this Table, it can be seen that:

- 41% of respondents thought that the sunlight or solar access into their building was good.
- Almost half (45%) of respondents thought that the ventilation/cross breezes into their building was good.
- 35% of respondents felt that privacy and distance from other buildings' windows/screening was fair.
- More than half of the respondents (54%) considered the garbage and recycling facilities/areas to be good.
- 41% of respondents thought clothes drying facilities/areas were good.
- Almost half (46%) of respondents felt that the cleanliness/maintenance of common areas was good.
- Almost half (47%) of respondents felt that their private open space was good.
- 37% of respondents thought that the on and off street parking was good.

- Almost half (47%) of respondents felt that the disabled access to their building was poor.
- Just over a third of respondents felt that the day-day accessibility for moving items was fair (37%) and just over a third of respondents felt this aspect was good (36%).

**Table 3.29: Elements of Building**

<i>Element of Building</i>	<i>Excellent</i>		<i>Good</i>		<i>Fair</i>		<i>Poor</i>		<i>Total</i>	
	Num ber	%	Numbe r	%	Num ber	%	Num ber	%	Num ber	%
<i>Sunlight or solar access into my building</i>	55	25	92	41	53	24	22	10	222	100
<i>Ventilation/cross breezes</i>	43	19	101	45	53	24	25	11	222	100
<i>Noise/sound proofing</i>	19	9	67	30	78	35	56	25	220	100
<i>Privacy/distance from other buildings' windows/screening</i>	24	11	87	39	65	29	46	21	222	100
<i>Garbage and recycling facilities/areas</i>	47	21	121	54	35	16	20	9	223	100
<i>Clothes drying facilities/areas</i>	46	21	89	41	48	22	32	15	215	100
<i>Cleanliness/maintenance of common areas</i>	45	20	101	46	57	26	18	8	221	100
<i>Private open space (balconies, private yard)</i>	51	23	104	47	50	22	18	8	223	100
<i>Communal open space (common yard and recreation areas)</i>	18	8	84	39	59	27	54	25	215	100
<i>Parking - on and off street (sufficient numbers, size and location)</i>	22	10	82	37	63	29	54	24	221	100
<i>Disabled access</i>	13	6	48	22	52	24	101	47	214	100
<i>Day-to-day accessibility for moving furniture, etc</i>	17	8%	80	36	82	37	43	19	222	100%

### 3.4.6 Facilities within Building

Respondents were asked to comment on whether they had, did not have particular facilities within their building. The particular facilities that respondents were asked to respond on were:

- Clothes drying;
- Garbage;
- Recycling;
- Private open space;
- Parking onsite;
- Visitor parking; and
- Storage.

There was also a section for respondents to state if they were unsure about whether these facilities existed within their building.

Table 3.30 shows the breakdown of the numbers and percentages. From this Table, it can be seen that:

- 85% of respondents stated that there were clothes drying facilities within their building.
- 87% of respondents stated that there were garbage facilities within their building.
- 86% of respondents stated that there were recycling facilities within their building.
- Two thirds of respondents (67%) stated that there were private open space areas within their building.
- Three quarters of respondents (75%) stated that there was onsite parking within their building.
- 61% of respondents stated that there were no visitor parking spaces within their building.
- Just over half of respondents (51%) stated that there was storage space within their building, while the rest (49%) stated there was none.

**Table 3.30: Facilities within Building**

<i>Facilities</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>	
	Number	%	Number	%	Number	%
<i>Clothes drying</i>	192	85%	33	15%	225	100%
<i>Garbage</i>	196	87%	29	13%	225	100%
<i>Recycling</i>	192	86%	30	14%	222	100%
<i>Private open space</i>	147	67%	71	33%	218	100%
<i>Parking onsite</i>	166	75%	56	25%	222	100%
<i>Visitor parking</i>	86	39%	136	61%	222	100%
<i>Storage</i>	112	51%	108	49%	220	100%



### 3.5 Building Design

#### 3.5.1 Building Well Designed

Respondents were asked to agree or disagree to the statement that their building was well designed. Of the 220 responses that were received, more than half of the respondents (54%) agreed that their building was well designed.

- 22% disagreed that their building was well designed.
- 24% were unsure.

**Table 3.31: Building Well Designed**

<i>Well designed</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	119	54
<i>Disagree</i>	48	22
<i>Unsure</i>	53	24
<i>TOTAL</i>	<b>220</b>	<b>100</b>

#### 3.5.2 Building Materials

Respondents were asked to agree or disagree to the statement that materials used in the building were NOT of a high quality. Opinion was fairly evenly spread, of the 217 responses received.

- Approximately a third agreed (31%).
- Approximately a third disagreed (32%).
- Just over one third were unsure (36%).

**Table 3.32: Building Materials**

<i>Do not have a high quality of building materials</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	68	31
<i>Disagree</i>	70	32
<i>Unsure</i>	79	37
<i>TOTAL</i>	<b>217</b>	<b>100</b>

#### 3.5.3 Within Proximity to Services, Transport, Employment

Respondents were asked to agree or disagree to the statement that their building was well located to services, transport and employment opportunities.

- The majority (171 or 78%) of respondents agreed.
- Only 14 (6%) disagreed.
- 16% were unsure.

**Table 3.33: Within Proximity to Services, Transport, Employment**

<i>Well located in terms of services, transport and/or employment opportunities</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	171	78
<i>Disagree</i>	14	6
<i>Unsure</i>	34	16
<b>TOTAL</b>	<b>219</b>	<b>100</b>

**3.5.4 Height and Bulk**

Respondents were asked to agree or disagree to the statement that their building fits in with surrounding buildings in terms of height and bulk. Of the 222 responses received:

- 73% agreed.
- 16% disagreed.
- 11% were unsure.

**Table 3.34: Height and Bulk**

<i>Fit in with the surrounding buildings in terms of height and bulk</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	163	73
<i>Disagree</i>	35	16
<i>Unsure</i>	24	11
<b>TOTAL</b>	<b>222</b>	<b>100</b>

**3.5.5 Character**

Respondents were asked to agree or disagree to the statement that their building added to the character of the surrounding area. 219 respondents responded and of these:

- Exactly half (50%) of respondents agreed.
- Just over a quarter (26%) of respondents disagreed.
- Just under a quarter (24%) of respondents were unsure.

**Table 3.35: Character**

<i>Add to the character of the surrounding area</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	109	50
<i>Disagree</i>	58	26
<i>Unsure</i>	52	24
<b>TOTAL</b>	<b>219</b>	<b>100</b>

**3.5.6 Important Housing Alternative**

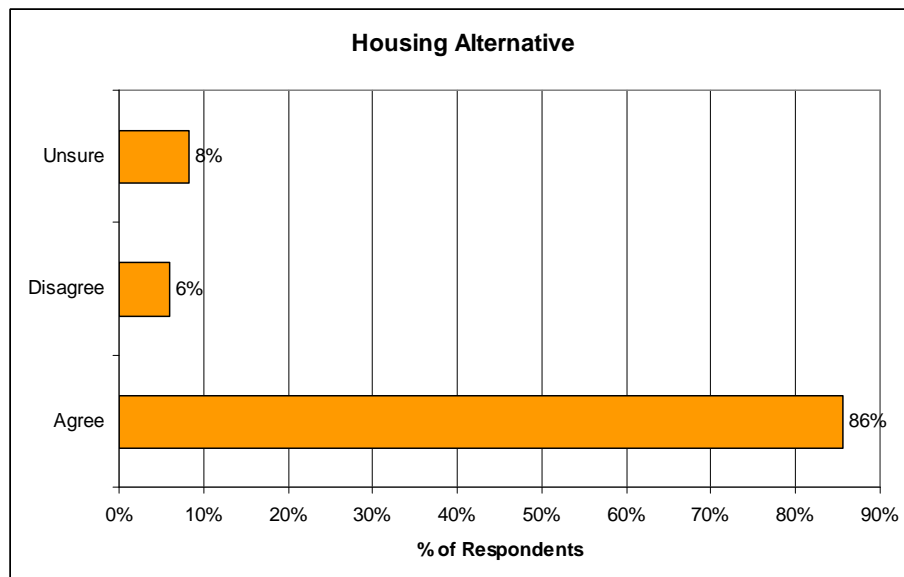
Respondents were asked to agree or disagree to the statement that buildings such as apartments, units, villas and townhouses provide an important housing alternative. 216 responses were received. Of these responses, the majority (86%) agreed.

- Only 6% did not agree; and
- Only 8% were unsure.
- Table 3.36 and Figure 3.16 show a breakdown of these figures and percentages.

**Table 3.36: Important Housing Alternative**

<i>Apartment/unit/villa/townhouse buildings provide an important housing alternative</i>	<i>Number</i>	<i>Percentage %</i>
<b>Agree</b>	185	86
<b>Disagree</b>	13	6
<b>Unsure</b>	18	8
<b>TOTAL</b>	<b>216</b>	<b>100</b>

**Figure 3.22: Important Housing Alternative**



### 3.5.7 Smaller Housing Option

Respondents were asked to agree or disagree to the statement that buildings such as apartments, units, villas and townhouses provide a smaller housing option. The majority of respondents (182 or 86%) agreed with this statement.

**Table 3.37: Smaller Housing Option**

<i>Apartment/unit/villa/townhouse buildings provide a smaller housing option</i>	<i>Number</i>	<i>Percentage %</i>
<b>Agree</b>	182	86
<b>Disagree</b>	17	8
<b>Unsure</b>	13	6
<b>TOTAL</b>	<b>212</b>	<b>100</b>

### 3.5.8 More Affordable Housing Option

Respondents were asked to consider whether such buildings as apartments, units, villas and townhouses are a more affordable housing option. Of the 215 who responded, 74% agreed that such buildings were a more affordable housing option, while 19% disagreed.

**Table 3.38: More Affordable Housing Option**

<i>Apartment/unit/villa/townhouse buildings are a more affordable housing option</i>	<i>Number</i>	<i>Percentage %</i>
<b>Agree</b>	159	74
<b>Disagree</b>	41	19
<b>Unsure</b>	15	7
<b>TOTAL</b>	<b>215</b>	<b>100</b>

### 3.5.9 Location of Apartments/Units/Villas/Townhouses

Respondents were asked to consider whether apartments, units, villas and townhouses should be located throughout the Penrith Local Government Area (LGA). Of the 216 responses received:

- The majority (66%) agreed and felt that these buildings should be located throughout the Penrith LGA.
- 19% were in disagreement with this statement.
- 14% were unsure.

Table 3.39 shows a breakdown of these figures while Chart 3.24 presents this visually.

**Table 3.39: Location of Apartments/Units/Villas/Townhouses**

<i>Apartment/unit/villa/townhouse buildings should be located throughout Penrith LGA</i>	<i>Number</i>	<i>Percentage %</i>
<b>Agree</b>	143	67
<b>Disagree</b>	42	19
<b>Unsure</b>	31	14
<b>TOTAL</b>	<b>216</b>	<b>100</b>

### 3.5.10 Built within Local Centres and near Train Stations

Respondents were asked if they agreed or disagreed with the statement that apartments, units, villas and townhouses should be built within local centres and near train stations. Table 3.54 presents the 214 responses and of these:

- The majority (156 or 73%) of respondents agreed.
- 19% disagreed.
- 8% were unsure.

**Table 3.40: Built within Local Centres and near Train Stations**

<i>Apartment/unit/villa/townhouse buildings should be built within local centres and near train stations</i>	<i>Number</i>	<i>Percentage %</i>
<i>Agree</i>	156	73
<i>Disagree</i>	40	19
<i>Unsure</i>	18	8
<b>TOTAL</b>	<b>214</b>	<b>100</b>

**3.5.11 Future Location/Limitation to Units, Villas, Townhouses**

Respondents were asked to consider what suburbs apartments, units, villas and townhouses should be limited to. Respondents had the ability to choose from a range of suburbs and to make multiple choices. There were 872 responses. Of these 35 suburbs featured in the survey, the Top 10 responses are shown in Table 3.41, in summary:

- 119 (or 14%) of respondents stated that these dwelling types should be in Penrith.
- 103 (or 12%) of respondents stated that these dwelling types should be in Werrington.
- 100 (or 11%) of respondents stated that these dwelling types should be in Kingswood.
- 85 (or 10%) of respondents stated that these dwelling types should be in St Marys.

Table 3.41 shows the rest of the Top 10 responses and a breakdown of the figures and percentages.

**Table 3.41: Top 10 Suburbs Buildings Limited To**

<i>Top 10 suburbs apartment /unit/ villa/ townhouse buildings limited to</i>	<i>Number</i>	<i>Percentage %</i>
<i>Penrith</i>	119	14
<i>Werrington</i>	103	12
<i>Kingswood</i>	100	11
<i>St Marys</i>	85	10
<i>Emu Plains</i>	74	8
<i>South Penrith</i>	70	8
<i>North St Marys</i>	67	8
<i>Oxley Park</i>	65	8
<i>Jamisontown</i>	64	7
<i>Werrington County</i>	64	7
<i>St Clairs</i>	61	7
<b>TOTAL</b>	<b>872</b>	<b>100</b>

**3.5.12 Housing Types to be Encouraged**

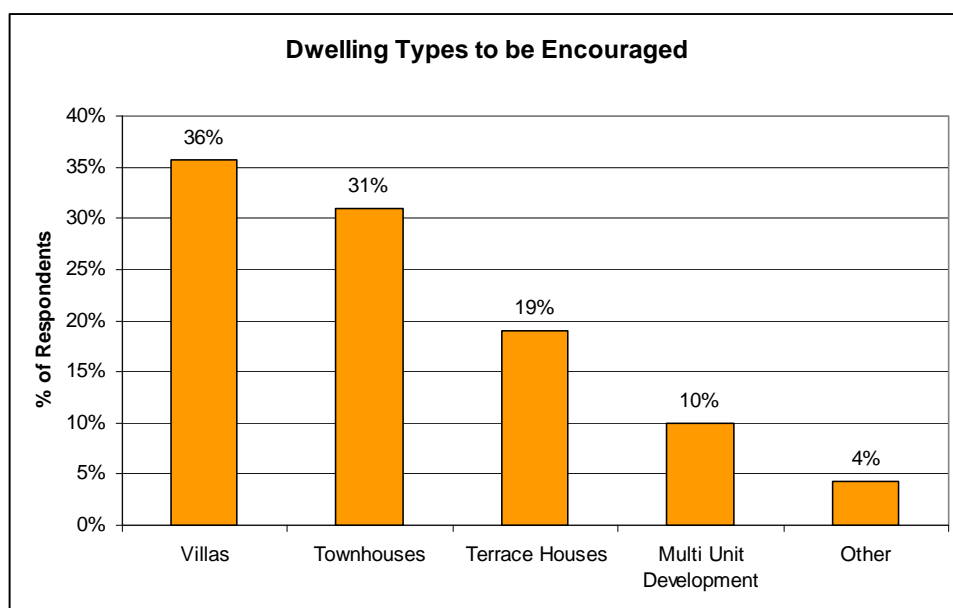
Respondents were asked what housing types should be encouraged in the Penrith LGA. Respondents were able to choose multiple answers. In total, 462 responses were provided as shown in Tale 3.42 and Figure 3.23, 36% of responses indicated that villas should be encouraged more in the area. The findings also showed that:

- 31% of respondents felt townhouses should be encouraged.
- 19% of respondents felt terrace houses should be encouraged.
- 10% felt multi unit developments should be encouraged.
- 4% had other housing types in mind. These included houses with yards and villas for the elderly or over 55s.

**Table 3.42: Housing Types to be Encourages**

<i>Housing Types to be Encouraged in Penrith City Council</i>	<i>Number</i>	<i>Percentage %</i>
<b>Villas</b>	165	36
<b>Townhouses</b>	143	31
<b>Terrace Houses</b>	88	19
<b>Multi Unit Development</b>	46	10
<b>Other</b>	20	4
<b>TOTAL</b>	<b>462</b>	<b>100</b>

**Figure 3.23: Housing Types to be Encouraged**



### 3.6 Demographic Characteristics

Questions were asked of respondents to determine some demographic characteristics and representations of the sample.

#### 3.6.1 Gender

This question asked for the gender of the respondent. 227 responses were received and of these:

- 60% were female.
- 37% were male.
- 3% had indicated that they were a couple (male and female) and had undertaken the survey together.

Such a response suggest the survey is skewed to within Penrith LGA whereby males comprise of 59.5% of the population and females comprise of 50.5% of the population.

### **3.6.2 Age**

This question required respondents to indicate their age by selecting from 8 age ranges. There were 227 responses received to this question, and of these responses:

- Exactly one quarter (25%) were between 60 and 74.
- 18% were between 50 and 59.
- Both age brackets of 40-49 and 30-39 had 17% each.
- 15% were between 20 and 29.
- 9% were older than 75.
- There were no respondents under 15 or between 15 and 19 years of age.

Table 3.43 and Chart 3.24 show the breakdown of these age brackets.

As Table 3.43 indicates, when compared with Penrith LGA age cohorts, the respondents were relatively representative in 20-29 years, 30-39 years and 40-49 years age cohorts. However, respondents were significantly greater in proportion in the older age groups of 60 years and above.

**Table 3.27: Age Brackets**

<i>Age Bracket</i>	<i>Number</i>	<i>Percentage %</i>	<i>Penrith City Council Comparisons %</i>
<i>Under 15</i>	0	0	23%
<i>15-19</i>	0	0	8%
<i>20-29</i>	33	15	15%
<i>30-39</i>	38	16	15%
<i>40-49</i>	38	17	15%
<i>50-59</i>	41	18	13%
<i>60-74</i>	57	25	8%
<i>Older than 75</i>	20	9	4%
<b><i>TOTAL</i></b>	<b>227</b>	<b>100</b>	<b>100</b>

### **3.6.3 Occupation**

Respondents were asked to indicate their occupation. There were 232 responses received and of these:

- More than half (53%) of respondents worked on a full time basis.
- Exactly one quarter (25%) of respondents were pensioners.
- 12% of respondents were retirees.
- 5% of respondents worked on a part time basis.
- 4% of respondents had home duties.
- 1% of respondents were students.

The breakdown of the numbers and percentages are shown in Table 3.59.

**Table 3.59: Occupation**

<i>Occupation</i>	<i>Number</i>	<i>Percentage %</i>	<i>Penrith City Council Comparisons</i>
<i>Full Time Work</i>	122	53	64.3%
<i>Part Time Work</i>	11	5	24.2%
<i>Student</i>	3	1	
<i>Pensioner</i>	57	25	
<i>Home Duties</i>	10	4	
<i>Retiree</i>	28	12	
<i>Unemployed</i>	1	0	5.3%
<b><i>TOTAL</i></b>	<b>232</b>	<b>100</b>	



## 04 CONCLUSION

### *Locality Considerations*

- With regard to whether residents felt that their dwelling was within close proximity to a variety of services, the majority (94%) stated their dwelling was close to public transport, 92% stated their dwelling was close to shops and services (i.e. milk and bread), 78% stated their dwelling was close to a broad range of shops and services (i.e. banks, post office), and 75% stated their dwelling was close to schools and other community facilities. A majority of respondents (80%) also stated that their dwelling was within walking distance to services and facilities. However, a significant proportion of respondents (63%) disclosed that they were not within close proximity to parks and open space.
- Although an overall high proportion of residents were within close proximity to a variety of services, 40% of respondents were reliant on their car. 56% stated that they were not reliant on their car.
- A significant proportion of respondents (76%) revealed they liked the area they lived in with almost half of respondents (49%) stating they felt the area to be attractive. On the other hand, 44% of respondents stated that they did not find the area attractive.
- 42% of respondents were unsure about whether their area of residence had a strong community and 37% felt that it did not have a strong community. Only 21% felt that their area of residence had a strong community. However, more than half of the respondents (55%) stated they felt safe within their area.
- Building Information
- A significant proportion of residents (68%) felt the design of their building enhanced or matched the rest of the street and a majority of respondents (80%) felt the height of their building fit in with the surrounding buildings or houses. Just over half of respondents (53%) felt that the building materials used were of high quality.
- The majority of respondents (88%) stated they felt safe in their building.
- With regard to the elements of respondents' buildings, respondents stated that the following elements were good: sunlight/solar access into their building (41%), ventilation/cross breezes (45%), privacy/distance from other buildings' windows/screening (39%), garbage and recycling facilities/areas (54%), clothes drying facilities/areas (41%), cleanliness/maintenance of common areas (46%), private open space (47%), communal open space (39%), and on and off street parking (37%). On the other hand, respondents stated that both noise/sound proofing (35%) and day-to-day accessibility for moving items (37%) were fair. Almost half of respondents (47%) stated that there was poor disabled access.
- With respect to the facilities within respondents' buildings, respondents stated that clothes drying (85%), garbage (87%), recycling (86%), private open space (67%), onsite parking (75%), and storage (51%) all existing within their building. However, 61% of respondents stated that there was no visitor parking in their building.

### *Building Design*

- Exactly half of respondents (50%) agreed that their building adds to the character of the surrounding area. A significant proportion (73%) of respondents felt that their building fits in with the height and bulk of the surrounding buildings.

- A majority of respondents (86%) felt that such dwellings as apartments, units, villas, and townhouses, provide an important housing alternative. Furthermore, 86% felt that these dwellings types provide a smaller housing option and 74% felt that these dwelling types provide a more affordable housing option.
- When considering the future location of such dwellings as apartments, units, villas, and townhouses, 66% of respondents felt that they should be located throughout the Penrith LGA and 73% felt they should be built within local centres and near train stations. 31% felt that townhouses should be encouraged and that the future locations of these dwelling types should be Penrith (14%), Werrington (12%), Kingswood (11%) and St Marys (10%).

#### *Demographics*

- The key demographics of the survey respondents were that 60% of respondents were female, exactly one quarter (25%) were between the ages of 60 and 74 years of age, and just over half (53%) worked on a full time basis.

Our Ref: 1654302  
Contact: Abdul Cheema  
Telephone: 4732 8120

14 May 2008

«To\_Field»  
«Property\_Address»

PENRITH MULTI-UNIT HOUSING SURVEY

Dear Sir/Madam,

Penrith City Council, together with HASSELL planning and urban design are currently undertaking a survey on the liveability of residential multi-unit buildings in Penrith. This survey is a component of Council's Urban Study and Strategy which is currently being prepared.

Council is inviting residents to comment on the quality of urban design and liveability of residential multi-unit housing as well as other building attributes. The responses to these surveys will assist to shape the type of housing standards and guidelines for future multi unit housing.

As a resident of a multi-unit development, could you please spare 5-10 minutes to answer this survey. If you choose to fill in a written survey, a reply paid envelope to Council has been enclosed for your convenience. Alternatively, this survey can be completed online at the following web address: <http://www.penrithcity.nsw.gov.au/index.asp?id=5037>.

All answers remain confidential and the property of Penrith City Council and HASSELL Ltd. Should you have any questions regarding this survey, please contact Abdul Cheema on 4732 8120.

Please return this survey within two weeks of receiving this mail to:  
Local Plan Team  
Penrith City Council  
PO BOX 60  
PENRITH NSW 2751

Yours faithfully

**Ruth Goldsmith**  
**Local Planning Manager**





**Survey**

**1.5 Do you:** (Please tick)

- Own your apartment/unit/villa/townhouse
- Have a mortgage to pay off your apartment/unit/villa/townhouse
- Rent your apartment/unit/villa/townhouse

**1.6 What is your reason for choosing to live at your current address? (You may nominate multiple reasons with a tick)**

- Suitable size of apartment/unit/villa/townhouses
- Down-size from previous home
- Close to shops and services including schools
- Close to employment
- Affordability
- Location
- Close to family and friends
- Lifestyle
- Quality of the overall building
- Facilities within the building such as swimming pool etc
- No maintenance
- No other housing options available
- Personal reasons
- Other, please specify

**1.7 How many bedrooms does your apartment/unit/villa/townhouse have? Please tick**

- One
- Two
- Three
- Four or more



**1.8 How old is your building? (Please tick)**

- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- More than 10 years
- Don't know

**1.9 How long do you anticipate staying at your current address? (Please tick)**

- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- More than 10 years
- Don't know



**Survey**

**4.2 Please tick whether you agree/disagree or are unsure of the following statements relating to how you would like apartment/unit/villa/townhouse buildings to be developed within Penrith local government area:**

	Agree	Disagree	Unsure
Apartment/unit/villa/townhouse buildings provide an important housing alternative			
Apartment/unit/villa/townhouse buildings provide a smaller housing option			
Apartment/unit/villa/townhouse buildings are a more affordable housing option			
Apartment/unit/villa/townhouse buildings should be located throughout Penrith local government area			
Apartment/unit/villa/townhouse buildings should be built within local centres and near train stations			

**4.3 What suburbs should apartment/unit/villa/townhouse buildings be limited to? (Please tick)**

- Agnes Banks
- Berkshire Park
- Cambridge Gardens
- Cambridge Park
- Castlereagh
- Claremont Meadows
- Colyton
- Cranebrook
- Emu Heights
- Emu Plains
- Erskine Park
- Glenmore Park
- Jamisontown
- Kemps Creek
- Kingswood
- Kingswood Park
- Leonay
- Llandilo
- Londonderry
- Luddenham
- Mt Vernon
- Mulgoa
- North St Marys
- Orchard Hills
- Oxley Park
- Penrith
- Regentville
- St Clair
- St Marys
- South Penrith
- Wallacia
- Werrington
- Werrington County
- Werrington Downs
- Other (Please list) \_\_\_\_\_

**4.4 Which of the following housing types should be encouraged in Penrith City Council?: (Please tick)**

- Villas
- Townhouses
- Terrace Houses
- Multi unit Development
- Other (please state) \_\_\_\_\_



# PENRITH MULTI UNIT HOUSING LIVEABILITY SURVEY

Residents of Multi Unit Housing Apartment Buildings, Units, Townhouses and Villas



# PENRITH MULTI UNIT HOUSING LIVEABILITY SURVEY

Residents of Multi Unit Housing Apartment Buildings, Units, Townhouses and Villas



## Survey

**3.3 Does your building provide enough space for the following facilities? (Please tick 'yes' or 'no' for each facility)**

	Yes	No
Clothes drying		
Garbage		
Recycling		
Private open space		
Parking onsite		
Visitor parking		
Storage		

## 4. BUILDING DESIGN - GENERAL COMMENTS

**4.1 Existing apartment/unit/villa townhouse buildings within Penrith City Council area are: (Please tick if you agree/disagree/are unsure with these statements)**

	Agree	Disagree	Unsure
Well designed			
Do not have high quality of building materials			
Well located in terms of services, transport and/or employment opportunities			
Fit in with the surrounding buildings in terms of height and bulk			
Add to the character of the surrounding area			

## Survey

**1.10 If you plan on moving within the next 6 months, what is your likely reason for moving? (Please tick one)**

- End of rental lease
- Dislike the building
- Dislike the area
- Employment opportunities elsewhere
- Buying a new property or renting elsewhere
- Other, please specify \_\_\_\_\_

**1.11 What area did you live in before your current address? Please tick one**

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> Agnes Banks       | <input type="checkbox"/> Erskine Park   | <input type="checkbox"/> Mt Vernon      | <input type="checkbox"/> Wallacia  |
| <input type="checkbox"/> Berkshire Park    | <input type="checkbox"/> Glenmore Park  | <input type="checkbox"/> Mulgoa         | <input type="checkbox"/> Werrington  |
| <input type="checkbox"/> Cambridge Gardens | <input type="checkbox"/> Jamisontown    | <input type="checkbox"/> North St Marys | <input type="checkbox"/> Werrington County                                     |
| <input type="checkbox"/> Cambridge Park    | <input type="checkbox"/> Kemps Creek    | <input type="checkbox"/> Orchard Hills  | <input type="checkbox"/> Werrington Downs                                      |
| <input type="checkbox"/> Castlereagh       | <input type="checkbox"/> Kingswood      | <input type="checkbox"/> Oxley Park     | <input type="checkbox"/> Outside of Penrith City Council, please specify _____ |
| <input type="checkbox"/> Claremont Meadows | <input type="checkbox"/> Kingswood Park | <input type="checkbox"/> Penrith        |  |
| <input type="checkbox"/> Colyton           | <input type="checkbox"/> Leonay         | <input type="checkbox"/> Regentville    |  |
| <input type="checkbox"/> Cranebrook        | <input type="checkbox"/> Llandilo       | <input type="checkbox"/> St Clair       |  |
| <input type="checkbox"/> Emu Heights       | <input type="checkbox"/> Londonderry    | <input type="checkbox"/> St Marys       |  |
| <input type="checkbox"/> Emu Plains        | <input type="checkbox"/> Luddenham      | <input type="checkbox"/> South Penrith  |  |



**1.12 Prior to moving into your current home, what type of housing were you living in? (Please tick)**

- Separate House
- Semi-detached or terrace house
- Townhouse or Villa
- Apartment/unit
- Other, please specify \_\_\_\_\_



# PENRITH MULTI UNIT HOUSING LIVEABILITY SURVEY

Residents of Multi Unit Housing Apartment Buildings, Units, Townhouses and Villas



## Survey

### 2 LOCALITY

Now we would like some information about the area in which you live

**2.1 Please identify whether you agree, disagree or are unsure of the following statements that relate to the location of your apartment/unit/villa/townhouse:**

	Agree	Disagree	Unsure
My apartment/unit/villa/townhouse is close to public transport (train, bus)			
Everyday shops and services (such as milk, bread etc) are close to my apartment/unit/villa/townhouse			
My apartment/unit/villa/townhouse is close to shops and services that provide a wider range of facilities and services (banks, post office, supermarket, chemist, butcher etc)			
I do not work near my apartment/unit/villa/ townhouse			
Schools and other community facilities are close to my apartment/unit/ townhouse/villa			
Parks and open space are not located close to my apartment/unit/villa/townhouse			

**2.2 Please tick whether you agree, disagree or are unsure of the following statements that relate to the neighbourhood in which you live:**

	Agree	Disagree	Unsure
I like the area in which I live			
The area in which I live is not very attractive			
I do not feel safe in the area in which I live			
The area in which I live has a strong community			
I can walk to a range of services and facilities			
I am reliant on my car to get to local services and facilities			

# PENRITH MULTI UNIT HOUSING LIVEABILITY SURVEY

Residents of Multi Unit Housing Apartment Buildings, Units, Townhouses and Villas



## Survey

### 3. INFORMATION RELATING TO YOUR BUILDING

Now we would like your comments on the building in which you currently live.

**3.1 Please tick whether you agree, disagree or are unsure of the following statements:**

	Agree	Disagree	Unsure
I feel safe within the building in which I live			
The design of my building enhances or matches the rest of the street			
The height of my building does not fit in with surrounding buildings or houses			
The building materials used in my building or home are modern and/or of a high quality			

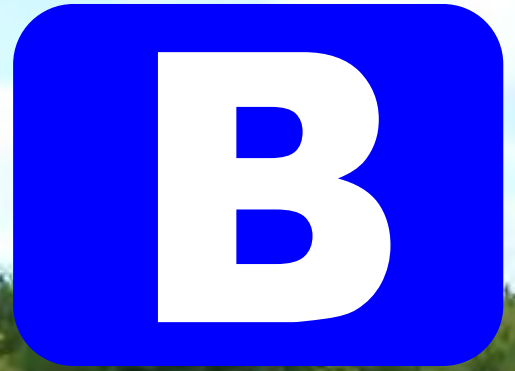
**3.2 Please rate the following aspects of your apartment/unit/villa/townhouse as excellent/good/fair or poor. (Please tick one for each statement)**

	Excellent	Good	Fair	Poor
Sunlight or solar access into my apartment				
Ventilation/cross breezes				
Noise/Sound proofing				
Privacy/distance from other building's windows/screening				
Garbage and recycling facilities/areas				
Clothes drying facilities/areas				
Cleanliness/maintenance of common areas				
Private open space (balconies, private yard)				
Communal open space (common yard and recreation areas)				
Parking – on and off street (sufficient numbers, size and location)				
Disabled access				
Day-to-day accessibility for moving furniture etc				









# DEMOGRAPHIC TABLES





## APPENDIX B: DEMOGRAPHIC TABLES

### DEMOGRAPHIC TABLES

Table 3.1.2 Age and Population Penrith LGA compared with WSROC and Sydney SD, in 2001 to 2006

	1991				2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of people	%			No. of people	%			No. of people	%		
0 to 4	14,638	9.8	8.2	7.2	13,916	8.1	7.6	6.7	12,933	7.5	7.4	6.6
5 to 11	20,044	13.4	11.3	9.7	19,938	11.6	10.9	9.5	18,431	10.7	10.5	9.1
12 to 17	15,432	10.3	9.8	8.6	16,828	9.8	9	8	16,354	9.5	9	7.9
18 to 24	17,265	11.5	11.9	11.7	18,915	11	10.2	9.9	18,614	10.8	10.2	9.9
25 to 34	26,905	18	16.3	16.8	27,385	15.9	15.4	16	25,646	14.9	14.5	15.3
35 to 49	33,588	22.4	21.5	21.4	38,958	22.7	22.5	22.6	37,396	21.8	22.2	22.5
50 to 59	9,762	6.5	8.7	9.1	18,800	10.9	11.1	11.4	21,654	12.6	12	12.2
60 to 69	7,065	4.7	6.9	7.9	8,780	5.1	6.5	7.1	10,949	6.4	7.2	7.8
70 to 84	4,675	3.1	4.7	6.6	7,363	4.3	5.9	7.3	8,135	4.7	6	7.3
85 and over	415	0.3	0.6	0.9	987	0.6	0.9	1.4	1,451	0.8	1.1	1.6
Total	149,789	100	100	100	171,870	100	100	100	171,563	100	100	100

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.3 Country of Birth in Penrith LGA compared with WSROC and Sydney SD, in 2001 to 2006

Country of Birth	2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of people	%			No. of people	%		
United Kingdom	10,490	6.1	3.6	4.2	9,063	5.3	3.0	4.2
New Zealand	2,641	1.5	1.7	2.0	2,948	1.7	1.7	2.0
Philippines	2,542	1.5	1.9	1.3	2,593	1.5	2.1	1.3
India	1,439	0.8	1.2	1.3	1,597	0.9	1.8	1.3
Malta	1,422	0.8	0.8	0.4	1,342	0.8	0.6	0.4
Italy	1,067	0.6	1.2	1.1	1,011	0.6	1.1	1.1
Fiji	931	0.5	1.1	0.7	1,001	0.6	1.1	0.7
Germany	1,136	0.7	0.5	0.5	995	0.6	0.4	0.5
South Africa	795	0.5	0.3	0.7	706	0.4	0.4	0.7
Netherlands	831	0.5	0.3	0.3	697	0.4	0.2	0.3
Non-English speaking backgrounds	21,431	12.5	27.8	24.0	21,513	12.5	29.2	24.0
Main English speaking countries	15,074	8.8	6.1	7.8	13,770	8.0	5.6	7.8
TOTAL OVERSEAS BORN	36,505	21.2	33.9	31.8	35,283	20.6	34.8	31.8
AUSTRALIA	125,007	72.7	60.1	60.3	126,713	73.9	58.4	60.3
NOT STATED	10,358	6.0	6.0	7.9	9,570	5.6	6.8	7.9
Total	171,870	100.0	100.0	100.0	171,566	100.0	100.0	100.0

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08

Table 3.1.4: Languages Spoken at Home in Penrith LGA compared with WSROC and Sydney SD, in 2001 to 2006

	2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of people	%			No. of people	%		
Arabic	2,177	1.3	6.0	3.6	2,570	1.5	6.9	3.9
Filipino (Tagalog)	2,252	1.3	1.8	1.0	2,193	1.3	1.9	1.1
Italian	1,637	1.0	2.0	2.0	1,478	0.9	1.7	1.7
Maltese	1,447	0.8	0.8	0.4	1,364	0.8	0.6	0.3
Greek	1,428	0.8	1.3	2.1	1,243	0.7	1.2	2.0
Hindi	967	0.6	1.2	0.7	1,171	0.7	1.6	0.9
Croatian	1,249	0.7	0.9	0.6	1,153	0.7	0.8	0.5
Spanish	1,083	0.6	1.6	1.1	1,058	0.6	1.4	1.1
Samoan	410	0.2	0.4	0.3	647	0.4	0.5	0.3
Cantonese	596	0.3	2.9	2.9	597	0.3	2.9	3.0
Speak English Only	140,389	81.7	59.6	66.5	140,517	81.9	56.5	63.9
Non-English total	22,592	13.1	35.0	27.6	23,131	13.5	37.9	29.3
Not Stated	8,889	5.2	5.4	5.9	7,917	4.6	5.6	6.7
Total	171,870	100.0	100.0	100.0	171,565	100.0	100.0	100.0

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08

Table 3.1.4.1 Household Income 2006

Weekly Household Income	2006			
	Penrith LGA		WSROC	Sydney SD
	No. of households	%		
Negative / Nil income	458	0.8	1.2	1.4
\$1 to \$149	614	1.1	1.5	1.4
\$150 to \$249	2,245	3.9	4.7	4.4
\$250 to \$349	3,013	5.3	5.6	5.7
\$350 to \$499	2,119	3.7	5.0	3.9
\$500 to \$649	4,824	8.4	9.0	8.3
\$650 to \$799	3,549	6.2	6.0	5.6
\$800 to \$999	3,972	6.9	6.7	6.3
\$1000 to \$1199	6,358	11.1	10.1	9.6
\$1200 to \$1399	3,791	6.6	5.8	4.9
\$1400 to \$1699	5,430	9.5	8.0	7.6
\$1700 to \$1999	4,380	7.7	6.6	6.5
\$2000 to \$2499	4,726	8.3	7.3	7.0
\$2500 to \$2999	3,062	5.4	5.6	7.8
\$3000 or more	2,404	4.2	5.1	8.2
Partial income stated	4,688	8.2	8.7	8.5
All incomes not stated	1,529	2.7	3.1	2.9
Total	57,162	100.0	100.0	100.0

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.4.2: Penrith LGA Qualifications

Qualifications	2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of people	%			No. of people	%		
Bachelor or Higher degree	9,393	7.2	10.9	16.5	11,526	8.7	13.7	20.0
Advanced Diploma or Diploma	6,016	4.6	5.7	6.9	7,869	6.0	7.0	8.1
Vocational	24,436	18.8	16.1	15.3	26,961	20.4	16.2	14.9
No qualifications	75,185	58.0	55.2	48.7	69,552	52.7	49.7	42.8
Not Stated	14,709	11.3	12.1	12.7	16,093	12.2	13.3	14.3
Total	129,739	100.0	100.0	100.0	132,001	100.0	100.0	100.0

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.4.3 Employment Status

Employment Characteristics	2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of people	%			No. of people	%		
Employed full time	55,159	64.0	63.2	63.0	56,345	64.3	62.9	63.0
Employed part time	23,239	27.0	26.0	28.9	24,052	27.4	27.2	28.9
Employed not stated	2,688	3.1	3.3	2.8	2,613	3.0	3.3	2.8
Total employed	81,086	94.1	92.6	94.7	83,010	94.7	93.4	94.7
Total unemployed	5,116	5.9	7.4	5.3	4,643	5.3	6.6	5.3
Total labour force	86,202	100.0	100.0	100.0	87,653	100.0	100.0	100.0
Total in labour force	86,202	66.4	60.4	60.7	87,653	66.4	59.8	60.7
Total not in labour force	38,411	29.6	35.2	31.8	37,844	28.7	34.1	31.8
Not stated	5,126	4.0	4.4	7.6	6,510	4.9	6.2	7.6
Total	129,739	100.0	100.0	100.0	132,007	100.0	100.0	100.0

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.4.5a Occupations of Residents in Penrith LGA compared to WSROC and Sydney in 2006

Occupations	2006			
	Penrith LGA		WSROC	Sydney SD
	No. of people	%		
Managers	8344	10.05	10.63	13.18
Professionals	10679	12.86	17.45	23.70
Technicians and Trades Workers	13169	15.86	14.98	12.70
Community and Personal Service Workers	7060	8.50	7.84	8.03
Clerical and Administrative Workers	15885	19.14	17.70	16.73
Sales Workers	8638	10.41	9.60	9.52
Machinery Operators And Drivers	8778	10.57	8.93	5.99
Labourers	8769	10.56	10.51	8.08
Inadequately described or Not stated	1688	2.03	2.36	2.07
Total	83010	100	100	100

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.4.5a Occupations/Industries of Residents in Penrith LGA compared to WSROC and Sydney in 2006

Occupations	2006			
	Penrith LGA		WSROC	Sydney SD
	No. of people	%		
Agriculture, Forestry & Fishing	592	0.7	0.6	0.5
Mining	217	0.3	0.1	0.2
Manufacturing	10,956	13.2	13.3	9.7
Electricity, Gas, Water and Waste Services	1,137	1.4	1.0	0.8
Construction	7,784	9.4	8.2	7.1
Retail Trade	10,147	12.2	11.2	10.5
Wholesale Trade	4,589	5.5	6.1	5.5
Accommodation and Food Services	4,599	5.5	5.5	6.1
Transport, Postal and Warehousing	5,932	7.1	6.3	5.4
Information Media and Telecommunications	1,322	1.6	2.1	3.0
Financial and Insurance Services	3,731	4.5	5.1	6.4
Rental, Hiring and Real Estate Services	1,286	1.5	1.5	1.8
Professional, Scientific and Technical Services	3,456	4.2	5.7	8.9
Administrative and Support Services	2,375	2.9	3.2	3.4
Public Administration and Safety	5,820	7.0	5.9	5.6
Education and Training	5,084	6.1	6.4	7.2
Health Care and Social Assistance	7,411	8.9	9.5	9.9
Arts and Recreation Services	938	1.1	1.1	1.4
Other Services	3,436	4.1	4.1	3.8
Inadequately described or Not stated	2,198	2.6	3.2	2.8
<b>Total</b>	<b>83,010</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/08

Table 3.1.4.6 Journey to Work for Penrith LGA Residents compared with NSW SR and Sydney SD, 2001 and 2006

Modes of Transport	2001				2006			
	Penrith LGA		NWS SR*	Sydney SD	Penrith LGA		NWS SR*	Sydney SD
	No. of people	%			No. of people	%		
Train	8,688	10.7	12.7	13.3	7,786	9.4	11.6	12.3
Bus	836	1.0	1.8	5.3	650	0.8	2.0	5.4
Tram or Ferry	15	0	0	0.3	10	0	0	0.3
Taxi	103	0.1	0.2	0.4	108	0.1	0.2	0.3
Car - as driver	48,010	59.2	57.7	52.1	51,582	62.1	60.1	53.7
Car - as passenger	5,349	6.6	6.6	5.6	5,169	6.2	6.2	5.3
Truck	2,316	2.9	2.2	1.6	2,087	2.5	1.9	1.3
Motorbike	416	0.5	0.4	0.4	439	0.5	0.4	0.5
Bicycle	351	0.4	0.4	0.5	311	0.4	0.4	0.6
Walked only	1,465	1.8	2.3	3.8	1,543	1.9	2.3	4.2
Other	862	1.1	1.1	1.1	671	0.8	0.7	0.9
Worked at home	2,593	3.2	3.4	4.1	2,329	2.8	3.0	3.9
Did not go to work	8,688	10.7	9.3	9.8	8,732	10.5	8.9	9.5
Not stated	1,394	1.7	2.0	1.7	1,591	1.9	2.2	1.9
<b>Total</b>	<b>81,086</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>83,008</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS Census of Population and Housing 2001 (Table B28) and 2006 (Table B45)\*  
WSROC data unavailable for this data set.

Table 3.1.5.3a Scenario A projected age demographic 2007-2031, Penrith LGA

	2007		2014		2021		2031*	
	No. People	%	No. People	%	No. People	%	No. People	%
0 to 4	13,001	7.4	13,166	7.1	14,993	7.1	16,637	7.1
5 to 11	18,355	10.4	19,260	10.4	21,837	10.4	24,231	10.4
12 to 17	16,280	9.2	16,082	8.7	18,322	8.7	20,331	8.7
18 to 24	19,910	11.3	20,012	10.8	21,886	10.4	24,285	10.4
25 to 34	27,101	15.4	28,000	15.1	32,195	15.3	35,725	15.3
35 to 49	38,027	21.6	37,820	20.5	43,230	20.5	47,969	20.5
50 to 59	22,003	12.5	22,639	12.2	24,100	11.5	26,742	11.5
60 to 69	11,895	6.7	15,730	8.5	17,520	8.3	19,441	8.3
70 to 84	8255	4.7	10,234	5.5	14,022	6.7	15,599	6.7
85 and over	1,505	0.9	1,935	1.0	2,343	1.1	2,600	1.1
<b>Total</b>	<b>176,332</b>	<b>100</b>	<b>184,878</b>	<b>100</b>	<b>210,448</b>	<b>100</b>	<b>233,560</b>	<b>100</b>

\*Projected population distribution for 2031 assumes constant age distribution of 2021

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08



Table 3.1.5.3b: Scenario A Household Structure 2007-2031, Penrith LGA

Household Type	2007		2014		2021		2031*	
	No.	%	No.	%	No.	%	No.	%
Couple with children	25,525	41.4	25,649	38.4	28,766	37.4	32352	37.4
Couple with no children	13,401	21.8	14,917	22.4	17,200	22.3	19290	22.3
One parent household	7,703	12.5	8,037	12	8,839	11.5	9948	11.5
Lone person household	11,773	19.1	14,689	22	18,249	23.7	20501	23.7
Group household	1,584	2.6	1,724	2.6	1,993	2.6	2249	2.6
Other	1,613	2.6	1,707	2.6	1,950	2.5	2163	2.5
Total	61,606	100	66,722	100	76,997	100	86,503	100

\*Projected household structure for 2031 assumes household structure of 2021

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08 and HASSELL 2008

Table 3.1.5.3c Scenario B Projected Age Demographic 2007-2031, Penrith LGA

	2006*		2014**		2021**		2031***	
	No. People	%	No. People	%	No. People	%	No. People	%
0 to 4	12,933	7.5	12,688	7.1	13,497	7.1	14,520	7.1
5 to 11	18,431	10.7	18,585	10.4	19,771	10.4	21,268	10.4
12 to 17	16,354	9.5	15,547	8.7	16,539	8.7	17,792	8.7
18 to 24	18,614	10.8	19,300	10.8	19,771	10.8	21,268	10.4
25 to 34	25,646	14.9	26,984	15.1	29,086	15.1	31,289	15.3
35 to 49	37,396	21.8	36,634	20.5	38,971	20.5	41,923	20.5
50 to 59	21,654	12.6	21,802	12.2	21,862	12.2	23,518	11.5
60 to 69	10,949	6.4	15,190	8.5	15,779	8.5	16,974	8.3
70 to 84	8,135	4.7	9,829	5.5	12,737	5.5	13,702	6.7
85 and over	1,451	0.8	1,787	1.0	2,091	1.0	2,250	1.1
Total	171,563	100	178,703	100	190,103	100	204,503	100

\*Data and age distribution from 2006 ABS Census

\*\*Age distribution adopted from Penrith City Council Community ID Population Projections

\*\*\*Projected household structure for 2031 assumes household structure of 2021Scenario B: Household structure 2031

Table 3.1.5.3d: Scenario B Household Structure 2006-2031, Penrith LGA

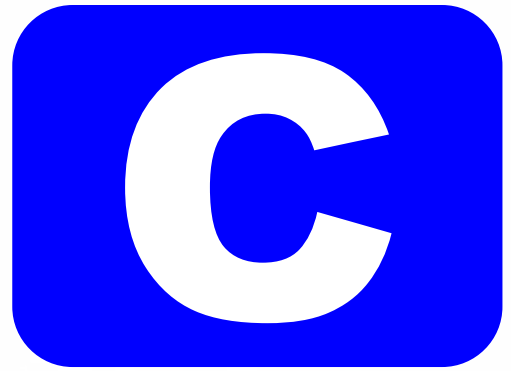
Household Type	2006*		2014**		2021**		2031***	
	No.	%	No.	%	No.	%	No.	%
Couple with children	23,892	40.7	25,416	38.4	26,333	37.4	27,995	37.4
Couple with no children	13,123	22.4	14,826	22.4	15,701	22.3	15,701	22.3
One parent household	8,527	14.5	7,942	12.0	8,097	11.5	8,097	11.5
Lone person household	10,577	18.0	14,561	22.0	16,687	23.7	16,687	23.7
Group household	1,403	2.4	1,721	2.6	1,831	2.6	1,831	2.6
Other	1,753	3.0	1,721	2.6	1,760	2.5	1,760	2.5
Total	58,663	100	66,186	100	70,409	100	74,853	100

\*Data and age distribution from 2006 ABS Census

\*\*Age distribution adopted from Penrith City Council Community ID Population Projections

\*\*\*Projected household structure for 2031 assumes household structure of 2021

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08 and HASSELL 2008



# HOUSING TABLES



15/10/20



## APPENDIX C: HOUSING TABLES

Table 3.2.3.1 Dwelling Types in Penrith LGA compared with North Western Sydney SD and Sydney SD, in 2001 to 2006

	2001				2006			
	No. of Dwellings	%	North Western SD*	Sydney SD	No. of Dwellings	%	North Western SD*	Sydney SD
Separate house	47,489	85.8%	87.9	64.5	48,514	85.2%	89.2	63.6
Semi-detached, row or terrace house, townhouse:	3,766	6.8%	3.0	11.3	4,635	8.1%	3.1	11.8
Flat, unit or apartment:								
In a one or two storey block	1,689	3.1%	5.4	6.2	1,723	3.0%	4.9	6.5
In a three or more storey block	1,617	2.9%	0.1	16.0	1,623	2.9%	0.1	17.2
Attached to a house	126	0.2%	0.1	0.4	62	0.1%	0.1	0.2
Total flats	3,432	6.2%	5.6	22.6	3,408	6.0%	5.2	23.9
Caravan, cabin, houseboat	129	0.2%	1.9	0.3	259	0.5%	1.7	0.3
Improvised home, tent, sleepers out	28	0.1%	0.2	0.0	43	0.1%	0.3	0.1
House or flat attached to a shop or office	67	0.1%	0.8	0.4	46	0.1%	0.5	0.3
Total other dwellings	224	0.4%	2.9	0.8	348	0.6%	2.5	0.6
Total	55,363	100.0%	100.0	100.0	56,931	100.0%	100.0	100.0

Source: NSW Centre for Affordable Housing, Housing Kit Data Base (Accessed 12/03/08)

\*North Western Sydney SR data used as WSROC data unavailable.

Table 3.2.3.2 Housing Tenure in Penrith LGA compared with WSROC and Sydney SD, in 2001 & 2006

Housing Tenure	2001				2006			
	Penrith LGA		WSROC	Sydney SD	Penrith LGA		WSROC	Sydney SD
	No. of Dwellings	%			No. of Dwellings	%		
Fully owned	18,572	32.4	38.0	30.1	15,624	26.5	28.8	39.0
Being purchased	21,147	36.9	27.9	31.1	24,639	41.8	35.6	23.7
Renting- Government	2,548	4.5	7.1	4.5	2,547	4.3	6.4	5.1
Renting - Other	11,006	19.2	19.3	24.6	12,396	21.0	21.0	23.6
Renting - Not stated	162	0.3	0.3	0.6	339	0.6	0.6	0.3
Renting - Total	13,716	24.0	26.7	29.7	15,282	25.9	28.1	29.0
Other	1,105	1.9	2.3	0.7	246	0.4	0.6	2.4
Not Stated	2,704	4.7	5.1	8.4	3,123	5.3	6.9	6.0
Total	57,244	100.0	100.0	100.0	58,914	100.0	100.0	100.0

Source: Penrith City Council Community ID Population Projections, (ID Profile) Accessed 03/03/08

Table 3.2.3.3 Selected Affordability Measures in Penrith LGA compared with North Western Sydney SD and Sydney SD, in 2001 and 2006

Housing Costs	Penrith LGA		North Western Sydney SR*		Sydney SR	
	2001	2006	2001	2006	2001	2006
Median household income (\$/weekly)	\$800-\$999	\$1,147	\$800-\$999	\$1,121	\$1,000-\$1,199	\$1,176
Median housing loan repayment (\$/monthly)	\$1,000-\$1,199	\$1,560	\$1,000-\$1,199	\$1,612	\$1,200-\$1,399	\$1,833
Median rent (\$/weekly)	\$150-\$199	\$210	\$150-\$199	\$205	\$200-\$249	\$250
Average household size	3	2.9	3	2.9	2.7	2.7

Source: ABS 2001 Census Data Table B33 and ABS 2006 Census Data Table B02

\*North Western Sydney SR data used as WSROC data unavailable.

Table 3.2.3.4 Rent and Sales Data for Penrith LGA, Outer Ring and Sydney SD areas 2007

Rent and Sales Data	Penrith LGA	Outer Ring*	Sydney SD
Median Sales Price \$'000	\$311	\$375	\$435
Median Rental			
Weekly rental one bedroom	\$160	\$210	\$330
Weekly rental two bedroom	\$200	\$270	\$350
Weekly rental three bedroom	\$270	\$290	\$350
Weekly rental four bedrooms plus	\$350	\$400	\$450

Source: Department of Housing Rent and Sales Data Issue 82, from

Table 3.2.3.5a: Building Approvals in Penrith LGA 1995 - 2005

Building Approvals	Number			Annual Change (%)		
	Separate dwellings	Other dwellings	Total dwellings	Separate dwellings	Other dwellings	Total dwellings
Year (ending June 30)						
2005-06	109	35	144	-6	-43	-49
2004-05	115	78	193	-177	-466	-643
2003-04	292	544	836	-238	229	-9
2002-03	530	315	845	-102	58	-44
2001-02	632	257	889	129	107	236
2000-01	503	150	653	-503	-13	-516
1999-00	1,006	163	1,169	148	-253	-105
1998-99	858	416	1,274	6	75	81
1997-98	852	341	1,193	202	20	222
1996-97	650	321	971	-66	-54	-120
1995-96	716	375	1,091	--	--	--

Source: Penrith City Council Community ID, (ID Profile) Accessed 03/03/0

Table 3.2.3.5b: Dwelling Approvals 2006-2008 (March)

Development Type		No. of Approvals	Total No. Dwellings
Separate dwellings			
	Single dwelling	122	122
	Two storey dwelling	140	140
	Multi level dwelling	1	1
	Villa	1	1
Multi dwelling developments			
	Dual occupancy dwelling	54 (11 on septic)	108
	Attached dual occupancy	14	28
	Units 2-5 dwellings	2	7
	Units 5-10 dwellings	2	
	Units 10+ dwellings	5	104
	Residential Flat Building/Apartments/Multi Unit	3	38
	Seniors Living/ Self Care/Retirement Village	3	4,6,6+ village
Demolition and Replacement			
	Demolition of existing dwelling and construction of a two storey dwelling	3	6
	Demolition of existing dwelling and construction of dual occupancy dwell	2	4
Subdivision			
	Subdivision 2 lots	6	12
	Subdivision 5-10 lots	4	17
	Subdivision 10+ lots	4	165

Source: Penrith City Council Building Approvals Database 2006-2008, Accessed 14/04/08



Table 3.2.4.1c: Dwelling Opportunity in Existing Areas

Type	Dwelling Opportunity	Proportion of Opportunity	Key Areas (potential dwellings)
In-centre Development	6,826 dwellings	61%	Penrith City Centre (4,808 dwellings) St Marys Town Centre (1,430 dwellings) Kingswood (388 dwellings) South Penrith (172 dwellings)
Large Residential Lots	2,609 dwellings	23%	St Clair (411) South Penrith (289) St Marys (255) Colyton (243)
Development Sites	587 dwellings	5%	North Penrith Urban Area (524) Claremont Meadows (39) Werrington Centre (24)
Vacant Land	1,077 dwellings	10%	Glenmore Park (339) Cranebrook (135) Emu Plains (106) St Marys (81)
<b>TOTAL</b>	<b>11,100 dwellings</b>	<b>100%</b>	-

Source: I.D Dwelling Opportunities Analysis for Penrith City Council, September 2007

Figure 3.2.4.1d: Opportunity for additional lots in existing centres of Penrith

Centre Name	Centre type	No. of dwellings at 100 dwells per hectare*	No of dwellings at 75 dwells per hectare*	No. of Dwellings at 50 dwells per hectare*	No. of Dwellings at 25 dwells per hectare*	Additional dwellings created	Existing dwellings lost to demolition	MDP	Net Dwelling Gain (+ MDP)
Penrith City Centre	Regional Centre	2,742	2,060	0	0	4,808	309	524	5,023
Kingswood	Specialised Centre	155	117	78	39	388	44	0	344
St Marys	Town Centre	520	390	520	0	1,430	88	0	1,342
Emu Plains (Lennox Centre)	Village	0	0	64	96	161	53	0	108
Glenmore Park	Village	0	0	19	29	49	3	0	46
South Penrith (Southlands)	Village	0	0	69	103	172	61	0	110
St Clair Shopping Centre	Village	0	0	48	73	121	46	0	75
Claremont Meadows	Small Village	0	0	0	4	4	1	39	38
Cranebrook (Mt Pleasant)	Small Village	0	0	20	30	50	17	0	33
Emu Plains	Small Village	0	0	93	46	139	24	0	115
Erskine Park	Small Village	0	0	3	5	8	1	0	7
Werrington County	Small Village	0	0	18	27	45	15	0	30
Cambridge Gardens (Star Court)	Neighbourhood Centre	0	0	26	38	64	24	0	41
Cambridge Park	Neighbourhood Centre	0	0	0	22	22	9	0	12
North St Marys	Neighbourhood Centre	0	0	0	25	25	9	0	16
Smith Street (South Penrith)	Neighbourhood Centre	0	0	0	21	21	11	0	10
Werrington Station	Neighbourhood Centre	0	0	30	15	45	10	24	58
<b>Total*</b>		<b>3,423</b>	<b>2,567</b>	<b>988</b>	<b>573</b>	<b>7,551</b>	<b>726</b>	<b>587</b>	<b>7,413</b>

Source: Penrith City Shire Council 2006

\*Note – The figures included within the “number of dwellings” columns have been given to the nearest whole number. The “totals” are derived from figures which, within the model, have not been rounded and the columns shown may therefore not add up to the total dwellings figures. The totals themselves are rounded.

Source: iD: Dwelling Opportunities Analysis for Penrith City Council, September 2007

Figure 3.2.4.1e: Summary of Activity Centres and Dwelling Capacity

Centre	Comments
Penrith City Centre (4,808 dwellings)	A regional centre assumed to be able to accommodate the highest scale of development in Penrith City Council area. There have been numerous approvals for higher density development (greater than 100 dwellings per hectare) in recent times. The centre is a major focus for employment, commerce, civic, community and health facilities. It is located on a major transport corridor and is bounded by the Nepean River in the west. Penrith City Centre also includes part of the Army Reserve site which has been identified for future redevelopment (North Penrith Urban Area). This site is expected to yield a density of approximately 20 dwellings per hectare. Assumed 30% of developable land in and around centre for development of between 50 and 100 dwellings per hectare.
St Marys Town Centre (1,430 dwellings)	Located approximately 6 kilometres east of Penrith City Centre, St Mary shares the same rail linkages to the Penrith City Centre. The town centre has experienced some medium and high density development in recent times, mainly in the areas south of the Great Western Hwy and north of Saddington Street. The centre is a focus for commerce, employment and recreation, and includes part of the St Marys Industrial Precinct. Assumed approximately 22% of developable land in and around centre for future residential development of between 25 and 100 dwellings per hectare.
Kingswood Specialised Centre (388 dwellings)	Located adjacent to the Penrith City Centre, this specialised activity centre includes the Nepean Hospital and provides an east-west rail connection. The centre has experienced some medium and high density development in recent times, with the highest at approximately 100 dwellings per hectare. Most of these developments have occurred in the area bounded by Bringelly Rd in the west, Santley Crescent in the north, First Street in the east and Second Street in the south. Assumed approximately 19% of developable land in and around centre for future residential development of between 25 and 100 dwellings per hectare.
South Penrith-Southlands (172 dwellings)	A centre with an established residential component, South Penrith (Southlands) is located away from any major road arterial or fixed public transport links. The area has experienced very little residential development in recent times. As this centre has an established residential component, it may be some time before denser forms of development take place. Consequently, 11% of developable land in and around the centre is assumed for redevelopment at densities of between 25 and 50 dwellings per hectare

Source: iD: Dwelling Opportunities Analysis for Penrith City Council, September 2007

Figure 3.2.4.1f: Opportunity for additional lots on existing large residential lots in Penrith

Area	Additions on 500-799 m <sup>2</sup> lots	Additions on 800-999 m <sup>2</sup> lots	Additions on 1,000+ m <sup>2</sup> lots	Total Dwell. Additions
Caddens Release Area	0	0	0	0
Cambridge Park	137	29	10	176
Claremont Meadows	0	0	0	0
Colyton	212	20	11	243
Cranebrook	0	10	6	16
Emu Heights	21	6	1	28
Emu Plains	92	13	10	115
Erskine Park	0	1	0	1
Glenmore Park	0	5	5	9
Jamison town	97	8	7	112
Kingswood	119	35	22	175
Leonay	16	2	1	18
Llandilo-Berkshire Park	0	0	0	0
Londonderry-Castlereagh-Agnes Banks	6	2	14	23
North St Marys	93	8	5	106
Orchard Hills-Rural South	1	0	1	1
Oxley Park	31	9	85	125
Penrith	118	34	11	163
Penrith Lakes	0	0	0	0
Regentville-Mulgoa-Wallacia	38	5	22	65
South Penrith	266	14	9	289
St Clair	375	31	5	411
St Marys	159	40	56	255
St Marys Release Area	0	0	0	0
Werrington	37	6	14	56
Werrington Downs-Werrington County-Cambridge Gardens	208	12	3	222
<b>Total Additional Dwellings</b>	<b>2,023</b>	<b>290</b>	<b>296</b>	<b>2,609</b>

Source: .id 2007

Source: id Dwelling Opportunities Analysis for Penrith City Council, 2007, p67

Figure 3.2.4.1g: Opportunity for additional lots on Vacant Land within Penrith LGA

Area	Vacant Land				Total lots
	Existing lots <500 sq m	Existing lots 500-799 sq m	Existing lots 800-999 sq m	Existing lots > 1,000 sq m	
Cambridge Park	0	9	0	0	9
Claremont Meadows	0	3	5	0	8
Colyton	2	18	0	24	44
Cranebrook	40	51	20	24	135
Emu Heights	0	12	0	12	24
Emu Plains	4	39	15	48	106
Erskine Park	0	3	0	12	15
Glenmore Park	12	156	15	156	339
Jamisontown	1	18	0	0	19
Kingswood	4	12	0	24	40
Leonay	0	21	5	0	26
Londonderry-Castlereagh-Agnes Banks	0	3	0	12	15
North St Marys	0	6	0	0	6
Orchard Hills-Rural South	0	3	0	0	3
Oxley Park	0	12	0	24	36
Penrith	1	9	0	12	22
Regentville-Mulgoa-Wallacia	0	12	5	12	29
South Penrith	0	12	0	12	24
St Clair	2	45	0	0	47
St Marys	6	24	15	36	81
Werrington	0	3	0	24	27
Werrington Downs-Werrington County-Cambridge Gardens	1	9	0	12	22
<b>Total</b>	<b>73</b>	<b>480</b>	<b>80</b>	<b>444</b>	<b>1,077</b>

Source: id 2007

Source: id Dwelling Opportunities Analysis for Penrith City Council, 2007, p67



# AFFORDABLE HOUSING BACKGROUND REVIEW





## **APPENDIX D: AFFORDABLE HOUSING REVIEW**

### **1. APPROACHES TO ADDRESSING HOUSING AFFORDABILITY**

As noted previously, housing affordability centres on the relationship between the cost of housing and household income and each of these factors are influenced by a variety of issues. These are opportunities where local governments can help to influence these issues and assist with the provision of affordable housing.

Many of the issues influencing the cost of housing are associated with the current economic climate such as interest rates and investment demand. Clearly local governments have very little or no influence on these factors. Federal government and state government have some influence over land supply, government taxes, levies and charges and economic growth and therefore have established a number of higher level policies to improve housing affordability.

Local government's influence on the cost of housing is primarily through land use planning decisions which impact the availability of residential land, preservation of existing sources of low cost accommodation and the design and configuration of new housing. It also extends to approval times for Development Applications which may impact holding costs of land and therefore costs of land.

Local Government may also enter into to partnerships with the emerging sector of not-for-profit community housing developers to stream line and facilitate the delivery of affordable housing. (Armstrong, 2007) The outcomes of these land use planning decisions can also have a positive impact on household costs by locating housing closer to services, infrastructure and public transport.

Whilst there is an increasing understanding that Local Governments can play an important role in the provision of affordable housing, Local Governments are restricted by state planning legislation, which has historically provided little support for Councils to implement housing affordability strategies effectively (Milligan, Phibbs, Fagan and Gurran 2004). For example, within New South Wales the current proposed Local Environmental Plan template does not include affordability provisions and therefore may further constrain local government's ability to respond to affordability issues.

As noted previously, housing affordability policies need to respond to the unique and individual needs of four specific groups: low income earners and private renters, first home buyers and those who can not access the private housing market and require public housing.

#### **First Home Buyers Housing Renewal**

First home buyers are generally impacted by the economic cycle and the continuous economic 'boom and bust' cycle which has occurred in Western Sydney over the past decades. The NSW and Federal Governments have initiated a variety of programs to provide financial assistance to first home buyers, which include guaranteed loan schemes, first home buyer grants and exemptions and concessions on property taxes that go some way in providing financial assistance for first home buyers.

There is a common perception that increasing the supply of land on the urban fringe can address affordability for first home buyers. However dwellings in new release areas have additional costs to cover the cost of providing services and infrastructure to greenfield land. WSROC (Western Sydney Regional Organisations of Councils) have identified that only a small proportion of first home buyers can afford to purchase properties in new release areas, which therefore places doubt on whether providing additional land on the

fringe for housing would directly increase the supply of affordable housing. It is considered that it not in the new release area, but in older suburban locations where existing homeowners move from in order to purchase a new dwelling in a release area (Berryman 2007). This highlights a potential role for Councils to assist in providing new release areas for secondary home buyers and allowing for renewal in existing areas to allow market entry for first home buyers.

### **Disadvantaged Households: Public Housing**

Public housing represents the majority of affordable housing, in Penrith it represents 4.3% (2,547 dwellings) of housing types, despite 3,841 households facing rental stress and 5125 households in mortgage stress. This is reflective of the changing mentality towards public housing; governments have significantly reduced their investment in affordable housing over the past 10 years (Berryman 2007). Public housing has traditionally been targeted to providing of housing to low income and disadvantaged households. However in recent times affordability of households has dramatically decreased and the NSW Department of Housing has been unable to meet the increasing need for affordable housing, for example the 27,000 shortfall of low rent dwellings across NSW (Johnston 2007).

Whilst the State governments will continue to provide limited public housing for very low income and disadvantaged households, it is no longer an option for low income households. These groups are now the focus of 'intermediate housing' which is discussed below.

### **Low Income Earners: Intermediate Housing**

Intermediate housing is a relatively new concept in Australia and refers to housing directed to people who are not disadvantaged enough to qualify for public housing but are also unable to enter and sustain affordable homeownership (Johnston 2007). As a subgroup of affordable housing, intermediate housing is growing in importance as housing has decreased in affordability and as state governments have restricted eligibility into public housing.

There are three main subsidy models of housing aimed at low income earners: discounted home ownership, affordable rental housing or mixed ownership-rental schemes. Many intermediate housing developments are marketed towards a variety of incomes where a variety of very low, low and moderate income households pay different rents depending upon their income, for example very low income households pay 25% of their income, low income households pay 27% and moderate income households pay 30% . Alternatively the discounted market rent approach is where all households pay 75% of the market rate (Armstrong 2007).

These intermediate housing models are primarily being pioneered by a new model of not-for-profit housing companies and associations which are developing new techniques for developing and financing affordable housing. These groups, such as City West Housing and Brisbane Housing Company operate as companies and develop housing product through grants, developer contributions from Councils and increasingly, revenue for affordable housing developments. Cost savings through efficient design and experience are also passed on to the consumer (Lawson and Milligan, 2007).

The following provides a brief overview of City West Housing and the Brisbane Housing Company:

### **City West Housing**

City West Housing was established in 1994 through a NSW State Government initiative to provide affordable housing in City of Sydney areas of Pyrmont, Ultimo and Green



Square. The administrative arrangements for the program were coordinated through the Sydney Regional Environmental Plan No. 26 (Amendment 4) (REP). City West Housing now operates as a not-for-profit affordable housing provider and has provided over 491 units of housing over 12 years.

City West Housing differs to other affordable housing providers as it takes on the role of developer as well as manager of its properties. Development by City West is funded through Developer Contributions from projects in the Pymont, Ultimo and Green Square areas.

### **Brisbane Housing Company**

Similar to City West Housing, Brisbane Housing Company (BHC) is an independent and not-for-profit developer, provider and manager of affordable housing in Brisbane. BHC was established in 2002 with initial funding received from the Queensland Department of Housing and Brisbane City Council. Since this time it has continued to use revenue, charitable donations and State Government funding to develop more affordable housing and continue to provide units and houses at below market rents to households on low incomes. At 2005/06 BHC had approved 781 units for construction with 372 complete and 208 under construction.

## **2. LOCAL GOVERNMENT ASSISTING IN THE PROVISION OF AFFORDABLE HOUSING**

Recent changes to the NSW Planning legislation have created a new onus on local governments to be involved in the provision of intermediate affordable housing and there are opportunities for local governments to work collaboratively with these groups to provide housing. The additional powers afforded through the NSW planning legislation, also provide opportunities for Council to pursue more progressive strategies. The NSW Local Government Association (2006) has defined the opportunities for local government to contribute to affordable housing by:

- Acting as owner or manager of housing stock.
- Acting as a land or housing developer.
- Initiating collaborative development of housing projects with state or Commonwealth housing initiatives, the not-for-profit sector and the private sector.

However, as noted previously, local governments primary role in affordable housing comes through land use planning decisions rather than developing and managing stocks of affordable housing. This is widely recognised, as Shelter NSW notes 'affordable housing schemes managed by Council will not have high yields, but that is not a relevant argument for not having them. They can contribute to the overall supply of affordable housing, while not replacing the state government's primary role in this matter' (Johnston 2007 p36).

From a review of existing local government strategies around Australia, Johnston (2007) has identified how and where local governments can contribute to affordable housing:

- They can maintain an association between residence and residents, to maintain local character and community-connectedness, affected through eligibility criteria for tenancies. For example, the Willoughby Local Environmental Plan stipulates that 'Willoughby local housing' is to be rented to residents of the municipality of Willoughby.
- They can cater to local workforces through eligibility criteria. For example, tenancies in Adelaide City council's first affordable housing project will be allocated to young workers and students in the city.

- They can give attention to specific housing types that are not addressed by the public housing system. For example, North Sydney council's affordable housing program allows for purchase of boarding houses.
- They can promote innovations in design. For example, Adelaide City council is planning an affordable housing project in Whitmore Square that incorporates ecodesign principles, and Port Phillip council in Melbourne has won awards for design and planning of its community housing stock.
- They can promote innovations in service management and delivery models. For example, the Brisbane Housing Company is a joint venture between Brisbane City council and the Queensland state government.
- They can mix affordability concerns with other social agenda such as aging in place (a match that is not reflected in the aims of State Environmental Planning Policy (Seniors Living) 2004).
- They might dampen overheated property markets, which is a socially, economically and environmentally worthy result. This would only apply to the extent that developer levies are a disincentive to investment in housing. However, the evidence for this cannot be established from experiences in the local government areas where affordable housings schemes operate now, since those schemes are very few in numbers and operate in local government areas that are 'prime' real estate with diverse inflationary pressures.

### **Examples of Programs**

Some examples of Local Government housing affordability programs include:

#### *Gosford City Council*

Gosford City Council introduced a Housing Affordability Strategy in 2005. The Strategy adopted a land use planning approach to addressing affordable housing by identifying surplus land suitable for affordable housing and identifying changes to the planning controls to require the provision of affordable housing. In addition, Council established itself as a central agency for information, advocacy, research and facilitation of stakeholders in affordable housing projects.

One key mechanism was to recognise the role of residential parks to provide affordable housing and the Strategy required to at least maintain the current level of affordable housing in these parks.

#### *Marrickville Council*

Marrickville Council's Local Environmental Plan and Development Control Plans contain specific objectives to encourage housing affordability, diversity and choice and requirements to be considered during the development application process. SEPP 10 is to be considered for development applications for strata subdivision and alterations to existing residential flat buildings and demolitions or alterations to boarding houses.

#### *North Sydney Council*

North Sydney Council introduced a Section 94 Contributions Plan in 2004 in response to a decline of affordable housing bed spaces across the municipality. The Contributions Plan levies an affordable housing contribution for any development which results in the loss of affordable housing, for example a residential subdivision, refurbishment of a flat building or demolition of a boarding house. The levy requires the replacement of 5% of affordable bed spaces lost and 5% of boarding houses spaces lost. Where a cash contribution is provided, Council provides the affordable housing and is leased to a local community housing provider. North Sydney Council has participated in joint ventures

with the NSW Department of Housing to provide the affordable housing in the municipality using their S94 plan.

#### *Willoughby Council*

Willoughby City Council has used three strategies to provide affordable housing through its Willoughby Local Housing Program. The program is implemented through the Willoughby LEP (1995) and Willoughby DCP (2006) and together they support inclusionary zonings to provide for affordable housing. The planning controls require that 4% of floor spaces of new dwellings within designated local housing precincts be provided as affordable housing. This may be provided as monetary contribution or through providing affordable housing on site. Council transfers the affordable housing through to a community provider for the long term management of the housing.

#### *Waverley Council*

Waverley Council introduced a 'density bonus' in 1999 to allow floor space bonuses in return for monetary contributions to finance the provision of affordable housing in the municipality. The controls are contained in the Waverly DCP and require the bonus floor space to be incorporated into the building envelope.

Since the program commenced in 1999, Waverley Council has been able to provide 32 affordable housing units through the program of which some are owned by Council and others are on a fixed term rental agreements with developers for 1-25 years. All affordable housing units are managed by a community housing provider.

### **3. STATE GOVERNMENT'S PROGRAMS AND FUNDING FOR AFFORDABLE HOUSING**

The State Government released a new policy on subsidised affordable housing in 2007 Planning for the Future: New directions for community housing in NSW 2007/08-2012-13. This strategy signifies the change in approach to affordable housing, this policy will continue to maintain existing community housing stocks but its emphasis is on promoting community housing providers to deliver intermediate housing using equity and borrowings to invest in new affordable housing stock, by leveraging government investment. This is referred to the 'debt equity model' and is envisaged to assist in providing an additional 17,000 community housing units over the next 10 years, or 10% growth

The proposed debt equity will see the state government funding up to 60% of project costs and registered community housing provider provides the remaining funds through a combination of debt, own funds and contributions from partners including local government. The model will be structured so rent revenue covers all ongoing costs, including debt servicing, maintenance and management costs.

Government has committed the funds to further develop the model:

- \$49.8 million in new funding to establish an Affordable Housing Innovations Fund to kick-start investment in affordable housing by expanding debt equity partnership programs, as well as to provide 70 new rental properties in Western Sydney;
- \$70 million of funding directed to community housing providers to allow them to develop housing directly; and
- Offering long-term leases over community housing properties to provide a predictable income stream to support debt finance to build affordable housing.
- Federal Government Programs and funding for Affordable Housing

In 2008 the new Federal Government announced a range of new initiatives to address housing affordability, some of these programs can provide funding and assistance to local governments:

### **Housing Affordability Fund**

The Government will establish a new Housing Affordability Fund in 2008 and invest \$500 million over five years in infrastructure linked to housing developments to reduce the cost of new homes.

Local governments will be able apply through a competitive process to receive grants to cover some of the cost of new housing infrastructure.

Proposals will have to outline how councils will cut red tape and reform the planning process.

### **Federal Land Release**

This program seeks to investigate releasing surplus Commonwealth-owned land for residential and community development. The Government has pledged to review the federal land release policy and will require all Government agencies to show why surplus land should not be released for the benefit of local communities.

Land release will be evaluated against three criteria:

- Whether it increases the supply of housing without adversely effecting surrounding property prices.
- Whether it improves the amenity of local suburbs through the addition of parks, playgrounds, child care centres or other facilities.
- Whether it creates new jobs.

The Government is currently considering what land is available and the best system to achieve more affordable housing, more community amenities and more jobs.

### **National Rental Affordability Scheme**

The Federal Government is seeking to establish a National Rental Affordability Scheme to stimulate supply of up to 100,000 new affordable rental properties across Australia.

The Scheme will use tax incentives to stimulate investment into affordable rental housing for low and middle income families. It will also support the expansion of affordable housing organisations, often in partnership with private investors. These initiatives will assist in increasing the supply of affordable rental dwellings, reduce rental costs for low and middle income households and encourage large scale investment in affordable housing.

The two key elements of the Scheme are:

- An annual \$6,000 Commonwealth incentive to construct new affordable rental properties and rent them at 20 per cent below market rents.
- At least \$2,000 per year direct or in-kind contribution from State and Territory Governments.

The Scheme will offer annual incentives to investors every year for a period of ten years.

State and Territory Governments have already agreed to contribute to the Scheme. They may provide valuable in-kind contributions at the beginnings of projects such as cut price land or relief from stamp duty. In other cases the States and Territories may provide cash grants. It is intended that this Scheme will help to reduce rental stress by reducing rent for eligible tenants by 20 per cent.

## **New National Affordable Housing Scheme**

The Federal Government has recently announced that it will negotiate a new National Affordable Housing Agreement with the States and Territories. Under this initiative, existing housing agreements and funding sources will be brought together into a single funding agreement. This will help all governments to deliver affordable housing for low and middle income earners.

## **4. AFFORDABILITY TOOLS FOR NSW LOCAL GOVERNMENTS**

### **Statutory Framework for affordable housing**

In 2000 the NSW Environmental and Planning Assessment Act (1979) was amended to provide local governments with greater ability to provide affordable housing, but also provides Councils with a responsibility to respond to the challenges of affordable housing. There have also been amendments to various SEPPs to promote increased provision of affordable housing. The key legislation relevant to local governments is summarised below:

#### *Environmental Planning and Assessment Act 1979*

The key mechanisms incorporated into the Act which are designed to promote the provision of affordable housing are:

- An objective of the Act is to 'encourage the provision and maintenance of affordable housing' (Clause 5 (a) (viii)).
- Local instruments may contain measures for providing, maintaining and retaining, and regulating any matter relating to, affordable housing,(Clause 26(1)(d))

S94 Contributions and Planning Agreements may provide for the provision of (or the recoupment of the cost of providing) affordable housing through contributions or land for affordable housing. In addition the Act also allows contributions for the funding of recurrent expenditure relating to the provision of public amenities or public services, affordable housing or transport or other infrastructure. To enact any of these provisions, a consent authority must first have a local plan containing affordable housing provisions approved by the Minister and supported by an amendment to State Environmental Planning Policy – Affordable Housing (SEPP 70).

#### *Local Government (General) Regulations 2005*

At Clause 200, the Local Government (General) Regulations requires Local Governments to prepare Social Plans that promote the wellbeing of their local communities. A key indicator of such wellbeing may be the provision of a diversity of housing to meet community needs, including affordable housing.

#### *State Environmental Planning Policies (SEPPs)*

The Environmental and Planning Assessment Act is also supported by a number of State Environmental Planning Policies (SEPPs) which seek to promote and secure affordable housing. A summary of these are provided below:

Figure; Summary of SEPPs

SEPP	Key Controls
SEPP (Senior Living) 2004	Aims to encourage the creation of housing that is appropriate to the aging of the population by allowing Seniors Living developments to be located on land zoned for urban purposes.
SEPP (Infrastructure) 2007	Replaced SEPP 9: Group Homes and allows multi-dwelling housing to be constructed on located within 800m of a railway station and owned by public agencies with out consent. A site compatibility assessment is required
SEPP 10: Retention of Low- Cost Rental Accommodation	Aims to protect existing supplies of affordable housing by requiring State government concurrence for the demolition, alteration or change the use of a boarding house or strata-subdivide a low cost residential flat building or boarding house.
SEPP 70	Introduced to allow affordable housing programs be established in the Ultimo/Harris Street area, Green Square Area (both through City West) and in Willoughby.

Source: HASSELL 2008

## **5. AFFORDABLE HOUSING OPTIONS FOR COUNCILS**

There are numerous options for councils when it comes to affordable housing. These both include council providing affordable housing itself and council using developers to contribute funds towards, or develop affordable housing.

Johnston (2008) has identified three ways for councils in the provision of affordable housing:

- Protecting existing supplies of affordable housing from loss, such as demolition, change of use, or change of socioeconomic status of residents;
- Promoting supply of affordable housing by establishing appropriate zonings, and through research, information and advocacy, and
- Producing affordable housing indirectly from council resources, alone or in partnership

Each of these are explored in the following sections.

### **Protecting existing supplies**

Gosford City Council and Murrumbidgee Council are examples where the local planning policies have been changed to require consideration of affordable housing in development applications and to use Council resources to preserve existing affordable housing sites.

### **Promoting supplies**

Within New South Wales, Council's can use land use zoning to promote the supply of affordable housing. For example, Leichhardt Council contains controls to encourage diversity of housing type and the provision of affordable rental and boarding house accommodation by requiring all multi unit housing developments to include a variety of dwelling sizes and capacity for adaptable housing.

Councils can also be an important source of providing information to developers, community housing suppliers regarding the provision of affordable housing. This information and advocacy role has been adopted by a number of Council's in New South Wales.

### **Producing affordable housing**

There are three ways that Councils can use their development assessment powers to require developers to contribute to, or provide affordable housing:

- Planning agreements under s93F of the Act with developers to provide a certain contribution towards, or, component of, affordable housing.
- Obtaining developer levies through s94F of the Act through conditions of development consent (inclusionary zoning).
- Providing developer incentives (offsets/bonuses) in return for developers contributing or providing affordable housing.

These can assist Council to generate funds towards providing affordable housing. Alternatively, Councils can also pursue partnerships with affordable housing providers to use a combination of contribution funds and other sources to produce stocks of affordable housing. This option is also explored.

### **Planning agreements with housing developers**

Voluntary Planning Agreements (VPAs) are administered under s93F of the Act and may be used to negotiate contributions towards to the provision, recoupment or funding of recurrent expenditure to provide affordable housing. Therefore they can be used to provide funds to finance or produce affordable housing. As they require complex negotiations, they are most useful for developments that:

- are large in scale,
- have long timeframes;
- are likely to be developed in stages, and
- are developments where the developer has a key interest in delivering public infrastructure.

(Source: Johnston, 2008)

Canada Bay and Randwick Councils have used VPAs around major development sites to provide a number of affordable housing units.

To ensure transparency in the VPAs, Council's should have policy and procedures for use the use and applications of VPAs. Similarly, policies on affordable housing will ensure that VPA's work towards wider LGA targets.

Steps to Satisfy s93F:

- Draft policies and procedures for use of planning agreements, including affordable housing,
- Consult residents/stakeholders on policies and procedures,
- Adopt policies and procedures,
- Negotiate with developers on large scale redevelopment sites, and
- Developer levies (inclusionary zoning).

Developer levies can be used to fund and provide affordable housing when an LEP has prescribed a minimum proportion of affordable housing be provided in a housing development. Where the developer can not provide the affordable housing units on site, levies are used to provide affordable housing units elsewhere. Generally between 3-4% of the total floor space of a housing development will be levied for affordable housing.

Developer levies are considered most appropriate in high growth areas, particularly where there is medium density housing (Johnston 2008).

The use of inclusionary zoning or developer levies is particularly complicated process both in administrating and establishing. This is primarily as section 94F of Act, which administers such levies, has a series of stringent requirements that must be addressed before a council can levy developers. Notably, a number of these requirements must be signed off by the Minister, these include:

- approval of proposed amendments to LEP,
- amendment to a SEPP to recognise the local government area has a need for affordable housing, and,
- make a provision through a SEPP to impose conditions for consent for affordable housing for the council.

For the Minister to consider the above, the Council must have undertaken appropriate strategic work such as housing needs study and an affordable housing strategy. To date,



only two levy schemes for affordable housing have been fully signed off by the Minister, which reflects the high degree of complexity associated with this approach.

### **Developer incentives offsets and bonuses**

Council's Development Control Plans (DCPs) can be an effective tool for providing affordable housing. Unlike planning instruments, amendments to DCPs do not require sign off from the Minister and therefore they provide greater flexibility to administer an affordable housing scheme. However a DCP is to be consistent with an LEP and therefore the LEP should generally contain objectives for affordable housing.

Using DCPs to provide affordable housing involves providing a degree of flexibility into the DCP controls. By negotiating on controls in the DCP, a Council can provide bonuses in terms of lot size, floor space, height, setbacks etc in return for the provision of, or contribution to, affordable housing. However, planning offsets are only appropriate when it can be demonstrated that the development will not compromise the overall planning standard or reduce local amenity.

### **Partnerships with affordable housing providers**

As an alternate to Council's using their planning and assessment powers, there is a significant role for local government to assist with and partner these not-for-profit companies through brokerage and facilitation of projects. With the City West Housing Company, many of the provisions are developed from the local Development Control Plan and developer contributions collected by Council continue to fund new affordable housing projects. As noted above, the recent changes to the NSW planning legislation have provided local Council's opportunities to greater utilise their planning powers and discretion.

The Forest Glade Smart Housing project at Parklea is an example of a successful collaboration between Landcom and developers, Cosmopolitan Developments. The aim was to provide 20% of its 64 dwellings for sale to those on moderate incomes, by provided at between 50-60% below market purchase price. Landcom and the developer established a number of requirements and restrictions on purchasing the property such as the purchasers had to be first home buyers and have a household income between \$48,000-\$69,000. The project went on sale in June 2002 and the designated moderate income homes were over subscribed by a ratio of 25 to 1.

A critical element of this project involved the collaboration with the Blacktown City Council who conditioned affordable housing in return for a more flexible approach to planning, design and construction.