

Land Use and Economic Assessment

Assessment report

Summary

Objectives

The broad aims of the Land Use and Economic Assessment are summarised as follows.

- To ascertain the ability of the site to achieve employment and housing targets given:
 - Policy and strategy framework
 - Market conditions
 - Terms of the priority sale (recognising that the multi-user depot has been excised from the land available for development)
 - The competitive offer of the site.
- To interrogate the current Concept Plan for the North Penrith site and make recommendations in terms of:
 - land-use mix
 - Residential dwelling numbers, types and sizes
 - Commercial floorspace areas
 - Retail floorspace areas
 - Industrial/ employment land provisioning.
- To identify and assess potential staging and delivery options for the development.
- For each component of the development, to assess:
 - the economic impact (job generation and economic multiplier effect)
 - the impact on the relevant industry in the City Centre and North Penrith vicinity.

Method

The Land Use and Economic Assessment has been undertaken through execution of the following tasks:

- Site and context assessment
- Strategic land use assessment for broad industrial, commercial and retail uses
- Market Issues Paper
- Targeted consultation with project stakeholders
- Consultation with real estate agents, investors and developers
- Assessment of the Concept Plan

- Yield assessment
- Assessment of economic impact
- Staging recommendations

Conclusions

Evidence gathered in this assessment indicates that a mixed use precinct including light industrial, office, retail and residential uses could be supported at North Penrith.

The Concept Plan includes a range of dwelling types including medium density development. Medium density dwellings are not currently featured strongly in Penrith LGA's housing mix. To assess the underlying demand for medium and higher density housing in Penrith LGA we have used the SGS Housing Model. This indicates that there is an underlying demand for medium and higher density dwellings. The North Penrith site is well positioned to accommodate higher density options as it is within immediate proximity to rail and bus transport options, employment opportunities, retail and services.

Consistent with the Concept Plan, SGS recommends that the areas of the North Penrith site adjacent to the existing industrial area be zoned for local (population serving) industry such as trade supplies or domestic storage. This would provide a suitable buffer between the existing industrial area along Coreen Avenue and the planned residential area within the North Penrith site.

The recommendations put forward by SGS for commercial development on the site recognise the need for a style of development that complements rather than competes with the Penrith CBD. The recommendation for flexible design codes to allow purpose built offices is aimed attracting institutions such as the Sydney Catchment Authority, CSRIO or National Parks and Wildlife Services or service businesses with a regional catchment.

The Concept Plan includes provision of a 2,000 square metre supermarket. A supermarket of this size may, in the short term, trigger a turnover impact greater than the accepted industry standard at the nearby centres of Cambridge Gardens and Kingswood Park. However, it is likely to be supportable in the longer term (2026 onwards) given the anticipated increase in the population in the nearby area.

The total likely job yield for North Penrith for development in accordance with the Concept Plan is summarised by land use in the following table.

Table 1. North Penrith Job Yield

	floorspace	sqm per job	yield
Light Industrial	13,730	60	229
Commercial	9,300	25	372
Retail Other	1,200	30	40
Retail Supermarket	2,000	40	50
Residential	n/a	n/a	25
Health care aged care	n/a	n/a	70
Total	n/a	n/a	786

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1. Objectives of assessment

At a glance

The purpose of the Land Use and Economic Assessment is to identify the appropriate mix of land uses on the North Penrith site.

The broad aims of the Land Use and Economic Assessment are summarised as follows.

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 - policy and strategy framework
 - market conditions
 - terms of the priority sale (recognising that the multi-user depot has been excised from the land available for development)
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- For each component of the development, to assess:
 - the economic impact (job generation and economic multiplier effect)
 - the impact on the relevant industry in the City Centre and North Penrith vicinity.

2. Study Method

At a glance

The Land Use and Economic Assessment has been completed through a combination of desktop research and targeted consultation. An important tool used in the assessment has been a review of the site's strategic offer as it relates to the Sydney Metropolitan Area and North West Subregion.

Study Method

The Land Use and Economic Assessment has been completed through execution of the following tasks:

- **Site and context assessment:** this included a review of current market trends and drivers for various land uses, a review of government policy at the local and state level and a review of the documented aspirations of the local Penrith business community.
- **Strategic land use assessment for broad industrial, commercial and retail uses:** this involved an assessment of the site's strengths and weaknesses compared to alternative sites in the North West Subregion.
- **Market Issues Paper:** the Market Issues Paper presented findings of the desk top research and was used for the basis of discussion during consultation.
- **Targeted consultation with project stakeholders:** to confirm market trends and feasible commercial development for North Penrith (see below for details).
- **Consultation with real estate agents, investors and developers:** to confirm market trends and feasible commercial development for North Penrith (see below for details).
- **Assessment of the Concept Plan:** this involved testing Landcom's preferred land use mix with regards to findings from previous tasks.
- **Yield assessment:** the market assessment outputs for residential, retail, industrial and commercial development have been used to determine suitable floorspace yields and associated number of jobs.
- **Assessment of economic impact:** with respect to the different land-uses this involved an assessment of job generation and economic multiplier effects as well as potential impact on existing activity in the Penrith CBD and North Penrith vicinity.
- **Staging recommendations:** Optimum staging and delivery has been recommended based on the inter-relationships between development types and threshold effects.

Consultation

Representatives of the following organisations were consulted to gather information and test findings for the Land Use and Economic Assessment.

Project stakeholders	Personnel
Penrith Business Alliance	Ben Artup
Penrith City Council	Mark Broderick Terry Agar Sarita Bista Natasha Baker
Greater Western Sydney Economic Development Board	Bob Germaine
Real estate agents, investors and developers	Personnel
LJ Hooker Commercial Penrith	Troy Kearney
LJ Hooker Commercial Penrith	Dave Reardon
Colliers	Terry Hassan
Colliers	Matthew Neale
Pullman and Williams	Peter Pazios
Raine and Horne Commercial Penrith	Shane Blackett
CVC Trinity	Mark
Becton	Fung Trung
MAB Corporation	Michael Martin
OPD Developers	Bill Griffin
Leighton Properties	Peter Clemnisha

3. Site analysis

At a glance

The North Penrith project site is around 40 hectares of largely vacant land north of the Penrith CBD.

The Concept Plan prepared by Landcom includes provision for 2.2 hectares of industrial land, 3,200 square metres of retail floorspace and 9,300 square metres of commercial floorspace.

The Site

The North Penrith project site is around 40 hectares of largely vacant land north of the Penrith CBD. It was previously an army base and is well serviced. It retains one building on the Commonwealth Heritage List and has some Aboriginal heritage artefacts. Adjoining land use includes an army depot, a museum, industrial uses, a rail line and residences.

The North Penrith site is around 50 km from the Sydney CBD on the northern side of Penrith CBD. The land is marked on Figure 1 below.

Figure 1. : North Penrith Site Plan



The project

Landcom proposes a mixed-use development of around 900-1,000 dwellings including affordable housing and aged housing. The project's Concept Plan includes provision for:

- 2.2 hectares of industrial land
- 3,200 square metres of retail floorspace
- 9,300 square metres of commercial floorspace

The project will have elements of a transit-oriented development with high quality urban design.

Adjoining land uses

Adjoining land uses include:

- the Army's Penrith Training Depot abutting the railway line to the south east
- the Museum of Fire (a locally listed heritage item) and industrial uses to the north and west
- the main western rail line to the south
- residential uses to the east.

There is a temporary commuter car parking area next to the railway station.

4. Statutory and Policy Context

At a glance

Although the North Penrith site recognised as being pre-eminent amongst potential redevelopment sites close to the city centre, state planning has not addressed the possible range of uses that could be accommodated as part of its development.

Planning is also focused on the Penrith CBD at the local government level in strategic studies. Penrith City Council has acknowledged that there is likely to be an insufficient supply of land to accommodate the NSW Government's job target for the centre.

The Penrith business community is active in the planning for Penrith LGA and the Penrith Regional City. They are keen to see the establishment of a Penrith Business Park as one of '10 Big Ideas for Penrith'. They also consider state government office relocation to be a suitable driver for the centre's development.

Metropolitan Planning Framework

The Metropolitan Planning Framework as it applies to the North West Subregion is summarised in 0.

The Sydney Metropolitan Strategy, City of Cities (2005) provides a broad framework to guide Sydney's growth to 2031. The Strategy identified ten subregions as a focus for more detailed future planning, grouping together LGAs with similar issues and challenges. Housing and employment capacity targets were identified for each of the subregions. Penrith is located within the North West Subregion.

City of Cities and the draft North West Subregional Strategy (2007) nominate Penrith as one of four Regional Cities within the Sydney Metropolitan Region. A Regional City, as defined in City of Cities is 'a city that is a focal point for regional jobs that also has a full range of business, government, retail, cultural, entertainment and regional activities'.

The other Regional Cities are Gosford, Parramatta and Liverpool. The regional cities task force has prepared a set of planning documents for each of the Regional Cities, including Penrith. These include:

- Penrith City Centre Plan Development Control Plan (2006)
- Penrith City Centre Plan Civic Improvement Plan (2006)
- Penrith City Centre Plan Local Environment Plan (2006)

The spatial coverage of these plans does not include the North Penrith site.

Penrith is intended as a major focus for development to ensure it plays a vital role as an employment hub and service centre for Western and North Western Sydney. The North Penrith site is mentioned in the draft Subregional Strategy as being pre-eminent amongst potential redevelopment sites close to the city centre.

Figure 2. Metropolitan and subregional planning framework

Employment in the North West Subregion and Penrith Regional City

Under the draft Subregional Strategy, Penrith LGA is expected to gain an additional 28,000 jobs between 2001 and 2031 bringing total employment to 86,000. Penrith Regional City is expected to accommodate 11,000 of these jobs, an increase from approximately 19,000 in 2001 to 30,000 by 2031. The PEAR estimates North Penrith will be able to accommodate around 770 new jobs. This represents around 4 percent of the jobs target for Penrith Regional City.

Outside of Penrith Regional City, the Metropolitan planning framework includes the identification of extensive employment lands in the North West Subregion. In March 2007, the NSW Government released the Employment Lands for Sydney Action Plan which confirmed the release of employment land in the Western Sydney Employment Hub (WSEH) which spans four LGAs- Fairfield, Penrith, Blacktown and Holroyd. This hub is now part of what is known as the Western Sydney Employment Area (WSEA). The WSEA provides more than 2,200 hectares of 'well-located, accessible and diverse employment land that will support 40,000 jobs for the people of Western Sydney'¹.

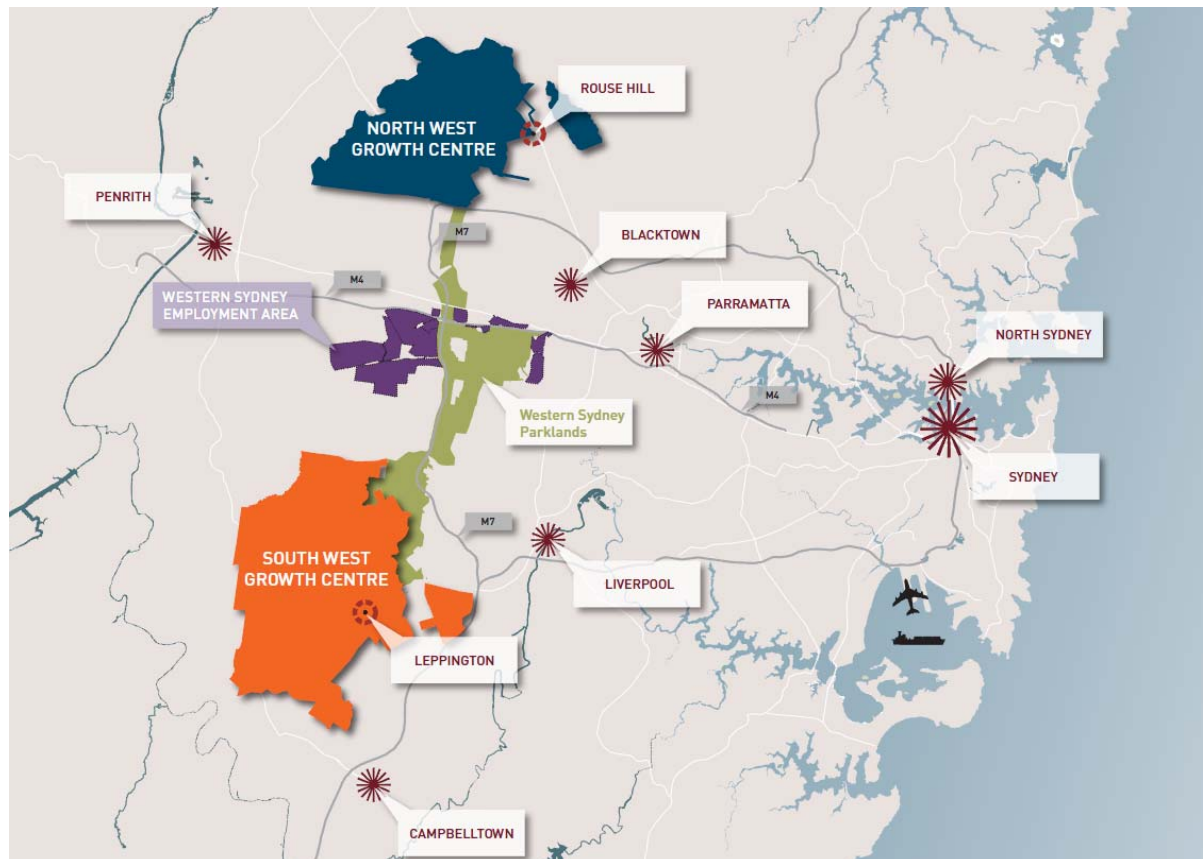
State Environmental Planning Policy (Western Sydney Employment Area) 2009 creates a consistent zoning system for new and existing employment lands and for environmental conservation in the area. The policy aims, according to the Department of Planning, to coordinate development of the land for industrial uses such as major warehousing, distribution, freight transport, industrial, high technology and research facilities.

¹ NSW Department of Planning (2010) Guide to the Western Sydney Employment Area

The Employment Lands for Sydney Action Plan also established the Western Sydney Employment Lands Investigation Area (WSELIA), though no land has yet been rezoned and the Western Sydney Employment Area is now the focus for any new development.

Additionally, significant generation of employment is expected within the North West Growth Centre which has a job target of 60,000.

Figure 3. Western Sydney Employment Area



Source: NSW Government (2010)

Housing target for Penrith LGA

The draft Subregional Strategy also established a housing target for Penrith LGA. As noted in the PEAR, the North Penrith will be able to accommodate around 1,000 residential dwellings representing 4 percent of the 25,000 new dwelling targets.

Transport

While City of Cities contained plans for transport infrastructure investment, these have been the subject of numerous revisions by the NSW Government. The latest iteration of the NSW Government's plans for Metropolitan Sydney's transport is contained within the Metropolitan Transport Plan (2010).

Penrith Regional City is already well serviced by road and rail including the M4 motorway and the Western Line passenger railway.

Improvements flagged in the Metropolitan Transport Plan are as follows. A map of the Metropolitan Transport network is provided in Figure 4.

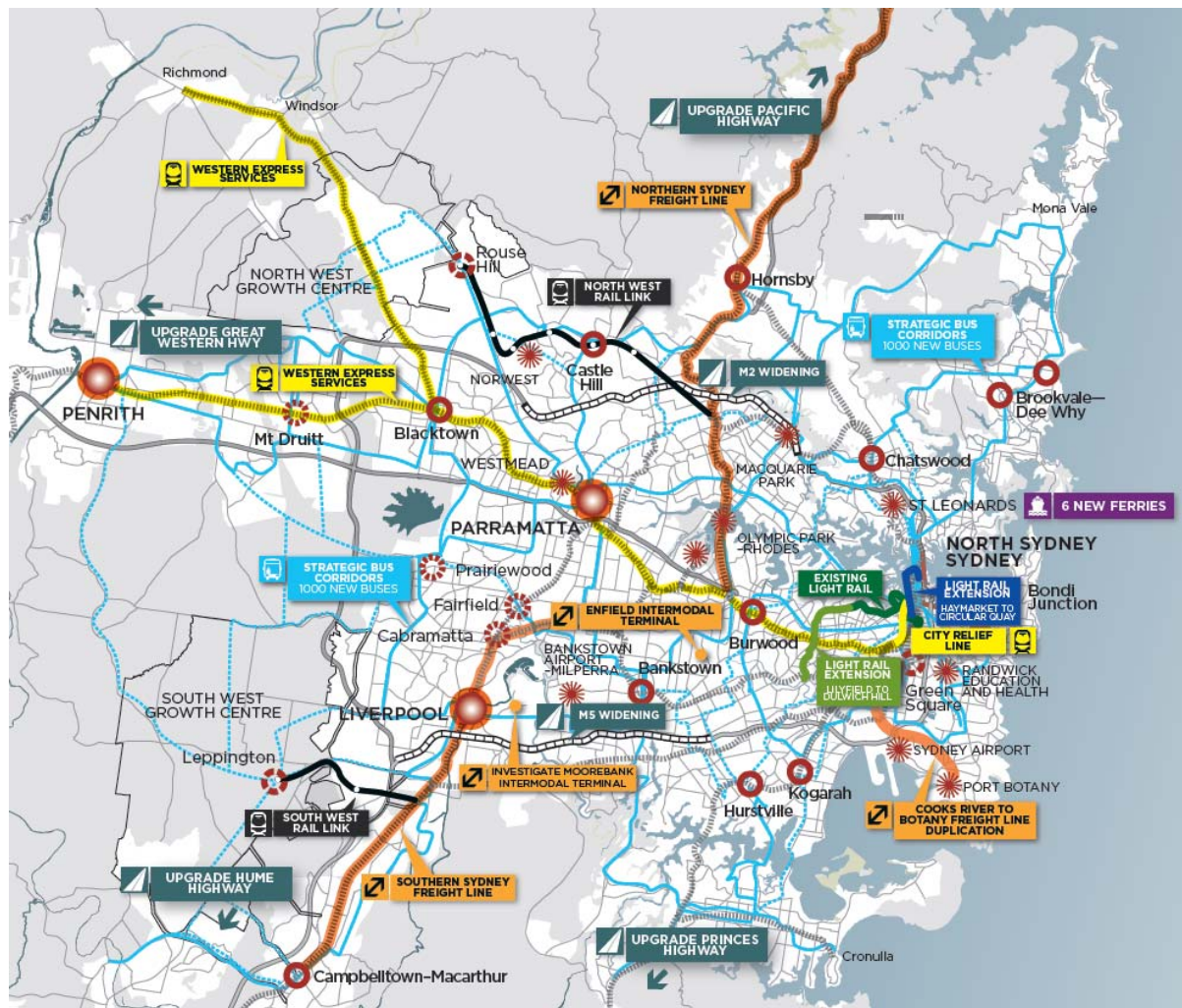
- New Express Rail Services for Western Sydney. A new express train services will be introduced from Richmond, Penrith, Blacktown and Parramatta. The estimated travel time saving from Penrith to the City is around 10 minutes. It is also expected to deliver a capacity improvement of 50 percent from Penrith to the City.
- Increasing the efficiency of the road network making the most out of the system. Of significance to Penrith, this includes an upgrade of the Great Western Highway. The potential for an outer Western Sydney orbital route has also been flagged. Penrith Council consider such a link 'is an essential infrastructure element in connecting the regional centres of Penrith, Liverpool and Blacktown with the North West and South West Growth Centres and the expanded Western Sydney Employment Hub'².
- Bus corridors. Penrith Regional City is a hub for two strategic bus corridors that link Penrith to Blacktown (and Mount Druitt). These are shown in Figure 5 by the light blue lines. Future strategic bus corridors will link Penrith to the north and south west growth centres.

As Penrith becomes more integrated with the north west and south west of Sydney through public transport investments, there will be a larger pool of labour available for local jobs and possibly a higher demand for local services and retail.

However, the competitive offer of the North Penrith site will also be influenced by transport developments in the north west and south west of Sydney which link these areas to the Sydney CBD. These include the North West Rail Link and the South West Rail. This may have the impact of broadening the pool of available labour for businesses in Penrith LGA. Alternatively, it may increase the currently leakage of Penrith LGA resident workers by making locations in the North West and South West relatively more attractive.

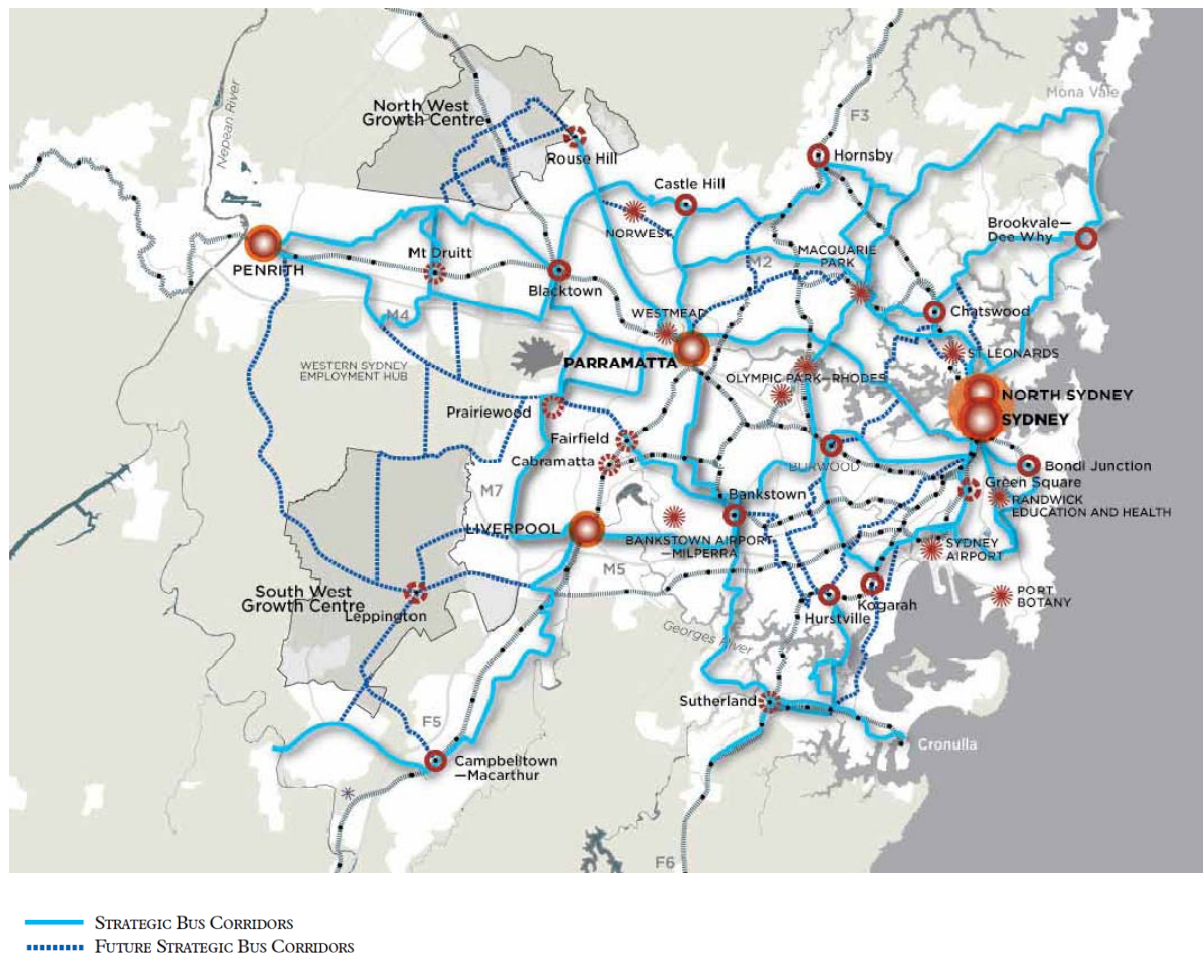
² Penrith City Council Submission to Infrastructure Australia (2008)

Figure 4. Metropolitan Transport Map



Source: NSW Government (2010)

Figure 5. Strategic Bus Corridors



Source: NSW Government (2010)

Council Policy and Planning

Penrith Planning Strategy (2008)

The Penrith Planning Strategy released in October 2008 outlines the strategic planning program to accommodate future growth and change across the LGA.

Challenges faced by Penrith City Centre, as acknowledged in the Strategy are as follows:

- A need for diversity. The Centre should not become dominated by retail activities. It requires a wide variety of uses to attract a more diverse range of people.
- Achieving a balance of activities. The Centre could potentially become split with Westfield Penrith Plaza being the main retail focus at one end of the Centre and commercial precinct along High Street at the other. There is a need to integrate Penrith Plaza more effectively with the mainstreet, with a combination of offices, restaurants and residential uses.
- Encouraging compactness and development intensity. The CBD should aim to encourage a compact centre to promote greater pedestrian activity, public transport use, and development intensification.
- Creating functional linkages. The creation of integrated paths, cycleways and pedestrian networks.
- Encouraging the growth of cultural activities. Penrith should aim to expand its cultural base by establishing cultural enterprise incubators, greater promotion of regional arts and music, and stronger connections with the Nepean River and Penrith's history.
- Building a positive identity. Penrith needs to build on its strengths and focus on its competitive advantages to foster business confidence and community support.
- Encouraging positive social interaction. There is currently a lack of meeting places within the City Centre. The creation of new meeting places will encourage greater social interaction.

The strategy notes that Penrith City Centre presently accommodates around 200,000 square metres of retail floorspace, including the Mulgoa Road bulky goods precinct, and approximately 100,000 square metres of commercial floorspace. It also notes that there is an insufficient supply of land to accommodate the NSW Government's job target for the centre.

The strategy seeks to establish strategic alliances with existing education and health assets, such as the Western Sydney Institute of TAFE, the University of Western Sydney and Nepean Hospital and associated medical facilities. This will encourage the creation of higher value knowledge-intensive jobs, in line with the Metropolitan Strategy's aims.

Draft Planning for an Ageing Community Strategy (2009)

The Draft Planning for an Ageing Community Strategy was prepared for Penrith City Council by Elton Consulting in June 2009, and provides an understanding of the needs of Penrith's ageing population and objectives for service delivery.

The themes outlined in the strategy include:

- Encouraging participation in social, leisure and cultural activities.
- Encouraging healthy lifestyles and access to health care and support services.

- Supporting older people to 'age in place'.
- Creating local communities that support active ageing.
- Encouraging participation in and contribution to community life.

The strategy highlights that the proportion of older people living in Penrith is expected to increase, with an emphasis for the strategy to be regularly monitored and reviewed to meet changing requirements.

The strategy outlines that Penrith Council needs to consider a wider range of housing options for older people, with smaller dwelling sizes being offered to accommodate downsizing and smaller household sizes. The strategy focuses on 'ageing in place', with housing needing to reflect people's choices to stay in one accommodation type for longer. This would require the provision of affordable and adaptable housing in accessible locations, and a greater variety of aged care facilities. The strategy also addresses the issue of affordability and access to health, leisure and support services for an ageing population, across the LGA.

Housing which is purpose built or adaptable for older persons could be accommodated at the North Penrith site.

Draft Urban Study and Strategy

Penrith City Council has commenced the preparation of an Urban Study and Strategy which provides a framework for existing and proposed residential development, and to manage growth of the LGA's urban areas. The purpose of the Study is to provide greater housing choice, more affordable, accessible and adaptable housing opportunities, and improved connectivity between key land uses.

The Urban Study and Strategy aims to:

- Identify the range of housing types required to meet the City's current and projected demographic profile.
- Identify centres, suburbs and locations where residential densities could be increased in the future, and how they will integrate with existing neighbourhoods and communities.
- Identify limits to growth, such as the existing urban character, existing density, access to support services, and environmental constraints.
- Identify other non-residential uses in the urban areas and consider how these will integrate with existing neighbourhoods and communities.

Again, the North Penrith site has the potential to contribute to a diversity of dwelling types in the Penrith LGA. The North Penrith site also has the potential to generate non-residential uses in an urban setting which is consistent with the aims of the strategy.

Employment Planning Strategy (2007)

The Employment Planning Strategy outlines three recommended strategies each with their own policy actions. These include:

- Working with employment planning partners.
 - Work with State Government, key land owners, developers and major institutions, both health and education, to deliver new employment lands.
 - Explore opportunities for, and the feasibility of, a business park in the LGA.

- Identify key industry sectors and develop programs to strength their contributions to employment.
- Direct efforts to attract knowledge based business service to Penrith's centres.
- Develop and implement a Business Marketing Program that promotes the region's lifestyles and it economic, skills, business and cultural strengths and attributes, in partnership with the subregional member councils, and the GWSEDB.
- Promote innovation in local business through an 'Industry Clusters' program.
- Planning initiatives relating to employment planning.
 - Promote opportunities for access to regional and metropolitan job opportunities. For example, through higher quality and more rapid transport links.
 - Attract knowledge based employment opportunities to Penrith's centres as part of the proposed Inward Investment Strategy.
 - Develop and implement a business plan for the proposed 'Business Incubator'.
 - Establish and nurture strategic alliances with key institutions.
- Research, monitor and review issues relating to employment planning.
 - Establish regular consultations with major landowners, to monitor the potential for land that may become surplus, or relevant to future planning activities.
 - Benchmark Penrith's knowledge infrastructure and lifestyle assets against other locations in the Sydney Metropolitan Region, and address identified gaps.

Draft Integrated Transport and Land Use Strategy (2008)

The Penrith Integrated Transport and Land Use Strategy was prepared by Geoplan and Cardno for Penrith City Council in June 2008. Penrith City Centre contains 10,000 square metres of office space and 156,000 square metres of retail floorspace. Of this retail floorspace, 96,000 square metres is located within the five shopping centres - Penrith Plaza, Nepean Centro, Penrith Centre, Henry Street Mall and the Henry Lawson Centre. The mainstreet contains approximately 50,300 square metres of retail floorspace.

The main problems affecting Penrith City Centre are traffic congestion and the perception of poor public transport usage and inadequate services. The Penrith City Centre Strategy aims to improving carparking and access in the centre, and enhance pedestrian movements.

Local Business Community Policy and Planning

10 Big Ideas for Penrith (2010)

The 10 Big Ideas for Penrith document released in June 2010 has been developed by the Penrith Business Alliance, the Penrith Valley Chamber of Commerce and NSW Business Chamber's Western Sydney Regional Advisory Council.

As described on the document's website, the centrepiece of the 10 Big Ideas for Penrith is a call for the NSW Government to move the Department of Transport to Penrith and the establishment of a Penrith Business Park and a Penrith Lakes Development Authority.

Major attractions for the proposed Penrith Business Park are considered to include road and rail transport linkages, the University of Western Sydney and 'an environment to develop substantial relationships with other businesses in the area'. The plan recommends that the Department of Transport be located in the Penrith Business Park. Potential locations for the business park are not provided.

The plan makes reference to the North Penrith site, acknowledging that 'it will have a dramatic impact on the way Penrith develops'. Redevelopment of the Penrith CBD is included as one of the 10 Big Ideas but there is little detail on what development would entail.

The complete list Big Ideas for Penrith is as follows:

1. Create additional parking and implement transport solutions for Penrith CBD
2. Relocate the Department of Transport to Penrith
3. Strengthen north-south Traffic and Transport Infrastructure
4. Encourage a major business headquarters to move to Penrith
5. Create a Health Technology Precinct
6. Create new jobs in Penrith
7. Upgrade Penrith Lakes Facility
8. Develop a Penrith Business Park
9. Redevelop Penrith CBD
10. Collaborate on a positive marketing plan for Penrith

Penrith Business Alliance Submission to Metropolitan Strategy Review (2010)

The submission by the Penrith Business Alliance to the Metropolitan Strategy Review outlines that there is 'little evidence of policy action with regard to supporting the level of development envisioned in the Strategy'. This is reinforced by evidence from supporting documents which highlight the problems that Penrith Centre faces. These include:

- The Penrith Regional City Infrastructure Strategy. This identifies that Penrith requires \$1 billion to support the existing needs of LGA, and a further \$3 billion is required for additional work to provide for future development and growth. The strategy also recommends developing a comprehensive Structure Plan for Western Sydney to identify the location, form and phasing of development, and the requirements of infrastructure and funding.
- The North West and West Centre Employment Strategies. The strategies recommend the creation of a framework to understand the regional economy and its key attributes. Once economic issues have been identified the region focus on employment growth, the creation of competitive industries and new business formations. Penrith in particular faces the difficulties of insufficient competitive industry clustering and skills shortages.
- The National Growth Areas Alliance has identified that Penrith has high living costs, an undersupply of infrastructure and services, and limited access to jobs. The Alliance proposes that responsibility be shared across all three levels of government to deal with funding, co-ordination and the delivery of infrastructure and services.

As part of the Metropolitan Strategy Review the Alliance is seeking numerous directions to guide economic development and jobs growth. The directions which relate to Penrith city centre include:

- The reinforcement of Penrith's regional city status based on its future catchment of one million people and a clear articulation of its economic functions based on its strengths in the Health and Well Being, Transport and Logistics, and other identified sectors.
- A clear recognition that the revitalisation of the Penrith CBD and its transformation as a fully functional urban centre that needs to grow to service one million people will not occur without direction intervention from the Government.
- A commitment that in its efforts to revitalise the CBD, the government will relocate a number of relevant departments and agencies which are appropriate and that provide the impetus for the growth of key industry sectors in Penrith.
- A strong endorsement of the submission by Penrith City Council and its call for infrastructure and transport and community solutions that are severely impacting on the city's capacity to grow and provide housing, jobs and a full range of community and social services befitting a regional city.
- Support for 'magnet' development opportunities in the City, such as the North Penrith Army Lands, Riverlink precinct, the Nepean Hospital precinct, Werrington Enterprise Living and Learning precinct, which provide significant opportunities for job creation in the City.
- Immediate review and reactivation of the key recommendations of the Penrith City Centre Plan already endorsed by the Department of Planning.

The Alliance proposes that the State Government, along with Penrith City Council, establish a Penrith 'development authority'. The authority would focus on growing Penrith CBD's capacity to become a Regional City, by having a leadership role in planning key economic development opportunities.

Penrith Business Alliance – Strategic Plan

Penrith Business Alliance's Strategic Plan 2009-2014 outlines the Alliance's strategic directions and plans for building Penrith as a regional city. Penrith City's competitive strengths, such as its provision of significant land for future development and its diverse economic base and number of major businesses, provide the City with future development and employment opportunities.

There is a dominance of small businesses within Penrith LGA. The plan recognises the need to support small businesses which provide opportunities to create local jobs, and increasing employment self sufficiency. The plan also outlines the need for Penrith City to diversify its economic base, especially as it has the potential to expand into education and health industries, business and professional services, tourism, transport and logistics, and creative industries.

The plan states that Penrith Council has made provision for adequate supply of zoned employment land. Future focus should be on broadening its skilled labour force and to create greater access to regional and Metropolitan job opportunities. This may be achieved by building on the strengths of existing infrastructure assets, such as the Hospital and University, and facilitating renewal of town and neighbourhood centres within an agreed retail hierarchy.

A study on the Western Sydney regional economy sited in the plan by Professor Phillip O'Neill recommends that Penrith:

- Build on regional service centre functions, including retail, entertainment, health, education, recreational, civic and cultural services.
- Build infrastructure to build the connections vital for new investments.
- Protect local advantages especially in natural and cultural heritage.

5. North Penrith Residents

At a glance

North Penrith is expected to accommodate a population of 1,941 residents who are anticipated to have a similar socio-economic profile to existing residents of Penrith LGA.

The North Penrith site is well positioned to accommodate higher density options as it is within immediate proximity to rail and bus transport options, employment opportunities, retail and services.

Underlying Demand for Housing Types

SGS has constructed a housing demand model which aligns dwelling types with family types. By examining these patterns at a broad spatial level we are able to determine underlying housing preferences. This forms the basis of a forecast of underlying demand for housing and enables forecasts by dwelling type and number of bedrooms based on forecast population growth and demographic characteristics.

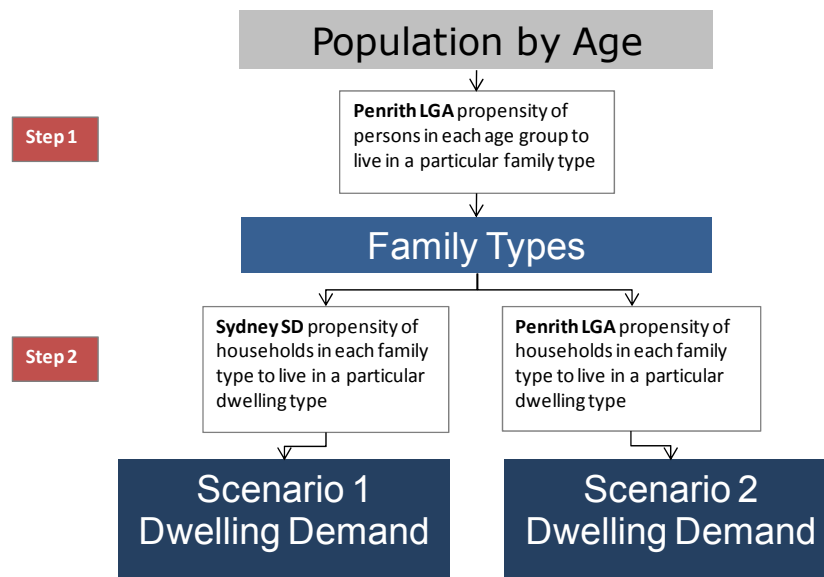
The underlying demand for particular dwelling types for Penrith LGA has been estimated using a 'propensity-based model'. The propensity to belong to a particular household is expected to change over time with decreasing fertility rates and lifestyle choices. It is difficult to estimate the extent to which family types, or the propensity of particular family types to live in particular dwelling types, will change in future. Typically, the forecast result will ascribe the decreasing prevalence of traditional family units (composed of a mother, father and two children). The methodology used to encapsulate these forecast changes in the relationship between population and dwellings is described below and illustrated in summarised in Figure 6.

- Population projections by age group have been sourced from the NSW Department of Planning³. These projections are disaggregated into family/relationship type, where the future distribution between age group and family/relationship type is linearly extrapolated based on the trends in 1996, 2001 and 2006 ABS Census data.
 - Projected family types (by number of persons) are converted to number of households based on the trends observed in household sizes of different family and household types in 1996, 2001 and 2006 ABS Census data.
- Projected family types are then disaggregated into dwelling types. Again, future distribution is linearly extrapolated based on the trends in 1996, 2001 and 2006 ABS Census data. Two scenarios have been developed to determine the likely demand for different types of dwellings.
 - In scenario 1, the model has been run using the trend relationship between family types and dwelling type for Penrith LGA.
 - In scenario 2, the model has been run using the trend relationship between family types and dwelling type for Sydney Statistical District (SD).

³ (2010)

In both scenarios, the number of dwellings is the same. However, the profile of dwelling types is different.

Figure 6. Summary of SGS Housing Model



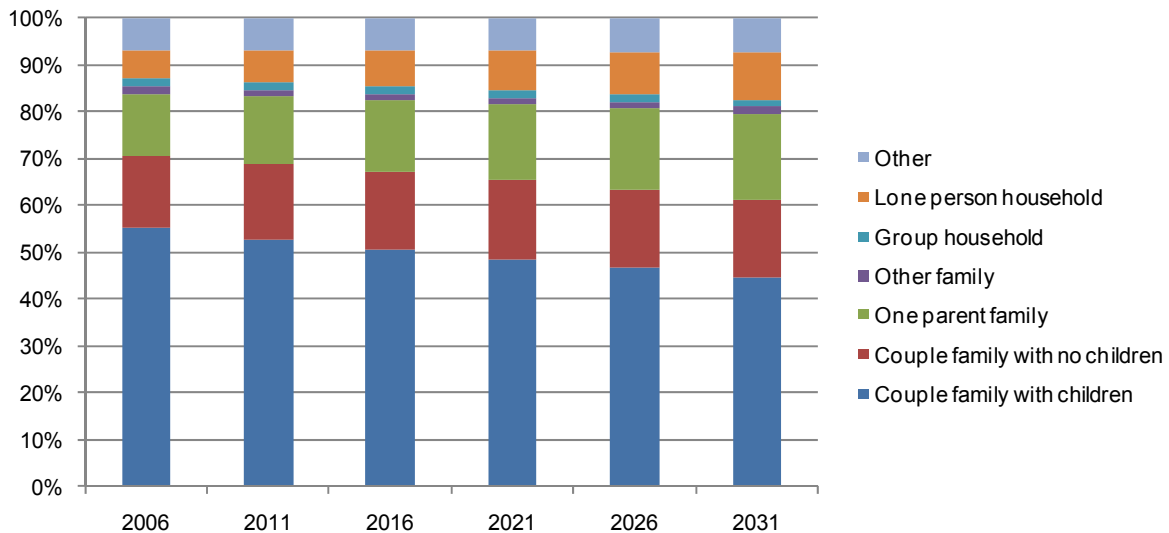
Source: SGS Economics and Planning (2010)

The results of step 1 of the model, disaggregated the population into total persons by family types, are shown in Table 2. Between 2006 and 2031, the number of persons living in lone person households is likely to increase at the greatest rate, at an average of 3.0 percent per annum. The number of persons living in lone person households is also likely to increase at a rate above other family types, at an average of 2.4 percent per annum. The relative shares of each family type are shown at five year intervals in 0.

Table 2. Family Type propensities projected to 2031, Penrith LGA

		2006	2011	2016	2021	2026	2031	2006 - 2031 Change	2006 - 2031 AAGR
Persons living in...	Couple family with children	98,019	96,222	99,253	100,029	100,027	103,982	5,963	0.24%
	Couple family with no children	26,972	28,980	32,413	34,586	36,027	39,393	12,422	1.53%
	One parent family	23,641	26,011	29,947	33,531	37,172	42,609	18,968	2.38%
	Other family	2,744	2,847	3,079	3,215	3,384	3,762	1,018	1.27%
	Group household	2,832	2,967	3,227	3,386	3,538	3,881	1,049	1.27%
	Lone person household	10,960	12,484	14,812	16,940	19,189	22,933	11,974	3.00%
	Other	11,985	12,529	13,767	14,741	15,774	17,749	5,764	1.58%
	Total Persons	177,152	182,039	196,498	206,429	215,111	234,309	57,157	1.12%

Source: SGS Economics and Planning (2010)

Figure 7. Percentage of Family Types projected to 2031, Penrith LGA

Source: SGS Economics and Planning (2010)

Overall, the expected population increase translates into an additional 25,156 households. The different dwelling types occupied by these households (step 2 of the model) vary between the two scenarios adopted for modelling.

The results of scenario 1 (Table 3), which assumes the trend relationship between family types and dwelling type for Penrith LGA, indicate that across the LGA between 2006 and 2031 there will demand for around

- 14,134 additional detached dwellings
- 9,394 additional semi-detached / row / terrace / townhouse dwellings
- 1,645 additional flat / unit / apartment dwellings.

The results of scenario 2 (Table 4), which assumes a trend relationship between family types and dwelling experienced across Sydney SD, indicates that the demand for higher density dwelling options will be greater than in scenario 1. In summary, scenario 2 suggests that across the LGA between 2006 and 2031 there will be demand for around:

- 10,056 additional detached dwellings
- 4,626 additional semi-detached / row / terrace / townhouse dwellings
- 3,028 additional flat / unit / apartment dwellings.

The different results between scenario 1 and scenario 2 are shown by the divergent solid and dotted line in Figure 8.

The purpose of running the two scenarios is to demonstrate how the demand for different dwelling types could change if Penrith residents adopt similar patterns of dwelling occupancy to other areas in Sydney SD. A greater demand for higher density options by family types which currently occupy lower density option could be driven by several factors. For example,

an increasing scarcity of land for new residential development could make higher density options more price competitive. Additionally, the quality of higher density options may improve with an offer of shared facilities that are not feasible to provide on a lot by lot basis.

The North Penrith site is well positioned to accommodate higher density options as it is within immediate proximity to rail and bus transport options, employment opportunities, retail and services.

Table 3. Dwelling Demand Forecast for Penrith LGA based on Dwelling Type Propensity of Penrith LGA

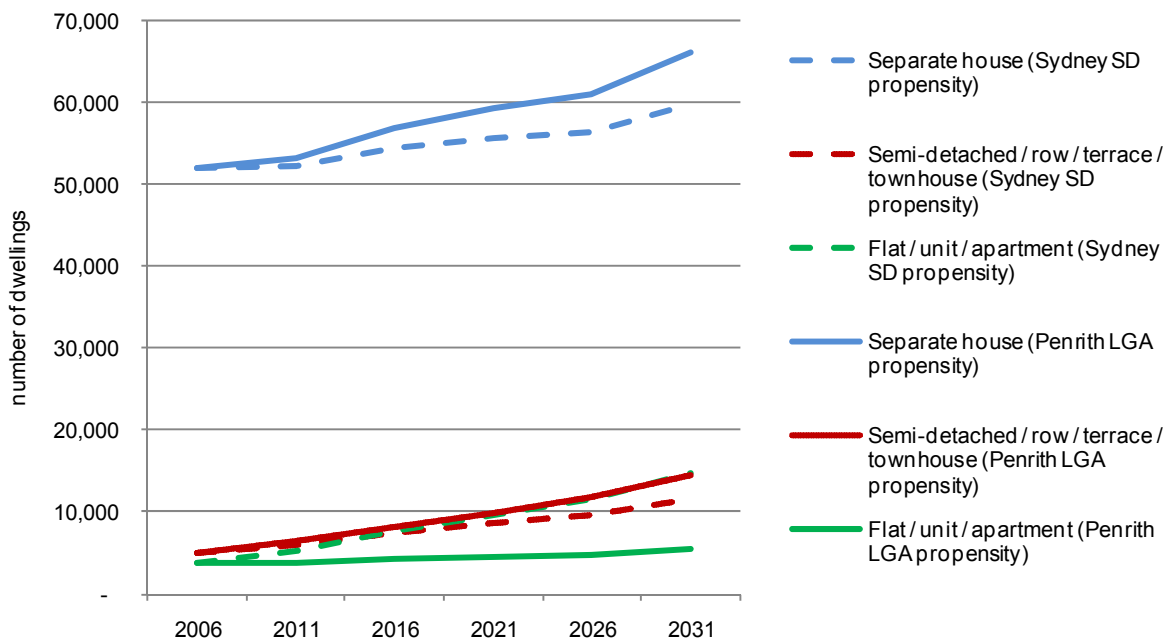
		2006	2011	2016	2021	2026	2031	2006 - 2031 Change	2006 - 2031 AAGR
No. of Private Dwellings	Separate house	52,068	53,166	56,966	59,346	61,137	66,203	14,134	0.97%
	Semi-detached / row / terrace / townhouse	5,114	6,483	8,234	9,961	11,782	14,508	9,394	4.26%
	Flat / unit / apartment	3,834	3,880	4,204	4,471	4,754	5,479	1,645	1.44%
	Other	420	316	341	357	370	403	-17	-0.16%
	Total Private Dwellings	61,436	63,845	69,744	74,135	78,042	86,592	25,156	1.38%

Source: SGS Economics and Planning (2010)

Table 4. Dwelling Demand Forecast for Penrith LGA based on Dwelling Type Propensity of Sydney SD

		2006	2011	2016	2021	2026	2031	2006 - 2031 Change	2006 - 2031 AAGR
No. of Private Dwellings	Separate house	52,068	52,190	54,413	55,635	56,475	59,791	10,056	0.55%
	Semi-detached / row / terrace / townhouse	5,114	6,051	7,377	8,541	9,670	11,554	4,626	3.31%
	Flat / unit / apartment	3,834	5,276	7,601	9,590	11,514	14,829	3,028	5.56%
	Other	420	328	353	369	383	417	- 2	-0.02%
	Total Private Dwellings	61,436	63,845	69,744	74,135	78,042	86,592	25,156	1.38%

Source: SGS Economics and Planning (2010)

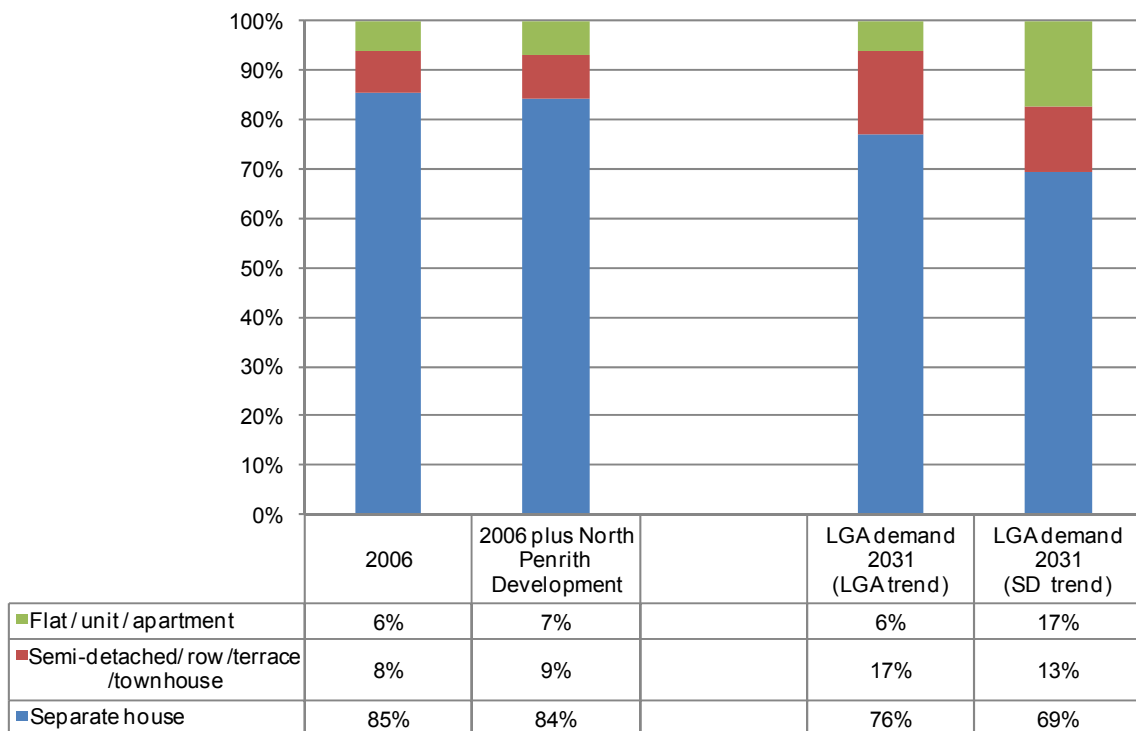
Figure 8. Dwelling Demand Forecast for Penrith LGA

Source: SGS Economics and Planning (2010)

Looking at the dwelling mix proposed for the North Penrith site in the Housing Demand and Supply Assessment indicates that the site can accommodate some of the underlying demand for higher density dwellings in Penrith LGA into the future. However, the proposed share of attached dwellings falls short of the future share required, as indicated by the housing demand model (Figure 9). This implies that higher density dwellings will also be required elsewhere in the LGA, in the longer term.

Market research conducted for Landcom by Genesis Training and Research revealed that while the majority of potential residents of North Penrith seek 'single dwellings with a slight modern edge', the provision of some apartment developments is acceptable subject to particular design requirements⁴.

⁴ Genesis Training and Research (2010), Presentation for Landcom 16 July

Figure 9. Share of dwelling types

Source: Landcom (2010), ABS (2006) and SGS Economics and Planning (2010)

Anticipated Resident Population

The anticipated resident population of North Penrith in 2016 is around 1,900 persons. The estimated number of residents is based on the assumption that there will be 900 dwellings.

Population characteristics

The North Penrith Social Sustainability Report⁵ profiles the social composition of the area surrounding the proposed development.

The report describes the socio-economic characteristics of the surrounding population as 'mixed' with 'a predominantly young, well educated and employed population on moderate incomes in the immediate Lemongrove area and an older, lower income population in the wider suburb of Penrith'. The authors of the report anticipate that the demographic composition of North Penrith residents will be the same as the local area:

'The North Penrith Urban Area population is also likely to have a broad socio-economic profile, reflecting the variety of pricepoints for different dwelling sizes and types and the inclusion of some affordable dwellings, along with larger detached dwellings for sale. Based on the wider Penrith experience, a reasonably high proportion of the medium and higher density dwellings s likely to be purchased by investors and made available as rental housing, as is the case in the wider area'.

⁵ Elton Consulting (2010)

Impact on existing residential activity in the City Centre and North Penrith Vicinity

The Concept Plan includes a range of dwelling types which is largely unprecedented in the Penrith area. SGS has used the SGS Housing Model to assess the underlying demand for higher density housing in Penrith LGA. The results of the model indicate that there is an underlying demand for higher density dwellings driven by the change in population demographics over the forecast period and changes in household occupancy patterns such that they more closely reflect patterns elsewhere in Sydney. The North Penrith site is well positioned to accommodate higher density options as it is within immediate proximity to rail and bus transport options, employment opportunities, retail and services.

6. Commercial Land Use at North Penrith

At a glance

The commercially zoned portion of the North Penrith site will be critical in achieving the job target established for the development (770 jobs). It will also be important in contributing to the role of Penrith as a Regional City.

The recommendations put forward by SGS for commercial development on the site recognise that need for a style of development that is an alternative to what's on offer in the CBD. The recommendation for flexible design codes to allow purpose built offices is aimed attracting institutions such as the Sydney Catchment Authority, CSRIO or National Parks and Wildlife Services or service businesses with a regional catchment.

Assessment of site potential for commercial land use

Penrith in the Metropolitan Context

The commercially zoned portion of the North Penrith site will be critical in achieving the job target established for the development (770 jobs). It will also be important in contributing to the role of Penrith as a Regional City.

This Land Use and Economic Assessment has considered the site's appropriateness for commercial activities given its context within the Sydney Metropolitan Area and North West Subregion.

Across the 2009 calendar year, net absorption across the Sydney Metropolitan office market was negative, with the vacancy rate increasing from 7.3 percent in January 2009 to 9.4 percent by January 2010⁶. This can be largely attributed to the impact of the global financial crisis. The return of more stable macroeconomic conditions following the slowdown in the first half of 2009, has resulted in increased business confidence and tenant demand. Polled in November 2009, many respondents to the Jones Lang LaSalle Investor Sentiment Survey believed that the bottom of the property cycle had been reached with an improvement in transaction activity in late 2009⁷.

For the suburban markets, vacancies increased by one percentage point during 2009, to 8.8 percent. However, the Sydney West region has performed comparatively well. Over the six months to January 2010, vacancy rates in the Sydney West region fell from 13.6 percent to 8.4 percent, 'demonstrating an increased attractiveness of the Sydney West area to tenants'⁸. CBRE forecasts the suburban vacancy rate to decrease by 1.3 percent to 7.5 percent in 2012⁹.

CBRE notes that with supply levels in the traditional office markets falling in 2009, the suburban market could be a potential benefactor offering cheaper rents and faster build time

⁶ CBRE – Sydney Metropolitan Office Q1 2010

⁷ JLL – Office Investment Market Review Australia Jan 2009-Mar 2010

⁸ CBRE – Sydney Metropolitan Office Q1 2010

⁹ CBRE – Sydney Metropolitan Office Q1 2010

than other markets¹⁰. Average prime net face rents in the March 2010 quarters across the major office markets ranged from \$615 per square metre in the Sydney CBD, \$300 per square metre in Macquarie Park and \$330 per square metre in Parramatta. Office rents in Sydney West, averaging \$232 per square metre in the March 2010 quarter are not only cheaper than the major office markets, they are also lower than all other suburban markets which average \$315 per square metre (Table 5 and Figure 10).

No significant additions to office supply in the Sydney West region are noted in the market reports. Figure 11 shows that after two years of significant additions, the Sydney West region actually experienced a net decrease in office supply.

The major office markets within closest proximity to North Penrith are Norwest and Parramatta. Colliers reports that unlike the majority of office markets across Sydney, the Norwest office market is set to see two new developments complete over the course of 2010 which will bring 12,760 square metres of A-grade office space into the market¹¹. In Parramatta, 24,000 square metres of floorspace was added to supply in early 2009 with the completion of two major projects but a more modest increase in net addition over the next five years of around 14,300 square metres per annum is anticipated¹².

Table 5. Suburban Office Summary

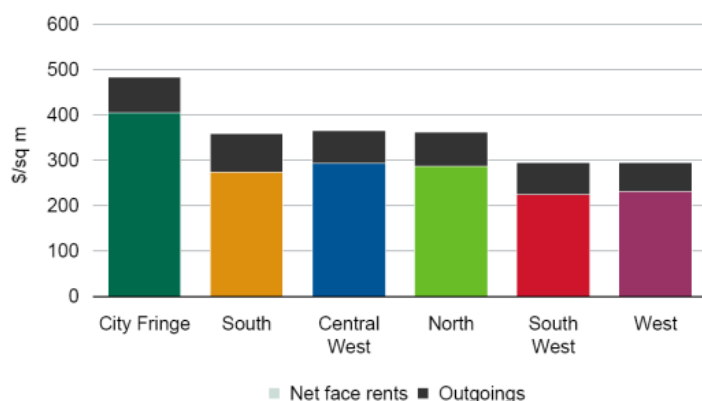
Suburban Markets	Total Stock (sq m)	Annual Net Absorption (sq m)	Total Vacancy (%)	Avg. PR Net Face Rent (\$/sq m)	Avg. Prime Yield (%)	Avg. Capital Value (\$/sq m)
North	873,827	5,130	13.7	288	9.43	3,052
City Fringe	867,173	47,317	7.3	406	8.64	4,699
Central West	499,270	-3,131	6.2	294	9.13	3,220
South	425,523	7,855	5.1	275	9.15	3,001
South West	184,630	-1,385	8.6	225	10.45	2,155
West	148,450	19,803	8.4	232	10.33	2,243
Suburban Total	2,998,873	75,589	8.8	315	9.22	3,411

Source: CBRE Sydney Metropolitan Office Q1 2010

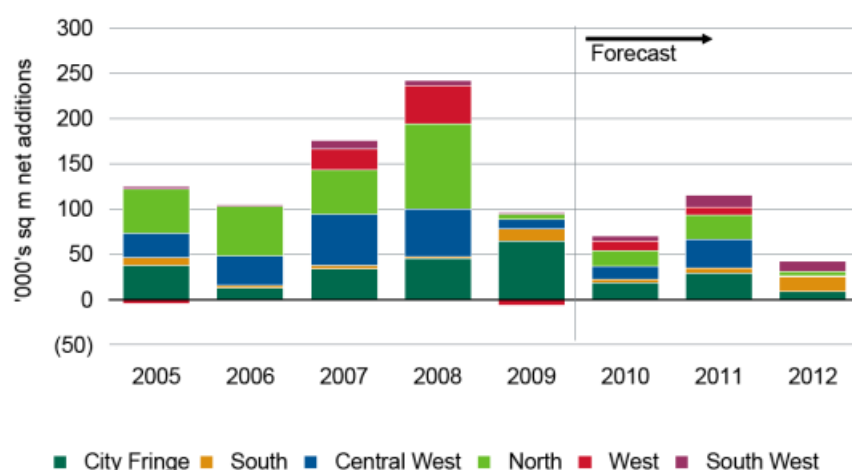
¹⁰ CBRE – Sydney Metropolitan Office Q1 2010

¹¹ Colliers International Market Indicators Report – Sydney Metropolitan Office Autumn 2010

¹² CBRE – Sydney Metropolitan Office Q1 2010

Figure 10. Office Rents for Suburban Regions

Source: CBRE Sydney Metropolitan Office Q1 2010

Figure 11. New Office Supply for Suburban Regions

Source: CBRE Sydney Metropolitan Office Q1 2010

Commercial activity in Penrith LGA

Within Penrith itself, most commercial activity is concentrated in the CBD. The Penrith City Centre Vision¹³ notes that in 2006, Penrith CBD had around 100,000 square metres of commercial office space. Macroplan¹⁴ has estimated that there is currently between 115,000 and 120,000 square metres of commercial office space. Offices are concentrated along High Street, mostly in street fronting premises or first floor shoptop style accommodation.

The NSW Government office building at 2-6 Station Street is the most significant recent office development in Penrith CBD. It is comprised of three levels of underground parking (120 car spaces) and a seven storey office building of approximately 8,400 square metres of net

¹³ NSW Department of Planning (2006)¹⁴ (2010) Project Optimisation Plan: Penrith City Centre for Penrith Business Alliance

lettable area¹⁵. The building was opened by the then Premier of NSW, Nathan Rees, in December 2008 (see Figure 12). Other recent office developments include:

- 606 High Street (around 3,500 square metres). This building is near completion and the listing agent has had multiple enquiries, including those from solicitors, accountants and corporate businesses currently based in Homebush and Parramatta and some local government authorities. Around 50 percent is already leased.
- 331 High Street (around 2,200 square metres, see Figure 12). Built in 2008 this building is now mostly leased. Two office spaces were leased six months ago and one space remains vacant. Tenants include Colliers and serviced offices. Enquires for space have come from accountants, banks, solicitors and real estate agents.
- 282-284 High Street. This building is a mixed use building offering small retail or office suites ranging from 70 to 123 square metres.

Macroplan notes that planning approval has also been granted to a mixed use retail/office/residential building at 612-632 High Street. This building, once completed, will add a further 2,365 square metres of retail space and 10,095 square metres of commercial floorspace to the city centre. Other relevant data contained within the Macroplan report is as follows:

- Not including the Council Civic Centre, about 40,000 square metres of Penrith's office space can be classified as A-grade space. This includes the ATO building, the State Government Offices and around 10,000 square metres of new High Street/Henry Street space.
- Almost all of this space is occupied by government agencies, although private firms completely occupy Macquarie House at 86 Henry Street and most of the Penrith Executive Centre at 331 High Street.

Real estate agents interviewed for this study indicated that the new government office building on Station Street has left a large amount of vacant floorspace which has been difficult to fill. Six to 12 months ago there was around 15,000 square metres of vacant commercial floorspace in the CBD. Reportedly, much of this has more recently been absorbed by employment agencies, disability carers, banks and some government agencies. This may indicate that the slow uptake of space was due to the general decline in leasing activity associated with the global financial crisis rather than a reflection of the prospects of Penrith as a business location.

Real estate agents indicate that smaller floorplates usually have faster take-up periods as they are more affordable. This is also likely to reflect the current profile of private businesses which require smaller offices. Consultation with business representatives indicated that large floorplates would be suitable for the North Penrith site as an attractor for strategic investors.

One real estate agent interviewed for this study indicated that there is currently around 3000 square metres of vacant A-grade office space and around 3500 square metres of vacant B-grade office space in the Penrith CBD. Taking Macroplan's upper estimate for total commercial floorspace of 120,000 square metres, this implies a vacancy rate of 6.3 percent. This is quite low compared to markets elsewhere in the Sydney Metropolitan Area. Total

¹⁵ Australian Institute of Architects (2009)

vacant floorspace, including both retail and commercial, in the Penrith CBD is reported by another real estate agent to be 20,943 square metres.

While there is in theory sufficient commercial floorspace capacity in the Penrith CBD to accommodate targeted jobs growth¹⁶, this is unlikely to be realised in the short to medium term as it would require redevelopment of presently occupied sites.

Figure 12. Recent office developments in Penrith CBD

331 High Street, Penrith



Government offices, Station Street, Penrith



Source: www.realcommercial.com.au (2010) and Australian Institute of Architects (2009)

Penrith LGA Resident Workforce

Employment data indicates that in 2006 around 63 per cent of residents in Penrith LGA travelled outside of the LGA for work (over 50,000 workers)¹⁷. Notably, there is a high incidence of Clerical and Administrative Workers who travel from Penrith to Parramatta and Sydney. This occupation category accounts for 18 percent (almost 4,000 workers) of Penrith's resident workforce which leaves the LGA for work. Other typically office-based occupations including Professionals and Managers each account for 13 percent and 12 percent respectively of Penrith's resident workforce which leaves the LGA for work.

The low level of workforce retainment in these occupation groups indicates that there is likely to be potential within the existing local labourforce to occupy more office-based local jobs. Providing jobs for local residents at North Penrith would support the NSW State Plan priority E5 for 'jobs closer to home'. There may, in addition, be opportunities for North Penrith to provide jobs closer to home for residents of the Blue Mountains LGA.

However, the lack of a highly educated workforce, relative to other parts of the Sydney Metropolitan Area may impact negatively on the site's capacity to attract major office development. Levels of educational attainment are typically higher around the Sydney CBD and to the north west of the Metropolitan Area (see figure below). This also corresponds with the location of the major office centres. This means that the major office markets have a

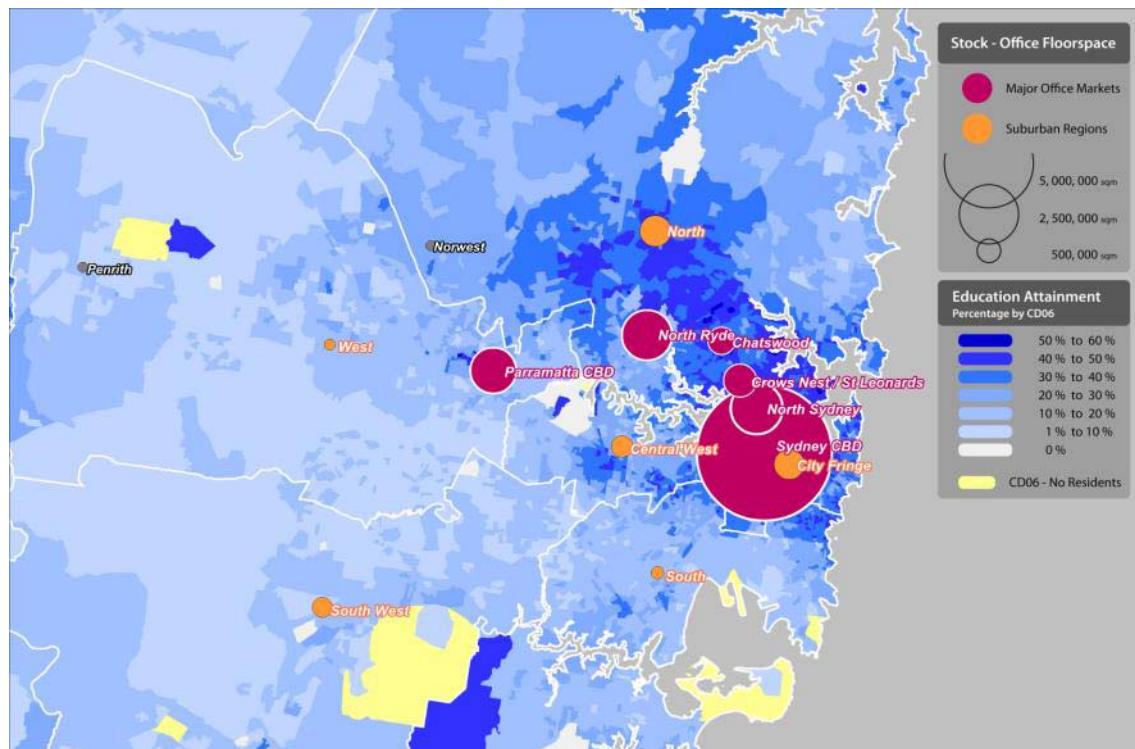
¹⁶ Macroplan (2010) Project Optimisation Plan: Penrith City Centre for Penrith Business Alliance

¹⁷ Bureau of Transport Statistics (BTS) (2010)

readily available pool of highly educated workers and this reinforces the existing major centres.

Planned residential developments in the LGA that include some executive housing (such as Glenmore Park and Cranebrook) may provide a boost to the local skills profile. New housing estates, including the Vines at Orchard Hills and Twin Creeks at Luddenham also offer attractive housing options on one acre blocks which could attract highly-skilled residents.

Figure 13. Educational attainment and location of major office markets



Source: ABS Census 2006 and Property Council 2009

Strategic drivers and relationship to nearby land uses

One of the challenges for the North Penrith site is the creation of jobs in the commercial sector without compromising the performance of the Penrith CBD.

The local business community is keen to see the establishment of a Penrith Business Park as one of '10 Big Ideas for Penrith'¹⁸. Major attractions for the proposed Penrith Business Park are considered to include road and rail transport linkages, the University of Western Sydney and 'an environment to develop substantial relationships with other businesses in the area'. Potential locations for the business park are not provided.

The concept of a business park can take on various forms. Sydney's most expansive business park is Norwest Business Park. Norwest Business Park is located on a 377 hectare site in Baulkham Hills, between Windsor Road and Old Windsor Road, and is characterised by corporate headquarters and high tech industrial development. Norwest has succeeded

through providing high tech/advanced manufacturing space in a highly skilled and affluent area, with an attractive environment offering an appropriate housing product to attract residents of this calibre who wish to live and work in the same area. Single ownership and excellent motorway access are also critical success factors.

A business park of this nature at North Penrith would offer something different to the current CBD, though there are significant drawbacks of the site for this type of land use. The most limiting factors are:

- The site's capacity. The entire North Penrith site is 40 hectares, around one tenth of the size of Norwest.
- The existing designation of alternative sites in the North West subregion. There are many competing sites for business parks. Locations such as Marsden Park Industrial Precinct and Riverstone West Precinct are likely to be developed at lower cost than North Penrith due to the lower value of land. These alternative sites also have the support of the NSW Government.
- Motorway access and site exposure. While the North Penrith site is not far from the M4, there is no direct exposure of the site to the motorway. There may also be local traffic issues at the North Penrith site, especially with the proposed commuter car park.

While the size of the North Penrith site, competition from alternative sites and its lack of direct access to major road infrastructure are prohibitive to the development of a Norwest style business park, investigation undertaken for the Land Use and Economic Assessment indicates that the North Penrith site has potential for an alternative model of Business Park.

Alternative models of business parks include:

- Innovation parks
- Business incubator precincts
- Eco-industrial parks
- Small-scale

These are described in the following table.

Table 6. Business Park Typology

Typology	Typical Tenants	Characteristics	Examples
Innovation Parks	Research oriented Distributions, service and repair of high-tech goods	<ul style="list-style-type: none"> ▪ Customised building design ▪ Campus style layout ▪ Broadband fibre optic cable network providing high speed, high quality connectivity options ▪ Conference centre and/or meeting space ▪ Informal broker of relationships to maximise benefits from knowledge sharing externalities ▪ Government or major institutional support 	<ul style="list-style-type: none"> ▪ Research Park, Macquarie University - a 7 hectare park within the university campus. ▪ ATP (Sydney) – a 14 hectare park owned by the Redfern Waterloo Authority
Business Incubator Precincts	Small business start-ups Not-for-profit organisations	<ul style="list-style-type: none"> ▪ Customised building design ▪ Broadband fibre optic cable network providing high speed, high quality connectivity options ▪ Conference centre and/or meeting space ▪ Business support services ▪ Government or major institutional support 	<ul style="list-style-type: none"> ▪ Sunshine Coast Innovation Centre - 3,000 square metres of office space at the edge of University of the Sunshine Coast ▪ Planned for precinct at the WELL precinct
Eco-Industrial Parks	A wide variety of complementary businesses often with a focus on the use of regional natural resources	<ul style="list-style-type: none"> ▪ Customised building design ▪ Design guidelines to ensure all development meets high performance standards and reduces water, energy and resource use. ▪ Retained ecological features ▪ Innovative infrastructure such as naturalized stormwater treatment and local energy generation ▪ Broadband fibre optic cable network providing high speed, high quality connectivity options ▪ Government or major institutional support 	<ul style="list-style-type: none"> ▪ Dandenong LOGIS (Victoria) – 23 lots between 3,000 and 9,000 square meters. developed through a partnership between several Victorian Government agencies ▪ Planned park at the St Marys ADI site
Low-Scale Industrial Parks	Trade services and/ warehousing with office requirements	<ul style="list-style-type: none"> ▪ Commercial vehicle access ▪ Workshops with adjoining office space 	<ul style="list-style-type: none"> ▪ South Penrith Business Park, South Penrith ▪ Ashmore Estate, Erskineville

Of these alternative models for business parks, the North Penrith site would be most suited to a research-oriented park, business incubator precinct or small eco-industrial park. As discussed further in the next section of this report, the land value of most of North Penrith is likely to be too high to support industrial uses. The same rationale applies to the site's potential to accommodate a low-scale industrial park. Access for commercial vehicles to the site is also likely to be hindered by local resident and commuter traffic which reduces the site's suitability for a low-scale industrial park.

A research-oriented innovation park, business incubator precinct or small eco-industrial park would require the support of the government or major institutions. On face-value, business linked with the Nepean Hospital, University of Western Sydney and/or Western Sydney Institute of TAFE would be prime candidates for an alternative model business park development at North Penrith. However, it appears that the growth in the health and education sector will be focused elsewhere.

The Penrith Business Alliance, who have been asked by the NSW Premier to facilitate the growth of the health and education sectors in the area, have indicated that development is likely to occur within the existing health and education precincts. There is already evidence that this is occurring. The Director General's Requirements for the environmental assessment of a mixed use development near the Nepean Hospital, on the corner of Parker Street and Barber Avenue Kingswood, have been issued. The proposed mixed use development has a capital value in excess of \$110 million and includes the following components:

- Commercial floorspace primarily for medical-related uses
- Accommodation including apartments, seniors living as well as a hotel and serviced apartments
- Retail services and facilities for hospital visitors
- Five level underground basement car park providing approximately 1000-1200 spaces

The University of Western Sydney has an abundance of land for research activities and a business park style development has already been mooted for the Werrington Enterprise Living and Learning (WELL) precinct.

There may be potential for strategic development of a precinct focussed on water and environmental research given the site's proximity to the Nepean River system and national parklands. Tenants might include the Sydney Catchment Authority, CSIRO or National Parks and Wildlife Services. These organisations have not yet been approached regarding their interest in the North Penrith site.

Industries suited to the North Penrith site would also include those with a large clerical and administrative skills component, to match the skills profile of residents who currently leave the Penrith LGA for work. These could be back-office or service related business with a focus on the North West Subregion. North Penrith may also be able to provide jobs closer to home for residents of Blue Mountains LGA.

Given Penrith is still in the very early stages of growth towards its Regional City status, adaptability for high density employment uses should be a key consideration in the design of the commercial areas of North Penrith. Stand-alone, large floorplate buildings may best suit

current market gaps but the arrangement of buildings on the site should not preclude possible infill development in the longer term.

Impact on existing commercial activity in the City Centre and North Penrith Vicinity

As stated earlier in this section of the report, one of the challenges for the North Penrith site is the creation of jobs in the commercial sector without compromising the performance of the Penrith CBD.

The recommendations put forward by SGS for commercial development on the site recognise that need for a style of development that is an alternative to the Penrith CBD's offer. The recommendation for flexible design codes to allow purpose built offices is aimed at attracting institutions such as the Sydney Catchment Authority, CSIRO or National Parks and Wildlife Services or service businesses with a regional catchment. Such businesses would assist in providing jobs for residents of the Penrith LGA and possibly the Blue Mountains LGA who currently travel outside of the Penrith LGA for work. Thus, commercial floorspace at North Penrith would not be drawing employees from the Penrith CBD.

A minimum area of the North Penrith site will need to be set aside for commercial use in order to create a sense of commercial address. If the amount of commercial floorspace is too low the attraction of larger businesses or institutions may be difficult. The result may then be a commercial offer at North Penrith which is similar to the current commercial offer of the Penrith CBD. This may impact negatively on the performance of the Penrith CBD if tenants who would otherwise choose to locate in the Penrith CBD choose to locate at North Penrith.

If the development is successful in creating a commercial sense of address, this may have a positive influence on the perception of Penrith Regional City, including both North Penrith and the Penrith CBD, as a destination for office investment. The physical connections between the North Penrith site and the Penrith CBD will be important in realising this potential benefit. It is also important that the design of the commercial buildings do not 'turn their back' on the Penrith CBD.

While at face value there is sufficient commercial floorspace capacity in the Penrith CBD to accommodate targeted jobs growth, this is unlikely to be realised in the short to medium term as it would require redevelopment of presently occupied sites. This indicates that the North Penrith site will be important in contributing to the Penrith jobs target set in the Metropolitan Strategy. Low vacancy rates in the Penrith CBD indicate that the market can support further floorspace development.

7. Industrial Land Use at North Penrith

At a glance

SGS recommends that the areas of the North Penrith site adjacent to the existing industrial area are zoned for local industry such as trade supplies or domestic storage. This would provide a suitable buffer between the existing industrial area and the planned residential area.

Assessment of site potential for industrial land use

Market trends

Market reports published by Savills¹⁹ and Colliers International²⁰ both note an increase in market activity in the later part of 2009 following the downturn during the global financial crisis and associated reduction in investor demand. Recent trends in industrial market demand indicators have been positive. These include:

- An increase in the Australian Performance of Manufacturing Index
- Strong growth in exports and imports
- Record container throughput
- An increase in the value of industrial building approvals

Knight Frank²¹ reports that the amount of available industrial space had begun to decline in the Sydney market final quarter of 2009. As at January 2010, 314,000 square metres of industrial space in the Western and South Western industrial precincts was available for lease, which reflects a decrease of more than 10 percent since October 2009. With most vacancies reported to be in existing older premises, it is suggested that there may be an emerging shortage of quality options. Of the 314,000 square metres available across the West and South West regions, only 120,000 square metres (38 percent) is of A-grade quality.

Savills identified approximately 786,988 square metres of industrial accommodation (>500 square metres) leased in Sydney in the 12 months to December 2009, down on the year prior (841,712 square metres) and down on the five year average (834,620 square metres). Knight Frank recorded a more positive result, at least for the Outer West region which includes Penrith where gross take-up in 2009 was more than double that of 2008 with almost 400,000 square metres leased over the year. This was driven by a few large pre-lease deals and occupation of recently completed speculative developments.

Looking forward, Savills expect the pre-commitment market to strengthen as tenant demand further improves and development becomes more feasible. They believe pre-commitment

¹⁹ (2010) Spotlight On Sydney Industrial, March Issue

²⁰ (2010) Market Indicators Report, Sydney Industrial, Autumn Issue

²¹ (2010) Sydney Industrial Market Overview, March Issue

deals should generally be centred in the West²² precinct over the medium term, given the land supply.

Knight Frank has also observed an increase in occupier demand and expects pre-lease activity to reignite further throughout 2010. They predict that 'with uncertainty clearing, many companies that have been deferring decisions will be actively seeking suitable accommodation'.

Knight Frank reports average prime rents for existing space in Sydney remained relatively flat over the year to January 2010 at \$122 per square metre, while rents for secondary are \$106 per square metre, down 2.5 percent. Average rents were around \$103 per square metre in the Outer West (see Figure 14).

Knight Frank acknowledges that actual land sales were scarce over 2009 but refers to anecdotal evidence which suggests land values fell on average by 15-20 percent over the year and 25-35 percent since the peak in late 2007/ early 2008. Colliers suggests that land values in some areas declined as much as 40 percent to 50 percent over the past 12 to 18 months. Colliers considers the value of land to 'close to the bottom with an increase in pre-lease activity and demand as well as the loosening of lending criteria by the bank, set to slowly increase over the course of 2010'.

The price of smaller serviced industrial lots averaged \$406 per square metre in the Western region during 2009 with an average price of \$380 per square metre in the Outer West (see Figure 14).

Figure 14. Sydney Industrial Rents and Serviced Land Values (\$/sqm)



Source: Knight Frank (2010)

²² Note: geographical classifications may not be consistent between market reports

Major Developments

There are extensive zoned employment lands in the North West Subregion which are at various stages of development.

Some of the recently released precincts are fully developed or nearing capacity. These include the Erskine Park, Huntingwood and Raceway precincts. Recently, there has been notable development of industrial land near the Lighthorse Interchange (M4/M7 Motorways Junction) and land to the west and east of the interchange immediately adjacent to the M4 Motorway.

There is still significant capacity in other recently released areas such as the Riverstone West, Marsden Park and Box Hill precincts. These are long term strategic land release areas that are expected to develop in line with future residential development in the North West Growth Centre. Ropes Creek and Eastern Creek still have capacity for significant further development, and will likely develop over the next several years.

There has been a variation of land uses for new industrial sites in the North West Subregion. This is due most likely to the IN1 (General Industrial) zone in WSEA land as well as similar zoning in the Growth Centre Industrial release areas, both of which are quite flexible in terms of permissible uses.

The proximity of the Sydney Orbital network and national highway network at the M4/M7 hub has led to a large demand for wholesale, distribution and warehousing uses. Notable tenants who have set up distribution facilities include Woolworths, Kmart, Myer and Goodman Fielder. There has also been a reasonable demand for processing plants and other light manufacturing industries, which are also permissible under the IN1 Zoning in WSEA. Business Park development has occurred concurrently and contiguous to Light Industrial and Warehousing development.

Industrial activity in Penrith LGA

Real estate agents consulted for this study indicated that the demand for industrial strata units is stronger for leasing compared to sales. The types of premises which are in demand for industrial strata units include:

- 150-300 square metres
- Roller door access
- Bathroom facilities
- High clearance ceilings
- On-site parking
- Small office space
- External advertising (dependent on strata entitlements)
- High exposure

Real estate agents also indicated there has been some demand for freestanding properties though higher costs usually mean they do not perform as well as strata units.

Strategic drivers and relationship to nearby land uses

Urban location theory suggests that rents diminish outward from the centre of a city, with industrial land uses typically favouring cheaper land away from the centre. Thus, a site such as North Penrith which is adjacent to Penrith CBD is not a likely candidate for industrial use. As described above and consistent with this theory, the focus for major industrial development

in the North West Subregion is the Western Sydney Employment Area which is some distance from Penrith CBD.

Nevertheless, the land-use transition gradient outwards from the Penrith CBD is quite steep with a predominantly population-serving industrial precinct to the western and northern perimeters of the North Penrith site. The development of North Penrith could extend this existing cluster of local industry towards the Penrith CBD though it is likely that the highest and best use for the site is commercial or residential. Indeed, more intensive land uses are required to maximise the site's contribution to Metropolitan Strategy job and housing targets for the Penrith LGA and City Centre.

A small amount of local industry at North Penrith could provide a suitable buffer between commercial or residential development and traffic along Coreen Avenue. However, it should be limited in scale to avoid excessive traffic generation.

Impact on existing industrial activity in the City Centre and North Penrith Vicinity

The portions of the site which are recommended for industrial use by SGS are the same as those designated for industrial zoning in the Concept Plan. The relevant areas adjoin existing industrial zoned land²³ to the north of Coreen Avenue.

Consultation with real estate agents for this study indicated there is strong demand for strata units in the area. Thus, development of such premises is not likely to detrimentally impact of the existing industrial zoned area to the Coreen Avenue. Indeed, a high quality design standard for buildings and a well presented street frontage may improve the image of the existing industrial area and impact positively through land value uplift.

There is also a significant Local Industry and Light Manufacturing precinct at South Penrith. This precinct is likely to service a catchment south of the railway and is therefore less of a competitor. There appears to be capacity for Local Industry in Huntingwood and Arndell Park industrial precincts, however these sites are located almost 17km and there is a considerable separation between the two residential catchments.

²³ The land is zoned 4(a) under the Penrith City Council LEP

8. Retail at North Penrith

At a glance

Retail expenditure generated by North Penrith residents, on-site workers and commuters alone would support a supermarket of 800 square metres and non-supermarket retail floorspace of 900 square metres. A larger supermarket of 2,000, as proposed in the Concept Plan, could be supported in the longer without significant impact on the Penrith CBD and other centres near North Penrith.

Assessment of site potential for retail

Supportable floorspace

Demand for retail floorspace at North Penrith will be generated by three sources:

- Demand from new residents
- Demand from on-site workers
- Demand from commuters using the planned commuter carpark.

Resident expenditure

Available retail expenditure associated with the anticipated resident population of North Penrith in 2016²⁴ has been derived on a per capita basis from the NSW average, adjusted for the likely income profile of households at North Penrith.

It is assumed that North Penrith residents will have the same income profile as the residents of Penrith LGA, consistent with the Penrith Social Sustainability Report²⁵.

Table 7 below shows the distribution of household incomes in Penrith LGA and across NSW. It shows that households in Penrith LGA have, on average, a higher income profile than the NSW average. Higher average income implies higher than average per capita retail expenditure for residents of North Penrith.

Applying the income differential to per capita retail expenditure in 2011 indicates that residents of North Penrith will spend an average of \$11,000 per annum on retail goods, compared to a per capita average of \$10,493 per annum across NSW (Table 8). Of this, around \$3,387 will be spent on supermarket expenditure.

²⁴ allowing for a six year development time frame, midway between the five to seven year timeframe indicated in the PEAR

²⁵ Elton Consulting (2010)

Table 7. Distribution of household income (2006)

	Income Quintiles					Total
	Lower	Second	Third	Forth	Upper	
Percent Penrith LGA Households	17%	16%	20%	27%	20%	100%
Percent NSW Households	23%	18%	19%	20%	20%	100%

Source: Australian Bureau of Statistics (2006)

Table 8. Retail Expenditure capita per annum, 2011(\$2010)

	Retail expenditure per capita
Penrith LGA	\$11,000
NSW Average	\$10,493

Source: SGS estimates (2010)

The anticipated resident population of North Penrith in 2016 is around 1,900 persons. This population would likely generate around \$21.3 million of retail expenditure per annum, of which \$6.4 million can be attributable to supermarket expenditure.

It is assumed that development at North Penrith will result in a net increase in the subregional population. As such, expenditure generated can be considered a net addition to available expenditure.

Non-resident expenditure

SGS has considered the impact of the on-site workforce on the demand for retail activity. On balance, it is likely that the number of residents who leave the site each day for work would be similar to the number of workers who come to the site for work. Thus, the net impact on the demand for retail activity is likely to be nil.

It is, however, likely that the commuters utilising the planned commuter car park adjacent to the site would generate additional expenditure. Surveys commissioned by SGS for past projects indicate that around 20 per cent of retail expenditure is associated with non-home based trips. Assuming a modest capture of 15 percent of commuter expenditure, allowing 5 percent to be spent elsewhere, this would be equivalent to an additional 150 residents. This implies additional available expenditure of \$1.6 per annum million, of which \$0.5 million per annum would be attributable to supermarket expenditure.

Distribution of expenditure

The distribution of retail expenditure generated by residents is related to the retail offer of various centres and the distances to such centres. Given North Penrith's proximity to the CBD, it is likely that most of the expenditure associated with the anticipated resident and worker

population of North Penrith will be distributed between the existing CBD and the development site. Given the lack of any intervening opportunities for retail spending, it is not likely the expenditure would go to other centres within the subregion. There would be a small amount of expenditure that would 'escape' outside of the subregion.

As such, it is critical to assess the appropriate split for retail provision between the existing CBD and the development site.

At most, the available supermarket expenditure of \$6.9 million (\$6.4 million of resident and on-site worker expenditure plus \$0.5 million of commuter expenditure) would support a supermarket of around 800 square meters, using published retail turnover densities. This falls short of the requirement of a full-line supermarket. As such, it is likely that most supermarket expenditure will go to Penrith CBD. Alternatively, a larger supermarket could be provided to retain expenditure on-site but this would also draw on expenditure from elsewhere off-site. The impact a larger supermarket would have on existing retail activity in the City Centre and North Penrith vicinity is dealt with later in this section of the report.

The North Penrith site will not be able to support expenditure associated with department stores or most household goods and clothing expenditure. Residents will likely prefer to go to the Penrith CBD given the greater range of products available. However, assuming all on-site resident and worker expenditure available for 'other food'²⁶ and 'hospitality and services'²⁷ and half of on-site resident and worker expenditure available for 'other retail'²⁸ is captured on-site, this would equate to around 900 square metres of retail floorspace, in addition to the supermarket.

Site potential for bulky goods

While some retailing activities have particular operating characteristics that make it difficult to accommodate them in centres, if a centres approach is to work then where possible most retailing needs to locate in centres.

Though bulky goods stores carrying white goods, stationery and furniture for example often claim a distinction to other forms of retail, unless they can show an operating and impact difference they should be located in centres.

As well as being a planning issue, regional clustering of bulky goods outlets provision is an important market consideration. Bulky goods outlets require a large trade area to be commercially successful. The Bulky Goods Retailers Association planning considerations include a wide regional catchment of over 100,000 residents, with some of the larger stores requiring catchments of 150,000 plus.

²⁶ Includes the following ANZSIC categories: Fresh Meat, Fish and Poultry Retailing, Fruit and Vegetable Retailing, Liquor Retailing, Bread and Cake Retailing, Specialised Food Retailing, nec

²⁷ Includes the following ANZSIC categories: Takeaway Food Retailing, Cafes and Restaurants

²⁸ Includes the following ANZSIC categories: Sport and Camping Equipment Retailing, Toy and Game Retailing, Newspaper, Book and Stationery Retailing, Photographic Equipment Retailing, Pharmaceutical, Cosmetic and Toiletry Retailing, Antique and Used Good Retailing, Garden Equipment Retailing, Flower Retailing, Watch and Jewellery Retailing and Retailing, nec.

Given these planning and market considerations, either the North Penrith site or the Penrith CBD appear to be good locations for development of bulky goods. However, future development is likely to focus on existing clusters in the area, particularly the Mulgoa Road precinct. The Mulgoa Road precinct is also favoured by Penrith City Council over the North Penrith site.

Impact on existing retail activity in the City Centre and North Penrith vicinity

The analysis presented earlier in this section indicates that expenditure generated on-site could support a maximum of 800 square metres of supermarket floorspace and 900 square metres of non-supermarket retail floorspace.

A supermarket greater than 800 square metres could retain expenditure on-site rather than it flowing to the Penrith CBD. A larger supermarket would also assist in the attraction of new residents to North Penrith and help to establish non-car based patterns of travel.

A larger supermarket would, however, also draw on expenditure from elsewhere off-site. Sources of this expenditure will include:

- workers in the industrial area adjacent to the site to the north and west
- residents in the adjoining travel zones to the north of the railway line

It is unlikely that residents or workers south of the railway line would bypass the CBD to shop at North Penrith. However, residents in travel zones to the north of the railway line who currently shop in the CBD or centres to the north of the railway line may instead shop at North Penrith. Accordingly, the impact of a larger supermarket on the following centres, which currently capture expenditure from residents in travel zones to the north of the railway line, has been assessed:

- Penrith CBD
- Cambridge Gardens (Coles supermarket on Star Court, near Dunheved Road)
- Kingswood Park (Franklins supermarket corner Caloola Avenue and Karella Avenue)
- Cranebrook (IGA supermarket on Barrowdale Way)

There are also centres close to North Penrith at Cambridge Park and Kingswood. However, these centres have no supermarket floorspace or only small convenience-style retail floorspace which would not compete with what is proposed at North Penrith.

It is assumed that the workers in the industrial area adjacent to the site would each spend around \$940 per annum on supermarket goods near their place of employment. This is based on a nominal value of \$20 per week per employee. The available expenditure from workers in the industrial area is summarised in **Error! Reference source not found.**

Table 9. Supermarket expenditure generated by workers in the nearby industrial areas

Centre	2016	2021	2026	2031
Industrial area workers	3,334	3,539	3,616	3,849
Expenditure per worker per annum	\$940	\$940	\$940	\$940

Total available expenditure per annum	\$3,133,786	\$3,326,463	\$3,398,714	\$3,617,835
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Source: SGS estimates (2010) and Transport Data Centre (2009)

SGS has calculated that the provision of a 2,000 square metre supermarket at North Penrith may have a detrimental impact on the nearby centres of Cambridge Gardens and Kingswood Park in the short term. However, in the longer term the impact on all nearby centres is within the accepted impact threshold. This is due to projected population increases in the nearby travel zones which generate additional available expenditure, compensating for any loss in expenditure to North Penrith.

The likely impact of a 2,000 square metre supermarket at North Penrith is summarised in Table 10. A turnover impact of -10 percent or greater is the accepted industry standard of what would normally be considered an unacceptable impact.

Table 10. Impact of a 2,000 square meters supermarket at North Penrith

Centre	Estimated change in Turnover, 2011 to 2016	Estimated change in Turnover, 2011 to 2021	Estimated change in Turnover, 2011 to 2026	Estimated change in Turnover, 2011 to 2031
Penrith CBD	-3.8%	+1.0%	1.3%	4.0%
Cambridge Gardens	-9.7%	-11.0%	-9.2%	-6.8%
Kingswood Park	-9.4%	-9.0%	-6.9%	-3.7%
Cranebrook	+3.1%	+7.1%	+10.1	+14.3%

Source: SGS estimates (2010)

SGS consider that the 1,200 square metres of non-supermarket retail floorspace proposed in the Concept Plan is supportable from 2016 onwards,

9. Yield and Multiplier Impacts

At a glance

The likely full time equivalent jobs yield of 786 jobs is likely to be comprised of

- _372 full time equivalent office based jobs
- _90 full time equivalent retail jobs
- _229 full time equivalent industrial jobs
- _70 full time equivalent jobs associated with the proposed aged care facility and
- _25 home based jobs.

Development of the North Penrith site in line with this mix of land uses is estimated to cost \$424 million and in total, would generate an \$882 million increase in Penrith LGA's output. This is equivalent to 1,707 direct jobs due to construction activity and 2,087 indirect jobs.

The 786 ongoing on-site jobs would generate around 664 additional jobs as a result of economic multiplier effects. Therefore, in total there will be an additional 1450 ongoing jobs created by the development.

Yield Analysis

The likely job yield and overall mix of land uses supportable at North Penrith has been derived through an iterative process using inputs from the preceding sections of this report and information provided by Landcom. Employment density ratios have been sourced from previous SGS floorspace audits and analysis of employment data.

The Concept Plan includes 9,300 square metres of commercial floorspace. Using an employment density ratio of 25 square metres per employee suggests that a commercial land uses will provide 372 full time equivalent office jobs.

The Concept Plan also includes a supermarket of up to 2,000 square metres and non-supermarket retail floorspace of around 1,200 square metres. Using an employment density ratio of 40 square metres per employee for the supermarket floorspace and 30 square metres per employee for the non-supermarket floorspace suggests that retail land uses will provide 90 full time equivalent retail jobs.

The analysis in section 7 indicates that light industrial activity would be suitable for the edges of the site adjoining the existing light industrial area along Coreen Avenue and the north western corner of the site. Landcom have advised that the land area with this characteristic is 2.29 hectares. Using a floorspace ratio of 0.6:1, typical of comparable areas in the South Penrith industrial area, would yield 13,730 square metres of light industrial land uses. Using an employment density ratio of 60 square metres per employee suggests that light industrial land uses will provide 229 full time equivalent jobs.

Landcom has advised that the aged care facility would generate 70 full time equivalent jobs and SGS have estimated that the workforce is likely to support 25 home based jobs. The latter is based on the Penrith LGA average.

The total job yield for North Penrith is summarised in the table below.

Table 11. North Penrith Job Yield

	floorspace	sqm per job	yield
Light Industrial	13,730	60	229
Commercial	9,300	25	372
Retail Other	1,200	30	40
Retail Supermarket	2,000	40	50
Residential	n/a	n/a	25
Health care aged care	n/a	n/a	70
Total	n/a	n/a	786

Job generation and economic multiplier effects

Economic impacts are assessed for both the construction phase of the development project, and the operational phase of the project. This involves estimation of the contribution of the project to output and employment in the Penrith LGA.

Construction Impact

Expenditure on construction activity provides the local economy with an economic stimulus, leading to further expenditure increases. For example, building works will require purchases of materials from suppliers, who in turn will spend this income on purchasing inputs required to produce their goods and services, and paying salaries. Workers (both from the construction and supplier industries) will spend a portion of their wages in the local economy for example on food and living expenses, generating increased retail demand and expenditure.

The objective of this assessment is to measure additional expenditure and employment generated as a result of the initial stimulus (or the construction impact). The assessment uses an Input Output (IO) model for the Penrith LGA developed by SGS (further details on SGS' Regional IO model is provided in Appendix 1). The model suggests that for every dollar spent in the construction industry, there will be a \$2.1 increase in local expenditure and output. It also shows that for every million dollars spent in the construction industry, total local employment will increase by nine full time equivalent jobs.

Estimates of project expenses have been sourced from the Indicative Capital Investment Value report. The report estimates that the project's total capital investment value will be \$424 million, with construction activity accounting for \$337 million, and professional (including marketing) and government services accounting for the remaining \$87 million.

SGS estimates that total output generated in the Penrith LGA as a result of the development project will be \$882 million, including multiplier impacts.

Construction activity is likely to result in 1,707 direct jobs due to construction activity and 2,087. In total, the construction phase is estimated to generate 3,794 jobs.

The breakdown of the expenditure and employment multiplier impacts is shown in Table 12.

Table 12. Impact of project expenditure, SGS Option

Initial Spending	Total output generated in the Penrith LGA	Total number of jobs generated in the Penrith LGA
\$424million	\$882 million	3,794 jobs

Operational Impact

This subsection looks at the ongoing yearly impact of the development options on local employment. By increasing total leasable floorspace, the development will foster job creation in the local economy. The table below provides an estimate of both the direct and total impact on local jobs resulting from the development.

The number of jobs created in the Penrith LGA as a result of the development project is 1,450 jobs. Of this total amount, the number of jobs created directly on site from the additional floorspace is expected to be 786 jobs.

Table 13. Operational jobs

Industry	On-site jobs	Total jobs generated in the Penrith LGA
Retail	90	123
Industrial	229	451
Commercial	372	735
Health care aged care	70	91
Home based employment	25	50
Total	786	1,450

10. Recommendations

At a glance

Evidence gathered in this assessment indicates that a mixed use precinct including light industrial, office, retail and residential uses could be supported at North Penrith.

The development of the site should be staged such that priority is given to public domain/landscaping then commercial development. Residential and retail should follow next with industrial uses to be developed prior to the development of the nearby residential component.

Land-use mix and yield

The Concept Plan includes a range of dwelling types which is largely unprecedented in the Penrith area. SGS has used the SGS Housing Model to assess the underlying demand for higher density housing in Penrith LGA. The results of the model indicate that there is an underlying demand for higher density dwellings. The North Penrith site is well positioned to accommodate higher density options as it is within immediate proximity to rail and bus transport options, employment opportunities, retail and services.

The commercially zoned portion of the North Penrith site will be critical in achieving the job target established for the development (770 jobs). It will also be important in contributing to the role of Penrith as a Regional City. The Concept Plan includes 9,300 square metres of commercial floorspace. This equates to 372 full time equivalent office based jobs.

Importantly, the development should offer flexible design codes to allow purpose built offices and the incorporation of sustainable design principles. Suitable tenants may include institutions such as the Sydney Catchment Authority, CSIRO or National Parks and Wildlife Services or service-oriented businesses with a regional catchment.

SGS recommends that a supermarket of up to 1,700 square metres with non-supermarket retail floorspace of around 1,200 square metres be provided on-site. The Concept Plan includes a supermarket of up to 2,000 square metres. The Concept Plan would 90 full time equivalent retail jobs.

SGS recommends that the edges of the site adjoining the existing light industrial area along Coreen Avenue are used for industrial land. The 2.29 hectares earmarked for this use would accommodate 229 full time equivalent jobs.

Additional on-site employment is likely to include 70 full time equivalent jobs associated with the proposed aged care facility and 25 home based jobs.

Staging

The staging of development at North Penrith will be critical in attracting residents and reaching the jobs target through the provision of commercial floorspace.

High amenity is considered by developers interviewed for the study as paramount in attracting both residents and commercial tenants. As such, priority should be given to development of

the public domain areas. Easy access to and from the station is also of great importance to potential residents and workers. Easy to navigate access pathways should be established immediately.

Commercial interest will be driven by a strong sense of commercial identity on the site. Commercial interests will not want to move into a residential area. For this reason, commercial activity will probably need to lead residential development on site. Careful marketing will also play an important role. Developers have indicated that a pre-commitment of at least 50 percent is needed for the development to secure finance. While not essential, floorspace take-up will be encouraged by a large anchor tenant. Securing a strong tenant will set the tone for the precinct. Landcom should be flexible in what they offer to prospective commercial interests in order to get the ball rolling. This may include the opportunity to change floorplates, reduced parking requirements and so on.

. An existing on-site population is ideal from retailers' perspective. Conversely, existing on-site retail is ideal from the perspective of residents and commercial tenants. Given the proximity to the Perth CBD, on-site retail and services may be less important than usual. To take advantage of this, priority should be given to developing the residential closest to the CBD first until on site retail / services are established.

If retail premises are developed and occupied on site in the early stages of development the retailers will probably lose money for the first 12 to 18 months. To overcome this disincentive for early establishment, the developer could offer a reduced rent or rent-free period to tenants. Positioning retail in a clearly visible and accessible location will assist in attracting business.

Industrial interest will be driven by good access to the site and suitably sized premises. Again, flexibility is likely to be an attractor. It is of high importance for all activities that industrial activity is clearly separated from other land-uses. The separation of residential and industrial will need to be stressed when attracting industrial interest. 'Over the fence' disputes are far less common than 'over the road' disputes between residential and industrial. Lot configuration will need to recognise this. Industrial uses should be developed prior to the development of the nearby residential component so as to assure residents that the uses will not detract from the amenity of the site. Being able to see the finished product provides greater certainty to potential residents than encouraging words on a plan.

Appendix 1: SGS Regional IO method

Input Output (IO) tables describe the inter-linkages between industries in a particular geographical location, and provides us with a understanding of the nature of production processes and, the strength of upstream and downstream industry inter-linkages.

SGS has developed a method which converts the Australian National IO table²⁹ into a Regional IO table. This conversion is informed by region specific data, including ABS Journey to Work employment data and population data for the areas (such as LGAs) considered. Regional IO tables can also be used to estimate industry specific exogenous expenditure multipliers. These multipliers allow us to gauge the total impacts of exogenous changes in expenditure on the set of economic indicators outlined below:

- **Output:** measures the total value of production
- **Value added:** measures the 'net output' associated with the total value of production - it represents only the value that is created within a geographical location
- **Employment:** measures the number of full time equivalent (FTE) jobs

Estimates of the total impact of changes (or shocks) in expenditure include estimates of the *direct effect* of the shock, and the *production and consumption induced effects* resulting from the direct effect. Production induced effects are produced by the downstream inter-linkages between industries, while consumption induced effects result from the increased expenditure by employees and employers associated with the industry which experienced the initial expansion in output.

SGS' method was used to estimate an IO table for the Penrith LGA. Multiplier estimates for the 35 broad industries considered are provided in 0. Note that output multipliers provide estimates of the effect a one dollar increase in expenditure in a particular industry has on the output of the broader LGA, while the employment multiplier estimates the effect a one million dollar increase in expenditure has on total employment in the Penrith LGA.

²⁹ Australia's IO table is sourced from the ABS (ABS Cat. No. 5209.0.55.001 - Australian National Accounts: Input-Output Tables - Electronic Publication, 2004-05 Final)

Multiplier estimates, Penrith LGA

Industry	Output multipliers	Employment multipliers
Agriculture, hunting and trapping	1.5	9
Forestry and fishing	1.6	8
Mining	1.5	3
Meat and dairy products	2.0	7
Other food products	1.7	7
Beverages, tobacco products	1.8	6
Textiles	1.6	7
Clothing and footwear	1.5	10
Wood and wood products	1.7	10
Paper, printing and publishing	1.6	7
Petroleum and coal products	1.1	1
Chemicals	1.6	4
Rubber and plastic products	1.6	7
Non-metallic mineral products	1.7	6
Basic metals and products	1.6	4
Fabricated metal products	1.7	7
Transport equipment	1.5	6
Other machinery and equipment	1.6	7
Miscellaneous manufacturing	1.6	8
Electricity, gas and water	1.6	5
Construction	2.1	9
Wholesale trade	1.8	8
Retail trade	1.8	15
Repairs	1.6	5
Accommodation, cafes and restaurants	1.8	12
Transport and storage	1.9	8
Communication services	1.7	7
Finance and insurance	1.7	6
Ownership of dwellings	1.2	1
Property and business services	1.9	9
Government administration	1.9	11
Education	1.7	15
Health and community services	1.7	15
Cultural and recreational services	1.7	9
Personal and other services	1.8	17

Source: SGS Economics and Planning (2010) Regional IO model.