

Employment Lands & Retail Study

Draft Report

15/3/7



E LANDCOM



Employment Lands & Retail Study





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INTRODUCTION

BACKGROUND

The DoP has recently highlighted the need for additional greenfied employment lands at a Metropolitan level and has suggested that Landcom can play a role in identifying suitable sites. While Landcom can see both advantages and disadvantages to the employment lands in Menangle Park, it is imperative to understand some of the economic issues and indeed, whether it is viable at the Menangle Park site

SCOPE OF WORK

The scope of work is for this study is outlined below:

- Employment Lands Study.
 - Understanding of Employment Lands Task Force proposal
 - Profile of regional employment lands in the SW Sydney region
 - Analysis of employment land demand in the SW Sydney region
 - Identification of areas to accommodate employment growth, with an assessment of the capacity of Campbelltown CBD and surrounds
 - Impact assessment of employment land development at Menangle Park on Campbelltown CBD
 - Broad traffic and transport implications of business park development at Menangle Park
 - Assessment of the suitability of Menangle Park for employment use and the identification of the most appropriate industry sectors
- Retail Study.
 - Assessment of supportable retail floorspace on-site driven by the needs of the incoming population and the nature of existing retail in the surrounding area
 - Description of an appropriate retail mix
 - Assessment of the suitability of the village centre for commercial use
 - Assessment of the suitability of the village centre for tourist use





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SITE ANALYSIS

POSITION & ACCESS

Menangle Park lies on the south-western outskirts of Sydney, approximately 60 kilometres from the City's centre. It is located within the Local Government Area (LGA) of Campbelltown which, in turn, is part of the Southwest Sub-region (Liverpool, Campbelltown, Camden and Wollondilly). It is approximately 5.5 km to the south west of the Campbelltown Central Business District.

The Menangle Park site has a total area of approximately 958 hectares and is bounded by the Nepean River to the south and the west, the Hume Highway (F5 freeway) and Menangle Road to the east and the Mount Annan Botanic Garden to the north. Approximately 61 hectares of the site is taken up by the F5 Freeway, Menangle Road, the railway line and other infrastructure. The site therefore has a net area of approximately 897 hectares

SITE TOPOGRAPHY

The site is generally characterised by undulating hills to the north, east and southern extremities flattening out in the centre. The eastern part of the site comprises broad rolling hills with gentle to moderate slopes (3-10 %), passing to the west into a gently sloping to flat alluvial terrace (0-5 %) adjacent to the Nepean River. A major tributary system flows from east to west across the northern part of the site towards the Nepean River, and three minor tributaries enter the Nepean River in the south and south west of the site.

ACCESS & INFRASTRUCTURE

The regional transport network surrounding Menangle Park comprises the main southern railway line which transects the study area, the F5 Freeway immediately to the east, as well as a number of arterial and sub-arterial roads in the vicinity. The F5 freeway linking Sydney to Canberra bisects the Campbelltown LGA and, together with the Main Southern Railway Line, provides Campbelltown residents with direct access to Sydney's CBD.

A major access issue is the lack of direct connection to the M5 Southern Freeway (Hume Highway). Currently, the only available connection is at Narellan Road, 6 km north and indirectly linked to Menangle Park via local and private roads including Menangle Road. Transport investigations for a rezoning plan for the area found that this route is already highly congested in peak periods and will worsen in the future as the Camden release areas and the southern sections of Bringelly start to develop¹.

The site is currently unsewered and augmentation of the existing West Camden STP is being undertaken to cater for future population growth. Sydney Water expects the upgrade to be complete in the second half of 2007 and recycled water is anticipated to be available soon afterwards². The Menangle Park village is currently serviced with low voltage electricity and a Telstra local network.



¹ Menangle Park Master Planning Project – Transport Management and Accessibility Plan (TMAP) Report, Phase 1 Working Paper Final Report, Parsons Brinkerhoff, May 2004.

² http://www.sydneywater.com.au/MajorProjects/WestCamden



The site is serviced by Menangle Park Station which is part of the Southern Highlands line of the CityRail intercity network. The Southern Highlands line services Goulbourn and there are some services which operate directly from Central Station in Sydney's CBD. Services to Menangle Park must be accessed from Campbelltown Station with 30 services/ hr in peak morning and afternoon and 1 to 1 ½ services/ hr outside these hours during weekdays and 1–2 services/ hr on weekends ³. Investigations undertaken for a rezoning plan for the area indicate that in 2000, counts undertaken by State Rail found Menangle Park Station was ranked as one of the most infrequently used stations in Sydney with less than 20 passengers recorded during peak periods².

There is only one bus service to Menangle Park from Campbelltown offered by Busways Bus Company known as Route 892. This route offers 6 services on weekdays between 6.49am and 6.37pm 2 services on Saturday between 7.25am and 5.38pm.

SURROUNDING LAND USE

The existing land uses across the site are typically characterised by rural and associated uses including livestock grazing and orcharding. The site is also characterised by the Menangle Village area in the centre of the site, consisting of rural residential and commercial uses. Other uses include:

- Glenlee Coal Washery (north western corner of the site);
- Menangle Sand and Soil (south western corner of the site); and
- Menangle Park Harness Club (central western part of the site).

To the south and west of the study area, the landscape is predominantly rural in character. It also contains extensive areas of natural bushland. To the north-west of Menangle Park is a mix of agricultural lands, villages and towns and new residential suburbs, with associated commercial and industrial development. To the north is Liverpool LGA which is predominantly urban in character.

DEVELOPMENT CONSTRAINTS

The site is constrained by a number of barriers to development. These barriers include significant State and local heritage items, high value ecological vegetation areas, and areas of high archaeological resources. In particular, a flooding study undertaken by ERM (2004) indicates that the extent of flooding from the Nepean River over the Menangle Park study area will pose significant constraints to the development of a large proportion of the site. Over one third of the site is subject to flooding.

For development of the site as employment land the significant constraints are:

- No direct access to M5
- The site is unsewered
- Large areas are floodprone
- The site is not within proximity of a major centre
- If developed along with residential, employment activity must be low impact i.e. cannot be heavy industrial



³ http://www.cityrail.info/networkmaps/index.jsp



POLICY CONTEXT

METROPOLITAN LEVEL

Sydney Metropolitan Strategy

The 'Sydney Metropolitan Strategy' was released in 2005 and is aimed at guiding growth and change in the Sydney Greater Metropolitan Region (GMR) over the next 25 years. In terms of actions, the economy and employment section of the Metropolitan Strategy effectively adopts a twofold approach:

- **Ensuring sufficient land**. Ensuring there is sufficient appropriately zoned land for different landuses and activities for the city and property market to operate efficiently.
- Fostering economic development. On this solid foundation of supply, fostering economic development by increasing innovation and skills development and improving access to job opportunities for disadvantaged communities, which will build on comparative and competitive advantages and needs.

The Strategy establishes an employment capacity target of 207,000 additional jobs between 2001 and 2031 for the South West. The Strategy recognises that the intensification of existing employment lands, the addition of new employment lands, and the strengthening of centres will provide the locations for these jobs, driven by significant population growth and continuing decentralisation of 'land hungry' industries.

The Strategy also recognises that changes in the way businesses are operating are increasing the 'white collar' component of employment in employment land areas. Old style industrial areas, for heavier industry types, are diminishing. Strategic factors affecting employment land provision are identified as (see pages 53-54 of the *Metropolitan Strategy* supporting information document):

- Increasing 'export and import' business activity requiring proximity or good access to the airport and port;
- The role of innovation which is driving industry clusters and the need for proximity to quality services and education activities;
- The increasing role of office jobs in industry, meaning that public transport in or near centre locations for employment areas needs consideration;
- The need for a good distribution across the metropolitan area of some activities such as concrete batching and waste services;
- The need for lower cost locations for 'start-up' businesses.

The Strategy outlines the following objectives and aims in planning for employment lands;

In relation to employment lands, the Strategy has the following objectives:

 ensure that there are adequate stocks of well located lands across Sydney to meet the needs of different industries and subregions;





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- ensure that new employment lands are accessible and serviced in a timely way;
- prevent or manage conflicts between industrial and other activities; and
- ensure coordination between planning and infrastructure provision to enhance economic, social and environmental benefits.

In spatial terms, this Strategy aims to:

- protect employment lands in strategic locations, particularly around Sydney Airport, Port Botany and the orbital motorway network;
- encourage the redevelopment of disused industrial sites in suitable locations served by utilities and public transport and proximate to the labour force - and improve opportunities for new investment and jobs in these areas; and
- plan and develop new greenfield sites to meet demand in new growth areas and growth that cannot be accommodated in established areas.

The Standard LEP template which reflected the aspirations of the Metropolitan Strategy acknowledges the new paradigm of employment land planning by including enterprise corridor, business park and business development zones as locations for a diversity of employment uses, including 'white collar' activities.

The Strategy identifies a broad distribution of jobs to employment land precincts for planning purposes (see Figure 1).



Figure 1. Metropolitan Strategy Strategic Employment Precincts

Source: DoP 2005





The subject site is positioned to the south of an area of proposed employment land (purple area above star on Figure 1) and is south of the Liverpool/Macarthur broad employment precinct. The Liverpool/Macarthur precinct extends south from Liverpool to Campbelltown and is concentrated around the South Western Freeway which links to the Hume Highway and the M7 further north at Glenfield. This precinct also includes an area which extends northwest from Campbelltown and adjoins the southern boundary of the South West Growth Centre. This growth area contains a future employment lands precinct known as the South West Employment Land precinct which has access from Elizabeth Drive and The Northern Road.

The strategy identifies that the South West subregion (which includes Liverpool, Camden, Campbelltown and Wollondilly) currently contains 2062.9 ha of zoned industrial land. The amount of vacant land is not reported. The Liverpool/Macarthur Corridor is also identified in the Strategy as being one of Western Sydney's important manufacturing and transport and logistics clusters:

Employment Lands Taskforce

The Metropolitan Strategy recommended the establishment of a body to allow industry and the Government to collectively inform decisions about employment lands. In 2006, the Employment Lands Taskforce was established to fulfil this role. One of the primary objectives of the taskforce is to advise the government on the existing supply of employment lands in metropolitan Sydney and its sub-regions and whether supply is adequate to meet demand of different industrial sectors. To date, the Employment Lands Taskforce has indicated a chronic shortage of Greenfield employment land across the metropolitan region to accommodate for projected demand and job capacity targets. In this light, major landholders in proposed release areas have a responsibility to alleviate this stress through the provision of new land.

The Action Plan addresses the recommendations of the Employment Lands Taskforce and presents the initiatives that will be pursued as part of the NSW Government's *Open for Business* Strategy. The Menangle Park greenfield site is located south of the South West Growth Centre. A small area of the site has been identified as a proposed employment lands site under the Action Plan.

The recommendations made by the Taskforce presented in the Action Plan of significance to the subject site include:

- Establishment of an Employment Lands Development Program (EDLP) which will administer the release of Greenfield lands for employment purposes, particularly in areas of rapid population growth;
- The staged release of more Greenfield sites accessible to high growth population areas and linked to strategic infrastructure;
- Establish criteria and identify a preferred location for a new business park (similar to Norwest) in South West Sydney; and
- Identify a role for Landcom in the development of new and renewal of existing employment lands, including opportunities for government owned land.

The Action Plan has decided on five key initiatives having considered the Taskforce's conclusions. These are:

- Establish an Employment Lands Development Program (EDLP) to maintain the balance between demand and supply of employment land;
- Release more Greenfield land to overcome a shortage of supply;
- Develop new policy initiatives to encourage the regeneration of Brownfield sites to support new investment and employment opportunities;



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- Employ more efficient processes for rezoning and developing employment lands; and
- Improve co-ordination between State Departments and agencies, Councils and Industry to improve economic development opportunities associated with employment lands policy.

With regards to the investigation and provision of Greenfield employment land sites, the Action Plan proposes designating a Western Sydney Employment Lands Investigation Area between the Western Sydney Employment Hub and the South West Growth Centre. The medium to long-term needs of this area would be investigated and integrated with development requirements for the South West Growth Centre and the Western Sydney Employment Hub.

The identification by the Taskforce of Landcom's role in outlining employment land opportunities for government owned land provides a method by which lands not currently identified as potential greenfield sites may be considered.

Sydney Freight Strategy

The Australian Rail Track Corporation (ARTC) is presently undertaking a program of works to improve the efficiency and cost-effectives of rail freight services along the North-South that runs through southwest Sydney. A major bottleneck in the rail freight network currently exists in southern Sydney, where freight trains share existing rail lines with the Sydney metropolitan passenger services operated by Railcorp. During morning and peak periods, freight services are not permitted to run due to passenger priority.

To alleviate this bottleneck, the ARTC proposes to construct the Southern Sydney Freight Line, which would provide a dedicated freight line for a distance of 30 kilometres between Macarthur and Sefton. The southwest growth area will benefit greatly from these infrastructure improvements.

The NSW Government is currently investigating possible sites for a new intermodal terminal including sites in southwest Sydney to support their policy of increasing use of rail for freight activities.

The southwest area is currently serviced by the Minto intermodal freight terminal which had a total annual throughput by rail of approximately 45,000 TEU (twenty foot equivalent units) during the last full financial year (2004/2005) and a total annual containerised throughput by road of around 50,000 TEU. The operator's growth expectations for the facility are high, with both containerised and non-containerised freight expected to double over the next five years⁴.

New sites for intermodal terminals have been identified at Ingleburn, Moorebank, and Menangle Park as well as expansion of the existing Minto Terminal⁴. The Moorebank site has been identified by the NSW Government for investigation as an intermodal terminal as part of its *Urban Transport Statement* released by NSW Premier Morris Iemma MP in November 2006⁵.

The Ingleburn site, owned by Patrick Corporation, has been granted approval by a Land and Environment Court ruling and is planned to have a capacity to handle 43,000 cars and 54,000 TEU per year, and will move them between rail and road transport. The proposed development includes development and operation of a new rail siding off the Main Southern Railway line.

A 60ha portion of a larger land holding between the Main Southern Line and the M5 close to Menangle Park has been proposed as an intermodal terminal and business park site by the Sydney Railport Facility.



⁴ National Intermodal Terminal Study, Meyrick and Associates and ARUP, Prepared for Department of Transport and Regional Services Final Report, February 2006

⁵ NSW Government Urban Transport Statement , Nov 2006



The site has been assessed by the Freight Implementation Advisory Board (FIAB) in its report to the NSW Government ⁶ as being unsuitable as an intermodal terminal. FIAB is of the view that Menangle Park is not an ideal location for servicing import/export traffic due to its location at the far south western edge of Sydney militates against its attractiveness as an import/export intermodal facility. Such facilities should, ideally, be relatively central to the areas they serve. The Menangle site would see import containers moved by rail beyond their likely end destination, and then transported between 10 and 20km back by road. The NSW Government is yet to officially confirm preferred sites.

LOCAL LEVEL

MACROC Economic Development Plan

Macarthur Region of Councils's (MACROC) Board of Directors approved the MACROC Economic Development Plan (EDP) in August 2003. MACROC was allocated up to \$12 million funding until 30 June 2006 from the Federal Government's Department of Transport and Regional Services 'Sustainable Regions Program' to implement aspects of the Plan.

Issues identified in the process of preparation and implementation of the EDP by MACROC were:

- Employment Land has been consumed at an average of 50 hectares per annum. It is forecast that
 consumption will increase to 80 hectares in subsequent years. Within three years, Macarthur will
 have no zoned Employment Land. This is a major disconnect with projected population growth;
- 4,000 new jobs per annum would have to be created in Macarthur to cater for the population growth projected in 2021 in order to maintain current labour force conditions;
- Macarthur has a high proportion of high income earners, with 38% of residents earning from \$1,200 per week, contrary to popular perception. 59% earn \$800 or more per week, 38% earn more than \$1,200 per week.
- Insufficient Industry diversification, significant reliance on Property and Construction, key area of
 opportunity in context to future developments.

As at May 2006, twenty-two separate projects were funded under the Federal grant provided. The projects funded included assistance for projects related to:

- construction and/or upgrades of community buildings and facilities related to health, the arts, sporting facilities and science and technology facilities;
- development of business opportunities in the areas of nanotechnology and tourism;
- provision of training and development programs for school leavers or those at risk;
- Leadership programs for young community leaders;
- Review of existing transport network;
- Development of an Integrated Transport Strategy;
- Implement strategies to improve the health of children in the region;



⁶ Railing Port Botany's Containers: Proposals to Ease Pressure on Sydney's Roads, Freight Infrastructure Advisory Board, July 2005.



Current Local Planning Policy Framework

A draft Local Environmental Study was prepared in 2004 by a working group consisting of Campbelltown City Council, Landcom, and Department of Planning upon designation of the Menangle Park land by the Metropolitan Development Program (MDP) as a potential future release area. A paper was prepared for the working group by a consultant project management company outlining the key issues that needed to be addressed or resolved before the LES could be finalised and progressed through to a Draft LEP for exhibition. The main issues raised in the paper⁷ regarding the viability of the Menangle Park new release area are as follows:

- Impacts of development on local and regional road networks. Regional roads around Campbelltown CBD/Macarthur are over or near capacity;
- Significant costs associated with augmentation of transport infrastructure to accommodate the projected population;
- State and local infrastructure requirements are likely to put significant pressure on development costs and the financial viability of projects in Menangle Park. In addition, the site's relatively remote location may present a marketing risk;
- The proposed dwelling /hectare target yields 4,200 dwellings which is short of the State target. Any increase of proposed target would increase road network impacts;
- Ownership issues the site is owned by various agency and private owners, significant consultation is required; and
- Verbal advice from the Department of Planning on 30 November 2006 suggests that Cabinet has not formally endorsed the Working Group agreement on coal mining. This represents a significant project risk until the LEP is gazetted and, it is assumed, a formal agreement with BHPBilliton has been signed.

Other issues raised include:

- Public transport issues need to be assessed in relation to the Spring Farm Arterial, Menangle Road upgrades, rail connections and the regional road and bus network;
- Environmental impacts of development on flooding regime of Nepean River and Tributaries;
- The potential impact of subsidence from mining around (not under) Menangle Park will need to be reviewed before finalising the LES;
- Agreement on the heritage curtilage of, and view corridors toward, Glenlee is urgently required, as both will influence options for the alignment of the Spring Farm Arterial; and
- A strategy for the future use, management, funding and ownership of the river and creek riparian zones, and adjacent flood prone areas, needs to be identified.

The working group seeks to have a final LES ready for lodgement to Council by July 2007.

Until such time that an LEP is gazetted, the zoning of the study area remains predominantly Non Urban 1 (under IDO No. 15) with a small area of Zone 7(d1) under Campbelltown Local Environmental Plan No. District 8 – (Central Hills Lands) in the northeast portion of the site. There is also a water supply easement zoned as 5a Special Uses (Water Supply) diagonally cutting the site from northeast to southwest. The main features of the provisions of these zones are summarised below:

⁷ MENANGLE PARK REZONING LOCAL ENVIRONMENT STUDY ISSUES PAPER, Prepared for: Campbelltown City Council and Landcom, APP Corporation Pty Ltd December 2006







Interim Development Order No. 15 - City of Campbelltown (IDO No. 15):

- In Zone 1 the following uses are prohibited: Bulk stores, caravan parks, car repair stations, commercial premises, industries other than rural industries, extractive industries or home industries, liquid fuel depots, motor showrooms, residential buildings, refreshment rooms, roadside stalls; service stations; shops, timber yards, transport terminals, warehouses.
- Any purpose other than those listed above is permissible with development consent.
- Under clause 7 of IDO No. 15, land in Zone 1 shall not be subdivided unless each allotment has a minimum area of 40 hectares. However subdivision of land to allow allotments of not less than 2ha (up to a maximum of not more than 3 as specified and only where consistent with other specific requirements regarding frontage and depth) is permissible where Council is satisfied that the proposed use is for agriculture or another permissible use other than a dwelling house.
- IDO No. 15 requires that dwelling houses are not permissible on land within Zone 1 where the allotment size is less than 40ha. Mining is permissible with consent.

Campbelltown Local Environmental Plan – District 8 (Central Hills Lands):

- Land in the north east of the site to the east and west of the F5 Freeway is currently zoned 7(d1) Environmental Protection under Campbelltown LEP. Agriculture (other than intensive animal or horticultural husbandry) is permissible without development consent in the 7(d1) zone.
- The following used are prohibited in the zone: Aerodromes; airports; boarding-houses; bulk stores; bus depots; car repair stations; caravan parks; clubs; commercial premises; drive-in theatres; entertainment and amusement parks; extractive industries; gas holders; general stores; generating works; hotels; heliports; industries (other then home or rural industries); intensive animal or horticultural husbandry; junk yards; liquid fuel depots; mines; motels; motor showrooms; places of assembly; recreation facilities; refreshment rooms; residential flat buildings; roadside stalls, sawmills; service stations; shops; tourist facilities; transport terminals; warehouses.
- All other uses are permissible with development consent.
- The minimum allotment size for land within the 7(d1) zone is 100 ha.



ECONOMIC OVERVIEW

DEMOGRAPHICS

In 2001, the population of Campbelltown stood at 145,860. The population in Campbelltown has grown by 1.5% between 1996-2001 (and 2087 in absolute terms). Of the population in Campbelltown, 67.4% are of working age (15-64 years), which is above the south-western Sydney average of 66.9%.

Campbelltown's age profile in 2001 is illustrated in Figure 2. The working population in Campbelltown is reasonably balanced between the young working population (20-34) accounting for 21.4%, and the more mature working population (35-49), accounting for 23.0%. Of particular note is the large proportion of individuals under 19, totalling 35%. These trends reflect the prevalence of families in the area. The figures in Campbelltown reflect the trends of the broader southwest sub-region with 22.6% aged between 20-34 years, 22.8% aged between 35-49 years, and 33.6% aged less than 19 years.



Figure 2. Age Profile, 2001

Source: ABS 2001

SOCIO-ECONOMICS

Table 1 identifies key labour market indicators for the study area. This analysis reveals that Campbelltown has a considerable labour pool, characterised by relatively steady full time employment. The Campbelltown LGA also has a relatively high labour force participation rate at 62.9% compared to the Sydney average of 61.4%. However the unemployment rate of 8.5% in Campbelltown is considerably higher than the region (7.5%) and Sydney SD (6.1%).

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Table 1. Key Labour Market Indicators, 2001

	Campbelltown LGA	Southwest Sub-region	Sydney SD
Labour Force Participation Rate	62.9%	63.1%	61.4%
Unemployment Rate	8.5%	7.5%	6.1%
% Full-time employment	62.2%	63.4%	63.5%
% Part-time employment	26.1%	25.6%	27.5%

Source: ABS 2001

Figure 3. Labour force by Industry Sector, 2001



Source: ABS 2001

Figure 3 illustrates that a considerable proportion of Campbelltown's labour force is engaged in the manufacturing (17.8%) and retail trade (15.3%) industry sectors. Other notable concentrations include the property and business sector (9.4%) and the health and community sector (8.0%). These trends align closely with those of the southwest region.

An analysis of occupational distribution of the study area is shown in Figure 4. In comparison to the Sydney SD, it is clear that Campbelltown LGA and has a higher proportion of residents employed in lower order occupations including 'intermediate clerical and service workers (20.7%), 'intermediate production and transport workers' (12.4%), 'elementary clerical, sales and service workers' (10.6%), and 'labourers and related workers (9.4%). Conversely, Campbelltown has a below average proportion of managers and professionals living in the area, when compared to Sydney SD and the Southwest sub-region.



25 20 % of Employed Persons 15 10 5 Manage Associate Tradesper Advanced enta Labo urers Professional Professional ns and Clerical and Clerical, Production Clerical, and Related and s dministrato Related Service Sales and Workers and Sales and Campbelltown SLA 5.1 11.7 10.0 14.1 3.9 20.7 12.4 10.6 9.4 South West Subregion 6.4 12.5 10.2 15.0 4.1 19.1 11.9 9.4 9.2 Sydney SD 90 212 118 111 45 17.2 74 91 66

Figure 4. Occupations, 2001

Source: ABS 2001

INDUSTRY ANALYSIS

Location quotient analysis is a means of examining the strength of various industries relative to another area. In this case, Journey to Work (JTW) destination data has been used to calculate location quotients, by comparing Campbelltown LGA with Sydney SD. Location quotients greater than 1 are indicative of relative industry specialism. Campbelltown's areas of relative strength are listed in Tables 3 and 4 These figures need to be considered in conjunction with the number of people employed, to gain an understanding of the size, as well as the relative concentration of these industries. As a result, the results displayed are based on those industry's that exhibited a LQ > 1.00 that also had over 100 jobs.

Similar to trends observed in labour force statistics, observed industry specialisations (at a 1 digit ANZSIC level) reveal significant relative strength in Education, Retail Trade and Manufacturing. However the degree to which education and retail trade are specialised dropped over the period from 1996 to 2001, despite an increase in jobs in these sectors (Table 3). Interestingly, despite a high proportion of jobs relative to other sectors, the Transport & Storage sector is not considered an industry specialisation in Campbelltown. Campbelltown also displays relative specialisms in Health & Community Services (LQ 1.17), and personal and other services (LQ 1.10).



	LQ 1996	LQ 2001	LQ Change	Jobs 1996	Jobs 2001	Job Change
Education	2.03	1.79	-0.24	4148	4364	216
Retail Trade	1.60	1.49	-0.12	6492	7453	961
Manufacturing	1.30	1.50	0.20	5285	6865	1580
Health and Community Services	1.17	1.17	0.00	3358	3949	591
Personal and Other Services	1.10	1.11	0.01	1228	1459	231
Construction	0.91	1.00	0.09	1845	1824	-21
Government Administration and Defence	0.90	0.77	-0.13	1120	1004	-116
Accommodation, Cafes and Restaurants	0.81	0.79	-0.02	1156	1408	252
Agriculture, Forestry and Fishing	0.78	0.61	-0.17	191	129	-62
Electricity, Gas and Water Supply	0.70	0.34	-0.36	159	78	-81
Communication Services	0.67	0.38	-0.29	471	333	-138
Non-Classifiable Economic Units	0.64	1.02	0.39	281	155	-126
Property and Business Services	0.57	0.50	-0.07	2120	2692	572
Wholesale Trade	0.57	0.70	0.14	1176	1613	437
Cultural and Recreational Services	0.55	0.57	0.02	435	583	148
Transport and Storage	0.55	0.79	0.24	855	1424	569
Finance and Insurance	0.35	0.35	0.00	597	605	8
Mining	0.28	0.26	-0.03	53	20	-33
not stated	0.05	1.14	1.10	25	221	196

Table 2. Campbelltown LQ Analysis, 2001 and 1996 (1 digit ANZSIC)

Source: JTW 2001, 1996

At a finer grain, Table 4 reveals that Campbelltown LGA has relative strength in the manufacturing industry, particularly those associated with Dairy Product and Food Manufacturing (LQ of 25.51 and 8.40 respectively) and various metals and plastic manufacturing. Other manufacturing sectors displaying relative strength include 'Ink Manufacturing', 'Ceramic Manufacturing' and 'Pump & Compressor Manufacturing'. Campbelltown also demonstrates relative strength is the education sector, scoring LQ's of 2.40 for combined primary and secondary education. This reflects the presence of University of Western Sydney in Campbelltown.



	Number o	f Jobs	Percentage of	Total Jobs	
Industry	Campbelltown LGA	Southwest sub-region	Campbelltown LGA	Southwest sub-region	LQ
Dairy Product Manufacturing, nec	284	284	0.8%	0.3%	25.51
Food Manufacturing, nec	96	127	0.3%	0.1%	8.40
Non-Ferrous Metal Rolling, Drawing, Extruding	103	112	0.3%	0.1%	6.75
Plastic Extruded Product Manufacturing	109	149	0.3%	0.1%	6.70
Metal Product Manufacturing, undefined	211	296	0.6%	0.3%	5.77
Ink Manufacturing	223	326	0.6%	0.3%	5.23
Ceramic Product Manufacturing, undefined	208	317	0.6%	0.3%	5.15
Non-Metallic Mineral Product Manufacturing, undefined	253	322	0.7%	0.3%	4.62
Fabricated Metal Product Manufacturing, undefined	130	200	0.4%	0.2%	4.24
Pump and Compressor Manufacturing	225	369	0.6%	0.4%	4.02
Plastic Blow Moulded Product Manufacturing	137	175	0.4%	0.2%	4.00
Printing	163	196	0.5%	0.2%	3.55
Business Services, undefined	166	261	0.5%	0.3%	2.83
Combined Primary and Secondary Education	1453	3052	4.0%	3.0%	2.40
Pesticide Manufacturing	312	530	0.9%	0.5%	2.37
Secondary Education	1402	3322	3.9%	3.2%	2.31
Non-Residential Care Services, nec	192	306	0.5%	0.3%	2.29
Primary Education	113	230	0.3%	0.2%	2.17
Community Care Services, undefined	473	1075	1.3%	1.1%	2.00
Milk Vending	1019	2255	2.8%	2.2%	1.99
Specialised Food Retailing, undefined	1387	3244	3.8%	3.2%	1.97

Table 3. Campbelltown Location Quotient Analysis, 2001 (4 digit ANZSIC)

Source: JTW 2001

These industries represent a notable starting point for further cluster analysis. The types of manufacturing represented indicate that within Campbelltown hard material manufacturing is the dominant form of manufacturing. Identifying clusters is useful, as clustering encourages investment from businesses in similar or complementary industries. Locating where there is an existing strength or 'clustering' provides a number of benefits including better access to employees, suppliers and other firms and better availability of ancillary support services.





EMPLOYMENT LANDS ASSESSMENT

SYDNEY METROPOLITAN AREA

Broad Market Trends

Across Sydney, a lack of employment land availability, (particularly for large land parcels) has resulted in industrial activities being pushed gradually further away from the metropolitan core. Further, increasing urban consolidation in the middle and inner suburbs has also created higher demand for employment land in the outer suburbs.

The Sydney employment land market has enjoyed considerable land value growth as a result of both completed and proposed major infrastructure improvements, state government policies and restricted land supply. As a result, rents have now started to rise, with a four percent increase in rental growth in Sydney over 2006. However recent market studies (Macquarie Bank, CBRE) reveal that rising constructions rates may dampen land value growth, but high construction costs will also mean that rents will continue to rise.

Employment Lands Planning

The challenge for planning for employment lands at a metropolitan level is often centred on gaining an understanding of the nature of available land. This will include supply-side information about the capacity of existing employment land, proportion of Greenfield sites, brown field sites and their potential for development for particular uses. This information is not currently available on a metropolitan area wide basis. However, the recently released NSW Government Action Plan for Sydney's Employment Lands does propose employment land audits. Local Government will be encouraged to undertake these audits in partnership with Department of Planning as part of the Action Plan.

It is outside of the scope of this report to elaborate further on the specifics of the employment lands market at a metropolitan level given this lack of supply-side information however, SGS provides the following methodology for how this kind of analysis could be undertaken. This methodology involves 5 phases which are discussed below:

- Step 1: Identify major transport, logistic and distribution hubs Identify major transport and distribution hubs and plan for areas of associated activities (based on freight and transport strategies). The reason for planning for these activities first is that they are land intensive and need access to transport infrastructure over which the state has control. Until the freight strategy is finalised all possible inland ports and extensive areas around the port and airport probably need to be reserved. These should be protected from change.
- Step 2: Urban Services Identify existing and future sites for 'urban services' which include concrete batching, construction materials, waste utilities, major substations, water plants, sewage treatment plants. Each subregion needs to have waste facilities and concrete batching to minimise the transportation of these and other materials long distances and through residential areas. These activities, heavy industry and infrastructure such as STPs require buffering from residential areas.





The buffering requirement also defines areas that may not be used for residential, commercial or educational uses and may therefore be retained for industrial activity. These should be protected from change.

 Step 3: Strategic Industrial Precincts - These are the main manufacturing areas serving the city and need to be protected but are expected to change and intensify e.g. Smithfield-Wetherill Park. In general they have good access to arterial roads and have their own industrial ecology with links between suppliers and producers, with clusters emerging.

It should be noted that many of the areas expected to be protected through the above three steps have already been identified as (state) strategic employment precincts in the Metropolitan Strategy. The above process would formalise this map with more detail. For example the Liverpool/Macarthur employment precinct has been identified as an important manufacturing and logistics cluster.

- Step 4: Business development and Business parks The Metropolitan Strategy (p. 105) and the Standard LEP template (see under http://www.planning.nsw.gov.au/planning_reforms/index.asp) distinguish "business parks" and "business development zones". The overall objective of the Metropolitan Strategy is to concentrate jobs in centres well served or capable of being well served by public transport. The business development zone is intended to allow for business park style development close to centres. The Strategy highlights the need for business parks to also meet objectives which support 'in-centre' development. New business parks should be considered only if there is no possibility of creating employment in centres.
- Step 5: Local industry The balance of supply suggested from the model remaining after application
 of the previous steps should be devoted to 'local industry and services'. There is a need to consider
 two complementary but distinct objectives:.
 - local employment (a social objective); and
 - serving the needs of the local population (an efficiency objective).
- Step 6: Consideration of sites and areas for rezoning In combination with the above analysis of local industry needs is the need to consider prospects for rezoning of some industrial areas. Issues or guidelines for this process include identifying sites or land which:
 - Is a discontinuous, fragmented parcel of land away from broad area of employment;
 - is fronting a narrow road, poor access;
 - has perpetual conflicts with residential and other uses (though with regard to 'which use was there first');
 - has vacant buildings, evidence of neglect and under-utilisation (i.e. the market has no interestthough this needs to be balanced against an owner just speculating on a rezoning in future);
 - could be transformed into higher order employment with good transport access (e.g. Pendle Hill);
 - can support other strategic objectives (e.g. is in a centre and if redeveloped can support transit oriented development, or liveability aspirations)
 - offers opportunities to achieve major strategic open space or urban design objectives (e.g. Canterbury on the river).





SOUTH WEST SYDNEY

Broad Market Trends

In recent years, Sydney's southwest industrial region has experienced increased popularity amongst developers and users of industrial land, offering a suitable alternative to the traditional industrial suburbs of the South and Inner-West. Existing employment land in the southwest is dominated by manufacturing, construction and transport sectors. More recently, the Westlink M7 has opened up the southwest to firms requiring larger distribution centres. In the southwest, industrial lands rental market has remained flat over the past 12 months, with the exception of distribution centres rising 4.7% to \$89/sqm. Over a period of 5 years, rents have risen 10.6% (CBRE). This reflects the current trend for distribution companies to move to outlying suburbs, driven by the consolidation of logistics companies and associated economies of scale (Macquarie). Pre-leased properties and purpose built facilities for owner occupiers have driven new construction.

In the office market, the southwest is expected to enjoy notable growth over the next couple of years, however within the suburb office sector the southwest continues to play a minor role, with the north and northwest continuing to dominate the suburban office market (Table 4).

	Total Stock 2006 (sqm)	Annual Net Absorption (sqm)	Av. Net Face Rent (\$/sqm)
North	715,497	80,990	276
Central West	394,423	64,595	211
City Fringe	676,091	75,717	277
South	436,844	21,456	273
South West	166,277	5,781	184
West	121,143	-1761	268

Table 4. Key Indicators for 2006 – Suburban Office Market

In the coming years, the southwest will be the recipient of strong growth in population and employment. The underlying factors driving this growth are the Westlink M7, the planned residential and employment releases as part of the 2005 Metropolitan Strategy, and the proposed Southern Sydney Freight Line.

The key factors driving demand for employment land in the southwest region are thus:

- Population growth increases demand for services, and as such increase the demand for employment lands.
- Infrastructure improvements, including the improved connectivity provided by the M7, which has
 provided decreased travel costs related to transport from particular areas, and hence increasing the
 desirability of these locations for manufacturing and distribution activities. The proposed Southern
 Sydney Freight Line will improve goods distribution when completed.
- A reduction in available industrial land, particularly large parcels, and increased land prices in inner Sydney areas has contributed to the demand for industrial land in outer areas.
- Proximity to an appropriately skilled workforce is a key factor for business location choice. With
 an increasing residential population, the southwest sector will be a desirable location for businesses
 whose labour requirements align with the labour force skills of South Western Sydney.



Volume of Demand

SGS calculations indicate that total demand for industrial employment land up to 2031 is 931 hectares, giving an average annual demand of 37.2 hectares. Total demand for commercial employment land up to 2031 is 262. Average annual demand of 37.2 hectares

Table 5. Projected Demand for Employment Land 2031 (Hectares)

	Commercial	Light Industrial	Heavy Industrial
Campbelltown	116	178	156
Camden	86	151	222
Liverpool	134	133	134
Wollondilly	-74	0	-43
Total (ha)	262	462	469

Source: SGS Economics and Planning

Volume of Supply

At present, there is a short supply of employment land in west and south west Sydney. In the south west, land shortages have been reported by a previous study undertaken by Hill PDA (2003). This work identified 292 hectares of available employment land across the south west (Liverpool, Camden and Campbelltown, LGAs). With the inclusion of 74 hectares of employment land in Wollondilly Shire (MACROC), employment land supply in the southwest region totals **366 ha**.

In the southwest, employment land has historically been consumed at an average of 50 hectares per annum (five years up to 2003). It is forecast that consumption will increase to 80 hectares in subsequent years (MACROC 2003), suggesting that the current supply has the capacity to meet demand for a period of approximately 4-5 years. To maintain competitive land stocks and to be able to respond to changing industry dynamics, a land stock of around 10 years is the generally accepted benchmark. In this light, current regional supplies clearly fall short of this mark.









Figure 5. Supply and Demand for Industrial land in the Southwest Sub-region 2011-2031

Source: SGS Economics and Planning

Given that there is only enough industrial employment land to last 4-5 years it is clear that more land is needed to meet not only short-term demand but long-term demand too. Supply and demand analysis for the southwest sub-region indicates that without the release of additional lands, and with current industrial dynamics, land within the southwest sub-region will be exhausted by 2013.

In reality, current trends are unlikely to persist in a tightening market. Industry dynamics will change as land becomes more scarce, with industries that are able to intensify their operations doing so, and other, inherently low employment density industries, moving elsewhere (in search of larger lots and cheaper land). This will have the effect of lowering land demand. Nevertheless, even with these changing dynamics there is a need for additional land in the south west – both as a response to population growth and broader metropolitan industry dynamics.

Potential Future Employment Lands

The 2003 Hill PDA report identifies six new areas in the south west area which have potential as future employment lands. These sites vary with respect to suitability for industrial use, accessibility, size and location. The analysis suggests that within the five years (from 2003) there is potential for a total 250-300ha of developable land on four sites. This increases to 700-1,000ha in the ten years 2003-2013 and the potential for an additional 1,500-2,000ha after ten years. A review of the current status of these sites is provided below.

Short term potential sites are identified as:

 Hoxton Park Aerodrome, located at the junction of Orbital Road and Cowpasture Rd is currently leasehold, however will become freehold in 2008 whereby the airport will cease operation. The site is owned by Mirvac and Leightons and according to Mirvac, master planning for services and





rezoning is underway, the rezoning process is underway and the first Stage of an 8Ha industrial subdivision is to commence in early 2007. There is 60ha of developable land overall and it appears that the owners expect the site to house retail, bulky goods, light industrial, "motor mart" light industrial and residential. Construction will be market driven and as yet there has been no precommitment.

- The University of Western Sydney Campbelltown campus is located on a 166ha site, 20% of which is used for educational purposes. The Hill PDA Employment Lands Strategy identified the site as suitable for a business park however the recent Macarthur Structure Plan indicates that planning for residential rather than industrial purposes is currently in progress. This has been confirmed by consultation with MACROC. This considerably reduces the employment land available in the immediate to short term.
- The Glenlee Coal Plant has a gross area between 100 and 150 hectares however 71ha are considered suitable for industrial/commercial uses. In 2006 a preliminary assessment report for the industrial redevelopment of the site was submitted to the Department of Planning. Potential industries that would be considered suitable for establishing at Glenlee include intermodal train operations, bulk materials handling, container handling and storage, manufacturing and processing, distribution centres, minerals processing, and warehousing. In December 2006, Camden and Campbelltown Council's received a request to rezone the site in order to continue the existing uses, consolidate and update those uses and to attract a range of heavy and support industrial activities to the site. Camden Council resolved to undertake a Local Environmental Strategy in conjunction with Campbelltown Council and based on the outcome prepare an LEP which rezones the land for requested use. The DoP has indicated preliminary support in principle for the proposal to be considered as a spot rezoning, which could be incorporated into both Camden and Campbelltown's comprehensive LEPs at the appropriate time. This indicates that additional employment land should become available over the next two years.

Medium to long term potential sites:

The Hill PDA report identified a number of sites that due to fragmented ownership, location and subsequent high servicing costs are not expected to become available for development for ten or more years. Recently Badgerys Creek has been identified in the Employment Lands for Sydney Action Plan, as a site to be included in Western Sydney Employment Lands Investigation Area. As this will focus on identifying issues prior to rezoning, it is possible that this land may come on line sooner than predicted. In addition to this, potential for industrial land to be released in the Oran Park and Bringelly Areas has also increased due to the implementation of the South West Growth Centre plans. Oran Park and Bringelly North Precincts both have identified light industrial areas however the size of these is not known.

Table 6 below is a revised indication of potential future employment land supply. This is followed by Table 7 which shows short term confirmed or planned employment land supply.





Table 6. Potential Future Employment Land Supply

Area	Gross Ha
Within 5 years	
Glenlee Coal Plant	120
Hoxton Park Aerodrome	88
Moorebank Defence Site	60
TOTAL	250
Beyond 5 years	
Badgerys Creek	800-1,000
Oran Park/Bringelly	800-1,000
Austral	1,000-1,400
TOTAL	2,600-3,400
Beyond 10 years	
Moorebank Defence Site	225
TOTAL ALL	3,000 to 4,000

 Table 7.
 Short term Confirmed Employment Lands

Area	Developable Ha
Glenlee Coal Plant (rezoning in process)	71
Hoxton Park Aerodrome	60
Total	131





MENANGLE PARK EMPLOYMENT POTENTIAL

BROAD CHARACTER OF THE LOCAL MARKET

Although the demand and supply analysis shows a shortage of regional employment land supply, there have been some broad issues affecting the market in recent years. With the high level of employment specialism in manufacturing in the southwest region, the trend for manufacturing activity moving offshore has affected local industrial market dynamics. In addition, the area suffers from some broad negative features:

- 'Tyranny of distance'. Although the M5 and M7 have done much to improve the connection of the southwest to other parts of Sydney, the region still suffers from a perception that it is a remote part of the Sydney Metropolitan area.
- Negative socio-economic perception. For many prospective industries, the south-west still has negative connotations. Although bodies such as MACROC are working to change negative preconceptions, this has proved to be difficult work.
- SW is 'Late starter'. The region caters for industries that require large land areas. This generally
 means low return on investment and relatively slow take-up (some institutional investors have been
 'burnt' by the slow southwest market). In other parts of Sydney, land is typically subdivided to
 smallest lots possible because of greatest returns on investment.

The majority of industries coming to the Campbelltown are from Bankstown, Revesby, Wetherill Park. These are generally industries needing to expand. Interestingly, almost no industry north of Parramatta Road moves to the southwest (due to perceived remoteness & perceived socio-economic characteristics).

Manufacturing, wholesale storage, and logistics and distribution are the dominant industry types. In particular, plastic extrusion, metal manufacturing, and tool making. The southwest is generally characterised by lower to middle order traditional industries. Logistics is attracted because of a lack of large sites across the Sydney region. There is little high tech activity, however some industries are engaging in cutting-edge technology (e.g. lasers). The majority of industries service the local area. This trend is expected to continue. Interestingly, MACROC developed a networking and knowledge sharing program between plastics and metal manufacturers. Industries have a lot of pride in the area (stemming from an 'underdog' mentality). There is a strong industrial community in the southwest.

In general, there is not much leasing in the area, the southwest is predominately characterised by owneroccupiers. There has been little change in the types of industries occupying the area, however over the past 10 years there has been notable growth in the logistics type industries.

LAND & EMPLOYMENT FORECASTS

Figure 6 shows forecast demand for employment land by broad employment land category for Campbelltown LGA and the southwest region. The employment land demand in both the LGA and the



broader region is dominated by residential and neighbourhood commercial employment land and special uses (e..g health and education).

Figure 6. Employment Land Demand Forecast (2006-2011, 2011-2016)



Source: SGS Land Demand Model Using TPDC (2004) Employment Forecasts

This land demand is driven by forecast employment growth. The patterns for the LGA and the southwest region are broadly similar:

- Figure 7 shows the forecast employment growth in Campbelltown LGA. This chart shows that the most significant sectors for employment growth are: Health & Community Services (1746 jobs, 31% growth), Education (1613 jobs, 26% growth), Property & Business Services (1401 jobs, 37% growth) and Wholesale Trade (1172 jobs, 53% growth).
- Figure 8 shows the forecast employment growth in the southwest region. This chart shows that the
 most significant sectors for employment growth are: Health & Community Services (5797 jobs, 38%
 growth), Education (3594 jobs, 26% growth), Property & Business Services (4370 jobs, 40% growth)
 and Retail (4074 jobs, 15% growth).





Figure 7. Campbelltown LGA Employment Forecast (2006-2016)

Figure 8. South West Region Employment Forecast (2006-2016)





PRE-CONDITIONS FOR DEVELOPMENT

The basic pre-conditions for employment land development can be summarised as:

- Land availability. The employment lands market is constantly shifting and land may become available for employment use for a number of reasons. For example, a large land intensive use may cease operations leaving a large land area available. More commonly, local development patterns may highlight that a rezoning to employment use provides the more appropriate allocation of the land resource. For example, residential expansion may prompt a rezoning of semi-rural land for employment purposes.
- Size. The size of an area of employment land is important not just so it can accommodate large land using sectors but also because it offers opportunities to attract a larger number of firms and thus encourage industry clustering.
- Land character. Site specific conditions will offer both opportunities and constraints for potential development (e.g topography, slope, water and flood issues). These factors will have different values for different industry sectors.
- Infrastructure & access. The existence of existing on site infrastructure (water, sewer, electricity, etc) affects the attractiveness of land for employment use. Often a lack of basic infrastructure will delay the development of land for employment purposes. Transport access is a key consideration, the existence of roads and railways greatly affects the attractiveness of land for employment purposes.
- Location & synergy. The nature of surrounding land uses and infrastructure will affect both the broad suitability for employment use and the specific employment purpose. For example, proximity to residential areas will prohibit heavier industry activity. Similarly, proximity to areas with a particular industrial or social character will affect suitability for employment purposes. For example, proximity to executive housing will be a positive factor for the location of head office functions.

The key sectors for employment growth have been previously identified as: Health & Community Services, Education, Property & Business Services and Wholesale Trade. Apart from Wholesale Trade, these sectors will tend to be located in town centre locations or, in the case of health and education, in special zones (and subject to separate planning exercises). The remaining key sectors for the region can be broadly grouped as:

- Manufacturing
- Construction
- Wholesale Trade
- Transport and Storage

These industry sectors represent the region's existing industrial specialism and account for the bulk of recent industrial interest in the area. These sectors have broadly similar locational requirements in that they tend to seek:

- Large land parcels
- Vacant land
- Good motorway or arterial road access





- Relatively cheap land
- Distance from sensitive activities, especially residential
- Consistent energy supply

CHARACTER OF COMPETING LOCATIONS

There are approximately 11 industrial areas and precincts in the south west sub-region providing an estimated 1700ha of employment land. These are:

- Chipping Norton
- Crossroads
- Moorebank
- Orange Grove
- Prestons Industrial
- Warwick Farm/Sappho Road
- Graham Hill Road, Narellan
- Narellan Business Park
- Smeaton Grange
- Campbelltown/Leumeah
- Ingleburn
- Minto

Manufacturing, wholesale storage, and logistics and distribution are the dominant industry types in these areas. The automotive industry also plays a dominant role, with Toyota recently relocating to Moorebank in addition to a large motor auctions company. Sites with good access to the M7 have continued to attract warehouse, logistics and transport operators. Area released in Moorebank, Ingleburn and Prestons have witnessed strong take-up activity.

Speculative development for industrial warehouses in the west and south west increased during 2006 with strong demand from tenants and limited stock available. The change of direction from the traditional construction on demand is being driven by the lack of stock in the area, a determination by companies to now lease instead of buy sites due to a concern about interest rates, and property trusts which can afford to build a site then undertake the leasing campaign. This has been particularly evident in Moorebank and Prestons industrial areas.

There has been a reduction of available sites in competing industrial areas due in part to the desire of logistics and warehousing companies for larger floorplates. The lack of any newly released Greenfield sites for industrial use has also contributed the reduction of available employment lands. Further, improved access to a number of sites, particularly Ingelburn has increased the attractiveness of the area.

BUSINESS PARK POTENTIAL

The Employment Lands Taskforce has identified the need to identify an appropriate site for a business park in southwest Sydney. A number of purpose-built business parks have been developed in the Sydney region over the past decade. These usually involve campus-style, low-rise commercial buildings together with office/warehouse premises and some light manufacturing. Pertinent examples include:



- North Ryde. Easily accessible, situated along 2 major arterial roads (Epping Rd and Lane Cove Rd). The M2 begins within the industrial area. Developed along American concept of an industrial area surrounding a University in which the University and industries share resources. Tight planning controls maintain a University focus. Mostly freestanding development with a large office space component. Landscaping is a feature that distinguishes it from traditional industrial areas. Typical industries include: educational research, scientific research, IT.
- Austlink Business Park. The business park is set in a bushland setting abutting the Davidson Recreation Area. Strategically located on the North Shore and close to recreational facilities. Easily accessible by road. Cheap land compared to north Ryde. Due to site topography, only partial views of the business park are possible from Forest Way and Mona Vale Road. The park is home to a number of head offices for electrical companies. The site also houses bulky goods retail.
- Frenchs Forest Business Park. Has 3 separate precincts within the zoned industrial area with good access from major arterials. Close to both shopping and recreational areas. Clustering of hitech activities. Rodborough Rd hosts large multinational firms. Many buildings have city views. The area fronting Warringah Road and Aquatic Drive hosts a mixture of modern office/ warehouse buildings and more traditional manufacturing.
- Lane Cove Industrial Park. A mixture of modern hi-tech office and general and light industrial activities. The area hosts a number of major firms. Although access to the industrial park itself is not a problem, parking is congested. Strategically located near the city and the start of the M2 motorway providing access to the NW region.
- Australia Centre Homebush Bay. One of a number of precincts within the Homebush Bay area. The site adjoins the Olympic and Showground facilities and the train station. The site also has good road access from major roads and freeways. Users include warehousing/ distribution, manufacturing and commercial offices.
- Norwest Business Park. Modelled on developments in the USA which have created a park-like work environment with links between landscaped open-space and 'landmark' buildings. Hosts a range of hi-tech and head office firms. Has relatively cheap land compared with North Ryde. Strategically located close to major arterials including the M2. At the interface of executive labour of the northern suburbs and the skilled workforce of western Sydney and in a major population growth area. Offers a streamlined DA process.
- Australian Technology Park. Unique locations occupying the adaptive re-use of the former locomotive workshops at Eveleigh. Unique rail access with the site bordering Redfern rain station. Typical firms include IT, high-tech and research businesses but some head office functions are starting to appear. The operations form a loose cluster of activity with a mix of public and private sector firms. The central location offers excellent access by both private and public transport. Onsite facilities for conferences, meetings, etc.

While business park development will respond to the nature of local industry demands and the 'land offer' there are some emerging themes from the development of business parks elsewhere. Emerging development pre-conditions for business parks can be summarised as:



- Strategic location. Each of the studied business parks is strategically located for access to their workforce and also accessibility for the workers. Many also are close to local shops and services or recreational facilities.
- Direct arterial access. Business parks usually have direct (or at least unencumbered) access to key arterial roads.
- Quality landscape. All of the business parks studied aim to provide a quality working environment, sometimes with carefully landscaped grounds and district views/.

In this context, the Menangle Park site is a poor candidate for a business park given its distance from Campbelltown CBD, lack of direct access to the M5, poor public transport access and unremarkable landscape. The existence of a skilled workforce and concentration of manufacturing activity offers some potential for manufacturing related synergies. On balance however, the site would require significant investment before a business park is a possibility.

POTENTIAL INDUSTRY ATTRACTION

Given the identified shortage of industrial land in the region, additional land is specifically required for the identified key business sectors (manufacturing, construction, wholesale trade, transport & storage) to enable their future growth and diversification. While the nature of these industry sectors is changing in the face of increasing international competition, technical changes and market sophistication, they will continue to compete on price, hence the supply of affordable and suitably configured land will remain critical for their competitiveness.

In terms of locational attributes, these industries will seek:

- Proximity to road access (most important)
- Access to an appropriate labour force
- Access to CBD but distance from sensitive activities (especially residential areas)
- Access to suppliers

The Menangle park site currently does not have direct motorway access. This will act as a considerable disincentive for time-sensitive industries or those requiring high volume vehicle movements. Though the Spring Farm Arterial will improve access, the area still suffers from a perceived remoteness. In a local context, the site is not especially close to Campbelltown CBD so does not benefit from access to its services. More worryingly, the site is close to residential activity and this will limit industrial activity. Access to suppliers is likely to be very good for manufacturing industries given the concentration of manufacturing activity in the southwest but will obviously vary by type of business. The southwest region offers a high concentration of skilled labour which would have good road access to the Menangle Park site, and access via Menangle Park rain station is reasonable.

In terms of site specifics, these industry targets will require:

- Large lots on flat and unencumbered sites
- Serviced (some require natural gas)

Although the site does have the potential to offer large lots, the flat parts of the site are flood affected.





Given the identified industry sectors, pre-conditions for development and the nature of the Menangle park site and location, the key target market is low-impact manufacturing. A diverse mix of manufacturing services the Campbelltown area and 'footloose' industries looking to expand would be primary targets.

Some warehousing activity would be a secondary target given the opportunity to offer very large lots. However, these industries would generate much lower employment densities and some may require more direct access to the M5 if they operate with large truck movements.

A suggested industrial mix would be:

- Low to mid order manufacturing 80% on 2,000–10,000 sqm lots @ \$200-300/ sqm. Jobs yield would be around 1 job/ 150 sqm of developable land area
- Warehousing 20% on 1 1.5 Ha lots @ \$200/ sqm. Jobs yield would be 1 job/ 500 sqm of developable land area

To make this type of employment activity work, careful attention would need to be given to on-site landscaping and the transition between the industrial area and any surrounding residential areas. As the best land for industrial development is low lying and flood prone, remediation work would be necessary. In addition, the Spring Farm Arterial would need to be in place before many industries would consider the location over competitor sites elsewhere in the region. M7 proximate areas are likely to be much more attractive for time-sensitive industries such as logistics/ distribution activity.

The identified industry targets will need to be supported by a range of other business services – such as design, office support, professional services, etc. Within this context, such 'ancillary activities' will be an important component of future greenfield business areas. Ancillary activities should demonstrate that they:

- Are ancillary or subordinate to the predominant activities in the business area.
- Can provide services to industries located in the business area.
- Do not attract, or have very limited attraction for, customers from outside the immediate business area.

Business sectors likely to fulfil this function include:

- Rental equipment
- Office supplies
- Design
- Administrative and support services
- Small scale retail such as lunch bars, service stations, dairies
- Childcare facilities, sports and fitness centres

These industries would have high employment densities but would occupy a very small portion of the site. This is essential to ensure they do not undermine commercial centres located elsewhere in the region. To do this, business activities in the new business areas should necessary services operating solely to support the predominant business sectors.





RETAIL ANALYSIS

DEVELOPMENT SCENARIOS

The Retail Analysis for Menangle Park has been undertaken using two in-house Models:

- Supportable Retail Floorspace Model
- SGS Retail Impact Model

The two models have been run for each of the assumed development scenarios on the Menangle Park site. A description of the models and the development scenarios is presented in detail in the following sections.

We have examined three scenarios for residential development on the site:

- Minimal Development Scenario (Scenario 1): This represents the base physical capability of the land, excluding areas affected by the major issues of flooding, heritage and high ecological value. This scenario proposes primarily low residential development with an average density of 7 dwellings per hectare resulting in an approximate yield of 2,000 dwellings.
- Moderate Development Scenario (Scenario 2): This scenario proposes fill and associated compensatory works to increase the area of developable lands above the 100 year flood level, while achieving a balanced urban outcome. The development will yield approximately 4,500 dwellings.
- Maximum Development Scenario (Scenario 3): This scenario represents the maximum developable area assuming the resolution of all issues with an emphasis on maximising the residential yield with less consideration paid to existing topography, ecological communities and areas of probable archaeological significance. This will yield approximately 5,500 dwellings.

FLOORSPACE DEMAND ASSESSMENT

The supportable retail floorspace model has been used to estimate the retail expenditure of the incoming population in Menangle Park by suitable statistical adjustment of national average per capita retail expenditure and then applying benchmark Retail Turnover Densities (RTDs) to arrive at supportable retail floorspace for the new population. The following sections give an account of the steps involved to arrive at the supportable retail floorspace.

National Trends

To estimate the changing patterns of retail expenditure, regression analysis was performed on data from 1983 to 2004 as published in the ABS Retail Trade publication (8501.0). This enabled an estimate of how the real growth in the national retail expenditure per capita has changed over time. Calculations of the available expenditure in Menangle Park were completed by translating national trends to the local context in line with the socio-economic profile of the Campbelltown LGA. Results of the regression analysis are shown in Figure 9

Figure 9. National Retail Spending per Capita (constant 2001 \$)





Source: ABS Retail Trade publication (8501.0) and SGS projection.

As seen in Figure 9, there has been growth in all commodities except in Department Store and Clothing spending. This reflects recent industry trends, which have shown a shift of spending away from higher order Department Stores (such as David Jones, Myer Grace Brothers) in regional centres. This does not necessarily mean that people are buying fewer clothes, but instead is likely to indicate how the price of clothes has decreased relatively in recent times.

Table 8 summarises the effect this pattern will have on retail expenditure per capita between years 2001 and 2026



	2001	2006	2011	2016	2021	2026
Supermarkets	2,504	2,764	2,992	3,220	3,449	3,677
Department Stores	715	713	656	598	541	483
Other Food	978	1,069	1,107	1,144	1,182	1,219
Clothing	571	571	532	493	454	414
HH Goods	1,229	1,376	1,452	1,527	1,603	1,679
Other Retail	1,264	1,440	1,547	1,654	1,761	1,868
Hospitality and Services	1,363	1,502	1,525	1,548	1,571	1,593
Total	8,623	9,436	9,810	10,185	10,559	10,934

Table 8. National Retail Expenditure Per Capita (2001\$)

Source: ABS Retail Trade publication (8501.0) and SGS projections.

Menangle Park Retail Expenditure

The national retail expenditure by commodity group per capita was modified for application to residents throughout the Campbelltown LGA. It is assumed that the future population in Menangle Park will have the same retail expenditure by commodity as the LGA average. Thus estimates for Menangle Park may be conservative. This modification was achieved through use of the 1998-1999 ABS Household Expenditure Survey (publication 6535.0), which contains statistics on how local demographics affect retail expenditure. This data is published on a household basis rather than a per capita basis and thus the household value and its variation from the national average has been used as a surrogate value for modifying the per capita expenditure figures. The basis of this modification is shown in the table below.

Table 9. Campbelltown Expenditure Variation by Income (2001\$)

HES Income Quintile	Lower	Second	Third	Forth	Upper	Totals
Percentage of Study Area Households	47%	19%	21%	9%	4%	100.00%
Variation from the Average	26.5%	-1.4%	1.3%	-11.1%	-15.6%	
Retail Expenditure per HH per week - Australian Average	\$274.11	\$420.63	\$518.87	\$599.58	\$764.49	\$515.54
Retail Expenditure per HH per week - Study Area	\$215	\$330	\$407	\$470	\$600	\$404

Table 10. Menangle Park Population projection

	2001	Proposed	2006-07	
	Population	Dwellings	Population*	
Scenario 1	532	2,000	6,532	
Scenario 2	532	4,500	14,032	
Scenario 3	532	5,500	17,032	

* assuming 3 persons per dwelling

By using population figures, income variation by percentile group and real growth in retail expenditure, it is possible to calculate the amount of expenditure available in a given location. The available retail expenditure by commodity group for Menangle Park for the three scenarios of residential development is illustrated in Table 11.



Menangle Park Supportable Retail Floorspace

The last step in the exercise is to arrive at retail floorspace that can be supported by the expenditure of the incoming population. A crucial step here is the calculation of the proportion of residents' retail expenditure that would be retained within the Menangle Park area or in other words, what proportion of the residents' expenditure would escape to areas outside Menangle Park. It has been assumed here that the escape retail expenditure in Menangle Park Travel Zone will be the same as that currently observed in the LGA. In 2006, only 10% of the residents' expenditure in the LGA escaped outside the LGA and 90% is retained within the LGA.

The retained expenditure of the residents in the Menangle Park Travel Zone will approximately equal the turnover of the new retail facilities developed on site. By assuming benchmark RTDs, it is has been possible to compute the supportable retail floorspace of the incoming population for the 3 scenarios discussed above.

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total	
Scenario 1									
2001 Exp (\$)	1,042,331	297,542	407,163	237,497	511,440	525,914	567,218	3,589,106	
2006-07 Exp(\$)	14,125,634	3,644,559	5,463,552	2,920,415	7,031,197	7,359,192	7,676,749	48,221,298	
% retained in MP	90%	90%	90%	90%	90%	90%	90%	90%	
Exp Retained(\$)	12,713,070	3,280,103	4,917,197	2,628,374	6,328,078	6,623,273	6,909,074	43,399,168	
RTD (\$/Sqm)	9,000	2,500	6,000	5,500	5,500	4,000	3,000		
Fl.Sp. Demand (Sqm)	1,413	1,312	820	478	1,151	1,656	2,303	9,131	
			Sc	enario 2					
2001 Exp (\$)	1,042,331	297,542	407,163	237,497	511,440	525,914	567,218	3,589,106	
2006-07 Exp(\$)	30,344,595	7,829,219	11,736,767	6,273,617	15,104,372	15,808,968	16,491,142	103,588,680	
% retained in MP	90%	90%	90%	90%	90%	90%	90%	90%	
Exp Retained(\$)	27,310,135	7,046,297	10,563,090	5,646,255	13,593,935	14,228,071	14,842,028	93,229,812	
RTD (\$/Sqm)	9,000	2,500	6,000	5,500	5,500	4,000	3,000		
Fl.Sp. Demand (Sqm)	3,034	2,819	1,761	1,027	2,472	3,557	4,947	19,616	
			Sc	enario 3					
2001 Exp (\$)	1,042,331	297,542	407,163	237,497	511,440	525,914	567,218	3,589,106	
2006-07 Exp(\$)	36,832,179	9,503,082	14,246,053	7,614,898	18,333,643	19,188,878	20,016,899	125,735,632	
% retained in MP	90%	90%	90%	90%	90%	90%	90%	90%	
Exp Retained(\$)	33,148,961	8,552,774	12,821,448	6,853,408	16,500,278	17,269,990	18,015,209	113,162,069	
RTD (\$/Sqm)	9,000	2,500	6,000	5,500	5,500	4,000	3,000		
Fl.Sp. Demand (Sqm)	3,683	3,421	2,137	1,246	3,000	4,317	6,005	23,810	

Table 11. Retail Floorspace Estimates for Menangle Park (2006-2007)

Table 11 gives the commodity-wise retail expenditure of the incoming population and supportable floorspace in Menangle Park under the 3 development scenarios. Currently the site has about 330 sqm of retail floorspace. The net floorspace demand is given in Table 12.



Table 12. Net Retail Floorspace Estimates for Menangle Park (2006-2007)

	Gross Fl. Sp.	Existing FI. Sp.	Net Fl. Sp.
Scenario 1	9,131	329	8,802
Scenario 2	19,616	329	19,287
Scenario 3	23,810	329	23,481

The summary of the results is given below.

• Scenario 1: The incoming population of approximately 2,500 dwellings can support a total of 9,000 sqm of retail floorspace

 Table 13.
 Suggested Floorspace Usage for Menangle Park (Scenario 1)

Category of Commercial Use	Suggested Specific Uses and Scale							
Retail (General)	 'Anchor' supermarket e.g. Coles, Woolworths, IGA 	2000-4000 sqm						
	 A small retail post office/news agency 	120-200 sqm						
	 A small pharmacy 	120-200 sqm						
	Possible other fresh food grocer e.g. bakery/butcher/greengrocer	Up to 600sqm						
	 Other Specialty Stores 	Up to 600sqm						
Retail (Café/Restaurant)	 1-2 café/restaurant 	Up to 800 sqm						
	 Take-Away shops 	Up to 800sqm						
Personal Services	• A small combination of uses such as: hairdresser, DVD hire,	Up to 800 sqm						
	beautician							
Business Services	 Possibility for small office suites/real estate agent/information 	Up to 800 sqm						
	technology/legal service							
Total		Max Total say 9,000 sqm						

• Scenario 2: The incoming population of approximately 4,500 dwellings can support a total of 19,000 sqm of retail floorspace. Table 14 presents the Retail Mix for Scenario 2.

 Table 14.
 Suggested Floorspace Usage for Menangle Park (Scenario 2)

Category of Commercial Use	Suggested Specific Uses and Scale	
Retail (General)	 'Anchor' supermarket e.g. Coles, Woolworths, IGA 	 3000-5000 sqm
	 Supermarket e.g. Aldi 	 2000-4000 sqm
	 Discount Department Store e.g. Golo/Kmart/Target 	 2000-4000 sqm
	 A retail post office/news agency 	 120-200 sqm
	 A pharmacy 	 120-200 sqm
	Possible other fresh food grocer e.g. bakery/butcher/greengrocer	 Up to 600 sqm
	 Other Specialty Stores 	 Up to 1000 sqm
Retail (Café/Restaurant)	 3-4 café/restaurant 	 Up to 1000 sqm
	 Take-Away shops 	 Up to 600sqm
Personal Services	• A combination of uses such as: hairdresser, DVD hire, beautician	 Up to 1000 sqm
Business Services	Possibility for small office suites/real estate agent/information	 Up to 1000 sqm
	technology/legal service	
Total		Max Total say 19,000 sqm





Scenario 3: The incoming population of approximately 5,500 dwellings can support a total of 23,000 sqm of retail floorspace. Table 15 presents the Retail Mix for Scenario 3.

Category of Commercial Use	Suggested Specific Uses and Scale							
Retail (General)	 'Anchor' supermarket e.g. Coles, Woolworths, IGA 	 3000-5000 sqm 						
	 Supermarket e.g. Aldi 	 2000-4000 sqm 						
	 Discount Department Store e.g. Golo/Kmart/Target 	 2000-4000 sqm 						
	 Entertainment Complex e.g. Cinema 	 3000-5000 sqm 						
	 A retail post office/news agency 	 200-400 sqm 						
	 A pharmacy 	 200-400 sqm 						
	Possible other fresh food grocer e.g. bakery/butcher/greengrocer	 Up to 600 sqm 						
	 Other Specialty Stores 	 Up to 1000 sqm 						
Retail (Café/Restaurant)	 3-4 café/restaurant 	 Up to 1000 sqm 						
	 Take-Away shops 	 Up to 1000 sqm 						
Personal Services	A combination of uses such as: hairdresser, DVD hire,	 Up to 1000 sqm 						
	beautician, medical centre							
Business Services	 Possibility for small office suites/real estate agent/information 	 Up to 2000 sqm 						
	technology/legal service/RTA/Insurance							
Total		Max Total say 23,000 sqm						

 Table 15.
 Suggested Floorspace Usage for Menangle Park (Scenario 3)

IMPACT ANALYSIS

Overview

The retail impact assessment utilises the SGS Retail Simulation Model. This model calculates the propensity of households in every Travel Zone (TZ) in NSW to spend money in any of the available retail offerings. In doing so, the model is able to describe the retail catchments of all retail offerings. Additional floorspace of new retail developments can then be 'added' into the retail system and the effect on retail catchments and retail turnover can be assessed.

To calculate required retail floorspace in the future, it was first assumed that retail centres within Campbelltown will maintain their current market share as the population grows and the retail offer shifts.

Population forecasts provided by the TPDC were used to calculate future expenditure for each Travel Zone in Sydney and the forecast growth in retail expenditure per capita was also used to predict retail demand.

Impact Analysis

The impact modelling is conducted at a Travel zone (TZ) level and does not account for the turnover impact on smaller retail centres within the same TZ. Thus, the analysis is based on assessing the economic impact at a community level rather than at the level of individual retailers.

In general, new retail development in a particular Travel Zone will have a positive impact on turnover in that zone and a negative impact on turnover for competing retail centres elsewhere in the LGA. This is because any new shock to the existing system (such as a new retail centre) will divert some expenditure





away from existing retail centres into the new centre. However, if there is a large retail demand created by incoming population of a new residential development, it might create positive impact in the zone of a competing retail centre which will receive a proportion of the expenditure escaping from the zone in which the new residential development is taking place. The extent of the impact will depend on the relative scale of the new development, its quality and location vis a vis existing centres.

The impact is calculated by converting the net floorspace into additional turnover by using benchmark turnover densities. The net addition to retail expenditure of the incoming population due to the new residential development is calculated by using data from ABS Household expenditure survey. This data is then added to the existing retail system in the model to recalculate the turnovers of retail centres in the travel zones of the LGA. Impacts have been calculated for 2006-07 in case of the 3 development scenarios in Menangle Park. Table 16 gives the retail turnover by commodity group for the 3 scenarios. The turnover figures are the retained expenditures for Menangle Park given in Table 11. These are used to calculate the impact of the retail development in Menangle Park on existing centres in the LGA.

							Hospitality	
	Supermkt.	Depart. Stores	Other Food	Clothing	HH Goods	Other Retail	and Services	Total
Scenario 1	12,713,070	3,280,103	4,917,197	2,628,374	6,328,078	6,623,273	6,909,074	43,399,168
Scenario 2	27,310,135	7,046,297	10,563,090	5,646,255	13,593,935	14,228,071	14,842,028	93,229,812
Scenario 3	33,148,961	8,552,774	12,821,448	6,853,408	16,500,278	17,269,990	18,015,209	113,162,069

Table 16. Retail Turnover for Menangle Park (2006-2007)

The following sections give the maps for 2006-07 depicting the extent of the impact of the new developments.

Figure 10. Impact Scenario 1: Minimum Development Scenario







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Figure 10 shows the impact of the new residential and commercial development in the Menangle Park travel zone for Scenario 1. The impact analysis illustrates the percentage change in turnover between the "with development" and "without development" scenarios assuming that the development takes place in 2006-07.

The impact map shows that there is a net positive impact on Menangle Park Travel zone itself which records a huge increase in the total turnover. The impact is large mainly because of a low base as currently the Menangle Park TZ has little or no existing retail apart from a few local shops.

The net impact on retail in other Travel Zones is negative. The total turnover of the Bradbury Travel Zone, Mt. Annan Market Place TZ, Narellan Shopping Centre TZ, Macarthur Square Shopping Centre, Campbelltown Mall and Camden Central Shopping Centre Travel Zones will go down by 0.76%, 2.14%, 1.89%, 0.02%, 0.23% and 2.67% respectively. The positive impact is explained by the fact that there would be some escape expenditure from the Menangle Park TZ, which will be captured by these centres (which are in close proximity to Menangle Park).





Figure 11. Impact Scenario 2: Moderate Development Scenario

Source: SGS Economics and Planning, Base map copyright Sydway Publishing Pty. Ltd. Reproduced with permission.

Figure 11 shows the impact of the new residential and commercial development in the Menangle Park travel zone for Scenario 2. The impact analysis illustrates the percentage change in turnover between the "with development" and "without development" scenarios assuming that the development takes place in 2006-07.

The impact map shows that there is a net positive impact on Menangle Park Travel zone itself which records a huge increase in the total turnover. The impact is large mainly because of a low base as currently the Menangle Park TZ has little or no retail apart from a few local shops.

The net impact on retail in other Travel Zones is mixed. While total turnover of the Bradbury Travel Zone, Mt. Annan Market Place TZ, Narellan Shopping Centre TZ, Campbelltown Mall and Camden Central Shopping Centre Travel Zones will go down by only 0.85%, 2.51%, 1.84%, 0.02%, 2.35% respectively that of Macarthur Square Shopping Centre is expected to increase by marginally by 0.59%. The positive impact is explained by the fact that there would be some escape expenditure from the Menangle Park TZ.





Figure 12. Impact Scenario 3: Maximum Development Scenario

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Figure 12 shows the impact of the new residential and commercial development in the Menangle Park travel zone for Scenario 3. The impact analysis illustrates the percentage change in turnover between the "with development" and "without development" scenarios assuming that the development takes place in 2006-07.

The impact map shows that there is a net positive impact on Menangle Park Travel zone itself which records a huge increase in the total turnover. The impact is very large mainly because of a low base as currently the Menangle Park TZ has little or no retail apart from a few local shops.

The net impact on retail in other Travel Zones is mixed. While total turnover of the Bradbury Travel Zone, Mt. Annan Market Place TZ, Narellan Shopping Centre TZ, and Camden Central Shopping Centre Travel Zones will go down by only 0.87%, 2.62%, 1.82%, 2.24% respectively that of Macarthur Square Shopping Centre and Campbelltown Mall are expected to increase by marginally by 0.81 and 0.06% respectively. The positive impact is explained by the fact that there would be some escape expenditure from the Menangle Park TZ, which will be captured by these centres (which are in close proximity to Menangle Park).



Significance of the Impact

	Bradbury SC	Camden Central SC	Macarthur Square SC	The Mall Campbelltown	Mt. Annan Mkt. Pl.	Narellan SC	Menangle Park
Benchmark RTDs	5,071	5,071	5,071	5,071	5,071	5,071	4,000
Resultant RTDs	5,033	4,936	5,070	5,060	4,963	4,976	4,736
Ratio Resultant/Benchmark	1.0	1.0	1.0	1.0	1.0	1.0	1.2

 Table 17.
 Scenario 1 Resultant & Benchmark RTD(Turnover/sqm) Ratios for 2006

 Table 18.
 Scenario 2 Resultant & Benchmark RTD(Turnover/sqm) Ratios for 2006

	Bradbury SC	Camden Central SC	Macarthur Square SC	The Mall Campbelltown	Mt. Annan Mkt. Pl.	Narellan SC	Menangle Park
Benchmark RTDs	5,071	5,071	5,071	5,071	5,071	5,071	4,000
Resultant RTDs	5,028	4,952	5,101	5,070	4,944	4,978	4,745
Ratio Resultant/Benchmark	1.0	1.0	1.0	1.0	1.0	1.0	1.2

 Table 19.
 Scenario 3 Resultant & Benchmark RTD(Turnover/sqm) Ratios for 2006

	Bradbury SC	Camden Central SC	Macarthur Square SC	The Mall Campbelltown	Mt. Annan Mkt. Pl.	Narellan SC	Menangle Park
Benchmark RTDs	5,071	5,071	5,071	5,071	5,071	5,071	4,000
Resultant RTDs	5,027	4,958	5,112	5,075	4,939	4,979	4,746
Ratio Resultant/Benchmark	1.0	1.0	1.0	1.0	1.0	1.0	1.2

Retail Turnover Densities (RTDs) give turnover per sqm of floorspace. After assessing the % change in turnover, it is important to also compare the resultant RTD against standard benchmarks to properly understand the significance of the impact. This will give an indication of whether the forecast reduction/increase in turnover for competing centres is likely to be tolerable. Table 17, Table 18 and Table 19 show the Resultant/Benchmark Ratios for the three scenarios.

Benchmark RTDs have been sourced from Urbis JHD Retail Averages for Sub Regional Centres and suitably chosen to represent the retail centres.

Values equal to 1 show a parity between the post development 2006 RTDs and the benchmark RTDs – suggesting negligible impact due to any new development. Values lower than 1, show that post development 2006 RTDs below the standard benchmark - suggesting underperformance. Values higher than 1, show that post-development 2006 RTDs are above the standard benchmark. This suggests over-performance.

The tables show that most of the competing centres' RTD ratios in 2006 are equal to 1, suggesting that the new retail development at Menangle Park would have little or no impact on the turnovers of other competing centres. The ratios are greater than 1 for the Menangle Park travel zone – suggesting significant positive impact for all three population scenarios in 2006.