WAHROONGA ESTATE REDEVELOPMENT - SOCIAL & ECONOMIC IMPACT ASSESSMENT

Prepared for

Johnson Property Group

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independent property HillPDA consulting

QUALITY ASSURANCE

This document is for discussion purposes only unless signed and dated by a Principal of Hill PDA.

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1.1 Study Brief

Hill PDA has been commissioned by the Johnson Property Group (JPG) to undertake a Social and Economic Impact Assessment of the proposed redevelopment of the Wahroonga Estate (hereafter referred to as the Subject Site). The Social and Economic Impact Assessment has been prepared to support the Environmental Assessment Report (EAR), the State Significant Site Study (SSSS) and the preferred Concept Plan to be submitted for the comprehensive redevelopment of the Subject Site.

The Social and Economic Impact Assessment has been prepared in light of the Director General's Requirements (DGR's) provided to JPG in April 2008. The DGR's were provided in light of the Preliminary Environmental Assessment prepared for the Subject Site by JPG and their Project Consultant Team for submission to the Department of Planning in February 2008.

This report has been prepared in consultation with JPG and the Consultant Project Team appointed by JPG. JPG are acting as proponent of the development application on behalf of the Australasian Conference Association (ACA). The ACA is the property Trustee for the Seventh-day Adventist Church. The Seventh-day Adventist Church operates the hospital and all other community facilities on the Subject Site.

1.2 Development Description

The development application seeks to create a sustainable living and working environment that provides a range of health and community services to the public. The redevelopment seeks approval for:

- a 94,000sqm hospital;
- 195,000sqm of residential floorspace;
- 20,000sqm for aged care;
- a 12,388sqm primary and secondary school;
- 13,000sqm of commercial floorspace (including 2,000sqm of retail floorspace);
- a 3,500sqm nursing college;
- 3,200sqm of church floorspace;
- 10,000sqm for church administration; and
- 3,500sqm of sporting facilities.

Where possible the proposed Concept Plan has retained buildings with a good economic life and of heritage value. Buildings that are inefficient in layout or sustainability terms have been identified for redevelopment or refurbishment.

1.3 Site Location

The vast majority of the 65ha Subject Site is located within the suburb of Wahroonga in Ku-ring-gai Shire Local Government Area (LGA), with a small portion of residential properties on the north-western section of the Subject Site located within the Hornsby Shire LGA. The Subject Site is located, approximately 2.2km to the east of Thornleigh railway station, 3km to the west of Turramurra railway station and 1.5km to the south of Normanhurst railway station.

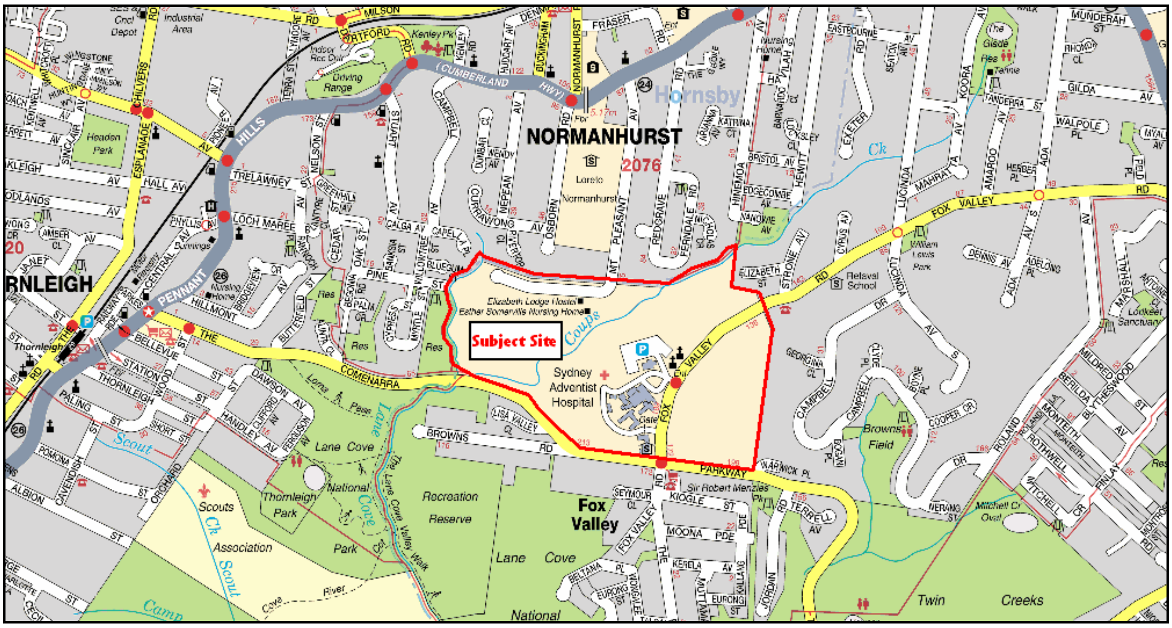
The Subject Site is bounded by the Comenarra Parkway to the south. Fox Valley Road crosses the Subject Site from north to south, with the main hospital building located to the west of this road. Coups Creek cuts through the Subject Site from the north-east to the south-west effectively dividing the site into two sections.

The Subject Site is surrounded by a large amount of bushland vegetation with some low density residential located to the north and south. Lane Cove National Park is located to the south of the Subject Site with some connection to the Coups Creek riparian corridor. Loreto Normanhurst Catholic School is located to the north of the site. A small retail development is located to the south of the Subject Site at the intersection of the Comenarra Parkway, Fox Valley Road and The Broadway.

Figure 1 - Aerial Image of Subject Site

Source: JPG

Figure 2 - Plan of Site Outlined in Red in Wider Geographic Context



Source: UBD

1.4 Key Study Findings – Economic & Social Impacts

Hill PDA's analysis of the proposed Wahroonga Estate Concept Plan has identified a number of potential direct and indirect, economic and social impacts. The impacts have been identified following a detailed investigation of the proposed development, surveys of the site and surrounding centres, demographic research and the analysis of relevant government objectives and priorities for the North Subregion.

Based on Hill PDA's research, the following matters have been highlighted as particularly relevant to an assessment of social and economic Impact;

- the hospital's function as magnet infrastructure and the sites clustering of associated health and community industries. The Draft North Subregional Strategy seeks to *"support programs that encourage clustering of business activities around magnet infrastructure";*
- the State Government's priority to *"Improve Access to Quality HealthCare"*[1];
- the dwelling growth target established by the Draft North Subregional Strategy of 21,000 dwellings for the North Subregion between 2001 and 2031 and priorities to increase the range of dwelling types and affordability's in the North Subregion to meet changing community needs;
- Action A3.2 of the Draft North Subregional Strategy that seeks to *"increase the integration of employment and housing markets";*
- the reality that *"Individuals working in key services on low-to-moderate incomes such as those working in childcare and aged care, police, ambulance personnel, nurses, community development*

[1] Priority S1 – NSW Government State Plan – A New Direction for NSW

workers and transport workers, are finding it increasingly difficult to find affordable housing close to their work places. Over time, we risk these individuals choosing not to work in high cost areas that are too far from their accommodation"[2];

- recognition that *"Australia needs nothing less than a revolution in education – a substantial and sustained increase in the quantity of our investment, and the quality of our education… this is required at every level of education from early childhood to mature age"[3];*
- the State Government's objective to encourage *"more students to complete Year 12 or recognised vocational training"[4];* and
- one of the State Health Plan's top four Strategic Directions to *"Build a Sustainable Health Workforce".*

A summary of the potential social and economic impacts identified by Hill PDA, and their implications in light of the above considerations, have been provided below.

Commercial

- The proposed net increase of approximately 8,000sqm of commercial floorspace will support the growth of the health and community industry cluster focused around the hospital and the provision of services to the local community.
- The proposed commercial floorspace will provide a range of economic benefits including the generation of approximately 265 jobs; a greater range of job types and opportunities; improved economies of scale and resource sharing between like industries; enhanced quality of space; a more attractive environment for professionals and skilled persons and improvements to efficiency of services.
- The proposed commercial floorspace will allow for a greater range of health and community services on site to the benefit and well being of the community. Importantly this community will not only relate to the North Subregion but to wider Sydney and in some cases NSW.
- The net increase of 8,000sqm of commercial floorspace for uses that are complementary to the existing health and community facilities is not considered of a scale or type that would adversely affect the viability of existing (or future) employment centres in the North Subregion. This conclusion has been based on the nature of the centres immediately surrounding the Subject Site that are predominantly retail focused; the intended relationship of the proposed floorspace in support of the existing health and community industry cluster; and the modest scale of the proposed floorspace increase comparative to the scale of the other major employment centres in the Region.

[2] Centre for Affordable Housing – Department of Housing

[3] Kevin Rudd, Australian Labour Party as quoted in The Australian January 23, 2007

[4] NSW State Plan – A Direction for NSW

Retail

- There is sufficient existing and forecasted expenditure generated in the Subject Site's Primary and Secondary Trade Areas to support the provision of a 1,000sqm supermarket and 1,000sqm of specialty retail.
- The development will encourage an anchor tenant such as an IGA to move into the area, solidifying the retail centre and transforming what was once a small neighbourhood shopping strip into a small village and more of a destination for convenience shopping.
- The proposed retail floorspace will provide a range of economic benefits including support for the viability of the existing Fox Valley Neighbourhood Shopping Centre and the retention of more locally generated expenditure. It will also enhance the commercial attraction of the Subject Site to prospective tenants and health related industries.
- The proposed additional retail floorspace will also provide social benefits including a greater range of local services and improved price competition. Each of these factors are important in light of the existing undersupply of retail floorspace in the locality.
- The proposed additional retail floorspace will minimise the need for staff, residents, visitors and patients to travel out of the area to purchase a range of goods. As a consequence dependence on private and public transport will be reduced to the benefit of road infrastructure and the environment.
- Detailed expenditure and gravity modelling undertaken by Hill PDA found that no one centre will be detrimentally impacted by the proposal. The proposal is responding to a current undersupply of retail floor space in the area and demand for retail services generated by the cluster of industries focused around the hospital.

Health

- The proposed hospital expansion aims to meet an anticipated 4% per annum growth in demand for all hospital services up to 2021. The extension and refurbishment will also help to relieve pressures on the Government Health System by providing additional quality care and holistic health services. The expansion of services, that form an established cluster of medical facilities, is also supported as an economically efficient use of existing infrastructure.
- An expansion of hospital services will enhance the physical and mental well being of the community through holistic preventative and care methods. It will help to highlight and effectively address key issues facing health care in NSW including chronic diseases due to increasingly unhealthy lifestyles; the socioeconomic inequity of health provision and the ageing of the population.
- An improved private health care system will enhance the local and wider economy by supporting the ongoing health and effectiveness of the labour force and by reducing demand for additional government funding. Such funding in turn may be used for alternative public services and benefits such as education and infrastructure.

Housing

- The proposed net increase in dwellings on the Subject Site will support the North Subregion to achieve the dwelling targets and objectives established by the Draft North Subregional Strategy and Metropolitan Strategy.
- The proposed mix of housing, increase in dwelling numbers and improved standard of accommodation will enhance the quality of living and social well being of key workers employed on the site and their families. This will be achieved through a reduction in staff travel times, improved housing options and a greater disposable income for household needs other than housing.
- The provision of a range of dwelling types and sizes will facilitate a mixed and integrated community including aged persons, professionals, key workers and families.
- The close proximity of the site to health, retail and commercial services will also support the growth of a sustainable community.
- The provision of affordable dwellings on site will help to create a socially and economically integrated and sustainable community in the North Subregion.

Education

- A significant number of social benefits have been closely connected to the provision of additional years of schooling and training. These benefits include substantially increased health, well being and health behaviours. These factors lead to an improvement in the quality of a person's life as well as preventing illness and enabling more efficient treatment. Other positive impacts, as a result of enhanced education, relate to reduced levels of crime, anti social behaviour and poverty within communities.
- The benefits outlined above have significant health and service related cost savings for Governments as well as economic benefits for individuals including a positive impact to an individual's wealth and a local, regional and national economy.
- More specifically the proposed improvements to the primary school and new secondary school will create a positive learning environment for a greater number of local students and age groups. This will be achieved thorough new high quality indoor and outdoor educational facilities set amongst an attractive natural setting. From an environmental and social point of view, the expansion of the school would also have a positive impact through the provision of local schooling opportunities reducing the need to travel. This in turn supports the wider benefits to roads and transport and enforces the local community character.
- The proposed relocation and expansion of the Avondale Nursing College will help to increase the number of students attracted to the nursing profession and the quality of their learning. This will in turn

translate into improved health care and patient recovery. An additional 115+ students per year[5] will go a considerable way to meeting the estimated shortfall of 800 students in the state per annum.

- The private funding of the primary and secondary school, as well as the Nursing College, support the State's education system and provide significant cost savings for the Government.

Employment

- The proposed redevelopment will generate employment in two ways – through the operation of uses on the site and through employment multipliers. It has been estimated that the proposed development will create over 1,000 additional operational jobs on site over the first five years of development. A further 3,000 to 5,000 jobs will be generated on the site over the remaining stages of development[6].

- The nature of the employment generated will also vary from low skilled work to highly skilled and technical positions. Employment opportunities will relate to health and community services; primary, secondary and tertiary education; office and medical administration; business and media and retail. In this way a variety of employment opportunities will be created that will form a diverse and balanced working environment. The range of jobs created will also provide a variety options for the different skills and ages of residents in the North Subregion.

- Based on the proposed redevelopments estimated construction cost of $800m, approximately 4,840 job years (or 484 jobs over ten years) will be directly generated in construction.

Community

- The proposed redevelopment will support Ku-ring-gai and Hornsby Council's objectives to meet the needs of the North Subregion's community through the provision of a range of services and facilities. Facilities and services provided by the proposed development include a 350 seat community hall, two churches, a child care centre, a medical and dental centre, aged care and sporting facilities.

- The proposed development aims to provide over 3,200sqm of community floorspace centrally located on the site and available to all members of the public. The facilities will be maintained and operated by the ACA.

Other Impacts

- **Investment Stimulus** - where a major property investment decision has been made it is generally viewed as a strong positive commitment for the local area. Such a major investment will in turn stimulate and attract further investment to the immediate area.

- **Economic Multipliers** - the $800m cost in construction has been estimated to translate into a further $723m activity in production induced effects and $770m in consumption induced effects. Total

[5] Based on an increase in student numbers attending the Nursing School by 350, split over the three year course period.

[6] Wahroonga Estate Redevelopment - Preliminary Environmental Assessment

economic activity generated by the construction of the proposed development is therefore estimated at $1,493m.

- **Open Space** - the proposed development will provide a significant amount of passive and active recreation space.
- **Sustainability** - the proposed development incorporates best practice methods for sustainable building design, an efficient site layout, safe and well connected spaces.
- **Sustainability** - the proposed development will facilitate an economically sustainable and integrated approach to health and community facilities that allows for effective and efficient service provision.
- **Sustainability** - the proposed development will be environmentally sustainable through the creation of a genuine mixed use living and working community that reduces the need to travel.

1.5 Conclusion

Given that the proposed development accords with the Director-General's Requirements in the following ways:

- provides an appropriate scale and range of social infrastructure and services to support the anticipated resident, employee and visitor population;
- has an acceptable economic impact to existing centres surrounding the site;
- improves the social vitality and character of the site and surrounding area;
- enhances and extends the existing facilities, health and community services to the benefit of the North Subregion and wider NSW;
- provides local retail facilities and services to the benefit of local residents, workers and visitors;
- generates new employment opportunities suited to a range of ages and skills;
- provides a range of housing types and affordability's;
- creates a sustainable community that reduces dependency on private car travel;
- provides improved educational opportunities from a primary through to a tertiary level for local, Sydney and NSW residents to the benefit of their social and economic well being; and
- has positive economic flow on effects to the wider economy,

the proposed Wahroonga Estate Redevelopment is supported and considered in accordance with State Government Objectives, the Draft North Subregional Strategy and the objectives of Ku-ring-gai and Hornsby Councils. It is therefore considered that the proposed development should be supported on social and economic grounds.

2. INTRODUCTION

2.1 Study Brief

Hill PDA has been commissioned by the Johnson Property Group (JPG) to undertake a Social and Economic Impact Assessment of the proposed redevelopment of the Wahroonga Estate (hereafter referred to as the Subject Site). The social and economic Impact Assessment has been prepared to support the Environmental Assessment Report (EAR), the State Significant Site Study (SSSS) and the preferred concept plan to be submitted for approval to the Department of Planning.

This report has been prepared in consultation with JPG and the Consultant Project Team appointed by JPG. JPG are acting as proponent of the development application on behalf of the Australasian Conference Association (ACA).The ACA is the property Trustee for the Seventh-day Adventist Church. The Seventh-day Adventist Church operates the Hospital and all other community facilities on the Subject Site.

The development application seeks to expand the existing Sydney Adventist Hospital, provide new educational and community facilities, residential development including retirement homes and affordable housing in addition to the creation of a mixed retail, commercial and recreational village centre.

The development application seeks to ensure that the environmental quality and character of the site will be retained and enhanced as a positive environment to live and work. The completed redevelopment will form a sustainable live, work and play community known as the Comenarra Park Living Working Community.

2.2 Site and Locality Description

The majority of the 65ha Subject Site is located within the suburb of Wahroonga in Ku-ring-gai Shire Local Government Area. A small portion of the Subject Site to the north-west is located within the Hornsby Shire Local Government Area. The Subject Site is located, approximately 2.2km to the east of Thornleigh railway station and approximately 3km to the west of Turramurra railway station by road from the Hospital grounds. The Subject Site is also located approximately 1.5km to the south of Normanhurst railway station.

The Subject Site is bounded by the Comenarra Parkway to the south, Fox Valley Road crosses the Subject Site from north to south, with the main Hospital Building to the west. Coups Creek cuts through the site from the north-east to the south-west, effectively dividing the site into two sections.

The Subject Site is surrounded by a large amount of bushland vegetation with some low density residential to the north and south. Lane Cove National Park is located to the south. Loreto Normanhurst Catholic School is located to the north.

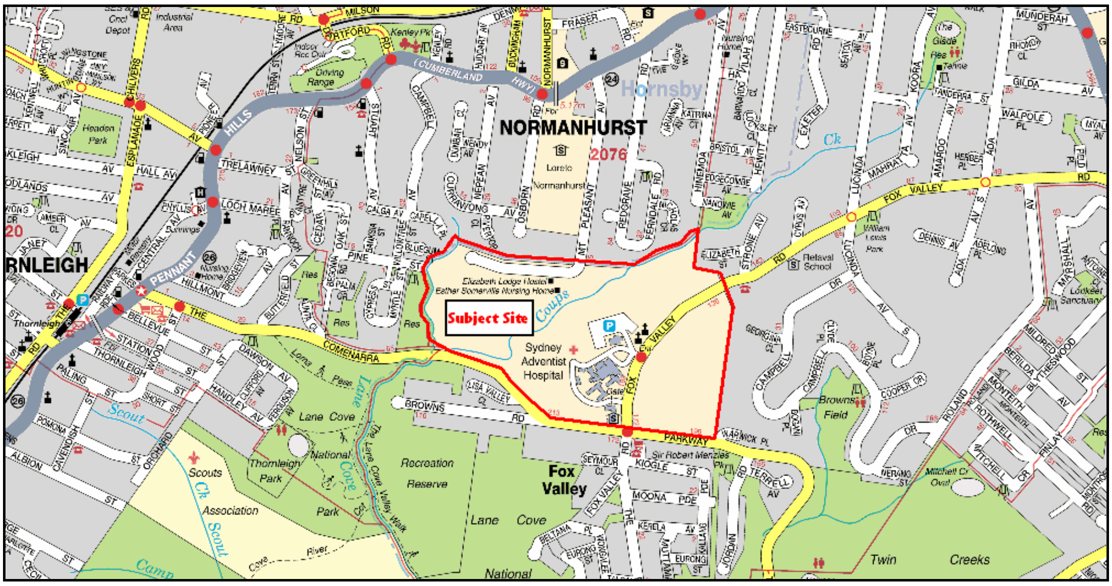
Figure 3 - Plan Showing Subject Site in full colour

Source: JPG

A significant portion of the site is urban bushland (approximately 40%). A large portion of the urban bushland lines Coups Creek where the topography of the site is considerably steeper. To the north-west of the creek, an aged care development and some low density residential exists with vehicular access via Mt Pleasant Avenue onto Pennant Hills Road to the north. The north-west development is surrounded by urban bushland to the west, south and east.

Sydney Adventist Hospital is located to the south-east of Coups Creek, surrounded by a number of other uses such as a primary school, churches, some open space, a relief agency, administration buildings and associated staff housing. All of these uses are sited in a linear fashion along Fox Valley Road. To the south-east of the Hospital, additional urban bushland occupies a large area of the site.

Figure 4 - Location Plan of Site in Wider Geographic Context



Source: UBD

2.3 Study Background

The Subject Site is owned by the Australasian Conference Association Limited (ACA). The ACA is the property trustee for the Seventh-day Adventist Church.

The Sydney Adventist Hospital was opened as the "Sydney Sanatorium" on the 1 January 1903 with a bed capacity of 70. The Hospital was rebuilt in 1973 and became an acute care institution known as the Sydney Adventist Hospital. The Hospital is currently licensed by the New South Wales Department of Health for a bed capacity of 342 beds, making it the largest single campus private hospital in NSW.

The site accommodates a number of complementary uses to the hospital including education establishments, private health services, two churches, residential accommodation, retail and commercial premises. 65ha of the site still remains relatively under-developed however with large sections of bushland.

Many of the existing facilities on the Subject Site are in need of refurbishment and upgrade. Some buildings and uses (such as car parking) are inefficient in their layout or have limited economic life. The ACA identifies a growing demand for health and community services and therefore the need to comprehensively redevelop the site as a sustainable living and working environment for future generations.

In light of the proposed redevelopment and refurbishment works JPG (in coordination with their Project Team Consultants) prepared a Preliminary Assessment Report for submission to the Department of Planning. On the basis of the preliminary assessment the proposed development was confirmed to fall under Part 3A (Clause 6) of the State Environmental Planning Policy (Major Projects) 2005.

In accordance with Part 75F of the Environmental Planning and Assessment Act 1979, the Director General documented all economic, social and environmental matters to be addressed in the applications submission. Further to these comments the JPG and Project Consultant Team have prepared a development application that addresses these requirements. This report is one of the documents prepared as part of the submission to respond to the Director Generals Requirements.

2.4 Proposed Wahroonga Estate Concept Plan

The Proposed Wahroonga Estate Concept Plan for the Subject Site includes:

- the retention of a number of buildings including the main hospital building, both churches, the majority of retirement apartments and dwellings in the north-west section of the site, the administration building on the eastern side of Fox Valley Road and some residential dwellings in the northern section of the Subject Site;
- the demolition of other buildings on site;
- the construction of a range of residential accommodation including detached dwellings, townhouses and apartments;
- the redevelopment of existing hospital facilities, aged care facilities, civic spaces and nursing school facilities;
- the construction of retail, commercial, sporting, community and car parking facilities; and
- the relocation and expansion of the existing primary school to include a secondary school.

In floor space terms the Proposed Wahroonga Estate Concept Plan seeks to provide:

- a 94,000sqm hospital;
- 195,000sqm of residential floorspace;
- 20,000sqm for aged care;
- a 12,388sqm primary and secondary school;
- 13,000sqm of commercial floorspace (including 2,000sqm of retail floorspace);
- a 3,500sqm nursing college;
- 3,200sqm of church floorspace;
- 10,000sqm for church administration; and
- 3,500sqm of sporting facilities.

2.5 Consultation

As part of the studies preparation, Hill PDA has engaged with the Consultant Project Team through a series of Project Team Meetings and site visits to ensure the assessment is consistent with and reflective of the proposed development.

During the course of the study Hill PDA also met with the Planning Assessment Community Reference Group (CRG) to identify and explain key areas the social and economic impact assessment would be focusing on and to answer any key questions. The CRG was formed by the Department of Planning in order to bring together representatives from Hornsby and Ku-ring-ai Councils, the hospital, community groups and individual community members to discuss the implications of the proposed development and any necessary considerations.

All relevant matters raised during the second CRG meeting and all Consultant Project Team meetings have been considered in the preparation of this report.

2.6 Limitations

This report is for the confidential use only of the party to whom it is addressed (the client) for the specific purposes to which it refers. We disclaim any responsibility to any third party acting upon or using the whole or part of its contents or reference thereto that may be published in any document, statement or circular or in any communication with third parties without prior written approval of the form and content in which it will appear.

This report and its attached appendices are based on estimates, assumptions and information sourced and referenced by Hill PDA. We present these estimates and assumptions as a basis for the reader's interpretation and analysis. With respect to forecasts we do not present them as results that will actually be achieved. We rely upon the interpretation of the reader to judge for themselves the likelihood of whether these projections can be achieved or not.

As is customary, in a report of this nature, while all possible care has been taken by the authors to prepare the expenditure and financial models from the best information available at the time of writing, no responsibility can be undertaken for errors or inaccuracies that may have occurred both with the programming or the financial projections and their assumptions.

3. POLICY CONTEXT

The proposed Concept Plan has been prepared in accordance with the various State, Regional and Local Planning Policies relevant to the redevelopment of the Subject Site. The following section of this report identifies the key policies and strategies that relate to the proposed redevelopment of the Subject Site from an economic and social point of view.

NSW State Plan 2006

The NSW State Plan identifies challenges and opportunities facing NSW whilst recognising the need for Governments to *'reconcile competing demands in an environment of constant social and economic change'.* The plan sets out the following key goals and priorities relevant to the proposed development of the Subject Site.

- NSW Open for Businesses:
  - Increase business investment;
  - Maintain and invest in infrastructure;
  - Cutting red tape; and
  - Facilitate more people participating in education and training throughout their life.
- Healthy Communities:
  - Improved access to quality healthcare
- Build Harmonious Communities:
  - Increased participation and integration in community activities.
- Opportunity and support for the most vulnerable.
- Practical Environmental Solutions:
  - Better environmental outcomes for native vegetation, biodiversity, land, rivers and coastal waterways.
- Improve Urban Environments through:
  - Jobs closer to home;
  - Housing affordability;
  - Improve the efficiency of the road network; and
  - More people using parks, sporting and recreational facilities and participating in the arts and cultural activity.

Metropolitan Strategy

The NSW Department of Planning prepared and released the Metropolitan Strategy City of Cities: A Plan for Sydney's Future (The Strategy) in 2005. The Strategy is a broad framework to secure Sydney's place in the global economy by promoting and managing growth. It is a strategic document that outlines a vision for Sydney over the next 25 years. It is also the start of a process to bring the State Government, Local Government, stakeholders and the community together to discuss, review and then make decisions to guide the future of Sydney's economy, environment and communities. More detailed planning supports the Strategy via regional strategies and subregional strategies.

With respect to employment, the Strategy plans for 500,000 new jobs within Sydney by 2031. This would bring the total number of jobs in Sydney to 2.5 million. The Strategy identifies that some areas of Sydney have difficulty in attracting workers because of high housing prices and rents. This gives rise to skill shortages or leads to extended journey to work distances and travel times. Examples include primary school teachers, childcare workers, retail and hospitality staff, and home care and nursing aides. The Strategy aims to provide affordable housing in these areas to accommodate these workers.

In regard to population growth for Sydney, the total population of Sydney is expected to grow by 1.2 million people to a total of 5.3 million by 2031. As a result of population growth, the State Government is planning for an additional 640,000 new homes to accommodate this growth and approximately 420,000 of these new homes will need to be constructed in existing suburbs. The Strategy plans for housing in centres consistent with their employment role and seeks to encourage a greater housing density in centres where capacity for employment and civic roles is provided.

Draft North Subregional Plan

Subregional planning is an intermediate step in translating the Metropolitan Strategy to a local level. The Subregional Strategy's recognise that some issues extend beyond local government boundaries and require a 'subregional' approach. The Subject Site is located within the North Subregion of Sydney. The North Subregional Strategy acts as a broad framework for the long term development of the North Subregion, guiding government investment and linking local and state planning issues.

The Strategy has set an employment capacity target for the North subregion of 13,500 new jobs by the year 2031. This is an increase of 17%, bringing the total number of jobs in the Subregion to 92,500. The majority of job creation has been targeted to occur in Hornsby, which is the only Major Centre in the Subregion.

The North Subregional Strategy has identified Fox Valley as a Neighbourhood Centre. Neighbourhood are Centres which is defined as one or a small cluster of shops and services, serving between 150 and 900 dwellings. The Strategy also states that Councils should consider opportunities to strengthen existing industry clusters. The Sydney Adventist Hospital is identified by the Strategy as one of those existing clusters of business activity in the North Subregion. The Hospital cluster is associated with knowledge infrastructure and the skill base of its resident workforce, which can be leveraged for ongoing success.

The Strategy has set a target of 21,000 new dwellings within the North Subregion by the year 2031. This will increase the number of dwellings within the North Subregion from 88,000 dwellings to 109,000 dwellings. The target for new dwellings is divided between the Ku-ring-gai and Hornsby Local Government Areas. 10,000 new dwellings should be provided within the Ku-ring-gai Local Government Area and 11,000 dwellings within the Hornsby Local Government Area.

NSW Statistical Local Area Population Projections 2001 – 2031, 2005 Release, NSW Government Department of Planning , Transport and Population Data Centre

The population projections contained in this report have been compiled for Statistical Local Areas (SLAs) as defined in the 2005 edition of the Australian Standard Geographic Classification. SLAs in NSW are generally identical to Local Government Areas (LGAs), but in some cases an LGA may comprise 2 or 3 SLAs. Hornsby LGA is recognised as a single SLA, as is Ku-ring-gai LGA. The report projects the population of Hornsby will increase from 153,200 in 2001 to 168,170 in 2031 and Ku-ring-gai from 107,660 in 2001 to 113,020 in 2031.

Director-General's Requirements (DGR) – Major Project MP07_0166 (Concept Plan)

The Department of Planning assesses and determines proposed major projects under Part 3A of the Environmental Planning and Assessment Act. A Concept Plan was submitted to the Department of Planning for the redevelopment of the Wahroonga Estate. After receiving these preliminary documents, the Department of Planning advised what issues need to be addressed in its environmental assessment in by issuing Director-General's requirements. The Proposed redevelopment of the Wahroonga Estate was confirmed by the Director-General as a Part 3A major project on 2nd December 2007 under Clause 6 of the State Environmental Planning Policy (Major Projects) 2005.

Requirements listed within the DGR particularly relevant to this Social and Economic Impact Study include the following:

- Consideration of surrounding land uses, patterns, density, and character and assess/resolve potential land use conflicts;
- Justification of proposed redevelopment, with particular regard to impacts on existing local town centres;
- Demonstration of appropriate provision of social infrastructure and services to support expected population increase; and
- Assessment of appropriateness of footprint size proposed for the school.

Ku-ring-gai Planning Scheme (Zoning Map), amended 15 June 2007

The Ku-ring-gai Planning Scheme Zoning Map details the current zoning of all the land located within the Ku-ring-gai LGA.

Wahroonga Estate is currently zoned "Special Uses" in the portion of the site that is used by the hospital, nursing home and church. Where the site is transected by Coups Creek, the area is zoned "Open Space (Public Parks & Recreation)". The Open Space zone is the same width as the riparian corridor of urban bushland that is located along the Creek.

The surrounding residential land is currently zoned "2C – Residential C"

Ku-ring-gai Planning Scheme Ordinance, 30 March 2007

The Ku-ring-gai Planning Scheme Ordinance is an environmental planning instrument used to manage development and conservation in Ku-ring-gai. In the hierarchy of Council's environmental planning documents it stands at the top, providing broad direction.

Under the Ku-ring-gai Planning Scheme Ordinance the surrounding "Residential C" land only permits "dwelling-house" forms of development. The minimum lot size for the zone is $929m^2$.

Ku-ring-gai Council - Section 94 Contributions - Plan 2004 – 2009 - Residential Development

The Plan is a public document that displays Ku-ring-gai Council's Policy for the assessment, collection, spending and administration of Section 94 development contributions. The Plan expects the population of Ku-ring-gai to grow from 109,824 people in the 2004 to 114,823 in 2009. Overall the population of Ku-ring-gai is expected to grow by 16,000 people to a total population of 126,181 by 2026.

Ku-ring-gai Council - Community Plan 2005 – 2009, Adopted by Council on 9 May 2006

The Community Plan is a framework to guide Council, government and community decision-making about community services and infrastructure over the next five years.

The Plan is particularly relevant to the proposed relocation of the school. For example, since 1996, preference for private primary school education has increased by approximately 3%. The Plan discusses the NSW Government's "Family First" and "Better Futures" strategies which aim to provide ongoing care and support for children and young people from birth through adolescence. One "Field of Activity" of the strategies, which is highlighted by the Plan, is "keeping young people at school and improving their educational attainment".

The Plan also found that there was a shortfall of child care places within the Hornsby Ku-ring-gai area. Some 49% of parents interviewed in the Hornsby Ku-ring-gai Families First Project consultations identified a shortage of services as a difficulty. The shortfall in required childcare places in the Ku-ring-gai LGA was estimated at the time of the Plan at 207 places or 20%.

Key Community Facility needs identified by the Plan include library extensions, multi-purpose community facilities, multi-purpose leisure centres, childcare centres, youth facilities and facilities to accommodate home and community support services and senior's groups.

The Plan found evidence that suggests some families were experiencing delays in accessing public health and support services. Some of these issues raised include:

- Reductions in opening hours of Early Childhood Health Clinics;
- Long waiting times to access the Child and Family Health Service, sometimes resulting in delays in diagnosis and access to specialist services;
- Services geared to crisis provision not prevention/early intervention, and
- Lengthy delays in child psychologist services.

Those people surveyed were also concerned that parents were not informed about alternative private providers. In some cases, parents were prepared to pay for earlier intervention rather than wait for an unacceptably long time for the publicly provided services.

In regard to aged care services, one strategy outlined by the Plan detailed that Council should provide guidelines for developers on accessibility and adaptable housing standards for older people and people with disabilities. Ku-ring-gai has limited housing choices for older people. Older residents who are 'downsizing' have difficulty finding appropriate alternative housing to suit their stage of life.

Hornsby Shire Council Community Purposes Development Control Plan, June 2004

Although the existing Primary School and proposed relocated school is not located within Ku-ring-gai LGA, Ku-ring-gai Council does not have a Development Control Plan containing information on the required facilities for a school. Hornsby Shire Council, however, does have a DCP stating the criteria and prescriptive measures for Council's objectives on the construction of a school. As a small section of the site falls within the Hornsby LGA, the Hornsby Shire Council Community Purposes Development Control Plan is useful as a guide on the matter.

The DCP requires an education establishment to provide adequate space to be provided for the users' indoor and outdoor recreation pursuits. An eduction establishment is required to provide a minimum of 20sqm per enrolled student of recreation space. The outdoor portion of recreation space should be located on land with a slope no greater than 1:60.

In regard to the provision of off street car parking for a school, the DCP states that parking should be determined on the basis of a "Parking Survey" or a "Traffic Impact Study" or at a rate of 1 space per 2 students of driving age.

Hornsby Shire Council Development Contributions Plan 2007-2011

The Plan is a public document that displays Hornsby Shire Council's Policy for the assessment, collection, spending and administration of Section 94 development contributions. The Plan anticipates a population growth from 161,341 people in 2007 to 167,508 in 2011. To accommodate this growth, the Plan has forecasted the need for 3,600 additional dwellings. Overall the population of Hornsby Local Government Area is expected to grow to 180,007 by 2021.

4. DEMOGRAPHICS

An assessment has been undertaken of the demographic characteristics of Hornsby and Ku-ring-gai LGAs in light of the same characteristics for the Sydney Statistical Division (SD). This analysis has been based on Australian Bureau of Statistics Census Data. It compares the 2001 and 2006 ABS Census years.

The demographic characteristics of the LGA's has been undertaken to better understand the social matters that are and are likely to influence demand for health care, education and community services on the Subject Site in the future. As retail services are a more localised matter, a demographic analysis of the area immediately surrounding the Subject Site has been included in Section 6 of this report.

4.1 General Population Characteristics

The key characteristics of both LGA's populations are as follows:

- In 2006 the total population in Hornsby LGA was 151,325. This was an increase of 4% since 2001 (at 144,692). Between the same period the population in Sydney increased by 4% from 3,948,015 in 2001 to 4,119,190 in 2006. In the Hornsby LGA the total number of dwellings subsequently increased by 7% from 52,252 in 2001 to 55,893 in 2006. The LGA had a median age of 37 in 2001. The highest proportion of the population's place of birth was Australia and Oceania (69%) and the average household size was 2.9 persons per dwelling. By 2006, median age increased to 38 years, average household size decreased to 2.8 and the proportion of the population born in Australia/Oceania decreased by 4%. Correspondingly the proportion of people born in Asia increased by 12% to 15%.

- In 2006 Ku-ring-gai LGA had a total population of 101,083, an increase of only 1% since 2001. The number of dwellings between the same period increased by 2% from 35,537 to 36,175. In 2001 the median age was 40 years, whilst in the Sydney SD it was 35. The highest proportion of the population in the Ku-ring-gai LGA in 2001 was aged in the 45-59 age bracket (22%). As of 2006, the median age increased to 41 years and the highest proportion of the population increased in the 45-59 age bracket (23%). The LGA also experienced an increase in the proportion of older residents aged in the 75+ bracket i.e. 8% in 2001 to 9% in 2006.

- Compared to the Sydney SD, both LGAs represent an older population. This is particularly the case for the Ku-ring-gai LGA, which had more than a 2% difference than the Sydney SD in 2001 for the "45-59", "60-74" and "75+" age brackets. This difference increased to more than 3% in 2006 for all three age brackets, suggesting that the number of proportion of the population in older age brackets is greater than the Sydney SD. For age brackets younger than 45 years, the distribution was less for both LGAs in 2001 and 2006, except for the "0-14"age bracket where both LGAs experienced a slightly higher proportion of people. Both LGAs had a higher proportion of people born in Australia / Oceania and Sub-Saharan African regions in compared to the Sydney SD. Hornsby LGA also had a greater proportion of people born in the Asian region compared to the Sydney SD.

The general population characteristics of the Region by LGA and the characteristics for Sydney are outlined in the following tables.

Table 1 - General Population Characteristics - 2001

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Population and Dwellings			
Total Population	144692	100154	3948015
Total Dwellings	52252	35537	1546691
Occupied Private Dwellings	49688	33673	1438394
Occupied Private Dwellings (%)	95.1%	94.8%	93.0%
Average Household Size	*2.9*	*3.0*	*2.7*
Age Distribution			
0-14	20.9%	20.7%	20.2%
15-29	20.1%	18.4%	21.9%
30-44	22.3%	18.4%	23.8%
45-59	20.4%	21.9%	18.4%
60-74	10.0%	12.3%	10.1%
75+	6.3%	8.3%	5.6%
Total	100.0%	100.0%	100.0%
Median Age	*36.7*	*40.2*	*34.9*
Place of Birth			
Australia & Oceania	68.5%	67.7%	65.3%
Europe	10.0%	10.7%	11.8%
North Africa and Middle East	1.7%	1.1%	3.1%
Asia	12.7%	10.7%	10.6%
Americas	1.3%	2.0%	1.5%
Sub-Saharan Africa	1.6%	4.2%	1.0%
Other	0.1%	0.1%	0.2%
Not Stated	4.1%	3.6%	6.6%
Other/Not Stated	4.3%	3.7%	6.7%
Total	100.0%	100.0%	100.0%

Source: ABS Census Data 2001

Table 2 - General Population Characteristics – 2006

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Population and Dwellings			
Total Population	151,325	101,083	4,119,190
Total Dwellings	55,893	36,175	1,643,675
Occupied Private Dwellings	52,399	33,795	1,521,465
Occupied Private Dwellings (%)	93.8%	93.4%	92.6%
Average Household Size	*2.8*	*2.9*	*2.7*
Age Distribution			
0-14	19.8%	20.7%	19.5%
15-29	19.3%	17.3%	21.2%
30-44	21.1%	17.2%	23.2%
45-59	21.6%	22.6%	19.3%
60-74	11.1%	13.0%	10.6%
75+	7.1%	9.2%	6.1%
Total	100.0%	100.0%	100.0%
Median Age	*38*	*41*	*35*
Place of Birth			
Australia & Oceania	65.6%	66.1%	63.1%
Europe	8.0%	9.3%	8.9%
North Africa and Middle East	0.8%	0.3%	2.5%
Asia	14.5%	10.4%	10.6%
Americas	0.7%	1.4%	0.6%
Sub-Saharan Africa	1.2%	3.9%	0.7%
Other	9.2%	8.5%	13.7%
Total	100.0%	100.0%	100.0%

Source: ABS Census Data 2006

4.2 Dwelling and Housing Types

The following section summarises the dwelling and housing characteristics of Hornsby and Ku-ring-gai LGA's:

- In Hornsby LGA in 2006 76% of the population owned a home, this was an increase from 75% in 2001. Family households made up the highest proportion of households in the LGA in 2001 (81%). This was similar in 2006 at 80%. In 2006 the predominant family type in the LGA was couples with children (56%), and the majority of the population resided in low density - separate houses (76%).
- In Ku-ring-gai LGA in 2006 85% of the population owned a home, this was an increase from 83% in 2001. Family households made up the highest proportion of households in the LGA in 2001 (82%). This was similar in 2006 at 83%. In 2006 the predominant family type in the LGA was couples with children (58%), and the majority of the population resided in separate houses in 2001 (86%) and 2006 (86%).
- In comparison to the Sydney SD, both LGAs have a large proportion of the population residing in separate dwellings and less in townhouse and unit developments. Both LGAs have a considerably high proportion of family households and of these, the dominant family type is couples with children, which makes up a higher proportion of the population than for Sydney. In both LGAs, home ownership was greater than for Sydney. Both LGAs represent a family oriented area.

Dwelling and Household types for the LGAs and the Sydney SD are outlined in the following tables.

Table 3 - Dwelling & Household Types - 2001

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Home Ownership			
Owned or Being Purchased	74.8%	83.4%	62.7%
Rented	18.6%	11.4%	29.0%
Other	3.0%	2.3%	2.4%
Not Stated	3.6%	2.9%	6.0%
Other/Not Stated	6.6%	5.2%	8.4%
Total	100.0%	100.0%	100.0%
Household Structure			
Family Households	80.5%	82.4%	73.3%
Lone Person Households	17.1%	16.1%	22.4%
Group Households	2.4%	1.5%	4.3%
Total	100.0%	100.0%	100.0%
Family Type			
Couple family w. children	56.6%	58.1%	50.5%
Couple family w/o children	30.6%	31.2%	32.4%
One parent family	11.3%	9.3%	15.0%
Other family	1.5%	1.3%	2.1%
Total	100%	100%	100.0%
Dwelling Type			
Separate house	77.6%	85.9%	63.1%
Townhouse	6.8%	2.7%	11.3%
Flat-Unit-Apartment	14.2%	10.7%	23.9%
Other dwelling	0.6%	0.2%	0.8%
Not stated	0.8%	0.5%	0.9%
Total	100.0%	100.0%	100.0%

Source: ABS Census Data 2006

Table 4 - Dwelling & Household Types – 2006

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Home Ownership			
Owned or Being Purchased	75.5%	84.7%	65.0%
Rented	21.0%	12.4%	31.3%
Other/Not Stated	3.5%	2.9%	3.7%
Total	100.0%	100.0%	100.0%
Household Structure			
Family Households	79.5%	82.5%	72.7%
Lone Person Households	18.2%	16.3%	23.1%
Group Households	2.4%	1.2%	4.2%
Total	100.0%	100.0%	100.0%
Family Type			
Couple family w. children	55.6%	57.9%	49.3%
Couple family w/o children	31.2%	31.5%	33.2%
One parent family	11.8%	9.6%	15.6%
Other family	1.4%	1.1%	1.9%
Total	100.0%	100.0%	100.0%
Dwelling Type			
Separate house	75.6%	85.6%	63.6%
Townhouse	7.9%	2.9%	11.8%
Flat-Unit-Apartment	16.0%	11.3%	23.9%
Other dwelling	0.4%	0.1%	0.6%
Not stated	0.0%	0.1%	0.1%
Total	100.0%	100.0%	100.0%

Source: ABS Census Data 2006

4.3 Employment and Income

The following section summarises the employment, unemployment and income characteristics for the Hornsby and Ku-ring-gai LGAs.

- In the Hornsby LGA in 2001 the majority of the residing population worked in clerical, sales and service positions (28%) and as professionals (28%). This was slightly different in 2006, where professionals made up 31% of the labour force. The proportion of the population working as managers increased in 2006 to 14.8% (by 4%). The median income in Hornsby in 2006 increased to $1,514 from $1,269 in 2001.
- In the Ku-ring-gai LGA in 2006 a higher proportion of the population worked in professional roles (37%) than in 2001 (34%). The proportion of the population working as managers increased from 16% in 2001 to 20% in 2006. This was reflected in the high median income for the LGA of $2,147 per week in 2006, up from $1,631 in 2001.
- Both LGAs had higher proportions of the population working as managers and professionals than the Sydney SD. This employment characteristic is reflected in the high median weekly household incomes for both LGAs in comparison to the Sydney SD.

Employment and Income Characteristics are outlined in the table below.

Table 5 - Employment & Income Characteristics - 2001

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Labour Force			
Managers and Administrators	11.0%	16.2%	8.4%
Professionals	27.5%	33.5%	19.9%
Associate Professionals	12.0%	12.4%	11.1%
Tradespersons & Related Workers	8.1%	3.6%	10.4%
Clerical, Sales and Service Workers	28.3%	25.3%	29.0%
Production & Transport Workers	3.4%	1.5%	6.9%
Labourers & Related Workers	4.3%	2.0%	6.2%
Inadequately described or N.S.	1.5%	2.0%	1.9%
Unemployed	4.0%	3.5%	6.1%
Total	100.0%	100.0%	100.0%
Weekly Household Income			
$0-$299	7.3%	5.2%	10.2%
$300-$599	12.3%	9.3%	16.8%
$600-$999	14.7%	11.6%	17.6%
$1,000-$1,499	16.2%	12.4%	16.7%
$1,500-$1,999	16.6%	17.7%	13.3%
$2,000+	21.0%	30.1%	13.8%
Partial income stated	9.7%	11.5%	8.4%
All incomes not stated	2.2%	2.2%	3.3%
Total	100.0%	100.0%	100.0%
Median Weekly Household Income	*$1,269*	*$1,631*	*$989*

Source: ABS Census Data 2001

Table 6 - Employment & Income Characteristics - 2006

	Hornsby LGA	Ku-ring-gai LGA	Sydney SD
Labour Force			
Managers	14.8%	20.2%	12.5%
Professionals	30.5%	37.1%	22.5%
Community & Personal Services Workers	7.0%	5.7%	7.6%
Clerical and Administrative Workers	16.0%	14.6%	15.8%
Sales Workers	8.8%	8.5%	9.0%
Technicians & Trade Workers	10.1%	5.3%	12.0%
Machinery Operators & Drivers	2.4%	0.9%	5.7%
Labourers & Related Workers	5.4%	2.8%	7.6%
Inadequately described or N.S.	1.4%	1.8%	2.0%
Unemployed	3.7%	3.2%	5.3%
Total	100.0%	100.0%	100.0%
Weekly Household Income			
$0-$349	9.1%	6.4%	12.8%
$400-$799	13.9%	9.7%	17.9%
$800-$1,399	18.3%	13.8%	20.8%
$1,400-$2,499	23.5%	17.8%	21.2%
$2,500+	23.8%	38.6%	16.0%
Partial income stated	9.6%	11.7%	8.6%
All incomes not stated	1.8%	1.9%	2.7%
Total	100.0%	100.0%	100.0%
Median Weekly Household Income	*$1,514*	*$2,147*	*$1,154*

Source: ABS Census Data 2006

4.4 Conclusions

- Hornsby LGA and Ku-ring-gai LGA had a high proportion of Australia / Oceania born residents i.e. 69% and 66% respectively compared to other nationalities. This reflects a well established population.
- Both LGAs had a significant number of households in the high median weekly household income brackets in comparison to the Sydney SD. This was particularly the case for Ku-ring-gai LGA which had a median weekly household income of $1,631 in 2006. Hornsby LGA also had a high median income at $1,209 per week in comparison to the median of $989 in 2006 for the Sydney SD. This reflects a very affluent population with a high degree of disposable household income.
- Ku-ring-gai LGA experienced an increase in the proportion of older residents residing in the area between 2001 and 2006. For example in 2001 8% of the population were aged in the 75+ age bracket. By 2006 this proportion increased to 9%. This was considerably higher than the equivalent figure for the Sydney SD of 6%. This characteristic reflects the trend towards an ageing population and therefore a growing demand for health care and aged community services in the North Subregion.
- Ku-ring-gai LGA had a significantly lower proportion of high density housing compared to the Sydney SD. In 2006 the Sydney SD had 36% of the population residing in medium to high density housing (townhouse and flat/apartments) whilst Ku-ring-gai had only 14%. The same characteristic for Hornsby LGA was 24% reflecting the lower density, suburban and open character of the North Subregion.
- Both LGA's (Ku-ring-gai 85% and Hornsby 76%) had a high proportion of houses in ownership by occupiers in comparison to the Sydney SD (65%). This again typifies the more affluent and established character of the Region.
- Both LGAs had a high proportion of their populations working in professional roles in comparison to the Sydney SD i.e. in Ku-ring-gai and Hornsby (37% and 31%) compared to the Sydney (23%). This characteristic correlates with the high household incomes and levels of education attainment for residents.

5. EXISTING RETAIL & COMMUNITY FACILITIES

As part of the Study, Hill PDA has undertaken an audit of existing retail and community facilities within reasonable proximity of the Subject Site. The audit was undertaken using a range of methods including site visits, floorspace surveys, discussions with local providers and government organisations. The location and characteristics of these facilities and their services are discussed and documented in detail below.

5.1 Retail Centres

There are 20 retail centres within approximately 6km (by road) of the Subject Site. These centres are generally within the area bounded by or near to the Pacific Highway to the north and east, Pennant Hills Road to the north and west, the M2 Motorway to the south-west and the Lane Cove National Park to the south.

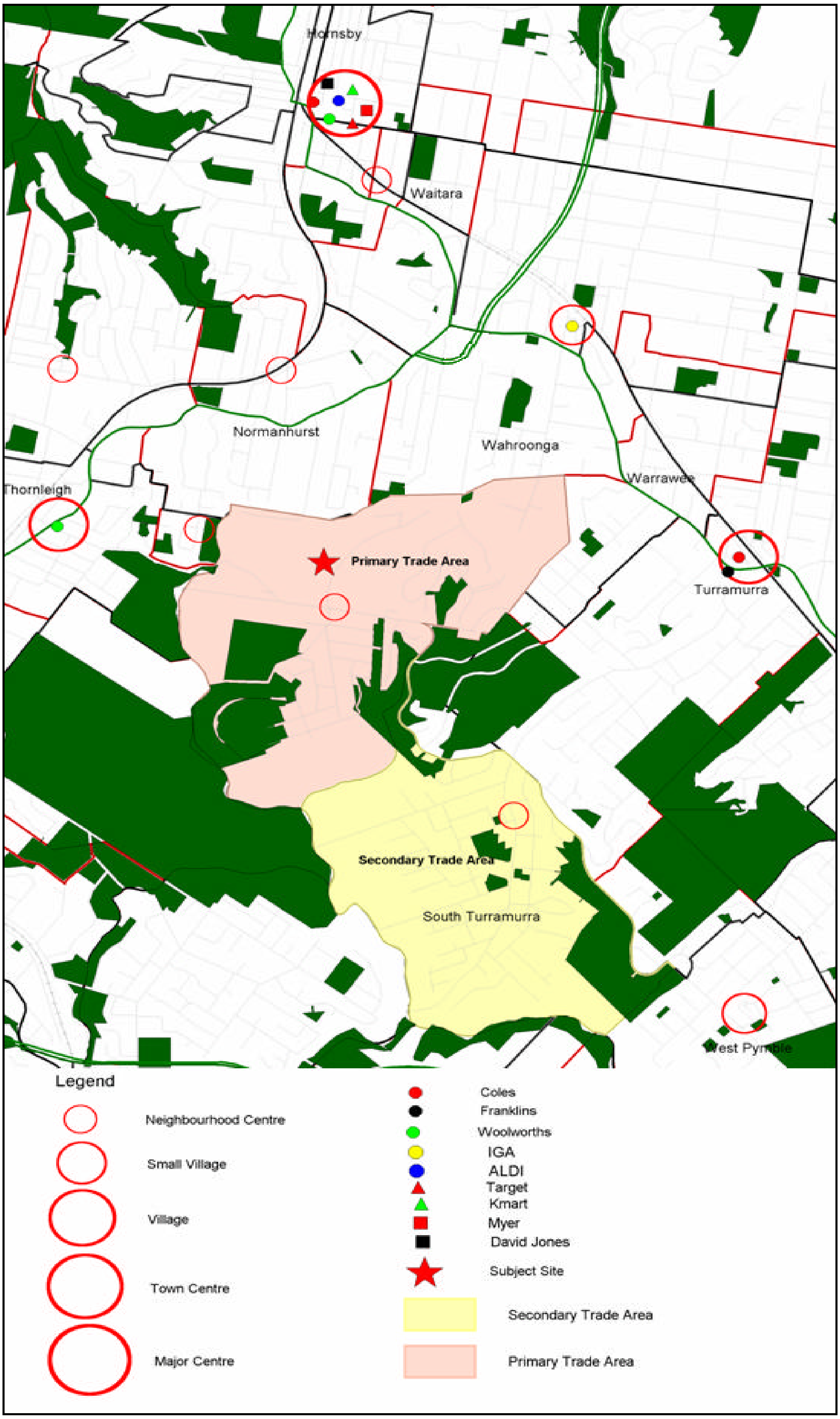
As part of the study Hill PDA has visited each of the centres and surveyed their major land use characteristics. The figure and tables below summarise the findings of Hill PDA's surveys including the location of the centres, their place within the existing centres hierarchy, the number of retail and shop front commercial establishments by broad store type and anchor tenants.

Table 7 - Summary of Number of Shopfront Premises in Surrounding Centres by Category

Retail Centre	Supermarket & Grocery Store	Specialty Food	Specialty Non-Food	Bulky Goods	Personal Services	Total Retail	Commercial	Vacant	TOTAL
Wahroonga	1	14	17	-	15	47	22	1	70
Fox Valley Road	1	1	-	-	-	2	1	-	3
Fox Valley Shopping Centre	-	2	3	-	2	7	1	1	9
Turramurra	2	18	30	3	25	78	30	4	112
North Turramurra	-	7	3	1	7	18	5	1	24
Eastern Road Turramurra	1	4	1	-	1	7	1	-	8
Princes St Turramurra	1	3	3	-	1	8	2	-	10
South Turramurra	-	3	2	-	-	5	1	1	7
Pymble	-	7	14	1	10	32	22	4	58
West Pymble	1	7	6	-	5	19	4	-	23
West Gordon	-	1	1	-	2	4	2	-	6
Gordon	1	18	32	5	19	75	20	3	98
Thornleigh	1	19	10	1	5	36	15	4	55
Sefton Road, Thornleigh	-	2	1	-	1	4	1	-	5
Pennant Hills	2	28	20	2	10	62	22	4	88
Westleigh	1	8	6	-	6	21	6	-	27
Normanhurst	-	5	3	-	1	9	2	-	11
Myrtle Street, Normanhurst	-	-	2	-	1	3	2	-	5
Beecroft	1	16	15	-	12	44	8	5	57

Source: Hill PDA

Figure 5 - Plan of Site and Existing Retail Centres Hierarchy



Source: Hill PDA

Table 8 - Floorspace of Supermarkets located in Surrounding Centres

Retail Centre	Supermarkets
Wahroonga	462
Fox Valley Road	90
Fox Valley Shopping Centre	0
Turramurra	2,800
North Turramurra	0
Eastern Road Turramurra	295
Princes St Turramurra	242
South Turramurra	0
Pymble	0
West Pymble	219
West Gordon	0
Gordon	3,132
Thornleigh	3,072
Sefton Road, Thornleigh	0
Pennant Hills	1,283
Westleigh	1,082
Normanhurst	0
Myrtle Street, Normanhurst	0
Beecroft	584

Source: Hill PDA

Based on the retail surveys summarised in the tables above, the following section provides a more detailed and qualitative assessment of each existing centre surrounding the Subject Site and their place within the existing retail hierarchy.

Fox Valley

Fox Valley is classified as a Neighbourhood Centre by the NSW Government's Metropolitan Strategy located at the intersection of Fox Valley Road and The Comenarra Parkway with shops fronting Fox Valley Road (on the south-eastern corner of the intersection). It has 9 shop front premises, all of which are being used for retail purposes.

Fox Valley Road

Located to the north-east of the Subject Site along Fox Valley Road is a small group of three shops. The group is not classified by the NSW Government's Metropolitan Strategy. The group comprises of a small convenience store, a specialty store and a commercial premises.

Thornleigh

Thornleigh is classified as a Village by the NSW Government's Metropolitan Strategy. To the east of the railway station and west of Pennant Hills Road, the area comprises of a number of shop front premises and bulky goods retail.

Thornleigh Marketplace shopping centre is located on Pennant Hills Road at the intersection of The Comenarra Parkway. It comprises of approximately 5,753sqm of retail floor area, 947sqm of office floor area and 173sqm of restaurant floor area. The shopping centre has one major anchor tenant, a Woolworths

Shopping Centre which has a floor area of approximately 3000m². In addition to the Woolsworths, the occupants of the shopping centre include a Dan Murphy's liquor store, a coffee lounge, bakery, butcher, chicken shop, hairdresser, donut shop, sushi bar, pharmacy, newsagent and travel agent.

Wahroonga

Wahroonga is classified as a Small Village by the NSW Government's Metropolitan Strategy. The Village comprises of 70 shop front premises and is anchored by an IGA supermarket. The IGA has a floor area of approximately 460m².

Myrtle Street, Normanhurst

Myrtle Street, Normanhurst is classified as a Neighbourhood Centre by the NSW Government's Metropolitan Strategy. The Centre comprises of five shop front premises including a hairdressers, two specialty non-food and two commercial premises serving the local community.

Normanhurst

Normanhurst is classified as a Neighbourhood Centre by the NSW Government's Metropolitan Strategy. The Centre is located near Normanhurst Railway Station, to the south-east, on the opposite side of Denman Parade. The Centre comprises of eleven shop front premises positioned in a linear fashion along Denman Parade. The premises include a milk bar/convenient store, a chemist, a newsagent, 4 specialty food, 1 specialty non-food, 2 commercial and 1 personal services.

South Turramurra

South Turramurra is classed as a Neighbourhood Centre by the NSW Government's Metropolitan Strategy. The South Turramurra neighbourhood centre is located on the north-west corner of Kissing Point Road and Auluba Road. The neighbourhood centre has approximately 7 shop front premises of which 3 are used for specialty food, 2 as specialty non-food and 1 as commercial. One of the shop front premises at the time of survey was vacant.

Turramurra

Turramurra is classed as a Village by the NSW Government's Metropolitan Strategy. Turramurra has around 112 shop front premises of which 30 are used for commercial services. Total shop front space is around 16,000sqm of which 12,400sqm is used for retail.

The centre is in three clusters – separated by the Pacific Highway and the railway. On the south side of the Highway is the only indoor centre being Turramurra Plaza. It has an anchor tenant – a 1,280sqm Franklins supermarket – and 14 specialty shops. West of the railway line on the north side of the highway is a number of strip retail shops. Behind these is a 1,500sqm Coles supermarket and a Freedom furniture and homeware shop. East of the railway line are specialty shops facing Rohini Street and the Highway.

Pennant Hills

Pennant Hills is classified as a Village by the NSW Government's Metropolitan Strategy. The main retail centre is located on the north-western side of Yarrara Road, Pennant Hills Road and the Northern railway line. The area comprises of a number of shop front premises, a shopping arcade development and a shopping centre.

The Shopping Centre comprises of two anchor tenants, a Harris Farm Fruit Market, a Franklins Supermarket (approximately 1,300m^2 in floor area) and a number of food and non-food specialty shops, commercial premises and personal services.

The neighbouring shopping arcade development and surrounding shop front premises comprise of a mix of food and non-food specialty shops, commercial premises, bulky goods and personal services. Only two shops in the Pennant Hills Retail Centre were found to be vacant and they were located within the shopping arcade development.

Sefton Road, Thornleigh

Sefton Road, Thornleigh is classified as a Neighbourhood Centre by the NSW Government's Metropolitan Strategy. The Centre comprises of a small fruit shop, a take-away shop and three other specialty non-food shops.

Westleigh

Westleigh is classified as a Small Village by the NSW Government's Metropolitan Strategy. Westleigh Shopping Centre is located near the western end of Duffy Avenue. The Village serves the relatively isolated suburb of Westleigh. The Village comprises of a Franklins Supermarket, 8 specialty food, 6 specialty non-food, 6 personal services and 6 commercial premises.

Pymble

Pymble is classified as a Small Village by the NSW Government's Metropolitan Strategy with shops fronting the Pacific Highway (mainly on the north side) and Grandview Street opposite the railway station. It has 58 shop front premises of which 22 (38%) are being used for commercial non-retail purposes and four are vacant. Total shop front space is 5,800sqm of which 3,200sqm is being used for retail.

Strip Shops on Grandview Street opposite the station

The high proportion of non-retail uses and vacancies is an indication of lower than average rents. The poor performance of the centre is partly a reflection of its lack of an anchor tenant such as a supermarket. It is also a reflection of its location between two larger retail centres (Gordon and Turramurra) that have a vastly superior retail offer.

Hornsby

Hornsby is classified as a Major Centre by the NSW Government's Metropolitan Strategy. The Centre is spread to the west and the east of Hornsby railway station which is located on the Northern and North Shore railway lines. On the western side of Hornsby railway station is the old town centre with many traditional shop front premises, particularly along the Pacific Highway.

To the east of the railway station is Hornsby Westfield Shopping Centre. The shopping centre contains 306 (33,500sqm) shops. These include many specialty food, specialty non-food, personal services and commercial premises. There are a number of anchor tenants located within the shopping centre, including a 4,300sqm Woolworths, 4080sqm Coles, 1,357sqm ALDI, 7,598sqm Target, 8,000sqm K-mart and 12,400sqm Myer, 14,600sqm David Jones. The majority of retail premises within Hornsby are located within Hornsby Westfield.

Gordon

Gordon is defined as a Town Centre by the NSW Government's Metropolitan Strategy and is the second largest retail centre in Ku-ring-gai. Whilst its trade area is perhaps not as extensive as St Ives for regular shopping it does have a few large tenants with an extended trade area. These tenants are Harvey Norman, Bunnings and to a lesser extent Retravision.

Gordon has around 100 individual shops of which 20 are being used for commercial services (banks, real estate agents, etc) and three are vacant. Total letable floor area is around 17,000sqm, of which 14,700sqm is used for retail of goods. The centre is predominantly a strip retail centre on both sides of the Pacific Highway. There are two indoor centres either side of the Highway joined by a pedestrian overpass. The larger of the two – Gordon Centre on the south side of the Highway – comprises 21 shops occupying 8,566sqm of space and 3,000sqm of office space. Anchor tenants include a 3,547sqm Harvey Norman and a 3,132sqm Woolworths supermarket. The smaller centre – Gordon Village Arcade on the north side – has 26 specialties occupying 1,846sqm and no anchor tenant. Both centres have the same ownership and both are managed by Centro.

Pacific Highway with Gordon Centre on the right

There are around 50 shop front premises in the strip retail fronting the Highway of which 15 are used for commercial services. Anchor tenants include a Bunnings (former 1,000sqm BBC Hardware store) and a 250sqm Retravision electrical store.

5.2 Schools

There are a number of schools within the area surrounding the Subject Site. These schools, their location and their enrolment numbers are detailed in the table below.

Table 9 - Schools and Student Numbers for the North Subregion

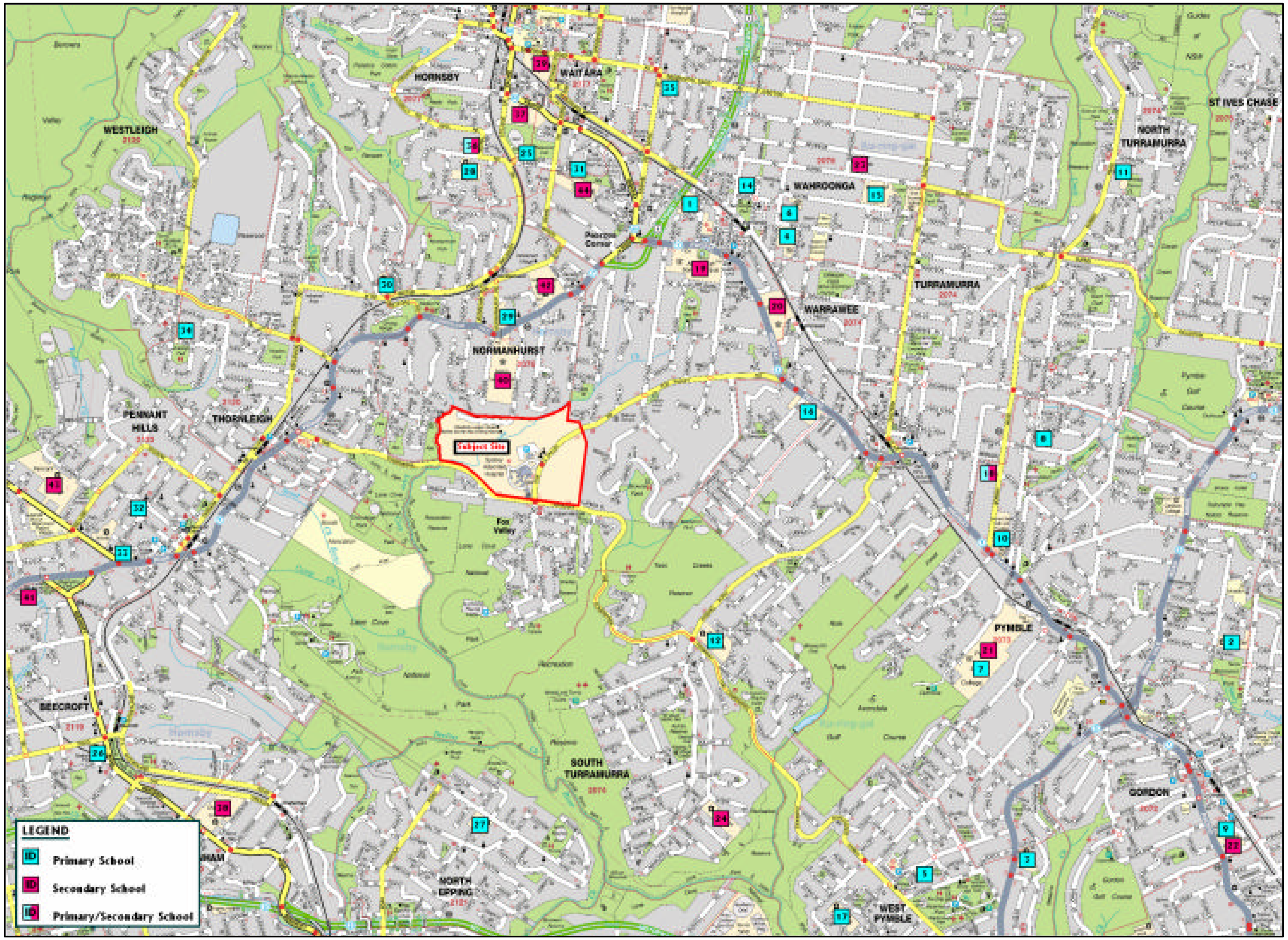
Ku-ring-gai LGA		
ID	**Primary Schools**	**Enrolment Nos.**
1	Abbotsleigh Junior School	479
2	Gordon East Public School	270
3	Gordon West Public School	411
4	Knox Grammar Preparatory	550
5	Our Lady of Perpetual Succour	179
6	Prouille Parish School	289
7	Pymble Ladies' College	695
8	Pymble Public School	494
9	Ravenswood School for Girls	320
10	Scared Heart Catholic School	345
11	Turramurra North Public School	317
12	Turramurra Public School	472
13	Wahroonga Adventist Primary School	200
14	Wahroonga Preparatory School	124
15	Wahroonga Public School	680
16	Warrawee Public School	355
17	West Pymble Public School	328
18	Montessori School (Northside) (K-12)	220

ID	High Schools	Enrolment Nos.
19	Abbotsleigh Senior School	890
20	Knox Grammar Senior School	1350
21	Pymble Ladies' College	1410
22	Ravenswood School for Girls	830
23	St Edmunds School	69
24	Turramurra High School	943

Hornsby LGA		
ID	**Primary Schools**	**Enrolment Nos.**
25	Barker College	320
26	Beecroft Primary School	754
27	Epping North Primary School	360
28	Hornsby South Public School	364
29	Normanhurst Public School	288
30	Normanhurst West Public School	323
31	Our Lady of the Rosary Primary School	?
32	Pennant Hills Public School	508
33	St Agatha's Parish Primary School	?
34	Thornleigh West Public School	533
35	Waitara Public School	582
36	Clarke Road Special School (K-12)	64

ID	High Schools	Enrolment Nos.
37	Barker College	1620
38	Cheltenham Girls High School	1325
39	Hornsby Girls High School	718
40	Loreto Normanhurst	900
41	Mt St Benedict High School	800
42	Normanhurst Boys High School	720
44	St Leo's College	990

Figure 6 - Location of Schools Surrounding the Subject Site



Source: UBD

5.3 Hospitals

The North Subregion provides a range of health and medical related facilities. The following section identifies and summarises some of the main facilities and their relationship to the Subject Site.

Sydney Adventist Hospital

The Sydney Adventist Hospital was opened as the "Sydney Sanitarium" on the 1 January, 1903, with a bed capacity of 70. The Hospital is currently licensed by the NSW Department of Health for a bed capacity of 342 beds, making it the largest single campus private hospital in NSW. Sydney Adventist Hospital is a not-for-profit, acute-care private hospital. It was the first private hospital in NSW to be accredited by the Australian Council on Healthcare standards. The Hospital currently employs approximately 2000 nurses and 500 accredited medical practitioners and cares for more than 40,000 in-patients and 150,000 out-patients annually.

The Hospital also has one of Australia's last remaining on-site nursing schools, Avondale, which provides full registered nurses training and continuing education/post-graduate programs. The Hospital is operated as a community service by the Seventh-day Adventist Church and as a result, a Seventh-day Adventist Church is located on the Subject Site.

Hornsby Ku-ring-gai Hospital

Hornsby Ku-ring-gai Hospital is located approximately 1 km east of the Hornsby Town Centre. The hospital has operated since 1933. The hospital has over 22,000 admissions per year and more than 1500 staff members who care for over a quarter of a million people living in the North Subregion. The hospital services incorporate six community health centres and ten early childhood c entres.

Mt Wilga Private Hospital

Mt Wilga Private Hospital is set on a 2 acre estate approximately 2 km north of Hornsby town centre. The hospital is a purpose built rehabilitation facility comprising of 77 beds.

Neringah Hospital

Neringah Hospital is a public hospital and community service located 200m west of Wahroonga Station specialising in palliative care.

5.4 Community

The Subject Site has a range of community facilities provided by the Church and the hospital including churches, community halls and a child care centre. There are a number of additional community facilities within the area. One such facility is the Pennant Hills Community Centre, which includes, among other things a community hall with a capacity of 300 people and a community library.

The *Ku-ring-gai Council - Community Plan 2005 – 2009* lists the following community facilities as located I the North Subregion:

- 18 long day care services (697 places);
- 28 pre-schools (1,010 places);
- 3 occasional care services (64 places);
- 9 home based care providers (45 places);
- 1 family day care scheme (160 places);
- 15 before school care services (455 places);
- 16 after school care services (855 places);
- 9 vacation care programs (410 places);
- 2 early childhood health centres;
- 3 health and support services (2 are within Hornsby LGA but cover Ku-ring-gai);
- 16 playgroups (affiliated with the NSW Playgroup Association);
- 1 early childhood immunisation clinic;
- 2 youth centres (The Fitz at St Ives and the student resource centre at Gordon Library);
- 1 mobile outreach project;
- 1 web-based youth information service;
- 1 drug, alcohol and gambling service, based at Hornsby Hospital;
- 2 family support, counselling and crisis services;
- 1 financial counselling service;
- 3 seniors' centres (including the Seniors Resource Centre at Lindfield and centres at Lindfield and Turramurra);
- 4 public libraries (including Libribus and homebound services);
- 1 art centre;
- 1 community college;
- numerous clubs and groups of interest to older people;
- 1 Community Health Resource and Information Centre;
- 1 HACC food service;
- 4 HACC aged and disabled transport services;
- 6 HACC domestic assistance/personal care services;

- 1 HACC home modification and maintenance service;
- 1 HACC gardening/lawn-mowing services;
- 1 HACC funded personal alarm monitoring service;
- 1 HACC community nursing service;
- 1 volunteer recruitment referral and training service;
- 2 HACC social support services;
- 3 respite day centres;
- 12 high care residential aged care facilities with 648 beds;
- 10 low care residential aged care facilities with 509 beds;
- 313 community aged care packages to cover both Hornsby and Ku-ring-gai;
- 10 respite services; and
- 2 HACC transport services.

5.5 Open Space and Recreation

The Wahroonga Estate is located predominantly within Ku-ring-gai LGA but also Hornsby LGA. Both LGAs have a large amount of open space. Ku-ring-gai LGA has 114sqm of open space under Council management per person and Hornsby LGA has 170sqm of open space under Council management per person. Both of these figures are high for a NSW LGA. The average amount of open space in NSW is 28.3sqm per person. These figures suggest that the area is well catered for in respect to open space.

In the immediate vicinity surrounding the Subject Site, Lane Cove National Park is the largest area of open space. Lane Cove National Park is located to the south of the Subject site and comprises of a large amount of urban bushland. On the fringes of this National Park are a number of reserves, most comprising of urban bushland but some include sporting ovals. Some of the reserves with sports ground facilities include:

- Thornleigh Park, Thornleigh;
- Howson Park, Turramurra;
- Mitchell Crescent Oval, Turramurra;
- The Glade Reserve, Wahroonga;
- Pennant Hills Park, Pennant Hills;
- George Christie Playing Field, Wahroonga;
- Normanhurst Park, Normanhurst; and
- Browns Field, Wahroonga.

The *Ku-ring-gai Council - Community Plan 2005 – 2009* lists the following recreation facilities as located within the North Subregion:

- 1 public swimming pool;
- 1 skate park;
- 44 sports fields;
- 5 half basketball courts;
- 71 tennis courts;
- 3 golf courses;
- 3 lawn bowls clubs;
- 20 netball and tennis courts; and
- 96 children's playgrounds.

6. RETAIL IMPACT ASSESSMENT

In this section we examine the need for additional retail floor space in the locality. This is measured by comparing demand for floor space from household expenditure to the supply of floor space. Note that when we refer to need, we refer to Roosterland Pty Ltd v Brisbane City Council (1986) 23 APAD 58 at 60 where the judgement stated that *"Need does not connote a pressing urgency but relates to the well-being of the community. A use would be needed if it would, on balance, improve the services and facilities available in a locality."*

The following section of the report defines a trade area for the Subject Site and the characteristics of households within the trade area. This section also quantifies the level of expenditure generated for particular types of retail floorspace in the trade area. An assessment of retail demand generated by non resident users of the site (i.e. visitors and onsite employees) has also been undertaken. The retail floorspace survey work conducted by Hill PDA and outlined in Section 5 above has been utilised to determine existing and possible future under / over supply of floorspace in the trade area.

6.1 Trade Area Definition

In order to measure demand for retail floorspace and any existing under / oversupply we first have to define a trade area. The trade area served by any retail centre is determined by a number of factors including:

- the strength and attraction of the centre in question, determined by factors such as the composition, layout, ambience/atmosphere and car parking in the centre;
- competitive retail centres, particularly their proximity to the subject centre and respective sizes, retail offer and attraction;
- the location and accessibility of the centre, including the available road and public transport network and travel times; and
- the presence or absence of physical barriers, such as rivers, railways, national parks and freeways.

Having regard to each of the factors detailed above, we have defined a Primary Trade Area (PTA) as the area bound:

- to the North by the northern boundary of the Subject Site, the suburb of Normanhurst and Fox Valley Road;
- to the South by the suburb of South Turramurra;
- to the West by Roland Avenue and Tin Creeks Reserve; and
- to the East by the Lane Cove National Park.

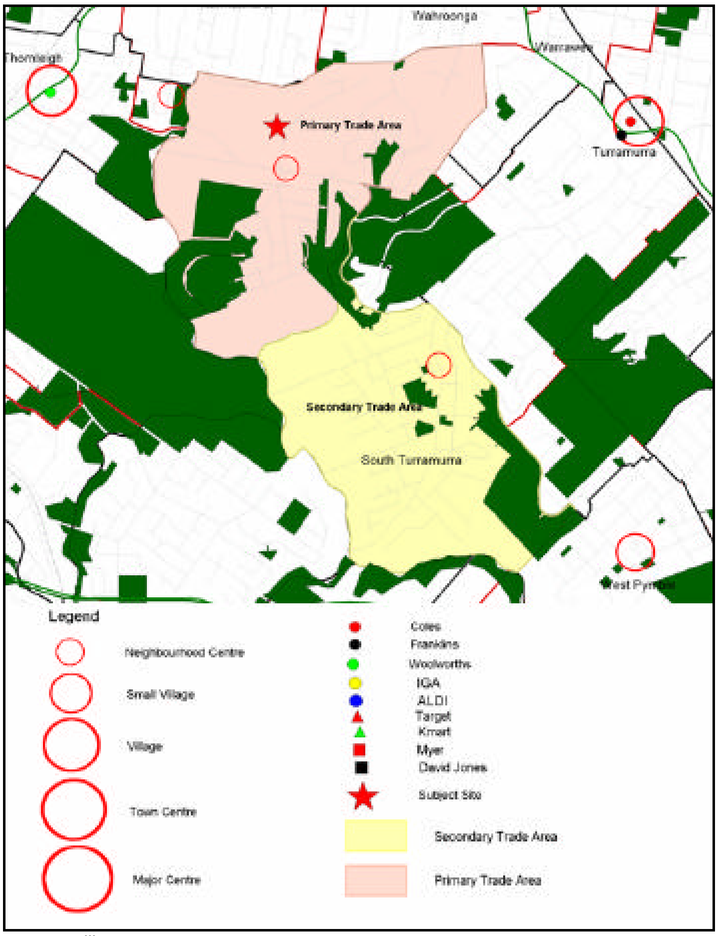
A Secondary Trade Area (STA) has also been defined for the site. The STA relates to the suburb of South Turramurra.

Based on Hill PDA's review of the locality it is considered that:

- Owing to road and rail constraints and the location of other major supermarkets presently operating in Thornleigh and Pennant Hills, the proposed retail floorspace will have a stronger trade draw to the east of Pennant Hills Road;
- Some trade may however be drawn from the east, particularly for supermarket related shopping and specialty retail as consumers may seek a more convenient shopping option than the larger centres along the Pacific Highway;
- A stronger trade draw from the south of the Subject Site owing to the relative ease of road access and the lack of major supermarkets in the suburb of South Turramurra; and
- Less of a trade draw north of the Pacific Highway owing to the geographical constraints of the road and rail line and the presence of alternative supermarkets in centres such as Wahroonga, Turramurra and Gordon.

The Figure below defines the PTAand STA for the proposed retail centre.

Figure 7 - Primary and Secondary Trade Areas



Source: Hill PDA

6.2 Socio- Demographic Analysis

Further to the socio-demographic profile of the Hornsby and Ku-ring-gai LGAs provided in Section 4 above, Hill PDA has undertaken a more detailed analysis of household characteristics within the defined PTA and STA. The following summarises these characteristics based on 2006 ABS Census Data.

When compared to the Sydney Statistical Division and NSW, the PTA in 2006 was characterised by:

- A significantly high proportion of homes in private ownership or being purchased (81% – 91% compared to the Sydney SD of 65%). The exception being residents of the Subject Site as of census night (i.e. patients, staff and nursing students) that reduced this number to 7% below the Sydney SD;
- Comparatively large average household sizes (i.e. 3.0 – 3.1 persons per household compared to 2.7 for the Sydney SD);
- Large household sizes that are reflected in the trade area's high proportion of family households (82% - 89% compared to the Sydney SD of 73%) and the high proportion of separate dwellings in the area (78% – 100% compared to the Sydney SD of 64%);
- A greater number of children aged less than 14 years and a generally greater median age than the Sydney SD yet proportionally less people aged over 75 years;
- A workforce that is predominantly employed in managerial and professional positions (55% compared to the Sydney SD of 35%); and
- The majority of households within high income brackets - 57% of households earn over $1,400 per week compared to the 37% of Sydney SD.

In summary the demographic profile of the Subject Site's PTA and STA is representative of a wealthy and established family orientated community. The community is well educated with this characteristic reflected in the predominant labour force occupation being professionals and managers and the high level of average household income. In turn the PTA and STA have significantly larger households, higher levels of home ownership and occupation than the Sydney SD reflecting the comparatively wealthy and suburban character of the area.

6.3 Household Growth

Based on the Council's population targets and policy objectives, it was assumed that the number of households within the defined trade area's will not increase significantly by 2021. Rather it was considered likely that the predominant portion of population growth would be focused around transport nodes and within existing centres in accordance with sustainable development initiatives. Therefore to take a conservative approach, a 0% household growth rate has been assumed for both the PTA and STA.

The exception to this approach however would be of the net growth in the number of households as a result of the proposed development. For assessment purposes it was assumed that there would be a net growth in the order 1,143 dwellings staged over a 10 year period between 2010 and 2020. The characteristics of these households and their size (i.e. lower income band and smaller households) were also conservatively applied on the assumption that there would be a higher proportion of key workers on the site compared to the surrounding community.

6.4 Household Expenditure Growth

Having identified the characteristics of the population within the PTA and STA and the forecasted increase in the number of households, this information was utilised in Hill PDA's Retail Expenditure Model to quantify the amount of expenditure likely to be generated in the locality.

Household expenditure was sourced from:

- ABS Household Expenditure Survey 2003-04 which provides household expenditure by broad commodity type by household income quintile; and
- Marketinfo 2006 database which is generated by combining and updating data from the Population Census and the ABS Household Expenditure Survey (HES) using "microsimulation modelling techniques".

Marketinfo combines the data from the Census, HES and other sources to derive total HES by commodity type. This data, which was validated using taxation and national accounts figures, quantifies around 14% more expenditure than the ABS HES Survey.

The table below shows the estimated household expenditure generated by the suburbs within the PTA in 2006[7]. The table does not include the proposed dwellings as part of the Wahroonga Estate's redevelopment. It does however shows that even with nil household growth, owing to the growing affluence of the area and the real growth in expenditure per capita, demand for retail floorspace in the PTA will increase by over $5m by 2021.

Table 10 - PTA Household Expenditure by Commodity Type in 2006, 2010, 2015 & 2021 (2006 $M) excluding the proposed development

YEAR	2006	2010	2015	2021
No. of Households	**1,360**	**1,360**	**1,360**	**1,360**
Food, Groceries & Liquor take-away	15.9	16.4	17.0	17.9
Food Catered	7.6	7.8	8.2	8.6
Apparel	5.0	5.1	5.3	5.6
Bulky Goods	7.1	7.3	7.6	8.0
Other Personal & Household Goods	5.4	5.6	5.8	6.1
Personal Services	1.6	1.6	1.7	1.8
TOTAL	**42.5**	**43.9**	**45.7**	**47.9**

Source: Hill PDA estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

By including the retail expenditure generated by the proposed additional households resulting from the Subject Site's redevelopment, the table below shows that retail expenditure generated within the PTA could increase from $43m in 2006 to $94m in 2021. This would represent over double the level of expenditure presently generated in the PTA.

Table 11 - PTA Household Expenditure by Commodity Type in 2006, 2010, 2015 & 2021 (2006 $M) including the proposed development

YEAR	2006	2010	2015	2021
No. of Households	**1,360**	**1,360**	**1,860**	**2,503**
Food, Groceries & Liquor take-away	15.9	16.4	24.3	35.2
Food Catered	7.6	7.8	11.5	16.6
Apparel	5.0	5.1	7.5	10.7
Bulky Goods	7.1	7.3	10.9	15.9
Other Personal & Household Goods	5.4	5.6	8.3	12.0
Personal Services	1.6	1.6	2.4	3.5
TOTAL	**42.5**	**43.9**	**64.8**	**94.0**

Source: Hill PDA estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

The amount of expenditure generated within the vicinity of the Subject Site is even greater when the STA of South Turramurra is included. As shown below, in 2006 the PTA and STA generated $80m in retail expenditure. This has been forecasted to grow to $136m by 2021 including the net additional households created by the proposed development.

Table 12 - PTA and STA Household Expenditure by Commodity Type in 2006, 2010, 2015 & 2021 (2006 $M) including the proposed development

YEAR	2006	2010	2015	2021
No. of Households	**2,431**	**2,431**	**2,931**	**3,574**
Food, Groceries & Liquor take-away	29.7	30.7	39.2	50.9
Food Catered	14.1	14.6	18.5	24.0
Apparel	9.3	9.6	12.1	15.6
Bulky Goods	13.3	13.7	17.6	22.9
Other Personal & Household Goods	10.1	10.4	13.3	17.3
Personal Services	3.0	3.1	3.9	5.1
TOTAL	**79.5**	**82.1**	**104.5**	**135.6**

Source: Hill PDA estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

The ABS Retail Survey 1998-99 Cat No. 8624.0 provides a cross tabulation of store type (defined by ANZIC), by commodity type. Multiplying the percentages of dollars spent on each commodity in the cross tabulation by total dollars spent generates household expenditure by retail store type. This is provided in the table below for the PTA only exclusive of the proposed additional dwellings as part of the Subject Site's development.

Table 13 - PTA only Household Expenditure by Retail Store (2006 $M)

YEAR	2006	2010	2015	2021
Supermarkets & Grocery Stores	12.0	12.3	12.8	13.5
Specialty Food Stores	4.8	5.0	5.2	5.5
Fast-Food Stores & Restaurants	8.0	8.2	8.5	9.0
Department Stores	3.9	4.0	4.2	4.4
Clothing Stores	3.3	3.4	3.5	3.7
Bulky Goods Stores	6.6	6.8	7.1	7.5
Other Personal & Household Goods Retailing	4.6	4.8	5.0	5.2
Selected Personal Services	1.6	1.6	1.7	1.8
Total Retailing	**44.8**	**46.2**	**48.1**	**50.5**

Source: Hill PDA Estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

The table below provides this analysis for the PTA including the dwellings generated by the proposed development.

Table 14 - PTA and Proposed Development Household Expenditure by Retail Store (2006 $M)

YEAR	2006	2010	2015	2021
Supermarkets & Grocery Stores	12.0	12.3	18.2	26.5
Specialty Food Stores	4.8	5.0	7.4	10.8
Fast-Food Stores & Restaurants	8.0	8.2	12.0	17.4
Department Stores	3.9	4.0	5.9	8.5
Clothing Stores	3.3	3.4	5.0	7.2
Bulky Goods Stores	6.6	6.8	10.2	14.8
Other Personal & Household Goods Retailing	4.6	4.8	7.1	10.3
Selected Personal Services	1.6	1.6	2.4	3.5
Total Retailing	**44.8**	**46.2**	**68.3**	**99.0**

Source: Hill PDA Estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

The table below provides the same analysis for the PTA and STA including the dwellings generated by the proposed development.

Table 15 - PTA, STA & Proposed Development Household Expenditure by Retail Store (2006 $M)

YEAR	2006	2010	2015	2021
Supermarkets & Grocery Stores	22.5	23.2	29.5	38.3
Specialty Food Stores	9.0	9.3	11.9	15.5
Fast-Food Stores & Restaurants	14.8	15.3	19.4	25.1
Department Stores	7.3	7.5	9.5	12.3
Clothing Stores	6.2	6.4	8.1	10.4
Bulky Goods Stores	12.4	12.8	16.3	21.3
Other Personal & Household Goods Retailing	8.7	8.9	11.4	14.8
Selected Personal Services	3.0	3.1	3.9	5.1
Total Retailing	**83.7**	**86.4**	**110.1**	**142.8**

Source: Hill PDA Estimate based on ABS Household Expenditure Survey 2003-04, Marketinfo, ABS Census 2001 and Household Forecasts

Note that the total expenditure amount in Tables 10, 11 and 12 to tables 13, 14 and 15 above do not equate. This is because some expenditure is captured by non-retailers (such as internet shopping) and some turnover captured by retailers is not household expenditure related (such as wholesaling and hiring of equipment).

The tables above show that retail expenditure for supermarket retailing is presently in the order of $12m in the PTA and $23m in the combined PTA and STA. Excluding the proposed retail expenditure has been forecasted to increase in the PTA and STA by 2021 to $14m. Combining the forecasted growth in expenditure in the PTA and STA including the proposed development, supermarket related expenditure could be as much as $38m by 2021.

6.5 Under Supply of Retail Floorspace

Whilst the PTA and STA are presently undersupplied in all types of retail floorspace, the following section of this report will focus on the undersupply of supermarket and specialty retail floorspace. This section also addresses how the proposed development could meet this local demand and any forecasted growth in demand.

Supermarket

As shown above the Primary Trade Area (PTA) generated $12m of supermarket expenditure in 2006. Based on a target turnover level of $9,500/sqm[8], this translated into a demand for 1,300sqm of supermarket and grocery floorspace. Following this approach, by 2021 there will be a forecasted demand for 1,400sqm of supermarket floorspace in the PTA. Factoring in the proposed development additional dwellings, demand will increase to 1,900sqm in 2015 and to 2,800sqm by 2021.

The PTA and STA combined generated $23m in supermarket and grocery related expenditure in 2006. This translated into demand for 2,400sqm of floorspace. By 2021 this has been estimated to increase to $38m or demand for 4000sqm of floorspace. Factoring in the proposed development floorspace demand will increase to 3,100sqm by 2010 and to 4,000sqm by 2021.

At present however there is only one small grocery store the order of 100sqm in the PTA and STA There is therefore an existing undersupply of over 1,200sqm of supermarket and grocery floorspace in the PTA and over 2,300sqm in the combined PTA and STA. Assuming no additional supply and factoring in the proposed development, the undersupply of supermarket and grocery floorspace in 2021 in this category will increase in the PTA to over 2,700sqm and in the combined PTA and STA to 3,900sqm.

It is important to note that there are a number of supermarkets surrounding the PTA and STA. As outlined in Section 3 above. For example, there is the Woolworths in Thornleigh; a Franklins and Coles Supermarket in Turramurra; the IGA in Wahroonga and the Franklins in Pennant Hills. Owing to the significant undersupply of retail floorspace in the PTA and STA, the vast majority of flood and grocery expenditure generated by the associated households is captured by these centres outside the PTA and STA. The effect of the additional supermarket and grocery floorspace provision on the Subject Site to these centres is discussed further in Section 7 of this report.

[8] Source: National Average sourced from ABS Retail Survey 1998-99 escalated at CPI to 2006.

Specialty Retail

Undertaking a similar analysis for specialty retail, in 2006 there was demand for 4,000sqm of this type of retail in the PTA. Factoring in the proposed development, by 2015 and 2021 this demand has been forecasted to increase to 6,000sqm and 9,000sqm respectively.

Combining expenditure generated in the PTA and STA, in 2006 demand for specialty retail floorspace was 7,500sqm. This demand has been forecasted to increase to 10,000sqm and 13,000sqm by 2015 and 2021 respectively.

6.6 Additional Expenditure

Whilst the majority of retail demand generated within the Subject Site's Primary and Secondary trade areas will be generated by households, a significant proportion of retail expenditure will also be generated by employees and visitors to the services and facilities on the Subject Site. By way of example, a degree of non resident expenditure is likely to be captured from:

- the Subject Site's employees including hospital, school, college and community workers. The number of employees on the Subject Site has been forecasted to increase by between 3,000 and 5,000 over the course of the redevelopment;
- a portion of the 40,000 annual hospital patients and their visitors;
- a portion of the 150,000 out-patients visiting the site per annum;
- parents and friends associated with the school; and
- visitors to the community facilities.

The proposed small supermarket and specialty retail facilities will provide convenient shopping opportunities for the prospective customers outlined above. The retail facilities may be used by staff to purchase lunch or dinner, by staff requiring top up shopping on the way to / home from work, for parents seeking convenient retail options whilst picking children up from school or for visitors to the community facilities on site.

A detailed survey of existing site users and employees to ascertain the degree of retail expenditure likely to be captured from the above groups has not been undertaken as part of this study. For conservative reasons, however, $40.00 per week expenditure has been estimated for the 3,000 staff to be employed on the site in the preliminary stages of its redevelopment.

Based on 3,000 employees, it has been estimated that in the order of $120,000 of additional expenditure could be generated in the PTA per week. This would create an additional $6.7m per year of expenditure for the proposed small village centre.

6.7 Demand for Retail Floorspace

Based on the supply and demand assessment undertaken in the preceding section, it may be concluded that the PTA and STA presently have a shortfall of supermarket, grocery, specialty and non specialty retail floorspace.

Hill PDA's industry experience has found that supermarkets, particularly main line supermarkets with a wide range of goods, have a high level of expenditure capture in their local area. Given however that the proposed supermarket will not be a full line supermarket but rather a convenience or 'top up' supermarket, for the purposes of assessment we have conservatively assumed that it will not have a high rate of expenditure capture. Instead of an 80 - 90% expenditure capture rate (which may be anticipated for a good quality main line supermarket) we have assumed a 25% capture rate in the PTA and 15% in the STA.

The above capture rates therefore mean that the proposed increase in retail facilities on the site will still allow for between 80% and 85% of supermarket expenditure generated within the PTA and STA to be captured by surrounding centres such as Thornleigh, West Pymble and Turramurra.

In relation to Specialty Retail, a similar rate of expenditure capture has been applied for the PTA (25%) and STA (15%). This is because a considerable level of this expenditure is still likely to escape to higher order centres such as Hornsby, Chatswood or Sydney CBD.

Applying national average turnover rates, in our experience we have therefore calculated that subject to the approval of the proposed development, the locality could support the following facilities as of 2010:

- A 900sqm supermarket; and
- 2,000sqm of specialty retail.

As of 2015, assuming the proposed development is approved and half of all dwellings have been completed and occupied, we have calculated sufficient demand for:

- A 1,100sqm supermarket; and
- 2,300sqm of specialty retail.

As of 2021, assuming the proposed development is approved and all of the dwellings have been completed and occupied, we have calculated sufficient demand for:

- A 1,200sqm supermarket; and
- 3,000sqm of specialty retail.

Based on this assessment it may be concluded that the Subject Site's trade areas have sufficient demand for an additional 2,000sqm of retail floorspace including 1,000sqm of supermarket and grocery space and 1,000sqm of specialty retail floorspace.

The provision of 2,000sqm of retail floorspace on the Subject Site would provide convenient retail options for households and employees in the Subject Site's defined trade area. It would still however allow for the vast majority of retail expenditure generated within the area to continue to be taken by centres in the wider locality. The following section of this report addresses the likely relationship of the proposed small village to other centres in the retail hierarchy and any potential impacts to trading.

7. Retail Impact Assessment

This section assesses the impact of the proposed small village centre to centres in the locality. The EPA Act 1979 is not clear as to what is meant by locality but for the purpose of this assessment we have assumed it to be the geographical influence of the proposal.

7.1 Statutory Considerations

In determining any development application under the Environmental Planning and Assessment Act, Council is obliged to take into consideration a number of matters including Section 79C(1)(b) the likely economic and social impacts of the proposal in the locality. Land and Environment Court (LEC) judgements have provided guidance on what those relevant matters are.

In *Fabcot Pty Ltd v Hawkesbury City Council* (97) LGERA, Justice Lloyd noted *"economic competition between individual trade competitors is not an environmental or planning consideration to which the economic effect described in s 90(1)(d) is directed. The Trade Practices Act 1974 (Cth) and the Fair Trading Act 1987 (NSW) are the appropriate vehicles for regulating competition. Neither the Council nor this Court is concerned with the mere threat of economic competition between competing business…. It seems to me that the only relevance of the economic impact of a development is its effect 'in the locality'…"*[9]. This has been suitably addressed within this report.

In *Kentucky Fried Chicken Pty Ltd v Gantidis* (*1979*) 140 CLR 675 at 687 Justice Stephen noted that *"if the shopping facilities presently enjoyed by a community or planned for it in the future are put in jeopardy by some proposed development, whether that jeopardy be due to physical or financial causes, and if the resultant community detriment will not be made good by the proposed development itself, that appears to me to be a consideration proper to be taken into account as a matter of town planning... However, the mere threat of competition to existing businesses if not accompanied by a prospect of a resultant overall adverse effect upon the extent and adequacy of facilities available to the local community if the development be proceeded with, will not be a relevant town planning consideration."*

The principles were reiterated by Justice Pearlman in *Cartier Holdings Pty Ltd v Newcastle City Council and Anor* [2001] NSWLEC 170. *"It follows that Section 79C(1)(b) does not require the consent authority to take an approach in consideration of the relevant matter different from the approach formerly taken in the application of 90(1)(d)."*

7.2 Methodology

Having regard to the relevant matters outlined above, the methodology that we have adopted to determine economic impact was to:

[9]. Fabcot Pty Ltd versus Hawkesbury City Council, 93 LGERA, p.378

- estimate the turnover of the proposed small village centre based on industry benchmarks;
- redistribute the turnover from existing competing centres in the locality using Hill PDA's bespoke gravity model;
- assess impacts as shifts in turnover over time, taking into consideration growth in expenditure in the PTA and STA; and
- consider whether or not the impact on existing retail centres is significant.

7.3 Estimated Retail Turnover

For the purpose of this method we have assumed that the proposed retail components of the development will trade similarly to industry benchmark levels and well above financially sustainable levels. The turnover levels we have adopted are $9,500/sqm for the supermarket and $5,500/sqm for the specialties. These turnover estimates are similar to industry average turnovers (SCN 2007 "Mini-Guns" and 2006/07 JHD averages for small supermarket centres).

Applying these rates we estimate that a 1,000sqm supermarket will turnover $9.5m per annum and 1,000sqm of specialties will turnover $5.5m per annum by the year 2010. The supermarket turnover represents a capture of 25% of the total supermarket expenditure that is expected to be generated by the PTA in 2010.

7.4 Redirection of Retail Turnover

The development's forecasted retail turnover will in part be captured owing to the household and employment growth that will occur in the locality as a result of the proposed development. In part it will also be captured from existing retail centres. In order to quantify the scope of this turnover capture from existing competing centres Hill PDA has prepared a bespoke gravity model.

The gravity model is based on the premise that the level of redirected expenditure from a centre is directly proportional to the supermarket and specialties turnover of that centre and indirectly proportional to the distance from the Subject Site. The impacts are provided in the table below.

Table 16 - Impact of Proposed Centre – Redirection of Turnover (2006 $m)

Retail Centre	Distance from Subject Site (km)	Approx. Retail Floor Space*	Turnover in 2007	Turnover in 2010 without Proposal	Turnover in 2010 with Proposal	Immediate Shift in Turnover	% Shift in Turnover in 2007	Shift in turnover from 2007 to 2010	% Shift in turnover from 2007 to 2010
Proposed Centre					15.0	15.0			
Fox Valley Existing Retailers	0.3	800	3.5	3.8	3.7	-0.1	-3.5%	0.2	5.4%
Hornsby	2.8	85,950	586.0	631.1	625.5	-5.5	-0.9%	39.5	6.7%
Thornleigh	1.9	8,550	68.3	70.7	68.9	-1.9	-2.6%	0.5	0.8%
Beecroft	5.2	6,300	36.9	38.2	38.0	-0.2	-0.5%	1.1	3.0%
Wharoonga	3.6	7,450	42.9	44.4	44.1	-0.3	-0.7%	1.2	2.8%
Turramurra	3.3	14,000	88.2	91.3	90.2	-1.0	-1.1%	2.0	2.3%
South Turramurra	2.6	600	2.8	2.9	2.9	0.0	-0.8%	0.1	2.2%
Pymble	5.2	5,500	22.0	22.8	22.7	-0.1	-0.4%	0.7	3.1%
Gordon	6.7	17,000	96.9	100.3	99.9	-0.4	-0.4%	2.9	3.0%
Normanhurst - Myrtle St	3.4	400	1.5	1.6	1.5	0.0	-0.6%	0.0	2.9%
Westleigh	4.1	3,800	20.0	20.7	20.5	-0.2	-1.0%	0.5	2.4%
Normanhurst	4.1	900	3.8	3.9	3.9	0.0	-0.5%	0.1	3.0%
Pennant Hills	3.0	10,100	54.5	56.4	55.8	-0.6	-1.1%	1.3	2.4%
West Pymble	5.1	2,500	13.3	13.7	13.6	-0.1	-0.5%	0.3	2.5%
Other Localities						-4.5			
TOTAL		**163,850**	**1040.7**	**1101.7**	**1106.2**	**0.0**	**0.4%**	**50.6**	**6.3%**

Various sources including, Hill PDA Surveys and Property Council Shopping Centres Directory

As shown above, the net increase in retail turnover of $15m will be captured from a range of centres including $5.5m from Miranda, $1.9m from Thornleigh and $0.3m from Wahroonga.

7.5 Impacts to Fox Valley Way

In terms of assessing economic impacts, as outlined above, previous court judgements such as *"Fabcot Pty Ltd v Hawkesbury City Council (97) LGERA"* and *"Cartier Holdings Pty Ltd v Newcastle City Council and Anor [2001] NSWLEC 170"* have provided some guidance on relevant issues. The Land & Environment Court has stated that Councils should not be concerned about competition between individual stores as this is a matter of fair trading. But they should be concerned with impact on established retail centres. The impact on competing stores and businesses is only relevant if the viability of those businesses are threatened and the viability of a retail centre as a whole is threatened due to a demonstrated nexus between the competitive stores and the other retailers within the retail centre.

In applying this principle to the Fox Valley Way neighbourhood shops, based on the premise that the proposed retail floorspace will form part of the established centre, the conclusion is that the overall impact will be net positive. The proposed redevelopment will give the Fox Valley Neighbourhood Centre an anchor tenant and increase total trade far beyond its current level.

The development will encourage a strong tenant such as an IGA to move into the area, solidifying the retail centre. It will transform what was once a small neighbourhood shopping strip into a small village and a greater destination for the residents of the locality and the Subject Sites employees and visitors.

The potential impact to the existing Fox Valley retailers shown in the above table is an immediate loss of $0.1m or 3.5% of existing turnover. Note however that the immediate loss of 3.5% in turnover from 2007 to 2010 is due to the methodology in the model, which assumes the level of competition between specialty stores is directly proportional to the distance between them. The model also assumes specialty stores compete evenly.

It is quite likely that a number of the existing specialties will enjoy an increase in trade due to added patronage to the centre as a result of the additional retail offer and anchor tenant. In fact the model also shows that by 2010 the immediate loss in turnover will be more than covered through a 5.4% increase in turnover. This benefit is predominantly a direct result of the proposed redevelopment and the additional households and jobs created in the locality.

There is always the possibility that one or several existing retailers will suffer loss as a result of added competition. However in such a scenario the vacancies are likely to be short-term. This is because the proposed development, being an extension to the centre, will attract further investment. Vacancies will quickly get replaced by retailers that will develop a neutral, if not nexus, relationship to the new centre rather than compete with it. The end result is a retail centre with a complementary, rather than competitive, mix of retailers.

7.6 Impacts on Other Centres

In terms of immediate or “point in time” impact, the centre to loose the largest level of trade is Thornleigh, with a loss of $1.9m. However this only represents 2.6% of its estimated total turnover. Furthermore it is understood that Thornleigh, owing to its large main line Woolworths Supermarket is trading well. Given the small scale of the proposed supermarket (1,000sqm) it will not be able to provide a range of goods that can compare with a 3,000sqm Woolworths. Accordingly the proposed supermarket will not compete with this centre and the strength of its trade draw.

Furthermore as discussed above, conservatively we have assumed that 80 – 85% of expenditure generated within the Subject Site’s trade areas will still escape to other centres such as Thornleigh. It is therefore considered that Thornleigh Retail Centre will be able to easily sustain the immediate degree of loss.

Turramurra will loose $1.0m in turnover or 1.1%, which is considered to be a moderate impact. Pennant Hills will loose $0.6m or 1.1% of turnover and Westleigh will loose 1% or $0.2m of turnover. This level of impact is considered to be moderately low.

These impacts however refer to immediate or “point in time” impacts. These impacts do not take into consideration growth in turnover levels over time or the additional expenditure generated in the areas as a result of the proposed redevelopment i.e. households, employees and visitors. The final column in the above table shows the shift in turnover from 2007 to 2010 following the initial stages of the development. It shows that after allowing for growth in expenditure over the three year period, no centre will experience a loss in trade. In fact all will experience significant increase in trade between 0.8% and 6.7%.

Lastly it is important to note that Hill PDA's modelling has not factored in the significant dwelling and population growth targeted for the rail nodes surrounding the Subject Site in the North Subregion. A greater density of development in key areas will further increase trade and turnover levels for existing retailers and centres.

7.7 Retail and Services & Shopper Convenience

The proposal will offer an alternative shopping destination and a choice of products at competitive prices. The proposal will provide a level of service commensurate with the needs of the local population and is an appropriate response to the needs of households in the area.

Within the subject sites primary and secondary trade areas there are no supermarkets. The nearest full-line supermarkets are in Thornleigh and West Pymble.

The Subject Site will provide residents, employees and visitors to the subject site with the benefits of a supermarket and enhanced specialty retailing without the inconvenience of travelling to, and shopping in a major centre. Given that there is no comparable centre within the PTA or its surrounds the proposed development should be viewed positively.

7.8 Added Price Competition

The proposal may have a minor short term impact to existing retailers in the area. Nevertheless there is sufficient expenditure available within the locality to support the additional facilities and the impact is considered sustainable. Accordingly, added price competition should be viewed positively in this case.

7.9 Conclusion

As shown by the analysis above, no one centre will be detrimentally impacted by the proposal. The proposal is responding to a current undersupply of retail floor space in the area and demand for retail services generated by the cluster of industries focused around the hospital. Accordingly it may be concluded that there are no reasonable grounds for refusal of the retail component of the proposal in relation to economic impact.

8. COMMERCIAL FLOORSPACE

8.1 Industry Clusters

Action A2.2.2 of the Draft North Subregional Strategy designates the Subject Site as an existing industry cluster. The cluster comprises of health and community services that have been attracted to collocate with the hospital.

As the hospital expands to meet the growing needs of the local and wider community, the growth of the associated medical and administrative support services will also be required to enable the effective operation of the hospital. As a form of magnet infrastructure, the hospital will also continue to attract complementary support services to the area. The strengthening of the industry cluster in this way is promoted by Action 2.3.1 of the Strategy that identifies the need to:

"support programs that encourage clustering of business activities around magnet infrastructure".

The existing hospital buildings and ancillary services are at capacity. Furthermore there is little existing physical scope to enable the expansion of services on the site and therefore maximise the economic and social benefits of the existing cluster. The concept plan proposes the extension of the existing 8,000sqm of commercial floorspace occupied by the Pacific Regional Headquarters of the SDA Church, Media Network Centre and other administrative functions by 2,000sqm to a total of 10,000sqm of commercial floorspace. It also proposes to provide 11,000sqm of commercial floorspace for new health and community based facilities looking to co-locate on the Subject Site. The 11,000sqm figure includes the existing 5,000sqm of ancillary hospital facilities and retail services that form part of the hospital.

Taking into consideration the existing commercial floorspace provided on site, the development proposes a net increase of 8,000sqm of commercial floorspace.

The benefits of providing this additional commercial floorspace include:

- the potential generation of an additional 265 commercial jobs[10] ;
- the cross pollination of ideas and knowledge between services and therefore the strengthening of associated industries;
- the sharing of resources and cost benefits through greater economies of scale;
- the provision of contemporary and good quality floorspace that will attract a high calibre of services and professionals; and
- the provision of a mix of job types on the Subject Site.

[10] Based on a ratio of 1 employee per 25sqm of office space and 80% NLA

As discussed in the preceding section of this report, the proposed retail floorspace is not considered of a scale that would significantly impact the function of centres surrounding the Subject Site. In keeping with that finding, the net increase of 8,000sqm of commercial floorspace related to the hospital is not considered of a scale that would adversely affect the viability of existing or future employment centres in the North Subregion. This conclusion has been drawn for a range of reasons as set out below.

1. The proposed commercial floorspace will be targeted to uses that are ancillary to the hospital and / or that support the growth of the existing health and community industry cluster. A combined 8,000sqm of these uses would not be drawn to alternative local centres such as Thornleigh, Beecroft, Gordon or South Turramurra as these centres do not have the key attraction or industry magnet created by the hospital.

2. Centres directly surrounding the Subject Site are predominantly retail focused, with commercial components that are subservient to the retail uses. The provision of commercial floorspace on the Subject Site would therefore not detract from their viable function or ability to attract generic commercial uses suited to small centres such as solicitors and accountants.

3. Much of the proposed floorspace is likely to be used by uses that support the effective operation and coordination of health and community services on the site and therefore their physical location in close proximity to the hospital is critical.

4. The proposed net increase of 8,000sqm of health and community related floorspace is not of a scale or character that would directly compete with the large scale tenancies promoted for major employment centres in the surrounding Region's such as Hornsby and Chatswood.

For the above reasons the proposed health and community focused commercial floorspace is considered necessary to support the effective function and coordination of activities on the site. The location of the proposed floorspace is not considered likely to adversely affect the role or function of surrounding retail centres nor the ability of major employment centres such as Hornsby and Ku-ring-gai to attract commercial occupiers.

8.2 Investment Stimulus

Where a major property investment decision has been made it is generally viewed as a strong positive commitment for the local area. Such a major investment will in turn stimulate and attract further investment to the immediate area.

In economic terms the value of this stimulus is often difficult to directly quantify and the effects are often not realised for many years after facilities and infrastructure have been built and are operational. Nevertheless investment in Wahroonga of this scale and quality will help to raise the profile of Wahroonga and the North Subregion as a result, as a hub for health, retail and community services as well as a range of housing options.

9. HEALTH

Health is a key factor in a community's social and economic well being. As stated by the Organisation for Economic Co-operation and Development (OECD):

"Good health is necessary for individuals to flourish as citizens, family members, workers and consumers. Improving health is a key concern of OECD societies, as it can contribute to higher economic growth and improved welfare[11]."

The Australian Government dedicates 9.5% of Australia's annual Gross Domestic Product (GDP) to health care. On a per capita basis, Australia spends 14% more on health care than the average OECD country[12].

The public health budget is the single largest expense for the State of NSW representing more than 27% of Government expenditure. This budget can be justified in light of the significant challenges faced by the public health system. Such challenges include the growing pressures on demand for care as a result of the prevalence of chronic diseases due to unhealthy lifestyles; the socioeconomic inequity of health provision and preventative measures in the State; the ageing of the population; healthcare worker shortages and economic inefficiencies in service provision[13].

Addressing these issues is not simply a matter of social equity or well being but also critical in ensuring a healthy and productive workforce that supports the State's economic goals and the function of Global Sydney. A healthy workforce reduces the strain on public services and generates economic gain through greater working efficiencies and higher labour force participation rates.

The following section of this report addresses how enhancements to the Sydney Adventist Hospital (the SAN) as part of the Subject Site's proposed redevelopment will support the economic and social well being and economic strength of the North Subregion, Global Sydney and NSW.

The Proposed Development

The SAN is a private not-for-profit hospital that has operated on the Subject Site since 1903. The hospital has grown to become the largest private hospital in NSW and one of Sydney's major health service providers. It provides specialist services that include acute surgical, medical and obstetric care such as complex cardiac and orthopaedic procedures; physiotherapy, radiology, ultrasound services for women, pathology, radiation oncology, nuclear medicine, dietician services and an on-site family medical and dental centre. The hospital supports Government funded hospitals in the provision of quality care for more than 40,000 in-patients and 150,000 out-patients annually.

The extension and refurbishment of the hospital has been proposed in order support the State Government's priority to *"Improve Access to Quality HealthCare"*[14]. The proposed hospital extension aims

[11] www.oecd.org

[12] OECD Health Data 2007 – How Does Australia Compare

[13] NSW Health Plan

[14] Priority S1 – NSW Government State Plan – A New Direction for NSW

to meet an anticipated 4% per annum growth in demand for all hospital services up to 2021. The extension and refurbishment will also help to relieve pressures on the Government Health System by providing additional quality care and holistic health services. The expansion of existing services, that form an established cluster of medical facilities, is also supported as an economically efficient use of existing infrastructure.

The hospital extension and refurbishment has been planned over eight stages extending over an 18 year period. The proposed works include:

- the redevelopment and relocation of the Faculty of Nursing to provide approximately 3,500sqm of new facilities for training and education. To support learning and the recruitment of students, the redevelopment includes the provision of new quality housing accommodation for nursing students;
- expanded clinics, inpatient care, administration and ward facilities;
- refurbished hospital facilities including the provision of lifts, additional car parking and refurbished women's health wards; and
- an enhanced built and landscape environment to create a positive setting that facilitates recovery, care, dignity and mental well being for patients and staff.

In order to meet the anticipated 4% per annum increase in demand for existing services up to 2020[15] the hospital proposes to grow from 62,000sqm to 94,000sqm (+28,000sqm). An additional 5,000sqm of floorspace is also proposed for ancillary health related uses to strengthen the clustering of industries.

[15] Sydney Adventist Hospital Master Plan Review and Update 2008

10. HOUSING

The Draft North Subregional Strategy (the Strategy) establishes a dwelling growth target of 21,000 homes for the North Subregion between 2001 and 2031. By LGA this translates into 10,000 additional dwellings for Ku-ring-gai and 11,000 for Hornsby. The proposed development seeks to provide over 1,000 dwellings on the Subject Site to support the Subregion in achieving this target.

The provision of additional housing in the North Subregion is however not simply a matter of meeting planning targets. One of the five key directions of the overall Strategy is to improve access in the Subregion to a variety of housing choices. The Draft North Subregional Strategy identifies that:

"The provision of a mix of housing types and affordability within the North Subregion is essential given the nature of the workforce required in the local area, particularly transport, retail, tourism employees and hospital staff."[16]

The following section addresses the two key housing issues for the North Subregion being housing mix and housing affordability and how the proposed development seeks to address them in support of the Draft Strategy.

Mix of Housing Types

The proposed development seeks to redevelop the existing inefficient stock of housing on the site to increase housing options from 340 to approximately 1,000 dwellings. These dwellings would include a mix of apartments, townhouses and detached dwellings.

The new dwellings will replace the existing poor standard of older, unsuitable accommodation currently available for hospital and church employees as well as nursing students. It will also provide more opportunities for staff to reside on site, in close proximity to their place of employment and potentially their children's education.

In fact on site residence will be encouraged for staff through the creation of a lease system. Such an approach is an active means of supporting Action A3.2 of the Draft North Subregional Strategy that seeks to *"increase the integration of employment and housing markets".* It is also seen as a non Government mechanism to increase the supply of affordable key worker accommodation in the area that should be supported.

The proposal also seeks to retain all of the existing retirement units on site (50) whilst increasing the provision of hostel/ nursing home floorspace to approximately 4,000sqm. This will allow for greater care for the aged and people with disabilities. This is a particularly pertinent issue in the North Subregion where the Strategy forecasts an additional 24,400 aged persons will be living by 2031. In addition to the type of accommodation provided and its suitability for aged persons, the location of the site as part of a community

[16] Action A3.2 – Draft North Subregional Strategy

and in close proximity to health and retail services will increase the ability for aged persons to care for themselves and age in place.

The existing 69 bed hostel known as Jacaranda Lodge will also be re-developed to a higher standard. This accommodation provides low-cost rooms for out-patients and their families who may live a considerable distance from the hospital or need to be close to loved ones. Facilitating this group of carers close to the hospital has proven to be a successful mechanism for enhanced care, recovery and mental health. This form of accommodation can also provide flow over options for visiting staff and delegates associated with the operation of the hospital and medical research or conferences.

By enhancing housing variety and choice on the Subject Site it will be possible to create a more efficient use of land and to cater to the changing characteristics of the community. This is particularly a consideration in an area with an ageing community, a significantly high proportion of detached family sized dwellings, few medium density or smaller dwelling alternatives and an undersupply of retail floorspace.

The varied provision of dwelling types and sizes in close proximity to health, retail and commercial services will also support the growth of a sustainable community. The community will be suitable for a wide variety of residents including aged persons, young professionals associated with the hospital and school and other uses on site in addition to families.

The proposed development will therefore not only be contributing to the mix of housing types in the Subregion but also providing housing options that support the operation of the hospital and related services as an industry cluster. By way of example, the proposed dwellings will provide:

- housing in close proximity to / around a village centre to provide sustainable access to these facilities for residents who are less mobile (i.e. aged, disabled or mothers with children);
- housing in close proximity to places of work thereby minimising the amount of time spent travelling and away from home, leisure pursuits and families;
- housing in close proximity to education, services and work opportunities thereby reducing dependency on private motor vehicles to the benefit of the environment;
- temporary accommodation for families seeking to support loved ones or outpatients unable to travel considerable distances from the hospital;
- short term accommodation for visiting staff or delegates in relation to hospital and other on site services;
- a mix of housing that caters to a range of aged persons abilities;
- a mix of housing that meets the changing demographic characteristics of the community and their needs; and
- enhanced visual design and streetscape character to the benefit of the local environment.

In light of the above merits, the redevelopment of existing housing and the provision of a mix of additional permanent and short term dwelling types on the Subject Site is considered of social benefit to the community and economic benefit to the effective function and operation of the industry cluster.

Housing Affordability

The Economy and Employment Chapter of the Draft Subregional Strategy identifies the importance of appropriate housing provision to the effective function of the Subregions economy. This is because household type and affordability has a direct relationship with labour type. A range of housing options caters to a diverse labour force that is required to support the range of services necessary for a sustainable local economy.

"Housing is affordable when households that are renting or purchasing are able to pay their housing costs and still have sufficient income to meet other basic needs such as food, clothing, transport, medical care and education.

NSW DoH - Centre for Affordable Housing

Intrinsic to this matter is the issue of housing affordability. The Australian Housing and Research Institute (AHURI) in fact identify that the:

"link between the supply of affordable housing and labour market shortages is one of the ways in which the chronic instability of housing markets can impact upon the efficiency of the economy[17]".

The issues of labour supply and housing affordability are particularly pertinent in the context of the Subject Site. This is because the services provide by the health and community industry cluster rely heavily on the skills of key workers. However the Region has high housing and living costs comparative to most Subregions in Sydney.

By way of background to the affordable housing issues, over 265,000[18] households in NSW are estimated to be experiencing housing stress (generally defined as households that spend over 30% of their gross income on housing related costs and thereby have to sacrifice their ability to meet other necessities).

Housing stress in Australia has grown as a result of the quadrupling of housing prices over the past 20 years without the commensurate growth in incomes. Within Sydney this issue has become particularly pronounced. In Sydney it was found that the median housing price of $520,000 would need to drop to $180,000[19] in order for the average household to avoid housing crisis.

The mismatch between housing costs and household incomes has resulted in a significant decline in the proportion of persons buying first homes and greater pressures on key workers. This very fact may be evidenced by the relatively high proportion of the Subject Site's workforce (12% of people employed in the Health and Community Service and 6% of people employed in Education) that travel from more affordable locations such as the Central Coast and Lower Hunter daily.

A study by AHURI into the connection between housing affordability and labour shortages across Australia found that the incidence of housing affordability problems amongst working households was highest for those working in Sydney. The study found that the mismatch between housing costs and staff wages in Sydney was being addressed through a range of methods including:

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[17] Are Housing Problems Creating Labour Shortages? – AHURI 2006

[18] NSW Housing Fact Sheet – Shelter NSW

[19] The Dimensions of Australia's Affordable Housing Problem - URBISJHD

1. commuting to Sydney from more affordable areas (this was the case for the majority of workers);
2. reliance on a higher income partner to afford to live in Sydney; and
3. the relocation of lower income households to more affordable areas and new employment markets in Sydney's outer suburbs or areas north of Sydney.

The responses to the scenario outlined above are a particular concern for industries that depend on shift workers who need to locate in close proximity to their work. This is because shift workers can not often rely on public transport because it does not correlate with the hours of their work.

The Department of Housing's Centre for Affordable Housing identifies that the issue of housing affordability is particularly prominent amongst key workers, stating that:

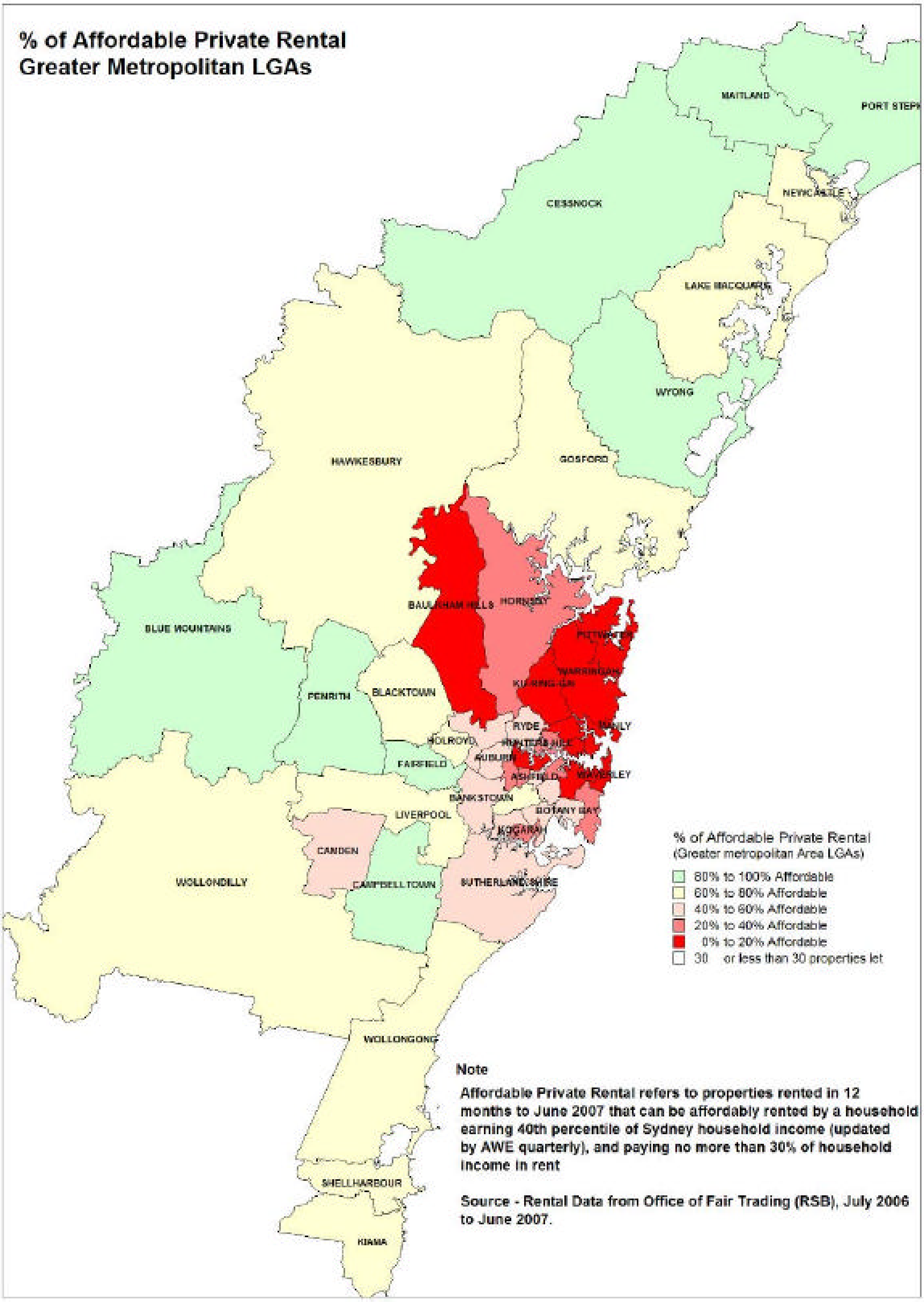
"Individuals working in key services on low-to-moderate incomes such as those working in childcare and aged care, police, ambulance personnel, nurses, community development workers and transport workers, are finding it increasingly difficult to find affordable housing close to their work places.

Over time, we risk these individuals choosing not to work in high cost areas that are too far from their accommodation".

The above issues are key matters for concern for the SAN hospital, nursing college, school and associated community and health services. These facilities provide essential local services however the majority of their employees (including teachers, nurses, administrative staff and technicians) are unlikely to be paid salaries that are commensurate with housing costs in the area. This places greater stress on key workers to either find cheaper accommodation locally that may not be suited to their needs or alternatively to travel considerable distances daily to work from alternative locations.

To exemplify the degree of the matter, the latest issue (No.83) of the Department of Housing's Rent and Sales Report shows a mean dwelling sale price in Ku-ring-gai LGA of $1,054,000 as of December 2007. This compares to a Sydney Statistical Division mean of $566,000 and represents a 196% increase in mean property value ($518,000) in ten years from 1998. As a result the LGA of Ku-ring-gai has been identified by the NSW Department of Housing's Centre for Affordable Housing as one of the areas with the least affordable housing.

Figure 8 - Proportion of Affordable Homes within Sydney's Greater Metropolitan LGAs



Source: Rental Data Office of Fair Trading 2006 - 2007

The housing predicament described above has a number of implications for the uses on the site including:

- a less attractive job prospect for staff who are required to commute to the area and therefore implications for staff recruitment in professions such as nursing that are already experiencing significant labour shortages (discussed further below);
- added stress to workers required to spend more time travelling and away from family and leisure pursuits;
- workers / students living in inadequate accommodation (i.e. too small, in poor condition) to the detriment of their mental well being;
- the relocation of workers with desirable skills and qualifications away from the Subregion to live and work in more affordable locations. This would create further deficiencies in the availability of key workers in the locality and quality of services; and
- increased pressure on surrounding road systems and the environment owing to a greater reliance on private car use to travel in / out of the Region for work.

At present the site provides in the order of 340 dwellings for its Nursing College Students and hospital staff. These dwellings are all owned and managed by the ACA however there is not a sufficient number to meet demand and the standard of the housing stock is considered inefficient and poor. Therefore in order to address the issues and pressures listed above, new and additional housing is proposed as part of the Subject Site's redevelopment.

The proposed housing will include dwellings for private ownership and rent. A range of medium and low density housing options are also proposed for the site including smaller apartments for students or professionals without children as well as detached dwellings for families.

> *"By increasing access to affordable housing, we work towards integrated and sustainable communities that function in a way that benefits the whole community."*
>
> NSW DoH - Centre for Affordable Housing

Housing priority will be given to key workers and others employed on site. It will be secured through leasing agreements that cap rental rates at affordable levels or through the provision of housing subsidies. In this way affordable, appropriate and sustainable housing options can be secured. This arrangement has clear social and economic benefits as it allows for the effective recruitment of skilled and suitable staff, enhanced efficiencies, enhanced service operation and reduced stress on infrastructure (including roads and transport). It also successfully integrates employment and housing markets in accordance with the objectives of the Draft North Subregional Strategy.

For the economic and social reasons given above, the proposed increase in dwellings on the site is supported.

11. EDUCATION

Of the 30 countries that form part of the Organisation for Economic Cooperation and Development (OECD), on average, half of all of their young adults enter universities or similar institutions at some point in their lives. In the case of Australia, over 45% of these students complete a first university degree. In fact, between 1995 and 2002, in Australia, the number of students enrolling in tertiary and vocational training has increased by over 20%[20].

The growth in popularity of higher education and lifelong learning may be reflective of the benefits it can have to an individual's potential future earnings and ability to find employment. Studies in the United States have found that people with tertiary qualifications earn as much as 86% more in salary than people with only secondary qualifications. Furthermore, it was found that on average in OECD countries, men with a tertiary qualification are 5% more likely to find employment and women 15% more likely.

On a macro economic level however, there are significant benefits that stem from tertiary education. It is widely recognised that the world is globalising and placing greater demand on skills, knowledge and innovation. Improvements in education and knowledge are considered critical to enabling nations to *"extract more returns from inputs of labour and capital"*[21]. Improved education is fundamental to creating a *"competitive, innovative, knowledge based economy better able to compete in world markets"*[22]. As stated by one New Zealand Parliamentary Minister in respect to this point *"it's not entirely coincidental that I'm both the Minister of Finance and the Minister for Tertiary Education"*[23].

The OECD recognises that *"Improved education contributes to a Country's overall prosperity, helping to raise labour productivity and technological progress thereby boosting economic growth"*[24]. In fact the OECD estimates that the impact of just one additional year of education increases economic output by between 3% and 6%.

The link between education and economic prosperity has also been recognised by the Australian Labour Party who has identified that *"education is the economic platform on which our future economic prosperity will rest"*. Despite this Australia is the only OECD nation to have reduced public investment in tertiary education in the past 10 years. The Opposition Leader, Kevin Rudd therefore considers that:

"Australia needs nothing less than a revolution in education – a substantial and sustained increase in the quantity of our investment, and the quality of our education… this is required at every level of education from early childhood to mature age".[25]

[20] www.oecd.org

[21] Hon. Dr Michael Cullen 16/3/2007 - Massey University Speech

[22] The Australian Economy Needs an Education Revolution, Australian Labour Party

[23] Hon. Dr Michael Cullen 16/3/2007 - Massey University Speech

[24] www.oecd.org

[25] Kevin Rudd, Australian Labour Party as quoted in The Australian January 23, 2007

Enhanced education can have a significant positive impact to an individual's wealth and a local, regional and national economy. Education does however also have significant social benefits. A study undertaken by the OECD[26] identified that there were in fact two main social benefits of improved education being:

1. Health; and
2. Civic and Social Engagement.

These benefits are explained in greater detail below.

Health

With respect to health, the OECD identifies that *"the health benefits of learning are potentially extremely large[27]".* There are three types of effect created as a result of improved learning as outlined below.

- *indirect effects on health i.e. via income;*
- *direct effects such as changes in individual competencies and abilities and changes in attitudes to risk and changes in self efficacy and self esteem;*
- *intergenerational effects of educated parents on the health of their children[28].*

It was found that additional years of schooling substantially increased health, well being and health behaviours. These factors lead to an improvement in the quality of a person's life as well as preventing illness and enabling more efficient treatment. Each of these benefits has significant health related cost savings for Governments.

Civic and Social Engagement

Education also has social benefits by improving civic and social engagement (CSE) and interaction. As identified by the OECD study, this can manifest in a number of ways including:

- *by shaping what people know – the content of education provides knowledge and experience that facilitates CSE;*
- *by developing competencies that help people apply, contribute and develop their knowledge in CSE;*
- *by cultivating values, attitudes, beliefs and motivations that encourage CSE;*
- *by increasing social status – this applies to forms of CSE that are driven by the relative position of individuals in a social hierarchy[29].*

[26] Understanding the Social Outcomes of Learning, OECD 2007
[27] Understanding the Social Outcomes of Learning, OECD 2007
[28] Understanding the Social Outcomes of Learning, OECD 2007
[29] Understanding the Social Outcomes of Learning, OECD 2007

The OECD study also identified other potential positive impacts as a result of education including reduced levels of crime, anti social behaviour and poverty within communities.

On an individual basis, education also enhances a person's ability to make choices and follow through on them. Education can also positively influence the 'context' in which people choose to live in and their opportunities to make choices within these contexts.

Whilst the social benefits of education are often visibility apparent, they are difficult to quantify particularly in economic terms. A Dutch study[30] has attempted to do this by assessing the impact of education to an individual's quality of life. The study results suggested that for every additional year of education the health state of men improved by 0.6% and of women by 0.3%.

A study based in the UK[31] found that for adult women, the improvement resulting from a rise in education from no qualifications to a basic qualification, reduced the risk of depression at age 42 from 26% to 22%, saving an estimated £200m annually.

In light of the studies and discussion above, it is evident that further education can not only have a positive impact on ones income potential and the wider economy but can also enhance ones ability to make choices, maintain their health and the health of their children. The multipliers of these benefits are vast and would be difficult to quantify in economic terms. Despite this however it is reasonable to assert that the extension of the existing primary school to provide secondary education and an extended and significantly enhanced nursing college will provide greater opportunities for many to build on their education and gain the economic and social benefits of further education.

The following section explores these matters further in the context of the proposed redevelopment.

11.1 Education – Primary and Secondary

As part of the Wahroonga Estate Concept Plan, it is proposed that the existing Wahroonga Adventist Primary School is relocated to the eastern side of Fox Valley Road and increased in size to accommodate 1,160 students from Prep to Kindergarten to Year 12.

The extension of the school on the site is considered of merit to the local community for a number of reasons. Primarily the extension of the school to include secondary education (including Year 12) will support the State Government's objectives to encourage *"more students complete Year 12 or recognised vocational training"*[32]. In this respect, the NSW State Plan quotes research in keeping with the discussion provided above that *"increasing completion of schooling raises the level of economic growth, reduces poverty and can improve health and crime outcomes".*

[30] Understanding the Social Outcomes of Learning, OECD 2007

[31] Understanding the Social Outcomes of Learning, OECD 2007

[32] NSW State Plan – A Direction for NSW

The proposed extension from a primary school to a primary and secondary school campus supports this Government Priority. The location of the school on the Subject Site in conjunction with the hospital and nursing college also however provides an awareness of and opportunities for ongoing vocational training.

The proposed new school will have the benefit of creating a positive learning environment for student's thorough new indoor and outdoor facilities amongst an attractive natural setting. From an environmental and social point of view, the expansion of the school would also have a positive effect through the provision of local schooling opportunities reducing the need to travel. This in turn reduces the wider impacts to roads and transport and enforces the local community character.

Appropriate Size of Primary and Secondary School

The Director General's Requirements issued in relation to the initial concept plan for the proposed redevelopment sought an assessment of the appropriate footprint for the proposed school. An assessment of an appropriate footprint has been carried out by Stanton Dahl & Associates Pty Limited (Appendix 2). Further to this, Hill PDA has undertaken an additional assessment with the support of key government departments and consultation bodies. Outlined below are the key matters reviewed for the assessment.

The Education Act 1990 (the Act) is the main legislative document that governs education within NSW. Section 47 of the Act sets requirements for the registration of non-government schools. The Registered and Accredited Individual Non-Government Schools (NSW) Manual provides further information and advice. Under the Act, the Minister for Education and Training has the authority to approve the registration of an individual non-government school, subject to the school meeting the relevant requirements.

The Education Facilities Research Group (EFRG) was established to research and develop school facilities that support changing trends in education. The EFRG is a joint initiative between the Department of Commerce and the Department of Education and Training. The Group has expertise in educational facility planning for primary, secondary and special schools.

The EFRG has compiled a number of publications to assist with the planning of schools. Two of these publications are the *"Primary School Facilities Standard"* and the *"Secondary School Facilities Standard"*. Both of these publications are updated annually, based on research undertaken by the EFRG. The publications are used help to streamline the establishment and approval of new government schools. Both publications are also useful in ascertaining the minimum requirements for a non-government school.

As the Department of Education and Training is one of the two departments behind the EFRG, it is reasonable to assume that a non-government school which meets all the requirements of each publication would be likely to receive the approval of the Minister for Education and Training in regard to the provision of adequate facilities. Therefore, both publications have been used by Hill PDA to determine the appropriate floor area for the proposed school.

As part of this assessment, a total student population of 1,120 has been used, with 548 primary students and 572 secondary students.

The total footprint calculated for the school by Stanton Dahl & Associates Pty Limited equals 12,388sqm. This has been based off class sizes of 20 students for Kindergarten and 26 students for Years 1-12. These class sizes have the capability to increase in size to 30 students if necessary and an additional class may be added in the future to Years 7 and 8. The assessment allows for a 600sqm covered play area for the Junior and Middle School children (Years K to 8) and a 400sqm covered play area for Senior College (Years 9 to 12). Additional facilities proposed are detailed in Appendix 2.

The Stanton Dahl & Associates Pty Limited assessment of the school footprint also incorporates 40 prep students, providing 250sqm of floor space.

For the Hill PDA assessment of the appropriate footprint, the Primary School Facilities Standard and the Secondary Schools Facility Standard has been used to calculate an approximate footprint for the school. Calculations have been carried out using the Primary School Facilities Standard for Years K to 6 and the Secondary Schools Facility Standard for Years 7 to 12.

The same number of students for each year has been used by Hill PDA, as for the Stanton Dahl & Associates Pty Limited assessment. Class sizes of 20 students for Years K to 2 and 26 students for Years 3 to 12 have been used in Hill PDA's calculations. Therefore, the Years which fall under the Primary School Facilities Standard will total 24 classes and the school is classified as Core 21 under the Standard. The Years which fall under the Secondary School Facilities Standard will have a total of 548 students. This student size is classified as Stream 4 under the Secondary School Facilities Standard.

The Primary School Facilities Standard accommodates for most facilities required by a Primary School, whereas the Secondary School Facilities Standard accommodates for the basic facilities required by a Secondary School and then lists a number of optional facilities. A summary of the minimum and optional facilities and their corresponding floorspace requirements has been calculated and is shown in the table below.

Table 17 - Minimum and Optional Floorspace for Proposed Primary and Secondary School

Floor Space Dedication	Floor Space (sqm)
Primary School Minimum	3,252
Secondary School Minimum	3,362
Minimum Total	**6,614**
Optional Extra Floor Space	3,979
Total	**10,593**

Source: Primary and Secondary Schools Facilities Standards, 2007

Please refer to Appendix 3 for a more detailed break down of the floor area required per facility.

Although the absolute minimum floor area for the school has been calculated as approximately 6,614sqm, a number of additional facilities will be required in order to ensure a high standard of learning and a positive environment. This is particularly the case for the Secondary School. It is considered likely that many of the facilities listed as optional would be desirable to provide the students with the best opportunities. Hill PDA's calculations have therefore identified that a primary and secondary school in the order of 10,593sqm would be appropriate for approximately 1,120 students.

It is also important to note that some additional floorspace may be required for religious facilities as the school will be run by the Seventh-Day Adventist Church. This floorspace has not been included within the optional facilities calculations.

Hill PDA has calculated that a total school minimum footprint of 10,593sqm would be appropriate. The calculations undertaken by the Stanton Dahl & Associates Pty Limited assessment details an area of 12,388sqm. The Stanton Dahl & Associates Pty Limited footprint is larger than what Hill PDA has calculated as appropriate, meaning that the Stanton footprint would be sufficient.

For the reasons given above and in light of the floorspace requirements provided in Appendix 2 and Appendix 3, the proposed 12,388sqm of built floorspace for the school is considered appropriate. The proposed 12,388sqm is considered sufficient space to provide for not only the minimum area of school facilities but also facilities that will enhance the student's educational experience in accordance with both the Primary School Facility Standard and the Secondary School Facility Standard.

11.2 Education – Tertiary

The shortage of nursing staff in both government and private hospitals and clinics is a commonly recognised issue faced by heath services across Australia. At present it is estimated by the NSW Nurse's Association that there is an undersupply of 1,750 nurses in public hospitals alone. This figure is set to increase as over half of existing nurses are aged over 45 years and are set to retire in the next 10 – 15 years[33]. This shortfall will be exacerbated by the estimated shortfall of 800 nurses per year studying in the profession. The NSW Nurse's Association identifies nursing shortages as a *"national problem"*[34] that must be addressed.

A shortfall in the number of nurses in NSW will have a significant and detrimental impact to the ability of the health care system to meet growing demands and the standard of care required. It will also adversely affect the State Government's ability to achieve one of the four Strategic Directions established by the State Health Plan to *"Build a Sustainable Health Workforce".* The State Health Plan highlights that the:

"Delivery of quality health services depends on having adequate numbers of skilled staff working where they are needed. Addressing the current shortfall in the supply of health professionals is one of our key priorities for the future. A shortage of staff or uneven distribution of staff will limit consumer access to the health care needed."

The shortfall in the number of student nurses has been attributed to a number of causes including the increasing costs of courses for students, government under-funding of nursing schools and the significant operating costs of courses. These factors have resulted in the limited availability of student places and course closures. One example being the University of Sydney's decision to close its nursing faculty and course last year.

[33] No Fix without Student Nurses – June 29 2005, NSW Nurse's Association
[34] Fix without Student Nurses – June 29 2005, NSW Nurse's Association

The proposed development is the exception to the trend outlined above. It proposes to extend its existing on site Faculty of Nursing and Health that provides undergraduate and graduate courses in Nursing from 50 places to 400 places. Government funding will cater for an annual intake of 120 students for the three year courses, totalling 360 government funded positions. The remaining 40 students will be self funded. In order to accommodate this growth in services a 3,500sqm training facility has been proposed as well as enhanced student residential accommodation.

The existing Avondale Nursing College located on the Subject Site is highly regarded in the health industry for training and developing quality nursing staff. The provision of new facilities and living environments is likely to increase student attraction to the course and the quality of their learning. An additional 115+ students per year will go a considerable way to meeting the estimated shortfall of 800 students in the state per annum. For a variety of social and economic reasons the proposed extension of Avondale College and the associated Nursing Facilities are therefore supported.

12. EMPLOYMENT & ECONOMIC MULTIPLIERS

12.1 Operations Generated Employment

The Subject Site currently provides a mix of uses that generate a significant number of jobs. Based on 2001 Journey to Work Data, the Subject Site generated over 2,900 jobs. The main employment categories were:

- Health and Community Services – 1590 jobs
- Education – 484 jobs
- Property and Business Services – 215 jobs
- Personal and Other Services – 158 jobs
- Retail Trade – 115 jobs

The key employment generator on the Subject Site is the hospital. In fact the hospital is one of the largest single employment generators within the LGA's of Hornsby and Ku-ring-gai. The hospital alone employs over 2,000 staff (500 of which are accredited medical professionals). Other notable employment generating uses include the existing child care centre, hostel, retail, community centre and media centre. As discussed in the preceding sections, together these uses form a health and community an industry cluster.

Action A2.2.2 and A2.3.1 of the Draft North Subregional Strategy seek to 'leverage' from industry clusters for ongoing success. In accordance with this objective the proposed redevelopment and expansion of uses will generate significant additional employment opportunities on the site enhancing its role as a major generator of employment in the North Subregion.

To quantify this, it has been estimated that the proposed development will create over 1,000 additional operational jobs on site over the first five years of development. A further 3,000 to 5,000 jobs will be generated on the site over the remaining stages of development[35]. These jobs will span a range of full time, part time and causal positions to meet the changing working requirements of the community.

The nature of the employment generated will also vary from low skilled work to highly skilled and technical positions. Employment opportunities will relate to health and community services; primary, secondary and tertiary education; office and medical administration; business and media and retail. In this ay a variety of employment opportunities will be created that will form a diverse and balanced working environment.

[35] Wahroonga Estate Redevelopment - Preliminary Environmental Assessment

12.2 Construction Multiplier Effects

The construction industry is a significant component of the economy accounting for 6.6% of Gross Domestic Product (GDP) and employing almost 14.6% of the workforce at March 2003. The industry has strong linkages with other sectors, so its impacts on the economy go further than the direct contribution of construction. Multipliers refer to the level of additional economic activity generated by a source industry.

There are two types of multipliers:

- Production induced: which is made up of:
    - first round effect: which is all outputs and employment required to produce the inputs for construction; and
    - an industrial support effect which is the induced extra output and employment from all industries to support the production of the first round effect; and
- Consumption induced: which relates to the demand for additional goods and services due to increased spending by the wage and salary earners across all industries arising from employment

The source of the multipliers adopted in this report is ABS and Australian National Accounts: Input-Output Tables 1996-97 (ABS Catalogue 5209.0). These tables identify first round effects, industrial support effects and consumption induced multiplier effects at rates of $0.466, $0.438 and $0.962 respectively to every dollar of construction.

Therefore by way of example, as shown in the table below, an $800m cost in construction translates into a further $723m activity in production induced effects and $770m in consumption induced effects. Total economic activity generated by the construction of the proposed development is therefore approximately $1,493m.

Table 18 - Construction Cost Effect

CONSTRUCTION MULTIPLIER EFFECT	Initial Effects	Production Induced Effects: First Round Effects	Production Induced Effects: Industrial Support Effects	Consumption Induced Effects	Total
Output multipliers	1	0.466	0.438	0.962	2.866
Output ($million)	800	$373	$350	$770	$1,493

Data Sources: Australian National Accounts: Input-Output Tables 1996-97 (5209.0), Price Index of the Output of the Building Industry - Producer Price Indexes (6427.0), CPI All Groups - RBA Bulletin (Table G2)

The 1996-97 ANA Input-Output Tables identified employment multipliers for first round, industrial support and consumption induced effects of 0.33, 0.45 and 2.33 respectively for every job year in direct construction. We adjusted these multipliers to March 2003 using the building price index. The adjusted multipliers are provided in the following table.

Table 19 - Construction Multiplier Effect

CONSTRUCTION MULTIPLIER EFFECT	Initial Effects	Production Induced Effects		Consumption Induced Effects	Total
		First Round Effects	Industrial Support Effects		
Employment No. per $million adjusted to Sept 06 dollars	6.05	2.00	2.72	14.10	24.87
Total employee years created	4,840	1,600	2,176	11,280	19,896
Project timeframe	1	1	1	1	1
Jobs per annum	4,840	1,600	2,176	11,280	19,896

Data Sources: Australian National Accounts: Input-Output Tables 1996-97 (5209.0), Price Index of the Output of the Building Industry - Producer Price Indexes (6427.0), CPI All Groups - RBA Bulletin (Table G2)

It is estimated that one full time construction position for 12 months is created for every $165,247 of construction work undertaken. Based on the proposed developments estimated construction cost of $800m, approximately 4,840 job years (or 484 jobs over ten years) will be directly generated.

The 1996-97 ANA Input-Output Tables identified employment multipliers for first round, industrial support and consumption induced effects of 0.33, 0.45 and 2.33 respectively for every job year in direct construction. For every $1 million in construction cost, a total of 24.87 job years could be generated in the economy. Including the multiplier impacts the proposed development will therefore have potential to generate almost 19,896 job years or 1,990 jobs over ten years.

Note that the multiplier effects are national, and not necessarily local. The ABS notes that *"Care is needed in interpreting multiplier effects; their theoretical basis produces estimates which somewhat overstate the actual impacts in terms of output and employment. Nevertheless, the estimates illustrate the high flow-on effects of construction activity to the rest of the economy. Clearly, through its multipliers, construction activity has a high impact on the economy."*

13. Other Considerations

13.1 Community Facilities and Integration

This report has discussed and assessed various elements of the proposal that relate to community infrastructure including the hospital, associated health facilities, the primary and secondary school and nursing college. Detailed social planning undertaken by Ku-ring-gai Council has however identified a range of additional social facilities and infrastructure required to meet the needs of the LGA's future population.

Ku-ring-gai Council's research has been based on an analysis of existing and future socio-demographic trends across the LGA. This analysis has been undertaken to inform the preparation of the Ku-ring-gai Community Plan 2005 – 2009 and the Ku-ring-gai S94 Plan 2004 - 2009. The following section of the report addresses these key issues in light of the additional facilities proposed by the redevelopment that have not already been discussed in detail.

Child Care

Ku-ring-gai Council forecasts that there will be significant growth in the number of children (aged between 0 and 15 years) in the LGA between 2004 and 2009[36]. A survey by Ku-ring-gai Council found however that 49% of parents interviewed were already experiencing difficulties associated with shortages in child care services[37]. This predicament causes significant social and economic concern as child care services critical in allowing many families to work and maintain a decent standard of living in light of rising housing costs.

As a major work destination for many parents (females in particular), the redevelopment of the hospital and community facilities proposes an extension to the existing child care facilities on site. The proposed extension will be to a scale that is commensurate with demand generated by the extended hospital and associated services. It is also intended that the centre will provide a range of services including long day care, family day care, out of school hour's care (in association with the proposed primary and secondary school), vacation care and occasional care. In this way the proposed development will support working families and avoid any greater strain on existing facilities in the North Subregion. Furthermore should the child care centre have additional capacity, it may help to meet some of the latent demand for these services in the North Subregion.

Community Centres and Halls

The Ku-ring-gai Community Plan identifies community facilities such as halls and other meeting places as indicators of a community's overall strength. They are considered valuable in their ability to bring people together in social, educational, artistic, recreational, religious and sporting activity. As a result they are favourable in reducing social issues such as isolation (particularly for the elderly), creating supporting communities (for a range of people including working families and youth) and creating active lifestyles

[36] Ku-ring-gai S94 Plan 2004 -2009

[37] Ku-ring-gai Community Plan 2005 - 2009

(necessary for the health of everyone). In the Ku-ring-gai Community Plan, Council identified multi purpose community facilities as one the LGA's key needs.

The proposed development supports this need the retention of the high quality community centre on the site. Given the good economic life of the building and its suitability for a range of community uses, it is proposed to be retained as part of the Subject Site's proposed redevelopment. This facility provides a 350 seat hall with ancillary amenities (kitchen, toilets etc) and may be used as a place of worship. The facility is currently available (and will remain available) to the wider community for casual hire.

In addition to the new community hall located on the site, the existing church will also be retained. Together these facilities could provide over 3,200sqm of community floorspace centrally located on the site and available to all members of the public.

Private Medical Facilities

As identified in Section 5 above, the North Subregion has two major hospitals and two smaller hospitals providing a range of medical facilities. A survey by Ku-ring-gai Council[38] found that owing to demand on these services and their focus on care rather than prevention, many residents of the Subregion had experienced difficulty in accessing these services. Many residents were not aware of the availability of alternative private health care providers. Survey respondents explained that they were prepared to pay for private facilities to enhance their ability to access them.

As part of the proposed redevelopment, 11,000sqm of commercial floorspace (a net increase of 8,000sqm) has been proposed for a range of uses that will be complementary to the hospital. This floorspace is likely to be attractive to a mix of private medical facilities including medical centres, dentists, physiotherapists, dieticians, chiropractors and pathologists. Whilst this will have a significant positive economic effect through the creation of jobs and by supporting the medical cluster, it will also provide significant social benefit by extending the availability of services and the public's awareness of them.

Site Management and Operation

The Seventh-day Adventist Church operates the SAN Hospital and all other community facilities on the Subject Site. The Church is a socially responsible organisation and therefore comfort should be gained in the knowledge that this arrangement will remain during and post the Subject Sites redevelopment. Furthermore it is also in the mandate and interests of the Church to ensure that the development creates a positive environment that meets the social needs and wellbeing of the community.

13.2 Open Space and Recreation

Wahroonga Estate is located predominantly within Ku-ring-gai LGA, known for its leafy residential suburbs and extensive areas of native vegetation and parkland. Over 16% of the LGA is open space and over 19%

[38] Ku-ring-gai Community Plan 2005 - 2009

of the LGA is National Park. The Subject Site contributes to this character through the retention of large areas of underdeveloped bush and creek areas.

The Northern Sydney Regional Organisation of Council's (NSROC) State of the Environment Report 2007 found that across the Ku-ring-gai LGA, the volume of open space under Council management per person was 114sqm. This is a considered a high ratio given that the average open space volume for the Northern Sydney Region, which includes the Ku-ring-gai LGA, reduces to 69sqm per person.

More specifically when compared to other Sydney LGA's located within the NSROC region such as North Sydney (25sqm per person), Lane Cove (50sqm per person), Hunters Hill (50sqm per person), Ryde (36sqm per person) and Willoughby (67sqm per person), the Ku-ring-gai LGA is relatively well catered for in respect to Council controlled open space. It is only the Hornsby LGA, of which a small portion of the Subject Site is located within, that has an average volume of Council controlled open space that is greater (170sqm per person) than Ku-ring-gai LGA. This is predominantly due to the location of the Hornsby LGA to the north, on the fringe of greater Sydney.

This measure of open space may also be compared to standard benchmarks of 28sqm per person in NSW, 40sqm per person in the ACT and 50sqm per person in Victoria. In comparison, Ku-ring-gai LGA contains a lot of open space.

A large proportion of Wahroonga Estate is currently open space. The majority of the open space on the site is urban bushland (almost 40% of the 65ha site) of varying quality, with some landscaped gardens nearer to existing development such as the Hospital and the church. None of this open space element is currently managed by Ku-ring-gai Council.

Existing open space on site is currently arranged in a fashion that is inefficient, with large portions not accessible. Although the proposed redevelopment will increase the existing total foot print of building within the Subject Site, through the total redevelopment of the Subject Site, the enhanced site layout allows for the improvement of connections to open space. The improved site layout would mitigate the impacts to existing open space from the increased building footprint and improve the benefits to Subject Site residents and visitors due to the large, varied and easily accessible portion of open space to be retained.

Population calculations for the redeveloped site have been carried out using an approximate number of 1,100 new dwellings. The 2006 average household occupancy rate for Wahroonga of 2.9 has been used to calculate the population for half of the dwellings within the Subject Site. The 2006 average household occupancy rate for Sydney of 2.7 has been used to calculate the population for the other half. This use of different occupancy rates will take into consideration the variables effecting households within the Wahroonga area but also greater Sydney as the housing proposed is not typical of Wahroonga. Based on these calculations, the redeveloped Subject Site would consist of a population in the region of 3,080.

The proposed redevelopment of the Wahroonga Estate would include 10,000sqm to 40,000sqm of active recreation space. The proposed redevelopment would provide the population of the redeveloped Subject Site with between 3.2sqm to 13.0sqm of active recreation space per person.

The proposed redevelopment of the Wahroonga Estate would also include 26ha of Bushland and Passive Recreation open space. This calculates to 40% of the Subject Site, a higher percentage of Subject Site and than the percentage for the LGA of Ku-ring-gai. Based on a population figure of 3,080 for the redeveloped Subject Site, the proposal will provide 84sqm of bushland and passive recreation space per person.

The amount of open space per person provided by the proposal is greater than for many parts of NSW. Although the average amount of open space per person for the proposal is less than the average for Ku-ring-gai LGA, the Subject Site is only small in comparison to the LGA. The amount of easily accessible open space is far greater than much of the open space in other parts of Ku-ring-gai LGA and is considered to be an excellent provision of open space.

Although Ku-ring-gai LGA has a large portion of open space per person, the NSROC State of the Environment Report 2007 found that the demand for sporting facilities exceeded supply for most of the Northern Sydney Region. Further to the shortage in sporting facilities, the Ku-ring-gai Open Space and Recreation Study 2004 found demand for a greater diversity of recreational opportunities within existing parks and open spaces.

The proposed redevelopment of the Subject Site will not only provide a large amount of open space but also a large diversity of active and passive recreational opportunities across the site.

Passive recreational facilities on the site will include walking tracks. The tracks will provide functional, safe and secure pedestrian linkages and access points throughout the site, particularly important in a community of shift workers, aged persons and young families. At the same time, the tracks will provide opportunities for activities such as bird watching and a therapeutic environment, beneficial for patients at the hospital and residents of the aged care housing.

Active recreational facilities on the Subject Site will include playing fields, particularly for the school, parks, tennis courts and a therapeutic pool. All of these facilities and more will help to provide for a greater diversity of recreational opportunities within the LGA.

The hospital is well known for its bushland setting. The proposed redevelopment will retain this feature while at the same time, provide a large amount of varied open space which is easily accessible and considered to be an excellent amount in comparison to the majority of NSW.

13.3 Social, Economic & Environmental Sustainability

The proposed development will generate efficiencies in a range of areas that will enhance the sustainability of the site. These efficiencies have been identified in three key areas being social, economic and environmental and are discussed further below.

Social Sustainability

The first key area where the proposed redevelopment will achieve efficiencies and sustainability is through the redevelopment of the majority of the existing buildings on site. The proposed concept plan identifies an efficient approach to building layout that makes better use of existing developed areas for a range of community and employment purposes.

Over the history of the site it has been developed in an ad hoc manner to meet the growing needs of the hospital and its staff. The proposed development will be the first comprehensive redevelopment of the entire site in its history and will allow for the sustainable design of buildings and better connections between buildings to facilitate effective living, studying and working environments.

Notwithstanding the objectives to comprehensively redevelop the site, some buildings will be retained as they have been identified to have a good economic life (such as the main hospital building and community hall). Others will be retained as they have important heritage significance. All new buildings will be carefully designed to ensure they integrate well with the existing buildings and create pedestrian friendly and secure environments.

Economic Sustainability

The strengthening and extension of the existing medical cluster is also considered sustainable from an economic point of view as it allows for efficiencies in scale and joint working between associated industries. It creates a single destination point for users and allows for the sharing of resources between services. These resources may include staff, car parking, knowledge, retail and staff facilities. As a result significant built and operational cost saving may be achieved through the reduction of building footprints, reduced vehicle movements, reduced time spent travelling and through shared knowledge.

This approach accords with the State Health Plan's objectives for 2010 to provide:

"a more integrated approach to planning, funding and delivering health services to communities and regions";

as well as to:

"make the most effective use of the finite resources available and manage costs, services and infrastructure effectively to meet the State's health care needs while maintaining financial sustainability."

Environmental Sustainability

The Subject Site is located approximately 2km to the east of Thornleigh railway station and approximately 3km to the west of Turramurra railway station. The site is currently served by two bus links, the 573 bus to Turramurra and the 589 "SAN Link" bus that connects the site to Hornsby via Thornleigh and Normanhurst. These services and their relative proximity and efficiency provide a number of sustainable methods that can be utilised by staff and visitors to access the site.

The provision of on site residential accommodation for workers and students also provides environmentally sustainable benefits. Based on the most recent Journey to Work Data prepared by the Transport Data Centre for the site[39], 13% of existing on site employee's travel to work by walking. This is a considerably

[39] Journey to Work Data 2001

high proportion that is reflective of the nexus between living and working in the area. This proportion is only likely to be enhanced through the greater provision of staff housing on the Subject Site and improved pedestrian connections within and surrounding the Subject Site through redevelopment.

The development proposes to further enhance the environmental sustainability of staff travel options through the provision of car pooling options. This is a particularly appropriate option for students, small households or shift workers who only require a car at certain times of the day / evening or week. For example the same car may be shared by an evening shift worker as a student doing grocery shopping during the day.

Accordingly for the reasons given above, the proposed redevelopment is considered environmentally sustainable with respect to travel and in keeping with the objectives of the NSW Government's Metropolitan Strategy to *"plan for a housing mix near jobs, transport and services"*.

14. CONCLUSION

Given that the proposed development accords with the Director-General's Requirements in the following ways:

- provides an appropriate scale and range of social infrastructure and services to support the anticipated resident, employee and visitor population;
- has an acceptable economic impact to existing centres surrounding the site;
- improves the social vitality and character of the site and surrounding area;
- enhances and extends the existing facilities, health and community services to the benefit of the North Subregion and wider NSW;
- provides local retail facilities and services to the benefit of local residents, workers and visitors;
- generates new employment opportunities suited to a range of ages and skills;
- provides a range of housing types and affordability's;
- creates a sustainable community that reduces dependency on private car travel;
- provides improved educational opportunities from a primary through to a tertiary level for local, Sydney and NSW residents to the benefit of their social and economic well being; and
- has positive economic flow on effects to the wider economy,

the proposed Wahroonga Estate Redevelopment is supported and considered in accordance with State Government Objectives, the Draft North Subregional Strategy and the objectives of Ku-ring-gai and Hornsby Councils. It is therefore considered that the proposed development should be supported on social and economic grounds.

APPENDIX 1 - TRADE AREA DEMOGRAPHIC CHARACTERISTICS

Table 20 - Trade Area Demographics – Population Characteristics

	PTA CD1370601	PTA CD1370603	PTA CD1370609	PTA CD1370610	PTA 1370604	STA - Sth Turramurra	Sydney SD	NSW	Non-Metro NSW
Population and Dwellings									
Total Population	851	978	449	423	709	3,002	4,119,190	6,549,177	2,429,987
Total Dwellings	253	327	164	191	259	1,023	1,643,675	2,728,719	1,085,044
Occupied Private Dwellings	233	309	149	164	241	993	1,521,465	2,470,451	948,986
Occupied Private Dwellings (%)	92.0%	95.0%	91.0%	86.0%	93.0%	97.0%	92.6%	90.5%	87.5%
Average Household Size	*3.0*	*3.1*	*3.1*	*2.6*	*3.0*	*3.9*	*2.7*	*2.6*	*2.6*
Age Distribution									
0-14	18.8%	19.9%	19.4%	13.9%	22.6%	24.3%	19.5%	19.8%	19.7%
15-29	26.8%	19.0%	18.5%	17.0%	13.3%	12.4%	21.2%	19.8%	20.3%
30-44	21.9%	18.9%	21.6%	18.7%	24.0%	23.7%	23.2%	21.8%	22.3%
45-59	17.0%	24.5%	26.1%	22.2%	19.6%	17.6%	19.3%	19.9%	19.7%
60-74	10.3%	12.4%	10.9%	19.4%	15.9%	15.4%	10.6%	12.0%	11.4%
75+	5.2%	5.3%	3.6%	8.7%	4.7%	6.6%	6.1%	6.7%	6.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Median Age	*33*	*40*	*38*	*44*	*40*	*39*	*35*	*37*	*36*
Place of Birth									
Australia & Oceania	69.2%	70.6%	68.8%	64.2%	76.0%	69.7%	63.1%	71.2%	68.1%
Europe	6.8%	12.1%	12.9%	12.3%	9.4%	10.3%	8.9%	7.8%	8.2%
North Africa and Middle East	0.4%	0.3%	0.0%	0.0%	0.4%	0.2%	2.5%	1.6%	2.0%
Asia	13.4%	5.6%	5.8%	10.2%	6.5%	8.1%	10.6%	7.1%	8.4%
Americas	1.2%	1.4%	0.7%	1.2%	1.1%	0.9%	0.6%	0.5%	0.5%
Sub-Saharan Africa	1.6%	3.5%	3.8%	2.1%	2.0%	2.0%	0.7%	0.5%	0.6%
Other	7.5%	6.4%	8.0%	10.0%	4.5%	8.8%	13.7%	11.4%	12.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: ABS Census Data 2006

Table 21 - Trade Area Demographics – Dwelling and Household Types

	PTA CD1370601	PTA CD1370603	PTA CD1370609	PTA CD1370610	PTA 1370604	STA - Sth Turramurra	Sydney SD	NSW	Non-Metro NSW
Home Ownership									
Owned or Being Purchased	0.71875	91.4%	81.9%	87.1%	90.8%	91.1%	65.0%	66.7%	66.1%
Rented	0.28125	6.6%	18.1%	12.9%	7.5%	6.9%	31.3%	29.5%	30.2%
Other/Not Stated	0	2.0%	0.0%	0.0%	1.7%	2.0%	3.7%	3.8%	3.7%
Total	1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Household Structure									
Family Households	0.82142857	87.7%	87.3%	82.2%	88.9%	87.6%	72.7%	72.1%	72.3%
Lone Person Households	0.13392857	11.3%	8.5%	17.8%	11.1%	11.8%	23.1%	24.2%	23.7%
Group Households	0.04464286	1.0%	4.2%	0.0%	0.0%	0.6%	4.2%	3.7%	3.9%
Total	1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Family Type									
Couple family w. children	51.6%	64.7%	56.9%	49.6%	55.3%	57.5%	49.3%	46.2%	47.4%
Couple family w/o children	34.0%	27.9%	35.4%	41.7%	32.2%	31.3%	33.2%	36.0%	34.9%
One parent family	11.7%	6.3%	3.8%	8.7%	12.5%	10.8%	15.6%	16.1%	15.9%
Other family	2.7%	1.1%	3.8%	0.0%	0.0%	0.4%	1.9%	1.7%	1.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Dwelling Type									
Separate house	0.79910714	99.0%	95.8%	78.1%	100.0%	99.1%	63.6%	71.4%	68.4%
Townhouse	0.20089286	1.0%	2.1%	14.2%	0.0%	0.9%	11.8%	9.7%	10.5%
Flat-Unit-Apartment	0	0.0%	2.1%	7.7%	0.0%	0.0%	23.9%	17.7%	20.1%
Other dwelling	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	1.1%	0.9%
Not stated	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Total	1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: ABS Census Data 2006

Table 22 - Trade Area Demographics – Employment and Income

	PTA CD1370601	PTA CD1370603	PTA CD1370609	PTA CD1370610	PTA 1370604	STA - Sth Turramurra	Sydney SD	NSW	Non-Metro NSW
Labour Force									
Managers	12.9%	19.2%	20.8%	18.6%	15.5%	19.2%	12.5%	12.8%	12.7%
Professionals	32.9%	38.4%	42.4%	39.2%	33.7%	35.8%	22.5%	19.9%	20.9%
Community & Personal Services Workers	14.7%	6.7%	3.0%	5.1%	4.4%	5.4%	7.6%	8.1%	7.9%
Clerical and Administrative Workers	11.5%	14.7%	16.0%	16.5%	15.5%	16.9%	15.8%	14.5%	15.0%
Sales Workers	6.3%	9.4%	4.1%	0.0%	6.7%	7.3%	9.0%	9.1%	9.1%
Technicians & Trade Workers	7.8%	3.8%	7.1%	10.1%	12.4%	6.3%	12.0%	12.8%	12.5%
Machinery Operators & Drivers	1.8%	0.9%	1.1%	0.0%	1.6%	1.9%	5.7%	6.1%	5.9%
Labourers & Related Workers	5.7%	3.8%	3.3%	5.9%	3.9%	3.3%	7.6%	9.0%	8.5%
Inadequately described or N.S.	1.8%	1.1%	0.0%	2.1%	1.6%	1.1%	2.0%	1.8%	1.9%
Unemployed	4.5%	2.0%	2.2%	2.5%	4.7%	3.0%	5.3%	5.9%	5.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weekly Household Income									
$0-$349	4.0%	2.7%	2.1%	7.7%	4.6%	4.2%	12.8%	14.9%	14.1%
$400-$799	12.4%	8.0%	8.3%	10.3%	7.9%	11.4%	17.9%	21.2%	19.9%
$800-$1,399	12.9%	12.0%	11.1%	14.2%	11.7%	16.0%	20.8%	21.5%	21.3%
$1,400-$2,499	24.9%	17.3%	21.5%	25.8%	25.1%	22.7%	21.2%	19.1%	19.9%
$2,500+	32.0%	43.9%	43.1%	30.3%	34.7%	34.6%	16.0%	12.0%	13.6%
Partial income stated	13.8%	15.0%	13.9%	8.4%	13.4%	9.6%	8.6%	8.3%	8.4%
All incomes not stated	0.0%	1.3%	0.0%	3.2%	2.5%	1.5%	2.7%	2.9%	2.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Median Weekly Household Income	*191800.0%*	*259400.0%*	*253700.0%*	*177500.0%*	*208000.0%*	*191400.0%*	*$1,154*	*$1,036*	*$1,082*

Source: ABS Census Data 2006

APPENDIX 2 - SCHOOL FLOORSPACE ASSESSMENT BY STANTON DAHL & ASSOCIATES PTY LIMITED

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Project Seventh Day Adventist - Wahroonga

Date 06 June 2008

Preliminary Schedule of Student No's & Areas

	Student No's	Global Area Allowance	Area m^2
Prep – 2 streams (40 places)	40		250
Junior School			
Kinder x 4 streams at 20 students each	80	6.75	540
1 – 4 x 3 streams at 26 students each	312	6.75	2106
Middle School			
5 & 6 x 3 streams at 26 students each	156	6.75	1053
7 & 8 x 3 streams at 26 students each	156	9.25	1443
Senior College			
9 – 12 x 4 streams at 26 students each	416	9.25	3848
Sub-total	1120		8990
Prep	40		
Circulation 20%			1798
Covered play area $600m^2$ in each for junior & middle school & $400m^2$ for senior college			1600
Total	**1160**		**12,388m^2**

Staffing

Across whole of School approximately 110 FTE (this could equate to 140 or 150 staff) plus maintenance and cleaning staff

Enrolment Forecast with the move to K-12

PRIMARY SCHOOL Yrs K-4

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2024
Kindy	36	44	44	44	60	66	66	66	66	66	66	66	66	66	66
Year 1	32	36	44	44	50	68	75	75	75	75	75	75	75	75	75
Year 2	30	34	36	44	50	50	75	75	75	75	75	75	75	75	75
Year 3	29	28	30	35	40	50	50	90	90	90	90	90	90	90	90
Year 4	27	30	30	30	40	40	50	50	90	90	90	90	90	90	90
TOTAL	200	228	244	197	240	274	306	356	396	396	396	396	396	396	396
	With 5 & 6	With 5 & 6	With 5 & 6		3 streams begin				***peak						

MIDDLE SCHOOL Yrs 5 - 8

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2024
Year 5	25	28	30	30	30	50	50	60	60	90	90	90	90	90	90
Year 6	21	28	30	30	30	30	50	60	60	60	90	90	90	90	90
Year 7				58	58	58	58	90	90	90	90	120	120	120	120
Year 8					58	58	58	90	90	90	90	90	120	120	120
TOTAL				118	178	196	216	270	300	330	360	390	420	420	420
	With primary	With primary	With primary	Middle School begins				3stream Yr 7 begins				4 stream yr 7 begins	** Peak		

SENIOR SCHOOL Yrs 9 -12

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2024
Year 9						58	58	60	90	90	90	90	90	120	120
Year 10							58	60	60	90	90	90	90	90	120
Year 11								60	60	60	90	90	90	90	120
Year 12									60	60	60	90	90	90	120
TOTAL						58	116	180	270	300	330	360	360	390	480
	Announcement of high school			Stage 1 building	Relocate Primary	Stage 2 building	Stage 3 building		3stream begins						*peak

PRIMARY SCHOOL BUILDING REQUIREMENTS

Primary School if needed to relocate off current site would move into demountables until permanent buildings can be afforded.

17 primary classrooms including storerooms and wet areas.
Classrooms placed together in stages of learning (3 hubs) - Prep & Kindy. Years 1 & 2, Years 3 & 4. Hubs are to be connected or overlapped for student and staff movement

Each hub to also include: **Shared learning space** –Classrooms opening into Shared area.
Teacher workroom/ resource area
1 general storage room
Boys toilet area
Girls toilet area
Staff toilet area
1 Cleaner's storage room
Computer lab (Years 3 & 4 hub only)

Also:

1 Special Ed Room with storeroom – small classroom size.
1 ESL Room
1 Staff lunch room - lunch area with kitchenette facilities.
1 Co-ordinator office – Primary school head office.
1 Secretary office – Secretary for Primary School
1 Piano room
1 Music room

Two storey buildings to fit leafy terrain with surrounding area for use by Primary school students including seating, drinking fountains, landscaping, playground area, concrete handball/assembly area and grass oval for play.

Each classroom is to be spacious and be able to comfortably fit 30 students and necessary equipment. The design of the building needs to be eco- friendly and where possible maintenance friendly.

MIDDLE SCHOOL BUILDING REQUIREMENTS – STAGE 1

16 classrooms with storerooms to be used as homerooms and general use rooms. Included in these rooms are:

2 Science labs
2 Art rooms
1 computer lab
1 D & T - Metal work/woodwork room (temporary)
1 Home Economics room (temporary)
1 Library area (temporary)

i.e. A Year 8 home room may also be the middle school science lab.

(temporary) – equipment from these rooms will move to senior school building when complete. Students from middle school will move to these rooms for D & T subjects.

1 Special Ed room with storeroom – small classroom size.
1 ESL Room
1 Piano Room
1 Music Room
1 Staff room – for Year 7 & 8 staff. This area is for teacher desk space and work area.
1 Staff lunch room /copier room – lunch area with kitchenette facilities and copier area.
2 general storage rooms
1 Co-ordinator office – Middle school head office.
1 Secretary office – Secretary for Middle School
1 Cleaner's storage room
Boys toilet area
Girls toilet area
Staff toilet area

A two storey building to fit leafy terrain with surrounding area for use by middle school students including seating, drinking fountains, landscaping, playground area, concrete handball/assembly area and grass oval for play.

The interior would need to include wide hallways to house student lockers as well as plenty of room for student movement. Each classroom is to be spacious and be able to comfortably fit 30 students and necessary equipment. The design of the building needs to be eco- friendly and where possible maintenance friendly.

SENIOR SCHOOL BUILDING REQUIREMENTS

16 general purpose classrooms with storerooms – These classrooms will be used for Humanities, Maths, Lote, PDHPE, Music etc

Specialist rooms including:

4 Science labs
3 D & T rooms (wood & metal & IT)
3 Home Economics rooms
3 Textile rooms
2 Art rooms

D & T and Home Economics rooms will be used by middle school students.

1 Special Ed room with storeroom – small classroom size.
1 ESL Room
1 Piano Room
1 Music Room
4 Staff rooms – 1 for each floor (depaqrtment). This area is for teacher desk space and work area.
2 Staff lunch room /copier room – lunch area with kitchenette facilities and copier area. (1 for each building)
2 general storage rooms
1 Co-ordinator office – Senior school head office.
1 Secretary office – Secretary for Senior School
2 Cleaner's storage room (1 for each building)
2 Boys toilet areas (1 for each building)
2 Girls toilet areas (1 for each building)
2 Staff toilet areas (1 for each building)

Two separate buildings with the first building being the specialist rooms. Building would need to be close in proximity to each other to provide easy access for students and staff.

Two storey buildings to fit leafy terrain with surrounding area for use by Senior school students including seating, drinking fountains, landscaping, playground area, concrete handball/assembly area and grass oval for play.

The interior would need to include wide hallways to house student lockers as well as plenty of room for student movement. Each classroom is to be spacious and be able to comfortably fit 30 students and necessary equipment. D & T rooms will need to be large enough to fit all required equipment with safety areas between each, enough for 20 students. The design of the building needs to be eco- friendly and where possible maintenance friendly.

ADMIN BUILDING AND RESOURCE CENTRE

ADMIN area would include:

Principal office
Interview Room
Secretary Office
Bursar Office
Enrolment/Marketing Office
Reception Area
Sick Bay
Fire Proof Storage Room
Copier Workroom
Store room
Cleaner's Room
Chaplain Office
Band Room
Uniform Shop
Canteen
Sports Room
Staff toilets

RESOURCE CENTRE

Library Centre – including study areas, storeroom and office area.
2 Multi media rooms – Conference style rooms connected with moveable wall.
2 Technology Labs
1 IT Office

Resource Centre rooms can be used for hire to the local community.

Two story complex with Admin on ground level and Resource Centre on top level to fit leafy terrain. This building is central to all three school areas.

APPENDIX 3 – HILL PDA PRIMARY AND SECONDARY SCHOOL FLOORSPACE REQUIREMENTS

The Table below provides a detailed breakdown of Hill PDA's floorspace calculation's for the proposed relocated Primary School facilities in accordance with the Primary Schools Facilities.

Table 23 - Primary School Floorspace Requirements in Detail

Facility Name	Floor Area per unit (sqm)	Units	Total Floor Area (sqm)
Home Base	60	24	1,440
H.B. Store	9	24	216
Withdrawal - Type 1	3	24	72
Practical Activities Area - Size 1	17	24	408
Library Main Area	163	1	163
Office/Workroom (Library)	24	1	24
Communications Room (Library)	8	1	8
KLA Resource Store (Library)	15	1	15
Staff Toilet (Library)	5	1	5
Special Programs Room	32	1	32
Store (Special Programs)	6	2	12
Community Hall - Communal Space	190	1	190
Chair Store - (Community Hall)	9	1	9
PE Store (Community Hall)	13	1	13
Sports Store (Community Hall)	13	1	13
Performance Store (Community Hall)	9	1	9
Kiln Room	6	1	6
Learning Support Facilities - Entry Vestibule	13	1	13
Principal (Learning Support Facilities)	17	1	17
Deputy Principal (Learning Support Facilities)	13	1	13
Interview	13	1	13
Interview/Office	17	1	17
Clerical/Printing	53	1	53
Security Store	14	1	14
Sick Bay	9	1	9
Staff Room	65	1	65
Staff Toilet (Library)	5	3	15
Access Shower/Toilet	6	1	6
Staff Room Annex	28	1	28
Access Shower/Toilet/Change	20	12	240
Laundry	6	1	6
Canteen	27	1	27
Office Store (canteen)	9	1	9
Servery Covered Area (Canteen)	18	1	18
Garden Store	13	1	13
Bulk Store	16	1	16
Cleaning Supplies Store	7	1	7
Cleaning Distributed Store	3	5	15
Main Switchboard cupboard	2	1	2
Distribution Board Cupboard	1	1	1
Total			**3,252**

Source: Primary Schools Facilities Standard, 2007

The Table below provides a detailed breakdown of Hill PDA's floorspace calculation's for the proposed Secondary School facilities in accordance with the Secondary Schools Facilities Standard 2007.

Table 24 - Secondary School Floorspace Requirements in Detail

Facility Name	Floor Area per unit (sqm)	Units	Total Floor Area (sqm)
General Learning Space - Type 1	60	12	720
General Learning Space - Type 2	65	4	260
Shared Learning Space	50	4	200
Seminar - Type 1	25	4	100
GLS Store - Size 1	20	4	80
Practical Activity Area	7	4	28
General Learning Space - Type 1	60	3	180
General Learning Space - Type 2	65	1	65
General Learning Space - Type 3	60	2	120
Science Laboratory - Size 1	100	1	100
Seminar - Type 2	20	1	20
Preparation - Science - Size 2	30	1	30
Apparatus Store	15	1	15
Apparatus Storage	10	1	10
Chemical Store	12	1	12
Botany/Zoology	16	1	16
General Learning Space - Type 4	60	1	60
General Learning Space - Type 5	60	1	60
Visual Arts Workshop	100	1	100
Visual Arts Store	20	1	20
Project Store - Type 3	25	1	25
Dark Room	28	1	28
General Learning Space - Type 1	60	2	120
Performance Workshop	100	1	100
Performance Store - Size 1	20	1	20
Practice/Seminar - Size 1	20	1	20
General Learning Space - Type 1	60	1	60
Fitness Laboratory	100	1	100
Seminar - Type 2	20	1	20
Fitness Store - Size 1	20	1	20
Change	22	2	44
General Learning Space - Type 6	60	1	60
General Learning Space - Type 7	60	1	60
Kitchen Type 1	100	1	100
Seminar - Type 2	20	1	20
Materials Store - Type 1	15	1	15
General Learning Space - Type 8	60	1	60
General Learning Space - Type 9	60	1	60
Materials Workshop - Type 2	120	1	120
Materials Store - Type 2 - Size 1	35	1	35
Project Store - Type 1	45	1	45
Total			**3,362**

Source: Secondary Schools Facilities Standard, 2007

The Table below provides a detailed breakdown of Hill PDA's floorspace calculation's for potential additional floorspace for the proposed Primary and Secondary School facilities.

Table 25 - Optional Extra Floorspace in Detail

Facility Name	Floor Area per unit (sqm)	Units	Total Floor Area (sqm)	Facility Name	Floor Area per unit (sqm)	Units	Total Floor Area (sqm)
MULTI MEDIA LEARNING UNIT				Change	22	2	44
General Learning Space - Type 1	60	1	60	Staff Toilet	5	1	5
Multi Media Workshop	100	1	100	Staff Shower	3	1	3
Multi Media Store	20	1	20	Access Shower/Toilet	6	1	6
Multi Media Studio	10	1	10	GAMES			
LECTURE LEARNING UNIT				Games Court	1,292	1	1,292
Lecture Space	100	1	100	ADMINISTRATION			
Store	10	1	10	Public Reception - Size 2	12	1	12
MATERIALS LEARNING UNIT - TYPE 3				Student Reception - Size 2	12	1	12
General Learning Space - Type 5	60	1	60	Principal	20	1	20
General Learning Space - Type 9	60	1	60	Deputy Principal	13	2	26
Materials Workshop - Type 3	120	1	120	Interview / Office - Type 1	13	1	13
Project Store - Type 2	20	1	20	Interview / Meeting	13	2	26
Visual Arts Store	20	1	20	Administration - Clerical - Size 3	25	1	25
MATERIALS LEARNING UNIT - TYPE 4				Administration - Executive - Size 3	8	1	8
General Learning Space - Type 6	60	1	60	Store	13	1	13
General Learning Space - Type 7	60	1	60	Clinic - Boys	13	1	13
Kitchen - Type 2	100	1	100	Clinic - Girls	13	1	13
Seminar - Type 2	20	1	20	Visitor's Room	13	1	13
Materials Store - Type 1	15	1	15	Tea room	5	1	5
Preparation - Materials - Size 1	20	1	20	Utility Space - Size 2	10	1	10
Laundry	9	1	9	Staff Toilet	5	2	10
Pantry - Size 2	20	1	20	Access Shower/Toilet	6	1	6
LIBRARY (to be added to Primary School Library)				STAFF			
Main Entry - Size 2	20	1	20	Staff Study - Size 1	200	1	200
Main Area - Size 4	140	1	140	Staff Lounge - Size 4	61	1	61
Printing/Photocopying	5	1	5	Interview / Meeting	13	2	26
Seminar - Type 3	13	2	26	Preparation / Printing - Size 2	30	1	30
Library Administration - Size 3	41	1	41	Staff Toilet	5	2	10
Computer Learning Space	65	1	65	Access Shower/Toilet	6	1	6
Computer Store	10	1	10	STUDENT SERVICES			
Careers Advisor's Office	13	1	13	Toilets - Boys / Girls	130	1	130
System Administrator's Office	13	1	13	Drinking Facilities	12	1	12
Communication Room	10	1	10	CANTEEN			
Staff Toilet	5	1	5	Canteen - Size 3	32	1	32
Access Toilet	6	1	6	Office / Store - Size 3	10	1	10
MOVEMENT COMPLEX				Vending Machines	2	1	2
Gymnasium - Size 2	482	1	482	STORAGE			
Sport Equipment Store	25	1	25	Archive Store - Size 2	15	1	15
Large Equipment Store	25	1	25	Garden Store	15	1	15
Chair Store - Size 2	22	1	22	Bulk Store	13	1	13
First Aid	13	1	13	Cleaning Supplies Store	7	1	7
Shower	15	2	30	**Total**			**3,979**

Source: Secondary Schools Facilities Standard, 2007

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This report and its attached appendices are based on estimates, assumptions and information sourced and referenced by Hill PDA and its sub consultants. We present these estimates and assumptions as a basis for the reader's interpretation and analysis. With respect to forecasts we do not present them as results that will actually be achieved. We rely upon the interpretation of the reader to judge for themselves the likelihood of whether these projections can be achieved or not.

As is customary, in a report of this nature, while all possible care has been taken by the authors to prepare the attached financial models from the best information available at the time of writing, no responsibility can be undertaken for errors or inaccuracies that may have occurred both with the programming or the financial projections and their assumptions.
This report does not constitute a valuation of any property or interest in property. In preparing this report we have relied upon information concerning the subject property and/or proposed development provided by the client and we have not independently verified this information excepted where noted in this report.