



# Macquarie Centre Redevelopment Stage 1 Concept DA Social Impact Assessment

Prepared by Urbis on behalf of AMP Capital

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**URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:**

Director	Susan Rudland
Associate Director	Daniel Collins
Consultant	Katie Inglis
Job Code	SSP29215
Report Number	Final

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# Executive Summary

This Social Impact Assessment (SIA) has been prepared for AMP Capital, to inform the Stage 1 Concept Design Development Application (DA) for the redevelopment of the Macquarie Centre. AMP has requested Urbis prepared a SIA to consider the potential social impacts and benefits associated with the project.

This SIA is a high level assessment based on the information available at the time of the report. The assessment has not been informed by stakeholder or community consultation and it is anticipated that this will occur at a later stage.

The DA seeks to establish the building envelopes, design parameters and distribution of floor space for future development on the site. The proposal includes provision of an active frontage and new pedestrian entries along Herring Road with new retail, commercial and community uses, building envelopes for four mixed use towers, creation of “Station Plaza” between the train station and shopping centre, basement and rooftop car parking for a maximum of 2,175 car parking spaces, and new vehicle and pedestrian access points.

The key social benefits potentially arising from the development include:

- Development of new retailing, commercial, food and community facilities and services on site, including a space dedicated for a community facility, which will improve and support the amenity of the Macquarie Centre for existing and future residents, in close proximity to public transport. The size and function of the dedicated community facility area will be considered in consultation with Council and refined at a later stage however it is likely to provide a valuable community meeting and service function
- Improved street activation and pedestrian permeability and accessibility on and around the site. New public domain and plaza works will provide additional community spaces and places for social interaction as well as support active and passive surveillance across the site and surrounding land uses
- Additional supply of accommodation options within the precinct, in close proximity to public transport options and existing services and facilities
- The proposal is anticipated to generate approximately 1,717 additional jobs and provide increased job opportunities during and after construction through retailing and commercial floor space, and provision of a community facility
- The proposed development aligns with the State Government’s vision for the redevelopment of the Macquarie Park Corridor and will support the vision for the precinct.

The key social impacts potentially arising from the development include:

- Potential increased demand for existing public transport services, particularly with regards to bus services and capacity of the existing bus interchange
- Potential increased private vehicle traffic which could impact existing residents, workers and students on and around the subject site, however overall the proximity of the bus and train stations is likely to minimise traffic impacts to and from the site
- The ability of community facilities and services including schools, open space and sports and recreation facilities, to meet any increased demand associated with the increasing population
- Disruptions to service provision, existing access routes, existing workers, shoppers and local residents caused during construction processes.

While a development of this scale is likely to result in disturbance during the construction and operation phases (e.g. generation of additional traffic etc.) it is anticipated that any potential impacts will be offset by the development of amenities within the centre, including community facilities, retail services, civic plazas and improvements to the streetscape and transport facilities.

Based on the information available, it is likely that a development of such scale can result in changes to social outcomes in the area and if appropriate mitigation and management measures are provided,

including transport improvement works and the provision of new social/community infrastructure, this development has the capacity to deliver far reaching benefits to the community.

# Introduction

## 1.1 BACKGROUND

This report has been prepared on behalf of AMP Capital (AMPC) for a Stage 1 Development Application (DA) for the mixed use redevelopment of Macquarie Shopping Centre (Macquarie Centre). The Stages 1 DA seeks concept approval for the redevelopment of Macquarie Centre by establishing:

- Building envelopes and design parameters for future development on the site, including the proposed uses within the podium and tower components
- The distribution of floor space across the site
- Future pedestrian and vehicle connections to and within the site.

This report supports the proposed future redevelopment of the Macquarie Centre in relation to Social Impact Assessment.

## 1.2 THIS REPORT

This report presents the preliminary research on the potential social benefits and impacts that may occur were the site to be rezoned. The assessment has been informed by a review of:

- Preliminary development plans
- Policy context
- Demographic profile
- Population projections
- Social infrastructure and potentially sensitive receptors

AMPC is in the early stages of discussions with the City of Ryde Council to determine potential community facilities to be provided at the Macquarie Centre.

The SIA presents a high level summary of the key impacts and benefits that such a large mixed use, high density project, could have in this location. The assessment is preliminary and based on the assumption that a more refined assessment will be undertaken at a later stage in the development process.

## 2 Method

A SIA is a specialist study undertaken to identify and analyse key social impacts associated with a particular development proposal. It involves a detailed and independent study to outline socially-related impacts, identify mitigation measures, if any, and provide recommendations in accordance with professional standards and statutory obligations.

Ideally, a SIA is undertaken with reference to a locally produced set of guidelines, or policy, however the City of Ryde Council does not currently provide any guidance documents relating to Social Impacts Assessment or planning for the LGA. In the absence of any locally based guidance, this SIA has been prepared with reference to the *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects* (2015).

### 2.1 SIA PRINCIPLES

The *International Principles for Social Impact Assessment* define a SIA as:

*“the process of analysis, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions”*

The Guidelines define social impacts as a change to one of more of the following:

- Peoples way of life – how they live, work, play and interact with one another on a day-to-day basis
- Peoples culture – their shared beliefs, customs, values and language or dialect
- The community – its cohesion and stability, character and services and facilities
- The political system – decision making and peoples participation
- The environment – including the quality of the air, water, food, risk, dust, noise, sanitation and physical safety
- Health and wellbeing – Physical, mental, social and spiritual wellbeing
- Personal and property rights – personal disadvantage and if people are economically affected
- Fears and aspirations – perceptions of safety, aspirations for the future.

### 2.2 METHODOLOGY

A comprehensive SIA involves the following key steps:

- Step 1 – Scoping:
  - Review of development proposal plans
  - Document review – documents relating to the proposed development, including development plans and technical reports
  - In-depth review of BOSCAR crime data
- Step 2 – Community facilities audit (to be informed by Community Needs Assessment in this instance)
- Step 3 – Review of potential social impacts and identification of mitigation measures
  - Review of the findings of technical studies associated with the proposed development



- Assessment of social impacts in accordance with criteria outlined above
- Step 4 - Assessment and Recommendations
  - Recommendations to inform the future development and management of the development within its local context
- Step 5 – Reporting.

### 2.2.1 SIA ASSESSMENT CRITERIA

The significance of potential social impacts and benefits of the project have been assessed by comparing the level of impact (low, moderate and high) against the likelihood of the impact occurring. Criteria used in the assessment includes:

- Duration and frequency – whether positive benefits or negative impacts will be short term, medium-term or long-term, and if the frequency of the event is one-off, intermittent or chronic. The duration takes into account the length of the project and also considers potentially longer term impacts which may continue to occur after the project is over
- Geographical extent or occurrence – whether positive benefits or negative impacts will impact many people or relatively few (i.e. only a small number of individuals or households)
- Sensitivity/ Ability to Adapt – the extent to which resources or receptors are able to adapt to the change and maintain pre-impact livelihood assets
- Social Outcome – the consequence of the impact in terms of its scope and scale, whether the project will impact a large number of individuals or communities, or communities with high levels of disadvantage (Department of Sustainability, 2006).

Table 1 below outlines a potential matrix of criteria for understanding the level and likelihood of particular impacts. Impacts identified will be assessed and evaluated for the level of significance.

TABLE 1 – ASSESSMENT CRITERIA

IMPACT	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES
Low	<ul style="list-style-type: none"> <li>▪ Short-term</li> <li>▪ &lt;1 year</li> <li>▪ Low frequency</li> </ul>	Individual/ Household	Capacity to adapt to the changes with relative ease and maintain livelihoods, culture, and quality of life.  Will have access to resources, infrastructure and services.	Inconvenience but with no consequence on long-term livelihoods, culture, quality of life, or adverse impact on access to resources, infrastructure and/or services.
Medium	<ul style="list-style-type: none"> <li>▪ Medium-term</li> <li>▪ 1-5 years</li> <li>▪ Medium or intermittent frequency</li> </ul>	Small number of households	Capacity to adapt to change, with some difficulty, and maintain pre-impact livelihoods, culture quality of life. Continued access to resources, infrastructure and services, with a degree of support	Primary and secondary impacts on livelihoods, culture, quality of life,  Restricted access to resources infrastructure and/or services
High	<ul style="list-style-type: none"> <li>▪ Long-term/ Irreversible</li> <li>▪ &gt; 5 years</li> <li>▪ Constant frequency</li> </ul>	Large part of/ whole community (defined as wider catchment or beyond)	Limited capacity to adapt to changes and continue to maintain pre-impact livelihoods, culture, and quality of life. Restricted access to resources, infrastructure and /or services.	Widespread and diverse primary and secondary impacts likely to be impossible to reverse or compensate for.

The likelihood of unplanned or accidental events will also be considered. This element of assessment provides an understanding of how important potential impacts are and what level of mitigation, if any, may be required to reduce the likelihood of particular impacts occurring (Department of Sustainability, 2006) .

The significance of potential impacts will be evaluated using the following:

- Not Significant – Something that, after assessment, was found not to result in a significant impact to potential receptors
- Minor – An impact does not require special conditions to be attached to the consent; which can be controlled by adoption of normal good practice; which should be monitored to ensure mitigation is working properly and the impact is not worse than predicted
- Moderate – An effect that warrants being brought to the attention of decision-makers and deserves careful attention; which is likely to require conditions to ensure mitigation is undertaken; which may require the project team to reduce the impact to as low as reasonably practicable
- Major – An effect that warrants being given considerable weight in the decision; conditions should be attached and residual impact must be compensated for if possible
- Critical – These effects are in effect “unacceptable” and we should find ways to avoid them.

## 3 Site Context

### 3.1 REGIONAL CONTEXT

The proposed development site is located within the Ryde Local Government Area (LGA) and is located approximately 14km north west of the Sydney Central Business District (CBD). Ryde LGA falls within the Northern subregion within *A Plan for Growing Sydney*.

Macquarie Park is identified as a Strategic Centre within *A Plan for Growing Sydney*. The areas along the Northern and North Shore Railway are identified as an Urban Renewal Corridor with Epping, Macquarie University and North Ryde Stations identified as Priority Precincts.

The subject site is located within the Macquarie Park Corridor, as defined by City of Ryde Development Control Plan 2014, which is bound by the M2 Motorway to the north, Epping Road to the south, Delhi Road to the south east and Gulloden Road to the north east.

The region is anticipated to experience significant change with the release of the Macquarie Park Priority Precinct, Macquarie University Station Precinct, North Ryde Station Precinct, and Ivanhoe Estate and Lachlan's Line development areas recently released. Further details on these precincts are available within Appendix A.

### 3.2 THE SITE AND IMMEDIATE SURROUNDS

Macquarie Centre is approximately 11.25 hectares in area and is located at the corner of Waterloo Road, Herring Road and Talavera Road, Macquarie Park. The site is legally described as Lot 100 in DP 1190494.

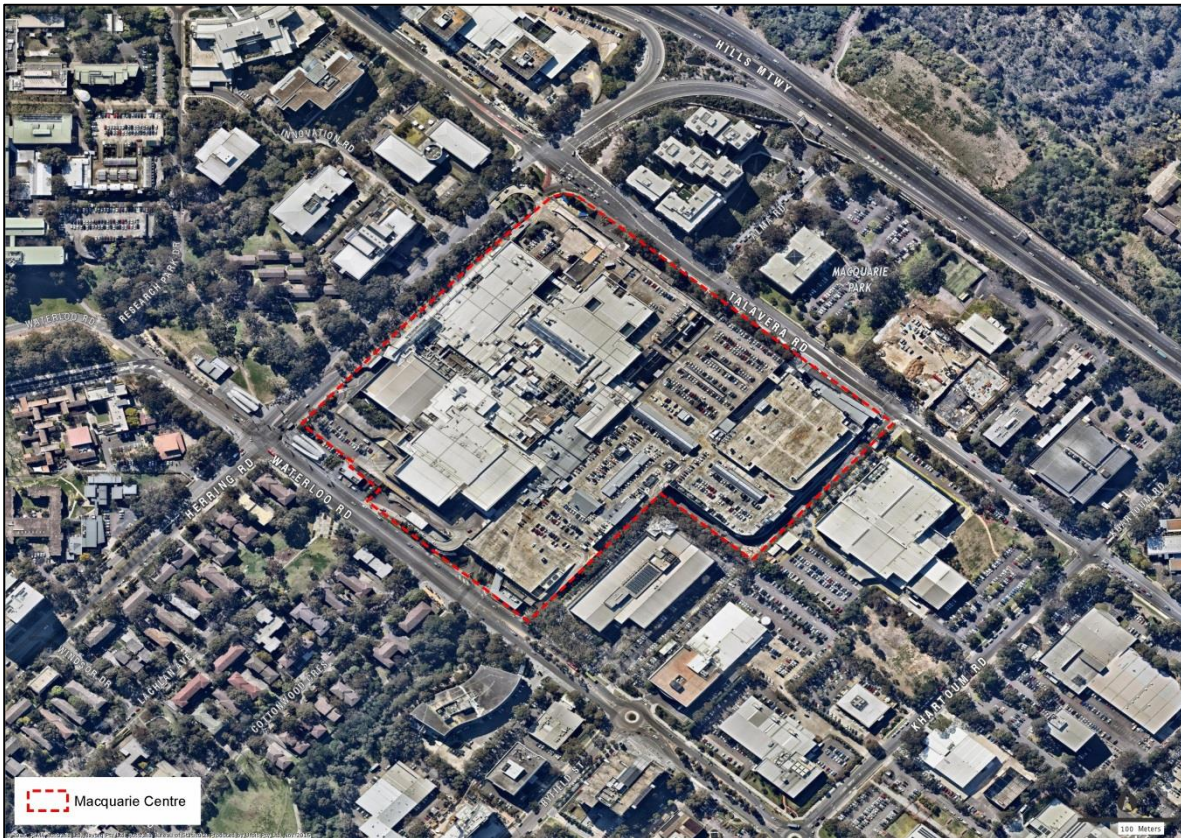
The site is bound by Herring Road to the north west, Talavera Road to the north east, commercial uses to the south east and Waterloo Road to the south west. Located within the Macquarie Park Corridor, the site has excellent access to public transport, situated immediately adjacent the Macquarie University Railway Station and the Herring Road Bus Station. Located between the M2 Hills Motorway and Epping Road, the site also enjoys excellent vehicle connectivity.

Macquarie Centre was originally constructed in 1981. The centre has undergone various stages of redevelopment and extensions. A major refurbishment occurred in 2000, 2003 and most recently in 2014, creating a fresh food court, David Jones expansion, addition of second full line supermarket (Coles), a value supermarket (Aldi), with new speciality food and convenience stores. Today Macquarie Centre is the largest shopping centre in NSW and the 8th largest shopping centre in Australia and includes a wide range of retail, entertainment and service offerings.

The shopping centre currently spans five levels accommodating 368 stores, including major retailers such as David Jones, Myer, Target, Big W, Aldi, Coles and Woolworths. The centre also houses a large number of mini major international retail stores including H&M, Zara, Uniqlo, Forever 21, GAP and Sephora. A number of entertainment offerings exist in the centre including a cinema complex and ice skating rink. The site currently has a gross floor area of 170,850m<sup>2</sup> and accommodates 4,755 car spaces.

Macquarie University and Macquarie University Hospital are located to the north, Macquarie University Colleges to the west, Meriton Serviced Apartments (North Ryde) to the north east, medium density residential dwellings to the south east and commercial premises to the south, south west and east. Nearby open space includes the Lane Cove National Park to the north, a number of nearby neighbourhood parks to the north and south east, including Elouera Reserve, Quantong Reserve, and Fontenoy Park. The site also benefits from close proximity to the Macquarie University which provides a wide range of publically accessible sports, recreation and leisure facilities.

FIGURE 1 – SUBJECT SITE



### 3.3 DEVELOPMENT PROPOSAL

The Stage 1 DA seeks concept approval for the mixed use redevelopment of Macquarie Centre under s.83B of the *Environmental Planning & Assessment Act 1979*. The first stage will seek concept approval only for:

- Mixed use development to enable a range of land uses. The final mix of land uses will be subject to and determined under the relevant Stage 2 detailed DAs
- Building envelopes for the proposed basement, expanded podium and tower forms
- The four tower envelopes fronting Herring Road will have maximum heights ranging from 90m and 120m above existing ground level. The building envelope for Tower 1 is of sufficient dimensions to accommodate alternate tower forms
- Maximum additional gross floor area (GFA) of 148,000sqm
- The new retail podium along Herring Road will replace the existing structure. This will provide an active frontage with separate pedestrian entries to Herring Road and the creation of a vibrant atrium space
- The creation of 'Station Plaza' between the train station and shopping centre, framed by active uses and a landmark building known as the "Shard"
- The building envelopes for the proposed basement and upper levels of the expanded podium will accommodate a maximum of 2,175 additional car spaces
- New vehicle and pedestrian access points.

The Stage 1 DA does not seek approval for

- Any works, including demolition, excavation, construction and public domain improvements
- The final arrangement of land uses
- Layout, mix and number of residential units
- A specific number of car spaces (as this will be determined having regard to the final mix of land uses)
- The design of the building exteriors including facades and roofs
- Public domain and landscape design.

Such approvals will be sought via subsequent development applications following receipt of development consent for the Stage 1 DA.

The overview of the indicative mix of land uses within the proposed building envelopes is identified in Table 2 below.

TABLE 2 – OVERVIEW OF INDICATIVE MIX OF LAND USES

COMPONENT	PROPOSED
Basement	<ul style="list-style-type: none"> <li>▪ Loading docks, car parking and associated vehicle circulation, waste rooms, utilities, future connection to existing train station (subject to consent from RailCorp) and retail premises.</li> </ul>
Podium	<ul style="list-style-type: none"> <li>▪ Retail premises, commercial premises, food and drink premises, entertainment facilities, recreation facilities (indoor), recreation area, car parking and associated vehicle circulation, community uses (subject to further discussions with Council) and communal open space associated with the towers.</li> </ul>
Tower 1	<ul style="list-style-type: none"> <li>▪ Mixed use development comprising commercial premises and/or residential accommodation and/or serviced apartments above a retail podium.</li> </ul>
Towers 2, 3 and 4	<ul style="list-style-type: none"> <li>▪ Mixed use development comprising residential accommodation and/or serviced apartments above a retail podium.</li> </ul>

FIGURE 2 – DEVELOPMENT PROPOSAL



## 4 Policy Context

A review of key local government policies, plans and studies was undertaken to inform this SIA. The key policies and documents reviewed include:

- A Plan for Growing Sydney (NSW Planning and Environment, 2014)
- City of Ryde 2025 Community Strategic Plan (City of Ryde Council, 2013)
- City of Ryde Four Year Delivery Plan 2015-2019 (City of Ryde Council, 2015)
- City of Ryde Quality of Life Indicators Report (City of Ryde Council, 2012)
- City of Ryde Community Facilities: Future Directions (City of Ryde Council, 2010)
- City of Ryde Draft Social and Cultural Infrastructure Framework (City of Ryde Council, 2014)
- City of Ryde Integrated Open Space Plan (City of Ryde Council, 2012)
- Herring Road Urban Activation Precinct Planning Report (NSW Department of Planning, 2014)
- Council Submission to the Department of Planning on the Herring Road UAP (City of Ryde, 2014).

The following provides a summary of the findings of this review:

- Macquarie Park is a strategic centre within the Global Economic Corridor with significant urban regeneration projects located within and around corridor. Macquarie Park is identified as a place for long-term employment growth, concentration of additional mix-used development and residential development within walking distance of train stations
- Council has identified an under provision, or additional demand, for flexible, multi-purpose and co-located community centre facilities which can support a range of community needs, services for young people and Culturally and Linguistically Diverse (CALD) residents, purpose built iconic, cultural and arts facilities
- Council has identified that development of a multi-purpose community facility as a key priority for the Macquarie Centre site. This facility could include a community lounge, hall, gallery, or local library, and may provide services for groups such as children, young people, older people, people with a disability and culturally and linguistically diverse communities
- Neither childcare nor seniors services are identified as a key area of need.
- Pedestrian movement within the Macquarie Park Corridor is very low when compared with successful urban centres. Movement levels are concentrated along Herring Road from Epping Road past the Waterloo Road intersection nearly as far as Talavera Road, and also between Macquarie Centre and Macquarie University
- Macquarie Park currently performs as a car dependent site. Spatial accessibility analysis shows high vehicle route choice for the arterial network and low pedestrian route choice, because the very large blocks produce very long walking distances to facilities
- Macquarie Park has a larger office market than North Sydney and Parramatta and has the capacity to grow to two million square metres. Currently there are approximately 45,000 employees working in Macquarie Park and it is expected that that number will double in the next 20 years.

## 5 Community Profile

A community profile has been developed for this SIA to illustrate the demographic characteristics of the communities potentially impacted by the proposed development. This section includes an overview of the demographic profile and crime statistics in the local and broader study areas.

### 5.1 DEMOGRAPHIC PROFILE

In 2011 the estimated resident population of Ryde LGA was 108,712 with a population density of 26.6 persons per hectare. The suburb of Macquarie Park had an estimated resident population of only 6,149 with a population density of 9.1 persons per hectare. The population of Macquarie Park accounts for only 5.7% of the total population of Ryde. Ryde LGA and Macquarie Park however have a much higher population density than Sydney GCCSA (3.6 persons per hectare).

The lower population density of Macquarie Park is a result of the nature of the precinct comprising predominantly commercial, health and education uses. There is a small portion of residential dwellings at the west of the suburb, along Epping Road, Herring Road and Waterloo Road, to the east of the suburb along the M2 Motorway, and a number of colleges associated with Macquarie University to the north of Herring Road.

The following demographic analysis is based on a Primary Study Area (PSA), using a 1km catchment from the subject site, and Secondary Study Area (SSA), using a 2km catchment from the subject site. The Ryde LGA and the Sydney Greater Capital City Statistical Area (Sydney GCCSA) are also used for comparison. The full demographic profile is available in Appendix B.

The key demographic trends for the nominated study areas are as follows:

- There is a significantly high proportion of residents identified in the tertiary education, independence and young workforce category (18-34 years of age) in the PSA (43%) and SSA (33%) compared to Ryde LGA (26%) and the Sydney GCCSA (22%)
- There are a smaller number of primary school and early high school aged children in the PSA (4%) and SSA (8%) than in the Ryde LGA (10%) and Sydney GCCSA (12%). This is consistent with the dominance of lone person households in the local area (40%), which is high compared to the SSA (30%), Ryde LGA (25%) and Sydney GCCSA (23%)
- Almost two thirds of all residents in the PSA (62%) and more than half of all residents in the SSA (52%) were born overseas, which is significantly higher compared to the Ryde LGA (44%) and Sydney GCCSA (36%). It is anticipated that this is due to the high number of international students or young workers who reside in the area
- There is high linguistic diversity in the PSA and SSA, evident in the higher proportion of languages other than English spoken at home when compared to Ryde LGA and Sydney GCCSA. Chinese is the most popular language spoken at home with nearly one quarter of all residents in the PSA (23%) and SSA (22%) speaking Chinese (total) at home, compared to 17% in the Ryde LGA and 7% across the Sydney GCCSA
- Non-family households are the prevalent family structure in the PSA (51%), which is high compared to the SSA (39%), Ryde LGA (31%) and Sydney GCCSA (27%). Almost half of the population of the PSA (49%) is made up of couple families with no children, which is high compared to the SSA (38%), Ryde LGA (36%) and Sydney GCCSA (34%)
- There is very little dwelling diversity within the PSA with 88% of the population of living in flats, units or apartments which are very high compared to the SSA (39%), Ryde LGA (32%) and Sydney GCCSA (26%). There is a relatively high proportion of public renters living in the PSA, consistent with the high provision of social housing in the area
- The existing population of the PSA and SSA are highly educated with more than four fifths of the population of the PSA (84%) completed schooling until Year 12, which is higher compared to the SSA



(78%), the Ryde LGA (72%) and the Sydney GCCSA (62%), and more than a third of the current population attained a Bachelor degree or higher (41% for the PSA and 38% for the SSA)

- The local area has a higher unemployment rate than the Ryde LGA and Sydney GCCSA. This may be related to the presence of social housing and large number of students in the local area.
- More than four fifths of the population in the PSA (85%) and SSA (84%) is employed in white collar occupations, which is slightly higher than the Ryde LGA (80%) and Sydney GCCSA (75%).
- The PSA experiences a lower average household income and a higher proportion of very low income earners than the other areas.
- In 2011, there were approximately 2,389 occupied private dwellings in Macquarie Park (State Suburb). Macquarie Park has a housing occupancy of 2 persons per household. This is reflective of the existing of more flats, units and apartments.

The analysis suggests that the demographic profile of the local population is influenced by the large number of students and young workers who attend or work at the Macquarie University or Macquarie University Hospital. The population is characterised by a high proportion of young residents (between the ages of 20-34 years), residents born overseas or identifying as CALD, residents living as singles or couple households with few families. The residents are predominantly renters of flat, unit and apartment dwellings.

## 5.2 POPULATION PROJECTIONS

Population forecasts for the local area have been based on data obtained from Forecast.id. Population forecasts for the proposed development have been based on the high case development scenario for 910 apartments.

Table 3 below presents population projections and age breakdown for the population of the City of Ryde LGA. The total population of Ryde LGA is projected to grow by 25% by 2031 (27,135 people). Table 3 below shows that the growth rate is expected to remain relatively stable over the 20 year period, with the population growing at approximately 1% per year. This is a similar growth rate to NSW, which is expected to grow at 1.2% per year over the next 20 years.

TABLE 3 – POPULATION PROJECTIONS AND AGE BREAKDOWN 2011-2031

	YEAR					% CHANGE 2011-2031
	2011	2016	2021	2026	2031	
Aged 0-4	6,628	6,964	7,489	7,901	8,170	23%
Aged 5-9	5,642	6,147	6,546	6,949	7,227	28%
Aged 10-14	5,285	5,531	5,945	6,263	6,540	24%
Aged 15-19	5,907	6,388	6,672	7,035	7,324	24%
Aged 20-24	9,883	9,523	10,026	10,465	10,895	10%
Aged 25-29	9,553	10,470	10,564	11,137	11,567	21%
Aged 30-34	8,829	9,906	10,706	11,108	11,563	31%
Aged 35-39	8,297	8,795	9,822	10,521	10,869	31%
Aged 40-44	7,509	8,002	8,566	9,444	9,983	33%
Aged 45-49	7,436	7,277	7,774	8,277	8,945	20%
Aged 50-55	6,857	7,100	6,999	7,429	7,828	14%
Aged 55-59	5,991	6,371	6,615	6,569	6,922	16%

	YEAR					% CHANGE 2011-2031
	2011	2016	2021	2026	2031	
Aged 60-64	5,364	5,476	5,839	6,083	6,074	13%
Aged 65-69	3,902	4,893	5,069	5,405	5,633	44%
Aged 70-74	3,330	3,709	4,554	4,741	5,047	52%
Aged 75-79	2,888	3,111	3,460	4,117	4,296	49%
Aged 80-84	2,564	2,600	2,818	3,083	3,509	37%
Aged 85+	2,508	2,735	2,888	3,010	3,114	24%
<b>Total</b>	<b>108,373</b>	<b>114,996</b>	<b>122,354</b>	<b>129,538</b>	<b>135,508</b>	<b>25%</b>
<b>Change</b>	-	<b>6,623</b>	<b>7,358</b>	<b>7,184</b>	<b>5,970</b>	-
<b>Growth Rate (%)</b>	-	<b>6%</b>	<b>6%</b>	<b>5%</b>	<b>4%</b>	-

Source: Forecast.id, 2014

Forecast.id estimate that the population of Macquarie Park will increase from 7,471 people in 2015 to 10,601 people in 2031 (+41.9%). In addition it is anticipated that the number of dwellings will increase to 5,007 dwellings in 2031.

### 5.2.1 INCOMING POPULATION PROFILE

The following provides an overview of the likely characteristics of the incoming population, based on the demographic profile of the existing population, population projections for the area, and an understanding of the type and size of dwelling being developed. This indicates that the incoming population may be characterised by:

- Young adults aged between 20 to 30 years. Predominantly professionals Predominantly professionals however there may be some student accommodation
- A high proportion of lone person households, and small proportion of family households. Singles, couples, group households and small proportion of couples with children (within two or three bedroom dwellings). Some tertiary students living in group households
- 'Empty nesters' maybe be attracted to downsize to larger apartment units (3 beds)
- There may also be demand from young professionals migrating from overseas and an increase in the number of people reaching retirement age
- A diverse population with potential for overseas residents and CALD residents.

The housing occupancy rate for one, two and three bedroom dwellings within residential flat buildings with four or more stories in Macquarie Park is 1.9 persons per dwelling. Therefore a maximum of 910 units at the site could accommodate up to 1,729 residents.

The housing occupancy rate for the whole Ryde LGA is 2.6 persons per household which results in an additional 1,586 to 2,366 residents. The housing occupancy rates for Ryde LGA are deemed to be not relevant as they encompass all dwelling types and do not appropriately reflect the nature of the proposed development. Therefore it is anticipated that the development could accommodate between 1,159 to 1,729 residents.

It should be noted that no information has been provided relating to the potential price point for the dwellings, which would impact the potential incoming population.

### 5.3 CRIME PROFILE

In the two years from July 2013 all recorded incidents, except for incidents of break and enter into a dwelling (down -28.1%), remained stable for Ryde LGA.

The crime “hot spot” maps for Macquarie Park are held at Appendix C. These maps illustrate that Macquarie Park does not have any crime hot spots for robbery and motor vehicle theft however has high density crime hot spots for theft related to the break and enter of dwellings and non-dwellings, a high hotspot for malicious damage to property and medium incident hotspot for stealing from a motor vehicle and stealing from a person. It is noted that the high density hotspots relating to dwellings (break and enter and stealing) are concentrated around residential premises to the north of the M2 motorway, to the north east of the subject site.

The subject site is located within a high density hotspot for theft (break and enter non-dwellings) and incidents of malicious damage to property. In addition the site is located within the medium density hotspot for stealing from a motor vehicle and stealing from a person. These incidents are generally concentrated around the Macquarie University Train Station and along Herring Road.

Overall, whilst crime in the broader area is stable, crime does occur on or near the site particularly with regards to break and enter non-dwellings and malicious damage to property. There is also a lower occurrence of stealing from a motor vehicle and/or a person, generally concentrated around the Macquarie University Train Station.

## 6 Social Infrastructure Review

A Community Needs Assessment was prepared by Urbis in December 2014 to inform the design of the proposed development. The community needs assessment found that the area is well serviced by a number of key assets such as the publicly available facilities provided at Macquarie University, and the nearby Lane Cove National Park. There are also a large number of residential aged care facilities including low level seniors living units, and a large number of childcare centres and education facilities. While the area is not currently serviced by a traditional community centre, providing a range of accessible services, there are a number of community halls which organisations can hire to provide services to the community.

The following provides a summary of the social infrastructure audit undertaken within the Community Needs Assessment:

- **Community centres, halls and libraries:** There are no community centres within 2km of the subject site but there are five community halls and two libraries within 2km of the subject site. Macquarie University provides a range of facilities available to the general public such as the Macquarie University Library, and a range of meeting rooms available for hire.

TABLE 4 – EXISTING COMMUNITY CENTRES, HALLS AND LIBRARIES

NAME	TYPE	CAPACITY	SERVICES / GROUPS
West Pymble Community Hall	Community Hall	up to 100 people	-
North Ryde School of Arts	Community Hall	up to 300 people	Weight Watchers
Trafalgar Place Community Hall	Community Hall	-	-
Marsfield Community Hall	Community Hall	up to 80 people	Yoga, dance, theatre, creative writing, craft, fashion, sewing, language, business
St. Anthony's Community Hall	Community Hall	-	-
Macquarie University Library	Library	-	Borrowing, guest PCs
North Ryde Library	Library	-	Borrowing, guest PCs, free Wi-Fi, book club

- **Health care facilities:** The nearest hospital to the subject site is the Macquarie University Hospital. The Hospital is co-located with the University, is a private teaching hospital, and currently provides 183 beds. The Hospital includes a private clinic, which offers private general practitioner services, specialist medical services, mental health services and allied health services (physiotherapy, occupational therapy, speech pathology, dietetics etc.). There is also two general practice medical centres located within the Macquarie Centre, Macquarie Medical Centre and Myhealth Medical.
- **Aged care facilities:** There are eight (8) residential aged care facilities in total located within 2km of the subject site, four (4) of which are located within the 1km study area. These are known as Willandra Village, Baptist Care Shalom Nursing Home, St. Catherine's Aged Care Services, Bethany Marsfield, Northaven West Pymble, Southern Cross Apartments Marsfield, Baptist Care Dorothy Henderson Lodge and Baptist Care Coinda Court.
- **Childcare:** Fifteen child care facilities are located within 2km of the subject site, as identified within Table 4 overleaf.

TABLE 5 – EXISTING CHILD CARE FACILITIES

NAME	TYPE
Macquarie Park CCC	Long day care
Nought to Five Early Childhood Centre	Long day care
Acre Woods Childcare	Long day care
Kendall Street Kindergarten	Long day care
West Pymble Preschool	Preschool
St. Georges Preschool	Preschool
Banksia Cottage (Macquarie University)	Long day care
Gumnut Cottage (Macquarie University)	Preschool
Greenwood Early Education Centre	Long day care
Goodstart Early Learning North Ryde (within Macquarie Centre)	Long day care and preschool
North Ryde Early Learning Centre	Long day care and preschool
KU Macquarie Park Child Care Centre	Long day care, preschool and occasional care
Explore and Develop	Long day care
Imaginations Preschool	Preschool
Nought to Five Early Childhood Centre	Long day care

- **Primary and secondary education:** Seven (7) Primary and two (2) Secondary schools were identified within 2km of the subject site, none of which are located in the PSA. In total the Primary schools accommodate 2,316 students, while the Secondary schools accommodate 2,338 students.
- **Tertiary education:** The site is located adjacent to the Macquarie University, accommodating 36,363 students. The University campus also offers a range of community facilities (discussed throughout this section), including a health clinic, a library, meeting rooms, a range of outdoor and indoor sports facilities and child care facilities.
- **Open space and recreation facilities:** There are over 260ha of open space within 2km of the subject site, however this includes the 158.9ha provided by the Lane Cove National Park, a significant national open space and recreation asset which is located to the north and north east of the subject site. The open space and recreation assets in the area include a mix of neighbourhood pocket parks and reserves, local parks, district and regional parks. There is also significant number of open space, sports and recreation facilities provided by Macquarie University which are accessible to the public.

## 7 Technical Studies

This section includes a review of the technical assessments undertaken in relation to the proposed development. The following preliminary assessments have been provided for review:

- Economic Impact Assessment (December 2015) prepared by MacroPlan Dimasi
- DA Environmental Noise Impact Assessment (20 November 2015) prepared by Acoustic Logic
- Accessibility Report (30 November 2015) prepared by Morris Goding Accessibility Consulting
- Wind Assessment (December 2015) prepared by Cermak Peterka Petersen
- Transport Management and Access Plan (3 December 2015) prepared by ARUP
- Internal Traffic and Parking Assessment (November 2015) prepared by Colston Budd Rogers & Kafes Pty Ltd
- Public Domain Design Report prepared by OCULUS Landscape Architecture

The following table outlines the key findings, potential impacts and recommendations and/or mitigations measures identified within the key draft technical assessments.

TABLE 6 – OVERVIEW OF TECHNICAL REPORT FINDINGS

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
Economic Impact Assessment	<ul style="list-style-type: none"> <li>▪ Macquarie Centre serves a broad regional trade area</li> <li>▪ Total trade area population is estimated to increase by around 24% reaching 872,500 persons</li> <li>▪ Total trade area retail expenditure market to grow to \$16.21 billion by 2031</li> <li>▪ Macquarie Centre services a surrounding worker trade area population of approximately 45,900 workers</li> <li>▪ Worker population is expected to increase to 57,800 by 2031</li> <li>▪ Macquarie University had 38,747 student enrolments in 2014 which could grow at around 2% per annum</li> <li>▪ Macquarie University has a full-time equivalent staff population of 2,768</li> <li>▪ Expansion of the Macquarie Centre represents a relatively minor addition to the retail network</li> <li>▪ Approximately 30,000m<sup>2</sup> of</li> </ul>	<ul style="list-style-type: none"> <li>▪ Greatest impacts to be absorbed by the closest nearby regional shopping centres such as Chatswood CBD, Westfield Hornsby, Castle Towers and Westfield Parramatta. Impacts resulting from the proposed expansion is estimated to be less than 6% on any individual centre, with impacts on the four identified regional centres in the network ranging between 2.0 – 5.8%. Generally impacts less than 10% considered relatively moderate and impacts less than 5% considered minor/negligible. Both Westfield Parramatta and Castle Towers are both planned to expand in the future, their trading levels are likely to be significantly greater than their current trading volumes. Estimated impacts on the Chatswood CBD and Westfield Hornsby are expected to be comfortably absorbed.</li> <li>▪ Estimated impacts on the surrounding sub-regional centres are all estimated to be less than 5%, given the expected composition of the proposed expansion, given Macquarie</li> </ul>	<ul style="list-style-type: none"> <li>▪ It was determined to be highly unlikely that the proposed development would result in any detrimental impacts on surrounding retail/centres hierarchy across northern and western Sydney</li> <li>▪ Any impact is considered to be moderate and temporary in nature which would dissipate within a couple of years given the significant future population and retail market growth expected within the trade area</li> <li>▪ The proposed expansion of Macquarie Centre represents a relatively minor addition to the retail network, especially in the context of some of the other major proposed expansions (e.g. Castle Hill and Westfield Parramatta) evidenced by the very minor impacts expected across the network</li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<p>additional retail uses would be provided and approximately 10,000m<sup>2</sup> of non-retail type uses such as bowling, gyms, gaming areas, child care and kids entertainment</p> <ul style="list-style-type: none"> <li>▪ As at June 2011, approximately 65% of all persons employed within the worker trade area drove to and from work, while only 19% utilised public rail and bus transport. It is anticipated that the proportion using public transport would have increased since the census and that it is likely to increase in the future as major upgrades to public transport facilities are made.</li> <li>▪ Since the Epping-Chatswood Rail Link opened, the average number of commuters per weekday passing through Macquarie University Station has almost doubled, from around 11,000 per day in 2009 to around 20,200 per day in 2014, reflecting significant annual average growth in patronage greater than 12%. Average weekday movements are projected to exceed 40,000 by 2030 (i.e. growth of around 4% – 4.5% per annum on average).</li> <li>▪ Average bus volumes passing through Macquarie Centre interchange are expected to increase significantly by 2030, anticipated to be approximately 1.5 times total train movements through Macquarie University Station, expected to exceed 60,000 passengers per weekday by 2030.</li> </ul>	<p>Centre already contains all three major supermarkets, and the different role these centres play in the retail hierarchy (i.e. localised/sub-regional catchments with strong convenience focus)</p> <ul style="list-style-type: none"> <li>▪ Additional ongoing employment on-site as well as further job creation through the supply chain, across industries servicing retail (and non-retail) tenant at the site such as transport workers, wholesalers and the like</li> <li>▪ Construction phase of the project will support temporary construction related employment, and additional temporary jobs through the broader economic supply chain</li> <li>▪ Approximately 1,717 additional jobs could be created as a result of the proposed expansion</li> <li>▪ Community benefits: <ul style="list-style-type: none"> <li>– Important catalyst to unlock a ‘main street’ outcome along Herring Road and improvements to the transport interchange</li> <li>– Improved integration with public transport</li> <li>– Introduction of alfresco dining and other retailing that activates Herring Road, creating a ‘sense of place’</li> <li>– Increased choice and amenity for residents, workers and students</li> <li>– Diversified retail mix and potential new retail/entertainment concepts</li> <li>– Strengthening and future-proofing Macquarie Centre as an important sub-regional centre in north-west Sydney</li> </ul> </li> </ul>	

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
Noise Impact Assessment	<ul style="list-style-type: none"> <li>▪ The Assessment provides the environmental noise emission criteria for Herring Road and Talavera Road Boundary and the Waterloo Road Boundary for the proposed development to meet Council and NSW EPA acoustic requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Noise potentially generated by the site will mainly consist of noise emissions from mechanical plant</li> <li>▪ Potential for traffic noise to affect the amenity of future residents on and around the site</li> </ul>	<ul style="list-style-type: none"> <li>▪ Compliance with the mechanical noise and air conditioning emission criteria is both practical and reasonable within the proposed development with the use of acoustic barriers/screen, internally lined ductwork, external lagging and silencers</li> <li>▪ Noise emissions from the site should comply with the intrusiveness noise emissions goals</li> <li>▪ Any external walls and roof design that are proposed to be of heavy masonry elements will not require upgrading. Any lightweight constructions will need to be reviewed and assessed at a later stage.</li> <li>▪ The residential component of the proposed development is recommended to be acoustically treated and that window/door suppliers should provide evidence that the systems proposed have been tested</li> <li>▪ External walls composed of concrete or masonry elements will not require upgrading. There should not be vents on the internal skin of external walls. All penetrations in the internal skin of external walls should be acoustically sealed. Any lightweight constructions will need to be reviewed and assessed at a later stage.</li> </ul>
Accessibility Report	<ul style="list-style-type: none"> <li>▪ The design will address the overall precinct connectivity by the creation of site linkages.</li> <li>▪ There are two proposed pedestrian accessible paths of travel from Herring Road at pedestrian level through to the retail atrium areas, these pathways will be activated by retail and also connect back to existing</li> </ul>	<ul style="list-style-type: none"> <li>▪ None identified.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The design will comply with the requirements of the DDA Access to Premises Standards and include requirements for accessible buildings, linkages and the seamless integration of access provisions compliant with AS1428.1-2009.</li> <li>▪ The developed design will consider all user groups, who include members of the</li> </ul>



STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<p>retail and existing car parking areas.</p> <ul style="list-style-type: none"> <li>▪ The new public domain will be universally accessible for all members of the public.</li> <li>▪ There will be accessible paths of travel from Waterloo Road and Herring Road via the Station Plaza and Tower 1 Foyer and retail areas.</li> </ul>		<p>public, visitors, and staff members.</p> <ul style="list-style-type: none"> <li>▪ The proposed drawings indicate that accessibility requirements, pertaining to site access, common area access, can be readily achieved</li> </ul>
Wind Assessment	<ul style="list-style-type: none"> <li>▪ The environmental wind conditions around the proposed development are expected to be suitable for pedestrian walking from a comfort perspective and pass the distress criterion with reference to the Lawson pedestrian wind acceptability criterion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Due to the number of entrances to the central semi-enclosed space, there will always be internal flow through the development. Patrons entering through the open entrances and laneways to the shopping centre are expected to experience relatively high wind speeds through the space. If this space is only to be used as a pedestrian thoroughfare, then amelioration measures may not be necessary. However, if the laneway spaces are to be used for outdoor café seating then the wind climate could be improved with local treatment, such as fins or landscaping as required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ It is considered that Towers 1, 3, and 4, have sufficient podium setback to minimise downwash onto the pedestrian walkways.</li> <li>▪ The south-west façade of Tower 2 does not have a sufficient tower setback from the podium edge, and will induce downwash along the pedestrian accessway from Herring Road to the shopping centre. It would be recommended to extend the glass roof between Towers 1 and 2 towards Herring Road to prevent downwash reaching ground level.</li> <li>▪ Further wind mitigation measures (if required) will be determined within the detailed design phase</li> </ul>
Transport Management and Access Plan	<ul style="list-style-type: none"> <li>▪ Approximately 43,000 work trips are made to Macquarie Park daily, 65% of people travel to work by car with an average of 1.05 people per vehicle</li> <li>▪ During peak periods approximately 122 buses operate to and from the Macquarie interchange, on 28 routes</li> <li>▪ There are strong pedestrian desire lines between the Macquarie University and the Macquarie Centre however there is a pedestrian fence restricting access along Herring Road</li> <li>▪ Transport for NSW forecasts indicate a 50% increase in bus passenger</li> </ul>	<ul style="list-style-type: none"> <li>▪ Global traffic growth across the Macquarie Park network in the future year 2026 are as follows: <ul style="list-style-type: none"> <li>– AM peak hour: 1.5% per annum</li> <li>– PM peak hour: 1.1% per annum</li> </ul> </li> <li>▪ Public transport impacts include: <ul style="list-style-type: none"> <li>– The need to accommodate increased bus flows forecast by Transport for NSW to cater for expected increased passenger demand from the proposed development</li> <li>– Increased train and bus passenger demands from increased retail floor space, as well as new commercial floor</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Passenger space in the proposed interchange upgrades would be ample for expected levels of demand up to 2025.</li> <li>▪ Improvement works identified include: <ul style="list-style-type: none"> <li>– Epping Road/Balaclava Road intersection: Additional traffic lane on Balaclava Road on the southern approach to Epping Road</li> <li>– Epping Road/Herring Road intersection: Modify signal phasing to provide double diamond on Herring Road approaches. Signalling the</li> </ul> </li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<p>trips in the interchange, an increase from approximately 6,600 passenger boarding and alighting's at the interchange stops per day, to 9,900 per day</p> <ul style="list-style-type: none"> <li>▪ The number of people expected to be waiting for a bus in the interchange at one time in the evening peak will increase to 138 people, or 28 people per stop in 2036</li> <li>▪ Based on TfNSW growth rates, passenger activity in the interchange is expected to increase by 17 per cent over current levels by 2019. This would result in a PM peak waiting passenger accumulation of some 108 passengers, requiring some 87m2 of waiting space</li> <li>▪ A number of intersections are forecast to function above capacity in the forecast year 2026 – even without the expansion of the Macquarie Centre intersections were found to be low performers and therefore upgrades are required irrespective of any future development to the Centre</li> <li>▪ Macquarie Train Station is primarily a destination station with more than double the number of customers leaving the station in the morning peak then entering. By 2036 destination customers will growth by 180% whilst outbound customers will increase by 75%</li> <li>▪ By 2036 an additional 4 bus stapes will be required within the bus interchange to meet demand.</li> </ul>	<p>space and residential units in the development proposal</p> <ul style="list-style-type: none"> <li>– Ensuring associated changes to the bus station support the different functions of the bus station, including catering for intermodal transfer as well as access to adjacent activities.</li> <li>▪ The existing 9 stops in the bus interchange are anticipated to accommodate forecast future growth to 2025 however the pedestrian-vehicle conflict along Herring Road will need to be resolved to ensure efficient operation of the bus interchange within the 5 bus spaces in the Macquarie Centre part of the bus interchange</li> <li>▪ By 2025 the existing interchange bus stop provision is expected to be at capacity</li> <li>▪ The relocation of bus stops A to E as part of the Macquarie Centre redevelopment will move bus stops closer to the Macquarie University Station entrance by 60m and reduce walking times for intermodal customers, and improve the relationship of the bus stops to the entrances of the shopping centre thereby promoting bus access for residents, workers and other visitors</li> <li>▪ Other interchange components, including taxi rank and kiss and ride parking, will not be affected by the development</li> <li>▪ Average delays at surrounding intersections would increase, however would be generally minor and in the order of 10% or less</li> <li>▪ The existing saturated intersections of Epping Road/Herring Road and Lane Cove Road/Talavera Road would experience significant increases in vehicle delays.</li> </ul>	<p>slip lane on Epping Road north west approach</p> <ul style="list-style-type: none"> <li>– Epping Road/Herring Road intersection: Provide additional through lane on Herring Road south west approach</li> <li>– Epping Road/Herring Road intersection: Grade separation of the intersection Epping Road/Herring Road potentially including a tunnel for the right turn movement from Epping Road (south east) to Herring Road</li> <li>– Herring Road/Waterloo Road intersection: Provide an additional left turn lane on Herring Road south west</li> <li>– Herring Road/Waterloo Road intersection: Provide dual right turn bay on Waterloo Road south east approach</li> <li>– Khartoum Road/Talavera Road intersection: Investigate modified signal phasing to provide shared through/right turn lane on Talavera Road north west approach</li> <li>– Lane Cove/Talavera Road intersection: Provide a staged pedestrian crossing on the south west approach of the intersection to reallocate green time to adjacent movements</li> <li>– Lane Cove/Waterloo Road intersection: Remove one</li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
			<p>right turn lane on Lane Cove Road south west approach to enable diamond phasing arrangement on Waterloo Road approaches. Provide additional traffic lane on Waterloo Road south east approach by shifting existing central median across to reduce number of eastbound departure lanes from three to two.</p>
<p>Internal Traffic and Parking Assessment</p>	<ul style="list-style-type: none"> <li>▪ Peak parking demand occurs between 10am and 2pm</li> <li>▪ The practical capacity of car parking at the Macquarie Centre is reached only during peak trading periods such as during the Christmas/New Year sales</li> <li>▪ The provision of additional retail parking at the rate of 3.5 spaces per 100m<sup>2</sup> GLA would satisfactorily cater for the parking generated by the expanded retail area</li> <li>▪ All proposed new parking areas, car parking dimensions, aisle widths, ramp grades and transitions will be provided in accordance with the Australian Standard for Off-Street car parking facilities</li> <li>▪ All loading areas will be designed to comply with the requirements of the Australian Standard for Off-street commercial vehicle facilities</li> <li>▪ Could generate a maximum of 630, 1,440 and 1,690 vehicles per hour in the weekday morning, weekday afternoon and Saturday midday peak hours respectively</li> <li>▪ 15% of trips to the centre were passing trade</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction impacts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction will need to be staged to minimise impact on the surrounding area. The overall principles for traffic management during construction of the development will include: <ul style="list-style-type: none"> <li>– take into account the future upgrade of the Macquarie Park railway station and possible future construction of the future Herring Road bus interchange</li> <li>– maintain appropriate parking for customers, associated with the on-going operation of the centre</li> <li>– maintain access to properties located in the vicinity of the site at all times during the construction process</li> <li>– minimise loss of on-site parking</li> <li>– maintain access for delivery vehicles associated with the continued operation of the shopping centre</li> <li>– manage and control construction traffic</li> </ul> </li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<ul style="list-style-type: none"> <li>▪ The proposed parking provision is considered appropriate given the sites location adjacent to a bus interchange and rail station</li> </ul>		<ul style="list-style-type: none"> <li>– movements on the adjacent road network and vehicles movements to and from the construction site</li> <li>– trucks to enter and exit the site in a forward direction</li> <li>– maintain traffic capacity at intersections and mid-block in the vicinity of the site</li> <li>– restrict construction vehicle activity to designated truck routes through the area</li> <li>– construction works will be staged to minimise traffic effects and to maintain the continued operation of the shopping centre</li> <li>– construction vehicle work zones to be provided adjacent to the construction activity</li> <li>– construction access driveways and on-street work zones to be managed and controlled by site personnel provide a convenient and appropriate environment for pedestrians</li> <li>– minimise effects on pedestrian movements and amenity</li> <li>– maintain appropriate capacity for pedestrians at all times along footpaths adjacent to the shopping centre</li> <li>– maintain appropriate pedestrian access to the shopping centre from the various on-site parking</li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
			<p>areas during construction</p> <ul style="list-style-type: none"> <li>– maintain convenient access and circulation for public transport pedestrian movements adjacent to construction activity, across construction access driveways and to/from public transport facilities along Herring Road and to/from the various on-site car parking areas will be managed and controlled by site personnel</li> <li>– traffic marshals will manage and control traffic movements on the surrounding road network adjacent to the shopping centre to ensure appropriate access to adjacent properties and to maintain two-way access at all times during the construction period</li> <li>– construction fencing will be erected around the perimeter of the construction sites. Hoardings, scaffolding and overhead protection will be provided where required</li> <li>– concrete barriers and containment fencing will be erected adjacent to the construction activity to separate general traffic from the construction work and to protect pedestrians</li> <li>– pedestrian warning signs and construction safety signs/devices to be utilised in the vicinity of the site and to be provided in</li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
			<p>accordance with WorkCover requirements</p> <ul style="list-style-type: none"> <li>– site contractor to be responsible for the management of the site, the movement of trucks on and off the site, signage detail, traffic management and control of pedestrians and management and control of construction vehicles in the vicinity of the site</li> <li>– construction activity to be carried out in accordance with Council’s approved hours of work.</li> </ul> <ul style="list-style-type: none"> <li>▪ The preparation of the construction traffic management plan, signage detail, control of pedestrians and control and management activities/vehicles in the vicinity of the site will be the responsibility of the appointed builder</li> </ul>
Public Domain Design Report	<ul style="list-style-type: none"> <li>▪ The following general principles form the landscape approach to the site: <ul style="list-style-type: none"> <li>– Use high quality landscape design to integrate the proposed development with the surrounding streets and enhance the neighbourhood</li> <li>– Design spaces that will become highly activated and vital to the community</li> <li>– Ensure that communal open spaces have access to sun light whilst also providing adequate shelter and wind</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ The redevelopment will see the creation of a new ‘civic’ space that will connect the existing rail station on the corner of Herring Road and Waterloo Road to the new redeveloped Macquarie Centre and provide much improved access from Macquarie University</li> <li>▪ Provide a new flexible public space that can be used for community events, outdoor seating associated with ground floor retail</li> <li>▪ Vibrant and interactive street character</li> </ul>	<ul style="list-style-type: none"> <li>▪ No mitigation measure identified</li> </ul>

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<p>protection</p> <ul style="list-style-type: none"> <li>– Maximise opportunities for social interaction through arrangement of seating and views</li> <li>– Contribute to local biodiversity by increasing the biomass and diversity of plant species included in the landscape</li> <li>– Provide sufficient soil depths through the clever use of level changes to enable trees and large shrubs to be grown over podiums, creating the impression the garden is not located over basement structures</li> <li>– Create a robust landscape made from simple materials, proven planting and bold forms that can be managed and maintained</li> <li>– Provide clear and integrated access</li> <li>– Make boundaries and interfaces green, verdant and alive</li> <li>– Consider the landscape as a composition to be viewed down upon from future residential apartments</li> </ul> <ul style="list-style-type: none"> <li>▪ The Plaza will contain an interactive water feature and public art</li> <li>▪ Additional pedestrian access to the centre via a combination of internal stairs and escalators</li> </ul>		

STUDY	KEY FINDINGS	POTENTIAL IMPACTS	RECOMMENDATIONS AND MITIGATION MEASURES
	<ul style="list-style-type: none"> <li>▪ Upgrades to the existing bus stops with new bus shelters, new paving treatments and planting as well as street furniture and outdoor seating associated with cafes and restaurants</li> </ul>		



## 8 Social Impact Assessment

The following list provides a summary of the key social benefits and impacts which have been identified as potentially emerging from the proposed development at this stage of the SIA. Whilst the development application process sought by the applicant will be staged, the following assessment considers the potential social benefits and impacts of the complete development.

It should be noted that these impacts and benefits have been identified based on the information available to date. It is anticipated that as additional research is greater certainty and detail can be provided regarding the potential social impacts and benefits which may arise from the proposed development.

At this stage, and based on the research undertaken in previous sections, the following potential impact and benefit areas have been identified for assessment:

- **Access and mobility:** New vehicle and pedestrian access points to the site and development of new Station Plaza, improved way finding and accessibility within and around the site.
- **Accommodation and housing:** The site may accommodate up to 910 residential units and could contribute to housing choice and affordability in the LGA. The proposal will provide additional housing choice within close proximity to transport facilities.

**Community services and facilities:** The existing area is well serviced by social infrastructure and community services however the proposed development may generate demand for additional facilities. The proposed development will also leverage significant funds to provide new, or upgrade existing social infrastructure. The Community Needs Assessment identified potential gaps in the current provision of facilities including the lack of a dedicated youth facility, community centre, and performing arts and cultural centre. These facilities may be provided at the site, particularly due to the site's connectivity to public transport and the amenities provided within the shopping centre. The proposal identifies space for a new community facility, the nature of which will be established within subsequent development applications. The proposal will create a central community hub in close proximity to public transport

- **Crime and public safety:** Crime levels are stable within the LGA, although the site is located within crime hotspots related to theft (break and enter non-dwellings), incidents of malicious damage to property, stealing from a motor vehicle and stealing from a person. Appropriate security and access arrangements should be considered within the detailed design of the development. It is anticipated that the development will provide passive and active surveillance due to activation of the site, particularly with the development of the Station Plaza. Passive surveillance may assist with the reduction of negative activity and criminal behaviour in the vicinity of the subject site.
- **Community profile:** The locality is characterised by a high proportion of students and young workers (between the ages of 20-34), residents born overseas or identifying as CALD, living as singles or couple households with few families and renters of flats, units and apartment dwellings. The incoming community is likely to reflect the existing demographic characteristics. The proposed development increases opportunities for social interaction and is consistent with the existing community identity.
- **Economic impact and employment:** The development proposed an additional employment opportunities through construction and occupation. It is anticipated that approximately 1,717 additional jobs could be created as a result of the proposed expansion.
- **Neighbourhood identity, cultural and community values:** Macquarie Park is identified as a Strategic Centre with a number of Priority Precincts and sites identified for urban renewal such that the area will transition over time to a higher density, mixed use precinct. The proposed development forms part of the Government's vision for this area. The proposed development provides significant public space upgrade works which improve the amenity of the neighbourhood for existing and future residents, workers and students.

The potential positive and negative social impacts associated with each subject area are outlined below.

## 8.1 ACCESS AND MOBILITY

TABLE 7 – ACCESS AND MOBILITY IMPACTS, BENEFITS, AND RECOMMENDATIONS

<b>BASELINE</b>	
<p>Whilst the site has been used for the Macquarie Centre for a number of years, pedestrian access within and around the site is currently fragmented, difficult and confusing.</p>	
<b>PROPOSED DEVELOPMENT</b>	
<p>The proposal includes a new commercial/retail podium oriented towards Herring Road to replace the existing structure. New active frontages and pedestrian entries will be provided along Herring Road.</p> <p>New community spaces will be provided including a new atrium space with open air seating and landscaping and a new Station Plaza, better linking the site to Macquarie Park Train Station.</p> <p>Upgrades to the existing five bus stops, Bus Stops A to E along Herring Road, include new bus shelters, new pavement treatments and planning as well as street furniture and outdoor seating. The upgraded bus stops will be 60m closer to the Macquarie University Station which reduces travel distances for intermodal passengers.</p> <p>The proposal will also provide an additional 2,175 car parking spaces.</p>	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>▪ Improved street activation and permeability</li> <li>▪ Improved way finding and pedestrian accessibility</li> <li>▪ The close proximity of public transport may result in reduced dependency on the car for travel by future residents</li> <li>▪ Improved integration with public transport and interface with the Macquarie Centre</li> <li>▪ The new public domain will be universally accessible for all members of the public and new commercial and residential components will be accessible via a continued path of travel</li> <li>▪ Car parking will be universally accessible for all members of the public</li> </ul>	<ul style="list-style-type: none"> <li>▪ Disruptions to access during construction</li> <li>▪ Potential future additional traffic congestions due to population growth within the locality</li> <li>▪ Higher demand for existing public transport services and failure to meet potential demand during peak times</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>▪ Raise community awareness of the facilities to be provided on site</li> <li>▪ Provision of bicycle facilities for both residents, workers and customers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Preparation of a Construction Traffic Management Plan</li> <li>▪ Appropriate site pedestrian signage during construction and control of pedestrians during construction</li> <li>▪ Appropriate way finding signage to be provided within the proposed development</li> <li>▪ Raise community awareness of the impact of construction on the facilities currently on site, construction timeframes and any potential changes to points of access and pedestrian pathways</li> <li>▪ The design of the site to comply with the DDA Access to Premises Standards and include requirements for accessible buildings, linkages of access provisions compliant with AS1428.1-2009</li> <li>▪ The development design to consider all user groups, who include members of the public, visitors, and staff members</li> </ul>

## 8.2 ACCOMMODATION AND HOUSING

TABLE 8 – ACCOMMODATION AND HOUSING IMPACTS, BENEFITS, AND RECOMMENDATIONS

<b>BASELINE</b>	
There are currently no residential dwellings on the site.	
<b>PROPOSED DEVELOPMENT</b>	
The proposed development will provide between 610 and 910 new apartments within the locality. No information is currently available on the proposed price points for the apartments and hence affordability.	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>Additional supply of modern accommodation options, in close proximity to public transport options.</li> </ul>	<ul style="list-style-type: none"> <li>Not identified</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>Not identified</li> </ul>	<ul style="list-style-type: none"> <li>Not identified</li> </ul>

## 8.3 COMMUNITY SERVICES AND FACILITIES

TABLE 9 – COMMUNITY SERVICES AND FACILITIES IMPACTS, BENEFITS, AND RECOMMENDATIONS

<b>BASELINE</b>	
The site is well located with regards to community facilities, as identified within Section 6 of this report.	
<b>PROPOSED DEVELOPMENT</b>	
The proposed development will accommodate approximately 1,159 to 1,729 residents at the site. The proposed population profile is likely to increase demand on existing services and facilities however this demand is likely to be accommodated by the existing and new facilities proposed as part of the development including new public plazas and new community centre/space which will support the needs of the incoming population, as well as the existing community.	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>Long term viability of the Macquarie Centre for the benefit of the wider community, continuing to provide a range of services and facilities</li> <li>Provision of new community centre and retail spaces which may accommodate gyms, healthcare and childcare services for new and existing residents and workers</li> <li>Provision of new public domain (plaza) and landscaping within the development and improve the amenity of public spaces around the site</li> <li>Enhanced connectivity and accessibility of services and facilities within the centre, including connectivity to public transport facilities</li> </ul>	<ul style="list-style-type: none"> <li>Additional demand on existing facilities decreases the accessibility, or level of service at community facilities for existing residents</li> <li>Potential unmet demand or need of the incoming community in terms of the type of facilities or services required</li> <li>Staging of new or improved facilities may not keep pace with the quantum of incoming residents resulting in unmet demand and impact on service quality.</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>Development of flexible community facilities and spaces which are designed to meet a diversity of needs</li> <li>Raise community awareness of the facilities to be provided on-site.</li> </ul>	<ul style="list-style-type: none"> <li>Review development staging</li> <li>Appropriate Developer Contributions leveraged as part of the proposed development will support Council in developing, maintaining, and managing sufficient community facilities to meet the needs of future populations.</li> </ul>

## 8.4 CRIME AND PUBLIC SAFETY

TABLE 10 – CRIME AND PUBLIC SAFETY IMPACTS, BENEFITS, AND RECOMMENDATIONS

BASELINE	
<p>Crime rates are generally stable within Ryde LGA. The site is identified within crime hotspots for theft (break and enter non-dwellings), incidents of malicious damage to property, stealing from a motor vehicle and stealing from a person.</p>	
PROPOSED DEVELOPMENT	
<p>The proposed development will increase opportunities for active and passive surveillance, and activation of the site may assist with the reduction of negative and criminal activity in the locality.</p> <p>Secure car parking and separate access points to the residential towers will be provided on the site.</p> <p>There is the potential for new liquor licences to be issued for new food and drink tenancies which may increase anti-social behaviour.</p>	
POTENTIAL POSITIVE IMPACTS	POTENTIAL NEGATIVE IMPACTS
<ul style="list-style-type: none"> <li>▪ Improved active and passive surveillance across the site and surrounding land uses</li> <li>▪ Increased night time activity and associated passive surveillance</li> <li>▪ Reduced crime rates on and around the site.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Negative impacts associated with anti-social behaviour associated with any new liquor licences issued for future tenancies</li> <li>▪ The site is located within a high density crime hot spots for theft related to the break and enter of dwellings and non-dwellings, a high hotspot for malicious damage to property and medium incident hotspot for stealing from a motor vehicle and stealing from a person and the proposal may result in increased opportunities for crime with respect to malicious damage to property (graffiti) and break and enter non-dwellings.</li> </ul>
BENEFIT ENHANCEMENT	MITIGATION MEASURE
<ul style="list-style-type: none"> <li>▪ Ensure the site incorporates the Crime Prevention Through Environmental Design (CPTED) principles to maximise benefits, and minimise any potential issues associated with potential for crime or malicious damage to property.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Security Management Plan to be prepared outlining the proposed on-site security and management measures for all uses on the site</li> <li>▪ Centre management required to remove all graffiti within 48 hours of identification</li> <li>▪ Appropriate security measures (e.g. CCTV cameras) to be included within the detailed design of the proposed development</li> </ul>

## 8.5 COMMUNITY PROFILE

TABLE 11 – COMMUNITY PROFILE IMPACTS, BENEFITS, AND RECOMMENDATIONS

BASELINE
<p>The existing profile comprises of a high proportion people classified as being within the tertiary education, independence and young workforce category (18-34 years of age) and there is a dominance of lone person households in the local area (40%). There is a relatively small proportion of primary and high school aged children within the study area when compared with Ryde LGA and Sydney GCCSA.</p> <p>The locality is linguistically diverse and has a high proportion of residents who were born overseas which is due to the high number of international student or young workers who reside in the area.</p> <p>Non-family households are the prevalent family structure where almost half the population is made up of couple families with no children. The residents of the study area are highly educated with more than a third of the current population having obtained a Bachelor degree or higher</p> <p>Dwellings within the locality predominantly comprise flats, units or apartments and there is a high proportion of public renters living in the PSA. In 2011, there were approximately 2,389 occupied private dwellings in Macquarie Park (State Suburb). Macquarie Park has a housing occupancy of 2 persons per household. This is reflective of the</p>

<b>BASELINE</b>	
existing of more flats, units and apartments. The local area has a higher unemployment rate than the Ryde LGA and Sydney GCCSA. This may be related to the presence of social housing and large number of students in the local area. More than four fifths of the population in the PSA (85%) and SSA (84%) is employed in white collar occupations, which is slightly higher than the Ryde LGA (80%) and Sydney GCCSA (75%). The PSA experiences a lower average household income and a higher proportion of very low income earners than the other areas.	
<b>PROPOSED DEVELOPMENT</b>	
Based on the existing population profile and population projections for the area, it is anticipated that incoming residents will be characterised as:	
<ul style="list-style-type: none"> <li>▪ Young adults aged between 20 to 30 years. Predominantly professionals however there may be some student accommodation</li> <li>▪ A high proportion of lone person households, and small proportion of family households. Singles, couples, group households and small proportion of couples with children (within two or three bedroom dwellings). Some tertiary students living in group households</li> <li>▪ 'Empty nesters' maybe be attracted to downsize to larger apartment units (3 beds)</li> <li>▪ There may also be demand from young professionals migrating from overseas and an increase in the number of people reaching retirement age</li> <li>▪ A diverse population with potential for overseas residents and CALD residents.</li> </ul>	
The incoming profile is similar to the existing community profile within Macquarie Park.	
The site could accommodate up to 1,729 residents which will help to make the centre a sustainable community hub in close proximity to public transport and education facilities, which will give the centre a captive market and ensure the long term future of the Macquarie Centre.	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>▪ The incoming population aligns with the existing population structure and it is anticipated that there will be little change to the existing community structure from the proposed development.</li> <li>▪ Opportunities to build new relationships with incoming residents</li> </ul>	<ul style="list-style-type: none"> <li>▪ NA</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>▪ Promote shared use of facilities and services onsite</li> <li>▪ Provision of appropriate open space, recreation and public spaces that promote "stay and play" activities</li> <li>▪ Provision of flexible community facilities to meet a diverse range of needs for incoming residents</li> <li>▪ The development will provide new facilities, public spaces and amenities (shops, restaurants and bars) to support the community and provide opportunities for social interaction</li> </ul>	<ul style="list-style-type: none"> <li>▪ NA</li> </ul>

## 8.6 ECONOMIC IMPACT AND EMPLOYMENT

TABLE 12 – ECONOMIC IMPACT AND EMPLOYMENT IMPACTS, BENEFITS, AND RECOMMENDATIONS

<b>BASELINE</b>
The Macquarie Centre currently serves a broad regional trade area. The Macquarie Centre currently provides retail based employment opportunities.
<b>PROPOSED DEVELOPMENT</b>
The proposed development will generate construction and ongoing employment opportunities within the proposed additional retail and commercial floor space to be provided on the site, in the order of 1,717 additional jobs.

<b>BASELINE</b>	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>Increased job opportunities provided on the site (approximately 1,717 additional jobs), in particular with regards to service sectors to support the existing and incoming community</li> <li>Provision of additional retailing, commercial and food options for new and existing residents</li> <li>Long term viability of the Macquarie Centre which will promote competition and choice for the community.</li> </ul>	<ul style="list-style-type: none"> <li>NA – The Economic Impact Assessment determined that it was highly unlikely that the proposed development would result in any detrimental impacts on surrounding retail/centres hierarchy across northern and western Sydney. Any impact is considered to be moderate and temporary in nature which would dissipate within a couple of years given the significant forecast population growth.</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>Supporting the local community to access job opportunities which may arise as a result of the project through job listings in local newspapers etc.</li> <li>Maximising opportunities to support local, small, or emerging business on-site through the provision of incubator space as part of the commercial floor space.</li> </ul>	<ul style="list-style-type: none"> <li>NA</li> </ul>

## 8.7 NEIGHBOURHOOD IDENTITY, CULTURAL AND COMMUNITY VALUES

TABLE 13 – NEIGHBOURHOOD IDENTITY, CULTURAL AND COMMUNITY VALUES IMPACTS, BENEFITS, AND RECOMMENDATIONS

<b>BASELINE</b>	
<p>The site is currently utilised as the Macquarie Centre. Macquarie Park is identified as a Strategic Centre with a number of Priority Precincts within or adjoining the Macquarie Park Corridor such that the area will undergo significant transformation in the coming years.</p>	
<b>PROPOSED DEVELOPMENT</b>	
<p>The proposed development design, layout and proposed retail, commercial and residential mix is consistent with the State Governments intent for the Macquarie Park Corridor. The proposed development provides significant public space upgrade works which improve the amenity of the neighbourhood for existing and future residents, workers and students. Long term viability of the Macquarie Centre continuing to provide a range of services and facilities, for the benefit of the wider community.</p>	
<b>POTENTIAL POSITIVE IMPACTS</b>	<b>POTENTIAL NEGATIVE IMPACTS</b>
<ul style="list-style-type: none"> <li>The proposed development may act as a catalyst for future community development</li> <li>Residential development on site has the potential to activate the site at different times of day and foster a variety of social interactions</li> <li>The proposed development secures the long term viability of the site</li> </ul>	<ul style="list-style-type: none"> <li>Negative amenity impacts to pedestrians, residents and workers within the precinct with regards to noise, wind, etc. during construction and operation</li> </ul>
<b>BENEFIT ENHANCEMENT</b>	<b>MITIGATION MEASURE</b>
<ul style="list-style-type: none"> <li>Provision of community spaces and places to foster social interaction</li> </ul>	<ul style="list-style-type: none"> <li>Design of the site to include appropriate acoustic and wind mitigation measures</li> </ul>

## 8.8 LEVEL AND SIGNIFICANCE OF IMPACTS

Table 14 provides the assessment of the level and significance of the social benefits and impacts which are likely to result from the proposed development. This includes an assessment of the duration, extent,

ability for populations to adapt, social outcomes, management measures and residual impact should these measures be implemented. This is based on the criteria identified in Section 2.2.1.

TABLE 14 – IMPACT LEVEL AND SIGNIFICANCE OF KEY IMPACTS

	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES	IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<b>BENEFITS</b>							
Improved street activation, permeability, way finding and pedestrian accessibility	Long term	Individual	Immediate	Access and mobility	Minor, long term benefit	Raise community awareness of the facilities to be provided on site	Minor, long term benefit
Improved integration with public transport facilities	Long term	Whole community	Immediate	Access and mobility	Minor, long term benefit	NA	Minor, long term benefit
The close proximity of public transport may result in reduced dependency on the car for travel by future residents	Long term	Individual/ household	Immediate – transport infrastructure in close proximity to the site	Improves drive times and traffic congestion in the area and allows for future growth in the area.  Improves amenity of the area.	Minor, long term benefit	NA	Minor, long term benefit
Additional supply of modern accommodation options, in close proximity to public transport options	Medium-term	Local area	Immediate – provides good quality units in close proximity to jobs, transport, services and amenities	Housing options	Moderate, medium-term benefit	Not identified – price points not available	Moderate, medium-term benefit
Long term viability of the Macquarie Centre continuing to provide a range of services and facilities, for the benefit of the wider community	Long term	Whole community	Short term (during construction when supply may be reduced)  Immediate upon completion of site	Economic viability and community services and facilities	Moderate, long-term benefit	Raise community awareness of the construction timeframes and facilities to be provided on site  Development of flexible community facilities and spaces which are designed to meet a diversity of needs	Moderate, long-term benefit
Provision of additional retailing, commercial and	Long term	Whole community	Short term upon opening of additional	Community services and	Minor, long term benefit	Raise community awareness of the construction timeframes and facilities	Minor, long term benefit



	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES	IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
food options for new and existing residents and workers			services and facilities	facilities		to be provided on site	
Provision of new public domain (plaza) and landscaping within the development	Long term	Whole community	Immediate	Access and mobility, community services and facilities and neighbourhood identity	Major, long term benefit	Raise community awareness of the construction timeframes and facilities to be provided on site Development of flexible community facilities and spaces which are designed to meet a diversity of needs	Major, long term benefit
Improved active and passive surveillance across the site and surrounding land uses, including increased night time activity on the site	Long term	Local study area	Immediate	Residential amenity and safety and security outcomes.	Minor, long term benefit	Ensure the site incorporates the Crime Prevention Through Environmental Design (CPTED) principles to maximise benefits, and minimise any potential issues associated with liquor licences or potential for crime or malicious damage to property.	Minor, long term benefit
The incoming population aligns with the existing population structure and it is anticipated that there will be little change to the existing community structure from the proposed development	Long term	Local study area	Long term transition process	Social cohesiveness and neighbourhood identity	Minor, long term benefit	Promote shared use of facilities and services onsite Provision of appropriate open space, recreation and public spaces that promote “stay and play” activities Provision of flexible community facilities to meet a diverse range of needs for incoming residents.	Minor, long term benefit
Opportunities to build new relationships with incoming residents	Long term	Local study area	Long term transition process	Social cohesiveness and neighbourhood identity	Minor, long term benefit	Promote shared use of facilities and services onsite Provision of appropriate open space, recreation and public spaces that promote “stay and play” activities Provision of flexible community	Minor, long term benefit

	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES	IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
						facilities to meet a diverse range of needs for incoming residents.	
Increased job opportunities provided on the site (approximately 1,717 additional jobs), in particular with regards to service sectors to support the existing and incoming community	Short and medium-term	Part of the community	Immediate – provides construction and white collar, professional jobs	Employment	Major, medium and long-term benefits	Support local community to access job opportunities at the site	Major, medium and long-term benefits
Long term viability of the Macquarie Centre which will promote competition and choice for the community	Long term	Local study area	Immediate	Improved service provision for the local area	Minor, long term benefit	NA	Minor, long term benefit
Increased residential development on site with the potential to activate the site at different times of day and foster a variety of social interactions	Long term	Local study area	Long term transition process	Social cohesiveness, neighbourhood identity, safety and security	Minor, long term benefit	NA	Minor, long term benefit
<b>IMPACTS</b>							
Disruptions to access of services and facilities during construction	Short term during construction	Individual	Immediate	Access and mobility, on-site service provision	Minor	Appropriate site pedestrian signage during construction Appropriate way finding signage to be provided within the proposed development Preparation of a construction management plan Raise community awareness of the impact of construction on the facilities currently on site	Not significant

	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES	IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
Potential future additional traffic congestions due to population growth within the locality	Long term	Local study area	Limited due to existing traffic constraints	Increased drive time and reliance on private transport	Moderate, long term impacts	Transport Management and Access Plan outlines a number of intersection upgrades required to meet future demand	Minor
Higher demand for existing public transport services and failure to meet potential demand during peak times. By 2025 the existing interchange bus stop provision is expected to be at capacity.	Long term	Whole community	Limited – level of service provision dependant on state agencies	Reduced ability to access public transport services and facilities and higher reliance on private transport	Major, long term impacts	The existing 9 bus stops are anticipated to accommodate forecast future growth to 2025 however the pedestrian-vehicle conflict along Herring Road will need to be resolved to ensure efficient operation of the bus interchange. The 5 bus spaces in the Macquarie Centre bus interchange are proposed to be updated to provide shorter walk times to the station for intermodal passengers and will improve the amenity for passengers waiting for busses	Major, long term impact to accessibility of bus infrastructure if no mitigation measure proposed
Additional demand on existing facilities decreases the accessibility, or level of service at community facilities for existing residents	Long term	Whole community	Limited due to limited existing services available	Reduced quality of facilities, or more difficult to access facilities	Major, long term impact	Review staging of development Development of additional services on site	Negligible
Potential unmet demand or need of the incoming community in terms of the type of facilities or services required. In addition, staging of new or improved facilities may not keep pace with the	Long term	Incoming residents	Long term transition process	Restricted access to resource infrastructure and/or services	Major, long term impact	Review staging of development Development of additional services on site Raise community awareness of the construction timeframes and facilities to be provided on site Development of flexible community	Minor, medium term impact

	DURATION	EXTENT	ABILITY TO ADAPT	SOCIAL OUTCOMES	IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
quantum of incoming residents resulting in unmet demand and impact on service quality						facilities and spaces which are designed to meet a diversity of needs	
Negative impacts associated with anti-social behaviour, potential for graffiti, increased opportunities for crime	Short term-long term	Whole community	Limited	Quality of life, livelihoods, culture	Major, long term impact	Ensure the site incorporates the Crime Prevention Through Environmental Design (CPTED) principles to maximise benefits, and minimise any potential issues associated with potential for crime or malicious damage to property Security Management Plan to be prepared outlining the proposed on-site security and management measures for all uses on the site Centre management required to remove all graffiti within 48 hours of identification Appropriate security measures (e.g. CCTV cameras) to be included within the detailed design of the proposed development	Minor
Negative amenity impacts to pedestrians, residents and workers within the precinct with regards to noise, wind , etc. during construction and operation	Short term-long term	Whole community	Limited	Quality of life	Major, long term impact	Design the proposal with appropriate acoustic and wind mitigation measures	Minor
Housing affordability	Impact not determined as pricing information not available						

## 9 Conclusions

This report has assessed the potential social impacts, and potential benefits, arising from the redevelopment of the Macquarie Centre and proposed development of potential 610-910 residential units. The assessment has been based on the Stage 1 DA details, and due to the stage of the planning process, no community or stakeholder consultation has been undertaken to inform the SIA at this stage. It is anticipated that this SIA will be updated at a later stage once consultation process has commenced.

The key social benefits potentially arising from the development include:

- Development of new retailing, commercial, food and community facilities and services on site, including a space dedicated for a community facility, which will improve and support the amenity of the Macquarie Centre for existing and future residents, in close proximity to public transport. The size and function of the dedicated community facility area will be considered in consultation with Council and refined at a later stage
- Improved street activation and pedestrian permeability and accessibility on and around the site. New public domain and plaza works will provide additional community spaces and places for social interaction as well as support active and passive surveillance across the site and surrounding land uses
- Additional supply of accommodation options within the precinct, in close proximity to public transport options and existing services and facilities
- The proposal is anticipated to generate approximately 1,717 additional jobs and provide increased job opportunities during and after construction through retailing and commercial floor space, and provision of community facility, anticipated
- The proposed development aligns with the State Government's vision for the redevelopment of the Macquarie Park Corridor and will support the vision for the precinct.

The key social impacts potentially arising from the development include:

- Potential increased demand for existing public transport services, particularly with regards to bus services and capacity of the existing bus interchange
- Potential increased private vehicle traffic which could impact existing residents, workers and students on and around the subject site, however overall the proximity of the bus and train stations is likely to minimise traffic impacts to and from the site
- The ability of community facilities and services including schools, open space and sports and recreation facilities, to meet any increased demand associated with the increasing population
- Disruptions to service provision, existing access routes, existing workers, shoppers and local residents caused during construction processes.

While a development of this scale is likely to result in disturbance during the construction and operation phases (e.g. generation of additional traffic etc.) it is anticipated that any potential impacts will be offset by the development of amenities within the centre, including community facilities, retail services, civic plazas and improvements to the streetscape and transport facilities.

Based on the information available, it is likely that a development of such scale can result in changes to social outcomes in the area and if appropriate mitigation and management measures are provided, including transport improvement works and the provision of new social/community infrastructure, this development has the capacity to deliver far reaching benefits to the community.

## Disclaimer

This report is dated December 2015 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of AMP Capital (**Instructing Party**) for the purpose of Social Impact Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.











## Appendix A

## Policy review

A review of key local government policies, plans and studies was undertaken to inform this SIA. This section provides a detailed review of this important documentation, including:

- A Plan for Growing Sydney (NSW Planning and Environment, 2014)
- City of Ryde 2025 Community Strategic Plan (City of Ryde Council, 2013)
- City of Ryde Four Year Delivery Plan 2015-2019 (City of Ryde Council, 2015)
- City of Ryde Quality of Life Indicators Report (City of Ryde Council, 2012)
- City of Ryde Community Facilities: Future Directions (City of Ryde Council, 2010)
- City of Ryde Draft Social and Cultural Infrastructure Framework (City of Ryde Council, 2014)
- City of Ryde Integrated Open Space Plan (City of Ryde Council, 2012)
- Herring Road Urban Activation Precinct Planning Report (NSW Department of Planning, 2014)
- Council Submission to the Department of Planning on the Herring Road UAP (City of Ryde, 2014)
- Baseline Movement Economy Report (Space Syntax, 2009)
- Macquarie Park Investment Prospectus (City of Ryde, 2015).

A brief review of the key findings from each document is provided below.

## A PLAN FOR GROWING SYDNEY (2014)

The NSW Department of Planning and Environment has released a metropolitan plan for Sydney called A Plan for Growing Sydney (NSW Department of Planning & Environment, 2014). The Plan identified four goals for metropolitan Sydney, as follows:

- Goal 1: A competitive economy with world-class services and transport
- Goal 2: A city of housing choice, with homes that meet our needs and lifestyles
- Goal 3: A great place to live with communities that are strong, health and well connected
- Goal 4: A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

There are a number of key directions under each identified goal. Direction 1.6 and 1.7 establishes the framework to expand the Global Economic Corridor and grow strategic centres to provide more jobs closer to home, Direction 2.1, 2.2 and 2.4 outline the requirements for accelerating housing supply and urban renewal and Direction 3.1 establishes the importance of revitalising existing suburbs, and the Government will prioritise the delivery of housing in or near centres in established urban areas.

Macquarie Park is identified as a Strategic Centre within *A Plan for Growing Sydney*. The areas along the northern and north shore train line are identified as an Urban Renewal Corridor with Epping, Macquarie University and North Ryde Stations identified as Priority Precincts. Macquarie Park is located within the northern end of Sydney's Global Economic Corridor.

Ryde LGA is located within the Northern subregion. General priorities for the subregion are outlined in the Table below.

PRIORITY AREA	PRIORITY
A competitive economy	<ul style="list-style-type: none"> <li>▪ Protect Sydney Harbour's function as a working harbour</li> <li>▪ Improve transit connections throughout the Global Economic Corridor to better link centres</li> </ul>

PRIORITY AREA	PRIORITY
	<p>and transport gateways</p> <ul style="list-style-type: none"> <li>▪ Investigate cross-regional transit links between Macquarie Park and Parramatta</li> <li>▪ Improve subregional connections, particularly from the Northern Beaches to Global Sydney and to the Global Economic Corridor</li> <li>▪ Preserve the corridor for Sydney Rapid Transit including a second harbour rail crossing</li> <li>▪ Facilitate the movement of people and freight through the North subregion to the Central Coast, Newcastle, the Hunter, Northern NSW and Brisbane, including through delivery of the NorthConnex project (a twin tunnel motorway linking the M2 and M1 under Pennant Hills Road). • Identify and protect strategically important industrial-zoned land</li> <li>▪ Investigate pinch-points on the Pacific Highway at Pymble Bridge/Pymble Station, Eastern Road/Rohini Street in Turramurra, Fullers Road intersection in Chatswood and Boundary Road intersection in Roseville.</li> </ul>
Accelerate housing supply, choice and affordability and build great places to live	<ul style="list-style-type: none"> <li>▪ Work with councils to identify suitable locations for housing and employment growth coordinated with infrastructure delivery (urban renewal) and train services, including around Priority Precincts, established and new centres, and along key public transport corridors including the North West Rail Link, the Western Line, the Cumberland Line, the Carlingford Line, the Bankstown Line and Sydney Rapid Transit.</li> </ul>
Protect the natural environment and promote its sustainability and resilience	<ul style="list-style-type: none"> <li>▪ Improve the health and resilience of the marine estate including the foreshore, tributaries and aquatic habitats of Sydney Harbour, Middle Harbour, Pittwater and the Hawkesbury River, the coast and beaches and Hawkesbury Shelf Bioregion</li> <li>▪ Protect and enhance national and regional parks including strategic additions to enhance bushland connectivity</li> <li>▪ Promote early strategic consideration of bushfire, flooding and coastal erosion in relation to any future development in the subregion, particularly around areas prone to coastal erosion at Collaroy/Narrabeen, Mona Vale and Bilgola</li> <li>▪ Work with councils to implement the Greater Sydney Local Land Services State Strategic Plan to guide natural resource management</li> <li>▪ Work with councils to protect the natural attributes and visual amenity of the coastline and enhance opportunities for public access.</li> </ul>

▪  
The Plan identifies the following priorities for Macquarie Park:

- Work with council to retail a commercial core in Macquarie Park for long-term employment growth
- Work with council to concentrate capacity for additional mixed-use development around train stations, including retail, services and housing
- Facilitate delivery of Herring Road, Macquarie Park Priority Precinct, and North Ryde Station Priority Precinct
- Investigate potential future opportunities for housing in areas within walking distance of train stations
- Support education and health-related land uses and infrastructure around Macquarie University and Macquarie University Private Hospital
- Support the land use requirements of the Medical Technology knowledge hub
- Investigate a potential light rail corridor from Parramatta to Macquarie Park via Carlingford
- Investigate opportunities to deliver a finer grain road network in Macquarie Park
- Investigate opportunities to improve bus interchange arrangements at train stations
- Work with council to improve walking and cycling connections to North Ryde train station.

## CITY OF RYDE 2025 COMMUNITY STRATEGIC PLAN (2013)

The *City of Ryde draft 2025 Community Strategic Plan (2013)* identifies seven outcomes and associated goals and strategies for the LGA. Goals and strategies of particular relevance to this SIA are identified in Table 15.

TABLE 15 – 2025 COMMUNITY STRATEGIC PLAN (2013): OUTCOMES AND RELEVANT GOALS AND STRATEGIES

OUTCOME	GOAL	STRATEGY
A city of liveable neighbourhoods	<p>All residents enjoy living in clean, safe, friendly and vibrant neighbourhoods.</p> <p>Our community has a strong sense of identity in their neighbourhoods and are actively engaged in shaping them.</p> <p>Our neighbourhoods thrive and grow through sustainable design, planning and regulation that support community needs.</p>	<p>To create welcoming neighbourhoods that are inviting, safe and enjoyable.</p> <p>To support a variety of uses and activities in our neighbourhoods, which contribute to a desirable lifestyle.</p> <p>To collaborate with our partners to increase social and recreational opportunities in our neighbourhoods.</p> <p>To plan and design our neighbourhoods in response to our community's needs wants and sense of belonging.</p> <p>To create active public places and spaces through good planning and design.</p>
A city of wellbeing	<p>Our residents are encouraged and supported to live healthy and active lives.</p> <p>All residents feel supported and cared for in their community through the provision of ample services and facilities.</p> <p>Residents feel secure and included in an environment where they can connect socially and are supported by their neighbours.</p>	<p>To offer a range of cultural, sport, recreational and leisure facilities to meet the needs of all.</p> <p>To provide a variety of activities that encourage social interaction and stimulate every day wellbeing.</p> <p>To provide services and facilities that meets the needs and challenges of all our community, throughout the cycles of their life.</p> <p>To provide safe community spaces and places for people to meet and get to know each other.</p>

OUTCOME	GOAL	STRATEGY
A city of prosperity	<p>Our Community and businesses across the city flourish and prosper in an environment of innovation progression and economic growth.</p> <p>Our city is well-designed and planning to encourage new investment, local jobs and business opportunities.</p> <p>Macquarie Park is recognised globally and locally as an innovative education and technology hub.</p>	<p>To create a strong economic direction, with incentives that encourages new and diverse business investment and opportunities.</p> <p>To share growth, prosperity and opportunities across the whole community.</p> <p>To provide innovative and integrated solutions to locate jobs, transport and housing together, to reduce time and travel costs and improve amenity.</p> <p>To design retailing places that encourage and attract a diversity of business opportunities and jobs.</p> <p>To brand, design and activate Macquarie Park as a distinctive, attractive and sustainable high technology centre of regional excellence.</p> <p>To optimise and promote Macquarie Park's distinctive qualities, to attract and create new and ongoing investment, assisting business to contribute to the Ryde community.</p>
A city of connections	<p>Our residents, visitors and workers are able to easily and safely travel on public transport to, from and within the City of Ryde.</p> <p>Our community has the option to safely and conveniently drive, park, cycle or walk around their city.</p> <p>Our residents, visitors, workers and businesses are able to communicate locally and globally.</p>	<p>To improve transport connections between our centres, neighbourhoods and workplaces, that are accessible and safe.</p> <p>To collaborate with relevant parties to maintain and develop better transport options that are convenient, safe, affordable and sustainable.</p> <p>To encourage the use of environmentally friendly transport options.</p> <p>To improve connectivity between and accessibility to our suburbs, centres, open spaces and places.</p> <p>To improve car parking options in our busiest centres.</p> <p>To create publicly available spaces that offer access to communication technologies.</p> <p>To create a Wi-Fi City that offers our community accessible and flexible communication.</p> <p>To collaborate with others to provide emerging communication technology in our city.</p>

OUTCOME	GOAL	STRATEGY
A city of harmony and culture	<p>People living in and visiting our city have access to an inclusive and diverse range of vibrant community and cultural places and spaces.</p> <p>Our community is able to learn and grow through a wealth of art, culture and lifelong learning opportunities.</p>	<p>To create and activate diverse cultural spaces and places for people to come together.</p> <p>To support opportunities for creative industries to flourish in our city.</p> <p>To provide a diversity of art, heritage, cultural and learning activities and opportunities in our city.</p>

## CITY OF RYDE QUALITY OF LIFE INDICATORS REPORT (2012)

The key findings from the *City of Ryde Quality of Life Indicators Report (2012)* of particular relevance to this assessment include:

TABLE 16 – CITY OF RYDE QUALITY OF LIFE INDICATORS REPORT: KEY INDICATORS

KEY INDICATOR	DETAILS
Housing affordability	<ul style="list-style-type: none"> <li>▪ Lack of affordable home purchasing options within Ryde. As of September 2010, only 4.1% of dwellings were considered affordable for households with moderate incomes, a rapid decline from 24.2 % in June 2009. The implications of this are the limited availability of affordable housing stock for purchase by people with very low, low and moderate incomes.</li> <li>▪ Of those households renting in Ryde, 42.9% paid more than \$275 per week in rent, including 2.6% that payed \$550 and over.</li> <li>▪ Ryde has higher rates of affordable housing for moderate and low income earners than the comparator LGAs of Ku-ring-gai (19.7%), Canada Bay (29.9%) and Hornsby (52.2%), and lower rates than Parramatta (79.9%).</li> <li>▪ The NSW Department of Housing (2010) ranked Ryde as high in housing need.</li> </ul>
Incidence of crime	<ul style="list-style-type: none"> <li>▪ Rate of major offences in Ryde in 2010 was 32.3 per 1,000 people and has decreased since 2003 (44.6 per 1,000 population).</li> <li>▪ Criminal offences in Ryde were most commonly committed by males, with 71.2% of offenders or persons of interest proceeded against being male. Of all male offenders, the age groups most dominant were those aged between 10-17 years and those aged 40 years and above (25.7% each). For females, 33.5% of offenders were aged between 10-17 years, and 24.7% were aged 20-29 years (BOCSAR 2010).</li> </ul>
Social participation	<ul style="list-style-type: none"> <li>▪ The most common type of social activity undertaken in 2006 was visiting or being visited by friends (92.3% of people in NSW over a three month period).</li> </ul>
Local employment and employing businesses	<ul style="list-style-type: none"> <li>▪ Ryde has a 1.3:1 ratio of local jobs to local workers indicating that there were more jobs in the LGA than workers and that there are many opportunities for local employment</li> </ul>
Urban green	<ul style="list-style-type: none"> <li>▪ Limited access to open space may negatively affect physical exercise habits and not allow for the</li> </ul>



KEY INDICATOR	DETAILS
spaces	<p>forming of community connections</p> <ul style="list-style-type: none"> <li>▪ There are 355 hectares of open space under Council management in Ryde</li> <li>▪ On a per person basis, the amount of open space is lower in Ryde (34 m<sup>2</sup> per person) than the Northern Sydney Region (72 m<sup>2</sup>)</li> <li>▪ In 2008 residents ranked the importance of parks and open spaces very highly (4th most important issue out of 40)</li> <li>▪ In 2008 satisfaction with Ryde's parks and open spaces was 90% (63% satisfied, 26% very satisfied).</li> </ul>
Transport options and public transport	<ul style="list-style-type: none"> <li>▪ Ryde residents in 2008 rated pedestrian access around shopping centres and community facilities as important (rated 3.55 in importance out of 4), and 82% recorded their satisfaction with the quality of these facilities (23% were not very, or not at all, satisfied).</li> <li>▪ Satisfaction with the footpath and bike path infrastructure was at 72%.</li> <li>▪ Only 67% of residents were satisfied with the availability of bus shelters in the same study (City of Ryde 2008).</li> <li>▪ The percentage of workers taking private motor transport is around 68-69%.</li> </ul>
Participation in cultural, recreational and leisure activities	<ul style="list-style-type: none"> <li>▪ In addition to any physical health benefits, involvement in recreational and leisure activities often involves social participation and creates a sense of belonging</li> <li>▪ Between 2008 and 2010 attendance at key events organised by the Council grew by 12%.</li> </ul>

## CITY OF RYDE COMMUNITY FACILITIES FUTURE DIRECTIONS (2010)

The key findings from the *City of Ryde Community Facilities: Future Directions* (2010) report include:

- Council does not currently have access to any purpose built arts facilities. Existing provision is via two heritage buildings not fit for purpose and development of a purpose built facility is a high priority
- Council is not a direct provider of child care services but does provide adequate land and buildings for child care services operated by not-for-profit organisations
- Provision of libraries will require upgrading over time to meet changing expectations and technology services. Opportunities for further delivery exist in Ryde Town Centre and Macquarie Park
- Key gaps identified in the provision of community facilities include:
  - Buildings that are built for purpose and offer flexible and multi-purpose space that can accommodate the needs of a diverse group of people and meet the changing needs of the Ryde community
  - The distribution of existing community buildings is uneven. There is limited provision in the northern part of the local government area compared to other areas
  - Council community buildings offer limited services to support the needs of young people, people from culturally and linguistically diverse backgrounds and the provision of cultural and arts activities.

- Council has identified a number of opportunities in changing the current delivery of community facilities and activities. These include:
  - Improved utilisation of existing facilities through a range of building upgrades and rationalisation of existing use and arrangements
  - Delivery of modern, iconic community facilities in major development projects including the Macquarie Park Corridor, Ryde Town Centre and West Ryde
  - Increased collaboration and partnerships with government agencies, Macquarie University, and private and community sector organisations to deliver community facilities
  - The growth identified in the City of Ryde presents a variety of funding and resource opportunities.

## CITY OF RYDE DRAFT SOCIAL AND CULTURAL INFRASTRUCTURE FRAMEWORK (2014)

The *City of Ryde Draft Social and Cultural Infrastructure Framework (2014)* responds to a number of key challenges which the City of Ryde faces in the delivery of community infrastructure. These include:

- Improving the financial sustainability of community buildings by delivering new infrastructure in partnership with other agencies and business groups to minimise capital expenditure
- Responding to population growth in the LGA by delivering flexible and adaptable activity and meeting spaces to meet the different demands of a growing and increasingly diverse community
- Creating purpose built facilities which are more functional and suited to the purpose of providing facilities where existing and new service providers can locate to meet a wider range of community needs and provide more integrated service provision
- Development of strategic directions within a framework which provides a schedule for developer contributions and informs the development of developer contribution agreements
- Delivery of community facilities in focal points throughout the city which increase the opportunities for place making to increase the vibrancy, connectivity, networking and increased economic activity which combine to create a stronger sense of place in key centres within the City of Ryde.

Delivery of key community facilities is prioritised in the *Framework* according to high, medium and low need. A district library and community centre are identified as a low need (over the next 15-20 years) in Macquarie Park. High and medium needs include:

- High: City wide cultural facility in Ryde and district library and district level community hub in Eastwood
- Medium: City wide community health hub in Ryde and a neighbourhood community centre in North Ryde and Gladesville.

The audit of suitability of infrastructure identified that:

- There is little social and cultural infrastructure in the north of the LGA, particularly around Macquarie Park
- A large proportion of child care and preschool services provided by the City are located outside urban centres
- The following are identified in the *Framework* as potential funding sources for future community facilities infrastructure:
  - Development contributions

- Disposal of underperforming or poorly located facilities
- Land developer partnerships or agreements
- Co-funding with government or non-government service providers.

## CITY OF RYDE INTEGRATED OPEN SPACE PLAN (2012)

The key findings from the *City of Ryde Integrated Open Space Plan (2012)* include:

- Highest participation across the City is in informal activities – walking, bushwalking, cycling and informal open space uses
- Park design should reflect social considerations for participation in leisure and recreation activities
- There is a need to optimise flexible indoor spaces that can adapt to diverse use wherever practical
- The needs of CALD, youth and seniors communities in the City should be integrated into open space and recreational planning
- Open space should include streets, urban spaces and other parts of the City that commonly cater to the community's recreation and leisure needs
- There is a need to improve access to and between open spaces to encourage more regular use.

## NSW DEPARTMENT OF PLANNING HERRING ROAD URBAN ACTIVATION PRECINCT PLANNING REPORT (2014)

The key findings from the *Herring Road Urban Activation Precinct Planning Report (2014)* include:

- The Herring Road Urban Activation Precinct (UAP) is centred around Macquarie Park
- Macquarie Park is classified as a 'Specialised Precinct' in the *Draft Metropolitan Strategy for Sydney to 2031 (2013)* and is predicted to provide 55,000 jobs by 2021, with an additional 16,000 jobs planned to be provided by 2031
- Herring Road was selected by the Department of Planning in 2013 as an Urban Activation Precinct with the aim of increasing housing supply in an environmentally, socially and economically sustainable manner
- Some of the advantages of the Precinct include:
  - Proximity to public transport
  - Proximity to important centres, including Sydney City, Parramatta and Chatswood
  - Connections to the North West Rail Link and M2 Motorway
  - Ability to respond to strong local market demand for housing
  - Availability of a number of large landholdings that provide opportunities for redevelopment.
- The indicative structure plan identifies the Macquarie Centre as an area for mixed uses: residential/retail/commercial
- Key elements of the Proposal include:

TABLE 17 – HERRING ROAD UAP: KEY ELEMENTS

CATEGORY	RELEVANT KEY ELEMENTS
Uses and activities	<ul style="list-style-type: none"> <li>Mixed uses: residential, commercial, retail, education, medical, entertainment, community facilities and open space</li> <li>Quality medium to high density urban community with up to 5,400 new homes by 2031</li> <li>Residential areas linked to public transport, the shopping centre and open space</li> </ul>
Movement network	<ul style="list-style-type: none"> <li>Convenient, pleasant and safer pedestrian and cycle access connecting residential areas with the university, shops, open space and public transport</li> </ul>
Built form	<ul style="list-style-type: none"> <li>Maximum heights and densities focused closest to the train station, university and shopping centre where they can benefit the most from public transport</li> <li>The precinct's key activity streets and precinct entry points defined with taller buildings between 45m and 120m (14-34 storeys)</li> </ul>
Open space	<ul style="list-style-type: none"> <li>Better links to open space</li> <li>Improved existing parks</li> <li>New local parks and public spaces</li> </ul>

- The Infrastructure Summary identifies the following social infrastructure priorities and potential funding arrangements:

TABLE 18 – HERRING ROAD UAP: SOCIAL INFRASTRUCTURE PRIORITIES

PRIORITIES	POTENTIAL FUNDING ARRANGEMENTS
Multipurpose community facility, such as a community space, community lounge, hall, gallery, local library or other community facilities	<ul style="list-style-type: none"> <li>Developers/ City of Ryde</li> <li>Potential delivery as part of future redevelopment Macquarie Centre</li> </ul>
New and improved local parks provide amenity for residents	<ul style="list-style-type: none"> <li>Developers/ City of Ryde</li> <li>Delivery as part of a Section 94 Plan</li> </ul>
Regional open space connections improved: north to Lane Cove National Park and south via Shrimptons Creek to Els Hall Park	<ul style="list-style-type: none"> <li>Developers/ City of Ryde</li> </ul>

- The UAP Proposal also identifies other significant developments occurring in the local area including:

TABLE 19 – HERRING ROAD UAP: OTHER SIGNIFICANT DEVELOPMENTS IN THE LOCAL AREA

DEVELOPMENT	DETAILS
The Stamford Hotel	<ul style="list-style-type: none"> <li>Concept plan approved September 2012</li> </ul>
110 -114 Herring Road	<ul style="list-style-type: none"> <li>7 buildings ranging from 4 to 22 storeys</li> </ul>
DP780314 (Lot 1)	<ul style="list-style-type: none"> <li>FSR of 2.28:1</li> </ul>
LDA 2014/0402	<ul style="list-style-type: none"> <li>51,119 m<sup>2</sup> of residential space</li> </ul>

DEVELOPMENT	DETAILS
	<ul style="list-style-type: none"> <li>▪ 1,210 m<sup>2</sup> of retail space</li> <li>▪ 741 car spaces</li> <li>▪ 11,530 m<sup>2</sup> of open space</li> </ul>
120 -128 Herring Road DP1187116 (Lot 18) LDA 2014/0170	<ul style="list-style-type: none"> <li>▪ Concept plan approved January 2011</li> <li>▪ Mixed use residential/retail development</li> <li>▪ 5 buildings ranging from 9 to 12 storeys</li> <li>▪ 560 residential apartments</li> <li>▪ Some small-scale retail</li> <li>▪ Swimming pool and gymnasium within complex, no open space provision</li> </ul>
84 - 92 Talavera Road DP1190961 (Lot 1) LDA 2011/0485	<ul style="list-style-type: none"> <li>▪ Development application approved March 2012</li> <li>▪ Mixed use residential/hotel</li> <li>▪ 4 buildings</li> <li>▪ 2 x 8 storey residential buildings</li> <li>▪ 2 serviced apartment buildings, 8 and 9 storeys</li> <li>▪ 405 car parking spaces</li> <li>▪ Landscaped park</li> </ul>

This indicates that many of the surrounding development projects provided limited community facilities or open space as part of the development project. The Stamford Hotel proposal includes development of 11,530 m<sup>2</sup> of open space, the 120-128 Herring Road proposal will provide a swimming pool and gym, and 84-92 Talavera Road will provide an area of landscape park. It is anticipated that these development projects provided significant contributions to the City of Ryde as part of the Section 94 Contributions Plan to support the delivery of community facilities and services by Council.

## COUNCIL SUBMISSION TO THE DEPARTMENT OF PLANNING ON THE HERRING ROAD UAP (2014)

Key findings from Council's *Submission to the Department of Planning on the Herring Road UAP (2014)* include:

- Council has significant concerns regarding the UAP, to the extent that Council cannot support the proposal in its current form and strongly rejects its approval
- Council's concerns include:
  - The high level of development and density proposed (not in line with the Macquarie Park Business Corridor nor Amendment 1 to the Ryde Local Environmental Plan 2014)
  - The cumulative impacts of additional development that occurs beyond the UAP proposal

- The inability of the existing and proposed infrastructure to cater for the additional levels of growth, including:
  - Minimal amounts of additional open space proposed
  - Lack of certainty around delivery of community facilities, especially in the Macquarie Centre
  - Lack of clarity around funding of infrastructure, especially in relation to Section 94 contributions and Planning Incentive schemes
- The proposed levels of density are largely dependent on the various infrastructures to be delivered, including
  - Community facilities
  - Open space areas
  - Schools
  - Intersection upgrades
  - New roads
  - Upgrades and improvements to existing roads
  - Pedestrian and Cycleway routes
  - Stormwater infrastructure.
- Council identify the provision of a “Multipurpose community facility, such as a community space, community lounge, hall, gallery, local library or other community facilities” as a key priority for the Macquarie Centre site
- Council also identify need for :
  - New and improved local parks provide amenity for residents
  - Environmental improvements to Shrimptons Creek
  - Improved access to:
    - North to Lane Cove National Park and
    - South via Shrimptons Creek to ELS Hall Park.
- The following principles for community infrastructure provision are outlined:
  - Locate new social and cultural infrastructure within urban centres
  - Create community hubs, inclusive of multipurpose social and cultural infrastructure
  - Express the experiences and richness of the local community
  - Maximise access to and use of social and cultural infrastructure
  - Use a partnership approach to planning, delivery and operation
  - Increase financial sustainability.

- Council identifies that the hub model seeks to incorporate a number of integrated compatible uses into a single building and that a district level multipurpose community hub in Macquarie Park should include:
  - Community space (facilities and services for groups such as children, young people, older people, people with a disability and culturally and linguistically diverse communities; hall, meeting rooms etc.)
  - Library
  - Community arts centre including performing arts and/or exhibition.
- Council identifies the following framework for provision of a multipurpose community hub at the district level:

TABLE 20 – COUNCIL SUBMISSION ON THE HERRING ROAD UAP: INFRASTRUCTURE FRAMEWORK AT DISTRICT LEVEL

INFRASTRUCTURE	RATE OF PROVISION (PER POPULATION)	APPROXIMATE GFA
Library	1:20,000-35,000	39 m <sup>2</sup> per 1,000 people
	1:35,000-65,000	35 m <sup>2</sup> per 1,000 people
Multipurpose community space	1:20,000-30,000	1,000-1,500 m <sup>2</sup>
		50 m <sup>2</sup> per 1,000 people
Community arts centre	1:40,000-50,000	1,000-1,500 m <sup>2</sup>

## BASELINE MOVEMENT ECONOMY REPORT (2009)

The 2009 baseline movement report for the Macquarie Park Corridor found that:

- Pedestrian movement along Herring Road would increase with additional development within the corridor
- The analysis shows that when pedestrian movement is measured in hourly averages per day Macquarie Park has very low pedestrian movement compared with successful urban centres. Movement levels are concentrated along Herring Road from Epping Road past the Waterloo Road intersection nearly as far as Talavera Road, and also between Macquarie Centre and Macquarie University
- A growing number of cafes are dispersed across Macquarie Park. Most cafes are not easily accessible for street passers-by
- Macquarie Park currently performs as a car dependent site. Spatial accessibility analysis shows high vehicle route choice for the arterial network and low pedestrian route choice, because the very large blocks produce very long walking distances to facilities
- There are very few transparent frontages (walls with doors and windows) and they are segregated from each other in localised areas where specialised retail land uses are sited.

## MACQUARIE PARK INVESTMENT PROSPECTUS (2015)

- Macquarie Park is a larger office market than North Sydney and Parramatta and has the capacity to grow to two million square metres

- Currently there are approximately 45,000 employees working in Macquarie Park and it is realistic to expect that that number will double in the next 20 years
- Connect Macquarie Park + North Ryde is a branch of the Macquarie Park Transport Management Association - collaboration with business, the City of Ryde and Transport for NSW to achieve efficient and sustainable transport for people working in Macquarie Park and North Ryde.

## MACQUARIE PARK PRIORITY PRECINCT

On 24 September 2015, the NSW Government announced the commencement of investigations into Macquarie Park as a Priority Precinct and to investigate opportunities to enhance the area's existing roles as a major commercial centre. Initial plans are currently being planned by the Department of Planning and Environment for public exhibition.

## MACQUARIE UNIVERSITY STATION PRECINCT

The Macquarie University Station Precinct includes Herring Road, the Macquarie Centre and Macquarie University. The Precinct is anticipated to provide up to 5,800 new homes by 2031. Key features of the precinct plan include:

- \$5 million for Council to enhance open space parkland along Shrimptons Creek corridor, Wilga Reserve and Elouera Reserve
- A B4 Mixed Use zoning 'academic core' at Macquarie University, to closely integrate academic and research activities with business and industry on campus
- Opportunities for new homes and urban renewal within a 800m radius of the railway stations – with taller buildings located close to the station
- Plans to secure upgrades for the bus interchange at Macquarie Centre.

## IVANHOE ESTATE AT MACQUARIE PARK

The Ivanhoe Estate is located at the corner of Epping Road and Herring Road and is 8.17ha in area, currently occupied by social housing. The NSW Government recently announced that the site would be redeveloped as part of the Macquarie Park Precinct, managed by Urban Growth.

The 259 existing social housing dwellings will be redeveloped to provide approximately 1,886 private dwellings, 556 social dwellings and 128 affordable dwellings.

## NORTH RYDE STATION PRECINCT

Whilst the North Ryde Station Precinct falls just outside the Macquarie Park Corridor, located to the south east of the corridor, it is expected to experience significant development uplift. It is anticipated that around 3,000 home and 1,500 jobs will be provided within this precinct. Key features of the precinct include:

- Over 2.4ha of parks and open space (20% of the total precinct area)
- New homes within 10min walk of North Ryde Station
- \$17 million in transport upgrades include new pedestrian and cycle bridge across Delhi Road, widening of Delhi Road and contributions towards a new pedestrian/cycle connection to Riverside Corporate Park
- Public plazas and a multi-purpose community facility.



## LACHLAN'S LINE MACQUARIE PARK

Lachlan's Line is centrally located between Macquarie Park and North Ryde train stations and forms part of the North Ryde Station Precinct. Urban Growth is the site masterplan developer who anticipates that the area will provide housing for over 5,000 residents.

The project includes a shared pedestrian and cycle bridge at the southern end of the M2 motorway connecting the site with North Ryde train station, the development of a series of linked parks and playgrounds, potential development of a community plaza, public art and a community centre, new links to improve connectivity to North Ryde Station and Macquarie Park Corridor, a road linking Epping Road to Wicks Road and restoration of natural bushland at Porters Creek.

## EPPING TOWN CENTRE

The rezoning proposal for the Epping Town Centre was finalised in March 2014. The Centre is located within Hornsby and Parramatta LGAs, to the west of the Macquarie Park Corridor. The centre is anticipated to provide 3,750 additional homes and a mix of retail and commercial development. As part of the rezoning, \$2.5million will be provided to both Hornsby Council and Parramatta Council to upgrade the sportsground at West Epping, to develop guidelines for the public space around Epping Town Centre, Council to upgrade Boronia Park and to improve safety around Rawsons and Bridge Streets.

Whilst outside Ryde LGA and the Macquarie Park Corridor, commercial floor space at the Epping Town Centre Precinct has been kept to a minimum to maintain the Corridors role as the commercial centre for the region.

Appendix B

Community profile

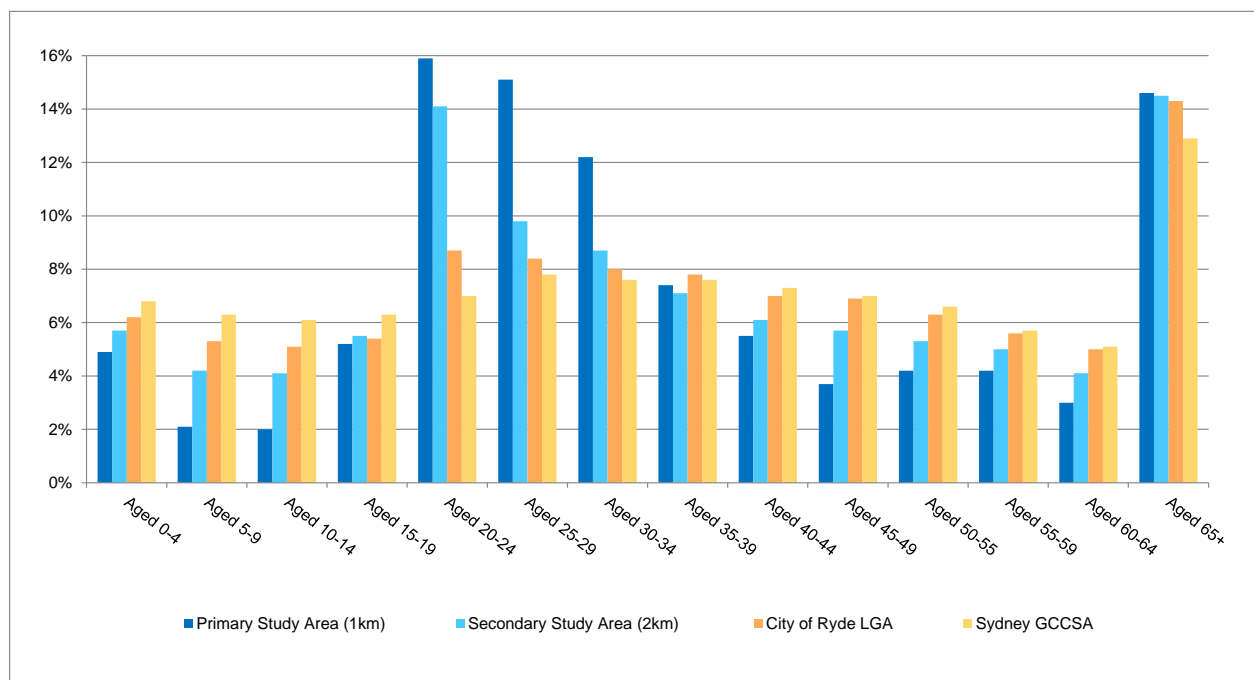
## POPULATION AND AGE

In 2014, the estimated residential population in the PSA was approximately 5,052 people, with 30,398 people in the SSA, equivalent to 4.6% and 18.7% of the Ryde LGA population respectively (estimated as 108,714 people).

The local population has a high proportion of young residents between the ages of 20-34 years. It is anticipated that this is due to the large number of students residing in the area and attending the Macquarie University. Figure 3 below indicates that:

- The most dominant age groups in the PSA and SSA are those aged:
  - 20-24 (15% in the PSA and 14% in the SSA)
  - 25-29 (15% in the PSA and 10% in the SSA)
  - 30-34 (12% in the PSA and 9% in the SSA)
- There is a significantly higher proportion of residents aged 20-34 in the PSA (43%) and SSA (33%) than in the Ryde LGA (26%) and the Sydney GCCSA (22%)
- There is a lower proportion of residents aged 5-14 in the PSA (4%) and SSA (8%) than in the Ryde LGA (10%) and Sydney GCCSA (12%). This is consistent with the dominance of lone person households in the local area.

FIGURE 3 – AGE BREAKDOWN



## COUNTRY OF ORIGIN AND CULTURAL & LINGUISTIC DIVERSITY

The population in the local area is characterised by a high Cultural and Linguistic Diversity (CALD) with a high proportion of residents born overseas. It is anticipated that this is due to the large number of international students and young workers residing in the area and attending or working at the Macquarie University or the Macquarie University Hospital. The data indicates that:

- Almost two thirds of all residents in the PSA (62%) and more than half of all residents in the SSA (52%) were born overseas, which is significantly higher compared to the Ryde LGA (44%) and Sydney GCCSA (36%). It is anticipated that this high proportion is due to the number of international students or young workers who reside in the area

- Nearly one sixth of all residents in the PSA (15%) and SSA (14%) were born in China, which is significantly higher compared to the Ryde LGA (10%) and Sydney GCCSA (3%)
- Nearly one quarter of all residents in the PSA (23%) and SSA (22%) speak Chinese (total) at home, compared to 17% in the Ryde LGA and 7% across the Sydney GCCSA
- There is high linguistic diversity in the PSA and SSA, evident in the higher proportion of languages other than English spoken at home when compared to Ryde LGA and Sydney GCCSA. The most common languages spoken at home are identified in Table 21 below:

TABLE 21 – MOST COMMON LANGUAGES (OTHER THAN ENGLISH) SPOKEN AT HOME IN THE PSA AND SSA

LANGUAGE	PRIMARY STUDY AREA	SECONDARY STUDY AREA	RYDE LGA	SYDNEY GCCSA
Chinese Total	22.7%	22.4%	17.3%	6.8%
Indo-Aryan Total	6.29%	3.6%	3.06%	3.6%
South East Asian Austronesian Total	5.51%	3.7%	2.5%	1.9%
Korean	3.05%	2.6%	4.06%	1.1%
Iranic Total	2.88%	1.3%	1.03%	0.6%

## HOUSEHOLD STRUCTURE AND FAMILY COMPOSITION

Consistent with the high student population associated with the Macquarie University,

The existing population in the PSA has a high proportion of non-family and lone person households and couple families with no children. This is consistent with the high proportion of students and young workers living in the local area. The data indicates that:

- More than half of the population of the PSA (51%) is made up of non-family households, which is high compared to the SSA (39%), Ryde LGA (31%) and Sydney GCCSA (27%)
- Two-fifths of the population of the PSA (40%) is made up of lone person households, which is high compared to the SSA (30%), Ryde LGA (25%) and Sydney GCCSA (23%)
- Almost half of the population of the PSA (49%) is made up of couple families with no children, which is high compared to the SSA (38%), Ryde LGA (36%) and Sydney GCCSA (34%).

## DWELLING STRUCTURE AND HOUSEHOLD STATUS

The majority of existing population living in the PSA are renters, living in flats, units or apartments. This is consistent with the medium density nature of the local area. There is a relatively high proportion of public renters living in the PSA, consistent with the high provision of social housing in the local area. The data indicates that:

- More than three fifths of the population of the PSA (68%) are renters, which is very high compared to the SSA (43%), Ryde LGA (35%) and Sydney GCCSA (32%)
- Of those that rent, a high proportion are public renters in the PSA (16%), compared to the SSA (8%), Ryde LGA (5%) and Sydney GCCSA (5%). This is consistent with the high provision of social housing in the local area
- The majority of the population in the PSA (88%) lives in flats units or apartments, which is very high compared to the SSA (39%), Ryde LGA (32%) and Sydney GCCSA (26%)

- A small proportion of the population of the PSA (11.7%) lives in semi-detached dwellings, and only 0.1% lives in separate houses. The latter is considered extremely low compared to the SSA (34%), Ryde LGA (53%) and Sydney GCCSA (61%) and is consistent with the medium density nature of the local area.

## EDUCATION

The existing population in the PSA and SSA have higher levels of educational attainment than the Ryde LGA and Sydney GCCSA:

- More than four fifths of the population of the PSA (84%) completed schooling until Year 12, which is higher compared to the SSA (78%), the Ryde LGA (72%) and the Sydney GCCSA (62%)
- In the PSA and SSA more than a third (41% and 38% respectively) of the current population has attained a Bachelor degree or higher, which is higher compared to the Ryde LGA (33%) and Sydney GCCSA (24%).

## EMPLOYMENT AND OCCUPATION

The local area has a higher unemployment rate than the Ryde LGA and Sydney GCCSA. This may be related to the presence of social housing and large number of students in the local area. Table 22 shows:

- The unemployment rate is higher in the PSA (11%) and SSA (8%) than in the Ryde LGA (6%) and Sydney GCCSA (6%)
- More than four fifths of the population in the PSA (85%) and SSA (84%) is employed in white collar occupations, which is slightly higher than the Ryde LGA (80%) and Sydney GCCSA (75%)
- Consistent with the above, a high proportion of residents in the PSA (41%), SSA (37%) and Ryde LGA (32%) are employed as professionals, compared to 26% across the Sydney GCCSA.

## INCOME

The average personal income is similar across all four areas; however the PSA experiences a lower average household income and a higher proportion of very low income earners than the other areas. Table 22 shows:

- The average per capita income in the PSA (\$36,879) is similar but slightly higher than that of the Sydney GCCSA (\$36,285), and slightly lower than that of the SSA (\$37,847) and Ryde LGA (\$38,391)
- The average household income in the PSA (\$72,685) is lower than that of the SSA (\$90,117), the Ryde LGA (\$96,032) and Sydney GCCSA (\$94,428)
- The proportion of the population earning nil to very low income (\$1-20,000) is higher in the PSA than in the other areas. A fifth of all residents in the PSA (21%) earn nil to very low incomes, which is almost double the Sydney GCCSA average (12%).

## MARKET RESEARCH

Market Research has been conducted by Colliers and Dimasi to determine the residential apartment market in Macquarie Park and North Ryde.

The Dimasi report, *AMP Project Green Residential Market Assessment* (May 2014), suggests that the current population profile has the following characteristics:

- A large proportion of lone person households
- A large rental market representing close to one third of all households in the Ryde LGA

- An undersupply of housing stock due to strong rental demand, resulting in strong rental growth driven by the 20-34 age cohort. This group consists mainly of students and young office workers
- A majority of Australian born residents (55.4%) with smaller but still substantial ethnic minorities from Asia, including China (6.8%), Hong Kong (2.8%) and South Korea (2.6%). A large portion of these represents the overseas students studying at Macquarie University
- Below average income levels compared to Sydney
- A lower proportion of separate houses in Ryde LGA (55%) than in Sydney (72%)
- Growth in the number of lone person households (35% of total growth between 1996 and 2006)
- The Ryde LGA scores 1,097 in the Socio-Economic Index for Areas (SEIFA) for Advantage / Disadvantage, with mixed advantage levels across the LGA.

The Colliers report, *Analysis of the Macquarie Park / North Ryde Residential Apartment Market* (April 2014), suggests that the current population has the following characteristics:

- A higher proportion of social housing in North Ryde and Macquarie Park (6-9%) compared to Ryde LGA (4%) and Sydney (5%)
- A high proportion of overseas born residents (46%) in Macquarie Park compared to North Ryde (29%), Ryde LGA (36%) and Sydney (28%)
- A high proportion of Chinese born residents in Macquarie Park (13%)
- The dominant household type in Macquarie Park is couples with no children (50%)
  - This is different to Ryde LGA and Sydney which are dominated by couples with children
  - This is influenced by the prevalence of young adults attending the University and the lack of affordable housing
- The most popular dwelling type in Macquarie Park is the apartment – this is different to Ryde LGA and Sydney, which are dominated by the detached house
- The proportion of owner occupiers is considerably lower in Macquarie Park and Ryde LGA than in Sydney.

TABLE 22 – DEMOGRAPHIC PROFILE

DATA ITEM	PRIMARY STUDY AREA (1KM)	SECONDARY STUDY AREA (2KM)	CITY OF RYDE LGA	SYDNEY GCCSA
Total population	5,052	20,398	108,714	4,605,992
Population 18 and over	4,529	17,083	87,460	3,549,838
Average per capita income	\$36,879	\$37,847	\$38,391	\$36,285
Age Distribution (%)				
Aged 0-4	4.9%	5.7%	6.2%	6.8%
Aged 5-9	2.1%	4.2%	5.3%	6.3%
Aged 10-14	2.0%	4.1%	5.1%	6.1%
Aged 15-19	5.2%	5.5%	5.4%	6.3%
Aged 20-24	15.9%	14.1%	8.7%	7.0%
Aged 25-29	15.1%	9.8%	8.4%	7.8%
Aged 30-34	12.2%	8.7%	8.0%	7.6%
Aged 35-39	7.4%	7.1%	7.8%	7.6%
Aged 40-44	5.5%	6.1%	7.0%	7.3%
Aged 45-49	3.7%	5.7%	6.9%	7.0%
Aged 50-55	4.2%	5.3%	6.3%	6.6%
Aged 55-59	4.2%	5.0%	5.6%	5.7%
Aged 60-64	3.0%	4.1%	5.0%	5.1%
Aged 65+	14.6%	14.5%	14.3%	12.9%
Aged 18+	89.7%	83.8%	80.5%	77.1%
Dependency Ratio <sup>1</sup>	23.7%	28.5%	30.9%	32.1%
Country of Birth and Indigenous Identification (%)				
Australia born	38.2%	48.5%	55.6%	63.7%
Overseas born	61.8%	51.5%	44.4%	36.4%
China	15.1%	14.1%	9.9%	3.6%
India	6.9%	3.1%	2.74%	2.1%
Malaysia	3.4%	2.6%	1.4%	0.6%
United Kingdom	2.7%	3.2%	3.0%	4.4%
Hong Kong	2.6%	3.2%	2.7%	0.9%
Korea, Republic of (South)	2.5%	2.2%	3.5%	1.0%
Indigenous population	0.06%	0.04%	0.04%	0.2%
Language Spoken at Home (%)				
English only	45.0%	52.9%	56.1%	65.7%

Chinese Total	22.7%	22.4%	17.3%	6.8%
Indo-Aryan Total	6.29%	3.6%	3.06%	3.6%
South East Asian Austronesian Total	5.51%	3.7%	2.5%	1.9%
Korean	3.05%	2.6%	4.06%	1.1%
Iranic Total	2.88%	1.3%	1.03%	0.6%
<b>Household Income (%)</b>				
\$Neg/Nil	6.1%	4.2%	2.7%	1.7%
\$1-\$10,400	2.8%	2.0%	1.7%	1.7%
\$10,400-\$15,600	5.3%	3.6%	2.8%	2.8%
\$15,600-\$20,800	7.2%	5.9%	5.7%	5.7%
\$20,800-\$31,200	9.1%	7.9%	8.0%	8.5%
\$31,200-\$41,600	6.8%	6.8%	7.2%	8.0%
\$41,600-\$52,000	8.4%	7.4%	7.4%	7.6%
\$52,000-\$65,000	8.2%	7.4%	8.1%	8.1%
\$65,000-\$78,000	8.7%	7.2%	7.4%	7.6%
\$78,000-\$104,000	13.8%	12.9%	12.1%	12.6%
\$104,000-\$130,000	7.5%	8.5%	8.8%	9.4%
\$130,000-\$156,000	9.3%	11.9%	11.0%	10.6%
\$156,000-\$182,000	3.2%	6.6%	6.9%	6.4%
\$182,000-\$208,000	1.0%	2.9%	3.6%	3.3%
\$208,000 plus	2.6%	4.9%	6.5%	6.1%
Average Household Income <sup>5</sup>	\$72,685	\$90,117	\$96,032	\$94,428
Household Income Variation	-23.0%	-4.6%	+1.7%	-
<b>Housing Status (%)</b>				
Owner	13.0%	27.9%	32.9%	31.1%
Purchaser	16.6%	27.4%	31.4%	35.7%
Renter	68.3%	42.9%	34.8%	32.4%
Public Renter	16.4%	8.2%	4.9%	5.4%
Private Renter	51.8%	34.8%	29.9%	27.0%
Households in Mortgage Stress (% Households)	2.2%	1.5%	1.6%	3.0%
Loan Mortgage Repayments (monthly \$)	\$2,048	\$2,513	\$2,574	\$2,424
Households in Rental Stress (% Households)	25.8%	13.9%	9.7%	7.8%
Rent Payments (weekly \$)	\$327	\$382	\$385	\$397
<b>Car Ownership (%)</b>				
0 Cars	28.7%	16.5%	12.9%	12.5%

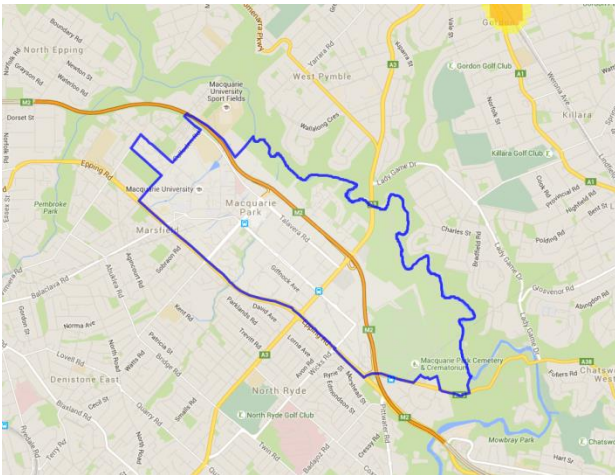


1 Car	55.3%	48.1%	44.0%	39.6%
2 Cars	14.0%	27.2%	32.2%	33.9%
3 Cars	1.5%	5.9%	7.6%	9.5%
4+ Cars	0.5%	2.3%	3.3%	4.5%
<b>Household Structure (%)</b>				
Family Households	48.8%	61.1%	69.4%	73.1%
Non-Family Households	51.2%	38.9%	30.6%	26.9%
Group	11.6%	9.1%	5.3%	4.3%
Lone Person	39.6%	29.8%	25.3%	22.6%
<b>Family Composition (%)</b>				
Couple family with no children	49.3%	38.3%	35.5%	33.5%
Couple family with children under 15	25.7%	31.8%	32.2%	32.5%
Couple family with no children under 15	6.1%	13.5%	16.8%	16.4%
One parent family with children under 15	5.3%	4.6%	4.7%	7.3%
One parent family with no children under 15	9.1%	8.9%	8.6%	8.4%
Other	4.6%	2.9%	2.16%	1.9%
<b>Labour Force (%)</b>				
% Unemployed	10.6%	8.2%	5.8%	5.7%
Labour Force Participation	60.9%	61.3%	65.2%	65.6%
<b>Occupation (%)</b>				
Managers	10.1%	13.5%	13.9%	13.5%
Professionals	41.3%	36.9%	32.4%	26.0%
Technicians & trades workers	8.3%	9.0%	10.8%	12.4%
Community & Personal Service Workers	8.0%	8.0%	8.2%	9.0%
Clerical & Administrative Workers	17.5%	17.0%	17.2%	16.5%
Sales Workers	7.8%	8.4%	8.7%	9.2%
Machinery operators & Drivers	2.6%	2.6%	3.2%	5.8%
Labourers	4.4%	4.6%	5.6%	7.5%
White Collar (%)	84.8%	83.8%	80.5%	74.3%
Blue Collar (%)	15.2%	16.2%	19.6%	25.7%
<b>Tertiary Education (%)</b>				
Bachelor Degree or Higher	41.3%	37.6%	33.3%	24.1%
Advanced Diploma or Associate Degree	7.4%	9.1%	9.8%	9.0%
Undertaking Tertiary Education	22.6%	19.0%	10.8%	6.5%

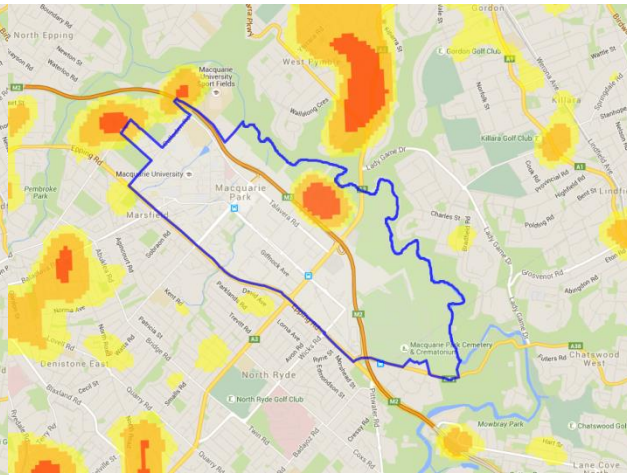
Highest Level of Schooling Achieved (%)				
Year 8 or Below	2.3%	3.1%	4.3%	5.3%
Year 9 or Equivalent	2.6%	3.4%	3.7%	5.3%
Year 10 or Equivalent	8.7%	11.2%	15.0%	21.0%
Year 11 or Equivalent	2.1%	2.9%	3.4%	4.7%
Year 12 or Equivalent	83.5%	78.6%	72.4%	62.3%
Did not go to School	0.8%	0.8%	1.2%	1.5%
Dwelling Structure (%)				
Separate House (%)	0.1%	33.9%	52.8%	61.0%
Semi-detached (%)	11.7%	26.6%	15.1%	12.8%
Flat, Unit or apartment (%)	88.2%	39.4%	31.9%	25.8%
Other dwelling (%)	0.0%	0.2%	0.1%	0.5%

## Appendix C

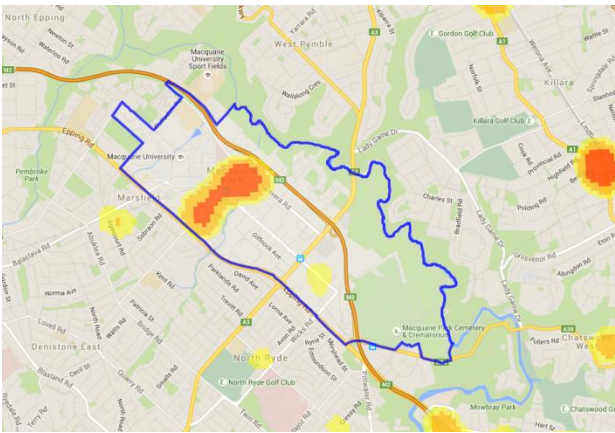
## Crime hot spots



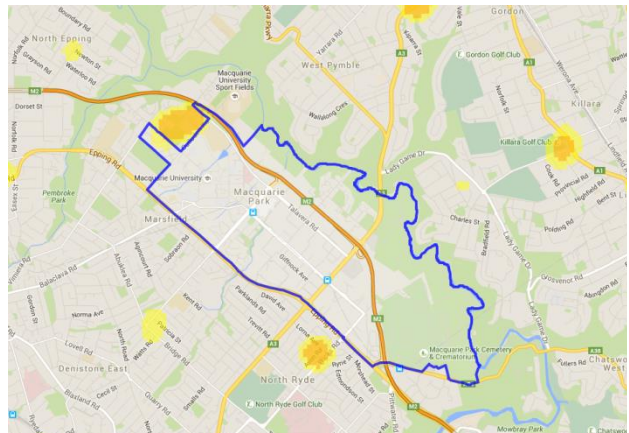
ROBBERY



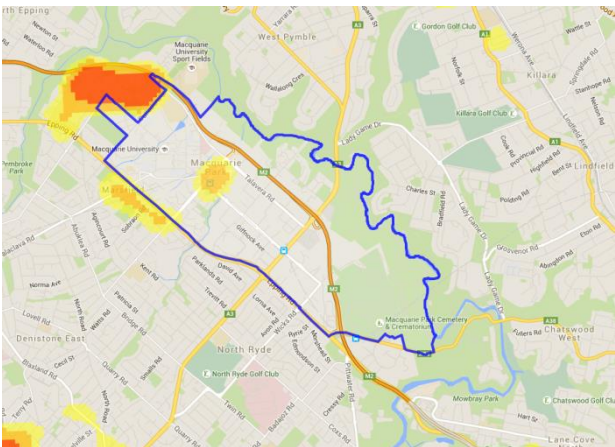
INCIDENTS OF THEFT (BREAK AND ENTER DWELLING)



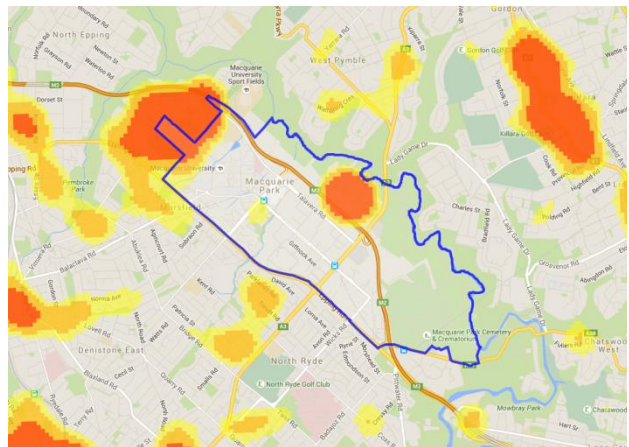
INCIDENTS OF THEFT (BREAK AND ENTER NON-DWELLING)



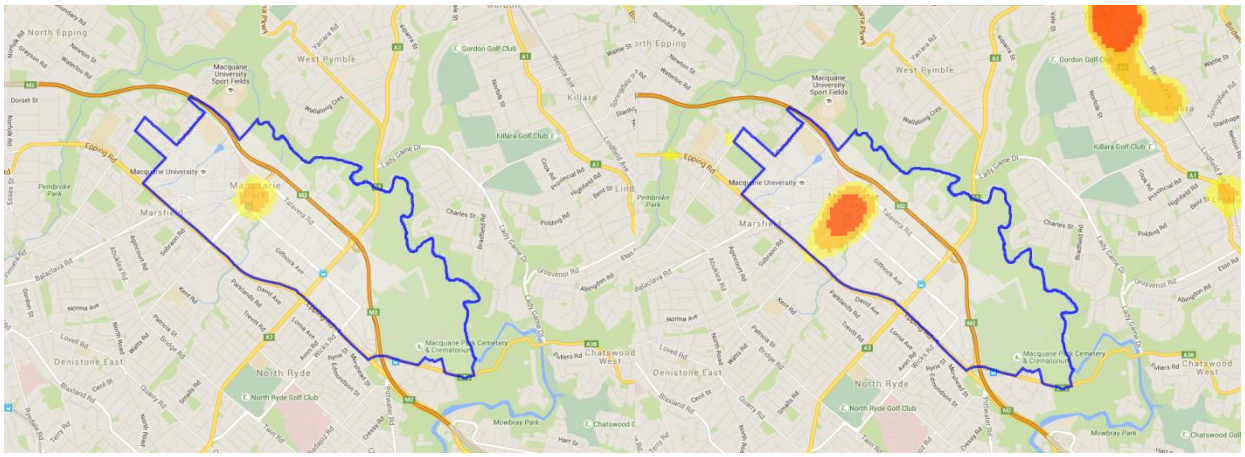
INCIDENTS OF THEFT (MOTOR VEHICLE THEFT)



INCIDENTS OF THEFT (STEAL FROM MOTOR VEHICLE)



INCIDENTS OF THEFT (STEAL FROM DWELLING)



INCIDENTS OF THEFT (STEAL FROM PERSON)

INCIDENTS OF MALICIOUS DAMAGE TO PROPERTY

**Sydney**

Tower 2, Level 23, Darling Park  
201 Sussex Street Sydney, NSW 2000  
t +02 8233 9900  
f +02 8233 9966

**Melbourne**

Level 12, 120 Collins Street  
Melbourne, VIC 3000  
t +03 8663 4888  
f +03 8663 4999

**Brisbane**

Level 7, 123 Albert Street  
Brisbane, QLD 4000  
t +07 3007 3800  
f +07 3007 3811

**Perth**

Level 1, 55 St Georges Terrace  
Perth, WA 6000  
t +08 9346 0500  
f +08 9221 1779

Australia • Asia • Middle East  
w [urbis.com.au](http://urbis.com.au) e [info@urbis.com.au](mailto:info@urbis.com.au)