Part C: Strategy Plans
Key Community Infrastructure: Infrastructure Planning Overview

2.0 Ku-ring-gai in Profile

The Ku-ring-gai Local Government Area (LGA) covered by this Contributions Plan is approximately 8,540 hectares (which is 85.4km^2) of which approximately 20% is covered by three National Parks: Ku-ring-gai Chase National Park, Garigal National Park and Lane Cove National Park. The urban area (excluding the National Parks) covers approximately 6,850 hectares (being 68.5km^2) which is 80% of the LGA.

Ku-ring-gai LGA has experienced several periods of rapid growth in its history, interspersed with periods of stable or declining population. The first period of rapid residential growth occurred after the opening of the North Shore railway line in 1890. This period began the establishment of the town centres along the railway line that we know today.

The interwar period of the 1920s and 1930s witnessed another active period of subdivision and residential expansion encouraged by improved access anticipated due to the opening of the Sydney Harbour Bridge in 1932. The post-war years, beginning in the 1950s through to the 1970s, were a period of intense development during which the population doubled from 50,000 to 100,000. Much of the community infrastructure provided around this time is now reaching the end of its economic life and is unable to cater for further growth. A significant amount of Ku-ring-gai's local open space was also developed during this suburban expansion and is physically remote from the town centres along the ridgeline and in St Ives where the current development phase is taking place.

Since the 1980s the population has been relatively stable in terms of overall numbers but ageing. The next phase of development, featuring urban consolidation in areas of high accessibility along the railway line and major roads, has recently commenced. This process is following the lead of other Local Government Areas closer to the Sydney Central Business District which have been experiencing urban consolidation for up to fifteen years.

The population of Ku-ring-gai is expected to have increased to around 126,151 by the time this current growth phase is complete in the early 2030s.

2.1 The Role of Ku-ring-gai as part of Greater Sydney

The State Government's 2005 Metropolitan Strategy *The City of Cities - A Plan for Sydney's Future* identifies the following broad trends and drivers of change to which planning for Sydney, as a whole, must respond. These are:

- population growth and demographic change, including migration trends, birth rates, an ageing population and less people living in each household;
- employment growth and change, including more service and office based jobs and a shift to integrated office, production and warehousing operations which means more land is required for some economic activities;
- the increasing globalisation of the economy, which means Sydney and Australia have to compete internationally to attract investment and sell goods and services overseas to remain prosperous;
- the push for more sustainable development, in the face of global environmental and climatic changes, which creates drier and more unpredictable weather events, and increased rates of consumption of natural resources such as water and fuels for energy;

- the rising costs of transport-fuel prices, congestion, greenhouse gas emissions, air quality and community health are placing increasing burdens on families and business. Demand for travel is increasing faster than population growth and the largest increase is in the use of private vehicles; and
- the basic structure and built fabric of the city which is substantially in place and will not change fundamentally over the life of the Strategy.

Notwithstanding the recent slowdown in economic activity, these drivers of change are expected to remain valid for the life of the Metropolitan Strategy. Economic and development activity is cyclical and several periods of both intense and slower activity will be experienced during the life of this Contributions Plan.

2.2 Ku-ring-gai and the Metropolitan Strategy

The Metropolitan Strategy supports continued economic growth while balancing social and environmental impacts. It recognises the significant challenges that will face Sydney over the next 25 years or so. The key challenge is that Sydney's population is expected to grow by 1.1 million people between 2004 and 2031, from a current population of 4.2 million to 5.3 million. To cater for this growth, the Government has predicted Sydney will require the 640,000 new homes and 500,000 more jobs. This will generate demand for approximately 7,500 hectares of extra industrial land, 6.8 million square metres of additional commercial floor space and 3.7 million square metres of additional retail space.

Recently there have been suggestions that even these growth figures in the Metropolitan Strategy are conservative and that Sydney could be looking at increased population pressures of up to 1.7 million to 2036. This underlines the necessity for regular review of all Strategic Planning documents.

The draft North Subregional Strategy, which covers Ku-ring-gai and Hornsby, was released by the Department of Planning on 31 October 2007. This subregional strategy translates the objectives of the NSW Government's Metropolitan Strategy to the local level. Local planning is required to be consistent with the subregional strategy.

Ku-ring-gai's share of the current targets for Sydney is a minimum of 10,000 achievable dwellings by 2031 and employment capacity for 4,500 new jobs. In the context of our ageing population, the variety of housing choice created by adding villas, townhouses and units to the stock of large houses will enable older residents to down-size their residence within their established community. The release of larger established dwellings will, in turn, encourage younger adults and families to return to the area or to stay. The provision of housing choice is also critical to improving housing affordability.

2.3 Focus on Town Centre and Pacific Highway Development

The current redevelopment trends are for medium to high density housing and mixed residential commercial buildings located around public transport nodes such as railway stations and major bus routes.

In Ku-ring-gai, Town Centres Planning has been underway since 2005/2006 and extensive work has been undertaken and consolidated by Council working with specialist consultants. This body of work includes a range of studies such as traffic, parking and transport modelling, comprehensive urban design analysis, community facilities analysis, heritage study, interface planning, housing, retail and commercial lands analysis, demographic review, open space planning, natural resource planning, detailed work on key sites, and an independent economic feasibility analysis/testing of proposed development scenarios.

The intent of *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* is to recognise and address the following key strategic planning issues facing Ku-ring-gai through to the 2030s:

- population growth and demographic change as a stable ageing population profile begins the shift to cyclical renewal as younger families move back to the area and retirees downsize their large dwellings;
- the need to take advantage of proximity to public transport maintaining good levels of train use and addressing access to bus transport;
- rectifying a relatively limited choice of housing with dwelling stock currently concentrated in single dwellings on large blocks;
- addressing a significant escape of retail spending to adjoining areas such as Hornsby, Macquarie Centre and Chatswood resulting in increased vehicle kilometres travelled;
- the need to revitalise local town centres to support population growth and demographic change, support local employment and improve local amenity and accessibility;
- supporting the character of Ku-ring-gai by strengthening local heritage provisions and maintaining access to parks and community facilities; and
- support for biodiversity and ecological processes.

2.4 Development outside the Town Centres

The key objective of providing housing choice underlines the fact that while a focus on highly accessible town centres makes good practical as well as good planning sense, not all development opportunities can be constrained to the Town Centres. There will always be demand for small-scale redevelopment such as dual occupancies and seniors living development in the form of villas and townhouses which may be better accommodated close to smaller neighbourhood centres. This smaller scale development is typically a maximum of two storeys in height with private gardens and can be more easily integrated into low rise housing areas.

The opportunity for this type of development remains in the *Ku-ring-gai Planning Scheme Ordinance* and the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*[43] and this on-going potential is expected to be incorporated in the Principal Local Environmental Plan going forward. Accordingly, the cumulative demand anticipated to arise from this incremental additional demand is also accommodated within this Contributions Plan.

In addition, there are some key sites outside the town centres and the Pacific Highway Corridor where significant development will be enabled. These sites include the Sydney Adventist Hospital (San) and the University of Technology (UTS). While other possible redevelopment sites cannot be formally anticipated, this Contributions Plan is drafted to enable development external to the Town Centres to also contribute their fair share towards additional community infrastructure, in particular new open space and community facilities. Since the demand for many works is analysed per capita and

[43] Note the name of this policy was changed from *SEPP (Seniors Living) 2004* to *SEPP (Housing for Seniors or People with a Disability) 2004* effective 12 October 2007.

given that works will be staged, if additional development occurs, any additional demand levied for can also be catered for by expanding the capacity of the existing works programme utilising those contributions in the form of larger community centres or additional areas of open space. All such development will, therefore, be expected to contribute its fair share in the same manner as any other nett additional development in the Ku-ring-gai Local Government Area.

2.5 Infrastructure Contributions Supporting Development

Ku-ring-gai Council's Development Contributions Plan is a key supporting document for achieving infrastructure to support the challenges inherent in population growth and consolidation as identified by the Metropolitan Strategy and the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*.

Major new development in Ku-ring-gai is concentrated along the Pacific Highway / North Shore Rail Corridor and focussed on the core Town Centres – including the satellite town centre of St Ives on Mona Vale Road. Intensification of this scale brings with it unique demands on the pedestrian and vehicular environment and on facilities for the future community. The vitality of the centres is supported by their physical amenity and that physical amenity must be upgraded to cater for this intensive development. The success of these upgrades will contribute to the economic viability of development of the area as well as its amenity. Both factors directly influence the on-going viability of later residential and commercial developments. In short, all developers have a vested interest in the success of the town centre redevelopments.

SURROUNDING INFRASTRUCTURE: *People rarely make property choices based merely on the four walls of the actual house. In fact, the schools, roads, parks, cafes and shops around those four walls are usually more important than the house itself, hence the value of location. You see, property values are rarely about the bricks, timber and materials of the home but more about the land value of the location. That's why apartments in the inner city can be worth more than a house on a quarter acre block further away from the city - the apartment attracts a location premium that the house cannot.*[44]

Contribution rates are a mathematical function of the cost of the work divided by the contributing population. Where land acquisition is involved this cost is inevitably impacted by the land values in the area. On the upper North Shore, these land values are high. These are the same land values which are created in part by the values that developers are, themselves, prepare to pay to acquire developable land. In most cases, Council has no option but to acquire additional land at that market rate and this cost is inevitably included within the Contributions Plan.

As far as possible, Council has incorporated strategies to reduce the cost of contributions including encouraging works in kind and facilitating land dedication through the provision of transferable floorspace (meaning that the development potential of that land is utilised within the development site). The zoning of much of the land required for parks and roads as RE1 and SP2, however, pre-empts a local government acquisition process at full market value which precludes the utilisation of any floorspace potential within an adjoining development and inhibits the carrying out of the work as works-in-kind. This ensures that the land must be acquired at market rates when the owner wishes to sell, which is not necessarily contemporary with the

[44] *Will a booming population mean another property boom?* Alex Brooks, Journalist / Property Writer, Sydney Morning Herald / Domain 24 September 2009.

development of adjoining sites. This process has restricted the use of an effective method of reducing the cost of infrastructure and directly increased the cost of the works programme that must be incorporated into this Contributions Plan. It also increases the financial risk exposure to Ku-ring-gai Council necessitating the retention of an account balance at levels that will enable council to respond to requests for acquisition. Many other works have also been deleted from this Contributions Plan in order to maintain a reasonable contribution rate.

2.6 Scope of Key Community Infrastructure Demarcations

Ku-ring-gai Council is constrained by the need to review *Ku-ring-gai Town Centres Contributions Plan 2008* to accommodate the amendments arising from the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010.* Gazettal of the LEP occurred on 25 May 2010. There is also some urgency in replacing the 2004-2009 Contributions Plan going forward.

The Notes to the Minister's s94E Direction of 31 May 2009, which confirmed the exemption of Ku-ring-gai Council from the $20,000 threshold, while not forming part of the Direction, none-the-less requested Ku-ring-gai Council to complete its review and consolidation by the end of 2009. Accordingly, there has been implicit onus on Ku-ring-gai Council to demonstrate that it has, in good faith, reported a formal draft document before the end of the 2009 calendar year. This Contributions Plan in its draft form commenced exhibition in December 2009, extended into February 2010..

As such, Ku-ring-gai Council was never in a position to delay the finalisation of this review until there was certainty on when Part 5B of the *Environmental Planning and Assessment Act* (assented in June 2008) will be commenced. At the time of finalising this document post-exhibition, a commenced date has not yet been announced.

Accordingly, while the requirements for Key Community Infrastructure do not exist under the present Division 6 of the *Environmental Planning and Assessment Act*, it is a fact that they will, ultimately, come into force. Even if commencement is delayed beyond the in force date of this Contributions Plan, it would be inappropriate to prepare a Contributions Plan with the intention of allowing it to become outdated almost immediately. Notwithstanding, preparing a draft Contributions Plan to with reference to new, untried legislation in the absence of revised Practice Notes from the Department of Planning presented a challenging situation.

The relevant section of the new Part 5B as passed by both Houses of Parliament reads as follows:

116I Councils limited to contributions for key community infrastructure

A council's contributions plan cannot allow the council to require a community infrastructure contribution unless the community infrastructure is:

(a) ***key community infrastructure*** (being community infrastructure prescribed by the regulations as key community infrastructure), or

(b) ***additional community infrastructure*** (being community infrastructure other than key community infrastructure) that the Minister has approved for the council under this section.

In the drafting of this Contributions Plan, Ku-ring-gai Council has relied on the list of Key Community Infrastructure listed in the version of Clause 31A of the Regulations appended to the *Environmental Planning and Assessment Amendment Bill 2008* as passed by both Houses of Parliament and assented by the Governor of NSW.

This Clause 31A reads as follows:

31A Key community infrastructure and additional community infrastructure

(1) The following community infrastructure is prescribed as key community infrastructure for the purposes of sections 116I and 116V of the Act:
(a) local roads,
(b) local bus facilities,
(c) local parks,
(d) local sporting, recreational and cultural facilities and local social facilities (being community and child care centres and volunteer rescue and volunteer emergency services facilities),
(e) local car parking facilities,
(f) drainage and stormwater management works,
(g) land for any community infrastructure (except land for riparian corridors),
(h) district infrastructure of the kind referred to in paragraphs (a)-(e) but only if there is a direct connection with the development to which a contribution relates.

(2) Public infrastructure comprising land for riparian corridors cannot be approved under section 116I or 116V of the Act as additional community infrastructure or additional public infrastructure.

(3) In this clause:
facilities means buildings and works.

As previously noted, Ku-ring-gai Council could not practically delay the exhibition of this Contributions Plan until revised Guidelines or Practice Notes were issued by the Department of Planning which might clarify how the term 'local road' or 'local park' as an item of key community infrastructure is to be applied to the urban context as distinct from the greenfield release areas or how embellishment of the public domain is to be treated in the urban context. While a consultation draft of the Local Development Contributions Guidelines was issued for consulation purposes only after this Contributions was adopted for exhibition, this information was not available to Ku-ring-gai at the time of drafting this Contributions Plan and only limited changes can be made to a draft document post-exhibition.

Accordingly, Ku-ring-gai has taken the following approaches to the distribution of its works programme under the Key Community Infrastructure headings which it believes, in good faith, to be reasonable.

2.6.1 Key Community Infrastructure – Public Places

Ku-ring-gai Council notes that the NSW State Government has provided clear support for urban civic spaces and town centre improvements as key community infrastructure for which additional demand is created by new development in established areas. The North Subregion - Draft Subregional Strategy states:

> " Population growth and demographic change will continue to create new demands for parks, public places and cultural facilities in the subregion. In addition to parks and sports grounds, public places also comprise other aspects of the public domain such as urban civic space such as town squares, widened footpaths and boulevards. Ku-ring-gai Council is working towards developing new civic spaces through the progression of an LEP for six of their centres. "[45]

There are different aspects of the 'public domain' ranging from improvements to the pedestrian environment on footpaths and through new pedestrian links through to civic spaces and town squares. These different aspects of the public domain could be considered to fulfil the role of a local park or a local road in the urban context. The demarcations in terms of usage and role are not clear-cut. In fact, the significant reductions in proposed local open space at less than half of current per capita rates, underlines the importance of the role of the public domain as a passive recreational resource in the urban context.

2.6.2 Key Community Infrastructure – Civic Spaces and Urban Parks

Civic spaces and town centre urban parks are considered differently to other aspects of the public domain. Frequently the establishment of new civic spaces is also dependent on the acquisition of private land to create or increase the space. The nature of use is also different. Rather than having a key function as thoroughfares with seating and places to linger being a secondary function, these spaces have a distinct passive recreation function as well as serving as a pedestrian linkage. It is the form of embellishment, and the focus on passive recreation that is distinguishes these spaces from the streetscape components of footpath embellishment. Accordingly civic spaces and urban parks are included as part of the Local Parks item of Key Community Infrastructure.

2.6.3 Key Community Infrastructure – The Pedestrian Environment

In attempting to define the correct demarcation for improvements to the pedestrian environment incorporating primarily footpath improvements, the definition of 'road' under the *Local Government Act 1993* is instructive:

"road" includes:
(a) highway, street, lane, pathway, footpath, cycleway, thoroughfare, bridge, culvert, causeway, road-ferry, ford, crossing, by-pass and trackway, whether temporary or permanent, and
(b) any part of a road and any part of any thing referred to in paragraph (a), and
(c) any thing forming part of a road or any thing forming part of any thing referred to in paragraph (a).

It is specifically noted that footpaths are a key part of the road, and are located within the road reservation. Ku-ring-gai Council consequently considers the term 'Local Roads' as it applies to key community infrastructure to include the entire road reservation in the public domain between property boundaries (being the private domain) inclusive of footpaths and nature strips and any structure located on them. As such, embellishments to the streetscape have been incorporated as part of the Local Road item of Key Community Infrastructure.

[45] NSW State Government: North Subregion: Draft Subregional Strategy Page 92

2.6.4 Key Community Infrastructure – Cycleways

The *Local Government Act 1993* definition of a road in the subsection above is also instructive as it pertains to cycleways. In the context of this Contributions Plan therefore both on-road and off-road cycleways are considered to be properly included in within the Local road category of Key Community Infrastructure.

2.6.5 Key Community Infrastructure – Local vs District vs Additional Infrastructure

There is some uncertainty as to when a local facility becomes a district facility in the context of a brownfields area where development may be widely distributed or clustered but accessibility is high throughout the Local Government Area as a whole as well as the correct interpretation of the term 'direct connection' which is used but not clarified in the Legislation that was passed by both Houses of Parliament. Again, this information was not available to Ku-ring-gai Council at the time of drafting this Contributions Plan.

This situation is unclear in the context of the West Pymble Aquatic Centre. This augmented facility is the only swimming pool complex in Ku-ring-gai however, given every surrounding Local Government Area has its own pool and, in some cases, up to four pools of comparable size serving their Local Government Area, Ku-ring-gai's only pool <u>is</u> its local pool which is centrally located near the heart of the Local Government Area. Ku-ring-gai believes this facility to be a local facility provided for the benefit of its population and this is further argued in the relevant chapter.

While plans for the Aquatic Centre are, in fact, sufficiently advanced for Ku-ring-gai Council to be in a position to provide a Business Plan to support its inclusion as District or Additional community infrastructure, other longer-term facilities are not.

It is noted that defining large centrally-located facilities as Additional Community Infrastructure by default of their size, singularity and/or location and, thereby, requiring the sort of business plans that can only be developed when a project is well-advanced, would, if pursued, effectively discourage planning for multi-purpose centralised facilities and, instead, encourage small-scale scattered facilities which are not necessarily the best mechanism for future service delivery.

Lastly, in the absence of any formal definition, it is also unclear whether the aquatic centre to be constructed at West Pymble open air swimming pool should be defined as a Sporting Facility or a Recreational Facility. For the purposes of this Contributions Plan, and noting that the preliminary design for the aquatic centre includes indoor pools, a hydrotherapy pool and a gymnasium, this item has been incorporated in this Contributions Plan as a Recreational Facility on the basis that it is primarily a structure rather than an open air sporting facility.

In conclusion, Ku-ring-gai Council believes, in good faith, that only the West Pymble Aquatic Centre currently potentially falls within the definition of Additional Community Infrastructure although it has been argued that this is a local facility for the population of Ku-ring-gai. If required at some point in the future, a Business Plan will be provided to the Minister for this possible Item of Additional Community Infrastructure.

2.6.6 Management, Studies and Administration

The management of the development contributions system is a complex and expensive business increasingly demanding specialist expertise.[46] There are significant, regularly changing, legislative requirements and legal precedents in governing every aspect of the system from plan preparation, management, monitoring, implementation, advice and reporting.

There are two facets to the direct costs of managing development contributions. One is people – their time and expertise expressed as salaries and on-costs including continuing professional development. The other is the supporting studies, demography and statistical products, studies and analyses that directly support the professional management of the contributions systems and the on-going review – and refinement – of the Contributions Plan.

Ku-ring-gai Council has recently begun the process of change significantly and dramatically from a Local Government Area with stable population to one of rapid development and demographic renewal. This places considerable demand on the Council for the timely delivery of the appropriate supporting infrastructure. This design and management of the contributions system is inseparable from the whole process. The salary and on-costs of a coordinator[47] and for studies, data and advice that directly support the plan, its management and implementation are, therefore, properly included in this Contributions Plan. Allowances towards these costs are incorporated within each of the Key Community Infrastructure chapters.[48]

The nature of work undertaken in the preparation and management of a Contributions Plan includes (but is not limited to):

- Analysis of Local Residential Development Trends
- Analysis of Local Business Development Trends
- Analysis of the Economic Cycle
- Demographic Analysis (census, journey-to-work, travel zones)
- Monitoring changing through Post-Occupancy Surveys
- Monitoring of Actual and Projected Development Statistics (residential and commercial)
- Monitoring Inflation and Contribution Rates
- Monitoring changing Land Valuations
- Negotiating of Planning Agreements
- Updating Web-based Information
- Project Management of Works-in-Kind

[46] Reference to the outcomes of the Contributions Review Panel (1st and 2nd tranche) indicate that the performance of the documents and practices of those councils who employ a specialist staff member justify that expense where the volume of contributions is sufficient to warrant that specialist attention.

[47] Ku-ring-gai Council currently employs a part-time specialist coordinator.

[48] In view of the uncertainty over the future capacity to include management costs as a distinct item of Key Community Infrastructure, these costs were distributed across the individual categories of Key Community Infrastructure. While these are, as a result of that process, represented as a percentage of the cost of this works programme, this is not an arbitrary percentage. The all-inclusive cost of managing the development contributions system over the life of the plan was first determined and the percentage was determined as a mathematical function of that cost to achieve the amount that would meet that budget estimate. Subsequently, the capacity to include these costs as a distinct item has been supported in draft consultation guidelines however, to amend this Contributions Plan to structurally reconfigure the contribution rates post-exhibition is considered a trigger for re-exhibition. It is also noted that these Guidelines remain draft at the time of completing this document.

- Project Management of Consultants providing supporting studies, economic advice, updating land valuations, and the like
- Financial Planning including Future Cash-Flow Analysis
- Financial Cash-Flow Management over the life of the Plan
- Budgeting the Council co-contribution for Apportioned Works
- Facilitating the prioritisation and implementation of the Works Programmes
- Quality monitoring – receiving feedback from users both internal and external
- Customer Service – Checks and Audits
- Assessment and advice on Legal Precedent

Additionally, management of the contributions system over the life of the plan requires the commissioning of studies and the purchase of additional data such as:

- Census Data;
- Other Statistical Information from the ABS and from other experts in the fields of demography and economics;
- Land Valuations;
- Development cycles and development activity;
- Economic feasibility testing and advice;
- Updating supporting studies and strategies including retention of specialised consultants; and
- Commissioning and analysing post-occupancy surveys and other surveys.

It should be noted than many of these activities involve all departments of the Council and many staff who are not funded directly or indirectly by development contributions.

The estimated total annual cost of managing the development contributions system inclusive of all tasks, consultancies and data above is estimated to be in the vicinity of $235,000 in 2009 dollars.

2.7 Integration of Town Centre Planning and Planning for Ku-ring-gai

This Contributions Plan is a key component of the funding strategy for infrastructure supporting development in Ku-ring-gai through to 2031. The majority of this development is expected to be concentrated in and around the six key town centres. Development that occurs outside the town centres is also likely to give rise to needs which, in many cases, may be more logically located in these key town centres to facilitate maximum accessibility. Of critical importance then, are the future structure plans for the six town centres as illustrated in *Ku-ring-gai Development Control Plan (Town Centres) 2010.*

The planning of each of the town centres was built on a planning vision which was prepared with input from the community and developed into a Structure Plan for each Town Centre.

2.7.1 Future Character of Gordon

Gordon will become a high density mixed use area that stretches about 800 metres along the Pacific Highway between St Johns Avenue and Ryde Road. Gordon will become the primary retail and commercial centre for Ku-ring-gai. It is anticipated that commercial floor space will grow from an existing base of about 81,000m^2 to about 129,000m^2. Supporting the retail growth will be a range of other employment related uses as well as shop-top housing. Two retail areas are planned for:

- A "Retail Core" on the western side of the Pacific Highway, with at least two large supermarkets and additional specialty stores focused around a newly created public urban space.
- A boutique retail and leisure precinct in the central area of Gordon providing improved main street shops along the Pacific Highway with new specialty shops, offices, and residential apartments on upper floors. Wade Lane will become activated with retail shops on one side of the street looking out across a new urban park which will be created on Council's land.

Gordon will also develop and expand to become the civic and administrative heart of the Local Government Area offering a wide range of civic and cultural facilities including a library, Council chambers and administration building; and a public park. Further investigation may indicate Gordon is the most appropriate location for a future cultural venue and auditorium either exclusively or as part of a multi-purpose facility.[49]

Shop top housing will be encouraged in each of the precincts to support commercial activity and improve safety of the area particularly in the evening. New apartment buildings are configured to achieve high amenity standards for new residents by minimising noise impacts and optimising solar access.

2.7.2 Future Character of Lindfield

Lindfield centre will be a high density mixed use centre extending about 400-500 metres along the Pacific Highway between Beaconsfield Avenue and Balfour Street. Strong incentive has been given for redevelopment of key areas to allow provision of contemporary supermarkets and addressing the undersupply of retail in the centre.

No extension of the retail zone is proposed however the density provisions in *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* will allow an increase in commercial floor space of about 11,686m^2 from a base of 32,469m^2 in Lindfield. This increase will largely cater for increases in the size of supermarkets and associated speciality retail as well as allowing the shops on the highway to face the rear to create quieter retail areas.

Lindfield will be defined by the two main retail hubs on the east and west sides of the centre. Each side will be strengthened and revitalised by allowing additional retail uses, office space, and new shop top housing. Lindfield Avenue's role as the "main street" will be enhanced to offer distinctive local shopping experience. Woodford Lane will become lined with shops overlooking a new "Village Green".

A large town square will be created located centrally on the Council car park at Kochia Lane with leisure-based retail uses adjoining such as cafés and restaurants to provide a major community focus. New shop-top apartment buildings along the Highway are configured to achieve high amenity standards for new residents by minimising noise impacts from the highway and ensuring solar access.

[49] This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

2.7.3 Future Character of Pymble

Pymble will become a high density mixed use area that stretches about 150-200 metres along the Pacific Highway between Livingstone Avenue and Post Office Street. New residents living in shop-top housing will further support the centre's viability.

Pymble will remain a small street based centre offering both an expanded and improved main street retail area along Grandview Street with new specialty shops, offices and residential apartments; as well as a leisure based retail area along Park Crescent with restaurants and cafes with views over Robert Pymble Park. The latter function has potential to attract people from a broader area which will support the viability of the centre.

The density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in commercial floor space of about 2,398m^2 from a base of 10,012m^2 in Pymble; such an increase is primarily to accommodate expansion of the retail zone onto Park Crescent as well as allowing for a small supermarket to be established (if viable). The proposed building heights in Pymble will provide strong encouragement for redevelopment to support a centre in decline.

A new Council owned multi-purpose community centre on the corner of Alma Street and Park Crescent is also proposed overlooking Robert Pymble Park.

2.7.4 Future Character of Roseville

Roseville will become a small high density mixed use area in two parts:

- The Pacific Highway precinct north of MacLaurin Parade which will continue to develop offering an increasing range of lifestyle and evening entertainment related retail outlets such as restaurants and cafes;
- Hill Street between Roseville Avenue and Bancroft Avenue which will retain a local retail service function. In addition, the Federation and early Inter-War commercial buildings on Hill Street will be retained and enhanced.

New shop top housing in each of the precincts will support commercial activity and improve safety of the area particularly in the evening. New apartment buildings will be configured to achieve high amenity standards for new residents by minimising noise impacts and optimising solar access.

A new "Village Green" on Lord Street behind the Hill Street shops will provide a central community space for a range of activities.

2.7.5 Future Character of St Ives

St Ives will become a high density mixed use area that will extend about 400-500 metres along Mona Vale Road between Stanley Street and Cowan Road. Density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in commercial floor space of about 23,873m^2 to cater for existing and future demand. Most of this anticipated growth would be retail floorspace incorporated within the St Ives Shopping Village if it were to undergo redevelopment.

The St Ives Shopping Village will be of a district centre scale offering increased retail choice and opportunities for shop-top housing, as well as office space for professional and medical services. The Shopping Village will not grow to compete with the other major shopping centres such as Chatswood or Hornsby. It will be a contemporary style centre with open pedestrian "streets" which would be lined with shops and provide views through to the Village Green.

An improved interface between the St Ives Village Shopping Centre and the Village Green will be created by replacing car parking with public space for community activities, events, celebrations, outdoor cafes and late night activities such as restaurants.

A new Council owned community facilities building will be provided that is intended to include a library, and may include a neighbourhood centre, new youth centre, and a child care centre.[50]

2.7.6 Future Character of Turramurra

Turramurra will become a moderate-sized centre that will stretch about 400-500 metres along the Pacific Highway between Turramurra Avenue and Duff Street. Density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in retail floor space of about 130% in Turramurra to cater for current and future demand.

The centre will be anchored by two major retail hubs one at Ray Street the other on Kissing Point Road; and a third boutique retail area will be centred around Rohini Street. Rohini Street's role as the "main street" will be protected and enhanced.

Overall the centre will provide a mix of uses including a variety of retail outlets, larger supermarkets, professional services as well as restaurants and cafes to serve the needs of existing and future residents. New housing opportunities, including shop top housing, will be created throughout the centre and this use will further support revitalisation of the centre.

New and upgraded community facilities, that are intended to include a new youth centre and library, will be provided in a central location adjacent to a proposed new town square.[51]

2.8 Recent Ku-ring-gai Development

Until quite recently, Ku-ring-gai had not experienced any significant growth since the 1970s. With the exception of 2002-2003 when medium density SEPP5 development was made permissible in Ku-ring-gai and 533 new dwellings received building approval, until 2004 Ku-ring-gai generally produced between 200 and 350 dwellings per year which is characteristic of a slow-growth middle ring Local Government Area.

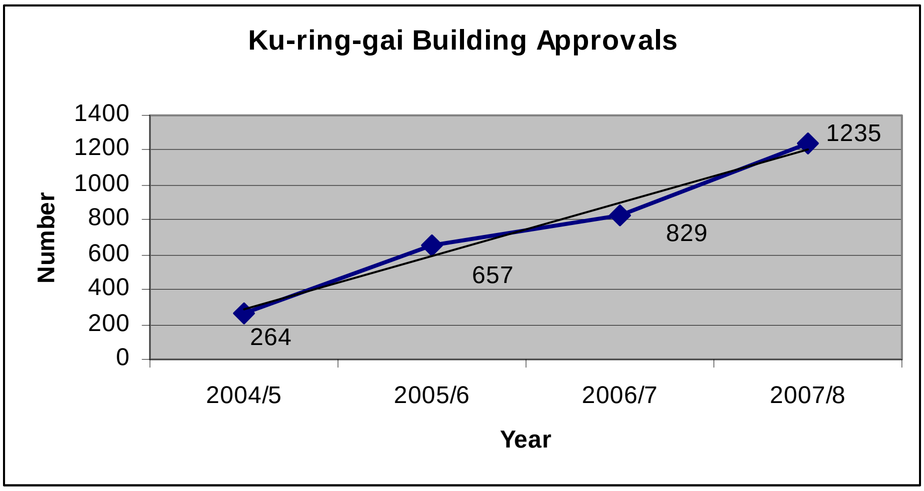
This situation began to turn around significantly following the effective date in 2004 of LEP 194 which allowed non-SEPP5 medium density development to be constructed within the Pacific Highway/Railway corridor and in St Ives. The graph below illustrates

[50] This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

[51] This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

the significant growth in building activity since 2005-2006 as the first 2004-2005 development consents received building approval and commenced construction.

Figure 2.1: Building Approvals for Dwellings in Ku-ring-gai 2004 - 2008[52]



While it is expected that the current economic climate will not permit comparable figures to be achieved in the short-term, this Contributions Plan mirrors the Metropolitan Strategy in planning for population growth through to 2031. Development activity is cyclical and this is a long-range plan. It is characteristic of the process of redevelopment in an established area that there are periods of high growth and periods of slow growth.

There remains a significant undersupply of dwellings to meet demand in Sydney which will only be exacerbated in the short-term. The National Housing Supply Council's *2008 State of Supply Report* released in March 2009 indicated a shortage of 85,000 dwellings in NSW in June 2008 and commented that this shortfall was likely to be in the order of 203,000 dwellings by 2013.

The NSW rental market is already extremely tight with vacancy levels at 1.6% in June 2007[53]. Continued undersupply in new dwellings will only exacerbate this situation. Ultimately investors will be encouraged to return to the residential market.

While the present stage of the economic cycle may affect the pace of some infrastructure provision (especially works-in-kind), with timely apportioned council spending and cash-flow management, this Contributions Plan is designed to ride out the inevitable fluctuations in the cyclical residential and non-residential markets. Indeed this is the time for government of all levels to be investing in the infrastructure that will support future development.

2.9 Residential Development Potential and Trends

The rate of realisation of the latent development potential envisaged by Environmental Planning Instruments will vary significantly over the life of the Contributions Plan due to stages in the economic cycle.

[52] Source: Building Activity, Australia; Australian Bureau of Statistics. Figures for 2008/2009 are not yet available at the time of drafting this Contributions Plan.
[53] Australian Bureau of Statistics: NSW in Focus: Housing; June 2008 reissue

2.9.1 New Dwelling Forecasts

This Contributions Plan generally aligns with the *Draft Metropolitan Strategy* which provides a requirement for Ku-ring-gai Council to accommodate a minimum of 10,000 additional achievable dwellings between 2004 and 2031. The table below represents the mid-range scenario of likely development in the Local Government Area from all potential sources.

Figure 2.2: Estimated Nett Additional[54] Dwellings in Ku-ring-gai 2004 - 2031

Area	Town Centres LEP	LEP 194 / 200	Other	Total
St Ives	1,800	-	-	1,800
Turramurra	1,422	-	-	1,422
Pymble	740	-	-	740
Gordon	1,959	-	-	1,959
Lindfield	1,285	-	345 (UTS)	1,630
Roseville	859	-	-	859
Killara	-	1,127	-	1,127
Wahroonga	-	897	700 (SAN)[55]	1,597
Roseville to Lindfield	-	51		51
Pymble to Turramurra	-	304		304
LGA wide	-	-	580 (infill)	580
Total	**8,065**	**2,379**	**1,625**	**12,069**

2.9.2 Population Growth Forecasts

The dwelling estimates above have been translated into estimated nett additional population growth. These figures take into account the loss of population from properties which are demolished to create a redevelopment site.

Figure 2.3: Estimated Nett Additional Population Growth in Ku-ring-gai 2004 - 2031

Area	Nett Additional[56] Population
St Ives	3,104
Turramurra	2,419
Pymble to Turramurra	521
Pymble	1,263
Killara	1,907
Gordon	3,272
Lindfield	2,200
Lindfield - UTS	621
Lindfield to Roseville	81
Roseville	1,441
Wahroonga	1,529
Wahroonga - SAN	1,260
LGA wide (incremental in-fill development)	1,430
Total	**21,048**

[54] Nett additional dwellings means new dwellings constructed less existing dwellings demolished.
[55] It should be noted that the SAN figure is, like the title to the table states, estimated nett additional dwellings. The total estimated numbers provided for by the concept plans and widely exhibited include a significant number of existing dwellings and non-private dwellings such as student accommodation and nursing home beds.
[56] Nett additional population means that the population lost as a result of the demolition of larger dwellings for redevelopment has been taken into account in these figures.

Area	Nett Additional[56] Population
Total North	10,954
Total South	10,094

As Australia moves out of the present economic slow-down with the concomitant potential for domestic housing interest rates to rise, with the end of the new homebuyers grant but the first indications of investors returning to the market, and with the on-going existence of some backlog of vacant recently completed new housing stock in Ku-ring-gai against an overall shortfall of housing in Sydney generally, the likely roll-out of development and population growth over five-year periods to 2031 remains most uncertain. Accordingly, no five-yearly estimates of growth are included in this Contributions Plan. Ku-ring-gai Council will continue to monitor the rate of development as part of the process of managing the development contributions system and roll out the works programme accordingly in light of the priorities and estimated timing indicated therein.

Figure 2.4: Population Growth in Ku-ring-gai 2004 - 2031

Year ending 30 June	Estimated Resident Population for Ku-ring-gai[57]	Growth
2004	106,620	
2005	105,579	- 1,041
2006	105,103	- 476
2007	106,135	+ 1,032
2008	108,135	+ 2,000
2031	126,151	+ 18,016

The table above illustrates the population growth arising from development commencing in 2004, arriving after the 2006 census continuing to demonstrate a sharp climb resulting from intense activity that cannot be sustained following the end of the economic boom period. More moderate rates of development of available stock is anticipated over the short to medium term, slowing towards the end of the development period as the better located sites have been taken up.

Total growth from the commencement of the population growth from 2004 development (population arriving after construction completion so 2006) = 21,048
Total growth from the effective date of the *Ku-ring-gai Town Centres Development Contributions Plan 2008* = 18,016

2.9.3 Forecasting Non-Private Dwelling Development

Ku-ring-gai Local Government Area has a significant older population and, until medium density development was permitted under LEP 194, most development in Ku-ring-gai was SEPP5 Seniors Living[58] development. Ku-ring-gai Council continues to receive development applications for new or reconfigured accommodation for older persons from active older people through to nursing home accommodation.

[57] Estimated Resident Population Figures are issued by the Australian bureau of Statistics approximately one year in arrears and are subject to revision until after the following five-yearly census. This means that 2007 and 2008 figures are preliminary only and will not be finalised until after the release of data from the 2011 census.
[58] This is the historic title of the policy that is currently known as *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*

Additionally, Ku-ring-gai Council also has a number of residents living in staff accommodation such as nurses' quarters and in boarding schools. Many of these types of non-private dwellings provide accommodation for active people who are able to participate fully in community life and use the facilities which council provides for all its residents. More details on this type of dwelling are provided in the demography section at 2.15.5 Non-Private Dwellings.

It is not possible to scientifically project whether the numbers of non-private dwellings will grow or remain stable over the life of this Contributions Plan as this is subject to the development decisions of individual companies however recent applications for development, as well as some preliminary concept plans, have foreshadowed reconfigurations of on-site accommodation mixes between private dwellings, serviced accommodation and non-private dwellings. Unless all types of residential development are included within this Contributions Plan it will not be possible to accurately assess nett additional population demand arising from such a site and, as such, it may not be possible to provide due credit for existing development.

Accordingly this Contributions Plan provides for a contribution rate for non-private dwellings which also, conversely, provides for a credit if such accommodation is redeveloped. This does not preclude any proponent making a merit case for developments that provide low-cost accommodation for vulnerable people for a formal exemption from the requirement for making a contribution under this Contributions Plan. All such submissions will be considered on their individual merits.

2.10 Residential Occupancy Rates

The demand for facilities, amenities and services has been calculated on a per capita basis. In practice, contributions are charged on the basis of dwelling types. The amount attributable to each type of dwelling unit is the rate per person multiplied by the average occupancy rate for that type of dwelling. It is important to note that occupancy rates can alter over time and will be subject to review at each review of the Contributions Plan.

Dwelling Houses[59]
2 bedrooms (or less) separate dwelling house: 1.9 persons/dwelling
3 bedroom separate dwelling house: 2.6 persons/dwelling
4 bedrooms (or more) separate dwelling house: 3.3 persons/dwelling

Units, villas and townhouses[60]
Studio/bedsit dwellings: 1.0 persons/dwelling
1 bedroom dwelling: 1.2 persons/dwelling
2 bedroom dwellings: 1.7 persons/dwelling
3+ bedroom dwellings: 2.1 persons/dwelling
Seniors Living: 1.3 persons/dwelling

New Lot Subdivision
Equal to a 4+ bedroom dwelling house: 3.3 persons/dwelling

[59] Occupancy rates for dwelling houses are derived from the 2006 Census as reported by SGS Economics and Planning in *Ku-ring-gai Development and Demographic Forecasts May 2008.*

[60] Occupancy Rates for medium to high density development have been extrapolated from *Ku-ring-gai Development and Demographic Forecasts* by SGS Economics and Planning May 2008 as at 2011 with the exception of Seniors Living which is derived from post-occupancy surveys.

Non-Private Dwellings
Residential non-private dwellings such as institutions, hostels, boarding houses, nurses' accommodation, seminaries, boarding schools and the like will be assessed in accordance with the number of persons intended to be resident on the basis of one resident per bed as well as on their individual merits as presented in the Statement of Environmental Effects. Applicants for low cost accommodation should specifically refer to sections **1.25 -1.33** concerning the application of this Contributions Plan.

2.11 Commercial Floorspace and Employment Projected Growth

The *Ku-ring-gai & Hornsby Subregional Employment Study*[61] analysed the forecast demand for business development and employment in the area. The key findings for Ku-ring-gai from that report are summarised as follows:

Strong forecast growth in property and business services: This sector displays very strong growth in Ku-ring-gai for the period 2006-2031. In line with forecast employment growth, demand for floorspace from 'Property and Business Services' is high at 49,428m^2 over the 2006-2031 period. The next highest in terms of floorspace demand comes from 'Retail and Trade' sector with forecast demand for an additional 15,031m^2 in the 2006-2031 period[62]; and
High demand for office space in Ku-ring-gai. Demand for office space is by far the greatest of the usage categories in Ku-ring-gai at 40,185m^2 over the 2006-2031 period. This is followed by main street retail at 17,728m^2.

Figure 2.5: Commercial Floorspace in Ku-ring-gai (2006)[63]

Town Centres & Villages	Floorspace 2006 (m^2)	Neighbourhood Centres and Villages	Floorspace 2006 (m^2)
Gordon	81,750	East Killara	1,137
Lindfield	32,469	East Lindfield	1,309
Pymble	10,012	Eastern Road Turramurra	1,290
Pymble Business Park	96,865	Fox Valley	2,863
Roseville	16,311	Hampden Ave Nth Wahroonga	868
St Ives	32,840	Killara	378
Turramurra	24,952	North Turramurra	4,989
Total	**295,199**	Princess Street Turramurra	1,328
		Roseville Chase	2,383
		South Turramurra	1,210
		St Ives Chase	927
		St Ives North	2,092
		Wahroonga	11,510
		West Gordon	961
		West Lindfield	4,484
		West Pymble	3,622
Total Centre based Commercial Floorspace[64]	**336,550m^2**	**Total**	**41,351m^2**

[61] *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning.
[62] This is in addition to the demand identified for the Hornsby Local Government Area for these two sectors being 56,185m^2 and 58,946m^2 respectively.
[63] These figures have been derived with reference to *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning, refined by subsequent detailed planning in respect of the six designated Town Centres and Pymble Business Park.
[64] This total excludes non-centre based employment nodes such as the Sydney Adventist Hospital, the University of Technology and the CSIRO at Lindfield and the like.

2.11.1 Town Centres Planning for Commercial Floorspace and Employment Growth

Planning for employment lands across the town centres through to 2031 considered both the *Ku-ring-gai & Hornsby Subregional Employment Study*[65] and the *Ku-ring-gai Retail Centres Study 2005*[66] and reflects the following principles:

- Gordon provides for a significant increase in the retail and commercial floorspace to reinforce Gordon's function as the district centre and to provide for increased population. Gordon has the potential to accommodate approximately 120,000m^2 of commercial floorspace. A significant growth in office and retail is expected.

- St Ives is planned to be the second centre in Ku-ring-gai. Significant retail and commercial expansion is planned for which will also consolidate the role of St Ives as an employment destination and service centre. St Ives will accommodate up to approximately 57,000m^2 of commercial floorspace of which a large proportion is expected to be retail floorspace within St Ives Shopping Village.

- Turramurra in the north and Lindfield in the south of the Local Government Area are also secondary centres where some commercial expansion is planned to meet the needs of the growing population surrounding these centres. Land zonings in these two centres are expected to accommodate between 33,000m^2 and 44,000m^2 of commercial floorspace respectively.

- The smaller centres of Roseville and Pymble are planned to accommodate approximately 18,000m^2 and 12,000m^2 of commercial floorspace respectively.

- Substantial growth is expected in the Pymble Business Park which is targeted for larger employment generating commercial, business and office buildings. This area has potential to accommodate approximately 135,000m^2 of commercial space. Pymble Business Park adjoins the Pymble Town Centre.

Figure 2.6: Commercial[67] Floorspace Potential in Ku-ring-gai

Commercial Centre	Existing commercial floorspace 2006 (m^2)[68]	Total full minimum development scenario (m^2)	Nett additional commercial floorspace (m^2)
St Ives	32,840	56,714	23,873
Turramurra	24,952	33,174	8,221
Pymble	10,012	12,410	2,398
Pymble Business Park	96,865	135,308	38,443
Gordon	81,750	119,975	38,225
Lindfield	32,469	44,155	11,686
Roseville	16,311	18,012	1,701
Total	**295,199**	**419,748**	**124,547**

[65] *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning.
[66] *Ku-ring-gai Retail Centres Study 2005 by HillPDA*.
[67] The term 'business' floorspace is a collective term and includes retail, commercial and business park type uses.
[68] These figures have been derived with reference to *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning, refined by subsequent detailed planning in respect of the six designated Town Centres and Pymble Business Park.

2.12 A Note about Population Projections and Population Forecasts

It is acknowledged without prejudice that there are a number of demographic projections extant which show alternative population growth/decline scenarios for the Ku-ring-gai Local Government Area. These include the RAPP programme available from the Local Government and Shires Association, data available from the Transport Data Centre and, to an extent, until recently, the ABS's own projections.

The difficulty with many broad-based estimates, meaning estimates that are undertaken for large areas of NSW broken down by Local Government Area, is that they tend to apply the methodology of formulating projections by examining what has happened in the past and extrapolating or 'projecting' it forward. This is an effective tactic for areas where the characteristics of growth or decline are established and are not in transition. However, because such projections of past trends rarely take account of current local-specific development trends and if they do, tend to err on the conservative side, they are not an accurate representation of areas that are in transition or turn-around.

As such projection-based methods are much less effective at producing valid forecasts for areas like Ku-ring-gai, which are transitioning from stable slow-growth areas to redevelopment areas. It should be noted that even studies that purport to take account of in-migration will, in the case of Ku-ring-gai, have limited past data with which to extrapolate as virtually all new development approved from late 2004 onwards in Ku-ring-gai reached occupation stage after the 2006 census.

By way of example, the RAPP study commissioned by the LGSA states that the age-specific nett migration levels for each region (2001-2006) were assumed to remain constant over the 2006-2021 period.[69] Ku-ring-gai's resident population declined slightly between 2001 and 2006 so the RAPP method projects a continuing decline. In fact, Ku-ring-gai's population has increased since the 2006 census as the first new unit developments welcomed their new residents. Over 4,000 new dwellings were approved in the period 2004-2008.

The latest Estimated Resident Population tables from the Australian Bureau of Statistics issued in mid 2009 confirm the change in Ku-ring-gai's Estimated Resident Population from a base of 105,103 as of 2006 (revised figures) to 108,135 in June 2008. At 1.9% growth rate over the past year, this is a similar rate of growth as some of the fastest growing local government areas in Sydney such as Blacktown and Liverpool (1.9%) and The Hills (2%). Ku-ring-gai's population increase of 2,000 persons was equal ninth fastest growing in terms of absolute numbers.[70]

Figure 2.7: Ku-ring-gai Estimated Resident Population 2004-2008

2004	2005	2006	2007	2008
106,620	105,579	105,103	106,135	108,135

In summary, the Ku-ring-gai Local Government Area is no longer a slow-growth area although this will not be formally demonstrated in census data until after the release of data from the 2011 census.

[69] Methodology for the Projection of Population and Labour Supply in RAPP (RAPP Technical Paper) Developed for the NSW Local Government and Shires Association; Section 4. It should also be noted that this paper contains a disclaimer stating that these projections are not to be considered forecasts.
[70] Australian Bureau of Statistics publication 3218.0 Regional Population Growth, Australia, 2007-08

2.13 Life of the Contributions Plan

This Contributions Plan mirrors the North Subregional Development Strategy which plans for development from 2004 to 2031. This time period also reflects the change in Ku-ring-gai from a stable area with few applications for development to an active brownfields urban consolidation area. The first LEP permitting medium density development beyond seniors living, LEP 194, was gazetted in 2004 and the first development consents were issued towards the end of that year.

The development horizon envisaged by this Contributions Plan also aligns with Ku-ring-gai Council's Long Term Financial Planning which maintains a twenty year horizon currently from 2010 to 2030, and rolled forward each year.

Due to the inevitable lag between development consent, subsequent building approval, demolition and construction through to habitation, it took until the census year of 2006 however, for the marginal decline in the Estimated Resident Population to stabilise and begin to turn around as the first residents of the new development began to settle. This situation is comprehensively demonstrated by comparing Figure 2.1: Building Approvals in Ku-ring-gai 2004 – 2008 and Figure 2.7: Ku-ring-gai Estimated Resident Population 2004-2008.

At the time of drafting this Contributions Plan, there are a number of latent development approvals which were levied under the previous contributions system which may or may not proceed in the current market and may or may not be superseded by a subsequent approval to reconfigure the proposed development to the emergent markets. Given the relatively recent nature of both the development phase in Ku-ring-gai and the present economic slow-down there is insufficient trend data to indicate what percentage of these developments are likely to proceed. It is characteristic of a development phase that has commenced, that it is impossible to pin-point a definitive status at any given point in time due to the number of developments that are under construction and developments that are approved but which may not proceed. Ku-ring-gai is not a new release area notwithstanding the commencement of the present development phase is relatively recent.

An additional complexity for Ku-ring-gai is that some major items of community infrastructure such as the West Pymble Aquatic Centre, commenced being levied for under a contributions plan in 2004 and must retain that base date in order to ensure that no duplication takes place.

This Contributions Plan manages the above complexities by retaining a development base date of 2004 and a population base date of the 2006 census, by tracking development in accordance with the Metropolitan Strategy (which will also assist the accuracy of future reporting on the achievement of those benchmarks) and by incorporating past but continuing works programmes and the past development that contributed to those works within that life on a pro rata basis. This process facilitates long-term planning for major items of infrastructure over the life of the plan recognising all contributing development from the commencement of the current development phase as well as the existing population. Contributions received under past Contributions plans towards these key infrastructure items support the implicit shortfall arising from developments that have already received approval and paid contributions under past Contributions Plans and will not, therefore, be levied under this Contributions Plan.

Although this is not a Nett Present Value system from a financial point of view as it does not involve estimated inflation and deflation, the approach utilises a key characteristic of an NPV system by analysing the whole development phase – and the demands arising from start to finish. In this way, all contributing demand arising from the current development phase is recognised and contributions are fairly apportioned.

Accordingly, Ku-ring-gai is entering the sixth year of this development phase as represented by the table below. Population growth as a result of that gradually instigated development initially lagged before beginning to turn around following the 2006 census.[71]

Figure 2.8 Progression of Ku-ring-gai's current development phase [72]

						⇩																					
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
ERP	105,579	105,103	106,135	108,135	Not released																						126,151

2.14 The Demography of Ku-ring-gai

This section outlines the key demographic issues which guide the nature and design of facilities that are to be provided, facilities required in the town centres and the manner in which open space is to be embellished. This demographic data is provided in this section because it is important to demonstration of the causal nexus for all types of key community infrastructure and would be repetitive if featured in each chapter.

The demographic data is based on census data from the Australian Bureau of Statistics and suburb based community profiles produced by .id consulting[73].

2.14.1 A Note about Place of Enumeration and Place of Usual Residence

There are two main types of resident population counts utilised by the Census. The first is Place of Enumeration which represents the people who were counted within the Ku-ring-gai Statistical Local Area on census night. This is the basic unit of the census and a large range of demographic information is available for this count. It is on this base, which counts about 100,000 people in Ku-ring-gai, on which most of the demographic analysis in this chapter is based.

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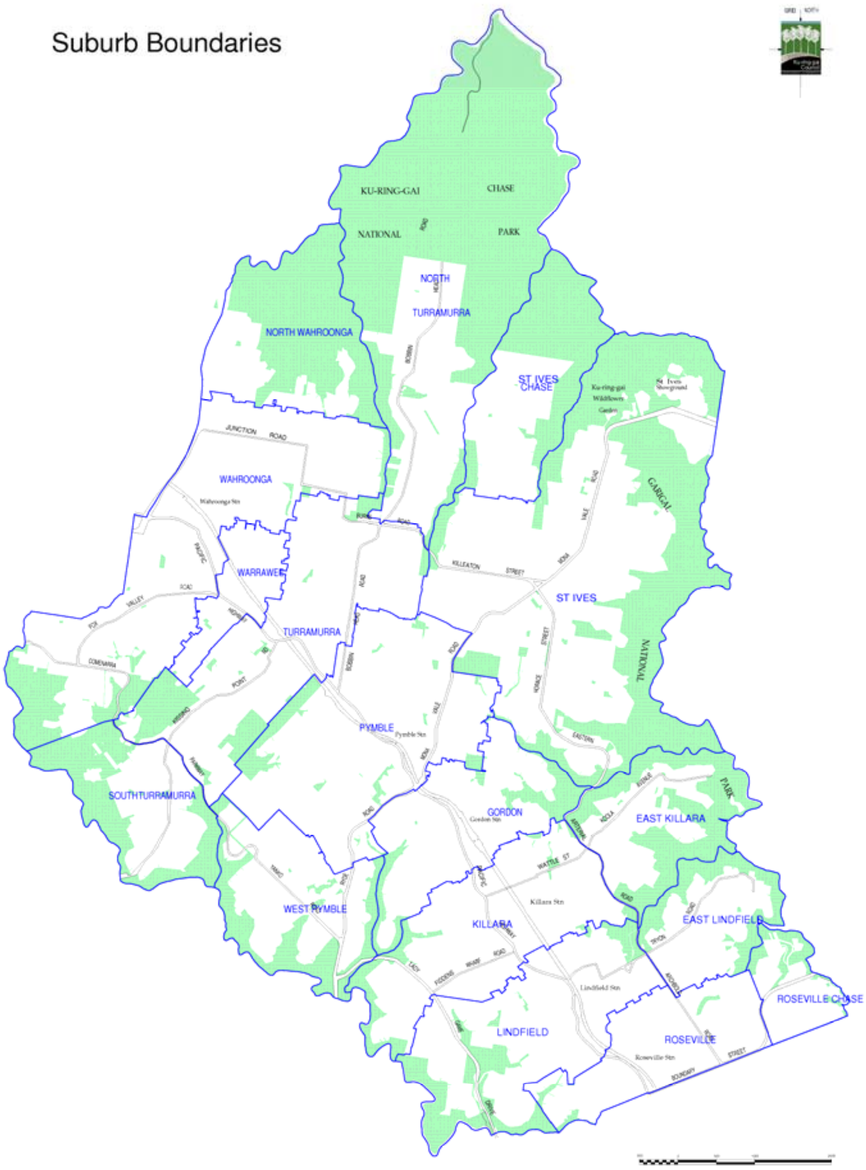
[71] The Estimated Resident Population (ERP) is published by the Australian Bureau of Statistics and issued in arrears. The latest figures are for 30 June 2008 and were released in June 2009. The ERP figures are subject to regular back-casting by the ABS and may be retrospectively changed at some future date. These are the figures that were current at the time this Contributions Plan was drafted.

[72] Five yearly estimates have not been provided in this Contributions Plan until there is greater certainty on the take-up of existing vacant stock, the rate of recovery from the Global Financial Crisis inclusive of the availability of financing for new developments, and the response to the gazettal of the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* on 25 May 2010. Any projection of the rate of development at this point of time, as distinct from the total amount of development, would be highly speculative.

[73] .id (informed decisions) is a company of demographers, housing analysts and census data experts who have developed information products specifically for the Australian Local Government market. They also provide extensive consulting services to other Government and commercial organisations: http://home.id.com.au/

The second type of population count is Place of Usual Residence from which the Estimated Resident Population is derived. This collects people who were away from home on census night and puts them back in the area where they actually live. This is the source of the figure of 106,000 residents for Ku-ring-gai in 2006 quoted in the North Subregional Strategy. This figure has, in fact, since been revised downwards by the Australian Bureau of Statistics to 105,000 persons in 2006 after the issue of that document. Unfortunately, only a limited range of demographic data is accessible based on Place of Usual Residence. Accordingly it is less useful for detailed comparative demographic analysis but remains valid for estimates of total population. Where statistics from place of enumeration are required to relate to statistics from place of usual residence, percentages rather than absolute figures are used.

Figure 2.9: Suburbs of Ku-ring-gai Local Government Area



2.14.2 Age Structure of Ku-ring-gai Residents

From the table overleaf it can be seen that, up until the 2006 census, Ku-ring-gai's population had been reasonably demographically stable for the past fifteen years with only marginal changes in individual age groups.

There has been a marginal increase in the overall number and proportion of infants as well as in young school age children whereas the number of young people has declined slightly. Young adults, in particular, have declined as a percentage of the total population. Adults in the family stages are stable with significant numbers of older adults as a proportion of the population. Age-groups can be grouped into demographic life-stages to assist in understanding the need for and use of different types of Council-provided facilities.

Figure 2.10: Ku-ring-gai Age Structures[74]

Age Cohorts	2006	2006	2001	1996	1991	1991
	%	#	#	#	#	%
0 to 4	5.27%	5,238	5,387	4,935	4,951	4.99%
5 to 11	10.42%	10,354	10,413	9,474	9,709	9.79%
12 to 17	10.27%	10,210	10,051	10,440	11,164	11.25%
18 to 24	8.70%	8,648	9,567	10,068	11,093	11.18%
25 to 34	6.85%	6,809	8,003	8,526	8,598	8.67%
35 to 49	21.99%	21,857	22,084	22,053	22,804	22.99%
50 to 59	14.16%	14,071	14,040	12,746	11,534	11.63%
60 to 69	9.50%	9,443	8,418	8,636	9,543	9.62%
70 to 84	10.00%	9,932	9,826	9,159	8,255	8.32%
85 and over	2.84%	2,823	2,365	1,941	1,552	1.56%
Total	100.00%	99,385	100,154	97,978	99,203	100.00%

The table below illustrates the age structure of the key suburbs that make up the Ku-ring-gai Local Government Area. In terms of overall numbers, there are significant concentrations of most age-groups distributed throughout Ku-ring-gai which is indicative of an established area.

Figure 2.11: Life Stages in Ku-ring-gai 2006 Census[75]

Suburbs	Infants 0-4	Children 5-17	Adults 18-64	Mature adults 65-84	Senior adults 85+	Total	%
Gordon	200	1,020	3,061	692	254	5,227	5.26%
Killara / East Killara	502	2,089	5,979	1,351	229	10,150	10.22%
Lindfield / East Lindfield	646	2,403	6,455	1,457	461	11,422	11.50%
Pymble / West Pymble	822	3,218	8,200	1,779	291	14,310	14.40%
Roseville / Roseville Chase	530	1,668	4,724	969	197	8,088	8.14%
St Ives / St Ives Chase	834	3,433	9,569	2,662	314	16,812	16.92%
Turramurra / Nth & Sth	967	3,236	9,783	3,069	759	17,814	17.93%

[74] Data Source: Community Profiles for Ku-ring-gai LGA produced by idconsulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

[75] Data Source: Community Profiles for Ku-ring-gai LGA produced by idconsulting utilising data from the five yearly national census from the Australian Bureau of Statistics. Numeric discrepancies between this table and the preceding table are primarily due to the respective source data because suburb data is built from small areas counts (collector districts) which include figures that have been rounded to avoid identifying individuals. LGA figures are built from raw data and do not include rounded figures.

Suburbs	Infants 0-4	Children 5-17	Adults 18-64	Mature adults 65-84	Senior adults 85+	Total	%
Turramurra							
Wahroonga / Nth Wahroonga	634	2,754	7,575	1,859	311	13,133	13.22%
Warrawee	92	623	1,366	280	35	2,396	2.41%
Total	**5,227**	**20,444**	**56,712**	**14,118**	**2,851**	**99,352**	**100.0%**
Ku-ring-gai Percentages	5.3%	20.7%	57.1%	14.2%	2.8%	100.0%	
Sydney Statistical Division Percentages	6.6%	16.9%	64.3%	10.6%	1.6%	100.0%	

Importantly, the table above demonstrates that school aged children make up a significant 20% of the population of Ku-ring-gai with their parents representing a significant proportion of the adult age-group. This compares to the Sydney Statistical Division which shows 16.9% of the Sydney population falls into the school-age population. There are relatively fewer very young children in terms of overall numbers. The 5.3% of the population in Ku-ring-gai compares to 6.6% of the population in the Sydney Statistical Division. The predominant family type in Ku-ring-gai is families with older school-aged children. In terms of overall numbers, there are, in fact, more school age children than people over the age of 65 (20,444 compared to 16,969) and more children in total (25,671).

The next most noteworthy group are the retirees (mature adults) which make up a significant 14.2% of the population of Ku-ring-gai compared to 10.6% of the Sydney Statistical Division. Elderly people at nearly 3% of the population compare to only 1.6% of the population over 85 in the Sydney Statistical Division. Collectively people over the age of 65 make up 17% of Ku-ring-gai's population compared to 12.2% of the Sydney Statistical Division.

2.14.3 Structure of Dwellings

As of 2006, Ku-ring-gai remains a Local Government Area characterised by low density single dwellings but with an increasing proportion of medium to high density dwellings.

Figure 2.12: Structure of Dwellings in Ku-ring-gai 1996-2006 Census[76]

Type of Dwelling	SSD 2006 (%)	KMC 2006 (%)	KMC 2006 (#)	KMC 2001 (#)	KMC 1996 (#)	KMC 1996 (%)
Separate House	57.1%	79.8%	28,853	28,922	28,400	81.3%
Medium Density (<3 storeys)	17.4%	8.0%	2,879	2,711	2,135	6.1%
High Density (3+ storeys)	17.3%	5.5%	2,002	1,805	1,823	5.2%
Caravans, cabins	0.3%	0.0%	6	4	4	0.0%
Other / Not Stated	0.5%	0.1%	52	231	608	1.8%
Subtotal Occupied Private Dwellings	**92.6%**	**93.4%**	**33,792**	**33,673**	**32,970**	**94.4%**
Total unoccupied Dwellings	7.4%	6.6%	2,384	1,864	1,944	5.6%
Total Dwellings	**100.0%**	**100.0%**	**36,176**	**35,537**	**34,914**	**100.0%**

[76] Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

It is important to note that much of the recent development post-dates the 2006 census and will not be recorded by a census until the 2011 census. This is expected to indicate the beginnings of a proportional shift in the dwelling types though single dwelling houses will remain the dominant dwelling type in Ku-ring-gai for the life of this Contributions Plan.

2.14.4 Household Size

The size and nature of households are influenced by the type and location of dwellings and the services and amenities in the Local Government Area. The relative proportions of single dwellings and medium to high density dwellings will continue to shift during the current development phase and will influence the future demographic make-up of local households.

Figure 2.13 Household Size in Ku-ring-gai[77]

Household Size	KMC 2006 (#)	KMC 2006 (%)	SSD 2006 (%)
Lone person households	5,371	16.1%	23.1%
2 person households	9,763	29.2%	31.2%
3 person households	5,336	16.0%	16.9%
4 person households	7,754	23.2%	17.2%
5 person households	3,615	10.8%	7.7%
6+ person households	1,555	4.7%	3.9%
Total households	**32,394**	**100%**	**100%**

The table above demonstrates that the dominant household type in Ku-ring gai is a two-person household followed by the four-person household underlining Ku-ring-gai's two dominant household types of families with older children and retirees or empty-nesters. Compared to the Sydney Statistical Division, Ku-ring-gai features a significant proportion of larger families of 4-5 persons and a much smaller proportion of single person households.

At the time of the 2006 census there were 36,177 dwellings in Ku-ring-gai of which nearly 80% were separate houses. The development of a large number of smaller apartment dwellings - 12,069 dwellings represents just over one-third of the current dwelling stock – has the capacity to significantly alter the present demography in terms of household profiles and place new – and different – demands on council provided infrastructure and services.

2.14.5 Household Structures

The structure of households in Ku-ring-gai is also an important indicator for the provision and delivery of facilities especially community facilities and the design of local parks and civic spaces.

[77] Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

Figure 2.14: Family and Household Structures[78]

Family and Household Types	KMC 2006 (#)	KMC 2006 (%)	SSD 2006 (%)
Couples with child(ren) 15 yrs & under	9,855	35.7%	32.8%
Couples with child(ren) over 15 yrs	6,134	22.2%	16.4%
Total couple with children	**15,989**	**57.9%**	**49.2%**
One parent families with child(ren) 15 yrs & under	922	3.3%	7.8%
One parent families with child(ren) over 15 yrs	1,722	6.2%	7.8%
Total one parent families	**2,644**	**9.5%**	**15.6%**
Couples without children	8,709	31.5%	33.3%
Other families	294	1.1%	1.9%
Total families	**27,636**	**100.0%**	**100.0%**

Family and Household Types	KMC 2006 (#)	KMC 2006 (%)	SSD 2006 (%)
Total family households[79]	27,216	81.1%	68.6%
Lone person households	5,371	16.0%	21.8%
Group households	407	1.2%	3.9%
Other not classifiable households	577	1.7	5.7%
Total households	**33,571**	**100.0%**	**100.0%**

In this context it is noteworthy that families with children make up a high 67.5% of family households in Ku-ring-gai being slightly higher than the 64.9% in the Sydney Statistical Division. Families generally, including couples without children, make up a very high 81.1% of households in Ku-ring-gai. Ku-ring-gai also features a significant proportion of people living alone although lower than the Sydney Statistical Division overall. In Ku-ring-gai these households are more likely to be elderly persons than in other areas of Sydney.

2.14.6 Non-Private Dwellings

While there are relatively few residents of non-private dwellings in Ku-ring-gai, none-the-less these residents are also members of the community and need to be considered in the planning and provision of services and amenities.

Some non-private dwellings are provided as stand-alone accommodation like a boarding house or hostel. In Ku-ring-gai, a number of properties incorporate both private and non-private dwellings. For example retirement villages may contain self-contained dwellings for active over 55s as well as serviced accommodation like hostels as well as nursing home beds.

Other properties may include non-private dwellings with other uses such as nurses' accommodation with a hospital complex; staff quarters within a business or institution; student accommodation within a school or tertiary establishment; and the like.

[78] Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

[79] It should be noted that there are some households which include more than one family accounting for the apparent discrepancy between families and family households.

Figure 2.15: Ku-ring-gai Residents of Non-private Dwellings 2006 Census[80]

Type of Non-Private Dwelling	Males	Females	Persons
Accommodation for the retired or aged (not self-contained)	105	532	637
Boarding house, private hotel	10	4	14
Boarding school	143	344	487
Childcare institution	4	3	7
Convent, monastery, etc	32	14	46
Corrective institution for children	0	0	0
Hostel for homeless, night shelter, refuge	5	6	11
Hostel for the disabled	0	0	0
Hotel, motel, bed and breakfast	22	11	33
Immigration detention centre	0	0	0
Nurses' quarters	38	124	162
Nursing home	127	460	587
Other and not classifiable[81]	9	18	27
Other welfare institution	0	0	0
Prison, corrective institution for adults	0	0	0
Private hospital (not psychiatric)	214	277	491
Psychiatric hospital or institution	0	0	0
Public hospital (not psychiatric)	13	35	48
Residential college, hall of residence	0	0	0
Staff quarters	9	5	14
Not stated	0	0	0
Total	731	1,833	2,564

Many of these listed types of non-private dwellings provide accommodation for active people who are able to participate fully in community life and use the facilities which council provides for all its residents. Conversely it is acknowledged that not all residents of non-private dwellings will place a demand on Council's services and facilities. By way of example, the public hospital listed in this table is a palliative care facility. In the case of levying and crediting these types of accommodation, the attention of applicants is drawn to section dealing with the limited opportunities for merit exemptions from this Contributions Plan.

2.14.7 Household Mobility

The table below demonstrates that Ku-ring-gai had a relatively stable population with a total of 69.2% persons having lived in Ku-ring-gai for over five years (at the same or different addresses).

It is noted that the 2006 census effectively predates the completion and occupation of virtually the new dwellings that were developed following the gazettal of *Ku-ring-gai Local Environmental Plan 194* and census information from residents of these properties will not be captured until the 2011 census. The information in this information is therefore likely to change over the life of this Contributions Plan and will need to be updated at each review since it has implications for the facilities and services needed to integrate new residents into the community.

[80] Data Source: Ku-ring-gai Local Government Area Statistics 2006 Census; Australian Bureau of Statistics.

[81] The other and not classifiable category has an explanatory note to the effect that it includes ski lodges and backpacker hostels. In the case of Ku-ring-gai, while the assumption is not verifiable, it is considered more likely to refer to the Glengarry Girl Guide Centre.

Figure 2.16: Ku-ring-gai residents between the 2001 and 2006 Census[82]

Movement 2001-2006	Number	%
Same address 5 years ago	59,890	59.2%
Moved within Ku-ring-gai	10,076	10.0%
Moved to Ku-ring-gai from elsewhere in NSW	13,894	13.7%
Moved to Ku-ring-gai from elsewhere in Australia	1,575	1.6%
Moved to Ku-ring-gai from another country	6,795	6.7%
Moved to Ku-ring-gai – no further information	243	0.2%
NA/Not Stated	8,609	8.6%
Total	101,082	100.0%

Ku-ring-gai Council conducted a survey of residents of newly constructed dwellings and summary information from this survey as reported in **2.15 Ku-ring-gai: Emergent demographic trends** following this section. This suggests that 54.4% of respondents had moved to the newly constructed dwelling from elsewhere in Ku-ring-gai and a further 20.1% had moved to the newly constructed dwelling from elsewhere on the north shore. Only 13.4% came from elsewhere in Sydney, 9% had come from elsewhere in Australia (including elsewhere in NSW) and 3% had come directly from overseas. The new residents survey did include a number of SEPP5 developments which are less likely to make up such a large proportion of future developments accordingly Ku-ring-gai will need to continue to monitor the source of its new residents over time.

2.14.8 The Ku-ring-gai Workforce and the Ku-ring-gai Labour Force

The term 'workforce' refers to people who work in Ku-ring-gai regardless of where they live. The term 'labour force' refers to people who live in Ku-ring-gai who are also employed or looking for work. A person may be both part of the labour force and the workforce if they are employed in the Local Government Area where they live.

Figure 2.17: Area of Employment Statistics[83]

Ku-ring-gai Employees – Area of Residence			Ku-ring-gai Residents – Area of Employment		
Ku-ring-gai	12,189	44.5%	Ku-ring-gai	12,189	25.9%
Hornsby	4,297	15.7%	Sydney	10,537	22.4%
Warringah	1,103	4.0%	Willoughby	4,419	9.4%
Baulkham Hills	1,045	3.8%	North Sydney	3,201	6.8%
Ryde	933	3.4%	Ryde	2,501	5.3%
Gosford	876	3.2%	Hornsby	2,160	4.6%
Willoughby	815	3.0%	Warringah	1,339	2.8%
Pittwater	519	1.9%	Parramatta	974	2.1%
Blacktown	504	1.8%	Lane Cove	739	1.6%
North Sydney	489	1.8%	Baulkham Hills	670	1.4%
Other Areas	4,648	17.0%	Other areas	8,343	17.7%
Total Employees of Ku-ring-gai	27,418	100.0%	Total Employed Residents	47,072	100.0%

The 2006 census recorded that a total of 27,417 people were employed within the Ku-ring-gai Local Government Area. A total of 47,072 residents of Ku-ring-gai were employed or looking for work. Of these two categories at total of 12,189 reported both

[82] Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.
[83] Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

living and working within Ku-ring-gai. As such, 15,228 persons commute from outside Ku-ring-gai to come to work and 34,883 persons leave Ku-ring-gai to go to work.

In percentage terms a very significant proportion (44.5%) of Ku-ring-gai's employees also live in Ku-ring-gai. While the following table illustrates that the number of employees who work from home is high compared to the Sydney Statistical Division, it is not a large proportion of the total number of persons who both live and work in Ku-ring-gai.

The above table demonstrates that a significant number of journeys to work are from either within Ku-ring-gai or from adjoining statistical local areas. The high proportion of those trips made by car by both the workforce and the labour force (as shown in the table below) underlines the potential impact of car-related travel resulting from intensifying development.

Figure 2.18: Labour force Journey to Work Statistics

Main Mode of Transport – Journey to Work	KMC Number	KMC Percentage	SSD Percentage
Train	8,915	19.2%	12.3%
Bus	704	1.5%	5.4%
Light Rail or Ferry	7	0.0%	0.3%
Taxi	104	0.2%	0.3%
Car – as driver	23,747	51.2%	53.7%
Car – as passenger	1,616	3.5%	5.3%
Truck	179	0.4%	1.3%
Motorbike	126	0.3%	0.5%
Bicycle	139	0.3%	0.6%
Walked only	1,017	2.2%	4.2%
Other	290	0.6%	0.9%
Worked at home	3,885	8.4%	3.9%
Did not go to work	4,899	10.6%	9.5%
Not Stated	710	1.5%	1.9%
Total	**46,338**	**100.0%**	**100.0%**

While one of the key rationales for concentrating development around railway stations is to increase the modal share of trains, it must be noted that a large proportion of current journeys both into and out of Ku-ring-gai are cross-suburban which are not well supported by public transport.

Figure 2.19: Workforce Journey to Work Statistics

Main Mode of Transport – Journey to Work	KMC Workforce	KMC %
Train	1,978	7.2%
Bus	174	0.6%
Ferry	0	0.0%
Tram (includes light rail)	0	0.0%
Taxi	45	0.12%
Car, as driver	15,560	56.8%
Car, as passenger	1,184	4.3%
Truck	116	0.4%
Motorbike/scooter	82	0.3%
Bicycle	60	0.2%
Other	209	0.8%

Main Mode of Transport – Journey to Work	KMC Workforce	KMC %
Walked only	900	3.3%
Total	**20,308**	**74.1%**
Worked at home	3,489	12.7%
Did not go to work	3,333	12.2%
Method of travel not stated	282	1.0%
Total	**27,412**	**100.0%**

Ku-ring-gai features a high proportion of commuters who drive to work however this percentage is still less than the proportion of drivers in the Sydney Statistical Division. Characteristic of its location along a major train line, a high proportion of Ku-ring-gai's commuters use the train but relatively fewer commute by bus. A significant proportion of people worked at home in 2006 comparable in number and percentage terms to home-based workers in 2001.

The *Ku-ring-gai & Hornsby Subregional Employment Study*[84] noted that both Hornsby and Ku-ring-gai have a very high incidence of home-based work compared with other areas within the Sydney Greater Metropolitan Region. In Ku-ring-gai the highest incidence of home-based work occurs in the 'Professionals' and 'Associate Professionals' categories. Consultation in association with this study indicated that this was a business choice rather than indicative of a lack of suitable business space.

Reference to the workforce tables indicates that a significant proportion of Ku-ring-gai's regular workforce either did not go to work or worked at their own homes on the day of the 2006 Census (Tuesday 8 August 2006). This must be read in conjunction with the statistics that indicate that 44.5% of Ku-ring-gai's workforce lives in Ku-ring-gai.

2.14.9 Ku-ring-gai Employment

The table on the following page identifies the key types of businesses employing people within Ku-ring-gai. The field of employment with the largest employee numbers is health care and social assistance which is likely to continue with the consolidation of the Sydney Adventist Hospital Site.

The next most significant business field in terms of employment numbers is education and training reflecting the number of educational establishments: preschool, primary, secondary and tertiary within Ku-ring-gai. Professional, scientific and technical services are the third largest employment field which may be influenced in part by the presence of the CSIRO's National Measurement Laboratory at West Lindfield. Retail trade is the fourth largest employment field.

Together, the top four employment types account for nearly 57% of employment by type in Ku-ring-gai.

The table below as well as the following section on small businesses has important implications for the development of additional commercial floorspace in Ku-ring-gai. Ku-ring-gai Council is currently developing an Economic Development Strategy to support and guide future business location in the Local Government Area.

[84] SGS Economics and Planning Ku-ring-gai & Hornsby Subregional Employment Study May 2008

Figure 2.20: Employment by Industry within Ku-ring-gai (Place of Work)

Industry[85]	Males	Females	Persons	%
Agriculture, forestry, fishing	44	30	74	0.3%
Mining	18	6	24	0.1%
Manufacturing	417	393	810	2.9%
Electricity, gas, water and waste services	59	11	70	0.3%
Construction	1,443	323	1,766	6.4%
Wholesale Trade	714	720	1,434	5.2%
Retail Trade	1,409	1,506	2,915	10.6%
Accommodation and food services	761	777	1,538	5.6%
Transport, postal and warehousing	384	164	548	2.0%
Information media & telecommunications	404	356	760	2.8%
Financial and insurance services	478	450	928	3.4%
Rental, hiring and real estate services	281	403	684	2.5%
Professional, scientific & technical services	2,162	1,500	3,662	13.4%
Administration and support services	329	406	735	2.7%
Public administration and safety	437	274	711	2.6%
Education and training	972	3,094	4,066	14.8%
Health care and social assistance	988	3,944	4,932	18.0%
Arts and recreation services	142	169	311	1.1%
Other services	415	607	1,022	3.7%
Inadequately described	208	169	377	1.4%
Industry of employment not stated	24	27	51	0.2%
Total	**12,089**	**15,329**	**27,418**	**100.0%**

2.14.10 Ku-ring-gai Businesses

The Ku-ring-gai Statistical Local Area has a large number of small and very small businesses according to the Australian Bureau of Statistics[86].

Of 12,534 individual businesses as at June 2008, 7,188 (57.3%) were classified as non-employing businesses. A further 3,909 (31.2%) employed between 1 and 4 persons and the remaining 1,437 (11.5%) employed 5 or more people.

Over the three years 2006-2008 inclusive, 5,457 new businesses were commenced in Ku-ring-gai and 5,349 businesses left Ku-ring-gai.

2.14.11 Motor Vehicles for Ku-ring-gai Households

Access to motor vehicles provides information on the usage of the street network for both essential and discretionary travel and the potential impact of additional people. Information from the 2006 census indicates that nearly half of dwellings in Ku-ring-gai have at least two motor vehicles and over 95% of households have at least one motor vehicle.

[85] It should be noted that an industry category may also include administration, governance and research services supporting that industry and does not necessarily mean direct activity in that industry.
[86] National Regional Profile: Ku-ring-gai Statistical Local Area

Figure 2.21: Access to Motor Vehicles

Number of motor vehicles[87] per dwelling	Dwellings	Percentage
None	1,501	4.7%
1 motor vehicle	9,914	30.8%
2 motor vehicles	15,044	46.7%
3 motor vehicles	4,105	12.7%
4+ motor vehicles	1,660	5.1%
Total	32,224	100.0%

This information is further clarified by the motor vehicle census which recorded 66,274 registered motor vehicles in Ku-ring-gai as of 31 March 2006. Of these, the majority, 60,811 (91.8%), were passenger vehicles, with 2,866 light commercial vehicles (4.3%) and 1,057 motorcycles (1.6%). The remaining 2.3% includes 806 larger commercial vehicles, 684 buses and 50 campervans.

The importance of the private motor vehicle is demonstrated by the Key Transport Indicators for Ku-ring-gai.[88]

Trips per average weekday: 450,000
Trips per average weekend day: 422,000

Reason for trips:
Commuting: 57,000
Work related business: 25,000
Education/childcare: 41,000
Shopping: 74,000
Personal business: 44,000
Social/recreation: 98,000
Serve passenger: 95,000
Other: 16,000

Mode of Transport for Trips:
Vehicle Driver: 51.8%
Vehicle passenger: 21.7%
Train: 6.1%
Bus: 2.2%
Walk (only): 17.0%
Other: 1.2%

Collectively, this information underlines the fundamental importance of the continuing functionality of the local road network for private vehicle travel and for pedestrians, as well as access to train based public-transport for both private vehicles and pedestrians.

2.15 Ku-ring-gai: Emergent demographic trends

Whether the current demography of the area will be continued is of key importance to estimating the future demography and, hence, future demands for specific facilities

[87] The ABS definition of motor vehicles excludes motorbikes and scooters but includes company vehicles kept at home.
[88] Key Transport Indicators by Statistical Local Area of Residence 2005 (being the most recent available) from the Transport Data Centre.

and amenities. While Ku-ring-gai has now been experiencing increasing multi-unit development approvals commencing from 2004, virtually all this development largely came onto the market after the 2006 census.

As part of the *Community Facilities Strategy* undertaken by Elton Consulting, a survey was undertaken of the residents of all new developments that had been completed and strata titled since 2004 (the majority since the 2006 census). This survey achieved a very statistically significant response rate of over 1 in 4 (27%). The following demographic trends were indicated[89]:

- 54.4% of respondents had moved to the newly constructed dwelling from elsewhere in Ku-ring-gai.
- A further 20.1% had moved to the newly constructed dwelling from elsewhere on the north shore.
- Only 13.4% came from elsewhere in Sydney, 9% had come from elsewhere in Australia and 3% had come directly from overseas.
- Downsizing was the reason for the choice of dwelling given by 54.5% of respondents and the appeal of the area by 35%.
- Being close to family (15.2%) and housing affordability (13.7%) were other key reasons cited.
- Proximity to employment (6.1%) and schools (5.1%) was also cited.
- 11.9% of respondents cited other reasons including proximity to amenities and services including trains, shops and medical services; and a new, level, low maintenance dwelling with no garden to tend.[90]
- All but 1.1% of respondents lived in new medium to high density developments.[91]
- 32% of respondents lived in Seniors Living housing.
- The residents of new developments were predominantly retirees with 32.8% aged 65-74, 19.5% aged 55-64 and 18.3% aged 75-84 (70.6%).
- Only 7.7% of residents of new housing were under 25 but nearly 20% of residents were adults aged 25-54, the largest of the three 10 year age cohorts being the 25-34 year olds.
- The dominant household type was a couple with no children at home (61.6%) or a single person (22.5%). 11.4% of households included children.
- 20% of people reported caring for a person other than an immediate family member. Of these carers, 85% were caring for at least one grandchild on a regular basis.
- Retired persons comprised 50.9% of adult residents of new dwellings.
- People employed full-time comprised 25.1% of adult residents of new dwellings with part-timers at 13.4%.
- 6.3% of people stated they were not in the workforce and 3.1% of people were studying.[92]
- 81% of residents of new dwellings spoke only English at home. The remaining 19% represented considerable cultural diversity with no one group predominating.[93]
- The majority of respondents to the survey fully own their new dwelling (73.1%) with 17.9% having a mortgage. Only 9% of respondents were renting.

[89] Unless otherwise stated, the given percentages are percentages of people who responded to this question (100%). In a few instances, respondents did not answer every question in the survey.
[90] Multiple responses were permitted to the question relating to the reason for choice of new dwelling accordingly the percentages do not add up to 100%.
[91] The remaining 1.1% comprises separate houses in the form of dual occupancies that had been strata subdivided. Non strata dual occupancies were not targeted by the survey.
[92] The remaining 1.2% reported answers such as volunteer, maternity leave and directorships.
[93] There were 22 other languages given of which the main were: Cantonese, Korean, Japanese, French, Spanish, Greek, Italian, Russian, Hindi. The remaining languages were spoken by a single household only.

Key observations include:

- The majority of residents of newly completed dwelling in Ku-ring-gai are likely to have down-sized from a larger house in Ku-ring-gai releasing that dwelling onto the market (noting the proportion of respondents that were already living in Ku-ring-gai and who own the new dwelling outright).
- Support for the concept that recent development activity has focussed on the down-sizing retiree market (noting the age of respondents in addition to the responses noted above).
- Early evidence of an emergent market of younger adults and parents with older children (noting the reported employment patterns and reasons for choosing the location).
- A noteworthy number of retirees are caring for grandchildren.

Key implications for Ku-ring-gai include:

- It is probable that continued concentration on the retiree market is likely to be unsustainable at least while the current economic situation continues and that developers will consider further the emergent market of adults in the young to middle age range.
- The young adult market is most likely to require a large mortgage and current entry prices limit accessibility to first home buyer packages.
- In the current stage of the economic cycle, price and value for money are likely to be increasingly important to retirees who have been hardest hit by share market and superannuation losses.
- Many of Ku-ring-gai's literally newly arrived residents (from outside Ku-ring-gai) will be living in the large dwellings vacated onto the market by retirees in the process of down-sizing (who are staying in Ku-ring-gai).
- Due to the cost of housing in Ku-ring-gai, these residents are likely to be second home buyers with older school age children maintaining the importance of the school age demographic in Ku-ring-gai however this trend cannot be formally confirmed until after the release of data from the 2011 census.

While it is acknowledged that this post-occupancy survey was undertaken relatively early in the development cycle and is influenced to an extent by the amount of SEPP5 development that led this development cycle, it is the only possible means of building an indicative picture of the new resident population prior to the 2011 census.

2.16 Key indicators for infrastructure planning in Ku-ring-gai

The key characteristics of the future population compared to the present population which will influence the type and design of the infrastructure planning to be funded, or partly funded, by this Contributions Plan, is summarised as follows:

- Ku-ring-gai is expected to continue to feature a significant ageing population;
- Ageing in place, dwelling downsizing and cyclical renewal as families purchase vacated family homes is expected to continue;
- Ku-ring-gai is expected to continue to feature a significant proportion of families with school aged children especially high school children;
- Younger adults being able to remain in or return to Ku-ring-gai to live as a result of a change in the dwelling mix may be an emergent trend that will be monitored;

- The number of lone person households will need to be monitored especially as the older population continues to age;
- Ethnic mix will need to be monitored;
- Population mobility (frequency) will need to be monitored as well as where new residents are coming to Ku-ring-gai from;
- Inter-censal post-occupancy surveys should be scheduled; and
- Employment statistics including journey-to-work data and new businesses will need to be monitored.

2.17 Summary of Development and Population Growth and Demand

The impact of the estimated development to occur in Ku-ring-gai through to 2031 on in the context of the characteristics above and the consequent demand for specific types of Key Community Infrastructure is detailed in the following sections under their relevant heading.

2.18 Vision for Ku-ring-gai

That: "Ku-ring-gai is a place with infrastructure and facilities that accommodate the needs of the community."[94]

[94] *Ku-ring-gai Council Strategic Plan 2030 (Draft).*