



Kogarah Council Housing Strategy 2031

Prepared by Kogarah Council

Version 1.0 July 2014



CONTENTS

1. Introduction	3
2. Demographic Profile	13
3. Kogarah 2031 Housing Strategy	32

I. Introduction

1.1 Why have a Housing Strategy?

Planning for housing across the City of Kogarah is an important part of Council's responsibilities. The Housing Strategy is intended to create a framework that will deliver housing to meet the needs of Kogarah's current population and the needs of future generations. Council's goal is to ensure that there is a sufficient supply of appropriate housing over the next 20 years suited to meet the needs of our community.

KEY OBJECTIVES

1. Housing across the City of Kogarah designed so that it provides choice, is affordable and is suited to the needs of our community.
2. Local centres within the City of Kogarah are distinctive and vibrant, providing opportunities for small businesses to flourish throughout the city.
3. Kogarah City residents can get to where they need to go in a way that is accessible, safe and efficient.
4. Development in Kogarah maintains and enhances the character and amenity of our neighbourhoods, town centres and local centres.
5. Comply with State Government requirements for housing targets throughout the Sydney Metropolitan Area.

I. Housing across the City of Kogarah designed so that it provides choice, is affordable and is suited to the needs of our community

Meeting the current and future needs of an ageing population

A range of housing choice to suit the different needs of people living in our City was a key concern that was raised by the community in the preparation of Kogarah's Community Strategic Plan – Bright Future, Better Lifestyle: Kogarah 2030, and, in particular, that future housing suits the needs of an ageing population.

Demographic changes across Australia and within the Kogarah LGA indicate a general trend towards an increase in people aged 65 and over as a proportion of the total population. In particular the proportion of people aged 80 and over will be greater than at any other time in history.

The ageing demographic in our community have identified a strong desire to be able to stay in the suburbs where they have raised families and have social networks and connections.

Council wants to provide increased opportunities for our existing residents to age-in-place, in areas and communities where that have established networks and support. To facilitate ageing-in-place the Strategy will increase opportunities for redevelopment of land across the whole of the LGA to provide a more suitable form of accommodation, in the form of dual occupancy development and seniors housing developments that are consistent with the surrounding development.

Meeting the community's need for increased housing choice

Council acknowledges that a mix of age and social groups is needed for a vibrant and diverse community.

Future residential development must be built and designed so that it meets the changing needs of our population as they move through different life stages, so that opportunities exist within the City of Kogarah for young people to move away from home, but still be close to their families, while older people have the opportunity to downsize to a smaller, more appropriate dwelling in their existing suburb.

Council wants to provide opportunities for young people leaving home and young families wanting to set up home in the City of Kogarah – a significant portion of these households will choose to live in small dwellings. Housing affordability was also an important issue for the younger members of our community.

It is becoming increasingly difficult to purchase a house or apartment to stay in the area close to other family members. Having a large medical and educational precinct within the City of Kogarah means that key community service workers like teachers, nurses, police and other emergency services workers are also likely to want to live as close to work as possible.

Providing a choice of housing options that are affordable and are responsive to the needs of our community is a priority. To facilitate this choice the Strategy will increase the potential for dual occupancy development, medium density and seniors housing and modern apartments.

Meeting the current and future needs of smaller sized households

There is a growing trend for smaller household sizes. At the last Census, almost half of Kogarah's households were 1 or 2 person households (49.3%). This can be attributed to the following:

- As the community ages the number of widows and widowers living alone increases
- Divorce leads to two smaller households
- More people are remaining single, or choosing not to have children
- Households become smaller as children leave home

These trends combine to increase the demand for housing even when the population is stagnant or falling. This trend is significant because increasing housing supply is necessary to simply maintain the population status quo.

2. Local centres within the City of Kogarah are distinctive and vibrant, providing opportunities for small businesses to flourish throughout the city.

Promote redevelopment to promote the revitalisation of Centres

Increasing the residential population in and around the City's Centres brings more customers to local businesses. Well designed new mixed commercial/residential apartment buildings also add new shops, cafes, restaurants and other businesses which can contribute to the revitalisation of centres, bringing more people and new businesses into the Centre.

3. Kogarah City residents can get to where they need to go in a way that is accessible, safe and efficient.

Facilitate the use of public transport and the efficient utilisation of existing and future infrastructure

When residents are located within walking distance to public transport, shops and services, they drive less. This takes increased pressure off the road network while also reducing potential greenhouse gas emissions and the need for additional parking stations.

Concentrated housing strategies have environmental benefits over dispersed housing models and encourage the efficient use of services, including public transport services.

The pattern of development over the last 20 years in the City of Kogarah has been greatly influenced by access to public transport and other community infrastructure. The most accessible areas of the City are where the commercial centres, the railway lines and the main roads are located. The location and capacity of existing infrastructure, proximity to public transport and accessibility for pedestrians have informed the selection of areas for increased residential capacity.

4. Development in Kogarah maintains and enhances the character and amenity of our neighbourhoods, town centres and local centres

The 'low density' nature of Kogarah's suburbs is a characteristic of our built environment that our community wants to see retained and protected. The community was extremely proud of the existing character of most of our neighbourhoods and felt that it was important that the City retained this character, particularly in our suburbs.

Future urban development needs to respond to the context of the existing neighbourhood characteristics through sensitive design that combines modern development styles and the natural qualities of the City.

5. Comply with State Government requirements for housing targets throughout the Sydney Metropolitan Area

Meet the requirements of the NSW Government strategies

Release of Population, Household and Dwelling Projections for NSW

In June 2014, the Department of Planning & Environment published updated Population, Household and Dwelling Projections for NSW, with detailed breakdowns for each LGA. This information provides a detailed assessment on how our population is expected to change over the next 20 years.

The projections are based on assumptions by demographers that take into account recent and current trends for births, deaths and migration.

Population Projections

Table 1 below shows population projections for the Kogarah LGA from 2011 to 2031. Based on these projections the total population growth in the Kogarah LGA will be 17,450 people over the next 20 years to 2031.

Dwelling Projections

Projected dwellings show the number of dwellings needed to provide private housing for all projected households. The projections assume that one household occupies one dwelling and an additional adjustment has been made to account for those dwellings that may be unoccupied.

It should be noted that the dwelling projections are not targets, nor are they a projection of future dwelling construction and they include no assumption about the type of dwelling the projected household will live in.

Table 2 indicates the dwellings needed in the Kogarah LGA to 2031 to house the projected population. It is estimated that 7,350 additional dwellings will be needed to be constructed in Kogarah over the next 20 years. That equates to approximately 370 new dwellings per year (from 2011).

Table 1 Population Projections for Kogarah

2011	2016	2021	2026	2031	Total Change	% Change (Total)	Annual Change (%)
58,900	62,950	66,850	71,500	76,350	17,450	29.6%	1.3%

Table 2 Dwelling Projections for Kogarah

2011	2016	2021	2026	2031	Total Dwellings
22,550	24,150 (+1600)	26,000 (+1,850)	27,900 (+1,900)	29,900 (+2000)	7,350

Annual Average Population Growth Rates

Table 3 shows the annual average growth rate for every five year period from 2001 to 2031. Growth rates for 2001-06 and 2006-11 are based on historical estimated resident population data from the Australian Bureau of Statistics. Growth rates from 2011-16 onwards are based on the 2014 NSW population projections.

Household Size

Table 4 indicates projected household size, which can be seen to be in decline from 2.75 persons in 2011 to 2.68 persons in 2031. Projected household size is calculated from the projected number of households and the projected population.

Draft Metropolitan Strategy for Sydney 2031

In March 2013, the NSW Government released its draft Metropolitan strategy for 2031 for comment

The draft Strategy sets the framework for Sydney's growth and prosperity to 2031 and supports the key goals, targets and actions contained in NSW 2021, the NSW Long Term Transport Master Plan and the State Infrastructure Strategy to fully integrate land use and infrastructure outcomes.

The draft Metropolitan Strategy sets a comprehensive strategic approach to ensure that the housing needs of Sydney will be delivered. The Strategy has set a target of at least 545,000 new dwellings across Sydney by 2031. This is a significant expansion on previous strategies.

The draft Strategy also sets minimum housing targets for the subregions – these are broken down into two key timeframes, being 2021 and 2031 and will be achieved through the Subregional Delivery Plans and Local Plans.

Table 3 Annual Average Growth Rate for Kogarah

2001-06	2006-11	2011-16	2016-21	2021-26	2026-31	2011-31
0.9 %	1.5 %	1.2 %	1.4 %	1.3 %	1.3 %	1.3%

Table 4 Projected Average Household Size for Kogarah

2011	2016	2021	2026	2031
2.75	2.72	2.71	2.70	2.68

Table 5. Draft Dwellings Targets for South Subregion 2031

2021 Minimum Housing Targets	2031 Minimum Housing Targets
22,000	42,000

Source: Draft Metropolitan Strategy for Sydney to 2031 (March 2013)
Extract of Table 3 Minimum housing targets by subregion (pg 30)

Kogarah is part of the South Subregion, along with the Sutherland Shire, Hurstville Council, Rockdale Council and Canterbury Council.

The dwelling targets for the South Subregion are identified in Table 5.

The draft Metropolitan Plan for Sydney 2031 is still a draft plan and it is anticipated that it will be finalised in 2014.

Metropolitan Plan for Sydney 2036

In December 2010, the NSW Government released its Metropolitan Strategy for Sydney to 2036 titled “Metropolitan Plan for Sydney 2036”.

The 2010 Metropolitan Strategy provides a framework to manage Sydney’s growth and development to 2036. It provides a shared vision to guide the activities of State agencies and local government in the Metropolitan Region.

The 2010 Metropolitan Strategy sets a housing target for the South subregion of an additional 58,000 new dwellings for the region by 2036, an increase of 23,000 from the previously endorsed 2005 Metro Strategy (35,000).

Draft South Subregional Strategy (2007)

The NSW Department of Planning & Infrastructure’s Draft South Subregional Strategy acts as a broad framework for the long term development of the area, guiding government investment in infrastructure and linking local and state planning issues. Implementing the draft South Subregional Strategy is a statutory responsibility for Kogarah Council.

A key action of the current draft South Subregional Strategy is for the City of Kogarah to make provision for approximately 2,500 additional dwellings to 2031. This target has been based on the population projections of the 2005 Metrostrategy, which are now outdated.

Since the release of the draft South Subregional Strategy in 2007, there have been significant increases to the population and dwelling projections for the Sydney Metro Region.

Based on the most recent population and dwelling targets released by the NSW Department of Planning & Environment, the number of additional dwelling required to house Kogarah’s projected population growth to 2031 is approximately 7,350.

1.2 Local Policy Context

There are a number of Kogarah policies and/or strategies that are relevant to consider in relation to housing. The list includes, but is not limited to the following:

- Kogarah Local Environmental Plan 2012
- Kogarah Employment Lands and Economic Development Strategy (SGS:2013)
- Ageing Strategy
- Community Strategic Plan 2030

Community Strategic Plan

The Community Strategic Plan – *Bright Future, Better Lifestyle: Kogarah 2030* includes a number of key strategic directions and goals that are relevant to housing across the LGA:

Key Strategic Direction 2. A Liveable and Connected City

Goal 2.1 Development in Kogarah maintains and enhances the character and amenity of our neighbourhoods, Town Centres and local centres.

2.1.1	Ensure new development responds to the character of our neighbourhoods and streetscapes.
2.1.2	Ensure development responds to environmentally sustainable practices and design.
2.1.3	Recognise and enhance our significant heritage through quality urban planning and design.
2.1.4	Establish new links and open space corridors.

Goal 2.2 Housing across the City of Kogarah designed so that it provides choice, is affordable and is suited to the needs of our community.

2.2.1	Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning.
2.2.2	Provide a mixture of housing types that allow residents to meet their housing needs at different stages of their lifecycle, within the City.
2.2.3	Support the location of new higher density development close to our Centres, where there are appropriate services, amenities and public transport.

Goal 2.3 Kogarah City residents can get to where they need to go in a way that is accessible, safe and efficient.

2.3.4 Appropriate levels of public parking is provided in our centres.

Goal 2.4 Kogarah City Residents are able to walk and cycle safely and conveniently throughout the City.

2.4.1 Develop and enhance walking and cycling networks around the City.

2.4.2 Promote and support walking and cycling as a viable transport option.

2.4.3 Promote and facilitate pedestrian and cyclist safety throughout the City.

2.4.4 Maintain and improve pedestrian connectivity in all of our neighbourhoods.

Key Strategic Direction 3. A Thriving & Prosperous City

Goal 3.1 Kogarah Town Centre is recognised as the major medical, financial and educational precinct in the St George Region.

3.1.1 Monitor existing planning controls to ensure quality outcomes are achieved for the long term benefit of the Centre.

Goal 3.2 Local centres within the City of Kogarah are distinctive and vibrant, providing opportunities for small businesses to flourish throughout the city.

3.2.1 Support and facilitate local centre development programs which contribute to distinctive, vibrant and commercially viable centres.

Goal 3.3 Kogarah City has a dynamic and resilient business community that provides employment and training opportunities that meet the needs of local residents.

3.3.1 Create opportunities for sustainable local employment.

3.3.3 Prepare and implement an economic strategy for the City.

3.3.4 Support and facilitate opportunities for Home Based Businesses to grow and prosper.

2. Demographic Profile

The City of Kogarah is located 15kms south of the Sydney CBD and forms the heart of the St George Region, bounded by the City of Rockdale, the City of Hurstville and the Georges River to the south.

The City comprises 17 suburbs: Allawah, Beverley Park, Blakehurst, Carlton, Carss Park, Connells Point, Hurstville, Hurstville Grove, Kogarah, Kogarah Bay, Kyle Bay, Mortdale, Penshurst, Oatley, Ramsgate, Sans Souci and South Hurstville.

Low density housing remains a key feature of Kogarah's urban landscape. In the last two decades however, the land use geography of the City has undergone change, with the growth of the Kogarah Town Centre and its identification as a Specialised/Major centre in the sub-region. Retail and commercial development in Kogarah are generally focused on the arterial road network and multi-dwelling housing is generally confined to those areas along the railway corridor or within existing commercial centres.

The following demographic profile has been undertaken on population and housing trends within Kogarah Local Government Area (LGA).

This analysis identifies the issues which will have an impact on the overall demand for housing in the City of Kogarah. The statistics used to collate the demographic profile have been based on information provided by profile id and atlas id and are based on 2011 Census data.

Figure 1 Suburbs of Kogarah City



Population size and future population projections

In 2011, the Census indicated that 58,938 people were residents of the City of Kogarah, with the suburbs of Allawah, Hurstville and Kogarah making up approximately 31.5% of the City’s total population.

It is estimated that by 2036, Kogarah’s population will grow to approximately 67,800 people.

Age

Kogarah has a similar age structure to Greater Sydney with Parents and Home-builders aged 35 to 49 (22%) and the Young Workforce aged 25 to 34 (15%) being the two largest age groups in the Kogarah LGA.

In 2011, 14.5% of Kogarah City’s population was aged 65 years or more compared to 12.8% in Greater Sydney. Kogarah City has a lower proportion of pre-schoolers and a higher proportion of people at post retirement age than Greater Sydney.

Figure 2 demonstrates that the City of Kogarah is consistent with national trend towards an ageing population. This is also reflected in the fact that the median age in Kogarah has been

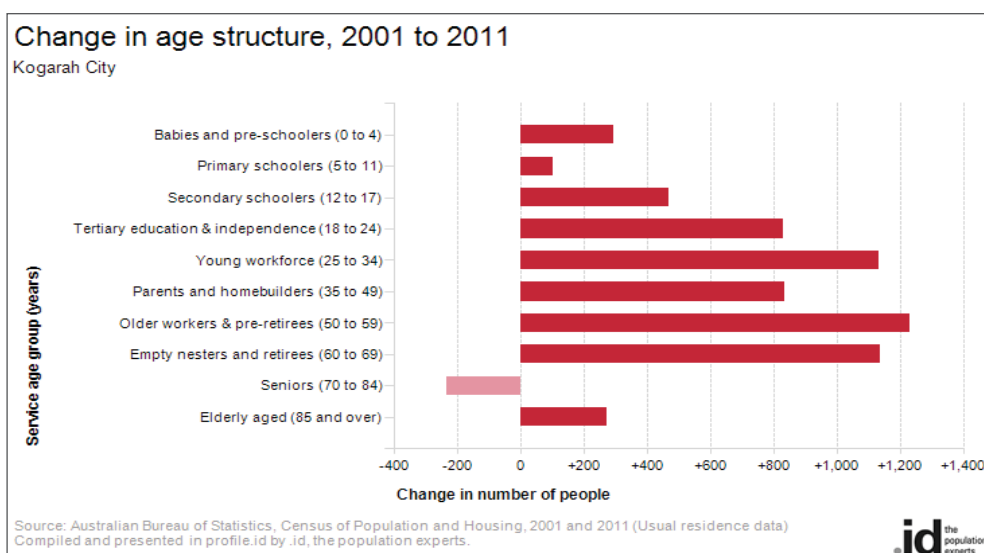
increasing in recent years, rising from 34 in 2006 to 37 in 2011.

It is also interesting to note that there was a small decline in the Seniors group aged 70 to 84 (-235 people) between 2001-2011. This may have been due to a number of contributing factors including migration, insufficient number of retirement villages, natural death rate, or a lack of suitable housing for this age group.

It is also interesting to note that the age structure within the LGA is not evenly spread across the City (see figure 3):

- The largest proportions of young workforce aged 25 to 34 are concentrated in the suburbs of Hurstville, Kogarah and Allawah (67.9%),
- The largest proportions of people aged 65 years and over are concentrated in the suburbs of Beverley Park – Ramsgate, Sans Souci, Blakehurst, Kogarah Bay – Carss Park and Oatley – Mortdale
- Beverley Park – Ramsgate, Sans Souci and Kogarah Bay – Carss Park are also the suburbs with the largest proportion of elderly aged 85 and over.

Figure 2 Kogarah city’s Change in Age Structure from 2001 to 2011



The differences in age structure across the suburbs within the City can be influenced by factors such as location and lifestyle, proximity to employment opportunities, availability of rental housing, cost of housing and the size/diversity of dwellings available.

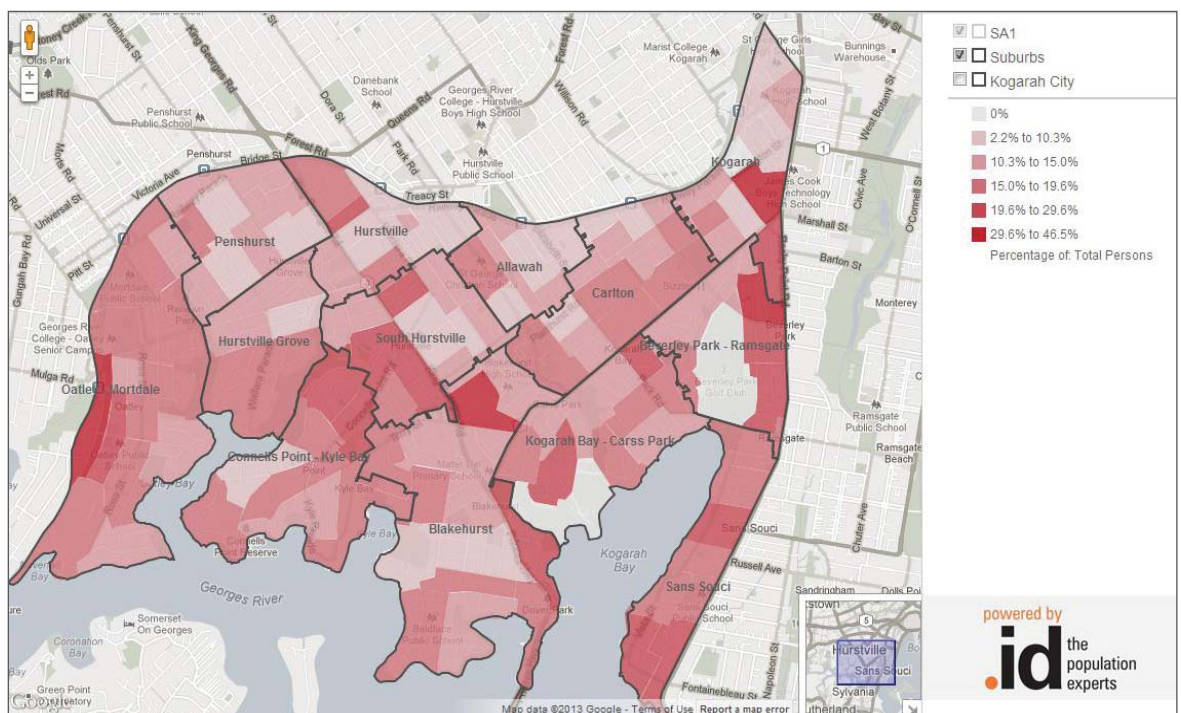
Migration

Migration, or residential mobility, together with births and deaths are significant components of population change in Australia. The movement of people into, and out of an area directly influences the characteristics of the population and the demand for services and facilities.

Migration is the most volatile component of population change and can be affected by changing housing and economic opportunities such as housing affordability issues or the mining boom.

There are three main types of migration in Australia, overseas migration, between-state migration, and within-state migration. By far the most common form of migration is within-state, and Kogarah's migration largely involves moves between neighbouring LGAs where moves are often short.

Figure 3 Proportion of People aged 65 years and over by Suburb.



Between 2006 and 2011, 808 people moved to other areas within NSW, while 4,619 people moved to Kogarah from overseas.

residents and migrants, most notably from overseas.

Figure 4 indicates the net migration for Kogarah City in 2011. This is based on the top 3 local government areas ranked by net loss and net gain to the area. The overseas migration figure is total incoming and not net migration as there are no figure for residents who moved overseas.

The three suburbs with the highest proportion of migration in the City of Kogarah were Hurstville (49.4%), Kogarah (49.3%) and Allawah (43.9%) which is consistent with the predominantly young transient population and high proportion of newly arrived migrants.

There is significant pressure for residential dwellings in Kogarah from both existing

Figure 5 shows that the most mobile age group in terms of migration in the City of Kogarah are the 25 to 34 year old group (young workforce), and 65 years and over (empty nesters, retirees, seniors and elderly).

Figure 4 Migration pattern for Kogarah City between 2006 - 2011

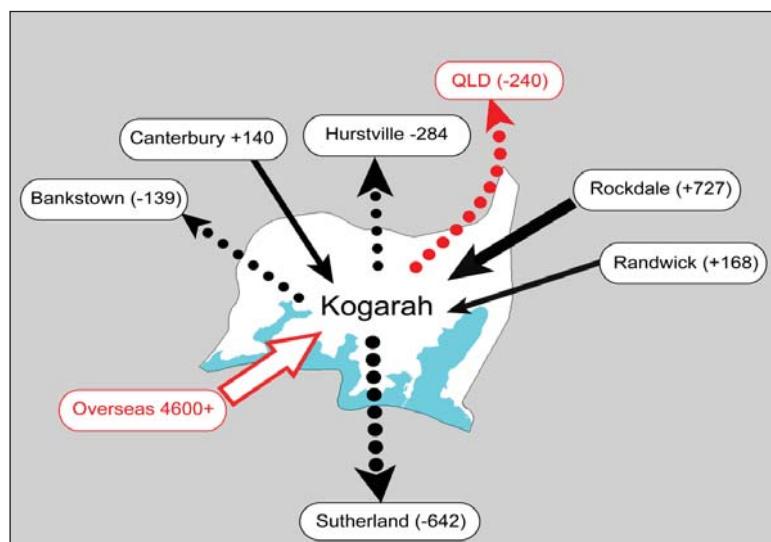
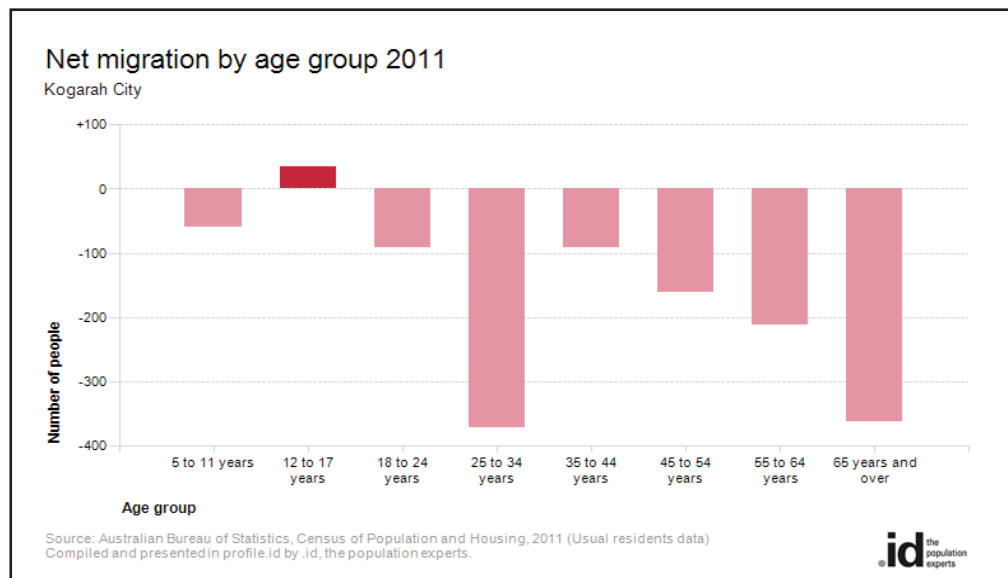


Figure 5 Net Migration by age group 2011



Diversity and Emerging populations

Between 2006 and 2011, the number of people born overseas increased by 17.1%, and the number of people from a non-English speaking background increased by 20.2%.

The largest changes in birthplace countries of the population in the Kogarah LGA between 2006 and 2011 were for those born in:

- China (+1,959 persons)
- Nepal (+651 persons)
- India (+181 persons)
- Bangladesh (+151 persons)

Income

Households in Kogarah City have a median income of \$1,463, which is \$16 more than Greater Sydney.

Across the City, median household incomes range from a low of \$1,181 in Hurstville to a high of \$2,011 in Connells Point - Kyle Bay.

Figure 6 indicates the weekly individual gross income for Kogarah City as compared to Greater Sydney. Overall, 14.9% of persons in the Kogarah LGA earned a high income, and 36.1% earned a low income, compared with 15.3% and 34.8% respectively for Greater Sydney.

Figure 6 Weekly individual gross income 2011



Household Types

Almost half of Kogarah's households are 1 or 2 person households (49.3%).

As a group, family households² are the most common form of household (73.7%) in the City of Kogarah. Of these households, couples with children are dominant (38.7%).

There is some variation evident across suburbs, with:

- Connells Point – Kyle Bay and Hurstville Grove having the largest proportion of family households and those with 4+ persons than the rest of the City of Kogarah
- Group households are most common in Hurstville and Kogarah.
- Lone person households are most common in Oatley-Mortdale and Allawah.
- Older (65 years and over) lone person households are most common in Oatley - Mortdale (11.3%), Kogarah Bay - Carss Park (10.8%) and Beverley Park - Ramsgate (10.2%) [Figure 7]

² Family households include couples without children, couples with children, one parent families, other families.

Figure 8 indicates the changes in household size between 2001 and 2011.

The largest changes in family/household types in Kogarah City between 2001 and 2011 were:

- Couples with children (+857 households)
- Couples without children (+467 households)
- One parent families (+373 households)

The largest changes in household size in Kogarah City between 2001 and 2011 were increases in 3 persons and 4 person households. When compared to Greater Sydney,

Kogarah City has a larger percentage of households with 3 persons (19.9% compared to 17.2%) and a larger percentage of households with 4 persons (19.0% compared to 17.5%).

The increasing household size in an area may indicate a range of issues: lack of affordable housing opportunities for young people, an increase in the birth rate or an increase in family formation in the area.

Table 6: Household Type by Suburb

Suburb	Family	Lone Person	Group
Allawah	68.3%	23.9%	4.3%
Beverley Park-Ramsgate	78.2%	17.7%	1.6%
Blakehurst	80.5%	15.5%	1.9%
Carlton	70.3%	22.3%	3.2%
Connells Point-Kyle Bay	82.6%	14.3%	1.4%
Hurstville	69.4%	18.2%	8.7%
Hurstville Grove	81.3%	15.2%	1.7%
Kogarah	66.5%	20.7%	5.8%
Kogarah Bay – Carss Park	77.7%	18.4%	1.6%
Oatley – Mortdale	71.5%	24.0%	2.3%
Penshurst	79.0%	16.5%	3.7%
Sans Souci	79.4%	15.7%	2.0%
South Hurstville	72.5%	21.2%	3.6%

Source: ABS Census 2011

Figure7: Older 65+ lone persons 2011

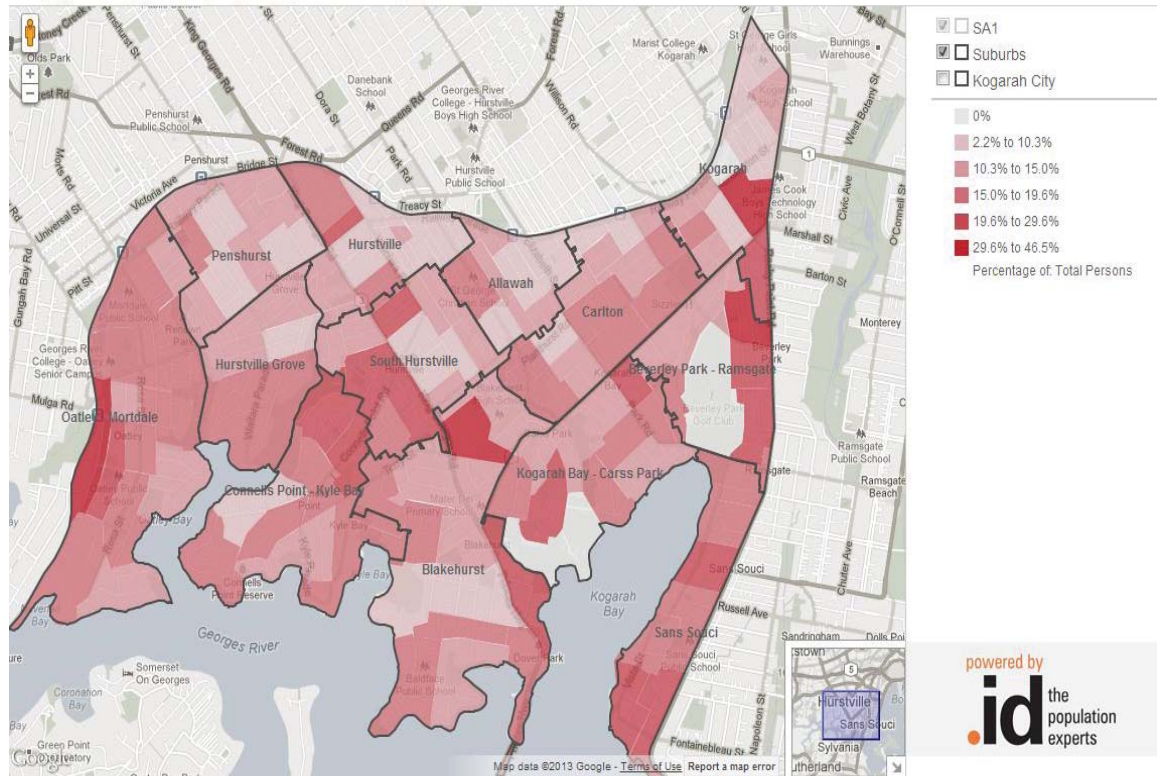
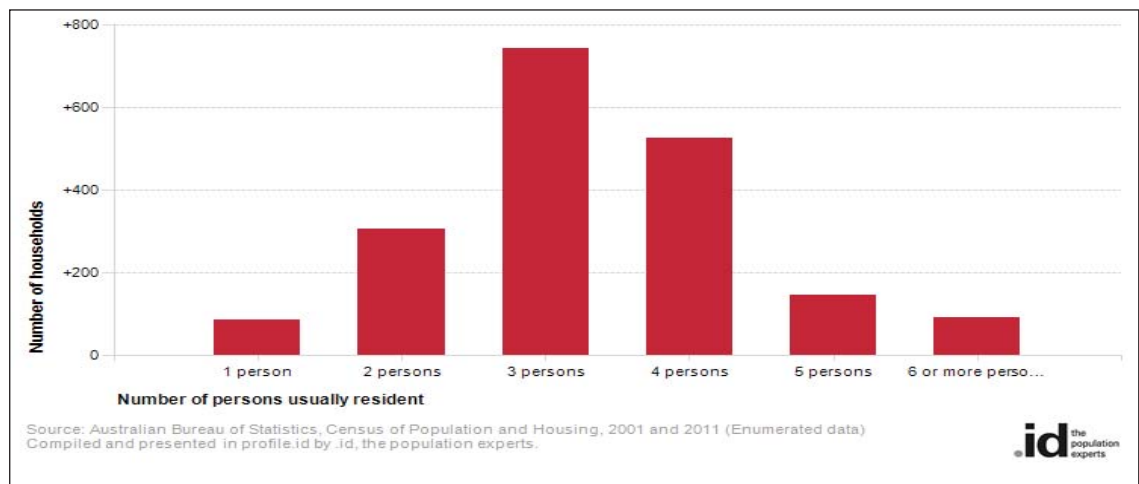


Figure 8 Change in household size 2001 - 2011



Existing Housing Stock

In 2011, Kogarah City's housing stock consisted of:

- 55.8% separate houses
- 16.1% medium density
- 27.6% high density

Separate dwellings comprises the largest share of dwelling types in Kogarah City, however this is not evenly spread across the LGA, as indicated in Table 7.

Table 7: Housing stock, by suburb 2011

Suburb	Separate House	Medium Density	High Density
Allawah	17.0%	14.6%	68.2%
Beverley Park-Ramsgate	90.4%	8.9%	0.0%
Blakehurst	87.2%	9.4%	2.9%
Carlton	44.6%	16.5%	38.1%
Connells Point-Kyle Bay	83.6%	16.2%	0.0%
Hurstville	18.4%	17.9%	63.6%
Hurstville Grove	92.3%	7.7%	0.0%
Kogarah	24.1%	14.7%	59.8%
Kogarah Bay –Carss Park	89.5%	8.1%	1.4%
Oatley – Mortdale	59.2%	27.0%	13.2%
Penshurst	94.4%	5.3%	0.0%
Sans Souci	80.9%	18.0%	0.8%
South Hurstville	54.0%	28.1%	17.2%

ABS Census 2011

Trends

The largest changes in the type of dwellings occupied by households in Kogarah City between 2001-2011 was an increase in high density dwellings, an increase in medium density and a decrease in separate houses [Figure 9].

The stock of high density dwellings increased significantly (+2,632 dwellings) between 1996 - 2011.

This is due to the redevelopment along the Railway Line as well as the redevelopment of the Kogarah Town Centre and Kogarah's side of the Hurstville Centre.

There has also been an increasing trend towards larger dwellings with more bedrooms, which is evident in the data relating to the number of bedrooms per dwelling [Figure 9]

While Kogarah City had a lower proportion of dwellings with four bedrooms or more than Great Sydney, it is important to note that this varied across the City.

Those dwellings with a greater number of bedrooms (4+ more bedrooms) were situated in those more affluent waterfront areas: Connells Point - Kyle Bay (50.2%), Blakehurst (46.1%), Hurstville Grove (44.0%) and Kogarah Bay - Carss Park (41.3%) and Sans Souci (38.2%).

Figure 10 indicates that three bedroom dwellings are the most common across all dwelling structures in Kogarah City.

The major differences between the number of bedrooms per dwelling of Kogarah City and Greater Sydney were:

- A larger percentage of 2 bedroom dwellings (31.6% compared to 23.9%)
- A larger percentage of 5 or more bedroom dwellings (7.3% compared to 6.2%)
- A smaller percentage of dwellings with no or 1 bedrooms (includes bedsitters) (3.2% compared to 7.3%)

Figure 9: Change in dwelling structure, 2001 – 2011

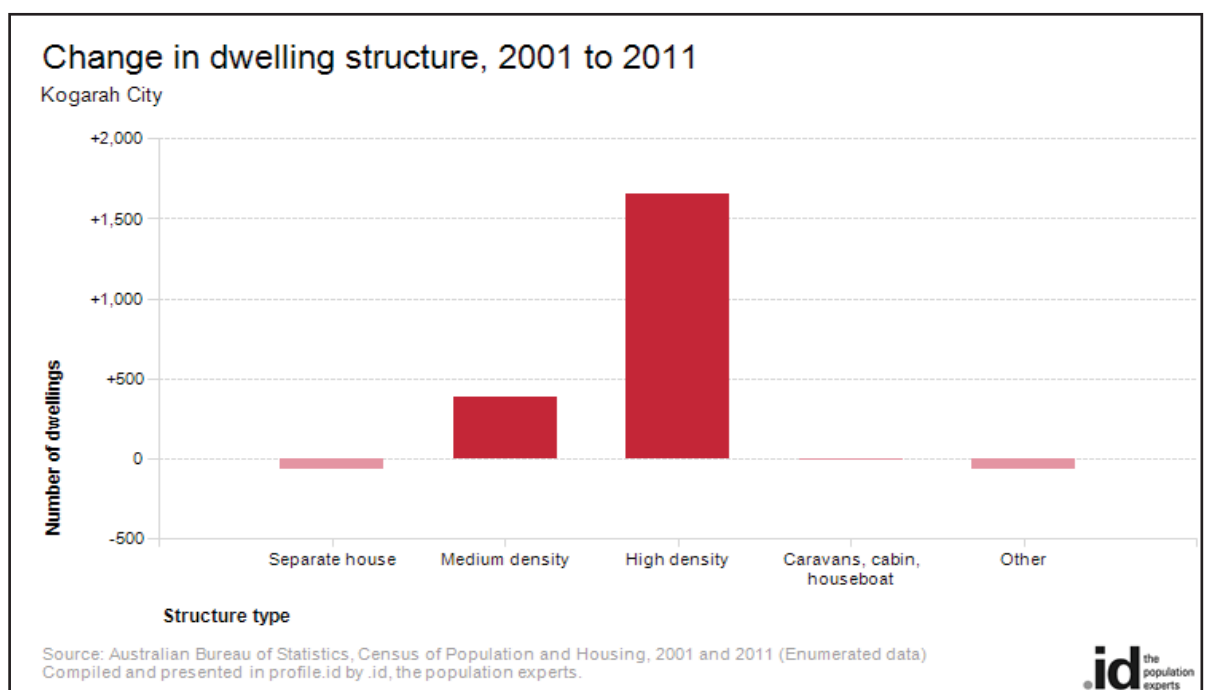


Figure 10: Change in number of bedrooms per dwelling, 2001 – 2011

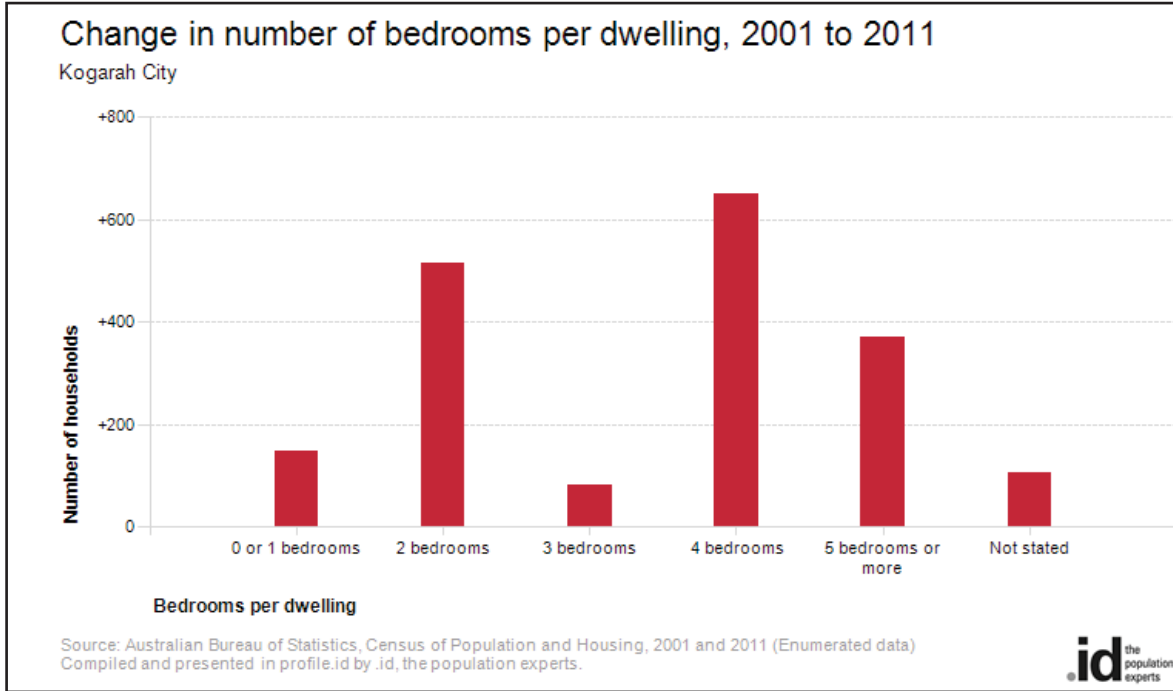
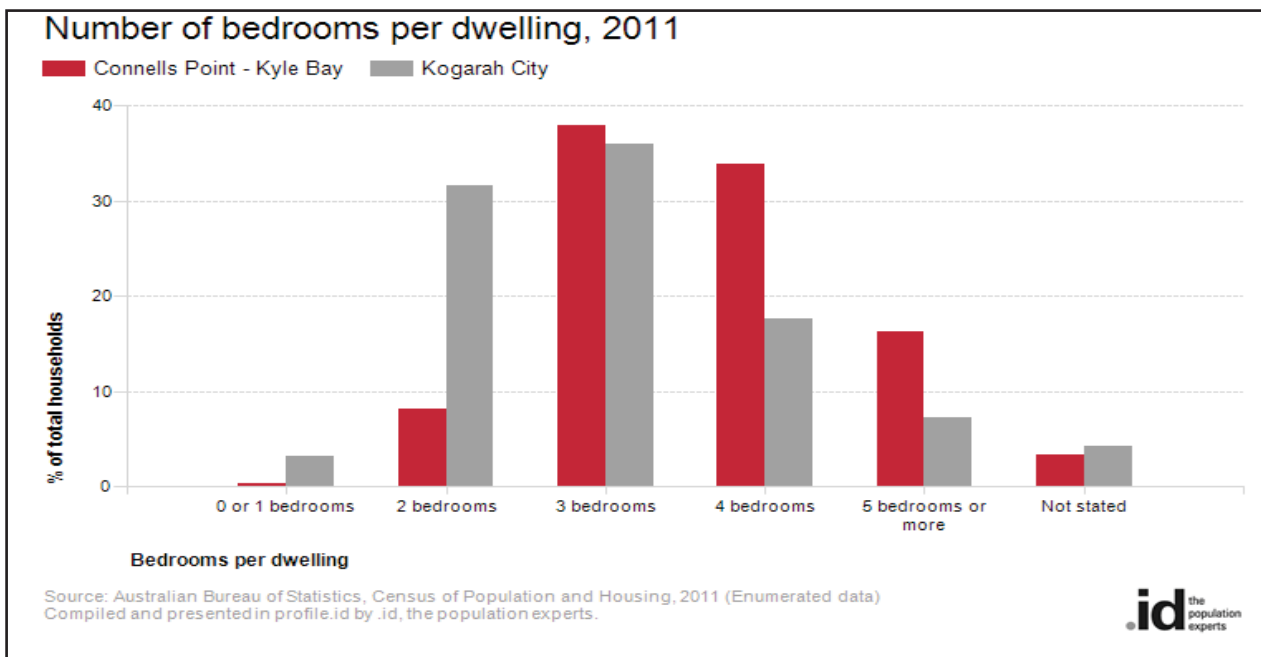


Figure 11: Number of bedrooms per dwelling, 2011



Housing Tenure

Analysis of the housing tenure of the population of Kogarah City in 2011 compared to Greater Sydney indicates that there was:

- a larger proportion of households who owned their dwelling;
- a smaller proportion purchasing their dwelling;
- a smaller proportion who were renters.

In Kogarah City 68% of households are purchasing or fully own their home. Overall, 36.1% of the population owned their dwelling; 32.1% were purchasing, and 26.2% were renting (compared with 29.1%, 33.2% and 30.4% respectively for Greater Sydney) (Figure 12).

The suburbs of Hurstville, Kogarah, Allawah and Carlton, accounting for the largest proportion of rented dwelling (Table 8).

While Kogarah City has a similar amount of private rentals to Greater Sydney (24.3% and 25.0%), Kogarah City has a very small percentage of social housing 1.1% when compared with Greater Sydney (4.8%)³.

³ Information on Kogarah Housing Market, Family and Community Services (Housing NSW) 2011

Figure 12: Housing tenure, 2011

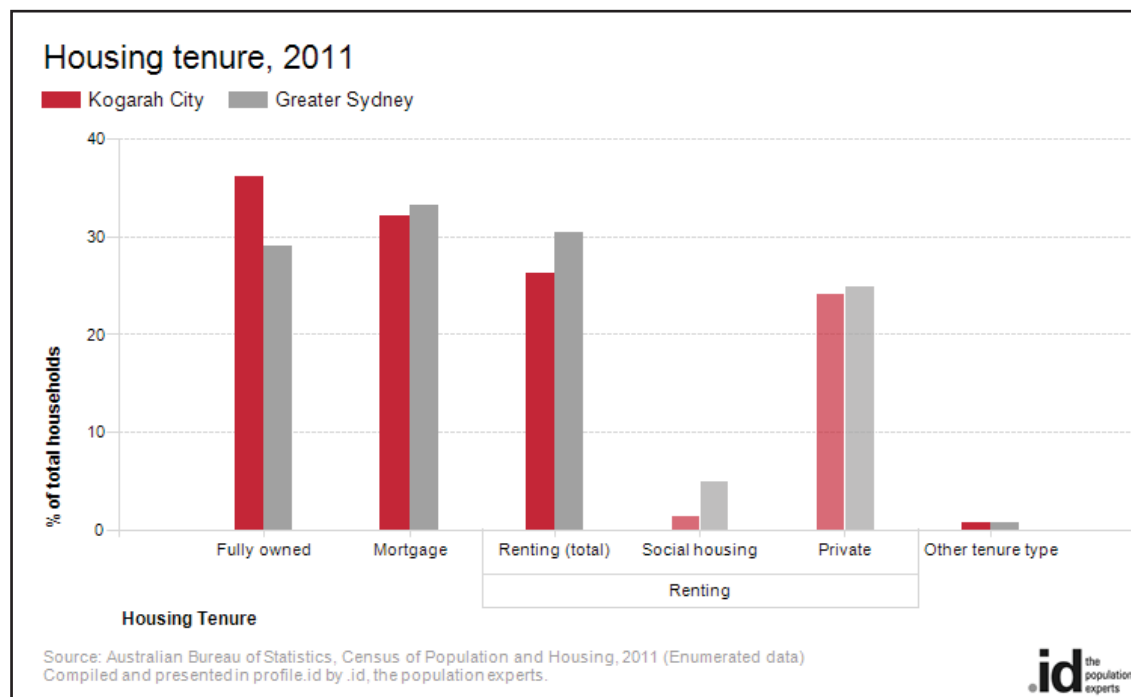


Table 8: Housing tenure, by suburb 2011

Suburb	Owned	Mortgage	Total owned or mortgage	Renting total	Renting Social	Renting Private
Allawah	24.5%	31.5%	56.0%	38.6%	2.1%	35.8%
Beverly Park-Ramsgate	47.6%	31.8%	79.4%	17.2%	1.0%	15.9%
Blakehurst	45.4%	34.4%	79.8%	15.1%	1.0%	13.3%
Carlton	29.4%	29.8%	59.2%	33.7%	3.5%	29.9%
Connells Point-Kyle Bay	49.8%	36.3%	86.1%	9.4%	0.0%	8.6%
Hurstville	21.8%	29.7%	51.5%	41.5%	1.4%	39.7%
Hurstville Grove	49.1%	36.2%	85.3%	11.3%	0.5%	10.8%
Kogarah	22.4%	29.1%	51.5%	40.9%	1.4%	39.0%
Kogarah Bay – Carss Park	44.2%	34.4%	78.6%	15.7%	4.9%	10.5%
Oatley – Mortdale	41.6%	29.1%	70.7%	25.2%	0.4%	24.1%
Penshurst	48.1%	35.2%	83.3%	13.2%	0.5%	12.4%
Sans Souci	45.0%	35.4%	80.4%	13.7%	0.4%	13.0%
South Hurstville	35.2%	34.6%	69.8%	24.2%	2.2%	21.1%

Cost of housing

Mortgage repayments

38.2% of households within Kogarah City with a mortgage were making high loan repayments of \$2,600 or more per month.

Analysis of the monthly housing loan repayments of households in Kogarah City compared to Greater Sydney shows that there was a larger proportion of households paying high mortgage repayments (\$2,600 per month or more), and a similar proportion of households with low mortgage repayments (less than \$1000 per month).

Overall, 38.2% of households were paying high mortgage repayments, and 12.1% were paying low repayments, compared with 36.0% and 11.9% respectively in Greater Sydney.

The major differences between the household loan repayments of Kogarah City and Greater Sydney were:

- A larger percentage of \$4000-\$4999 (7.9% compared to 6.2%)

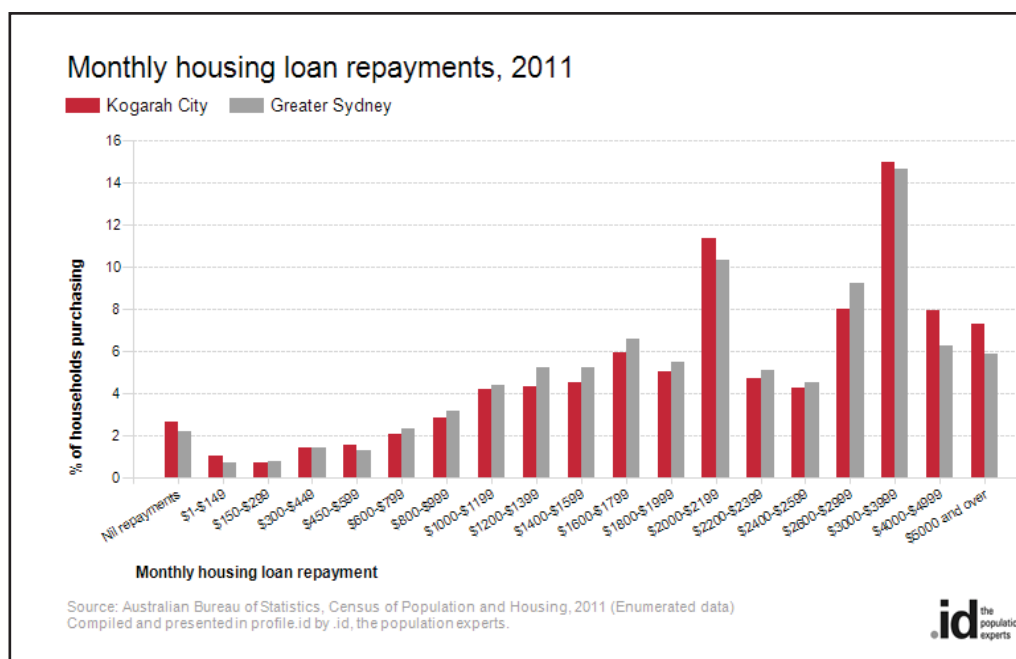
- A larger percentage of \$5000 and over (7.3% compared to 5.9%)
- A smaller percentage of \$2600-\$2999 (8.0% compared to 9.3%)

The quartile method is the most objective method of comparing change in the mortgage payment profile of a community over time.

In Kogarah City, the 'highest' quartile is the largest group, comprising of 35% of households with mortgages. Mortgage repayments in Kogarah City are directly related to house prices, length of occupancy and the level of equity of home owners. When viewed with Household Income data it may also indicate the level of housing stress in the community. (Figure 14)

Housing loan repayment quartiles allow us to compare relative repayment liabilities across time. Analysis of the distribution of households by housing loan repayment quartiles in Kogarah City compared to Greater Sydney shows that there was a larger proportion of households in the highest repayment quartile, and a similar proportion in the lowest repayment quartile.

Figure 13 Monthly housing loan repayments, 2011



The total number of households with a mortgage in Kogarah City increased by 2,945 between 2001 and 2011. The most significant change in Kogarah City during this period was in the highest quartile which showed an increase of 823 households.

Weekly Rent

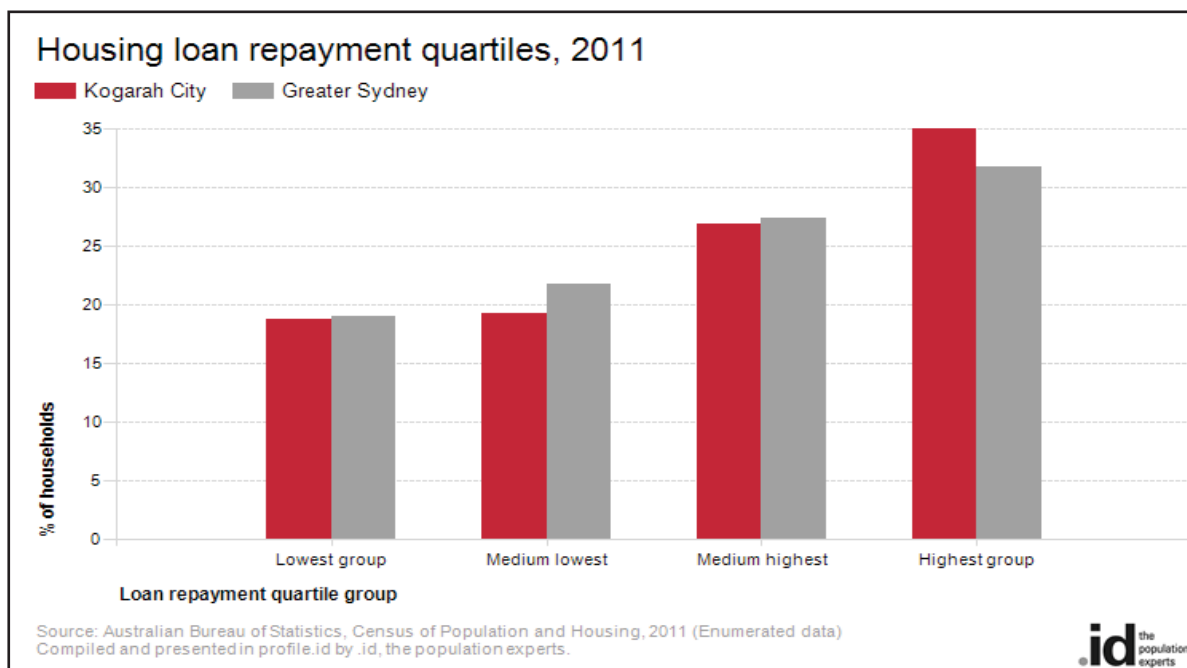
Analysis of the weekly housing rental payments of households in Kogarah City compared to Greater Sydney shows that there was a larger proportion of households paying high rental payments (\$400 per week or more), and a smaller proportion of households with low rental payments (less than \$150 per week).

Overall, 44.3% of households were paying high rental payments, and 7.7% were paying low payments, compared with 39.3% and 13.3% respectively in Greater Sydney.

The major differences between the housing rental payments of Kogarah City and Greater Sydney were:

- A larger percentage of \$450 - \$549 (18.7% compared to 13.2%)
- A larger percentage of \$400 - \$424 (11.1% compared to 6.9%)
- A larger percentage of \$350 - \$374 (12.0% compared to 7.8%)
- A larger percentage of \$375 - \$399 (7.7% compared to 4.6%)

Figure 14: Housing tenure, 2011



Housing Stress

Housing Stress is defined as per the NATSEM (National Centre for Social and Economic Modeling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income on housing costs.

Housing affordability is a significant issue if mortgage and rent payments rapidly increase as a share of income. While stress can be highly dependent on individual circumstances, using Census data to analyse this provides a good overview of the problems, and highlights any areas in Kogarah City where households may be having problems meeting their commitments.

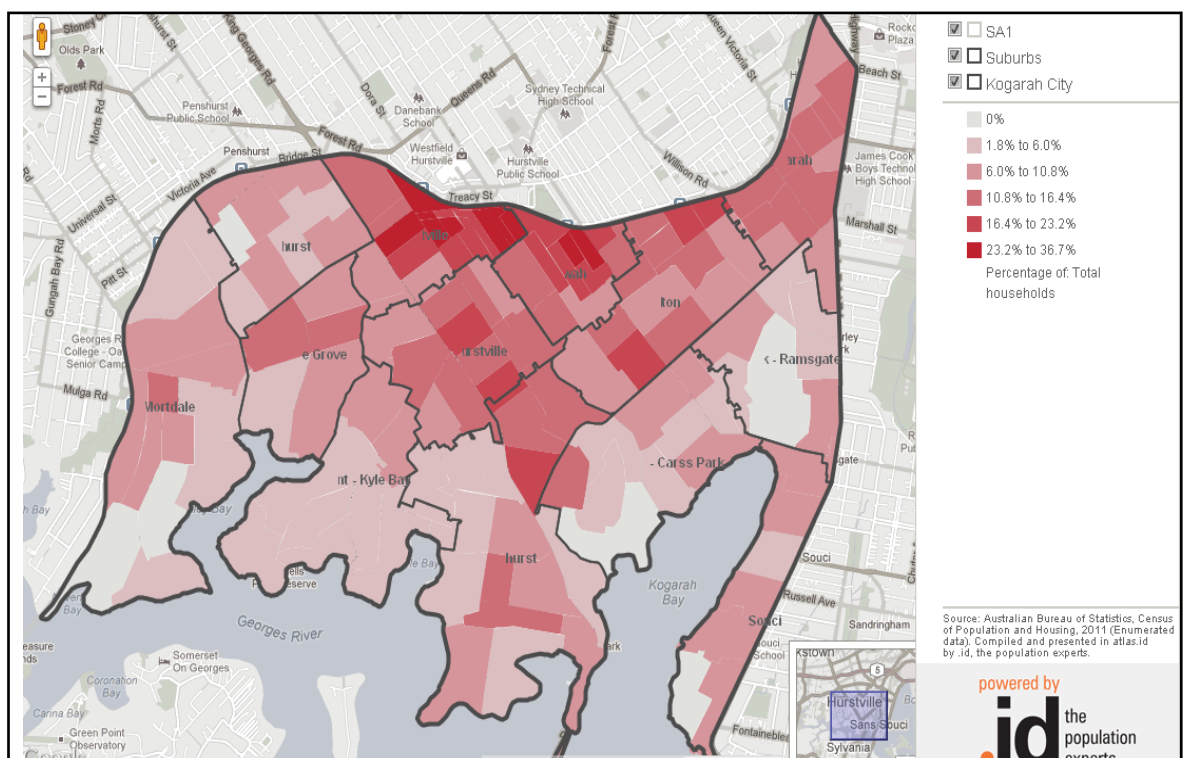
In 2011, 11.9% of Kogarah City's households were experiencing housing stress compared to 11.5% in Greater Sydney.

While Kogarah City had a higher proportion of households experiencing housing stress, it is important to note that this varied across the City. Proportions ranged from a low of 4.8% in Connells Point - Kyle Bay to a high of 22.8% in Hurstville.

The five areas with the highest percentages of households experiencing housing stress were: (Figure 15)

- Hurstville (22.8%)
- Allawah (19.1%)
- Carlton (14.0%)
- Kogarah (13.3%)
- South Hurstville (13.3%)

Figure 15 Areas experiencing housing stress in Kogarah City, 2011



Journey to Work

In 2011, approximately 14.2% of Kogarah City's employed residents choose to work within the Kogarah City LGA, 14.9% work in Sydney CBD, while 16.4% work in the neighbouring Hurstville, Rockdale and Sutherland Shire LGAs.

At the 2011 Census, 54.4% of Kogarah City's employed residents drove to work by car (a decrease of 1.7% from 2006) and 26.9% travelled to work via public transport. This percentage is higher than Greater Sydney where 20% use public transport to travel to work.

Car Ownership

Analysis of the car ownership of the households in Kogarah City in 2011 compared to Greater Sydney shows that 83.3% of the households owned at least one car, while 11.5% did not, compared with 81.2% and 11.8% respectively in Greater Sydney.

Overall, 39.3% of the households owned one car; 31.4% owned two cars; and 12.6% owned three cars or more, compared with 36.8%; 31.4% and 13.0% respectively for Greater Sydney.

The largest changes in the household car ownership in Kogarah City between 2006 and 2011 were:

- an increase in the number of households with 2 motor vehicles (+538 households),
- an increase in the number of households with 3 or more motor vehicles (+341 households) and
- an increase in the number of households with 1 motor vehicle (+312 households).

Table 4: Employment location of residents in the Kogarah LGA, 2011

	Number	%
Live and work in the area	3,837	14.2
Live and work in the same SLA	3,837	14.2
Live in the area and work in different SLA	0	0.0
Live in the area, but work outside	19,948	73.7
Work location unknown	3,286	12.1
Total employed residents	27,071	100.0

3. Kogarah 2031 Housing Strategy

Kogarah 2031 Housing Strategy is Council's commitment to managing housing supply over the next 20 years. Facilitating changes in the supply of housing requires long lead times. The delivery of additional housing begins with changes in statutory planning which then must be taken up by the private sector. A lead time of approximately five years is generally needed between Council's initial decision to increase housing supply in an area and any new housing being delivered.

Kogarah 2031 Housing Strategy seeks to ensure a reasonable supply of new housing comes onto the market over the period from 2015 to 2031 to cater for the projected population.

The ageing of the population and the demographic change to smaller household size are compelling reasons to facilitate more small dwellings in the City of Kogarah. The proportion of residents aged over 65 years was 14.5% of the population in 2011 and population estimates for 2031 suggest that this proportion will increase to 22% of the population. Older people tend to live alone or in two person households. As older person households become the dominant household type, Kogarah's population will fall unless housing supply increases. This is because more dwellings are needed to maintain the population if there are less people in each dwelling.

Council's adopted Ageing Strategy was the result of extensive community consultation and it highlights the housing needs of the ageing community. Older residents want opportunities to downsize to quality dwellings within their communities.

In order to facilitate the housing forms that the City's older residents identified as meeting their needs, the Housing Strategy makes opportunities for new seniors living developments on larger sites across the City.

More opportunities have also been created for dual occupancies across the City, including in the foreshore areas.

Building heights and densities have also been increased in centres to facilitate more housing where older residents can take advantage of public transport, shopping, services and medical facilities within easy walking distance.

Another compelling reason to make provision for increased future housing is to ensure there are housing opportunities within the City for young people starting out and young families. The City of Kogarah has been a family based community and the majority of older residents would prefer to have their children and grandchildren living close by. However, lack of housing supply and affordability is a significant barrier to younger people looking to establish themselves locally. Increasing supply helps to improve affordability. Young working people will seek out well located and designed apartment buildings. In addition, the movement of older residents to smaller new dwellings will free up larger family sized housing.

If Council can use the planning framework to assist this movement of people, residents will move to housing more suited to their needs. At the same time local communities will be revitalised because families will help rejuvenate schools, sporting clubs and local shops. Such a strategy helps keep generations together, which in turn means more community and family support is available for people as they age. If Council does not take initiatives to provide more housing, local communities will experience population loss and become characterised as an aged community. If left unchecked, these trends would undermine the viability of local retail centres, schools and community facilities.

Council will use change to inject vitality into localities that need it most. Population growth in local centres can help improve the economic viability of existing shops, maintain the presence

of services such as banks and post offices, and create new opportunities for small businesses such as local cafés and restaurants. Well located housing also meets the needs of young people who are looking for well designed residential apartments near jobs and public transport.

The Kogarah 2031 Housing Strategy seeks to provide increased housing choices and opportunities for our current and future residents. Through changes to the planning framework, Council is seeking out opportunities in appropriately located areas to achieve the Strategy's objectives.

What Council Actions will deliver the Kogarah 2031 Housing Strategy?

Kogarah Local Environmental Plan 2012 (Kogarah LEP 2012) represented a conversion of the Kogarah LEP 1998 to the Department of Planning's Standard Instrument LEP (SILEP) and was gazetted on 25 January 2013.

That Plan was not a review of the statutory planning controls as it was a conversion of the existing plan to the new Standard Instrument LEP format. There was therefore no strategic review of housing provision undertaken at the time of preparing Kogarah LEP 2012.

The elements which will create additional housing capacity and deliver housing to meet the needs of the population to 2031 are detailed below:

I. Removing restrictions on dual occupancy development to permit redevelopment of a larger number of sites across the LGA.

A review of the current E4 – Environmental Living zone has been undertaken as part of the development of the Housing Strategy and it is proposed that the zone be removed and replaced with the R2 – Low Density zone in order to facilitate dual occupancy development across the LGA and allow residents to undertake Complying Development.

The E4 – Environmental Living zone was introduced into the conversion of KLEP 1998 to the Standard Instrument LEP as a solution to identifying land previously identified under KLEP 1998 as Waterfront Scenic Protection Area (WSPA) and Foreshore Scenic Protection Area (FSPA), which acted to prohibit dual occupancy development. The prohibition was introduced in 2004 in response to previous dual occupancy development that had been undertaken in accordance with the then State Policy – Sydney Regional Environmental Plan No 12 – Dual Occupancy (SREP 12).

When dual occupancy development was first introduced through SREP 12 it was essentially unconstrained. This resulted in community concern because of both the large number of dual occupancies being built and the poor design outcomes that were often involved.

The future ability of our community to age-in-place will depend on the availability of alternative housing types across the LGA and policies to support alternative housing types would allow older residents to redevelop their land to provide a more suitable form of accommodation, whilst not being financially prohibitive.

As well as an ageing population, younger residents and first home buyers are also creating pressure on the LGA's housing stocks. Changing perspectives in housing density are creating a shift in housing demand – research undertaken in other LGAs indicates that the motive for residents to redevelop their land for dual occupancy has changed.

In the past 20 years, Sydney property prices have risen considerably, placing increased pressure on first home buyers, young families and older people looking to downsize and have cash left over for their retirement.

The proposed changes will open up opportunities for a wider range of dual occupancy development across the LGA, including development for dual occupancy on large blocks on the waterfront.

It is proposed that Kogarah LEP 2012 be amended to include provisions that will permit attached dual occupancy development on allotments zoned R2 – Low Density Residential and R3 – Medium Density Residential with an area 650m² or greater, with the exception of those properties in the foreshore areas and heritage conservation areas, where the minimum lot size requirement is 1000m².

For the majority of sites, attached dual occupancy development will be permitted. Council will also permit detached dual occupancy development on sites that have frontage to two streets. The permitted floor space ratio and building height controls will be the same as allowed for single dwellings.

Subdivision of the dwellings will also be permissible. This allows landowners to realise the capital expenditure involved in developing a dual occupancy. This is particularly desirable for older residents who, by subdividing and building a dual occupancy can partially realise the capital tied up in the family home.

2. Increase housing capacity in and around the Kogarah and Hurstville Town Centres

Increasing dwelling capacity in and around the existing Kogarah and Hurstville Town Centres, close to services, facilities and public transport is also proposed.

The Kogarah Town Centre has undergone a significant transformation over the last decade, to become a vibrant, livable and working community. The Kogarah Town Centre is a highly concentrated business district, and is home to the Head Office of the St. George/ Westpac Bank, the St George Private and St George Public Hospital and the second largest TAFE in NSW. The Centre also caters to approximately 200 smaller business.

The Kogarah Centre's identification as a Specialised Centre in the draft Metropolitan Strategy reinforces the growth of the Kogarah Town Centre as a specialised medical precinct.

The existing Kogarah Town Centre boundaries are becoming somewhat constrained, due to the lack of land zoned to accommodate future growth of the Centre. Rezoning has been undertaken in the last decade (Railway Parade South and land bounded by Gray Avenue, Princes Highway and Rocky Point Road) to extend the boundaries of the Town Centre, however there has been minimal redevelopment in these two (2) precincts.

Kogarah's side of the Hurstville Town Centre is also constrained, with much of the land within the precinct fully developed.

Having a large medical and educational precinct within the City of Kogarah means that key community service workers like teachers, nurses, police and other emergency service workers need affordable and appropriate housing, close to work.

A review of the zoning around the Kogarah and Hurstville Town Centres and a review of building height and density will provide significant opportunities for redevelopment, close to the major employment generators and provide Council with an opportunity to investigate opportunities for housing that is more affordable than other suburbs within the LGA.

Details of the areas proposed to be rezoned are summarised in the Table at Annexure 1. Maps identifying the boundaries of the areas where change is proposed, along with zoning height and FSR are included at Annexure 2.

3. Review the development controls in the B4 – Mixed Use zone within the Kogarah and Hurstville Town Centre to allow for additional development opportunities

Significant redevelopment has been undertaken in the Kogarah and Hurstville Town Centres over the last 10-15 years. The majority of larger sites zoned B4 – Mixed Use have been developed to their maximum capacity, however there are still a number of sites that have not been redeveloped to their maximum potential.

A review of the development standards (height and density) in the Kogarah Town Centre and Hurstville Town Centre has been undertaken to ensure that there are significant opportunities for redevelopment of these remaining sites, close to the major employment generators.

Redevelopment of these sites will also provide Council with an opportunity to investigate opportunities for housing that is more affordable than other suburbs within the LGA.

Details of the areas proposed to be rezoned are summarised in the Table at Annexure 1. Maps identifying the boundaries of the areas where change is proposed, along with zoning height and FSR are included at Annexure 2.

4. New areas identified for the development of residential flat buildings and townhouses close to centres and public transport. This will occur through the rezoning of some nominated areas.

Some areas currently zoned for low density residential uses (R2 – Low Density Residential) which are close to existing commercial centres and existing residential flat building development and are located on good public transport networks have been identified to be rezoned to provide increased opportunities for additional residential flat development (R3 – Medium Density Residential).

These new areas will have a range of heights and floor space ratios, with areas allowing heights ranging from 15-21m (this equates to approximately 4 - 6 storeys and Floor Space Ratios (FSR) of up to 2:1.

Some areas close to Oatley Centre and along Rocky Point Road have also been identified to be rezoned for townhouse development. These areas have a proposed height of 9m (2 storeys) and an FSR of 0.7:1.

Details of the areas proposed to be rezoned are summarised in the Table at Annexure 1. Maps identifying the boundaries of the areas where change is proposed, along with zoning height and FSR are included at Annexure 2.

5. Increase opportunities to develop residential apartments (shop top housing) in selected commercial centres and the R3 – Medium Density Residential zones by increasing permissible heights and floor space ratios.

A review of land in existing commercial centres has been undertaken to identify opportunities for increases in dwelling density and heights. The draft South Subregional Strategy identifies that increasing residential densities within the walking radius of smaller local centres can make these places more vibrant and provide much needed housing choice for the ageing and changing population.

A review of the development controls in existing commercial centres has identified that in the majority of centres the current controls are not economically viable, which has resulted in limited redevelopment in these centres- thus limited housing opportunities have been provided. In some centres, it is also proposed that the zone be changed in order to better reflect the future role of the centre.

The proposed changes aim to encourage redevelopment of sites in existing commercial centres, through the provision of shop-top housing and smaller, more affordable residential dwellings.

Increases to height and FSR requirements are also proposed in a number of existing R3 – Medium Density zoned localities. The proposed changes aim to encourage redevelopment of remaining sites in the R3 – Medium Density Residential zone and will also assist in encouraging the redevelopment of older residential flat developments to newer, modern and accessible apartment buildings, with lift access.

Details of the areas where changes are proposed are summarised in the Table at Annexure 1. Maps identifying the boundaries of the areas where change is proposed, along with zoning height and FSR are included at Annexure 2.

6. Provide opportunities for a retailing corridor, including bulky goods retailing through the creation of an Enterprise Corridor along a section of the Princes Highway.

Investigation of appropriate locations for retail uses in centres, business development zones and enterprise corridors is an action identified in the draft South Subregional Strategy. The draft South Subregional Strategy states that Enterprise Corridors are an appropriate location for bulky goods retail uses, where they can take advantage of signage opportunities and access to public transport.

The Kogarah Employment Lands and Economic Development Strategy, prepared by SGS Economics and Planning and completed in March 2013, recommended the implementation of a B6 Enterprise Corridor zone on the north-western side of Princes Highway between Jubilee Avenue and Plant Street (SGS, 2013) so as to ensure that bulky goods retail is clustered at a highly accessible location within close proximity to the Kogarah Town Centre. It will also reinforce the existing bulky goods and mixed business cluster along this strip. Residential uses may be permissible with consent in this zone, but ideally should be setback from the road corridor” (SGS, 2013: 84).

Consistent with the Kogarah Employment Lands and Economic Development Strategy, it is proposed to introduce a B6 Enterprise Corridor zone along the Princes Highway between Westbourne Street and Jubilee Avenue, plus half of the block (the former ‘White Castle’ site) between Francis and Westbourne Streets.

The B6 - Enterprise Corridor zone enables a mix of employment uses including business, office and light industrial as well as bulky goods retailing.

A B6 Enterprise Corridor in the Standard Instrument LEP is a zone that allows employment uses (usually low value), is suited to main road type areas, away from centres and can allow residential. The objectives of the zone are:

- To promote businesses along main roads and to encourage a mix of compatible uses.
- To provide a range of employment uses (including business, office, retail and light industrial uses).
- To maintain the economic strength of centres by limiting retailing activity.

It is considered that the proposed B6 Enterprise Corridor will ensure that the existing non-conforming uses currently situated along the Princes Highway become permissible within the zone, while encouraging a mix of compatible business uses and reinforcing the corridor as a commercial/employment precinct with residential development above.

The objective of the B6 – Enterprise Corridor is to encourage the redevelopment of commercial development (minimum commercial FSR of 0.7:1) with residential development above.

It is proposed that the built form in this zone be large floor plate commercial at ground floor with residential development stepped up and away from the Highway frontage (maximum height of 21m). The overall FSR is proposed to be 2:1.

It is proposed that Kogarah LEP 2012 be amended by rezoning the following area to B6 – Enterprise Corridor.

In conjunction with the introduction of the B6-Enterprise Corridor, it is also proposed to rezone the existing B1 - Neighbourhood Centre zoned land between Plant Street and Edward Street and the remaining sites within

the block bounded by Francis and Westbourne Streets to B2 - Local Centre to achieve greater consistency between the zone objectives and the nature of development within this section of the Princes Highway corridor.

The existing residential strip between Edward and Francis Streets, which divides the centre, is also proposed to be rezoned B2 – Local Centre in order to create a retailing precinct and facilitate the provision of increased retail floor space, catering for the additional demand identified by the Kogarah Employment Lands and Economic Development Strategy.

Details of the areas proposed to be rezoned are summarised in the Table at Annexure 1. Maps identifying the boundaries of the areas where change is proposed, along with zoning height and FSR are included at Annexure 2.

7. Allow dwellings on smaller lots by reducing the minimum subdivision lot size requirements.

The intention is to encourage the subdivision of land, to allow for smaller allotments across the LGA.

Kogarah's current requirements are generally more onerous than other Council areas across Metropolitan Sydney. As outlined above, in the past 20 years, Sydney property prices have risen considerably, and the values of land throughout the Kogarah LGA have increased considerably.

Torrens title subdivision (land subdivision) involves the creation of new allotments from an existing allotment. It is proposed that the minimum allotment size be 700m² on allotments zoned R2- Low Density Residential, which are situated along the waterfront and 550m² on allotments zoned R2 – Low Density Residential outside of the waterfront.

It is also proposed that if the allotment is a battle-axe lot or other lot with an access handle, then the area of the access handle and any right of carriageway will not be included in calculating the allotment size, and this area will need to be in addition to the minimum allotment size.

8. Provide opportunities for seniors housing on large sites in waterfront and foreshore areas.

The new requirements will provide opportunities for land owners with larger blocks to subdivide their land. Any development on the subdivided allotment would still need to comply with FSR, setback and height requirements.

Older people in households in Australia have high rates of home ownership. In 2006, 83% of people over 55 years of age lived in owner occupied dwellings.⁴ In 2007-08, people aged 65 years and over represented 77.9% of outright home owners, whilst 5.4% of this age group still had a mortgage⁵.

Whilst the majority of older people live in private owner occupied three or four bedroom separate dwellings on their own land, these households usually consist of only one or two people.

In the City of Kogarah, the largest proportion of people aged 65 years and over is concentrated in the suburbs of Beverley Park – Ramsgate, Sans Souci, Blakehurst, Kogarah Bay – Carss Park and Oatley – Mortdale.

In the Kogarah LGA, housing designated for seniors is constructed under State Environment Planning Policy – Housing for Seniors and People with a Disability (SEPP HSPD). The SEPP HSPD provides for a range of housing types including *self contained dwellings*⁶.

The current provisions of the SEPP HSPD require that housing for seniors, including self contained dwellings meet certain locational requirements – these requirements generally preclude large development sites in and around the foreshore and waterfront areas.

As a result, older people who choose to move from their own large home in the foreshore or waterfront areas to smaller appropriately constructed homes are constrained, and are forced to move out of the LGA to other LGAs, such as the Sutherland Shire⁷.

Council is seeking to provide additional opportunities for self contained dwellings for seniors on large sites in and around the foreshore. Such developments will provide an option for over 55s to downsize to residential accommodation in areas where there is currently an undersupply of this type of housing.

Detailed controls will ensure that the development for this type of accommodation is not out of context with the character of the existing residential development in terms of height and density.

⁴AHURI - Dwelling, Land and Neighbourhood Use by Older Home Owners, 2010

⁵ABS Household Income and Income Distribution 2007-08.

⁶Under the SEPP HSPD a self-contained dwelling is a dwelling or part of a building (other than a hostel), whether attached to another dwelling or not, housing seniors or people with a disability, where private facilities for significant cooking, sleeping and washing are included in the dwelling or part of the building, but where clothes washing facilities or other facilities for use in connection with the dwelling or part of the building may be provided on a shared basis.

⁷Refer to Figure 3.

9. Protect areas of recognised building character and heritage value and promote high quality residential design and amenity outcomes.

Built heritage is an important part of the built environment and provides our community with a sense of identity, pride and history and makes an important contribution to the character and amenity of the City.

Our aim is to conserve, protect and enhance the natural and built environment of the City of Kogarah and to improve the quality of life for our community and future generations.

Council has three (3) Heritage Conservation Areas (HCAs) identified in Kogarah LEP 2012. Kogarah's residents value many things about the character of these HCAs and Kogarah City Council supports the protection and enhancement of these areas through the retention of the Heritage Conservation Area Guidelines.

It is also proposed to downzone the block bounded by Ocean Street, Princes Lane and Queens Avenue, which is situated within the Kogarah South Heritage Conservation Area and contains a number of Heritage Items from R3 – Medium Density Residential to R2 – Low Density Residential to ensure that these properties are not inappropriately redeveloped.