Residential Development Ralston Avenue, Belrose

Economic Impact Assessment

PREPARED FOR

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1. Executive Summary

This Study examines the potential economic impacts which could eventuate from the proposed rezoning of the site (the 'Subject Site') in Belrose North, located within Warringah Local Government Area.

The Subject Site has been deferred from the Warringah Local Environmental Plan (LEP) 2011 pending further analysis by the NSW Department of Planning and Infrastructure (DoPI). The landowners of the Subject Site are seeking a future zoning in the Warringah LEP 2011 which would facilitate residential development. Although plans are at an early stage, it is anticipated that if a rezoning is secured approximately 169 detached residential dwellings would be developed on the Subject Site.

The purpose of this Study is to quantify at a high-level (and based on the provisional concept plans) the potential economic impact which could eventuate from the proposed rezoning.

In economic terms, the Subject Site is uncleared, undeveloped and does not generate any economic benefit to the local, Subregional or Metropolitan economy. As such, all of the potential economic benefits associated with the proposed development would be net additional. The Subject Site is used informally for recreation and local access however this is not considered a quantifiable economic benefit in this instance given that the land is privately owned and not part of the Garigal National Park.

The potential positive economic benefits of the proposed development can be summarised as follows:

- A contribution towards housing supply, housing mix and assisting to ease house price inflation;
- Creating additional retail expenditure available to be captured by existing centres in the local area such as Ralston Avenue Belrose, Glenrose Small Village Centre and Sorlie Road Frenchs Forest Neighbourhood Centre;
- Supporting jobs in surrounding centres and the provision of additional retail floorspace which would benefit both existing and new residents;
- Creating jobs directly and indirectly during the construction process; and
- Creating significant direct and indirect capital investment in Warringah LGA, the North East Subregion and the Sydney Metropolitan Area.

POTENTIAL ECONOMIC IMPACTS OF PROPOSAL	
ADDITIONAL DWELLINGS	+169
ADDITIONAL RETAIL EXPENDITURE FROM RESIDENTS (2017)	+$9m
DIRECT CAPITAL INVESTMENT	$98m
PROJECT'S TOTAL ECONOMIC MULTIPLIER DIRECT AND INDIRECT	$281m
JOB YEARS SUPPORTED DURING CONSTRUCTION DIRECT AND INDIRECT	1,611
ADDITIONAL RETAIL EXPENDITURE FROM CONSTRUCTION WORKERS	+$1m

Note: All prices in $2009

We should note that there may be some short-term adverse economic impact during the construction process resulting from increased traffic locally. This potential adverse impact would likely be insignificant and would be mitigated as far as possible.

2. Introduction

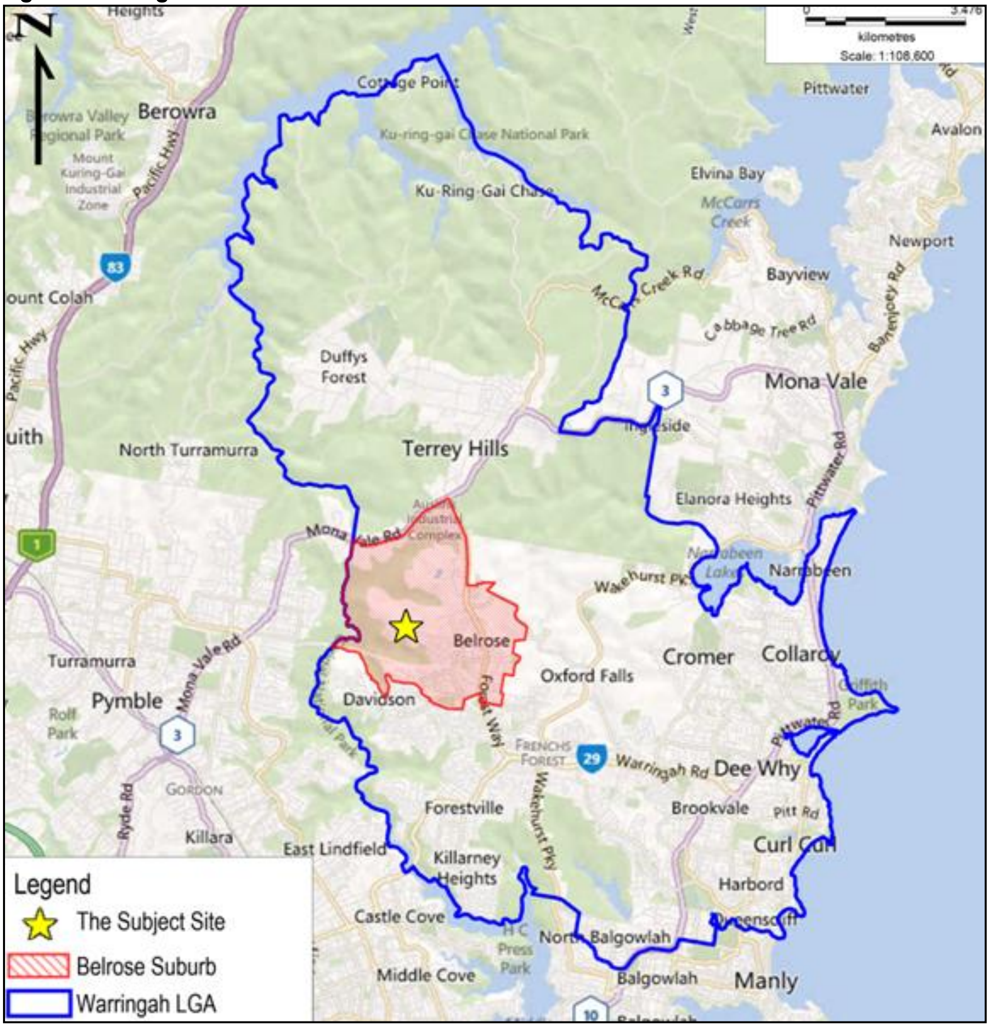
2.1 Study Background

Matthews Civil Pty Ltd is seeking to rezone a site in Belrose North for residential purposes. The site which are subject to the rezoning (the 'Subject Site') is situated adjacent to Ralston Avenue in Warringah Local Government Area (LGA). The Subject Site is currently uncleared, undeveloped and constitute private land used informally for local access and recreation.

The landowners are seeking a rezoning of the Subject Site which would permit residential uses to be developed. This would facilitate the construction of approximately 169 residential plots on the Subject Site. These would comprise single detached dwellings. This housing estimate is preliminary and is based on the concept plan available at the time of this report.

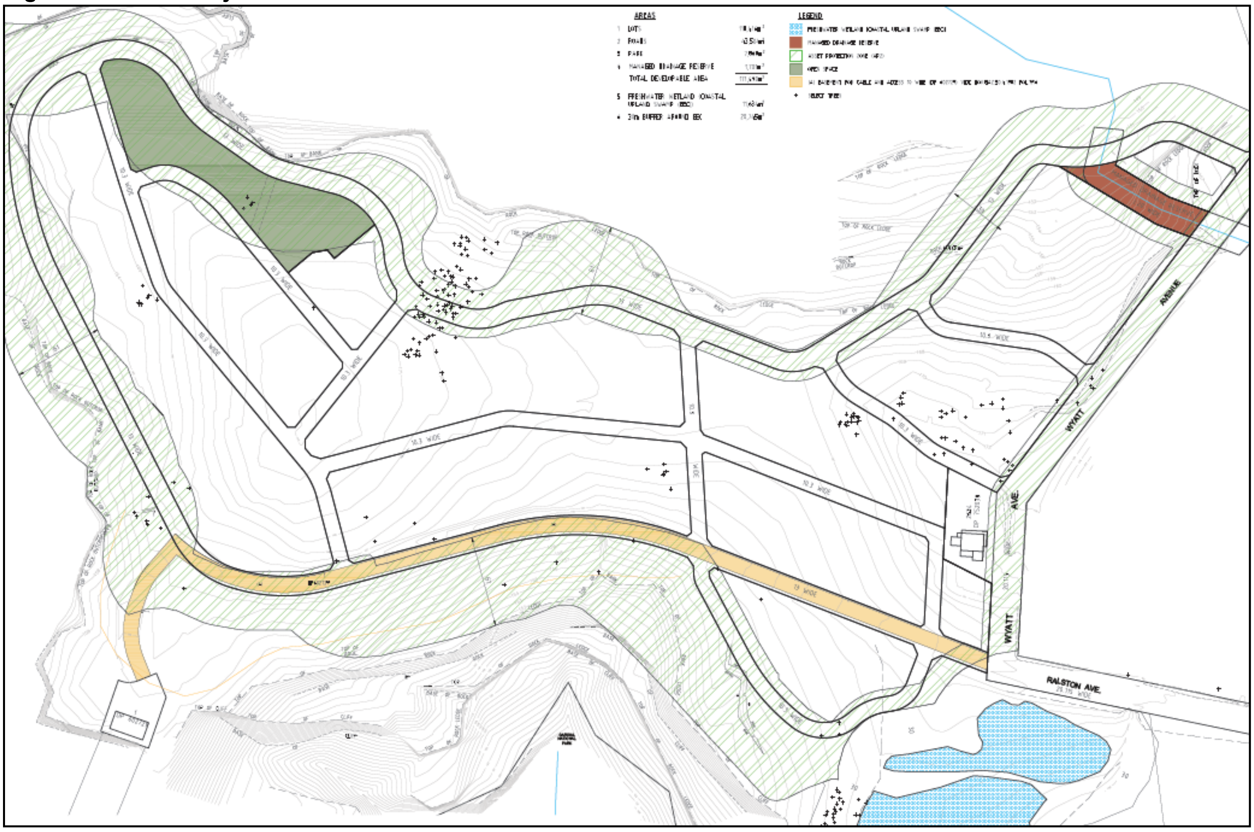
The location of the Subject Site is depicted in Figures 1 and 2.

Figure 1 - Regional Context



Source: Map produced by Hill PDA using MapInfo 11.0 software and Microsoft Bing (c) 2011 Microsoft Corporation

Figure 2 - The Subject Site



Source: Plan of Proposed Subdivision of Lot 1 in DP1139826 and Road Closures at Ralston Avenue, Belrose, Lockley Land Title Solutions (24/09/2012)

2.2 Subject Site Designation

The Subject Site is proposed to be zoned E3 Environmental Management in the draft Warringah Local Environmental Plan (LEP) 2009. As a response to submissions made by the landowners objecting to the proposed zoning, the Subject Site, together with another site at Oxford Valley Falls, was subsequently deferred from the Warringah LEP 2011 (which has been made) to enable more detailed investigation into the most appropriate zoning and land use controls.

The Subject Site is classified as 'Deferred Land' in accordance with the Warringah LEP 2011. The deferral means the current range of permissible land uses contained in the Warringah LEP 2000 have been retained. The Subject Site is subject to a 'Locality C8 Belrose North' zoning in the Warringah LEP 2000. Housing is identified as a Category Two Land Use within this zoning i.e. development which may be consistent with the desired future character of the Locality, provided that such development is limited to new detached style housing at low density.

2.3 Purpose of the Study

Hill PDA has been commissioned to undertake three separate reports exploring the implications of a proposed residential zoning on the Subject Site. These reports are:

- An Economic Impact Assessment;
- A Social Impact Assessment; and
- A Housing Demand Analysis.

We understand that a broader consultant team has been engaged to review other impacts such as environmental issues, planning, traffic and transport. These aspects are not the subject of this report.

This report comprises the Economic Impact Assessment (hereafter referred to as the EIA) which considers the potential economic implications of the proposed zoning and subsequent development only. This is based on the provisional concept plans.

Note that it does not comprise a full economic cost-benefit analysis.

2.4 Study Structure

To assess the potential economic impacts associated with the rezoning, the EIA is set out in the following manner:

- Chapter 3 undertakes a review of planning policies and strategies which are relevant considerations to the EIA;
- Chapter 4 quantifies the economic impacts of the proposed rezoning on the Subject Site;
- Chapter 5 considers the economic multipliers and construction related economic impacts from the proposed rezoning; and
- Chapter 6 concludes the Study by considering the overall economic impact of the proposed development from the community perspective.

3. PLANNING & POLICY REVIEW

This Chapter considers the context of the proposed rezoning by examining relevant planning policies, strategies and documents. Note that only aspects which relate directly to economic impacts are considered.

3.1 State Planning Policies and Strategies

NSW 2021- A Plan to Make NSW Number One (2011)

The NSW 2021 Plan aims to rebuild the NSW economy, provide quality services, renovate infrastructure, restore government accountability and strengthen NSW's local environment and communities. The Plan comprises five key strategies. The main strategy of relevance to this Study is "*Rebuild the Economy"* which seeks to secure new jobs and ensure that more land is made available for housing in order to support economic growth.

The NSW 2021 plan sets a target of +60,000 jobs in Sydney by 2021, and +25,000 new dwellings in Sydney per year to 2021. Housing development opportunities within the Sydney Metropolitan Area will play a key role in the future economic growth of NSW. Housing is thus recognised as a major contributor towards economic development.

Metropolitan Plan for Sydney 2036 (2010)

The Metropolitan Plan for Sydney sets the strategic direction for Sydney towards 2036. It sets targets for additional dwellings and employment in the Sydney Metropolitan Area by Subregion. The Warringah LGA is situated in the North East Subregion within which +29,000 additional dwellings and +23,000 additional jobs are targeted between 2006 and 2036.

A new Metropolitan Strategy is being developed by the DoPI for Sydney. A discussion paper entitled "Sydney Over the Next 20 Years' (May 2012) has been published for public consultation. This paper recognises the need for an additional +570,000 homes and +600,000 jobs in Sydney between 2010 and 2031. The discussion paper acknowledges that to enhance economic activity there is a need to attract and retain skilled labour by, amongst other measures, building upon economic infrastructure. Economic infrastructure includes housing.

Draft North East Subregional Strategy (2007)

The draft Subregional Strategy includes specific dwelling and employment targets for the Warringah LGA. Over the 2001 to 2031 period +10,300 additional dwellings and +12,500 additional jobs are targeted within the Warringah LGA.

3.2 Local Planning Policies and Strategies

Draft Warringah Housing Strategy (2011)

This document has not been adopted by Warringah Council ('Council') and therefore its content is for reference purposes only. The draft Strategy recognises that housing affordability is a key issue locally, resulting from strong demand for houses coupled with reduced supply of low cost housing.

The draft Strategy identifies a number of locations across the LGA where the +10,300 additional houses targeted in the draft Subregional Strategy are expected to be accommodated. The Subject Site is not identified as forming part of these sites.

Warringah Local Environmental Plan 2011

The Subject Site is classified as 'Deferred Land' in accordance with the Warringah LEP 2011. It is stated that all deferred land remains under the provisions of Warringah LEP 2000 until a review of deferred lands is complete and a planning proposal process is undertaken to bring this land into the Warringah LEP 2011.

Warringah Local Environmental Plan 2000

The Subject Site is identified as forming part of Locality C8 'Belrose North' in the Warringah Local LEP 2000. The Desired Future Character of the Locality is identified as follows:

> *"The present character of the Belrose North locality will remain unchanged except in circumstances specifically addressed as follows.*
>
> *The natural landscape including landforms and vegetation will be protected and, where possible, enhanced. Buildings will be grouped in areas that will result in the minimum amount of disturbance of vegetation and landforms and buildings which are designed to blend with the colours and textures of the natural landscape will be strongly encouraged.*
>
> *Development will be limited to new detached style housing conforming with the housing density standards set out below and low intensity, low impact uses*
>
> *A dense bushland buffer will be retained or established along Forest Way. Fencing is not to detract from the landscaped vista of the streetscape.*
>
> *Development in the locality will not create siltation or pollution of Middle Harbour."*

Housing is identified as a Category Two Land Use i.e. development which may be consistent with the desired future character of the Locality, provided that such development is limited to new detached style housing at low density.

4. ECONOMIC IMPACT OF HOUSING

This Chapter considers the economic impacts associated with the development of 169 residential lots on the Subject Site which would be facilitated by the proposed rezoning. For the purposes of this EIA we have assumed that the development would accommodate 524 residents once it is fully developed and occupied. This is based on applying the average household size of separate dwellings in the Warringah LGA sourced from the 2011 ABS Census (3.1 persons per dwelling[1]) to the 169 residential lots envisaged.

Note that we have assumed that these new residents would be new to the Belrose suburb i.e. they would be residents from the wider Warringah LGA, North East Subregion, Sydney Metropolitan Area and beyond. Where there is internal movement within the Belrose suburb it is assumed that backfill of existing housing would occur, leading to a net population increase from all of the proposed dwellings.

4.1 Housing Impacts

As discussed in Hill PDA's Housing Demand Study, industry sources report that Sydney is experiencing its lowest rate of housing growth in 50 years[2] with the gap between housing demand and supply worsening. According to Deloitte Access Economics, NSW has slumped from contributing more than one third of new housing in Australia to less than a fifth in a single decade, with little indication that this trend will change in the short term. To exemplify this point, between 2007 and 2008 only 15,000 additional dwellings were built in the Sydney Statistical Division in comparison to 32,000 between 1999 and 2000[3].

Housing completions in NSW peaked in 1999-2000 and have since fallen by 47%[4]. Over the same period, private completions across Australia increased by 26% implying that NSW is not keeping pace with other States in terms of housing developments. This adversely impacts upon the economic competitiveness of NSW.

Previous work undertaken by Council (draft Warringah Housing Strategy 2011) recognises that a lack of housing supply within the Warringah LGA has negatively contributed towards housing affordability issues. Data complied by Housing NSW indicates that the Warringah LGA has a "high" need for affordable housing and states that:

> *"…it is virtually impossible for lower income households to purchase housing in Warringah and while it has been this way for some years, affordability is tighter now than it was a number of years ago."*[5]

Vacancy rates for housing are very low, another feature of tight supply. The table below indicates the number of dwelling completions over the 2000 to 2010 period in the Warringah LGA.

---

[1] Note: This is calculated using Table D31 Dwelling Structure of the 2011 ABS Community Profiles and based on 30,677 separate dwellings housing 94,025 residents
[2] Source: Rents to soar as housing crisis worsens, Daily Telegraph March 25, 2009
[3] Source: Metropolitan Strategy Review, Sydney Towards 2036, NSW Government
[4] Source: NSW Treasury
[5] Source: Information on Warringah Housing Market, Housing NSW

Table 1 - Residential Dwelling Completions (2000 to 2010)

	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	Total (00-10)
Warringah	535	696	994	722	588	695	431	357	226	239	5,483

Source: Metropolitan Development Program 2010/11 Report North East, NSW Department of Planning and Infrastructure (August 2011)

A total of 5,483 dwellings were completed in the Warringah LGA between 2000/01 and 2009/10. Dwelling completions have declined consistently over this period with the 08/09 and 09/10 periods recorded the lowest number of completions overall. Combined, total completions for the 08/09 and 09/10 period (465 dwellings) equate to less than half (47%) of the total dwellings completed in the peak of 02/03 (994 dwellings). Furthermore, the number of dwellings completed over the five years post-2005 (1,948) equate to just 55% of the dwellings completed over the five years pre-2005 (3,535).

In summary, housing completions in the Warringah LGA are declining despite a need to increase supply in order to assist in easing affordability in the housing market and to meet aspirational housing targets.

The downturn in housing supply has a number of short and long term impacts on the local and wider economy including:

- Impact on house prices and inflation – A mismatch between housing supply and demand has led to sustained house price growth in NSW. Sydney has persistently had the highest house prices in the country, with the median house price in Sydney for the December 2011 quarter being $527,000 compared to $485,000 in Melbourne for the same period[6]. The latest data available from Housing NSW indicates that median prices for non-strata dwellings in the Warringah LGA ($900,000) are well above average for Sydney ($580,000) by some $320,000 or 55%[7] in the March 2012 quarter;

- Labour supply and population growth – Restrained housing supply and higher house prices have been shown to reduce overseas migration and increase interstate out-migration. This in turn impacts upon population growth rates. Research has found that periods of relatively high house prices in NSW have been associated with a decline in the share of total Australian migration[8]. Lower population growth directly and indirectly impacts upon the economic growth of NSW[9]. Indeed the Metropolitan Plan for Sydney 2036 states that *"housing is strongly linked to economic performance and the ability to provide employers with a strong labour force"*; and

- Impact on the construction industry – A reduction in housing supply has resulted in a direct impact on the construction industry. The decline in building investment has contributed to the under-performance of the NSW economy relative to other States[10]. For example, a 2010 study prepared by BIS Shrapnel and the Urban Taskforce found that the construction of an additional 8,000 dwellings per annum would have directly increased gross state product by an estimated 0.5-0.6 per cent per annum[11].

In the context of the above the proposed development would:

[6] Source: House Price Indexes: Eight Capital Cities, ABS (June 2012)
[7] Source: Rents and Sales Report Issue 100, Housing NSW (August 2012)
[8] Source: NSW Treasury, See 2011-12 Budget Paper 6, page 2-6
[9] Source: NSW Treasury
[10] Source: NSW Treasury
[11] Source: BIS Shrapnel/Urban Taskforce, Going Nowhere: How the planning system and development levies are ruining NSW, 2010

- Increase the supply of dwellings available in the Warringah LGA by 169 dwellings. Whilst the dwellings proposed would likely not be within the affordable range for low or very low income households, they will nevertheless contribute towards a mix of housing locally. Increasing the mix of housing is particularly important in the context of recent dwelling completions in the Warringah LGA. ABS data indicates that the number of units in the Warringah LGA increased by +3,192 (or 22%) between 2001 and 2011 whilst the number of separate dwellings increased by +602 (2%) over the same period. Units are the most affordable dwelling types so an increase in unit development is good for affordability, but an increase in the number separate dwellings should also be supported to ensure that a range of housing types are available to cater for all sectors of the market and overall supply is increased. This is particularly important in the context of the socio-demographic analysis provided in Appendix 1 of the EIA which indicates that the proportion of family households in both Belrose and Warringah LGA increased between 2006 and 2011 (by 2.2 percentage points and 1.9 percentage points respectively) based on ABS Census data[12]. Detached dwellings are particularly suitable for families;
- Increase the availability of residential accommodation and in doing so help to ease house price inflation resulting from constrained supply;
- Support the economic performance of the Warringah LGA by increasing the potential for workers in the LGA to live locally and thus increase job containment rates. In doing so it would assist in ensuring that labour supply and population growth is not constrained by a lack of housing to accommodate workers locally. This is particularly important given the presence of the Austlink Business Park 2km to the north of the Subject Site[13];
- Contribute towards meeting the housing targets for the Warringah LGA, the North East Subregion and broader Sydney; and
- Support the construction industry by providing employment during the construction process (examined in Chapter 4).

4.2 Retail Demand and Sustainability

Using the Hill PDA retail expenditure model[14] we estimate that residents of the Warringah LGA generate retail expenditure of $14,853 per capita in 2012[15].

We have taken 2017 as the base year at which time the economic impact of the proposed development is assessed i.e. the assumed point at which it is completed and fully occupied. In reality the development and release of residential dwellings may be phased over a number of years dependent upon market demand, which may push the completion date back a number of years. However in the absence of any information on likely phasing we have adopted 2017 as base year for the purposes of this EIA.

The following table calculates total retail expenditure resulting from the estimated residential population in 2017. It includes an allowance for per capita retail expenditure to increase by 1.2% per annum from 2012 reflecting

[12] See Table A1.3, Appendix 1

[13] Source: Googlemaps

[14] Note: Based on Marketinfo 2009 data and the ABS Household Expenditure Survey 2003-04 (the latest available survey)

[15] Note: Includes an allowance of 1.2% per annum growth in retail expenditure per capita

historic growth trends and current market conditions. Household expenditure by commodity type derived from Marketinfo 2009 has been equated to expenditure by retail store types using the results of the ABS Retail Survey (1998-99 Cat No. 8624.0 - the latest available data).

Table 2 - Household Expenditure by Retail Store Type for New Residents

	2017
Expenditure Per Capita by Retail Store Type ($m2009)	18,862
Estimated Additional Resident Population	524
Retail Store Type ($m2009)	
Supermarkets & Grocery Stores	2.4
Specialty Food Stores	0.8
Fast-Food Stores	0.7
Restaurants, Hotels and Clubs*	0.8
Department Stores	0.7
Clothing Stores	0.5
Bulky Goods Stores	1.2
Other Personal & Household Goods Retailing	1.2
Selected Personal Services**	0.3
TOTAL	**8.6**

* Turnover relating only to consumption of food and liquor (excludes all other types of revenue such as accommodation, gaming and gambling). ** Selected Personal Services includes hair and beauty, laundry, clothing hire and alterations, shoe repair, optical dispensing, photo processing and hire of videos. Note: distribution of expenditure between different store types is assumed to be consistent with that for existing residents in the Warringah LGA, sourced from Marketinfo 2009 and the ABS Household Expenditure Survey 2003-04

The 524 residents on the Subject Site would generate in the order of $9m in retail expenditure in 2017 ($2009). Given that no retail facilities would be provided as part of the development, all of this expenditure would be directed towards existing and future retail facilities in the wider area.

The following table applies target retail turnover rates ($/sqm) to estimated retail spend. This allows the amount of retail floorspace which be supported as a direct result of new residents to be determined.

Table 3 - Retail Floorspace Demand from New Residents on Site (sqm gross lettable area)

Retail Store Type	Target Turnover ($/sqm)^		F'space Demand (sqm)
	2012	2017	2017
Supermarkets & Grocery Stores	10,000	10,304	232
Specialty Food Stores	7,500	7,728	104
Fast-Food Stores	7,500	7,728	89
Restaurants, Hotels and Clubs*	4,500	4,637	182
Department Stores	3,500	3,606	202
Clothing Stores	5,000	5,152	91
Bulky Goods Stores	3,500	3,606	325
Other Personal & Household Goods Retailing	4,500	4,637	263
Selected Personal Services**	3,200	3,297	86
TOTAL	-	-	**1,573**

^ 2012-based target turnover. Benchmark turnover rates derived from various sources including Urbis Retail Averages, ABS Retail Survey 1998-99 escalated at CPI to $2009, Shopping Centre News, Hill PDA and various consultancy studies. Target turnovers are assumed to increase by 0.6% per annum reflective of historic growth trends and current market conditions * Turnover relating only to consumption of food and liquor (excludes all other types of revenue such as accommodation, gaming and gambling). ** Selected Personal Services includes hair and beauty, laundry, clothing hire and alterations, shoe repair, optical dispensing, photo processing and hire of videos.

We estimate the $9m of additional retail expenditure generated by residents on the Subject Site would support approximately 1,600sqm of retail floorspace in 2017. This would increase year-on-year subsequently reflecting real retail expenditure increases.

By applying indicative job ratios to the retail store types identified in Table 3[16] we estimate that new residents could directly support 56 retail-related jobs in the LGA. Additional jobs over and above this level would also be supported in retail services and support services such as banks, estate agents, travel agents, medical services, schools and so on. This is further to the industries which the new residents themselves will be employed in the LGA.

The nearest centres to the Subject Site, and therefore the centres most likely to benefit from this additional expenditure, are:

- Ralston Avenue Belrose Neighbourhood Centre located 1km by road or a 2 minute drive to the east of the Subject Site[17]. The centre contains a total of 1,210sqm[18] of retail and commercial floorspace which includes an IGA supermarket (600sqm);
- Glenrose Small Village Centre located 3km by road or a 5 minute drive to the south[19]. This centre is currently undergoing redevelopment which will see an expanded Woolworths supermarket in addition to an ALDI foodstore, mini-major and specialty retail floorspace;
- Sorlie Road Frenchs Forest Neighbourhood Centre located 3km by road or a 6 minute drive to the south east[20]. This centre provides approximately 1,620sqm[21] shopfront floorspace in 6 retail units;
- Mimosa Neighbourhood Centre located 3km by road or a 6 minute drive to the south[22]. This is a small neighbourhood centre contains 7 retail units and 430sqm of shopfront floorspace[23];
- Frenchs Forest Small Village Centre located 4km by road or a 7 minute drive to the south east[24]. This centre comprises the purpose-built Forestway Shopping Centre containing 9,600sqm shopfront floorspace[25]; and
- Terrey Hills Small Village Centre located 5km by road or a 6 minute drive to the north-east[26]. This centre provides localised shopping facilities including an IGA supermarket.

In addition to these centres, although it is not a defined centre in planning policy terms the Belrose SupaCenta is situated approximately 4km by road or a 4 minute drive to the north of the Subject Site[27]. The SupaCenta provides in the order of 33,500sqm gross lettable area of retail floorspace[28] and there are a number of other bulky goods retailers adjacent. These facilities would also benefit from the additional retail expenditure generated by new residents on the Subject Site.

[16] Sourced from the ABS Retail Census and Hill PDA
[17] Source: Googlemaps
[18] Hill PDA (February 2011)
[19] Source: Googlemaps
[20] Source: Googlemaps
[21] Hill PDA (February 2011)
[22] Source: Googlemaps
[23] Hill PDA (February 2011)
[24] Source: Googlemaps
[25] SCN Mini-Guns 2011
[26] Source: Googlemaps
[27] Source: Googlemaps
[28] DA approved floorspace

4.3 Traffic and Other Issues

The proposed development would generate minor additional volumes of traffic locally. Unmitigated, this could lead to additional local congestion, travel times and pollution. Additional travel time is an economic cost in that the lost time could be better allocated to a more economically beneficial use. Additional traffic may also lead to additional costs for households in terms of petrol, vehicle maintenance etc. Notwithstanding this, we note the findings of the Traffic Study by Transport and Traffic Planning Associates which indicates that the proposed subdivision *'will not have any adverse traffic implications'*[29] and *'will not result in any comprise to the environmental capacity of any existing roads in the area'*[30].

The proposed development would also create additional demand for infrastructure (refuse collection, sewerage etc) and public services (policing, hospitals etc). However, the development would also require Section 94, developer contribution or other agreements to mitigate these impacts.

This EIA does not comprise an economic cost benefit analysis which would require detailed quantification of these issues. For the purposes of this EIA we have assumed that any negative impacts on traffic, services and the like are mitigated by monetary contributions through a Section 94, developer contribution or other agreements. As such, the net impact on traffic and other issues resulting from the proposed development is assumed to be nil.

4.4 Planning and Policy Impacts

As a result of increasing housing supply, the proposed rezoning and the subsequent development would have the following positive economic impacts on policies identified in Chapter 3:

- Supporting the objective of the NSW 2021- A Plan to Make NSW Number One (2011) to rebuild the economy in NSW by ensuring that more land is made available for housing. Housing is identified as a major contributor towards economic growth. It would also support the economy by supporting new jobs locally as outlined in Section 4.2. The NSW 2021 Plan seeks to provide an additional +60,000 jobs and +25,000 housing in Sydney per annum to 2021;

- Assisting to reach the targets of +29,000 additional dwellings in the North West Subregion between 2006 and 2036 as identified in the Metropolitan Plan for Sydney 2036 (2010). In doing so it would contribute towards economic development in the North East Subregion and the wider Sydney Metropolitan Area. Supporting jobs off-site would also assist the North East Subregion in achieving the target of +23,000 additional jobs by 2036; and

- Assisting to achieve the housing targets for the Warringah LGA set in the draft North East Subregional Strategy (2007) and the draft Warringah Housing Strategy (2011. These target +10,300 additional dwellings in the LGA between 2001 and 2031. It would also contribute towards the target of +12,500 additional jobs in Warringah LGA by 2031 set in the draft Subregional Strategy.

[29] Source: Page 14, Traffic Study, Transport and Traffic Planning Associates
[30] Source: Page 15, Traffic Study, Transport and Traffic Planning Associates

5. Development Impacts

This Chapter examines the economic impact of the development itself in terms of multiplier effects, construction related employment and investment stimuli.

Because the proposal is for a rezoning only and concept plans are still being developed no Capital Investment Value (CIV) has yet been calculated. For the purpose of this EIA we have assumed that the average cost of each residential plot (including servicing, infrastructure, landscaping, materials and construction) in the context of local topography would be in the order of $580,000[31]. Based on 169 lots being provided this would equate to total CIV of approximately $98m. We have used this CIV to calculate potential development impacts

5.1 Construction Multiplier Effects

The construction industry is a significant component of the economy accounting for 7.3% of Gross Domestic Product (GDP) and employing almost one million workers across Australia[32]. The industry has strong linkages with other sectors, so its impacts on the economy go further than the direct contribution of construction. Multipliers refer to the level of additional economic activity generated by a source industry.

There are two types of multipliers:

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

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

The proposed development equates to some $98m in direct CIV. The table below calculates economic multipliers associated with this CIV.

31 Based on Rawlinsons and Hill PDA's Industry experience
32 Source: IBIS World Construction Industry Report 2011

Table 4 - Economic Multipliers

	Direct Effects	Production Induced Effects		Consumption Induced Effects	Total
		First Round Effects	Industrial Support Effects		
Output multipliers	1	0.466	0.438	0.962	2.866
Output ($million)	$98	$46	$43	$94	$281

* Source: ABS Australian National Accounts: Input-Output Tables 1996-1997 (ABS Pub: 5209.0).

The estimated $98m direct construction cost will support a further $89m of activity in production induced effects and $94m in consumption induced effects. Total economic activity supported by the construction facilitated by the proposed rezoning is therefore approximately $281m.

Note that the multiplier effects are national, and not necessarily local. The ABS states that:

> *"Care is needed in interpreting multiplier effects; their theoretical basis produces estimates which somewhat overstate the actual impacts in terms of output and employment. Nevertheless, the estimates illustrate the high flow-on effects of construction activity to the rest of the economy. Clearly, through its multipliers, construction activity has a high impact on the economy."*

In particular the multiplier impacts can leave the impression that resources would not have been used elsewhere in the economy had the development not proceeding. In reality many of these resources would have been employed elsewhere. It should also be noted, as stated in the NSW Treasury guidelines, that:

> *"Direct or flow on jobs will not necessarily occur in the immediate vicinity of the project – they may be located in head office of the supplier or in a factory in another region or State that supplies the project"[33].*

Nevertheless, economic multiplier impacts represent additional value add to the Australian economy resulting from this proposed development.

5.2 Construction Employment

It is estimated that four full time construction positions over 12 months are created for every one million dollars of construction work undertaken[34]. Based on the proposed development's estimated construction cost of $98m, approximately 392 job years[35] will be directly generated.

Table 5 - Employment Generation

	Direct Effects	Production Induced Effects		Consumption Induced Effects	Total
		First Round Effects	Industrial Support Effects		
Multipliers	1	0.33	0.45	2.33	4.11
Employment No. per $million	4.00	1.32	1.80	9.32	16.44
Total job years created	392	129	176	913	1,611

Source: ABS Australian National Accounts: Input-Output Tables 1996-1997 (ABS Pub: 5209.0).

[33] Source: Office of Financial Management Policy & Guidelines Paper: Policy & Guidelines: Guidelines for estimating employment supported by the actions, programs and policies of the NSW Government (TPP 09-7) NSW Treasury
[34] IBIS World Construction Industry Report 2011
[35] Note – One job year = one full time job for one full year

The 1996-97 ANA Input-Output Tables identified employment multipliers for first round, industrial support and consumption induced effects of 0.33, 0.45 and 2.33 respectively for every job year in direct construction. Including the multiplier impacts the proposed development will therefore have potential to generate 1,611 job years directly and indirectly.

5.3 Retail Demand

Construction workers on site would generate demand for additional retail floorspace. Workers spend on average between $2,000 to $3,000 per annum ($2012) on retail goods and services close to their place of work[36]. This will be spent predominately on convenience-related expenditure such as lunches, coffees, snacks etc.

We have assumed that:

- Workers on average spend $2,500 per annum close to their place of work ($2012);
- Worker spending will increase in line with real retail growth at 1.2% per annum; and
- Construction occurs between 2014 and 2016 and jobs would be distributed evenly across the three year period.

Based on this approach we estimate that construction workers would generate in the order of $1m in retail expenditure over the construction period. This would be available to be captured by centres in the surrounding area such as Ralston Avenue Belrose Neighbourhood Centre, Glenrose Small Village Centre and Sorlie Road Frenchs Forest Neighbourhood Centre.

5.4 Other Construction Impacts

The construction process may lead to short-term negative impacts locally such as increased traffic related to site-works, noise during construction and so on, although only a minority of these impacts would be economic. We assume that the development process would take necessary steps to minimise the extent of any impacts on traffic by ensuring deliveries take place outside of peak periods. This is standard practice in the construction industry.

5.5 Investment Stimulus

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

The proposed rezoning would not lead to further development of residential plots adjacent to it given that it comprises a spot rezoning and residential uses are not permissible on adjacent land. However in supporting the provision of additional jobs in retail and other industries and by increasing the amount of retail expenditure locally, it would support the commercial viability of providing new retail and other floorspace in existing centres. This would benefit new and existing residents alike.

[36] Based on Hill PDA's experience which indicates that around 15- 20% of household income is spent close to workers place of work. This is variable and highly dependent on the range of retail facilities provided locally.

Increasing choice in the residential market would also increase the attractiveness of the Warringah LGA as a place for people to live, particularly in light of the area's constrained housing market. This in turn would support is economic competitiveness and may encourage investment in existing and new industries in the LGA in which new residents would be employed.

5.6 Planning and Policy Impacts

As a result of supporting jobs and investment during the construction process, the proposed rezoning and the subsequent development would have the following positive economic impacts on the policies reviewed in Chapter 3:

- Support rebuilding of the economy encouraged by the NSW 2021- A Plan to Make NSW Number One (2011) by providing investment and support for jobs both during the construction process and post-development in the local and wider area;
- Assisting the North East Subregion to provide an additional +23,000 new jobs between 2006 and 2036 as targeted in the Metropolitan Plan for Sydney 2036 (2010) and the +12,500 additional jobs in Warringah LGA targeted in the draft North West Subregional Strategy (2007) by:
    - supporting employment during the construction process;
    - increasing the amount of retail expenditure locally to support centres;
    - increasing demand for jobs to employ new residents; and
    - Supporting additional jobs in support services like schools and hospitals.

6. Economic Impact Assessment

6.1 Level of Impacts

Based on the above analysis, the tables below provide an assessment of the economic impact which the proposed development would have.

Table 6 - Assessment Rating Levels

Rating Level	Description
Significant Negative	Impacts with serious, long term and possibly irreversible effects leading to serious damage, degradation or deterioration of the environment and community. Requires a major re-scope of concept, design, location, justification, or requires major commitment to extensive management strategies to mitigate the effect.
Moderate Negative	Impacts may be short, medium or long term in duration and most likely to respond to management actions.
Slight Negative	Impacts have minimal effect, could be short term, can be mitigated and would not cause substantial detrimental effects. May be confined to a small area.
Neutral	No discernible or predictable positive or negative impact.
Slight Positive	Impacts have minimal effect, could be short term. May be confined to a small area.
Moderate Positive	Impacts may be short, medium or long term in duration. Positive outcome may be in terms of new opportunities and outcomes of enhancement or improvement.
Significant Positive	Impacts resulting in substantial and long term improvements or enhancements to the existing environment and community.

Source: Adapted from the Strategic Merit Test, National Guidelines for Transport System Management in Australia (2nd Edition)

Table 7 - Summary of Potential Economic Impacts (With and Without Mitigation)

Issue	Consideration	Comment	Rating of Impact	Rating of Impact with Mitigation
Housing Supply	Will the project improve housing supply in the area?	Yes, it will: • Contribute 169 dwellings towards achieving the housing target for the Warringah LGA, the North East Subregion and the Sydney Metropolitan Area and in doing so support economic growth. • Assist to ensure that dwelling completions, which have been declining over the last ten years, keep pace with the high demand for housing in the LGA. • Support the economic performance of the Warringah LGA by providing new housing to meet all aspects of the labour market.	**Moderate Positive**	**None required**
	Will the project improve housing choice?	Yes, it will assist the LGA to provide new detached dwellings. Analysis of ABS data indicates that the provision of separate dwellings over the 2001 to 2011 period (+602) has been modest compared to the number of new units (+3,192) constructed over the same period. There is a need to ensure that all sectors of the housing market are catered for by new development, particularly for families which account for a growing proportion of households in the Warringah LGA.	**Moderate Positive**	**None required**
	Will the project improve housing affordability?	Yes, it will assist to ease house price inflation and affordability locally. The latest data indicates that median house prices in the Warringah LGA are 43% above average for Sydney. Although the proposed development would not be affordable for lower income households, increasing supply of all types of dwellings will have a positive impact on housing price inflation.	**Slight Positive**	**None required**
Business and industry	Does the project impact (either directly or indirectly) on	Yes, new households would generate approximately $9m of retail expenditure in 2017 ($2009) which would be available to support existing centres in the surrounding area such as Ralston Avenue Belrose Neighbourhood Centre, Glenrose Small Village Centre and Sorlie Road	**Significant Positive**	**None required**

Issue	Consideration	Comment	Rating of Impact	Rating of Impact with Mitigation
	businesses/ commercial enterprises?	Frenchs Forest Neighbourhood Centre. This could directly support around 1,600sqm of retail floorspace, the provision of which would benefit existing and new residents alike.		
	Are there any impacts on local traffic?	For the purposes of this Study we have assumed that any additional demand on road infrastructure could be mitigated by design or construction management measures and/ or confined to short-term. There may be some short-term adverse economic impact during the construction process resulting from increased traffic locally, although it is likely that this would be mitigated.	**Moderate Negative**	**Slight Negative**
	Are impacts on businesses likely to have flow on effects for employees?	Yes, it would support additional jobs in a range of industries locally and further afield post-development as a result of additional retail expenditure and demand for retail and support services. During the development process construction jobs would be support on site and multiplier impacts would support other jobs in the broader economy.	**Moderate Positive**	**None required**
	Is the project likely to have direct or indirect effects on the local economy?	Yes, by: • Providing a CIV of an estimated $98m directly which would support a further $89m in production induced effects and $94m in consumption induced effects. Total economic value of the development project would be around $281m. • Supporting an estimated 392 jobs years directly during construction and a further 1,219 in production and consumption induced effects. This would equate to 1,611 job years being supported overall; • Supporting the provision of an additional $1m of retail expenditure available to be captured by retail facilities locally as a result of construction workers on-site; • Supporting the provision of an $9m of retail expenditure in 2017 ($2009) from new residents; and • Providing a stimulus for investment in nearby centres and supporting the economic role of the Warringah LGA as a place in which to live and work.	**Significant Positive**	**None required**

From an economic perspective, the Subject Site does not generate any quantifiable economic benefits at the current time; that is they do not contribute towards the economic growth or development of the Warringah LGA, the North East Subregion or the Sydney Metropolitan Area. On this basis, all of the economic benefits associated with the proposed rezoning constitute net additional benefits.

This EIA does not constitute an economic cost benefit analysis and we have therefore assumed that any costs associated with the development in terms of increased demands on infrastructure, public services, servicing and so on would be mitigated by requisite monetary contributions to State and Local government.

6.2 Conclusions

In economic terms, the Subject Site is uncleared, undeveloped and does not generate any economic benefit to the local, Subregional or Metropolitan economy. As such, all of the potential economic benefits associated with the proposed development would be net additional. The Subject Site is used informally for recreation and local access however this is not considered a quantifiable economic benefit in this instance given that the land is privately owned and not part of the Garigal National Park.

There may be some short-term adverse economic impact during the construction process resulting from increased traffic locally. This potential adverse impact would likely be insignificant and would be mitigated as far as possible. Aside from this, the potential positive economic benefits of the proposed development can be summarised as follows:

- A contribution of 169 dwellings towards housing supply, housing mix and assisting to ease house price inflation;
- Creating additional retail expenditure of $9m from residents (in 2017) and $1m from workers during the construction process available to be captured by existing centres in the local area such as Ralston Avenue Belrose, Glenrose Small Village Centre and Sorlie Road Frenchs Forest Neighbourhood Centre;
- Supporting jobs in surrounding centres and the provision of additional retail floorspace which would benefit both existing and new residents;
- Supporting an estimated $281m in direct and indirect capital investment and supporting 1,611 jobs years directly and indirectly during the construction process; and
- Creating significant direct and indirect capital investment in Warringah LGA, the North East Subregion and the Sydney Metropolitan Area.

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5. Due care has been taken to prepare the attached financial models from available information at the time of writing, however no responsibility can be or is accepted for errors or inaccuracies that may have occurred either with the programming or the resultant financial projections and their assumptions.

6. This report does not constitute a valuation of any property or interest in property. In preparing this report Hill PDA has relied upon information concerning the subject property and/or proposed development provided by the Client and Hill PDA has not independently verified this information except where noted in this report.

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    This valuation is prepared on the assumption that the lender or addressee as referred to in this valuation report (and no other) may rely on the valuation for mortgage finance purposes and the lender has complied with its own lending guidelines as well as prudent finance industry lending practices, and has considered all prudent aspects of credit risk for any potential borrower, including the borrower's ability to service and repay any mortgage loan. Further, the valuation is prepared on the assumption that the lender is providing mortgage financing at a conservative and prudent loan to value ratio.

Appendix 1 - Socio-Demographic Analysis Based on ABS Census Data

Appendix 1: Socio-Demographic Analysis Based on ABS Census Data

The following Appendix provides a resident and labour force profile of the Belrose suburb based on ABS Census data. Where appropriate, data from the Warringah Local Government Area (LGA) and the Greater Sydney Area has also been presented for benchmarking purposes. For the purposes of the analysis undertaken in this Appendix, the Belrose suburb, the Warringah LGA and Greater Sydney Area comprise the Study Area.

Note that the boundaries of the Belrose suburb were refined between the 2006 and 2011 ABS Censuses. As such, the data is not directly comparable. Data for the Belrose suburb from 2006 and 2011 has been included nonetheless as it provides a useful indicator of the broad demographic changes which have occurred over the 2006 to 2011 period.

A1.1 Population

Population Growth

According to ABS Census data the population of the Belrose suburb declined between 2006 and 2011 after having increased between 2001 and 2006. Between 2006 and 2011 the number of people living in the Belrose suburb declined by 120 people which equates to an annual average decline of -0.3% (pro-rata). This annual growth rate was significantly lower than that recorded over the same period for both Warringah LGA and Greater Sydney (1.0% and 1.3% pro-rata respectively).

Table A1.1 – Population Growth for Study Area (2001-2011)

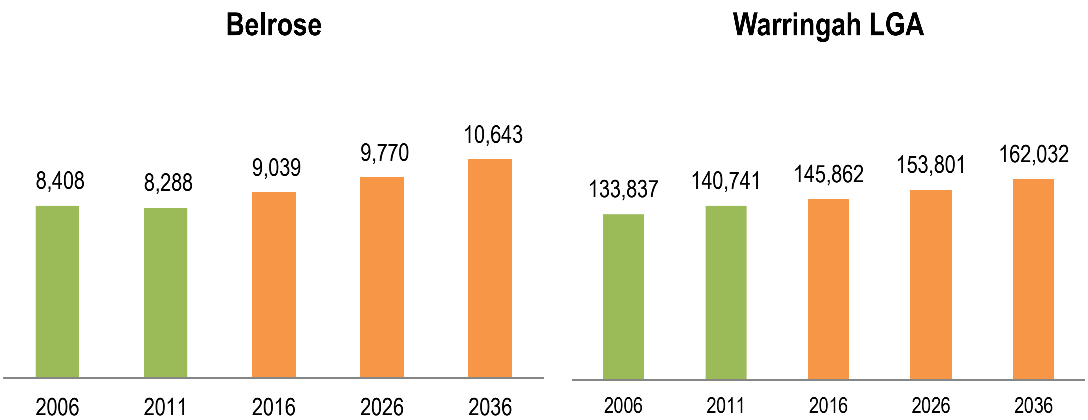
	2001	2006	2011	# Change 06-11	% Change 06-11	Average Annual Growth Rate 2006-2011 (%)
Belrose	7,585	8,408	8,288	-120	-1.4%	-0.3%
Warringah LGA	127,613	133,837	140,741	+6,904	+5.2%	+1.0%
Greater Sydney	3,948,015	4,119,190	4,391,674	+272,484	+6.6%	+1.3%

Source: ABS Census 2011

Population Forecasts

In contrast to recent historic trends, the NSW Bureau of Transport Statistics (BTS) expects the resident population of Belrose to grow at a rate similar to that of the broader Warringah LGA (around 0.7% annually).

Figure A1.1 – Population Growth for the Belrose suburb and the Warringah LGA (2006 – 2036)



Source: ABS 2006 and 2011 and Bureau of Transport Statistics 2009 Forecasts

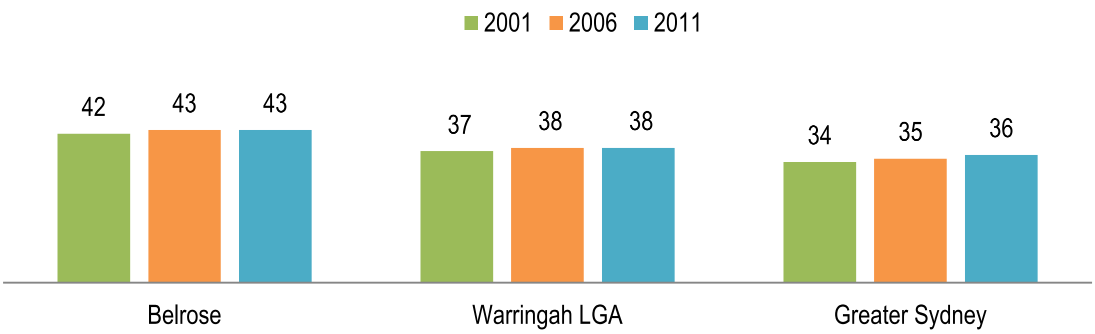
Based on these projections (Figure A1.1), the population of the Belrose suburb is expected to increase by more than 2,355 people between 2011 and 2036. The Warringah LGA will accommodate nearly 21,291 additional residents over the same period.

A1.2 Age

Median Age

Figure A1.2 illustrates that the population in the Study Area has aged over the 2001 to 2011 period with the median age increasing. The median age for residents in the Belrose suburb of 43 years (2011) is older than that of residents living in both the Warringah LGA (38 years) and Greater Sydney (36 years). The older resident population in the Belrose suburb reflects the presence of substantial aged care accommodation within the suburb. This is evident in the two retirement villages located within Belrose itself, namely Uniting Care Ageing Northern Sydney Region Community Care and Wesley Gardens Aged Care.

Figure A1.2 – Median Ages for the Study Area (2001 – 2011)

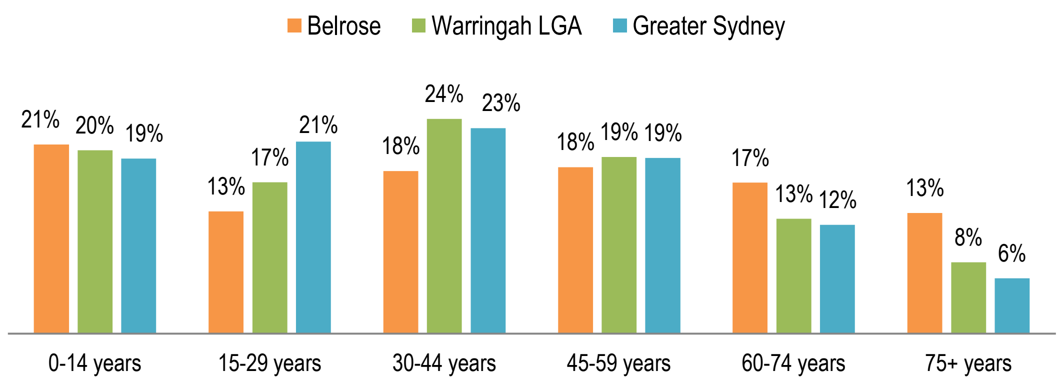


Source: ABS Census 2001-2011

Age Distribution

The predominant age cohort in the Belrose suburb in 2011 was 0-14 years which comprised 21% of total population. The proportion of residents aged over 45 years in the Belrose suburb (48%) was significantly higher than for the Warringah LGA (40%) and Greater Sydney (37%), as was the proportion of persons aged 75+ years.

Figure A1.3 – Age Distribution for the Study Area (2011)



Source: ABS Census 2011

Appendix 1: Socio-Demographic Analysis Based on ABS Census Data

Forecast Age Distribution

Consistent with nationwide trends the resident population of the Belrose suburb is forecast to age over the 2011-2036 period (Table A1.2). By 2036 the BTS anticipates that the number of residents in the Belrose suburb aged 75+ years will grow by 626 persons (58%) compared to their 2011 level. This compares to an increase of just 290 persons (17%) aged 14 years or younger over the same period. It is important to note that persons aged within the 15-29 years age cohort are also expected to experience a 42% increase between 2011 and 2036.

Table A1.2 – Forecast Age Distribution for the Belrose suburb (2016-2036)

Belrose	2011	2016	2021	2026	2031	2036	% change 2011-2036
0-14 years	1,718	1,769	1,800	1,854	1,923	2,008	17%
15-29 years	1,110	1,399	1,472	1,513	1,534	1,576	42%
30-44 years	1,478	1,702	1,724	1,795	1,856	1,920	30%
45-59 years	1,513	1,722	1,795	1,810	1,832	1,867	23%
60-74 years	1,371	1,360	1,391	1,440	1,493	1,549	13%
75+ years	1,097	1,087	1,200	1,357	1,519	1,723	58%
Total	**8,287**	**9,040**	**9,382**	**9,770**	**10,156**	**10,643**	**2,356**

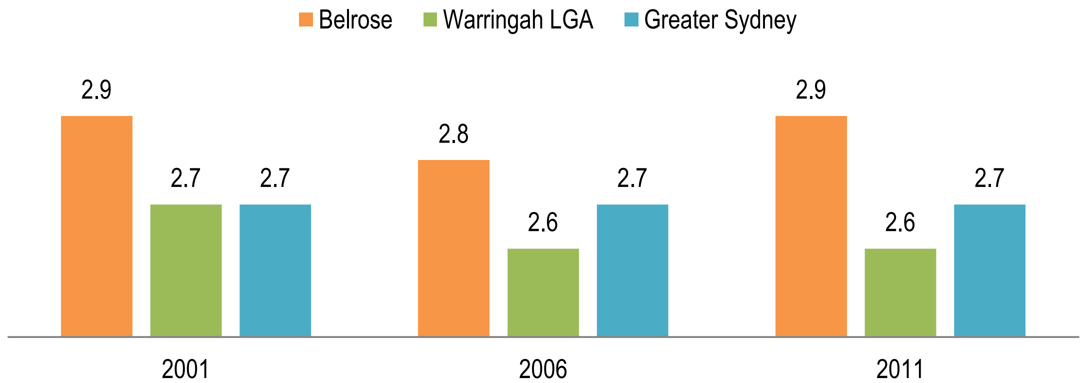
Source: ABS 2011 and Bureau of Transport Statistics 2009 Forecasts

A1.3 Households

Household Occupancy Rates

Households in the Belrose suburb were on average larger than those across both the LGA and Greater Sydney (Figure A1.4) based on 2011 ABS Census data. In 2011 the typical household size was 2.9 persons in the Belrose suburb, 2.6 in the wider LGA and 2.7 for Greater Sydney. The larger average household size within the Belrose suburb can be attributed to the higher proportion of families households with children located in the suburb.

Figure A1.4 – Household Occupancy Rates for the Study Area (2001, 2006 and 2011)



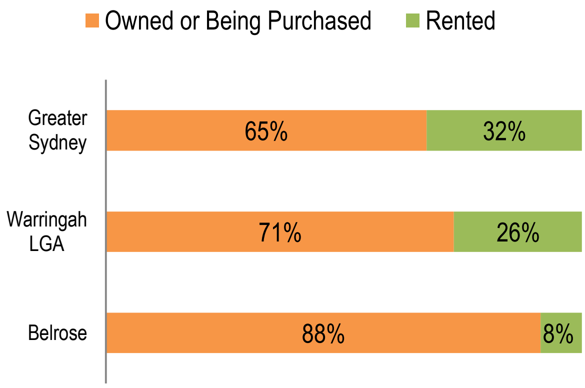
Source: ABS Census 2001, 2006, 2011

Appendix 1: Socio-Demographic Analysis Based on ABS Census Data

Home Ownership

Figure A1.5 shows that nearly 90% of households in the Belrose suburb either owned or were in the process of purchasing their home at the time of the 2011 ABS Census. This is substantially higher than that recorded for both the LGA (71%) and Greater Sydney (65%). In 2011 the proportion of households renting in the Belrose suburb was 8% which was around a third of that recorded for the wider LGA (24%) and a quarter of that for Greater Sydney (36%). In the ten years between 2001 and 2011 home ownership rates within the Belrose suburb remained relatively stable.

Figure A1.5 – Home Ownership for the Study Area (2011)

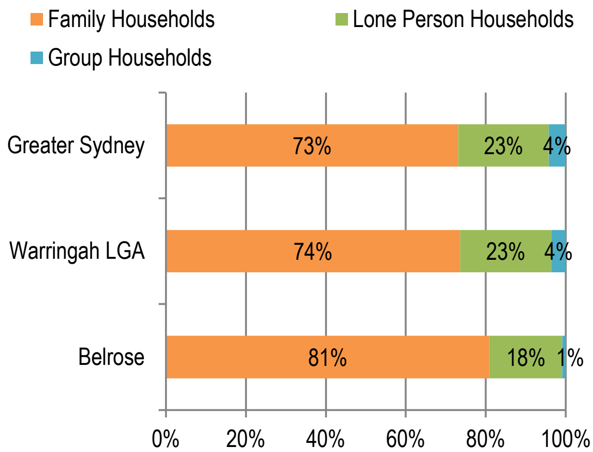


Source: ABS Census 2011

Household Structure

Figure A1.6 demonstrates that the proportion of family households in the Belrose suburb was higher than that recorded for the LGA and Greater Sydney in 2011. Since 2001 the proportion of family households in the Belrose suburb has remained steady which is consistent with trends in the LGA and Greater Sydney.

Figure A1.6 – Household Structure for the Study Area (2011)



Source: ABS Census 2011

Family Type

According to the 2011 ABS Census the most common family type in the Belrose suburb was couples with children (55%). This was higher than that recorded for the wider LGA (51%) and Greater Sydney (49%). The Belrose suburb contained a low proportion of one parent families (9%) whilst the proportion of families without children was comparable to that recorded for the LGA and Greater Sydney.

Since 2006 the proportion of couple families with children has increased within the Belrose suburb and the wider LGA (+2.2 percentage points and +1.9 percentage points respectively). This positive increase is in contrast to the negative growth within this category experienced by Greater Sydney (-0.3 percentage points). The Belrose suburb and the Warringah LGA experienced negative growth within the couple without children category since 2006 (-1.9 percentage points and -1.6 percentage points respectively) in contrast to the slightly positive growth experienced by Greater Sydney (+0.3 percentage points).

In 2011 the average number of children per family within the Belrose suburb (1.9 children) and the Warringah LGA (1.8) was comparable to that for Greater Sydney (1.9).

Table A1.3 – Family Types for the Study Area (2006-2011)

	2011 ABS Census			Change since 2006 ABS Census (percentage points)		
	Belrose	Warringah LGA	Greater Sydney	Belrose	Warringah LGA	Greater Sydney
Couple family w. children (%)	55.3%	50.7%	48.9%	+2.2	+1.9	-0.3
Couple family w/o children (%)	34.6%	35.5%	33.5%	-1.9	-1.6	+0.3
One parent family (%)	9.1%	12.4%	15.7%	-0.3	-0.1	+0.1
Other family (%)	1.0%	1.4%	1.9%	-0.1	-0.2	-0.1
Average children per family	1.9	1.8	1.9			

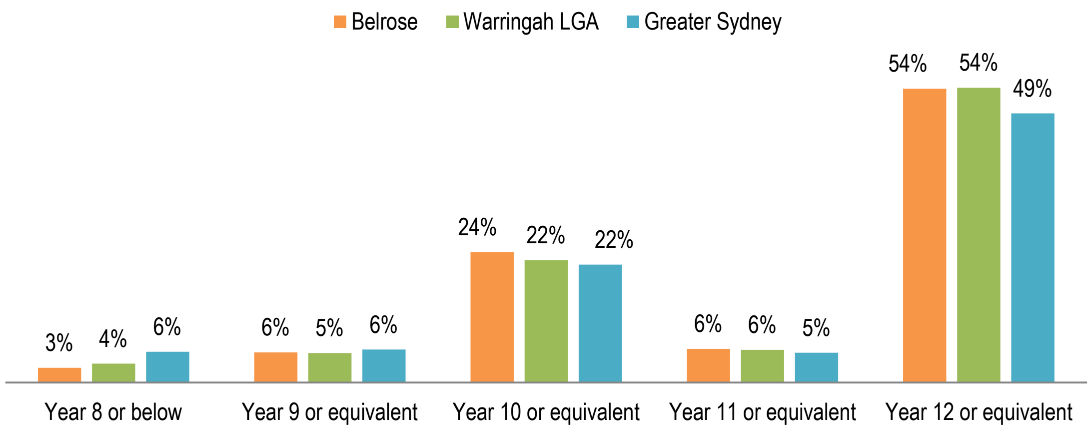
Source: ABS Census 2006 and 2011

A1.4 Education Attainment

Highest Year of School Completed

Education attainment levels of residents of the Belrose suburb improved since 2001 and remained above that of Greater Sydney (Figure A1.7) at the time of the 2011 ABS Census. In 2006 nearly 50% of the Belrose suburb's residents had completed year 12 compared to 49% across Greater Sydney.

Figure A1.7 – Highest Year of School Completed for the Study Area (2006)

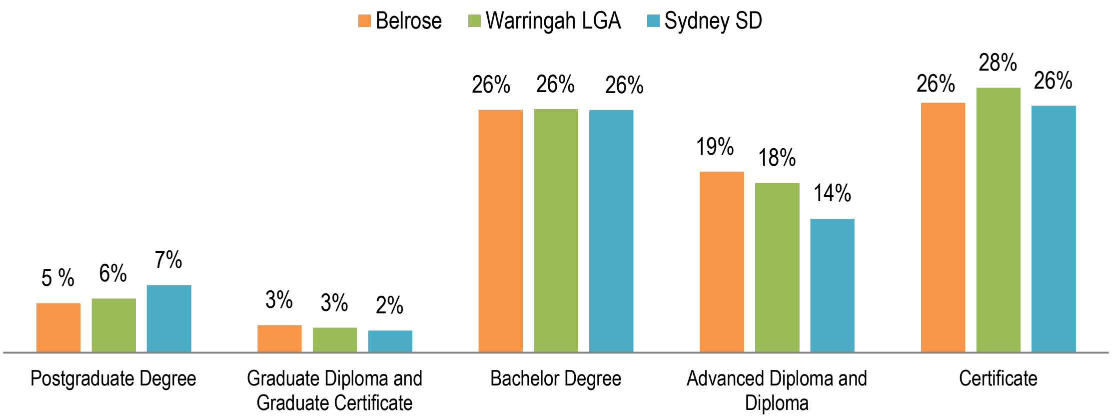


Source: ABS Census 2006

Non-School Qualifications

In 2006 the proportion of the Belrose suburb's residents with a tertiary qualification (34%) was comparable to the LGA (32%) and Greater Sydney (35%). Since 2001 the proportion of the Belrose suburb's and the Warringah LGA's residents with non-school qualifications increased dramatically. Between 2001 and 2006 the proportion of residents within the Belrose suburb with a certificate level qualification increased by 35 percentage points (44% to 79%). This increase was sustained across the wider LGA and Greater Sydney, mainly be due to the inadequately described / not stated category having being reduced in proportion between the census dates.

Figure A1.8 – Highest Year of School Completed for the Study Area (2006)



Source: ABS Census 2006

A1.5 Income

Household Weekly Incomes

The suburb of Belrose was relatively affluent with household incomes ($1,782) well above the median recorded by Greater Sydney in 2011 ($1,447). Furthermore 51% of households in 2011 earned more than $1,400 per week compared to 42% of households across Greater Sydney.

Figure A1.4 – Weekly Household Income for the Study Area (2006-2011)

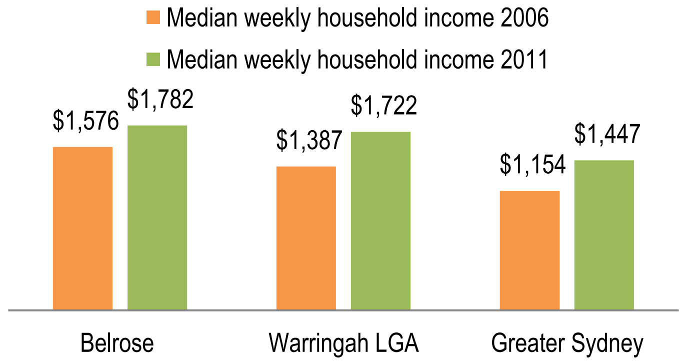
	2011 ABS Census			Change since 2006 ABS Census (percentage point)		
	Belrose	Warringah LGA	Greater Sydney	Belrose	Warringah LGA	Greater Sydney
Median weekly household income	$1,782	$1,722	$1,447	-	-	-
$0-$349	6%	7%	9%	-2	-3	-4
$400-$799	17%	16%	19%	+4	+1	+1
$800-$1,399	17%	20%	22%	-1	-	+1
$1,400-$2,499	23%	23%	21%	+1	+1	-1
$2,500+	28%	25%	21%	+1	+4	+5

Source: ABS Census 2006-2011

Individual Weekly Incomes

Figure 9 shows the median individual weekly incomes of residents living in Belrose was higher than the wider LGA and Greater Sydney. In 2011 the median individual income in the Belrose suburb was $60 more than for the LGA and $335 higher than the Greater Sydney area. Between 2006 and 2011 household incomes in Belrose increased by 13%. This increase was almost half the rate increase

Figure A1.9 – Individual Weekly Incomes (2006 and 2011)



Source: ABS Census 2006 and 2011

experienced for the wider LGA and Greater Sydney (24% and 25% respectively).

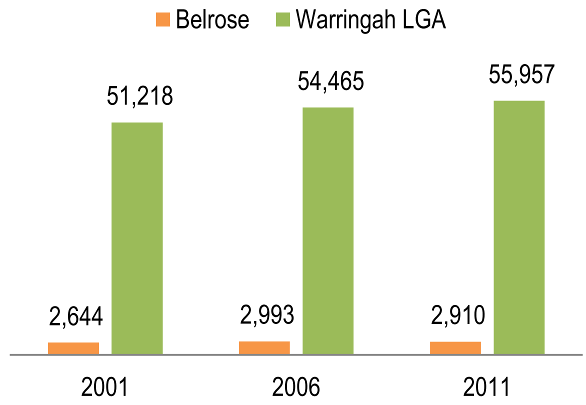
A1.6 Dwellings

Dwelling Growth

Over the 2006 to 2011 period the number of dwellings within the Belrose suburb declined by 83. This decline in dwellings may have influenced the suburb's population decline of 120 persons over the same period.

This decline in dwellings is in contrast to the dwelling growth experienced over the wider LGA which grew by additional 1,492 dwellings over the 2006 to 2011 period.

Figure A1.10 – Dwelling Growth for the Belrose suburb and the Warringah LGA (2001-2011)

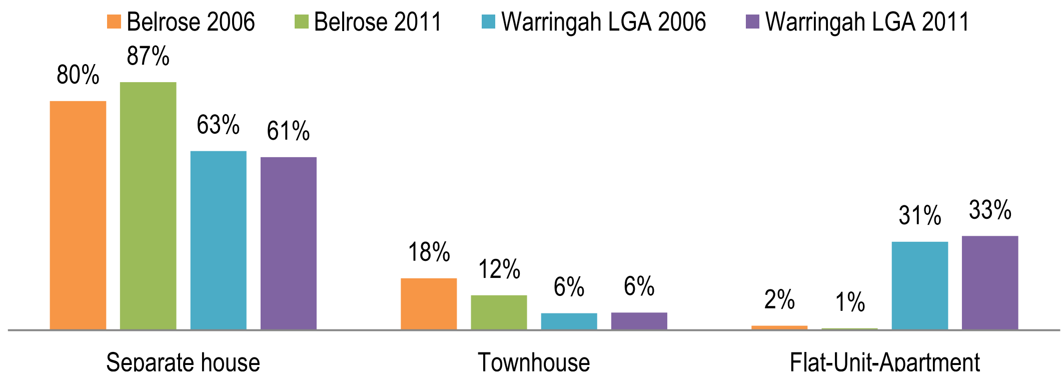


Source: ABS Census 2011

Dwelling Type

According to the 2011 ABS Census separate (detached) houses continue to be the most prevalent form of dwellings in the Belrose suburb. Since 2006 the proportion of separate houses in the Belrose suburb increased by 7 percentage points whilst the proportion of townhouses and units decreased by 6 percentage points and 1 percentage points respectively. In contrast the Warringah LGA witnessed a decrease in detached houses over the 2006 to 2011 period (-2 percentage points) although this category remains the dominant dwelling type within the LGA. The LGA also experienced a slight growth in townhouses (+0.3 percentage points) and a 2 percentage point increase in units.

Figure A1.11 – Dwelling Type for the Study Area (2011)



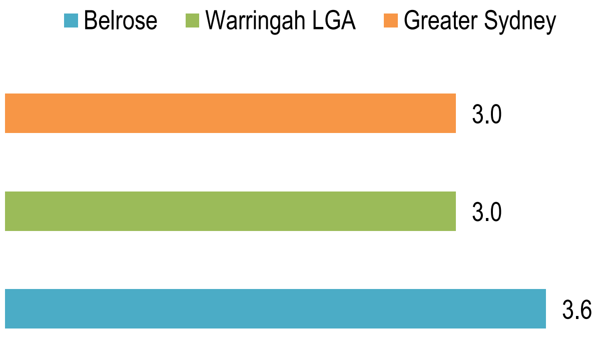
Source: ABS Census 2006 and 2011

Number of Bedrooms

Dwellings in the Belrose suburb were on average larger than those for the wider LGA and Greater Sydney based on the 2011 ABS Census. According to the 2011 ABS Census dwellings in the Belrose suburb averaged 3.6 bedrooms compared to 3 bedrooms for the LGA and Greater Sydney.

The greater average number of bedrooms in the Belrose suburb can be attributed to the high number of detached dwellings within the suburb.

Figure A1.12 – Number Bedrooms per Dwelling for the Study Area (2011)



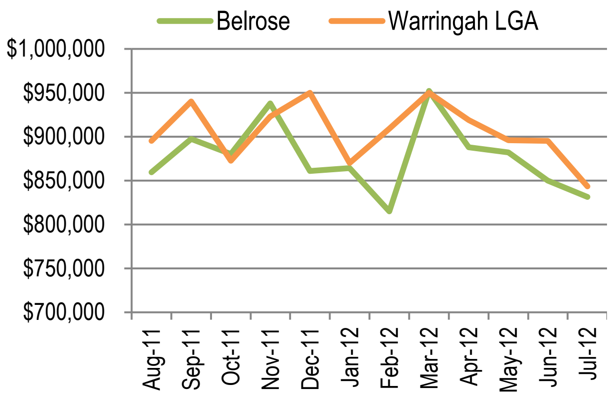
Source: ABS Census 2011

A1.7 Housing Costs

Housing Prices

Median house prices within the Belrose suburb tended to be slightly lower than the median for the Warringah LGA based on the 2011 ABS Census. Despite a fall in prices from November 2011 to February 2012, house prices in the Belrose suburb rebounded sharply between February and March 2012 to be comparable to the wider LGA median.

Figure A1.13 Housing Prices for the Belrose suburb and the Warringah LGA (2011-2012)

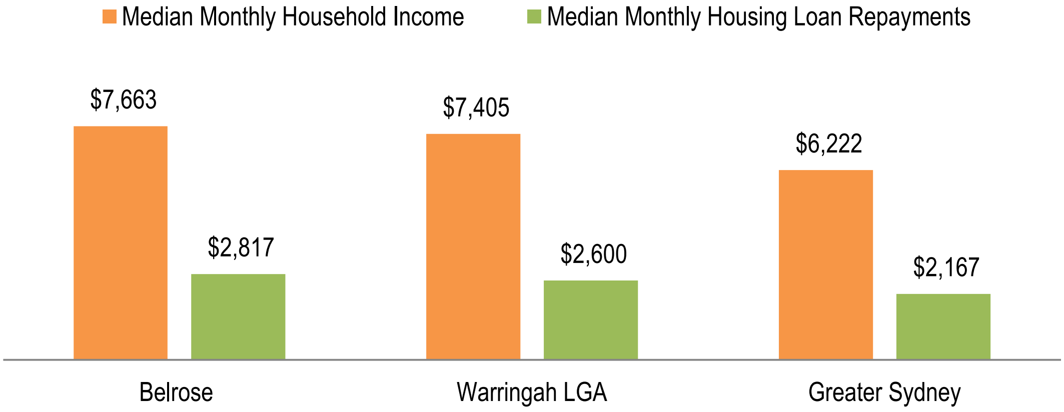


Source: RP Data

Housing Costs and Affordability

Compared to the Warringah LGA and Greater Sydney's, residents in the Belrose suburb tended to have a larger mortgage and use a greater proportion of their household income to service it. According to the 2011 ABS Census the median monthly mortgage was $2,817 in the Belrose suburb and households were using 37% of their income to service it (Figure A1.14). Within the LGA the median monthly mortgage was $2,600 which represented 35% of households' median income. Across Greater Sydney the median monthly mortgage was $2,167 which represented 35% of median household incomes.

Figure A1.14 – Monthly Household Income and Mortgage Repayments for the Study Area (2011)

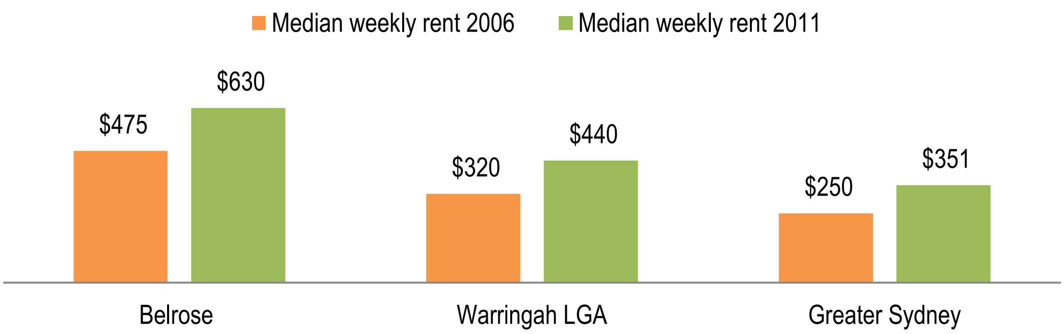


Source: ABS Census 2011

<u>Rental Costs and Affordability</u>

Over the 2006 to 2011 period the median weekly rent in the Belrose suburb increased by 33% from $475 to $630, this increase was below that of Warringah and Greater Sydney which increased by 38% and 40% respectively. Although the Belrose suburb rental market increased by a smaller percentage, the median weekly rent paid within the Belrose suburb remained higher than both the Wider LGA and Greater Sydney

Figure A1.15 Median Weekly Rent (2006-2011)



Source: ABS Census 2006 and 2011

A1.8 Index of Advantage and Disadvantage

Notwithstanding the analysis provided above, it is important to note that a review of weekly household incomes alone may not accurately shed light on the affluence of a resident population. By way of example, a review of weekly incomes alone fails to consider an area with an ageing population and thereby an area with a high level of retirees who have left the workforce yet still have a substantial asset base. Accordingly we have applied the Socio Economic Index for Areas (SEIFA) as an alternative means of assessing the socio economic character of Belrose.

The SEIFA[37] is produced by the Australian Bureau of Statistics and compares geographic areas (LGAs and derived suburbs) with respect to advantage and disadvantage. The SEIFA, Index of Socio Economic

[37] The SEIFA data based on the 2011 ABS Census will be available from 28 March 2013.

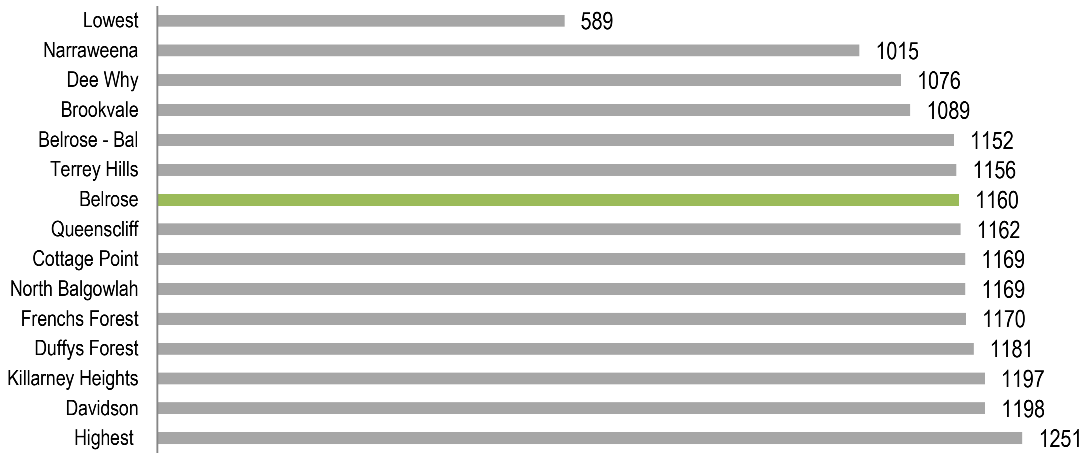
Appendix 1: Socio-Demographic Analysis Based on ABS Census Data

Disadvantage and Advantage (the 'Index') is derived from the attributes of an area's residents such as income, educational attainment, rate of unemployment and labour force skill. Accordingly, the SEIFA shows where the affluent (as opposed to just high income earning) live; where disadvantaged (as opposed to the unemployed) live; and where the highly skilled and educated (as opposed to the tertiary educated people) live. The findings can be used to facilitate research into the relationship between socio economic status and various health and educational outcomes to determine areas that require funding and services and to identify new business opportunities. The Index refers to the area in which a person lives, not to the socioeconomic situation of the particular individual. For the Index, every geographic area in Australia is given an SEIFA score which shows how disadvantaged that area is compared with other areas in Australia. *Higher scores* on the Index occur when the particular geographic area has higher family incomes and a more skilled labour force. A higher score means that an area is more advantaged and accordingly a lower score indicates that an area is more disadvantaged.

The below figure shows the SEIFA Index of Relative Socio-economic Advantage and Disadvantage (2006) indicating the top 10 rated suburbs within Warringah LGA, the lowest 3 rated suburbs within the LGA and a comparison to the lowest and highest scoring that a suburb attained within Australia.

On this basis, the SEIFA Index of Relative Socio-economic Advantage and Disadvantage (2006) found that Belrose was ranked 8th in the top 10 suburbs with a SEFIA score of 1160. This score places Belrose within the 98th percentile ranking of suburbs within Australia (i.e. top 2% most advantaged suburb in Australia).

Figure A1.16 – SEIFA Index of Advantage / Disadvantage – Sample of Suburbs (2006)



Source: ABS Census 2006

A1.9 Summary of Findings

Since 2006 the suburb of Belrose has experienced a decline in its resident population (-120) and dwelling stock (-83 dwellings). Demographic analysis revealed residents of Belrose generally live in larger households and are increasingly educated, white collar and affluent in comparison to the average for Greater Sydney. Workforce participation rates amongst this relatively advantage community are high and levels of unemployment low.

Whilst residents of Belrose tend to be on average older, the predominant age group in 2011 was 0-14 years which constitutes 21% of the local population. Belrose has also become more family orientated, with the proportion of family households increasing by 2% since 2006.

Appendix 1: Socio-Demographic Analysis Based on ABS Census Data

With regard to built form, Belrose has a large proportion of detached dwellings which contain more people and bedrooms than the average for Greater Sydney. Home ownership levels in Belrose (87%) are also significantly higher than the average for Greater Sydney (65%).

In summary the Belrose is a well-established family orientated suburb inhabited by relatively advantaged, educated and affluent residents.