cranbourne east
precinct structure plan

Residential Analysis – Specialist Report

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Executive Summary

The Cranbourne East B study area is an 870 hectare site earmarked for residential expansion located in Cranbourne East.

This report analyses the residential market for the study area, looking at both regional and local level demographic data in order to fully understand the background drivers for residential demand in the area.

This is followed by a detailed examination of migration to and from Casey-Cardinia Growth Region and Cranbourne SLA, in order to better understand why households chose to come and go from the area.

The current residential market in Cranbourne is scrutinised, and the future housing demand is modelled.

A Building Envelope Review explains the lot sizes required for particular residential densities.

A series of housing options are outlined to fit within these size parameters, and the report is concluded with a discussion of the residential issues and opportunities.

Policy Context

At the metropolitan level, Melbourne 2030 sets the policy context for development up to 2030, with a substantial proportion of housing earmarked for locations in and around activity centres, urban expansion accommodated within growth areas, and an increase in the supply of affordable housing. Casey is designated as a growth area, and it seeks an increase in residential densities and greater housing diversity.

Council's Casey 21 strategy identifies the suburban lifestyle as a community aspiration, and sets out a range of housing options including rural residential, large lot suburban and integrated medium density housing. It promotes housing and lifestyle choice via delivery of lot size variations, and suggests lot sizes for parts of the study area.

The Casey Housing Strategy recognises the vital role of housing in delivering a liveable city, and introduces a range of policy options including increasing diversity, ensuring that 70% of Greenfield supply is for the traditional lot size (550 – 700 sq m), support for affordable housing, and recognising the need to provide appropriate housing for the elderly.

The Cranbourne East Development Plan reveals Council's vision for the area is "*a quality treed, suburban environment, with a country-feel and strong links to Cranbourne and benefiting from unique access to extensive parkland areas."* It proposes an average lot size of no less than 600 sq m for the area, and larger lots in excess of 4,000sq m for the southern part of the precinct.

Other relevant documents include the Cranbourne West Draft Precinct Structure Plan, which specifies 20 dwellings per hectare within 200 metres of Activity Centres, with an average lot size of 360 sq m, whilst in the rest of the site the density is set at 14 lots per hectare, an average lot size of 550 sq m. On the southern interface with the Urban Growth Boundary, the plan specifies dwellings of no less than 1,000 sq m.

The Collison Estate Background Paper introduces the issues of redevelopment for the estate which is situated in the Cranbourne East B Study Area, and outlines 5 options for the redevelopment of the estate.

Existing Conditions

Demographic analysis of the region revealed rapid growth in Casey – Cranbourne SLA, with growth between 2001 and 2006 even outstripping the broader Casey – Cardinia Growth Region. At the more local level, much of this growth has been in Cranbourne East, which grew from 523 in 2001 to 4,859 in 2006.

Cranbourne SLA has a large proportion of young couples aged 30-39 and children aged 0-14, mostly residing in households sized between two and four people, with a large share of middle income earners on a weekly income of between $700 and $1,999 per household, often employed in the regional manufacturing and retail trade sectors.

From an occupation perspective there is a tendency towards the tradespersons, intermediate clerical sales and services workers, intermediate production and transport workers, and labourers, educated to certificate, advanced diploma and diploma level. This middle income, new family segment is reflected in the area's built environment which is dominated by detached dwellings, and it is likely that this pattern of income and family structure will continue in the future.

Newcomers to Cranbourne SLA are mostly drawn from Greater Dandenong and other middle and outer eastern municipalities such as Monash, Knox, Kingston and Frankston. There is also a significant level of overseas migrants moving into the SLA. This suggests that people are drawn to the area because of cheaper land providing the opportunity for second and third homeowners to upsize.

Opportunities

Cranbourne East offers the opportunity to fulfil metropolitan and local level policies regarding residential development. Increasing dwelling diversity by incorporating a mix of lot sizes is in alignment with both Melbourne 2030, which is seeking to increase residential density in growth areas, and Casey Housing Strategy, which seeks to increase housing choice. This might also retain residents who are leaving Cranbourne SLA, as those who leave are 10 percent less likely to move into a separate house than those who move into the SLA. As the population of Cranbourne matures, with a future increase in empty nesters likely in a decade or so, this segment will be looking locally for opportunities to downsize, as will their more senior counterparts.

Two modelling scenarios were undertaken utilising the VIF population projections for Cranbourne SLA. The first scenario, the base case, considered dwelling preference changes reflected in the current Cranbourne SLA data. It estimated that in Cranbourne SLA an additional 34,000 dwellings would be required between 2001 and 2031, with the following breakdown of additional dwelling stock:

- Separate houses: 87.4%
- Semi-detached, row or terraced housing: 5.3%
- Flat, unit or apartments: 7.2%
- Other dwelling: 0.1%

Scenario two used the preference changes observed in Berwick SLA, where a shift was witnessed towards a greater diversity of dwelling stock in synchrony with Melbourne 2030, because the base case does not account for future shifts in dwelling preferences, except as reflected in historical trends. It forecasted an additional 33,400 dwellings, with an alternative additional dwelling breakdown of:

- Separate houses: 83.1%
- Semi-detached, row or terraced housing: 16.11%
- Flat, unit or apartments: 0.1%
- Other dwelling: 0.6%

This indicates that there is the potential for greater dwelling diversity within Casey SLA, if a similar demographic to that residing in Berwick SLA can be attracted to Cranbourne East. There are a range of dwelling types and products which can be developed within the lot sizes specified, which can attract and retain a diverse community within Cranbourne East. By increasing dwelling diversity, which fulfils both metropolitan and local level policy ambitions, a wider range of tastes and budgets can be catered for. The upper income segment is likely to be drawn to a master-planned 'lifestyle product', which combines a sense of place with provision of extensive community facilities, to foster a dynamic community.

Increasing residential density in close proximity to neighbourhood activity centres and public transport corridors can offer increased choice, as well as opportunities for retirement villages or accommodation for smaller households. This is predicted in the Victoria In Future population projections, with the average household size in Cranbourne SLA forecast to decline from 2.8 in 2006 to 2.4 in 2031.

There is acknowledgement in the Casey Housing Strategy that there is a need for continued supply of conventional suburban lots sized between 550 and 700 sq m from 70 percent of Greenfield lots. It also supports the notion of integrated housing with Greenfield areas in Cranbourne, an outcome which will enhance social sustainability. This can be realised via the fine-grained approach to densities within the site, with different targets for individual neighbourhoods, including local precincts with larger lots to capture the segment of the family market looking to upscale to larger dwellings. This will also prevent the development of large precincts without diversity. There are a range of housing products available from various suppliers, which can be built on lots sized up to

700sq m. Smaller family homes and townhouses can be built on lots sized between 170 sq m to 512 sq m.

Cranbourne East's neighbourhood character should incorporate best practice, Ecologically Sustainable Development principles as well as building on Cranbourne's image of tree-lined streetscapes. There is the opportunity for larger lots along the Urban Growth Boundary in order to provide a transition from an urban environment to the rural countryside. The area can be further enhanced by master-planned developments, which can deliver a holistic environment, thus promoting the site as a 'green place', maximising its position at the urban-rural interface.

Constraints

The buffer suggested in the Cranbourne East Development Plan, immediately to the east of the Collison Estate requiring 1,000 sq m lots should be carefully considered. By buffering the estate from new development it could prevent its redevelopment by supporting existing densities, which poses challenges for the upgrade of roads and services to the estate and would be unviable if the current situation persists.

The Collison Estate is strategically placed in close proximity to the proposed Catholic School on the north of the Berwick – Cranbourne Road, which offers the potential for co-locating a convenience activity centre with it. Because of its access potential and central position in relation to the rest of the study area, it is better suited to conventional residential lots of 600 sq m.

As residential development occurs in Cranbourne East, it is likely that the value of land on the Collison Estate will increase to the extent that it is uneconomic to retain large lots, prompting its future development, which might be piecemeal and poorly integrated with its surroundings if its long term future is not resolved in this planning exercise.

1 Introduction

SGS Economics and Planning (SGS) has been commissioned as part of the Consultant Team for the strategic planning for the Cranbourne East B study area, an 870 hectare site earmarked for residential expansion located in Cranbourne East. The site has a northern precinct which is bounded by Thompsons Road to the north, Berwick – Cranbourne Road to the east, Mayfield Road to the west and the former South Gippsland railway to the South. This also includes the Collison Road Estate, a 1950s large lot semi-rural subdivision, in the south-western corner of the precinct. The southern precinct is bounded by the Berwick – Cranbourne Road to the north, the South Gippsland Highway to west and south, and Casey Fields regional sports complex to the east.

This paper introduces the policy context to residential development in Cranbourne East. It analyses the residential market for the study area, looking at both regional and local level demographic data in order to fully understand the background drivers for residential demand in the area. Migration data is also studied as this gives a vital insight into who is coming into Cranbourne as well as offering a snapshot of those who are leaving.

It should be noted that this report draws heavily on the 1996 and 2001 ABS Census data used in the Cranbourne West residential analysis. This has not been updated with 2006 Census data because the relevant data sets have not yet been released. With this in mind the data still provides many useful insights which can be applied to the planning for Cranbourne East.

An in-depth analysis of the local property market was undertaken which examines construction rates, value of construction, residential sales data and further analysis of the retirement village sector. The Future Housing Demand Model was run for Cranbourne, which using VIF population projections forecasts individuals and their household types which in turn is used to estimate future demand for different dwelling types.

A Building Envelope Review was utilised in order to suggest residential dwelling densities and lot sizes, with a description of various dwelling products on the market and their specifications. The contextual review and issues and opportunities section concludes the paper by outlining the current situation, linking this with policy, explaining how the modelling scenarios relate to the future and offers some considerations for design.

This paper should be read in conjunction with the Economic Analysis – Draft Specialist Report which includes scenarios to determine the future residential population of the site. This modelling suggests an average residential lot size of 600 sq m in standard residential neighbourhoods, with some provision for larger lots of 1,000 sq m and also some medium density lots of 400 sq m.

2 Policy Context

Melbourne 2030

At the metropolitan scale the State Government's Melbourne 2030 plan, which is incorporated within Casey's Planning Scheme as Clause 12, sets the policy context for development within the region up to 2030. It aims to accommodate a further 620,000 households by 2030 within a more compact city. To help realise this goal, there are specific policies which relate to housing:

- Policy 1.3: Locate a substantial proportion of new housing in or close to activity centres and other strategic redevelopment sites that offer good access to services and transport
- Policy 2.2: Concentrate urban expansion into growth areas that are served by high-capacity public transport
- Policy 6.1: Increase the supply of well-located affordable housing

Casey is a designated growth area, and is anticipated to provide considerable residential opportunities. Policy 2.2 seeks to increase average housing density significantly higher than 10 dwellings per hectare, whilst providing a range of housing types, with highest densities located in and around activity centres. It aims to restrict low-density rural residential development that would compromise future development at higher densities.

Casey 21

Casey's municipal plan was released in September 2002, prior to Melbourne 2030, and indicates that the community seeks a suburban lifestyle, with a large home on a large block of land. This is in conflict with Melbourne 2030's intent to increase residential densities in growth areas. The plan incorporates the following mix of housing options:

- Rural residential. Large lot living with a lot size between one acre and five acres, requiring access to the range of suburban services and will be planned in an integrated way with suburban areas.
- Large lot suburban housing. Suburban housing with an average lot size of around one third to half an acre; it provides a unique and popular lifestyle opportunity that is only available on Melbourne's fringe, allowing landscape objectives to be met, as there is room for the planting of trees with a spreading canopy.
- Integrated Medium Density Housing. New Urban Villages within easy walking distance of activity centres. The subdivision, housing, walkway and open space design is to be integrated from the outset to create a quality living precinct.

C21 also relates to housing by enhancing liveability through promotion of lifestyle and housing diversity and managing new development to protect and enhance suburban character.

Goal 6 – Housing and lifestyle choice includes the following objectives:

- The delivery of lot size variations, specifically rural residential and large lot opportunities, and therefore facilitate housing and lifestyle diversity throughout Casey, particularly in the Cranbourne area.
- Planning of new suburban subdivisions to ensure a range of lot sizes, and therefore housing and lifestyle opportunities are provided throughout Casey's growth areas

The plan specifies goals for Cranbourne East, including:

- Diverse suburban housing and lifestyle opportunities to provide the full range of suburban housing and lifestyle opportunities throughout the new suburban area, with areas of larger allotments to provide required diversity for Cranbourne.

In addition the following outcomes are also detailed:

- Development of a quality suburban environment in Cranbourne East, including a range of lot sizes and lifestyle opportunities.
- Suburban expansion in the area north/south of Ballarto Road and west of the proposed new north south arterial road with a mix of lot sizes, including some half-acre housing as well as some larger lots. Larger rural residential housing of more than one acre is to be developed between Ballarto Road and the South Gippsland Highway.

The plan includes a map indicating the sequencing of development within Casey, which earmarks the southern portion of the Cranbourne East precinct as short term (1 – 3 years) suburban land for release while the northern portion is deemed as future suburban land release.

Casey Housing Strategy

Released in June 2005, the strategy acknowledges community preferences for larger houses, with 3-4 bedrooms, and the availability of larger blocks for families to upsize. It recognises the policy priority for housing is to deliver a liveable city and introduces a range of policy options:

- Increasing liveability.
- Ensuring balanced residential development.
- Providing opportunities to trade-up.
- Promoting diversity.
- Continuing a supply of traditional suburban lots, sized 550-700 sq m, which are expected to cover 70% of new Greenfield lots.
- Socio-economic outcomes.
- Management of public housing.
- Support for Affordable housing.
- Providing appropriate housing for the aged.
- A preferred neighbourhood character for Greenfield areas.
- A preferred neighbourhood character for established residential areas.
- Improving ecological outcomes.
- Conservation of agricultural areas and foothills.

Proposed actions include the support for master-planned communities, setting of an aspirational goal to move towards a third of new housing stock as medium density in the long term. It proposes

integrated housing close to activity centres, whilst it recognises the demand for 3-4 bedroom housing in the family market. It references the Casey Image Strategy, which articulates the desired future character of Casey, with particular emphasis on retaining and improving the leafy suburban character.

Cranbourne East Development Plan

Adopted by Council in November 2006, the plan proposes a revised development plan overlay for Cranbourne East, which is to include the whole of the Cranbourne East growth area precinct. It sets out the vision for Cranbourne East:

> *"A quality, treed, suburban environment, with a country-feel and strong links to Cranbourne and benefiting from unique access to extensive parkland areas."*

It specifies that there is to be a full range of suburban and lifestyle opportunities throughout the new suburban area, with provision for larger lots. It proposes a mix of lots sizes including some half-acre housing as well as larger lots in excess of 1 acre for the southern portion of the precinct in order to provide a visual break between the suburban housing of Cranbourne East and the Botanic Ridge precinct.

There is further content relating to overall residential lot mix, with the development plan requiring a mix of types of living places throughout the area to create a diverse suburban structure. An average lot size of no less than 600 sq m is required in order to deliver an appropriate dwelling density for the area. It encourages development of aged care and retirement villages as well as the provision of medium density precincts within 500 m of the proposed Cranbourne East railway station and the Cranbourne East Activity Centre. A buffer is specified to the east of the Collison Estate with a minimum lot size of 1,000 sq m for lots bordering the Estate.

Cranbourne West Draft Precinct Structure Plan

The draft Precinct Structure Plan for the Cranbourne West growth area, a 792 ha site located on the western edge of the City of Casey, was prepared in May 2007. The site includes 236 hectares of residential land in addition to 339 ha of land for industrial, office and activity centre purposes. A key element of the plan is to create walkable residential neighbourhoods, which are integrated to local shops, services and schools. This is to be implemented using Clause 56.03 which contains objectives for the realisation of compact and walkable neighbourhoods in new subdivisions.

The clause also supports greater dwelling diversity by increasing the variety of dwelling densities in residential precincts, which attracts a diverse range of people and offers the opportunity for downsizing without the need to relocate. The plan designates gross residential densities, which include local parks and roads but exclude main roads, activity centres, schools and employment land. It stipulates that within 200 metres of Activity Centres, 20 dwellings per hectare should be achieved which provides an average lot size of 360 sq m, whilst in the remainder of the residential

area the target is 14 dwellings per hectare, which allows for an average lot size of 550 sq m. For the southern residential area there is no minimum density standard, to allow a transition from the medium density housing to dwellings of no less than 1,000 sq m on the fringe of the growth area.

Collison Estate Background Paper

In April 2007 Beca prepared a paper for the City of Casey on Collison Estate, a 92 lot low density subdivision situated in the Cranbourne East growth area precinct, to the north of Berwick – Cranbourne Road. Lot sizes range from 7,000 sq m to 16,500 sq m. The estate was developed in the late 1950's and has unsealed roads and no provision of services, including sewer, water and drainage, except for shallow channel drains. The estate is zoned Low Density Residential which allows a minimum subdivision lot size of 4,000 sq m. As residential development surrounds the estate it will provide opportunities for the connection to the mains sewer, which will increase the pressure for the redevelopment of the estate.

The paper conducted an open survey of the Collison Estate's residents and received a response rate of 74%. In summary respondents indicated that the key benefits of living on the Estate were location, lot size/low density and rural views, while the major issues to be addressed included improved drainage, upgraded roads and connection to the sewer, and concerns regarding future development revolved around increased traffic congestion and noise, and loss of character. 19 respondents thought that the minimum lot size for future development should remain at 8,000 sq m, while 15 thought 4,000 sq m, and 9 wanted 500 sq m lots. This was echoed by the residents future intentions, with 33 (54% of the survey) wanting the area to remain the same, 17 wanted to subdivide, and 7 subdivide and then move. A large proportion of those who wanted to subdivide thought that appropriate lot size was either 500 or 1,000 sq m. Future development of surrounding areas might increase the number of neighbours for those on the boundary of the estate and is likely to increase the potential for conflict between landowners.

The report offers five options for the redevelopment of the Collison Estate. The first is to retain the existing density, i.e. no redevelopment, and suggests 1,000 sq m lots around the estate as a buffer. This would require a new DDO with an 8,000 sq m minimum lot size. Option 2 is for the low-density redevelopment with a minimum lot size of 4,000 sq m, and is supported by the current zoning. This could raise the lot yield to 139. The third option, which requires rezoning to Residential 1, would allow a minimum lot size of 3,500 sq m, yielding 184 lots in total. Option 4 is for full redevelopment of the Estate on conventional densities of 800 – 1,000 sq m per lot and could yield 600-700 lots. The fifth assumes full development based on either 2,000 or 800-1,000 sq m lots and includes the development of two new north – south roads to allow for subdivision without the creation of battleaxe lots.

3 Areas of Analysis

This paper analyses the issues and opportunities facing residential development in Cranbourne East by comparing and contrasting demographic profiles at two levels. At the regional level, trends and analysis are undertaken in the following study areas:

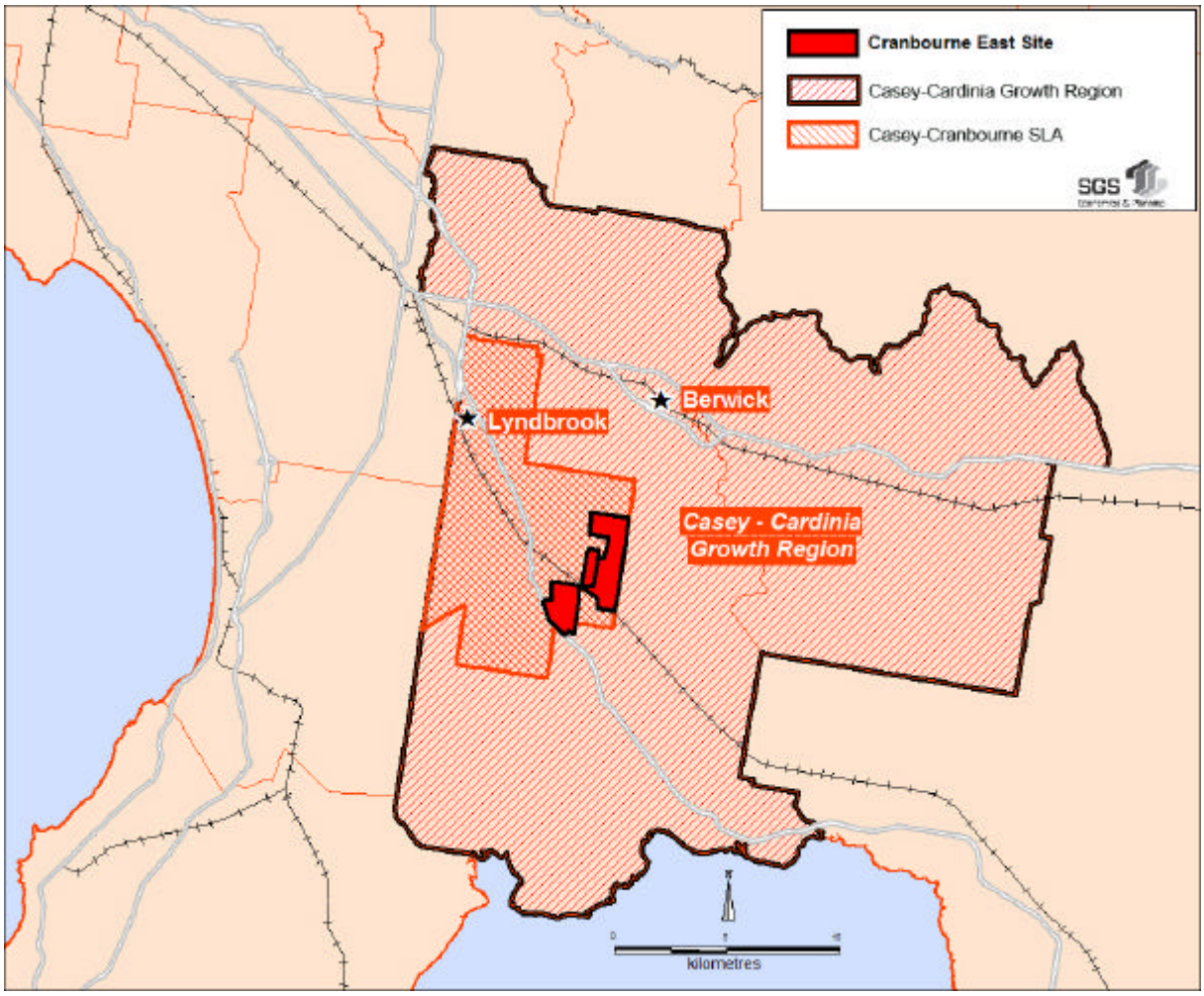
- Cranbourne Statistical Local Area (SLA);
- Casey – Cardinia Growth Region (SGS defined area of Casey LGA aggregated with Cardinia – Pakenham SLA) and
- Melbourne Statistical Division (SD).

The local level analysis will be conducted on the following suburbs:

- Cranbourne East;
- Lynbrook; and
- Berwick.

These locations are shown in Figure 1.

Figure 1: Areas of Analysis



4 Demographic Analysis

4.1 Number of Residents

The Regional Level

Melbourne's population continued to grow between 2001 and 2006, by 196,626 people or 5.8 percent, which was slightly slower growth than the previous 5 year period. In the Casey – Cardinia Growth Region, population growth continued in excess of 20 percent, with an additional 46,656 people living in the region. Casey – Cranbourne SLA experienced the fastest growth between 2001 and 2006, of 26.1 percent, an increase of 13,119 people.

Table 1: 1996 – 2006 Census Population

	Casey - Cranbourne SLA	Casey - Cardinia Growth Region	Melbourne SD
1996	44,171	158,231	3,138,147
2001	50,268	193,501	3,366,542
2006	63,387	240,157	3,563,168
Change 1996 - 2001	6,097	35,270	228,395
Change 2001 - 2006	13,119	46,656	196,626
% Change 1996 - 2001	13.80%	22.29%	7.28%
% Change 2001 - 2006	26.10%	24.11%	5.84%

Source: ABS Census 1996, 2001 & 2006

Case Studies

Cranbourne East experienced the most rapid population growth between 2001 and 2006, growing from 523 to 4,859 people, which reflects its largely undeveloped status in 2001. Lynbrook also experienced a growth rate of 208 percent in the same period, with the population increasing by 1,812 people. The more established suburb of Berwick had a slightly lower growth rate but had the highest total increase of 5,691 people.

Table 2: 2001 - 2006 Census Population

	Cranbourne East	Berwick	Lynbrook
2001	523	7,170	870
2006	4,859	12,861	2,682
Change 2001 - 2006	4,336	5,691	1,812
% Change 2001 - 2006	829.06%	79.37%	208.28%

Source: ABS Census 2001 & 2006[1]

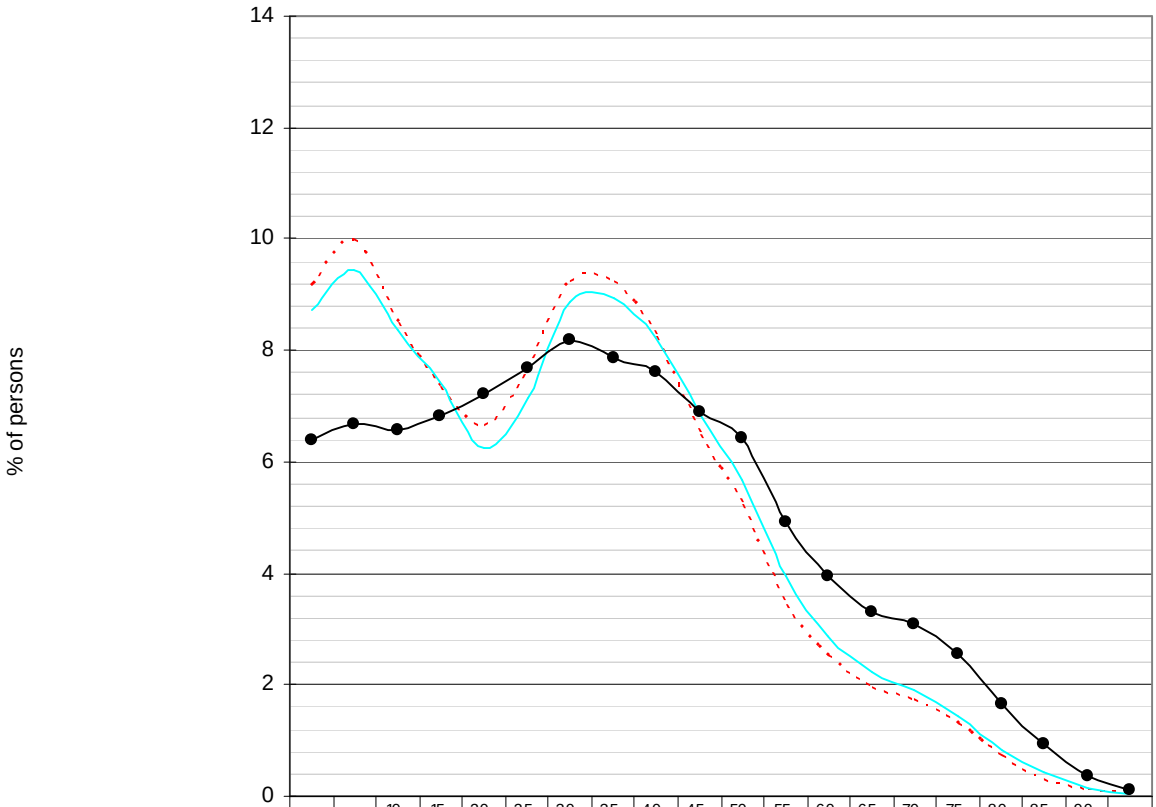
4.2 Age Profile

The Regional Level

The age profile of the Cranbourne SLA reflects that of the broader Casey - Cardinia Growth Region, where the largest percentages fall within the 0-9 and 30-39 age cohorts. These are due to the substantial presence of young couple families with children. In contrast, the Melbourne SD has a lower share in the 0-9 age cohort and a higher share of the 60-89 age cohorts, reflecting the more mature profile of the overall metropolitan population.

[1] It was not possible to analyse population growth rates in the case study areas between 1996 and 2001 because of changes to census administrative boundaries. The size of the population in 2001 reflects the size of each of the areas selected, with both Lynbrook and Cranbourne East, consisting of one Census Collection District (CD) in 2001 whilst the portion of Berwick selected consisted of 9 CDs. In 2006 Lynbrook was comprised of 5 CDs, Cranbourne East had 7 CDs and Berwick had increased to 20 CDs. It should be noted that the boundaries of CDs within both Lynbrook and Cranbourne East had altered slightly in the intercensal period.

Figure 2: Percentage of population by age, 2001



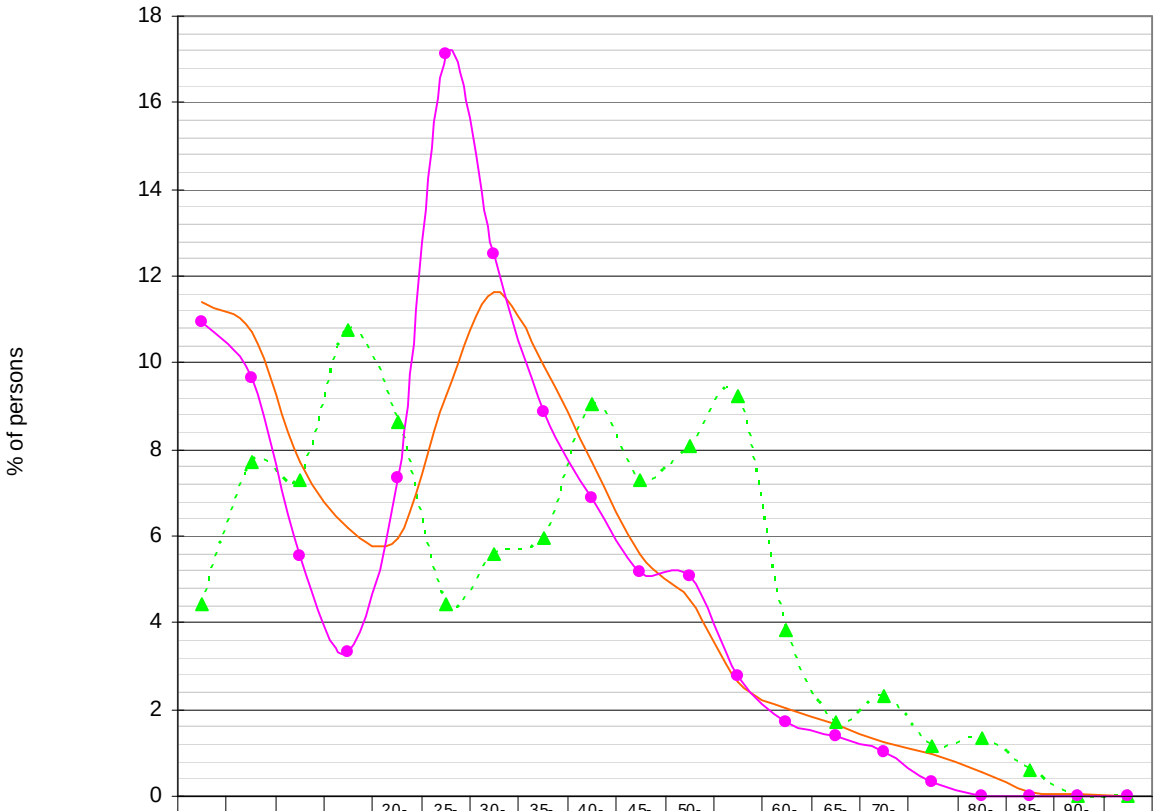
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
Casey - Cranbourne SLA	9.2	10.0	8.5	7.4	6.6	7.6	9.2	9.2	8.3	6.5	5.2	3.4	2.5	19	17	13	0.7	0.3	0.1	0.1
Casey - Cardinia Growth Region	8.7	9.4	8.4	7.4	6.2	7.2	8.9	8.9	8.2	6.8	5.7	3.9	2.9	2.2	19	14	0.8	0.4	0.1	0.1
Melbourne SD	6.4	6.7	6.6	6.8	7.2	7.7	8.2	7.9	7.6	6.9	6.4	4.9	3.9	3.3	3.1	2.6	16	0.9	0.4	0.1

Source: ABS Census 2001

Case Studies

The trend line of the age breakdown reveals that Lynbrook and Berwick follow a similar pattern, with a large percentage of children aged 0-9, then a drop in the percentage of older children and young adults aged in the 15-24 bracket. Lynbrook has the largest percentage of population in the 30-34 cohort whilst Berwick peaks in the 30-39 bracket. Both areas have significantly lower numbers of residents aged 60 and over, reflecting the tendency for families with children to reside in outer suburban locations, where housing is more affordable. Cranbourne East has a different age profile, with the largest percentage of population in the 15-19 cohort, while the 50-59 age bracket is also significantly larger than the other areas, reflecting a more mature family lifecycle, and there are also slightly higher shares of those aged in the 70-74 and 80-84 brackets.

Figure 3: Percentage of population by age, 2001



	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
Cranbourne East	4.4	7.7	7.3	10.8	8.7	4.4	5.6	6.0	9.0	7.3	8.1	9.2	3.8	1.7	2.3	1.2	1.3	0.6	0.0	0.0
Berwick	11.4	10.7	7.7	6.2	5.9	9.2	11.6	9.9	7.7	5.6	4.5	2.6	2.1	1.7	1.3	1.0	0.6	0.1	0.0	0.0
Lynbrook	10.9	9.7	5.5	3.3	7.4	17.1	12.5	8.9	6.9	5.2	5.1	2.8	1.7	1.4	1.0	0.3	0.0	0.0	0.0	0.0

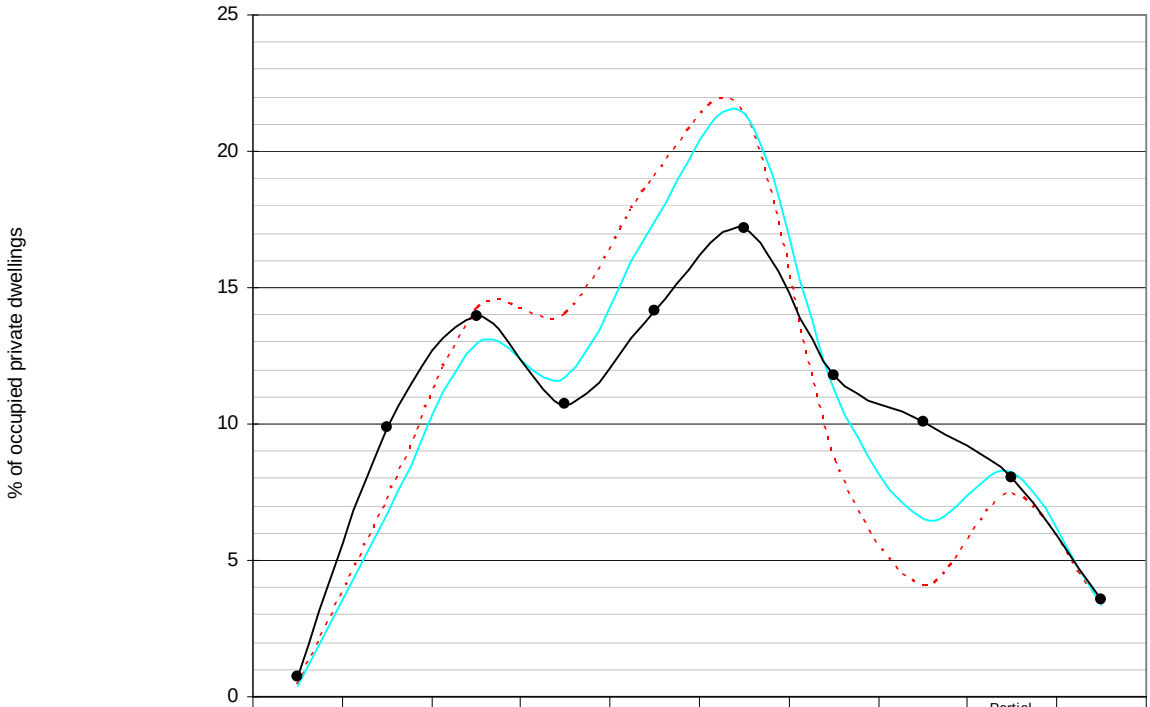
Source: ABS Census 2001

4.3 Weekly Household Income

The Regional Level

The Cranbourne SLA and Casey – Cardinia Growth Region have a higher percentage of middle income earners, earning between $700 and $1,999 per week than the Melbourne SD. However the Melbourne SD has a much higher proportion of high income earners (over $2,000 per week).

Figure 4: Weekly household income as a percentage of occupied private dwellings, 2001



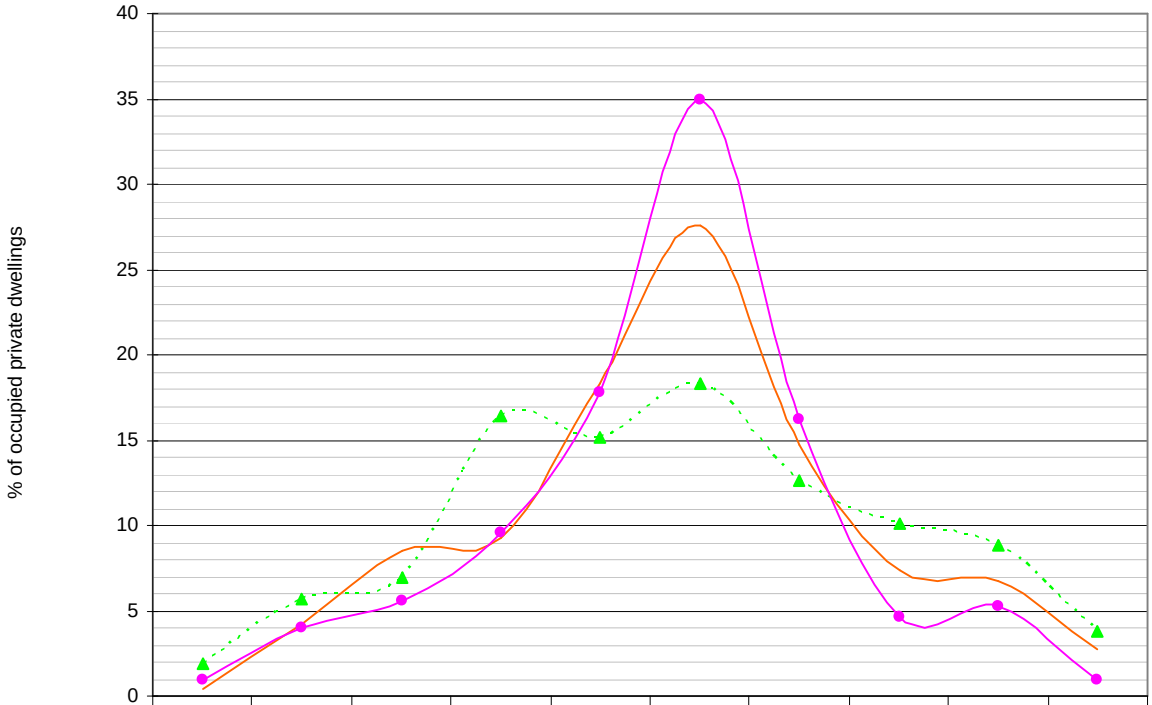
	Negative/Nil income	$1-299	$300-499	$500-$699	$700-$999	$1,000-$1,499	$1,500-$1,999	$2,000 or more	Partial income stated	All incomes not stated
Casey - Cranbourne SLA	0.5	7.3	14.2	14.0	19.1	21.3	8.7	4.1	7.4	3.4
Casey - Cardinia Growth Region	0.4	6.7	13.0	11.7	17.4	21.4	11.3	6.5	8.2	3.3
Melbourne SD	0.7	9.9	13.9	10.7	14.2	17.2	11.8	10.0	8.0	3.5

Source: ABS Census 2001

Case Studies

Cranbourne East has a higher share of households earning between $500 and $699 per week, which might in part be due to its higher share of retirees, while it also has a higher share of those earning $2,000 or more per week, which indicates the potential to attract or retain higher income households by providing larger lot rustic living. Berwick and Lynbrook both have a much more pronounced income profile with a greater proportion of households earning between $1,000 and $1,499 per week. In Lynbrook 50 per cent of the population earned between $1,000 and $1,999 per week, whilst 42 percent of households in Berwick and 31 percent of households in Cranbourne East were within this range. Hence there might also be the opportunity for Cranbourne East to attract more middle income households if it was to also contain a similar product to that found in Lynbrook.

Figure 5: Weekly household income as a percentage of occupied private dwellings, 2001



	Negative/Nil income	$1-299	$300-499	$500-$699	$700-$999	$1,000-$1,499	$1,500-$1,999	$2,000 or more	Partial income stated	All incomes not stated
Cranbourne East	1.9	5.7	7.0	16.5	15.2	18.4	12.7	10.1	8.9	3.8
Berwick	0.4	4.2	8.6	9.2	18.4	27.6	14.8	7.3	6.8	2.7
Lynbrook	1.0	4.0	5.6	9.6	17.8	35.0	16.2	4.6	5.3	1.0

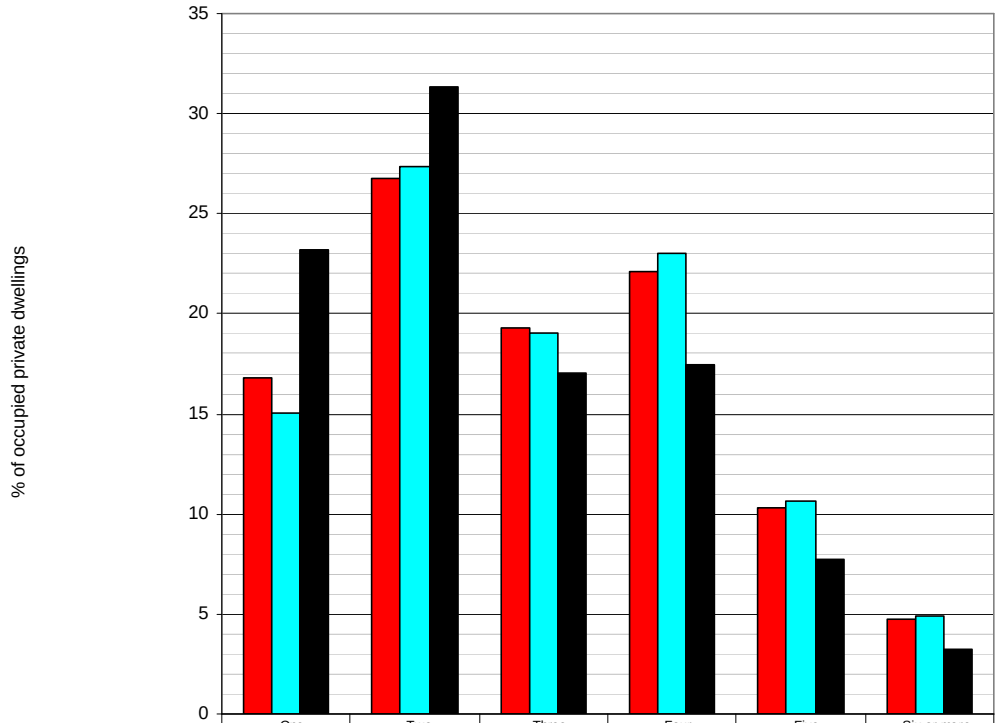
Source: ABS Census 2001

4.4 Household Size

The Regional Level

Melbourne SD has a greater share of people living alone than either the Casey – Cardinia Growth Region or Cranbourne SLA, with these areas above the metropolitan average in terms of households containing three or more persons.

Figure 6: Household Size as a percentage of occupied private dwellings, 2001



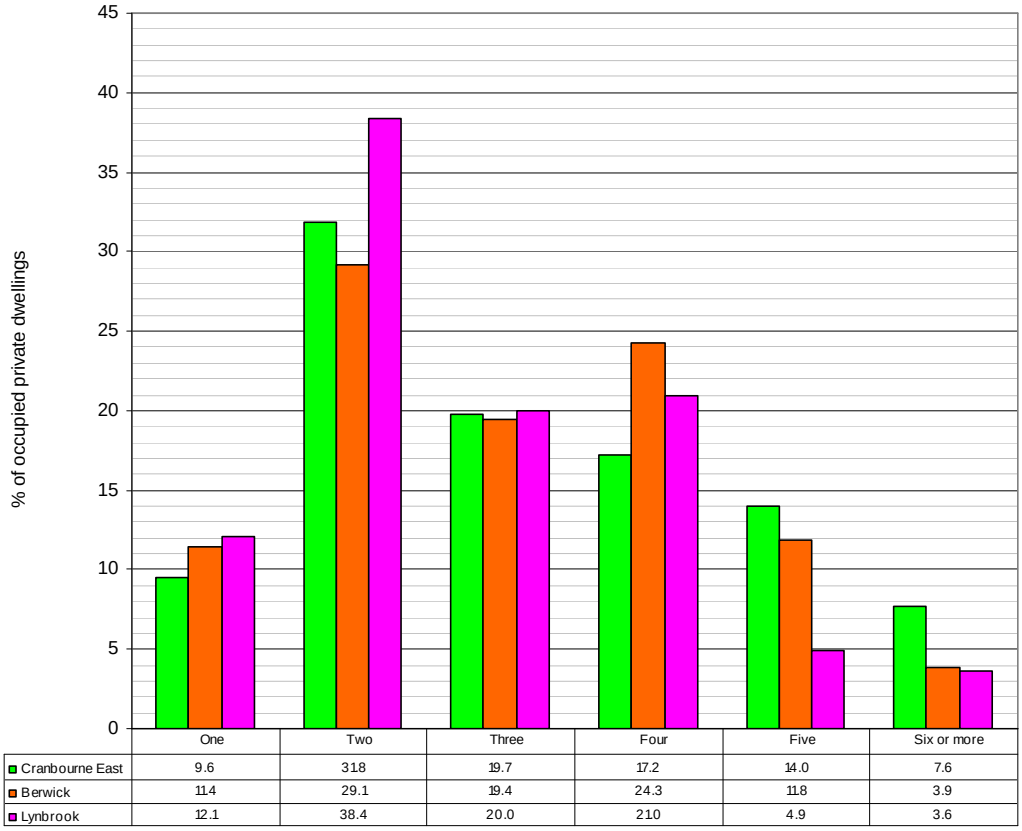
	One	Two	Three	Four	Five	Six or more
Casey - Cranbourne SLA	16.8	26.7	19.3	22.1	10.3	4.8
Casey - Cardinia Growth Region	15.1	27.3	19.1	23.1	10.6	4.9
Melbourne SD	23.2	31.3	17.0	17.4	7.8	3.3

Source: ABS Census 2001

Case Studies

Cranbourne East has a greater share of households with five or more people, and a lower proportion of single person households. Lynbrook has the highest share of two person households (38%), while Berwick has a greater share of four person households (24%).

Figure 7: Household Size as a percentage of occupied private dwellings, 2001



	One	Two	Three	Four	Five	Six or more
Cranbourne East	9.6	31.8	19.7	17.2	14.0	7.6
Berwick	11.4	29.1	19.4	24.3	11.8	3.9
Lynbrook	12.1	38.4	20.0	21.0	4.9	3.6

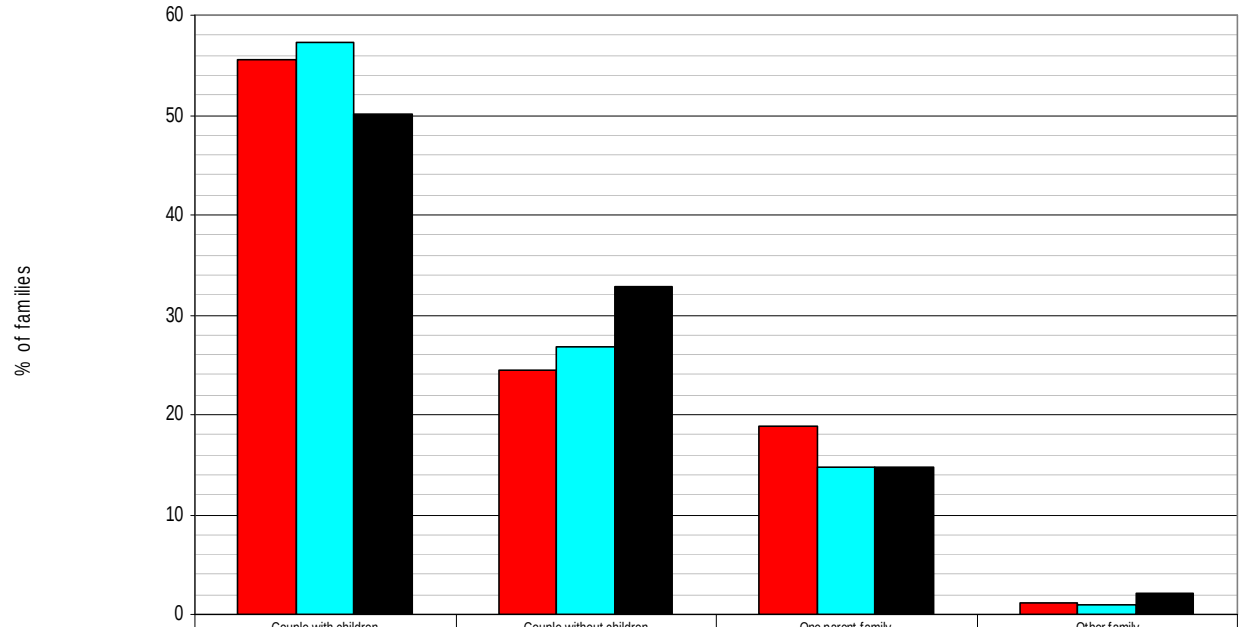
Source: ABS Census 2001

4.5 Family Type

The Regional Level

Cranbourne SLA and the Casey – Cardinia Growth Region have a greater share of couple families with children (at 56% and 57% percent of families than the Melbourne SD (50%). Cranbourne has the highest percentage of one parent families. The Melbourne SD has a higher proportion of couple families without children.

Figure 8: Family Type as a percentage of families, 2001



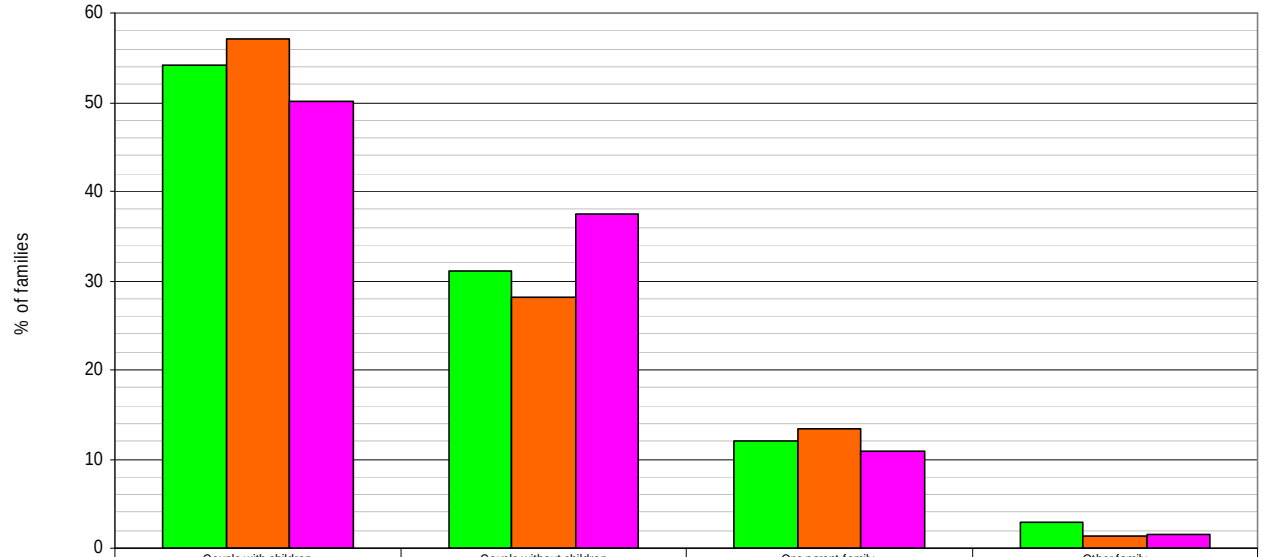
	Couple with children	Couple without children	One parent family	Other family
Casey - Cranbourne SLA	55.5	24.5	18.8	1.2
Casey - Cardinia Growth Region	57.4	26.7	14.8	1.1
Melbourne SD	50.1	32.8	14.8	2.2

Source: ABS Census 2001

Case Studies

Berwick (57%) and Cranbourne East both have higher proportions of couple families with children than Lynbrook (50%). Lynbrook (38%) instead has a greater proportion of couple families without children than Cranbourne East (31%) and Berwick (28%). All three locations have similar shares of single parent families.

Figure 9: Family Type as a percentage of families, 2001



	Couple with children	Couple without children	One parent family	Other family
Cranbourne East	54.2	31.0	12.0	2.8
Berwick	57.0	28.1	13.5	1.4
Lynbrook	50.2	37.5	10.8	1.5

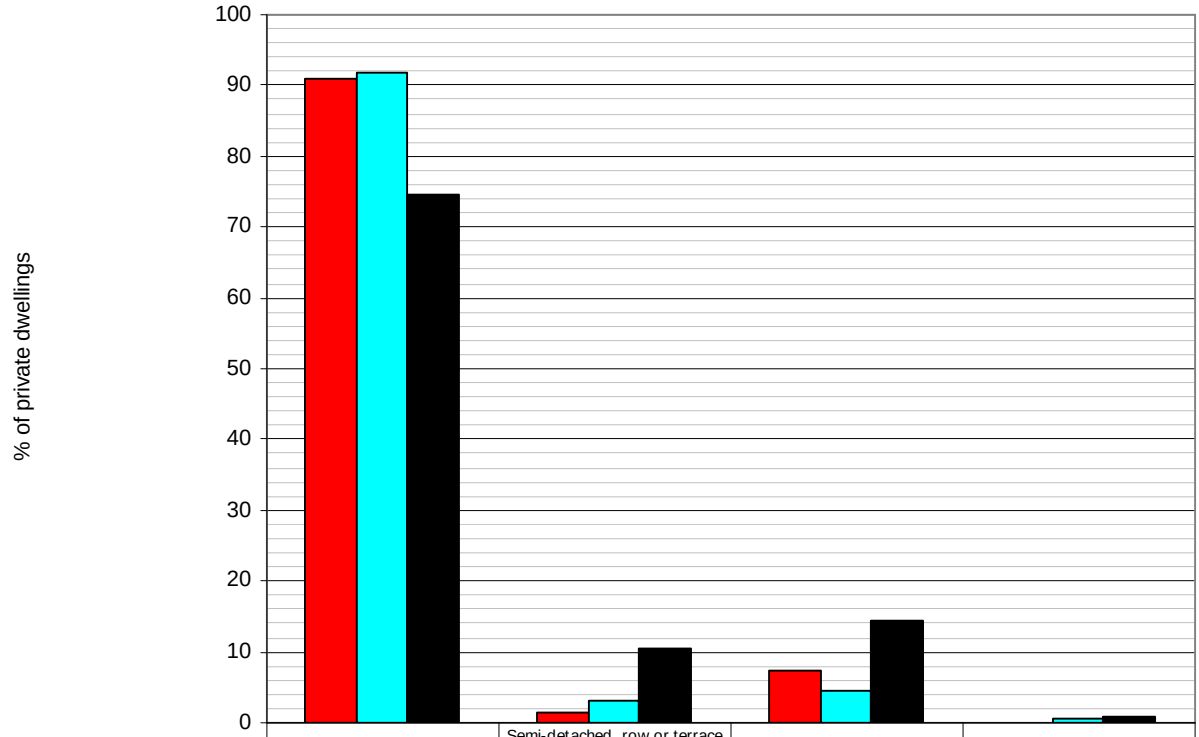
Source: ABS Census 2001

4.6 Dwelling Structure

The Regional Level

The Cranbourne SLA and Casey – Cardinia Growth Region have the greatest share of separate houses, reflecting their peripheral location in the metropolitan landscape. Correspondingly, the Melbourne SD has a greater share of semi-detached houses, flat, units and apartments, reflecting the overall metropolitan situation. Cranbourne SLA has nearly double the percentage of flats than the broader Casey - Cardinia Growth Region. This is a result of the more established localities within the SLA.

Figure 10: Dwelling type as a percentage of occupied private dwellings, 2001



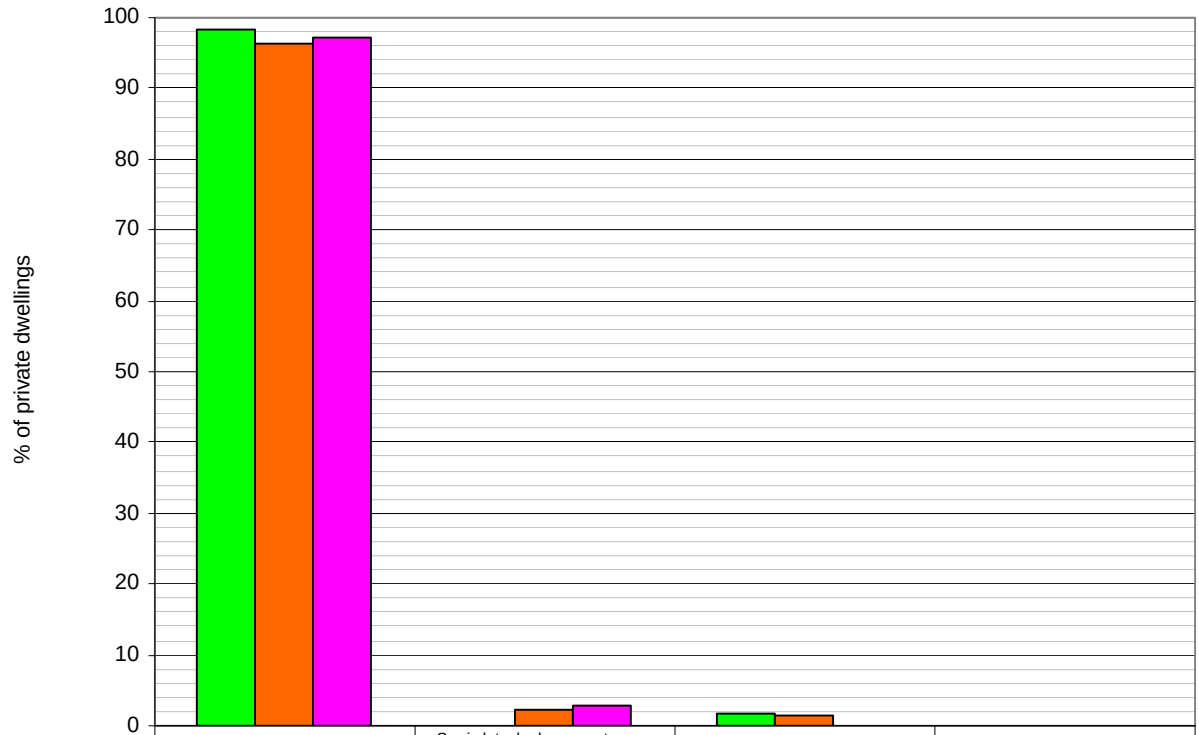
	Separate house	Semi-detached, row or terrace house, townhouse	Flat, unit or apartment	Other dwelling
Casey - Cranbourne SLA	91.0	1.4	7.5	0.1
Casey - Cardinia Growth Region	91.8	3.2	4.5	0.5
Melbourne SD	74.5	10.4	14.4	0.7

Source: ABS Census 2001

Case Studies

Each of the case study locations has an overwhelming share of separate houses, at around the 97 percent level. Only Cranbourne East and Berwick have any flats, accounting for 1.8 percent and 1.4 percent of total dwelling stock. Berwick and Lynbrook have a small proportion of semi-detached, row or terrace, or town house, accounting for 2.1 and 2.6 percent of dwelling stock.

Figure 11: Dwelling type as a percentage of occupied private dwellings, 2001



	Separate house	Semi-detached, row or terrace house, townhouse	Flat, unit or apartment	Other dwelling
Cranbourne East	98.2	0.0	18	0.0
Berwick	96.4	2.2	14	0.0
Lynbrook	97.1	2.9	0.0	0.0

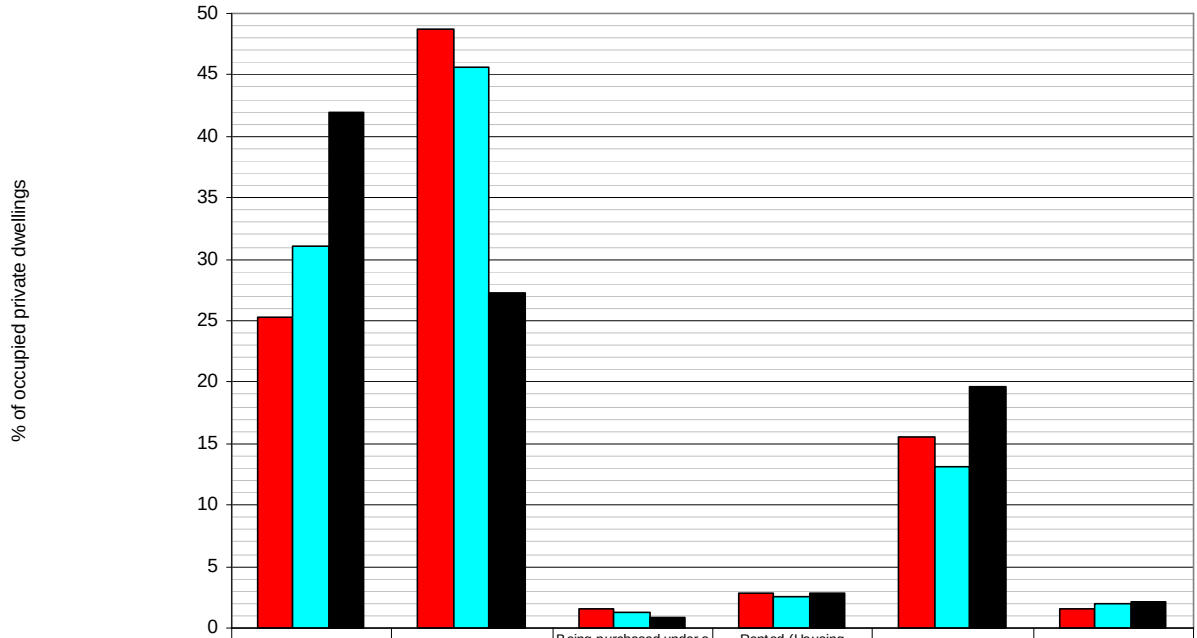
Source: ABS Census 2001

4.7 Tenure type

The Regional Level

Cranbourne SLA has the lowest percentage of fully owned dwellings, at 25 percent, whilst the Melbourne SD has 42 percent. The Cranbourne SLA and Casey – Cardinia Growth Region have the greatest share of dwellings being purchased (i.e. a mortgage still being paid off), with proportions at 49 percent and 46 percent respectively. The Melbourne SD has a proportionately higher number of residences available for private rental market accommodation.

Figure 12: Tenure type as percentage of private dwellings, 2001



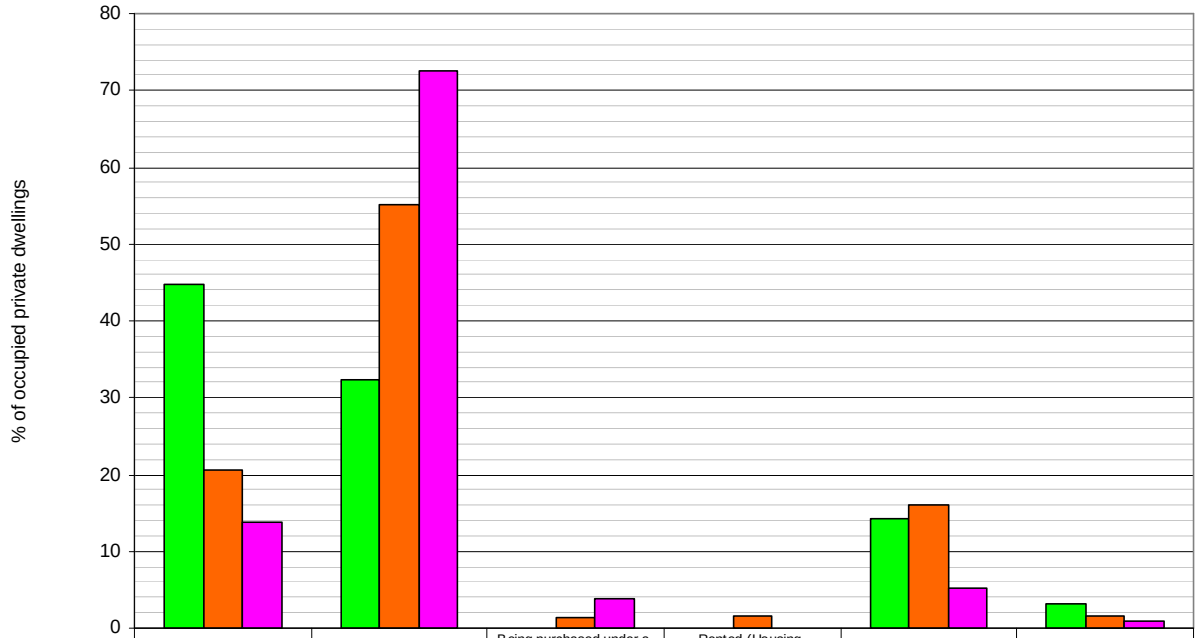
	Fully Owned	Being Purchased	Being purchased under a rent/buy scheme	Rented (Housing Authority)	Rented (Private)	Other
Casey - Cranbourne SLA	25.3	48.7	1.6	2.8	15.5	1.6
Casey - Cardinia Growth Region	31.1	45.6	1.3	2.5	13.1	2.0
Melbourne SD	41.9	27.3	0.8	2.9	19.6	2.2

Source: ABS Census 2001

Case Studies

The largest share of tenure in Lynbrook and Berwick is the being purchased category, (i.e. a mortgage still being paid off), reflecting that these are newer residential areas. In Cranbourne East the greatest share of tenure is the fully owned dwellings category, at 45 percent, which reflects the more established nature of the residential area which existed in 2001 (principally the Collison Estate). Berwick and Cranbourne East have the highest share of private rentals, at around 15 percent, three times the share of Lynbrook.

Figure 13: Tenure type as percentage of private dwellings, 2001



	Fully Owned	Being Purchased	Being purchased under a rent/buy scheme	Rented (Housing Authority)	Rented (Private)	Other
Cranbourne East	44.7	32.3	0.0	0.0	14.3	3.1
Berwick	20.7	55.2	1.2	1.5	16.0	1.5
Lynbrook	13.7	72.5	3.9	0.0	5.2	1.0

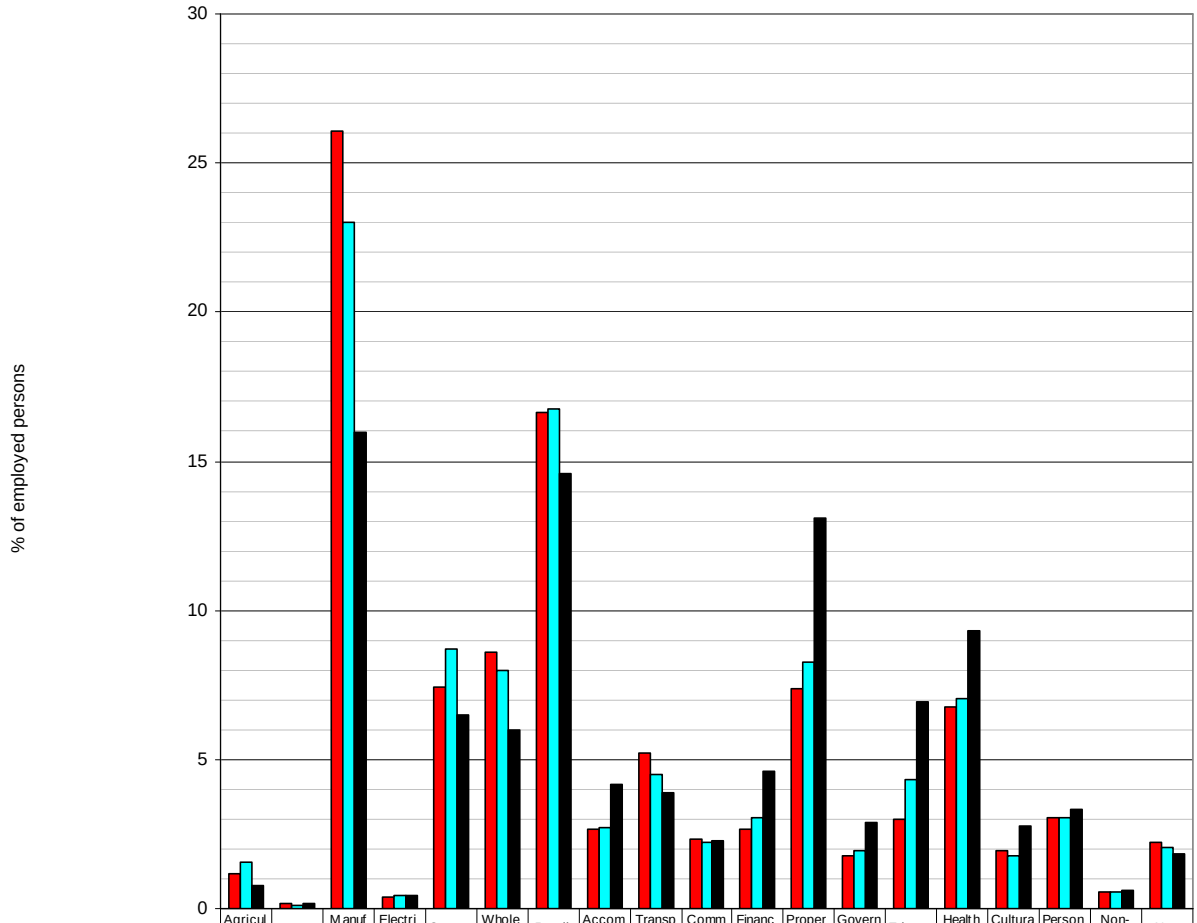
Source: ABS Census 2001

4.8 Industry

The Regional Level

Manufacturing is the dominant industry in Cranbourne SLA and the Casey – Cardinia Growth Region, employing 26 percent and 23 percent of residents. The retail trade, wholesale trade and construction sectors in Cranbourne SLA and the Casey – Cardinia Growth Region are also slightly above the metropolitan level. At the metropolitan level, property and business services and finance and insurance sectors employ double the percentage of residents than in Cranbourne SLA and the Casey – Cardinia Growth Region.

Figure 14: Industry as percentage of employed persons, 2001



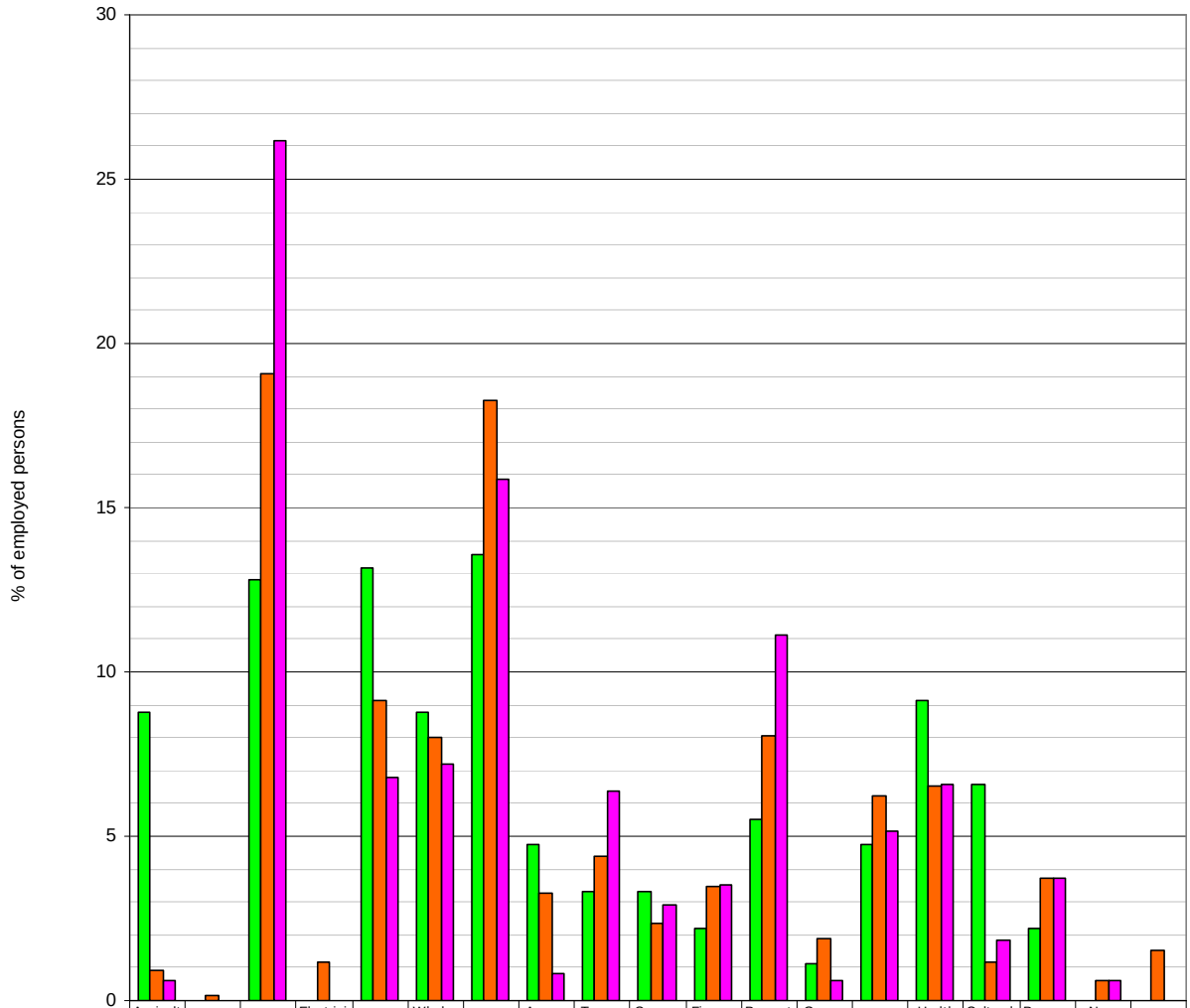
	Agricul ture, Forest	Mining	Manuf acturin g	Electri city, Gas	Constr uction	Whole sale Trade	Retail Trade	Accom modati on,	Transp ort and Storag	Comm unicati on	Financ e and Insuran	Proper ty and Busine	Govern ment Admini	Educat ion	Health and Comm	Cultura l and Recrea	Person al and Other	Non-classifi able	Not stated
Casey - Cranbourne SLA	12	0.2	26.1	0.4	7.4	8.6	16.6	2.7	5.2	2.3	2.6	7.4	18	3.0	6.8	19	3.0	0.6	2.2
Casey - Cardinia Growth Region	15	0.1	23.0	0.5	8.7	8.0	16.7	2.7	4.5	2.2	3.1	8.3	19	4.3	7.0	18	3.0	0.6	2.0
Melbourne SD	0.8	0.2	16.0	0.4	6.5	6.0	14.6	4.1	3.9	2.3	4.6	13.1	2.9	6.9	9.3	2.8	3.3	0.6	18

Source: ABS Census 2001

Case Studies

Manufacturing is the dominant employer of residents in Lynbrook and Berwick. Retail trade is the most significant employer of residents in Cranbourne East and second most important for Lynbrook and Berwick residents. Construction is the second most important industry for Cranbourne East residents. Property and business services are the third most important industry for residents of Lynbrook, as opposed to Manufacturing in Cranbourne East and Construction in Berwick. The proportion of people who work in the business services is much greater in Lynbrook than in Cranbourne East and Berwick.

Figure 15: Industry as percentage of employed persons, 2001



	Agriculture, Forestr	Mining	Manufacturing	Electricity, Gas and	Construction	Wholesale Trade	Retail Trade	Accommodation,	Transport and Storage	Communication Service	Finance and Insuranc	Property and Busines	Government Adminis	Education	Health and Commu	Cultural and Recreat	Personal and Other	Non-classifiable	Not stated
Cranbourne East	8.8	0.0	12.8	0.0	13.2	8.8	13.6	4.8	3.3	3.3	2.2	5.5	1.1	4.8	9.2	6.6	2.2	0.0	0.0
Berwick	0.9	0.2	19.1	1.2	9.1	8.0	18.2	3.3	4.4	2.4	3.4	8.1	1.9	6.2	6.6	1.2	3.7	0.6	1.5
Lynbrook	0.6	0.0	26.2	0.0	6.8	7.2	15.9	0.8	6.4	2.9	3.5	11.1	0.6	5.2	6.6	1.9	3.7	0.6	0.0

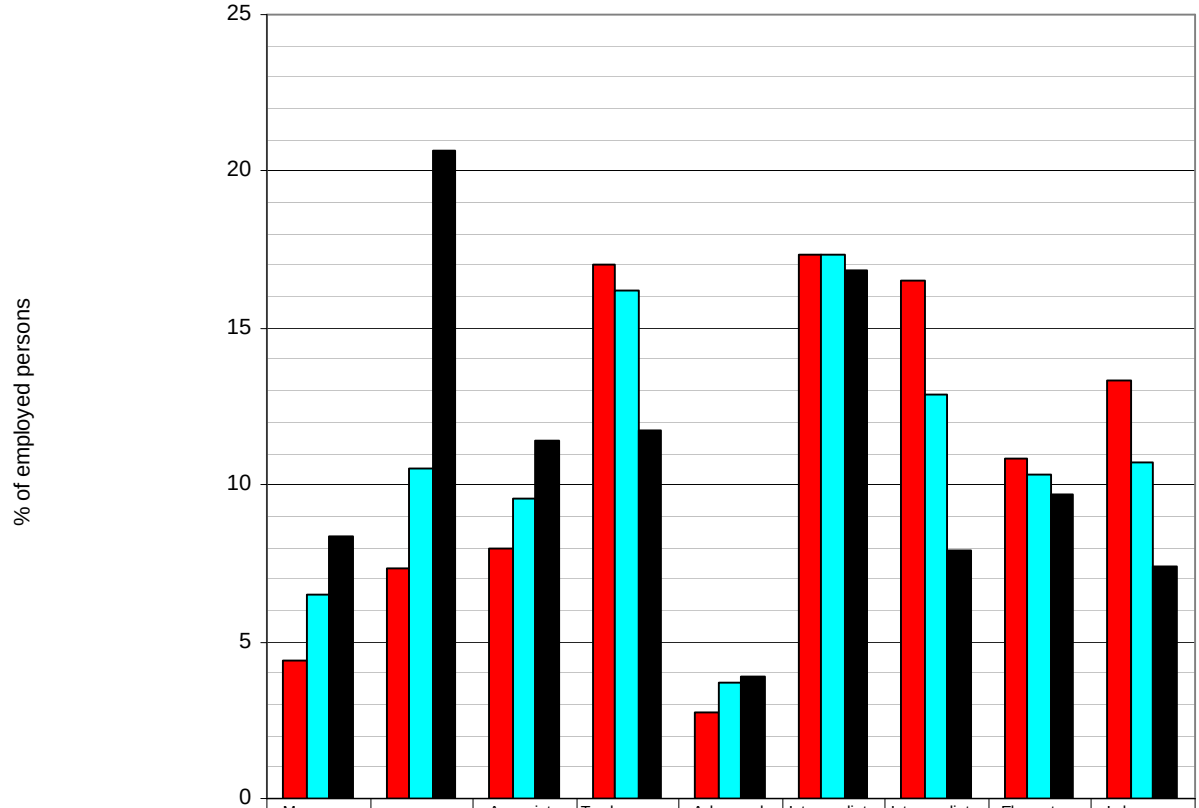
Source: ABS Census 2001

4.9 Occupation

The Regional Level

Professionals are the most dominant category accounting for nearly a fifth of employees residing in metropolitan Melbourne, nearly double the level in Cranbourne SLA and the Casey – Cardinia Growth Region. In Cranbourne SLA and the Casey – Cardinia Growth Region, the Intermediate Clerical, Sales and Service Workers sector is the most significant occupation accounting for 17 percent of workers. The tradepersons and related workers and intermediate production workers are also significant occupations in Cranbourne SLA and the Casey – Cardinia Growth Region.

Figure 16: Occupation as percentage of employed persons, 2001



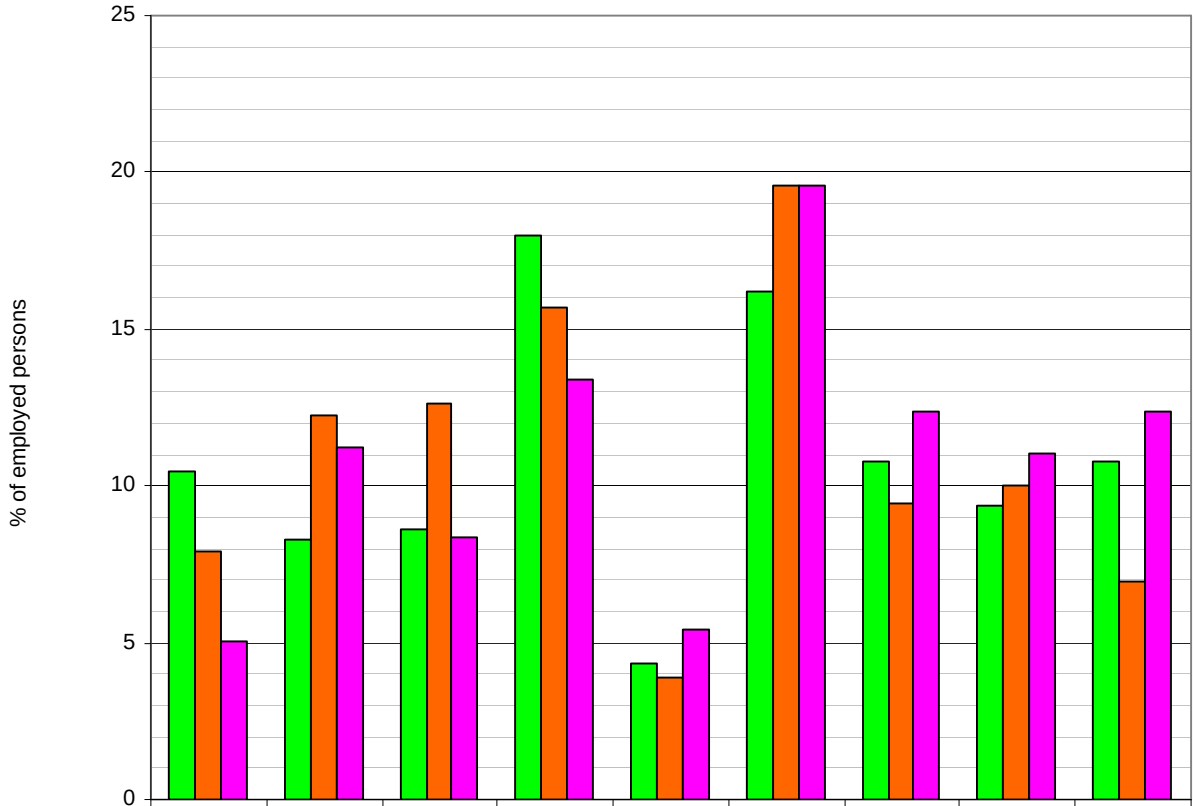
	Managers and Administrato	Professionals	Associate Professionals	Tradespersons and Related	Advanced Clerical and Service	Intermediate Clerical, Sales and	Intermediate Production and	Elementary Clerical, Sales and	Labourers and Related Workers
Casey - Cranbourne SLA	4.4	7.3	8.0	17.0	2.8	17.4	16.5	10.9	13.3
Casey - Cardinia Growth Region	6.5	10.5	9.5	16.2	3.7	17.3	12.9	10.3	10.7
Melbourne SD	8.3	20.6	11.4	11.8	3.9	16.9	7.9	9.7	7.4

Source: ABS Census 2001

Case Studies

The Intermediate Clerical, Sales and Service Workers sector is the most significant occupation in Berwick and Lynbrook, accounting for nearly a fifth of employed residents, while in Cranbourne East it accounts for 16 percent of employed residents. Cranbourne East had a slightly higher proportion of residents employed in the Tradespersons and related workers category. It also has the lowest percentage of residents employed in the professionals category, at 8.3 percent, but with the highest share of managers and administrators, 10.4 percent.

Figure 17: Occupation as percentage of employed persons, 2001



	Managers and Administrators	Professionals	Associate Professionals	Tradespersons and Related Workers	Advanced Clerical and Service	Intermediate Clerical, Sales and Service	Intermediate Production and Transport	Elementary Clerical, Sales and Service	Labourers and Related Workers
Cranbourne East	10.4	8.3	8.6	18.0	4.3	16.2	10.8	9.4	10.8
Berwick	7.9	12.2	12.6	15.7	3.9	19.6	9.4	10.0	7.0
Lynbrook	5.0	11.2	8.3	13.4	5.4	19.6	12.4	11.0	12.4

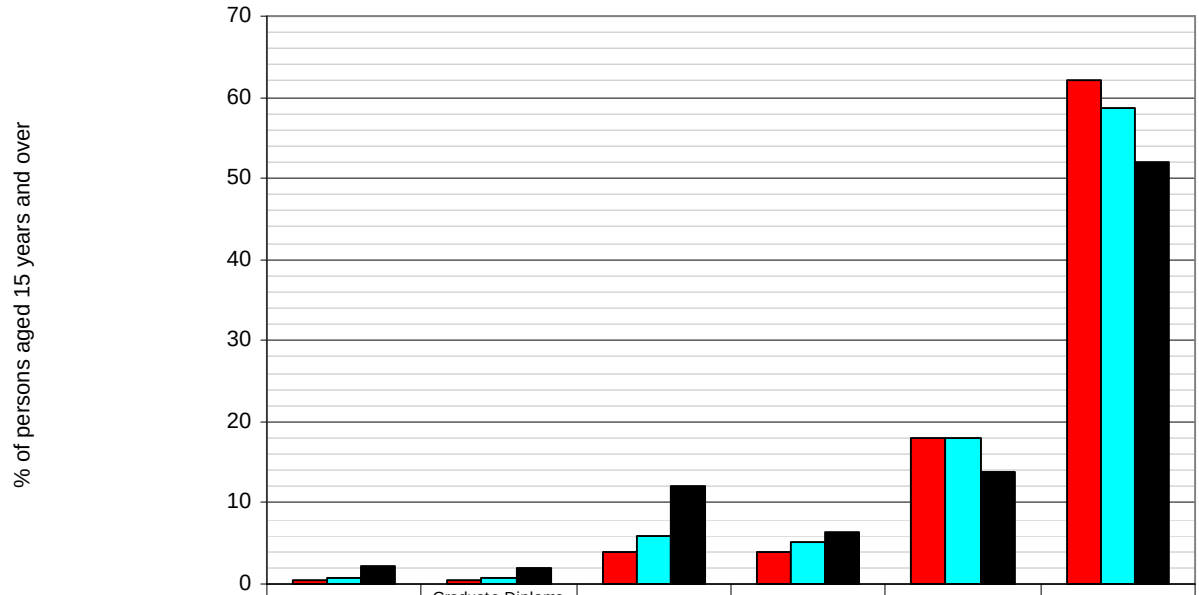
Source: ABS Census 2001

4.10 Qualifications

The Regional Level

The Cranbourne SLA and Casey – Cardinia Growth Region have a greater share of those with a Certificate degree than the Melbourne SD. However their share of those with a Bachelor Degree or higher is substantially less than the Melbourne SD.

Figure 18: Qualifications as percentage of persons aged 15 years and over, 2001



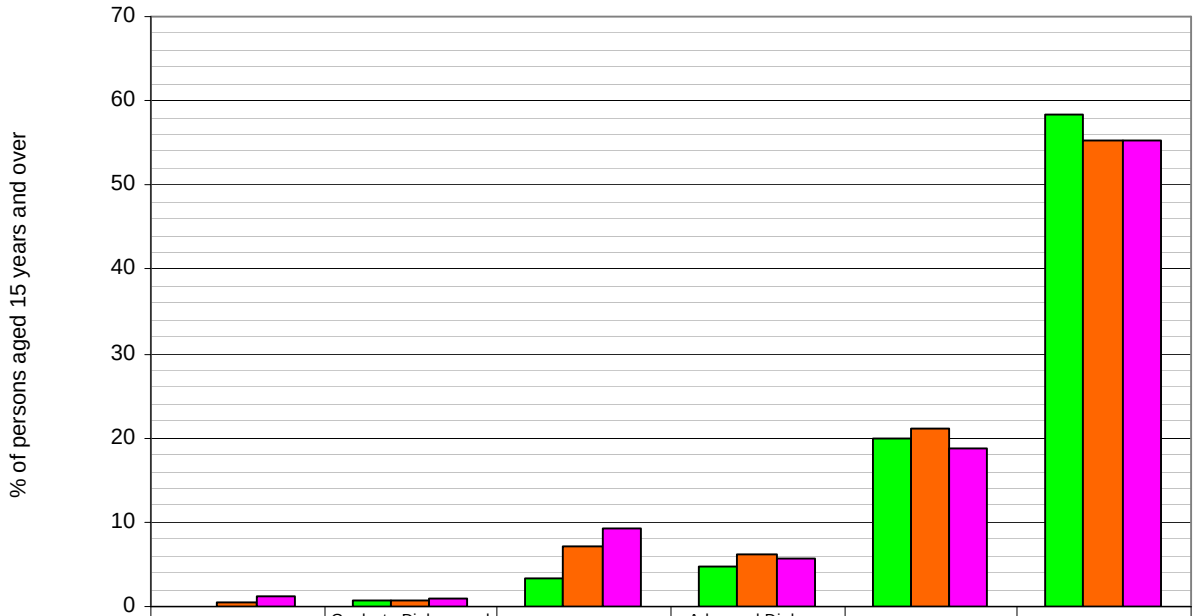
	Postgraduate Degree	Graduate Diploma and Graduate Certificate	Bachelor Degree	Advanced Diploma and Diploma	Certificate	No Qualification
Casey - Cranbourne SLA	0.4	0.5	3.9	4.0	17.9	62.1
Casey - Cardinia Growth Region	0.6	0.8	5.9	5.1	18.0	58.6
Melbourne SD	2.1	1.9	12.1	6.5	13.8	52.1

Source: ABS Census 2001

Case Studies

Cranbourne East has slightly higher (3%) levels of people with no qualifications than the other locations, and also lower percentages of people qualified to a Bachelor degree or higher. At the other end of the spectrum, 11.4% of residents in Berwick have a bachelor degree or higher compared to 4.1% for Cranbourne East.

Figure 19: Qualifications as percentage of persons aged 15 years and over, 2001



	Postgraduate Degree	Graduate Diploma and Graduate Certificate	Bachelor Degree	Advanced Diploma and Diploma	Certificate	No Qualification
Cranbourne East	0.0	0.7	3.4	4.8	19.9	58.3
Berwick	0.5	0.7	7.1	6.1	21.1	55.4
Lynbrook	1.2	0.9	9.3	5.6	18.8	55.3

Source: ABS Census 2001

5 Migration Analysis

2001 Census data was ordered from the ABS to analyse migration between 1996 and 2001 to and from Cranbourne SLA and the Casey – Cardinia Growth Region. This reveals the top 20 source and destination LGAs and the family/household, dwelling, industry and occupational profiles of new arrivals and those who have departed, who were aged 5 and over.

5.1 Population inflow 1996 - 2001

5.1.1 Where have people come from?

Casey – Cardinia Growth Region

The neighbouring municipality of Greater Dandenong provided just over a fifth of newcomers to the area, with substantial arrivals also from the middle-ring Eastern municipalities of Monash, Knox, Kingston, Frankston and Yarra Ranges, with over 1,000 people arriving from each. Smaller numbers arrived from the country municipalities to the east and south-east of the area. Eleven percent of new residents, 5,433 people, came from overseas.

Table 3: Casey – Cardinia Growth Region In Migration, by the Top 20 LGAs

Greater Dandenong	10,550	21.66%
Monash	3,283	6.74%
Knox	2,484	5.10%
Kingston	2,218	4.55%
Frankston	1,990	4.09%
Yarra Ranges	1,144	2.35%
Mornington Peninsula	855	1.76%
Whitehorse	852	1.75%
Glen Eira	820	1.68%
Latrobe	664	1.36%
Maroondah	611	1.25%
Baw Baw	575	1.18%
South Gippsland	375	0.77%
Stonnington	356	0.73%
Boroondara	350	0.72%
Bayside	324	0.67%
Bass Coast	323	0.66%
Manningham	293	0.60%
East Gippsland	287	0.59%
Port Phillip	226	0.46%
Rest of Australia	7,721	15.85%
Overseas	5,433	11.15%
Not Stated	6,979	14.33%
Total	48,713	100.00%

Source: ABS Census 2001

Cranbourne SLA

At the more local level, the source of new residents reflects almost exactly that of the broader Growth Region, with the largest inflow occurring from neighbouring Greater Dandenong, where one fifth of arrivals hail from. Reflecting the pattern in the Growth Region, the next most significant sources were the middle-ring Eastern municipalities, and overseas arrivals were also significant.

Table 4: Cranbourne In Migration

Greater Dandenong	2,687	20.44%
Monash	860	6.54%
Kingston	722	5.49%
Frankston	705	5.36%
Knox	497	3.78%
Mornington Peninsula	295	2.24%
Whitehorse	257	1.96%
Glen Eira	250	1.90%
Yarra Ranges	200	1.52%
Maroondah	165	1.26%
Latrobe	153	1.16%
South Gippsland	134	1.02%
Bass Coast	124	0.94%
Bayside	97	0.74%
Boroondara	87	0.66%
Baw Baw	78	0.59%
Manningham	70	0.53%
Stonnington	66	0.50%
East Gippsland	55	0.42%
Port Phillip	36	0.27%
Rest of Australia	2,125	16.17%
Overseas	1,549	11.78%
Not Stated	1,932	14.70%
Total	13,144	100.00%

Source: ABS Census 2001

5.1.2 What family household type?

Casey – Cardinia Growth Region

Over half of new arrivals to the Casey-Cardinia Growth Region were families with children, whilst nearly a fifth, 9,270 people, were couples without children. Ten percent, 5,206 people, were in one parent families, whilst lone person households accounted for five percent, 2,661 people.

Table 5: Casey – Cardinia Growth Region In Migration by Family Household Type

In Migration	Total	%
Couple family with children	25,141	51.61%
Couple family without children	9,270	19.03%
One parent family	5,206	10.69%
Other family	462	0.95%
Unrelated Individual in a family household	767	1.57%
Lone person household	2,661	5.46%
Group household	1,410	2.89%
Other household (d)	3,796	7.79%
Total	48,713	100.00%

Source: ABS Census 2001

Cranbourne SLA

As with the wider Growth Region, Cranbourne has nearly half of new arrivals within families with children and nearly a fifth are families without children. Single parent families are slightly higher, at 13 percent, as are lone households, at 6 percent.

Table 6: Cranbourne SLA In Migration by Family Household Type

In Migration	Total	%
Couple family with children	6,484	49.33%
Couple family without children	2,420	18.41%
One parent family	1,667	12.68%
Other family	143	1.09%
Unrelated Individual in a family household	266	2.02%
Lone person household	826	6.28%
Group household	416	3.16%
Other household (d)	922	7.01%
Total	13,144	100.00%

Source: ABS Census 2001

5.1.3 What dwelling structure?

Casey – Cardinia Growth Region

The vast majority of new arrivals are living in separate houses, with only 1,778 people (3.7%) living in flats or units in a one or two storey block, and 1,076 (2.2%) people living in a one storey semi-detached dwelling.

Table 7: Casey – Cardinia Growth Region In Migration by Dwelling Structure

In Migration	Total	%
Separate house	44,468	91.29%
Semi-detached, row/terrace, townhouse etc one storey	1,076	2.21%
Semi-detached, row/terrace, townhouse etc two or more storeys	309	0.63%
Flat, unit or apartment in a one or two storey block	1,778	3.65%
Flat, unit or apartment in a three storey block	6	0.01%
Flat, unit or apartment in a four or more storey block	9	0.02%
Flat, unit or apartment attached to a house	37	0.08%
Caravan, cabin, houseboat	159	0.33%
Improvised home, tent, sleepers out	-	0.00%
House or flat attached to a shop, office, etc	78	0.16%
Not stated	347	0.71%
Not applicable (b)	446	0.92%
Total	48,713	100.00%

Source: ABS Census 2001

Cranbourne SLA

Ninety two percent of new residents live in separate houses, 6 percent in flats or units in a one or two storey block, and one percent lives in a one storey semi-detached dwelling.

Table 8: Cranbourne SLA In Migration by Dwelling Structure

In Migration	Total	%
Separate house	12,036	91.57%
Semi-detached, row/terrace, townhouse etc one storey	130	0.99%
Semi-detached, row/terrace, townhouse etc two or more storeys	36	0.27%
Flat, unit or apartment in a one or two storey block	774	5.89%
Flat, unit or apartment in a three storey block	-	0.00%
Flat, unit or apartment in a four or more storey block	-	0.00%
Flat, unit or apartment attached to a house	6	0.05%
Caravan, cabin, houseboat	-	0.00%
Improvised home, tent, sleepers out	-	0.00%
House or flat attached to a shop, office, etc	24	0.18%
Not stated	54	0.41%
Not applicable (b)	84	0.64%
Total	13,144	100.00%

Source: ABS Census 2001

5.1.4 What age?

Casey – Cardinia Growth Region

Most of the new arrivals are aged between 25 and 39, whilst there is also a significant influx of children aged 5-9, who are most likely accompanying their parents in the 25-39 age bracket. It is interesting to note that there is a significant inflow of those aged 65 and over - 3,493 people.

Table 9: Age of new residents in Casey - Cardinia Growth Region

In Migration		
Age	Total	%
5-9	5,026	10.32%
10-14	3,525	7.24%
15-19	3,017	6.19%
20-24	3,999	8.21%
25-29	6,486	13.31%
30-34	6,317	12.97%
35-39	4,905	10.07%
40-44	3,830	7.86%
45-49	2,757	5.66%
50-54	2,335	4.79%
55-59	1,706	3.50%
60-64	1,317	2.70%
65+	3,493	7.17%
Total 5+	48,713	100.00%

Source: ABS Census 2001

Cranbourne SLA

The age profile of new arrivals to Cranbourne mirrors that of the larger local Growth Region, with the majority of new residents aged between 5-9, 25-39 and nearly 7 percent are aged 65 and over.

Table 10: Age of new arrivals to Cranbourne SLA

In Migration		
Age	Total	%
5-9	1,365	10.38%
10-14	920	7.00%
15-19	795	6.05%
20-24	1,168	8.89%
25-29	1,860	14.15%
30-34	1,672	12.72%
35-39	1,331	10.13%
40-44	1,047	7.97%
45-49	763	5.80%
50-54	570	4.34%
55-59	419	3.19%
60-64	336	2.56%
65+	898	6.83%
Total 5+	13,144	100.00%

Source: ABS Census 2001

5.1.5 Employed in which industry?

Casey – Cardinia Growth Region

Manufacturing employs nearly a quarter of new residents to the Growth Region, 5,678 people. Retail trade accounts for 15 percent, or 3,522 people and wholesale trade a further 9 percent or 2,033 people. Property and business services, construction, health and community services, transport and storage all employed over 1,000 new residents. It should be noted that in the data supplied by the ABS the unemployed were classified as not applicable together with those who were not in the labour force and those aged 5-14. To reveal the labour force breakdown, this category was omitted.

Table 11: Industry of new residents in the workforce to Casey – Cardinia Growth Region

In Migration	Total	%
Agriculture, Forestry and Fishing	200	0.86%
Mining	24	0.10%
Manufacturing	5,678	24.35%
Electricity, Gas and Water Supply	82	0.35%
Construction	1,700	7.29%
Wholesale Trade	2,033	8.72%
Retail Trade	3,522	15.10%
Accommodation, Cafes and Restaurants	663	2.84%
Transport and Storage	1,064	4.56%
Communication Services	561	2.41%
Finance and Insurance	842	3.61%
Property and Business Services	2,208	9.47%
Government Administration and Defence	383	1.64%
Education	952	4.08%
Health and Community Services	1,676	7.19%
Cultural and Recreational Services	397	1.70%
Personal and Other Services	751	3.22%
Non-Classifiable Economic Units	107	0.46%
Not stated	479	2.05%
Total	23,322	100.00%

Source: ABS Census 2001

Cranbourne SLA

Over a quarter of new residents who are employed, work within the manufacturing sector. Retail and wholesale trade account for a further 25 percent of new residents' jobs, whilst property and business services, construction, health and community services, transport and storage all had shares of between 5 and 9 percent. This reflects the situation in the broader Growth Region amongst both new residents and the overall employment structure of all residents.

Table 12: Industry of new residents in the workforce to Cranbourne SLA

In Migration	Total	%
Agriculture, Forestry and Fishing	42	0.68%
Mining	3	0.05%
Manufacturing	1,706	27.65%
Electricity, Gas and Water Supply	15	0.24%
Construction	382	6.19%
Wholesale Trade	580	9.40%
Retail Trade	940	15.24%
Accommodation, Cafes and Restaurants	174	2.82%
Transport and Storage	335	5.43%
Communication Services	147	2.38%
Finance and Insurance	176	2.85%
Property and Business Services	539	8.74%
Government Administration and Defence	103	1.67%
Education	165	2.67%
Health and Community Services	418	6.78%
Cultural and Recreational Services	122	1.98%
Personal and Other Services	198	3.21%
Non-Classifiable Economic Units	24	0.39%
Not stated	100	1.62%
Total	6,169	100.00%

Source: ABS Census 2001

5.1.6 In what occupation?

Casey – Cardinia Growth Region

Intermediate clerical, sales and service were the most common occupational level accounting for 18% of new residents. The next most prevalent occupation was tradespersons (16%), followed by intermediate production and transport workers, professionals, labourers, associate professionals and elementary clerical, sales and service workers. The levels of professionals amongst the new residents in the Growth Region is about half the level found across metropolitan Melbourne (see Figure 16), however it is slightly above the level found across current Growth Region's workforce, which includes the established resident population.

Table 13: Occupation of new residents to the Casey – Cardinia Growth Region

Occupation	Total	%
Managers and Administrators	1,340	5.75%
Professionals	2,762	11.84%
Associate Professionals	2,258	9.68%
Tradespersons and Related Workers	3,720	15.95%
Advanced Clerical and Service Workers	747	3.20%
Intermediate Clerical, Sales and Service Workers	4,094	17.55%
Intermediate Production and Transport Workers	3,172	13.60%
Elementary Clerical, Sales and Service Workers	2,157	9.25%
Labourers and Related Workers	2,563	10.99%
Inadequately described	212	0.91%
Not stated	297	1.27%
Total	23,322	100.00%

Source: ABS Census 2001

Cranbourne SLA

In the Cranbourne SLA intermediate production and transport workers, intermediate clerical, sales and service workers and tradepersons and related workers each accounted for over 1,000 new residents in Cranbourne SLA. Other significant occupations included labourers and related workers, elementary clerical sales and service workers, associated professionals and professionals. The percentage of new managers and administrators, 3.6 percent, is below the current proportion in the Casey – Cranbourne growth region (6.5 percent) (see Figure 16).

Table 14: Occupation of new residents to Cranbourne SLA

Occupation	Total	%
Managers and Administrators	221	3.58%
Professionals	517	8.38%
Associate Professionals	494	8.01%
Tradespersons and Related Workers	1,031	16.71%
Advanced Clerical and Service Workers	149	2.42%
Intermediate Clerical, Sales and Service Workers	1,048	16.99%
Intermediate Production and Transport Workers	1,089	17.65%
Elementary Clerical, Sales and Service Workers	606	9.82%
Labourers and Related Workers	873	14.15%
Inadequately described	65	1.05%
Not stated	76	1.23%
Total	6,169	100.00%

Source: ABS Census 2001

5.2 Population Outflow 1996 - 2001

It is impossible to know how many people have moved overseas, or to what countries, since 1996 because they will not have been included in the 2001 census.

5.2.1 Where have people gone?

Casey – Cardinia Growth Region

Greater Dandenong is also the most popular destination for residents moving from the Casey - Cardinia Growth Region, accounting for 11.15 percent. Other middle ring Eastern municipalities, Knox, Monash and Kingston, and the South-Eastern municipalities of Mornington Peninsula and Frankston all received over 1,000 residents from the area. Two Queensland LGAs were in the Top 20 LGAs to receive migrants from the Growth Region, Gold Coast and Brisbane, whilst no non-Victorian LGAs were in the top 20 when in migration was measured.

Table 15: Casey – Cardinia Growth Region Out Migration by the Top 20 LGAs

Greater Dandenong	2,510	11.15%
Frankston	1,946	8.64%
Knox	1,593	7.07%
Monash	1,503	6.67%
Mornington Peninsula	1,402	6.23%
Kingston	1,055	4.69%
Baw Baw	748	3.32%
Yarra Ranges	738	3.28%
Bass Coast	559	2.48%
Whitehorse	479	2.13%
Glen Eira	478	2.12%
Gold Coast	453	2.01%
South Gippsland	380	1.69%
Maroondah	364	1.62%
Stonnington	351	1.56%
Boroondara	326	1.45%
Brisbane	269	1.19%
Latrobe	238	1.06%
Port Phillip	238	1.06%
East Gippsland	233	1.03%
Rest of Australia	6,654	29.55%
Total	22,517	100.00%

Source: ABS Census 2001

Cranbourne SLA

The most popular destination for migrants from Cranbourne SLA was Frankston, which received 880 people, or 13 percent, over one hundred more people than Greater Dandenong, which received 717 people. The other leading destinations are middle ring Eastern and South Eastern municipalities. As with the broader Growth Region, there was outflow to the Queensland LGAs of Gold Coast and Brisbane amongst the top 20 LGAs, whilst there was no interstate LGAs in the inward migration to Cranbourne SLA.

Table 16: Cranbourne SLA Out Migration, by the Top 20 LGAs

Frankston	880	12.60%
Greater Dandenong	717	10.27%
Knox	453	6.49%
Mornington Peninsula	452	6.47%
Monash	374	5.36%
Kingston	331	4.74%
Bass Coast	216	3.09%
South Gippsland	196	2.81%
Yarra Ranges	180	2.58%
Baw Baw	163	2.33%
Gold Coast	146	2.09%
Whitehorse	140	2.00%
Maroondah	134	1.92%
Glen Eira	128	1.83%
Brisbane	85	1.22%
East Gippsland	83	1.19%
Latrobe	63	0.90%
Boroondara	51	0.73%
Stonnington	42	0.60%
Port Phillip	27	0.39%
Rest of Australia	2,122	30.39%
Total	6,983	100.00%

Source: ABS Census 2001

5.2.2 What family household type?

Casey – Cardinia Growth Region

Forty seven percent of those who moved from the Growth Region were in families with children. Twenty one percent were couples without children and 14 percent were in one parent families. Eight percent were in lone person households. The proportion of couple family with children was much less than out-migration than in the in-migration and current profile data. Hence people moving out of Casey- Cardinia tended to be older and further down the life-cycle.

Table 17: Casey – Cardinia Growth Region Out Migration by Household Type

Out Migration	Total	%
Couple family with children	10,513	46.69%
Couple family without children	4,658	20.69%
One parent family	3,079	13.67%
Other family	278	1.23%
Unrelated Individual in a family household	390	1.73%
Lone person household	1,872	8.31%
Group household	1,375	6.11%
Other household (c)	352	1.56%
Total	22,517	100.00%

Source: ABS Census 2001

Cranbourne SLA

Around half of people leaving Cranbourne SLA were within families with children. A further 17 percent were couples without children, whilst 16 percent of people were in one parent families, and seven percent were in lone person households.

Table 18: Cranbourne SLA Out Migration by Household Type

Out Migration	Total	%
Couple family with children	3,428	49.09%
Couple family without children	1,221	17.49%
One parent family	1,121	16.05%
Other family	88	1.26%
Unrelated Individual in a family household	124	1.78%
Lone person household	521	7.46%
Group household	368	5.27%
Other household (c)	112	1.60%
Total	6,983	100.00%

Source: ABS Census 2001

5.2.3 What dwelling structure?

Casey – Cardinia Growth Region

Three quarters of residents who left the Growth Region resided in separate houses, whilst one storey semi-detached and one or two story units also accommodated over 1,000 residents who had moved from the area. Six hundred and five people who left, resided in a two or more storey semi-detached dwelling.

Table 19: Casey – Cardinia Growth Region Out Migration by Dwelling Structure

Out Migration	Total	%
Separate house	17,148	76.16%
Semi-detached, row/terrace, townhouse etc one storey	1,334	5.92%
Semi-detached, row/terrace, townhouse etc two or more storeys	605	2.69%
Flat, unit or apartment in a one or two storey block	1,777	7.89%
Flat, unit or apartment in a three storey block	347	1.54%
Flat, unit or apartment in a four or more storey block	271	1.20%
Flat, unit or apartment attached to a house	42	0.19%
Caravan, cabin, houseboat	312	1.39%
Improvised home, tent, sleepers out	29	0.13%
House or flat attached to a shop, office, etc	125	0.56%
Not stated	184	0.82%
Not applicable (b)	343	1.52%
Total	22,517	100.00%

Source: ABS Census 2001

Cranbourne SLA

About four-fifths of residents who moved from Cranbourne SLA resided in separate houses; one or two storey dwellings housed 7 percent of those who left whilst one storey semi-detached housed 6 percent of residents who had moved out.

Table 20: Cranbourne SLA Out Migration by Dwelling Structure

Out Migration	Total	%
Separate house	5,540	79.34%
Semi-detached, row/terrace, townhouse etc one storey	437	6.26%
Semi-detached, row/terrace, townhouse etc two or more storeys	100	1.43%
Flat, unit or apartment in a one or two storey block	463	6.63%
Flat, unit or apartment in a three storey block	71	1.02%
Flat, unit or apartment in a four or more storey block	28	0.40%
Flat, unit or apartment attached to a house	21	0.30%
Caravan, cabin, houseboat	98	1.40%
Improvised home, tent, sleepers out	12	0.17%
House or flat attached to a shop, office, etc	47	0.67%
Not stated	54	0.77%
Not applicable (b)	112	1.60%
Total	6,983	100.00%

Source: ABS Census 2001

5.2.4 What age?

Casey – Cardinia Growth Region

The main age profile of those who moved from the Growth Region is in the 25-39 range, whilst 11 percent were aged 5-9, and are likely to have moved with their parents in the 25-39 age bracket.

Table 21: Age of residents who left Casey - Cardinia Growth Region

Out Migration		
Age	Total	%
5-9	2,430	10.79%
10-14	1,730	7.68%
15-19	1,420	6.31%
20-24	1,980	8.79%
25-29	2,773	12.32%
30-34	3,071	13.64%
35-39	2,462	10.93%
40-44	1,800	7.99%
45-49	1,282	5.69%
50-54	1,047	4.65%
55-59	740	3.29%
60-64	562	2.50%
65+	1,220	5.42%
Total 5+	22,517	100.00%

Source: ABS Census 2001

Cranbourne SLA

As with the broader the Growth Region, the main age profile of those who moved from Cranbourne SLA is in the 25-39 range, whilst 11 percent were aged 5-9.

Table 22: Age of residents who left Cranbourne SLA

Out Migration		
Age	Total	%
5-9	924	13.23%
10-14	596	8.54%
15-19	434	6.22%
20-24	491	7.03%
25-29	769	11.01%
30-34	1,041	14.91%
35-39	829	11.87%
40-44	565	8.09%
45-49	363	5.20%
50-54	285	4.08%
55-59	192	2.75%
60-64	164	2.35%
65+	330	4.73%
Total 5+	6,983	100.00%

Source: ABS Census 2001

5.2.5 Employed in which industry?

Casey – Cardinia Growth Region

Eighteen percent of those in the workforce who left the Growth Region worked in manufacturing. Retail trade accounted for 16 percent, and property and business services employed 11 percent. Other sectors which employed between 600 and 1,000 people included health and community services, construction and wholesale trade.

Table 23: Industry of residents in the workforce who left Casey – Cardinia Growth Region

Out Migration	Total	%
Agriculture, Forestry and Fishing	197	1.64%
Mining	24	0.20%
Manufacturing	2,149	17.90%
Electricity, Gas and Water Supply	73	0.61%
Construction	876	7.30%
Wholesale Trade	876	7.30%
Retail Trade	1,890	15.75%
Accommodation, Cafes and Restaurants	575	4.79%
Transport and Storage	453	3.77%
Communication Services	304	2.53%
Finance and Insurance	465	3.87%
Property and Business Services	1,370	11.41%
Government Administration and Defence	334	2.78%
Education	517	4.31%
Health and Community Services	929	7.74%
Cultural and Recreational Services	245	2.04%
Personal and Other Services	519	4.32%
Non-Classifiable Economic Units	75	0.62%
Not stated	132	1.10%
Total	12,003	100.00%

Source: ABS Census 2001

Cranbourne SLA

Over a fifth of residents who left Cranbourne SLA in the labour force worked in manufacturing, 16 percent in retail trade and 10 percent in property and business services. This broadly reflects the situation in the wider Growth Region.

Table 24: Industry of residents in the workforce who left Cranbourne SLA

Out Migration	Total	%
Agriculture, Forestry and Fishing	32	0.92%
Mining	9	0.26%
Manufacturing	716	20.51%
Electricity, Gas and Water Supply	18	0.52%
Construction	248	7.10%
Wholesale Trade	276	7.91%
Retail Trade	555	15.90%
Accommodation, Cafes and Restaurants	144	4.12%
Transport and Storage	152	4.35%
Communication Services	107	3.07%
Finance and Insurance	117	3.35%
Property and Business Services	339	9.71%
Government Administration and Defence	88	2.52%
Education	128	3.67%
Health and Community Services	260	7.45%
Cultural and Recreational Services	91	2.61%
Personal and Other Services	149	4.27%
Non-Classifiable Economic Units	24	0.69%
Not stated	38	1.09%
Total	3,491	100.00%

Source: ABS Census 2001

5.2.6 In what occupation?

Casey – Cardinia Growth Region

Intermediate clerical, sales and service workers was the dominant occupational category in relation to individuals leaving the Casey – Cardinia growth region. They accounted for 18 percent of total people leaving the area. Professionals accounted for 16%, associate professionals 14%, and tradespersons and related workers 13%.

Table 25: Occupation of residents in the workforce who left Casey – Cardinia Growth Region

Occupation	Total	%
Managers and Administrators	944	7.86%
Professionals	1,863	15.52%
Associate Professionals	1,672	13.93%
Tradespersons and Related Workers	1,589	13.24%
Advanced Clerical and Service Workers	447	3.72%
Intermediate Clerical, Sales and Service Workers	2,213	18.44%
Intermediate Production and Transport Workers	1,098	9.15%
Elementary Clerical, Sales and Service Workers	1,111	9.26%
Labourers and Related Workers	913	7.61%
Inadequately described	75	0.62%
Not stated	78	0.65%
Total	12,003	100.00%

Source: ABS Census 2001

Cranbourne SLA

A fifth of residents in the workforce who left Cranbourne SLA were intermediate clerical, 14 percent were tradespersons and professionals, and 12 percent were associate professionals and intermediate production and transport workers.

Table 26: Occupation of residents in the workforce who left Cranbourne SLA

Occupation	Total	%
Managers and Administrators	203	5.81%
Professionals	478	13.69%
Associate Professionals	423	12.12%
Tradespersons and Related Workers	484	13.86%
Advanced Clerical and Service Workers	90	2.58%
Intermediate Clerical, Sales and Service Workers	694	19.88%
Intermediate Production and Transport Workers	418	11.97%
Elementary Clerical, Sales and Service Workers	347	9.94%
Labourers and Related Workers	304	8.71%
Inadequately described	21	0.60%
Not stated	29	0.83%
Total	3,491	100.00%

Source: ABS Census 2001

6 Residential Property Market Analysis

Victoria in Future (2004) projected a requirement for an additional 32,000 dwellings in Casey over the next 15 years with an annual average dwelling growth rate of 2.4%. Another 21,000 dwellings are proposed within the growth area of Cardinia and an additional 50,300 expected in the non growth area municipalities in the south region of Bayside, Franskton, Glen Eira, Greater Dandenong, Kingston and Mornington Peninsula.

6.1.1 Context

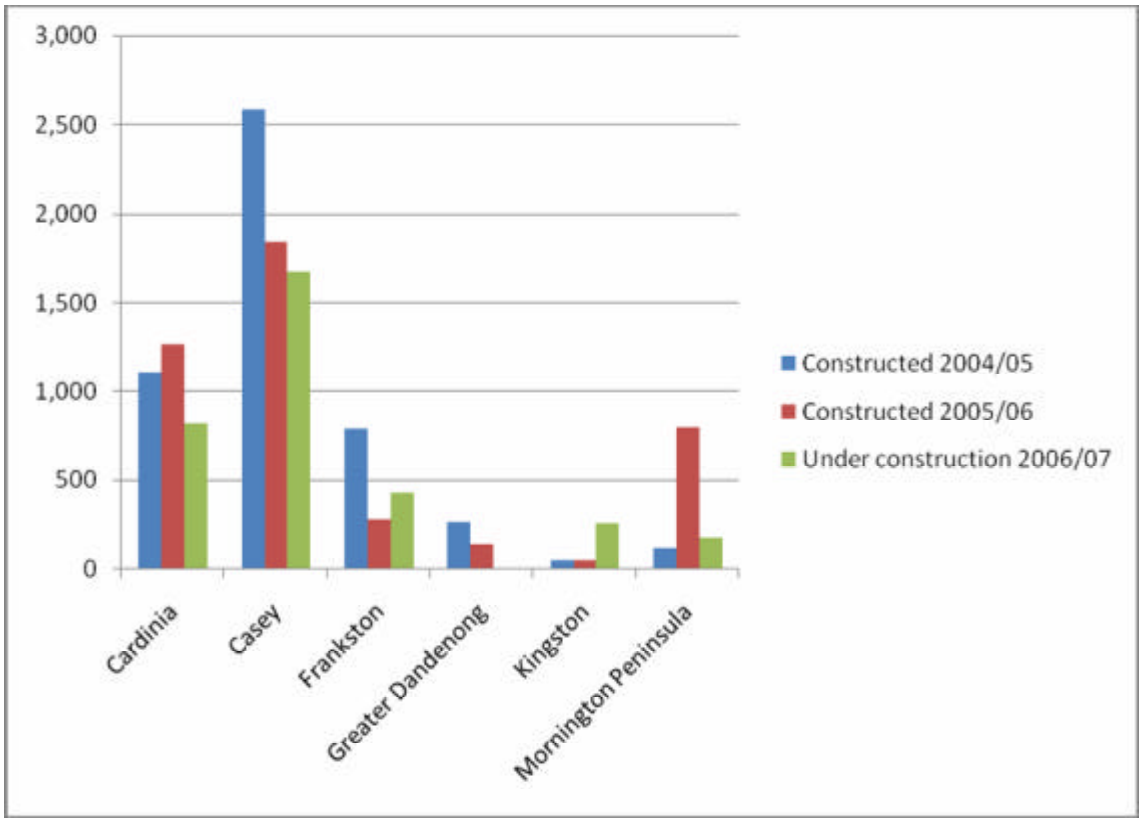
Residential development in East Cranbourne has been occurring at a rapid rate with key developments around the local area including:

- **Brookford Estate**. This development is currently under construction and lies to the north of the Cranbourne Estate development. The estate provides for small to conventional lot sizes of approximately 400-600 sq m.
- **Brindalee Residential Estate** lies to the north east of Cranbourne and is under construction.
- **Hunt Club Estate** is partially developed and the later stages are now under construction. When the estate is complete, there will be approximately 1,800 dwellings with the majority being sold before reaching the market. This will ultimately adjoin the Collison Estate at Mayfield Road. As part of this development, a new arterial road is proposed to run north-south directly to the west of Mayfield Road.
- **Blue Hills Retirement Village**. The 248 unit Retirement Village is under construction, and will consist of units, pairs of single storey attached dwellings for independent living, and 16 single storey apartments. The development also includes recreation facilities such as a bowling green, tennis court, craft centre and library. An expansion is proposed to a site across the Berwick – Cranbourne Road, and this will feature a 6 hole golf course.

6.1.2 Recent Construction Rates

According to DSEs UDP Annual Report 2006, between the years of 2004/05 and 2005/06, Casey accounted for 48% of all constructed broadhectare lots in the south region with a total of 4,420 lots being constructed. This equates to an average construction rate of 1,185 lots per annum over this period. Figure 20 below shows recent broadhectare activity in Casey relative to other Local Government Areas in the South Region.

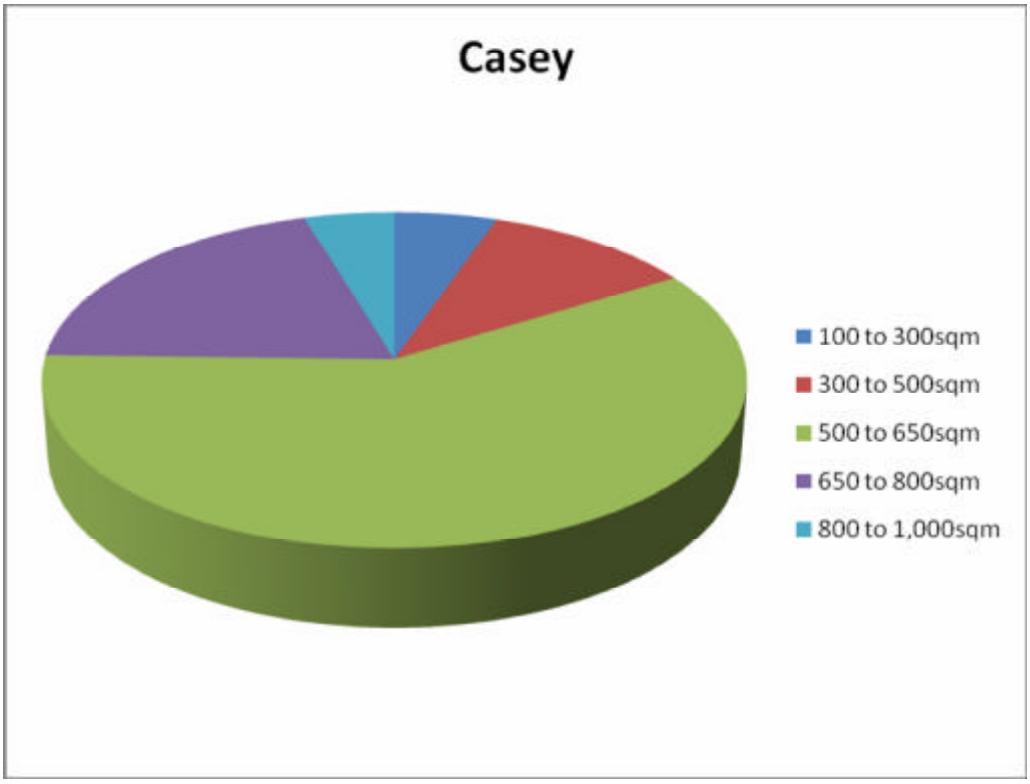
Figure 20: Recent Broadhectare Activity in South Region



Source: Department of Sustainability and Environment 2006, Internal Database (UDP)

Figure 21 below indicates that the majority of recently constructed lots in Casey – around 59% - have been within the 500 to 650 sqm range. 20 percent of lots developed have been within the 650 to 800 sqm range and 11 percent within the 300 to 500sqm range.

Figure 21: Broadhectare Lot Size Profile for Casey

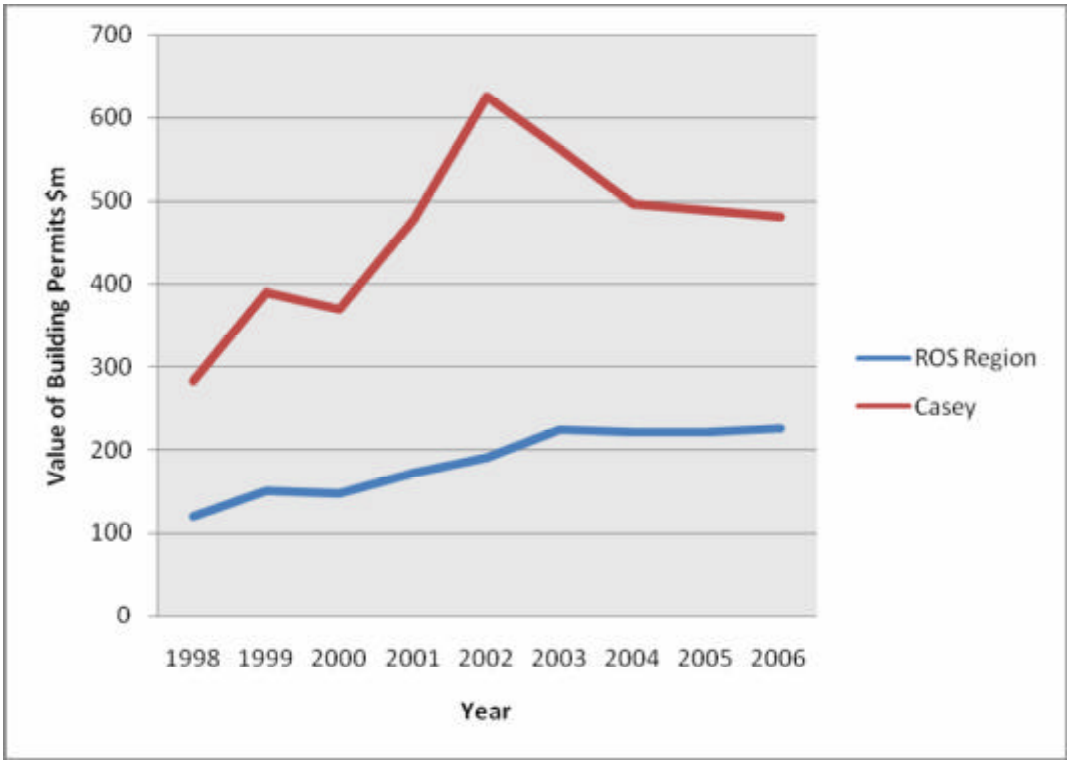


Source: Department of Sustainability and Environment 2006, Internal Database (UDP)

6.1.3 Value of Construction

The value of new domestic[2] building work in Casey has increased between 1998 and 2006 from $283.7 million to $480.1 million. The value of construction in Casey peaked in 2002 following which it has been in decline. Across the whole of this period, the value of building work in Casey has been significantly higher than the average for the rest of the south (ROS) region[3]. In 2006, for example the value of building work in Casey was 113% higher than for the Rest of the South Region.

Figure 22: Value of Domestic Building Permits ($m)



Source: PULSE Buildings Permit Data, 2007

[2] Defined as one or more buildings which in association constitute a single dwelling such as a detached house, one or more attached dwelling.

[3] Defined as Glen Eira, Bayside, Cardinia, Frankston, Greater Dandenong, Kingston, Mornington Peninsula

Table 27 below compares the value and number of domestic permits for Casey and the Rest of the South Region. This again highlights the fact that the number of building permits for new homes is higher for Casey than for the rest of the south region average across the whole period between 1998 and 2006. For both areas, the number of permits has fluctuated across the whole period with the number for the rest of the south region fluctuating around the 2,000 mark and Casey experiencing greater fluctuations between 4,189 and 6,126.

Table 27: Value and Volume of Domestic Building Permits

	ROS Region Average		Casey	
	No of Permits	**Value $m**	**No of Permits**	**Value $m**
1998	1857	120.3	4189	283.7
1999	2096	150.5	5101	390.5
2000	1966	147.1	4741	369.4
2001	2037	171.8	5394	477.7
2002	2055	191.1	6126	625.0
2003	2124	223.3	5516	562.4
2004	1998	220.5	4817	496.5
2005	1874	221.7	4504	487.7
2006	1910	225.6	4366	480.1

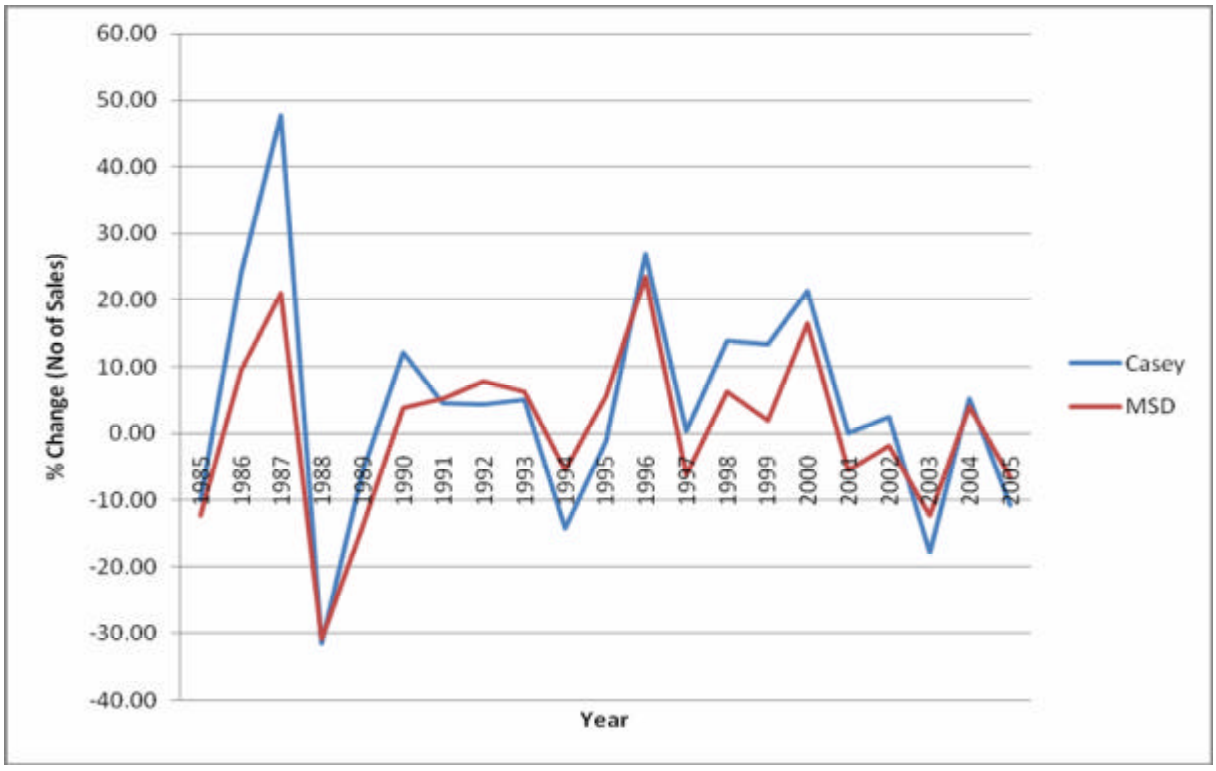
Source: PULSE Buildings Permit Data, 2007

6.1.4 Residential Sales Data

Trends in House Sales

During the early 1990s, the Melbourne SD had higher growth rates of **house sales** than Casey. This changed in the mid to late 1990s where Casey recorded high house sale growth rates, greater than the other areas. Between 2000 and 2001 for example, house sales in Casey increased by 21% compared to 17% for Melbourne SD. A slump across all regions was noted in 2003 and again in 2006 with sales in Casey declining by 11%.

Figure 23: Change in House Sales (%)

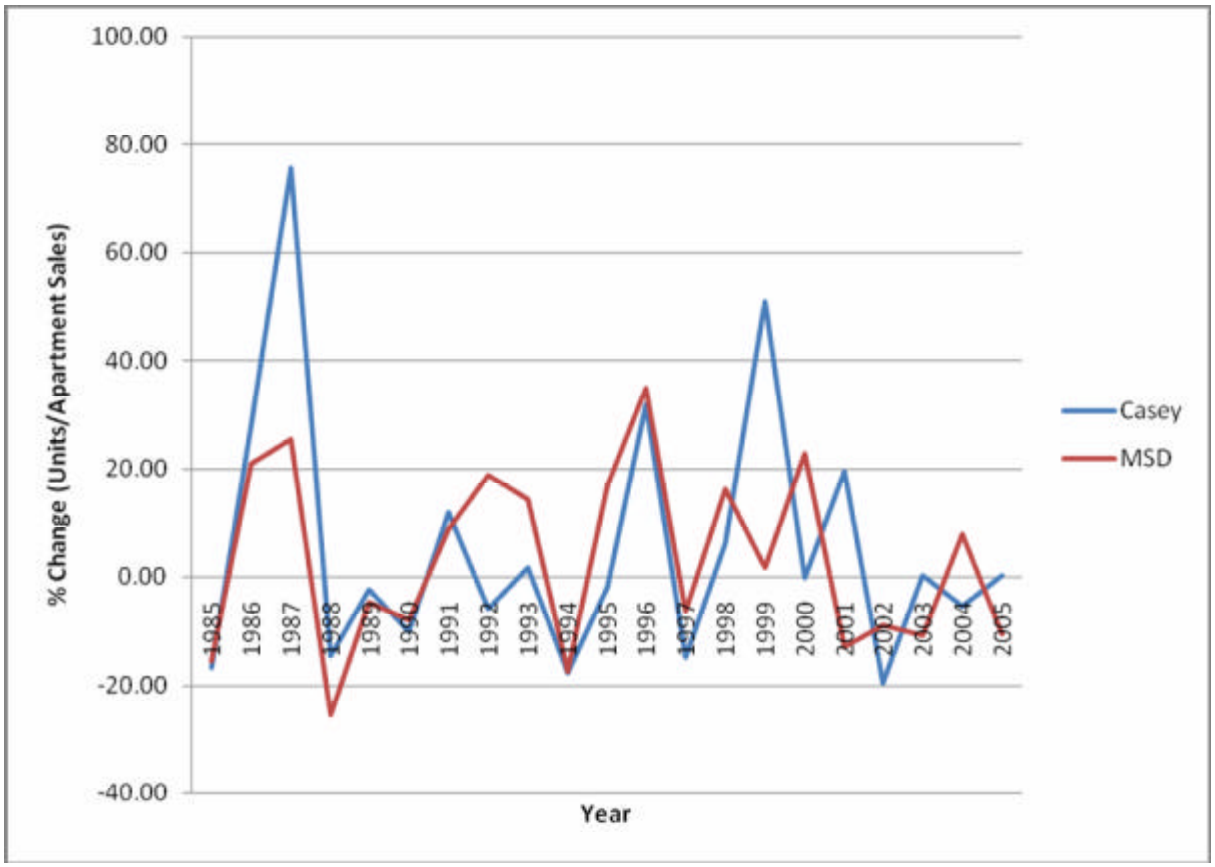


Source: Valuer General Time Series Data, 2006

Trends in Unit/Apartment Sales

A similar trend to that above is shown for the sale of Units/Apartments with Casey experiencing a rapid increase in sales in the 1980's, followed by a slower rate of change in the 1990's until 1999 when the rate increased substantially. Early on in this decade, Casey experienced declining sales again but 2005 figures suggest a minor increase in sales for Casey whilst Melbourne SD experienced a decline. It is worth noting however that because there are proportionately less units/apartments in Casey, the rate of change can be heavily influenced by one or two large developments coming on to the market.

Figure 24: Change in Unit/Apartment Sales (%)

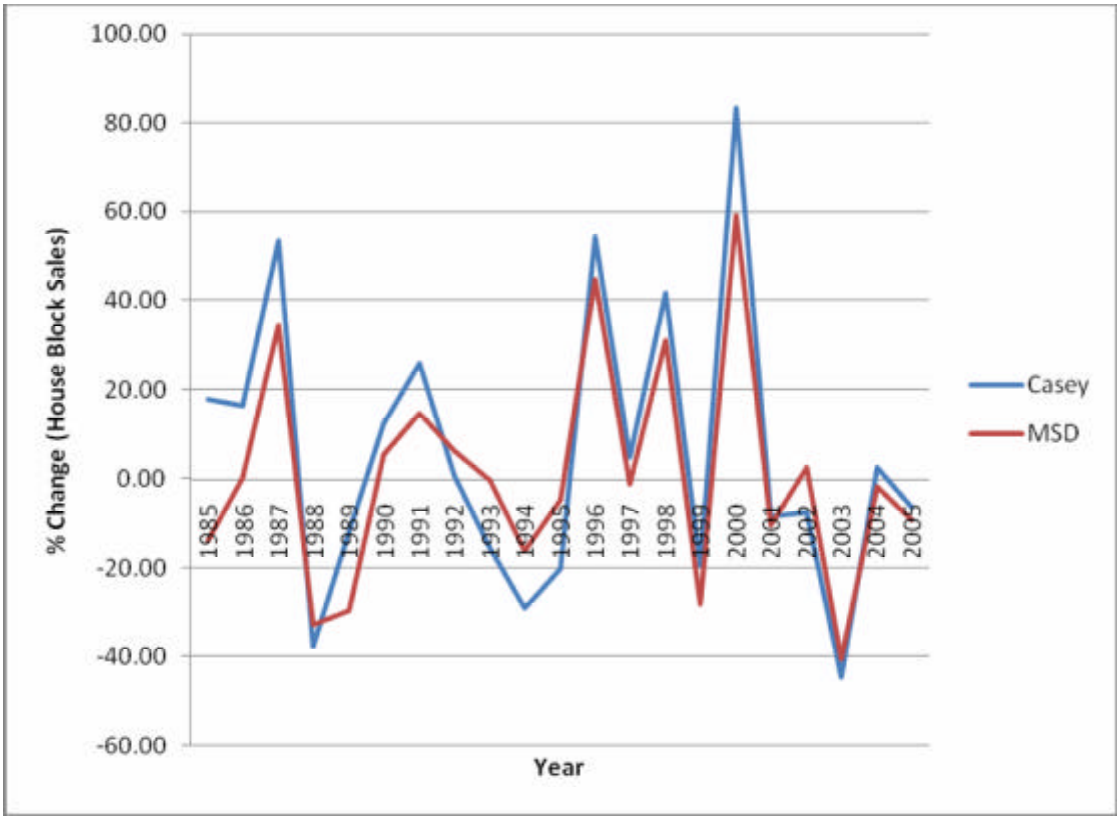


Source: Valuer General Time Series Data, 2006

Trends in House Land Block Sales

Casey and Melbourne SD experience similar trends in house land block sales between 1985 and 2005. Casey had the greatest percentage change in house land block sales in the mid-1980s but during the 1990s it was below the level witnessed across the MSD until 1996, when the rate increased more sharply. Following a decline in sales in 2003 for both Casey and the MSD, levels increased in 2004 and then marginally declined again in 2005.

Figure 25: Change in House Land Block Sales (%)

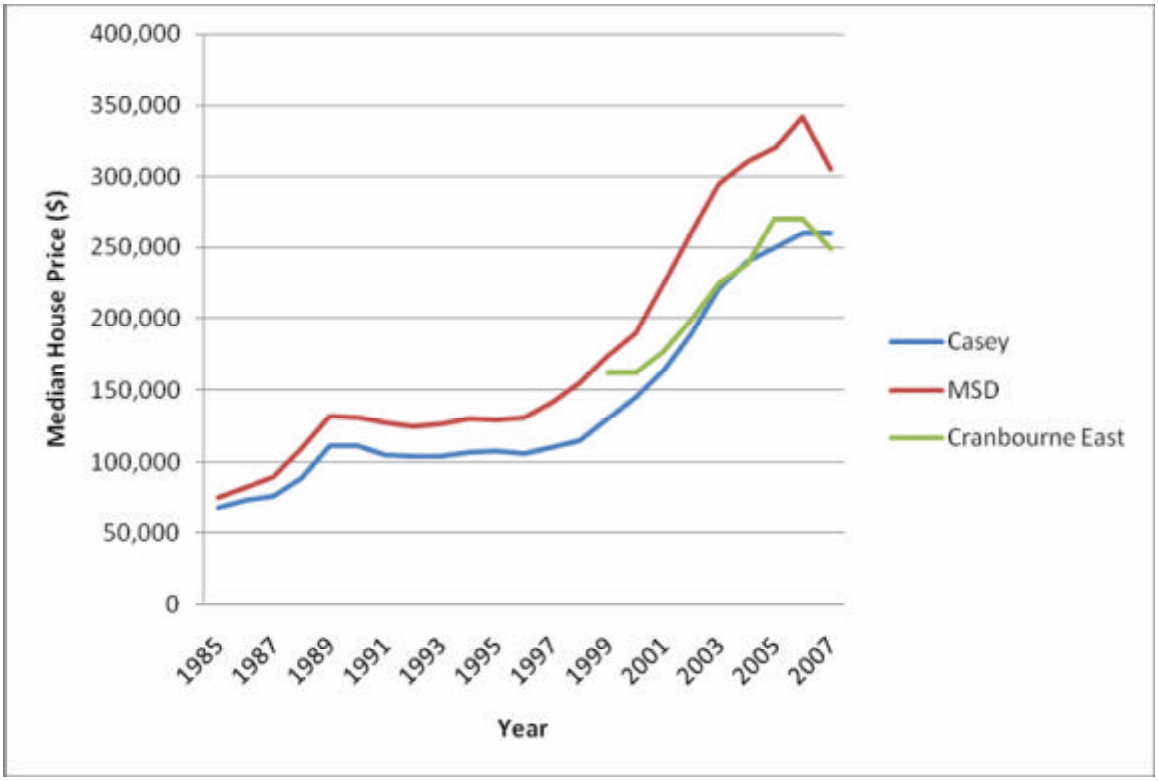


Source: Valuer General Time Series Data, 2006

Median House Prices

All three areas follow a similar trend, with median house prices for the Cranbourne East suburb generally being marginally above those for Casey and those for the Melbourne SD being above those for both Casey and Cranbourne East. The gap between house prices across the Melbourne SD and the other two areas has increased during the period. In 2006, the median house price in Cranbourne East was $270,000, compared to $260,000 for Casey and $342,000 for the MSD.

Figure 26: Median House Prices

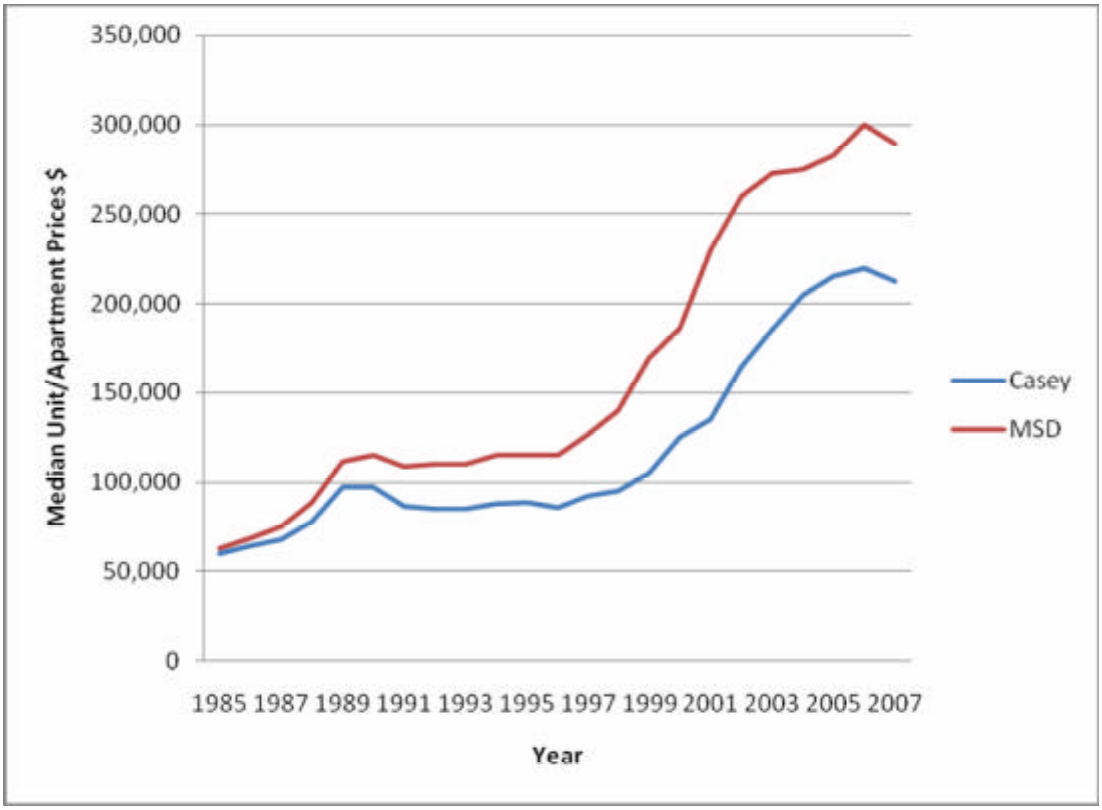


Source: Valuer General Time Series Data, 2006

Median Unit/Apartment Prices

The trend in median unit/apartment prices mirrors that of median house prices (although data isn't available for Cranbourne East). Median house prices were similar for Casey and the MSD in 1985 and whilst these have grown substantially, the gap between the two has grown considerably. In 1985 the median price of an apartment in Casey was $59,900 whilst in 2006 it is $220,000 but the MSD median price increased from $63,000 in 1985 to $300,000 in the same period.

Figure 27: Median Unit/Apartment Prices

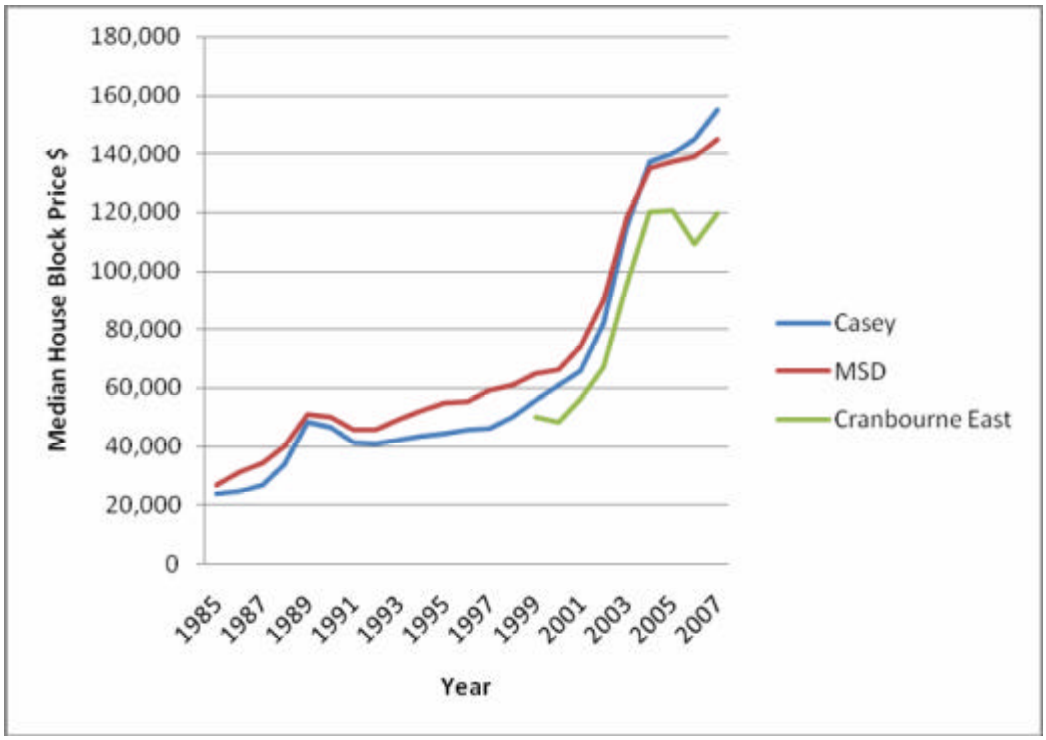


Source: Valuer General Time Series Data, 2006

Median Vacant House Block Prices

The trend in median vacant house block prices is different to the other two categories analysed, as Casey follows the metropolitan prices much more closely, rising from $24,000 in 1985 to $145,000 in 2006, whilst across the MSD it rose from $26,700 in 1985 to $139,000 in 2006. This is likely to be much closer because the majority of vacant house blocks are likely to be in outer suburban municipalities similar to Casey. Unlike house prices, median house block prices for Cranbourne East are below those for Casey and the MSD across the period and stood at $109,000 in 2006.

Figure 28: Median Vacant House Block Prices



Source: Valuer General Time Series Data, 2006

6.1.5 Retirement Village Sector

A recent report by Jones Lang La Salle[4] suggests that there has been an increasingly strong demand for aged care facilities and retirement villages in the 18 to 24 months leading up to September 2006 with compressed yields of 1.5% and 3.0% respectively. The main factors driving the market are thought to be as follows:

- **Ageing population nationally**. The ageing population is the main catalyst for growth in the aged care and retirement living sectors. The proportion of and numbers of people aged over 65 years is expected to grow even further over the next 25 to 50 years and as such the aged care and the retirement living sector is expected to grow to meet this increased demand.
- **Regulatory Changes**. The Hogan report[5] recommendations for improving the provision of resident care and commercial returns to operators have given many operators and investors the confidence to proceed with development and/or acquisition strategies.
- **Re-weighting of the Industry Risk Profile**. The risk profiles of the aged care sector have been re-weighted from high risk to a medium level of risk.
- **Entry and Consolidation of Major Players**. The growth of established operators such as DCA/Amity in the aged care sector and KFP in the retirement living sector, together with the entry of new major players such as Macquarie Bank and MFS has contributed to the interest in these sectors and to their emergence as asset classes in their own right.
- **Lower interest rates**. The lower interest rates often mean that higher prices are being paid as long as the returns adequately cover the cost of debt and provide an acceptable return on equity.

Another research paper by Jones Lang La Salle[6] suggests that the market for retirement villages is changing with a shift in resident expectations and that this is set to change even further with the even greater expectations held by Baby Boomers when the main influx occurs in 12 to 17 years. It suggests that a large component of existing retirement village stock was constructed in the 1960's and 1970's and faces the risk of obsolescence before the first wave of baby boomers even reach retirement age. Tomorrow's retirement villages will need to include services such as a cafe, theatrette, serviced offices, well-being centre and a financial advisor and activities co-ordinator to meet the needs of the baby boomers, according to Jones Lang La Salle.

The implications it suggests are clear, either operator and owners budget for total redevelopment in a shorter timeframe than in the past or develop strategies that will enable old stock to be upgraded without seriously disrupting cash flow. The incorporation of more flexible building designs into future accommodation must be a consideration.

[4] Yield Compression in the Aged Care and Retirement Village Sectors, Jones Lang La Salle, September 2006

[5] The Hogan Report , a Review of Pricing Arrangements in Residential Aged Care for the department of Health and Ageing, April 2004

[6] Retirement Villages: will the current product satisfy Baby Boomers needs? Jones Lang La Salle, November 2006

7 Modelling

Modelling future housing demand for a local or regional area is a three step procedure.

In the first step, a population forecast for the area is calculated, or in this case was obtained from the Department of Sustainability and Environment (DSE). The population forecast is broken down by age group and hence allows for age/population shifts, lifestyle changes and the impact on dwelling demand to be accounted for by the model.

The second step transforms the population forecast into detailed household forecasts. As the type of households one lives in is a predictor of the dwelling type one requires, thus household forecasts are an important intermediary step between population and dwelling forecasts.

The third step then estimates the demand for various dwellings based on household growth and movements between one household type and another. Because the model thus far does not account for shifts in dwelling preferences in the future (except as reflected in historical trends), an alternative forecast was undertaken at step 3, based on the change in dwelling preference observed in Berwick SLA between 1996 and 2001. This revealed a slight shift in preference to semi-detached/townhouse dwellings. This is in synchrony with Melbourne 2030, particularly policy 2.2, which advocates for increasing residential densities in Greenfield locations, which will result in a greater range of dwelling types, including semi-detached/townhouses.

7.1 Population Forecast

The leading inputs into the Future Housing Demand Model are population projections. Projections have been calculated for Cranbourne SLA by the Department of Sustainability and Environment (DSE) through their *Victoria in Future* program and are shown in the table below. It is estimated that between 2001 and 2031, the population of Cranbourne SLA will increase by 78,583 individuals with the dominant age group being 30 – 49 in 2031. As discussed in Appendix B, the methodology for *Victoria in Future (VIF)* considers land and development capacity which is used to constrain their forecasts.

Table 28: Victoria in Future Population Projections for Cranbourne SLA

	Year							2031	2031 -
Age Group	**2001**	**2006**	**2011**	**2016**	**2021**	**2026**	**2031**	**%**	**2001**
0-4	4,694	5,561	6,240	7,210	8,357	8,938	8,823	6.8%	4,129
5-9	5,043	4,871	5,633	6,149	7,103	8,236	8,792	6.8%	3,749
10-14	4,283	5,368	5,118	5,716	6,218	7,164	8,282	6.4%	3,999
15-19	3,726	4,934	5,951	5,505	6,002	6,451	7,331	5.6%	3,605
20-24	3,476	5,809	6,840	7,670	6,827	7,071	7,232	5.6%	3,756
25-29	4,045	6,067	8,423	9,560	10,009	8,901	8,689	6.7%	4,644
30-34	4,813	4,626	6,597	8,792	9,886	10,296	9,117	7.0%	4,304
35-39	4,797	5,091	4,833	6,633	8,807	9,888	10,280	7.9%	5,483
40-44	4,233	5,302	5,556	5,150	6,884	9,007	10,032	7.7%	5,799
45-49	3,329	4,894	5,863	5,925	5,462	7,126	9,163	7.0%	5,834
50-54	2,723	4,146	5,552	6,311	6,260	5,733	7,298	5.6%	4,575
55-59	1,806	3,516	4,769	5,971	6,627	6,497	5,893	4.5%	4,087
60-64	1,324	2,317	3,779	4,845	5,993	6,616	6,461	5.0%	5,137
65-69	1,033	1,967	2,759	3,970	4,962	6,032	6,592	5.1%	5,559
70-74	927	1,393	2,183	2,771	3,908	4,844	5,850	4.5%	4,923
75-79	677	1,270	1,635	2,184	2,704	3,728	4,565	3.5%	3,888
80-84	378	843	1,219	1,378	1,854	2,307	3,186	2.4%	2,808
85 and over	241	959	1,277	1,394	1,581	2,012	2,544	2.0%	2,303
Total	51,548	68,934	84,227	97,134	109,445	120,847	130,131	100.0%	78,583

Source: Department of Sustainability and Environment (2004) Victoria in Future data

Consultation with DSE has revealed that after monitoring recent population growth in Cranbourne SLA, the VIF data does not need to be amended to incorporate green field development in the area because they believe the forecasts to be optimistic for the area. This growth has been factored into the VIF data and therefore no further adjustments are required for the Cranbourne East growth area.

7.2 Forecasting Individuals and their Household Types

The propensity to belong to a particular household is expected to change over time with decreasing fertility rates and lifestyle choices that result in the decreasing prevalence of traditional family units composing of a mother, a father and children. However within Cranbourne SLA these changes are likely to be less widespread than across the broader metropolitan area as the Growth Areas are attractive to young families because of cheaper land and house prices. For example, in Cranbourne SLA, the number of people living in 'couple families with children' increased by 1,765 between 1996 and 2001 (see Table 42 and Table 43 in Appendix A). However the greatest increases were of:

- individuals living in a 'one parent' household, which increased by 1,810; and
- individuals in 'lone person' households increased by 741.

The extent that fragmentation of the traditional family unit will continue into the future is uncertain and difficult to estimate. This future housing demand model assumes that the probability of a person in a particular age group having a particular household characteristic will continue to change until 2011 (based on observed difference in the inter-censal period between 1996 & 2001), following which it is assumed to remain constant to 2031.

Even with the above assumption, family type and relationships in households will still change after 2011 due to underlying demographic changes (e.g. an ageing population, population inflow, population outflow, births and deaths).

The results of the forecasts (i.e. the number of individuals in a particular household type) are shown in Appendix A, Table 44 to Table 50 . Table 44 is the model's projections for 2001 and is different from Census 2001 data (Table 43) as the former uses DSE's estimated resident population and does not undercount due to households being unavailable on Census night. A summary of the forecasts is provided in Table 29 below.

Table 29: Cranbourne SLA Individuals by their Household Type Forecasts

	2001	2006	2011	2016	2021	2026	2031	2031 - 2001
Couple family with children	31,335	38,260	43,485	49,201	54,819	60,058	64,110	32,775
Couple family without children	7,083	9,960	12,051	14,712	17,095	19,139	20,860	13,777
One parent family	7,294	10,846	14,588	16,528	18,317	20,052	21,412	14,118
Other family	353	549	760	890	987	1,084	1,185	831
Unrelated individual living in family household or group household member	1,432	2,065	2,695	3,095	3,411	3,652	3,850	2,418
Lone person	2,929	4,841	6,648	7,962	9,316	10,633	11,851	8,922
Not applicable(a) - Mainly Non-Private Dwellings	1,122	2,412	4,000	4,746	5,500	6,230	6,864	5,742
Total	**51,548**	**68,934**	**84,227**	**97,134**	**109,445**	**120,847**	**130,131**	**78,583**

Source: SGS Economics and Planning Calculations

As expected, the model predicts that all types of household are increasing across both scenarios, with the highest growth in real terms seen in families with children. Proportionately there is also a significant increase in the quantum of one parent families, which increases by 14,118 over the period from 2001 to 2031.

From the above estimates of the number of individuals in a particular household, the number of households can be derived. This necessitates the following basic assumptions:

- The number of couple family with children households = The number of individuals who are husbands, wives or partners (in a couple family with children) divided by two.
- The number of couple family without children households = The number of individuals who are husbands, wives or partners (in a couple family without children) divided by two.
- The number of one parent family households = The number of lone parent individuals
- The number of lone person households = The number of lone person individuals.

However, estimating the number of other family households and group households was not as straightforward. The first step was to calculate the average household sizes for these two household categories from ABS Census 2001. The number of future households was then estimated by dividing the number of forecasted individuals living in these two household categories by their respective household size[7].

Results from this part of the model, (see Appendix A, Table 44 to Table 50) have been summarised in Table 30 below.

Table 30: Cranbourne SLA Household Number Forecasts

	2001	2006	2011	2016	2021	2026	2031	2001 - 2031
Couple family with children	7,745	9,674	11,365	13,190	15,025	16,441	17,589	9,843
Couple family without children	3,464	4,863	5,894	7,200	8,363	9,349	10,171	6,707
One parent family:	2,663	4,215	6,045	7,082	8,042	8,780	9,394	6,731
Other family	170	265	366	429	476	522	571	401
Group household member	446	652	864	1,000	1,111	1,194	1,261	815
Lone person	2,929	4,841	6,648	7,962	9,316	10,633	11,851	8,922
Total (Private Market)	17,417	24,510	31,182	36,862	42,333	46,920	50,835	33,419

Source: SGS Economics and Planning Calculations

[7] Note that these two household categories only account for a small proportion of total households.

7.3 Dwelling Structure Forecast

7.3.1 Cranbourne SLA

The third step in the model was to estimate the demand for different dwelling types given that we have approximations on household numbers in the future. The propensity for a particular household/family to live in a particular dwelling in Cranbourne SLA can be determined from ABS Census data 1996 and 2001 (see Table 51 and Table 52 in Appendix A).

Analysing 2001 data (Table 52), it is not surprising to see that the vast majority of couple family with children (98%) live in separate houses. This is not only due to the availability and affordability of land and houses on the urban frontier, but also the style preferences and space requirements of this household type. Couples/family without children in Cranbourne SLA are instead more open to living in medium density accommodation (semi-detached, row or terrace house, townhouse or flat, units or apartments) with 9% of households living in such accommodation in 2001.

Between 1996 and 2001 Cranbourne SLA does not exhibit substantial changes in the proportions of household living in a certain type of dwelling. In other words the dwelling preferences of households have by and large have not changed extensively between 1996 and 2001.

The future housing demand model undertaken assumes that propensity of households to live in 'other dwelling types[8]' will remain at their 2001 propensity. It is not expected that preferences for these types of accommodation will change into the future. For the detached house, semi-detached row or terrace house, townhouse, flat, unit or apartments categories, it was assumed that household taste preferences are similar to 2001, but with the subtle variations between 1996 and 2001, extrapolated linearly to 2031.

Detailed results for the model are shown in Table 53 - Table 59 and the summary results are provided in Table 31. Appendix C also presents detailed definitions of the dwellings listed below.

Table 31: Demand for Dwellings, Cranbourne SLA

Dwelling Type	2001	2006	2011	2016	2021	2026	2031	2031 - 2001
Separate House	15,847	22,113	27,951	33,321	38,247	42,200	45,531	29,684
Semi-Detached, Row or Terrace, Townhouse	250	440	708	1,000	1,338	1,693	2,056	1,806
Flat, Unit or Apartment	1,302	1,933	2,494	2,898	3,243	3,518	3,736	2,434
Other Dwelling	18	24	29	34	39	43	46	28
Total	**17,417**	**24,510**	**31,182**	**37,252**	**42,867**	**47,454**	**51,369**	**33,953**

Source: SGS Economics and Planning Calculations

[8] Caravan, cabin, houseboat, improvised home, tent, sleepers out, house or flat attached to a shop, office, etc.

7.3.2 Berwick Scenario

This dwelling demand projection uses the same method as the Cranbourne SLA with one major change. Instead of being based on the changes in dwelling preference observed in Cranbourne SLA between 1996 and 2001, it was decided to base the change in dwelling preference in Berwick SLA over the same period, (see Table 60 and Table 61 in Appendix A).

This was undertaken because an increase in dwelling diversity in Berwick SLA was observed between 1996 and 2001. Given that increasing dwelling diversity is an objective of Melbourne 2030, C21 and the Cranbourne East Development Plan it was decided to model this change in preference using the projected Cranbourne population. The model therefore projects that Cranbourne will have a higher diversity of dwelling stock than if the current trends were to continue.

The model requires 2001 census data from the ABS Extended Community Profile which is only available at SLA scale and above, therefore Berwick SLA data was used. Detailed results for the model are shown in Table 62 - Table 68 and the summary results are provided in Table 32.

Table 32: Demand for Dwellings, Cranbourne SLA: Berwick Scenario

Dwelling Type	2001	2006	2011	2016	2021	2026	2031	2031 - 2001
Separate House	15,962	22,355	28,065	32,805	37,263	40,831	43,745	27,783
Semi-Detached, Row or Terrace, Townhouse	844	1,631	2,511	3,372	4,311	5,271	6,229	5,384
Flat, Unit or Apartment	503	357	389	438	482	517	543	40
Other Dwelling	106	165	214	244	272	295	314	208
Total	**17,415**	**24,508**	**31,180**	**36,859**	**42,329**	**46,916**	**50,830**	**33,415**

Source: SGS Economics and Planning Calculations

8 Building Envelope Review

8.1 Lot Size

In the planning of the Cranbourne East B Study Area no specific dwelling density targets have been set by Council. The Cranbourne East Development Plan indicates that the southern portion of the site could offer acre lots, approximately 4,000 sq m, which as Table 36 indicates only yields 2 dwellings per hectare. The Development Plan also suggests a buffer for the land immediately to the east of the Collison Estate, with lots of 1,000 sq m, which would yield 8 dwellings per hectare.

Table 33 indicates how dwelling densities are derived from lot sizes on a per hectare basis, with a hectare of 800 sq m lots producing 10 dwellings, the average density of residential development identified in growth areas by Melbourne 2030 and deemed to be too low. If the Melbourne 2030 target figure of 15 dwellings per hectare is to be obtained, an average lot size of 533 sq m is required.

Table 33: Lot Size and Density

		Assumptions
Developable Land	10,000 sq m	*For land set aside for urban development**
Public Domain	2,000 sq m	*Assumed 20% allowance for roads and parks*
Net Land for Development	8,000 sq m	

Dwellings Per Hectare	Lot Size
2	4,000 sq m
8	1,000 sq m
10	800 sq m
13	615 sq m
14	571 sq m
15	533 sq m
16	500 sq m
18	444 sq m
20	400 sq m

**'Net of 'take outs' for environmental assets*

Lots of 600 sq m, which have been proposed in the population forecasting used in the Economic Analysis – Draft Specialist Report would yield approximately 13 dwellings per hectare whilst some higher density development of 400 sq m would yield 20 dwellings per hectare.

8.2 Building Envelope

Data on average floor area of new houses shows growth over the past two decades or so, even in the context of falling household size. This suggests that people's expectations have changed with respect to their homes, with more floorspace being an important factor.

Table 34: Average Floor Area of New Residential Buildings (Australia), 1984-85 - 2002-03

	1984-85	1993-94	2002-03	Change 1984-85 to 2002-03	Change 1993-94 to 2002-03
	sqm	sqm	sqm	%	%
New houses	162.2	188.7	227.6	40.3	20.6
New other residential buildings	99.2	115.9	134	35.2	15.6
All new residential buildings	149.7	171.1	205.7	37.4	20.2

Source: ABS Building Activity Survey.

Using 228 sqm as the benchmark new home size, it is possible to test whether it is physically possible to accommodate homes on the range of lot sizes noted above.

A lot take up of 60% is assumed to represent 'full development' whilst maintaining a separate house environment. As shown in the following table, all of the density targets can accommodate the typical new home but the higher density options rely on double level dwellings.

This suggests that a density target of 15-25 dwellings per hectare – even for the separate house component - is technically feasible.

Table 35: Building Envelope Review

Average Home Size	228 sqm			
Dwellings Per Hectare	Lot Size	Single Level Take Up	Double Level Take Up (Assuming 67% Ground Floor and 33% Upper Floor)	Double Level Take Up (Assuming 50% Ground Floor and 50% Upper Floor)
	sqm	228	152	114
10	800 sqm	28.5%	19.0%	14.3%
16	500 sqm	45.6%	30.4%	22.8%
18	444 sqm	51.3%	34.2%	25.7%
20	400 sqm	57.0%	38.0%	28.5%
25	320 sqm	71.3%	47.5%	35.6%
30	267 sqm	85.5%	57.0%	42.8%

9 Housing Types

9.1 Separate Houses

Case Study – Caroline Springs

Caroline Springs has been developed by Delfin-Lend Lease. The master-planned residential community contains around 8,000 lots that range from 300 sqm to over 1,000 sqm. There are eight standard block sizes available to homebuyers as shown in the table below. The table also includes the dwelling types specified by Delfin as the potential physical design characteristic on the site.

This shows that six of eight options would deliver at least 17 dwellings per hectare.

Table 36: Delfin Case Study Development Parameters

Standard Dwelling Block	Average Lot Size	Descriptions	Illustrations
Town Cottage Blocks	313m² (12.5m x 25m)	Block proposed for a one-storey dwelling with 2 bedrooms and one bathroom.	
Villa Blocks	320 m² (10m x 32m)	One-storey home proposed for young couples or retirees with 2 bedrooms, 2 bathrooms, plus a study.	
Patio Blocks	350 m² (14m x 25m)	Block sufficient to accommodate a two-storey home with garage carport.	
Premium Villa Blocks	400m² (12.5m x 32m)	This option offers a frontage of 12.56m for double garages. It is proposed for a two-storey house with spacious living area.	
Courtyard Blocks	448 m² (14m x 32m)	Offers the option to maximise build-able area for house with 2-3 bedrooms with double garage suitable for young couple	

Town Traditional Blocks	500 m² (20m x 25m)	Proposed for 3 bedrooms plus a study room house, suitable for young family with double garage.	
Traditional Blocks	640 m² (20m x 32m)	This option caters for family living, with 3 or 4 bedrooms plus study, 2 bathrooms and double garage.	
Parkland Blocks	1,000 m² (25m x 40m)	Block provides for a family home, with extra space for entertainment areas for e.g. swimming pool or tennis courts	

Source: Delfin-Lend Lease

Case Study - Dennis Family Homes

Dennis Family Homes operates throughout Victoria, offering house and land packages. The following table shows a selected sample of packages offered by this property group.

This demonstrates that detached houses on lots sizes less than 533 sqm is a core product of this developer.

Table 37: Dennis Case Study Development Parameters

Sample	Average Lot Size	Descriptions	Illustrations
1	168m²	Designed for compact living on smaller allotment, one-storey dwelling with 3 bedrooms, 2 bathrooms, and garage parking. Living area of 113m²	
2	248m²	Design suitable for first home buyers or couples looking to down size including 3 bedrooms, 2 bathrooms, and an open family, kitchen and meals area. A living area of 162 m².	
3	356m²	Home designed for a growing family with spacious living area (214 m²) including parents' retreat area and options for home theatre with 4 bedrooms, two bathrooms.	

4	448m²	A modern single storey home suitable for a growing family, with 3 bedrooms, 2 bathrooms and an optional fourth bedroom or study. A living area of 153m².	
5	512m²	A two-storey family home designed with 4 bedrooms, 3 bathrooms plus study with a living area of 318m².	
6	576m²	A contemporary home designed with 4 bedrooms, 2 bathrooms, plus study (256m² of living area) with garage parking. A dedicated home theatre space is also provided.	

Source: Dennis Family Homes

9.2 Townhouses

A brief search of leading residential property developments was undertaken to determine whether townhouses are being provided in the current market environment. The research was not exhaustive but revealed the following examples.

Case Study – Australand Property Group

Australand is a property developer operating throughout Australia, covering residential, commercial and industrial properties. Australand has been active in outer suburban markets and in offering higher density options.

Table 38 shows a selected sample of townhouses that Australand offers homebuyers. Note that the area figures quoted in this table refer to building area.

Table 38: Australand Case Study Development Parameters

Sample	Total Building Area	Descriptions	Illustrations
1	150 m² (Total living area)	Designed for compact living on a small allotment, double-storey townhouses with 3 bedrooms including master bedroom with double basin and walk-in-robe.	

2	120 m² (Total living area)	Designed for compact living with 2 Bedrooms including large master bedroom with double basin ensuite & walk-in-robe, one undercover car space.	
3	173 m²	Contemporary double- storey terrace townhouses with 3 bedrooms including a master bedroom with ensuite and walk-in-robe, and double garage	
4	144 m² (Total living area)	Double-storey townhouses designed with 3 bedrooms including large master bedroom with ensuite, and double garage.	
5	142 m²	A traditional family townhouse with 3 bedrooms, including large master (ensuite), double garage	

Source: Australand

Case Study – Austcorp Group Limited

Austcorp is a national property group managing various residential projects across Australia. Two of Austcorp's residential projects are Rolling Meadows near Sunbury and The Village in Clayton South.

The Village promotes a range of homes designed from single detached dwellings to medium density townhouse type dwellings. There are seven standard townhouse designs which are shown in the table below.

Table 39 details the block size and includes specifications of the physical design characteristic of each townhouse product.

Table 39: Austcorp Case Study Development Parameters

Standard Townhouse	Total Land Size	Descriptions	Illustrations
The Hibiscus	198 m²	Terrace house designed with 3 bedrooms, 2 bathrooms and 3 toilets. Spacious living area with entertainment area in the rear and front garden.	
The Magnolia	235 m²	Compact living space designed with 3 bedrooms plus optional fourth bedroom/study, 2 bathrooms and 3 toilets. Spacious living area with outdoor entertaining area and double garage.	
The Water Lily	211 m²	Traditional terrace house comes with 3 bedrooms plus optional fourth bedroom/study, 2 bathrooms and 3 toilets. Spacious living area with outdoor entertaining area and double garage.	
The Frangipani	209 m²	Brick terrace house with 3 double bedrooms, 2 bathrooms, 3 toilets and double garage. Cater for young family needs with an outdoor entertaining area and front garden.	
The Orchid	183 m²	Proposed for 3 bedrooms plus 2 bathrooms, 3 toilets and double garage.	
The Lotus	173 m²	This option caters for family living, with 2 bedrooms plus third bedroom/study option, 2 bathrooms, 3 toilets, and single garage plus outdoor car space.	

Source: Austcorp Group

9.3 Retirement Accommodation

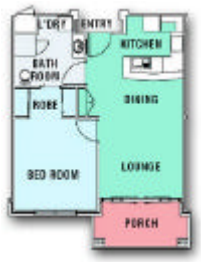
Case Study – Blue Hills Residences

Blue Hills is a retirement village under development in Cranbourne East consisting of 202 units and 18 apartments designed for independent living. The development includes the Blue Hills Country Club which contains a variety of facilities including a medical room, hairdressing salon, community shop, fully equipped hydrotherapy pool with water exercise classes, gymnasium, computer room, library, pool room, restaurant and cocktail bar, dance floor, and theatrette.

The development also contains a variety of outdoor sporting facilities including a tennis court, bowling green, croquet lawn, and fishing lake.

The development contains four house styles and the Stephanie Apartments as shown in the following table. The area figures quoted in this table refer to building area.

Table 40: Blue Hills Residences Case Study Development Parameters

Standard Townhouse	Total Building Area	Descriptions	Illustrations
Stephanie Apartments		An apartment building containing 18 self-contained apartments including modern and ergonomically designed features including wheelchair access to all apartments and secure entrance, monitored security system and emergency call system.	
Madeleine	159 m²	Modern dwelling with 3 bedrooms, separate bathroom, 2 toilets, front and rear pergola, security alarm, and emergency call system	
Anneleise	141 m²	Dwelling containing 2 bedrooms, separate bathroom, 2 toilets, front and rear pergola, security alarm, and emergency call system	

Camilla	123 m²	Dwelling containing 2 bedrooms, separate bathroom, separate toilet, rear pergola, security alarm, and emergency call system	
Courtney	89 m²	Dwelling containing 2 bedrooms, kitchen servery to dining room, bathroom with toilet, rear pergola, security alarm, and emergency call system	

Source: Blue Hills

10 Contextual Review

The City of Casey has expressed a desire to increase the range of dwelling diversity in the Cranbourne East development plan area, which includes the entire Cranbourne East growth area precinct except for the Collison Estate, whose future is unresolved. Land within the subject site which borders the eastern boundary of Collison Estate is subject to a minimum lot size of 1,000 sq m to minimise potential interface issues. Council has also expressed a desire to provide larger residential lots in excess of one acre (4,040 sq m) for the southern portion of the site to provide a visual break between the suburban housing of Cranbourne East and the Botanic Ridge precinct.

The Cranbourne East development plan also supports the increased provision of aged care/ retirement accommodation, with the site adjacent to the Blue Hills Retirement Village along the Berwick – Cranbourne Road. It has been suggested that there could be additional development of this nature in the triangular portion of the site bounded by the former South Gippsland railway to the south and the Berwick – Cranbourne Road to the north. This would achieve two desired outcomes as it increases dwelling diversity; as the product within such developments is often a mix of semi-detached dwellings and walk in apartments, and also offers the opportunity for older residents to remain in the area, which also increases the residential diversity of the area.

The proposal for a learning centre, containing a catholic school, on the site to the north of the Berwick – Cranbourne Road offers the potential for co-locating a convenience activity centre on an adjacent lot which could allow for medium density residential development within close proximity.

The Cranbourne East growth area offers the opportunity to build upon the image of Cranbourne's leafy tree-lined streetscapes by creating a development which interacts with the natural environment and utilises its location at the urban-rural interface. The growth area should be established utilising a sustainable model for best practice urban development, with a special connection to the natural environment which will form an intrinsic part of its character and lifestyle appeal. This draws on other successful developments such as Lynbrook which offer a semi-rural lifestyle location founded upon a blend of wetland and mature red gums.

In addition to the semi-rural 'green' drawcard, another crucial element behind the generation of a thriving new residential community in a metropolitan fringe location is the technique of master-planning. This ensures a high amenity built environment and the adequate provision and timing of community infrastructure, listed in Table 41 below, which plays a key part in enabling the new community to ease into its surroundings.

Table 41: Planned Estate Community Infrastructure

Hard Infrastructure	Soft Infrastructure
Local Retail and Services	Residents Association
Education: childcare and school	Education & pre-school programs
Health: Community Health Centres	Healthcare programs
Sports and Recreational: Ovals, trails, BBQs	Sports and social clubs
Police	Neighbourhood Watch
Public Transport	
Library	

11 Issues and Opportunities

The here and now

Cranbourne SLA and the broader Casey – Cardinia Growth Region, of which it is a part, is an area which is highly attractive to families and especially young couples with children. Due to its location on the metropolitan fringe, where land is at its most affordable, it is seen as a place to raise children with adequate space for family requirements.

While the Census data in this report is primarily drawn from the 1996 and 2001 Censuses, it is anticipated that the 2006 Census data will reveal a continuation of these trends at the regional level. It should be noted that at the local level there will have been considerable change, with Cranbourne East's population having grown from 523 in 2001 to 4,859 in 2006. This is likely to have considerably altered the characteristics of the population in this area.

The demographic profile of Cranbourne SLA reveals:

- High population growth rates;
- A large proportion of young couples (30-39) and children (0-14);
- Most households sized between two and four people;
- Middle income earners with a weekly household income of between $700 and $1,999;
- Residents working in the regional manufacturing and retail trade sectors;
- A large share of tradespersons, intermediate clerical sales and service workers, intermediate production and transport workers, and labourers; and
- Educated to certificate, advanced diploma and diploma level.

This middle income, new family segment is reflected in the area's built environment which is dominated by detached dwellings, and it is likely that this pattern of income and family structure will continue in the future.

Newcomers to Cranbourne SLA are mostly drawn from Greater Dandenong and other middle and outer eastern municipalities such as Monash, Knox, Kingston and Frankston. There is also a significant level of overseas migrants moving into the SLA. This suggests that people are drawn to the area because of cheaper land providing the opportunity for second and third homeowners to upsize.

Linkage with policy

Increasing diversity of dwelling by incorporating a mix of lot sizes is in alignment with both Melbourne 2030, which is seeking to increase residential density in growth areas, and Casey Housing Strategy which seeks to increase housing choice. This might also retain residents who are leaving Cranbourne SLA, as those who leave are 10 percent less likely to move into a separate house than those who move into the SLA. As the population of Cranbourne matures, with a future increase in empty nesters likely in a decade or so, this segment will be looking locally for

opportunities to downsize, as will their more senior counterparts. Increasing residential density in close proximity to neighbourhood activity centres and public transport corridors can offer increased choice, as well as opportunities for retirement villages or accommodation for smaller households. This is predicted in the Victoria In Future population projections, with the average household size in Cranbourne SLA forecast to decline from 2.8 in 2006 to 2.4 in 2031.

There is acknowledgement in the Casey Housing Strategy that there is a need for continued supply of conventional suburban lots sized between 550 and 700 sq m from 70 percent of Greenfield lots. It also supports the notion of integrated housing with Greenfield areas in Cranbourne, an outcome which will enhance social sustainability. This can be realised via the fine-grained approach to densities within the site, with different targets for individual neighbourhoods, including local precincts with larger lots to capture the segment of the family market looking to upscale to larger dwellings. This will also prevent the development of large precincts without diversity. There are a range of housing products available from various suppliers, which can be built on lots sized up to 700sq m. Smaller family homes and townhouses can be built on lots sized between 170 sq m to 512 sq m.

Cranbourne East's neighbourhood character should incorporate best practice, Ecologically Sustainable Development principles as well as building on Cranbourne's image of tree-lined streetscapes. There is the opportunity for larger lots along the Urban Growth Boundary in order to provide a transition from an urban environment to the rural countryside. The area can be further enhanced by master-planned developments, which can deliver a holistic environment, thus promoting the site as a 'green place', maximising its position at the urban-rural interface.

Future Residential Demand Modelling Scenarios

Two modelling scenarios were undertaken utilising the VIF population projections for Cranbourne SLA. The first scenario, the base case, considered dwelling preference changes reflected in the current Cranbourne SLA data. Scenario two used the preference changes observed in Berwick SLA, where a shift was witnessed towards a greater diversity of dwelling stock in synchrony with Melbourne 2030, because the base case does not account for future shifts in dwelling preferences, except as reflected in historical trends.

The first scenario estimated that in Cranbourne SLA an additional 34,000 dwellings would be required between 2001 and 2031. The second scenario forecasted an additional 33,400 dwellings.

In scenario one the breakdown of additional dwelling stock is:

- Separate houses: 87.4%
- Semi-detached, row or terraced housing: 5.3%
- Flat, unit or apartments: 7.2%
- Other dwelling: 0.1%

Scenario two had an alternative additional dwelling breakdown of:

- Separate houses: 83.1%
- Semi-detached, row or terraced housing: 16.11%
- Flat, unit or apartments: 0.1%
- Other dwelling: 0.6%

This indicates that there is the potential for greater dwelling diversity within Casey SLA if a similar demographic to that residing in Berwick SLA can be attracted to Cranbourne East. There is a range of dwelling types and products which can be developed within the lot sizes specified, which can attract and retain a diverse community within Cranbourne East. By increasing dwelling diversity, which fulfils both metropolitan and local level policy ambitions, a wider range of tastes and budgets can be catered for. The upper income segment is likely to be drawn to a master-planned 'lifestyle product' which combines a sense of place with provision of extensive community facilities in order to foster a dynamic community.

Considerations for Design

To ensure Cranbourne East maximises its potential as a landmark residential community on the urban-rural interface it is important that the development contain a diverse range of dwelling densities, from medium density lots of 350 sq m to larger lots of 1,000 sq m on the fringe of the development to ensure an appropriate interaction with the surrounding rural countryside. Medium density development should be sought in areas adjacent to neighbourhood activity centres, and include the provision of retirement accommodation.

The buffer suggested in the Cranbourne East Development Plan, immediately to the east of the Collison Estate requiring 1,000 sq m lots should be carefully considered. By buffering the estate from new development it could prevent its redevelopment by supporting existing densities, which poses challenges for the upgrade of roads and services to the estate and would be unviable if the current situation persists.

The Collison Estate is strategically placed in close proximity to the proposed Catholic School on the north of the Berwick – Cranbourne Road, which offers the potential for co-locating a convenience activity centre with it. Because of its access potential and central position in relation to the rest of the study area, it is better suited to conventional residential lots of 600 sq m.

As residential development occurs in Cranbourne East, it is likely that the value of land on the Collison Estate will increase to the extent that it is uneconomic to retain large lots, prompting its future development, which might be piecemeal and poorly integrated with its surroundings if its long term future is not resolved in this planning exercise.

Appendix A

Table 42: Family Type and Relationship in Household by Age – 1996 (Actual Data)

HOUSEHOLD TYPE	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75 years and over	Total
Couple family with children:										
With Chldrn - Husb, Wife or Partner	0	0	440	5,399	5,250	2,253	489	148	27	14,006
With Child under 15	4,428	6,332	0	0	0	0	0	0	0	10,760
Depend. student (15-24)	0	0	1,478	0	0	0	0	0	0	1,478
Non-dependent child	0	0	1,342	361	44	7	3	0	0	1,757
Other related individual	0	0	44	39	20	19	43	73	42	280
Total	*4,428*	*6,332*	*3,304*	*5,799*	*5,314*	*2,279*	*535*	*221*	*69*	*28,281*
Couple family without children:										
Wthout chld: Husb, Wife or Partner	0	0	612	1,859	613	869	969	713	289	5,924
Other related individual	0	0	34	20	9	7	10	8	22	110
Total	*0*	*0*	*646*	*1,879*	*622*	*876*	*979*	*721*	*311*	*6,034*
One parent family										
1 parent: Lone parent	0	0	152	589	626	316	92	53	49	1,877
With Child under 15	716	1,460	0	0	0	0	0	0	0	2,176
Depend. student(15-24)	0	0	339	0	0	0	0	0	0	339
Non-dependent child	0	0	445	142	50	30	15	0	0	682
Other related individual	0	0	33	17	9	18	10	16	10	113
Total	*716*	*1,460*	*969*	*748*	*685*	*364*	*117*	*69*	*59*	*5,187*
Other family	0	0	106	81	30	18	11	17	10	273
Non-family Member:										
Unrel indiv. in fmly hse	0	0	127	103	53	24	6	6	6	325
Group household memb.	0	0	258	292	113	90	47	21	8	829
Lone person	0	0	130	484	381	265	243	298	210	2,011
Total	0	0	515	879	547	379	296	325	224	3,165
Not applicable(a) - Mainly Non-Private Dwellings	25	47	67	62	50	46	32	32	75	436
Total	**5,169**	**7,839**	**5,607**	**9,448**	**7,248**	**3,962**	**1,970**	**1,385**	**748**	**43,376**

(a) Comprises persons in 'non-classifiable households', 'non-private dwellings' and 'migratory or off-shore collection districts'.

Source: ABS Census 1996

Table 43: Family Type and Relationship in Household by Age – 2001 (Actual Data)

HOUSEHOLD TYPE	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	387	4,157	5,972	3,144	774	201	87	14,722
Child under 15	3,723	6,980	0	0	0	0	0	0	0	10,703
Dependent student (15-24)	0	0	1,947	0	0	0	0	0	0	1,947
Non-dependent child	0	0	1,672	550	91	26	3	0	0	2,342
Other related individual	0	0	71	43	17	30	52	64	55	332
Total	*3,723*	*6,980*	*4,077*	*4,750*	*6,080*	*3,200*	*829*	*265*	*142*	*30,046*
Couple family without children:										
Husband, wife or partner	0	0	585	1,443	649	1,191	1,327	898	404	6,497
Other related individual	0	0	42	22	9	9	9	12	43	146
Total	*0*	*0*	*627*	*1,465*	*658*	*1,200*	*1,336*	*910*	*447*	*6,643*
One parent family:										
Lone parent	0	0	145	660	853	537	171	86	72	2,524
Child under 15	749	2,071	0	0	0	0	0	0	0	2,820
Dependent student (15-24)	0	0	505	0	0	0	0	0	0	505
Non-dependent child	0	0	605	236	86	46	20	3	0	996
Other related individual	0	0	40	19	11	25	20	17	20	152
Total	*749*	*2,071*	*1,295*	*915*	*950*	*608*	*211*	*106*	*92*	*6,997*
Other family	0	0	114	85	32	38	20	24	19	332
Non-family Member:										
Unrelated individual living in family household	0	0	199	128	81	46	9	5	4	472
Group household member	0	0	231	254	171	117	58	35	14	880
Lone person	0	0	131	514	569	470	379	343	346	2,752
Total	0	0	561	896	821	633	446	383	364	4,104
Not applicable(a) - Mainly Non-Private Dwellings	66	133	120	165	145	124	83	95	130	1,061
Total	**4,538**	**9,184**	**6,794**	**8,276**	**8,686**	**5,803**	**2,925**	**1,783**	**1,194**	**49,183**

(a) Includes persons in 'Non-classifiable households', 'Non-private dwellings' and 'Migratory or off-shore collection districts'.

Source: ABS Census 2001

Table 44: Family Type and Relationship in Household by Age – 2001 (Model Calculations)

2001	*0-4 years*	*5-14 years*	*15-24 years*	*25-34 years*	*35-44 years*	*45-54 years*	*55-64 years*	*65-74 years*	*75 years and over*	*Total*
Couple family with children:										
Husband, wife or partner	0	0	410	4,449	6,209	3,279	828	221	94	15,491
Child under 15	3,851	7,088	0	0	0	0	0	0	0	10,939
Dependent student (15-24)	0	0	2,064	0	0	0	0	0	0	2,064
Non-dependent child	0	0	1,772	589	95	27	3	0	0	2,486
Other related individual	0	0	75	46	18	31	56	70	60	356
Total	*3,851*	*7,088*	*4,322*	*5,084*	*6,321*	*3,337*	*887*	*291*	*154*	*31,335*
Couple family without children:										
Husband, wife or partner	0	0	620	1,544	675	1,242	1,420	987	439	6,927
Other related individual	0	0	45	24	9	9	10	13	47	156
Total	*0*	*0*	*665*	*1,568*	*684*	*1,251*	*1,430*	*1,000*	*485*	*7,083*
One parent family:										
Lone parent	0	0	154	706	887	560	183	95	78	2,663
Child under 15	775	2,103	0	0	0	0	0	0	0	2,878
Dependent student (15-24)	0	0	535	0	0	0	0	0	0	535
Non-dependent child	0	0	641	253	89	48	21	3	0	1,056
Other related individual	0	0	42	20	11	26	21	19	22	162
Total	*775*	*2,103*	*1,373*	*979*	*988*	*634*	*226*	*117*	*100*	*7,294*
Other family	*0*	*0*	*121*	*91*	*33*	*40*	*21*	*26*	*21*	*353*
Non-family Member:										
Unrelated individual living in family household	0	0	211	137	84	48	10	5	4	500
Group household member	0	0	245	272	178	122	62	38	15	932
Lone person	0	0	139	550	592	490	406	377	376	2,929
Total	*0*	*0*	*595*	*959*	*854*	*660*	*477*	*421*	*395*	*4,361*
Not applicable(a) - Mainly Non-Private Dwellings	*68*	*135*	*127*	*177*	*151*	*129*	*89*	*104*	*141*	*1,122*
Total	***4,694***	***9,326***	***7,202***	***8,858***	***9,030***	***6,052***	***3,130***	***1,960***	***1,296***	***51,548***

Source: SGS Economics and Planning Calculations

Table 45: Family Type and Relationship in Household by Age – 2006 (Model Calculations)

2006	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	623	4,998	6,807	4,687	1,608	351	274	19,347
Child under 15	4,361	7,293	0	0	0	0	0	0	0	11,653
Dependent student (15-24)	0	0	3,134	0	0	0	0	0	0	3,134
Non-dependent child	0	0	2,692	661	104	39	6	0	0	3,502
Other related individual	0	0	114	52	19	45	108	112	173	623
Total	*4,361*	*7,293*	*6,563*	*5,711*	*6,930*	*4,770*	*1,722*	*463*	*447*	*38,260*
Couple family without children:										
Husband, wife or partner	0	0	695	1,634	673	1,727	2,413	1,659	925	9,726
Other related individual	0	0	50	25	9	13	16	22	98	234
Total	*0*	*0*	*745*	*1,659*	*683*	*1,740*	*2,429*	*1,681*	*1,023*	*9,960*
One parent family:										
Lone parent	0	0	251	1,095	1,159	940	401	188	181	4,215
Child under 15	1,065	2,711	0	0	0	0	0	0	0	3,776
Dependent student (15-24)	0	0	873	0	0	0	0	0	0	873
Non-dependent child	0	0	1,046	392	117	80	47	7	0	1,688
Other related individual	0	0	69	32	15	44	47	37	50	294
Total	*1,065*	*2,711*	*2,239*	*1,518*	*1,291*	*1,064*	*495*	*232*	*231*	*10,846*
Other family	*0*	*0*	*157*	*128*	*34*	*77*	*47*	*49*	*57*	*549*
Non-family Member:										
Unrelated individual living in family household	0	0	279	189	116	80	18	9	10	702
Group household member	0	0	324	374	246	205	117	60	37	1,363
Lone person	0	0	184	758	818	822	767	587	906	4,841
Total	*0*	*0*	*787*	*1,321*	*1,180*	*1,107*	*902*	*655*	*953*	*6,906*
Not applicable(a) - Mainly Non-Private Dwellings	*135*	*235*	*251*	*356*	*275*	*281*	*236*	*280*	*361*	*2,412*
Total	***5,561***	***10,239***	***10,743***	***10,693***	***10,393***	***9,040***	***5,832***	***3,360***	***3,073***	***68,934***

Source: SGS Economics and Planning Calculations

Table 46: Family Type and Relationship in Household by Age – 2011 (Model Calculations)

2011	*0-4 years*	*5-14 years*	*15-24 years*	*25-34 years*	*35-44 years*	*45-54 years*	*55-64 years*	*65-74 years*	*75 years and over*	*Total*
Couple family with children:										
Husband, wife or partner	0	0	755	6,497	6,465	5,651	2,451	475	436	22,730
Child under 15	4,667	7,144	0	0	0	0	0	0	0	11,811
Dependent student (15-24)	0	0	3,798	0	0	0	0	0	0	3,798
Non-dependent child	0	0	3,262	860	99	47	9	0	0	4,276
Other related individual	0	0	138	67	18	54	165	151	276	870
Total	*4,667*	*7,144*	*7,953*	*7,424*	*6,582*	*5,751*	*2,625*	*626*	*712*	*43,485*
Couple family without children:										
Husband, wife or partner	0	0	554	1,972	570	2,018	3,195	2,390	1,089	11,789
Other related individual	0	0	40	30	8	15	22	32	116	262
Total	*0*	*0*	*594*	*2,002*	*578*	*2,034*	*3,217*	*2,422*	*1,205*	*12,051*
One parent family:										
Lone parent	0	0	324	1,878	1,297	1,316	676	316	237	6,045
Child under 15	1,361	3,268	0	0	0	0	0	0	0	4,629
Dependent student (15-24)	0	0	1,128	0	0	0	0	0	0	1,128
Non-dependent child	0	0	1,352	672	131	113	79	11	0	2,357
Other related individual	0	0	89	54	17	61	79	62	66	429
Total	*1,361*	*3,268*	*2,893*	*2,604*	*1,445*	*1,490*	*835*	*389*	*303*	*14,588*
Other family	*0*	*0*	*160*	*205*	*29*	*121*	*80*	*78*	*87*	*760*
Non-family Member:										
Unrelated individual living in family household	0	0	290	298	136	113	27	11	14	890
Group household member	0	0	337	591	287	287	174	79	50	1,805
Lone person	0	0	191	1,195	955	1,152	1,140	775	1,240	6,648
Total	*0*	*0*	*819*	*2,084*	*1,378*	*1,551*	*1,341*	*866*	*1,304*	*9,343*
Not applicable(a) - Mainly Non-Private Dwellings	*212*	*338*	*372*	*701*	*377*	*467*	*450*	*562*	*521*	*4,000*
Total	***6,240***	***10,750***	***12,791***	***15,020***	***10,388***	***11,414***	***8,548***	***4,943***	***4,132***	***84,227***

Source: SGS Economics and Planning Calculations

Table 47: Family Type and Relationship in Household by Age – 2016 (Model Calculations)

2016	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	778	7,939	7,333	6,058	3,101	648	523	26,380
Child under 15	5,392	7,884	0	0	0	0	0	0	0	13,277
Dependent student (15-24)	0	0	3,912	0	0	0	0	0	0	3,912
Non-dependent child	0	0	3,359	1,050	112	50	12	0	0	4,584
Other related individual	0	0	143	82	21	58	208	206	331	1,049
Total	*5,392*	*7,884*	*8,192*	*9,071*	*7,466*	*6,166*	*3,322*	*854*	*854*	*49,201*
Couple family without children:										
Husband, wife or partner	0	0	571	2,410	647	2,164	4,043	3,259	1,306	14,399
Other related individual	0	0	41	37	9	16	27	44	139	313
Total	*0*	*0*	*612*	*2,446*	*655*	*2,180*	*4,071*	*3,303*	*1,445*	*14,712*
One parent family:										
Lone parent	0	0	334	2,295	1,472	1,411	856	430	285	7,082
Child under 15	1,573	3,607	0	0	0	0	0	0	0	5,179
Dependent student (15-24)	0	0	1,162	0	0	0	0	0	0	1,162
Non-dependent child	0	0	1,392	820	148	121	100	15	0	2,597
Other related individual	0	0	92	66	19	66	100	85	79	507
Total	*1,573*	*3,607*	*2,980*	*3,181*	*1,639*	*1,598*	*1,056*	*531*	*364*	*16,528*
Other family	*0*	*0*	*165*	*251*	*33*	*129*	*101*	*107*	*104*	*890*
Non-family Member:										
Unrelated individual living in family household	0	0	299	364	154	121	34	15	17	1,005
Group household member	0	0	347	722	325	307	221	108	60	2,091
Lone person	0	0	197	1,460	1,083	1,235	1,442	1,057	1,487	7,962
Total	*0*	*0*	*843*	*2,546*	*1,563*	*1,663*	*1,697*	*1,180*	*1,564*	*11,057*
Not applicable(a) - Mainly Non-Private Dwellings	*245*	*373*	*383*	*857*	*428*	*500*	*569*	*766*	*625*	*4,746*
Total	***7,210***	***11,864***	***13,176***	***18,352***	***11,783***	***12,236***	***10,816***	***6,741***	***4,956***	***97,134***

Source: SGS Economics and Planning Calculations

Table 48: Family Type and Relationship in Household by Age – 2021 (Model Calculations)

2021	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	757	8,606	9,765	5,803	3,619	853	648	30,051
Child under 15	6,250	8,852	0	0	0	0	0	0	0	15,103
Dependent student (15-24)	0	0	3,809	0	0	0	0	0	0	3,809
Non-dependent child	0	0	3,271	1,139	149	48	14	0	0	4,621
Other related individual	0	0	139	89	28	55	243	272	410	1,235
Total	*6,250*	*8,852*	*7,977*	*9,834*	*9,941*	*5,907*	*3,876*	*1,124*	*1,058*	*54,819*
Couple family without children:										
Husband, wife or partner	0	0	556	2,612	861	2,073	4,718	4,289	1,618	16,726
Other related individual	0	0	40	40	12	16	32	57	172	369
Total	*0*	*0*	*596*	*2,652*	*873*	*2,088*	*4,750*	*4,346*	*1,790*	*17,095*
One parent family:										
Lone parent	0	0	325	2,488	1,960	1,352	999	566	353	8,042
Child under 15	1,823	4,050	0	0	0	0	0	0	0	5,872
Dependent student (15-24)	0	0	1,132	0	0	0	0	0	0	1,132
Non-dependent child	0	0	1,356	889	198	116	117	20	0	2,695
Other related individual	0	0	90	72	25	63	117	112	98	576
Total	*1,823*	*4,050*	*2,902*	*3,449*	*2,182*	*1,531*	*1,232*	*698*	*451*	*18,317*
Other family	*0*	*0*	*161*	*272*	*44*	*124*	*118*	*140*	*129*	*987*
Non-family Member:										
Unrelated individual living in family household	0	0	291	394	205	116	40	20	21	1,088
Group household member	0	0	338	782	433	295	258	142	75	2,323
Lone person	0	0	192	1,583	1,442	1,183	1,683	1,391	1,842	9,316
Total	*0*	*0*	*821*	*2,760*	*2,081*	*1,593*	*1,980*	*1,553*	*1,938*	*12,727*
Not applicable(a) - Mainly Non-Private Dwellings	*284*	*419*	*373*	*929*	*569*	*479*	*664*	*1,008*	*774*	*5,500*
Total	***8,357***	***13,321***	***12,830***	***19,895***	***15,690***	***11,722***	***12,620***	***8,870***	***6,139***	***109,445***

Source: SGS Economics and Planning Calculations

Table 49: Family Type and Relationship in Household by Age – 2026 (Model Calculations)

2026	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	798	8,304	11,760	6,366	3,760	1,046	849	32,883
Child under 15	6,685	10,234	0	0	0	0	0	0	0	16,919
Dependent student (15-24)	0	0	4,015	0	0	0	0	0	0	4,015
Non-dependent child	0	0	3,448	1,099	179	53	15	0	0	4,793
Other related individual	0	0	146	86	33	61	253	333	537	1,449
Total	*6,685*	*10,234*	*8,407*	*9,489*	*11,972*	*6,479*	*4,027*	*1,379*	*1,386*	*60,058*
Couple family without children:										
Husband, wife or partner	0	0	586	2,521	1,037	2,274	4,902	5,259	2,121	18,698
Other related individual	0	0	42	38	14	17	33	70	226	441
Total	*0*	*0*	*628*	*2,559*	*1,051*	*2,291*	*4,935*	*5,329*	*2,346*	*19,139*
One parent family:										
Lone parent	0	0	342	2,400	2,360	1,483	1,037	695	462	8,780
Child under 15	1,949	4,682	0	0	0	0	0	0	0	6,631
Dependent student (15-24)	0	0	1,193	0	0	0	0	0	0	1,193
Non-dependent child	0	0	1,429	858	238	127	121	24	0	2,798
Other related individual	0	0	94	69	30	69	121	137	128	650
Total	*1,949*	*4,682*	*3,058*	*3,328*	*2,628*	*1,679*	*1,280*	*856*	*591*	*20,052*
Other family	*0*	*0*	*169*	*262*	*52*	*136*	*123*	*172*	*169*	*1,084*
Non-family Member:										
Unrelated individual living in family household	0	0	307	380	247	127	42	25	28	1,156
Group household member	0	0	356	755	522	323	268	174	98	2,496
Lone person	0	0	202	1,528	1,737	1,298	1,749	1,706	2,414	10,633
Total	*0*	*0*	*866*	*2,663*	*2,506*	*1,748*	*2,058*	*1,905*	*2,540*	*14,285*
Not applicable(a) - Mainly Non-Private Dwellings	*304*	*484*	*393*	*896*	*686*	*526*	*690*	*1,236*	*1,015*	*6,230*
Total	***8,938***	***15,400***	***13,522***	***19,198***	***18,896***	***12,859***	***13,113***	***10,876***	***8,047***	***120,847***

Source: SGS Economics and Planning Calculations

Table 50: Family Type and Relationship in Household by Age – 2031 (Model Calculations)

2031	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
Couple family with children:										
Husband, wife or partner	0	0	859	7,702	12,641	8,149	3,542	1,196	1,087	35,178
Child under 15	6,599	11,347	0	0	0	0	0	0	0	17,946
Dependent student (15-24)	0	0	4,324	0	0	0	0	0	0	4,324
Non-dependent child	0	0	3,713	1,019	193	67	14	0	0	5,006
Other related individual	0	0	158	80	36	78	238	381	687	1,657
Total	*6,599*	*11,347*	*9,055*	*8,801*	*12,870*	*8,295*	*3,794*	*1,577*	*1,774*	*64,110*
Couple family without children:										
Husband, wife or partner	0	0	631	2,338	1,114	2,911	4,618	6,016	2,713	20,341
Other related individual	0	0	45	36	15	22	31	80	289	519
Total	*0*	*0*	*676*	*2,373*	*1,130*	*2,933*	*4,649*	*6,096*	*3,002*	*20,860*
One parent family:										
Lone parent	0	0	369	2,226	2,537	1,898	977	795	591	9,394
Child under 15	1,924	5,191	0	0	0	0	0	0	0	7,115
Dependent student (15-24)	0	0	1,285	0	0	0	0	0	0	1,285
Non-dependent child	0	0	1,539	796	256	163	114	28	0	2,895
Other related individual	0	0	102	64	33	88	114	157	164	723
Total	*1,924*	*5,191*	*3,294*	*3,087*	*2,825*	*2,149*	*1,206*	*979*	*756*	*21,412*
Other family	*0*	*0*	*182*	*243*	*56*	*174*	*115*	*197*	*216*	*1,185*
Non-family Member:										
Unrelated individual living in family household	0	0	331	353	266	163	39	28	36	1,215
Group household member	0	0	384	700	561	414	252	199	125	2,635
Lone person	0	0	218	1,417	1,867	1,661	1,647	1,951	3,089	11,851
Total	*0*	*0*	*932*	*2,470*	*2,694*	*2,238*	*1,939*	*2,179*	*3,250*	*15,701*
Not applicable(a) - Mainly Non-Private Dwellings	*300*	*537*	*424*	*831*	*737*	*673*	*650*	*1,414*	*1,298*	*6,864*
Total	***8,823***	***17,074***	***14,563***	***17,806***	***20,312***	***16,461***	***12,354***	***12,442***	***10,295***	***130,131***

Source: SGS Economics and Planning Calculations

Table 51: Cranbourne SLA Dwelling Structure by Household Type – 1996 (Actual Data)

1996	Family households							
	Couple family with children	Couple family without children	One parent family	Other family	Total	Group household	Lone Person household	Total
Separate house	6,753	2,587	1,503	104	10,947	323	1,495	13,102
Semi-detached, row or terrace house, townhouse etc with:								
One storey	31	28	26	3	88	6	34	134
Two or more storeys	10	7	7	3	27	3	15	45
Flat, unit or apartment:								
In a one or two storey block	88	200	177	15	480	58	410	977
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	3	6	0	0	9	0	116	22
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	3	3
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	13	0	3	0	16	0	3	19
Total	***6,898***	***2,828***	***1,716***	***125***	***11,567***	***390***	***2,076***	***14,302***

Source: ABS Census 1996

Table 52: Cranbourne SLA Dwelling Structure by Household Type – 2001 (Actual Data)

2001	Family households							
	Couple family with children	Couple family without children	One parent family	Other family	Total	Group household	Lone Person household	Total
Separate house	7,251	2,888	2,198	137	12,474	357	2,043	14,874
Semi-detached, row or terrace house, townhouse etc with:								
One storey	26	44	23	3	96	3	105	204
Two or more storeys	16	4	3	0	23	3	3	29
Flat, unit or apartment:								
In a one or two storey block	97	224	219	20	560	58	574	1,192
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	3	4	0	0	7	0	12	19
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	11	3	0	0	14	0	3	17
Total	***7,404***	***3,167***	***2,443***	***160***	***13,174***	***421***	***2,740***	**16,335**

Source: ABS Census 2001

Table 53: Dwelling Structure by Household Type – 2001 (Model Calculations)

2001	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	7,585	3,158	2,396	146	13,285	378	2,184	15,847
Semi-detached, row or terrace house, townhouse etc with:								
One storey	27	48	25	3	104	3	112	219
Two or more storeys	17	4	3	0	24	3	3	31
Flat, unit or apartment:								
In a one or two storey block	101	245	239	21	606	61	614	1,281
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	3	4	0	0	8	0	13	20
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	12	3	0	0	15	0	3	18
Total Private Dwellings	***7,745***	***3,464***	***2,663***	***170***	***14,042***	***446***	***2,929***	***17,417***

Source: SGS Economics and Planning Calculations

Table 54: Dwelling Structure by Household Type – 2006 (Model Calculations)

2006	*Family households*							
	Couple family with children	*Couple family without children*	*One parent family*	*Other family*	*Total*	*Group household*	*Lone Person household*	*Total*
Separate house	9,473	4,425	3,880	228	18,006	565	3,542	22,113
Semi-detached, row or terrace house, townhouse etc with:								
One storey	24	87	15	3	130	0	277	407
Two or more storeys	28	0	0	0	28	4	0	32
Flat, unit or apartment:								
In a one or two storey block	130	344	320	34	828	83	1,017	1,928
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	2	0	0	6	0	0	6
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	14	5	0	0	19	0	5	24
Total Private Dwellings	***9,674***	***4,863***	***4,215***	***265***	***19,016***	***652***	***4,841***	***24,510***

Source: SGS Economics and Planning Calculations

Table 55: Dwelling Structure by Household Type – 2011 (Model Calculations)

2011	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	11,130	5,340	5,650	316	22,435	759	4,756	27,951
Semi-detached, row or terrace house, townhouse etc with:								
One storey	18	129	22	3	171	0	491	662
Two or more storeys	41	0	0	0	41	5	0	46
Flat, unit or apartment:								
In a one or two storey block	157	417	374	47	994	99	1,394	2,487
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	2	0	0	6	0	0	6
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	17	6	0	0	22	0	7	29
Total Private Dwellings	***11,365***	***5,894***	***6,045***	***366***	***23,671***	***864***	***6,648***	***31,182***

Source: SGS Economics and Planning Calculations

Table 56: Dwelling Structure by Household Type – 2016 (Model Calculations)

2016	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	12,916	6,495	6,717	372	26,499	892	5,581	32,972
Semi-detached, row or terrace house, townhouse etc with:								
One storey	7	186	25	1	220	0	707	927
Two or more storeys	57	0	0	0	57	5	0	62
Flat, unit or apartment:								
In a one or two storey block	186	509	340	56	1,091	103	1,666	2,860
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	3	0	0	7	0	0	7
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	20	7	0	0	26	0	7	34
Total Private Dwellings	***13,190***	***7,200***	***7,082***	***429***	***27,900***	***1,000***	***7,962***	***36,862***

Source: SGS Economics and Planning Calculations

Table 57: Dwelling Structure by Household Type – 2021 (Model Calculations)

2021	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	14,698	7,512	7,736	412	30,358	1,004	6,408	37,770
Semi-detached, row or terrace house, townhouse etc with:								
One storey	8	249	29	1	287	0	953	1,241
Two or more storeys	75	0	0	0	75	5	0	81
Flat, unit or apartment:								
In a one or two storey block	217	590	277	63	1,147	102	1,947	3,195
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	3	0	0	8	0	0	8
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	22	8	0	0	30	0	8	38
Total Private Dwellings	***15,025***	***8,363***	***8,042***	***476***	***31,906***	***1,111***	***9,316***	***42,333***

Source: SGS Economics and Planning Calculations

Table 58: Dwelling Structure by Household Type – 2026 (Model Calculations)

2026	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	16,067	8,361	8,563	452	33,443	1,093	7,187	41,724
Semi-detached, row or terrace house, townhouse etc with:								
One storey	9	315	31	1	357	0	1,219	1,576
Two or more storeys	94	0	0	0	94	5	0	99
Flat, unit or apartment:								
In a one or two storey block	243	659	186	69	1,157	96	2,218	3,471
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	4	0	0	8	0	0	8
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	24	9	0	0	33	0	9	42
Total Private Dwellings	***16,441***	***9,349***	***8,780***	***522***	***35,093***	***1,194***	***10,633***	***46,920***

Source: SGS Economics and Planning Calculations

Table 59: Dwelling Structure by Household Type – 2031 (Model Calculations)

2031	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	17,171	9,057	9,284	493	36,005	1,169	7,881	45,056
Semi-detached, row or terrace house, townhouse etc with:								
One storey	10	383	33	1	427	0	1,491	1,918
Two or more storeys	112	1	0	0	113	5	0	117
Flat, unit or apartment:								
In a one or two storey block	265	716	77	76	1,135	87	2,469	3,691
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	4	4	0	0	8	0	0	8
Other dwelling:								
Caravan, cabin, houseboat	0	0	0	0	0	0	0	0
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	26	10	0	0	36	0	10	45
Total Private Dwellings	***17,589***	***10,171***	***9,394***	***571***	***37,724***	***1,261***	***11,851***	***50,835***

Source: SGS Economics and Planning Calculations

Table 60: Berwick SLA Dwelling Structure by Household Type – 1996 (Actual Data)

1996	*Family households*							
	Couple family with children	*Couple family without children*	*One parent family*	*Other family*	*Total*	*Group household*	*Lone Person household*	**Total**
Separate house	6,772	3,438	1,034	91	11,335	273	1,364	13,269
Semi-detached, row or terrace house, townhouse etc with:								
One storey	29	107	23	5	164	14	244	426
Two or more storeys	5	8	8	0	21	0	9	30
Flat, unit or apartment:								
In a one or two storey block	37	123	78	4	242	24	239	509
In a three storey block	0	0	0	0	0	0	0	0
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	3	5	0	0	8	0	16	27
Other dwelling:								
Caravan, cabin, houseboat	4	13	17	0	34	8	53	115
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	3	0	0	0	3	0	3	6
Total	***6,853***	***3,694***	***1,160***	***100***	***11,807***	***319***	***1,928***	***14,382***

Source: ABS Census 1996

Table 61: Berwick SLA Dwelling Structure by Household Type – 2001 (Actual Data)

2001	*Family households*							
	Couple family with children	*Couple family without children*	*One parent family*	*Other family*	*Total*	*Group household*	*Lone Person household*	*Total*
Separate house	10,258	4,593	1,893	138	16,882	353	2,081	19,316
Semi-detached, row or terrace house, townhouse etc with:								
One storey	49	220	57	7	333	32	427	792
Two or more storeys	27	22	15	4	68	5	33	106
Flat, unit or apartment:								
In a one or two storey block	50	116	76	5	247	29	222	498
In a three storey block	0	0	0	0	0	0	3	3
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	3	8	0	0	11	0	10	21
Other dwelling:								
Caravan, cabin, houseboat	15	9	8	3	35	4	62	101
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	4	0	3	0	7	0	0	7
Total	***10,406***	***4,968***	***2,052***	***157***	***17,583***	***423***	***2,838***	**20,844**

Source: ABS Census 2001

Table 62: Dwelling Structure by Household Type – 2001: Berwick Scenario (Model Calculations)

2001	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	7,635	3,202	2,456	147	13,440	374	2,148	15,962
Semi-detached, row or terrace house, townhouse etc with:								
One storey	36	153	74	7	271	34	441	746
Two or more storeys	20	15	19	4	59	5	34	99
Flat, unit or apartment:								
In a one or two storey block	37	81	99	5	222	31	229	482
In a three storey block	0	0	0	0	0	0	3	3
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	6	0	0	8	0	10	18
Other dwelling:								
Caravan, cabin, houseboat	11	6	10	3	31	4	64	99
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	3	0	4	0	7	0	0	7
Total Private Dwellings	***7,745***	***3,464***	***2,663***	***167***	***14,038***	***448***	***2,929***	***17,415***

Source: SGS Economics and Planning Calculations

Table 63: Dwelling Structure by Household Type – 2006: Berwick Scenario (Model Calculations)

2006	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	9,521	4,458	3,982	225	18,186	525	3,644	22,355
Semi-detached, row or terrace house, townhouse etc with:								
One storey	50	289	149	10	499	69	837	1,405
Two or more storeys	43	32	32	13	121	15	89	226
Flat, unit or apartment:								
In a one or two storey block	41	65	29	6	141	40	156	337
In a three storey block	0	0	0	0	0	0	10	10
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	1	9	0	0	10	0	0	10
Other dwelling:								
Caravan, cabin, houseboat	14	9	16	5	44	6	105	155
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	4	0	6	0	10	0	0	10
Total Private Dwellings	***9,674***	***4,863***	***4,215***	***260***	***19,011***	***655***	***4,841***	***24,508***

Source: SGS Economics and Planning Calculations

Table 64: Dwelling Structure by Household Type – 2011: Berwick Scenario (Model Calculations)

2011	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	11,165	5,358	5,676	305	22,505	666	4,894	28,065
Semi-detached, row or terrace house, townhouse etc with:								
One storey	64	440	252	13	769	117	1,236	2,122
Two or more storeys	72	53	47	29	200	30	159	389
Flat, unit or apartment:								
In a one or two storey block	41	20	39	6	107	46	203	356
In a three storey block	0	0	0	0	0	0	20	20
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	12	0	0	14	0	0	14
Other dwelling:								
Caravan, cabin, houseboat	16	11	22	7	57	8	136	201
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	4	0	8	0	13	0	0	13
Total Private Dwellings	***11,365***	***5,894***	***6,045***	***359***	***23,664***	***868***	***6,648***	***31,180***

Source: SGS Economics and Planning Calculations

Table 65: Dwelling Structure by Household Type – 2016: Berwick Scenario (Model Calculations)

2016	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	12,935	6,426	6,611	351	26,322	740	5,743	32,805
Semi-detached, row or terrace house, townhouse etc with:								
One storey	81	640	336	13	1,070	164	1,574	2,808
Two or more storeys	108	80	56	45	289	45	230	565
Flat, unit or apartment:								
In a one or two storey block	40	24	44	3	112	47	230	389
In a three storey block	0	0	0	0	0	0	30	30
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	17	0	0	19	0	0	19
Other dwelling:								
Caravan, cabin, houseboat	19	13	25	9	66	9	155	230
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	5	0	10	0	15	0	0	15
Total Private Dwellings	***13,190***	***7,200***	***7,082***	***421***	***27,892***	***1,005***	***7,962***	***36,859***

Source: SGS Economics and Planning Calculations

Table 66: Dwelling Structure by Household Type – 2021: Berwick Scenario (Model Calculations)

2021	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	14,708	7,329	7,466	378	29,881	787	6,595	37,263
Semi-detached, row or terrace house, townhouse etc with:								
One storey	100	860	425	11	1,396	213	1,940	3,549
Two or more storeys	151	110	64	64	389	62	311	762
Flat, unit or apartment:								
In a one or two storey block	37	28	49	4	117	44	256	417
In a three storey block	0	0	0	0	0	0	42	42
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	21	0	0	24	0	0	24
Other dwelling:								
Caravan, cabin, houseboat	22	15	28	10	74	10	172	256
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	6	0	10	0	16	0	0	16
Total Private Dwellings	***15,025***	***8,363***	***8,042***	***467***	***31,897***	***1,116***	***9,316***	***42,329***

Source: SGS Economics and Planning Calculations

Table 67: Dwelling Structure by Household Type – 2026: Berwick Scenario (Model Calculations)

2026	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	16,065	8,046	8,110	403	32,623	810	7,398	40,831
Semi-detached, row or terrace house, townhouse etc with:								
One storey	117	1,088	508	10	1,723	261	2,316	4,300
Two or more storeys	197	142	71	85	494	79	398	971
Flat, unit or apartment:								
In a one or two storey block	30	31	51	4	117	39	279	435
In a three storey block	0	0	0	0	0	0	54	54
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	26	0	0	28	0	0	28
Other dwelling:								
Caravan, cabin, houseboat	24	16	29	11	80	11	187	278
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	6	0	11	0	17	0	0	17
Total Private Dwellings	***16,441***	***9,349***	***8,780***	***512***	***35,083***	***1,200***	***10,633***	***46,916***

Source: SGS Economics and Planning Calculations

Table 68: Dwelling Structure by Household Type – 2031: Berwick Scenario (Model Calculations)

2031	*Family households*							
	Couple family with children	***Couple family without children***	***One parent family***	***Other family***	***Total***	***Group household***	***Lone Person household***	***Total***
Separate house	17,155	8,596	8,635	427	34,812	819	8,114	43,745
Semi-detached, row or terrace house, townhouse etc with:								
One storey	134	1,319	588	7	2,048	308	2,685	5,041
Two or more storeys	243	174	76	110	604	96	488	1,187
Flat, unit or apartment:								
In a one or two storey block	22	33	53	5	113	33	297	443
In a three storey block	0	0	0	0	0	0	68	68
In a four or more storey block	0	0	0	0	0	0	0	0
Attached to a house	2	31	0	0	33	0	0	33
Other dwelling:								
Caravan, cabin, houseboat	25	18	30	12	85	11	200	296
Improvised home, tent, sleepers out	0	0	0	0	0	0	0	0
House or flat attached to a shop, office, etc.	7	0	11	0	18	0	0	18
Total Private Dwellings	***17,589***	***10,171***	***9,394***	***560***	***37,713***	***1,267***	***11,851***	***50,830***

Source: SGS Economics and Planning Calculations

Appendix B

Victoria In Future

Modelling of future housing demand in Cranbourne requires an input or estimate of population growth. This was obtained from the Department of Sustainability and Environment's (DSE) *Victoria in Future* (VIF) Program. The modelling work undertaken by *VIF* is a top down approach whereby forecasts at the larger geographical level are used to constrain those at the smaller geographical level. The hierarchy of levels are Victoria, Metropolitan Melbourne/Rest of State, Statistical Divisions (SD), Statistical Sub-Divisions (SSD) and Statistical Local Areas (SLA).

Three integrated models are used in VIF. They are the Cohort Component method, the Household Formation method and the Housing Unit Method. The "Cohort-Component Method gives a projection of how many people there will be in Victoria each year by age and sex[9]." This is a purely demographic process and generates the estimated resident population of a region from inputs including the base year population, mortality rates, overseas migration arrivals and departures, interstate migration arrivals and departures, fertility rates and sex ratio for births. "The Household Formation method gives a projection of the number of households in Victoria each year[10]." It converts the estimated resident population (living in private dwellings) from the Cohort Component Method into households. The Housing Unit Method gives a projection of the amount of dwellings that will be constructed for households. It constrains population forecasts by providing a 'reality check' of the capacity of existing stock and residential land supply to support the household forecasts. In 2000, the following information was used to determine supply side constraints:

- DOI's two-yearly report on residential land supply and development in metropolitan Melbourne – Residential Land Release Forecast (1997);
- DOI's annual monitor of Residential redevelopment in Melbourne (1998); and
- Analysis of information gained from local planning schemes, framework plans, and municipal strategic statements in regional Victoria.

There are two stages in the modelling process. In Stage 1 the Cohort Component model is used to generate projections at the State, Metro Melbourne/rest of State, SD and SSD level. Stage 2 is instead driven and constrained by the Housing Unit Method and projections are provided at the SSD and SLA level.

[9] Department of Infrastructure. (2000, p.8), *Victoria in Future: methodology and assumptions,* State Government of Victoria, Melbourne.

[10] Department of Infrastructure. (2000, p.8), *Victoria in Future: methodology and assumptions,* State Government of Victoria, Melbourne.

The various assumptions for VIF[11] are listed below:

- A low fertility rate (a total fertility rate of 1.53 after 2006);
- High net overseas migration into Victoria (that is, a net gain of +21,400 persons per year);
    - 92.5% of immigrants will locate in metropolitan Melbourne
    - 7.5% will locate throughout regional Victoria
- High net interstate migration in Victoria (that is, a net loss of -7,000 persons per year);
    - The Melbourne Statistical Division is projected to sustain the majority (53 per cent) of the average annual net interstate migration loss.

Changes to household composition will result in the average household size in Victoria declining significantly during the projection period.

[11] These assumptions are for VIF 2001 and are documented in their methodology and assumptions publication. VIF 2004 uses similar assumptions but are not documented as this point in time.

Appendix C

Dwelling Categories[12]

Separate house: This is a house which stands alone in its own grounds separated from other dwellings by at least half a metre. A separate house may have a flat attached to it, such as a granny flat or converted garage (the flat is categorised under Flat, unit or apartment — see below). The number of storeys of separate houses is not recorded.

Semi-detached, row or terrace house, townhouse, etc.: These dwellings have their own private grounds and no other dwelling above or below them.

Flat, unit or apartment: This category includes all dwellings in blocks of flats, units or apartments. These dwellings do not have their own private grounds and usually share a common entrance foyer or stairwell. This category also includes flats attached to houses such as granny flats, and houses converted into two or more flats.

Caravan, cabin, houseboat: This category includes all occupied caravans, cabins and houseboats regardless of location. It also includes occupied campervans, mobile houses and small boats.

Improvised home, tent, sleepers out: This category includes sheds, tents, humpies and other improvised dwellings, occupied on Census Night. It includes caravans occupied on Census Night and located in roadside parking areas. It also includes people sleeping on park benches or in other 'rough' accommodation (the traditional definition of homeless people).

House or flat attached to a shop, office, etc.: A house or flat attached to a shop, office, factory or any other non-residential structure is included in this category.

[12] Obtained from the Australian Bureau of Statistics - 2901.0 2001 Census Dictionary: Census Concepts and Definitions