City of Casey Housing Diversity Strategy:

Housing Market Assessment.

Prepared for

City of Casey

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CHARTER KECK CRAMER

Charter Contact	Blair Warman
Report Author	Blair Warman
Job FON	
Client Contact	Joy Chen

CONTENTS.

1. EXECUTIVE SUMMARY

The City of Casey appointed Charter Keck Cramer in October 2014 to prepare a market assessment of Casey's housing sector to inform the development of Council's Housing Diversity Strategy. The purpose of this assessment is to identify the appropriate mix of housing within Casey's existing residential areas to meet the needs of future residents. In doing so, consideration has been given to both demand and supply side factors that influence the underlying commercial viability and potential for a wider range of housing types being developed.

1.1 Context

The population of Casey's established residential areas is projected to increase by 36,255 residents over the period to 2031 which equates to 23% of total population growth across the municipality. At the same time, there is projected to be an overall ageing of the population within existing residential areas and a decline in household size by up to 13% in some suburbs

With detached housing accounting for 91% of all dwellings compared to only 71% across metropolitan Melbourne, it is natural to question whether the existing housing stock is appropriate. This is particularly so given the increasing tendency for older empty nesters to remain in larger family homes while younger families reside in much smaller and more affordable dwellings

Rural lifestyle properties are also a key feature of Casey's housing mix accounting for approximately 5% (4,051) of dwellings of which almost half (1,838) are within Low Density Residential zoned areas. Rural lifestyle properties now account for a declining share of dwelling construction although this may reflect a decline in the relative supply of vacant lots to the equivalent of approximately 3 years of longer -term historical demand.

1.2 Medium Density Housing

The now well established trend towards medium and higher density housing is expected to continue across metropolitan Melbourne. This will primarily take the form of semi-detached dwellings such as townhouses and to a lesser extent apartments.

Demand for apartments will continue to be largely driven by the locational preferences of the 20-39-year-old age group (primarily as tenants rather than owner-occupiers) which account for approximately half of all apartment residents. As these younger age groups are less constrained by mortgages and dependents they have the flexibility to rent apartments (and to a lesser extent townhouses) in inner-city locations closer to where they work and socialise. As this group establish their own families, they will typically return to suburban locations in search of more affordable separate and semi-detached housing.

Semi-detached dwellings appeal to a wider demographic including families and owner-occupiers seeking more affordable alternatives to a traditional family home. Townhouses are also now the preferred housing option for many households due to changing social, economic and demographic factors. This is expected to be reinforced as the townhouse market evolves to better meet the needs of individual purchasers and occupiers.

Outer suburban locations such as the City of Casey therefore perform a very different role to that of Melbourne's inner and middle suburbs where medium and higher density housing caters for a more transient population at a particular life cycle stage.

1.3 Development Industry

There is a strong relationship between property values and the extent of medium density housing development with higher median house prices encouraging the search for more affordable housing options.

With Casey's median house price below the metropolitan equivalent there is not yet sufficient demand to support a viable apartment market beyond smaller niche projects in highly sought-after locations. These would typically offer superior accessibility and liveability through being located close to public transport, activity centres and recreational opportunities.

The residential development industry encompasses a range of developer types each with different skills and expertise, cost structures and profit requirements which determine the type and scale of housing development they can viably undertake in a given location. Within Casey, local builder/developers will initially play a key role in the medium density housing sector with medium scale developers likely to become more involved as the market matures and perceived market risks reduced.

Developers and financiers perceive outer suburban locations as posing greater risks for apartment projects due to increased competition from lower density housing and limited opportunities to market projects to buyers outside the local area. With larger developers favouring locations with lower market risks, local builders/developers with lower cost structures may play a key role in initiating apartment development.

Financiers will however typically require greater developer equity in projects where a higher level of risk is identified either due to project related factors (e.g. location, design etc.), developer capability or success of off-the-plan marketing. These factors create further hurdles for unproven apartment locations and projects.

1.4 Development Constraints

Future demand for apartments within Casey will be primarily driven by median house prices increasing in real terms to levels comparable to locations such as the City of Knox where there is an emerging apartment market.

While townhouse development is a more immediate opportunity within Casey, this is still dependent upon efficient design outcomes to maximise dwelling yields and the profitability of projects. Ideally townhouse sites should be at least 1,000 sqm with a minimum frontage of 18-20 metres while apartment developments may typically be undertaken upon sites upwards of around 800 sqm.

1.5 Future Housing Requirement

Demand for additional housing within Casey's established residential areas has been projected based upon three scenarios. These range from a base case where existing housing preferences are assumed to remain unchanged, through to a growth scenario reflecting the expectation that housing preferences within the area will mirror that of more established locations being the City of Knox as well as reflect a growing trend towards medium density housing and in particular townhouses.

Study Area: Projected Additional Housing Demand 2011-2031

	Separate Houses	Semi Detached Dwellings (Townhouses)	Apartments
Base Case Scenario	19,000	1,300	560
Moderate Scenario	17,250	2,900	1,250
Growth Scenario	15,000	4,700	1,700

1.6 Rural Lifestyle Properties

While the construction of new dwellings on rural lifestyle properties averaged around 50 dwellings per annum over 1980-2010, only 109 dwellings have been constructed since 2010. A key factor behind this decline may be the reduced availability of vacant properties (currently 176 lots) which represents just over three years supply based upon longer term construction rates.

The median annual growth rate for properties of 4,000 sqm-2.0 ha purchased and re-sold during the period 2000-2014 was 9.4% per annum compared to a benchmark rate of 7.3% per annum for traditional residential properties within the benchmarked suburb of Narre Warren.

1.7 Strategic Direction

With apartment development being primarily driven by median house prices there is unlikely to be any significant level of development occurring until existing greenfield housing opportunities are exhausted. This would provide the necessary increase in median house prices to generate demand for more affordable, higher density housing alternatives.

Niche apartment development opportunities may however be facilitated by Council in key strategic locations such as the Fountain Gate-Narre Warren activity centre and Berwick Village through the redevelopment of key Council sites.

In the interim however semi-detached townhouse style development will support the emergence of a broad-based medium density housing sector in various forms across the municipality.

2. INTRODUCTION

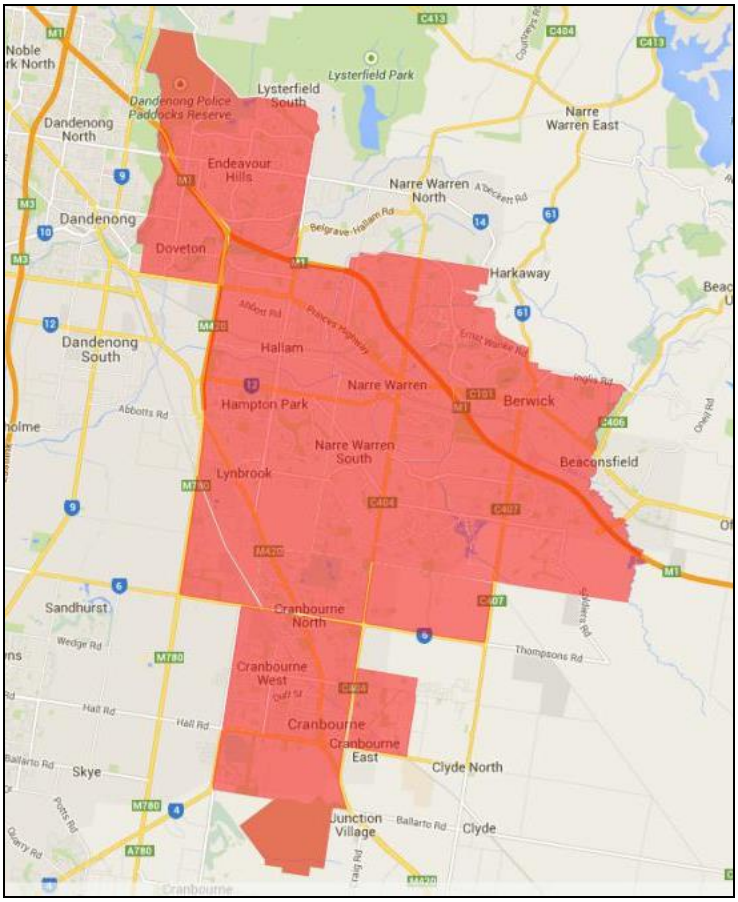
Charter Keck Cramer was appointed by the City of Casey in October 2014 to prepare a Housing Market Assessment to inform the development of a Housing Diversity Strategy for the municipality. The purpose of the Strategy is to determine the appropriate mix of housing to meet the needs of an evolving community primarily characterised by an ageing population and reduced household sizes.

Given the potential need for a greater diversity of housing types, the purpose of this assessment is to identify likely demand for different housing formats and associated land requirements over the period to 2031. In undertaking this assessment consideration has also been given to potential constraints upon housing supply.

2.1 Study Area

The focus of the Strategy and therefore this assessment is upon Casey's established residential areas where there is potentially the greatest need for a realignment of the mix of housing to meet the changing housing needs of residents. The following figure identifies the Study Area as defined for the purpose of this assessment.

Figure 1: Study Area



Source: City of Casey, Google Streets

2.2 Report Format

The initial sections of this report profile Casey's housing stock (Section 3) based upon an analysis of data from the 2011 ABS Census and Council's Rates Database followed by an overview of population and household projections prepared by Id Consultants (Section 4). A more detailed analysis of these projections is provided in Appendix A.

Section 5 provides an overview of housing demand trends across metropolitan Melbourne with Section 6 providing a more detailed investigation of the emergence of medium density housing over recent decades.

A development industry perspective is provided in Section 7 with a focus upon the underlying property market fundamentals and the implications for the viability and scale of apartment development at a local level.

Section 8 identifies a number of potential constraints that may limit the potential for the projected housing requirement being delivered by the development industry.

The Study Area's future housing requirement in 2031 is projected in the Section 9 based upon three scenarios reflecting the likely change in housing preferences as a result of Casey's projected population growth and broader property market trends.

Section 10 investigates the supply and demand situation for rural lifestyle properties including the capacity for existing supply to meet likely future demand.

Finally, Section 10 provides a number of recommendations to address key issues identified during the course of this assessment.

2.3 Abbreviations

ABS Australian Bureau of Statistics
Sqm: Square metres

3. CASEY HOUSING PROFILE

Summary

- Medium density housing needs to be considered as a broad category given a number of anomalies in the classification of 'semi-detached dwellings' and 'flats, units or apartments' within ABS data and Council's Rates Database.
- Casey's housing mix reflects its outer suburban location with over 90% of dwellings being separate houses compared to only 72% for metropolitan Melbourne.
- Doveton and Eumemmerring have a notably older housing stock with the average value of capital improvements being less than $50,000 compared to $100,000 - $200,000 across much of Casey. Doveton and Eumemmerring (along with Berwick) also have the highest average site values in Casey reflecting their proximity to employment opportunities, freeways and urban amenities. This suggests potentially stronger opportunities for urban renewal over the medium to longer term.
- The potential scale of urban renewal within Doveton is highlighted by there being 2,185 properties with capital improvements of less than $50,000 representing 43% of the total number within Casey.
- Rural lifestyle properties account for 4,051 (5%) of Casey's total stock of separate houses of which almost half (1,838) are located within Low Density Residential zoned areas. Construction of dwellings on rural lifestyle properties peaked in 1990 at 175 dwellings before declining to 60-100 dwellings per annum during the 1990s and more recently to an average of 34 dwellings per annum over the past five years.
- The share of total dwelling construction accounted for by rural lifestyle properties has steadily declined from 5% to less than 1% since 1980, most likely due to a tightening in the availability of vacant properties which now equate to approximately 3 years of longer-term historical demand.

The City of Casey's existing housing stock provides a basis for understanding the historical pattern of residential development across the municipality, the market conditions that have shaped development and future opportunities. The purpose of this section is to profile Casey's existing housing stock based upon data from both the ABS Census and Council's Rates Database.

3.1 ABS Census

The ABS Census offers the opportunity to not only profile Casey's housing but also identify the characteristics of those households and individuals living within each dwelling type. It also allows comparisons to be made with other municipalities and the wider metropolitan area.

The ABS classifies dwellings according to the following definitions:

- Separate House

  Dwelling 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).

- Semi-detached, row or terrace house, townhouse, etc.

  Dwellings have their own private grounds and no other dwelling above or below them. They are either attached in some structural way to one or more dwellings or are separated from neighbouring dwellings by less than half a metre.

- Flat, unit or apartment

  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.

There are however a number of anomalies that arise in applying this classification system to different locations and housing types. For example within the City of Casey, which is characterised by relatively low density residential development, virtually all dwellings classified as a 'flat, unit or apartment' are single level villa units. This contrasts with other municipalities where there has been more intensive residential development and 'flats, units or apartments' also include multi-level apartment buildings which are quite distinct from the form of development that has occurred within Casey.

While the ABS does distinguish between 'flats, units or apartments' based upon the number of levels, those of one and two levels are grouped together under one classification which does not allow villa units to be distinguished from low rise apartment buildings.

There is also inconsistencies with the classification of dwellings within retirement villages and in some cases identical dwellings within the same development have been classified differently. For example, the Woodlands Park Retirement Village in Berwick which represents the only residential development within the statistical area[1] defined by the ABS is recorded as having 42 separate houses, three semi detached dwellings and 85 flats, units or apartments despite all the dwellings within the estate being identical.

Therefore, while ABS data is invaluable for identifying relationships between housing and demographic groups these classification issues need to be taken into account if projections of future housing needs are based upon historical provision rates.

3.1.1 City of Casey Rates Database

Council's Rates Database provides detailed information on the characteristics of residential properties including the type of dwelling, year of construction, floor area, site value and capital improved value. It is however not possible to directly link this data to the characteristics of residents or make comparisons with other municipalities as is possible with ABS Census data.

3.2 Housing Mix

The ABS Census identified a total of 87,346 dwellings across the City of Casey in 2011 of which 95% were occupied. Separate houses accounted for 91% of all dwellings which is significantly higher than the 72% recorded across metropolitan Melbourne and reflects Casey's outer metropolitan location. Similarly, the proportion of dwellings that are semi-detached is approximately one-third the metropolitan average, and for flats, units and apartments approximately one-quarter that of metropolitan Melbourne.

As already discussed above, flats, units and apartments within the City of Casey generally relate to single-level villa units which is reflected in virtually all being within a 'one or two storey block' whereas just over half of those across metropolitan Melbourne fall into this category.

[1] Statistical Area 1 No. 2129351

Table 1: City of Casey Private Dwelling Mix 2011 (ABS Classification)

Dwelling Type	City of Casey			Housing Mix	
	Occupied	Unoccupied	Total	Casey	Metro. Melbourne.
Separate house	**75,584**	**4,008**	**79,592**	**91.1%**	**71.7%**
Semi-detached, row or terrace house, townhouse etc. with one storey	2,708	169	2,877	3.3%	7.4%
Semi-detached, row or terrace house, townhouse etc. with two or more storeys	982	106	1,088	1.2%	4.2%
Sub Total: Semi-detached dwellings	***3,690***	***275***	***3,965***	***4.5%***	***13.1%***
Flat, unit or apartment in a one or two storey block	3,126	319	3,445	3.9%	9.1%
Flat, unit or apartment in a three storey block	12	3	15	0.0%	3.0%
Flat, unit or apartment in a four or more storey block	92	7	99	0.1%	4.0%
Sub Total: Flat, unit or apartment	***3,230***	***329***	***3,559***	***4.1%***	***16.0%***
Flat, unit or apartment attached to a house	22	6	28	0.0%	0.1%
Caravan, cabin, houseboat	140	5	145	0.2%	0.2%
Improvised home, tent, sleepers out	9	3	12	0.0%	0.0%
House or flat attached to a shop, office, etc.	24	4	28	0.0%	0.2%
Not stated	17	0	17	0.0%	0.0%
Not applicable	0	0	0	0.0%	0.0%
Total	**82,716**	**4,630**	**87,346**	**100.0%**	**100.0%**

Source: ABS Tablebuilder

Council's Rates Database provides a much more detailed description of dwelling types as at 2014. As shown in the table below, 91% of dwellings are separate houses which is consistent with ABS Census data for 2011. Similarly, 9.2% of dwellings are classified as medium density housing which is consistent with ABS data where a combined 8.6% of dwellings were either semi-detached or flats, units and apartments.

The issues relating to the ABS classification of villa units as 'flats, units or apartments' is highlighted by the high proportion of total medium density housing that are either single units, villa units or townhouses. In particular, only around 1% of medium density housing is classified as a individual flat or residential investment flat. Similarly, retirement village units which are a unique form of residential development represent 20% of medium density housing (and almost 2% of total housing).

Table 2: City of Casey Total Dwelling Mix 2014 (Rating Classification)

Dwelling Type	No.	%
Detached Dwelling	80,717	86.1%
Residential Rural/Rural Lifestyle (0.4 to 20 Hectares)	4,051	4.3%
Separate Dwelling & Curtilage	216	0.2%
Total Separate House	***84,984***	***90.6%***
Single Unit/Villa Unit/Townhouse	5,970	6.4%
Individual Flat	462	0.5%
Conjoined Unit/Townhouse	38	0.0%
Residential Investment Flats	411	0.4%
Retirement Village Unit	1,748	1.9%
Granny Flat/Studio	31	0.0%
Total Medium Density Housing	***8,660***	***9.2%***
Other	64	0.1%
Total	***93,708***	***100%***

Source: City of Casey Rates Database

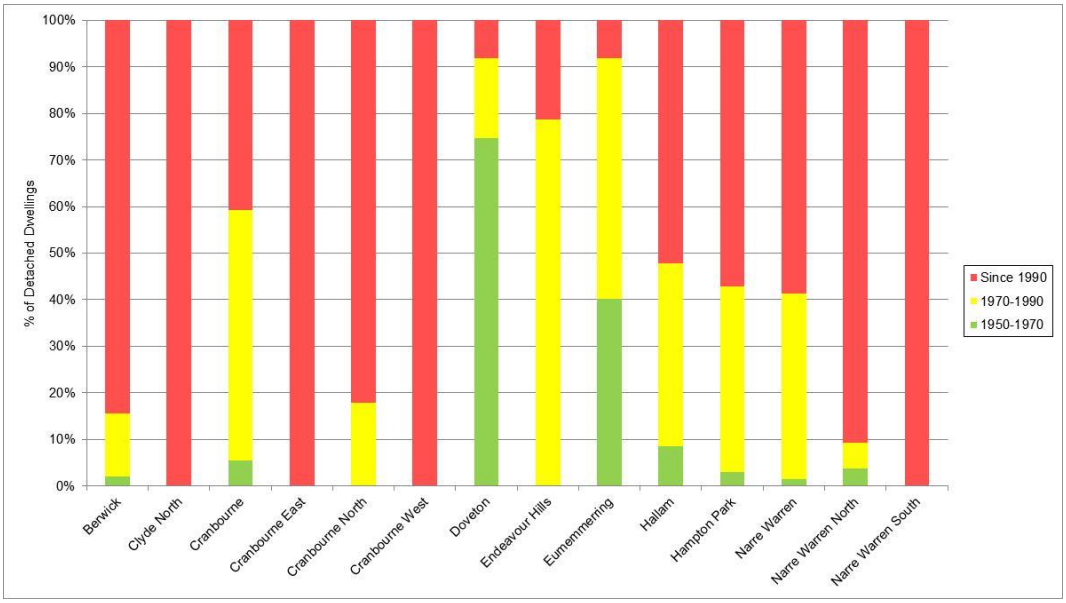
3.3 Separate Houses

Separate houses represent not only the dominant form of housing across the City of Casey, accounting for over 90% of dwellings, but also a source of potential development sites within the established residential areas. The potential to redevelopment properties for more intensive housing will be primarily determined by the value of capital improvements which if sufficiently great may discourage redevelopment.

Council's rates database provides information on construction year and the estimated value of capital improvements. The figure below highlights the diversity of residential development across Casey, from Doveton where the majority of houses were constructed before 1970 through to newer suburbs such as Narre Warren South which have been developed since 1990.

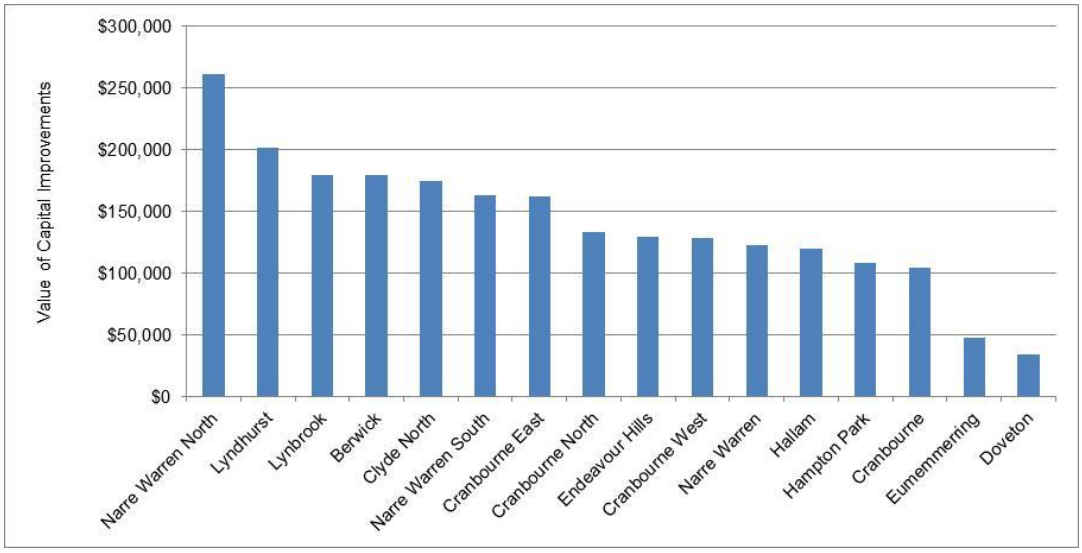
The value of capital improvements generally reflect the age of houses with older suburbs such as Doveton and Eumemmerring having the lowest average value of improvements at less than $50,000. Other suburbs across the City of Casey have a considerably higher value of capital improvements within the range $100,000-$200,000 with Narre Warren North having an average value of improvements in excess of $250,000 reflecting larger dwellings on rural lifestyle properties.

Figure 2: Detached Dwellings Construction Year (Selected Suburbs)



Source: City of Casey

Figure 3: Detached Dwellings – Average Value of Capital Improvements



Source: City of Casey

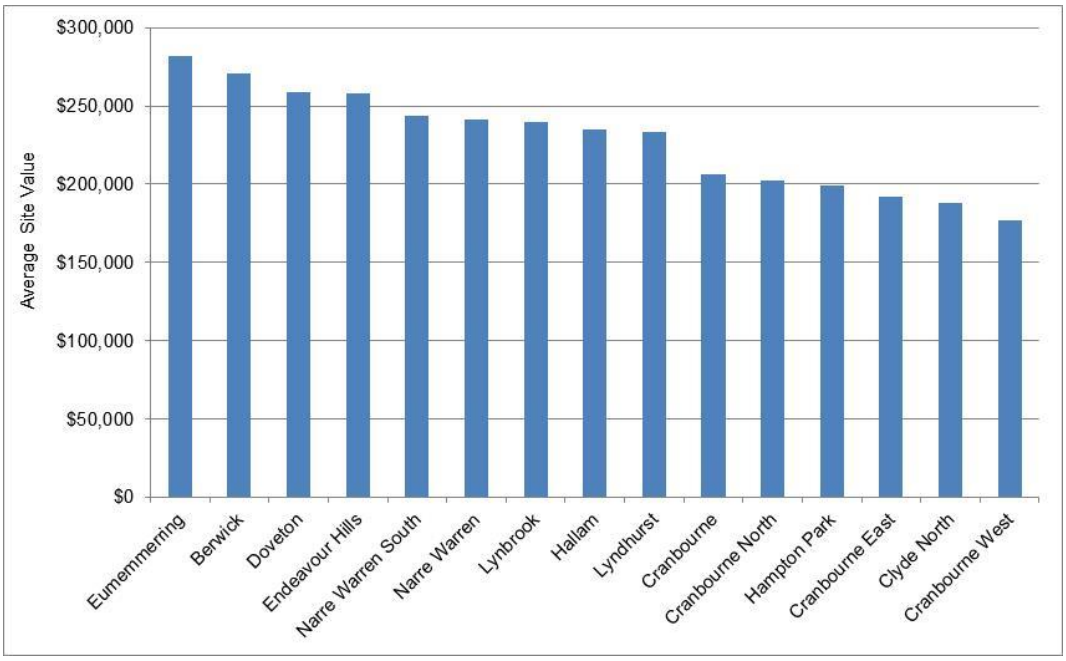
Given that any redevelopment of sites would discard capital improvements they represent an additional cost that do not add value to a potential development site and therefore discourages any redevelopment in favour of vacant sites that may be available elsewhere.

Higher quality housing within the immediate area does however contribute to the amenity of a location which in turn may encourage the redevelopment of individual sites with a low value of capital improvements.

Council's assessment of site values also provides an indication of local housing demand independent of the value of capital improvements. The following figure shows average site values for established locations within the City of Casey. As would be expected, those suburbs within the northern portion of the municipality are most highly valued reflecting their proximity to employment opportunities, Melbourne's freeway network and major retail facilities such as Fountain Gate Shopping Centre.

It is notable that Doveton and Eumemmerring are within the highest ranked locations while also having the lowest average value of capital improvements. This suggests potentiall opportunities for urban renewal at a suburb level.

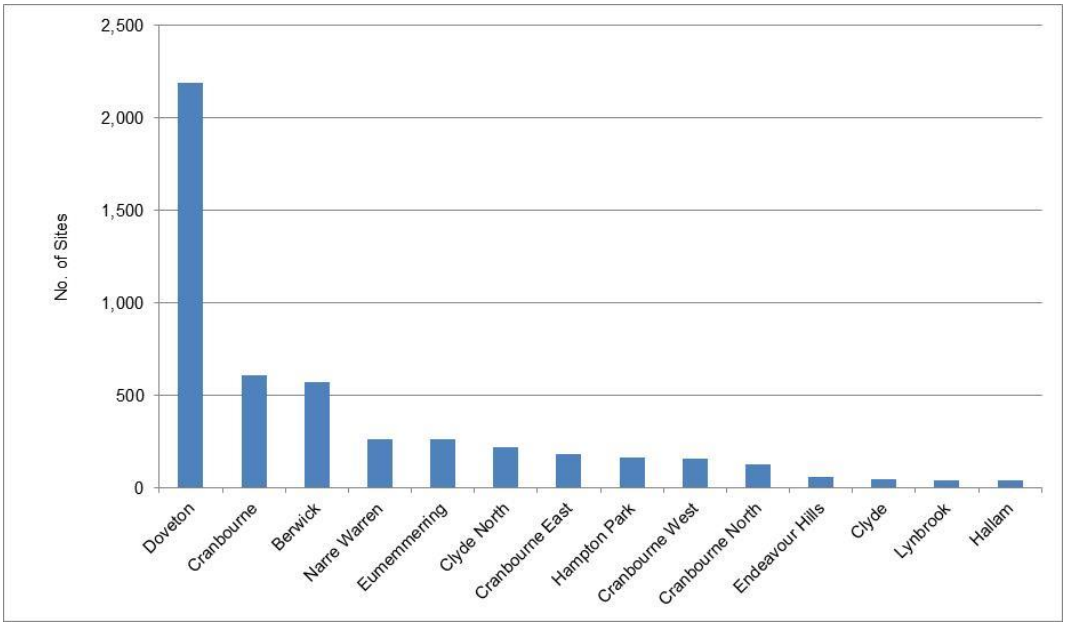
Figure 4: Detached Dwellings – Average Site Value (Selected Suburbs)



Source: City of Casey

The scale of any redevelopment that may occur will also be dependent upon the number of potentially available sites. The figure on the next page identifies the number of properties with capital improvements of less than $50,000 with Doveton having the highest number with 2,185 sites representing 43% of the total number of sites in this group across the municipality. This is followed Cranbourne (605), Berwick (572), Narre Warren (263) and Eumemmerring (259).

Figure 5: Detached Dwelling Capital Improvements Less Than $50,000 – Number of Sites



Source: City of Casey

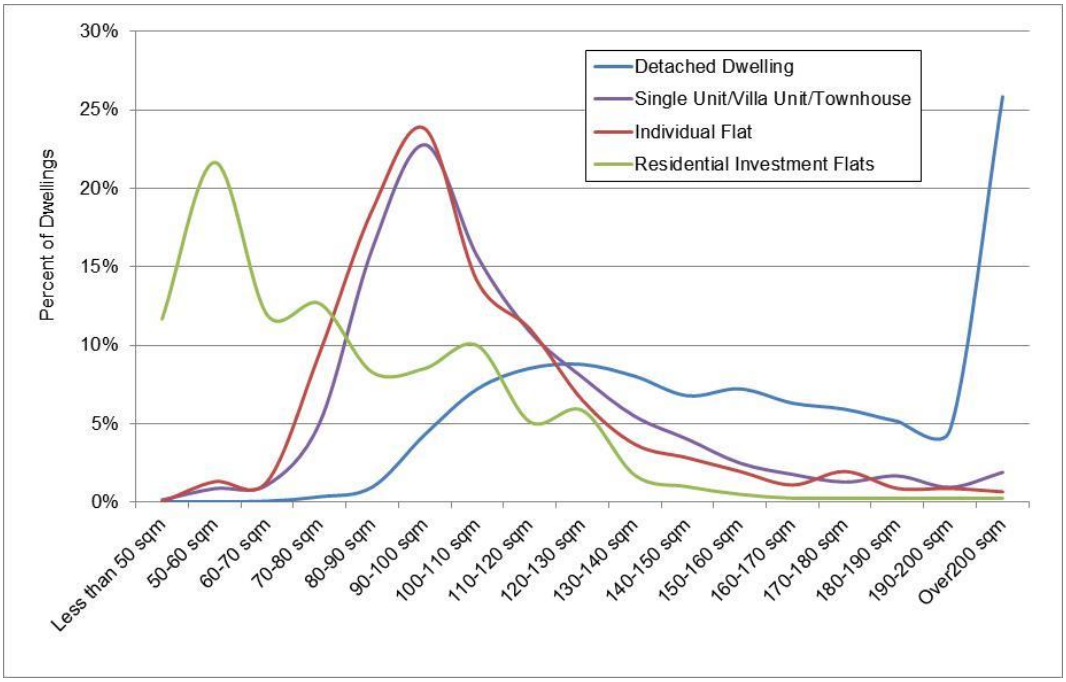
3.4 Medium Density Housing

As already discussed, medium density housing within the City of Casey is of a lower density than that developed within Melbourne's inner and middle regions. In particular, what is typically described as flats within the City of Casey are more comparable to villa units elsewhere across Melbourne.

Council's rates database also identifies 'single units, villa units and townhouses' which account for 5,970 dwellings compared to only 873 flats. These flats are further segmented as being 462 'individual flats' and 411 'residential investment flats'. The figure below however indicates that the size of 'individual flats' is comparable to that of 'single units, villa units and townhouses' with 45% and 54% respectively being larger than 100 sqm in contrast to 'residential investment flats'of which only 25% are larger than 100 sqm.

This analysis of building areas for various medium density dwelling types further highlights the issues relating to their classification and the need to consider medium density housing broadly as an alternative to traditional detached dwellings rather than individual classifications such as 'flats, units or apartments' or 'semi-detached dwellings'.

Figure 6: Medium Density Housing Gross Floor Area by Dwelling Type



Source: City of Casey

3.5 Rural Lifestyle Properties

Rural lifestyle properties are identified by Council's Rates Database as '*Residential Rural/Rural Lifestyle (0.4 to 20 Hectares)*'. There is currently 4,051 occupied rural lifestyle properties within the City of Casey representing almost 5% of the municipality's combined stock of separate houses. These properties are distributed across a number of zones each with different minimum lot sizes with the Low Density Residential Zone (LDRZ) accounting for almost half (1,838) of the total properties in this category. Other zones of interest to this assessment are those with a minimum subdivision size of 2 ha or less (GWAZ1/2/3 and GWZ1 zones) which account for a further 13% (515) of occupied properties.

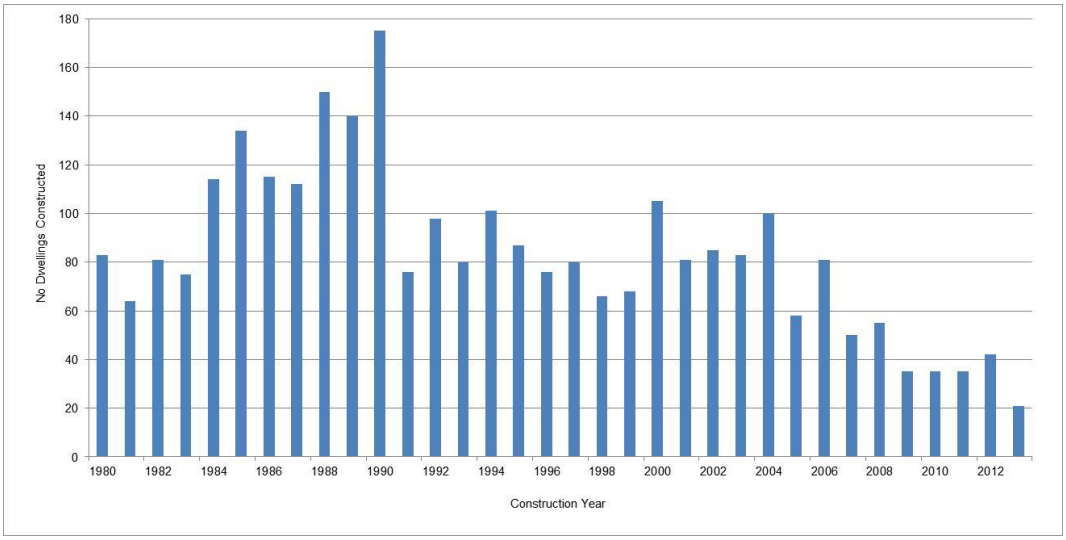
Table 3: Occupied Rural Lifestyle Properties by Zoning

Zoning	No. Properties
LDRZ	1,838
GWAZ1	312
GWAZ2	127
GWAZ6	35
GWZ1	41
Green Wedge Other	1,246
GRZ1	141
UGZ	106
Other	205
Total	**4,051**

Source: City of Casey

An indication of the historical demand for rural lifestyle properties within Casey may be gained from Council's rates database which identifies the year in which dwellings were constructed on these properties. Construction activity grew strongly during the 1980s before peaking in 1990 when 175 dwellings were completed (refer figure below). With the recession of the early 1990s completions fell sharply and remained at around 60-100 dwellings per annum during the 1990s. Since 2000 there has been a general decline in construction activity with an average of only 34 dwellings per annum constructed over the past five years.

Figure 7: City of Casey – Rural Lifestyle Dwellings Constructed

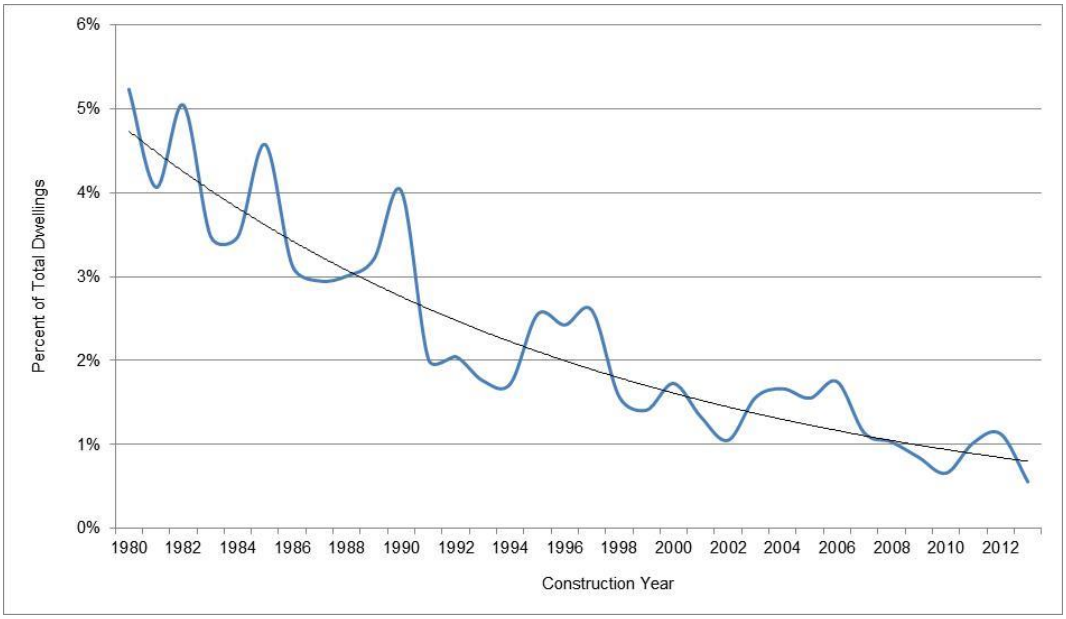


Source: City of Casey

Construction activity within the rural lifestyle sector also reflects conditions within the broader housing market including the impact of economic uncertainty, alternative lifestyle opportunities offered by other housing options both within Casey and elsewhere, and increased awareness of environmental sustainability. Importantly, it also reflects the relative availability of rural lifestyle properties within Casey with the current supply of vacant properties equivalent to just over three years of historical demand (refer Section 10)

These factors have contributed to a steady long-term decline in the share of total dwelling construction accounted for by rural lifestyle properties over the past three decades from 5% to less than 1% (refer figure below).

Figure 8: City of Casey – Rural Residential Dwellings - Share of Total Dwellings* Constructed



Source: City of Casey

Excluding flats

4. PROJECTED POPULATION AND HOUSEHOLD GROWTH

Summary

- The Study Area's population is projected to increase by 36,255 residents by 2031 representing 23% of Casey's total projected population growth.
- An overall ageing of the Study Area's resident population will result in an increased number of single person and empty nester households and an associated decline in household size of up to 13% in some suburbs.

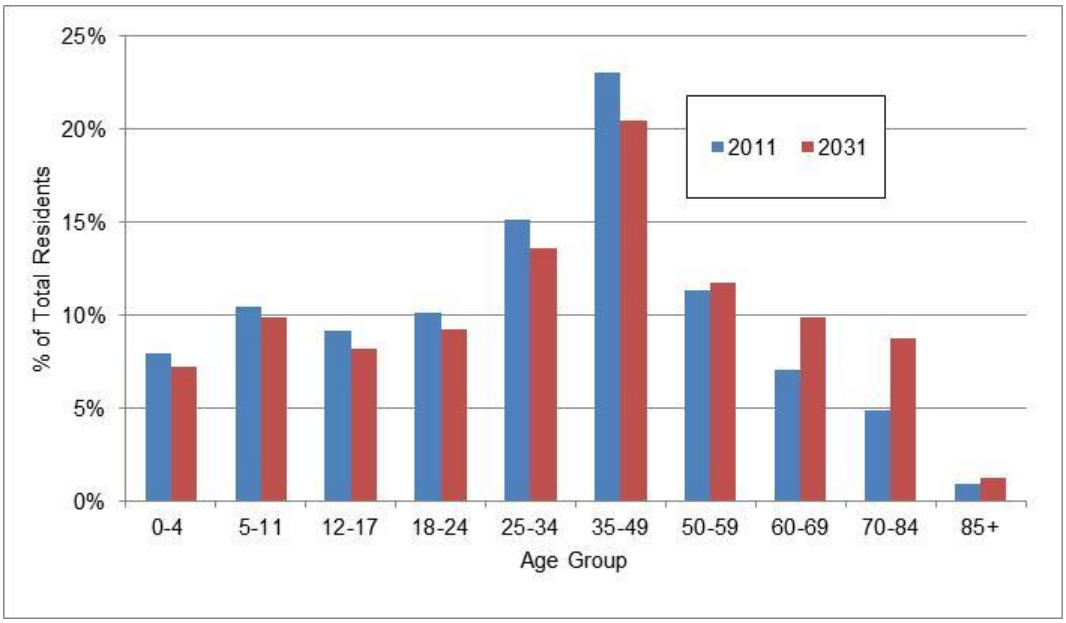
A detailed analysis of Casey's projected population and household growth is provided in Appendix A. This section provides a summary of some of the key findings from that analysis.

Future demand for housing within the City of Casey will be driven by population and household growth from existing households whose housing requirements may change to reflect their life cycle stage as well as new households migrating to the municipality. There will however also be a migration of households from the municipality for a range of reasons including moving closer to educational institutions or workplace locations.

The Study Area will continue to play an important role in accommodating Casey's future population growth with Id Consultants projecting that its resident population will increase by 11% or 36,255 residents by 2031. This represents 23% of Casey's total projected population growth over the period.

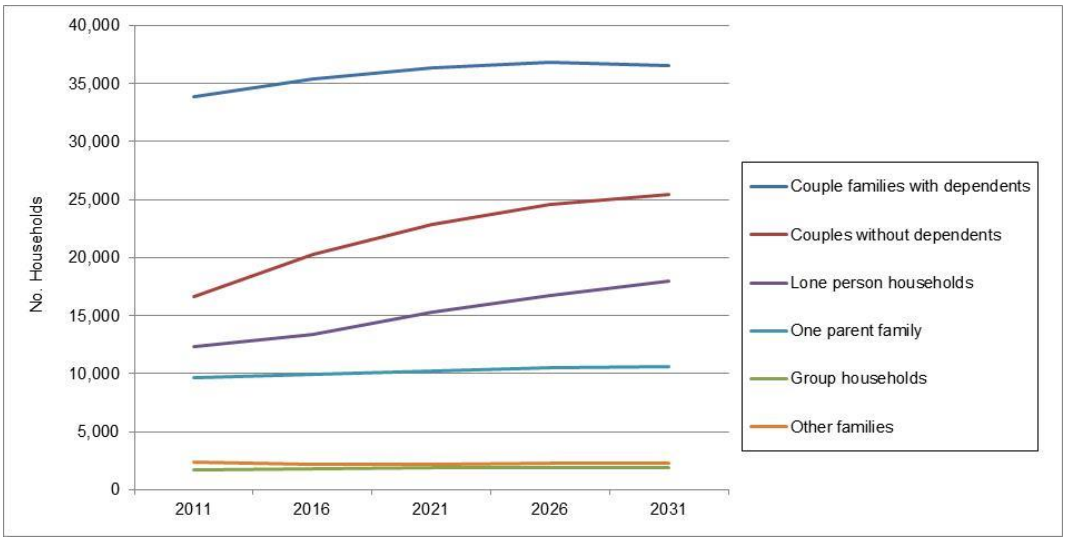
Id Consultants' population projections also highlight a notable ageing of residents within the Study Area and as a result growth in the number of 'lone person' and 'couple without dependents' households. Associated with this trend is a projected decline in the average household size with Casey's most populated areas Berwick (South), Endeavour Hills, Hampton Park, and Narre Warren South projected to experience a decline in household size of between 7% and 13% by 2031.

Figure 9: Study Area Age Distribution 2011 vs 2031



Source: Id Consultants

Figure 10: Study Area – Projected Households 2011-2031



Source: Id Consultants

5. METROPOLITAN HOUSING TRENDS

Summary

- Melbourne's trend towards medium and higher density housing over recent decades is expected to continue. Higher density apartment development will be primarily focused upon the inner region while medium density development (townhouses and lower rise apartments) will be more evenly distributed across the metropolitan area.
- Demand for apartment living is primarily driven by the location preferences of the 20-39 year age group (primarily as tenants rather than owner-occupiers) which account for 53% of apartment residents. Favoured locations include those offering convenient access to inner Melbourne's employment and lifestyle opportunities, as well as more suburban locations close to tertiary education institutions.
- Semi-detached dwellings (townhouses) appeal to a wider demographic as an affordable alternative to a traditional home for owner-occupiers while also offering additional space to that of an apartment. Due to their broader appeal to families and owner occupiers these dwellings are more widely distributed across suburban Melbourne including the City of Casey.
- Medium and higher density housing also represents a supply-side response to underlying land values with reduced land requirements offsetting higher construction costs associated with higher density housing. Similarly, higher land values are also reflected in the cost of lower density housing alternatives to purchasers and tenants.
- The majority of apartment projects contain fewer than 30 apartments reflecting the limited depth of demand outside of Melbourne's inner region. Similarly, apartment projects are predominantly located within 800 metres of railway stations reflecting demand from potential tenants working in the Melbourne CBD.

Future housing provision within the City of Casey needs to be considered within the context of the pattern of residential development occurring across the wider metropolitan area. Development activity reflects a range of factors including housing affordability as dictated by local residential property market conditions and in particular underlying land values, housing preferences at various stages within a household's life-cycle, and differences in housing tenure across housing types.

With the residential development sector responding to the needs and financial capacity of potential purchasers, these characteristics of housing demand are reflected in the spatial distribution of housing across metropolitan Melbourne.

This section reviews the pattern of residential development that has occurred across metropolitan Melbourne as a basis for understanding future opportunities for a greater diversity of housing within the City of Casey.

5.1 Metropolitan Context

Melbourne's housing market comprises a range of dwelling types albeit dominated by traditional suburban stand-alone houses which currently account for 73% of its total housing stock. The next most prominent form of housing is medium density housing which includes townhouses and semi-detached dwellings which account for around 20% of the city's dwellings. Higher density apartments account for only 6% of the total dwelling stock.

Higher density housing is primarily concentrated in the Melbourne CBD and Inner region (up to 5 km from the Melbourne CBD) with additional development within identified activity centres and

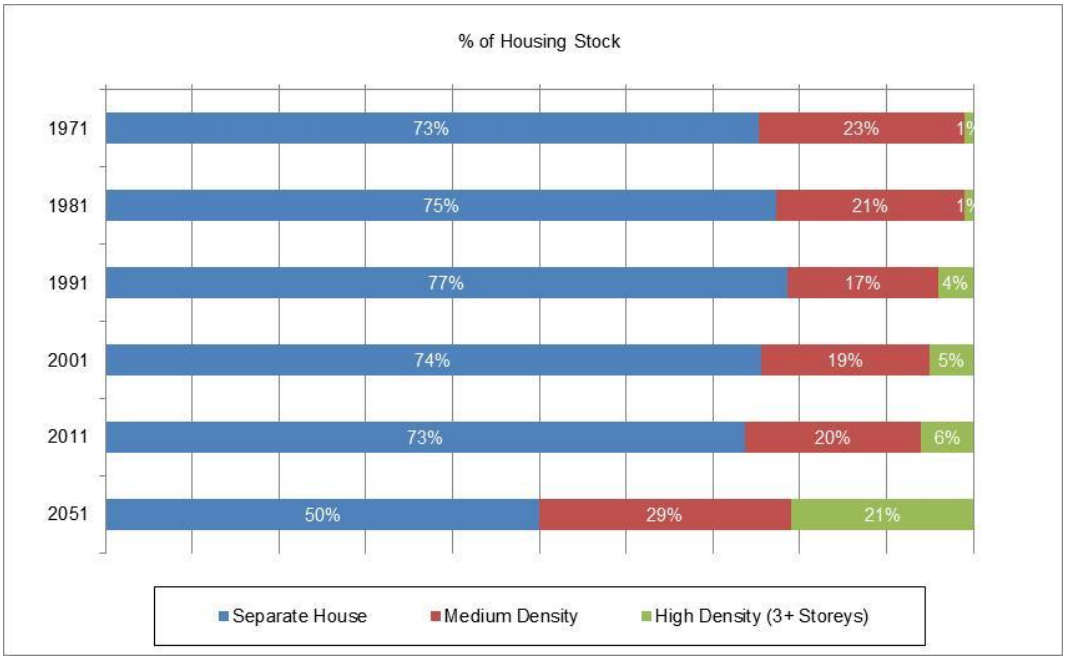
suburban employment and education nodes. Conversely separate houses are distributed widely across metropolitan Melbourne and has accounted for the vast majority of new housing that has been developed in the outer and fringe greenfield suburbs since the 1960s.

Melbourne's stock of medium density housing has grown over the last 40 years by about 70% with townhouses representing a higher proportion of this supply. Of greater significance however to the underlying opportunities for new townhouse supply, it is estimated by Charter that there will be a 95% increase in medium density housing over the next 40 years (2011 – 2051). This will be primarily due to the development of townhouses which an expected increase their share of Melbourne's dwelling stock from 20% in 2011 to 29% by 2051.

Medium density housing is also widely dispersed across Melbourne's Inner and Middle suburbs as a result of the historic provision of villa units and walk-up apartments. Increasingly, contemporary townhouses are also being delivered widely across Melbourne's Middle and Outer suburbs at a range of price points to cater for local demand. This new supply is being delivered through the redevelopment of interwar and post-war housing initially built on larger lots and now becoming functionally obsolete.

In addition, because of the imperative to increase housing supply in established areas that takes advantage of existing infrastructure, there is increasing policy support across Melbourne for the redevelopment of larger industrial sites to be redeveloped as integrated medium density projects of up to 150 townhouse dwellings.

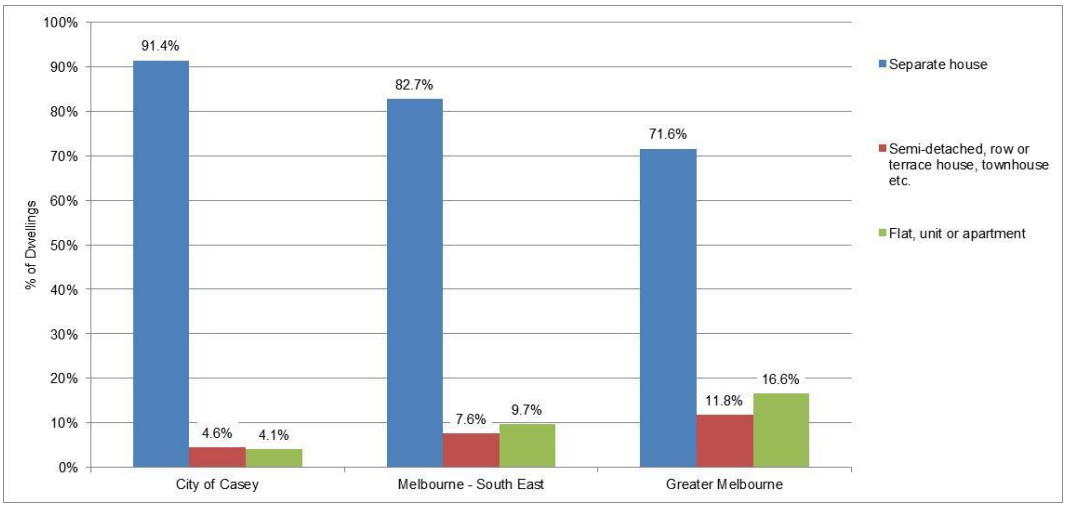
Figure 11: Metropolitan Melbourne: Dwelling Structure – Historic and Projected Future Scenario.



Source: ABS, DTPLI, Charter Keck Cramer.

The City of Casey's existing housing stock is predominantly separate houses which account for 91% of all dwellings with semi-detached housing and apartments each accounting for just over 4%. (refer figure below) By comparison, across Melbourne's south-east region which includes the City of Casey together with the municipalities of Cardinia, Monash and Greater Dandenong, 83% of dwellings are separate houses with semi-detached dwellings accounting for a further 7.6% and apartments almost 10% of total dwellings. Similarly, across metropolitan Melbourne there is a greater diversity of housing with separate houses only accounting for 72% of total dwellings followed by apartments (17%) and semi-detached dwellings (12%).

Figure 12: Dwelling Mix 2011



Source: ABS

There are a range of factors that influence the mix of housing types within any one location through their impact upon the depth of housing demand and ultimately underlying land values which determine the commercial viability of developing each housing type given their different land requirements. These factors are discussed in more detail throughout this report but include proximity to:

- Melbourne CBD which as a key employment location generates demand for rental accommodation particularly amongst younger professional workers.
- Tertiary educational institutions and the need to accommodate students.
- Public transport and in particular rail services within reasonable commuting distance of the Melbourne CBD and other employment nodes.

Each housing type typically caters for different market segments which is reflected in the age profile of the occupants, and related to this the proportion of dwellings that are rented, as shown in the two figures below for metropolitan Melbourne.

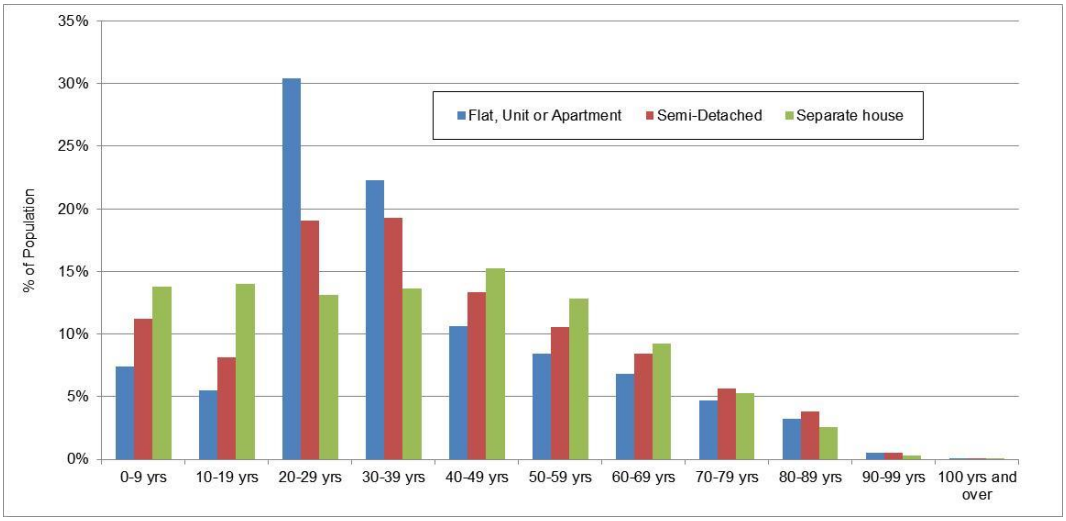
The age distribution of occupants of each dwelling type again reflects a range of factors that vary across each age group such as space requirements (including private open space, storage, car parking), affordability relative to earning capacity, preferred location and relative affordability of alternative dwelling types in the area.

As the figure below indicates, the age distribution of the occupants of separate houses is much more uniform than for other housing types albeit with a steady decline in the representation of over 60 year olds as they relocate to medium density housing or enter aged care facilities.

The 20-29 and 30-39 year old age groups representing those segments of the population most likely to have left home but yet to establish their own families account for 53% of apartment residents. The concentration of demand within this relatively narrow cohort and the location and lifestyle preferences of this group have a major influence upon the pattern of apartment development across Melbourne.

Semi-detached dwellings represent a compromise between apartments and separate dwellings offering more space than an apartment but more affordable than a traditional home and therefore appeal to a wider range of household types.

Figure 13: Metropolitan Melbourne – Age Distribution of Dwelling Type Occupants 2011

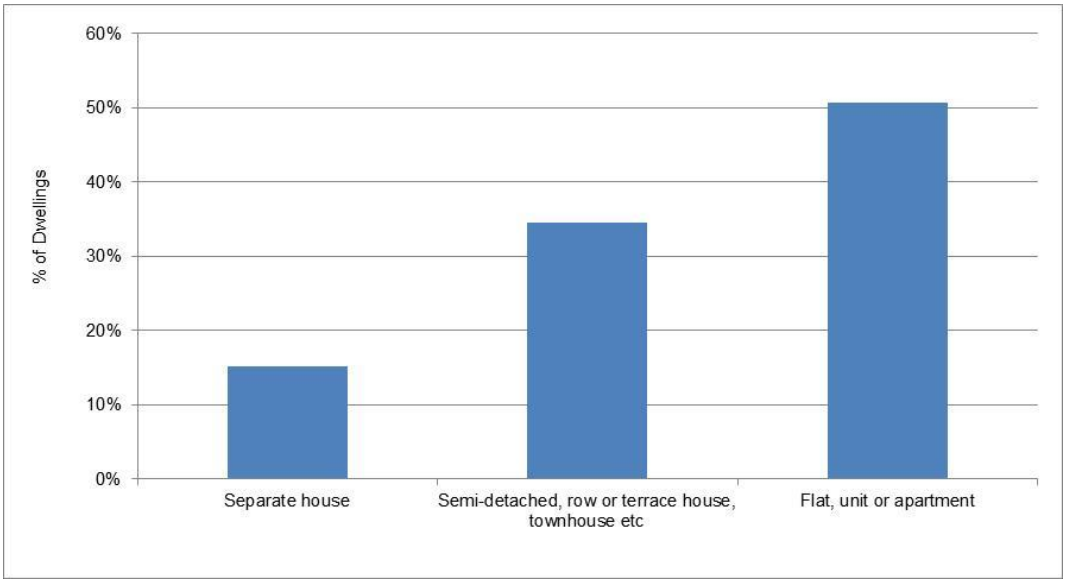


Source: ABS

The likelihood of dwellings being rented also reflects the age profile of the occupants of each dwelling type with half of all apartments being rented compared to less than 20% of separate houses. As a result the distribution of apartment development reflects the needs of younger tenants which have very different location preferences to older owner-occupiers of separate houses.

However the location of apartment projects must also appeal to investors with an increasing number residing outside of Melbourne as a result of apartment projects being marketed through financial intermediaries. Importantly, a location must support the marketing of apartments in terms of appealing to purchasers that may not be familiar with Melbourne.

Figure 14: Metropolitan Melbourne – Rented Dwellings 2011



Source: ABS

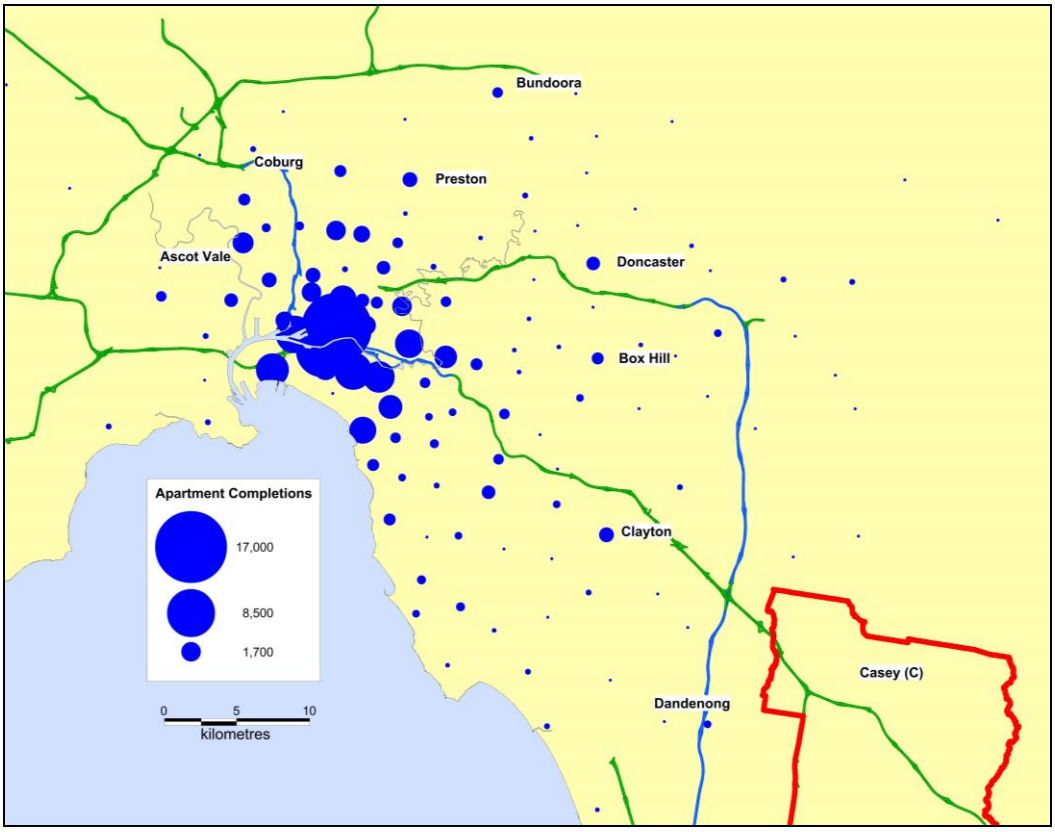
5.2 Spatial Distribution

The influence of these factors upon the location of new medium density residential development is best summarised by the pattern of apartment and townhouse development that has occurred across metropolitan Melbourne since 2000. Charter Keck Cramer maintains a database of apartment and townhouse projects comprising more than 10 dwellings with a range of variables including completion date, the scale of development (levels), developer, and current development status.

The following figure highlights the concentration of completed apartment projects within the inner Melbourne region where there is stronger rental demand from younger households looking to live close to where they work, study and socialise. Similarly, higher property values in these inner locations mean that apartments represent a more affordable alternative to either renting or purchasing a traditional house or townhouse.

There are however a number of suburban locations such as Bundoora and Clayton where there is stronger demand from students at Latrobe and Monash universities, as well as at Doncaster due to the views offered from Doncaster Hill, and Box Hill which offers local employment opportunities, efficient rail services to the CBD and the vibrancy of the Asian themed Box Hill activity centre.

Figure 15: Apartment Completions* by Postcode 2000-2014

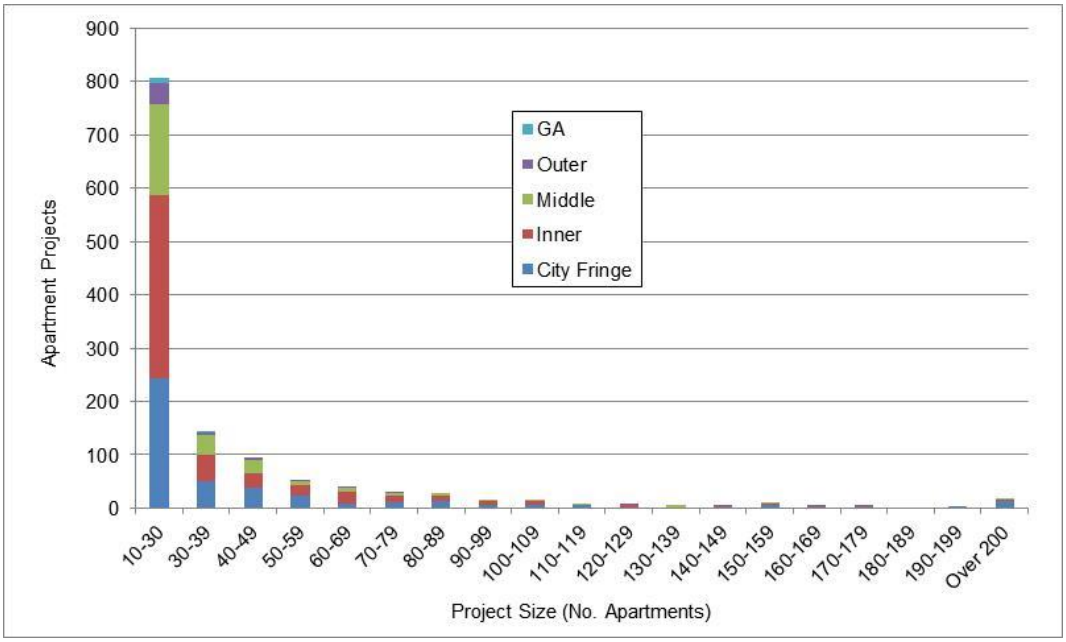


Source: Charter Keck Cramer

* projects of 10 for more apartments

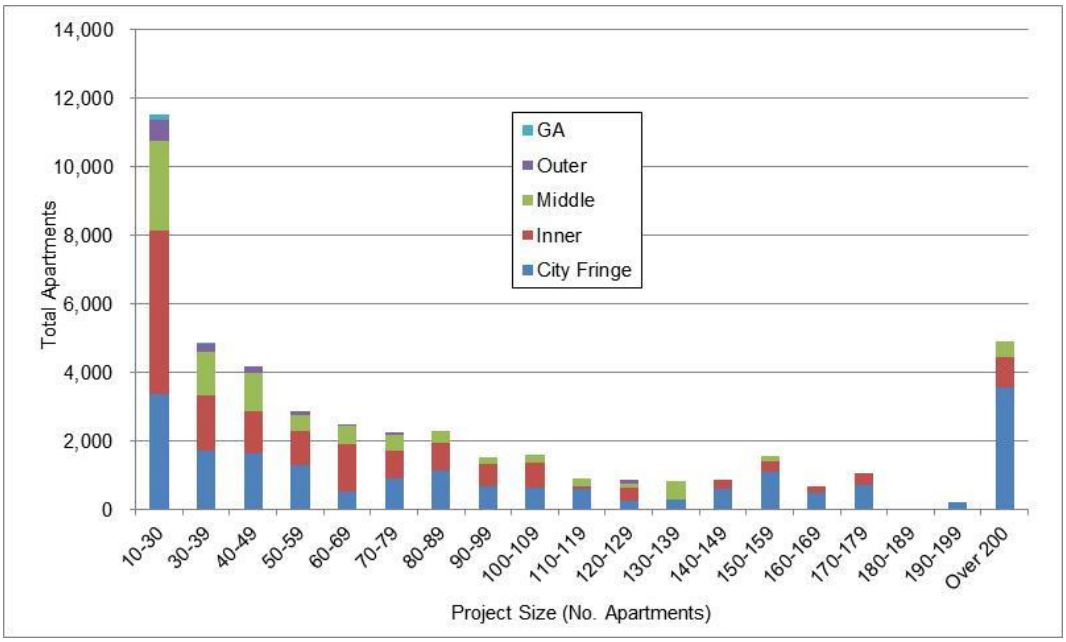
In addition to the overall number of apartments, the scale of individual apartment projects also reflects the underlying depth of demand. As shown in the figure below, over the past decade the dominant scale of development has been projects of 10-30 apartments of which only a very small portion were located within either the outer Melbourne region or within Melbourne's growth areas (GA).

Figure 16: Apartment Projects Completed (2005-2014) by Project Size



Source: Charter Keck Cramer

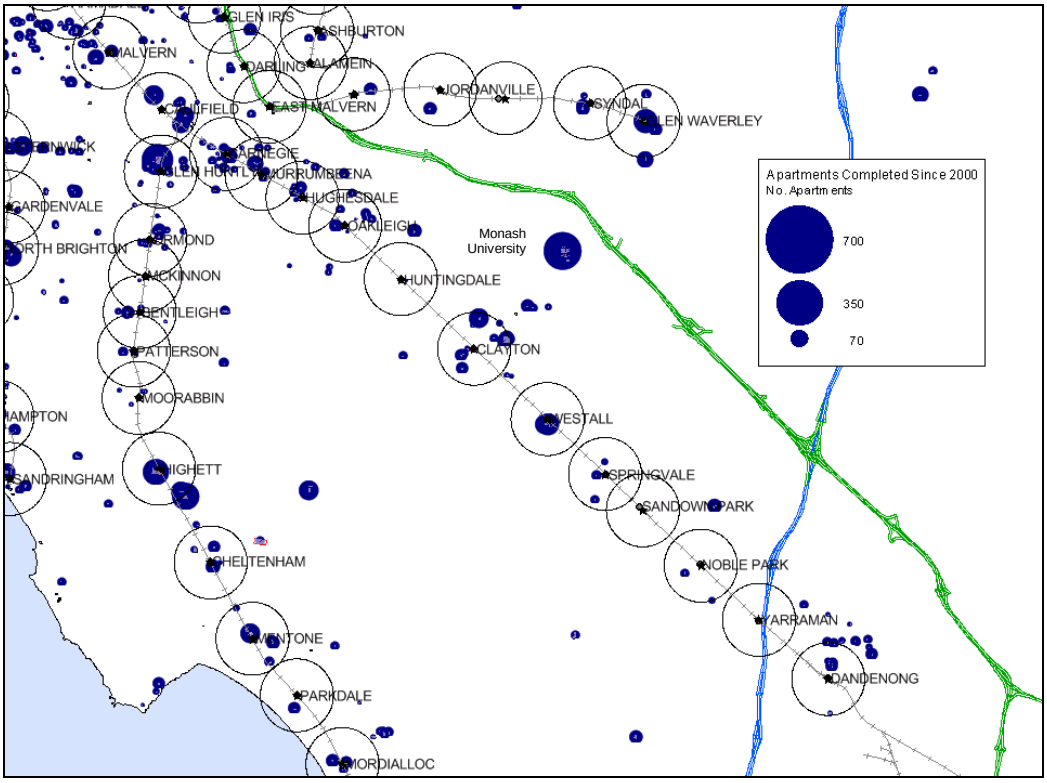
Figure 17: Total Apartments Completed (2005-2014) by Project Size



Source: Charter Keck Cramer

Apartment development has also been concentrated within 800 metres of railway stations as shown in the figure below for Melbourne's south-east region. It is notable that the only other significant concentration of apartment development has been around Monash University. Proximity to railway stations provides convenient access to employment opportunities within the Melbourne CBD which increases the attractiveness of apartments to both tenants and purchasers.

Figure 18: Apartment Completions 2000-2014 - Location and 800 Metre Buffer to Railway Stations



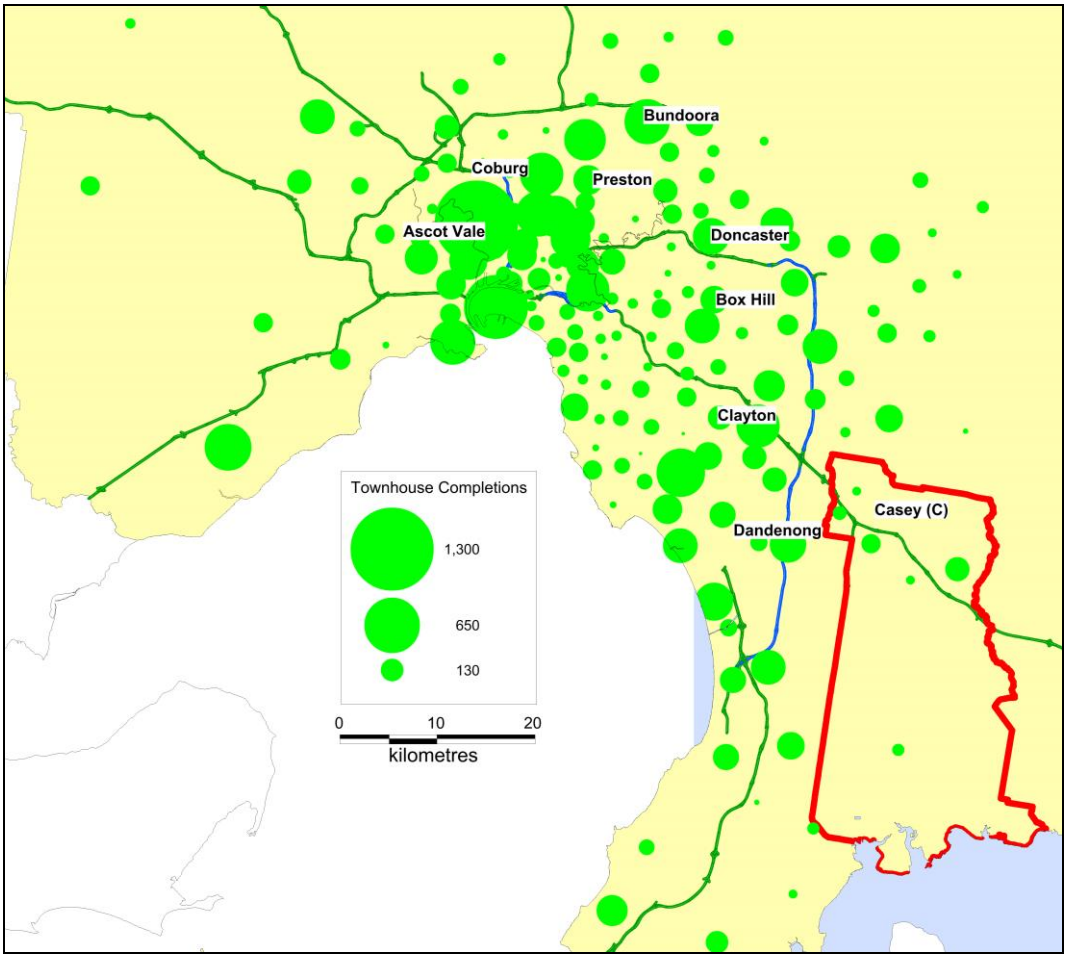
Source: Charter Keck Cramer

* projects of 10 for more apartments

The distribution of townhouse development is however much more uniform across metropolitan Melbourne (refer figure below) and is generally between that of apartments and traditional detached dwellings. This would be expected given the land requirements of townhouses which limit their affordability within Melbourne's inner region, together with competition from detached dwellings in outer suburban locations where there is a growing availability of smaller lots for detached houses in new residential estates.

Townhouses represent a viable alternative to traditional detached housing in many suburban areas given that they still offer private open space (e.g. courtyard), storage (e.g. garage) and greater privacy than an apartment.

Figure 19: Townhouse Completions* by Postcode 2000-2014



Source: Charter Keck Cramer

* projects of 10 for more townhouses

6. MEDIUM DENSITY HOUSING

Summary

- Traditional low density residential development that has characterised much of the 20th century is increasingly giving way to a higher density housing forms dominated by semi-detached dwellings such as townhouses and to a lesser extent apartments.
- The contemporary townhouse market initially emerged in the 1980s and has now matured to the point of being the preferred housing choice for many households due to changing social, economic and demographic factors. The townhouse market is expected to further mature to better meet the needs of individual purchasers and occupiers.
- Demand for medium density housing is closely associated with the life cycle stage of a household rather than household type as is often assumed. This is reflected in a higher proportion of Melbourne's population in the 20-29 year and 30-39 year age groups living in apartments. A somewhat smaller proportion live in semi-detached dwellings, and as expected there is a sharp decline in the proportion of these age groups living in separate houses.
- Younger age groups are less constrained by mortgages and dependents and have the flexibility to rent apartments (and to a lesser extent townhouses) in inner-city locations closer to where they work and socialise. As they establish their own families many return to more suburban locations in search of affordable separate and semi-detached housing. Casey's role as a housing location is therefore quite distinct from that of Melbourne's inner and middle suburbs where medium and higher density housing caters for a more transient population at a particular life cycle stage.

As the previous section discussed, residential development patterns reflect the characteristics of the occupants of various housing types and associated with this the underlying property market fundamentals that determine the commercial viability of developing various forms of housing.

Based upon recent patterns of residential development activity across metropolitan Melbourne, future development within the City of Casey would be expected to continue to be dominated by traditional detached dwellings (albeit on smaller lots). This will however be complemented by an increasing level of medium density housing primarily in the form of townhouses and to a lesser extent lower-rise apartments in key strategic locations such as within walking distance of railway stations and activity centres. It is therefore useful to discuss the history of medium density housing that has occurred within Melbourne over recent decades.

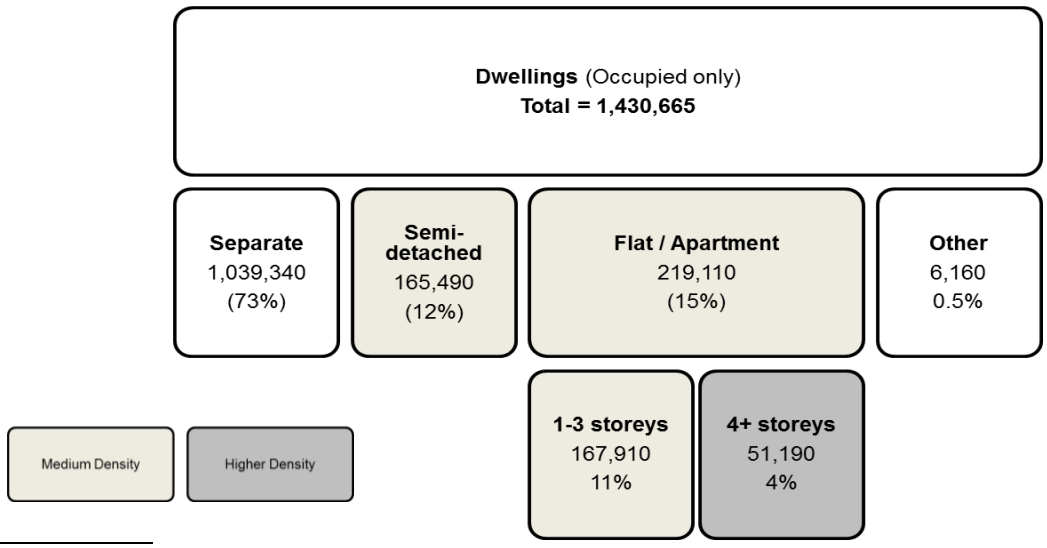
6.1 Historical Context

Like all Australian cities, Melbourne is characterised by its low density (suburban) form and the prevalence of stand-alone houses. Its housing stock does however comprise a range of dwelling types of low, medium or higher density. This categorisation by density reflects the amount of land that each dwelling consumes but masks the diversity of housing typologies within each category.

Suburban development accelerated during the early 20th century with the extension of the railway networks and later by the mass availability of private car ownership which provided greater flexibility for households in choosing where to live. The resultant model of urban development has however proven to be unsustainable from an economic, financial and environmental perspective and given way to urban consolidation policies in various forms since the 1970s. Notwithstanding changing attitudes towards urban development, Melbourne's current housing stock still reflects historic development patterns with 73% of today's 1.43 million houses still low

density separate dwellings (refer figure below). A further 23% of Melbourne's dwellings (about 332,000 dwellings) are classified as medium density dwellings with only 4% being higher density (in 4+ storey apartment buildings).

Figure 20: Metropolitan Melbourne Dwelling Structure as at 2011.



Source: ABS QuickStats

6.2 Townhouses

Townhouses have emerged as the main form of medium density development across Melbourne's middle and outer suburbs over the past 30 years via the following timeframe:

- Emerged during the 1980s through the subdivision and redevelopment of large underutilised suburban backyards, especially in higher priced suburbs, to facilitate delivery of additional new dwellings and to create dual-occupancy lots. Many of these developments included additional attached townhouses that were separate from the original dwelling.
- Since the early 1990s the townhouse concept broadened and spread to more modest priced suburbs where obsolete housing on large suburban blocks was demolished to allow typically up to five new attached and mostly two storey dwellings. These projects were most often undertaken by the original owners of the demolished homes and / or small private builders acting as developers rather than by large corporate developers. This form of development still remains a significant source of new housing supply in established suburbs today.
- From the early-mid 1990s new urban regeneration projects saw the redevelopment of former industrial and other non-residential sites for medium density housing. Typically this incorporated integrated townhouse and other medium density housing in order to meet planning policy aspirations. Consumers responded positively to the emerging offer of new format housing options including townhouses which further encouraged their development by larger corporate developers.
- Since 2000 standalone vacant or former industrial sites in established suburbs have been increasingly targeted by specialised developers for larger scale integrated townhouse projects often comprising more than 50 dwellings.

The extent of contemporary townhouse supply has established a sufficient critical mass and greater market maturity which will further encourage changes in structural factors that will continue to underpin demand over the longer term.

Due to the positive attributes of townhouses, as well as a changing demand and supply context, it is clear that townhouses are experiencing a growth and broadening of their appeal to purchasers and occupiers alike.

6.3 Changing Housing Preferences.

Living in townhouses and other medium and higher density housing forms has historically been associated with renters, primarily young singles or couples households saving a deposit for a (detached) home. In almost all respects, medium or higher density housing was perceived as an inferior alternative to the traditional detached dwelling in the suburbs.

Market perceptions have shifted over the past two decades with medium or higher density housing moving from being a “forced” choice to a preferred choice for an increasing proportion of households because of the longer-term nature of changes in social, economic, and demographic factors. One example of a structural shift is that the Melbourne townhouse, and apartment, market is no longer considered a niche market but rather it is now a mainstream sub-market which implies that its’ exposure and appeal has widened significantly to a much deeper pool of prospective purchasers.

Another structural shift is that there is now a much greater understanding and appreciation of the townhouse concept within the broader community. The townhouse concept has matured to the extent that now almost everybody in Melbourne knows someone, if not themselves, who has lived, or is living, in a townhouse. The same could not be said even 10 years ago. Consequently, there is now a much greater awareness and understanding of what is a fundamentally good townhouse to either live in or to invest in. This increased knowledge and awareness of the concept has removed the previous uncertainty and misperceptions about living in townhouses or medium density housing.

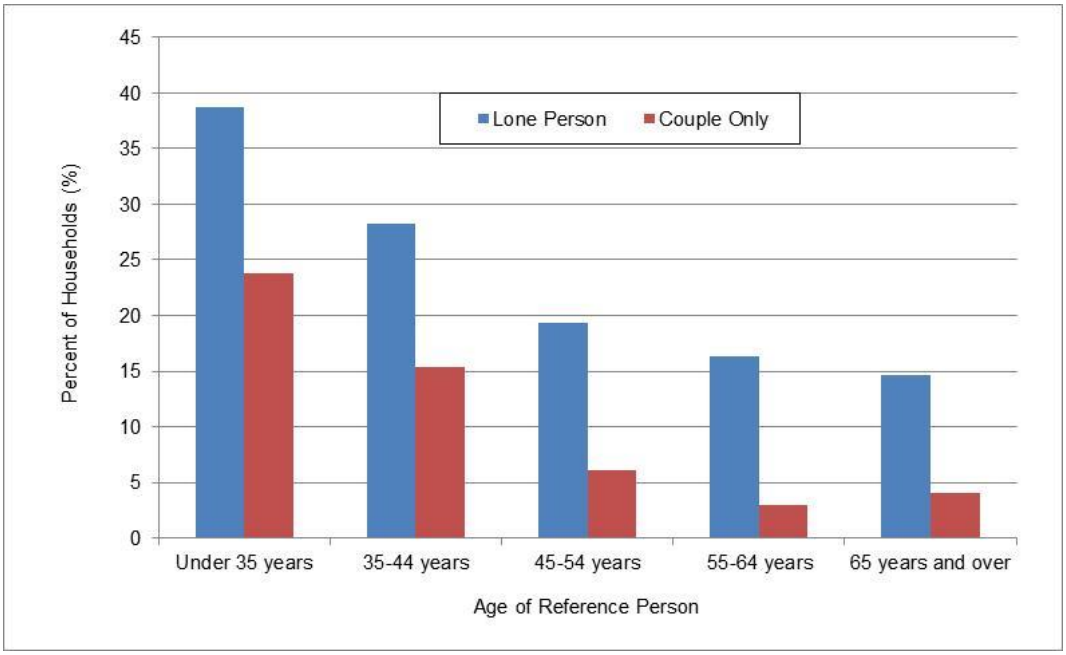
The maturing of the townhouse market is expected to manifest itself in a much greater level of segmentation of supply based upon building design and location. In the future, it can be expected that better quality projects will achieve much better market acceptance from more discerning purchasers.

6.4 Demographic Factors.

While there is often assumed to be a relationship between household type and demand for different types of dwellings, this does not take account of noticeable differences in housing preferences between younger and older age groups that may both be classified as ‘lone person households’ or ‘couples without children’. Rather, the age of individuals is more representative of the stage of the lifecycle that people are at and hence the type of housing that they are likely to consider living in.

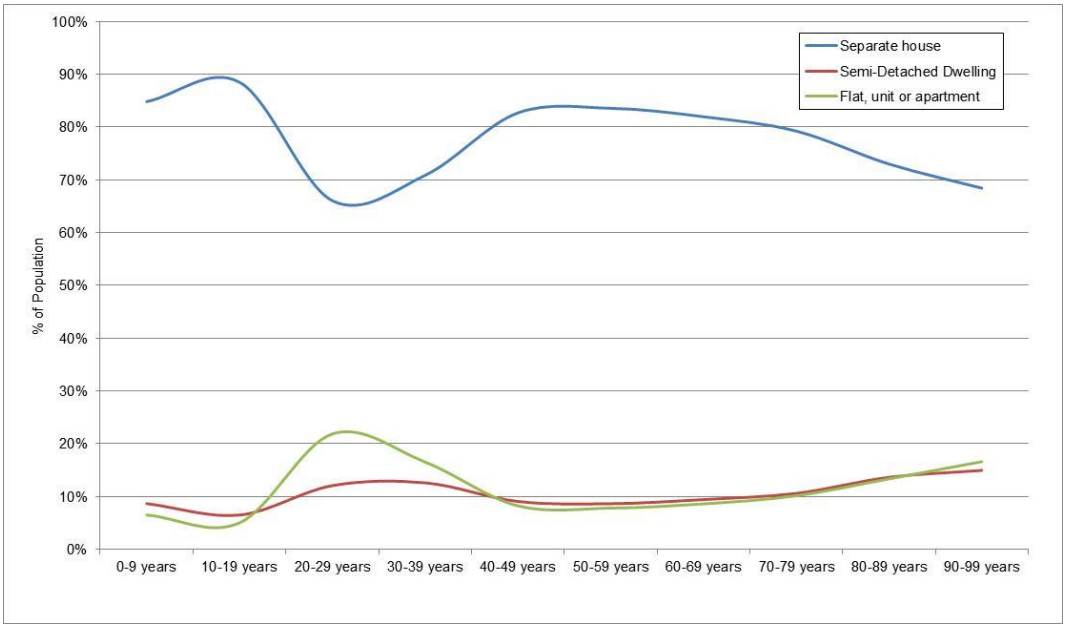
Data collected by the ABS as part of its Survey of Income and Housing highlights the influence of age upon the likelihood of lone person and couple only households living in higher density housing (flat, units and apartments). As the figure below shows, for each of these two household types the proportion of households living in a ‘flat, unit or apartment’ steadily declines with age.

Figure 21: 'Flats, Units and Apartments' Occupied by Lone Person and Couple Only Households (Australia) 2009-2010



Source: ABS 1301.0 - Year Book Australia, 2012

Figure 22: Metropolitan Melbourne - Type of Dwelling Occupied by Age Group 2011



Source: ABS

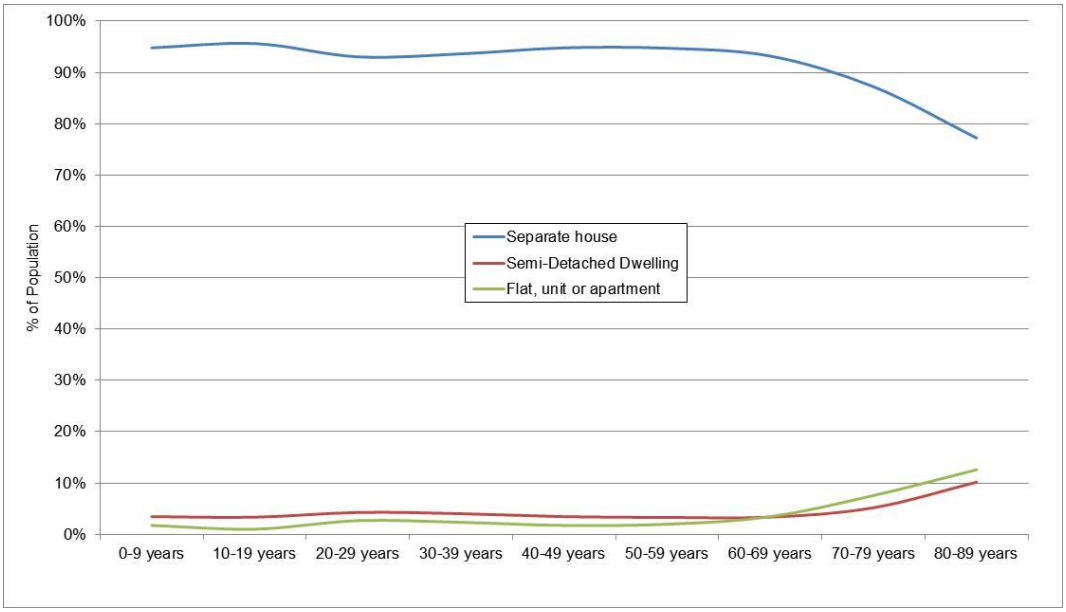
Similarly census data shows (refer figure above) that the proportion of Melbourne's population living in flats, units and apartments increases sharply to around 20% for the 20-29 year age group before gradually declining back to approximately 10% by the time people are aged 40-49 years. This is consistent with children leaving home and living in apartments before establishing their own families which in most cases involves a transition back to a traditional detached house.

The proportion of the population living in semi-detached dwellings follows a similar pattern albeit with a more gradual increase and decline reflecting the appeal to a wider range of household types and age groups.

While there is a second increase in the proportion of the population living in these two forms of medium / higher density housing, for those aged 80-89 years this is typically associated with living in retirement villages.

Within the City of Casey the proportion of residents living within each dwelling type is much more consistent across age groups (refer figure below). There is still however a minor increase in the proportion living in medium density housing in the 20-29 and 30-39 year age groups which is consistent with that occurring across the wider metropolitan area albeit much less pronounced.

Figure 23: City of Casey - Type of Dwelling Occupied by Age Group 2011



Source: ABS

There are a number of factors to explain why fewer residents within these age groups choose to live in medium density housing in the City of Casey including:

- The majority of Melbourne's population in these age groups live in rented apartments (refer table below) and therefore have greater flexibility in terms of where they choose to live.
- Potential residents of medium density housing often choose to live in more central locations that may better suit their lifestyle with respect to where they work and socialise.
- Traditional detached housing in Casey being more affordable relative to medium density housing than elsewhere across metropolitan Melbourne.
- A preference for larger detached dwellings amongst younger age groups as identified by a number of research studies (refer Appendix B).

The figure above also indicates a more significant increase in the proportion of older age groups living in medium density housing. As indicated earlier in Section 3 this reflects the classification of dwellings within retirement villages as medium density housing. This is misleading and should

not be taken as older age groups downsizing into apartments and townhouses, particularly given the findings of recent research indicating that if older households are going to downsize this will most likely be into a detached dwelling (refer Appendix B).

Table 4: Metropolitan Melbourne 20-39 Year Age Group – Housing Type by Tenure (Private)

Dwelling Type	Rented	Owned outright	Owned with a mortgage	Total
Flat, Unit or Apartment	72%	5%	22%	100%
Semi-Detached	51%	10%	39%	100%
Separate house	20%	21%	58%	100%
Total	33%	17%	50%	100%

Source: ABS

As the table above indicates, 72% of 20-39-year-olds living in apartments are tenants rather than owner occupiers. This proportion is much lower for semi-detached dwellings (51%) and only 20% for separate houses.

Tenants have greater flexibility in choosing where they live particularly for apartments given that rents are more likely to be determined by size and quality rather than location. Given that demand for apartments is ultimately determined by where younger tenants wish to live it follows that those locations close to major employment nodes such as the Melbourne CBD, education institutions and lifestyle precincts have the greatest concentration of development activity.

The rapid development of suburban flats across Melbourne during the 1960's and 1970's similarly coincided with the 'baby boomer' generation leaving home and working in the manufacturing sector. At the time, manufacturing activity was much more widely dispersed across metropolitan Melbourne than today's major employment sectors such as business services and finance which are concentrated in the inner Melbourne region.

Semi-detached dwellings such as townhouses are equally likely to be occupied by tenants and owner-occupiers within the key 20-39 age group. This reflects their role as an affordable alternative to owning a traditional detached dwelling (rather than a stepping stone to home ownership as is the case for apartments) with purchasers choosing locations based upon longer-term considerations. In addition, semi-detached dwellings are better suited to families which favour more suburban locations. Finally, the market value of semi-detached dwellings is more influenced by underlying land values than apartments and as a result greater price differentials exist between inner, middle and outer suburban areas.

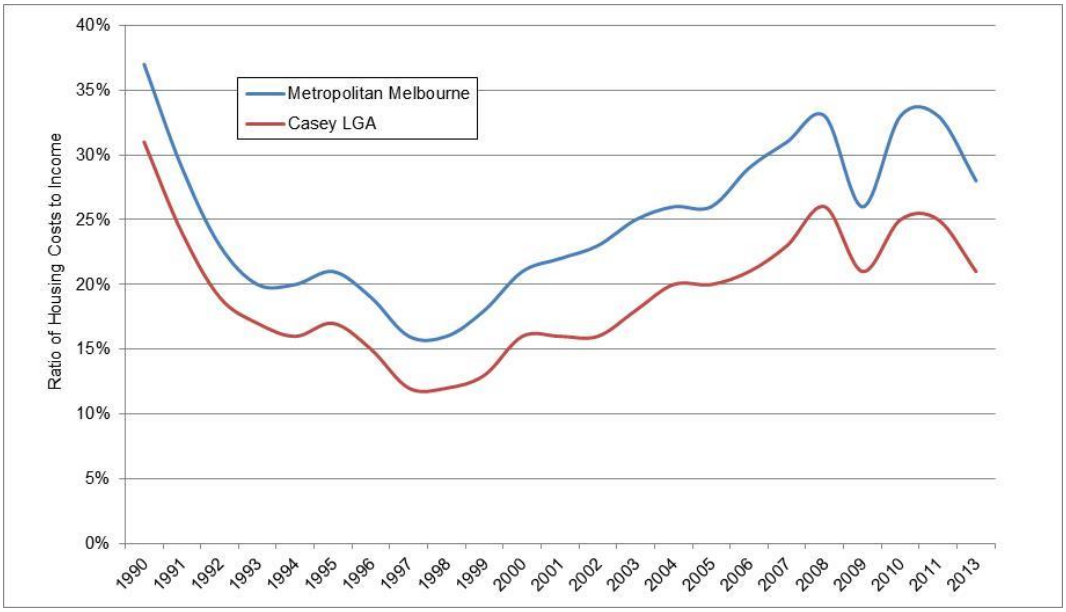
6.5 Affordability

Although Melbourne's overall median house price is currently around $550,000 there is significant variation across the city. In the most desirable Inner suburbs (5 – 10 km from the CBD), the median house price of $950,000 excludes many aspiring younger purchasers. Hence this segment of the market are forced to accept alternative housing choices including renting mainly flats and apartments and to a lesser extent townhouses.

The unsatisfied demand for inner city townhouses is being channelled into the middle band of suburbs (approximately 10-20 km from the CBD) where there is a greater supply of townhouses and median house prices are still typically higher than the affordability threshold for the average first home buyer.

Currently, the average ratio of housing costs to household income is 28% (mortgage repayments on houses as a percentage of income) across Melbourne which has risen from 20% in 2000 (refer figure below). Whilst this ratio fell in 2013 with lower interest rates, it is expected to increase back towards recent levels of near 35% when interest rates begin to escalate again.

Figure 24: Melbourne – Housing Affordability Indicator.



Source – Housing in Victoria.

6.6 Functionality

The more widespread pattern of townhouse development across Melbourne reflects its functionality for a wider range of potential occupants relative to apartments through having:

- Many attributes of a traditional detached house in terms of internal design (bedrooms and living areas).
- Lower construction costs and being more affordable than a traditional stand-alone house due to their lower land requirement.
- Larger internal size than apartments.
- Separate (non-strata) title rather than the vertical stratum of apartments.
- Low or no body corporate fees (depending on subdivision pattern).
- Individual street address.
- Individual private open space.
- On-site (and most often at-grade) carparking.
- Broad distribution across established areas rather than concentrated around key public transport nodes as is typically the case for apartments.
- Standardised construction within a project of multiple dwellings that allows more cost-effective and scalable production across development sites of varying sizes and configurations.
- Appeal to a wider range of occupiers from families with children through to couples and singles.
- Potentially greater opportunity to ‘age in place’ compared to apartments.

7. DEVELOPMENT INDUSTRY CONTEXT

Summary:

Property Market Fundamentals

- There a clear relationship within Melbourne's housing market between property values and the extent of medium density housing development with higher median house prices encouraging the search for more affordable housing options.
- An analysis of median house prices at a suburb and metropolitan level identified an indicative relationship between the ratio of these two median prices and the scale of supportable apartment projects across a suburb with:
  - Small domestic-built apartment projects (<25 apartments) being generally supportable when a suburb's median house price is 1.4 times the metropolitan median price or approximately $710,000.
  - Small scale commercial-built projects (50-75 apartments and less than five levels) typically supportable at a multiple of 1.5 or $750,000.
  - Commercial scale apartment project (> 75 apartments and over five levels) are generally supported at a multiple of 1.6 or $815,000
- Casey's median house price is yet to reach Melbourne's median and as a result unable to sustain a viable apartment market beyond potential niche projects in highly sought after strategic locations. Locations for such niche projects would typically offer superior accessibility and liveability through being located close to public transport, activity centres and recreational opportunities.

Developer Capacity

- There is a range of residential developers with different skills and expertise, cost structures and profit requirements which determine the type and scale of housing development they can viably undertake in a given location.
- Smaller local builders may viably undertake smaller projects through extracting a 'builders margin' as well as a 'developer margin' while corporate developers require larger scale developments in order to achieve economies of scale and add value through incorporating public realm improvements.
- Casey's future supply of medium density housing will be predominantly developed via local builder/developers that may better recognise local development opportunities. Medium scale developers may become more active over the longer term as the apartment market matures and perceived market risks have been reduced.

Project Feasibility

- Melbourne's outer suburbs are typically seen by developers and financiers as being higher risk locations for apartment projects due to increased competition from lower density housing and limited demand from investors beyond the local area. As result, higher financial returns are required to compensate developers for these additional risks.
- Larger developers will generally prefer proven apartment locations with lower market risks over outer suburban locations leaving local builders/developers with lower cost structures to initiate apartment development.

- Financiers will typically require developers to provide greater equity to projects where a higher level of risk is identified either due to project related factors (e.g. location, design etc.), developer capability or success of off-the-plan marketing. These factors create further hurdles for unproven apartment locations and projects.
- Apartment projects are typically considered to be commercial construction and therefore subject to union influence as distinct from simpler townhouse projects with higher construction costs impacting upon the feasibility of apartment development.

The preceding sections largely focused on the various characteristics of demand for housing. This section provides an overview of the key property market and development factors that influence the supply of new housing across metropolitan Melbourne at both an industry and local level.

7.1 Local Housing Market Fundamentals

A key indicator of a local housing market's readiness for medium density residential development is detached house prices (at a suburb level) as a proxy for a location's relative attractiveness to residents and represents a capitalisation (in monetary terms) of the suburb's various attributes.

There is a clearly established hierarchy of housing forms and prices across Melbourne. The emergence of a critical mass of apartments within a suburb of say 500 contemporary apartments demonstrates that the housing market within a location has reached a point of maturity with clearly identifiable price points within the detached housing, townhouse and apartment sub-markets.

As affordability thresholds are breached for traditional housing within a location, the market seeks a lower cost alternative. Historically, townhouses have represented the next closest substitute to conventional detached housing as they provide a cheaper entry price point into a preferred location through trading-off land and building size for location. Once the townhouse market becomes established within a locality and its own price levels breach affordability thresholds, an established house price hierarchy is established and a legitimate apartment market emerges.

Figure 25: Housing Hierarchy - Progression

An analysis has been undertaken of the median house price of individual suburbs relative to the Melbourne metropolitan median, to establish the Median House Price Ratio (MHPR) required to support a mature apartment market (considered to be approximately 300 contemporary apartment completions across several projects). This level of development represents the point where suburban markets have typically emerged from an initial market testing phase to give developers and financiers the necessary comfort about local market conditions to consider larger scale apartment developments.

The MHPR has been calculated historically and analysed relative to the historic volumes of apartment completions within individual suburbs. This analysis has enabled the identification of the relationship between house prices and apartment delivery across all suburbs where there is now a viable apartment market.

The main findings of this analysis were that:

- Apartment markets emerge, and are later entrenched, in suburbs where the economic cost of apartment development is supported by the underlying MHPR and house price hierarchy.
- Unsophisticated, small projects (<25 apartments) begin to emerge when the MHPR for a suburb reaches around 1.4 which suggests a minimum suburb median house price of approximately $710,000.
- Further strengthening in the MHPR to around 1.5 creates opportunities for smaller scale commercial projects (50 - 75 apartments at less than 5 levels) which suggest a minimum suburb median house price of around $750,000.
- Commercial scale development (>75 apartments and more than five levels) is legitimised where the MHPR of a suburb exceeds 1.6 which suggests a minimum suburb median house price of $815,000. Larger scale projects require a stronger house price base due to higher delivery costs, and the need to support a higher economic cost (sale price) irrespective of market conditions, trends and sentiment.

Importantly, these indicators of market acceptability cannot be considered in isolation as a determinant of apartment market supply but rather is indicative of a suburb's potential to accommodate apartment development within the housing market price hierarchy.

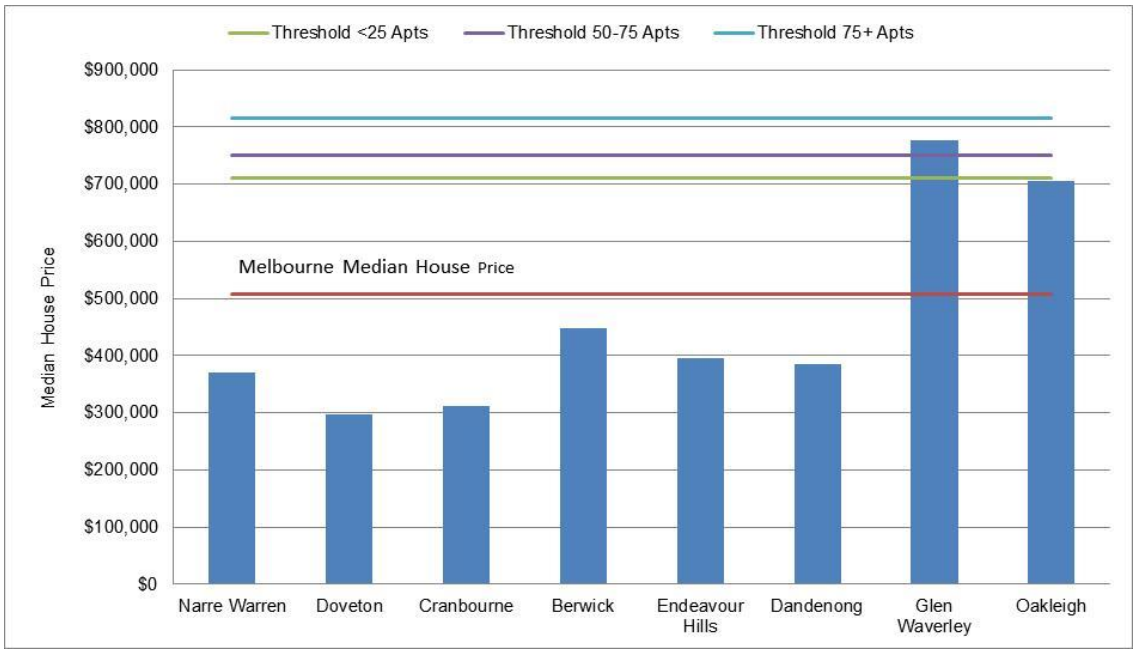
It needs to be recognised that this indicator is a broad measure of the potential for apartment development based upon market conditions at a suburb level. Within any suburb, there is likely to be locations such as within an activity centre, close to public transport or near recreational facilities such as parks that contribute to the overall liveability within that particular location which may support higher density apartment projects.

As result, apartment development may occur in suburbs where median house prices are below the indicative thresholds. The figure below shows the median house price for selected suburbs within the City of Casey together with locations within Melbourne's south-east region where apartment development has already occurred being Dandenong, Glen Waverley and Oakleigh.

The spatial distribution of the MHPR in 2011 (refer figure next page) for individual suburbs highlights that the strongest potential market opportunity for apartments was in the Established – Inner LGAs as well as selected Established – Middle LGAs to the east and in bayside locations which indicate MHPRs of more than 2.0. This is consistent with the distribution of apartment development activity that has occurred since 2011.

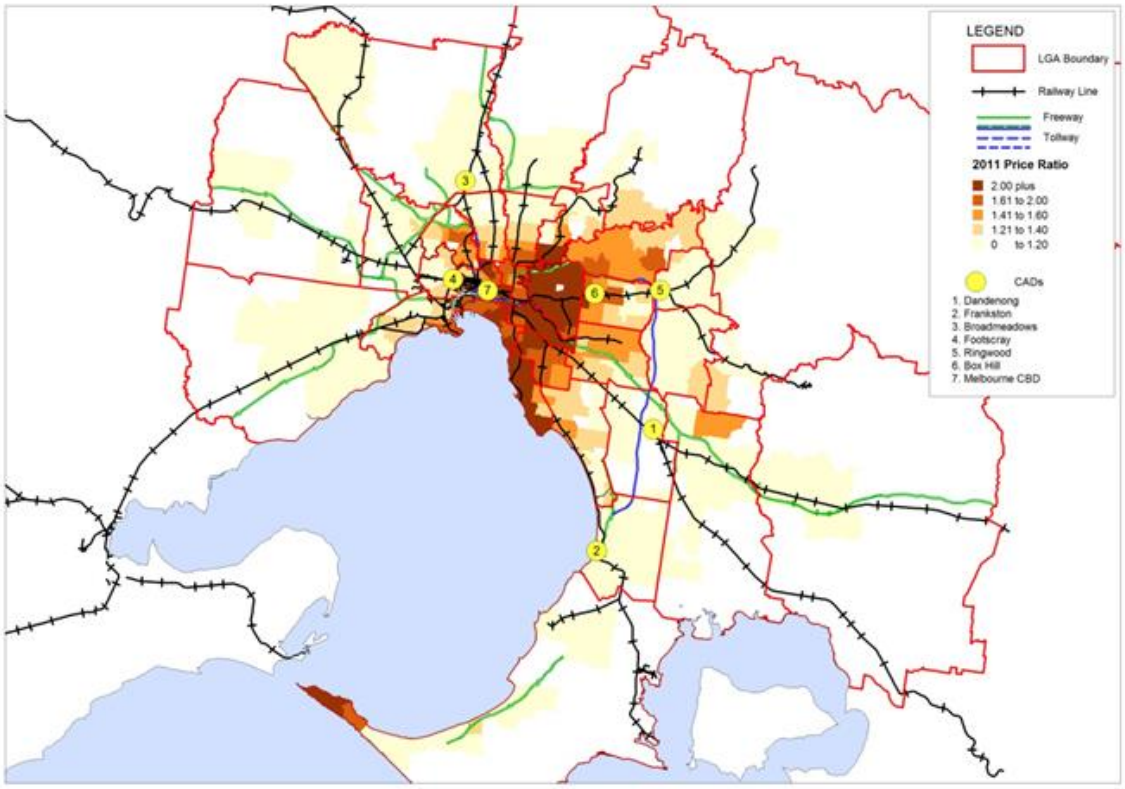
Within the City of Casey, Narre Warren North had the highest MHPR at 1.44 although this reflects larger properties resulting in a higher median price and therefore is not indicative of the potential for future apartment development. Across the rest of the municipality, median house prices are yet to reach the levels required to support a viable broad based apartment market.

Figure 26: Selected Suburbs – Median House Price and Indicative Apartment Project Thresholds



Source: Valuer General Victoria, Charter Keck Cramer

Figure 27: Median House Price Ratio as at 2011 - Melbourne Suburbs



Source - Charter Keck Cramer

7.2 Developer Capacity

The local property market conditions discussed above will determine the likely depth of demand for medium density housing and in particular for apartments where demand is primarily generated by potential purchasers being priced out of both the detached housing and townhouse markets. This in turn will determine the scale of apartment project that is commercially viable to undertake on a particular site at a point in time.

It is the supportable project size that ultimately determines the type of developer that may undertake such a development and will range from local builder / developers through to large corporate style developers. Whereas local builder/developers have the opportunity to viably undertake smaller projects through extracting a 'builders margin' as well as a 'developer margin', corporate developers require larger scale developments in order to achieve economies of scale and add value through incorporating public realm improvements.

It is important to recognise that builder/developers and corporate style development companies represent each end of the developer spectrum. In addition there are a range of other developers in the market each with different skills, expertise, cost structures and profit requirements which then determine their ability to undertake the various forms of residential development.

It is therefore not uncommon for smaller builder/developers to successfully undertake small to medium sized apartment projects in locations where market conditions would suggest that such a project may not be feasible for a larger developer. This often reflects their better understanding of local market demand and possibly a willingness to accept a lower development margin in return for generating work for the construction side of their business.

Within the context of the City of Casey, future medium density housing projects would be expected to be predominantly undertaken by local builder/developers and potentially medium scale developers once the apartment market begins to mature.

7.3 Market Sectors

The commercial viability and scale of apartment projects that may be supported is dependent upon the extent to which they appeal to key market segments. As discussed in Section 6.4, 72% of all flats, units and apartments across metropolitan Melbourne are rented compared to only 51% of semi-detached dwellings and 20% of separate houses.

The ability to sell apartments within a relatively short period of time in order to achieve pre-sales targets and obtain development finance, and sell any remaining apartments prior to the completion of construction, is necessary to ensure that a project is commercially viable. In order to do so requires a depth of demand that extends beyond local residents and those that may be familiar with a location. As result, apartment projects are marketed locally, interstate and, in the case of high profile projects, overseas.

Investors not only represent a key market but they are also more willing to purchase properties off the plan than are owner occupiers. Similarly, investors purchase properties primarily as a financial investment and therefore focus upon proven locations offering the strongest demand from potential tenants. This is typically within Melbourne's inner region or in close proximity to educational institutions.

Within Melbourne's outer region, demand for apartments is mainly limited to local residents wishing to invest in a location with which they are familiar or possibly purchasing for their children to live in. Alternatively, the community housing sector also represents a potential source of demand which offers the opportunity for developers to achieve sales targets, obtain development finance and successfully complete small and medium scale projects.

7.4 Project Feasibility

The property development process is predicated upon the expectation of achieving a financial return consistent with the inherent risks of a project. These primarily relate to external risks generally of a medium-longer term nature and project specific risks, some of which are listed below:

- External Risks:
  - Market: broader property market environment, cyclicality.
  - Economic / Financial: macroeconomic settings, economic growth, inflation, interest rates.
  - Policy / Regulatory: change of Government, change in policies and programs, regulatory environment, fees, charges and taxes, deliverability of policy vision.
  - Competition: actions by competitors to offer alternative product.
  - Consumer: community expectations, preferences.

- Project Risks:
  - Site: availability / acquisition of an appropriate site.
  - Planning: time delays and expense of pursuing an appropriate permit, objections.
  - Marketing: selection of wrong target markets, inability to sell product, incorrect pricing.
  - Place / Location: perceptions (justified or otherwise) about a place, changes in amenity of location, actions by adjoining properties.
  - Finance: unwilling lenders, higher risk premium for location.
  - Capital: potential loss of initial capital through diminution of property value due to project failure.
  - Construction: unbudgeted cost and time over-runs.

Due to relatively less demand for apartments in outer suburban locations, the underlying level of risk faced by developers is generally higher than for projects located elsewhere. Consequently, higher returns would need to be achieved. In addition, for larger corporate style developers the ability to secure board / senior management approval would be more difficult which results in this group favouring established inner city locations.

7.5 Site Availability

Part of the reason for the revitalisation of central Melbourne in the early 1990's was the availability of numerous obsolete, vacant and cheap commercial buildings that were well located and suitable for conversion for residential purposes. These buildings, often with inherent architectural character, particularly in their façade treatments that appealed to prospective purchasers, represented a lower risk to developers because core construction had already been undertaken and hence delivery time was reduced. No such opportunities exist in most outer suburban activity centres to allow lower-risk development to occur and to test the market acceptance of alternative housing products.

In many activity centres, any vacant office / commercial stock typically relates to fairly unattractive, low rise buildings from the 1970's – 1980's which are usually viewed as unsuitable to conversion because they are purpose-designed, curtain glass façade office buildings. Building design from the 1970's – 1980's sought to maximise floor area because of the then prevailing

planning policies relating to plot ratios and building heights. These resulted in a concentration of low / medium rise buildings with near-equal frontages and depths (almost square buildings) rather than the preferred rectangular form (and therefore structural column-free internal spaces) of narrower frontage (or depth) and longer depth (or frontage) as existed in central Melbourne.

7.6 Planning Approval

There are considerable financial and time costs associated with seeking planning approval for new residential development projects. Even before a planning application is lodged, there are fees and costs of up to $200,000 for a project of say 50 apartments. Costs escalate further throughout the planning application stage (application fees, consultant and other professional fees), especially if the matter is subject to a planning scheme amendment or a VCAT hearing. In addition, there are financing costs associated with the funding of such expenditure over a 6-18 month period.

There is significant risk from a developer's perspective because there is no certainty of a positive outcome with respect to the planning process, nor the ultimate deliverability of the project. These costs, excluding site purchase and its own associated costs are effectively sunk costs regardless of whether the project is ultimately developed or abandoned. In some respects, these costs can also be viewed as a form of 'opportunity cost' associated with the exploration of the probability of achieving a successful project. Such costs are factored into the ultimate return as compensation for the planning risk and therefore are taken into consideration in determining the feasibility of undertaking a project.

7.7 Finance

The nature of property development implies that all projects are undertaken through a combination of debt provided by financiers and equity from developers to fund site purchase, construction and other development costs. The split between debt and equity will vary according to the financiers' assessment of their potential project-related risks which will be influenced by a broad range of internal and external factors such as the financial capacity of the developer, project fundamentals (location, design, etc.), level of off-the-plan sales, and the financial position of appointed builder.

Since the early 1990's property market downturn, Australian financiers have significantly tightened control of credit so as to minimise downside risk. Systems and processes are now in place to control exposure to risks including teams of specialist credit analysts to critically assess property and project related lending with broad ranging criteria including location risk. Financiers typically view outer suburban centres, especially those within lower socio-economic areas, as having a higher risk premium attached to them for any proposed residential apartment project when compared to an Inner city location. In essence, any future development would have to pass through higher hurdles than comparable projects elsewhere.

Since the onset of the Global Financial Crisis in late 2007, the financing of property development projects has come under even greater scrutiny. Credit has been rationed, and interest charges and other financing costs have increased significantly. Most importantly, the number of potential sources of finance has diminished significantly through the withdrawal of overseas banks, mezzanine providers and smaller / regional banks. The net result is finance is more difficult to source, with refusal initially likely, resulting in both funding costs and loan approval times increasing overall.

Where there may be the need for community housing the opportunity may exist for a joint-venture between a developer and the Office of Housing or a housing association which agrees to purchase any unsold apartments by a given date. This would reduce the development and finance risk for both developers and financiers as well as deliver more diverse and affordable housing.

7.8 Construction

A major issue that has consistently faced developers is that there is a significant construction cost differential between commercial (i.e. unionised labour force) and domestic (non-unionised) construction for low-rise apartments, which is largely due to additional labour related costs including site allowances, C-Bus superannuation fund membership, Incolink long service leave and redundancy fund membership and a higher standard of site amenities for on-site workers.

Whether or not a project is considered commercial or domestic is a grey area and is often subject to negotiation between a builder and the main construction union, the Construction, Forestry, Mines and Energy Union (CFMEU). There is no clear cut rules for when a site becomes unionised and is determined based upon a range of factors including contract value, the number of levels, the type of sub-contract labour employed (whether they are a unionised workforce), the site location (inner Melbourne versus outer suburbs) and the actual building contractor. Once a project or building contractor falls within the radar of the unions, they are typically nominated from then on as being 'commercial'.

A number of development and housing industry bodies have suggested a cost difference of 20 - 40% for the same building depending on whether the site is considered of commercial or domestic construction[2]. Nearly all apartment construction in Melbourne is subject to commercial construction and therefore union influence, due to the nature and scale of construction as distinct from simpler townhouse or individual house construction. Ultimately the higher construction costs must be passed on in the form of higher prices to purchasers.

[2] Productivity Commission (2004) First Home Ownership - Productivity Commission Inquiry Report, pp. 219

8. DEVELOPMENT CONSTRAINTS

Summary

- Opportunities for medium density housing development are primarily dependent upon households being priced out of the traditional detached housing market to the point where there is a sufficient depth of demand to attract interest from the development industry. Accordingly, the projected demand for apartments within Casey is reliant upon median house prices increasing in real terms to be comparable to that which currently exist within the City of Knox where there is an emerging apartment market.
- The viability of medium density housing development is to a degree dependent upon opportunities to achieve design efficiencies and maximise yields and promote the supply of new dwellings. Ideally townhouse sites should be at least 1,000 sqm with a minimum frontage of 18-20 metres while apartment developments may typically be undertaken upon sites upwards of around 800 sqm.
- The consolidation of individual allotments to form a townhouse development site may require developers to pay a premium which would negatively impact upon the feasibility of such development. As result, there will be greater pressure for higher density and site coverage in excess of that identified by Rescode.
- In the absence of sufficiently high median house prices across Casey there will be an increased need for a higher quality public realm and access to infrastructure such as public transport and activity centres in order to facilitate niche apartment development opportunities.

8.1 Property Market Conditions

Property market conditions play a key role in shaping demand for medium density housing and the capacity of the development sector to deliver new housing within this segment of the market. The principal driver of demand for medium density housing is the pricing out of potential purchasers within the traditional detached housing market to the point where there is sufficient pent-up demand for more affordable housing alternatives to support a viable medium density housing market.

As has been discussed earlier in this report, recent quantitative research has confirmed the preference of households for detached dwellings subject to their financial capacity to afford such housing. Therefore within outer suburban locations such as Casey, the relative affordability of traditional detached housing limits demand for medium density housing, particularly apartments.

Casey's projected requirement for medium density housing over the period to 2031 is based upon the expectation that median house prices will increase in real terms as the available supply of greenfield residential land is absorbed, and as a result housing preferences will evolve to more closely match that of more mature residential markets such as within the City of Knox.

Rising house prices combined with increasing depth of demand for medium density housing will further support the viability of undertaking such development. This will primarily be in the form of townhouses and villa units which still have a significant land component (typically 250-300 sqm) and which enables outer suburban locations such as Casey to continue to be relatively more affordable than middle suburban areas. Conversely, apartment projects have a much lower land requirement per dwelling which limits their ability to be priced competitively with preferred middle suburban locations.

The following table profiles recent sales of houses within Narre Warren, Berwick and Wantirna South which are comparable to the median house price of each suburb. These suburbs represent the preferred residential areas of each municipality. The table highlights that while these dwellings are generally similar in terms of land area, dwelling size and quality, houses within Wantirna South are approximately $100,000 or 20% higher than within Berwick, and $200,000 or 50% higher than Narre Warren.

It is therefore apparent that for potential purchasers looking to live in Wantirna South there will be stronger pressure to consider more affordable housing alternatives such as townhouses or apartments. It is such a situation that will need to emerge within the preferred areas of Casey before there can be expected to be sufficient opportunity for a viable apartment market to emerge.

Table 5: Indicative Median Priced Separate Houses

Narre Warren 2013 Median House Price $370,000	23 Song Street Sold: Jul 2014 Sale Price $383,000 Land: 653 sqm Bedrooms: 4 Bathrooms: 2 Floorarea: Approx 150 sqm	
Berwick 2013 Median House Price $447,750	4 Kurnwill Place Sold: Sep 2013 Sale Price $450,000 Land: 632 sqm Bedrooms: 4 Bathrooms: 2 Floorarea: Approx 200 sqm	
Wantirna South 2013 Median House Price $562,700	2 Marsh Court Sold: Jun 2013 Sale Price $516,000 Land: 695 sqm Bedrooms: 4 Bathrooms: 2 Floorarea: Approx 170 sqm	

Source: pricefinder.com.au

The scale of individual medium density housing projects will be determined by both the depth of demand for any one project at a point in time, the size of development that may be undertaken by local builder developers operating within Casey, and the level of exposure to an individual project that financiers are willing to accept.

As previously discussed in Section 5.2 the majority of apartment projects across Melbourne comprise less than 30 apartments. Furthermore, virtually all apartment projects of 10 or more dwellings have occurred within Melbourne's inner and middle regions. It follows that any apartment development within the City of Casey will be of a smaller scale, within the capacity of local builder developers, and able to be priced competitively with more attractive alternative housing options such as townhouses.

8.2 Design Efficiency

The indicative residential projects profiled in Appendix C highlight the capacity for smaller scale townhouse and apartment projects to be undertaken within established residential areas. Typically, a larger suburban lot of 800 sqm may be considered to be a minimum size for an apartment project. Townhouse projects generally have the ability to be adapted to individual sites however there is a need to achieve economies of scale particularly in outer suburban locations where development margins are much less.

Within the Casey's established suburbs there are examples of additional dwellings being developed at the rear of existing houses, most likely by the current owner. This form of incremental development is however unlikely to facilitate a significant supply of new housing and existing landowners are unlikely to have the financial capacity to undertake more intensive development.

In order for a larger-scale townhouse project to be commercially viable for a developer/builder it would need to comprise at least three townhouses. This would begin to provide the necessary economies of scale to cover engineering and construction costs. A project of this size would require a site of ideally at least 1,000 sqm. Similarly, a minimum frontage of approximately 18-20 metres would be preferred in order to maximise dwelling yield.

Where there is a need for existing sites to be consolidated, developers are likely to have to pay a premium which will impact upon the development feasibility for any townhouse style development. As a result, there will be a greater pressure for projects to be of a higher density and compact design in order to increase lot yields. This may require a reduction in setbacks in order to achieve a higher site coverage of preferably at least 80% which would exceed the maximum identified by Rescode.

The future land requirements for separate houses would be most likely to be met through the subdivision of larger sites given the greater potential for an up-lift in underlying land values compared to smaller sites.

8.3 Public Realm and Infrastructure

Although there is projected demand for apartments within Casey this is dependent upon underlying land values increasing sufficiently to result in detached houses and townhouses becoming less affordable and thereby encouraging more intensive development in the form of apartments.

Niche locations within Casey's most sought after suburbs may offer opportunities to support apartment development before a suburb's median house price reaches levels that encourage broader underlying demand. This may occur through potential residents trading off the benefits offered by a traditional detached house or townhouse for living in a particular location that offers access to key infrastructure and facilities and a higher quality public realm. Examples of this

include immediate access to an efficient public transport service, regional shopping centres, tertiary education campuses, and lifestyle precincts offering cafes and restaurants.

In the absence of these attractions, demand for apartments will continue to be determined by underlying property market fundamentals which in the context of Casey favour traditional detached housing and to a lesser extent townhouses.

8.4 Planning Controls and Covenants

Land within the Study Area is currently subject to a number of Development Plan Overlays. A high-level review of these overlays could not identify any significant impact upon the potential for medium density housing being developed.

Single dwelling covenants currently apply to residential areas adjacent to the Endeavour Hills Town Centre. Although not a planning control administered by Council these covenants do restrict medium density housing from occurring within some existing residential areas.

The potential impact of these controls should be firstly considered within the context of the preference for a minimum lot site area of approximate 1,000 sqm for a townhouse project that would deliver more than 1-2 additional dwellings. An analysis of residential lot sizes within the area surrounding the Endeavour Hills Town Centre did not identify any properties that met this criteria. As a result it may be concluded that the existing single dwelling covenant is unlikely to have any impact upon the potential for medium density housing being developed. This is due to sites not being sufficiently large to support a significant level of development in the absence of such a covenant.

9. FUTURE HOUSING REQUIREMENT

Summary

- Future housing demand across the Study Area will reflect underlying population growth together with any shifts in housing affordability and the housing preferences of future residents.
- Demand for additional housing within the Study Area has been projected based upon three scenarios ranging from a base case whereby existing housing preferences remain unchanged through to a growth scenario reflecting the expectation that housing preferences within the area will mirror that of more established locations being the City of Knox as well as reflect a growing trend towards medium density housing and in particular townhouses.

Study Area: Additional Housing Demand 2011-2031

	Separate Houses	Semi Detached Dwellings (Townhouses)	Apartments
Base Case Scenario	19,000	1,300	560
Moderate Scenario	17,250	2,900	1,250
Growth Scenario	15,000	4,700	1,700

- The area required to accommodate the projected additional housing demand has been calculated based upon an indicative unit site area being the average land area per dwelling for each dwelling type.

Study Area: Additional Land Area Requirement 2011-2031

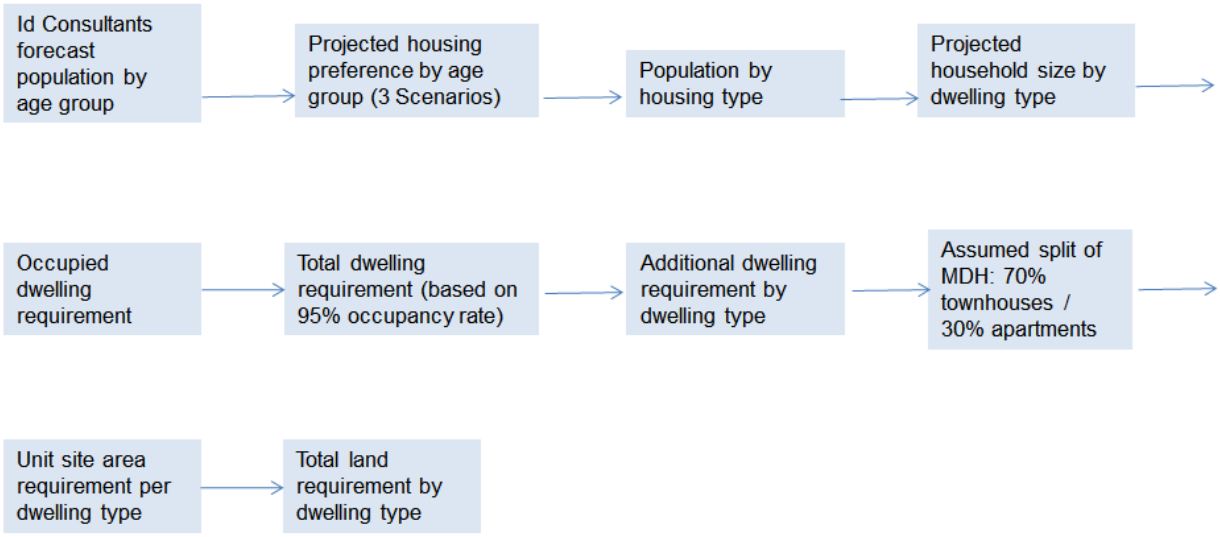
Dwelling Type	Unit Site Area (sqm)	Base Case (ha)	Moderate Scenario (ha)	Growth Scenario (ha)
Separate Houses	500	958	862	747
Townhouses	275	36	79	129
Apartments	80	4.5	9.9	13.7
Total		**998**	**951**	**890**

9.1 Methodology

The relationship between each age group and their occupation of different housing types is a central component of the methodology adopted for projecting future demand for housing. This reflects the finding from previous research (refer Section 6.4) that housing preferences are more closely aligned with age rather than household type. This is due to the correlation between a person's age and their life cycle stage, the type of household that they are a member of, and likely demand for various housing types.

This will however a need to take account of the likely evolution of Casey's housing sector towards medium density housing as greenfield housing opportunities are exhausted with an associated impact upon housing affordability, as well as broader trends occurring at a metropolitan level. The most transparent means through which this may be undertaken is to benchmark the City of Casey against other more established municipalities within Melbourne's south-east region while also taking into consideration additional factors that may influence the likelihood of age groups living in different housing types.

Figure 28: Housing Requirement Forecasting Methodology



Three scenarios are proposed for the future housing preferences of Study Area residents which when applied to the population forecasts for each age cohort provide projections of the number of residents within separate dwellings and medium density housing. Projections of household size then allow the demand for each dwelling type to be projected.

9.2 Projected Housing Requirement 2031

Future housing requirements for the Study Area have been projected based upon forecast population and the three scenarios reflecting the existing and likely future housing preferences of residents within the area.

Scenario 1: Base Case Scenario:

Under the Base Case Scenario of housing preferences remaining unchanged from that which existed as at the 2011 Census there is projected to be demand for approximately:

- 19,000 separate houses.
- 1,300 townhouses.
- 560 apartments.

Scenario 2: Moderate Scenario:

This scenario reflects the expectation that over the period 2011-2031 the housing preferences of residents within the Study Area will on average reflect that of more established municipalities within Melbourne's outer south-east and eastern region. The City of Knox is considered an appropriate benchmark given:

- A similar age structure in 2001 to that of the Study Area in 2011.
- Median house prices of a level that may be potentially achieved (in real terms) within the Study Area during the later stages of the period to 2031.

Based upon housing preferences within the Study Area over the period to 2031 trending towards that which existed in the City of Knox in 2011 there is projected to be an additional requirement for approximately:

- 17,250 separate houses.
- 2,900 townhouses.
- 1,250 apartments.

These projected dwelling requirements are also based on an assumed 70% / 30% split between townhouses and apartments which is consistent with that experienced by municipalities within Melbourne's outer south-east and eastern regions.

Scenario 3: Growth Scenario

This third scenario is also based upon the overall housing preferences of residents within the City of Knox as per Scenario 2. It does differ however by taking into account the growing trend towards medium density housing and in particular townhouses. With the population of the study area forecast to increase by 11% over the decade 2011-2021 compared to only 4.4% experienced by Knox over the decade to 2011 there would be expected to be much greater opportunities for new medium density housing to be incorporated into the housing stock by 2031.

Accordingly, it has been assumed that the distribution of additional housing will be according to the following mix as shown relative to that assumed for Scenarios 1 and 2.

Table 6: Assumed Additional Dwelling Mix

	Separate Houses	Detached Dwellings (Townhouses)	Apartments	Total
Scenario 1: Base Case Scenario	91.2%	6.2%	2.7%	100%
Scenario 2: Moderate Scenario	80.7%	13.5%	5.8%	100%
Scenario 3: Growth Scenario	70.0%	22.0%	8.0%	100%

Under this third scenario there is projected to be a requirement for approximately:

- 15,000 separate houses.
- 4,700 townhouses.
- 1,700 apartments.

The calculation of the projected housing requirements under each scenario is presented in Table 7 with the remainder of this section detailing the methodology and assumptions that underpin these projections.

9.3 Projected Land Requirement 2031

The projected land requirement to support the forecast number of additional dwellings has been calculated based upon indicative residential projects within Melbourne's outer east and south-east regions. These projects reflect the scale of development which is expected to occur within the Study Area over the period to 2031 and have been profiled in Appendix C. These projects allow an indicative 'unit site area' to be calculated which represents the average site area per dwelling for each dwelling type.

Table 6: Study Area Projected Housing Requirement 2031

	Base Case Scenario			Moderate Scenario			Growth Scenario		
	Separate Houses	**Medium Density Housing**	**Total**	**Separate Houses**	**Medium Density Housing**	**Total**	**Separate Houses**	**Medium Density Housing**	**Total**
Resident Population by Dwelling Type	251,806	18,148	269,954	246,449	23,505	269,954	246,449	23,505	269,954
% of Resident Population	93.3%	6.7%	100.0%	91.3%	8.7%	100.0%	91.3%	8.7%	100.0%
Average Household Size	2.93	2.11	2.85	2.93	2.11	2.85	2.93	2.11	2.85
Occupied Dwelling Requirement	86,075	8,694	94,769	84,244	10,841	95,085	84,244	10,841	95,085
Occupancy Rate	95%	95%	95%	95%	95%	95%	95%	95%	95%
Total Dwelling Requirement	90,605	9,152	99,757	88,678	11,412	100,090	88,678	11,412	100,090
Existing Housing Stock (2011)	71,444	7,292	78,736	71,444	7,292	78,736	71,444	7,292	78,736
Additional Dwelling Requirement (2011-2031)	19,161	1,860	21,021	17,234	4,120	21,354	17,234	4,120	21,354
Annual Additional Requirement	958	93	1,051	862	206	1,068	862	206	1,068
Additional Dwelling Requirement	**Annual**	**2011-2031**	**Percent**	**Annual**	**2011-2031**	**Percent**	**Annual**	**2011-2031**	**Percent**
Separate Houses	958	19,161	91%	862	17,234	81%	747	14,948	70%
Townhouses	65	1,302	6%	144	2,884	14%	235	4,698	22%
Apartments	28	558	3%	62	1,236	6%	85	1,708	8%
Total	1,051	21,021	100%	1,068	21,354	100%	1,068	21,354	100%

The calculated land requirement for each scenario and dwelling type is shown in the table below. This requirement ranges from 890 ha to 998 ha. The projected requirement for each dwelling type however is more variable.

Table 7: Projected Additional Residential Land Requirement (Hectares) 2011-2031

Dwelling Type	Unit Site Area (sqm)	Scenario 1 (ha)	Scenario 2 (ha)	Scenario 3 (ha)
Separate Houses	500	958	862	747
Townhouses	275	36	79	129
Apartments	80	4.5	9.9	13.7
Total		**998**	**951**	**890**

9.4 Projected Population Growth

Population projections prepared by Id Consultants for Council have been aggregated to represent the Study Area (refer table below) which highlights the increasing number of residents aged over 60 years which account for approximately two-thirds of projected total population growth. The rate of population growth is however projected to slow over the forecast period from an average of 1.2% per annum over 2011-2016 to only 0.2% per annum over 2026-2031.

Table 7: Study Area Projected Population Growth

	2011	2016	2021	2026	2031	2011-2031
Study Area	233,754	248,150	260,151	267,885	269,954	36,200
Average Annual Growth Rate		1.2%	0.9%	0.6%	0.2%	0.7%
0-9	35,871	37,989	38,880	39,210	38,686	2,815
10-19	35,331	35,185	36,236	37,046	36,827	1,496
20-29	34,092	35,242	36,042	35,883	35,578	1,486
30-39	36,724	36,837	37,850	38,260	37,626	902
40-49	35,165	36,458	36,475	36,380	36,340	1,175
50-59	26,536	29,816	31,531	32,158	31,673	5,137
60-69	16,511	20,265	23,035	25,389	26,524	10,013
70-79	8,629	10,864	13,901	16,437	18,396	9,767
80+	4,895	5,494	6,201	7,122	8,304	3,409

Source: Id Consultants

9.5 Housing Preferences

The housing preferences of Casey's future residents will be influenced by a range of factors including the existing housing stock which represents a fixed investment with the majority of dwellings continuing to be utilised in their current form. There will however be the opportunity for new housing development to introduce a greater diversity of dwelling types subject to being commercially viable for developers to deliver.

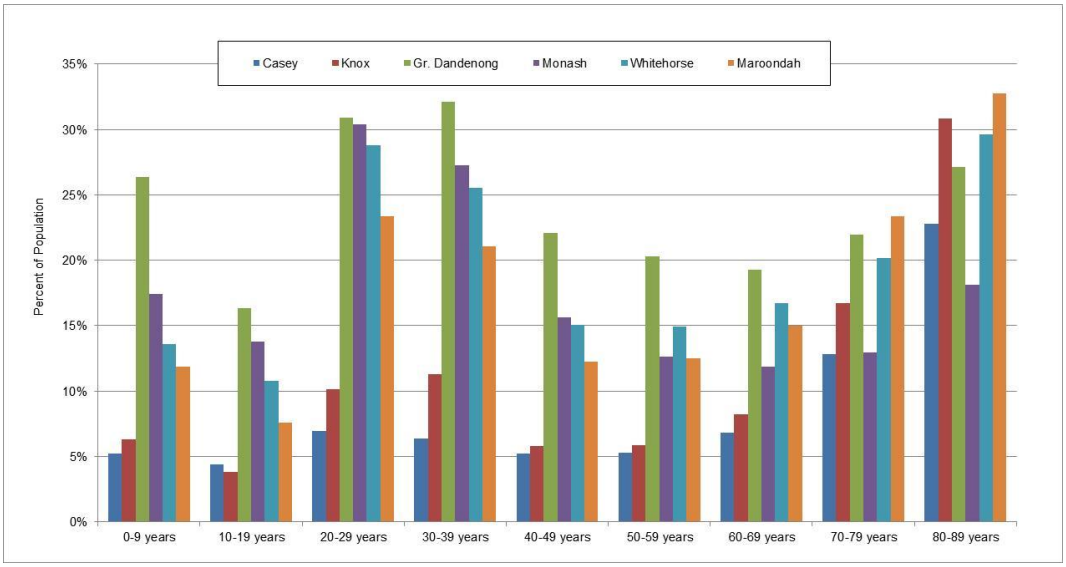
As Casey's supply of greenfield residential land is consumed, increasing land values are expected to result in growing demand for medium density housing as potential purchasers are priced out of the traditional detached housing market. As a result the City of Casey's housing mix is expected to move closer to that of more established municipalities. The extent to which this occurs will however

be dependent upon the level of median prices for established housing which is expected to remain subdued due to the availability of greenfield residential land.

The following figure shows the proportion of residents living in medium density housing within municipalities across Melbourne's outer south-east and eastern regions. The considerable differences in the proportion of different age groups occupying medium density housing is a reflection of a range of factors including:

- Availability of local employment opportunities.
- Presence of major educational institutions such as Monash University.
- Attraction of centres to ethnic groups such as Dandenong and Box Hill for the Indian and Chinese communities.
- Notably higher median house prices as is the case for locations within Monash and Whitehorse such as Glen Waverley and Box Hill.

Figure 29: Medium Density Dwellings Occupancy (% of Population) 2011



Source: ABS

Taking these factors into consideration, it is unlikely that the City of Casey will achieve the occupancy rates for medium density housing that currently exist within Greater Dandenong, Monash or Whitehorse.

Maroondah has notably higher occupancy rates which in most cases is at least double that which exist in the City of Casey. This is a reflection of not only higher median house prices but also a more established long-term market for medium density housing including significant development of villa units extending back to the 1970s. For this reason the occupancy rates within Maroondah are unlikely to be achieved within Casey by 2031.

The City of Knox immediately to the north of Casey has a higher proportion of its population living in medium density housing across all age groups except the 10-19 years cohort. Importantly, Knox has a moderately higher proportion of residents within the key 20-29 years and 30-39 years age groups living in medium density housing.

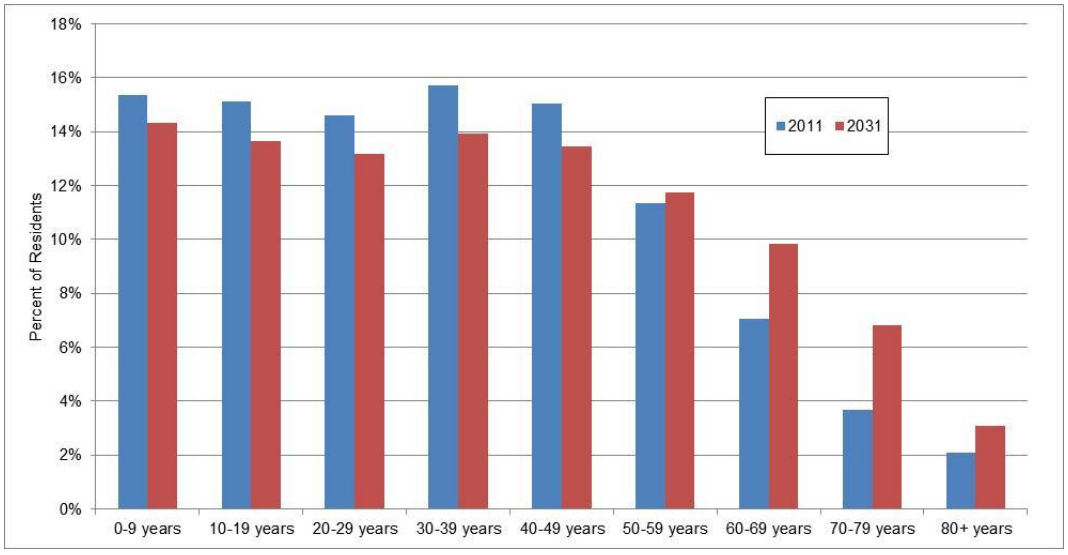
The occupancy rates for medium density housing within the City of Knox are considered to be indicative of that which may be achieved within Casey by 2031 for a number of reasons including:

- Occupancy rates being notably higher for the key 20-29 year and 30-39 year age groups which will be the primary source of demand for medium density housing. This is consistent with the greater likelihood of these age groups to consider medium density housing as an alternative to traditional separate houses in response to declining housing affordability.
- Occupancy rates for older age groups in most cases being only slightly higher in Knox compared to Casey. This is consistent with previous research indicating that empty nesters are less likely to consider downsizing than is often assumed, while still recognising the potential for future generations to consider this as an option.
- Casey's rate of population growth will have slowed to an average of 0.2% by 2031 which is consistent with the City of Knox whose population has increased at an average rate of 0.4% per annum over the period 2001-2011.
- The age distribution of Casey's population in 2011 is almost identical to that of the City of Knox in 2001 which suggests that Casey's population profile may be mirroring that of Knox with a 10 year lag.

9.6 Age Distribution

The projected age distribution for the Study Area is shown in the figure below together with that recorded in 2011. It highlights a notable ageing of the population with a significantly higher proportion of residents aged over 60 years. In particular the smaller proportion of residents within the key 20-29 year and 30-39 year age groups may reduce the relative overall demand for medium density housing.

Figure 30: Study Area – Projected Age Distribution 2011 vs 2031

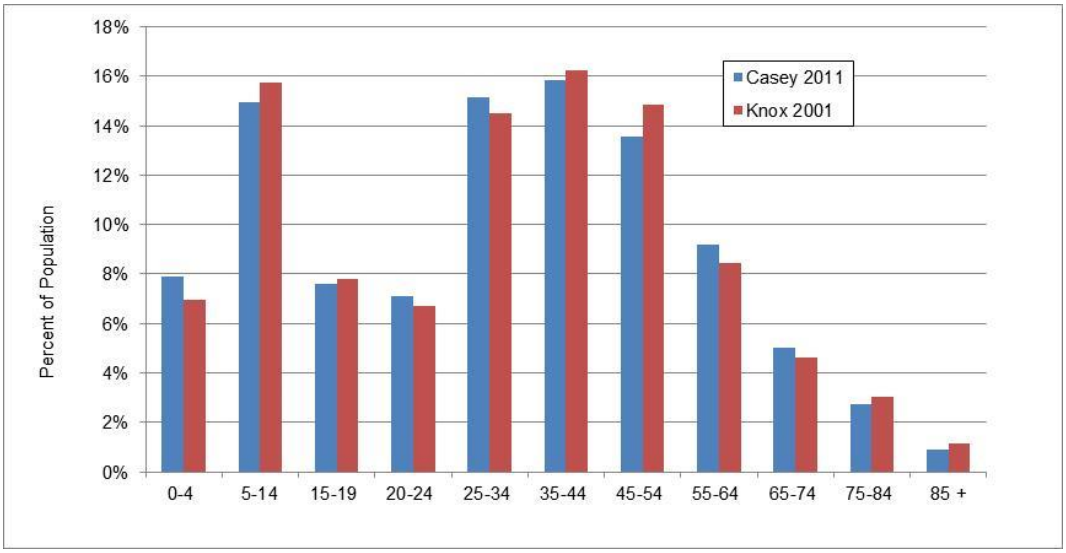


Source: Id Consultants

As indicated above, the age distribution of Casey's population in 2011 is very similar to that of Knox in 2001 (refer figure below). Although the occupancy rates for medium density housing are calculated for each age group, the similarities between the two municipalities does suggest a similar social composition which may also result in comparable housing choices.

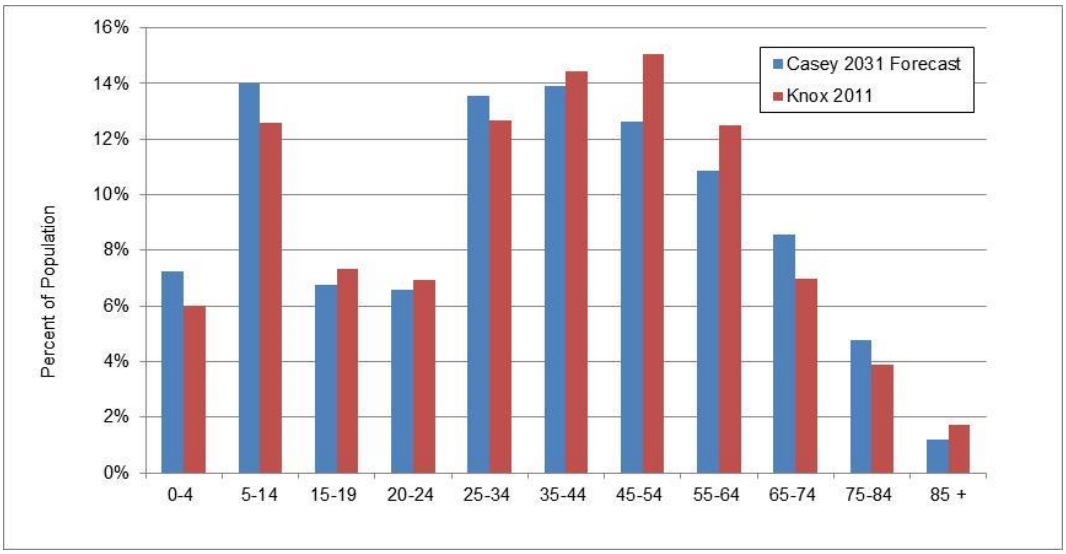
By 2031 Casey is projected to have an age profile which is similar to Knox in 2011 but with a smaller proportion of its population in the 45-64 age group and a larger share than Knox in its 65 years and over age group. The projected proportion of residents within the key 20-29 year and 30-39 year age groups in Casey will however still be similar to that of Knox in 2011.

Figure 31: Age Distribution Casey Study Area (2011) vs. Knox (2001)



Source: ABS

Figure 32: Study Area Age Distribution Casey (Forecast 2031) vs. Knox (2011)



Source: ABS

9.7 Housing Preference Scenarios

Casey's future housing requirements have been forecast based upon three scenarios relating to the proportion of each age group living within separate houses and medium density housing which for the purpose of this exercise may be referred to as housing preferences. These scenarios are:

- Base Case Scenario

The Base Case Scenario adopts the housing preferences that existed as at the 2011 ABS Census.

- Moderate Scenario

This scenario reflects the expectation that the housing preferences of Casey's future residents will be in line with those of the City of Knox as at 2011.

- Growth Scenario

This scenario is the same as the Moderate Scenario however takes account of an anticipated trend towards an increased proportion of medium density housing within the City of Casey based upon anecdotal evidence at a metropolitan level over recent years as well as expected future residential market conditions.

Applying the three housing preference scenarios to the projected age group populations for 2031 provides projections of the total number of future residents expected to be living in separate houses and medium density dwellings.

9.8 Average Household Size

Id Consultants project that the average size of households within the Study Area will decline from 3.06 persons in 2011 to 2.85 persons per household by 2031. In order to project the number of separate houses and medium density dwellings required to accommodate the number of future residents living in each of these dwelling types, it has been assumed that the average household size associated with each dwelling type as reported in the 2011 Census will also decline by an equivalent proportion by 2031.

Table 8: Study Area - Projected Household Size by Dwelling Type 2031

Separate house	Townhouse	Flat, unit or apartment	Medium Density Housing	Total
2.93	2.43	1.74	2.11	2.85

Source: Id Consultants, ABS

9.9 Dwelling Occupancy Rate

In addition to those dwellings which are occupied by residents there are also unoccupied dwellings that need to be accounted for in projecting Casey's future housing requirement. Consistent with the 2011 Census it is assumed that 5% of dwellings will be unoccupied at any point in time. Applying this projected dwelling occupancy rate to the projected number of occupied dwellings provides a forecast of the total housing requirement for the Study Area.

9.10 Additional Housing Requirement

Having established the total housing requirement for the projected population of the Study Area in 2031, the requirement for additional housing may be calculated relative to that which existed as at the 2011 Census.

9.11 Medium Density Housing Requirement

The requirement for medium density housing over the period 2011-2031 will be determined by not only population growth but also underlying property market conditions. Similarly, the proportion of total medium density housing in the form of either semi-detached dwellings such as townhouses or apartments will also be determined by property market conditions. The experience of other more established municipalities in Melbourne's outer east and south-east region provides an indication of the dynamics of the residential property sector and is discussed below.

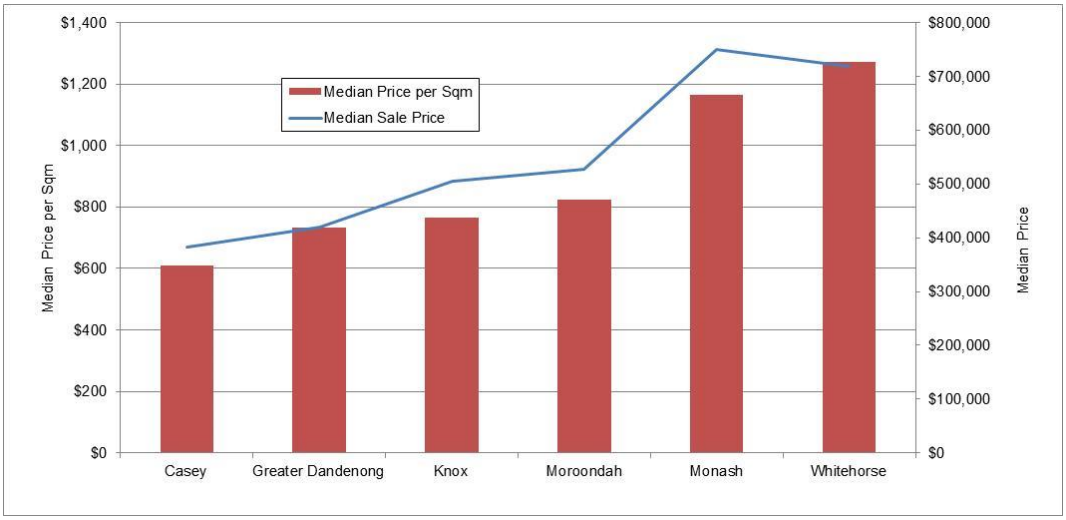
9.11.1 Property Market Conditions

The price of established separate housing is a key determinant of demand for medium density housing as potential purchasers are forced to seek out alternative housing opportunities within a particular location. The availability of new housing lots within Casey's greenfield residential estates is a key factor limiting the rise in underlying land values and median prices for established housing to a point where demand for medium density housing reaches that of more established locations.

The following figure shows both median sale price and median price per square metre for established houses across Melbourne's outer south-east and eastern municipalities. The value of established housing within Casey is notably less than that of these other municipalities based upon either of these two measures and would need to increase by 25-30%% in real terms (1.3-1.6% per annum over the 17 years to 2031) for prices to be comparable to house prices within the City of Knox and 35% to be comparable with Maroondah. To achieve the levels of Monash and Whitehorse, property values within Casey would need to double which would require an average annual real increase of 4.2% per annum.

While the real increase in prices required for Casey's established house prices to reach current levels within the City of Knox is possible, the growth required to match prices within more established municipalities such as Monash and Whitehorse would not be expected to be achieved.

Figure 33: Established Houses - Median Sales Price and Price per Sqm 2013



Source: Valuer General Victoria

9.11.2 Medium Density Housing Mix

As has been discussed earlier in this report, there are a number of inconsistencies in the classification of medium density housing by the ABS both within the City of Casey and between municipalities. For the purpose of determining future housing requirements historical census data relating to the number of 'semi-detached dwellings' and 'flats, units or apartments' has been aggregated as 'medium density housing'.

Projections of future medium density housing requirements are then segmented into townhouses and apartments based on the anticipated impact of projected property market conditions upon housing preferences and the commercial viability of developing each of these housing types.

Charter Keck Cramer monitors medium density housing projects comprising 10 or more dwellings across metropolitan Melbourne. Since 2009 all medium density housing projects within the City of Casey have been in the form of townhouse developments with no recorded apartments being constructed. Within more established municipalities across Melbourne's outer east townhouses

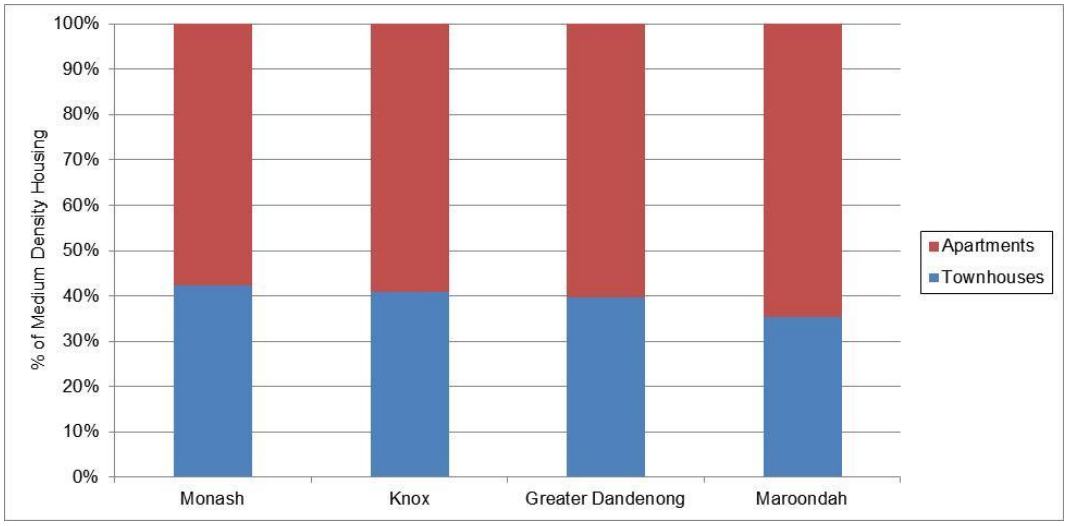
have typically accounted for 40% of medium density housing development within projects of 10 or more dwellings (refer figure below).

Taking into consideration the range of small projects of less than 10 dwellings it would be reasonable to assume that 60-80% of total medium density housing within these municipalities would be in the form of townhouses.

For the purpose of forecasting the future mix of medium density housing within the City of Casey Study Area it has been assumed that on average 70% of medium density housing developed over the period to 2031 will be in the form of townhouses. This proportion has been applied for Scenarios 1 and 2 (base case and moderate scenarios).

A different set of proportions have however been applied to Scenario 3 (Growth Scenario) to reflect the growing trend towards medium density housing which is occurring across metropolitan Melbourne. While it is still assumed that 70% of medium density housing will be in the form of townhouses, it is also assumed that separate dwellings will also account for only 70% of total additional housing. This compares to 91% under Scenario 1 (Base Case) and 81% for Scenario 2 (Moderate).

Figure 34: Medium Density Housing Completions 2009-2014 – Dwelling Mix*



Source: Charter Keck Cramer

* Within projects of 10 or more dwellings.

10. RURAL LIFESTYLE PROPERTIES

Summary

- Rural lifestyle properties with a permitted minimum subdivision size of less than 2 ha are primarily concentrated in the Low Density Residential zoned areas of Casey's north. Green Wedge zoned land extending from Cranbourne South to Western Port account for the remaining one-third of rural lifestyle properties.
- Limited opportunities exist for further subdivision of existing lots with only 1% of properties (31) being more than 3 ha in size. Similarly, only 7% of both the number and total area of properties is currently vacant (i.e. no dwelling) compared to 13% of land identified for conventional residential development within the General Residential Zone with additional land also available for residential development within the Urban Growth Zone.
- Construction of new dwellings on rural lifestyle properties averaged around 50 dwellings per annum over 1980-2010 but with a total of only 109 dwellings constructed since 2010. The current supply of vacant properties (176 lots) represents just over three years supply based upon the longer term construction rate.
- A tightening supply of rural residential housing opportunities has been reflected in relatively stronger growth in property values compared to traditional residential locations elsewhere within Casey. The median annual growth rate for properties of 0.4-2.0 ha purchased and re-sold during the period 2000-2014 was 9.4% per annum compared to a benchmark rate of 7.3% per annum for traditional residential properties within Narre Warren.
- Local real estate agents involved in the marketing of rural lifestyle properties confirmed the apparent shortage of rural lifestyle properties and suggested potential underlying demand for up to 50-60 lots per annum.

10.1 Context

The Project Brief for this assessment requested advice on the demand for low density residential zoned (LDRZ) lots and rural residential lots with a minimum subdivision size of 2 ha or less. There are five relevant land use zones as identified in the table below with the Low Density Residential Zone (LDRZ) accounting for the majority of properties and total area. The remaining properties are located within the Green Wedge extending from Cranbourne South to Western Port.

Table 9: Low Density and Nominated Green Wedge Zoned Land Profile

Zoning	Minimum Subdivision Area	Number of Properties	Total Area (ha)
Low Density Residential Zone (LDRZ)	0.4 ha	2,455	1,437
Green Wedge Zone Schedule 1 (GWZ1)	2 ha	42	86
Green Wedge A Zone Schedule 1 (GWAZ1)	1 ha	355	349
Green Wedge A Zone Schedule 2 (GWAZ2)	2 ha	140	283
Green Wedge A Zone Schedule 6 (GWAZ6)	0.92 ha	45	43
Total		**3,037**	**2,198**

Source: City of Casey

Figure 35: City of Casey Low Density Residential Zoned Land

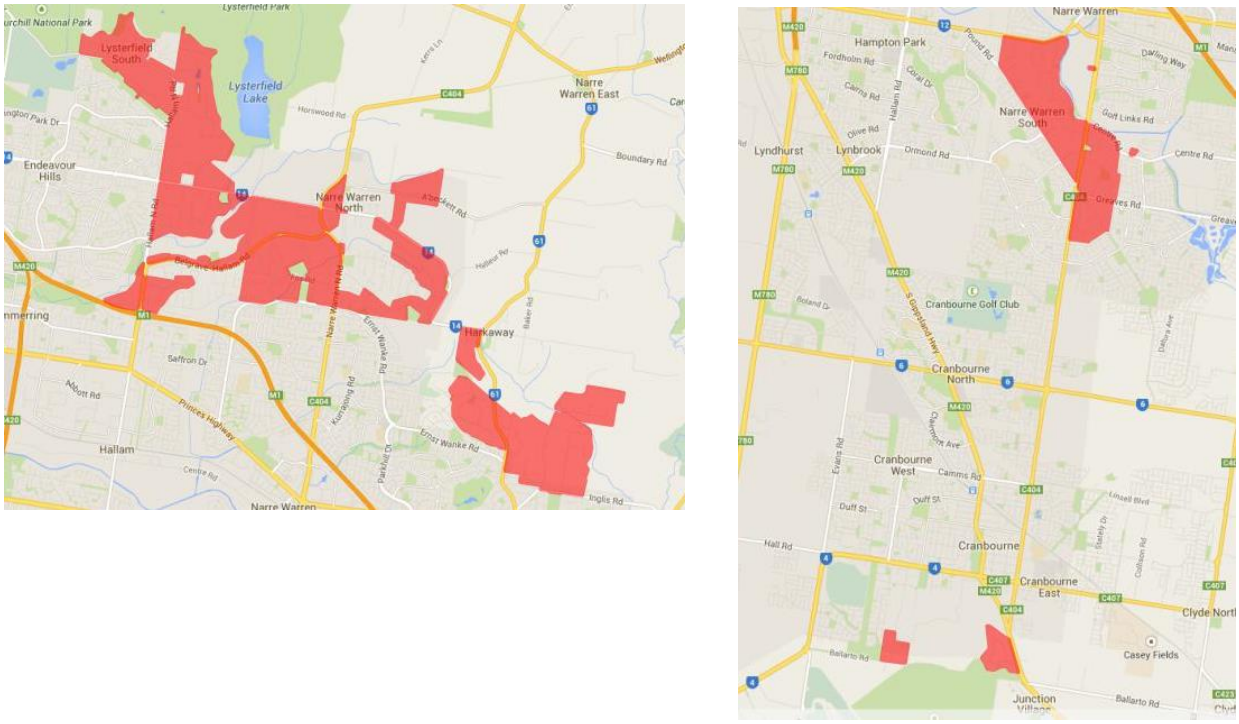


Figure 36: Nominated Green Wedge Zoned Land (GWZ1, GWAZ1, GWAZ2, GWAZ6)

The following table indicates the distribution of properties according to their size and zoning. It is notable that only 1% of properties (31) are more than 3 ha in size indicating limited opportunities for the further subdivision of properties to meet any future growth in demand.

Table 10: Number of Allotments by Selected Zoning

Area	GWAZ1	GWAZ2	GWAZ6	GWZ1	LDRZ	Total	Percent
Under 0.2 ha	6		2		162	170	5.6%
0.2-0.4 ha	5	1			487	493	16.2%
0.4-1.0 ha	130	5	29		1,624	1,788	58.9%
1-2 ha	208	34	10	12	112	376	12.4%
2-3 ha	4	99	4	30	42	179	5.9%
3-4 ha		1			9	10	0.3%
4-5 ha	2				4	6	0.2%
5-10 ha					10	10	0.3%
10-20 ha					3	3	0.1%
Over 20 ha					2	2	0.1%
Total	355	140	45	42	2,455	3,037	100.0%

Source: City of Casey

Council's rates database indicates that 7% (176) of all properties within the five nominated zones are currently vacant (i.e. no dwelling constructed) which accounts for 7.2% of total zoned land by area. By comparison, within Casey's General Residential Zone (GRZ) 12.9% of land developed, or proposed, for housing is currently vacant. This however does not include land within the Urban Growth Zone (UGZ) which is also available for future residential development.

Table 11: Residential Rural / Rural Lifestyle (0.4 to 20 Ha) – Number of Allotments by Occupancy Status

Zoning	Occupied (no.)	Vacant (no.)	Total	Vacancy Rate
GWAZ1	312	16	328	4.9%
GWAZ2	127	1	128	0.8%
GWAZ6	35	1	36	2.8%
GWZ1	41		41	0.0%
LDRZ	1838	158	1996	7.9%
Total	**2,353**	**176**	**2,529**	**7.0%**

Source: City of Casey

Table 12: Residential Rural / Rural Lifestyle (0.4 to 20 Ha) – Total Area of Allotments by Occupancy Status (Hectares)

	Occupied	Vacant	Total	Vacancy Rate
GWAZ1	309.2	19.4	328.6	5.9%
GWAZ2	260.5	2.3	262.8	0.9%
GWAZ6	32.5	1.0	33.5	3.0%
GWZ1	83.7	0.0	83.7	0.0%
LDRZ	1,013.7	109.0	1,122.7	9.7%
Total	1,699.5	131.8	1,831.3	7.2%

Source: City of Casey

10.2 Historical Demand

An indication of the historical level of demand for 'rural lifestyle' properties within the nominated zones is best gained from Council's rates database which identifies the construction year for individual properties. However for approximately one-third of properties, a dwelling construction year is not available.

The table below indicates that there have been approximately 500 dwellings constructed over each decade (averaging 50 dwellings per annum) since 1980, of which around 400 have been within the LDRZ zone. This is likely to represent a base level of demand given the significant number of properties for which a construction year is not available.

The existing 176 vacant lots (refer table above) therefore represents just over three years supply based upon a historical construction rate of 50 dwellings per annum. This should be taken as an indicative figure given that those properties for which a dwelling construction year is not known may represent additional demand. Similarly, in the case of older dwellings they may represent potentially additional supply.

Table 13: Residential Rural / Rural Lifestyle (0.4 to 20 Ha) – Dwelling Construction Year

Construction Year	GWAZ1	GWAZ2	GWAZ6	GWZ1	LDRZ	Total
1940-1950					2	2
1950-1960	16	2	2	1	10	31
1960-1970	39	3			66	108
1970-1980	91	70		3	127	291
1980-1990	67	26		24	375	492
1990-2000	47	11		10	444	512
2000-2010	41	14	32	4	412	503
2010-2014	9	1	1		98	109
Not Available	45	13	10		921	989
Total	**355**	**140**	**45**	**42**	**2,455**	**3,037**

Source: City of Casey Rates Database

10.3 Property Values 2000-2014

Rural lifestyle properties represent a niche segment of Casey's residential property market accounting for only 4.3% of all residential properties within the municipality. Given the relatively small number of property sales each year together with the potential for median prices to be influenced by variations in the size of allotments sold, comparisons with the broader market trends may be potentially misleading.

For the purpose of assessing price movements within the rural lifestyle sector, re-sales of individual properties rather than median prices for all properties have been analysed. This has been undertaken through identifying properties that have been purchased and re-sold during the period 2000-2014, calculating the average annual price growth between the two sale dates and comparing this to the growth in median house prices in a benchmark location. Narre Warren was chosen as a benchmark given its proximity to the LDRZ zoned areas which account for the majority of rural lifestyle properties within Casey as well as being more established and experiencing higher price growth than elsewhere within the municipality.

The table below summarises the key findings from this analysis of 206 sales of properties of 4,000 sqm - 2 ha and a further 12 properties of 2-10 ha. Given the larger number of sales for the first group this is considered to be a more reliable indication of underlying conditions within the rural lifestyle property market.

The median growth in values for properties of 0.4 - 2.0 ha was calculated to be 9.4% per annum compared to a benchmark of 7.3% per annum. Price growth for individual properties was also compared to the benchmark with a median difference of 2.3% per annum.

For larger properties of 2-10 ha, for which there were only 12 re-sales identified, the median annual growth rate was 6.9% per annum compared to a benchmark of 6.6%. The median difference between the price growth rate for individual properties and the benchmark for the same period was 1.2% per annum.

Table 14: Rural Lifestyle Properties Price Growth

Lot Size (ha)	No. Sales	Median Annual Growth	Median Benchmark (Narre Warren)	Median Difference
0.4-2.0 ha	206	9.4%	7.3%	2.3%
2-10 ha	12	6.9%	6.6%	1.2%

Source: pricefinder.com.au, Charter Keck Cramer

The growth in values for rural lifestyle properties above that for conventional residential properties within Narre Warren highlights the extent to which there is a relative shortage of such properties within Casey. This is consistent with the earlier finding that there is only around three years supply of rural lifestyle properties within the municipality.

10.4 Real Estate Agent Consultation

Local real estate agents with experience in marketing rural lifestyle properties were consulted in order to obtain an ‘on the ground’ perspective of local market conditions. There was a general consensus that there was a notable shortage of smaller rural lifestyle properties which is reflected in the prices being paid for available stock. Future employment growth within Casey and Cardinia Shire was identified as potentially generating further demand above that which already exists.

The depth of demand for smaller properties of 1-5 acres (4,000 sqm – 2 ha) was seen by agents as generally being up to around 50-60 lots per annum with one agent suggesting that there would be an immediate pent-up demand for up to 250 lots across Casey. Preferred locations were identified as being within the northern portion of the municipality in locations such as Berwick, Narre Warren North, Narre Warren East and Harkaway.

It was noted by agents that new rural lifestyle subdivisions were being priced above the market and as a result properties taking longer to sell than would otherwise be the case. This is a reflection of developers not being under pressure to sell properties within short time frames.

11. STRATEGIC DIRECTION

Summary

- Underlying property market conditions will be the primary determinant of opportunities for a more diverse housing mix comprising medium density housing. However, the necessary increase in land values to support any significant level of apartment development may not occur until existing greenfield residential opportunities are exhausted.
- Townhouse development will play a key role in facilitating the emergence of a viable medium density housing sector within Casey and should be promoted in various forms across the municipality.
- Council may play a key role in facilitating niche apartment development opportunities within the Fountain Gate-Narre Warren Activity Centre and Berwick Village through the longer term redevelopment of strategically located landholdings.
- Opportunities to meet demand for rural lifestyle properties should be investigated by Council given evidence of limited supply impacting upon dwelling construction and an escalation in property values.

The analysis undertaken throughout this report has identified a number of issues that impact upon the opportunity for a more diverse mix of housing within the City of Casey. The most overwhelming of these impacts is the relative affordability of traditional detached housing which determines the financial capacity of households to pursue the widely held preference for this form of housing.

Until the existing supply of greenfield residential land is exhausted, residential land values across Casey are expected to remain relatively subdued with reduced financial pressure for potential purchasers of new dwellings to consider higher density apartment style housing. There will however be the opportunity for medium density housing in the form of townhouses to cater for that segment of the market seeking a more affordable housing product and/or a smaller, lower maintenance dwelling.

Townhouses have been strategically important in facilitating a transition from traditional detached dwellings to higher density housing including higher rise apartments across Melbourne's middle suburbs. This has occurred through gradually shifting housing preferences as well as providing a means for testing the market for more intensive housing via small to medium-sized projects able to be undertaken by local builder/developers.

Council should therefore actively promote townhouse development as a means of enabling the medium density housing market to mature within Casey. This may take the form of a range of formats including projects on existing house sites as well as projects of 4 or more dwellings on amalgamated sites, and larger scale projects on infill sites. Council will however need to be aware of the likely pressure for higher densities to enable projects to be commercially viable.

With a longer-term objective of facilitating apartment development, Council may look to identify key strategic locations where there is the potential to establish precincts offering a higher amenity environment. Such locations would offer access to a range of infrastructure and services that may include rail services, regional retail facilities, open space and recreational facilities, lifestyle and entertainment opportunities. These should be located within the already more preferred areas of Casey with a higher median house prices.

Two locations that meet a number of these criteria are the Fountain Gate-Narre Warren Activity Centre (FNAC) and Berwick Village. As a significant land owner within the FNAC, Council also has the opportunity to play a role in developing catalyst projects within that centre. Similarly, Council

also owns a number of strategic sites within Berwick Village that may potentially incorporate an element of medium density housing as part of any longer term redevelopment of these sites.

Figure 37: Council Own Sites (Fountain Gate – Narre Warren Activity Centre)

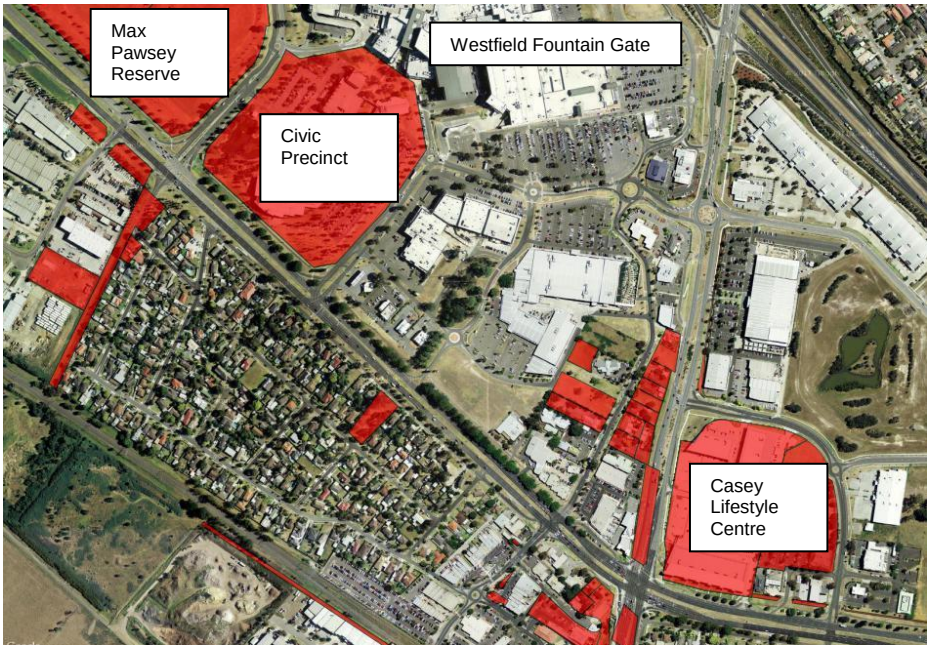


Figure 38: Council Own Sites (Berwick Village)

Council's involvement with, and influence upon the residential development sector, primarily takes place via its development assessment function against the relevant provisions of its planning scheme (as required by the Planning & Environment Act).

From a developer's perspective, the extent of control and level of planning support that exists – either directly or indirectly – for a potential development site is fundamental to the decision as to whether to proceed or otherwise with a project. Logically, the greater the level of regulatory restriction, the higher the planning risk to the project. Developers also consider opportunities both

within and across municipalities and therefore gravitate to opportunities of greatest probability of achieving a successful outcome in a regional context.

The Planning Scheme provides the regulatory framework, including both prescriptive and performance based criteria, against which new development opportunities are assessed against by developers. In the context that the Planning Scheme includes a variety of mechanisms by which development decisions are made, that is, the State and Local Planning Policy Framework, Zones, Overlays, Particular and General Provisions, Council has a significant and highly influential role to play in determining where, when and what type of residential development can or should occur.

The introduction of the new residential zones – an inherently hierarchical regime - has given Councils the ability to identify the extent, and type of residential development it desires to be delivered in various locations throughout the municipality. Application of the new zones and associated schedules are therefore a significant mechanism that can be used to promote or limit, new housing supply. The suite of planning controls that apply to any given site are a key consideration in the initial assessment of a site's ability to be developed.

In the context of Council's role within the above-described framework, the measures by which it can generate developer interest is through the creation of policies and controls that provide explicit support for new residential development particular with respect to identified strategic sites or precincts. As an example this could include:

- Consideration of the extent to which, and what, residential zone (and associated schedule) is applied (eg broader application of the residential growth zone)
- The use of the local policy framework in promoting residential development
- Density and/or height dispensations
- Explicit policy for site consolidation or for sites of particular characteristics (size, location advantage)

In summary, as opposed to the often prevalent ambiguity associated with the development application process, a planning framework that is clear and explicit in its support or not of residential development, together with certainty in the timeframe to achieve approvals, is a significant factor in generating developer interest. This interest will be accelerated against a backdrop where other Councils do not offer the same certainty. As the responsible authority, Council has the opportunity to develop such a framework - beginning with a review of the existing range of controls as they relate to residential development as a means of identifying constraints to its delivery across the City of Casey.

Within the rural lifestyle property sector there is evidence that there is a notable shortage of properties resulting in a decline in dwelling construction within this sector, together with increased property values above that experienced across Casey's wider housing market.

There may therefore be a case for Council investigating options to accommodate existing demand for rural lifestyle properties estimated to be up to 50 lots per annum. Consideration should however I'll also be given to non-market issues including land availability, impacts upon the natural environment and broader Council policies.

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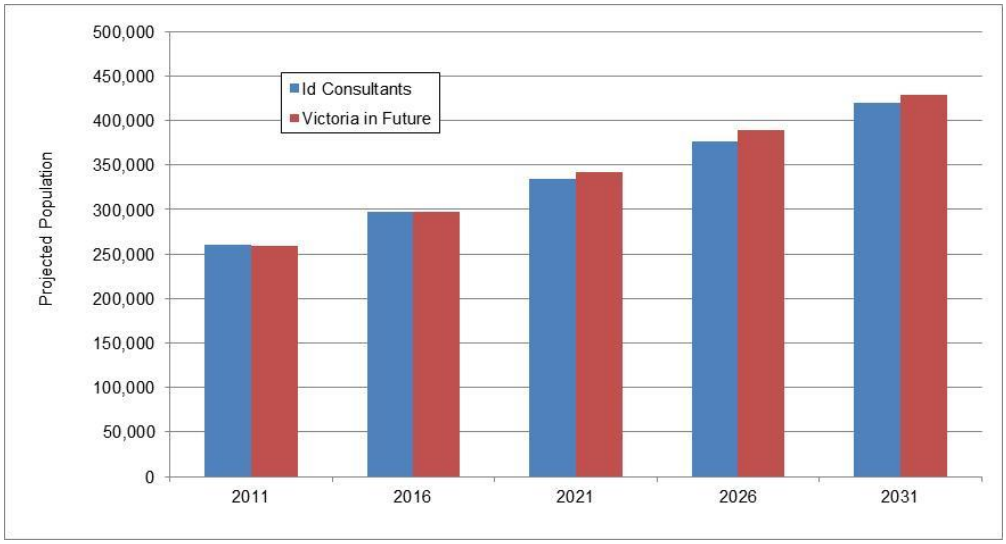
13. APPENDIX A: PROJECTED POPULATION AND HOUSEHOLD GROWTH

This section provides an overview of the key demographic factors likely to influence future housing requirements within the Study Area. Given the purpose of this study to assess longer term housing requirements, the focus is upon projected population and households as at 2031 rather than the timing of demand within this outlook period.

13.1 Population

Population projections for the City of Casey have been prepared by the Victorian government as part of its Victoria in Future (VIF) program as well as by Id Consultants. As indicated by the figure below both sources project that the overall population of the municipality will increase from just over 260,000 residents in 2011 to around 425,000 residents by 2031.

Figure 39: City of Casey Projected Population Growth 2011-2031

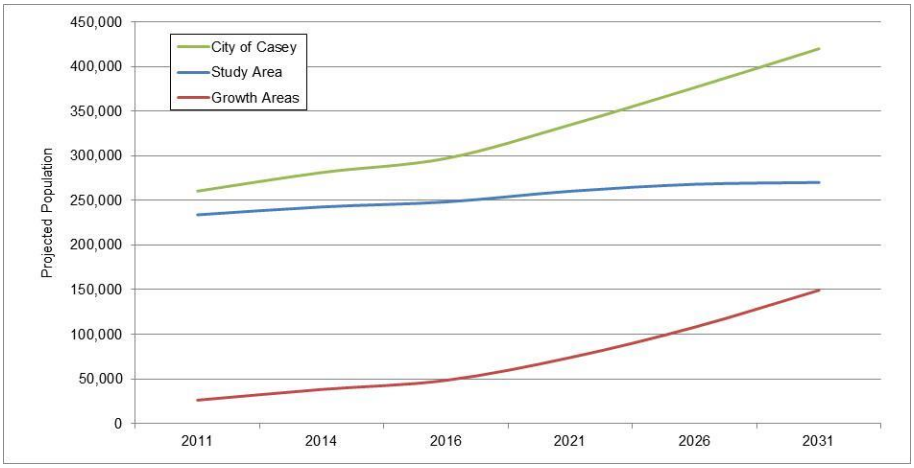


Source: Victoria in Future, Id Consultants

While the state government does not produce population projections below a municipal level, Id Consultants have prepared projections at a small area level which may be aggregated to represent the Study Area.

The following figure highlights the distribution of population growth across the Study Area as well as Casey's residential growth areas. Although the growth areas will account for the majority of projected population growth, an additional 36,255 residents representing 23% of total projected growth for the municipality are expected to reside within Casey's established residential areas by 2031.

Figure 40: City of Casey Study Area / Growth Areas - Projected Population 2011-2031



Source: Id Consultants

The population of the Study Area is projected to increase by 16% over the period 2011-2031 representing an average annual growth rate of 0.7% per annum. The pattern of growth however will not be uniform and will vary significantly at a local area level as shown in the table below. The projected population growth at a local level reflects the opportunity for residential development as well as changes in average household size.

Table 15: City of Casey Established Areas - Projected Population Growth

	2011	2031	2011-2031	% Change 2011-2031
Study Area	**233,836**	**270,091**	**36,255**	**16%**
Berwick (South)	22,493	30,468	7,975	35%
Berwick Township - Beaconsfield	22,303	23,923	1,620	7%
Casey Foothills (Berwick)	1,583	1,954	371	23%
Cranbourne	19,130	24,406	5,276	28%
Cranbourne East (Established)	7,830	17,554	9,724	124%
Cranbourne North (Established)	11,722	11,090	-632	-5%
Cranbourne West (Established)	8,847	8,665	-182	-2%
Doveton - Eumemmerring	10,764	12,545	1,781	17%
Endeavour Hills	25,753	24,681	-1,072	-4%
Hallam	10,720	12,303	1,583	15%
Hampton Park	24,450	24,439	-11	0%
Lynbrook	6,919	10,105	3,186	46%
Lyndhurst	5,008	8,053	3,045	61%
Narre Warren	26,766	31,852	5,086	19%
Narre Warren South	29,548	28,053	-1,495	-5%

Source: Id Consultants

Across the Study Area there is projected to be an additional 14,336 households over 2011-2031 with 72% of this growth occurring within Berwick (South), Cranbourne, Cranbourne East, Lynbrook and Narre Warren.

Table 16: City of Casey Established Areas - Projected Household Growth

	2011	2031	2011-2031	% Change 2011-2031
Study Area	**76,513**	**94,817**	18,304	24%
Berwick (South)	6,982	10,319	3,337	48%
Berwick Township - Beaconsfield	8,203	9,265	1,062	13%
Casey Foothills (Berwick)	467	678	211	45%
Cranbourne	6,958	9,258	2,300	33%
Cranbourne East (Established)	2,704	5,985	3,281	121%
Cranbourne North (Established)	3,853	3,960	107	3%
Cranbourne West (Established)	2,876	3,044	168	6%
Doveton - Eumemmerring	3,877	4,565	688	18%
Endeavour Hills	8,222	8,493	271	3%
Hallam	3,466	4,184	718	21%
Hampton Park	7,667	8,358	691	9%
Lynbrook	1,941	3,264	1,323	68%
Lyndhurst	1,646	2,711	1,065	65%
Narre Warren	9,078	11,380	2,302	25%
Narre Warren South	8,573	9,353	780	9%

Source: Id Consultants

Average household size across the Study Area is projected to fall by 7% over 2011-2031 with declines occurring within all the forecast areas. Those locations projected to experience the sharpest fall in household size include Casey's most populated areas such as Berwick (South), Endeavour Hills, Hampton Park and Narre Warren South which in 2011 accounted for 41% of total households in the Study Area. Each of these areas is projected to experience a decline in household size of between 7% and 13% by 2031.

Table 17: City of Casey Established Areas - Projected Average Household Size

	2011	2031	2014-2031	% Change
Study Area	**3.06**	**2.85**	-0.21	-7%
Berwick (South)	3.22	2.95	-0.27	-8%
Berwick Township - Beaconsfield	2.72	2.58	-0.14	-5%
Casey Foothills (Berwick)	3.39	2.88	-0.51	-15%
Cranbourne	2.75	2.64	-0.11	-4%
Cranbourne East (Established)	2.90	2.93	0.04	1%
Cranbourne North (Established)	3.04	2.80	-0.24	-8%
Cranbourne West (Established)	3.08	2.85	-0.23	-7%
Doveton - Eumemmerring	2.78	2.75	-0.03	-1%
Endeavour Hills	3.13	2.91	-0.23	-7%
Hallam	3.09	2.94	-0.15	-5%
Hampton Park	3.19	2.92	-0.26	-8%
Lynbrook	3.56	3.10	-0.47	-13%

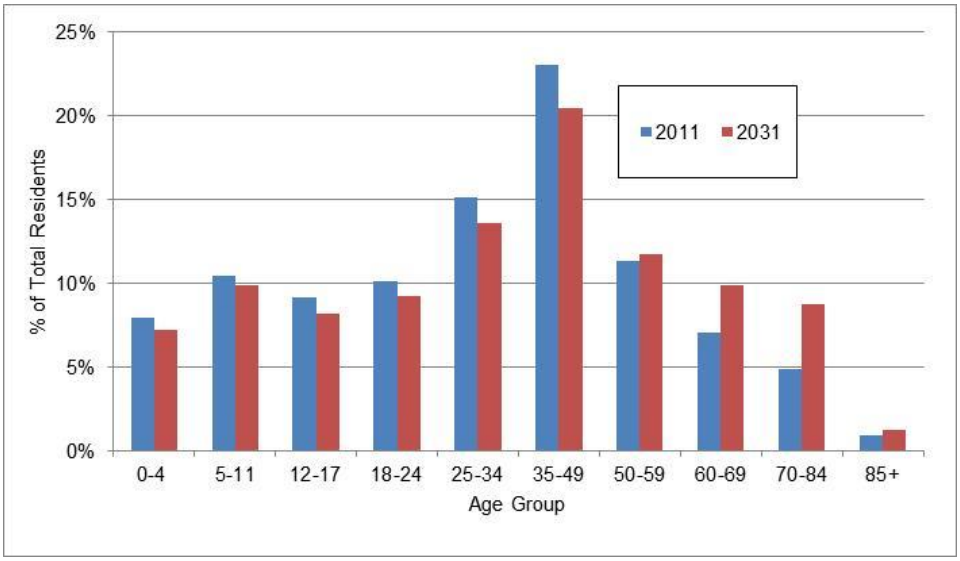
	2011	2031	2014-2031	% Change
Lyndhurst	3.04	2.97	-0.07	-2%
Narre Warren	2.95	2.80	-0.15	-5%
Narre Warren South	3.45	3.00	-0.45	-13%

Source: Id Consultants

13.2 Age Distribution

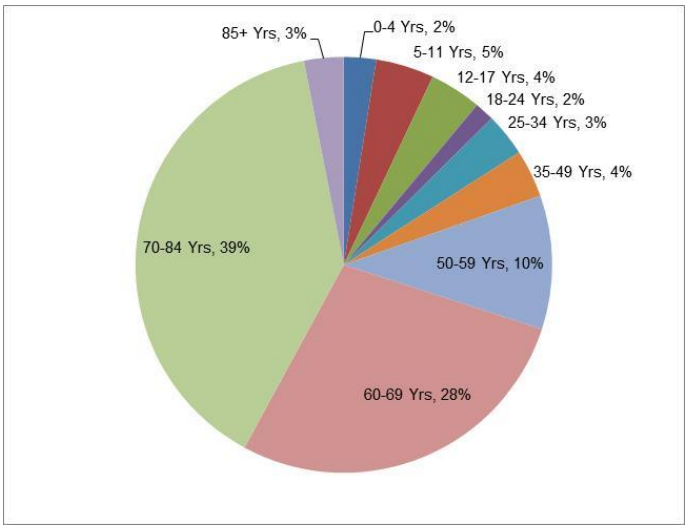
Declining household size across the Study Area is largely a result of an ageing population with a growing proportion of residents aged over 50 years (refer figure below). Many of these residents will live in 'couple only' and 'single person households' as their families mature and leave home. Importantly, growth in the number of those residents aged over 60 years will equate to 70% of total projected population growth over 2011-2031 (refer figure on next page).

Figure 41: Study Area Age Distribution 2011 vs 2031



Source: Id Consultants

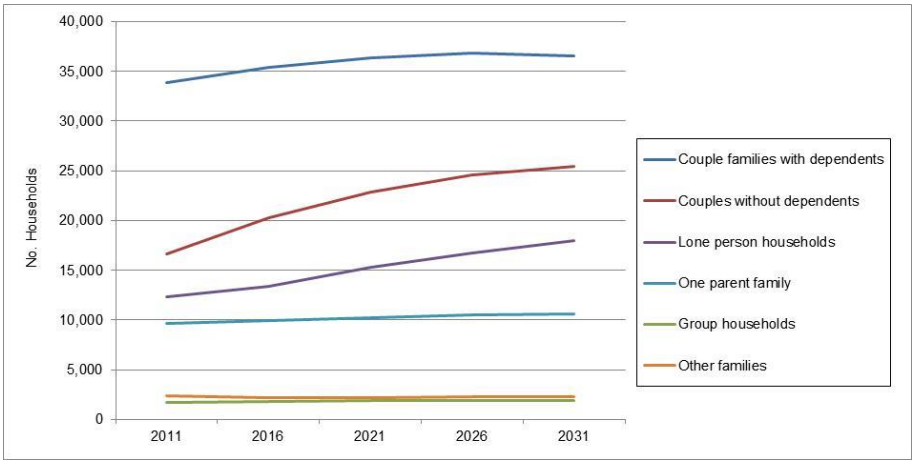
Figure 42: Study Area - Age Distribution of Population Growth 2011-2031



Source: Id Consultants

The impact of an ageing population upon the mix of household types within the Study Area will be particularly significant with 'couples without dependents' or 'lone person' households increasing at a much faster rate than 'couples with dependents' (i.e. traditional family households) as shown by the figure below.

Figure 43: Study Area – Projected Households 2011-2031



Source: Id Consultants

Table 18: City of Casey - Projected Population in Private Dwellings 2011-2031

	2011	2014	2016	2021	2026	2031	2014-2031 (no.)	2014-2031 (%)
Study Area	**232,227**	**241,082**	**246,610**	**258,480**	**266,063**	**267,999**	**26,917**	**11%**
Berwick (South)	22,493	23,051	24,011	26,841	29,757	30,468	7,417	32%
Berwick Township - Beaconsfield	21,882	22,463	22,433	22,766	23,113	23,296	833	4%
Casey Foothills (Berwick)	1,583	1,685	1,810	1,963	1,943	1,954	269	16%
Cranbourne	19,066	19,748	20,031	21,796	23,371	24,342	4,594	23%
Cranbourne East (Established)	7,711	11,199	12,393	14,884	17,332	17,366	6,167	55%
Cranbourne North (Established)	11,722	11,823	11,738	11,378	11,199	11,090	-733	-6%
Cranbourne West (Established)	8,791	8,846	9,025	8,869	8,724	8,608	-238	-3%
Doveton - Eumemmerring	10,592	10,988	11,241	12,032	12,235	12,373	1,385	13%
Endeavour Hills	25,584	25,749	25,550	25,112	24,731	24,512	-1,237	-5%
Hallam	10,480	10,680	11,182	11,420	11,592	11,857	1,177	11%
Hampton Park	24,450	24,814	25,133	25,023	24,681	24,439	-375	-2%
Lynbrook	6,735	7,552	8,606	10,175	10,170	9,921	2,369	31%
Lyndhurst	5,008	5,957	6,592	8,023	8,097	8,053	2,096	35%
Narre Warren	26,628	26,925	27,301	29,037	30,529	31,713	4,788	18%
Growth Areas	26,213	38,182	48,380	73,963	107,973	149,330	111,148	291%
City of Casey	**258,438**	**279,263**	**294,989**	**332,444**	**374,036**	**417,331**	**138,068**	**49%**

Source: Id Consultants

Table 19: City of Casey - Projected Households 2011-2031

	2011	2014	2016	2021	2026	2031	2014-2031 (no.)	2014-2031 (%)
Study Area	**76,513**	**80,481**	**82,971**	**88,817**	**92,770**	**94,817**	**14,336**	**18%**
Berwick (South)	6,982	7,261	7,632	8,757	9,870	10,319	3,058	42%
Berwick Township - Beaconsfield	8,203	8,540	8,601	8,867	9,103	9,265	725	8%
Casey Foothills (Berwick)	467	510	557	635	656	678	168	33%
Cranbourne	6,958	7,276	7,432	8,159	8,809	9,258	1,982	27%
Cranbourne East (Established)	2,704	3,820	4,206	5,030	5,882	5,985	2,165	57%
Cranbourne North (Established)	3,853	3,944	3,956	3,960	3,960	3,960	16	0%
Cranbourne West (Established)	2,876	2,951	3,019	3,044	3,044	3,044	93	3%
Doveton - Eumemmerring	3,877	4,011	4,102	4,401	4,492	4,565	554	14%
Endeavour Hills	8,222	8,327	8,374	8,419	8,443	8,493	166	2%
Hallam	3,466	3,641	3,824	3,977	4,071	4,184	543	15%
Hampton Park	7,667	7,904	8,078	8,271	8,302	8,358	454	6%
Lynbrook	1,941	2,237	2,580	3,169	3,254	3,264	1,027	46%
Lyndhurst	1,646	1,924	2,137	2,642	2,689	2,711	787	41%
Narre Warren	9,078	9,351	9,570	10,316	10,908	11,380	2,029	22%
Growth Areas	**8,635**	**12,413**	**15,602**	**23,836**	**35,023**	**49,020**	**36,607**	**295%**
City of Casey	**85,147**	**92,896**	**98,573**	**112,653**	**127,793**	**143,839**	**50,943**	**55%**

Source: Id Consultants

Table 20: City of Casey - Projected Household Size 2011-2031

	2011	2014	2016	2021	2026	2031	2014-2031 (no.)	2014-2031 (%)
Study Area	**3.06**	**3.02**	**2.99**	**2.93**	**2.89**	**2.85**	**-0.17**	**-6%**
Berwick (South)	3.22	3.17	3.15	3.07	3.01	2.95	-0.22	-7%
Berwick Township - Beaconsfield	2.72	2.68	2.66	2.62	2.60	2.58	-0.10	-4%
Casey Foothills (Berwick)	3.39	3.30	3.25	3.09	2.96	2.88	-0.42	-13%
Cranbourne	2.75	2.72	2.70	2.68	2.66	2.64	-0.09	-3%
Cranbourne East (Established)	2.90	2.96	2.98	2.99	2.98	2.93	-0.03	-1%
Cranbourne North (Established)	3.04	3.00	2.97	2.87	2.83	2.80	-0.20	-7%
Cranbourne West (Established)	3.08	3.02	3.01	2.93	2.88	2.85	-0.17	-6%
Doveton - Eumemmerring	2.78	2.78	2.78	2.77	2.76	2.75	-0.03	-1%
Endeavour Hills	3.13	3.11	3.07	3.00	2.95	2.91	-0.21	-7%
Hallam	3.09	3.00	2.99	2.95	2.94	2.94	-0.06	-2%
Hampton Park	3.19	3.14	3.11	3.03	2.97	2.92	-0.22	-7%
Lynbrook	3.56	3.46	3.41	3.27	3.18	3.10	-0.36	-10%
Lyndhurst	3.04	3.10	3.08	3.04	3.01	2.97	-0.13	-4%
Narre Warren	2.95	2.89	2.87	2.83	2.81	2.80	-0.10	-3%
Growth Areas	**3.08**	**3.10**	**3.12**	**3.12**	**3.10**	**3.06**	**-0.05**	**-2%**
City of Casey	**3.06**	**3.03**	**3.01**	**2.97**	**2.95**	**2.92**	**-0.11**	**-4%**

Source: Id Consultants

Table 21: Study Area - Projected Age Profile 2011-2031

	2011	2014	2016	2021	2026	2031	2014-2031	
Study Area	**233,788**	**242,622**	**248,207**	**260,215**	**267,942**	**270,018**	**27,396**	**11%**
0 to 4 years	18,480	18,859	19,306	19,632	19,838	19,542	683	4%
5 to 11 years	24,359	25,426	25,935	26,665	26,971	26,666	1,240	5%
12 to 17 years	21,332	20,973	20,864	21,902	22,186	22,076	1,103	5%
18 to 24 years	23,644	24,544	24,773	24,599	24,880	24,959	415	2%
25 to 34 years	35,437	35,663	36,078	37,230	37,465	36,580	917	3%
35 to 49 years	53,948	54,249	54,787	55,486	55,465	55,265	1,016	2%
50 to 59 years	26,542	28,835	29,822	31,540	32,166	31,682	2,847	10%
60 to 69 years	16,515	18,887	20,269	23,042	25,397	26,532	7,645	40%
70 to 84 years	11,386	12,803	13,873	17,400	20,624	23,492	10,689	83%
85 and over years	2,145	2,383	2,500	2,719	2,950	3,224	841	35%

Source: Id Consultants

Table 22: Study Area - Projected Household Type 2011-2031

	2011	2016	2021	2026	2031	2014-2031	
Study Area	**153,025**	**165,940**	**177,633**	**185,539**	**189,638**	**36,613**	**24%**
Couple families with dependents	33,829	35,408	36,382	36,809	36,598	2,769	8%
Couples without dependents	16,679	20,295	22,882	24,555	25,409	8,730	52%
Group households	1,729	1,801	1,867	1,925	1,941	212	12%
Lone person households	12,290	13,405	15,269	16,731	18,013	5,723	47%
One parent family	9,624	9,918	10,208	10,481	10,574	950	10%
Other families	2,360	2,143	2,208	2,269	2,283	-77	-3%
Total households	76,512	82,970	88,816	92,770	94,819	18,306	24%

Source: Id Consultants

14. APPENDIX B: HOUSING PREFERENCES

Despite an increasing proportion of households living in higher density housing across metropolitan Melbourne, traditional detached dwellings remain the preferred housing option for the majority of households. This is particularly the case in more affordable outer metropolitan locations such as the City of Casey where the price differential between traditional detached dwellings and higher density housing is much less that within Melbourne's inner and middle suburbs.

As a result, higher density residential development is more dependent upon well serviced, higher amenity locations that encourage households to trade-off private open space in the form of traditional backyards for community open space and accessibility to infrastructure and services. Typically these include access to major shopping centres, public transport services and recreational and community facilities.

Planning strategies therefore need to recognise the influence of housing preferences upon the future pattern of residential development as well as the opportunities for influencing these preferences in favour of higher density housing that may potentially better meet future housing needs and planning objectives.

It is often assumed that older households will naturally look to downsize their dwelling as their children leave home. This is often based upon the statistical relationship between household size and dwelling type identified from ABS census data. However this assumes that the housing preferences of older couples and singles will be similar to that of their younger equivalents, which is unlikely to be the case given their very different financial situation and housing experiences. A more reliable indicator therefore is the relationship between age and housing type. There is still a need to take account of the findings from recent research into housing preferences given the range of factors other than just household size that determine demand for different dwelling types.

14.1 Historical Versus Future Housing Preferences

The existing housing stock within Casey's established residential areas reflects its initial development for new families predominantly during the 1970s and 1980s. As result, the housing stock reflects the needs of younger households requiring space for a growing family rather than the mix of household types that now define these areas. Similarly, households now require greater access to a wider range of services within walking distance or via public transport consistent with an ageing population.

Given that housing typically has a functional and economic lifespan of potentially in excess of 50 years, Casey's existing housing stock is not able to be easily modified or redeveloped as the community's housing requirements change. At the same time, the value of many of Casey's traditional detached dwellings may in some cases be less than that of a new smaller dwelling which, together with associated transaction costs, acts as a disincentive for households to relocate to potentially more appropriate housing.

Analysing housing demand based simply upon historical relationships between household structure and dwelling type from ABS Census data overlooks the growing number of baby boomer households now classified as either 'couples without children' or 'lone person households'. Given that these older households will have very different housing preferences to younger couples and singles that also fall into these household classifications there is a need for a more detail analysis of housing preferences.

Until recently, there has been limited research into housing preferences with it assumed that a trend towards smaller households will naturally translate into increased demand for smaller dwellings. Housing preferences and ultimately the form of housing in which people live is however influenced by a range of both demand and supply side factors that contribute to the complexity of the housing market.

This section of the report reviews the key findings of a number of recent research studies based upon surveys of a range of existing and potential residents of higher density housing. These studies provide a significant contribution to the understanding of housing preferences particularly with respect to older households including the 'baby boomer' generation which may potentially have very different housing aspirations to previous generations.

The following table summarises a number of key research studies undertaken into the housing preferences of a number of demographic groups and the extent to which they may potentially generate demand for higher density housing. Across these studies a total of more than 9,000 respondents provided information on their housing preferences with additional information and insight collected through one-on-one interviews and focus groups.

Table 23: Housing Preferences - Recent Quantitative Research Studies

Publication	Description
City Futures Research Centre (University of NSW) 2009, '*The Desirable Apartment Life?: The Demand for Higher Density Housing in Sydney and Melbourne'*	1,597 surveys and 29 in-depth interviews of apartment residents in Sydney and Melbourne regarding the desirability of apartment living.
Grattan Institute 2011, *'The Housing We'd Choose'*	Survey of more than 700 residents of Sydney and Melbourne to identify housing preferences. Respondents identified what home they would like to live in, taking into account real-world circumstances such as current housing costs and income levels by making trade-offs between size and type of housing, and its location.
Western Australian Department of Housing 2013, *'The Housing We'd Choose: A Study for Perth and Peel'*	Six focus groups to Identify housing attributes that most important to people when selecting a home. Online survey of 866 people, which asked Perth residents to prioritise the features of homes that they placed the highest priority on. On-line "Housing Preferences and Trade-offs," survey of 1,071 people. This survey presented participants with a set of housing options reflecting the full range of potential house types and locations, with prices and rents for each house set according to the Perth and Peel markets.
Australian Housing and Urban Research Institute (AHURI) 2014. *'Downsizing Amongst Older Australians'*	National survey of 2,819 people who had moved since turning 50 years of age, distributed with the seniors magazine 50 Something. In-depth interviews with 60 survey respondents, 20 each in New South Wales (NSW), Victoria and South Australia (SA).
National Seniors Productive Ageing Centre 2014 *'Downsizing decisions of senior Australians: What are the motivating and discouraging factors?'*	National survey of 2,018 older Australians with results weighted to be representative of the population aged over 50 years.

14.2 Housing Aspirations

Planning and housing strategies are often based on the assumption that a decrease in household size directly translates into a requirement for smaller dwellings and higher density residential development to provide greater sustainability, affordability and choice of housing. The desirability of higher density housing formats to each segment of the housing market is however often overlooked due to their being 'very little actual data available on the housing preferences of Australians'[3].

Australian households generally aspired to own a large detached house primarily reflecting the importance placed upon internal space (bedrooms, living areas etc.,) and the freedom, flexibility and privacy that it offers.[4] Conversely, apartments are typically seen as too small and lacking external space particularly for younger families but also for older 'couple only' households where retirees require space for hobbies and activities as well as accommodating family and friends that may visit.

Housing however often represents more than just shelter as 'home ownership provides significant financial and tenure security. Moreover, homeownership is seen as a means to freedom and independence to realise other important priorities'.[5] Home ownership is often seen as an investment for the future and a financial asset that can be borrowed against or passed on to children. The role of housing as a financial asset is also reinforced by the tax and welfare systems through not attracting capital gains tax nor being subject to pension asset tests. As a result, there is an incentive to over-consume housing where financial means allow.

14.3 Housing Diversity and Choice

City Futures (2009a) questions the focus of planning strategies upon increasing 'housing choice' through the provision of medium and higher density options when there is the need to firstly determine whether smaller households want to live in apartments, what type of households are living in apartments and whether apartments suit the lifestyles of those people who live in them.[6]

Housing diversity in its simplest form distinguishes between traditional detached housing and higher density dwellings (townhouses, villa units and apartments) and the appropriateness of each for various household types and sizes. However, there are a range of other factors beyond just household size that influence demand for higher density dwellings such as apartments.

Importantly, there is the need to recognise that the housing preferences and decisions of smaller households comprising a single person or couple will vary based upon their financial situation, intentions regarding starting a family and expectations with respect to size, privacy and location. These factors will also vary significantly between younger households that have traditionally chosen apartments as a financial stepping stone to home ownership, and older households that may potentially be considering downsizing to a smaller, lower maintenance dwelling.

Accordingly, it has been suggested that age and life cycle stage, rather than household size, is a better indication of whether people would consider living in a smaller dwelling such as an apartment.[7] Furthermore, it has been identified that young renters in the mobile stages of the life-cycle are the most likely to move from a detached dwelling to higher density housing, rather than people looking for an alternative to a traditional separate house.

City Futures (2009a) identified that amongst those already living in apartments, 20-34-year-olds were significantly less likely to want to live in an apartment than a house compared to those people aged over 55 years. This reflects the traditional role of apartments as a pathway to owning a detached family home for younger age groups. This was also confirmed by a much lower proportion of younger age groups seeing apartment living as their preferred long-term housing option.

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[3] Grattan Institute (2011)
[4] (Grattan Institute 2011).
[5] City Futures (2012) p.12
[6] City Futures (2009a) p5.
[7] City Futures (2009a) p. 7.

> "*There is 'more to the story' than smaller households desiring smaller dwellings; there are many more factors influencing the desires and choices of apartment residents. Indeed, it is essential that any discussion of the pros and cons of apartment living takes into consideration the complexity of the urban apartment market as this reflects a wide range of needs, attitudes and intentions"*. City Futures (2009a) p.11

Overall around 50% of existing apartment residents surveyed for the City Futures study indicated that they would prefer to live in a house, or that apartment living was not their preferred long-term housing option, indicating that there are a lot of people living in apartments due to constraints or trade-offs, rather than through personal choice.

An understanding of the complexity of the apartment market in terms of the characteristics of various market segments may be gained from the following table from City Futures (2009a) which based upon ABS Census data highlights the economic and social diversity of the major apartment resident groups. It is the location preferences of these groups which has also shaped the distribution of apartment demand and development activity across metropolitan Melbourne. For example, the 'Economically Engaged ' 'Apartment Elite' and 'Achieving Education' groups are concentrated within the inner areas of Melbourne, the majority of the 'Battlers' group live in Melbourne's outer region while the 'residentially retired' group is dispersed across all regions of Melbourne.

Associated with each of these market segments is not only a preferred location that best meets their needs but also a financial capacity to rent or purchase apartments. It is this financial capacity that drives development and investment opportunities for new apartment projects. Furthermore, the potential depth of demand in terms of the number of likely purchasers or tenants within each segment also determines the scale of development that may be supported as well as the level of investment risk to potential investors.

Table 24: Major Apartment Resident Groups (Sydney and Melbourne)

	Dominant Household Type	**Dominant Age Range**	**Dominant income range**	**Dominant Tenure**	**Dominant Locations (Melbourne)**
Battlers	Families with children.		Low income (<$50,000 p.a common)	Rental and ownership	Outer region
Economically Engaged	Singles and couples.	Young adults through to early middle age	Medium to high income (> $90,000 p.a. common)	Rental	Inner region
Apartment Elite	Couples	Over 50	High to very high income (> $130,000 p.a. common)	Rental and ownership	Inner region
Residentially Retired	Singles	Over 65		Ownership	All regions
Achieving Education	Singles and group households	Under 25		Rental	Inner region

Source: City Futures (2009a)

Melbourne's inner region is a dominant location for apartments occupied by the 'Economically Engaged', 'Apartment Elite' and 'Achieving Education' groups due to not only proximity to employment and educational institutions but also the financial constraints associated with renting or purchasing either a detached or semi-detached dwelling in inner Melbourne. As result, housing decisions are based more upon financial circumstances rather than housing preferences.

The variance in values between apartments and detached dwellings (as well as semi-detached dwellings) declines with distance from the Melbourne CBD in line with lower underlying land values.

As a result there is an increased opportunity for housing decisions to reflect true underlying housing preferences rather than financial and property market related constraints.

City Futures (2009a) identified the extent to which an apartment was the preferred housing option for each of these groups currently living in an apartment. As shown in the table below, apartment living was the preferred option for only a minority of the 'Economically Engaged' and the 'Achieving Education' groups most likely because of their younger age and aspiration for a detached dwelling that is beyond their current financial means. The 'Residentially Retired' group however have the highest preference for apartments presumably because their decision has been based upon a preference for apartment living unconstrained by their financial capacity.

Table 25: Major Apartment Resident Groups Preferring Apartment at over a House (Melbourne)

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Economically Engaged	15%	20%	22%	25%	18%
Battlers	26%	18%	23%	20%	14%
Achieving Education	13%	20%	23%	25%	18%
Residentially Retired	53%	18%	n/a	13%	n/a
Apartment Elite	26%	20%	26%	n/a	n/a

Source: City Futures (2009a)
n/a indicates insufficient data

14.4 Location and Affordability

There is a broad consensus amongst previous studies that the majority of Australians aspire to live in detached housing over higher density dwellings such as apartments. Households' strongest preference is for larger homes in an inner city location with a willingness to accept a smaller dwelling in order to access the lifestyle opportunities offered by such locations.

Therefore, a shift towards higher density housing is generally associated with a relocation to more attractive inner-city locations rather than remaining in suburban areas. The WA Department of Housing also found a willingness, particularly amongst owner occupiers, to consider an apartment where it is in a more attractive location and represents a more affordable alternative to a house[8]

In terms of the weighting given to location versus dwelling features, the Grattan Institute (2011) identified that overall housing preferences were generally balanced between dwelling characteristics and location factors. The relative importance of each did however vary across age groups and household types[9].

Location was also found by the WA Department of Housing study to be the most important factor determining people's housing choice across all demographic groups through determining the broad location and the type and size of property affordable in that chosen location. In choosing a location the key factors taken into account were a preference for safe neighbourhood close to family, friends, shopping, and public transport. Proximity to work was generally not ranked highly overall by households possibly due to multiple workers within a household, along with the frequency with which Australians change jobs, making the relationship between housing location and employment more complicated.

Affordability was identified as having a key influence on housing decisions for all but the highest income earners households with respect to the range of accessible locations and the type and size

[8] WA Department of Housing p.5.
[9] Grattan Institute (2011) p.12

of dwellings affordable in those locations. Households were found to trade-off dwelling features and location although this varied across household types with lone person households placing greater emphasis upon location.

While the importance of being located near various activities and infrastructure will vary depending on the needs of individual households, the following table provides an indication of the importance of key locational features to broad household types.

Table 26: Importance of Location

Aspects	Important to:	Importance Because:
Easy access work	Couples and families	Time spent commuting was seen to be time wasted
Easy access to children's school	Families with children	To save time
Easy access to restaurants and nightlife	Especially singles and young childless couples.	To reduce the need to drive when going out; to reduce the cost of taking a taxi.
Easy access to amenities.	Health care for older people, as well as supermarkets and shops for all.	Convenience
Easy access to public transport.	Older people and some males wanting to access public transport by foot. Mainly women who work in the CBD and want a quick and easy drive to public transport.	Older people wished to reduce dependence on private car, acknowledging that they may not be able to drive in the future

Source: Western Australian Department of Housing (2013).

14.5 Baby Boomer Generation

The first of the baby boomer generation turned 65 years old in 2011 which signalled a potential shift in the attitude of older Australians to post-retirement living including their preferred form of housing. Compared to previous generations, baby boomers are typically wealthier, healthier and likely to live active lives well into their 70s.

However within the baby boomer cohort there is considerable diversity with many having insufficient wealth to fund a comfortable lifestyle in retirement or will experience ill health that may limit their housing options. Given the proportion of the population within this age group it is not surprising that it has been a key focus of recent research studies and in particular the potential for households to downsize into smaller dwellings.

14.5.1 Older Households Downsizing

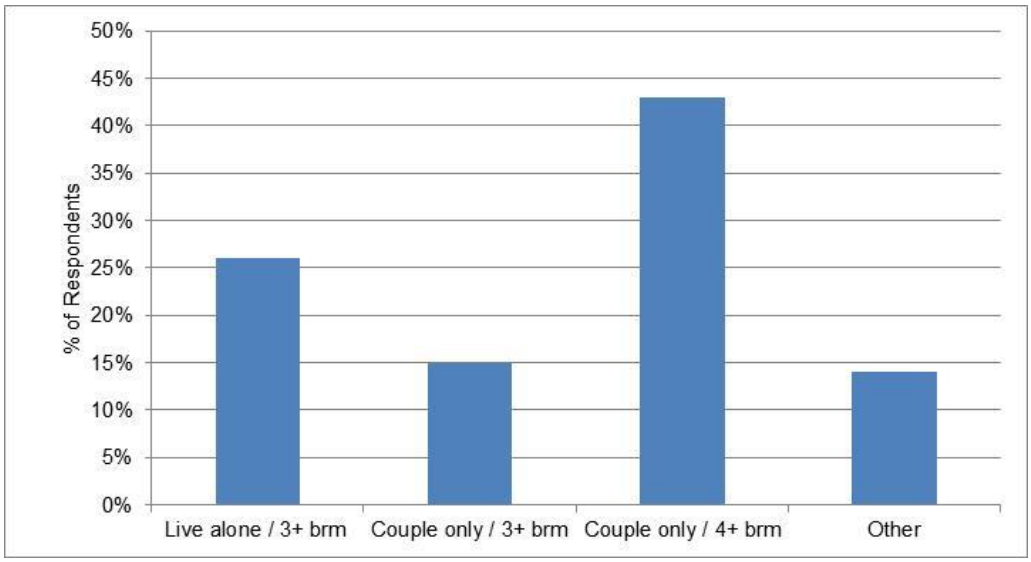
AHURI (2014) estimates (based upon the extrapolation of survey results to the wider population) that approximately 9% of Australians have downsized to a home with fewer bedrooms since turning 50 years old. This group of downsizers represents approximately half of all households aged over 50 years that had relocated to another dwelling. For both downsizers and other movers, separate houses were the main choice of housing type while retirement villages were the primary alternate means of downsizing.

This is consistent with the findings of National Seniors Australia (2014) which identified 10% of seniors (aged over 50 years) as having moved to a smaller dwelling over the previous five years. Of these downsizers, more than half (55%) moved to a separate dwelling of three or more bedrooms.

Recent research studies also discovered that the likelihood of older 'lone person' and 'couple only' households considering downsizing to a smaller dwelling is largely determined by their ability to physically maintain their existing home. However, only a minority of older households consider their existing traditional family home to be too large as shown in the figure below based upon surveys undertaken by National Seniors Australia (2014).

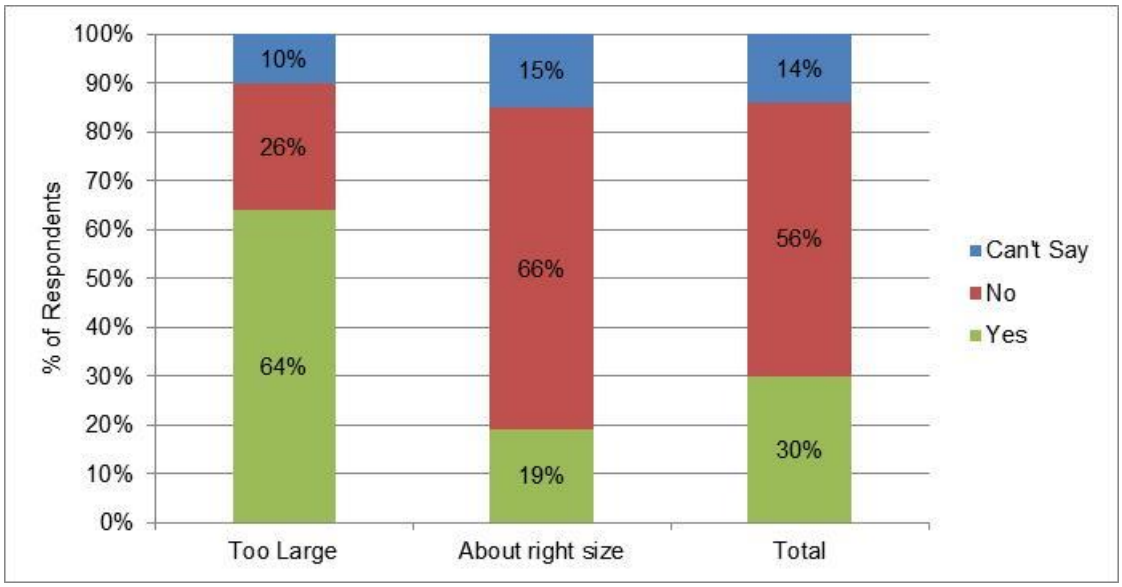
As would be expected, those living in larger dwellings of four bedrooms or more are most likely to perceive their home to be too large (43%) followed by 'lone person' households in three bedroom dwellings (26%) and 'couple only' households currently living in a three-bedroom homes (15%). Furthermore, of those households that considered their home to be too large, only a portion (64%) were found to be considering moving into a smaller dwelling.

Figure 44: Respondents perceptions that the size of their current residence is too large by living arrangement and number of bedrooms in the dwelling



Source: National Seniors Australia (2014)

Figure 45: Whether respondents were considering moving to a smaller residence by perceptions of size of current residents



Source: National Seniors Australia (2014)

As already mentioned above, an inability to physically maintain a home or garden is the primary reason for older households considering downsizing. This was nominated 37% of respondents to

one survey as being the main reason for considering downsizing and as being 'a reason' by almost 60% of respondents. (National Seniors Australia 2014)

Downsizing by older households is often assumed to represent an opportunity to access equity in their family home to fund their retirement. This however was nominated by only 9% of older households as the main reason for considering downsizing. Similarly, City Futures (2012) suggests that 'despite retiring baby boomers having additional lifestyle aspirations, moving into less valuable housing to release funds or more closely match anticipated income, is often driven by constraint rather than aspiration'.[10] Furthermore 'unlike aspirational downsizers, those looking to relocate due to financial constraints will not have the back-up option of staying where they are, and are also going to be looking for a different, more affordable housing product'.

This raises an important issue with regard to the financial capacity to downsize from an older family home into a new smaller dwelling such as a townhouse or apartment. Whereas such an opportunity may exist in Melbourne's inner and middle suburbs with high underlying land values that may be used to finance a new dwelling with a lesser land component, this may not be the case in outer metropolitan locations such as Casey where land values are lower.

For older households that moved but didn't downsize, the opportunity to improve their lifestyle was much more important than for downsizers. Similarly they also placed greater importance upon moving to a more attractive area, a more modern home, a better investment and a larger dwelling than do downsizers.

Table 27:Reasons (a reason and main reason) for considering downsizing (% of people considering moving to a smaller residence)

Reasons for Considering Downsizing	A Reason (%)	Main Reason (%
Not physically able to maintain home/yard	58.9	36.8
Too costly to maintain home/yard	43.3	17.1
Need single level house	23.9	12.7
Use the proceeds from the sale of home	18.5	8.8
My children moved out	15.6	6.0
Move to home with appropriate design features	9.8	2.2
Spouse/partner passed away	6.3	1.6
Lifestyle	5.2	4.5
Relationship breakdown	1.9	0.4
Retirement	1.5	1.4
Other	7.0	7.6

Source: National Seniors Australia (2014)

14.5.2 Downsizing Incentives and Disincentives

Older households' level of satisfaction with a new smaller dwelling has been identified as often being related to:

- Lower maintenance of a smaller house and/or garden.
- Having enough space to entertain/accommodate family and friends.
- Having access to shared common spaces where space was limited.

[10] City Futures (2012) p.17

- The layout and accessible design of the dwelling.
- Having adequate storage.
- Close proximity of shops, transport and other services.
- Living in a safe area, and having good security.

Although older households may have downsized, often this is not to an apartment but rather a smaller detached dwelling, townhouse or unit that still offers the necessary space to accommodate activities/hobbies as well as visitors. Importantly, what statistically may seem to be an underutilisation of space (i.e. number of unoccupied bedrooms) may in fact be well utilised because older households are spending more time in their home undertaking a wider range of activities than they previously may have.

The incentive for older households to downsize has also been lessened by 'home and community care' programs encouraging 'ageing in place' as a means of reducing the cost of aged care to the government. Similarly, financial products such as reverse mortgages as well as transaction and other costs associated with relocating (e.g. stamp duty, real estate agents fees) also encourage older households to remain in their existing homes. AHURI (2014) suggests that 'ageing in place' policies may be an explanation for the proportion of the Australian population aged over 65 years living in apartments declining from 10.8% to 9.5% over 2001-2011[11]. The increasing tendency for children to remain living at home as a result of declining housing affordability may also have delayed decisions by older households to downsize.

Other factors identified as discouraging older households to downsize included the amount of effort required to do so, as well as difficulties in finding a smaller property that represented good value for money which was nominated as a main reason for not downsizing by 29% and 18% of respondents respectively to the National Seniors Australia survey (refer table below).

Table 28:Factors discouraging downsizing (%), by whether considering moving to a smaller residents

	A Reason			Main Reason		
	Considering moving to a smaller residents			Considering moving to a smaller residents		
	Yes	No	Total	Yes	No	Total
Too much effort in moving	32.0	51.9	44.4	13.8	37.6	28.9
Finding a smaller place with good value for the price they would pay	51.0	25.3	35.1	30.6	11.2	18.4
The cost of stamp duty	33.5	32.7	32.9	5.8	5.9	6.1
Other moving costs, excluding stamp duty (e.g. real estate agent, removalist)t	32.2	33.8	34.2	5.9	7.8	7.2
Age pension assets test (% of all people)	24.8	17.5	20.3	12.8	6.1	9.1
Age pension assets test (% of current Age pensioners)	37.5	27.5	30.4	16.3	9.3	12.1
Difficulty finding a smaller place						
- In current community	26.9	16.5	20.0	10.3	4.8	6.4
- Close to other required amenities	29.9	16.0	22.1	8.4	3.3	5.6

[11] AHUR! (2014) p.41

- Close to medical facilities	19.7	11.8	15.1	2.1	1.9	2.2
- Appropriate design features	9.1	7.7	8.6	3.0	2.2	2.5
Other	7.5	18.3	13.7	7.2	19.3	13.7

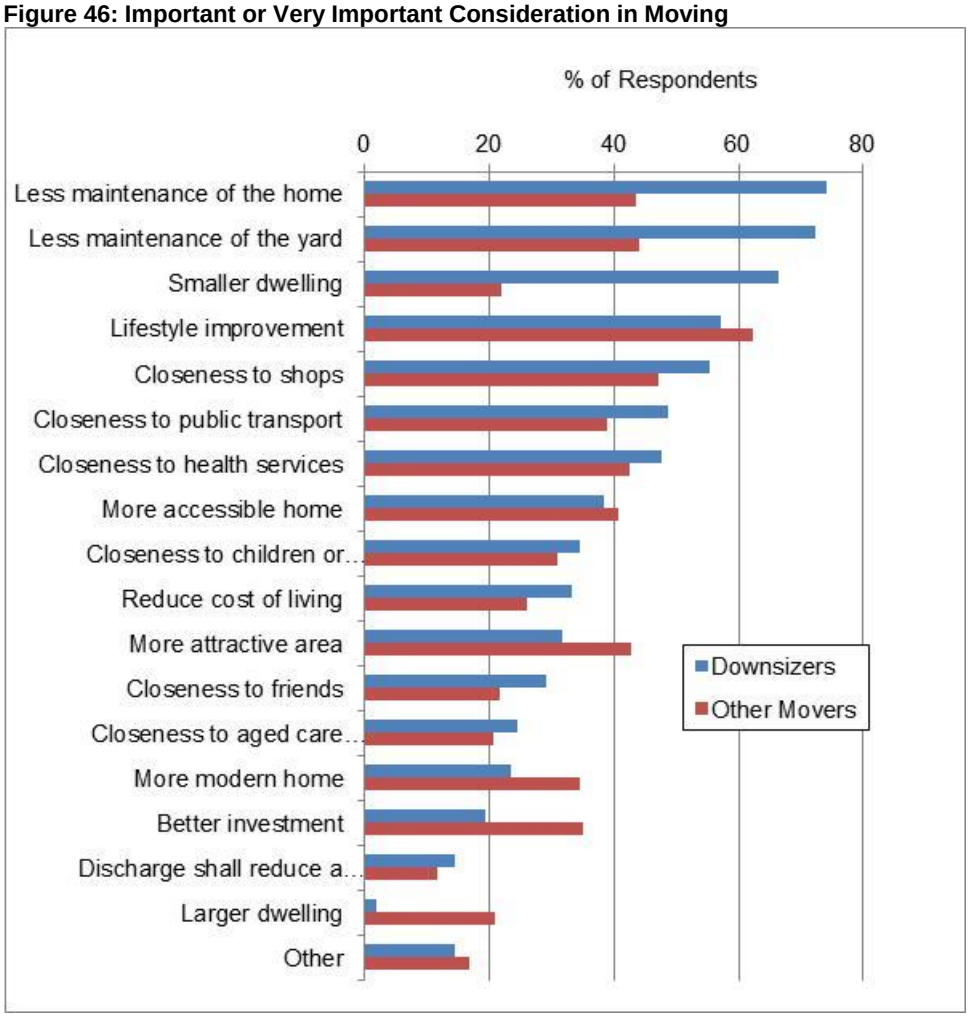
Source: National Seniors Australia (2014)

A key motivation for downsizing is to reduce the maintenance required for either home or yard and associated with this a desire for a smaller dwelling (refer figure below). By comparison, for those remaining older households that moved without downsizing, an improved lifestyle was the main reason.

AHURI identified that around half of downsizing households nominated proximity to shops, public transport and health services as being important considerations in moving. Lifestyle considerations were also of importance to the majority of both downsizers and other movers and included the opportunity to undertake hobbies such as gardening and other activities.

The opportunity to walk to shops is another important factor determining where both downsizers and other movers chose to locate particularly for those that thought they may not be able to drive in the future. For the same reason, proximity to public transport was also nominated as important for around half of all downsizers.

Figure 46: Important or Very Important Consideration in Moving

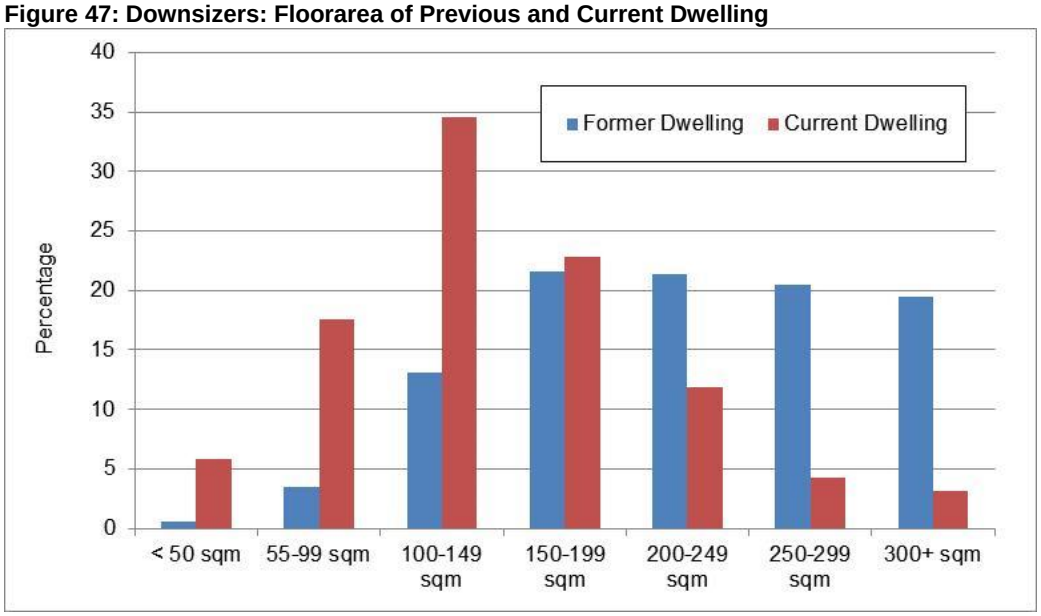


Source: AHURI 2014

14.5.3 Downsized Dwelling Size

AHURI (2014) found that a significant proportion of downsizers move to dwellings larger than 100 sqm of floorarea with less than a quarter choosing properties smaller than this. As would be expected the greatest net decline has been for larger properties over 200 sqm (refer figure below).

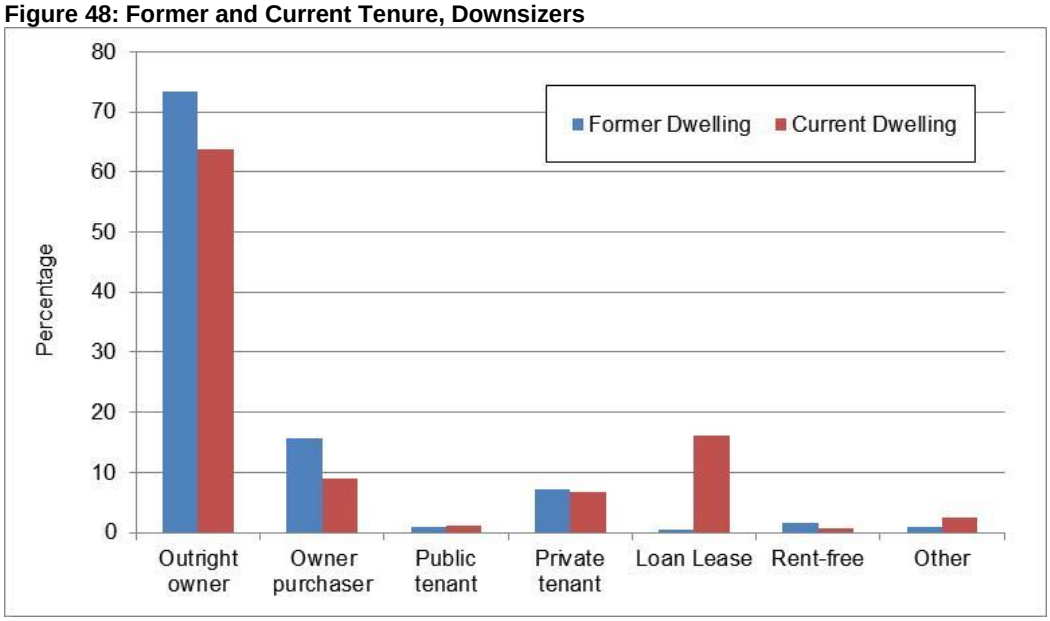
Figure 47: Downsizers: Floorarea of Previous and Current Dwelling



Source: AHURI 2014

While AHURI (2014) identified that the proportion of downsizers living in properties of less than 100 m² increased from 4% to 23%, the majority of these properties are likely to be within retirement villages. This is reflected in the figure below with 16% of downsizers moving into properties with loan / lease arrangements which are typical of retirement villages.

Figure 48: Former and Current Tenure, Downsizers



Source: AHURI 2014

National Seniors Australia (2014) similarly identified that over half (55%) of households that downsized moved to a separate house with three or more bedrooms. Only 16% moved to a house (separate or semi-detached) with 1–2 bedrooms and 17% moved to an apartment or unit. Even among people living alone, over one-third (35%) downsized to a separate house with three or more bedrooms, and 16% moved to a semi-detached residence with three or more bedrooms.

This tendency to not downsize to a dwelling much smaller than where they previously lived, reflects the the importance of adequate storage to downsizers, and that inadequate storage may discourage downsizing in favour of a larger dwelling with more bedrooms (AHURI 2014).

Table 29: Type of dwelling moved to (% of people who move to smaller residence in the previous five years), by current living arrangement

	Current Living Arrangement		
	Single	**Couple Only**	**Total**
Separate house 1-2 brm.	10.8	6.5	7.6
Separate house 3 brm.	33.2	48.3	43.1
Separate house 4+ brm.	1.7	14.0	11.6
Semi-detached 1-2 brm.	13.0	7.1	8.4
Semi-detached 3+ brm.	16.1	8.6	11.3
Apartment / unit	25.2	14.4	17.4
Other	0.0	1.0	0.6
Total	100.0	100.0	100.0

Source: National Seniors Australia 2014

14.6 Public Transport

ABS Census data does not enable an analysis of the usage of public transport by higher density housing residents as a means of gauging the extent to which publc transport may have encouraged higher density living. Anecdotally, access to public transport is a key component of marketing campaigns for new apartment projects which would suggest locations near railway stations would provide greater opportunities for supporting higher density housing. Similarly, the pattern of apartment development since 2000 has tended to favour locations within walking distance of railway stations (refer Section 5.2).

City Futures (2009b)[12] however provides some insight into the importance of public transport to apartment residents based upon quantitative surveys across apartment resident sub-groups and locations within metropolitan Melbourne and Sydney. Survey results indicated that *'closeness to public transport was regarded as the most important of (these) nine factors for survey respondents when choosing their current dwelling'* (2009b p.11).

Proximity to public transport was also either 'very important' or 'important' in choosing an apartment to live in for approximately 80% of residents within Melbourne (refer table below). Almost one third of surveyed apartment residents (32%) were found to use public transport five or more days per week, with a further 21% using it at 1-4 days per week.

Across the various resident groups, students and retirees placed the greatest importance upon accessibility to public transport in choosing an apartment with nearly 60% nominating this as 'very

[12] City Futures (2009 b), Travel characteristics and access to jobs by higher density residents in Sydney and Melbourne

important'. However more than half of the survey respondents from each resident group also viewed public transport as very important.

The importance of public transport access when choosing an apartment is also still 'very important' for 38% of apartment residents in outer Melbourne and rated as 'important' for a further 18%.

Table 30: Importance of Public Transport When Choosing an Apartment

	Very Important	Important	Neutral	Not Very Important	Not at All Important
Economically Engaged	55.2%	22.3%	10.3%	7.1%	5.1%
Battler	53.4%	19.2%	13.1%	4.5%	9.8%
Achieving Education	61.8%	17.3%	8.7%	7.2%	5.0%
Residentially Retired	59.6%	13.0%	8.6%	13.8%	5.0%
Apartment Elite	55.6%	26.4%	8.8%	9.2%	0.0%
Total	59.2%	20.4%	10.2%	7.9%	5.4%

Source: City Futures (2009b)

15. APPENDIX C: DEVELOPMENT PROFILES

This section profiles the three main housing typologies being separate houses, townhouses and apartments primarily for the purpose of identifying dwelling yields. These yields form the basis for calculating the land required to support the projected number of dwellings identified in the previous section.

- Separate houses

It is assumed that additional separate houses will primarily result from the development of larger infill sites offering access to existing open space within the surrounding area. A dwelling yield of 20 lots per hectare is considered indicative of the form of development that is likely to occur.

- Townhouses

A number of recent townhouse projects across Melbourne's outer south-east region have been identified as indicative of that likely to occur within the Study Area. These projects comprised 4-12 townhouses with a unit site area of 178-341 sqm with the majority being within the range 250-300 sqm.

Sites ranged in size over 1,070-3,808 sqm being previously either single allotments or an amalgamation of allotments in the case of larger sites.

- Apartments

A number of smaller scale apartment projects considered indicative of that likely to occur within the Study Area over the medium-longer term have been identified. With projects within the Study Area likely to be of 2-3 levels and comprising less than 20 apartments the unit site area of any projects is expected to be approximately 70-90 sqm.

15.1 In-Fill Residential Estates

Separate housing within the Study Area will need to occur on larger strategic sites where land values on a per square metre basis are at a level which allow this relatively lower density form of residential development to be commercially viable.

The redevelopment of a 2 ha site in Kingfisher Drive Doveton represents an upper level of development yield given that an average lot size of 230 sqm is consistent with that of townhouse developments. Conversely, the median lots size within Casey's greenfield residential estates is currently around 450 sqm.

An indicative yield for infill development sites within the Study Area is considered to be in the order of 20 lots per hectare taking into account the likely opportunity to access existing open space facilities within the surrounding area.

Kingfisher Drive Doveton

Development Site Area: 21,116 sqm (2.1 ha)

Lot Yield 52 lots

Lots per Ha: 24.6

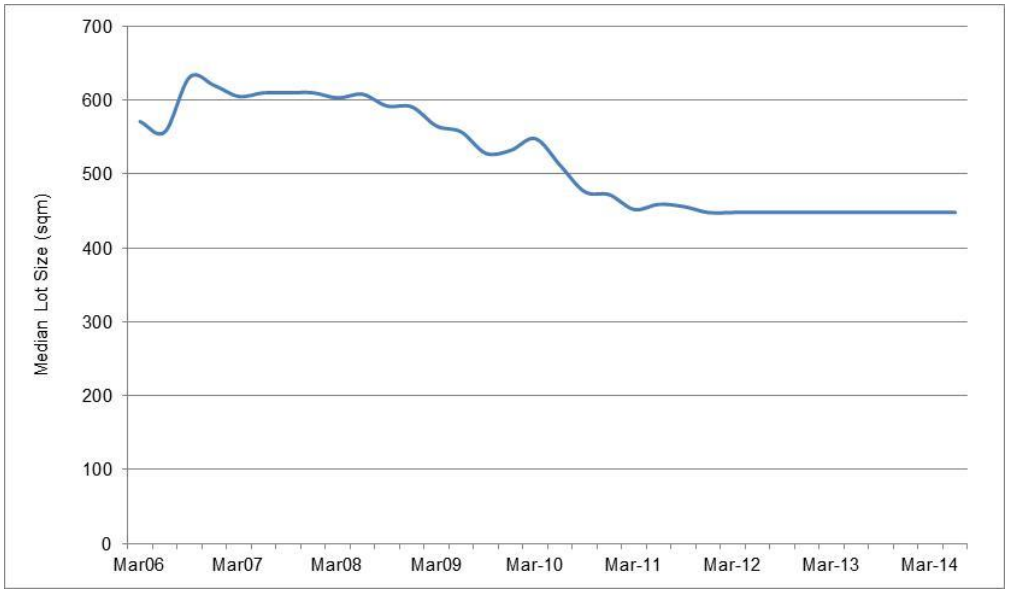
Average lot size: 230 sqm

Lot Range: 196-325 sqm

Total Lot Area 11,983

Yield: 57%

Figure 49: Casey Greenfield Residential Estates Median Lot Size 2006-2014



Source: Charter Keck Cramer

15.2 Townhouses

A number of townhouse projects have been identified across Melbourne's outer eastern and south-eastern region which is considered indicative of the form of development which may occur within the Study Area. These infill projects have been undertaken on either larger single dwelling sites or in the case of large developments through the amalgamation of a small number of sites.

The majority of projects have a unit site area of 250-300 sqm and considered indicative of that which is likely to occur within the Study Area.

Table 31: Indicative In-Fill Townhouse Projects

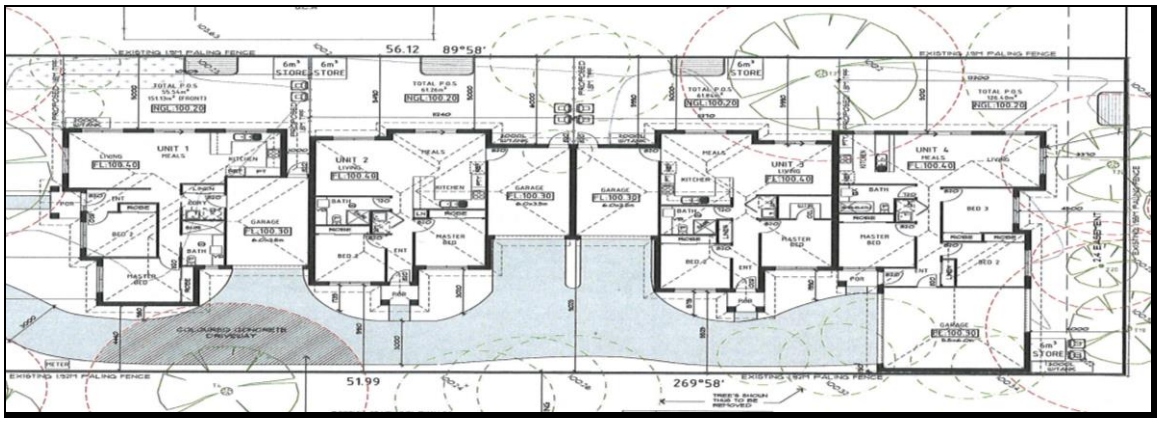
Address	Site Area	No. Dwellings	Unit Site Area
60 Norma Crescent Knoxfield	1,165 sqm	4	291 sqm
2 Bowmore Road, Noble Park	1,070 sqm	6	178 sqm
17 Vasey Avenue Mount Waverley	1,082 sqm	4	270 sqm
40 - 44 Golf Links Road, Berwick	3,808 sqm	12	292 sqm
48 Lyons Road, Croydon North	1,365 sqm	4	341 sqm
71 - 73 Exeter Road, Croydon North	2,000 sqm	8	250 sqm
14 Humber Road, Croydon North	1,632 sqm	6	272 sqm
Range	**1,070-3,808 sqm**	**4-12**	**178-341 sqm**

60 Norma Crescent Knoxfield

Site Area: 1,165 sqm.
Norma Crescent Frontage: 21.95 metres.
No. Dwellings: 4
Unit Site Area: 291 sqm

Contemporary unit development, comprising four comparatively small units having individual building areas in the range of 75 - 88 sqm. The development comprises a mix of two and three bedroom, incorporating above average quality appointments throughout. Each unit is complemented with a single lock-up garage and private rear courtyard. Notably Unit 1 will enjoys its own street frontage and separate pedestrian access.

The unit/townhouse market within Knoxfield is characterised by similar style conventional developments providing low maintenance, residential accommodation in the broad value range $350,000 - $450,000. The majority of projects are generally in the range 2 - 6 units, in some instances more, with two bedroom units/townhouses typically commencing at 85 sqm rising to 110 sqm, whilst three bedroom units typically commence at 100 sqm, rising to 150 sqm. Car parking is usually in the form of a lock-up garage, with most units having at least one car space, in some instances two. Quality is consistent, in most cases of a good standard, usually of face brickwork and lightweight render construction, together with stainless steel kitchen appliances, ducted heating, ceramic tile and carpet floor coverings.



Accommodation Summary					
Unit	**Building Area (sqm.)**	**Garage (sqm.)s**	**POS**	**BRs**	**BthRs**
1	81.73	22.08	55.54	2	1
2	76.56	23.38	61.26	2	1
3	75.83	22.38	61.84	2	1
4	88.77	37.14	126.40	3	1
Total	**322.9**	**104.98**	**305.00**		

2 Bowmore Road, Noble Park

Site Area 1,070 sqm.
No. Dwellings: 6
Unit Site Area: 178 sqm

Bowmore Road Frontage	22.25 metres
Rear Boundary	21.64 metres
Northern Boundary	48.77 metres
Southern Boundary	48.77 metres

Contemporary development, comprising four double storey townhouses and two single storey units, with individual building areas in the range of 81 - 102 sqm. Each unit/townhouse comprises two bedroom accommodation, complemented by single garage and private rear courtyard, with areas ranging from 25- 44 sqm, consistent with competing stock. Architectural perspectives are as follows:

The unit/townhouse market within Noble Park is characterised by well designed and constructed developments, providing low maintenance, residential accommodation in the broad value range $300,000 - $450,000. The majority of projects are generally in the range 2 - 6 units, rarely more, due to scarcity of large sites. Most units/townhouses comprise at least two bedrooms, in most instances, three with areas generally commencing at 85 sqm. rising to 140 sqm. Car parking is usually in the form of a lock-up garage, with most units having one car space, in some instances two. Quality is consistent, in most cases of a good standard, usually of face brick or rendered construction, together with stainless steel kitchen appliances, ducted heating, ceramic tile and carpet floor coverings.

Townhouses 1 & 2 – Own Street Frontage

Townhouses 3 & 4 – Middle

Rear Single Storey Units (No 5 & 6)

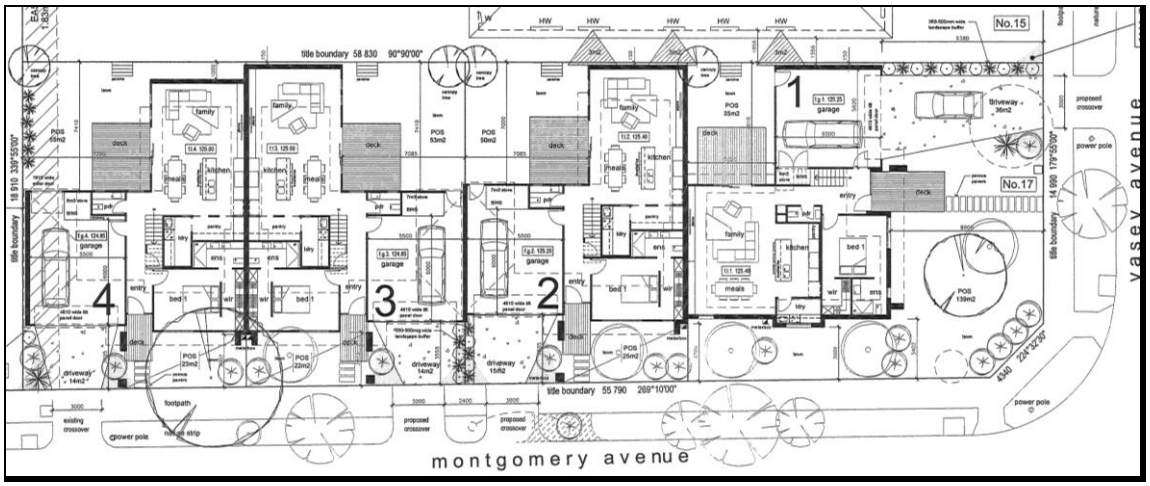
Accommodation Summary						
Unit	**Aspect**	**Area (sqm.)**	**POS (sqm.)**	**BRs**	**BthRs**	**Garage (sqm.)**
1	Bowmore Road	95.70	25.50	2	1	25.20
2	Bowmore Road	81.92	30.50	2	1	24.40
3	Middle	102.74	40.86	2	1	25.60
4	Middle	100.46	44.07	2	1	23.75
5	Rear	92.30	32.60	2	1	23.40
6	Rear	86.87	44.73	2	1	26.61
6		**559.99**	**218.3**			

17 Vasey Avenue Mount Waverley

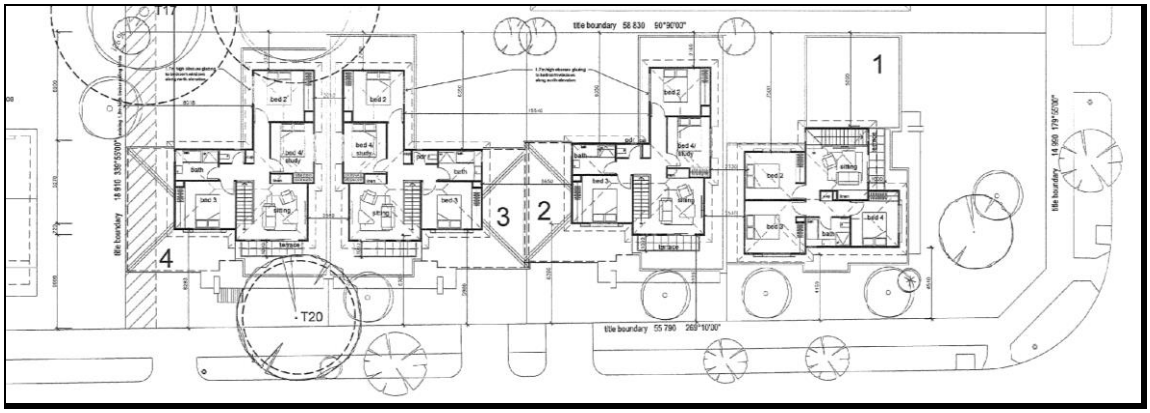
Site Area 1,082 sqm
No. Dwellings: 4
Unit Site Area 270 sqm
Vasey Avenue Frontage: 14.98 metres.
Montgomery Avenue Frontage: 55.79 metres.

The development will consist of four townhouses of contemporary style and design. Proposed living areas will be in the range of 159.8 - 170.6 30 sqm, each residence providing for four bedroom accommodation.

Accommodation Summary				
Townhouse	Building Area (sqm.)	Garage (sqm.)	BRs	BthRs
1	159.8	36.4	4	2
2	168.5	36.0	4	2
3	170.6	36.0	4	2
4	165.5	38.08	4	2
4	**664.4**	**146.48**		



Ground Floor Plan



First Floor Plan

40 - 44 Golf Links Road, Berwick

- 12 double storey townhouses ranging in size from 136 - 143 sqm.
- Each townhouse provides three bedroom accommodation and is complemented by a double garage, courtyard and private open space.
- The townhouses provide functional floorplans, completed to an average standard of finish.

Site Area: 3,808 sqm
No. Apartments 12
Unit Site Area: 292 sqm

48 Lyons Road, Croydon North

- The development comprises four dwellings including both villa units and townhouses.
- The dwellings have building areas in the range 96 - 161 sqm. providing for two and three bedroom accommodation.
- The dwellings are of a standard commensurate with competing developments, and be complemented by a courtyard in addition to either a single or double garage. The development is set amidst appropriately paved and landscaped surrounds.

Site Area: 1,365 sqm
No. Apartments 4
Unit Site Area: 341 sqm

71 - 73 Exeter Road, Croydon North

- The development comprises eight villa units.
- The units have building areas in the range 71 - 102 sqm. providing for two and three bedroom accommodation.
- The villa units are appointed to a standard commensurate with competing developments, and be complemented by a courtyard in addition to a single car garage. The development is to be set amidst appropriately paved and landscaped surrounds.

Site Area: 2,000 sqm
No. Apartments 8
Unit Site Area: 250 sqm

14 Humber Road, Croydon North

- The development comprises six dwellings of single storey design.
- The units have building areas in the range 71 - 82 sqm. providing for two and three bedroom accommodation.
- The apartments are appointed to a standard commensurate with competing developments, and be complemented by a courtyard in addition to a single car garage. The development is to be set amidst appropriately paved and landscaped surrounds.

Site Area: 1,632 sqm
Frontage:
No. Apartments 6
Unit Site Area: 272 sqm

15.3 Apartments

A number of smaller scale apartment projects consistent with that expected to be supportable within the Study Area over the medium-longer term have been identified from across Melbourne's outer eastern and south-eastern regions.

These identified projects range and scale with 7-18 apartments over 2-4 levels. Similarly the size of sites varies over 817-1,127 sqm. As would be expected for the level projects have the lowest unit site area of approximately 50 sqm while 2-3 level projects generally have a unit site area in the range 70-90 sqm.

Figure 50: Indicative Apartment Projects

Project	Site Area	No. Dwellings	Levels	Unit Site Area
Myrtle Mews, 15A Myrtle Street, Bayswater	971 sqm	14	3	69 sqm
Seven Bourke, 7 Bourke Street, Ringwood	817 sqm	12	3	68 sqm
The Oaks, 22 Bourke Street, Ringwood	772 sqm	8	2	85 sqm
NelsoNine, 9 Nelson Street, Ringwood	1,127 sqm	13	3	87 sqm
Rise Apartments, 39 Scott Street, Dandenong	822 sqm	15	4	55 sqm
Clow Heights, 69 Clow Street, Dandenong	836 sqm	18	4	46 sqm
12 New Street, Dandenong	530 sqm	7	3	76 sqm
535 Princes Highway, Noble Park	991 sqm	11	3	90 sqm
Range	**817-1,127 sqm**	**7-18**	**2-4**	**46-90 sqm**

Myrtle Mews, 15A Myrtle Street, Bayswater

- The concept relates to a three level apartment building to be known as *Myrtle Mews* comprising 14 apartments (comprising seven 1 bedroom and seven 2 bedroom apartments), together with associated car parking.
- The apartments upon completion will provide functional floorplans (albeit smaller in size than apartments within surrounding developments), completed to a standard commensurate with the pricing structure and requirements of the purchaser profile, which we are satisfied will be a mix of investors and first home buyers/owner occupiers.

Site Area: 971 sqm
No. Apartments 14
Unit Site Area: 69 sqm

Seven Bourke, 7 Bourke Street, Ringwood

- Three story apartment building to be known as Seven Bourke comprising 12 apartments, together with associated basement car parking.
- The apartments will incorporate a mix of one and two bedroom accommodation with individual areas ranging from 64 - 108 sqm.
- Each apartment will be complemented by a courtyard/balcony, basement car space and storage cage.
- The project has been marketed “off the plan” since 20 December 2013 through the appointed agent Carter Real Estate.

Site Area: 817 sqm
No. Apartments 12
Unit Site Area: 68 sqm

The Oaks, 22 Bourke Street, Ringwood

- Boutique contemporary style two storey development comprising nine apartments.
- The project will comprise two bedroom apartments, each completed by basement car parking and courtyard/balcony.
- The property forms part of a central Ringwood locality with Eastland Shopping Centre located 100 metres from the subject property, together with Ringwood Railway Station and access to the Eastlink both within close proximity.

Site Area: 772 sqm
No. Apartments 8
Unit Site Area: 85 sqm

NelsoNine, 9 Nelson Street, Ringwood

- Contemporary style three level development comprising 13 apartments.
- The project will comprise a mixture of two bedroom and two bedroom plus study apartments of single and two level configurations.
- Each apartment will be completed by a single car space and balcony/terrace.
- Central Ringwood location within walking distance of the Eastland Shopping Centre and Ringwood Railway Station, together with the access to the Eastlink within a 1 kilometre radius.

Site Area: 1,127 sqm
No. Apartments 13
Unit Site Area: 87 sqm

Rise Apartments, 39 Scott Street, Dandenong

- The concept relates to the construction of a four storey apartment building, comprising 15 two bedroom apartments.
- Each apartment occupies an area in the range 74 - 77 sqm.
- Each apartment will feature stone benchtops, stainless steel Omega appliances, polished chrome accessories and wall mounted air-conditioning.
- Each apartment will be complemented by a balcony and grade level car parking, for one vehicle.

Site Area: 822 sqm
No. Apartments 15
Unit Site Area: 55 sqm

Clow Heights, 69 Clow Street, Dandenong

- The concept relates to a four storey plus basement apartment building, comprising 18 apartments, incorporating a mix of two and three bedroom accommodation.
- Each apartment is complemented by one secure car space and balcony, featuring stainless steel appliances, split system heating and cooling, and double glazed windows.
- As at the relevant date, construction works had commenced.

Site Area: 836 sqm
No. Apartments 18
Unit Site Area: 46 sqm

12 New Street, Dandenong

- The concept relates to the construction of a three storey apartment building, comprising seven apartments.
- Each apartment comprises two bedrooms, having areas in the range 70 - 75 sqm.
- Each apartment will feature stone benchtops, stainless steel appliances, polished chrome accessories and wall mounted air-conditioning.
- Each apartment will be complemented by a balcony and grade level car parking, for one vehicle.

Site Area: 530 sqm
No. Apartments 7
Unit Site Area: 76 sqm

535 Princes Highway, Noble Park

- Concept relates to a three storey development, comprising 11 residential apartments.
- Each apartment will comprise two bedroom one bathroom accommodation, having individual areas in the range 72 - 92 sqm.
- Each apartment will feature modern appointments throughout, including split system heating and cooling.
- Each apartment will be complemented by one basement car space and private terrace, whilst the common property will include a formal entrance foyer with stairwell, together with security controls.

Site Area: 991 sqm
No. Apartments 11
Unit Site Area: 90 sqm

16. APPENDIX C: NATIONAL URBAN HOUSING MONITOR.

16.1 National Urban Housing Monitor.

Simply understanding that a planning approval has taken place or that a new house has been constructed is not sufficient to understand housing market activity, Charter's *National Urban Housing Monitor* (NUHM) provides policy makers with an independent and comprehensive evidence base that can inform future strategic policy. The NUHM includes house, townhouse and apartment development and only includes projects that create new housing supply and excludes all one for one replacements.

Over the last 12 months Charter has been developing a new *National Urban Housing Monitor* that monitors smaller scale development (less than 10 dwellings) across Melbourne. The database tracks and identifies new housing supply projects but also includes:

- Lot characterises – lot size, frontage, zoning, and overlays;
- Project characteristics – number of net additional dwellings, project size, and the original land use (i.e. number of existing dwellings);
- Dwelling characteristics – number of bedrooms, bathrooms and car spaces, building area and dwelling typology;
- Pricing characteristics – sale price, sale date, rental price, rental date and rental yield estimates;
- Project Status – identification of project stage (yet to commence, under construction or completed).

Importantly, the NUHM is designed to monitor and report on industry activity (the production of new housing) over time, rather than providing a snapshot at a point in time. Charter has undertaken a high-level analysis of the suburb of Doveton to provide a data snapshot.

16.2 Doveton Snapshot.

In 2014 (as at November) the NUHM identified 17 new supply projects in Doveton.

HDD vs Urban Infill Database – City of Casey.	
Suburb	**UID Project (Nov 2014) (2+ dwellings)**
Doveton	17

SOURCE: NUHM.

The 17 identified projects resulted in the production of 23 net new dwellings entering the local market.

Project Summary.				
Suburb	**Total Projects**	**Total Net Dw**	**Avg. Net Dw**	**Avg. Site Density (sq.m)**
Doveton	17	23	1.4	278

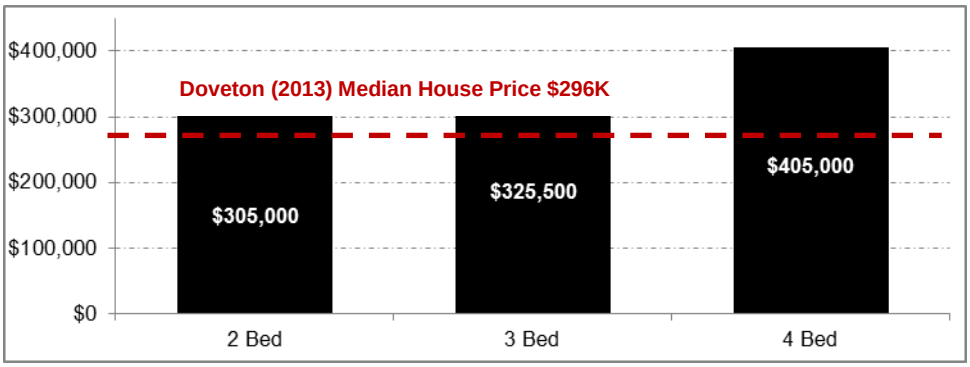
SOURCE: NUHM.

Project typology was also considered, with the dominant form of development in Doveton additional development to the rear of an existing dwelling.

Development Analysis – Projects (Count).		
Project Type	**Count**	**Share (%)**
Rear of Existing	15	88%
Demolition	2	12%
TOTAL	17	100%

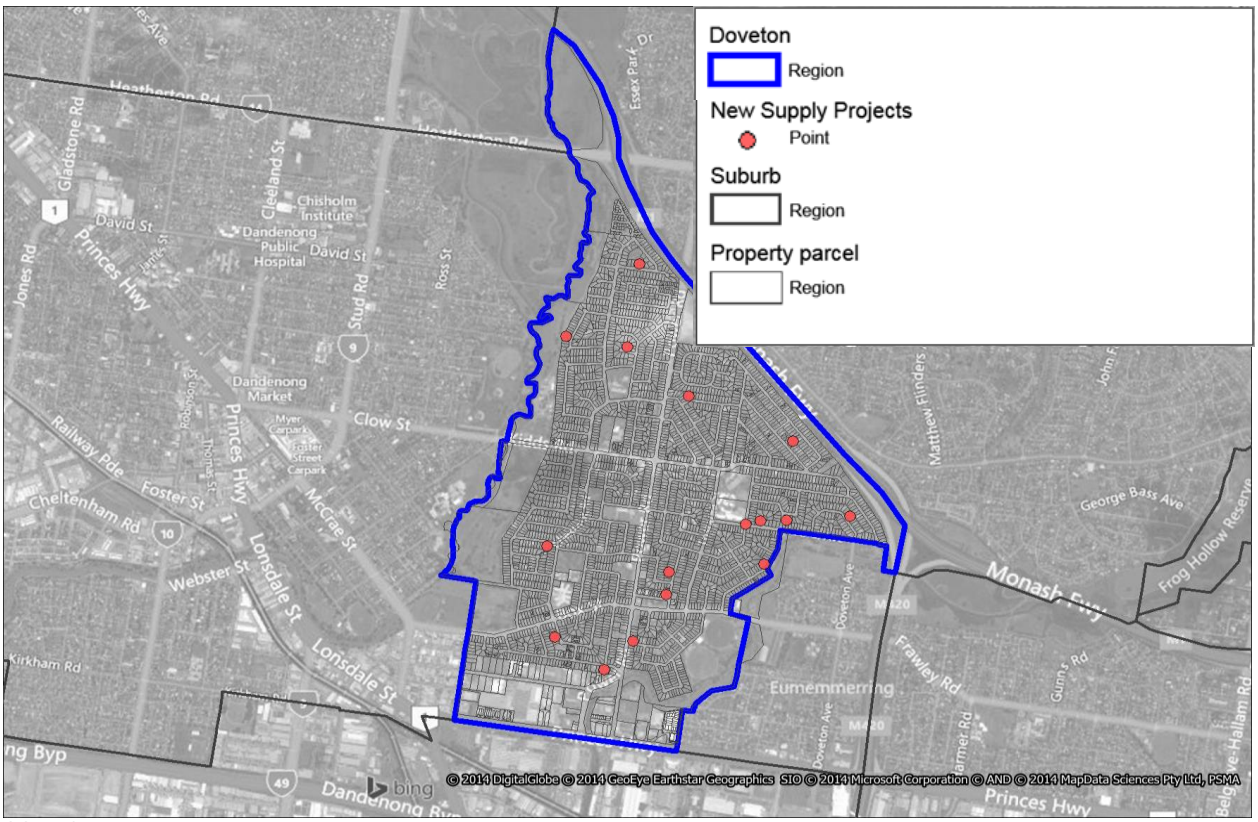
SOURCE: NUHM.

Significantly the NUHM allows policy makers to understand the type of housing produced by the market (by bedroom) and in turn the pricing and future affordability impacts of new housing supply.



SOURCE: NUHM.

Identified new supply projects in Doveton have been outlined below.



SOURCE: NUHM.