

# Lilydale Quarry Housing Supply and Demand Analysis

## Final Report

Intrapac

December 2016



1991-2016  
**25** years of Independent  
insight.



This report has been prepared for Intrapac. SGS Economics and Planning has taken all due care in the preparation of this report. However, SGS and its associated consultants are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred to herein.

SGS Economics and Planning Pty Ltd  
ACN 007 437 729  
[www.sgsep.com.au](http://www.sgsep.com.au)  
Offices in Canberra, Hobart, Melbourne and Sydney

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
Our brief	1
Research findings	1
Demographic trends	1
Dwelling demand	1
Current and future housing supply	2
Dwelling capacity	2
The current market	2
Conclusions and recommendations	3
<b>1 INTRODUCTION</b>	<b>4</b>
Objective	4
<b>2 CONTEXT</b>	<b>5</b>
2.1 Defining the sub market	5
Melbourne's self-contained housing markets	6
<b>3 FUTURE HOUSING DEMAND</b>	<b>11</b>
Housing by type demand	12
Housing type due to presence of cultural groupings	14
<b>4 CURRENT AND FUTURE HOUSING SUPPLY</b>	<b>15</b>
Current housing supply in the sub market	15
Housing capacity in the sub market	21
Likely take up of dwelling capacity	24
Residential development projects	24
<b>5 THE CURRENT MARKET</b>	<b>26</b>
The current market by housing type	26
Medium density housing projects in the ILQP sub market	30
<b>6 CONCLUDING REMARKS</b>	<b>31</b>
<b>APPENDIX</b>	<b>32</b>
Cultural and ethnically diverse community indicators data	32

## LIST OF FIGURES

FIGURE 1. METROPOLITAN MELBOURNE CONTEXT	5
FIGURE 2. MELBOURNE'S SELF CONTAINED HOUSING MARKETS, 2011	6
FIGURE 3. EASTERN SELF CONTAINED HOUSING MARKET	7
FIGURE 4. HOUSE PRICES VERSUS EFFECTIVE JOB DENSITY	8
FIGURE 5. IMPACT OF EASTLINK ON EFFECTIVE JOB DENSITY	8
FIGURE 6. ILQP SUB MARKET	9
FIGURE 7. ILQP SUB MARKET PLANNING ZONES	10
FIGURE 8. POPULATION PROJECTIONS BY AGE, ILQP SUB MARKET, 2016 - 2031	11
FIGURE 9. MAJOR SHORTAGES IN MELBOURNE BY DWELLING TYPE AND LOCATION	14
FIGURE 10. HOUSING DEVELOPMENTS 2005- 2014	16
FIGURE 11. NUMBER OF ADDITIONAL DWELLINGS PER YEAR 2005- 2014	17
FIGURE 12. HOUSING DEVELOPMENTS BY ZONE 2005- 2014	18
FIGURE 13. UP TO 30 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE	19
FIGURE 14. 35 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE	19
FIGURE 15. 40 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE	20
FIGURE 16. 55 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE	20
FIGURE 17. NET DWELLING CAPACITY	22
FIGURE 18. NET DWELLING CAPACITY- OVER 5 DWELLINGS PER SITE	23
FIGURE 20. RESIDENTIAL DEVELOPMENT PROJECTS MINIMUM 100 DWELLINGS	25
FIGURE 21. HOUSE AND LAND PACKAGE EXAMPLE – 3 BEDROOM	27
FIGURE 22. HOUSE AND LAND PACKAGE EXAMPLE– 4 BEDROOM	27
FIGURE 23. HOUSE EXAMPLE – 3 BEDROOM	28
FIGURE 24. HOUSE EXAMPLE – 4 BEDROOM	28
FIGURE 25. TOWNHOUSE EXAMPLE – 2 BEDROOM	28
FIGURE 26. TOWNHOUSE EXAMPLE – 3 BEDROOM	29
FIGURE 27. UNIT EXAMPLE – 2 BEDROOM	29
FIGURE 28. UNIT EXAMPLE – 3 BEDROOM	29
FIGURE 29. MEDIAN HOUSE AND UNIT SOLD PRICES*; ILQP SUB MARKET VS EASTERN SELF CONTAINED HOUSING MARKET	30
FIGURE 30. GARDENS ESTATE, CHIRNSIDE PARK	30



## LIST OF TABLES

TABLE 1. SELF-CONTAINED HOUSING MARKETS, 2011	6
TABLE 2. POPULATION PROJECTIONS: 2016 - 2031	11
TABLE 3. HOUSEHOLD PROJECTIONS: 2016 - 2031	12
TABLE 4. HOUSEHOLD STRUCTURE PROJECTIONS 2016- 2031 YARRA RANGES LGA	12
TABLE 5. DWELLING TYPE DEMAND PROJECTIONS 2016- 2031 YARRA RANGES LGA	13
TABLE 6. BEDROOM NUMBER DEMAND PROJECTIONS 2016- 2031 YARRA RANGES LGA	13
TABLE 7. NUMBER OF HOUSING PROJECTS UNDERTAKEN BY TYPE 2005-2014	15
TABLE 8. NUMBER OF ADDITIONAL DWELLINGS BY TYPE 2005-2014	16
TABLE 9. CLASSIFICATION OF PROJECTS 2005- 2014	17
TABLE 10. NUMBER OF DWELLINGS IN RECENT DEVELOPMENTS BY DENSITY	18
TABLE 11. NET DWELLING CAPACITY OF THE ILQP SUB MARKET	21
TABLE 12. NET DWELLING CAPACITY – OVER 5 DWELLINGS PER SITE	23
TABLE 13. NET DWELLING CAPACITY BY LOT SIZE	24
TABLE 14. MEDIAN PRICE AND LAND SIZE; PROPERTIES FOR SALE IN THE ILQP SUB MARKET	26
TABLE 15. TOP 10 COUNTRIES OF BIRTH, 2011	32
TABLE 16. TOP 10 LANGUAGES SPOKEN AT HOME, 2011	32
TABLE 17. RELIGIOUS AFFILIATIONS, 2011	33
TABLE 18. YEAR OF ARRIVAL, 2011	33
TABLE 19. PLACES OF WORSHIP/ RELIGIOUS ORGANISATIONS IN THE ILQP SUB MARKET	33
TABLE 20. SCHOOLS IN THE ILQP SUB MARKET	34
TABLE 21. MAJOR CLUBS/ SOCIETIES IN THE ILQP SUB MARKET	34

# EXECUTIVE SUMMARY

## Our brief

Intrapac wishes to investigate housing supply and demand conditions in the environs of the Lilydale Quarry. The objectives of this research project were to:

- Define the geographic reach of the Lilydale housing sub-market
- Undertake an analysis of housing supply in the core and secondary catchment areas
- Analyse current and projected housing demand within these core and secondary catchment areas, and
- Based on this information, suggest an appropriate house typology for the Lilydale Quarry site.

## Research findings

### Demographic trends

The population of the Intrapac Lilydale Quarry Project (ILQP) sub market is projected to increase by around 15,000 people between 2016 and 2031. The projected rate of growth for the ILQP sub market is currently on par with Metropolitan Melbourne and is substantially higher than the Eastern self-contained housing market. The ILQP sub market is also set to age in the coming 15 years. The over 65 age group in the ILQP sub market is projected to nearly double between 2016 and 2031.

Household projections for the ILQP sub market exceed both Metropolitan Melbourne and the Eastern self-contained housing market projections (in terms of percentage increase) between 2016 and 2031.

Couple families with children will remain the most dominant household structure in the Yarra Ranges LGA. However, lone person households and couple families with no children are predicted to experience the greatest increase in percentage between 2016 and 2031. In the years between 2001 and 2011, over half of this category of households consisted of individuals aged over 55 (which were either couples living by themselves post their children moving out, or couples with no children). It can be assumed that this trend will continue into the future.

### Dwelling demand

Projected demand for housing suggests there would be the need for at least 2,400 medium density dwellings within the Shire of the Yarra Ranges up to 2031. As there is nowhere else in the Shire of Yarra Ranges where this type of development is permitted, it is likely that this demand will need to be met in the ILQP sub market.

Although semi-detached houses are projected to be growing the fastest in percentage terms, this does not translate into a demand for fewer bedrooms. Four bedroom dwellings show the highest growth rate in this time period, with demand for over 6,000 new dwellings by 2031. Demand for housing with numerous bedrooms can be met by medium density developments such as townhouses just as easily as detached housing.

The SGS Housing Demand Model is limited in that it looks to historic patterns (1996- 2011) of development and housing types in projecting demand. Therefore, existing and previous housing type availability heavily influences the demand projections. The model does not take into consideration alternative housing choices people might make should the housing stock be available for purchase, nor does it account for the quarry site attracting demand from neighbouring municipalities. Our demand

projections should therefore be treated as particularly conservative, with the demand for medium density in the ILQP likely to be much higher.

Research by the Grattan Institute in 2011 identifies a shortage and confirms there would be significant demand for medium density housing in outer suburban areas such as Lilydale. Since 2011, the housing market continues to be frustrated at supply of medium density housing. The introduction of the reformed and much more restrictive residential zones on the 1<sup>st</sup> of July 2014 stifled any groundswell that was occurring across metropolitan Melbourne. Much of the insights from the Grattan report therefore remain relevant.

There are no characteristics of the ILQP sub market that would indicate the need for a particular housing type to accommodate specific cultural groupings in the area. Both the Eastern self-contained housing market and wider Metropolitan Melbourne are more culturally, ethnically, religiously and linguistically diverse than the ILQP sub market.

### **Current and future housing supply**

Between 2005 and 2014 there were 1,547 housing development projects completed in the ILQP sub market. The overwhelming majority of these projects were single dwelling projects (comprising houses built on vacant lots, knock down and rebuilds, secondary dwellings and duplex replacements). This equated to 2,544 additional dwellings. As expected with the prominence of single dwelling developments, the most common type of project was classified as infill, with broad hectare development accounting for less than half of that of infill.

There has been an annual average of 250 net additional dwellings built in the ILQP sub market over the 2005 and 2014 period, with the number of annual additional dwellings growing from 163 in 2005 to 588 in 2014. The majority were built on land zoned Neighbourhood Residential Zone 1.

The majority of additional dwellings has been delivered at 20-30 dwellings per hectare (equating to a 330 - 500 square metre lot size). The amount of dwellings developed at a net density of 30 + dph (14 per cent) over the 2005 to 2014 period indicates some demand for medium density housing in the ILQP sub market.

### **Dwelling capacity**

SGS has assessed that the net dwelling capacity of the ILQP sub market is **16,740 dwellings**. However, the vast majority of lots only have the capacity for one additional dwelling. SGS suggests that the likely take-up of dwelling capacity for the ILQP sub market area will be around 250- 400 dwellings per year (between 2,500 and 4,000 over a 10 year period).

UDP data shows that there are a number of projects that could potentially be delivered within the ILQP sub market over the next 10 years. Projects within the ILQP sub market tend to be planned over a longer timeframe than areas closer to the CBD.

### **The current market**

The ILQP has a long history of large, low density, detached dwelling development. As a consequence of this development history, the primary type of housing available is low density, detached dwellings. This is reflected in the recent real estate sales history and the demand projections for the Yarra Ranges. However, townhouses and units made up 20 per cent of housing sales within the last month. The successful sale of 176 townhouses off the plan in the recent Gardens Estate by Sunland Group in Chirside Park also suggests the growing presence of a new housing market.

## Conclusions and recommendations

Housing demand and supply analysis, along with the recent sales history for townhouses and apartments, the changing demographic of the local community and the success of the Gardens Estate development indicate that **there is strong latent demand for medium density, high quality housing in garden-like suburbs in the ILQP.**

There is an opportunity for Intrapac to provide a form of housing that represents a genuine intermediate offering between standard detached dwellings and apartments or typical walk up flats. The lingering demand for large floorplate housing with numerous bedrooms can be met by large **terrace style townhouses with front gardens and courtyards** (a product that has proven itself to be very popular in the ILQP sub market quite recently).

If Intrapac was to apportion a percentage of the site to standard detached development and thereby relinquish total control of built form, there is a risk that the overall brand offering of the development may be weakened. This in turn likely weaken the quantum of development, market demand and ultimately development profitability.



# 1 INTRODUCTION

The Lilydale Quarry, now almost entirely surrounded by suburban development, is strategically located less than a kilometre from the Lilydale town centre. Moreover, it enjoys ready access to a range of amenities including Lilydale Lake and a network of parks and open spaces linking back to the town centre.

The quarry is at the end of its economic life and will now be remediated. The 'framing land' for the filled quarry provides a key development opportunity in a corridor which has effectively run out of major greenfield or brownfield land reserves.

In 2013, Sibelco, the owner of the quarry, commissioned Places Victoria to undertake a planning and commercial due diligence process on its behalf. This resulted in a 'preferred' vision for the site based on a mixed use development featuring a significant amount of medium density housing.

Intrapac was subsequently granted an exclusive due diligence period in which to assess the development potential of the site and make a commensurate commercial bid. The site has now been secured by Intrapac.

Against this background, Intrapac wishes to investigate housing supply and demand conditions in the environs of the Lilydale Quarry to, amongst other things, test the viability of a 'medium density rich' vision for the site.

## **Objective**

The objectives of this study were to:

- Define the geographic reach of the Lilydale housing sub-market
- Undertake an analysis of housing supply in the core and secondary catchment areas
- Analyse current and projected housing demand within these core and secondary catchment areas, and
- Based on this information, suggest an appropriate house typology for the Lilydale Quarry site.

## 2 CONTEXT

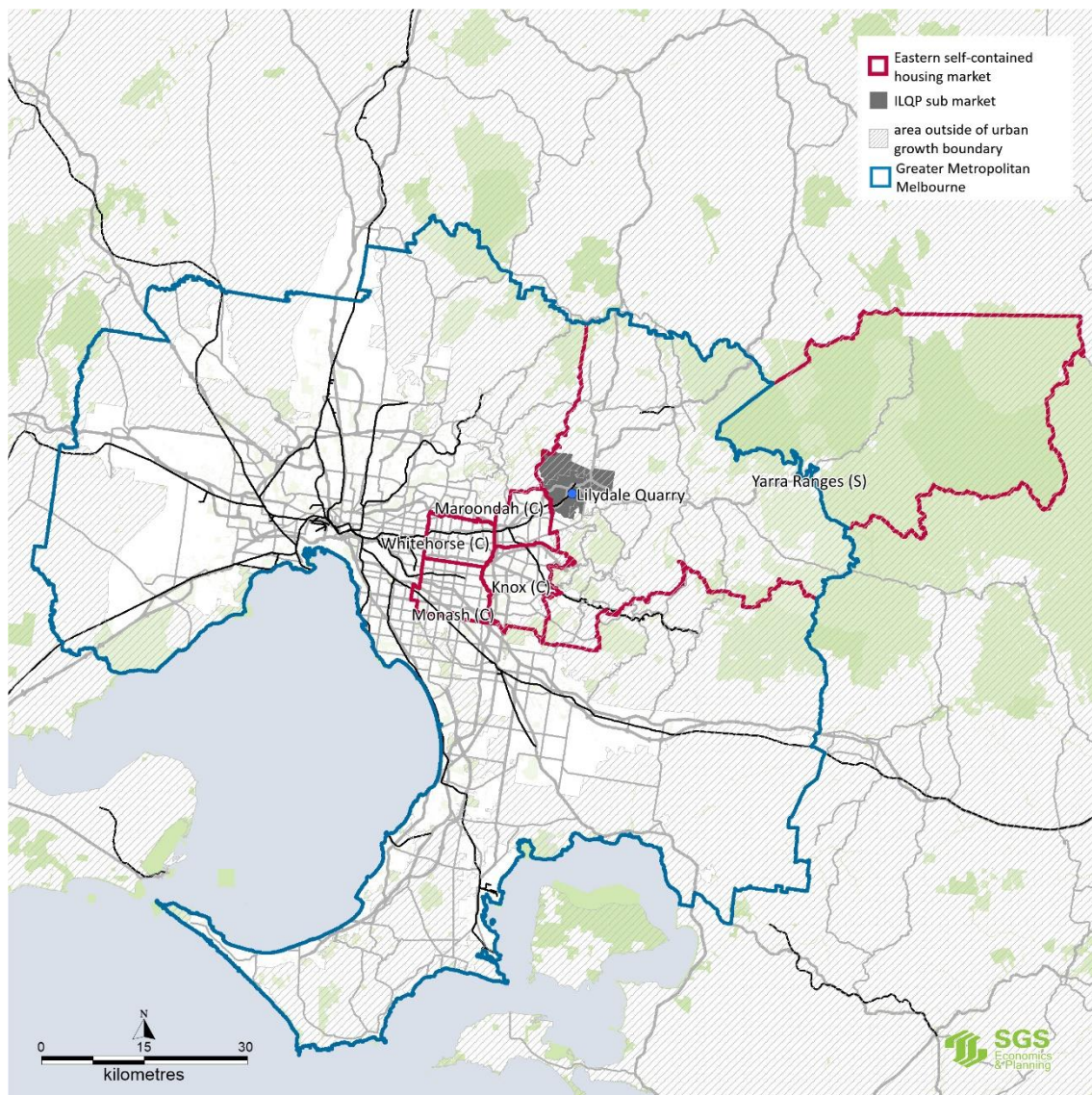
### 2.1 Defining the sub market

The following analysis will (where data is available) take into account three geographies:

- The **Intrapac Lilydale Quarry Project (ILQP) Sub Market**
- The **Eastern Self Contained Housing Market**, and
- The wider **Metropolitan Melbourne** area.

The three geographies are shown in the figure below.

FIGURE 1. METROPOLITAN MELBOURNE CONTEXT

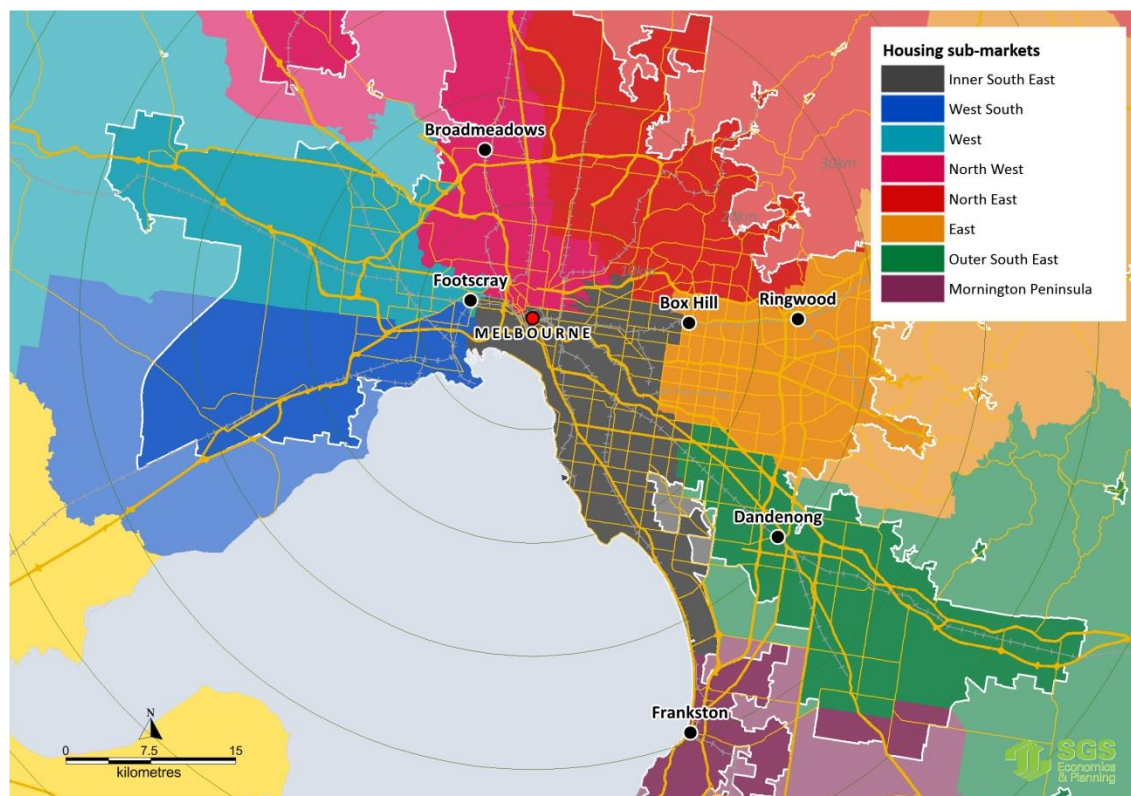


## Melbourne's self-contained housing markets

SGS has previously undertaken detailed analysis to determine self-contained housing markets. The analysis looked at people who moved during the 2006 to 2011 inter-Census period and identified housing sub-markets inherent within the metropolitan region.

Figure 2 and Table 1 below present the results from this analysis. Over this period the sub-markets remained largely unchanged, with the exception of some suburbs in the middle of the eastern corridor which, over this period, have become increasingly associated with the Inner South-East market rather than the East.

FIGURE 2. MELBOURNE'S SELF CONTAINED HOUSING MARKETS, 2011



Source: SGS Economics and Planning; based on ABS Census 2011

TABLE 1. SELF-CONTAINED HOUSING MARKETS, 2011

	Residents who moved in last 5 years	Moved from within sub-region #	% Self Contained
Inner South East	241,000	136,000	56%
West South	67,000	42,000	62%
West	79,000	49,000	63%
North West	142,000	76,000	53%
North East	153,000	92,000	60%
<b>East</b>	<b>173,000</b>	<b>98,000</b>	<b>57%</b>
Outer South East	133,000	85,000	64%
Mornington Peninsula	84,000	54,000	65%

Source: SGS Economics and Planning, based on ABS Census 2011

From this data it can be seen that, unlike labour markets, Melbourne's housing markets largely operate through a series of corridors within which people relocate. Rather than crossing over the city, people tend to prefer to re-locate within their known transport corridor, often moving further out to gain access to an affordable housing option. Each sub-region broadly follows a separate transport corridor (public and/or private).



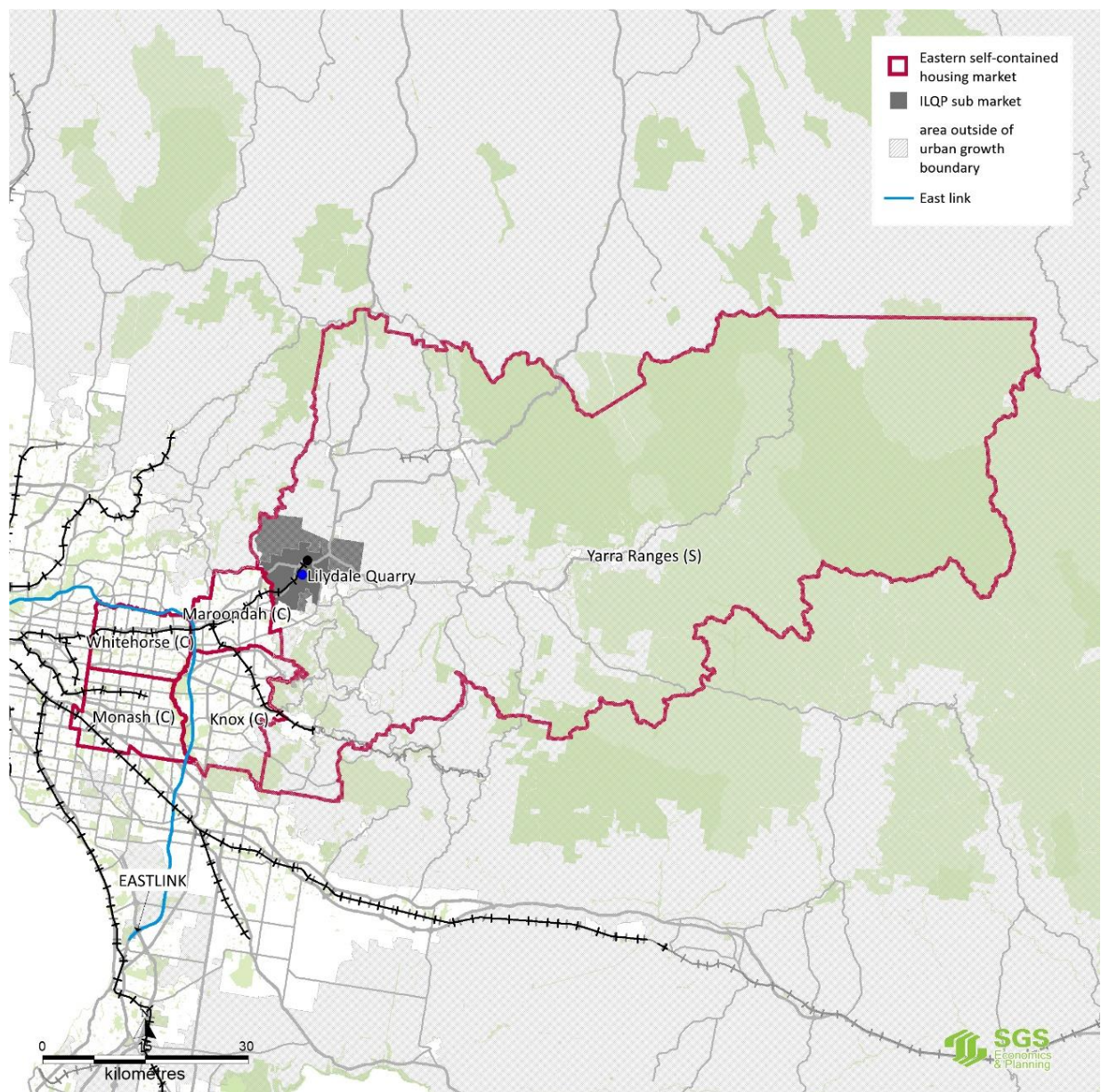
The public and private vehicle network has had a strong influence on settlement patterns and resident travel behaviour across Melbourne. The networks, and the opportunities along them, form natural catchments for residents to work and live at both a broad sub-regional and local level.

Melbourne's public transport network is largely a radial system of rail, tram and bus corridors across the metropolitan region. This rail network has shaped urban development in Melbourne for well over a hundred years. The rail lines also influence patterns of travel, accessibility and amenity along the corridors that they serve, creating areas of common interest and influence.

The Eastern Freeway and the Lilydale Train Line both play an important role in facilitating the movement of the population within the Eastern Self Contained Housing Market to and from the CBD and other Central Activity Areas (CAAs).

The **ILQP Sub Market** lies within the **Eastern Self Contained Housing Market** (which consists of the Knox, Maroondah, Monash, Whitehorse and Yarra Ranges local government areas situated within the Urban Boundary, as shown in the figure below).

FIGURE 3. EASTERN SELF CONTAINED HOUSING MARKET

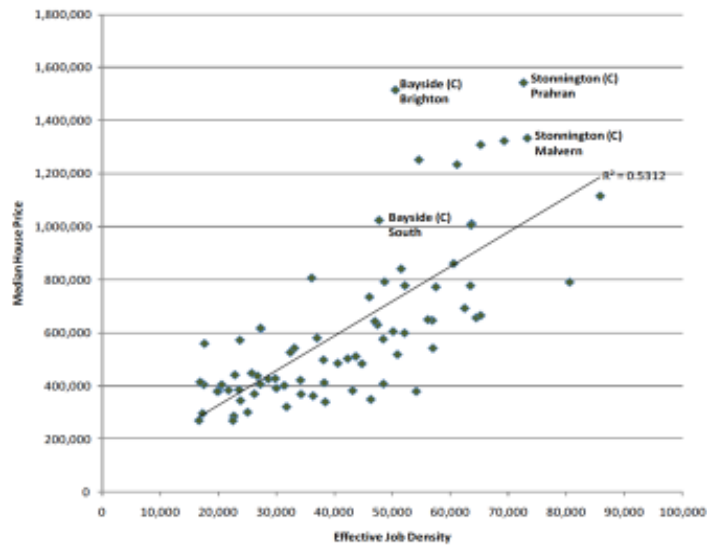


## The impact of Eastlink on housing prices

Effective Job Density (EJD) is a generalised measure of accessibility and urban agglomeration. It is calculated on the basis of the existing job stock in a given small area plus all the jobs that can be reached from that area divided by travel time. As one person's job is another person's service, EJD reflects access to a range of urban opportunities as well as employment.

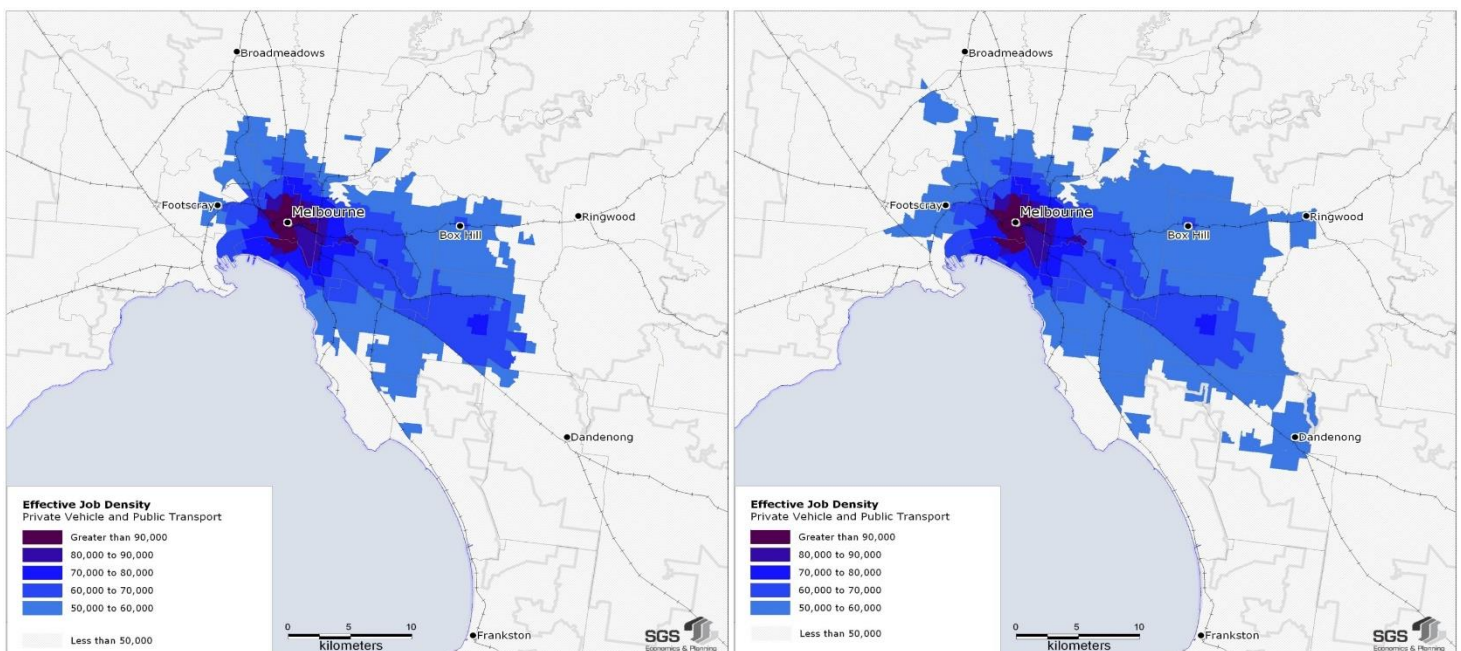
EJD has been shown to be a strong predictor of housing prices, accounting for more than half the variation in dwelling values across Melbourne.

FIGURE 4. HOUSE PRICES VERSUS EFFECTIVE JOB DENSITY



As shown in Figure 5, EastLink changed the pattern of EJD significantly in the eastern segment of the metropolitan area. It effectively increased the 'centrality' of Ringwood and Dandenong. One of the impacts was a direct stimulation of higher density housing development in both Ringwood and Dandenong. Lilydale can expect to have sustained a similar impact on underlying demand for higher density housing forms.

FIGURE 5. IMPACT OF EASTLINK ON EFFECTIVE JOB DENSITY

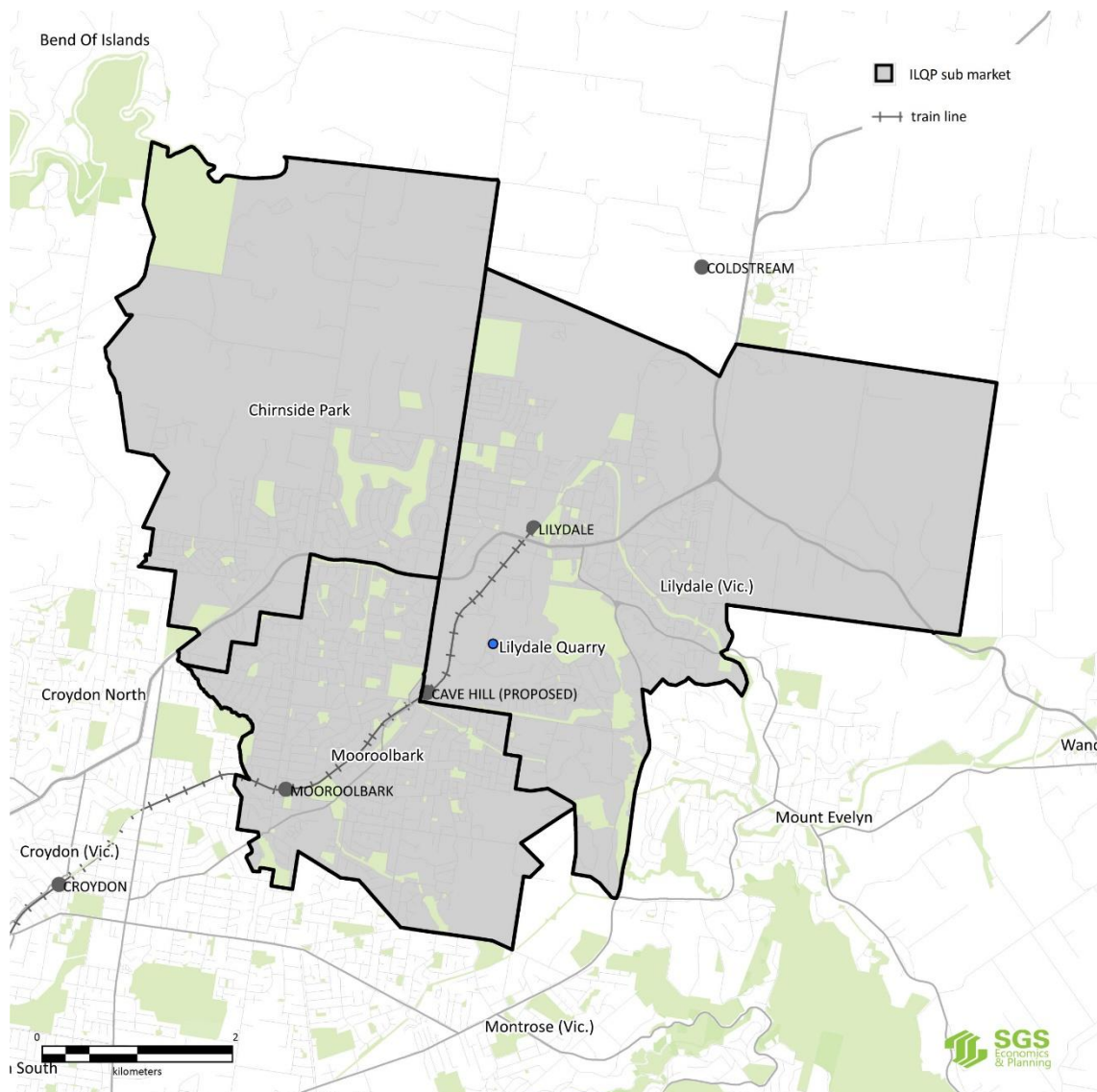




The ILQP sub market is defined as the suburbs of **Lilydale, Mooroolbark and Chirside Park** (as shown in the figure below). Our justification for including the three suburbs is as follows:

- The Lilydale Quarry occupies the bottom south west corner of the Lilydale suburb. Although the Maroondah Highway separates this corner and the Northern part of Lilydale, it is not considered to be a restrictive barrier, as it reduces both in speed and in the number of lanes upon entering the Township and has an increased number of crossroads. As such, the Northern part of Lilydale is also included in ILQP sub market
- Mooroolbark has been included in the ILQP sub market as there is a tendency for people to gravitate in a radial corridor back to Melbourne. Mooroolbark and Lilydale are therefore considered substitutable destinations from a buyer's perspective
- Although the Maroondah Highway acts as a barrier for cross suburb travel outside of the Lilydale Township, Chirside Park has been included in the ILQP sub market. This is due to the presence of similar housing products, both previously and currently, having been delivered within the suburb. This makes Lilydale and Chirside Park also substitutable from a buyer's perspective, and
- Areas outside of the Urban Growth Boundary within the ILQP sub market have been excluded from the analysis due to the difference in permissible land uses.

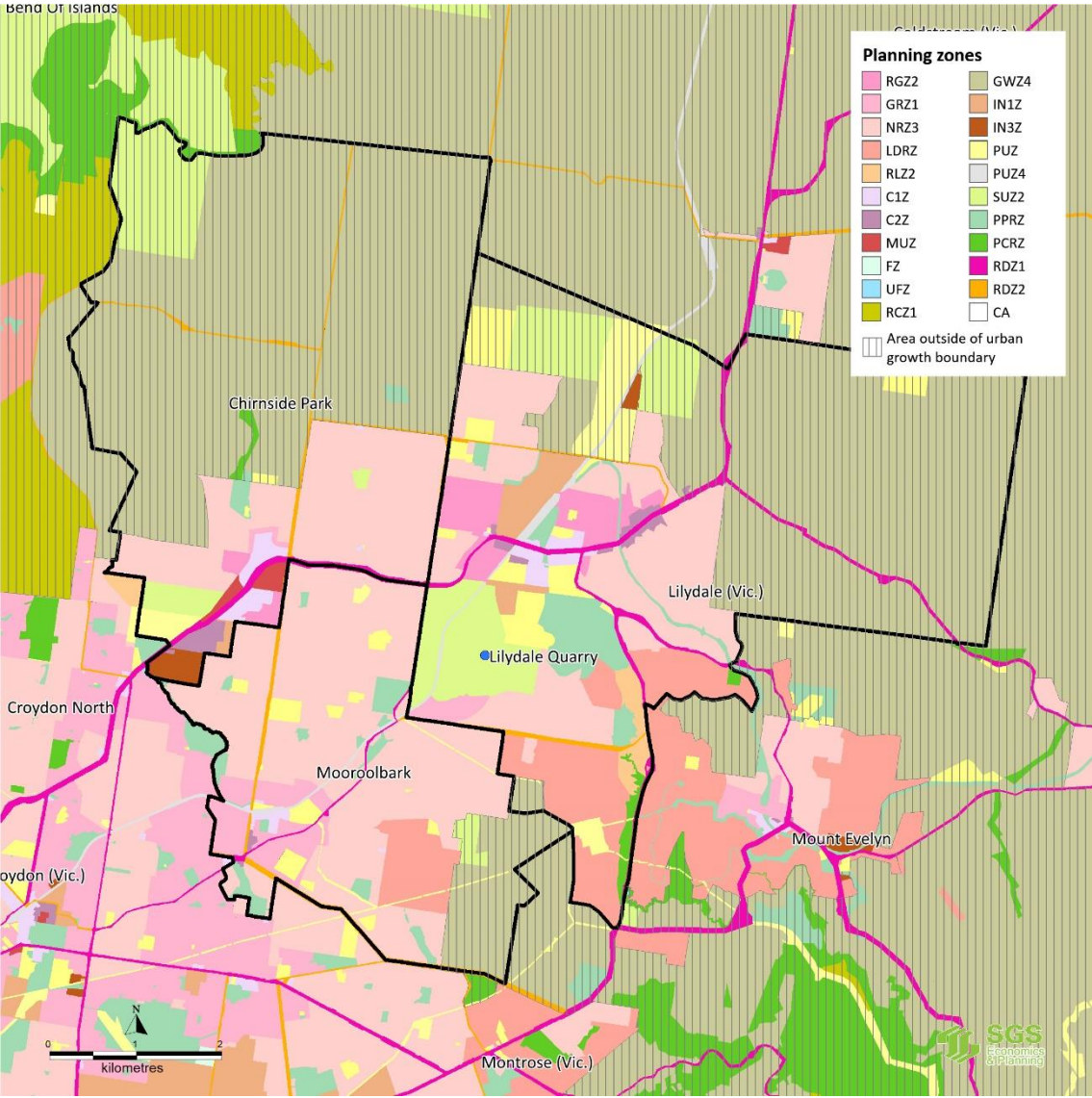
FIGURE 6. ILQP SUB MARKET





The following figure denotes the various planning zones that determine the permissible land uses across the ILQP sub market.

FIGURE 7. ILQP SUB MARKET PLANNING ZONES



### 3 FUTURE HOUSING DEMAND

This section of the report looks at both historical data and projections to understand the likely demand for housing in the future.

All three geographical areas in the analysis are expected to grow substantially in the next 15 years. Between 2016 and 2031, residential populations are projected to increase by approximately 15,000 people in the ILQP sub market, around 100,000 in the Eastern Self Contained Housing market and 1.3 million in Metropolitan Melbourne.

The projected growth rate for the ILQP sub market is currently on par with Metropolitan Melbourne (around 28 per cent), and is substantially higher than the Eastern self-contained housing market (a projected 12 per cent increase).

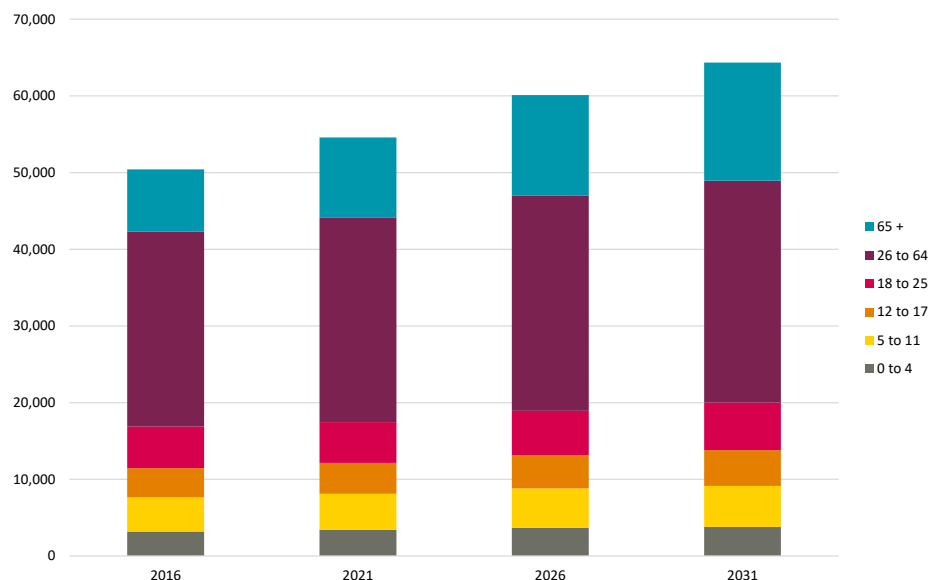
TABLE 2. POPULATION PROJECTIONS: 2016 - 2031

Geography	2016	2021	2026	2031	% change 2016-2031
Lilydale suburb	18,848	19,939	21,788	23,141	23%
Mooroobark suburb	19,198	20,899	23,439	25,306	32%
Chirnside Park suburb	12,202	13,612	14,760	15,834	30%
ILQP sub market	50,247	54,451	59,986	64,281	28%
Eastern self-contained housing market	775,656	805,748	839,766	872,352	12%
Metropolitan Melbourne	4,556,783	5,004,004	5,445,354	5,872,483	29%

Source: Small Area Land Use Projections, SGS Economics and Planning

The ILQP sub market is set to age in the coming 15 years. Specifically, the over 65 age group in the ILQP sub market is projected to nearly double in numerical terms between 2016 and 2031, and to increase from 16 to 23 per cent of the total population between 2016 and 2031. Little to no growth is projected in the 0-25 age brackets, with the share of the population aged between 0 – 25 projected to decrease from 34 per cent to 31 per cent.

FIGURE 8. POPULATION PROJECTIONS BY AGE, ILQP SUB MARKET, 2016 - 2031



Household projections for the ILQP sub market are on par with Metropolitan Melbourne and significantly exceed the Eastern self-contained housing market projections (in terms of percentage increase) between 2016 and 2031. In this time period, household numbers are projected to increase by roughly 6,000 in the ILQP sub market, 40,000 in the Eastern Self Contained Housing market and 500,000 in Metropolitan Melbourne.

TABLE 3. HOUSEHOLD PROJECTIONS: 2016 - 2031

Geography	2016	2021	2026	2031	% change 2016- 2031
Lilydale suburb	7,221	7,719	8,481	9,069	26%
Mooroolbark suburb	7,149	7,865	8,900	9,671	35%
Chirnside Park suburb	4,513	5,090	5,580	6,029	34%
ILQP sub market	18,883	20,674	22,961	24,769	31%
Eastern self-contained housing market	294,156	307,642	322,131	337,044	15%
Metropolitan Melbourne	1,748,621	1,926,118	2,101,486	2,277,539	30%

Source: Small Area Land Use Projections, SGS Economics and Planning

## Housing by type demand

SGS has developed a Housing Demand Model that uses population projections and historical data to understand the demand for housing by type. The smallest geography that the Housing Demand Model can use is the 'Local Government Area' (LGA), thus the following data is for the entire Yarra Ranges LGA. It is important to note that the Yarra Ranges LGA includes a large amount of land outside the urban growth boundary (as shown in Figure 3 above), which will no doubt dilute the implications for the ILQP sub market area.

Couple families with children will remain the most dominant household structure in the Yarra Ranges LGA. However, lone person households and couple families with no children are predicted to increase in percentage terms at the highest rate between 2016 and 2031 (32% increase and 23% increase respectively).

In the years between 2001 and 2011, over half of the household structure in Yarra Ranges LGA consisted of individuals aged over 55 (which were either couples living by themselves post their children moving out, or couples with no children). It can be assumed that this trend will continue into the future.

TABLE 4. HOUSEHOLD STRUCTURE PROJECTIONS 2016- 2031 YARRA RANGES LGA

	2016	2021	2026	2031	% change 2016- 2031
Couple family with children	76,211	75,712	76,889	78,440	3%
Couple family with no children	32,190	34,912	37,377	39,623	23%
One parent family	17,467	18,316	19,478	20,831	19%
Other family	2,265	2,367	2,436	2,535	12%
Group household	2,427	2,481	2,473	2,464	2%
Lone person household	11,855	13,094	14,459	15,644	32%
Other*	8,939	9,439	10,119	10,768	20%
<b>Total persons</b>	<b>151,355</b>	<b>156,322</b>	<b>163,231</b>	<b>170,305</b>	<b>13%</b>

Source: SGS Economics and Planning Housing Demand Model, 2016

The type of dwelling projected to be required in the Yarra Ranges is changing. Although demand for detached housing will continue to comprise the greatest volume of new dwellings in the LGA, the demand for semi-detached / row / terrace / townhouses in Yarra Ranges is projected to increase by 63 per cent between 2016 and 2031. The demand for flats, units or apartments is projected to increase by 41 per cent.

Projected demand for housing suggests there would be the need for at least 2,400 medium density dwellings within the Shire of the Yarra Ranges up to 2031. As there is nowhere else in the Shire of Yarra

Ranges where this type of development is permitted, it is likely that this demand will need to be met in the ILQP sub market.

TABLE 5. DWELLING TYPE DEMAND PROJECTIONS 2016- 2031 YARRA RANGES LGA

	2016	2021	2026	2031	% change 2016- 2031	% new dwellings 2016-2031
Separate house	52,869	54,965	57,511	59,901	13%	74%
Semi-detached / row / terrace / townhouse	2,348	2,808	3,312	3,830	63%	16%
Flat / unit / apartment	2,050	2,315	2,606	2,890	41%	9%
Other	364	392	424	452	24%	1%
<b>Total private dwellings</b>	<b>57,630</b>	<b>60,480</b>	<b>63,852</b>	<b>67,073</b>	<b>16%</b>	<b>100%</b>

Source: SGS Economics and Planning Housing Demand Model, 2016

Although semi-detached houses are projected to be growing the fastest in percentage terms between 2016 and 2031, this does not translate into a demand for fewer bedrooms. Four bedroom dwellings show the highest growth in volume over this time period, with demand for over 6,000 new dwellings by 2031 (accounting for over 65 per cent of new dwellings). Demand for dwellings with three or more bedrooms comprises almost 90 per cent of total demand.

This does not necessarily infer a particular housing typology, though, traditionally, the demand for larger dwellings has been met via larger detached dwellings on freehold title. In principle, this demand can also be met by medium density developments such as townhouses, as exemplified by large Victorian terrace houses built in the 'tramway suburbs'.

TABLE 6. BEDROOM NUMBER DEMAND PROJECTIONS 2016- 2031 YARRA RANGES LGA

	2016	2021	2026	2031	% change 2016- 2031	% new dwellings 2016-2031
None (includes bedsitters)	171	190	214	237	39%	1%
One bedroom	1,573	1,580	1,571	1,529	-3%	0%
Two bedrooms	6,689	7,034	7,396	7,712	15%	11%
Three bedrooms	27,488	28,176	28,986	29,621	8%	23%
Four or more bedrooms	21,709	23,500	25,685	27,974	29%	66%
<b>Total dwellings</b>	<b>57,630</b>	<b>60,480</b>	<b>63,852</b>	<b>67,073</b>	<b>16%</b>	<b>100%</b>

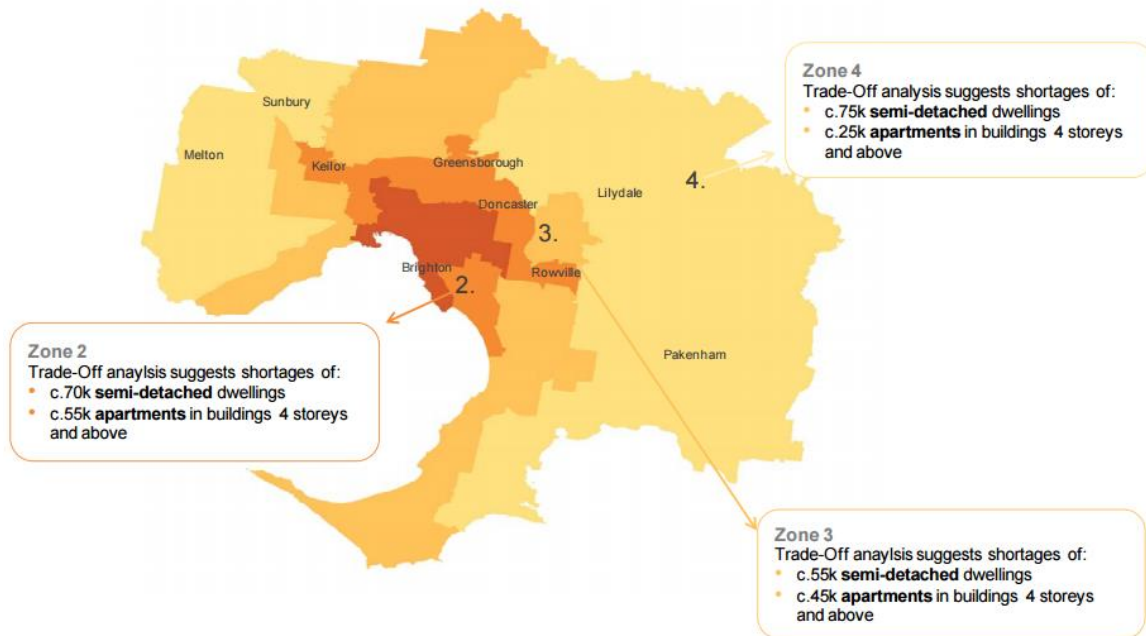
Source: SGS Economics and Planning Housing Demand Model, 2016

As noted, the Housing Demand Model is limited in that it looks to historic patterns (1996- 2011) of development and housing types in projecting demand. Therefore, existing and previous housing type availability heavily influences the demand projections. The model does not take into consideration alternative housing choices that people might make should the housing stock be available for purchase, nor does it account for the quarry site attracting demand from neighbouring municipalities. Our demand projections should therefore be treated as particularly conservative, with the demand for medium density in the ILQP likely to be much higher.

A report by the Grattan Institute<sup>1</sup> looked at the type of housing available in Sydney and Melbourne, and the type of housing choices people would like to make. Housing type, housing structure and housing location were key considerations in the analysis. It found that in outer areas like Lilydale, there is a clear shortage of medium density semi-detached housing, and also a shortage of higher density apartment housing. The metropolitan wide shortages are shown in Figure 9 below. The report also looked at the impact of price increases for semi-detached housing. It found that even with large changes to the price assumptions the shortages identified remained.

<sup>1</sup> The Grattan Institute (2011) 'The Housing We'd Choose'. [http://grattan.edu.au/wp-content/uploads/2014/04/090\\_cities\\_report\\_housing\\_market.pdf](http://grattan.edu.au/wp-content/uploads/2014/04/090_cities_report_housing_market.pdf)

FIGURE 9. MAJOR SHORTAGES IN MELBOURNE BY DWELLING TYPE AND LOCATION



Source: Grattan Institute, 2011

Since 2011, the housing market continues to be frustrated by the limited supply of medium density housing. The introduction of reformed and much more restrictive residential zones in July 2014 stifled any prospective groundswell in supply that might have occurred across metropolitan Melbourne. Much of the insights from the Grattan report still remain highly relevant.

### Housing type due to presence of cultural groupings

There are no characteristics of the ILQP sub market that would indicate the need for a particular housing type due to the presence of cultural groupings in the area (i.e. the presence of a large cultural grouping that traditionally accommodates elderly relatives with younger family members may require dwellings with additional bedrooms/ granny flats). The 2011 ABS data shows both the Eastern self-contained housing market and wider Metropolitan Melbourne are more culturally, ethnically, religiously and linguistically diverse than the ILQP sub market. Data outlining the top 10 countries of birth, top 10 languages spoken at home, religious affiliations and year of arrival information for all three geographies can be found in the appendix.

The relative absence of culturally diverse clubs, societies, places of worship or schools located in the ILQP sub market reinforces this finding that there is unlikely to be a niche housing market of relevance to the Quarry site. The appendix contains data on the places of worship, religious organisations, major clubs and societies and schools in the ILQP sub market.

## 4 CURRENT AND FUTURE HOUSING SUPPLY

This section draws on Housing Development Data compiled by the Department of Environment, Land, Water and Planning (DELWP) to understand both the current and future supply of housing in the ILQP sub market.

### Current housing supply in the sub market

Between 2005 and 2014 there were 1,547 housing development projects completed in the sub market. The overwhelming majority of these projects were single dwelling projects (which are either recent sub divisions, secondary dwellings, or knock down and duplex replacements).

TABLE 7. NUMBER OF HOUSING PROJECTS UNDERTAKEN BY TYPE 2005-2014

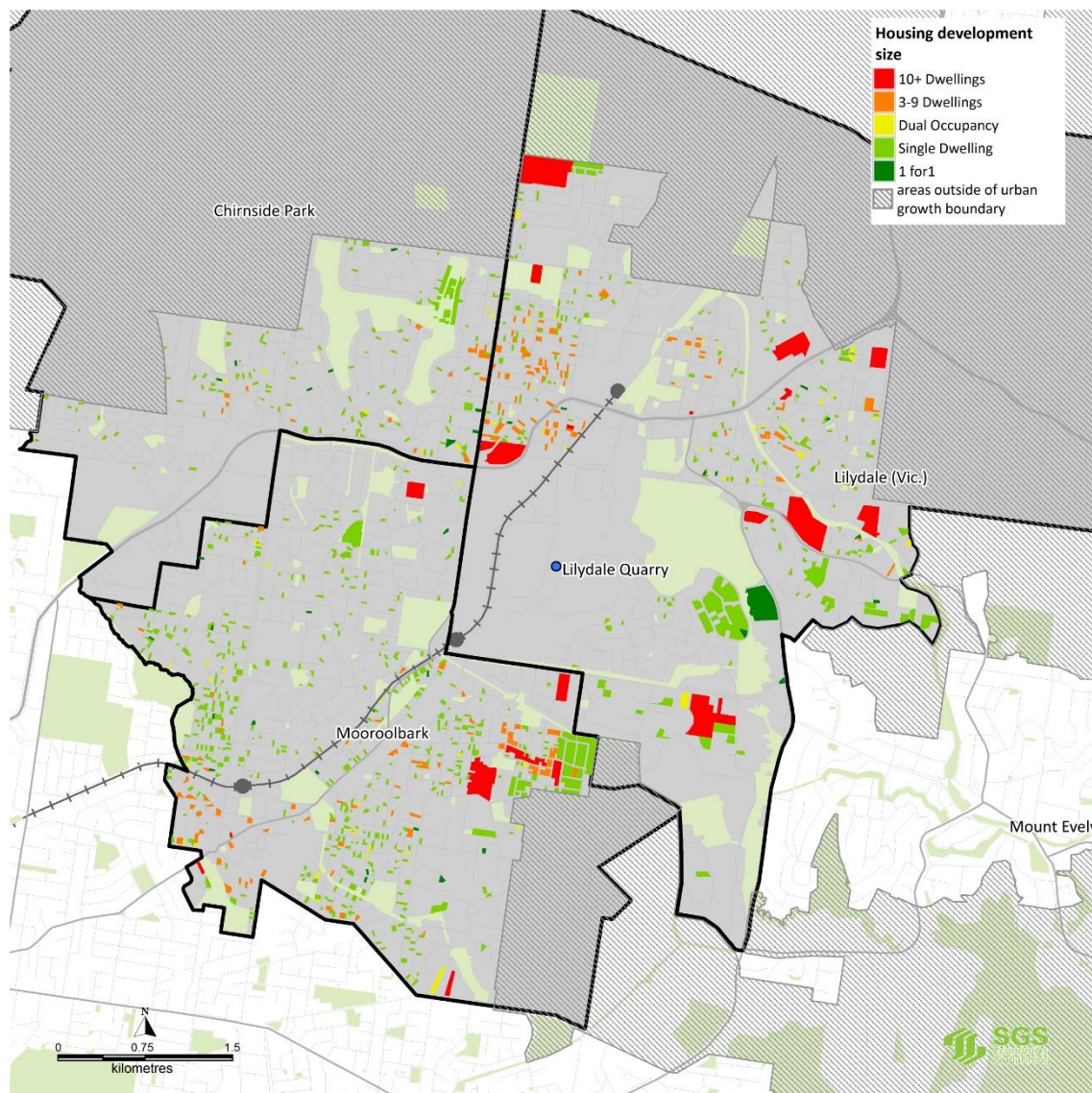
No of projects	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market
Mid construction/no dwellings	23	16	10	49
Replacement (knockdown/rebuild)	11	15	10	36
Single Dwelling	316	634	248	1198
Dual Occupancy	26	27	9	62
3-9 Dwellings	87	74	17	178
10+ Dwellings	15	8	1	24
<b>Total Number of Projects</b>	<b>478</b>	<b>774</b>	<b>295</b>	<b>1547</b>

Source: Housing Development Data, DELWP, 2014

The figure overleaf depicts where in the ILQP sub market these projects occurred.



FIGURE 10. HOUSING DEVELOPMENTS 2005- 2014



The 1,547 projects equated to 2,544 net additional dwellings (again the vast majority being single dwelling developments).

TABLE 8. NUMBER OF ADDITIONAL DWELLINGS BY TYPE 2005-2014

No of additional dwellings	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market
Single Dwelling	317	635	248	1200
Dual Occupancy	45	40	16	101
3-9 Dwellings	266	243	56	565
10+ Dwellings	485	158	35	678
<b>Total number of dwellings</b>	<b>1113</b>	<b>1076</b>	<b>355</b>	<b>2544</b>

Source: Housing Development Data, DELWP, 2014

As expected with the prominence of single dwelling developments, the most common type of project was classified as infill, with broad hectare development accounting for less than half of that of infill.

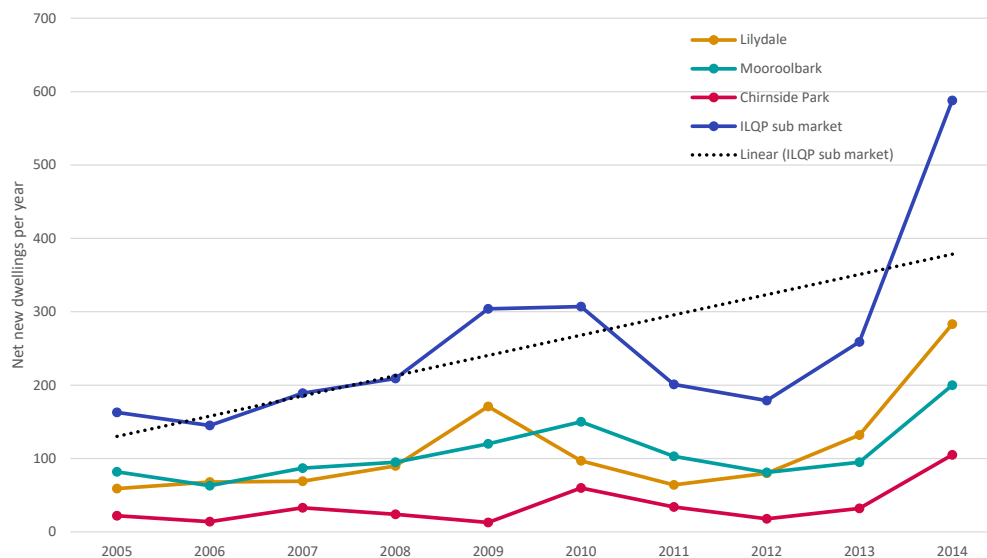
TABLE 9. CLASSIFICATION OF PROJECTS 2005- 2014

No of additional dwellings	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market
<b>Infill</b>	580	689	174	1443
<b>Urban Renewal</b>	233	60	0	293
<b>Broad Hectare</b>	280	321	83	684
<b>Private Use</b> (outside of Urban Growth Boundary)	20	6	98	124
<b>Total</b>	<b>1113</b>	<b>1076</b>	<b>355</b>	<b>2544</b>

Source: Housing Development Data, DELWP, 2014

There has been an annual average of 250 net additional dwellings built in the ILQP sub market over the 2005 and 2014 period, with the number of annual additional dwellings growing from 163 in 2005 to 588 in 2014 (as shown in the figure below) .

FIGURE 11. NUMBER OF ADDITIONAL DWELLINGS PER YEAR 2005- 2014

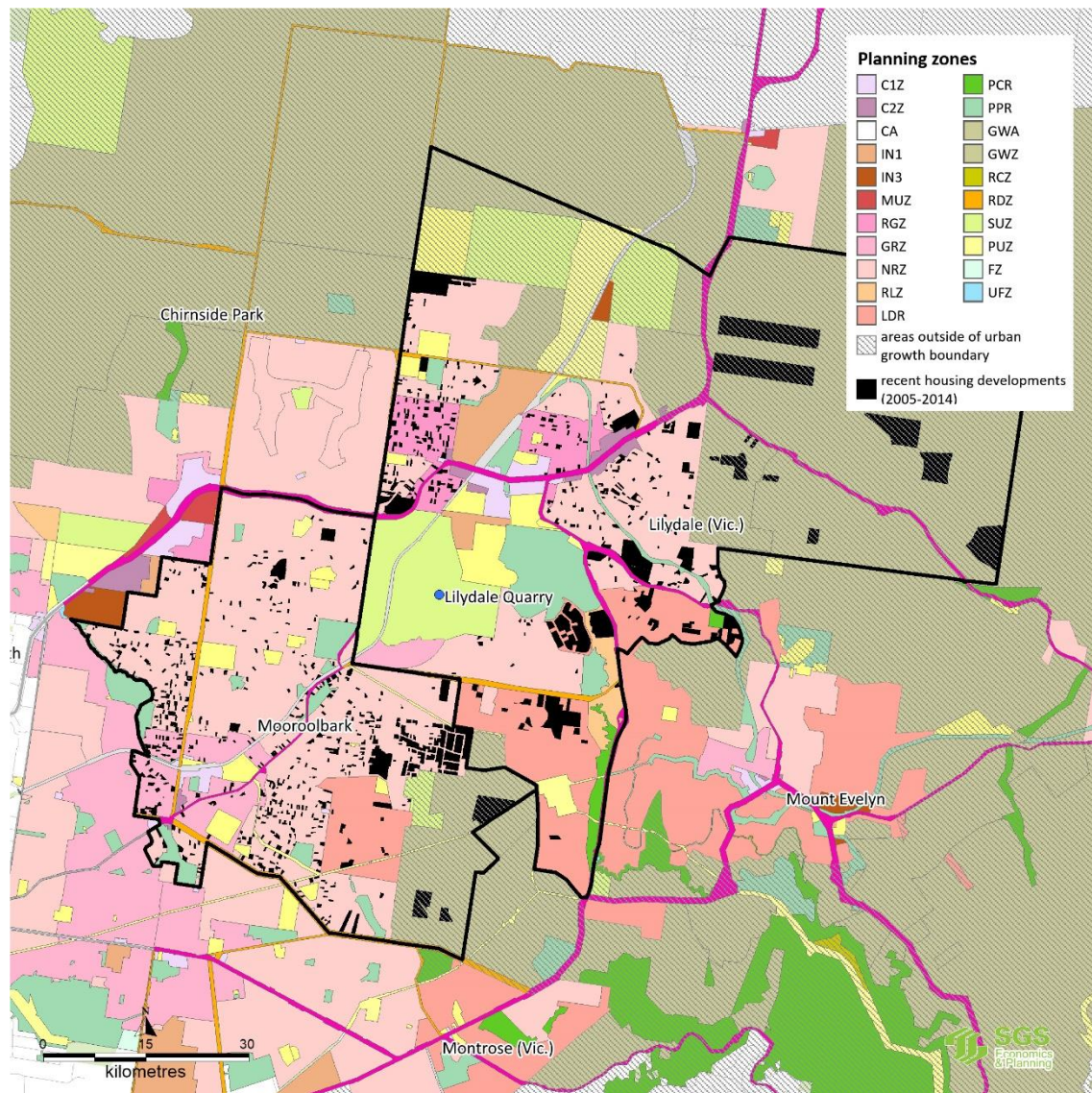


Source: Housing Development Data, DELWP, 2014.

The overwhelming majority (1,732 of the 2,544 dwellings) were built on land zoned Neighbourhood Residential Zone 1. The figure overleaf shows additional dwellings by zone.



FIGURE 12. HOUSING DEVELOPMENTS BY ZONE 2005- 2014



Source: Housing Development Data, DELWP, 2014.

The majority of new dwellings have been delivered at 20-30 dwellings per hectare (this equates to a 330 - 500 square metre lot size). The amount of dwellings developed at a net density of 30 + dph (14 per cent) indicates significant demand for medium density housing in the ILQP sub market.

TABLE 10. NUMBER OF DWELLINGS IN RECENT DEVELOPMENTS BY DENSITY

Total dwellings in recent developments	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market	ILQP sub market %
0-5 dwellings per hectare	95	22	3	120	4%
5-10 dwellings per hectare	185	27	8	220	7%
10-15 dwellings per hectare	156	265	39	460	15%
15-20 dwellings per hectare	199	270	86	555	18%
20-30 dwellings per hectare	389	739	167	1295	42%
30-50 dwellings per hectare	239	175	29	443	14%
50 plus dwellings per hectare	4	0	0	4	0%
<b>Total Number of Constructed dwellings</b>	<b>1267</b>	<b>1498</b>	<b>332</b>	<b>3097</b>	<b>100%</b>

Source: Housing Development Data (HDD), DELWP, 2014

\*Note, this table includes dwellings generated from knock down and rebuilds. Other tables reporting on the HDD show net additional dwellings; that is, they excluded knock down and rebuilds.



Due to the dataset used for this analysis, it is not possible for SGS to determine the gross density of recent developments. However, Intrapac has advised that gross density can be assumed as 70% of net density (i.e. dwellings developed at a net density of 30 dwellings per hectare have a gross density of 23-24 per hectare).

Housing developments with net densities of around 30 – 40 dwellings per hectare (net) are being delivered across Melbourne resulting in various built form outcomes. The following aerials and street-view images show recent housing development projects that represent different net densities of between 30 and 40 dwellings per hectare.

FIGURE 13. UP TO 30 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE



FIGURE 14. 35 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE



FIGURE 15. 40 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE



FIGURE 16. 55 DWELLINGS PER HECTARE – 2 STOREY EXAMPLE



## Housing capacity in the sub market

In order to assess housing capacity, sites that are available for redevelopment first need to be identified. All lots (property parcels) where development has taken place over the last 10 years were considered unavailable for redevelopment. These were identified using the Housing Development Data set. All sites that had zoning that did not permit residential development were also identified as unavailable for redevelopment. Lots that were zoned RLZ (Rural Living Zone) or LDRZ- low density rural living were also considered unavailable due to the low maximum densities prescribed in the planning scheme. RLZ allows 1 dwelling per hectare maximum, while LDRZ allows 2.5 dwellings per hectare.

Housing capacity was approximated based on existing trends identified in the Housing Development dataset. The median density of developments across Mooroolbark and Lilydale was identified and applied to all available lots to determine total housing capacity. Developments outside of the urban growth boundary were excluded from the median density estimate. A median density of development of 21.7 dwellings per hectare was identified.

This density was applied to all lots identified as available to determine the total dwelling capacity of each lot. In the case of land zoned NRZ3, a maximum dwelling capacity of 1 was applied. (The planning scheme prescribes that any land zoned NRZ3 has a maximum of 1 dwelling allowed per lot).

The number of existing dwellings present on each lot was subtracted from the total dwelling capacity of each lot to identify the net dwelling capacity (the number of existing dwellings present on each lot was also obtained from the Housing Development Data set).

On this basis, the net dwelling capacity of the ILQP sub market has been calculated as **16,740 dwellings**.

Capacity analysis was based on existing trends in the Housing Development Data set. Median density was applied to all available lots, thus larger lots resulted in additional capacity.

TABLE 11. NET DWELLING CAPACITY OF THE ILQP SUB MARKET

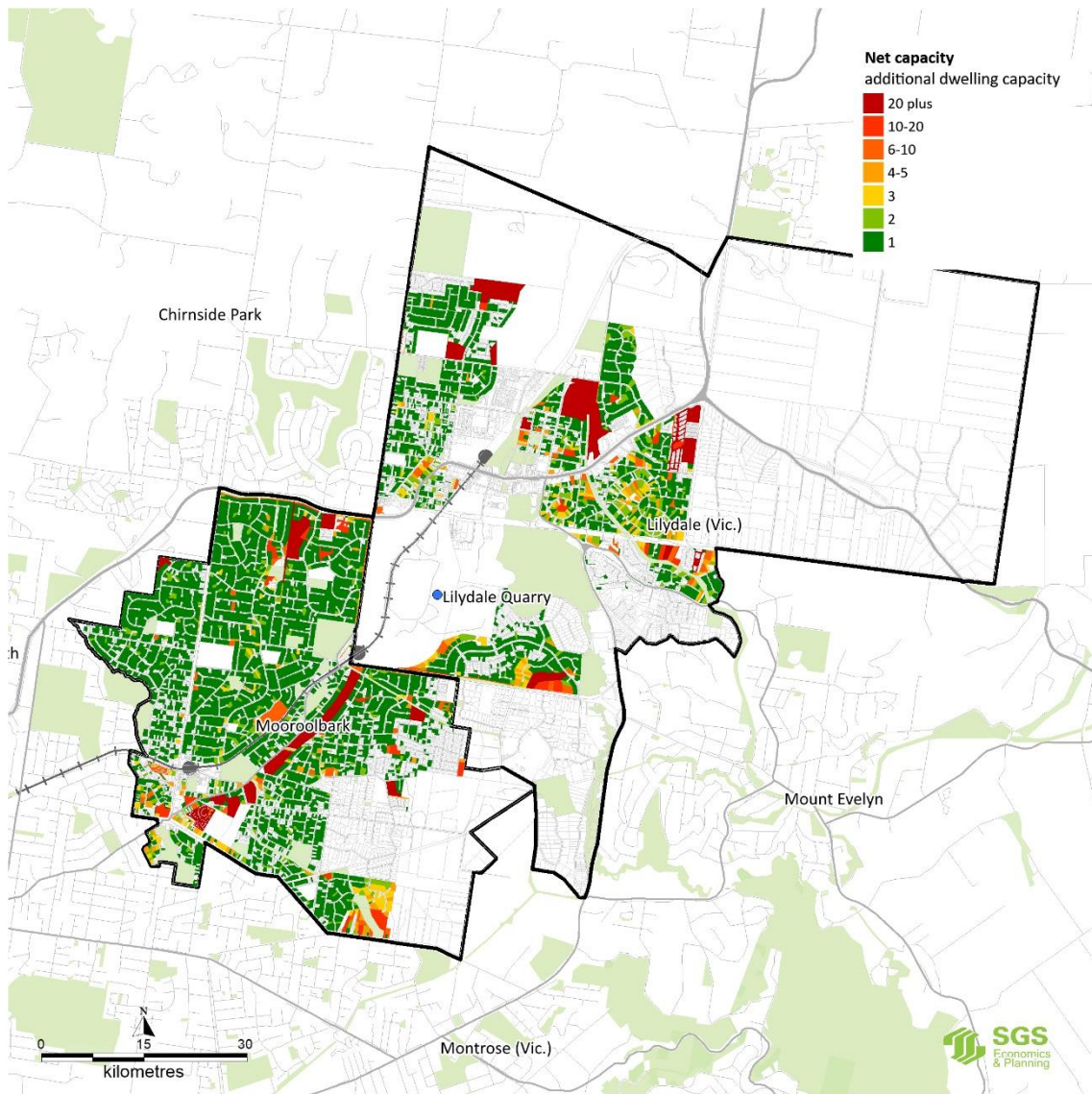
	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market
Existing dwellings	6,333	8,049	3,650	<b>18,030</b>
Total dwelling capacity	11,399	15,485	7,880	<b>34,770</b>
<b>Net dwelling capacity</b>	<b>5,066</b>	<b>7,436</b>	<b>4,230</b>	<b>16,740</b>

Source: SGS Economics and Planning, 2016



The figure below displays this capacity in terms of the number of dwellings that each site could yield. As it can be seen, the vast majority of lots only have the capacity for one additional dwelling.

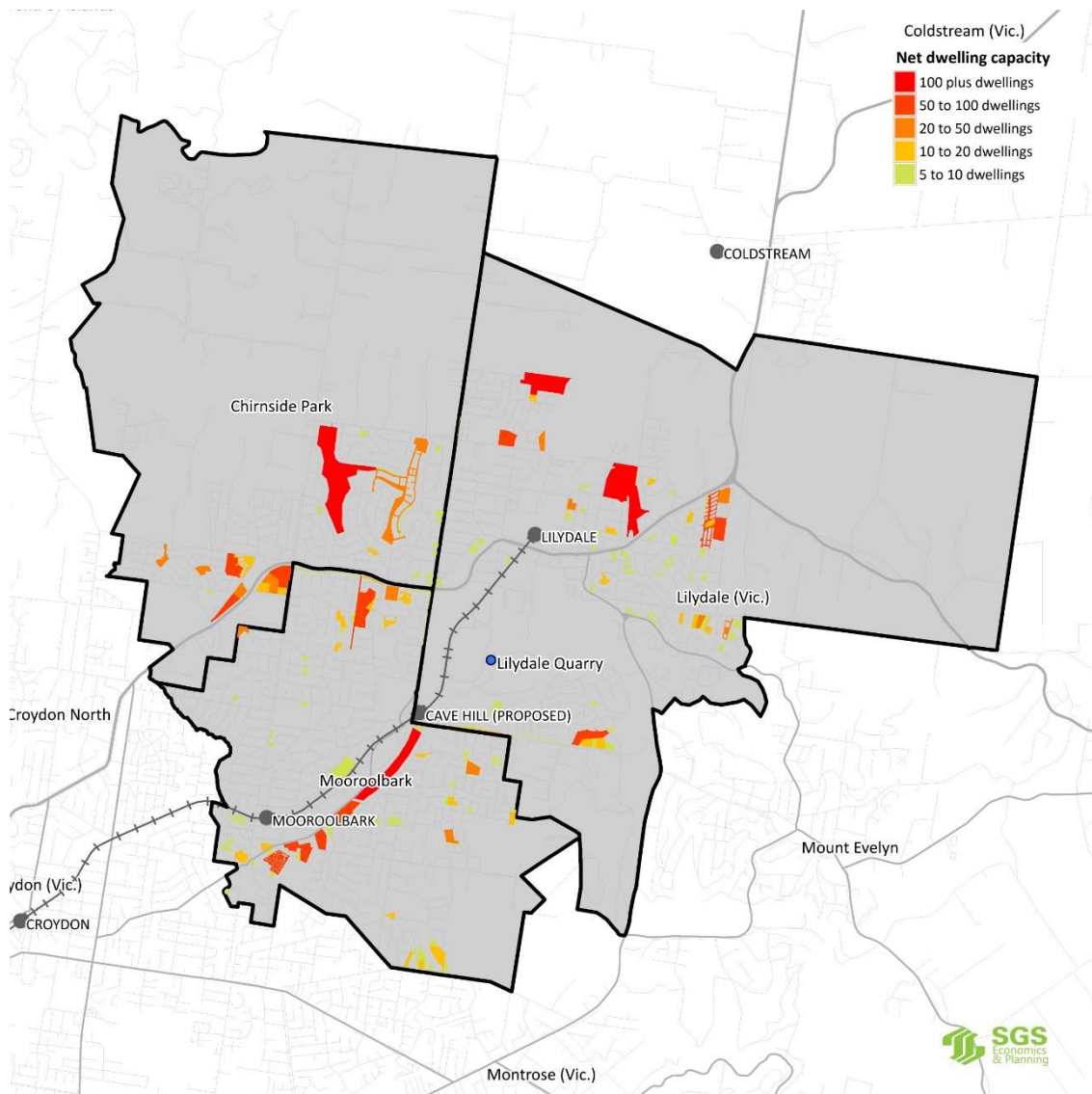
FIGURE 17. NET DWELLING CAPACITY



Source: Housing Development Data, DELWP, 2014

The figure overleaf removes all sites that have a net dwelling capacity of less than five dwellings, effectively highlighting the sites that are suitable for significant medium density development. This excludes the ILQP itself.

FIGURE 18. NET DWELLING CAPACITY- OVER 5 DWELLINGS PER SITE



Source: Housing Development Data, DELWP, 2014

The table below represents this data in a tabular format.

TABLE 12. NET DEWLLING CAPACITY – OVER 5 DWELLINGS PER SITE

Net dwelling capacity	Lilydale	Mooroolbark	Chirside Park	ILQP sub market
5-10 additional dwelling capacity	331	419	88	838
10-20 additional dwelling capacity	218	265	121	604
20-50 additional dwelling capacity	139	187	412	738
50-100 additional dwelling capacity	298	446	220	964
100 plus additional dwelling capacity	617	227	565	1,409
<b>Total</b>	<b>1,603</b>	<b>1,544</b>	<b>1,406</b>	<b>4,553</b>

Source: Housing Development Data, DELWP, 2014

The table overleaf breaks the net dwelling capacity down into lot size and notes the number of available sites in the ILQP sub market, showing again the dominance of lots sizes between 0 and 2,000 square metres.

This indicates that there is likely to be limited competition for the ILQP in terms of integrated, large scale medium density housing.

TABLE 13. NET DWELLING CAPACITY BY LOT SIZE

Lot size	Net dwelling capacity				No. of available sites in ILQP sub market
	Lilydale	Mooroolbark	Chirnside Park	ILQP sub market	
less than 1000 square metres	2,140	4,456	2,174	<b>8,770</b>	8,650
1000-2000 square metres	1,117	1,308	621	<b>3,046</b>	1,984
2000-5000 square metres	547	579	126	<b>1,252</b>	230
1/2 to 1 hectare	230	273	132	<b>635</b>	44
1-2 hectares	71	99	298	<b>468</b>	15
2-3 hectares	46	160	146	<b>352</b>	7
3-4 hectares	298	239	80	<b>617</b>	8
4-5 hectares	-	95	87	<b>182</b>	2
5-10 hectares	337	-	-	<b>337</b>	2
10-15 hectares	280	227	-	<b>507</b>	2
15-20 hectares	-	-	-	-	-
20-30 hectares	-	-	565	<b>565</b>	1
<b>Total</b>	<b>5,070</b>	<b>7,440</b>	<b>4,230</b>	<b>16,740</b>	<b>10,945</b>

Source: Housing Development Data, DELWP, 2014

### Likely take up of dwelling capacity

As the HDD data has shown, there has been an average of an annual 250 net additional dwellings built in the ILQP sub market over the 2005 and 2014 period, with the number of annual additional dwellings growing from 163 in 2005 to 588 in 2014.

In addition to this, dwelling projections out to 2031 suggest that between 2016 and 2031 there will be the need for additional 6,000 dwellings in the ILQP sub market (which equates to 400 dwellings each year).

It can therefore be assumed that in the absence of the ILQP project, the likely take-up of dwelling capacity for the ILQP sub market area will be around 250- 400 dwellings per year (between 2500 and 4000 over a 10 year period).

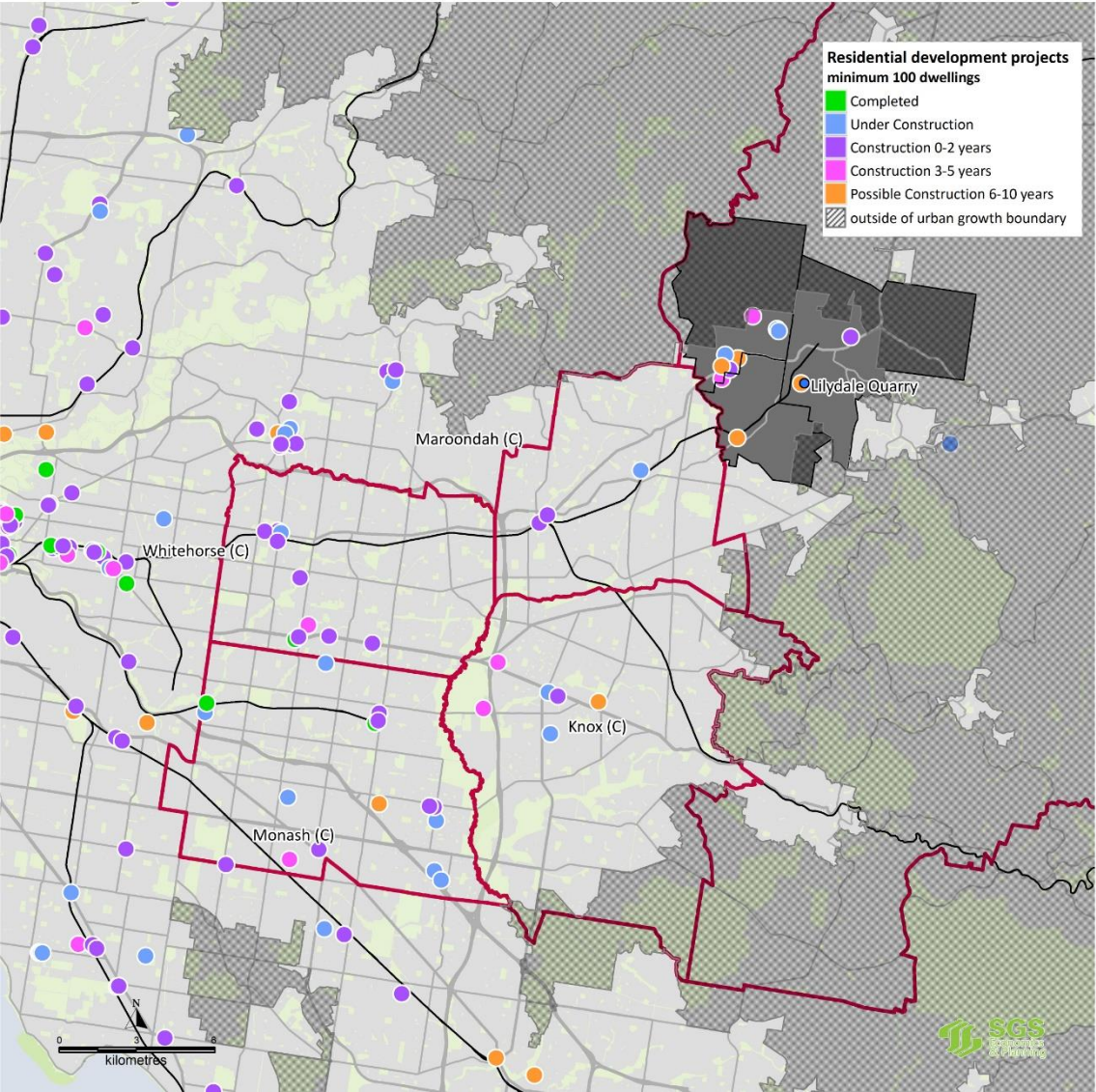
### Residential development projects

When looking at take up of capacity, it is important to understand the context in which the Lilydale Quarry resides regarding other residential development projects. The figure overleaf shows the locations of residential development projects that have the capacity to deliver over 100 dwellings over the next 10 years, as reported to the Urban Development Program (collated by DELWP).

The UDP indicates that there are a number of projects that could potentially be delivered within the ILQP sub market over the next 10 years. Projects within the ILQP sub market appear to be planned over a longer timeframe than areas closer to the CBD, as indicated by the prominence of the orange dots in the figure overleaf.



FIGURE 19. RESIDENTIAL DEVELOPMENT PROJECTS MINIMUM 100 DWELLINGS



Source: Urban Development Program, DELWP, 2016



# 5 THE CURRENT MARKET

## The current market by housing type

The market is currently dominated by 3 and 4 bedroom dwellings which are on large lots between 800 and 900 square metres. Two thirds of the market consists of detached houses, overwhelmingly in the 3-4 bedroom range. Units and townhouses (that consist of 20 per cent of the market) are at a lower price point and are on much smaller lots as expected.

All house and land packages within the ILQP are in the suburb of Chirnside Park.

TABLE 14. MEDIAN PRICE AND LAND SIZE; PROPERTIES FOR SALE IN THE ILQP SUB MARKET

Classification	No. of properties for sale	Median Price	Median Land size (sqm)
<b>Residential land</b>	<b>8</b>	<b>\$397,500</b>	<b>544</b>
House and land packages (to be constructed) 3 bedrooms	3	\$665,860	623
House and land packages (to be constructed) 4 bedrooms	6	\$696,813	630
House and land packages (to be constructed) 5 bedrooms	2	\$749,355	546
<b>All house and land packages</b>	<b>11</b>	<b>\$688,860</b>	<b>630</b>
House 2 bedrooms	1	\$500,000	633
House 3 bedrooms	39	\$580,000	864
House 4 bedrooms	33	\$640,000	845
House 5 bedrooms	8	\$630,000	868
House 6 bedrooms	3	\$690,000	869
House 7 bedrooms	1	\$2,625,000	37,300
<b>All houses</b>	<b>85</b>	<b>\$610,000</b>	<b>862</b>
Townhouse 2 bedrooms	10	\$450,000	128
Townhouse 3 bedrooms	4	\$470,000	not available
Townhouse 4 bedrooms	1	\$580,000	487
<b>All townhouses</b>	<b>15</b>	<b>\$450,000</b>	<b>239.5</b>
Unit 2 bedrooms	6	\$414,975	246
Unit 3 bedrooms	5	\$575,000	304
Unit 4 bedrooms	1	\$520,000	250
<b>All units</b>	<b>12</b>	<b>\$518,750</b>	<b>254</b>
<b>Unit block</b>	<b>1*</b>	<b>\$1,200,000</b>	<b>956</b>
<b>Acreage/ semi-rural</b>	<b>1</b>	<b>price withheld</b>	<b>262,000</b>
<b>All properties</b>	<b>133</b>	<b>\$590,000</b>	<b>735</b>

Source: Realestate.com.au live property data extracted on 4<sup>th</sup> October 2016

\*\*\* 3 x units for combined sale

The following images show examples of properties currently for sale/ have recently sold in the ILQP sub market.

FIGURE 20. HOUSE AND LAND PACKAGE EXAMPLE – 3 BEDROOM



**Lot 5190 Locksley Road  
Cloverlea Estate  
Chirnside Park**

**Bedrooms: 3  
Bathrooms: 2  
Carparks: 2**

**Price: \$546,350  
Land size: 350 sqm  
Building size: 139.35 sqm**

FIGURE 21. HOUSE AND LAND PACKAGE EXAMPLE– 4 BEDROOM



**Lot 5178 Outlook Drive  
Cloverlea Estate  
Chirnside Park**

**Bedrooms: 4  
Bathrooms: 2  
Carparks: 2**

**Price: \$681,860  
Land size: 630 sqm  
Building size: 222.97 sqm**

FIGURE 22. HOUSE EXAMPLE – 3 BEDROOM



**3 Diane Crescent  
Lilydale**

**Bedrooms: 3  
Bathrooms: 2  
Carparks: 4**

**Price: \$590,000- \$640,000  
Sold: \$645,000  
Land size: 617 sqm**

FIGURE 23. HOUSE EXAMPLE – 4 BEDROOM



**130 Lakeview Drive  
Lilydale**

**Bedrooms: 4  
Bathrooms: 2  
Carparks: 2**

**Price: \$670,000 – 730,000  
Land size: 884 sqm**

FIGURE 24. TOWNHOUSE EXAMPLE – 2 BEDROOM



**20 St Andrews Court  
Chirnside Park**

**Bedrooms: 2  
Bathrooms: 2  
Carparks: 2**

**Price: above \$450,000  
Land size: unknown**



FIGURE 25. TOWNHOUSE EXAMPLE – 3 BEDROOM



**10 Conlan Way  
Lilydale**

**Bedrooms: 3  
Bathrooms: 2  
Carparks: 0**

**Price: above \$450,000  
Land size: unknown**

FIGURE 26. UNIT EXAMPLE – 2 BEDROOM



**6/196 Hull Road  
Mooroolbark**

**Bedrooms: 2  
Bathrooms: 1  
Carparks: 1**

**Price: above \$390,000  
Land size: unknown**

FIGURE 27. UNIT EXAMPLE – 3 BEDROOM



**3/5 Contour Court  
Chirnside Park**

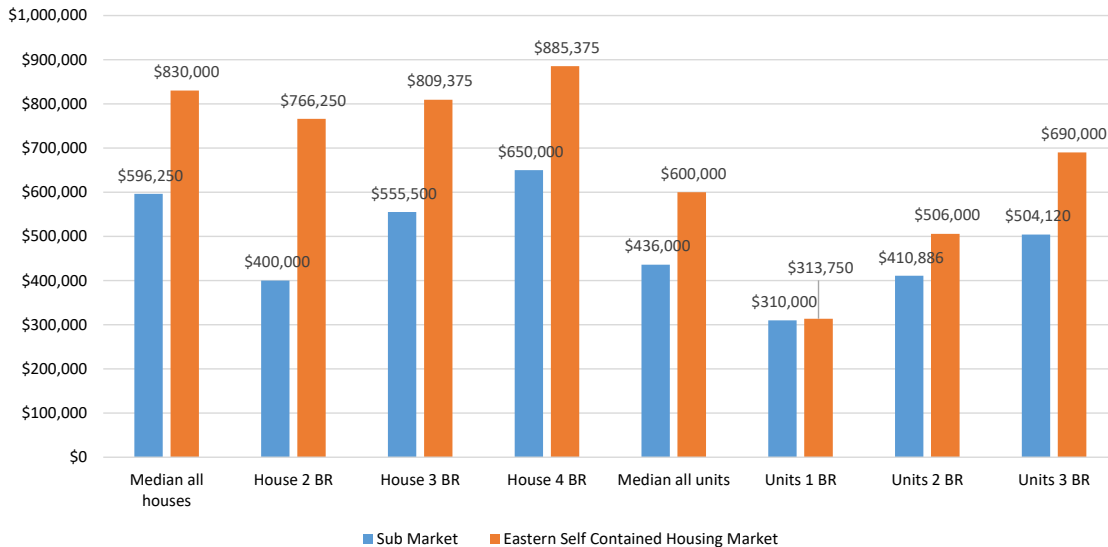
**Bedrooms: 3  
Bathrooms: 2  
Carparks: 2**

**Price: \$495,000 -  
\$540,000  
Land size: 224 sqm**



Recent property sales data suggests that the ILQP sub market is substantially more affordable than the Eastern self-contained housing market across all housing types except for one bedroom units.

FIGURE 28. MEDIAN HOUSE AND UNIT SOLD PRICES\*; ILQP SUB MARKET VS EASTERN SELF CONTAINED HOUSING MARKET



Source: Realestate.com.au suburb/neighbourhoods

Median House and Unit Price\*: The sold price of a property that falls in the middle of the total number of houses or units sold between 1 September 2015 - 26 September 2016. No data was recorded if less than 10 sales occurred in that time period.

## Medium density housing projects in the ILQP sub market

There have been a number of successful residential developments in recent years within the ILQP sub market that indicate an appetite for medium density housing. In 2014, a Chirnside Park development consisting of 176 townhouses completely sold out before construction finished. The townhouses within Gardens Estate developed by Sunland Group sold for a combined value of \$86.2 million (Yarra Valley Leader, 2015). The first stage of homes was completed in mid-2016, with the balance of homes expected in mid-2017. House prices ranged from \$390,000-\$550,000 with floor plans including two bedroom and three bedroom 'town homes', ranging in size up to 214 sqm (Yarra Valley Leader, 2015).

Sunland Group Managing Director Sahba Abedian attributes the success of the development to "open plan home designs, landscape gardens and community amenity [that complements] the existing natural beauty and lifestyle attributes of the area" (Yarra Valley Leader, 2015). Mr Abedian commented that "This approach certainly resonated with the local market, with a number of purchases from long-term local residents who wanted to downsize their home without having to move outside their community" Ibid.

FIGURE 29. GARDENS ESTATE, CHIRNSIDE PARK



Source: Sunland Group, 2016

## 6 CONCLUDING REMARKS

Projected demand for housing suggests there would be the need for at least 2,400 medium density dwellings within the Shire of the Yarra Ranges up to 2031. As there is nowhere else in the Shire of Yarra Ranges where this type of development is permitted, it is likely that this demand will need to be met in the ILQP sub market. Importantly, our analysis does not account for the quarry site attracting demand from neighbouring municipalities, or take into consideration the change in underlying preferences for housing types since the 2011 census. Our demand projections should therefore be treated as particularly conservative, with the demand for medium density in the ILQP likely to be much higher.

This analysis, along with the recent sales history for townhouses and apartments, the changing demographic of the local community and the success of the Gardens Estate development strongly indicates that **there is strong latent demand for medium density, high quality housing, in garden-like suburbs**. The market continues to be frustrated at the supply of medium density housing across the metropolitan area.

Therefore, there is an opportunity for Intrapac to provide a form of housing that is a genuine intermediate offering between standard detached dwellings and apartments or typical walk up flats.

The lingering demand for large floorplate housing with numerous bedrooms can be met by large **terrace style townhouses with front gardens and courtyards** (a product that has proven itself as extremely desirable in the sub market quite recently). If Intrapac was to apportion a percentage of the site to standard detached development and thereby relinquish total control of built form, there is a risk that the overall brand offering of the development may be weakened.

# APPENDIX

## Cultural and ethnically diverse community indicators data

TABLE 15. TOP 10 COUNTRIES OF BIRTH, 2011

Lilydale suburb	Mooroolbark suburb	Chirnside Park suburb	ILQP sub market	Eastern self-contained housing market	Metropolitan Melbourne
Australia 79.2%	Australia 78.1%	Australia 76.0%	Australia 78.1%	Australia 66.4%	Australia 63.3%
England 5.9%	England 5.7%	England 6.2%	England 5.9%	China* 4.1%	England 3.4%
Italy 1.5%	New Zealand 1.1%	Italy 2.1%	Italy 1.3%	England 4.0%	India 2.7%
New Zealand 1.3%	Scotland 0.9%	New Zealand 1.3%	New Zealand 1.2%	India 2.2%	China 2.3%
Netherlands 1.1%	Burma 0.9%	Germany 1.0%	Netherlands 0.9%	Malaysia 1.7%	Italy 1.7%
South Africa 0.8%	Netherlands 0.8%	Netherlands 0.9%	Scotland 0.8%	Sri Lanka 1.5%	New Zealand 1.7%
Germany 0.7%	Italy 0.7%	Scotland 0.8%	Germany 0.7%	New Zealand 1.2%	Vietnam 1.7%
Scotland 0.6%	South Africa 0.7%	South Africa 0.5%	South Africa 0.7%	Italy 1.0%	Greece 1.2%
India 0.4%	India 0.7%	India 0.5%	India 0.6%	Greece 1.0%	Sri Lanka 1.1%
China 0.3%	China 0.7%	Northern Ireland 0.4%	China 0.5%	Vietnam 0.9%	Malaysia 1.0%

Source: ABS Census 2011, Counting Persons, Place of Residence

\*excludes SARs and Taiwan

TABLE 16. TOP 10 LANGUAGES SPOKEN AT HOME, 2011

Lilydale suburb	Mooroolbark suburb	Chirnside Park suburb	ILQP sub market	Eastern self-contained housing market	Metropolitan Melbourne
English 90.0%	English 88.5%	English 87.5%	English 88.8%	English 72.5%	English 66.3%
Italian 2.3%	Italian 1.2%	Italian 2.7%	Italian 1.8%	Mandarin 4.6%	Greek 2.8%
German 0.5%	Mandarin 0.7%	German 0.7%	Mandarin 0.6%	Cantonese 3.0%	Italian 2.8%
Dutch 0.5%	German 0.5%	Polish 0.5%	German 0.5%	Greek 2.6%	Mandarin 2.5%
Mandarin 0.5%	Chin Haka 0.4%	Mandarin 0.4%	Dutch 0.4%	Italian 1.6%	Vietnamese 2.1%
Polish 0.2%	Dutch 0.4%	Dutch 0.4%	Cantonese 0.3%	Sinhalese 0.9%	Cantonese 1.8%
Spanish 0.2%	Greek 0.4%	Greek 0.3%	Greek 0.3%	Vietnamese 0.8%	Arabic 1.6%
Non-verbal, so described 0.2%	Cantonese 0.4%	Cantonese 0.3%	Arabic 0.2%	Hindi 0.7%	Hindi 0.8%
Arabic 0.2%	Arabic 0.3%	Arabic 0.3%	Polish 0.2%	German 0.6%	Turkish 0.8%
Cantonese 0.2%	Burmese and Related Languages 0.3%	Hindi 0.3%	Chin Haka 0.2%	Tamil 0.6%	Punjabi 0.7%

Source: ABS Census 2011, Counting Persons, Place of Residence

TABLE 17. RELIGIOUS AFFILIATIONS, 2011

Religious Affiliation	Lilydale suburb	Mooroolbark suburb	Chirnside Park suburb	ILQP sub market	Eastern self-contained housing market	Metro Melbourne
Buddhism	0.7%	0.7%	0.8%	0.7%	3.9%	4.0%
Christianity	61.9%	60.3%	63.8%	61.6%	56.2%	55.8%
Hinduism	0.3%	0.5%	0.2%	0.3%	2.0%	2.0%
Islam	0.3%	0.3%	0.5%	0.3%	1.1%	3.6%
Judaism	0.1%	0.1%	0.1%	0.1%	0.2%	1.1%
No Religion	27.7%	29.2%	25.2%	7.6%	27.3%	23.5%
Not stated	7.9%	7.2%	8.0%	7.6%	7.5%	8.1%
Other Religions	0.4%	0.6%	0.6%	0.5%	1.0%	1.1%
Supplementary codes	0.7%	1.0%	0.8%	0.9%	0.9%	0.9%
Total	100%	100%	100%	100%	100%	100%

Source: ABS Census 2011, Counting Persons, Place of Residence

TABLE 18. YEAR OF ARRIVAL, 2011

	Lilydale Suburb	Mooroolbark Suburb	Chirnside Park suburb	ILQP sub market	Eastern self-contained housing market	Metro Melbourne
Arrived pre 1950	0.2%	0.3%	0.4%	0.3%	0.4%	0.4%
Arrived between 1950 and 1959	2.7%	2.1%	3.4%	3.2%	2.5%	2.4%
Arrived between 1960 and 1969	3.5%	3.9%	4.4%	4.9%	3.5%	3.6%
Arrived between 1970 and 1979	2.7%	2.8%	2.8%	3.5%	3.1%	3.3%
Arrived between 1980 and 1989	2.3%	2.5%	3.0%	3.2%	4.4%	4.5%
Arrived between 1990 and 1999	1.8%	1.9%	2.1%	2.4%	4.1%	4.5%
Arrived between 2000 and 1 Jan 2011	3.1%	4.8%	3.2%	4.9%	10.6%	11.4%
Not stated	0.8%	0.7%	0.7%	0.7%	1.1%	1.3%
Not applicable	82.8%	81.1%	79.9%	81.8%	70.3%	68.5%
Total	100%	100%	100.0%	100%	100%	100%

Source: ABS Census 2011, Counting Persons, Place of Residence

TABLE 19. PLACES OF WORSHIP/ RELIGIOUS ORGANISATIONS IN THE ILQP SUB MARKET

Lilydale	Mooroolbark	Chirnside Park
Yarra Valley Vineyard Christian Fellowship	60 Cavehill Road	Australian Christian Churches Victoria
Grace Church Lilydale	24 Main Street	Catholic Archdiocese of Melbourne
Discovery Church	42- 44 Castella Street	Anglican Church of Australia Diocese of Melbourne
Catholic Archdiocese of Melbourne Lilydale	65 Clarke Street and 120 Anderson Street	Baptist Union of Australia
St John's Church	81 Castella Street	Uniting Church Australia
Uniting Church Australia	Cnr Anderson and George Streets	New Apostolic Church
Acts Bible Church	Sda Building, 608 Hull Road	St Francis in the Fields
Baptist Union of Victoria	305 Swansea Road	Australian Christian Churches Victoria
Seventh Day Adventist Church- Victorian Conference	Hull Road	
Australian Christian Churches Victoria	608 Hull Road,	

Source: Whereis.com



TABLE 20. SCHOOLS IN THE ILQP SUB MARKET

Lilydale		Mooroolbark		Chirnside Park	
School	Type	School	Type	School	Type
Lilydale Heights College	Government	Mooroolbark College	Government	Chirnside Park Primary School	Government
Lilydale High School	Government	Yarra Hills Secondary College	Government	Oxley Christian College	Non Government- Christian
Lilydale Primary School	Government	Manchester Primary School	Government		
Lilydale West Primary School	Government	Bimbadeen Heights Primary School	Government		
Edinburgh College	Non- Government - Seventh Day Adventist	Pembroke Primary School	Government		
Walford College	Non- Government - Anglican	Yarralinda School and Early Learning Centre	Government		
Mount Lilydale Mercy College	Non- Government - Catholic	Mooroolbark East Primary School	Government		
		Billanook College	Non- Government- Uniting		
		St Peter Julian Eymard Primary School	Non- Government- Catholic		

Source: Google

TABLE 21. MAJOR CLUBS/ SOCIETIES IN THE ILQP SUB MARKET

Lilydale		Mooroolbark		Chirnside Park	
Rotary Club of Lilydale	Lilydale Football Club	Mooroolbark Scout Club	Lions Club of Mooroolbark	Chirnside Park Country Club	Chirnside Park Netball Club
Lions Club of Lilydale	Lilydale Toastmasters Club	Junior Chamber Whitehorse-Maroonadah	Mooroolbark Football Club	Chirnside Park Football Club	Chirnside Park Bowls Club
Returned and Services League	Lilydale Radio Yacht Club	Mooroolbark Soccer Club	Mooroolbark Pony Club	Chirnside Club Cricket Club	
Yarra Valley Fly Fishers	Lilydale Rifle Club	Mooroolbark Basketball Club	Mooroolbark Bowls Club	Chirnside Club Basketball	
Lilydale Elderly Citizens Club	Lilydale Croquet Club	Mooroolbark Cricket Club	Mooroolbark and District Miniature Railway and Steam Club	Heritage Golf and Country Club	
Lilydale Squash Club	Lilydale Community Sailing Club				
Lilydale Cricket Club	Lilydale District Pony Club				
Lilydale Bowling Club	Lilydale and Mooroolbark Pony Club				
Lilydale Swimming Club	Mount Lilydale Old Collegians Soccer Club				
Lilydale Junior Football Club	Lilydale and District Model Flying Association				
Lilydale Tennis Club	Mount Lilydale Basketball Club				
Yarra Glen and Lilydale Hunt Club					

Source: Google

## Contact us

### CANBERRA

Level 6, 39 London Circuit  
Canberra ACT 2601  
+61 2 6263 5940  
[sgsact@sgsep.com.au](mailto:sgsact@sgsep.com.au)

### HOBART

PO Box 123  
Franklin TAS 7113  
+61 421 372 940  
[sgstas@sgsep.com.au](mailto:sgstas@sgsep.com.au)

### MELBOURNE

Level 14, 222 Exhibition Street  
Melbourne VIC 3000  
+61 3 8616 0331  
[sgsvic@sgsep.com.au](mailto:sgsvic@sgsep.com.au)

### SYDNEY

209/50 Holt Street  
Surry Hills NSW 2010  
+61 2 8307 0121  
[sgsns@sgsep.com.au](mailto:sgsns@sgsep.com.au)

