

Upper Gully Strategic Plan

Technical Report – Land use and Economics

KNOX CITY COUNCIL

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CONTENTS

1. INTRODUCTION	4	5. RECOMMENDATIONS	41
1.1. BACKGROUND	4		
1.2. REPORT OUTLINE & METHODOLOGY	4		
1.3. STUDY AREA	5		
1.4. STRATEGIC CONTEXT	6		
2. LAND USE AND FUNCTION	10		
2.1. INTRODUCTION	10		
2.2. LAND USE AND FUNCTION	10		
2.3. REGIONAL CONTEXT	13		
3. RESIDENTIAL ASSESSMENT	19		
3.1. INTRODUCTION	19		
3.2. POPULATION	19		
3.3. AGE	20		
3.4. HOUSEHOLD INDICATORS	21		
3.5. DEVELOPMENT OPPORTUNITIES	26		
3.6. KEY FINDINGS AND RECOMMENDATIONS	30		
4. COMMERCIAL LAND ASSESSMENT	32		
4.1. INTRODUCTION	32		
4.2. EXISTING FLOORSPACE	32		
4.3. REGIONAL RETAIL HIERARCHY	33		
4.4. HISTORICAL FLOORSPACE GROWTH	35		
4.5. DEMAND DRIVERS	35		
4.6. PROJECTED DEMAND	36		
4.7. TOURISM OPPORTUNITIES	38		
4.8. KEY FINDINGS AND RECOMMENDATIONS (COMMERCIAL LAND)	39		

EXECUTIVE SUMMARY

OVERVIEW

This report has been prepared by Urban Enterprise to inform the Upper Gully Strategic Plan, undertaken by Tract for the Knox City Council. The report provides a technical assessment of the relevant economic and property considerations which influence land use and development in the Upper Ferntree Gully Neighbourhood Activity Centre (NAC). This report utilises a range of economic and demographic datasets and is presented in the key sections: Review of key background reports and strategies; Land use and function; residential assessment; and Commercial land assessment. Recommendations to capitalise on opportunities available for the NAC are consolidated in Section 5.

LAND USE AND FUNCTION

Upper Ferntree Gully Neighbourhood Activity Centre plays greater regional role than just servicing its local catchment. This is due to its location along a major highway and train line, proximity to the regionally significant Angliss Hospital, and high number of visitors passing through the NAC towards the Dandenong Ranges tourism region. This results in an economically diversified NAC which attracts a range of different user groups. The primary and secondary roles can be summarised as follows:

- **Primary Role**
 - **Local convenience food and retail;** the centre is anchored by Ferntree Plaza containing a full-line supermarket and other convenience retail offerings. In addition to servicing the retail needs of local residents, the centre services a large secondary retail catchment within the Dandenong hills.
 - **Tourism retail and hospitality;** retailers fronting Burwood Highway between Rose and Dawson Street are predominately smaller scale specialty retail shops and cafes. Many of these shops service visitors passing through the NAC travelling to the Dandenong Ranges and Kokoda Memorial Trail (1,000 Steps).
- **Secondary Role**

- **Employment (office and industrial);** employment uses within the centre include a mixture of small-scale professional offices, light industrial, and medical consulting clinics.
- **Highway sales;** Larger sites at the periphery of the centre, fronting Burwood Highway, are predominately used for large format uses (e.g. vehicle sales, garden supplies) which rely on the highway for exposure.
- **Health and wellbeing;** leveraging from the close proximity to the Angliss Hospital, the NAC supports a number of allied health and wellbeing practitioners.

RESIDENTIAL

The suburb of Upper Ferntree Gully has experienced minimal population and dwelling growth in recent years due to strict planning controls within the Dandenong foothills which aim to preserve the low density character of the area. The small number of vacant residential lots within the wider area, and large minimum subdivision sizes mean that opportunities for dwelling growth in the suburb are extremely limited. Any future dwelling growth in the suburb would need to occur within the NAC.

Although the local area will continue to be an attractive location for detached dwellings, analysis of key demographic trends indicate changing factors influencing. These include:

- An ageing population;
- Decreasing household size;
- Growing number of lone person households; and
- Growing number of 'couple only' households and a small decrease in households with children.

These changes generally point to the need for smaller dwellings, located in close proximity to services and public transport. The existing dwelling stock in Upper Ferntree

Gully is not well positioned to cater for these changes, with 78% of dwellings containing 3 or more bedrooms.

The primary opportunity for facilitating residential growth in the NAC is identified as redevelopment of larger sites at the periphery of the centre. These sites are currently used for car sales and garden supplies and are considered to represent long-term development opportunities. A review of any residential areas surrounding the NAC was not part of this project scope, as this was undertaken as part of the development of the draft Housing Strategy 2013.

COMMERCIAL, TOURISM & HEALTH

Existing demand for retail floorspace in the NAC is driven by the following key markets:

- **Local Residents;** servicing the needs of the primary and secondary catchments for convenience food and retail;
- **External Demand;** visitors to the NAC for community and health services, or passing trade from commuters by train and car; and
- **Tourism;** passing tourists who are visiting the Dandenong Ranges or 1,000 Steps.

Analysis of the primary and secondary retail catchments indicates that the residential population in these areas will experience minimal growth. Therefore, retail, commercial and industrial floorspace demand is unlikely to be driven by population and expenditure growth in the residential catchment. However, the centre is well positioned to leverage from its key locational and infrastructure advantages, primarily in relation to the tourism and health industries. Tourism visitation is considered to be a key driver of future retail floorspace demand. Considering the volume of tourists passing through the NAC, the yield from passing visitors is currently low. With tourism numbers expected to increase, opportunities to capture greater yield and expenditure include:

- Improved signage and branding;
- A retail and product mix which appeals to visitors;
- Cycling infrastructure; and
- Street and landscape improvements

The current provision of employment uses within the centre includes a mixture of small-scale professional offices, light industrial and medical consulting clinics. Economic trends in the wider region indicate a shift in employment growth towards professional services and the health sector which may facilitate some business and employment growth within the NAC.

Due to the existing concentration of health services within the NAC, proximity to the Angliss Hospital, and ageing population of the surrounding catchment, the health sector is considered a key driver for future business and employment growth in the centre. Opportunities for growth in small-scale office for professional services will be incremental and linked to mixed used developments.

1. INTRODUCTION

1.1. BACKGROUND

This report has been prepared by Urban Enterprise to inform the Upper Gully Strategic Plan, undertaken by Tract for the Knox City Council (**Council**).

Urban Enterprise has prepared this report to assess the relevant economic and property considerations for the strategic plan, including:

- Economic and demographic analysis of the surrounding catchment;
- Demand and supply of retail and commercial floorspace;
- Demand and capacity of Upper Ferntree Gully to accommodate residential development;
- High level tourism analysis and opportunities; and
- Directions for future land use as well as the role and function of the centre.

The following sections provide background information, data and analysis which have been provided to inform the Upper Gully Strategic Plan.

1.2. REPORT OUTLINE & METHODOLOGY

This report utilises a range of economic and demographic datasets including:

- ABS Census 2006 and 2011;
- Forecast ID Knox Projections;
- Victoria in Future 2014;
- Economic data sourced from the Knox Remplan Profile;
- Consumer spending data sourced from Marketinfo;
- Council's rates database for the NAC; and
- Tourism Research Australia, National Visitor Survey.

The report is presented in 5 key sections:

Section 1. Background: Review of key background reports and strategies and their implications for land use within the NAC.

Section 2. Land use and Function: This section provides an overview of the existing land use and function of the NAC. The economic role of the centre is analysed within the regional activity centre hierarchy. Key competitive advantages which may influence future development are identified.

Section 3. Residential Assessment: This section analyses demand for residential development within the NAC and the capacity of the centre to accommodate dwelling growth. Key residential indicators are analysed to identify trends impacting future demand. Future development opportunities to facilitate residential growth within the NAC are considered.

Section 4. Commercial Land Assessment: This section provides a review of commercial land use opportunities in the NAC. A floorspace audit was conducted to identify the existing commercial floorspace composition. The role of the NAC in the existing retail hierarchy is analysed, and future floorspace demand projected using a residential demand model. Other drivers of commercial floorspace demand are analysed including employment uses and tourism.

Section 5. Recommendations. This section consolidates the key recommendations for consideration within the Upper Gully Strategic Plan.

1.3. STUDY AREA

The study area is located within Knox City Council, on the border of the Yarra Ranges Shire. The focus of the study is on the Upper Ferntree Gully Neighbourhood Activity Centre (NAC), but will also take into account the surrounding residential catchment which is considered to comprise the suburb of Upper Ferntree Gully.

The study site is located along the Burwood Highway at the eastern edge of Knox City and at the foothills of the Dandenong Ranges. The site includes Upper Ferntree Gully Railway Station, a premium grade station which draws a large number of daily commuters. The study area is bisected by Burwood Highway, a major transportation link in the eastern suburbs and a gateway for visitors to the Dandenong Ranges and nearby Kokoda Memorial Trail (known as 'The 1,000 steps').

The commercial centre is anchored by 'Maxi Foods', a full-line supermarket. The centre provides a number of functions including local convenience retail, community and health services, and tourism functions to service visitors travelling to the Dandenong Ranges.

The surrounding catchment is predominately standard density residential. There are some significant institutions including the Angliss Public Hospital which services a large part of the eastern region, Upper Gully Primary School and a nursing home. The catchment sits within the Dandenong Foothills area which known for its unique views, vegetated landscape and low density development. The catchment boundaries were selected on the general movement patterns in the area and consistency with population projections completed by Forecast ID on behalf of Knox City Council.¹

¹ <http://forecast.id.com.au/knox>

FIGURE 1 COMMERCIAL CENTRE



FIGURE 2 CATCHMENT



1.4. STRATEGIC CONTEXT

1.4.1. KNOX HOUSING STRATEGY

The *Draft Knox Housing Strategy 2013* aims to balance the changing housing needs of current and future residents with the important aspects of Knox that should be retained and enhanced. Some of the major trends which the strategy aims to respond to include:

- An ageing population;
- Growing lone person households; and
- Growing 'couple only' households and small drop in households with children.

Important to the Strategy are the preservation of Knox's '*green and leafy*' character and the importance of the Dandenong Ranges to remain central to the identity of the city. The draft Strategy aims to achieve a balance of retaining its character and responding to emerging trends by:

- Identifying preferred locations for new housing (in parts of Knox with good access to existing infrastructure and services, such as public transport, shops and schools).
- Identifying non-preferred locations for new housing (areas where there are environmentally significant vegetation or landscape character elements that should be protected).
- Giving current and future Knox residents choices about the type, size and location of housing within the City.
- Assisting developers and investors understand where and what types of housing are preferred, and where not to build.
- Assisting Council and other government agencies to decide where to invest in infrastructure and services.
- Providing guidance and therefore assisting residents with choices of where to live and businesses where to locate.

It utilises a 'scaled approach' to housing development, setting out the preferred types of housing (detached, dual occupancy, villa units, townhouses, and apartments) in four

different areas; Bush Suburban, Knox Neighbourhood, Local living, and Activity Areas, as shown in the table below:

TABLE 1 RESIDENTIAL AREAS AND PREFERRED DWELLING TYPES

RESIDENTIAL AREA TYPES:		detached dwellings	dual occupancy	villa units	townhouses	apartments/ mixed use	
Bush Suburban	ALL LOTS	▲	▲				
Knox Neighbourhood	SMALL LOTS (under 1000m ²)	▲	▲				
	LARGE LOTS (1000m ² and above)	▲	▲	▲			
Local Living	ALL LOTS	▲	▲	▲	▲		
Activity Areas	ALL LOTS (additional planning controls apply based on approved Structure Plans)	▲	▲	▲	▲	▲	
		▲ PREFERRED HOUSING TYPE	▲ PERMISSIBLE BUT NOT PREFERRED				

Source: City of Knox Draft Housing Strategy 2013

Upper Ferntree Gully is located in the 'Bush Suburban' category areas which have significant biological and landscape values. The draft strategy envisages that the area will continue to be low-scale neighbourhoods, characterised mostly by detached houses, where significant indigenous and native vegetation is retained and complemented. **The preferred housing types are detached dwellings and some dual occupancies.**

Amendment C131 has been exhibited by Council. This amendment proposes to implement new format residential zones to align with the Draft Housing Strategy. It is proposed that the Neighbourhood Residential Zone (NRZ) will be applied to the Upper Ferntree Gully residential area (currently Residential 3 Zone).

1.4.2. KNOX ECONOMIC DEVELOPMENT STRATEGY

The City of Knox's long-term planning framework is based on the Knox Vision 2025 strategic document, which provides direction for improving the social, economic and environmental wellbeing of the city. The vision consists of key themes that describe the aspirations for the city. The following themes are relevant to this study:

- Activity Centres with a unique and valued identity and image: Continue to develop local activity centres to provide a community hub for desirable and enhanced amenity for residents and traders.
- Provide local employment opportunities for a broad demographic across a full range of industries. Facilitate these opportunities by encouraging the development and growth of small to medium enterprises.
- Retail and industrial business attraction; an improved business mix as a result of a well-planned infrastructure and planning services.
- Advocate to link public and private transport to industrial and employment precincts.

The Strategy is driven by 11 Objectives, with the most relevant being *Objective 6: Fully developed and highly functional Major, Neighbourhood and Local Activity Centres*. Supporting this objective is *Strategy 6.5 Implementation of the Place Management Program of all Neighbourhood activity centres*. Knox City Council's 'Place Management Program' seeks to respond to all elements of an activity centre and its user communities, focusing not only the physical and economic determinants of the centre, but the importance of social and recreational attributes in defining user communities. Identifying the key user communities of the Upper Ferntree Gully NAC and understanding how the centre can better meet their needs will be a key driver of the Strategic Plan.

1.4.3. ZONES

Upper Ferntree Gully is characterised by Commercial 1 Zone covering the majority of the activity centre, Public Use Zone covering the Rail Station and associated infrastructure, and Road Zone covering Burwood Highway. There is also a Public Use Zone covering a child care centre. Surrounding the commercial centre is the General Residential Zone (formerly **Residential 3 Zone**).

COMMERCIAL 1 ZONE (C1Z)

The Commercial 1 Zone promotes vibrant mixed use commercial centres for retail, office, business, entertainment and community uses, as well as residential uses at densities complementary to the role and scale of the commercial centre.

The Commercial 1 Zone replaces the former Business 1 Zone (B1Z), Business 2 Zone (B2Z) and Business 5 Zone (B5Z).

PUBLIC USE ZONE 4 -TRANSPORT (PUZ4)

Public Use Zone 4 (PUZ4) aims to recognise public land use for public utility and community services and facilities and provide for associated uses that are consistent with the intent of the public land reservation or purpose. The Upper Ferntree Gully Station and associated infrastructure and commuter car parking are included in the PUZ4.

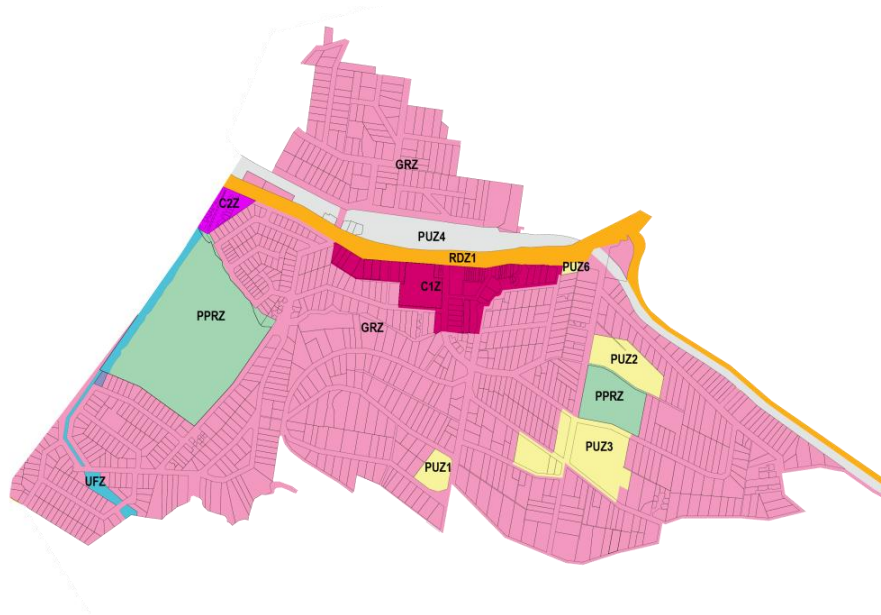
PUBLIC USE ZONE 6 -LOCAL GOVERNMENT (PUZ6)

Public Use Zone 6 (PUZ6) aims to recognise land for community facilities and services, and covers the child care centre on the corner of Burwood Highway and Rollings Road.

GENERAL RESIDENTIAL ZONE (GRZ)

General Residential Zone (GRZ) replaces the former R3Z and aims to encourage residential development which respects the neighbourhood character of the area, implement neighbourhood character policy, and provide a diversity of housing types and moderate housing growth in locations offering good access to services and transport. It also allows for educational, religious, recreational and community, and a limited range of non-residential uses to serve the local community in appropriate locations. Small scale retail uses are permitted with a number of conditions. Note that Amendment 131 proposes to rezone all currently GRZ areas to Neighbourhood Residential Zone (NRZ)

FIGURE 3 UPPER FERNTREE GULLY ZONING



Source: Planning Maps Online

1.4.4. DANDENONG FOOTHILLS

There is a suite of planning controls and standards that are designed to protect the significant landscape character of the Dandenong Foothills area which includes the study area. The Dandenong Foothills Local Planning Policy (Clause 22.01) aims to protect and enhance the landscape significance of the foothills, maintaining uninterrupted view lines from vantage points, and ensuring the sensitive design of buildings (development to be sited below the dominant tree canopy height). Further, the clause seeks to maintain the low density residential character of the landscape areas by ensuring that preferred subdivision patterns and lot sizes are retained.

Clause 22.01 requires that applications for buildings and works be accompanied by a site analysis and design response. **It is policy that building height does not exceed 7.5 metres.** This policy addresses five key landscape areas that make up the Dandenong Foothills area including the study area which is within the 'Backdrop and Ridgeline Area'. A number of overlays apply to the residential land surrounding the study area, but not the commercial centre of the study area, as outlined below.

DDO1: FOOTHILLS BACKDROP AND RIDGELINE AREA

Development controls include:

- The site area covered by buildings must not exceed 40%;
- The site area covered by buildings and impervious surfaces must not exceed 60%;
- **Minimum subdivision size of 1,000sqm.**

DDO2: LOWER SLOPE AND VALLEY AREAS

Development controls include:

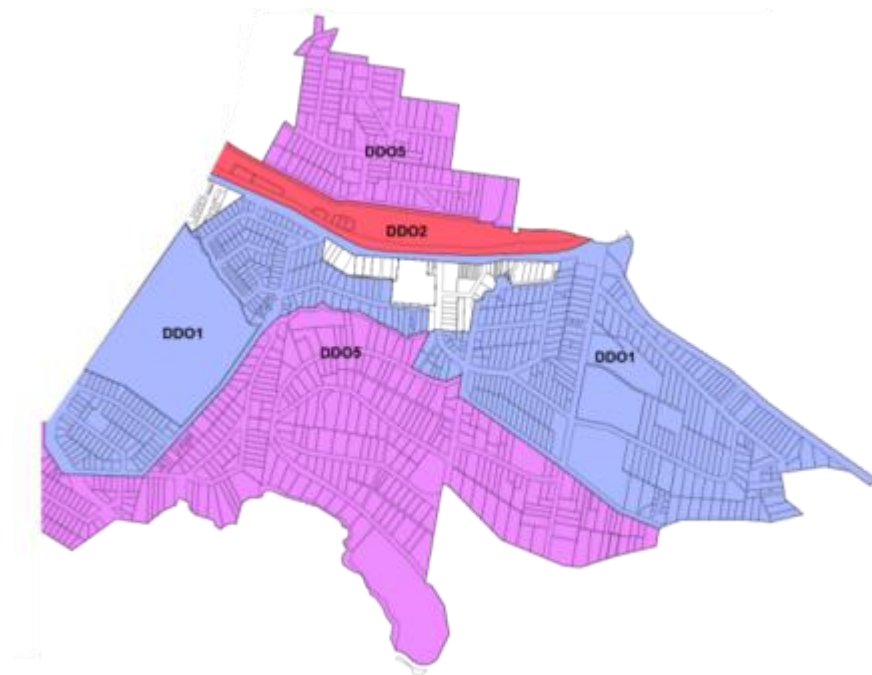
- The site area covered by buildings must not exceed 40%;
- The site area covered by buildings and impervious surfaces must not exceed 60%;
- **Minimum subdivision size of 500sqm.**

DDO5: FOOTHILLS BACKDROP AND RIDGELINE CENTRAL AREA

Development controls include:

- The site area covered by buildings must not exceed 40%;
- The site area covered by buildings and impervious surfaces must not exceed 60%;
- **Minimum subdivision size of 2,000sqm.**

FIGURE 4 UPPER FERNTREE GULLY DDO AREAS



Source: Planning Maps Online

Amendment C131 which implements the Draft Housing Strategy does not propose to amend minimum subdivision areas in the study areas as controlled by Design Development Overlays.

1.4.5. POLICY IMPLICATIONS

The key implications of policies reviewed are outlined below:

- The draft Knox Housing Strategy aims to identify preferred areas for new housing to support future population growth and non-preferred locations which should be protected from housing growth. The study site is located within the 'Bush Suburban' area which seeks to preserve the current low-density residential character, with preferred dwelling types being detached and dual occupancy.
- Local planning policy seeks to preserve low density character in the area and applies a 7.5m height limit to all development. Minimum subdivision sizes, as controlled in the Design and Development Overlays (DDO), mean there is very limited opportunity for residential growth in the catchment, outside of the commercial centre where no DDO applies.

2. LAND USE AND FUNCTION

2.1. INTRODUCTION

This section analyses the land use and economic function of the Upper Ferntree Gully NAC within the context of the broader activity centre hierarchy. The key competitive strengths of the centre which are expected to influence future development are identified.

2.2. LAND USE AND FUNCTION

Figure 5 shows the current land use of the NACs commercial centre. The NAC is largely within the C1Z, with a small portion in the PUZ6 (Pre-school). The land area of the NAC is approximately 73,000sqm (7.3ha). The key land uses within the centre are discussed opposite.

LOCAL CONVENIENCE

The centre is anchored by the Ferntree Plaza which contains a full line Maxi Foods Supermarket (approximately 3,000sqm) and other convenience retail offerings such as a bakery, butcher, take away outlets, pharmacy, and post office. There is a large amount of at grade parking surrounding the Plaza which serves local shoppers and passing commuters using Burwood Highway. There are also a number of personal services (hairdressers and tanning salons) and take away shops fronting Burwood Highway to service passing commuters and local residents.

The convenience retail offering services the local residents as well as residents within the Dandenong Hills which act as a strong secondary catchment.

TOURISM

Retailers fronting Burwood Highway between Rose and Dawson Street are predominately smaller scale specialty retail and hospitality. Many of these shops service visitors passing through the NAC towards the Dandenong Ranges and 1,000 Steps and include antique shops, home wares, and cafes. The Royal Hotel also draws visitors to the study area.

The 1812 Theatre on Rose Street is also an important component of the NAC. The theatre draws people from a broad catchment across the eastern metropolitan region and acts as a sub-regional entertainment attraction.

LARGE FORMAT HIGHWAY RETAIL

Larger sites at the periphery of the centre, fronting Burwood Highway, are predominately used for large format uses (e.g. vehicle sales, garden supplies) which rely on the highway for exposure.

HEALTH AND COMMUNITY SERVICES

The NAC, leveraging from the close proximity to the Angliss Hospital, supports a number of allied health and community service practitioners. This includes a row of practitioners along Rose Street. There is also a Veterinary Clinic, Kindergarten and Rehabilitation Clinic on Burwood Highway.

SMALL SCALE OFFICE

There are a number of small scale office uses scattered through the centre, including a building at 1174-1182 Burwood Highway which contains a number of professional services. There are a small amount of dwellings within the NAC which may also be used as home businesses. However, offices are not a significant land use in the centre.

VACANT LAND

There are a small number of vacant lots and premises fronting Burwood Highway including a former car sales yard, former bank and two small shop fronts. There is also a parcel of land at 6-8 Rose Street which is undeveloped and currently used for Maxi Foods centre staff permit parking.

INDUSTRIAL USES

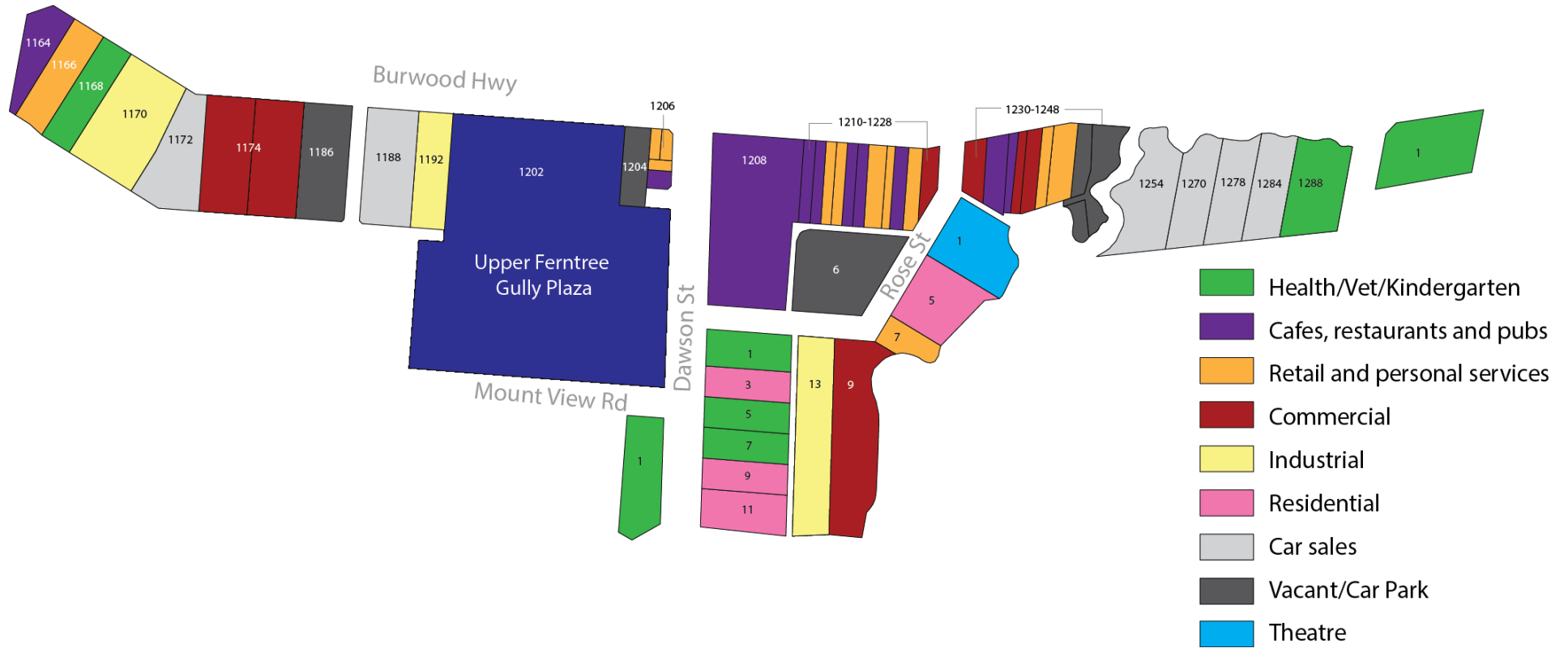
There is a small level of light industrial use within the centre including a panel beater, screen manufacturing and garden supplier.

2.2.1. ROLE SUMMARY

The role of the Upper Ferntree Gully NAC can be summarised as follows:

- **Primary:**
 - Local convenience food and retail;
 - Tourism retail and hospitality;
- **Secondary:**
 - Employment (office and industrial);
 - Highway sales;
 - Health and wellbeing;

FIGURE 5 UPPER FERNTREE GULLY LAND USE



*Note: Upper Ferntree Gully Plaza contains a mix of uses, mainly food and groceries and personal services.

2.3. REGIONAL CONTEXT

2.3.1. EMPLOYMENT

MUNICIPALITY

Table 2 shows the employment industries in Knox compared to Metropolitan Melbourne. Manufacturing is the largest employing industry, followed by Retail and Healthcare and Social Assistance. Compared to the Melbourne average there are smaller proportions of professional service workers.

The concentration of workers within Manufacturing, Retail and Wholesale Trade is a key issue for the local economy. Macro-economic shifts over the past decade have presented challenging conditions for these industries, as demonstrated by the decline in employment over the last census period. This follows a similar trend across Metropolitan Melbourne, especially in the eastern suburbs which has historically been a strong base for manufacturing.

Industries which have increased significantly over the past Census period include Healthcare and Social Assistance, Professional Scientific and Technical Services. These industries are expected to continue to grow over the short-term due to demographic shifts in the population. This may provide **new opportunities for employment within activity centres and within proximity to major health services**. Upper Ferntree Gully is well located to facilitate growth in these sectors due to its locality on the public transport network, proximity to the Angliss Hospital, and opportunities to provide for small-scale office development to support professional services.

TABLE 2 KNOX EMPLOYMENT BY INDUSTRY 2011

Industry	# Workers	% Knox Workers	% Melbourne Workers
Manufacturing	12,569	23%	11%
Retail Trade	7,441	13%	11%
Wholesale Trade	6,240	11%	5%
Health Care & Social Assistance	6,172	11%	12%
Construction	4,102	7%	6%
Education & Training	3,181	6%	9%
Professional, Scientific & Technical Services	3,053	5%	10%
Accommodation & Food Services	2,848	5%	6%
Other Services	2,401	4%	4%
Public Administration & Safety	1,605	3%	5%
Transport, Postal & Warehousing	1,469	3%	5%
Administrative & Support Services	1,444	3%	3%
Financial & Insurance Services	955	2%	5%
Rental, Hiring & Real Estate Services	666	1%	2%
Arts & Recreation Services	665	1%	2%
Information Media & Telecommunications	592	1%	2%
Electricity, Gas, Water & Waste Services	279	0%	1%
Agriculture, Forestry & Fishing	78	0%	0%
Mining	47	0%	0%
Total	55,807	100%	100%

Source: Knox Remplan Profile 2014

TABLE 3 CHANGE IN EMPLOYMENT BY INDUSTRY 2006-2011

Industry	Growth in Knox Workers 2006-2011	% Growth of Knox Workers 2006-2011	% Growth of Melbourne Workers 2006-2011
Health Care & Social Assistance	828	15%	25%
Professional, Scientific & Technical Services	727	31%	22%
Construction	326	9%	28%
Education & Training	174	6%	18%
Information Media & Telecommunications	81	16%	4%
Administrative & Support Services	73	5%	12%
Electricity, Gas, Water & Waste Services	38	16%	50%
Public Administration & Safety	36	2%	17%
Arts & Recreation Services	28	4%	26%
Accommodation & Food Services	18	1%	18%
Mining	6	15%	37%
Other Services	-15	-1%	12%
Agriculture, Forestry & Fishing	-17	-18%	-1%
Rental, Hiring & Real Estate Services	-35	-5%	17%
Transport, Postal & Warehousing	-259	-15%	17%
Financial & Insurance Services	-316	-25%	14%
Retail Trade	-529	-7%	4%
Wholesale Trade	-603	-9%	2%
Manufacturing	-1,020	-8%	-6%
Total	-459	-1%	13%

Source: Knox Remplan Profile 2014

LOCAL EMPLOYMENT

Employment in the Upper Ferntree Gully suburb is shown in the table below. There are 1,578 employees in the Upper Ferntree Gully suburb. Health Care and Social Assistance is the major local industry due to the presence of the Angliss Hospital. Retail Trade and Accommodation & Food Services are the next largest industries, with a combined 214 employees, most of which are located in the NAC.

TABLE 4 UPPER FERNTREE GULLY EMPLOYMENT 2011

Industry	No. Employees	% Employees
Health Care & Social Assistance	1,001	63%
Retail Trade	150	10%
Accommodation & Food Services	64	4%
Education & Training	56	4%
Administrative & Support Services	55	3%
Wholesale Trade	51	3%
Other Services	38	2%
Professional, Scientific & Technical Services	36	2%
Construction	36	2%
Manufacturing	34	2%
Financial & Insurance Services	30	2%
Public Administration & Safety	17	1%
Transport, Postal & Warehousing	11	1%
Total	1,578	100%

Source: Knox Remplan Profile 2014

2.3.2. ACTIVITY CENTRE HIERARCHY

The recently released metropolitan strategy, Plan Melbourne, has removed certain activity centre categories which were a feature of Melbourne 2030. However, from an analysis perspective, the previous categories provide a useful method to understand the role and function of the centre within a regional context.

Upper Ferntree Gully was one of four Neighbourhood Activity Centres (NACs) in the Dandenong Foothills. Melbourne 2030 identified NACs as providing a limited mix of uses for local convenience to service the basic needs of the immediate residents, important focal points for the surrounding neighbourhood, ideally located close to community services, as well as being accessible by public transport.

The following provides a summary of the activity centre hierarchy within proximity of Upper Ferntree Gully, as shown in Figure 6.

PRINCIPAL ACTIVITY CENTRE

Knox City Shopping Centre was the Principal Activity Centre for the region and serves as a major shopping, entertainment, and employment centre. It is the third largest shopping centre in Melbourne with a leasable area of approximately 142,500sqm and is currently seeking Council approval for redevelopment which would expand the leasable floorspace to 188,500sqm. There is also a large employment precinct to the east of the shopping centre which generally consists of light industrial and associated office and civic uses.

MAJOR ACTIVITY CENTRES

Major activity centres in proximity to Upper Ferntree Gully include the following.

- Boronia Mall Shopping Centre is centred on the Boronia Railway Station, and contains two full-line supermarkets and a K-mart. The area also has a night-time entertainment function containing a cinema and bowling entertainment centre.
- Mountain Gate Shopping Centre is located at the junction of Burwood Highway and Ferntree Gully Road, approximately 3.5km from Upper Ferntree Gully. Similar to Boronia Mall Shopping Centre, it has a significant convenience shopping function with two full-line supermarkets. Due to the shopping centre's proximity to Upper Ferntree Gully and position along Burwood Highway, it would be expected to

compete strongly with the Upper Ferntree Gully NAC for convenience retail expenditure, especially for commuters residing in the Dandenong Hills.

NEIGHBOURHOOD ACTIVITY CENTRES

In close proximity to Upper Ferntree Gully is the Ferntree Gully Village NAC. The Village shares a number of attributes with Upper Ferntree Gully including its location on the Belgrave train line as well as the setting within the Dandenong Foothills. As a result of their close proximity, it is expected that the Village and Upper Ferntree Gully compete in attracting demand for residential, retail and commercial development. Understanding the key competitive differences between the centres will be important for future positioning. Upper Gully's relative strengths include its proximity to Angliss hospital and opportunity for continued growth in the health services sector, and the role of Upper Ferntree Gully as a key gateway to the Dandenong Ranges and opportunities for tourism development.

In addition, there are important synergies between the two centres. Each play an important role within the local community - the Village has a strong presence of community services including education, mental health, and disability support, whilst Upper Ferntree Gully has a strong health and medical services focus. This positions Upper Ferntree Gully as an attractive residential location for older residents through ready access to both community and health services.

OTHER ECONOMIC DRIVERS

Facilities which play an important role in the region include the following:

- **Angliss Hospital.** The public hospital is located less than a kilometre from the commercial centre of the NAC. The hospital services cover a region including the south of Knox to the south west of the Yarra Ranges, as well as Croydon and parts of Ringwood. The services provided include emergency care, general medicine, surgery, midwifery, paediatrics and rehabilitation. The other hospitals in the region include Maroondah Health (public) and Knox Private Hospital.
- **1,000 Steps.** The popular Kokoda Memorial Walk (1,000 Steps) is located less than a kilometre from the study area. No detailed assessment of visitation to the steps is available with reports estimating 75,000 people per month visit the steps². The

² <http://www.heraldsun.com.au/leader/east/safety-fears-for-1000-steps-fanatics-in-upper-ferntree-gully/story-fgnvixu-1226709887939>

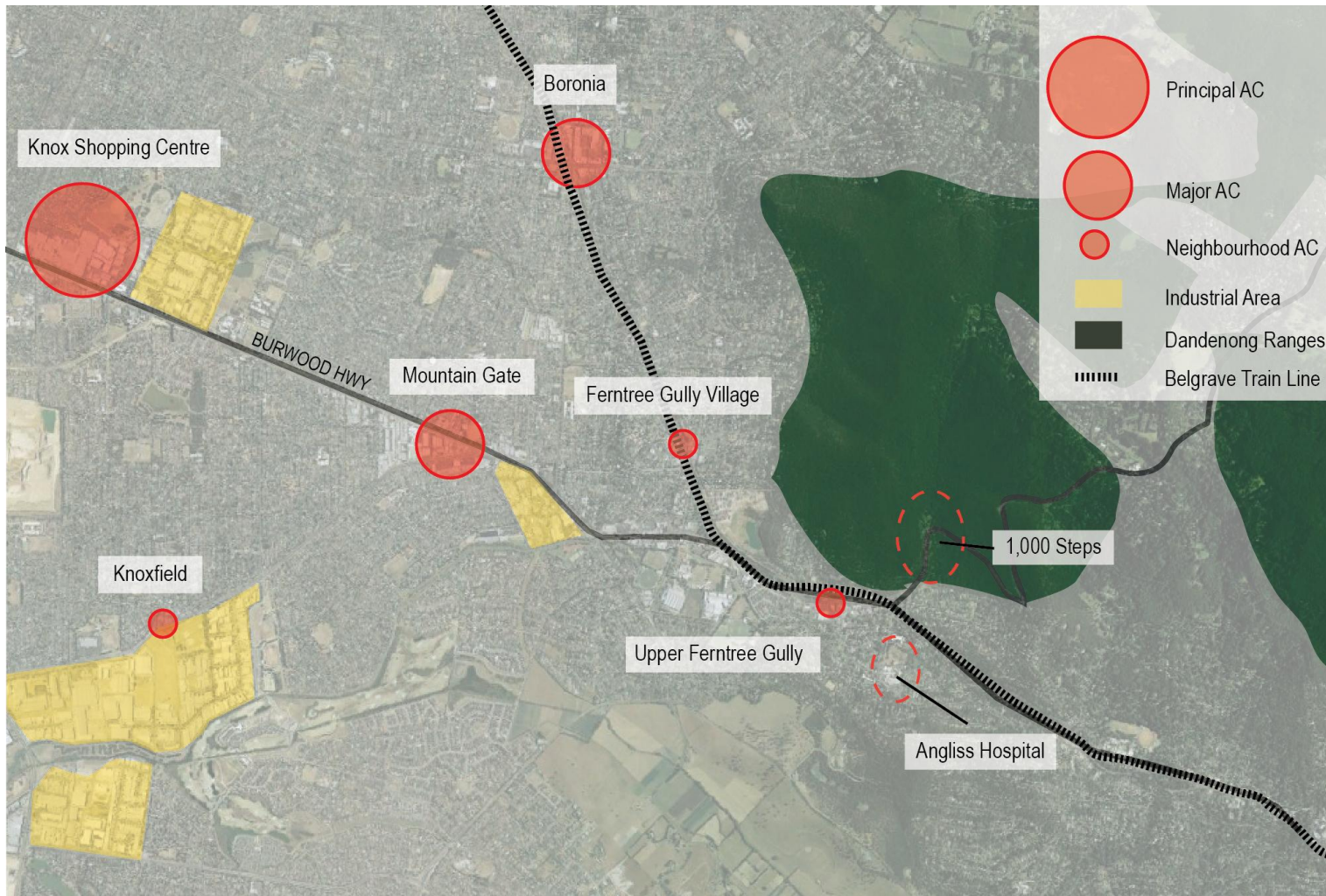
1,000 Steps are particularly popular on weekends for visitors undertaking leisure and fitness activities and visiting the recently constructed World War II memorial.

In addition to the 1000 Steps, the NAC also functions as a key gateway to the Dandenong Ranges tourism region and National Parks which drives strong weekend trading for cafes within the NAC.

TABLE 5 ACTIVITY CENTRE HIERARCHY

	Type*	Distance to UFTG	Major Functions
Knox	Principal	7km	<ul style="list-style-type: none"> • High-order comparison shopping • Convenience shopping • Employment • Entertainment
Mountain Gate	Major	3.5km	<ul style="list-style-type: none"> • Limited comparison shopping • Convenience shopping • Personal services • Bulky goods
Boronia	Major	5.5km	<ul style="list-style-type: none"> • Limited comparison shopping • Convenience shopping • Personal services • Entertainment (cinema and bowling) • Rail commuting
Ferntree Gully Village	Neighbourhood	2.5km	<ul style="list-style-type: none"> • Convenience shopping • Personal services • Community services and NFP organisations • Rail commuting
Upper Ferntree Gully	Neighbourhood		<ul style="list-style-type: none"> • Convenience shopping • Health and wellbeing • Tourism • Rail commuting

FIGURE 6 ACTIVITY CENTRE HIERARCHY



2.3.3. COMPETITIVE STRENGTHS

Future positioning of the centre should leverage from the competitive strengths of Upper Ferntree Gully within the regional activity centre hierarchy. The key strengths which may influence future development are summarised below.

REGIONAL ROLE

Upper Ferntree Gully has a unique function compared with most NACs. In general, the role of a NAC is to service the basic retail needs of immediate residents and provide some ancillary services and employment opportunities. Upper Ferntree Gully plays a more regional role in some respects due its location along a major highway and train line, proximity to the regionally significant Angliss Hospital, and the high number of tourists passing through the NAC. This regional role attracts a diverse range of user groups to the NAC from outside the local catchment for a range of purposes such as health and wellbeing, tourism and hospitality, and local convenience. This results in an existing NAC which is relatively economically diversified and contains key points of difference and competitive advantages due its local infrastructure and assets (highway exposure, rail, health, and tourism). Further development of employment and economic uses within the centre could leverage from these advantages as discussed below.

HEALTH AND WELLBEING

There is a significant concentration of health services within the NAC including medical consulting offices (physiotherapist, podiatrist, and dentist) and wellbeing studios (pilates studio). These services leverage from the proximity to the Angliss Hospital and to a lesser extent the 1,000 Steps which attracts a large number of fitness enthusiasts. Health is a key economic growth sector both in the broader economy and in the local area due to the proximity to the Angliss Hospital and ageing community. This may provide future development and employment opportunities in the NAC, especially for small businesses and practitioners.

TOURISM AND HOSPITALITY

The centre's position as a major gateway to the Dandenong Ranges tourism region and National Parks is a key strength and has the potential to drive future demand for goods and services in the NAC. The opportunity exists to improve the tourism offering within the centre (including retail mix, hospitality, and streetscape) to better service this market.

Recent trends in consumer spending show significant increase in hospitality spending. During the first half of 2014, retail expenditure for cafes, restaurants and takeaway food grew by 10.3%, more than double the growth of all other retail sectors³. This is considered a key opportunity for the centre in the future given the important tourism role of the Dandenong Ranges and 1,000 Steps in the broader region.

³ Colliers Retail Research and Forecast Report , 2014

3. RESIDENTIAL ASSESSMENT

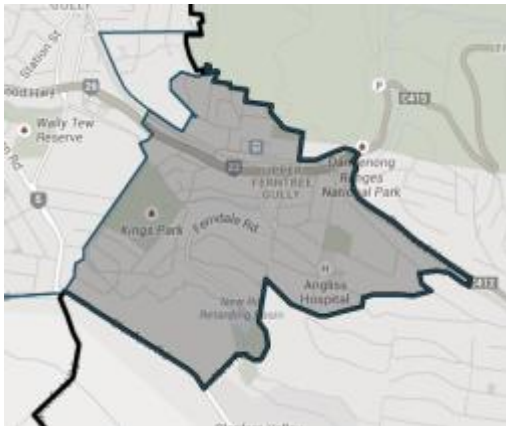
3.1. INTRODUCTION

This section provides a profile of residential land use in the Upper Ferntree Gully NAC and surrounding suburb. The main trends impacting future dwelling requirements are analysed. Demand for future residential growth within the commercial centre is analysed including potential development opportunities.

Demographic data and population projections were sourced from Forecast ID.⁴ The boundaries of Upper Ferntree Gully are shown in Figure 7.

Victoria in Future (VIF) 2014 projections were also analysed - these are the official State Government projections. However, projections are not available at the local level.

FIGURE 7 UPPER FERNTREE GULLY – POPULATION PROJECTIONS AREA



Source: Forecast ID, 2014

⁴ <http://forecast.id.com.au/knox>

3.2. POPULATION

HISTORICAL POPULATION GROWTH

The resident population of Knox City at the 2011 Census was 149,300 persons. The municipal population increased by 2,562 people at an average rate of 0.4% per annum between 2006 and 2011. Over the same period, the average population growth for Metropolitan Melbourne was significantly higher (2.3% per annum). Population increased modestly in Upper Ferntree Gully by 22 residents (0.2%).

TABLE 6 HISTORICAL POPULATION GROWTH 2006–2011

	2006	2011	Difference	% Growth p.a.
Upper Ferntree Gully	2,466	2,488	+22	0.2%
Knox	146,738	149,300	+2,562	0.4%
Metropolitan Melbourne	3,592,591	3,999,982	+407,391	2.3%

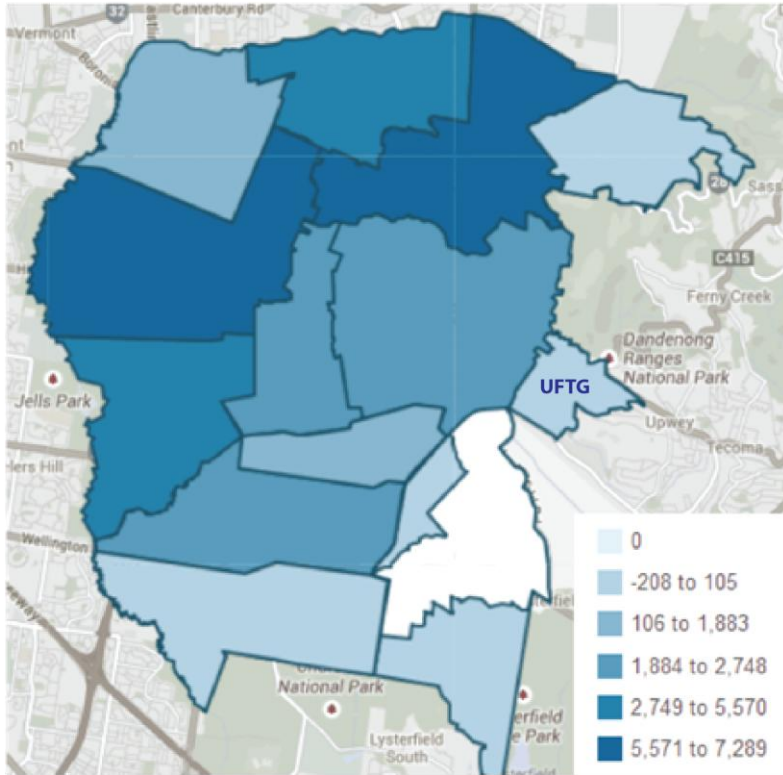
Source: Profile ID 2014

POPULATION PROJECTIONS

According to Forecast ID the City of Knox population is forecast to grow to 184,821 by 2036. This corresponds to an increase of 30,204 residents between 2011 and 2036, and an annual growth rate of 0.72% p.a. This is slightly higher than the VIF2014 projections which predict an annual growth rate of 0.69% p.a. to 2031. Greater Melbourne is expected to grow at a higher rate of 1.72% p.a. over the same period (VIF 2014).

The population for Upper Ferntree Gully is projected to remain stable from **2,567 in 2011 to 2,563 in 2036** (Forecast ID). It is predicted that population growth across the municipality will occur in other areas where there are identified significant development sites, as shown in the map below.

FIGURE 8 FORECAST POPULATION GROWTH IN KNOX 2011–2036



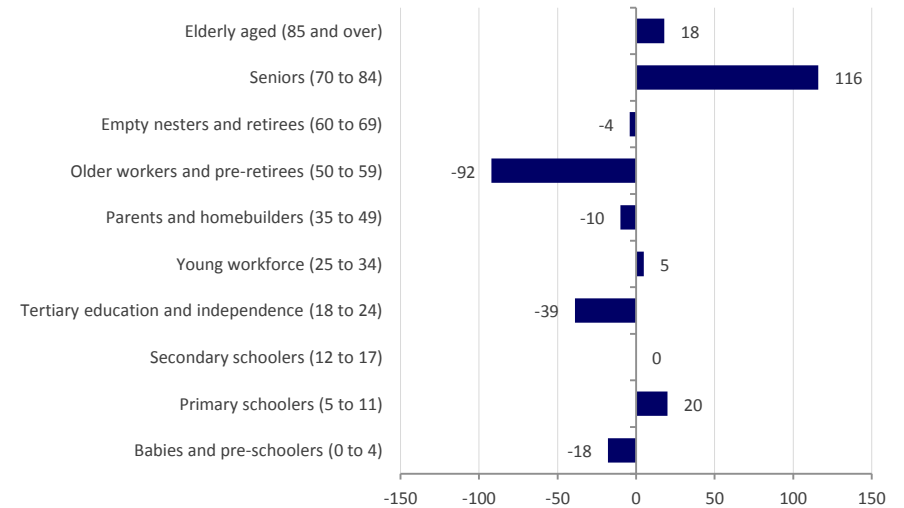
Source: Forecast ID, 2014

3.3. AGE

The median age of the Upper Ferntree Gully suburb in 2011 was 39 years, slightly older than the Knox municipality at 38 years, and Greater Melbourne at 36 years.

The age profile of Upper Ferntree Gully is expected to mature, with a significant increase in seniors aged 70 years and over. The trend of an ageing population is taking place across Australia and will also have implications on demand for housing, as well as consumer spending. Currently there are a high proportion of people aged in the 'older workers and pre-retirees' age bracket (50-59 years old). As this group matures to 70 years and over, they may seek other housing options such as downsizing or aged care. With a lack of housing diversity in the local area, these residents may need to move away from their community to seek other housing options unless a greater diversity can be provided in the local area.

FIGURE 9 UPPER FERNTREE GULLY CHANGE IN AGE STRUCTURE 2011–2036



Source: Forecast ID, 2014

3.4. HOUSEHOLD INDICATORS

3.4.1. NUMBER OF DWELLINGS

HISTORICAL DWELLING GROWTH

The number of households in Knox at the 2011 Census was 53,111, which was an increase of 1,877 dwellings since 2006. Over the same period, the number of households in Upper Ferntree Gully declined from 886 to 884.

TABLE 7 HISTORICAL DWELLING GROWTH 2006-2011

	2006	2011	Difference	% Growth
Upper Ferntree Gully	886	884	-2	-0.2%
Knox	51,234	53,111	1,877	4%
Metropolitan Melbourne	1,471,155	1,636,167	165,012	11%

Source: Profile ID, 2014

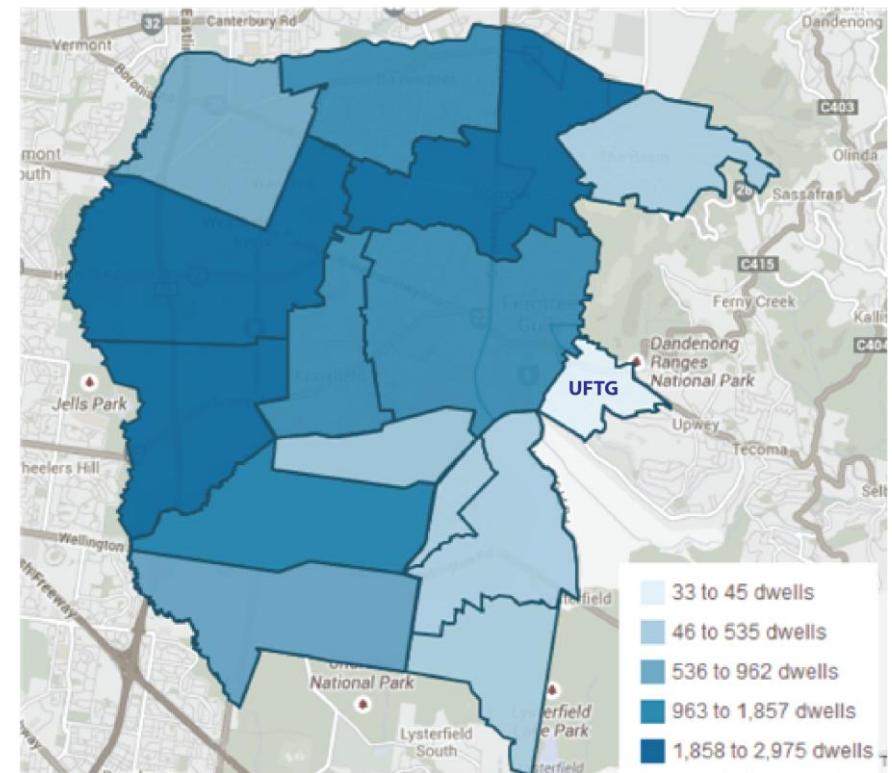
PROJECTED DWELLING GROWTH

Dwelling projections for Knox are sourced from the Forecast ID Projections.⁵ The City of Knox is forecast to grow to 72,461 dwellings by 2036. This corresponds to an increase of 15,604 dwellings, or 0.97% p.a. VIF 2014 projections predict a similar annual growth rate of 0.98% p.a. This is significantly lower than forecast dwelling growth rate across Melbourne over the same period at 1.89% p.a. (Victorian In Future 2014).

Forecast ID projections for Upper Ferntree Gully predict that dwelling growth will be minimal. **Between 2011 and 2036 it is forecast that only 33 new dwellings will be established in Upper Ferntree Gully**, an increase of just 0.14% p.a. Upper Ferntree Gully's planning controls and lack of significant development sites will mean that projected dwelling growth will need to occur in other parts of the municipality.

⁵ <http://forecast.id.com.au/knox>

FIGURE 10 KNOX PROJECTED DWELLING GROWTH 2011-2036



Source: Forecast ID, 2014

3.4.2. HOUSEHOLDS

HOUSEHOLD SIZE

The average household size in Upper Ferntree Gully was 2.7 people in 2011, slightly lower than Knox at 2.8. The average household size is predicted to slightly decrease over time.

TABLE 8 AVERAGE HOUSEHOLD SIZE

	2011	2036
Upper Ferntree Gully	2.7	2.6
Knox	2.8	2.6
Metropolitan Melbourne	2.6	2.5

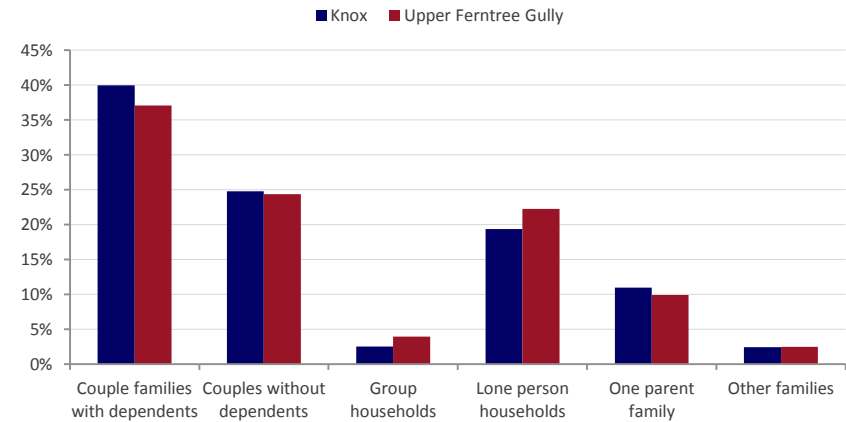
Source: Forecast ID 2014 and VIF 2014

HOUSEHOLD COMPOSITION

The household composition of Upper Ferntree Gully is similar to the Knox average. The largest household type in Upper Ferntree Gully was 'couple family with children', representing 37% of all households, and 'couples without children' representing 24%. Lone person households are slightly higher in Upper Ferntree Gully making up 22% of households.

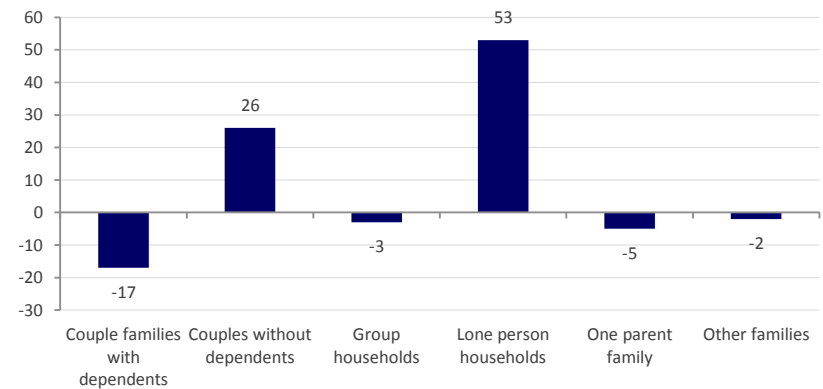
Figure 12 shows the forecast change in household composition for Upper Ferntree Gully to 2036. **Lone person households are projected to increase by 27%.** 'Couples without children' are also expected to increase by 26 households, while 'couples with children' will decrease by 17 households.

FIGURE 11 HOUSEHOLD COMPOSITION 2011



Source: Forecast ID 2014

FIGURE 12 CHANGE IN HOUSEHOLD COMPOSITION 2011-2036 UPPER FERNTREE GULLY



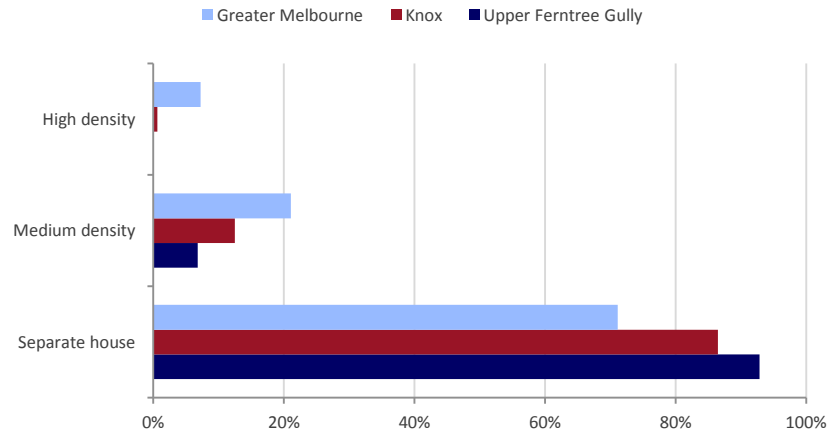
Source: Forecast ID 2014

DWELLING TYPE

In 2011 the vast majority of dwellings in Upper Ferntree Gully were detached dwellings (93%), with a small amount of medium density (7%).

The lack of diversity in housing types may be an issue in the future as housing trends towards smaller average household sizes, and higher numbers of lone person households.

FIGURE 13 DWELLING TYPE 2011



'Separate house' includes all free-standing dwellings separated from neighbouring dwellings by a gap of at least half a metre.

'Medium density' includes all semi-detached, row, terrace, townhouses and villa units, plus flats and apartments in blocks of 1 or 2 storeys, and flats attached to houses.

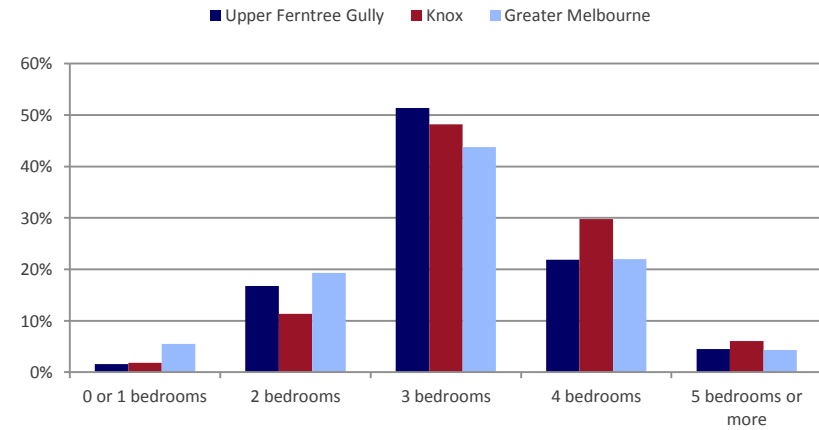
'High density' includes flats and apartments in 3 storey and larger blocks.

Source: Profile id 2014, ABS Census 2011

NUMBER OF BEDROOMS

In 2011, 78% of dwellings in Upper Ferntree Gully were 3 bedrooms or larger, compared to the Greater Melbourne average of 70%. There is a very small provision of one bedroom dwellings with only 2% within Upper Ferntree Gully. With the projected increase in lone person households, greater numbers of smaller dwellings will be required.

FIGURE 14 NUMBER OF BEDROOMS 2011



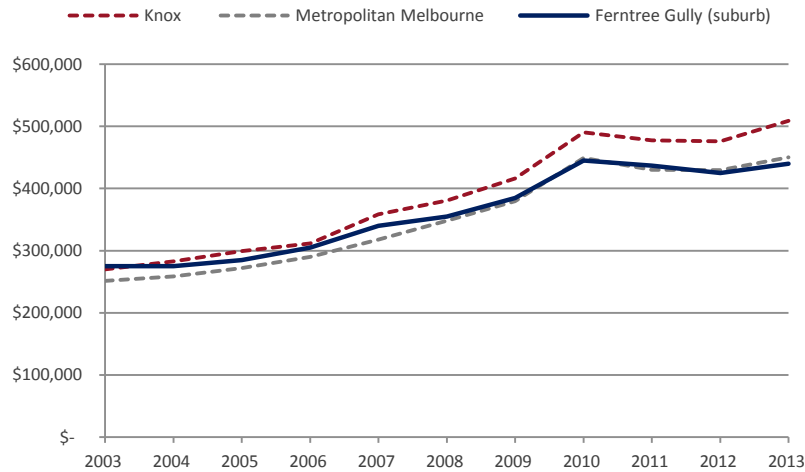
Source: Profile id 2014, ABS Census 2011

3.4.3. PROPERTY PRICES

HOUSE PRICE

In 2013 the median house sale price in Ferntree Gully (suburb) was \$450,000, which is lower than Knox and Greater Melbourne. Over the period 2003-2013, the Ferntree Gully and Knox median house price grew at 6.0% p.a. and 6.5% p.a. respectively, slightly higher than the Metropolitan Melbourne average (4.8% p.a.).

FIGURE 15 MEDIAN HOUSE PRICE 2003-2013

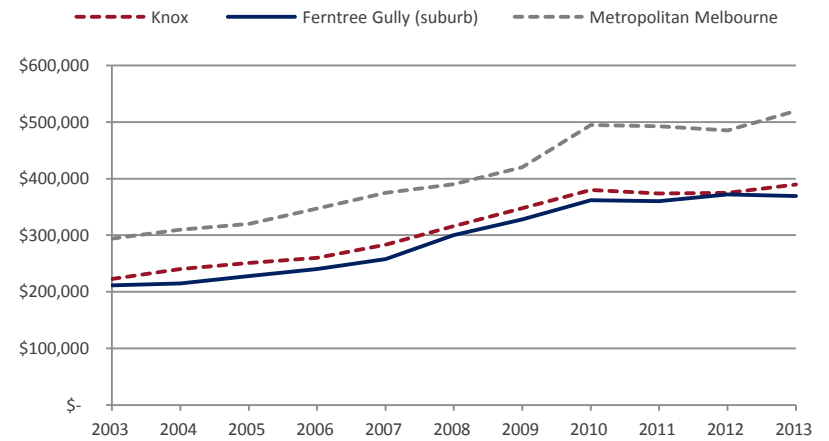


Source: DSE Guide to Property Values 2013

UNIT/APARTMENT PRICE

In 2013 the median unit and apartment price in Ferntree Gully (suburb) was \$369,000, which was lower than Knox (\$389,500), and significantly lower than Metropolitan Melbourne (\$520,000). Over the period 2003-2013, the median unit and apartment prices in Ferntree Gully grew at 5.7% p.a., similar to Knox (5.8% p.a.) and Metropolitan Melbourne (5.9% p.a.).

FIGURE 16 MEDIAN UNIT/APARTMENT PRICE 2003-2013



Source: DSE Guide to Property Values 2013

3.4.4. PLANNING AND BUILDING PERMITS

Historical housing demand and development activity was investigated by analysing dwelling approvals for the past five years within the Upper Ferntree Gully catchment area. The permit data shows that in recent years there has been very little residential development activity in the study area and surrounding catchment.

According to building permit data, there have been 11 new dwellings approved in the past five years, all within the R3Z. All new dwellings appear to be detached dwellings on a single lot.

The records of subdivisions for the catchment area show only 4 approved residential subdivisions over the past 5 years. All subdivisions were within the R3Z and included subdivision from one to two lots. The small number of subdivisions is a reflection of the restrictive planning controls and indicates that the capacity to subdivide at the current minimum lot size is very limited.

Analysis of planning permit data shows that there have been some recent applications for mixed-use development within the commercial study area. These include:

- **1172 Burwood Highway (approved 2013).** Development of land for two storey development comprising offices (two offices at 61sqm and 67sqm), 19 dwellings (one and two bedrooms), and basement car park with 24 spaces.
- **1168 Burwood Highway (2014, under assessment).** Development of the land for a 3 storey apartment building containing 15 dwellings, basement car parking and ground floor retail space.

Both of these proposed developments are on the western periphery of the activity centre where the lot pattern and size can accommodate larger scale development.

3.4.5. REAL ESTATE AGENT DISCUSSIONS

Residential demand is largely driven by Upper Ferntree Gully's scenic location, high level of amenity, and family friendly location. Consultation with real estate agents showed there was moderate amount of interest in apartment style living within the local area. The proposed development at 1172 Burwood Highway provides apartment style living within the NAC. Apartment buyers include a mixture of local elderly residents seeking to

downsize, first home buyers and investors. The area was appealing to buyers due to the proximity to the train station, shops, and lifestyle amenity.

Agents reported developer interest in developing additional mixed-use, apartment style developments within the commercial centre. However, it was unclear whether there was sufficient demand for apartment-style living at this stage to support such development. Medium density development such as townhouse, villa, and dual occupancy was seen as a more attractive residential product for the market.

3.4.6. HOUSING DEMAND SUMMARY

The local area will continue to be an attractive location for detached dwellings due to the suburban setting and existing housing stock. However, analysis of housing trends in Upper Ferntree Gully and the wider region indicate changing factors influencing housing demand and needs. These trends include:

- An ageing population;
- Decreasing household size;
- Growing number of lone person households; and
- Growing number of 'couple only' households and a small decrease in households with children.

These changes generally point to the need for smaller dwellings, reduced needs for large lots/open space, and increasing need for accessible dwellings for aged populations. The existing dwelling stock in Upper Ferntree Gully is not well positioned to cater for these changes, as identified in this section.

In addition to demographic shifts, research suggests that housing preferences have undergone somewhat of a 'cultural change' with greater acceptance of higher density housing and attached dwellings.⁶ This has facilitated significant apartment development across metropolitan Melbourne in recent years, particularly in inner and CBD locations.

Upper Ferntree Gully's access to public transport, health and community services, and retail facilities make it a strategic location for some level of residential intensification,

⁶ Grattan Institute, Getting the Housing We Want, 2011

particularly for older residents. This is a strategic objective of the draft Housing Strategy to enable residents to 'age in place'.⁷

3.5. DEVELOPMENT OPPORTUNITIES

3.5.1. PRIMARY DEVELOPMENT OPPORTUNITIES

The key development sites within the study area which may provide opportunity for future residential growth generally include the larger sites at the periphery of the activity centre. These sites include a mixture of vacant lots, and large format uses such as car sales and nurseries. The sites have been selected due to the large lot sizes, proximity to the activity centre core, and relative underutilisation of the land (both from a land use and site coverage perspective).

As discussed earlier, there have been two development applications in this area (1172 and 1168 Burwood Highway), for mixed used development with apartment dwellings and retail/office space on the ground floor frontage.

A case study of the permitted development for 1172 Burwood Highway provides an indication of the type and scale of development which could be accommodated within these areas in the future. Although there was some community objection to the intensity and scale of the development it was considered to be consistent with local planning policy by Council, a decision which was upheld at VCAT.

The development site is 1,329sqm, irregular shape, and contains a car sales yard. The proposal comprises;

- 2 storey mixed used development;
- 2 ground floor offices, at 61sqm and 67sqm;
- 19 dwellings (all with one or two bedrooms); and
- Basement carpark with 24 car spaces.

Applying these development parameters to other potential development sites provides an indication of the potential capacity for higher density residential development, as shown in

⁷ Draft Knox Housing Strategy 2013, pg 28

Table 5. It is important to note that the dwelling capacities are a high-level assessment and does not take into account a range of factors e.g. lot shape, access etc.

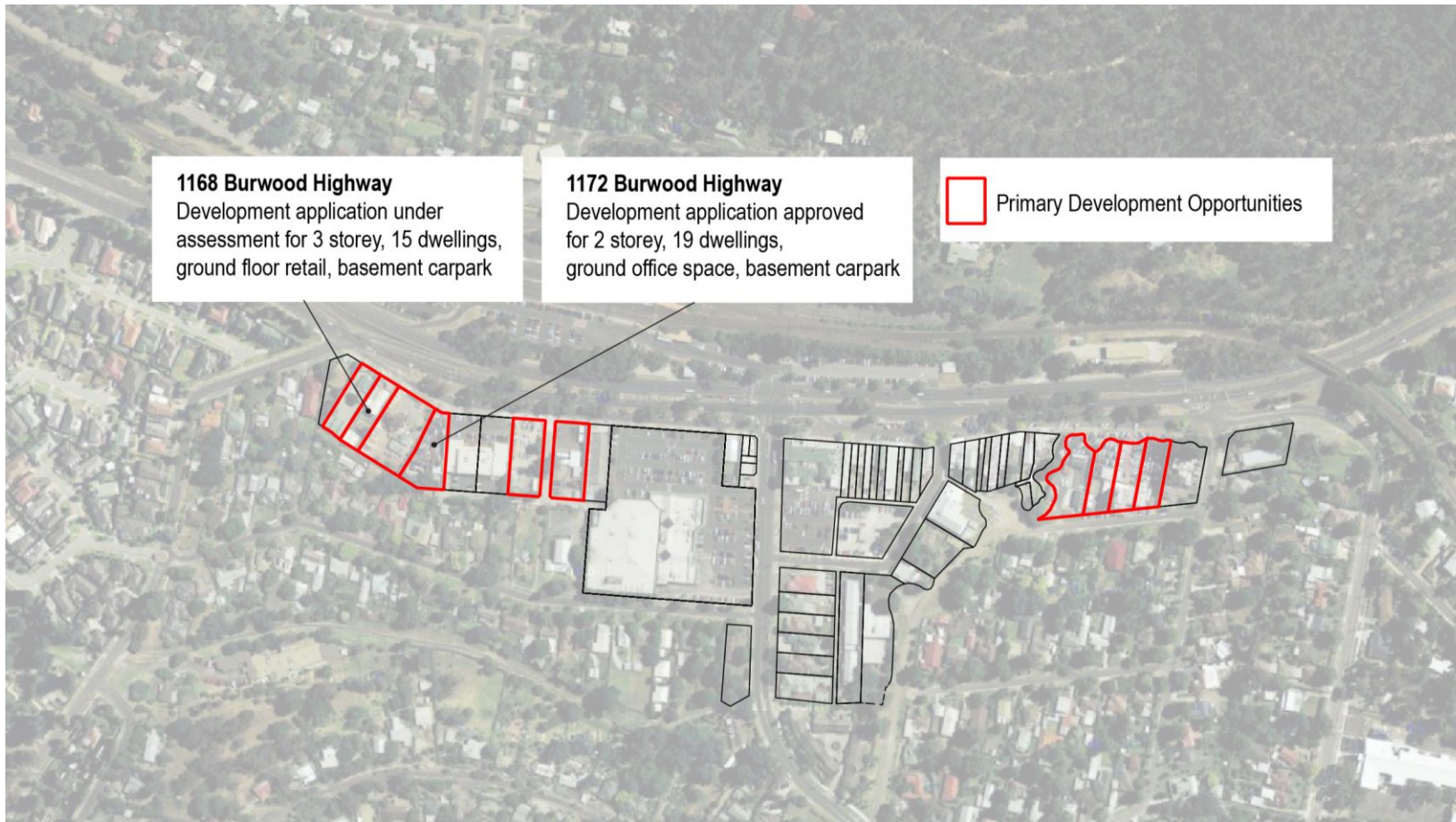
TABLE 9 PRIMARY DEVELOPMENT OPPORTUNITIES

Site Address	Current Use	Area (sqm)	Indicative Dwelling Capacity
1168 Burwood Hwy	Heath Clinic (development application pending)	935	15
1170 Burwood Hwy	Nursery	2,026	28
1172 Burwood Hwy	Car Sales (development application approved)	1,329	19
1186 Burwood Hwy	Vacant (former car sales yard)	1,394	19
1192 Burwood Hwy	Car Wash	1,477	21
1254 Burwood Hwy	Car Sales	1,459	21
1270 Burwood Hwy	Car Sales	983	14
1272 Burwood Hwy	Car Sales	966	13
1284 Burwood Hwy	Car Sales	962	13

Source: Urban Enterprise 2014

The total residential capacity of the primary development sites is estimated to be in the order of 150-170 dwellings. Although there appears to be some demand for apartment living in the area, it is considered that at this time, the level of market demand as indicated by population projections and discussions with real estate agents is considered to be insufficient to support any significant increase in the number of apartment developments in Upper Ferntree Gully. These sites are considered to be strategic long-term opportunities, as the population of Knox increases, residents seek new housing types, and the other activity centres closer to Melbourne experience greater mixed use development.

FIGURE 17 PRIMARY DEVELOPMENT OPPORTUNITIES



3.5.2. SECONDARY DEVELOPMENT OPPORTUNITIES

Secondary development opportunities include the central car park area which provides at-grade parking either side of Dawson Street for the Ferntree Gully Plaza, hotel, and retail specialities. As the centre continues to develop and to incorporate a greater mix of uses, the central supermarket and hotel carparks could be consolidated/redeveloped to reorient the town centre towards the supermarket and provide new retail tenancies with frontage to Dawson Street and connect the two Burwood Highway fronting sections of the NAC. These areas could be suitable for core retail/commercial uses.

Additionally, three sites in the south-west of the commercial centre (9,13 and 5 Rose Street) are large sized lots which could accommodate residential development. The sites are currently used for a dwelling, screen manufacturer and an office, which appear to be well established on the site. Planning permit records show that there has previously been an application to develop 8 double storey dwellings on 13 Rose Street. However, this was subsequently withdrawn. The size and shape of the lots would suit medium density, townhouse or villa type development. This housing type is considered as being in high demand, currently under provided in the area, and would suit older members of the community looking to downsize within the local area. Such unit/townhouse development would support walkability and access to public transport and retail stores. Redevelopment of sites on Rose Street may also provide the opportunity to improve the pedestrian links between the supermarket and tourism precinct.

FIGURE 18 SECONDARY DEVELOPMENT OPPORTUNITIES



3.5.3. ACTIVITY CENTRE INTERFACE

There is opportunity to encourage greater housing intensification through dual occupancy development at the interface of the activity centre and residential area. This would allow improved transition from higher density development on Burwood Highway, to the suburban residential areas to the south and facilitate the provision of a greater diversity of dwelling sizes in the catchment area.

Current planning controls limit residential intensification on the periphery due to the prescribed minimum subdivision size of 1,000sqm (DDO1). Most lots range between 1,000 and 1,500sqm meaning that no further subdivision can take place under current controls. Changes to the planning scheme would be required to support this type of development. Dual occupancy subdivisions, would provide for a greater choice of dwelling size and type in the local area, and would allow some dwelling growth in the area without relying solely on apartment developments which do not necessarily match the market demand in the area at this time. The review of residential zones undertaken as part of the draft Housing Strategy 2013 has not recommended changes to the surrounding residential areas. Therefore, this option is not being considered as part of the Strategic Plan process.

3.6. KEY FINDINGS AND RECOMMENDATIONS

The key findings which relate to residential demand in Upper Ferntree Gully are outlined below.

- Upper Ferntree Gully has experienced minimal population growth in recent years. Future dwelling growth, as projected by Forecast ID, is minimal with only 33 new dwellings between 2011 and 2036. This is in stark contrast to Melbourne and Knox which are expected to grow significantly.
- Major demographic trends which are impacting housing demand and needs in Knox include:
 - An ageing population;
 - Growing number of lone person households; and
 - Growing number of 'couple only' households and a small decrease in households with children.

These changes will require greater housing diversity in Knox which is predominately detached, suburban housing types. As residents age and their housing needs change, they may need to seek other housing options (such as units, townhouses and apartments) outside their local community.

- Historical and projected population growth is minimal due to the strict planning controls in the area which seek to preserve the low density character of the area. Large minimum subdivision sizes mean that opportunities to subdivide in the residential catchment are extremely scarce and any dwelling growth would need to occur within the Neighbourhood Activity Centre. The entire study area, including the NAC, is subject to a 7.5m height control.
- Two development applications for multi-storey mixed-use developments in the past 12 months indicate a level of demand for residential uses within the commercial centre and demand for detached, smaller dwellings in the area, however, neither have yet progressed to construction.
- The primary opportunities for residential growth are the larger sites at the periphery of the centre. These sites could accommodate greater residential intensification and mixed use development, as demonstrated by the proposal for 1172 Burwood

Highway. Agent discussions indicate that there is a moderate level of demand for apartment dwellings in the area, however not a sufficient level to support large scale or multiple developments at this time. These 'Primary' sites are considered long-term strategic opportunities.

- Current planning controls of the surrounding residential catchment limit any additional dwelling development to maintain the current built residential form characterised by detached houses on larger lots.

3.6.1. RECOMMENDATIONS

The following recommendations should be considered in the development of the Upper Gully Strategic Plan:

- Retain existing zones for housing purposes. No need is identified for further zoned land to accommodate residential demand.
- Encourage a diversity of housing within the NAC, as well as on the periphery of the NAC to provide a greater range of dwelling types and sizes (e.g. apartments or townhouses within the NAC and dual occupancy at the NAC periphery).
- Encourage mixed use redevelopment of strategic sites in the Upper Gully Strategic Plan including commercial/retail and residential.
- Consider a range of local streetscape improvements to support residential amenity in the NAC such as landscaping, lighting, and pedestrian connectivity (including stronger links to train station and retail core).

4. COMMERCIAL LAND ASSESSMENT

4.1. INTRODUCTION

This section provides a profile of commercial land use in the Upper Ferntree Gully Neighbourhood Activity Centre, including retail, tourism, and office. The main drivers of commercial growth are discussed as well as analysis of existing retail and non-retail supply. Future commercial floorspace requirements are projected and strategic directions for growth discussed.

4.2. EXISTING FLOORSPACE

A site visit and analysis of aerial photography was undertaken in July 2014 to provide an estimate of the existing commercial and retail floorspace in the activity centre. This was supplemented by comparison against Council's rates database. The overall building floorspace (excluding stand alone facilities such as car sales, and industrial uses), are shown by type in Table 10.

There is approximately 10,700sqm of retail floorspace in the study area. The retail categories 'Food, Liquor, Groceries' and 'Food Catering' are the prominent retail types making up 63% of retail floorspace. This demonstrates the **primary function of providing local convenience retail to the immediate residential catchment and nearby suburbs.**

The turnover of the retail centre is estimated to be \$62m. The Maxi Foods Supermarket is likely to contribute almost half of the retail turnover of the centre.

TABLE 10 EXISTING FLOORSPACE

Category	Floorspace (m ²)	% of Total Floorspace	Indicative Retail Turnover (millions)*
Food, Liquor, Groceries	3,600	24%	\$29m
Food Catering	3,200	21%	\$16m
Apparel Homewares & Leisure	1,300	9%	\$5m
Bulky Goods	300	2%	\$1m
Retail Services	2,300	15%	\$10m
Retail sub-total	10,700	72%	\$62m
Commercial	2,000	13%	-
Health and Community services	1,400	9%	-
Vacant	800	5%	-
Total Commercial Floorspace	14,900	100%	-

*Turnover was estimated by applying typical turnover densities to each retail category
Source: Urban Enterprise 2014

4.3. REGIONAL RETAIL HIERARCHY

Within close proximity to Upper Ferntree Gully NAC are a number of higher-order activity centres and major supermarkets which define the competitive retail hierarchy and retail catchment of the centre.

Figure 19 overleaf shows the distribution of competing retail centres and supermarkets in the region. Retail competition to the west of Upper Ferntree Gully is very strong with a number of large retail centres including Knox City Shopping Centre, Mountain Gate Shopping Centre, and Boronia Shopping Centre. These all contain full-line supermarkets and a number of diverse retail offerings. In addition there are also Woolworths and Aldi supermarkets on Burwood Highway, only 3km to the west of Upper Ferntree Gully. There is also a Coles supermarket in Rowville, approximately 9km to the south.

Retail competition to the east of Upper Ferntree Gully is limited with no full line supermarkets; there is a Foodworks (convenience supermarket) in Upwey and a small Woolworths supermarket in Belgrave (less than 2,000sqm). The Maxi Foods Supermarket is the last full-line supermarket before arriving in the Dandenong Hills. This suggests that **residents within the Dandenong Hills including Upwey, Tecoma and Belgrave are an important customer base for Upper Ferntree Gully**. Although some of the convenience retail turnover of these residents would be captured in local small supermarkets, it is considered that the weekly shopping needs would be met at a full-line supermarket such as Maxi Foods, Woolworths (Burwood Hwy), or Aldi (Burwood Hwy).

4.3.1. RETAIL CATCHMENTS

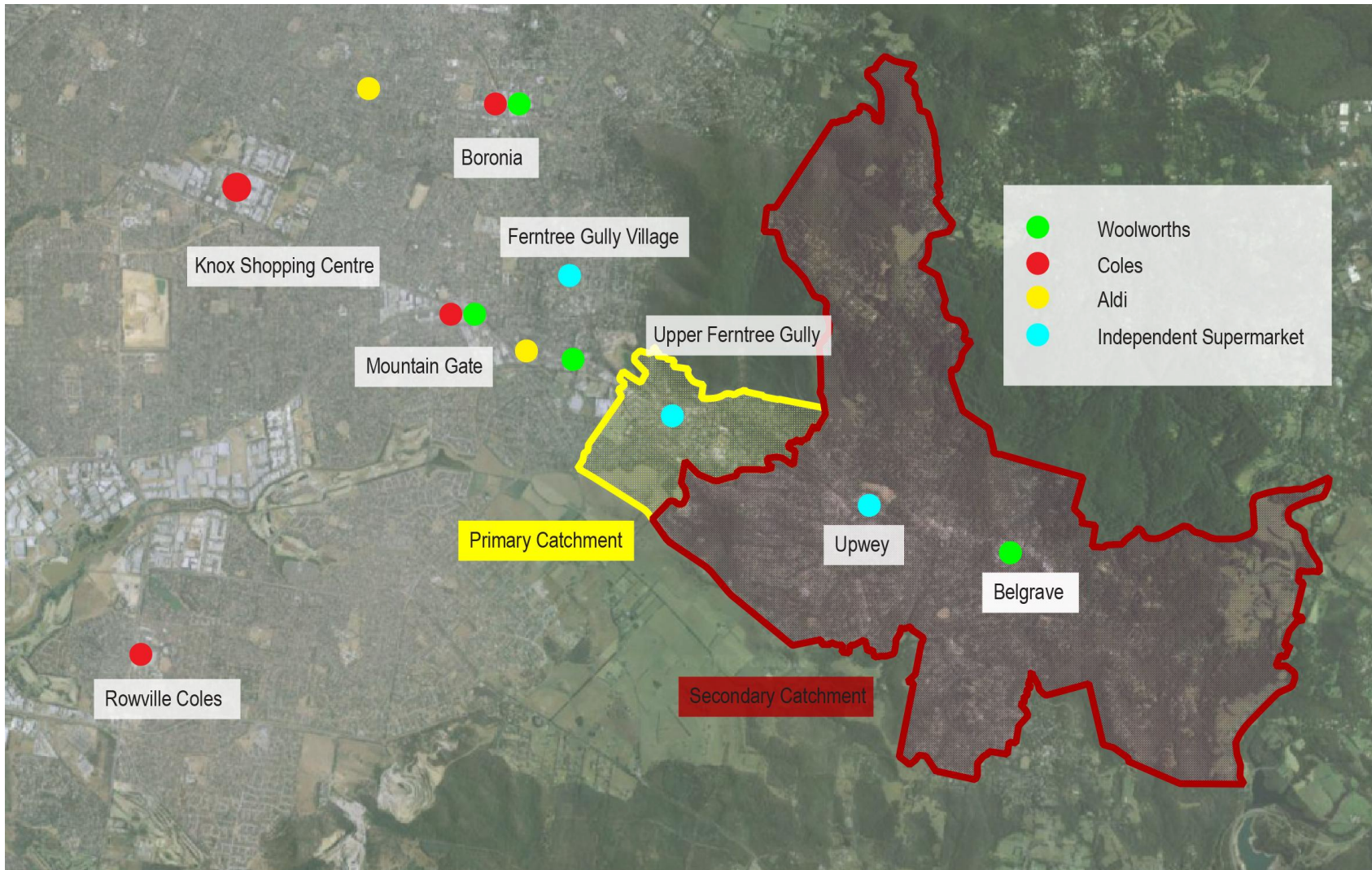
Based on the competitive supply of retail centre, the retail catchment for Upper Ferntree Gully is estimated to include:

- **Primary Catchment;** Service the needs of the immediate residential population, as shown by the yellow line in Figure 19; and
- **Secondary Catchment;** Residents in the Dandenong Ranges including Upwey, Tecoma and Belgrave, as shown by the red line in Figure 19.

TABLE 11 RETAIL CENTRE HIERARCHY

Supermarket Type	Type	Distance from Upper Ferntree Gully
Knox Shopping Centre	Full line Supermarket	7km
Mountain Gate	Two Full-line Supermarkets	3.5km
Boronia	Two Full-line Supermarkets	3.5km
Ferntree Gully Village	Mid-size Supermarket	2km
Ferntree Gully Woolworths	Full line Supermarket	2km
Ferntree Gully Aldi	Full line Supermarket	2km
Upwey Foodworks	Mid-size Supermarket	2km
Belgrave Woolworths	Mid-size Supermarket	5km

FIGURE 19 COMPETITIVE RETAIL HIERARCHY AND UFTG CATCHMENTS



4.4. HISTORICAL FLOORSPACE GROWTH

Analysis of building and planning permit data for the commercial centre shows there has been little development over the past five years and no increase in commercial floorspace. There were 11 building applications approved, mostly for small-scale repairs and signage. One permit included a fit out of a retail shop to a café. This provides some indication of growing demand for tourism oriented uses.

4.5. DEMAND DRIVERS

Future demand for retail floorspace will be primarily driven by the following key markets:

- **Local Residents;** Servicing the needs of the primary and secondary catchments for convenience food and retail;
- **External Demand;** Visitors to the NAC for community and health services, or passing trade from commuters by train and car; and
- **Tourism;** Passing tourists who are visiting the Dandenong Ranges or 1,000 Steps.

An overview of these key markets is outlined below.

4.5.1. LOCAL RESIDENTS

Servicing the needs of the local catchment is an important function of the Upper Ferntree Gully Activity Centre. The centre includes a full line supermarket (Maxi Foods), a number of personal services (e.g. hairdressers), and take away food outlets.

Analysis of existing retail expenditure within the primary catchment was undertaken using data from MarketInfo; a retail micro simulation model. The primary area has an estimated retail expenditure of approximately \$12,500 per person, which based on the current population equates to a total retail expenditure of approximately \$31 million per annum. Consumer spending is slightly lower in this area due to the higher proportion of retirees in the residential catchment. Typically, 28% of local spending is directed to NACs⁸. At an average turnover density of \$6,000/sqm (higher than \$6,000/sqm for supermarkets, lower for speciality and other retail types), this expenditure would support only 1,500sqm of retail floorspace in local and neighbourhood centres. This represents just 13% of the

⁸ Retail Floorspace Forecasts for Metropolitan Melbourne 2006 to 2030, Essential Economics 2007

floorspace within the Upper Ferntree Gully NAC, and demonstrates the importance of the secondary catchment in the Dandenong Hills, and passing trade.

4.5.2. EXTERNAL DEMAND

The NAC is located along Burwood Highway, a major arterial road in eastern Melbourne, and includes the Upper Ferntree Gully Railway Station, a premium grade train station. Passing demand from commuters is expected to drive a significant proportion of the retail turnover in the NAC. Although the station attracts a high number commuters and visitors, the pedestrian connections between the station and retail centre are very poor. This limits the potential to encourage retail expenditure from train commuters in the centre.

The commercial centre is in close proximity to the Angliss Hospital and Upper Ferntree Gully Primary School, and contains a number of health and community services. Visitors to these services will also drive demand for convenience retail through trip sharing.

4.5.3. TOURISM

The NAC plays an important role in servicing the visitor economy, with a number of tourism uses such as cafes and antique stores. Many of these uses have trading hours which are oriented towards visitor times (e.g. weekends).

Burwood Highway is a major gateway to the Dandenong Ranges, with an estimated 27% of visitors to the Dandenong Ranges using the highway.⁹ The popular Kokoda Memorial Trail (1,000 Steps) is located less than a kilometre, (a ten minute walk along a shared path) from the study area. The 1,000 Steps are particularly popular on weekends. Consultation with staff at the Upper Ferntree Gully Visitor Information Centre (VIC) indicated that 16% of visitors to the VIC were visiting the 1,000 steps. The strength of the passing visitor trade also supports a weekend market which operates every Saturday and Sunday (except for public holidays) on the station car park.

Consultation with local real estate agents highlighted the importance of the 1,000 Steps in generating activity in the centre, especially in the eastern section of the shopping strip fronting Burwood Highway (between 1208 and 1248 Burwood Highway). This area is somewhat protected from the harsh highway environment by trees and landscaping. An

⁹ Yarra Ranges Shire Visitor Information Services Study , 2010

agent for a vacant property reported high interest in this area for tourism oriented uses such as a café and juice bar.

The 1812 Theatre on Rose Street is also an important component of the visitor economy. The theatre draws people from around the Eastern suburbs and acts as a sub-regional entertainment attraction and strengthens this section of the NAC for tourism uses.

4.6. PROJECTED DEMAND

Projecting retail demand is complex and limited by the availability of data industry wide. An expenditure model based on population growth is widely accepted as the most appropriate measure for future retail demand. However, due to the unique role of Upper Ferntree Gully in servicing a broad catchment and passing tourists, a localised catchment model which estimates future floorspace growth would not be sufficient. Instead, a strategic approach is used to demonstrate the key drivers of demand, particularly the tourism potential of the centre.

4.6.1. RESIDENT DEMAND

The need for additional floorspace for convenience retail is typically driven by population growth within the primary and secondary retail catchments. Population projections to 2031 were sourced from Forecast ID Knox and Yarra Ranges, and are shown in the table opposite. **Population is predicted to decline in the primary and secondary catchments by a total of 794 people.** Negative population growth generally reflects existing planning controls which protect the area from increased housing intensity due to location within the environmentally significant Dandenong Hills. In addition, the existing population is ageing with smaller household sizes, and minimal opportunities for residential dwelling construction.

TABLE 12 CATCHMENT GROWTH 2011–2031

Area	Population 2011	Population 2031	Difference
Primary Catchment (Upper Ferntree Gully)	2,567	2,552	-15
Secondary Catchment*	24,902	24,123	-779
Total	27,469	26,675	-794

*Secondary Catchment is made up of 'Kallista and Surrounds', 'Belgrave-Selby', 'Upwey and Surrounds', and 'Belgrave Heights and Surrounds'

Source: Forecast ID Knox 2014, Forecast ID Yarra Ranges 2014

Although population is expected to decline within the retail catchment, this will not necessarily have a negative impact on the turnover available in the NAC. Retail expenditure per person is expected to increase over time (in real terms) which would have a balancing effect on population decline. However, **future floorspace growth is very unlikely to be driven by population and retail expenditure growth in the residential catchment.**

4.6.2. TOURISM DEMAND

Future growth in retail floorspace within the NAC could be driven by demand from outside the current retail catchment, such as increasing retention or capture of passing visitors expenditure.

A high level profile of visitor activities and groups for the Dandenong Range and Yarra Valley are shown in the following tables. The region has a diverse range of attractions for tourists. Strengths of the region include bushwalking and other outdoor activities, food and wine, and heritage attractions (e.g. Puffing Billy). The region is also becoming increasingly popular with cyclists including road and mountain bike riders who use tracks further into the heart of the ranges.

The majority of visitors travelled as an adult couple, family group, or with friends and relatives. The region is particularly popular with couples due to its proximity to Melbourne and accessibility for overnight getaways and daytrips.

TABLE 13 DANDENONG REGION VISITOR ACTIVITIES

Activity	Yarra Valley and Dandenong Ranges	Regional Victoria
Visit friends & relatives	54%	46%
Eat out / dine at a restaurant and/or cafe	50%	53%
Go shopping for pleasure	28%	22%
Sightseeing/looking around	26%	28%
Bushwalking / rainforest walks	24%	14%
Visit national parks / state parks	19%	12%
Visit wineries	12%	5%
Pubs, clubs, and discos	10%	19%
Going to markets	9%	10%
Picnics and BBQs	8%	8%

Source: Dandenong Ranges and Yarra Valley Market Profile, Tourism Victoria 2013

TABLE 14 DANDENONG REGION TRAVEL PARTY

Travel Party	Yarra Valley and Dandenong Ranges	Regional Victoria
Travelling alone	15%	20%
Adult couple	37%	29%
Family group - parents and children	22%	24%
Friends and relatives	20%	23%
Business associations	0%	2%
Other	6%	2%

Source: Dandenong Ranges and Yarra Valley Market Profile, Tourism Victoria 2013

According to Tourism Research Australia (TRA) visitor estimates, the Dandenong Ranges and Yarra Valley currently receive an estimated 3.8 million domestic visitors and 350,000 international visitors per annum (a total of 4.15 million visitors).¹⁰ It is estimated that 27% of visitors to the Yarra Ranges Shire utilise Burwood Highway as an entry point¹¹, generating a significant number of tourists passing through the NAC every day.

It should be noted that Tourism Research Australia (TRA) defines a daytrip as being a minimum stay of over 4 hours, and a round trip of over 50km. Therefore, the majority of visitors from eastern Melbourne and visitors to the 1,000 Steps (who generally spend less than 4 hours), would not be included within Dandenong Ranges and Yarra Valley visitation estimates. Including these visitors would increase estimates significantly.

Tourism in Australia is expected to grow significantly in the future with increased international visitation, increased numbers of trips by domestic visitors, and increased visitor expenditure. The following table shows the projected increase in visitation to the Dandenong Ranges and Yarra Valley, by applying Tourism Victoria forecasts. Tourism visitation to Dandenong Ranges and Yarra Valley is forecast to grow to 4.74 million by 2023, an increase of approximately 600,000 visitors over the next 10 years. Given that the majority of tourism product is in the Yarra Ranges Shire a large proportion of these additional visitors would be expected to access the region through Burwood Highway.

TABLE 15 DANDENONG RANGES AND YARRA VALLEY VISITOR PROJECTIONS

Visitor Market	2013 Visitation	% Growth p.a.	2023 Visitation Projection
Domestic	3.8 million	1.3% p.a.	4.3 million
International	350,000	4.9% p.a.	435,000
Total	4.15 million		4.74 million

Source: Forecast Visitation, Tourism Victoria 2014, Urban Enterprise 2014

¹⁰ Yarra Valley and Dandenong Ranges Market Profile, Tourism Research Australia 2013

¹¹ Yarra Ranges Shire Visitor Information Services Study , 2010

4.6.3. NON-RETAIL COMMERCIAL LAND

The current provision of employment uses within the centre includes a mixture of small-scale professional offices, light industrial and medical consulting clinics. Economic trends in the broader region demonstrate shifts in employment towards health and social assistance and professional services. These trends may result in businesses in these industries seeking to establish within the centre given the proximity to Angliss Hospital.

Discussions with real estate agents indicated that there is currently a low level of demand for commercial office space in the Upper Ferntree Gully NAC, as well as the broader region. Recent amendments to industrial zones which remove office floorspace caps in industrial areas is expected to draw a small proportion of office demand away from commercial centres such as Upper Ferntree Gully. The lack of population growth in the area is also expected to impact demand for professional services and commercial floorspace. Future opportunities within the NAC will be for incremental growth for small-scale office space. This is likely to be linked with mixed use residential developments (as shown by the proposed development at 1172 Burwood Highway) or use of existing retail/shopfront space.

Employment opportunities are expected to be driven by the health and wellbeing sector.

This is demonstrated by recent property transactions, as sourced through consultation with real estate agents, including the closure of Commonwealth Bank, which is intended to be converted into a dental practice, and the leasing of a shopfront on Burwood Highway for a podiatry clinic. Future opportunities for growth in the sector should be investigated through identifying gaps in the health services provision in the sub-region which could be accommodated in the NAC. Opportunities for small and home businesses could be provided in residential areas within close proximity to the NAC. For example, 'medical centre' and 'home occupation' are as of right uses in the proposed Neighbourhood Residential Zone. These types of uses would be expected to locate, or wish to locate, between the NAC and hospital precinct (along or near Dawson Street).

Industrial and similar uses within the centre are relatively small scale, low intensity, and light industrial operations, such as a panel beater, car sales, and garden supplies. Whilst these provide local employment opportunities, the location is not well suited to industrial use given nearby residential and sensitive uses and relatively small land holdings. Employment trends show that industrial sectors are generally declining in Knox and

limited demand for service industrial uses will be generated through local population growth.

4.7. TOURISM OPPORTUNITIES

Capturing greater visitation and expenditure from passing tourists is considered a key opportunity for Upper Ferntree Gully. Leveraging this opportunity will require improving the retail and product mix to appeal to visitors, and design and landscape interventions to improve the connectivity and appeal of the NAC to encourage passing visitors to stop in the centre. Tourism opportunities are discussed below. These opportunities should be considered in the Strategic Plan and accompanying Streetscape Design Project.

SIGNAGE AND BRANDING

The current signage within the NAC and at key entry points along Burwood Highway is limited. For visitors passing through, there is little indication of what is available in Upper Ferntree Gully and that they are entering the Dandenong Ranges tourism region. **Improved signage through a consistent approach to branding, particularly at key entry points** along Burwood Highway will encourage greater visitation from passing traffic. This also includes improved wayfinding signage and exposure of the visitor information centre, which provides a clear indication that visitors are entering the tourism region.

The signage and branding of the centre should communicate the recreational and lifestyle values and opportunities which are available in the centre.

DESIGN AND LANDSCAPING

Tourism focused retail within Upper Ferntree Gully is concentrated around the shops fronting Burwood Highway, between Rose and Dawson Street. The shops include a mix of speciality retail and cafes which have a strong visitor focus. Improved landscaping and streetscape improvements to make this area appealing and provide further protection from the heavy traffic on Burwood Highway will encourage a greater number of passing visitors to stop and engage with the retail offerings in this area. This may also facilitate outdoor dining opportunities.

Although Upper Ferntree Gully Railway Station receives a large number of daily commuters and visitors, heavy traffic along Burwood Highway and poor pedestrian connections mean that there are a relatively small number of train users visiting the commercial centre. **Improving pedestrian connections across Burwood Highway and**

wayfinding throughout the centre to bring greater numbers of train users into the commercial centre should be considered in the Strategic Plan.

CYCLING

The Dandenong Ranges is a popular location for cyclists including road cyclists who challenge themselves on the steep road climbs, and mountain bike riders who use tracks further into the heart of the ranges. Analysis of 'Strava' routes shows that a large number of cyclists either use Upper Ferntree Gully as a starting point, or pass through on their way to the hills.¹² The popular climbs known as 'Devil's Elbow' and 'One Tree Hill', commence from Upper Ferntree Gully.

Encouraging cyclists to utilise Upper Ferntree Gully as a base and engage with the retail offerings may provide opportunity for future growth. Cyclists are considered a high yielding visitor segment. Upper Ferntree Gully Station also provides easy access for cyclists by train. **Greater yield could be achieved through improved cycling infrastructure (e.g. trails, bike lanes, bike parking) and consideration of cycling within streetscape design.**

RETAIL MIX

Analysis of building permits, and discussions with real estate agents showed that there are a growing number of retailers which are targeting visitor trade. Tourism hospitality uses such as cafes and juice bars have showed interest in establishing in the centre. **Facilitating an improved retail and product mix including improving the hospitality offering to appeal to visitors should be considered in the Strategic Plan.**

The centres growth in health and wellbeing services is considered complimentary to its tourism appeal. The 1,000 Steps is very popular with fitness enthusiasts, particularly on weekends. Commercial opportunities to service this market including fitness studios, health food stores and juice bars should be encouraged in the centre.

¹² Strava is a leading website and mobile application used by cyclists to share cycling routes and results.

4.8. KEY FINDINGS AND RECOMMENDATIONS (COMMERCIAL LAND)

The key findings which relate to commercial floorspace demand in Upper Ferntree Gully are outlined below.

- The Upper Ferntree Gully NAC functions within a dual role including:
 - Servicing the local residential catchment with convenience retail; the centre is anchored by the Maxi Foods Supermarket and includes a number of other convenience retail offerings such as a bakery, butchers, take away outlets, and a pharmacy.
 - Servicing the visitor economy; with a number of tourism uses such as cafes and antique stores. Burwood Highway is a major gateway to the Dandenong Ranges tourism region, and the popular 1,000 Steps is within close proximity.
- The secondary roles of the Upper Ferntree Gully NAC include a small provision of employment floorspace (small office and industrial), highway retail for large format uses (e.g. car sales and garden supplies), and a small number of health and community services.
- The retail catchment of the NAC includes a primary catchment of the surrounding suburb, and a secondary catchment in the Dandenong Hills (including Upwey, Tecoma and Belgrave). The regional retail hierarchy shows that there is strong retail competition to the west of Upper Ferntree Gully, and little provision of retail, or full-line supermarkets within the Dandenong Hills. This suggests that the Dandenong Hills are an important customer base for Upper Ferntree Gully.
- Both the primary and secondary retail catchments of the NAC are projected to experience population decline over the next 20 years. This indicates that there is expected to be minimal growth in demand for convenience retail over the next 20 years.
- Tourism visitation is considered to be the key opportunity for future retail and economic activity in the NAC. Considering the volume of tourists passing through the NAC, the yield from passing visitors is currently low. With tourism numbers expected to increase, opportunities to capture greater yield and expenditure include:

- Improved signage and branding;
- A retail and product mix which appeals to visitors;
- Cycling infrastructure; and
- Street and landscape improvements to improve the:
 - Amenity and attractiveness of the centre;
 - Streetscape of the shops fronting Burwood Highway, between Dawson and Rose Streets, where much of the tourism activity is concentrated; and
 - Walkability and wayfinding, particularly the connections between the train station and commercial centre.

4.8.1. RECOMMENDATIONS (COMMERCIAL LAND)

The following recommendations should be considered in the development of the Upper Gully Strategic Plan:

- Support mixed-used development within the NAC, and encourage a mixture of residential dwellings with commercial and employment functions at lower levels.
- Liaise with the owners of Ferntree Plaza regarding any plans for future expansion with a view to ensuring future development provides for a consolidation of core retail uses along Dawson Street, with active frontages where possible.
- Identify shopfronts along Burwood Highway, between Dawson and Rose Streets, as a preferred location for tourism/hospitality uses.
- Implement streetscape improvements along Burwood Highway, between Dawson and Rose Street, to improve the amenity, pedestrian safety, and provide a visual and noise break from traffic on Burwood Highway to support this area for tourism and hospitality uses.
- Investigate opportunities for outdoor dining within the identified tourism/hospitality area.
- Promote and investigate the role of the NAC in providing business premises for the health and wellbeing sector. Engage with major health institutions and aged care

facilities in the area to identify gaps in health services which could be located in the NAC or in adjacent residential areas.

- Improve the walkability and wayfinding of the centre, particularly connections between the train station and commercial centre, and connections to walking paths to the 1,000 Steps and beyond.
- Provide directional and distance signage to the 1,000 Steps from the commercial centre and train station.
- Investigate the opportunity to promote the centre as a base for walkers visiting the 1,000 steps and Dandenong Ranges. Engage with Parks Victoria and Yarra Ranges Tourism in regards to this opportunity (this may help alleviate weekend parking and traffic congestion from the 1,000 Steps).
- Improve cycling infrastructure (e.g. bike lanes, bike parking) in the centre and around the train station.
- Formalise the brand and image of the NAC by implementing signage which communicates the strengths of the centre to visitors - lifestyle village in a foothills setting. Develop signage at key entry points along Burwood Highway.

5. RECOMMENDATIONS

This section consolidates recommendations for consideration within the Upper Gully Strategic Plan.

RESIDENTIAL

1. Retain existing zones for housing purposes. No need is identified for further zoned land to accommodate residential demand.
2. Encourage a diversity of housing within the NAC, as well as on the periphery of the NAC to provide a greater range of dwelling types and sizes (e.g. apartments or townhouses within the NAC and dual occupancy at the NAC periphery).
3. Designate strategic development sites within the Upper Gully Strategic Plan (these are discussed in this report) to encourage redevelopment/greater utilisation and provide direction for investment.
4. Encourage mixed use redevelopment of strategic sites in the Upper Gully Strategic Plan including commercial/retail and residential.
5. Consider a range of local streetscape improvements to support residential amenity in the NAC such as landscaping, lighting, and pedestrian connectivity (including stronger links to train station, and retail core).

COMMERCIAL

6. Support mixed-used development within the NAC, and encourage a mixture of residential dwellings with commercial and employment functions at lower levels.
7. Liaise with the owners of Ferntree Plaza regarding any plans for future expansion with a view to ensuring future development provides for a consolidation of core retail uses along Dawson Street, with active frontages where possible.
8. Identify shopfronts along Burwood Highway, between Dawson and Rose Streets, as a preferred location for tourism/hospitality uses.

9. Implement streetscape improvements along Burwood Highway, between Dawson and Rose Street, to improve the amenity, pedestrian safety, and provide a visual and noise break from traffic on Burwood Highway to support this area for tourism and hospitality uses.
10. Investigate opportunities for outdoor dining within the identified tourism/hospitality area.
11. Promote and investigate the role of the NAC in providing business premises for the health and wellbeing sector. Engage with major health institutions and aged care facilities in the area (e.g. Angliss Hospital) to identify gaps in health services which could be located in the NAC or in adjacent residential areas.
12. Improve the walkability and wayfinding of the centre, particularly connections between the train station and commercial centre, and connections to walking paths to the 1,000 Steps and beyond.
13. Provide directional and distance signage to the 1,000 Steps from the commercial centre and train station.
14. Investigate the opportunity to promote the centre as a base for walkers visiting the 1,000 Steps and Dandenong Ranges. Engage with Parks Victoria and Yarra Ranges Tourism in regards to this opportunity (this may help alleviate weekend parking and traffic congestion from the 1,000 Steps).
15. Improve cycling infrastructure (e.g. trails, bike lanes, bike parking) in the centre and around the train station.
16. Formalise the brand and image of the NAC by implementing signage which communicates the strengths of the centre to visitors - lifestyle village in a foothills setting. Develop signage at key entry points along Burwood Highway.

UPPER FERNTREE GULLY CAPACITY ASSESSMENT

ADDENDUM TO THE UPPER GULLY TECHNICAL REPORT – LAND USE AND ECONOMICS – 4 NOVEMBER 2016

1.1. BACKGROUND

The Technical Report – Land Use and Economics, November 2014 (the **Technical Report**), was prepared by Urban Enterprise to inform the Upper Gully Strategic Plan. The Technical Report provides an assessment of the relevant economic and property considerations that influence land use and development in the Upper Gully Neighbourhood Activity Centre (NAC).

1.2. INTRODUCTION

This Addendum has been prepared by Urban Enterprise for the City of Knox (**Council**) to provide additional analysis for the Upper Gully Strategic Plan to address the Panel direction to provide further assessment of traffic impacts based on “anticipated future development in the activity centre”.

The Addendum summarises the potential capacity of the centre based on revised built form controls proposed through Amendment C141 (as endorsed by Council 28 June 2016) and scenarios for development over a 20-year timeframe (2016 to 2036).

This high level assessment has been prepared within a short timeframe at the request of Council – the limited time available has confined the level of detail and therefore this does not constitute a full demand and supply assessment for the centre. Existing information has been relied upon in order to provide a broad indication of potential development over the next 20 years. A more detailed scope of work would be required to further investigate the likelihood of certain scenarios and the narrow the range of potential development in the centre.

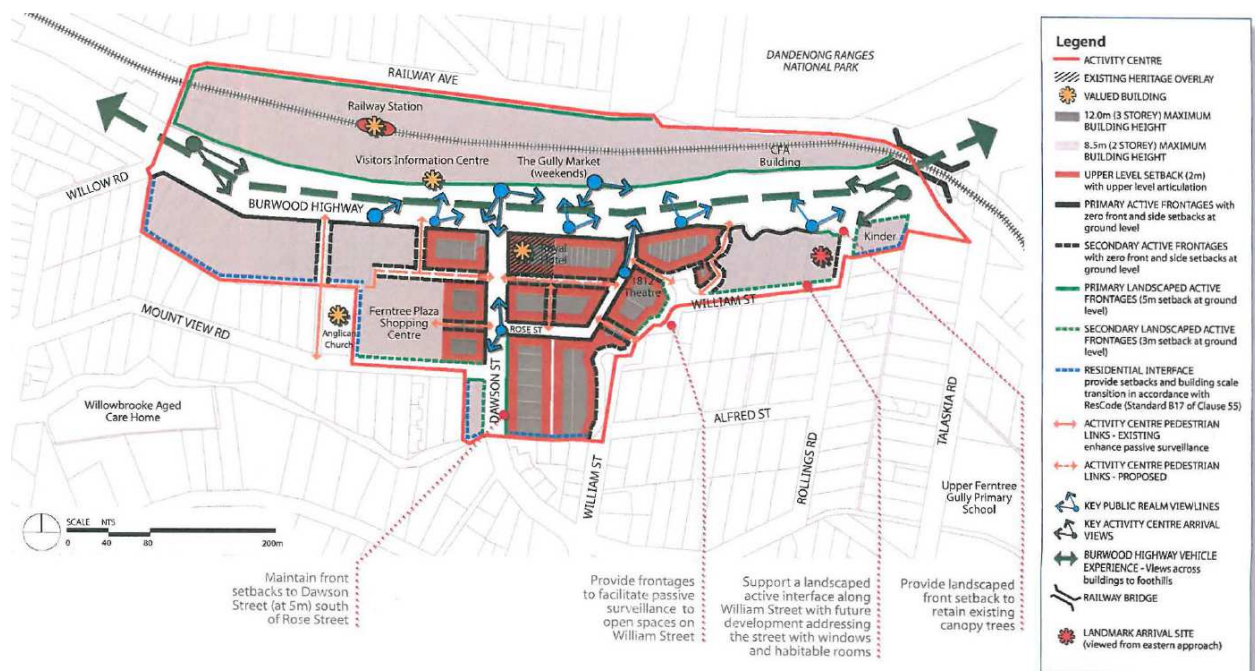
1.3. PLANNING CONTROLS

Amendment C141 proposes to implement the Upper Gully Strategic Plan by making changes to the Knox Planning Scheme. In respect of the capacity of the NAC to accommodate additional development, the following changes are proposed:

- Delete Schedule 10 to the Design and Development Overlay (DDO10), which applied an interim maximum building height of 7.5 metres above natural ground level to all properties in the NAC; and
- Introduce a new Schedule to the Design and Development Overlay (DDO) which applies the following building controls as identified in Map 1 of the DDO (Figure 1):
 - A 12 metre (3 storey) maximum building height to specific properties and sections of properties in the centre of the NAC;
 - An 8.5 metre (2 storey) maximum building height to properties at the periphery of the NAC; and
 - A variety of minimum setback distances.

It is noted that following the exhibition of Amendment C141, Council adopted a revised version of Map 1 Building Heights and Setbacks (28 June 2016). The revised map is shown in Figure 1.

FIGURE 1 PROPOSED DDO MAP 1 – BUILDING HEIGHTS AND SETBACKS



Source: Knox City Council, Council Notice of Motion, 28 June 2016 Council meeting.

The proposed changes to the planning controls would allow an additional storey for any developments in the central core of the NAC compared with the current controls, and therefore it is likely that new developments would generally comprise 3 storeys as opposed to 2 storeys, increasing the overall capacity of the NAC.

Despite the proposed increase in maximum building height from 7.5m to 8.5m, the overall capacity of properties at the periphery of the NAC will not be materially impacted by the changes proposed given that a two storey height limit will continue to apply to these areas.

1.4. ACTIVITY CENTRE CAPACITY

Figure 2 identifies properties within the NAC on which buildings would be permitted up to a maximum building height of 3 storeys. These properties have frontage to the Burwood Highway, Dawson Street and Rose Street. Properties have been grouped into 'Blocks' numbered 1 through 10. Figure 2 also shows the sites identified in the Technical Report as 'Primary Development Opportunity' sites – although no changes are proposed to the height restrictions on these properties (2 storeys), the low value improvements and relatively large sites are considered potential development sites over the next 20 years.

FIGURE 2 PROPERTIES WITH PROPOSED MAXIMUM THREE STOREY HEIGHT LIMIT, UPPER FERNTREE GULLY



Source: Urban Enterprise 2016

A broad estimate of the potential additional capacity for residential and commercial development created by the proposed changes has been undertaken by Urban Enterprise. The assessment is based on the following assumptions:

- Sites can be consolidated to create suitable development parcels;
- Each property / area is developed for a mix of uses comprising commercial / retail uses on the ground floor and residential uses (apartments) at upper levels;
- Maximum allowable development of the site based on proposed controls (i.e. 100% coverage on allowable building footprints allowing for relevant setbacks);
- Internal circulation space of 20% for upper levels (for corridors, stairwells, services, etc) and 40% at ground level (parking access, storage, access to upper levels, etc);
- Average apartment size of 80sqm;
- All car spaces are provided in basements. Note: a detailed assessment of carparking needs has not been undertaken as part of this assessment and it assumed that required carparking would be accommodated at basement levels.

Table 1 shows details of the maximum capacity of buildings within the areas subject to the new 3 storey height controls, and the net additional floorspace and dwellings that could be accommodated.

TABLE 1 INDICATIVE CAPACITY OF SITES WITHIN THE 3 STOREY HEIGHT LIMIT AREA

Block No.	Land Area	Existing Commercial Floorspace (sqm)	Total Commercial Floorspace Capacity (GLA, sqm)	Net Additional Commercial Floorspace Capacity (GLA, sqm)	Existing Dwellings	Total Dwelling Capacity	Net Additional Dwelling Capacity
1	2,408	606	1,445	839		44	44
2	2,696	1,467	1,618	151		48	48
3	1,855	-	1,113	1,113		33	33
4	1,774	-	1,064	1,064		31	31
5	1,489	-	893	893		25	25
6	1,247	-	682	682		19	19
7	4,214	1,529	2,212	683	3	66	63
8	4,327	1,634	2,576	942		77	77
9	2,210	878	1,202	324		36	36
10	3,029	1,473	1,817	344		56	56
Total	25,249	7,587	14,621	7,034	3	435	432

Block numbers correspond with Figure 2.

Source: Urban Enterprise 2016

Under the proposed planning controls, sites subject to a 3 storey height limit would have capacity to accommodate a net increase of 7,000sqm of commercial or retail floorspace (over and above the current floorspace) and a net increase of 432 dwellings (apartments) at upper levels. However given that the current controls allow buildings of up to two storeys, **the new controls would only effectively permit an additional level of apartments to be constructed – this additional level could result in a capacity of up to 197 additional apartments being accommodated in core of the NAC.** The height changes would not create any additional capacity for retail or commercial floorspace under the assumptions outlined in this Addendum.

Note that Table 1 provides an indication of pure built form capacity based on the broad assumptions outlined. The extent to which this capacity is actually delivered and the timing of any new development will depend on a range of factors, including market demand, developer / investor capacity, intentions of property owners and opportunities to consolidate sites to create larger development parcels.

Some parts of the NAC with a proposed 3 storey height limit are challenging from a development perspective given the fine grain subdivision pattern and fragmented land ownership (eg. lots fronting the Burwood Highway in Blocks 2 and 10) and the reliance on major strategic redevelopments of the Maxi Supermarket car park (Blocks 1, 5 and 6) and other car parks which service the activity centre (Blocks 3 and 4). These challenges are likely to limit the realisation of additional floorspace, at least in the short to medium term.

Therefore, it is considered highly unlikely that 100% of this indicative capacity will be delivered. The likely scenarios considering these factors are summarised in Section 1.7.

In addition to the assessment above, Primary Development Opportunity sites could be developed over the next 20 years. The Technical Report identified that these sites could accommodate in the order of 150 to 170 apartments within the 2 storey height limit, in addition to some smaller commercial tenancies at ground level. Applying the proportion of commercial floorspace to site area from the approved development at 1168 Burwood Highway (10%), it is estimated that these Primary Development Opportunity sites could accommodate at least 1,000sqm of additional retail and/or commercial floorspace.

Table 2 provides a summary of the capacity of the Activity Centre under the current planning controls (2 storey maximum) and proposed planning controls (combination of 2 and 3 storey controls). This capacity is for Primary Development Opportunity sites in the two storey area, and the areas that are within the proposed 3 storey area.

The difference between the current and proposed planning controls is the additional potential capacity of buildings in the core area to include a third storey, which would most likely be developed for apartments.

Note that the impact of the proposed changes to planning controls on the feasibility of development, or the likely composition of developments has not been assessed.

TABLE 2 UPPER GULLY NEIGHBOURHOOD ACTIVITY CENTRE CAPACITY

Planning controls	Current controls (2 storeys only)		Proposed controls (combination of 2 and 3 storeys)	
	Net Additional Commercial Floorspace Capacity (GLA, sqm)	Net Additional Dwelling Capacity	Net Additional Commercial Floorspace Capacity (GLA, sqm)	Net Additional Dwelling Capacity
Primary Development Sites	1,000	160	1,000	160
Core area	7,034	235	7,034	432
Total	8,034	395	8,034	592

Source: Urban Enterprise, 2016.

1.5. HOUSING DEMAND

Population projections prepared for Council by Forecast ID indicate that the population of the suburb of Upper Ferntree Gully will increase only marginally by 13 persons over the next 20 years, as shown in Table 3.

A decreasing average household size across the suburb will result in existing dwellings housing fewer people, which is expected to be offset by a minor increase in the number of dwellings in the suburb, including:

- Development of 1172 Burwood Highway for 18 dwellings (apartments) in 2018;
- Low level of vacant lot development (1 dwelling per annum); and
- Low level of infill development (1-2 dwellings per annum).

TABLE 3 UPPER FERNTREE GULLY POPULATION AND HOUSEHOLD PROJECTIONS, 2016 – 2036

Summary	2016	2026	2036	Change 2016-2036	Average increase p.a.
Population	2,550	2,554	2,563	+13	
Households	897	930	942	+45	
Average household size	2.70	2.61	2.59	-0.11	
Dwellings	953	979	979	+26	+1.3

Source: Forecast ID. May 2014.

These Forecast ID projections have informed both the Technical Report and the Knox Land for Business Project which is currently being prepared by Urban Enterprise for Council. These projections are supply-led; that is, they are based on current planning controls which are very restrictive for housing in the residential zones of Upper Ferntree Gully, and likely developments within the NAC (there is only one permitted development in the NAC at present).

If the changes to planning controls proposed through Amendment C141 result in additional development within the NAC, or if demand increases over time for apartments in Upper Ferntree Gully over and above the rate evident through recent development, this could result in population growth that exceeds the Forecast ID projections over the period to 2036.

Given that the market is relatively untested for mixed use development in the NAC, there is limited evidence to underpin projections of the extent to which this development might occur. The following assessment provides an overview of broad indicators to guide strategic planning.

DWELLING AND APARTMENT DEMAND INDICATORS

Over the period 2011 to 2014, an average of 2 dwellings per annum were approved for construction in Upper Ferntree Gully, none of which were apartments. Discussions with real estate agents undertaken in 2014 (during preparation of the Technical Report) found that demand for apartments in Upper Ferntree Gully was relatively low, with medium density dwelling types such as townhouses and units seen as more attractive to the local market.

However, existing planning controls mean that there are limited opportunities for these dwelling types within the surrounding residential areas in Upper Ferntree Gully, and as a result the only opportunities for any material increases in the local dwelling stock will be provided in the commercial zones of the NAC through new apartments.

The Knox Housing Strategy 2015 directs medium density dwelling growth to Activity Areas (around the Bayswater, Knox Central, Rowville Activity Centres and along the Stud Road corridor), 'Local Living' areas (primarily within the Bayswater, Boronia and Rowville Activity Centres) and Strategic Sites for housing. The Strategy identifies that there is significant capacity in these areas to accommodate dwelling demand over the next 20 years, with specific capacity available for apartments in Bayswater, Boronia, Rowville, Mountain Gate and Knox Central.

On the Belgrave rail-line, significant capacity exists for apartment development in the Bayswater and Boronia Activity Centres (4,341 apartments, according to the Housing Strategy, p.57). These locations are on the same train line as Upper Ferntree Gully, and located closer to central Melbourne and other employment and service areas in Knox and the eastern suburbs. Apartment development is expected to be concentrated in these areas over the short to medium term, with demand then likely to shift further east to Ferntree Gully and Upper Ferntree Gully as development sites become more scarce in Bayswater and Boronia.

The Knox Housing Policy Monitoring and Review Report 2016 identified that "as infill development in existing areas continues to increase, the share of townhouses and apartments has risen from 30% of all new dwelling approvals in 2006-2010 to 50% in 2015." (p.20) However, apartments comprised 22% of all dwellings approved in 2014 and only 11% in 2015, indicating although there is an increasing proportion of smaller dwelling types in Knox over time, the apartment market is still inconsistent and relatively small.

These factors combine to indicate that Upper Ferntree Gully may experience an increase in demand for apartments over time due to the overall trends identified in the Housing Strategy, however this is unlikely to occur in the short to medium term given the significant capacity and policy support for such development to occur elsewhere in the municipality, particularly in Boronia and Bayswater.

UPPER FERNTREE GULLY DEVELOPMENT PROPOSALS

A permit application for the mixed use development at 1172 Burwood Highway was initially lodged in 2011 and was approved at VCAT in June 2013. Construction commenced in mid-2016. The development timeline of this site provides an example of the long timeframe often encountered for mixed use developments in suburban activity centres (planning, appeals, marketing, sales and construction), and also provides an indication of the rate of demand for apartments in Upper Ferntree Gully (it is likely that during the 3 year period between permit approval and commencement of construction, apartments pre-sales were sought in order for the developer to obtain project finance).

A permit application for a nearby apartment development (1168 Burwood Highway) is currently under appeal at VCAT after a planning application was lodged in 2014. This development is proposed to include 15 apartments with ground floor retail space.

DWELLING DEMAND SCENARIOS

Opportunities to construct additional dwellings in Upper Ferntree Gully are mostly limited to apartments at upper levels of mixed use developments in the NAC. The market is relatively untested for this product, however current development proposals indicate that there is demand (albeit at a relatively low rate) for apartments in this location.

If recent development activity is used as a guide, at least 15 apartments have been sold over a period of 3 years (assuming 80% of apartments were pre-sold at 1172 Burwood Highway), resulting in an average of 5 dwellings per annum. Given the likelihood that this development is catering to a degree of latent demand (no other apartments have previously been constructed in the centre), it is possible that ongoing demand in the short term may be lower - a lower scenario of 3 apartments per annum has also been considered. Assuming that these rates continue over a 20 year period, a total of between 60 and 100 apartments could be required in the NAC. At an average household size of 2 persons for apartments, this would support an additional population of between 120 and 200 persons.

Not all of this development would be stimulated by the proposed planning controls (proposals are proceeding in areas subject to 2 storey limits), and the additional population housed by the new supply would be offset to some degree by a reduction in population in existing dwellings across the suburb as the population ages and the average household size decreases.

It should be noted that these scenarios are indicative only given that they are based on a very limited sample of recent development activity (one development). The absence of a clear medium to long trend of relevant development activity in Upper Ferntree Gully means that future demand could differ significantly from recent activity, and as such a broad range of scenarios should be tested for strategic planning purposes.

1.6. COMMERCIAL FLOORSACE DEMAND

The 2014 Technical Report found that the population of the retail catchment of the NAC was projected to decline over the next 20 years (based on Forecast ID projections). When offset by projected increases in per capita retail expenditure of existing residents, the net growth in demand for additional retail floorspace generated by local residents over the next 20 years was considered to be negligible.

Urban Enterprise is currently preparing a 'Land for Business' study for Council which considers overall retail and commercial floorspace demand across the municipality. Preliminary findings from this study indicate that demand driven by residents of the Upper Ferntree Gully suburb could support an additional 500 square metres of retail floorspace over the next 20 years, some of which would be met by floorspace growth in other larger activity centres (such as Knox Central).

Other drivers of demand for retail and commercial floorspace growth identified in the 2014 Technical Report included tourism and health.

TOURISM

Burwood Highway is a key gateway for tourists visiting the Dandenong Ranges and Yarra Valley region, presenting the opportunity to attract more visitor expenditure to the NAC, especially for food catering retail. Approximately 2,000sqm of existing floorspace in the NAC is oriented towards tourists and visitors, including the hotel, cafes and antique stores.

Visitation to the Dandenong Ranges and Yarra Valley region is expected to increase at an average rate of 1.3% per annum¹. Assuming that half of the turnover of tourism-oriented floorspace is generated by visitors (with the balance supported by local residents) and that Upper Ferntree Gully is able to capture the same proportion of visitor expenditure over the next 20 years, tourism-oriented floorspace could increase by approximately 30% (300sqm) by 2036 in the Activity Centre.

If the Strategic Plan and other Council initiatives are successful in attracting greater visitor expenditure to the NAC to leverage from the strategic location at the entrance to the Dandenong Ranges and the close proximity to the 1,000 Steps area, a higher proportion of visitor expenditure

¹ Tourism Victoria, 2014.

may be able to be captured. To reflect this, an indicative scenario of 2% per annum growth in visitor expenditure has been applied. This scenario would result in floorspace growth of approximately 50% (500 sqm) by 2036 in retail businesses oriented to visitors.

Tourism floorspace scenarios are summarised in Table 4.

TABLE 4 UPPER FERNTREE GULLY TOURISM FLOORSPACE SCENARIOS, 2016 TO 2036

Scenario	Approximate floorspace supported by visitors (sqm)		Average growth per annum	Additional retail floorspace required (sqm)
	2016	2036		
Scenario 1	1,000	1,295	1.3%	295
Scenario 2	1,000	1,486	2.0%	486

Source: Urban Enterprise, 2016.

HEALTH

Demand for health and other commercial floorspace is less readily defined, however the ageing population of the local area and proximity of the NAC to the Angliss Hospital is likely to generate additional demand for ancillary / small health businesses within the NAC. These businesses generally occupy small tenancies – recent examples in the NAC include a dentist occupying premises formerly used by a bank.

It is difficult to estimate the potential for additional health business demand over the next 20 years in the short timeframe of this assessment. In order to ensure that sufficient commercial floorspace is available for new health businesses, an allowance of 200 to 500 sqm (which would support 2 to 5 small health related businesses) has been made.

OVERALL COMMERCIAL FLOORSPACE GROWTH

It is estimated that the overall commercial and retail floorspace growth over the period 2016 to 2036 is likely to range between 750sqm and 1,500sqm. Known development proposals on Burwood Highway within the NAC are expected to include approximately 200sqm of commercial floorspace over the next 3 – 4 years.

The capacity of potential future development sites in the core of the NAC as estimated in this Addendum could provide for 7,000sqm of net additional floorspace at ground levels which could be used for retail or commercial purposes (properties within the proposed 3-storey area). It is unlikely that demand would support occupation of all of this floorspace within the next 20 years, and similarly unlikely that development of all properties will be possible within the timeframe. A high growth scenario has been added to the assessment which assumes that 50% of this floorspace is provided over the 20 year planning timeframe, a total of 3,500sqm. This scenario would require a significant increase of demand from current levels over the period, but provides an indication of the upper level of demand for traffic and parking that might be generated over the period.

1.7. SUMMARY OF GROWTH SCENARIOS

Table 5 provides a summary of the potential dwelling, population and floorspace scenarios presented in this Addendum.

The potential additional dwelling scenarios (3 dwellings per annum and 5 dwellings per annum) are based on a review of recent sales for the development at 1172 Burwood Highway, and are indicative only given the absence of a reasonable sample of recent development and sales evidence. It is possible that other factors could lead to increased demand over time, such as a reduction in available apartment development sites within Activity Centres to the west.

TABLE 5 SUMMARY OF DWELLING AND FLOORSPACE GROWTH SCENARIOS

	Low Scenario	Mid Scenario	Upper Scenario (50% of three storey capacity plus Primary Development Opportunity sites in 2 storey areas)
Potential additional dwellings	60	100	376
Potential additional resident population in the NAC (@2 persons/household)	120	200	752
Potential additional retail and commercial floorspace in NAC (sqm)	750	1,500	4,500

Source: Urban Enterprise, 2016.

It should be noted that these scenarios are indicative only for the purposes of modelling traffic demand. Given the lack of evidence regarding the scale and rate of demand for mixed use development in the NAC, the extent to which the market responds to development opportunities in Upper Ferntree Gully could vary widely over the next 20 years. It is expected that the 'Upper Scenario' could only be realised if demand increases significantly over the next 20 years.