

Moorabool West Small Towns Residential Assessment

MOORABOOL SHIRE COUNCIL

NOVEMBER 2014

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CONTENTS

1. INTRODUCTION	2		
1.1. INTRODUCTION	2	4.4. DUNNSTOWN	20
2. CONTEXT	3	4.5. INFRASTRUCTURE CAPACITY	22
2.1. INTRODUCTION	3	4.6. TOWNSHIP SUMMARY	23
2.2. CONTEXT	3	5. REGIONAL GROWTH	25
2.3. EXISTING POPULATION	4	5.1. INTRODUCTION	25
2.4. POPULATION PROJECTIONS	5	5.2. CENTRAL HIGHLANDS REGIONAL GROWTH PLAN (DRAFT)	25
2.5. POTENTIAL TOWNSHIP CAPACITY	7	5.3. THE RESIDENTIAL CATCHMENT	27
2.6. GROWTH SCENARIOS	8	5.4. COMPETITIVE GROWTH FRAMEWORK	29
3. DEMAND INDICATORS	9	5.5. KEY FINDINGS	33
3.1. INTRODUCTION	9	6. FINDINGS	34
3.2. HOUSEHOLD INDICATORS	9	6.1. DEMAND DRIVERS	34
3.3. ECONOMIC DRIVERS	12	6.2. TOWNSHIP ASSESSMENT	34
3.4. BUILDING PERMITS	14	6.3. GROWTH SCENARIOS	35
3.5. PROPERTY VALUES	14	7. CONCLUSIONS	37
3.6. KEY FINDINGS	15		
4. TOWNSHIP ANALYSIS	16		
4.1. INTRODUCTION	16		
4.2. BUNGAREE	16		
4.3. WALLACE	18		

1. INTRODUCTION

1.1. INTRODUCTION

Moorabool Shire is currently undertaking a *Small Town Settlement Clusters Strategy* aimed at determining the future role of the towns in respect to population growth potential. The Strategy is a key element of Council's *Moorabool 2041*; a broad strategic planning project to guide the development of the Shire to 2041.

This report has been prepared by Urban Enterprise to understand residential market demand in the small towns of Western Moorabool, namely Bungaree, Wallace, and Dunnstown. The objective of the study is to determine the:

- Attractiveness of towns for residential growth;
- Demand drivers for residential land;
- Competing supply of residential land;
- Market segments and household types which would be attracted to the towns; and
- Impact of the construction of a sewage scheme on population projections.

The following sections provide background information, data and analysis to understand the residential demand for the study towns. Key conclusions are consolidated in Section 7 of this report.

2. CONTEXT

2.1. INTRODUCTION

This section provides a summary of the key drivers of the study including the planning context, current population levels, and capacity of the towns to absorb growth if the towns were provided with enhanced infrastructure.

2.2. CONTEXT

The Shire of Moorabool is strategically located on the western fringe of metropolitan Melbourne and extends to the outskirts of Ballarat to the west. The Shire forms part of a key transport corridor which connects Ballarat and Melbourne by rail and road (Western Highway and Melbourne-Ballarat rail line). Bacchus Marsh is the major town in the Shire and has experienced significant growth over recent years due to its popularity as a commuter area.

The subject towns are located in the western section of the Shire, only 12-18kms from Ballarat, and approximately 85kms from the Melbourne CBD. Whilst Bacchus Marsh has experienced strong residential growth, the subject towns have experienced minimal growth. Growth is likely to have been constrained by the town's location within a Proclaimed Water Catchment Area and lack of sewer infrastructure.

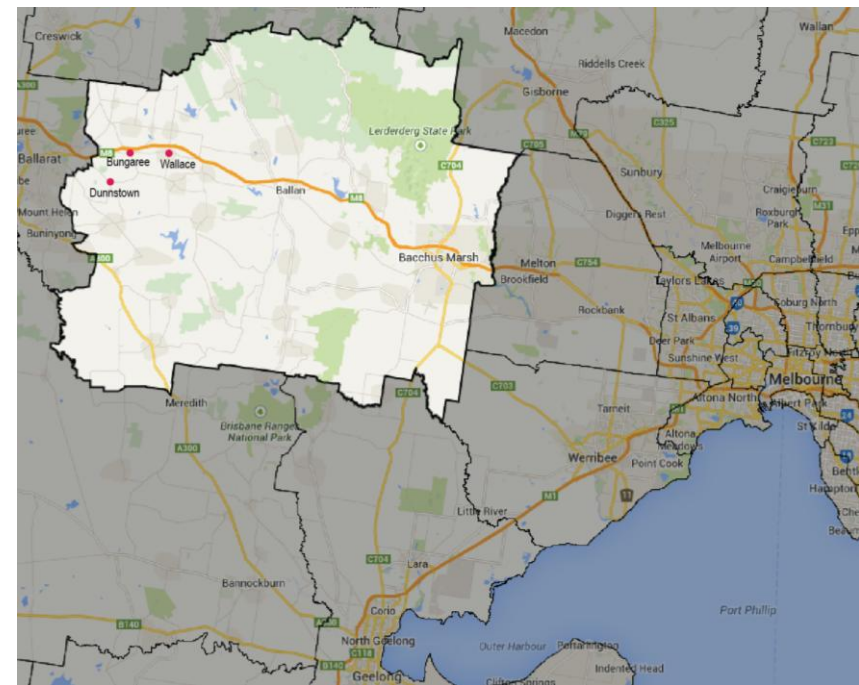
Planning controls limiting development within the water supply catchments are implemented through the Environmental Significance Overlay (ESO1) which covers each of the towns. If a dwelling is not connected to reticulated sewerage, then it is required to meet the provisions of the "Septic Tanks Code of Practice" to the satisfaction of the responsible authority and relevant water authority.

2.2.1. REGIONAL DRIVERS

- **Ballarat** is one of Australia's fastest growing regional cities with projected growth of an additional 28,800 residents and 15,000 jobs by 2031;
- **Bacchus Marsh** has experienced significant growth in peri-urban residential development;

- **Melbourne's western growth areas** including Melton have grown significantly in recent years;
- **Greater Geelong** has experienced significant growth in recent years and has recently opened up a number of new growth areas;
- **Infrastructure upgrades** including duplication of the Western Highway and the Regional Rail Link decreasing travel times between Ballarat and Melbourne;

FIGURE 1 SHIRE OF MOORABOOL



Source: REMPLAN Mapbuilder 2014

2.3. EXISTING POPULATION

2.3.1. TOWNSHIP POPULATION

Estimates for the current population of the three towns were prepared by analysing the number of dwellings within the township boundary using aerial photography and applying average occupancy rate and household size for the areas SA1 (the smallest ABS Census level available).

TABLE 1 ESTIMATED TOWNSHIP POPULATION

Town	No. Dwellings	Occupancy Rate	Average Household Size	Estimated Population
Wallace	68	87%	2.8	165
Bungaree	52	88%	2.6	118
Dunnstown	45	95%	2.7	115

Source: ABS Census 2011 (Household size and occupancy rate), Urban Enterprise 2014 (no. dwellings)

TOWNSHIP GROWTH

Historical growth of the townships was analysed using building permit records from 2004 - 2014.

Town	Dwellings Constructed 2004-2014*
Wallace	1
Bungaree	0
Dunnstown	4

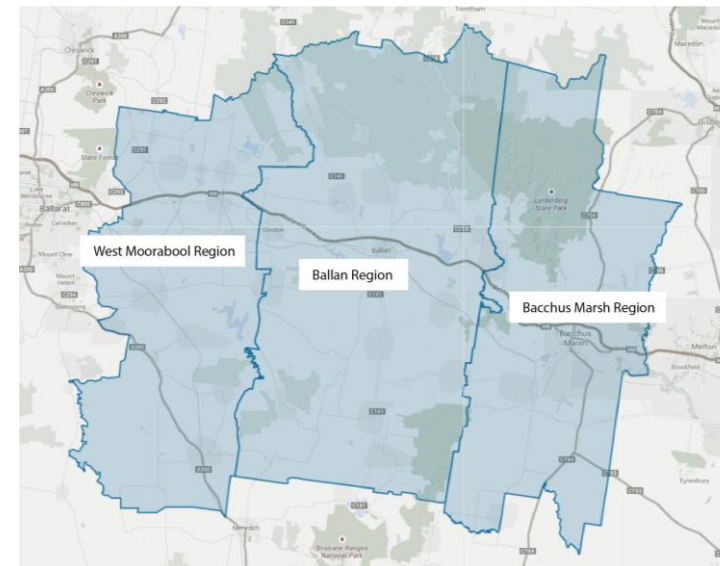
*Month ending August

Source: Moorabool Shire 2014

2.3.2. MUNICIPAL POPULATION

Historical population and dwelling growth were analysed using the Profile ID statistical boundaries as shown in Figure 2.¹

FIGURE 2 PROFILE ID STATISTICAL BOUNDARIES



Source: ID Consulting 2014

Between 2001 and 2011 the population of Moorabool Shire grew by 3,900 persons; an average growth rate of 1.5% per annum. The majority of population growth occurred in the Bacchus Marsh Region. The number of dwellings grew at a much faster rate than population, a trend which has been observed across Victoria due to declining the average household size. West Moorabool experienced minimal growth with 87 additional residents over the decade.

¹ <http://profile.id.com.au/moorabool>

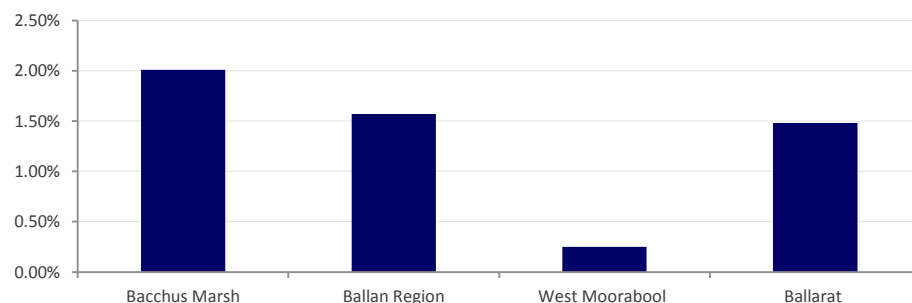
Whilst there has been minimal growth in West Moorabool, surrounding areas have experienced significant growth over the decade to 2011. Figure 3 shows that Ballarat, Ballan Region and Bacchus Marsh have grown by at least 1.5% per annum compared with 0.25% in West Moorabool.

TABLE 2 HISTORICAL POPULATION AND DWELLING GROWTH

	Population			Dwellings		
	2001	2011	% Growth p.a.	2001	2011	% Growth p.a.
West Moorabool	3,486	3,573	0.25%	1,427	1,506	0.54%
Ballan Region	5,594	6,534	1.57%	2,473	3,000	1.95%
Bacchus Marsh	14,779	18,025	2.01%	5,383	7,091	2.79%
Moorabool (S)	24,225	28,125	1.50%	9,283	11,585	2.24%
Ballarat (C)	80,756	93,502	1.48%	32,986	40,473	2.07%
Golden Plains (S)	14,605	18,765	2.54%	5,475	7,316	2.94%

Source: ID Consulting 2014, ABS Census 2001 and 2011

FIGURE 3 POPULATION GROWTH RATE 2001-2011 (%PER ANNUM)



Source: ID Consulting 2014, ABS Census 2001 and 2011

2.4. POPULATION PROJECTIONS

Population projections were sourced from Forecast ID and Victoria in Future 2014.

2.4.1. VICTORIA IN FUTURE

Victoria in Future (VIF) are the official State Government projections. These projections are not available at the local level; LGA is the smallest area available.

VIF projections for Moorabool Shire estimate the same population growth rate as Forecast ID - 2.3% p.a. to 2031. This is a higher growth rate than neighbouring LGA's; Ballarat and Golden Plains, however, Ballarat is expected to absorb the majority of growth across the region in absolute terms.

Moorabool Shire is expected to grow at a significantly higher rate than the regional Victoria average (1.2%p.a.). This is primarily due to the Shire's proximity to Melbourne and Ballarat, a major regional centre.

TABLE 3 VICTORIAN IN FUTURE POPULATION PROJECTIONS

Area	2011	2031	Difference	% Growth p.a.
Moorabool (S)	28,670	44,979	+16,309	2.3%
Ballarat (C)	95,185	142,002	+46,817	2.0%
Golden Plains (S)	18,958	28,610	+9,652	2.1%
Hepburn (S)	14,629	17,777	+3,148	1.0%
Pyrenees (S)	6,759	7,681	+922	0.6%
Regional Victoria	1,368,451	1,742,181	+373,730	1.2%

Source: VIF 2014

2.4.2. FORECAST ID

Moorabool Shire Council commissioned population projections from ID Consulting, last updated in April 2014.² According to ID Consulting, Moorabool Shire is forecast to increase from 28,620 in 2011 to 45,210 in 2031, an increase of 2.3% p.a. The vast majority of growth is expected to occur in the eastern part of the Shire. Bacchus Marsh and surrounds (including Darley and Maddingley) is expected to increase by 11,047 people by 2031, representing 39% of the Shire's growth.

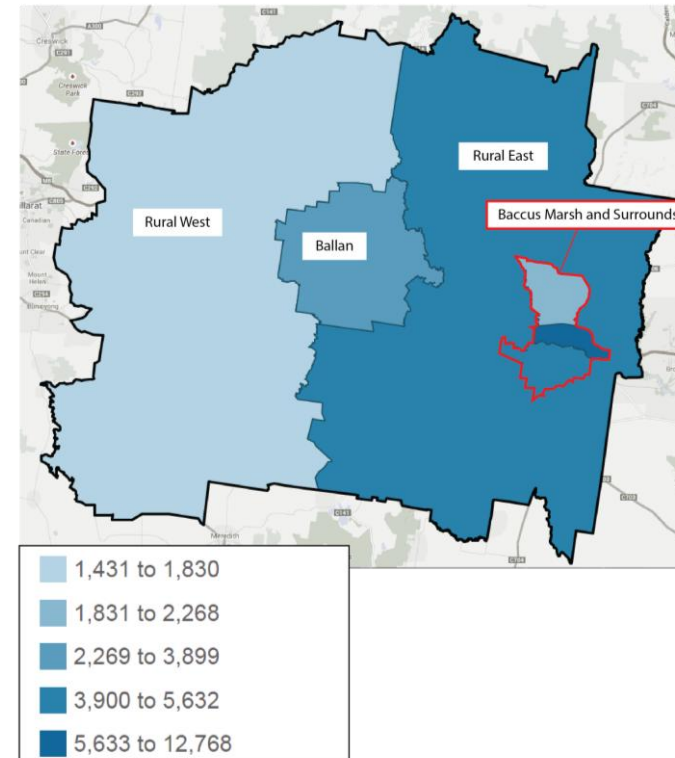
The study towns are within the geographic area known as 'Rural West'. Rural West is forecast to experience minimal growth; an additional 1,078 residents and 483 dwellings between 2011 and 2031. It is understood that these projections were based on the assumption that there would be no improvements or upgrades to utility infrastructure (e.g. sewer) to facilitate dwelling growth.

TABLE 4 POPULATION AND DWELLING GROWTH 2011-2031

	Population			Dwellings		
	2011	2031	% Growth p.a.	2011	2031	% Growth p.a.
Bacchus Marsh and Surrounds	15,801	26,848	2.7%	6,221	10,625	2.7%
Ballan	2,779	4,488	2.4%	1,178	1,889	2.4%
Rural East	4,533	7,289	2.4%	1,882	2,919	2.2%
Rural West	5,507	6,585	0.9%	2,421	2,904	0.9%
Moorabool Shire	28,620	45,210	2.3%	11,702	18,337	2.3%

Source: ID Consulting 2014

FIGURE 4 FORECAST POPULATION GROWTH 2011-2036



Source: ID Consulting 2014

² <http://forecast.id.com.au/moorabool>

2.5. POTENTIAL TOWNSHIP CAPACITY

AECOM was engaged to prepare an engineering and planning study to assess the opportunities, challenges, and viability of providing reticulated utility services to Bungaree, Wallace and Dunnstown. This includes the following items:

- Land Use Planning and Community Facility Analysis;
- Desktop Geotechnical Study;
- Stakeholder consultation;
- Servicing options for sewer (Bungaree and Wallace), water (Dunnstown) and gas (Bungaree); and
- Funding Options.

The report provides a possible urban growth scenario for the towns of Bungaree and Wallace. This includes a high level assessment of development yield using a number of assumptions for subdivision size and urban densities. The growth scenarios include infill development within existing urban areas, standard density development (1,000sqm lots) within the inner core areas (400-800m from town centre), low density development (2,000sqm lots) at the periphery of the town, and strategic long term sites for standard density development. In addition, there is also an earmarked industrial precinct in Wallace along the Western Highway.

The combined development yields for Bungaree and Wallace is for a total of **5,146 dwellings** and **13,895 people** as shown in the table opposite.

TABLE 5 DEVELOPMENT YIELDS FOR BUNGAREE AND WALLACE

Staging	Dwellings	Persons
Existing population (State Suburbs)	267	720
Short to mid-term development opportunities	1,136	3,067
Infill development opportunities	41	110
Long term future growth area opportunities	3,703	9,998
Total development yield	5,146	13,895

Source: Small Towns Services Study, AECOM 2014

The report provides a detailed assessment of community facilities and services available in each town. The services which are considered most likely to influence the opportunity for urban growth include:

- Childcare and kindergarten facilities
- Maternal child health facilities
- Recreational facilities
- Halls and community facilities

Community facilities in Bungaree and Wallace could **support a combined population of 8,000** across Moorabool West SLA before facilities would need to be upgraded.

In addition to AECOM's analysis, Council considered the preferred population growth rates. Council considered a realistic population for Wallace and Bungaree **short/medium term is 1,000 per town**, with capacity to grow further if demand was apparent. Council envisages a two stage process; Stage 1 was designed to accommodate a total of 1,000 population either totally in Bungaree or split equally across Bungaree and Wallace, and then subject to development uptake population would be encouraged to increase to 2,000, with a limit of 1,000 per town (Stage 2).

It is important to note that report's findings provide an indication of potential township capacity, and growth figures are subject to a number of additional studies to assess environmental constraints and market demand.

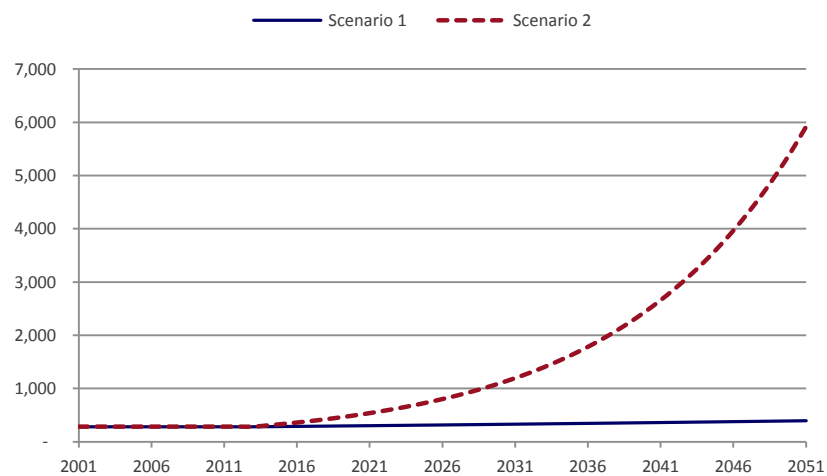
2.6. GROWTH SCENARIOS

The figure below summarises two different growth scenarios;

Scenario 1 - Applies the Forecast ID population growth rates for Moorabool West which assumes that no sewer infrastructure is provided (0.9% growth per annum to 2051.).

Scenario 2 - Applies the population growth rates based on the potential capacity of towns to accommodate growth if sewerred, as sourced from the AECOM services study (8.33% growth per annum to 2051).

FIGURE 5 INDICATIVE GROWTH SCENARIOS



Source: Urban Enterprise 2014

3. DEMAND INDICATORS

3.1. INTRODUCTION

This section provides an overview of the key drivers influencing residential demand in the region and within the small towns. The key indicators analysed include household, economic and property trends.

3.2. HOUSEHOLD INDICATORS

3.2.1. HOUSEHOLD SIZE

The average household size in Moorabool West was 2.59 people in 2011, slightly lower than Moorabool Shire at 2.66. Consistent with state-wide trends, the average household size is expected to decrease over time.

TABLE 6 AVERAGE HOUSEHOLD SIZE

	2011	2031
Rural West	2.59	2.48
Moorabool Shire (S)	2.66	2.58
Regional Victoria	2.37	2.28

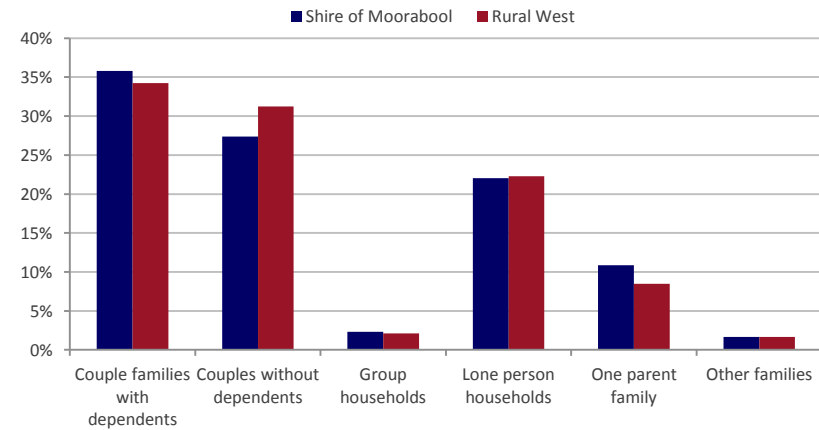
Source: ID Consulting 2014, VIF 2014

3.2.2. HOUSEHOLD COMPOSITION

The household composition of Rural West is similar to the Moorabool Shire average. The largest household type in West Moorabool was 'couple family with children', representing 34% of all households, and 'couples without children' representing 31%.

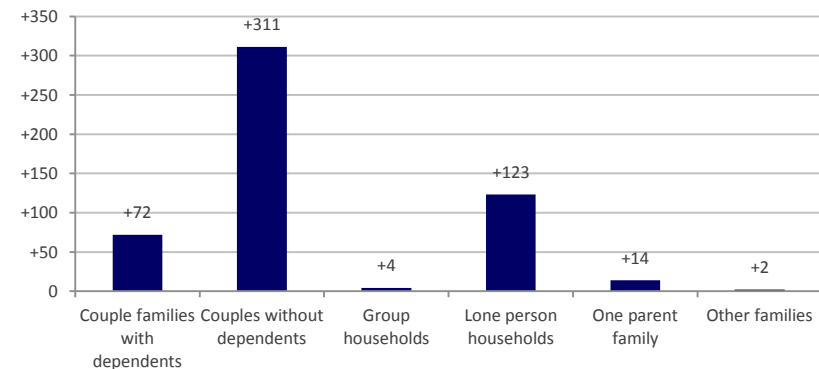
Figure 7 shows the forecast change in household composition for Rural West to 2031. 'Couples without dependents' are expected to increase substantially by 47%, as well as 'Lone person households' by 26%.

FIGURE 6 HOUSEHOLD COMPOSITION 2011



Source: ID Consulting 2014

FIGURE 7 CHANGE IN HOUSEHOLD COMPOSITION RURAL WEST (2011-2031)

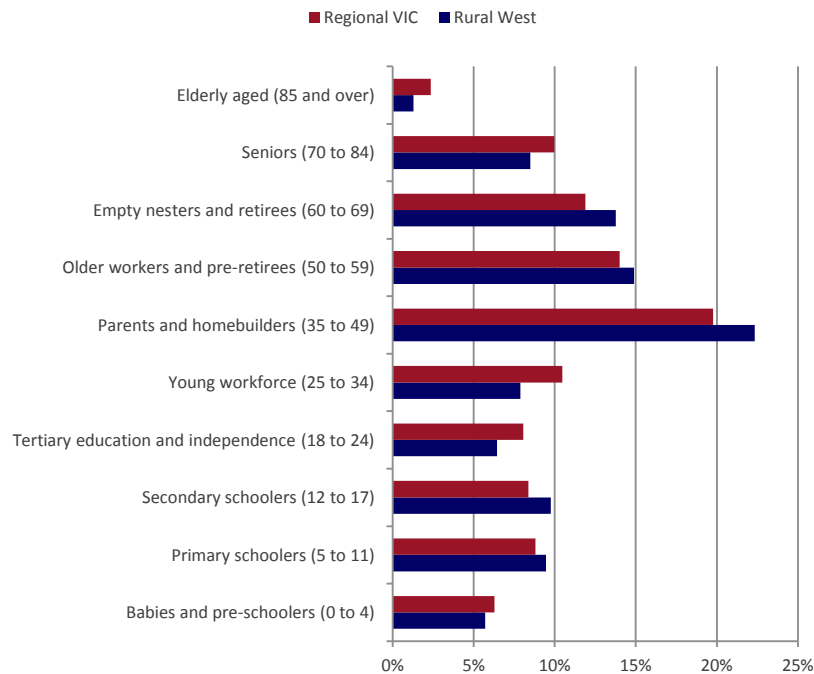


Source: ID Consulting 2014

3.2.3. AGE PROFILE

The age profile of Rural West compared with Regional Victoria is shown in the figure below. Rural West has a greater proportion of older residents within the empty nester (60-69 years) and pre-retirees (50-59 years) service age groups, as well as younger school age groups.

FIGURE 8 RURAL WEST AGE PROFILE 2011

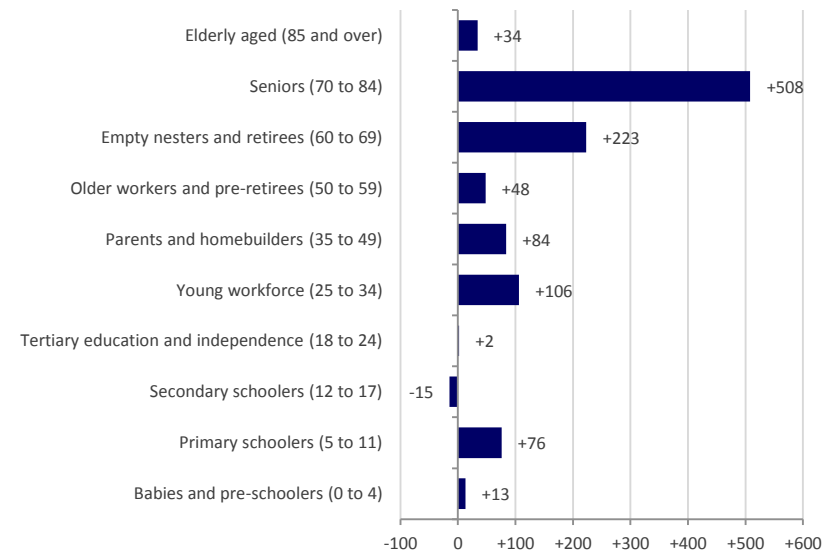


Source: ID Consulting 2014

The age profile of Rural West 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.

It should be noted that these projections are calculated based on an assumption of no significant utility upgrades to facilitate opportunities for new housing, and new household types (e.g. first home buyers) to move into the area.

FIGURE 9 RURAL WEST CHANGE IN AGE PROFILE 2011-2036



Source: ID Consulting 2014

3.2.4. POPULATION MOVEMENTS

Moorabool Shire's migration data provides a summary of where current residents lived five years prior to the last Census.

IMMIGRATION

The table below shows the Council of origin of new arrivals to Moorabool Shire between 2006 and 2011. The majority of new arrivals to Moorabool are from the western suburbs of Metropolitan Melbourne. Wyndham in particular is a large source of new residents with over 700 moving from Wyndham to Moorabool Shire between 2006 and 2011.

TABLE 7 ORIGIN OF NEW ARRIVALS 2006-2011 (TOP TEN LGAS)

LGA	In migration	Out migration	Net migration
Wyndham (C)	707	200	507
Brimbank (C)	365	108	257
Melton (S)	877	628	249
Hobsons Bay (C)	200	85	115
Maribymong (C)	143	45	98
Hume (C)	133	41	92
Moreland (C)	117	53	64
Yarra Ranges (S)	55	10	45
Knox (C)	52	13	39
Darebin (C)	76	38	38

Source: ID Consulting 2014, ABS Census 2006 and 2011

EMIGRATION

Emigration refers to residents which moved away from Moorabool Shire between 2006 and 2011. The majority of residents leaving Moorabool Shire located to the City of Ballarat. Interestingly, residents leaving Moorabool Shire tend to move to other rural locations rather than Melbourne.

TABLE 8 LOCATION OF EMIGRANTS FROM MOORABOOL 2006-2011 (TOP TEN LGAS)

LGA	In migration	Out migration	Net migration
Ballarat (C)	425	784	-359
Pyrenees (S)	5	42	-37
Hepburn (S)	55	86	-31
Corangamite (S)	4	34	-30
Surf Coast (S)	12	41	-29
Colac-Otway (S)	0	24	-24
Cairns (R)	28	51	-23
Sunshine Coast (R)	6	28	-22
Warrnambool (C)	4	26	-22
Nillumbik (S)	7	25	-18

Source: ID Consulting 2014, ABS Census 2006 and 2011

3.3. ECONOMIC DRIVERS

3.3.1. COMMUTING

A key driver of future residential demand is considered to be the availability of employment opportunities within reasonable commuting distance to the towns.

Analysis of West Moorabool (SLA) resident's place of work shows that there are strong journey-to-work relationships between West Moorabool and Ballarat. 43% of residents within West Moorabool (which were employed in 2011) work within the City of Ballarat, 26% work within Moorabool Shire, and 8% commute to Greater Melbourne.

The data shows that West Moorabool has a significant commuter population with up to 74% of working residents commuting away from the Shire. High levels of commuting are common in peri-urban areas and with employment growth expected in Ballarat and western Melbourne, this pattern is expected to continue. This positions the subject towns as an attractive residential location for commuting workers (especially to Ballarat), and future employment growth in Ballarat and west Melbourne is considered to be a key driver of residential demand in the subject towns.

TABLE 9 WEST MOORABOOL SLA PLACE OF WORK

Place of Work (LGA)	# Residents	% Residents
Ballarat (C)	724	43%
Moorabool (S)	435	26%
Greater Melbourne LGAs*	133	8%
Greater Geelong (C)	40	2%
Hepburn (S)	40	2%
Golden Plains (S)	26	2%
Pyrenees (S)	6	0%
Northern Grampians (S)	5	0%
Surf Coast (S)	5	0%
Macedon Ranges (S)	4	0%
POW not stated/no fixed address	271	16%
Total	1,692	100%

*All LGAs within Greater Melbourne

Source: ABS Census 2011

3.3.2. EMPLOYMENT GROWTH

Due to the strong economic linkages between Moorabool West and Ballarat, future business and employment growth in Ballarat is considered a key driver for future residential growth. The City of Ballarat is aiming to generate an additional 15,000 jobs over the next 15 years, as outlined in the Ballarat Regional Capital Plan. The majority of this growth is planned to occur within the new Ballarat West Employment Zone, a 250ha greenfield industrial precinct located close to Ballarat Airport. When fully developed, the precinct is expected to accommodate 9,000 jobs in industries including manufacturing, freight and logistics, construction, wholesale trade, and research and development.

Other employment drivers in Ballarat include the growth and revitalisation of the Ballarat CBD to strengthen its role as the largest commercial and retail centre in the region, and the growth of the health and education precinct. Health is the largest employing industry in Ballarat and the health precinct delivers services to a region of over 400,000 people³.

The subject towns are located only 20 minutes drive from the Ballarat West Employment Zone and 15 minutes from the Ballarat CBD.

In addition to the subject town's proximity to jobs in Ballarat, significant employment growth is planned for Melbourne's outer west. East Werribee is identified as a National Employment Cluster within Plan Melbourne and is being planned to provide commercial opportunities to create 58,000 jobs. The Truganina Employment Precinct is planned as a commercial and industrial area to support 10,000-15,000 jobs⁴. These areas are just over one hour's drive from the towns. Although there is currently a low proportion of workers commuting to Melbourne from West Moorabool, if planned employment growth in west Melbourne is realised, the towns may become an attractive residential location for commuters to west Melbourne, particularly given the proximity of each town to the Western Freeway.

Although commuting residents represent an opportunity for residential growth within the subject towns, consideration should be given to the detrimental impacts that high commuting levels can have on a local community. As recognised in the draft Moorabool Economic Development Strategy, these negative impacts include approximately \$20

million annually in transportation costs, lost retail expenditure, less time spent with family, and less time to participate in community life⁵.

FIGURE 10 BALLARAT WEST EMPLOYMENT ZONE



Source: Urban Enterprise 2014, Google Maps 2014

³ Ballarat Regional Capital Plan 2013

⁴ Truganina Employment Precinct Structure Plan 2009

⁵ Draft Moorabool Economic Development Strategy 2014

3.4. BUILDING PERMITS

Analysis of building permit data for the past 10 years provided by Council, shows that only 5 new dwellings have been constructed within the three towns. This includes 1 in Wallace, 4 in Dunnstown, and none in Bungaree.

However, real estate agents consulted suggested a number of new dwellings have been constructed in the FZ near the towns in recent years, indicating a level of demand for lifestyle dwellings in the area.

TABLE 10 NEW DWELLINGS CONSTRUCTED IN LAST DECADE

Town	Dwellings constructed in past 10 years
Wallace	1
Bungaree	0
Dunnstown	4

Source: Moorabool Shire 2014

3.5. PROPERTY VALUES

Data on property sales for the past decade was sourced from the Victorian Valuer-General's 'A Guide to Property Values 2014'.

Residential property prices in Moorabool Shire have experienced similar growth to that of Ballarat and the Regional Victoria average. Despite experiencing significant population growth, Ballarat property prices have grown at a similar rate to the state average.

Golden Plains Shire has experienced strong growth in residential house and vacant lot prices. This is likely due to the high number of rural living lots which have been released to market in recent years, which due to their larger lot sizes generally receive a higher price.

Due to the small sample size, average property prices are not available for the subject towns. Analysis of other small towns in the region shows a similar rate of growth in Gordon and Creswick. Ballan experienced a higher level of price growth and has a higher median property value indicating stronger demand for dwellings in Ballan in recent years.

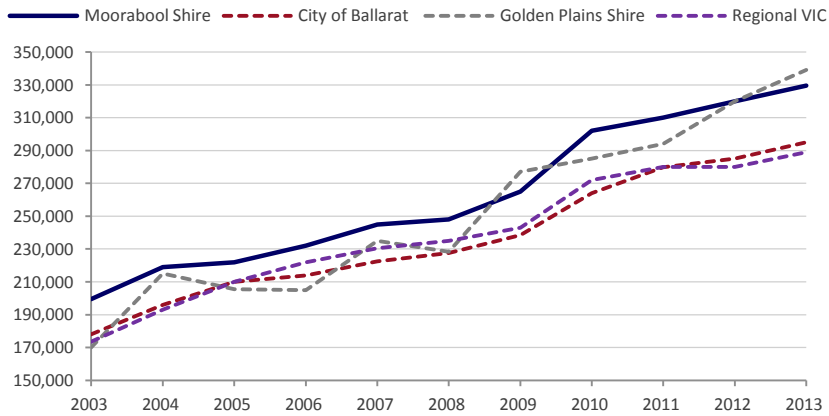
Similarly, strong property price growth (both in median house and vacant lot) in Golden Plains Shire indicates demand for houses outside major urban centres in this region. Golden Plains Shire does not contain a major urban centre and dwellings are available in small towns and rural areas.

TABLE 11 GROWTH IN PROPERTY PRICE 2003-2013

	Residential Houses		Vacant Residential Lots	
	2013 Median Price	Housing value growth rate 2003-2013 (% p.a.)	2013 Median Price	Vacant lot value growth rate 2003-2013 (% p.a.)
Moorabool (S)	\$329,000	4.7%	\$145,900	6.6%
Ballarat (C)	\$295,000	4.7%	\$133,000	6.0%
Golden Plains (S)	\$339,010	6.5%	\$147,500	13.3%
Regional Victoria	\$289,000	4.7%	\$132,500	6.7%
Ballan	\$352,000	7.3%	-	-
Gordon	\$278,000	4.0%	-	-
Creswick	\$246,000	4.6%	-	-

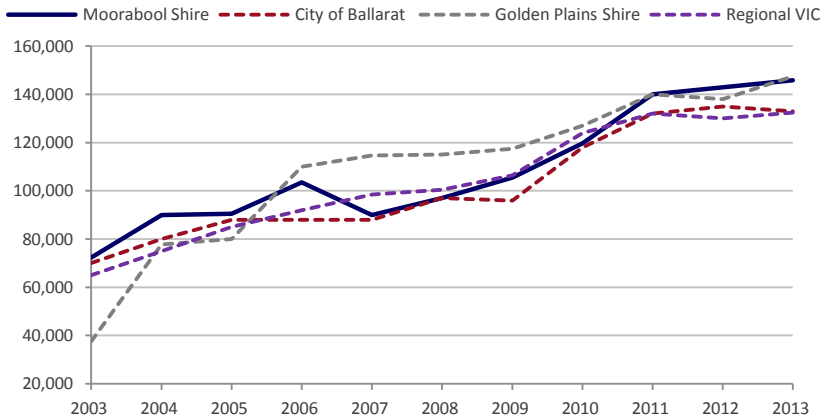
Source: Guide to Property Values, DTPLI 2014

FIGURE 11 MEDIAN HOUSE PRICE 2003-2013



Source: Guide to Property Values, DTPLI 2014

FIGURE 12 MEDIAN VACANT LOT PRICE 2003-2013



Source: Guide to Property Values, DTPLI 2014

3.6. KEY FINDINGS

The key findings which influence residential demand for the subject townships are summarised below.

- The West Moorabool region has experienced minimal population growth of only 0.25% per annum between 2001 and 2011;
- The regions surrounding West Moorabool have experienced significant growth between 2001 and 2011; Ballarat (1.48%p.a.), Ballan Region (1.57%p.a.), and Bacchus Marsh (2.01%p.a.).
- Changes to housing demand including:
 - Declining average household size across the region;
 - Older age profile with high proportion of residents within the retiree, older worker, and empty nester service age groups. The ageing of the population is expected to continue with higher number of seniors (70+ years) in the community;
 - Changing household composition with more lone households and couples without children;
- West Moorabool has strong economic links with Ballarat, with a large proportion of the working population commuting to Ballarat. Future employment growth in Ballarat may be a key driver of residential demand within the subject towns.
- Property prices in Moorabool Shire have grown at a similar rate to the regional average, however, Ballan and the neighbouring Golden Plains Shire have shown relatively strong price growth indicating demand for non-urban centre housing in the region;
- Very limited building activity within the three subject towns, primarily due to their location in a declared water catchment and lack of sewerage infrastructure.

4. TOWNSHIP ANALYSIS

4.1. INTRODUCTION

This section provides analysis of the small towns including current infrastructure and facilities, lot patterns, and capacity of existing infrastructure to absorb population growth.

4.2. BUNGAREE

Bungaree was first settled during the gold rush period when migrants took up land holdings outside of Ballarat for farming.⁶ The community is located along Bungaree-Wallace Road, approximately 4kms west of Wallace, and just 500m from the Western Highway.

The community is located in two clusters; the majority of the community is located around the intersection of Bungaree-Wallace Road and Bungaree-Creswick Road, and in a smaller cluster around the old rail station which was closed in 1982. The two clusters are separated by a water body which is likely to be subject to flooding.⁴

In comparison to the other subject towns, Bungaree has a much stronger agricultural servicing focus. The convenience store plays an important role in servicing the surrounding farms.

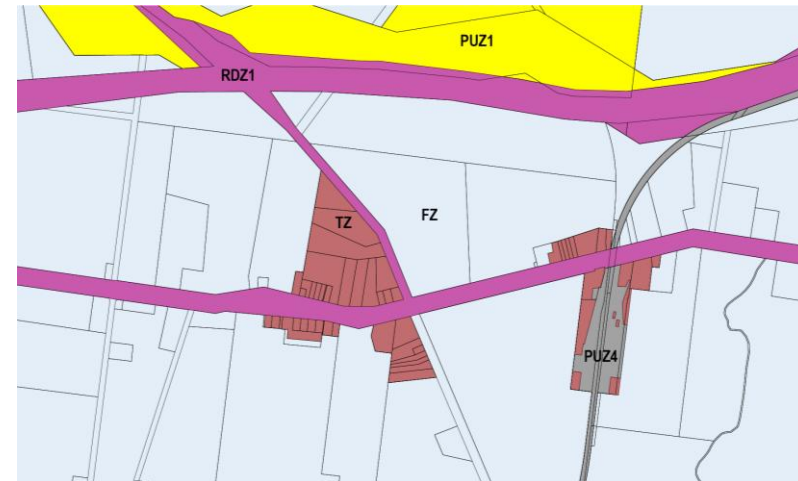
Lot sizes within the township vary from 1,000-1,500sqm along Bungaree-Wallace Road to over 1.5ha on the fringe of the town.

FACILITIES AND SERVICES

Service provision in the town includes a general store, Country Fire Authority, Anglican Church, community hall, Bungaree Primary School, and a hotel/pub. The general store plays an important role for the region as it provides petrol, post office, ATM, convenience shopping, and a mobile library stop (located at the front of the store). There has been significant investment into the upgrade of the sporting oval to AFL standard with lights,

change rooms, club room facilities, as well as netball courts. Bungaree has reticulated water but no gas connection.

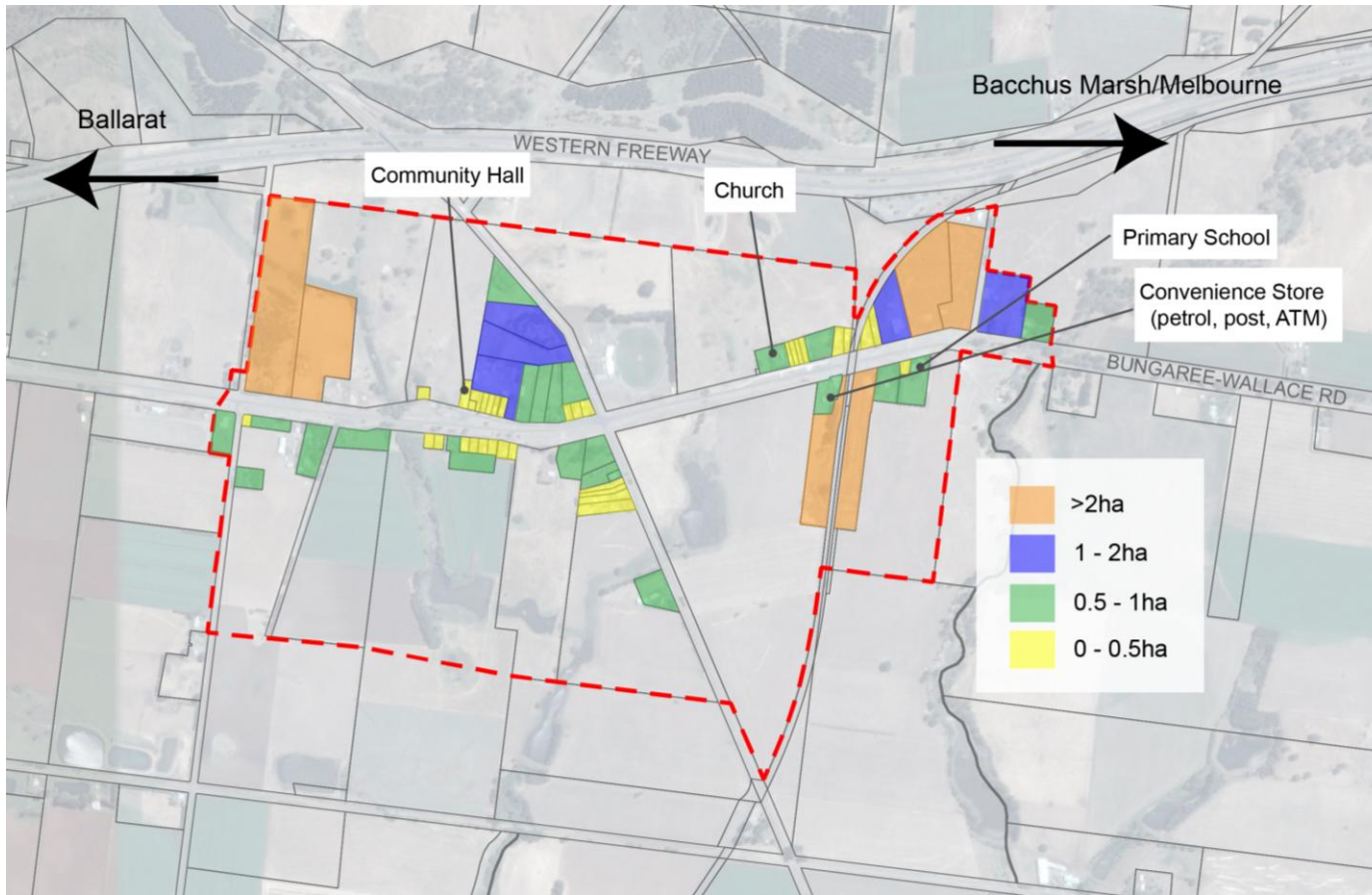
FIGURE 13 BUNGAREE ZONES



Source: Planning Maps 2014

⁶ Small Towns Bungaree, Wallace and Dunnstown Services Study, 2014 AECOM

FIGURE 14 BUNGAREE SERVICES MAP



Source: Urban Enterprise 2014

4.3. WALLACE

Wallace is located just off the Western Highway, with the majority of the settlement developed around the intersection of Westcotts Road, Ormond Road, and Bungaree-Wallace Road. Erin Court provides access to a number of larger residential lots between Bungaree-Wallace Road and the Western Highway.

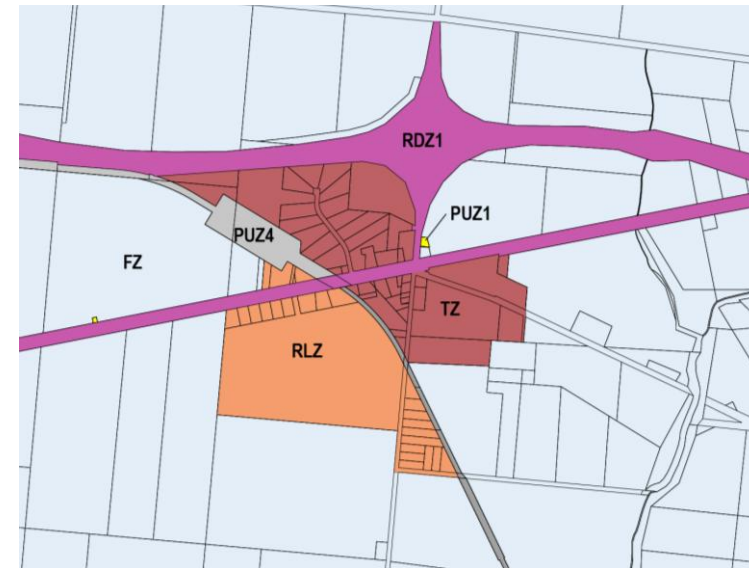
In comparison to Bungaree, Wallace appears to have greater residential amenity with properties which are more lifestyle oriented (hobby farms, large lot residential), greater investment in residential properties, and a portion of the town zoned for rural living. Wallace also has better access to the Western Freeway than Bungaree.

Typical lot sizes range from 5,000sqm along the Bungaree-Wallace Road, to 1ha on Erin Court.

FACILITIES AND SERVICES

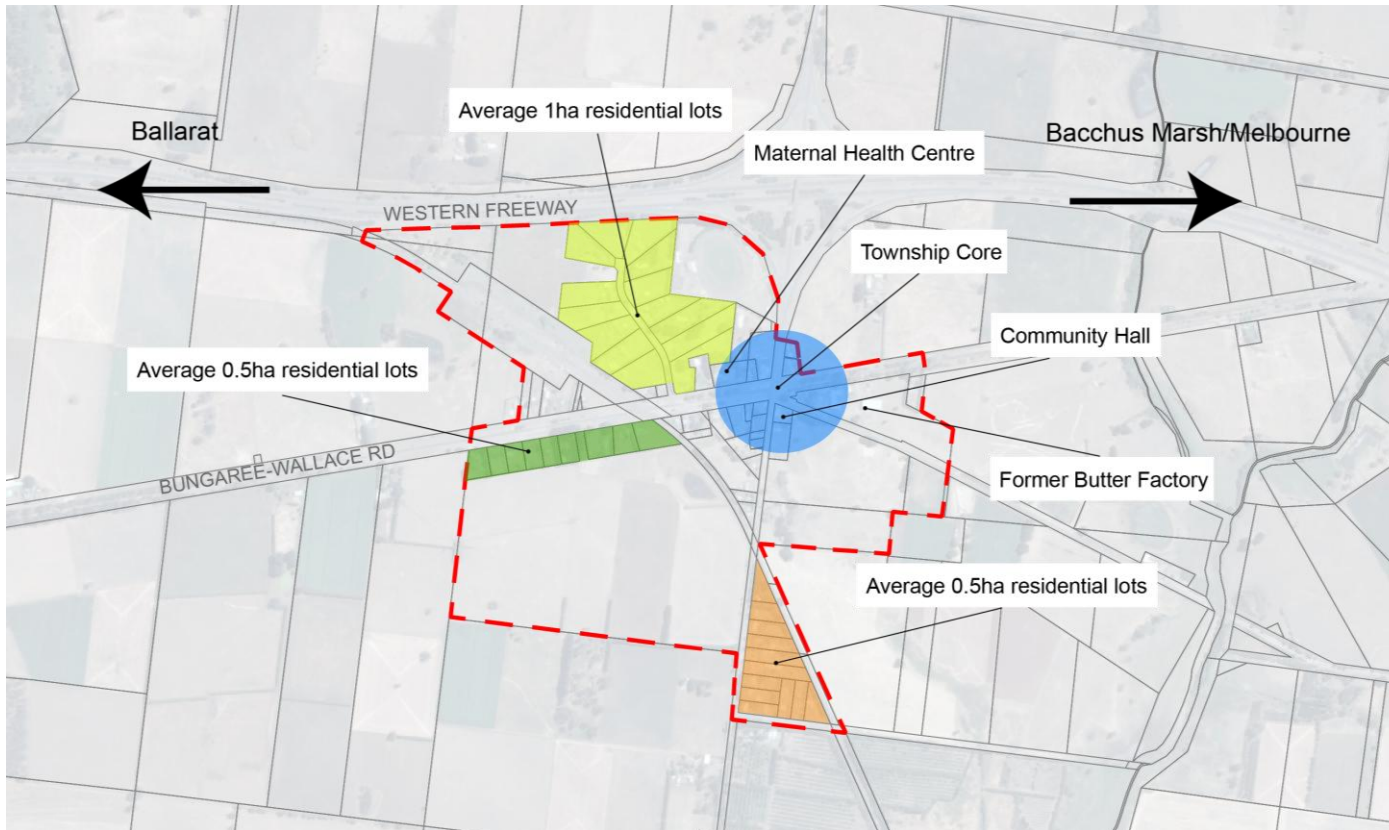
Service provision in the town includes the Wallace and District Family Services Hub (Kindergarten, Maternal healthcare, and Childcare), church, community hall, and multi-purpose sports oval including two netball courts. The town also includes the Wallace Hotel, and the Old Wallace Shop Bed and Breakfast, both of which appear to have undergone recent renovation. The old Butter Factory is located in the centre of town and has been closed since 1994. Wallace has reticulated water and gas connections.

FIGURE 15 WALLACE ZONES



Source: Planning Maps 2014

FIGURE 16 WALLACE SERVICES MAP



Source: Urban Enterprise 2014

4.4. DUNNSTOWN

Dunnstown is located approximately 5km south-west of Bungaree, below Mount Warrenheip. It is the closest of the three towns to Ballarat, but furthest from the Western Highway. The community is clustered around the intersection of Old Melbourne Road and Ti Tree Road. Within the centre of town is a unit development known as 'Ti-Tree Estate' which includes 8 units.

Property sizes vary from the 400sqm units in Ti-Tree Estate, to 0.5 - 1ha lifestyle lots.

Approximately 2km south of the township is a quarry. This has led to a high number of trucks travelling through the town centre, impacting on the amenity of the township.

FACILITIES AND SERVICES

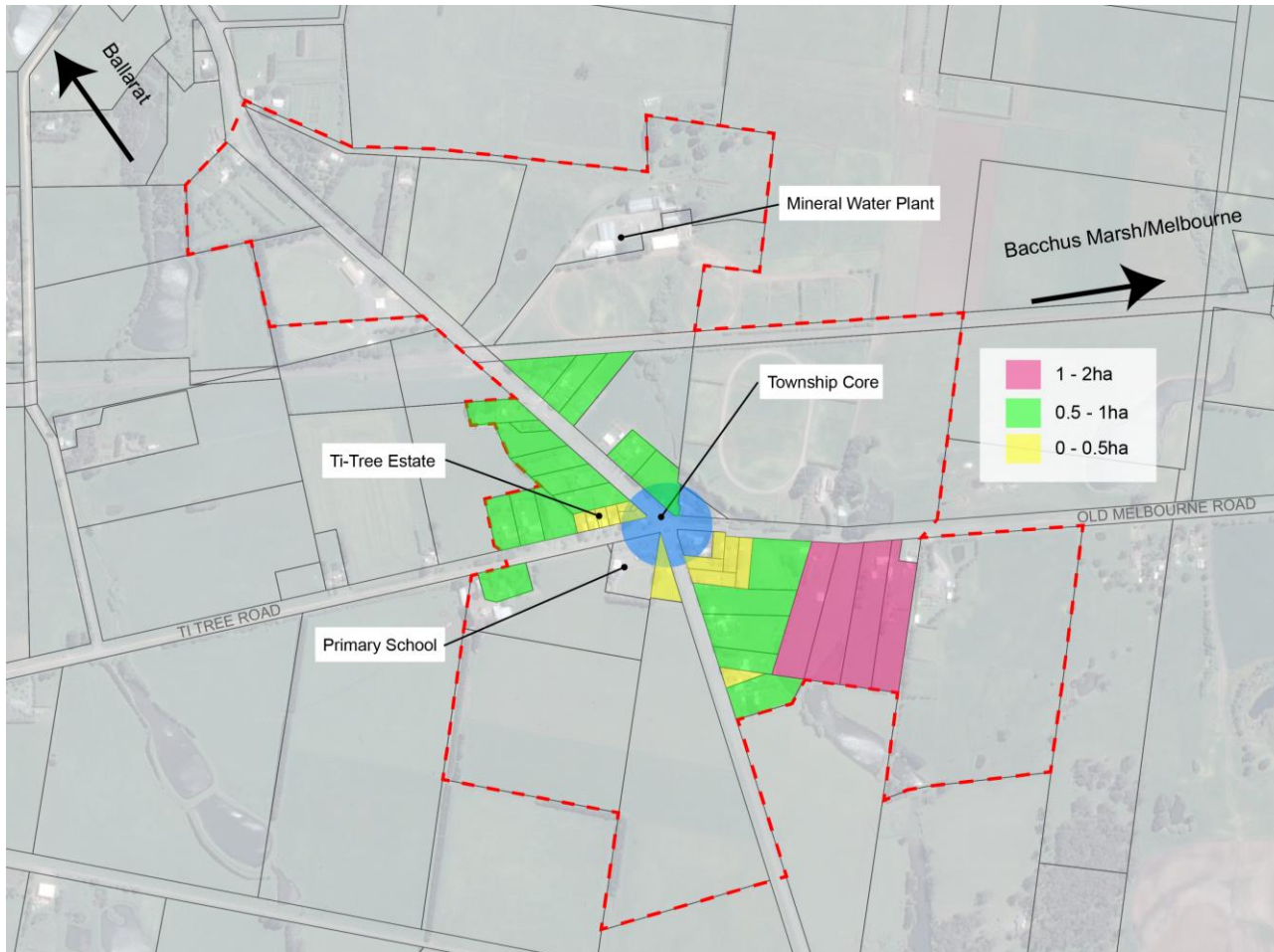
Service provision includes a community hall, St Brendan's Primary School, multi-purpose sports oval including two tennis courts, and a hotel/pub. There is an old distillery complex on Old Melbourne Road which is listed on the Victorian Heritage Register which has been converted to a mineral water processing plant. The town has no reticulated water or gas connection.

FIGURE 17 DUNNSTOWN ZONES



Source: Planning Maps 2014

FIGURE 18 DUNNSTOWN SERVICE MAP



Source: Urban Enterprise 2014

4.5. INFRASTRUCTURE CAPACITY

Information for the infrastructure assessment has been sourced through site visits and the draft *AECOM Small Towns Services Study 2014*. The table below lists the services, facilities, infrastructure and utilities available in each of the towns.

TABLE 12 FACILITIES AND SERVICES MATRIX

Facilities	Bungaree	Dunnstown	Wallace
Community Services			
Electricity			
ATMs			
Library			
Post Office			
Shire Office			
Court House			
Hospital			
Maternal & Child Health Care			
Doctor/Medical Centre			
CFA			
Police Station			
Ambulance			
SES			
Church			
Railway			
Retirement Village			
Farmers Market			
Shire Managed Social Housing			
Community Facilities			
Halls and Community Centres			
Neighbourhood Houses			
Park and public toilet			
Sports Facilities			

Art Galleries/Museums			
Education			
Childcare Centre/Pre-school			
Primary School			
Secondary School			
Tertiary			
Other			
Pub/Hotel			
Pharmacy			
Visitor Information Centre			
Café/Restaurant			
Accommodation			
Fuel Sales			
General Store			
Retail Precinct			
Utilities Connected			
Water			
Sewer			
Gas			
Waste Kerbside Service			

Source: Small Towns Services Study, AECOM 2014

Due to the proximity of the towns, it is appropriate to assume that the community facilities operate as part of a network - services provided in one town also service the other towns and surrounds.

The AECOM analysis found that the community facilities and services that are most likely to influence future growth include Childcare and Preschool facilities, Maternal Child and Healthcare facilities, Recreational facilities, and Halls and Community facilities. The threshold population of what existing facilities can accommodate is shown in the table below.

TABLE 13 COMMUNITY FACILITIES THRESHOLD POPULATIONS

Facilities	Threshold Population
Childcare/Kindergarten	Approximately 8,000 across Moorabool West SLA
Maternal Child and Health Care facilities	Approximately 11,200 across Moorabool West SLA
Recreational facilities	Approximately 8,000 across Bungaree and Wallace
Halls and Community facilities	Approximately 16,000 across Bungaree and Wallace

Source: Small Towns Bungaree, Wallace and Dunnstow Services Study, 2014 AECOM

Based on this analysis, the region can grow to a theoretical population of 8,000 people across Moorabool West SLA before childcare and recreational facilities would need to be expanded. The existing population of Moorabool West is 3,573 residents (2011 Census). Therefore, an additional 4,427 residents could theoretically be accommodated before community facilities would need to be upgraded. It is noted that Gordon is located on the boundary of the Moorabool West SLA and would be expected to continue to provide community services to the area.

It is important to note that the AECOM analysis of existing facilities is based on commonly used benchmarks and trigger points for population levels, rather than a detailed analysis of their suitability and catchment areas. A more detail analysis will be required to fully understand their capacity and suitability in accommodating population growth.

4.6. TOWNSHIP SUMMARY

A summary of the three towns is provided in the table overleaf.

In order to gain understanding of the residential attractiveness of the towns, consultation with local real estate agents was undertaken. The key elements which were considered to make these towns attractive for residential development include the following:

- Location on the Western Highway and proximity to Ballarat - real estate agents commented on the '15 minute arc' to Ballarat as an important driver;
- Location on the eastern side of Ballarat (i.e. Melbourne side). This area is much more 'sought after' than the western and is considered a key competitive strength

against other small towns in proximity to Ballarat. In addition, connectivity to the Ballarat CBD is much easier from the east than the west;

- Strong sense of local community within the townships, especially Bungaree, and their existing community facilities. This includes the sporting facilities and proposed bowls club upgrade in Bungaree; and
- The landscape values and rural amenity of the small towns, particularly Wallace.

Discussions with agents also explored the housing market segments which may seek to reside in the subject towns. They include:

- **Commuters.** The accessibility to Ballarat means that the subject towns will be attractive for workers in Ballarat. Commuters to Melbourne were considered a smaller market due to the larger distance, and better position of Gordon and Ballan (which also has train connections to Melbourne).
- **Lifestyle.** The towns landscape qualities and rural amenity would make them attractive for residents seeking greater lifestyle options. Particularly given the continued suburbanisation of Bacchus Marsh and Melton and parts of Ballarat. Residents from these areas may seek to move to the towns for their rural amenity.
- **Retirees.** The lifestyle qualities of the towns make them attractive for retirees, particularly from Melbourne seeking a 'tree change'. In addition, the ageing profile of farmers and recent trends towards farm amalgamations may lead to retiring farmers seeking housing in the towns, particularly given the town's existing agricultural heritage.

Other housing segments which may seek to establish in the region include affordable housing and first home buyers. However, a large supply of this housing type exists and is proposed in Melton, Bacchus Marsh, and Ballarat.

TABLE 14 TOWNSHIP SUMMARY

	Wallace	Bungaree	Dunnstown
Dwellings	68	52	45
Estimated Population	165	118	115
Community Facilities	Wallace and District Family Services Hub (Kindergarten, Preschool, Maternal healthcare, and Childcare), church, community hall, mobile library stop, and multi-purpose sports oval including two netball courts.	A general store (inc. ATM, Post Office and Petrol), Country Fire Authority, Anglican Church, community hall, Bungaree Primary School, and a hotel/pub. There has been significant investment into the upgrade of the sports oval to AFL standard with lights, change rooms, club room facilities, and two netball courts.	Service provision includes a community hall, St Brendan's Primary School, multi-purpose sports oval including two tennis courts, and a hotel/pub
Utilities	Reticulated water, natural gas connection, no sewer	Reticulated water, no gas or sewer	No reticulated water, gas connection, or sewer.
Role/Function	High residential amenity and lifestyle oriented.	Plays an important agricultural service function.	Small rural settlement at the intersection of a number of rural service roads.

Source: Small Towns Services Study, AECOM 2014

5. REGIONAL GROWTH

5.1. INTRODUCTION

This section provides analysis of the wider region to understand the regional growth context. The Central Highlands Regional Growth Plan (CHRGP) has been reviewed to understand the settlement framework for the region, and key policies to support township growth.

5.2. CENTRAL HIGHLANDS REGIONAL GROWTH PLAN (DRAFT)

The draft CHRGP covers 8 municipalities across the region and provides broad direction for regional land use and development. The subject towns are located within the significant Ballarat Hinterland Region and Ballarat to Melbourne corridor.

The regional settlement strategy (Section 13.3 of the plan) provides direction for the preferred locations for growth and the role of settlements within the Central Highlands settlement framework. Ballarat is expected to experience significant growth and will remain the primary urban centre of the region. Within close proximity to Ballarat are three towns which are expecting medium level growth: Creswick, Smythesdale, and Ballan.

Bungaree is identified as a 'Rural Settlement'. The role of rural settlements is summarised as follows:

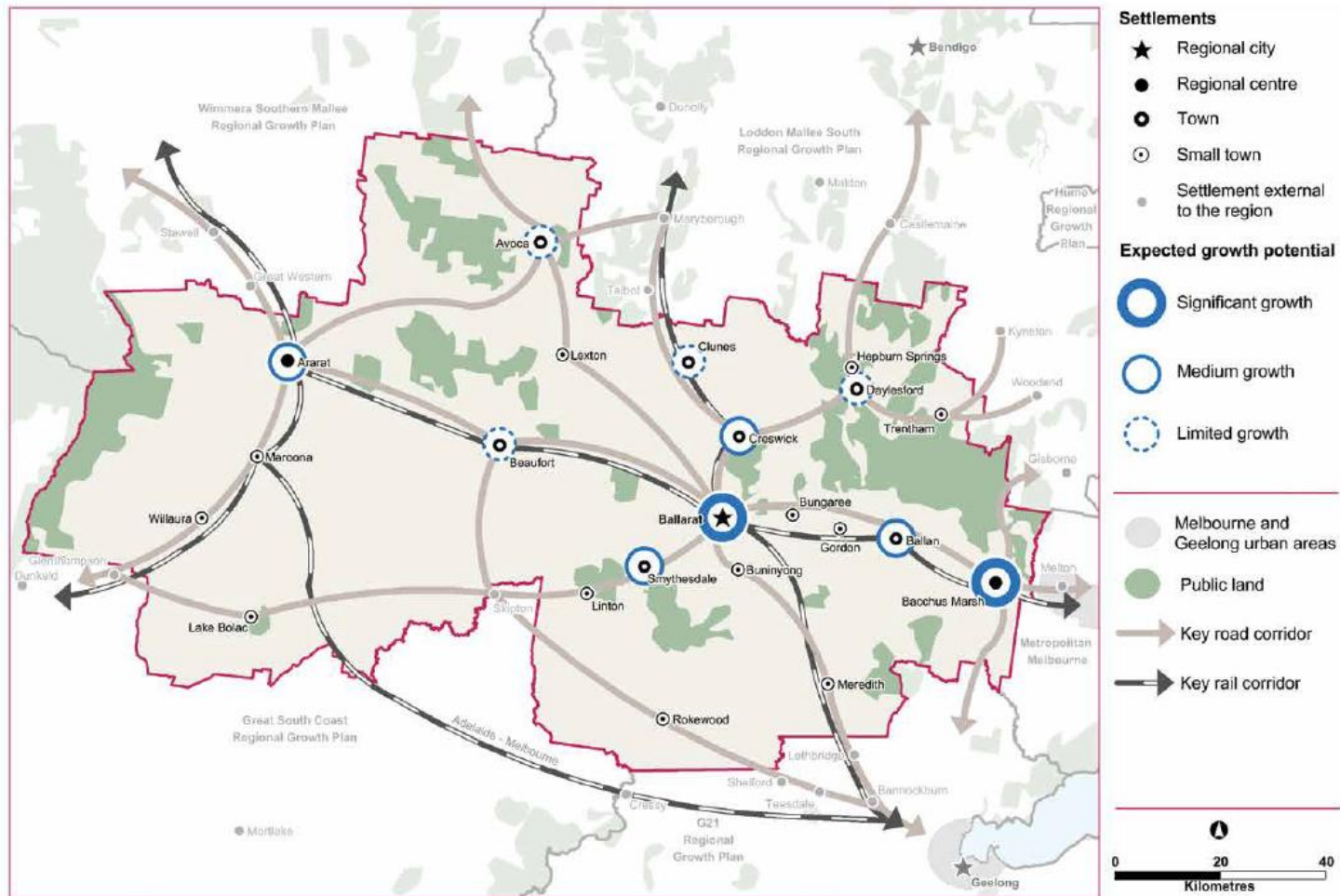
- Characterised by small rural dispersed population with some small concentrations of housing and minimal services for example sole general store and primary school;
- Reliant on other settlements for wider range of services;
- Connection to reticulated water may be available but access to sewer connection varies.

Although the CHRGP does not include any specific actions for the subject towns, it refers to areas which are considered attractive for rural residential development, including land within, and in proximity to, the Western Highway corridor between Bacchus Marsh and Ballarat. The Plan recognises some of the detrimental impacts of inappropriate rural

residential development including impacts on farming activities, environmental assets, landscape values, and inefficient use of infrastructure. Therefore, Councils should undertake detailed planning for rural residential use to make use of existing infrastructure and services and consider the contribution of communities to the local economy.

In regards to the provision of sewerage infrastructure, the Plan recognises that smaller settlements which rely on septic tanks may have impacts on declared water supply catchments. Furthermore, any decision to provide a reticulated sewage system needs to be carefully considered, with business cases measured against environmental factors, anticipated growth and supported by planning policies concerning that settlement.

FIGURE 19 REGIONAL SETTLEMENT FRAMEWORK



Source: Draft Central Highlands Regional Growth Plan 2013

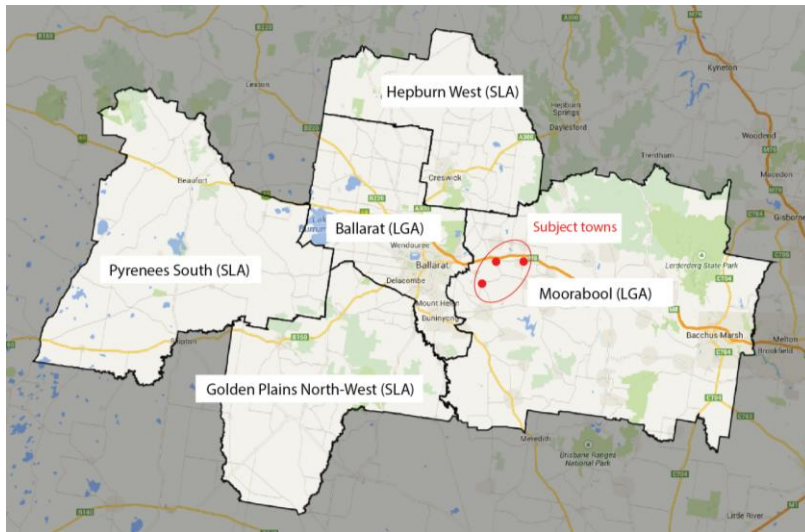
5.3. THE RESIDENTIAL CATCHMENT

With regard to the settlement framework within the CHRGP, the catchment which is considered likely to be influenced by Ballarat - that is residential demand for people who are seeking to reside within close proximity to Ballarat, is shown in the map below. The catchment is composed of the following ABS geographical areas:

- Moorabool Shire LGA
- City of Ballarat LGA
- Golden Plains - North West (SLA)
- Pyrenees - South (SLA)
- Hepburn - West (SLA)

This is the catchment within which people commuting to jobs in Ballarat are most likely to consider living within, based on likely journey times of approximately 30-40 minutes.

FIGURE 20 REGIONAL HOUSING CATCHMENT



CATCHMENT POPULATION

The population of the catchment is shown in Table 15. In 2011, the population of the catchment was 139,610. In 2011, the share of population living within the major centres was 72% and Rural Balance was 28%. The share of population living within major centres has increased since 2001, mainly due to greenfield residential development in Bacchus Marsh and Ballarat West.

TABLE 15 CATCHMENT POPULATION 2001-2011

	2001	2006	2011
Catchment Population			
Ballarat LGA	79,794	85,169	93,501
Moorabool LGA	24,225	25,474	28,125
Golden Plains North SLA	6,960	7,439	7,917
Hepburn West SLA	6,522	6,507	6,734
Pyrenees South SLA	3,067	3,263	3,333
Total	120,568	127,852	139,610
Major Centre vs Rural Balance			
Ballarat UCL	72,766	78,221	85,935
Bacchus Marsh UCL	12,107	13,261	14,913
Major Centre*	84,873	91,482	100,848
Rural Balance	35,695	36,370	38,762
Major Centre (Proportion of Catchment)	70%	72%	72%
Rural Balance (Proportion of Catchment)	30%	28%	28%

*Major Centres are Ballarat Urban Centre Locality (UCL) and Bacchus Marsh UCL

Source: ABS Census 2001, 2006, and 2011

Table 16 shows how the growth across the catchment has been distributed between the major centres and the rural balance. Between 2001 and 2006, only 9% of population growth occurred in the rural balance. Between 2006 and 2011, the proportion of growth occurring within the rural balance increased to 20%. Over this period a number of towns in the rural balance experienced growth including Creswick and areas within the rural area of the City of Ballarat (e.g. Cardigan Village).

TABLE 16 CATCHMENT POPULATION GROWTH 2001-2011

	5 Year Population Growth 2001-2006	5 Year Population Growth 2006-2011	10 Year Population Growth 2001-2011
Catchment Population Growth			
Ballarat LGA	+5,375	+8,332	+13,707
Moorabool LGA	+1,249	+2,651	+3,900
Golden Plains North SLA	+479	+478	+957
Hepburn West SLA	-15	+227	+212
Pyrenees South SLA	+196	+70	+266
Catchment Growth	+7,284	+11,758	+19,042
Major Centre and Rural Balance Population Growth			
Ballarat UCL	+5,455	+7,714	+13,169
Bacchus Marsh UCL	+1,154	+1,652	+2,806
Major Centre	+6,609	+9,366	+15,975
Rural Balance	+675	+2,392	+3,067
Share of Population Growth			
Major Centre	91%	80%	84%
Rural Balance	9%	20%	16%

Source: ABS Census 2001, 2006, and 2011

PROJECTED CATCHMENT POPULATION

The projected population of the catchment to 2031 is shown in Table 17. Population projections are sourced from VIF 2014. VIF2014 does not provide projections at the SLA level, therefore the relevant LGA growth rate has been used to model population growth for SLA areas.

The catchment is projected to grow by 68,482 to 2031, at an annual average growth rate of 2.6%, more than double the growth rate of Regional Victoria of 1.2% per annum.

TABLE 17 CATCHMENT POPULATION PROJECTION

	2011 Population	2031 Population	2011-2031 Growth
Ballarat LGA	95,815	142,002	+46,187
Moorabool LGA	28,670	44,979	+16,309
Golden Plains North SLA	7,917	11,997	+4,080
Hepburn West SLA	6,734	8,217	+1,483
Pyrenees South SLA	3,333	3,757	+424
Catchment Population	142,469	210,952	+68,482

Source: VIF2014

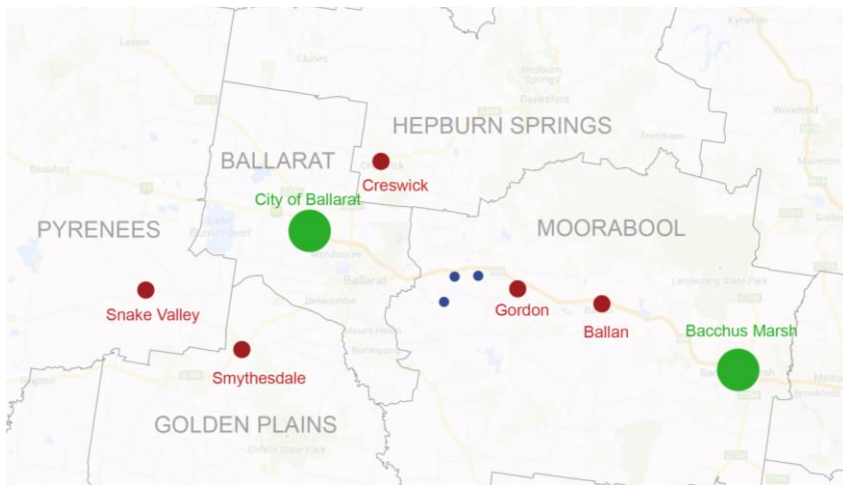
Between 2001 and 2011, 84% of population growth occurred within major centres, and 16% occurred in the rural balance. If the same distribution of growth occurs in the future, then the **catchment rural balance (all areas outside of Ballarat UCL and Bacchus Marsh UCL) can be expected to grow by 11,030 residents to 2031.**

5.4. COMPETITIVE GROWTH FRAMEWORK

A competitive growth framework has been developed based on the CHRGP to understand the key townships which are expected to accommodate population growth over the next 20 years outside of the major centres - Ballarat and Bacchus Marsh. These townships are shown in red in the map below, and include:

- Smythesdale;
- Creswick;
- Ballan;
- Gordon; and
- Snake Valley.

FIGURE 21 GROWTH TOWNS



CRESWICK

Creswick is located 19 kilometres northeast of Ballarat on the Midland Highway and Ballarat-Maryborough railway. The town has a mixture of heritage, rural character and vegetated surrounds. The town includes mid-level services such as education (including a University of Melbourne campus), retail, business, medical and recreational opportunities.

The regional growth plan provides policy support for medium-level growth. Directions for Creswick include the following:

- Support growth of Creswick as a settlement in Ballarat's hinterland;
- Promote further employment opportunities in the town to reduce its role as a commuter centre;
- Encourage the provision of a range of services and facilities for the local community;
- Provide for residential growth through infill development and incremental growth.

The level of population growth expected in Creswick is unclear at this stage. Hepburn Shire Council is currently completing a residential and industrial land use study which will be publically available in December 2014. However, due to the policy support for growth identified in the CHRGP, the scale of population growth is estimated to be between 500 - 1500 additional persons by 2031.

SMYTHESDALE

Smythesdale is located 20km south-west of Ballarat on the Glenelg Highway. The town offers a range of local services such as primary education, retail, medical and recreation. These services are important for surrounding smaller settlements.

The town was sewered in 2013 and has significant capacity to absorb further growth. The CHRGP provides policy support for medium-level growth. Directions for Smythesdale include the following:

- Support Smythesdale as the preferred growth town for the northern part of the Golden Plains Shire and Ballarat's hinterland;
- Promote further employment opportunities and services to reduce the town's role as a commuter centre;
- Favour infill development and planned growth areas.

In order to understand the impact of the sewerage scheme on population growth, building permit data was sourced from Golden Plains Shire. Table 18 shows that before the sewerage scheme, there was an average of 7.7 new dwellings approved per annum and after there was an average of 11 per annum. It suggests that **although the sewerage scheme may have resulted in a small uplift in dwelling growth, it has not yet provided a significant stimulus for development in Smythesdale.** However, due to the short timeframe, a clearer understanding of the impact of the sewerage scheme will require a longer monitoring period.

TABLE 18 SMYTHESDALE BUILDING PERMITS (BEFORE AND AFTER SEWERAGE SCHEME)

	Year (ending April)	New Dwellings
Before Sewer	2010/11	3
	2011/12	10
	2012/13	10
	Annual Average	7.7
After Sewer	2013/14	12
	2014/15 (ending October)	5
	Annual Average	11

Source: Golden Plains Shire Council, 2014

The future growth of the town is guided by the Smythesdale Urban Design Framework which considers a preferable population level of between 2000 - 2500 persons. However, no timeframe is provided.

BALLAN

Ballan is located 34km east of Ballarat, on the strategic transport corridor linking Melbourne. The town has a strong historical and village character within a rural setting.

Ballan's location on the Western Highway and on the Ballarat-Melbourne rail line, mean it will continue to attract growth. It is anticipated development pressure on the town will

increase in the long term, when residential development opportunities become scarce in Bacchus Marsh⁷.

The CHRGP provides policy support for medium-level growth. Directions for Ballan include the following:

- Support Ballan as a town providing services in the peri-urban area.
- Support residential growth that respects the surrounding rural character and environmental attributes.
- Encourage local employment opportunities.

A structure plan is currently being developed for Ballan. The draft structure plan supports growth in infill areas, and new growth corridors to the south and west. The structure plan includes vision for future development which sees a population of 3,500 by 2026. This rate of growth would correspond to an additional 2,135 residents to be accommodated in Ballan by 2031.

GORDON

Gordon is a small settlement just 18km east of Ballarat, within the strategically important Ballarat-Melbourne transport corridor. The town has a village setting and relatively high rural amenity. Historical growth of the town was constrained due to its location within a declared water catchment area and lack of sewerage infrastructure. The construction of a sewerage treatment plant and the **sewering of the core township area in 2013 has provided the opportunity for further residential development.** According to CHW, the sewerage system has been designed for a capacity of 280 properties, which represents a capacity to grow by an additional 139 properties. Based on the average household size in the area (2.5) this would correspond to an additional 348 residents.

Information on dwelling growth since the installation of reticulated sewerage in early 2013 was provided by Moorabool Shire Council. In the two years prior to the sewerage scheme there were a total of 12 building permit applications for new dwellings in Gordon. Since reticulated sewerage has been installed, there have been 19 applications for new dwellings. **Similar to the Smythesdale experience, Gordon has had a mild increase in development activity following connection to reticulated sewerage.**

⁷ Draft Central Highlands Regional Growth Plan 2013

SNAKE VALLEY

Snake Valley is a small settlement 30km to the south-west of Ballarat. The town has a strong gold rush heritage, and during the late 1850s, the town had a population of almost 10,000 people. The town now has a population of approximately 350 people⁸.

A sewerage scheme has recently been installed which will allow for infill and consolidated growth of the township. According to the Snake Valley Structure Plan, the scheme will allow for an additional 132 dwellings to be constructed within the zoned township area. Based on the average household size in the area (2.5) this would correspond to an additional 330 residents.

COMPETITOR TOWNS SUMMARY

A summary of the key competitor towns is provided in the table overleaf. The total **population capacity of the competitor towns based on existing information and infrastructure is estimated to be between 5,000 and 7,000 additional residents.**

⁸ Snake Valley Structure Plan 2012

TABLE 19 STRATEGIC GROWTH TOWNS

	Distance to Ballarat	Distance to Melbourne	Policy to support growth	2001 Population	2011 Population	Additional Population Capacity	Key Features
Ballan	34km	79km	Support Medium Growth in the CHRGP	1,724	2,045	2,135	Within the Ballarat-Melbourne transport corridor. A strong historical and village character within a rural setting. On the Melbourne-Ballarat rail line.
Creswick	19km	120km	Support Medium Growth in the CHRGP	2,449	2,568	500-1500	A mixture of heritage and rural character. On the Ballarat-Maryborough train line.
Smythesdale	20km	133km	Support Medium Growth in the CHRGP	308	493	2,007	Gold rush heritage. The town has country living characteristics and recreational assets. Sewered in 2013 and has significant capacity for growth.
Snake Valley	30km	143km	Not identified as a growth town, but has been sewered	308	293	330	Gold rush heritage. Recently sewered. Constrained by bushfire risk.
Gordon	10km	122km	Not identified as a growth town, but has been sewered	382	378	348	Small settlement on the Ballarat-Melbourne transport corridor. Strong village setting. Recently sewered.

5.5. KEY FINDINGS

The key findings from the analysis of the regional context include:

- The CHRGP provides clear policy support for the location of future population growth. The settlement framework shows that residential demand in the subject towns will be impacted by its proximity to:
 - Ballarat, the largest centre in the region and where significant growth should be supported; and
 - Ballan, Smythesdale and Creswick which are designated as medium growth towns and are expected to accommodate a significant proportion of population growth outside of Ballarat.

Although the subject towns are not specifically identified for growth, the Plan refers to areas within, and in proximity to, the Western Highway corridor between Bacchus Marsh and Ballarat as being attractive for residential development.

- The residential growth catchment is the region considered to be influenced by housing demand from Ballarat. The catchment has a current population of 139,610 with 72% of the population living in the major centres of Ballarat and Bacchus Marsh, and 28% living in the rural balance.
- Between 2001 and 2011, the catchment's population increased by 19,042. 84% of this growth occurred in the major centres, and 16% occurred in the rural balance.
- The catchment's population is projected to increase by an additional 68,482 residents between 2011 and 2031. Assuming the same distribution of growth will occur, the rural balance is estimated to grow by approximately 11,000 residents by 2031.
- The key towns in close proximity to Ballarat which are expected to grow over the next 20 years are identified as Smythesdale, Creswick, Ballan, Snake Valley and Gordon. Analysis of the growth capacity of competitor towns indicates a total capacity of between 5,000 - 7,000 additional residents.
- Considering the growth of the rural balance to 2031 (additional population of 11,000), and capacity of the strategic growth towns (5,000 - 7,000 residents), **an additional 4,000 - 6,000 residents are expected to be accommodated across the**

rural balance, outside of the strategic growth towns. This level of growth provides a guide as to the level of population growth that is likely to be attracted to non-major centres and strategic towns over the period to 2031.

- The majority of population growth in the region is expected to occur within the major centres of Ballarat and Bacchus Marsh. The primary residential market for the major centres will continue to be first home buyers. It is considered that the subject towns appeal to different market segments, primarily tree changers, commuters, and retirees. Therefore these towns operate within a different competitive framework than the major centres.
- The total population growth in the subject towns will be limited by strong competition in the region with other small towns including Gordon, Ballan, Smythesdale, Snake Valley, and Creswick. Existing community facilities, strategic location, and high amenity (especially Wallace) will mean demand for residential properties in these towns could result in moderate dwelling growth if utility infrastructure, particularly sewer, is established. However, the vast majority of population growth in the region will continue to be supported in Ballarat and Bacchus Marsh, as well as the strategic towns identified in the CHRGP.
- Analysis of towns which have been seweraged in recent years including Gordon and Smythesdale shows that the provision of reticulated sewerage has corresponded to a small increase in development activity. However, it has not resulted in any significant stimulus for development which suggests that there is not a major level of latent demand in the region for residential development in the small towns.

The experience of Gordon is particularly relevant to the subject towns given its proximity and similar rural and landscape qualities. The slow rate of uptake in Gordon suggests that the installation of enhanced utilities in the subject towns will not necessarily lead to a 'rush' of new development, rather it would be a long-term growth prospect. It is important to note that the monitoring period since the sewerage scheme is very short (approximately 18 months) and a full understanding of the impact of the sewerage scheme would require another 2-3 years of monitoring.

6. FINDINGS

6.1. DEMAND DRIVERS

Key factors which make the subject towns attractive for residential development include:

- Location on the Western Highway as well as on the eastern side of Ballarat (i.e. Melbourne side);
- Proximity to employment and services in Ballarat, and to a lesser extent proximity to employment in western Melbourne;
- Existing community facilities and services with capacity to support further growth; and
- The landscape values and rural amenity of the small towns, particularly Wallace.

Housing market segments which may be attracted to the towns include retirees, tree changers, and commuters. Commuters to Ballarat are considered a key market given the accessibility to central Ballarat (15 minutes drive time) and the western employment zone.

6.2. TOWNSHIP ASSESSMENT

The table opposite provides a summary of the key development drivers and constraints for each town.

Based on this assessment, it is considered that both Wallace and Bungaree would be well positioned to attract residential growth should reticulated sewerage be available in the future, with Wallace likely to be slightly preferred due to the high amenity, community facilities (especially for families and commuters) and excellent access to the Western Freeway. Dunnstown may experience minor levels of infill growth, however, the lack of opportunity for future sewer connectivity will severely limit growth rates in the future. In addition Dunnstown is not as well positioned in relation to the Western Freeway than the other towns.

Town	Strengths/Constraints
Bungaree	<p>Strengths:</p> <ul style="list-style-type: none"> • A rich heritage and engaged local community • A general store which is important in servicing the region • Existing community facilities including a primary school, new sporting facilities, and a community hall which is used regularly • Due to the proximity to Ballarat, slightly cheaper to connect to reticulated sewerage than Wallace <p>Constraints:</p> <ul style="list-style-type: none"> • The existing town layout is somewhat disjointed and spread across two clusters • In comparison to Wallace, is located further from the Western Freeway
Wallace	<p>Strengths:</p> <ul style="list-style-type: none"> • Location on the Western Freeway and easy access to Melbourne and Ballarat • Wallace and District Family Services Hub (Kindergarten, Preschool, Maternal healthcare, and Childcare) • Compact form and layout • Flat topography and ample land availability, including large strategically located parcels adjacent to the town centre • Existing reticulated gas connection • Higher level of residential and lifestyle amenity than Bungaree • Potential future industrial/employment area <p>Constraints:</p> <ul style="list-style-type: none"> • Slightly more expensive than Bungaree to install reticulated sewerage • Possible localised flooding

Town	Strengths/Constraints
Dunnstown	<p>Strengths:</p> <ul style="list-style-type: none"> Existing community facilities including a primary school <p>Constraints:</p> <ul style="list-style-type: none"> Amenity issues from passing trucks Compared to other towns, located away from the Western Freeway No sewer availability

6.3. GROWTH SCENARIOS

The following growth scenarios provide a guide as to the scale of growth which may be possible across the three subject towns.

Scenario A is based on the assumption that no significant utility upgrades are provided, and Scenario B and C assume the subject towns are provided enhanced infrastructure (reticulated sewerage in Bungaree and Wallace, reticulated water in Dunnstown). The growth scenarios assume the completion of infrastructure works by 2020, simultaneous sewer connection to Wallace and Bungaree, and use a development horizon of 20 years. The number of dwellings per annum relates to the total across the three towns. Given the close proximity of the towns to each other and shared attributes the following growth scenarios are for all three towns.

Scenario A (2 additional dwellings per annum): This growth rate represents the expected growth if no enhanced utility infrastructure is provided. The dwelling growth rate is sourced from Forecast ID projections for Rural West region which were calculated on the basis of no new significant utility upgrades.

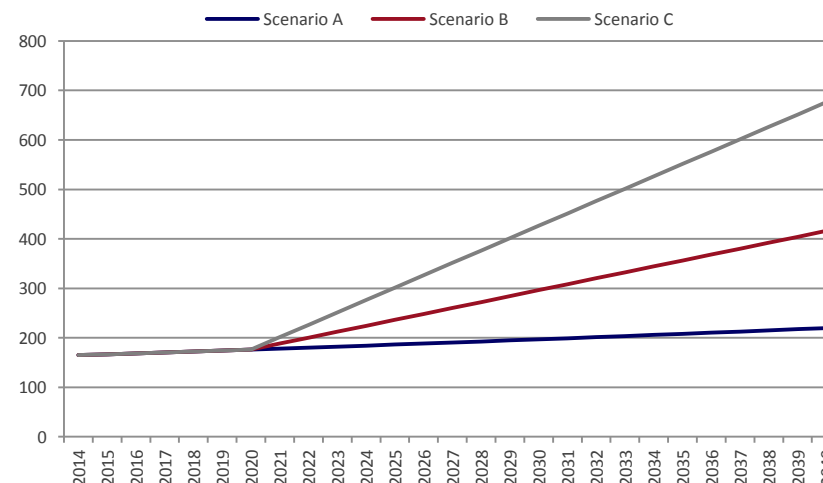
Scenario B (12 additional dwellings per annum): This growth rate represents what is currently being experienced in Gordon and Smythesdale since the installation of reticulated sewerage. However, as it has been only 18 months since the sewerage schemes were installed, dwelling growth may increase in the coming years. This is considered a baseline rate of growth for the subject towns.

Scenario C (25 additional dwellings per annum): This represents the rate of growth experienced in Ballan over the past decade. Growth rates in the subject towns would not be expected to exceed that experienced in Ballan which is an established township with existing services, retail provision, local employment and is identified as strategic growth town in regional policy. This rate of growth is considered to provide a guide as to the upper limit of demand for the subject towns.

	Dwelling Growth Per Annum	Dwelling Growth (2020-2040)	Population Growth (2020-2040)*	Population in 2040
Scenario A	2	40	100	502
Scenario B	12	240	600	1,020
Scenario C	25	500	1,250	1,670

*Based on a average household size of 2.5

FIGURE 22 DWELLING GROWTH SCENARIOS



Scenario C would equate to an average population increase of 63 persons per annum in the towns, for a total population increase of 1,250 from 2020 - 2040. The vast majority of dwelling growth will be expected to occur in Wallace and Bungaree. Wallace is considered to be slightly better positioned to attract growth due to its existing residential amenity and location on the Western Highway. The absence of a reticulated sewer connection in Dunnstown will mean that population growth will be very limited.

Based on each of the growth scenarios, the scale and rate of growth is relatively low. For example, within 8 years of introduction of sewer infrastructure Scenario C would result in a total dwelling growth of approximately 200. This would mean that the significant upfront cost required to introduce reticulated sewerage infrastructure would be providing benefit to a relatively small population base. Over time population growth in the area may support this investment subject to more detailed cost-benefit analysis and attraction of grant funding.

There are a number of other factors which could impact on growth within the 2040 time horizon and beyond, including the consumption of supply in other key towns (particularly Gordon), the continued expansion of metropolitan Melbourne, and improved infrastructure (e.g. train frequencies).

It is important to note these growth scenarios are a theoretical estimate of potential growth rates. They do not constitute a preferred rate of growth or a specific development scenario. It is understood that community consultation will be undertaken regarding the community's vision for the townships.

7. CONCLUSIONS

- Analysis of regional population growth projections and location trends confirms that there is likely to be significant demand for dwellings outside of the major towns of Bacchus Marsh and Ballarat.
- Due primarily to the amenity and access factors of the study towns, when compared with the competing townships of similar characteristics in the region, it is considered that Wallace and Bungaree are well suited to attract a proportion of this demand should sewerage infrastructure be introduced.
- It is considered that Wallace is best positioned to attract residential growth due to the relatively high local amenity, direct access to the Western Freeway, and existing local community services.
- Bungaree is also well placed to accommodate population growth due to excellent access to Ballarat via the Western Freeway and availability of community facilities.
- Dunnstown may experience minor levels of infill growth; however, the lack of opportunity for future sewer connectivity will severely limit growth rates in the future.
- If enhanced infrastructure were provided (sewerage for Wallace and Bungaree, reticulated water for Dunnstown), it is estimated that future growth could be in the order of 12-25 dwellings per annum across the three towns. This equates to dwelling growth of between 240 and 500, or population growth of between 600 and 1,250 over a 20 year period across the three towns.