

URBAN GROWTH STRATEGY – BACKGROUND REPORT

APPENDIX C – DEMOGRAPHICS, TRENDS AND POPULATION DATA

1 Broad Trends and Issues

1.1 Climate Change

Climate change is one of the most important challenges facing us today and will affect the world in different ways. In the coming decades Victoria can expect to experience the impacts of climate change. These may include:

- increased temperatures
- drier conditions
- more frequent extreme events such as extreme rainfall, bushfires and droughts.

The wellbeing of all Victorians is directly connected to the health of our environment, the quality of our infrastructure and services, and the strength of our economy. Changes in our climate may put each of these things under pressure.

Despite global and local efforts to reduce greenhouse gas emissions, some level of climate change is now inevitable. Consideration must be given not only to continuing to reduce resource consumption and the emission of greenhouse gases, but also how we can adapt and plan for the changes which will occur over time (Environment Victoria).

Of particular note for the Shire is the potential for climate change to increase extreme weather patterns, which in turn increase the length of the fire season and an increased number of extreme fire danger days. As outlined in the Climate Council's report *Be Prepared: Climate Change and the Victorian Bushfire Threat*, the role of climate change in bushfires is both straightforward and complex, but essentially climate change is a factor at play in the ignition of a fire, fuelling of a fire and by providing weather conditions which are conducive to the fire spreading.

Building in resilience to climate change impacts such as more extreme weather events, including storms and flooding, bushfire risk, less available water and changes in resource consumption should form broad considerations which should be incorporated into the thinking of the Urban Growth Strategy.

1.2 Urbanisation

The world is undergoing the largest wave of urban growth in history. For the first time in history, more than half of the world's population now lives in towns and cities, and by 2030 this number will swell to about 5 billion (United Nations).

As of the 2011 Census, 88.9% of the population lived in urban Australia. The Census classifies an Urban Area as a built up area of more than 1,000 people. As with the global trend, urbanisation in Australia is increasing, and has been doing so for many years. Between 2006 and 2011, the Australian percentage of urbanisation went from 88.0% to 88.9%, and increased everywhere except the Northern Territory.

In the case of Mount Alexander Shire, the trend towards urbanisation may mean increased growth within the Shire due to its accessibility to the larger urban areas of Melbourne and Bendigo, and to a lesser extent, Ballarat, as well as increased growth within its own urban areas. Castlemaine as the largest town within the Shire is likely to offer a more urban environment than smaller towns within the municipality.

2 Population and Housing Trends within Mount Alexander Shire

Council adopted the Mount Alexander Urban Living Study in 2004, primarily based on population and economic drivers stemming from an increase in dwelling approval growth prior to 2002, as well as the Calder Highway upgrade and sewerage of townships. The Study indicated a need to respond to relatively rapid growth, with a predicted population growth of 1.4% p.a. to the year 2030.

The Residential Land Demand and Supply Analysis prepared by Philip DeAraugo in 2010 subsequently indicated a slight decline of growth by around 1.3% p.a. through to the year 2026.

More recently, Minister for Planning, Richard Wynne, has released the Victoria in Future 2015. These statistics indicate the Mount Alexander Shire Council will experience a reduced population projection at an average of 0.8-0.9% p.a. to the year 2031. However, the projected number of households is consistent with the findings of the Residential Land Demand and Supply Analysis, at 1.4-1.3%. This suggests that the number of people in each household is to be less, and this is consistent with broader trends in Victoria.

This strategy should not respond to residential land supply and demand figures alone, rather any strategy needs to be based on environmental, social, physical, cultural, technological and political factors, as well as population and economic data.

2.1 Current Population

The current estimated population of Mount Alexander Shire is 18,102. Unlike other regions within Regional Victoria, the Shire has seen a yearly increase in population since 2003. The median increase in population is 81 from 2003-2014.

Table 1: Estimated Resident Population (source: .id)

Estimated Resident Population (ERP)			
Mount Alexander Shire			
Year (ending June 30)	Number	Change in number	Change in percent
2003	17,153		
2004	17,180	+27	+0.16
2005	17,240	+60	+0.35
2006	17,304	+64	+0.37
2007	17,415	+111	+0.64
2008	17,585	+170	+0.98
2009	17,683	+98	+0.56
2010	17,806	+123	+0.70
2011	17,872	+66	+0.37
2012	17,896	+24	+0.13
2013	17,977	+81	+0.45
2014	18,102	+125	+0.70

Consistent with the global trend of urbanisation, the population is centred around the townships, most significantly Castlemaine, which has almost half the total population of the Shire. Figure 5 shows the population density, which is centred around Castlemaine and surrounds, with other population densities seen in Harcourt, Maldon, Newstead and Guildford.

Table 2: Population Density 2011 (source: .id)

Population density, 2011				
Mount Alexander Shire - Enumerated				
	Area	Number	Hectare	Persons per hectare
Campbells Creek		1,451	2,428	0.60
Castlemaine (East)		2,265	715	3.17
Castlemaine (South) - Chewton		2,596	2,835	0.92
Castlemaine (West) - McKenzie Hill		2,604	1,217	2.14
Maldon - Tarrengower - Nuggetty		1,602	9,991	0.16
Rural East - Taradale		3,567	64,475	0.06
Rural West - Newstead		2,717	71,210	0.04
Castlemaine		6,613	2,016	3.28
Castlemaine - Chewton - McKenzie Hill		7,465	4,767	1.57
Calder Highway Corridor		2,089	17,201	0.12
Greater Castlemaine Area		8,916	7,195	1.24
Mount Alexander Shire		17,205	152,870	0.11
Regional VIC		1,330,073	21,742,140	0.06
Victoria		5,307,025	22,740,640	0.23
Australia		21,504,278	770,213,508	0.03

2.2 Migration Trends

Migration trends assist in understanding more about the movements to and from Mount Alexander Shire. While we have found that Mount Alexander has an aging population, there is still a relatively high level of migration of working aged people who are moving into Mount Alexander Shire, with the age group of 35-44 years making up the highest age group of migration. Younger people aged 18-24 years are the largest age group of people leaving the Shire. The tables below show more of the patterns of migration.

The migration data below provides a summary of where residents lived five years prior to the last Census (2011).

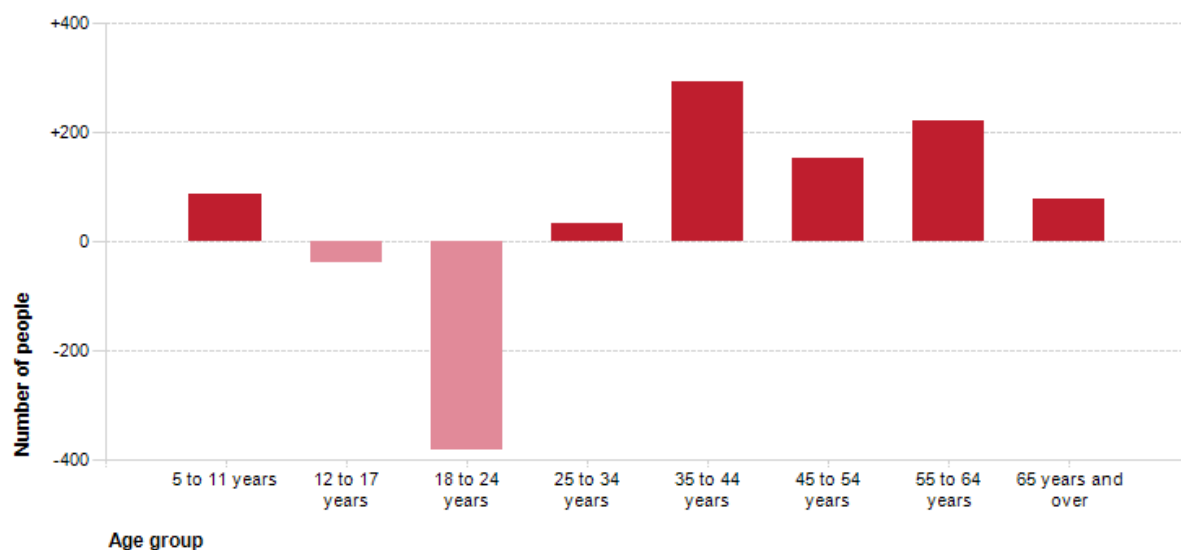
Table 3: Previous Residential Location (source: .id)

Previous residential location of current residents in 2011		
Mount Alexander Shire		
Migration summary	Number	Percentage
Residents who did NOT move between 2006 and 2011	10,064	57.2
Total residents who moved between 2006 and 2011	5,351	30.4
Residents who had moved within Mount Alexander Shire between 2006 and 2011	2,193	12.5
Residents who moved from another part of Victoria	2,428	13.8
Residents who moved from another part of Australia	524	3.0
Residents who moved from another country	163	0.9
Residents who moved from an unknown area	96	0.5
Not stated - Didn't state whether or not moved	1,367	7.8
Not applicable - Births between 2006 and 2011	805	4.6
Total 2011 usual resident population	17,587	100.0

Figure 4: Net Migration by Age (Source: .id)

Net migration by age group 2011

Mount Alexander Shire



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 (Usual residents data)
Compiled and presented in profile.id by .id, the population experts.



Table 4: Local Government Areas - Top 10 net gain (source: .id)

Top 10 LGAs ranked by net gain to the area

Mount Alexander Shire			
LGA	In migration	Out migration	Net migration
Darebin (C)	160	63	+97
Yarra Ranges (S)	77	16	+61
Yarra (C)	109	51	+58
Glen Eira (C)	57	3	+54
Hepburn (S)	107	53	+54
Port Phillip (C)	64	20	+44
Nillumbik (S)	46	6	+40
Boroondara (C)	76	37	+39
Moreland (C)	113	77	+36
Macedon Ranges (S)	166	131	+35

Table 5: Local Government Areas - Top 10 net loss (source: .id)

Top 10 LGAs ranked by net loss to the area			
Mount Alexander Shire			
LGA	In migration	Out migration	Net migration
Greater Bendigo (C)	231	617	-386
Ballarat (C)	27	84	-57
Warrnambool (C)	3	32	-29
Melton (S)	23	50	-27
Greater Geelong (C)	45	69	-24
Central Goldfields (S)	37	60	-23
Wangaratta (RC)	0	20	-20
Melbourne (C)	47	61	-14
Sunshine Coast (R)	9	23	-14
Moyne (S)	0	12	-12

The story told by the above figures suggest that there many people move to the as a change of lifestyle, based on the higher migration rates from Local Government Areas within the Greater Melbourne Region. It also suggests that those who leave the Shire tend to be moving to areas of larger Regional Cities or Towns, such as Bendigo, Ballarat and Geelong.

2.3 Population Projections

In order to understand and plan for urban growth within Mount Alexander Shire, a strong understanding of the population projections is important, although as articulated above, it should not be the only driving factor.

The recently released Victoria in Future 2015 provides us with the following projections of population and household growth for Mount Alexander Shire Council:

Table 6: Population Projections for Mount Alexander Shire (source: Victoria in Future 2015)

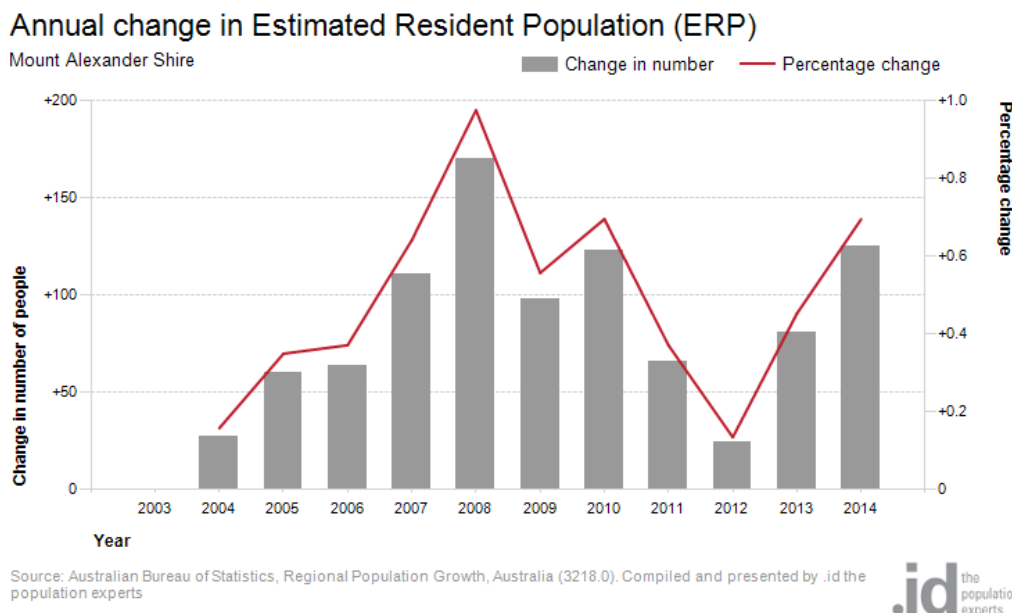
Total Population Projection				
2011	2021	2031	Annual % change 2011-21	Annual % change 2021-31
17,900	19,300	21,100	0.8	0.9

The projected levels of growth are less than those which were previously projected for the Shire. The projected populations which were used in the Urban Living Study 2004 stated that in 2011 the Shire should have a population of 18,690, and by 2031 there would be a population of 24,240, based on increase of 1.4%.

Importantly, none of the projected population figures seem to have eventuated. From 2006 to 2011, Mount Alexander Shire's population increased by 520 people (3.0%) (profile id). This represents an average annual population change of 0.6% per year over the period, well below the 1.4% projected, and also below the current projections of 0.8% to 0.9%.

Furthermore, it should be understood that population levels do not rise steadily, but ebb and flow based on numerous external factors. This is demonstrated in the below graph:

Figure 5: Annual Change in Estimated Resident Population (source: .id)



The population projections form only one part of the consideration for future urban growth, and the other relevant aspects are considered below.

2.4 Aging Population

There is also an aging population trend which should be considered in terms of how the Shire is growing.

The largest changes in the age structure in the Shire between 2006 and 2011 were in the younger and older age groups:

- Empty nesters and retirees (60-69) (+605 people)
- Seniors (70 to 84) (+212 people)
- Older workers and pre-retirees (50 to 59) (+189 people)
- Primary schoolers (5 to 11) (-153 people)

It is noted that while an aging population trend is occurring across Australia, the aging population within Mount Alexander Shire is higher than within other areas of Regional Victoria, and that the average age of residents within the Shire is to increase, with the percentage of residents over the age of 65 to increase by 11.9% by 2031, and the percentage of residents under the age of 20 years to decrease by 6.3% by 2031.

Table 7: Population Projections for Mount Alexander Shire (source: Victoria in Future 2015)

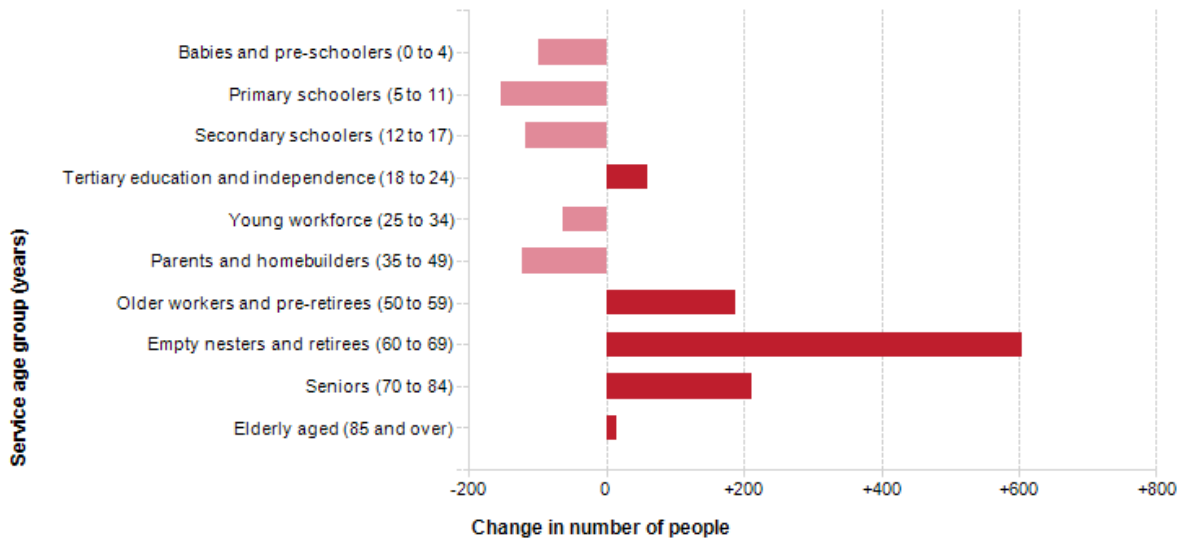
Population Projections - Age			
% Aged under 20 years		% Aged 65 years or older	
2011	2031	2011	2031
22.4	16.1	20.5	32.4

The graph within Figure 7 clearly shows how between 2006 and 2011, the largest increase in population was with those over the age of 50, and that there was less children and younger adults.

Figure 6: Change in Age Structure 2006-2011 (source: .id)

Change in age structure - service age groups, 2006 to 2011

Mount Alexander Shire - Total persons



Source: Australian Bureau of Statistics, Census of Population and Housing, 2006 and 2011 (Usual residence data)
 Compiled and presented in profile.id by .id, the population experts.



The future Urban Growth Strategy will need to consider the impacts of an aging population, and what impacts that has on the types and location of housing which will be required to respond to this shifting demographic.

2.5 Households

Given the Urban Growth Strategy considers the physical impacts population growth may have on Mount Alexander Shire, a key fact to review is the number of new residential buildings which are occurring within the Shire. The table below shows the number of new residential building approvals. It is important to note that this data relates to approvals only, not the construction and completion of dwellings.

Table 8: Residential Building Approvals (source: .id)

Residential building approvals						
Mount Alexander Shire	Number			Annual change		
Year (ending June 30)	Houses	Other	Total	Houses	Other	Total
FYTD (1 mth)	6	0	6			
2014-15	119	0	119	+4	-3	+1
2013-14	115	3	118	-15	0	-15
2012-13	130	3	133	+5	+3	+8
2011-12	125	0	125	+28	-12	+16
2010-11	97	12	109	-37	+12	-25
2009-10	134	0	134	+35	0	+35
2008-09	99	0	99	+12	0	+12
2007-08	87	0	87	-23	-3	-26
2006-07	110	3	113	-7	-5	-12
2005-06	117	8	125	-9	+3	-6
2004-05	126	5	131	+33	-6	+27
2003-04	93	11	104	-20	+7	-13
2002-03	113	4	117	-24	-7	-31
2001-02	137	11	148			

The median yearly rate of new residential approvals is 118.5. Contrasted with the median of a yearly increased population of 81, it can be understood that there is a higher rate of new residential buildings as opposed to population growth. This will be considered in more detail below, by considering how many holiday houses may be within the Shire and the changing population demographics.

The number of people within a household is also changing, with smaller households being more common. This is consistent with the Australian trend of smaller households. The Shire has more 1 person homes than the average within Regional Victoria.

Table 9: Household Size 2011 - 2006 (source .id)

Household size							
Mount Alexander Shire	2011			2006			Change
Number of persons usually resident	Number	%	Regional VIC %	Number	%	Regional VIC %	2006 to 2011
1 person	2,279	32.1	27.9	2,059	30.7	26.7	+220
2 persons	2,668	37.6	36.3	2,484	37.0	36.1	+184
3 persons	881	12.4	13.9	857	12.8	14.0	+24
4 persons	758	10.7	13.1	781	11.6	13.8	-23
5 persons	359	5.1	6.2	365	5.4	6.7	-6
6 or more persons	151	2.1	2.6	164	2.4	2.7	-13
Total classifiable households	7,096	100.0	100.0	6,710	100.0	100.0	+386

The increase of smaller households may also relate to the trend of an aging population within the Shire. Figure 10, below, shows the household type within the Shire.

Table 10: Household type 2011-2006 (source: .id)

Household type							
Mount Alexander Shire	2011			2006			Change
Households by type	Number	%	Regional VIC %	Number	%	Regional VIC %	2006 to 2011
Couples with children	1,704	23.0	26.9	1,734	25.1	28.7	-30
Couples without children	2,072	28.0	27.8	1,909	27.6	27.6	+163
One parent families	769	10.4	10.5	753	10.9	10.4	+16
Other families	57	0.8	0.8	52	0.8	0.9	+5
Group household	218	2.9	2.9	207	3.0	2.8	+11
Lone person	2,281	30.8	26.8	2,060	29.8	25.7	+221
Other not classifiable household	191	2.6	2.6	143	2.1	2.5	+48
Visitor only households	106	1.4	1.6	64	0.9	1.4	+42
Total households	7,398	100.0	100.0	6,922	100.0	100.0	+476

As demonstrated within the graphs above, there is a trend for smaller households, and a pattern of smaller households containing couples with children.

The projected household numbers are higher than the projected population and, interestingly, is consistent with the population projections which were used for the Urban Living Study 2004.

Table 11: Housing Projections for Mount Alexander Shire (source: Victoria in Future 2015)

Total Households Projection				
2011	2021	2031	Annual % change 2011-21	Annual % change 2021-31
7,800	8,900	10,200	1.4	1.3

2.6 Dwelling Occupation and Type

Mount Alexander has a private dwelling occupancy rate which is commensurate with regional Victoria, however the pattern of vacant dwellings shows that this is inconsistent across the Shire.

Table 12: Vacant Dwellings 2011 (Source: .id)

Vacant dwellings, 2011				
Mount Alexander Shire - Enumerated				
	Area	Number	Total dwellings	Percent %
Campbells Creek		81	672	12.0
Castlemaine (East)		133	1,183	11.2
Castlemaine (South) – Chewton		172	1,426	12.0
Castlemaine (West) - McKenzie Hill		145	1,212	12.0
Maldon - Tarrengower – Nuggetty		216	965	22.4
Rural East – Taradale		409	1,919	21.3
Rural West – Newstead		257	1,416	18.2
Castlemaine		394	3,388	11.6
Castlemaine - Chewton - McKenzie Hill		450	3,821	11.8
Calder Highway Corridor		186	1,066	17.4
Greater Castlemaine Area		531	4,494	11.8
Mount Alexander Shire		1,396	8,800	15.9
Regional VIC		105,268	641,819	16.4
Victoria		246,785	2,277,999	10.8
Australia		934,388	9,116,142	10.2

There are a number of possible reasons for vacant dwellings, for example, residents temporarily away (eg. on holiday), dwelling is vacant and for sale, dwelling has just been built and is not yet occupied, or the dwelling is a holiday house which is unoccupied most of the time (particularly in winter when Census is held). Large percentages of unoccupied dwellings may indicate a holiday area, an area with a high population turnover, or a declining area with abandoned dwellings (.id). The high vacancy within Maldon-Tarrengower-Nuggetty suggests that the area is popular for holiday homes, and this is consistent with anecdotal feedback.

The number and type of dwellings within the Shire are outlined in the figure below. It is significant to note that Mount Alexander Shire has more smaller (less than 2 bedroom) dwellings than regional Victoria, and that this may be related to the historic urban form of Castlemaine and Maldon, and the significance of Castlemaine as a regional city. It is also noted that a greater concentration of smaller housing is likely to attract more young adults and smaller households, and that smaller housing is generally considered more suitable for older persons.

Table 13: Number of bedrooms per dwelling (source .id)

Number of bedrooms per dwelling							
Mount Alexander Shire	2011			2006			Change
Number of bedrooms	Number	%	Regional VIC %	Number	%	Regional VIC %	2006 to 2011
0 or 1 bedrooms	367	5.0	3.9	344	5.0	4.0	+23
2 bedrooms	1,678	22.7	16.5	1,581	22.8	16.7	+97
3 bedrooms	3,510	47.4	50.4	3,381	48.9	51.8	+129
4 bedrooms	1,257	17.0	21.0	1,112	16.1	19.6	+145
5 bedrooms or more	231	3.1	3.5	206	3.0	3.2	+25
Not stated	356	4.8	4.8	297	4.3	4.6	+59
Total households	7,399	100.0	100.0	6,921	100.0	100.0	+478

Smaller housing is often more affordable, more centrally located, can be more accessible and has less maintenance requirements. In this regard it is often more practical for older residents and more attractive for single persons or couples without children.

2.7 Housing Affordability

The Housing Needs and Opportunities Discussion Paper 2012 identified limited affordable housing within the Shire, although it is worthwhile noting that affordable private housing is a broader Australian issue, certainly not isolated within the Mount Alexander Shire. The table below shows housing stress within each area of the Shire. Housing Stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income on housing costs.

Housing affordability is a significant issue if mortgage and rent payments rapidly increase as a share of income. While stress can be highly dependent on individual circumstances, using Census data to analyse this provides a good overview of the problems, and highlights any areas in Mount Alexander Shire where households may be having problems meeting their commitments (.id).

Table 14: Housing Stress (source: .id)

Housing stress, 2011				
Mount Alexander Shire - Enumerated				
	Area	Number	Total households	Percent %
Campbells Creek		49	594	8.2
Castlemaine (East)		116	1,049	11.1
Castlemaine (South) - Chewton		159	1,264	12.6
Castlemaine (West) - McKenzie Hill		115	1,077	10.7
Maldon - Tarrengower - Nuggetty		70	755	9.3
Rural East - Taradale		129	1,503	8.6
Rural West - Newstead		102	1,162	8.8
Castlemaine		340	3,011	11.3
Castlemaine - Chewton - McKenzie Hill		391	3,390	11.5
Calder Highway Corridor		82	880	9.3
Greater Castlemaine Area		440	3,984	11.0
Mount Alexander Shire		755	7,398	10.2
Regional VIC		54,705	536,578	10.2
Victoria		215,220	2,031,211	10.6
Australia		878,404	8,181,750	10.7

The Housing Needs and Opportunities Discussion Paper also found that there was a lack of social housing. Both the Council Plan 2013-2017 and the Public Health and Wellbeing Plan 2013-2017 highlight the Mount Alexander Shire Council's commitment to facilitate and advocate for housing that meets community needs. Table 8, below, shows the types of housing people live in with the Shire. While all of the other forms of housing increased, social housing decreased between 2006-2011.

Table 15: Housing tenure (source: .id)

Housing tenure							
Mount Alexander Shire	2011			2006			Change
Tenure type	Number	%	Regional VIC %	Number	%	Regional VIC %	2006 to 2011
Fully owned	3,265	44.2	37.3	3,098	44.8	39.1	+167
Mortgage	2,336	31.6	32.1	2,102	30.4	31.8	+234
Renting	1,326	17.9	24.1	1,315	19.0	22.7	+11
Renting - Social housing	181	2.4	4.0	190	2.7	4.2	-9
Renting - Private	1,093	14.8	19.3	1,050	15.2	17.5	+43
Renting - Not stated	52	0.7	0.8	75	1.1	1.0	-23
Other tenure type	57	0.8	0.8	56	0.8	0.8	+1
Not stated	411	5.6	5.6	349	5.0	5.6	+62
Total households	7,395	100.0	100.0	6,920	100.0	100.0	+475

Considering the above, there is a need for Mount Alexander Shire to continue to consider affordable housing as it remains an issue for the Shire, and Victoria as a whole.

2.8 Employment

Employment and access to employment is a strong factor in understanding population and housing trends. Much of the initial population trend of 1.4% growth from the Urban Living Study 2004 stemmed from a projected increase in population living in Mount Alexander and commuting to larger areas of employment within Bendigo and Melbourne, based on reductions in travel time and improvements in transport systems. Furthermore, if large employers close down or move, populations surrounding those large employers tend to relocate to find employment elsewhere.

The following table shows the breakdown of employment within Mount Alexander Shire.

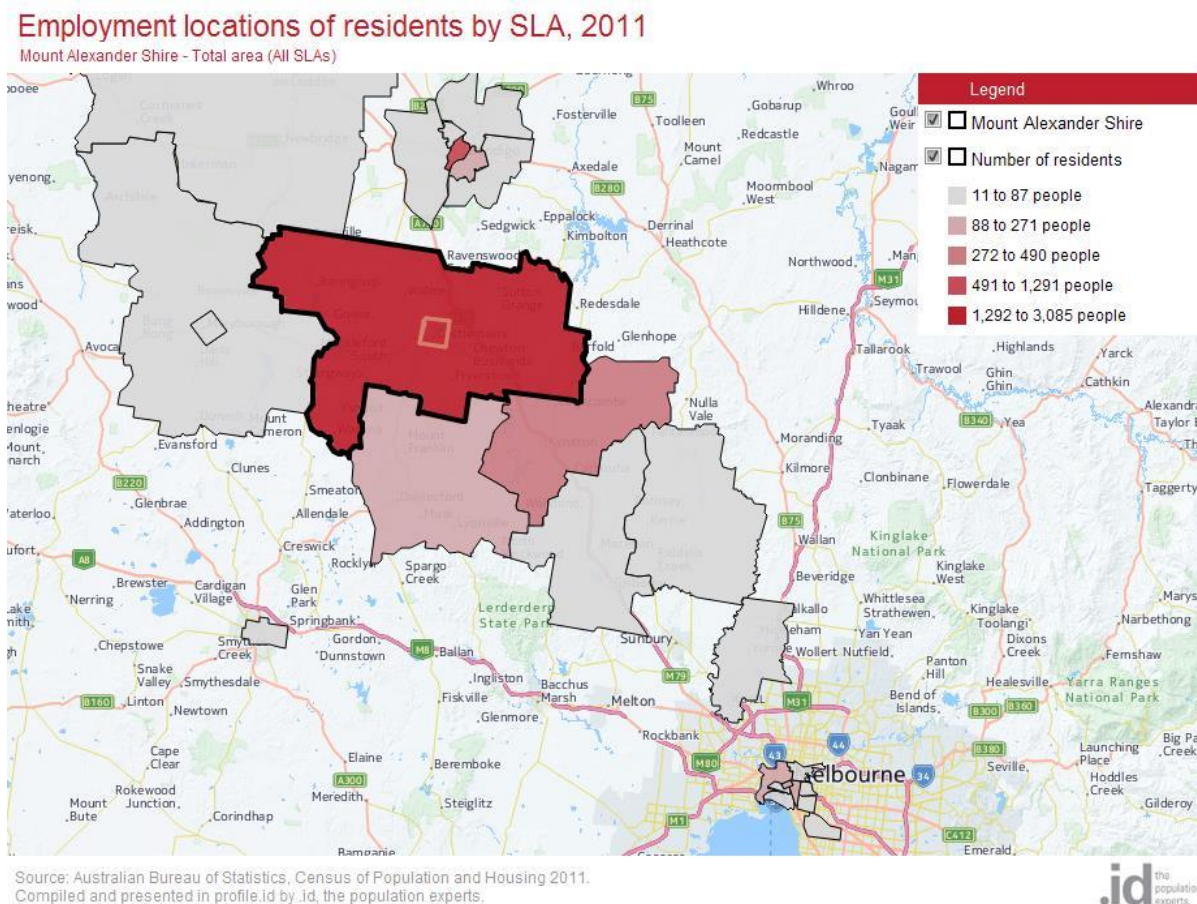
Table 16: Employment location of Mount Alexander Shire Residents (source: .id)

Employment location of residents		
Mount Alexander Shire	2011	
Status	Number	%
Live and work in the area	4,377	59.0
Live and work in the same SLA	2,789	37.6
Live in the area and work in different SLA	1,588	21.4
Live in the area, but work outside	2,180	29.4
Work location unknown	862	11.6
Total employed residents	7,419	100.0

A relatively high proportion of Mount Alexander Shire residents live and work within the municipality (59%). A total of 29.4% of the population living in the municipality work elsewhere. The table above demonstrates this. Please note that an SLA is a 'Statistical Local Area', which essentially means local area. A more detailed explanation of how the data is represented can be found on the following website: <http://profile.id.com.au/mount-alexander/geography-notes>.

The map overleaf shows the employment locations of residents. As can be seen, and as was demonstrated in table 12 above, most people live and work within the Shire, or within nearby Bendigo and adjoining Shires. There is also a sizeable population who work in Greater Melbourne.

Figure 7: Employment Location of Residents (source: .id)



Finally, the following tables show the V/Line train capacity along the Bendigo to Melbourne line. This indicates the availability of transport only, and figures relating specifically to Castlemaine Train Station are not included. It is noted that those services which run to and from Kyneton only have been excluded:

Table 17: Bendigo line trains arriving in Melbourne before 9am (source: V/Line)

Bendigo line trains arriving in Melbourne, Southern Cross before 9am				
Departs	From	Arrives	Seats	Average capacity
05:07	Bendigo	06:59	359	77%
05:33	Eaglehawk	07:18	363	62%
05:58	Epsom	08:05	416	94%
06:22	Eaglehawk	08:23	362	99%
07:45	Bendigo	09:27	441	86%

Table 18: Bendigo line trains leaving Melbourne between 4pm and 6:30pm (source: V/Line)

Bendigo line trains leaving Melbourne between 4pm and 6.30pm				
Departs	To	Arrives	Seats	Average capacity
16:25	Eaglehawk	18:29	434	100%
16:58	Bendigo	18:30	355	70%
17:31	Epsom	19:32	358	100%
17:57	Bendigo	19:56	230	100%
18:23	Swan Hill	22:51	242	65%

The above tables demonstrate that the trains are at capacity. The State Government are currently undertaking the Regional Network Development Plan. This may result in changes to the frequency and function of services along this line, however at this stage is unknown. Improvements to the service may result on more utilisation of the train line and may increase the Shire’s attractiveness for new residents who work within Melbourne.