

# Malvern Area Plans Assessment

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# **Contents**

1	INTRODUCTION3
1.1	BACKGROUND3
1.2	OBJECTIVE
1.3	SCOPE
2	METHODOLOGY6
2.1	ECONOMIC FUTURES MODEL
2.2	CENTRAL PLAINS WATER
2.3	Tourism Industry9
2.4	LAND DEMAND9
2.5	Assumptions and Uncertainty
3	GROWTH PROJECTIONS
3.1	POPULATION PROJECTIONS
3.2	EMPLOYMENT
4	LAND USE
4.1	ZONED AND VACANT LAND
4.2	LAND AREA REQUIRED
5	SUPPORTING CENTRES24
6	CONCLUSION26
APPENDI	X 1: LOCATION MAPS28
APPENDI	X 2: TOWN DEFINITION31
APPENDI	X 3: EMPLOYMENT PROJECTIONS36
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# **Figures**

FIGURE 1.1: SELWYN WARD BOUNDARIES	3
FIGURE 2.1: CPW AREA	7
Figure 2.2: CPW Land Use Assumptions	8
FIGURE 3.1: MALVERN POPULATION PROJECTIONS	12
FIGURE 3.2: MALVERN EMPLOYMENT DISTRIBUTION 2014 (MECS)	13
FIGURE 3.3: DESTINATION OF RETAIL AND SERVICES EXPENDITURE	16
FIGURE 3.4: MALVERN EMPLOYMENT PROJECTIONS (MECS)	17
FIGURE 4.1: MALVERN BUSINESS 1 LAND DEMAND PROJECTIONS TO 2031	19
FIGURE 4.2: MALVERN BUSINESS 2 LAND DEMAND PROJECTIONS TO 2031	21



# 1 Introduction

### 1.1 Background

Selwyn District's rapidly growing population provides a challenge to the Council's ability to cater for growth. To assist in managing this, Selwyn District Council (SDC) has adopted the "Selwyn 2031 District Development Strategy" (Selwyn 2031), a document that emphasises the importance of a strategic approach to managing urban growth.

One of the actions from Selwyn 2031 identifies the preparation of Area Plans for the Malvern and Ellesmere Wards (Figure 1.1) to guide the sustainable management of settlements for the next 15 years. The Area Plans seek to ensure more sustainable settlement patterns and outcomes are being enabled, and to provide Council with an understanding of where housing, employment, community facilities and recreation requirements should be planned for, and show how the Selwyn District Plan can be implemented at a local level.

Market Economics (M.E) was commissioned by SDC to provide input to SDC's Malvern Area Plan.

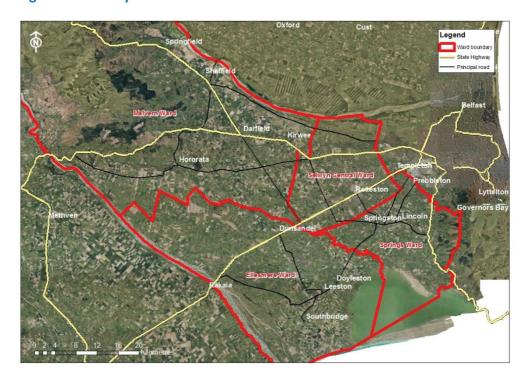


Figure 1.1: Selwyn Ward Boundaries

The main population centres in Selwyn are in the eastern wards (Selwyn Central and Springs), close to Christchurch. Growth in those areas is to be managed under the Urban Development Strategy (UDS). The settlements and populations in Ellesmere and Malvern are smaller, with economies dominated by rural activities. Growth patterns in Ellesmere and Malvern present different challenges to providing for future community and economic needs than in the rest



of Selwyn, including making allowance for a degree of self-sufficiency while recognising that the main economic nodes in the District are located closer to Christchurch.

## 1.2 Objective

The objectives of this report are to provide background information to contribute to Council's understanding of current and future land demand by businesses in Malvern, and to provide interpretation of growth trends and the implications of those trends for SDC's planning. Key among these objectives is to understand the likely spatial distribution of growth within Malvern, and to understand how much zoned land will be required to accommodate businesses in the future.

### 1.3 Scope

The assessment summarises how we expect the complete network of Malvern settlements to accommodate demand for business activity, from the provision of convenience and rural support services in the smaller settlements through to higher order retail, commercial and industrial activities. The study quantifies the size and timing of future additional land requirements, and makes recommendations as to how new business land might be accommodated. The geographic and economic scope applied is summarised here.

#### 1.3.1 Economic Sectors

The core of this assessment is understanding the demand for business land, which includes retail, commercial and industrial land uses, and excludes agricultural and other rural land uses. It is assumed that these activities are currently and will continue to be accommodated predominantly outside the Business 1 and Business 2 areas.

For this assessment the 48 economic sectors from the Economic Futures Model (EFM, described in section 2.1) are aggregated to four summary groups. Those groups broadly correspond to the type of land employment tends to occupy:

- Retail and commercial: Land uses that tend to occupy Business 1 land, including: retail
  trade; accommodation and food services; personal services; finance and insurance;
  real estate and property; central and local government; professional and scientific
  services; information media and telecommunications; technical and administrative
  services.
- Industrial: Land uses that tend to occupy Business 2 land, including: manufacturing; construction; wholesale trade; transport.
- Rural: horticulture; agriculture; forestry; fishing; mining. Farm advisors, rural economists etc. are not classified as Rural, but instead fall into the Commercial sector.
- Other: Education; health; arts and recreation.



### 1.3.2 Spatial Areas

The demand for business land is assessed across the existing network of activity centres in Malvern, and also considers the potential for new demand to be serviced in other (non-activity centre) settlements (whether or not they have an existing Business zoning) and outside settlements. The centres network includes Key Activity Centres in Christchurch City and at Rolleston, Lincoln, Darfield and Leeston in Selwyn, Service Centres at Prebbleton and West Melton, and a number of Rural Activity Centres such as at Hororata, Kirwee, Coalgate, Dunsandel, Southbridge and Castle Hill. This network is established based on a hierarchy from KACs as the largest centres which should accommodate the most future development, through to the smallest centres (Rural Activity Centres) which are primarily focussed on providing convenience retail and services to local residents.

This study assesses the demand for both Business 1 (town centres) and Business 2 (industrial) land. The location of each town and the current extent of their business zones (if any) is shown in the maps in Appendix 1.

The spatial areas used in this assessment are based on the zoning file provided by SDC. Data is presented at a town (or settlement) level, where each town is defined as the grouping of meshblocks that intersect the Township boundary in the zoning file (Appendix 2). That boundary includes all types of zoning (Business, Living, Existing Development Areas etc.) and so the town definitions used in our assessment also take in, for example, employment across all these zones, and is not limited to employment only in Business zones. This definition has been applied because:

- SNZ Business Frame data is only available at a meshblock level, and zone boundaries do not necessarily follow meshblock boundaries, and;
- It is important to understand how much employment there is in each town in total, and therefore how much total demand there might be in the future to accommodate in Business zones, whether or not it is now located in Business zones.

#### 1.3.3 Economic Drivers

The assessment takes into account a wide range of background economic drivers through the application of the EFM. In addition to assessing these underlying growth trends and their implications, we have had particular regard to two other specific (potential) growth drivers: the Central Plains Water (CPW) irrigation scheme and the tourism industry, as explained in section 2.



# 2 Methodology

The approach in this assessment was to create employment projections for Malvern, taking into account local and international growth drivers, and translate those employment projections into projections of the additional land that will be required to accommodate economic growth. Those projections take into account the projected population in each place, the amount of existing zoned land, the capacity of that land to accommodate additional activity, the presence and availability of vacant zoned land, and the role and location of significant out of zone economic activities. This section provides detail about that approach.

### 2.1 Economic Futures Model

The employment projections used in the assessment are calculated in the EFM. The EFM is a multi-regional scenario model which traces the economic implications of growth feedbacks between a local economy, and the surrounding regional and rest of NZ economy, in this case Selwyn, Canterbury and the rest of NZ. The EFM uses industry input and output structures representing the flow of goods and services between different economic sectors and areas and applies growth rates to final demand to project future economic activity.

The EFM evaluates economic (and environmental) impacts under a restricted set of consumption assumptions formulated as a scenario. The scenario applied for this assessment takes into account all known Christchurch rebuild data from CERA, and is also adjusted for:

- SDC's population projections;
- Central Plains Water (CPW) productivity changes (described in section 2.2);
- Tourism industry changes;
- The spatial distribution of industry growth, across each ward.

The scenario run used was established by generating projections of final consumption (i.e. household consumption, export consumption and gross fixed capital formation (GFKF)), and refined through supplementing quantitative data with qualitative analysis (for example, from interviews and international literature). The parameters have been adjusted to reflect New Zealand and Canterbury conditions.

The model maps the growth path for 48 sectors and for households out to 2031, and identifies major economic indicators (including, of most relevance to this assessment, employment), indicators of environmental resource requirements, and indicators of environmental residuals. Importantly, the EFM captures not only the direct economic implications of growth in final consumption but also the associated indirect (i.e. through supply chain) and induced (i.e. through consumer spending) economic and environmental effects.

Industries driven by local demand (e.g. education, health, accommodation, hospitality, services and retail trade) are primarily influenced by changes in the size of the population, and its composition. The population projections used in the Model are those supplied by SDC



(section 3.1). Industries driven by international demand are analysed using quantitative projections of export growth, for each industry. Industries driven by intermediate demand (such as road transport and services to agriculture) are captured via flow-on implications from growth of the key industries. Technological progress and changes in labour productivity are also accounted for.

### 2.2 Central Plains Water

The Central Plains Water scheme (CPW) is an irrigation scheme that has been granted consent to take water from the Waimakariri and Rakaia Rivers. The scheme consists of a series of tunnels, canals and water races to supply water for irrigation to a large part of the Central Plains area between the two rivers, extending north to Springfield and south to Dunsandel and Rakaia along State Highway 1 (Figure 2.1). The CPW is planned to be developed in three stages, with the first planned for completion in September 2015, the second a year later and the final stage by late 2018<sup>1</sup>. The projections in this assessment apply those indicative timings.

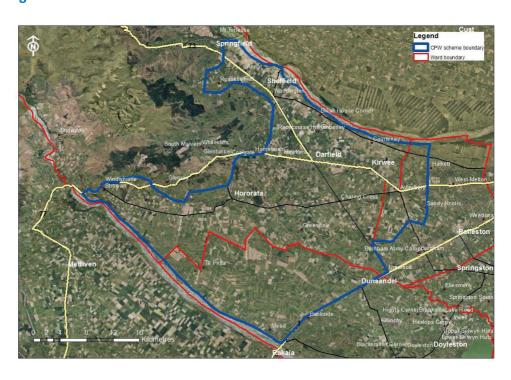


Figure 2.1: CPW Area

The ability to irrigate new areas of rural land is expected to change the type and intensity of land use, and therefore the economic productivity of the land. That will then have flow-on effects to other industries, potentially supporting new business activity in other sectors (e.g. agricultural supplies and services, accountants, vets etc.) and how much land is required for those industries. The EFM has been applied to track the flow-on effects of that changing rural land use to other sectors.

<sup>&</sup>lt;sup>1</sup> http://www.cpwl.co.nz/scheme-development/construction-stages



7

We have used data about the CPW scheme from the Environment Court evidence<sup>2</sup> of Andrew Macfarlane, a farm management consultant who assessed the on-farm economics of the scheme's irrigation. The evidence presented was that the total irrigated area would be 76,000ha, with a large increase in arable land, a slight increase in the area used by dairying, and a large decrease in land used for livestock. We translated those land area estimates, and the associated earnings data (EBIT) to estimate changes in employment that new land use would support. That post-CPW employment is used as input to the EFM.

That assessment indicates that although the economic productivity of the land (in EBIT terms) is projected to increase by over 50%, employment is projected to decrease slightly (Figure 2.2). The decline in employment is projected because the change in land use will be primarily from higher employment livestock agriculture to lower employment arable horticulture.

Figure 2.2: CPW Land Use Assumptions

	La	nd Area (h	ia)	Employment (MECs)				EBIT (\$m)				
	Pre-CPW	Post-CPW	Change	Pre-CPW	Post-CPW	Change	Pre	-CPW	Pos	t-CPW	Ch	ange
Dairy	22,000	25,000	3,000	614	698	84	\$	44	\$	81	\$	37
Livestock	54,000	32,000	- 22,000	745	397	-348	\$	12	\$	31	\$	19
Arable	-	19,000	19,000	76	268	193	\$	-	\$	30	\$	30
Other	-	-	-	173	173	-	\$	0	\$	0	\$	-
Total	76,000	76,000	-	1,607	1,535	- 72	\$	56	\$	142	\$	86

There are four ways that those changes in land use might affect demand for business land:

- The businesses (farms) in the CPW area consume the goods and services of other businesses (suppliers), thereby contributing to how much land those suppliers need to operate.
- An increase in economic productivity of some CPW farms will support an increase in off farm employment, such as in engineering and supply outlets.
- Farms in the CPW area yield produce that requires processing, contributing to how much land those processors need to operate.
- The workers on CPW area farms spend in retail and other businesses to support their domestic households.

The EFM takes these factors into account, and identifies the likely location of the businesses impacted by changes in land use based on the current distribution of economic activity in the region and existing economic linkages.

http://ecan.govt.nz/publications/Consent % 20 Notifications/applicants-evidence-central-plains-analysis-110909.pdf



8

<sup>&</sup>lt;sup>2</sup> Earlier evidence was completed in early 2008, but the data referred to here is from updated evidence presented in September 2009: http://ecan.govt.nz/publications/Consent%20Notifications/applicants-evidence-supplementary-andrew-macfarlane-180909.pdf and

## 2.3 Tourism Industry

The Selwyn 2031 document describes perceptions of Selwyn's tourism industry as being that "many people travel through Selwyn rather than seeing it as a destination"<sup>3</sup>. This perception is supported by the small amount of visitor accommodation in the District, including an absence of chain brand and any large capacity hotels. Nevertheless, to ensure that the economic projections in this assessment take into account the potential impacts of tourism, we have interviewed SDC's Tourism Officer, and used the findings of that discussion to inform our assessment. From that discussion we can make the following observations about the tourism industry in Selwyn generally, and Malvern in particular.

There are few significant visitor attractions in the District, with the most notable being the skifields in the vicinity of Castle Hill<sup>4</sup> and Arthurs Pass<sup>5</sup>. These are all (with the exception of Porters) club skifields, that is, smaller skifields that are open to the public, but which aim to provide affordable skiing to their members. Porters was a club field but recently commercialised, and there are plans to significantly expand it, with consents having been granted in 2012. However, development has still not yet begun, the timeline is uncertain, and development is likely to take some time.

The benefits of any expansion of Porters are likely to take some time to be felt, but might include new businesses in Malvern towns (e.g. Springfield and Darfield) in accommodation, food outlets, ski hire etc., although much of that activity is expected to be accommodated onsite in the proposed Porters resort.

Other tourism attractions are limited to smaller, predominantly standalone businesses or natural attractions such as walking tracks. We have not identified any tourism initiatives which are expected to affect any significant changes to the current state of tourism in Selwyn generally, and Malvern in particular, but have incorporated an increase in tourism numbers consistent with the baseline tourism projections from our internal models.

### 2.4 Land Demand

The employment data output from the EFM provides the basis for the future demand for business land, spatially throughout Malvern. Land demand projections are calculated by applying industry-average employment density figures (compiled in-house from other similar studies<sup>6</sup>) to the employment projections. The land demand projections have been adjusted to take into account Selwyn-specific factors, such as lower than average development densities, and the presence and known density of the several large, standalone (and therefore easily identifiable) businesses (e.g. Fonterra Darfield), as noted from our site visits.

<sup>&</sup>lt;sup>6</sup> In a wide range of geographic areas, and adjusted to take into account the specific locational characteristics of the Malvern area.



<sup>&</sup>lt;sup>3</sup> Page 189

<sup>&</sup>lt;sup>4</sup> Porters, Mt Olympus, Cheeseman, Broken River, Craigieburn

<sup>&</sup>lt;sup>5</sup> Temple Basin

Development densities are applied for the 48 economic sectors used in the EFM, so distinction is made between different types of manufacturing, transport, construction and wholesale trade, while commercial and retail sectors are assumed to have the same density. In this way, 10 MECs of growth in a low density sector such as road transport will require much more land than 10 MECs in a higher density sector such as retail or office-based activity.

These land demand projections are of the total additional amount of land that would be required to accommodate the additional employment described from the EFM output. That land demand is then adjusted to take into account:

- the capacity of existing businesses and business areas to accommodate some proportion of growth by way of intensifying;
- vacant and vacant potential land stocks, and;
- the operation of some commercial and industrial businesses outside of Business 1 and 2 zones.

As discussed below, there are some assumptions made, and accompanying uncertainty in this process, however in our opinion the assumptions made are robust and supported by our experience in business land studies in other jurisdictions.

## 2.5 Assumptions and Uncertainty

This assessment uses several datasets that introduce uncertainty into the modelling process:

- The EFM is based on a range of economic outlook information that drives projections of economic (employment) growth. Economic outlooks are subject to uncertainty, and prospects for growth in Malvern will be strongly influenced by domestic and international forces. Variables such as dairy prices have the potential to strongly influence the nature of economic development, and the flow-on effects on other industries in Selwyn.
- Business Frame data from Statistics NZ is a database of the individual economic units
  which make up the New Zealand economy. We have in the past, and again for this
  assessment, identified instances where businesses have been allocated to the wrong
  location, which can mean that they are coded to the wrong location (Business zone)
  in the modelling framework. We have manually corrected any inaccuracies found,
  however it is possible that there are other errors in the SNZ coding. Most instances of
  this would be related to small businesses and have little effect on the modelling
  output.
- Land vacancy data. It is difficult to accurately establish the vacancy status of some parcels of land in the absence of discussion with land owners and occupants (which was outside the scope of our assessment). Some parcels or buildings may appear to be not being used but in fact are, and premises which are identified as occupied could in fact be vacant. Further, there may be development plans for land which cannot be understood from site visits, whether construction of a new development or



demolition of an existing premises. Vacant land is used in the model to potentially accommodate some future growth, and so conclusions about how much future land will be required are influenced by uncertainty in the vacant land variable. We anticipate that some improvement of vacant land assumptions may be possible following the consultation process and stakeholder engagement.

- Not all additional employment will require additional business land on which to establish. Some share of employment growth will be directed towards existing businesses that can operate more productively within their existing footprint. The assumptions made in this regard have taken into account a number of factors including: the range of existing business types; the degree to which individual industries are dominant in each place; locational attributes such as accessibility, and; population projections.
- The employment density of new employment growth has been assumed to be comparable to existing employment within each land use.

A small number of relatively large businesses dominate the economy. The loss of a key employer would therefore have significant effects on the economy, including employment and demand for business land. The likelihood of this happening, or alternatively a large new business seeking to establish, is another element of uncertainty in this assessment.



# **3 Growth Projections**

## 3.1 Population Projections

Understanding population growth is important when planning for business land demand because the domestic market supports a large proportion of the retail and household services sector. That activity is a significant component of the activity occurring on business land, especially in the Business 1 zone.

For this assessment we have used SDC's in-house population projections as the best current estimate of future population. Statistics NZ (SNZ) released projections in February 2015 which provide another scenario of future growth, but those projections are only available at a District level at present, and in any case the difference to the SNZ projections is less than 2% when compared to SDC's projections by 2031. The SDC projections are made for 19 towns throughout the District, including six in Malvern, and a residual "Rural" area. For the purposes of this assessment we have allocated SDC's projected growth quantum throughout the rural area in line with SNZ's distribution of growth in those areas from SNZ's most recent sub-District growth projections (2012).

**Figure 3.1: Malvern Population Projections** 

	2014	2016	2021	2026	2031	Grow	th
	2014	2016	2021	2026	2031	n	%
Darfield	2,820	2,960	3,290	3,630	3,960	1,140	40%
Kirwee	1,110	1,170	1,330	1,480	1,640	530	48%
Coalgate/Glentunnel/Whitecliffs	1,070	1,100	1,180	1,250	1,330	260	24%
Hororata	250	260	280	300	320	70	28%
Sheffield/Waddington	580	580	600	620	650	70	12%
Springfield	460	470	500	530	550	90	20%
Sub-total Malvern Towns	6,290	6,550	7,180	7,820	8,460	2,170	34%
Malvern Rural	3,030	3,090	3,210	3,360	3,500	470	16%
Total Malvern Ward	9,320	9,640	10,390	11,180	11,960	2,640	28%
Other Selwyn	38,510	44,130	51,830	57,320	62,410	23,900	62%
Total Selwyn District	47,830	53,770	62,220	68,500	74,370	26,540	55%

Those growth projections show that 43% of Malvern growth is projected to occur in Darfield, which is the biggest town in the ward with a current population of 2,820. That population is projected to increase to 3,960 by 2031, an increase of 40%. Elsewhere population growth is projected to occur in smaller amounts, with growth to 2031 amounting to 530 people in Kirwee, 260 in Coalgate/Glentunnel/Whitecliffs, 70 in Hororata and in Sheffield/Waddington, and 470 spread throughout the rural areas. Growth in Malvern is projected to contribute only 10% of the total District population growth expected out to 2031.



### 3.2 Employment

### 3.2.1 Current Employment Structure

There are currently 3,600 MECs<sup>7</sup> engaged in Malvern, of which 1,320 (37%) are engaged in Darfield identified and 1,230 (34%) are employed in rural areas. No other town has more than 150 MECs. The economy is dominated by the Rural sector (agriculture, horticulture etc.) which employs 38% of workers (1,370 MECs) and Industry, which employs 34% of workers, while the Retail and Commercial sector employs 17% of workers (620 MECs) (Figure 3.2: Malvern Employment Distribution 2014 (MECs)

).

Figure 3.2: Malvern Employment Distribution 2014 (MECs)

	Retail and Commrcl	Industrial	Rural	Other	Total
Darfield	259	733	95	233	1,320
Hororata	12	90	32	9	144
Coalgate	51	42	14	20	127
Kirwee	30	33	62	1	125
Sheffield	20	60	22	9	111
Springfield	18	15	3	13	50
Waddington	4	5	38	=	47
Lake Coleridge	6	1	37	-	44
Arthurs Pass	7	15	=	6	28
Whitecliffs	3	2	21	-	25
Glentunnel	4	3	8	-	15
Castle Hill	4	2	4	-	10
Malvern Towns	419	1,001	336	292	2,048
Rural Malvern	206	224	1,037	62	1,528
Total Malvern	624	1,224	1,374	354	3,576

Darfield is by far the largest employment area in the ward, with 1,320 MECs, more than nine times more workers than the next largest town (Hororata). Darfield is also the largest Retail and Commercial centre, with 260 MECs, 41% of Malvern employment in that sector, and the largest grouping of Industrial employment, 60% of Malvern Industrial employment. The next largest single employment location is Hororata (144 MECs, of which 90 are Industrial).

A large proportion (42%) of Malvern's employment is engaged in rural areas and 67% of that (1,037 MECs) is engaged in Rural businesses, although there are some notable standalone Industrial employers located outside of the ward's towns in Rural Malvern. Those large employers include a sawmill and an earthmover near Hororata, and an engineering firm near Sheffield (each employing between 20 and 40 MECs), and a construction company near

<sup>&</sup>lt;sup>7</sup> Modified Employment Count, a measure of total persons employed plus all working proprietors.



13

Greendale (65 MECs). Fonterra is another large employer (250 MECs) in a rural area just outside Darfield, but which falls into the town based on our meshblock definitions.

### 3.2.2 Historic Employment Trends

#### **Retail and Commercial**

The proximity of most parts of Malvern to Rolleston (and to Christchurch) means that Malvern's retail and commercial sector has not developed a full service role, with only a small (but increasing) range of retail and household services businesses present in Malvern:

- In 2000 there were 340 MECs engaged in Malvern towns' Retail and Commercial businesses, and that increased by 23% to 420 MECs in 2014. That growth was spread around the ward, with the largest single employment gain being at Darfield (+43 MECs).
- A number of towns' employment in the sector also grew, but by small amounts and from a small base: Sheffield from 10 to 20 MECs; Kirwee from 17 to 30; Springfield from 7 to 18 and Coalgate from 24 to 51 MECs. The employment in Coalgate includes that at Coalgate Motors (mechanics, service station, and the store component), the tavern and a number of small apparently home-based businesses.
- A decrease in Retail and Commercial employment was recorded in Arthurs Pass (-24 MECs), Castle Hill, Glentunnel and Waddington (-8 MECs combined).

Those patterns indicate that Darfield is consolidating its role as the focal point for Retail and Commercial activity in Malvern, and that employment in the smaller towns has grown by small amounts to keep pace with population growth. Darfield is still a much less attractive destination for consumers in this category than Christchurch, which is the predominant destination for the Retail and Commercial spend that is resident in Malvern, as discussed in section 3.2.3.

#### Industrial

There has been strong growth recorded in Malvern towns' Industrial businesses since 2000:

- Industrial employment in the towns was 360 MECs in 2000, and has nearly tripled to 1,000 in 2014. Growth outside the towns has been only slightly slower, although still increased from 90 to 220 MECs.
- The largest growth was in Darfield, where Industrial employment increased from 260 MECs in 2000 to 730 MECs in 2014. A large part of that growth was from the Fonterra factory (established in 2012, now employing 250 MECs) which is classified in the model as being inside the Darfield town boundary, but there was growth of 220 MECs in other businesses as well. That growth included an expanded sawmill, new and expanded construction firms and transport operators, and a number of small increases to existing firms in other types of Industry.



- Hororata Industrial employment increased by nearly 90 MECs (from 2 MECs to 90), mostly due to the establishment of a seafood processor and an earthmoving company.
- There was also growth at Sheffield (+40 MECs in an agricultural machinery manufacturer), Coalgate (+30 MECs in two small manufacturing businesses) and Springfield (+10 MECs).
- There have been no significant net Industrial employment declines in Malvern since 2000, with any business closures tending to have been offset by new businesses establishing or existing businesses growing. There appear to have been some relocations both between and within towns as well.

These changes indicate that there is some demand for new space from Industrial businesses, many with ties to the rural sector, and many of which have fewer than 30 MECs. A number of these appear to have established outside Business zoned land, such as on rural land (often near towns, but sometimes not). It is not clear whether the presence of more Business land would encourage more growth in these types of businesses, or whether the zoning rules and policies and readily available Rural land mean that a lack of Business land is no obstacle to their establishing and growing. This could be a topic of conversation pursued in consultation if some of these new entrants can be interviewed.

#### Overall

Across all sectors total employment in Malvern's towns increased by 45% between 2000 and 2014, from 1,620 to 2,350 MECs. This was comprised of net increases in employment in Darfield (+490 MECs, 55% of total employment growth in the ward), Hororata (+70), Coalgate (+60) and Sheffield (+30) but a decline in Arthurs Pass and Kirwee (each -40 MECs). This indicates a reasonably broad distribution of growth around Malvern, and that there has been no significant structural shift in employment since 2000. Most of the growth observed tends to have been driven by one or two new or expanded business in each place which indicates that if future growth follows similar patterns the amount of additional land required in each town to accommodate that growth will not be large. That assessment is made below in section 4.

#### 3.2.3 Current Spend Patterns

We have assessed data from BNZ Marketview<sup>8</sup> to provide a measure of the current spending patterns in Malvern. The data shows the share of spending (in services and food and non-food retail) that is directed to a number of major retail destinations<sup>9</sup> from each Malvern town. Data was not provided for small towns because of the confidentiality restrictions due to the small retail base in those towns. The data shows that only a minority of spend from each town is directed to Darfield, with Christchurch being significantly the most attractive destination for retail and services spending by people living in Malvern (Figure 3.3).

<sup>&</sup>lt;sup>9</sup> Darfield, Lincoln, Leeston and Rolleston in Selwyn, Christchurch, Ashburton, Methven, Geraldine, Temuka and Timaru



<sup>&</sup>lt;sup>8</sup> All credit and debit card spending by BNZ customers

This is consistent with other studies we have completed for SDC which show that a large proportion of the spend resident in Selwyn 'leaks' out of Selwyn to destinations in Christchurch. The attractiveness of the large amount and wide range of retail and services businesses in Christchurch is a very strong drawcard to Selwyn consumers, many of whom regularly visit Christchurch (e.g. for work) and so retail there is very accessible to them.

Figure 3.3: Destination of Retail and Services Expenditure

Spand Origin	Spe	end Destinat	ion
Spend Origin	Darfield	Rolleston	Chch
Darfield	0.32	0.05	0.61
Hororata	0.21	0.08	0.54
Coalgate	0.31	0.03	0.64
Kirwee	0.06	0.19	0.73
Sheffield	0.21	0.02	0.74
Springfield	0.22	0.01	0.76
Waddington	0.21	0.02	0.74
Lake Coleridge	0.09	0.02	0.64
Whitecliffs	0.32	0.03	0.64
Glentunnel	0.32	0.03	0.64
Castle Hill	0.09	0.02	0.64
Rural	0.11	0.10	0.58

### 3.2.4 Employment Projections

Employment projections are sourced from the EFM. As explained above, the EFM takes into account projections of future expected population growth and projections of international and domestic economic drivers to calculate employment projections by sector. For this assessment EFM output has been spatially allocated to a sub-District level, and so growth in individual towns is influenced by broader District and Regional growth drivers (which project growth in the District) to a greater extent than local factors. This means that in towns where there has been an historic decline in employment, the projections will indicate growth is expected, which is contrary to what would be expected if historic employment trends were to continue. For this assessment we prefer the EFM output, although interpret this with reference to historic trends.

Darfield's employment is projected to increase from 1,320 to 1,730 (+400 MECs), at a similar rate to the period between 2000 and 2014 if the employment increase from the Fonterra plant is excluded (Figure 3.4). Over 60% of that growth is projected to be in Industrial employment, and only 17% from Retail and Commercial (see detail in Appendix 3).

The rural parts of Malvern are projected to experience employment growth of 330 MECs out to 2031, predominantly in the Rural sector, but also in Industrial businesses. The Industrial sector growth expected in rural Malvern is likely to occur mostly in current large businesses, and is not expected to require Business 2 zoned land to be created in those rural areas.



Figure 3.4: Malvern Employment Projections (MECs)

							Growth 2	014-31
	2000	2014	2016	2021	2026	2031	n	%
Darfield	826	1,320	1,478	1,572	1,660	1,734	414	31%
Hororata	72	144	151	162	171	179	35	25%
Coalgate	67	127	132	143	152	161	33	26%
Kirwee	165	125	130	137	143	148	23	18%
Sheffield	79	111	117	127	136	144	33	30%
Springfield	34	50	52	55	59	62	12	25%
Waddington	51	47	49	52	54	56	9	18%
Lake Coleridge	36	44	45	45	45	45	1	2%
Arthurs Pass	64	28	29	32	33	35	7	24%
Whitecliffs	37	25	26	26	26	27	1	6%
Glentunnel	15	15	16	17	18	19	4	28%
Castle Hill	10	10	11	11	12	13	2	21%
Malvern Towns	1,456	2,048	2,236	2,378	2,510	2,623	575	28%
Rural Malvern	1,213	1,528	1,575	1,689	1,812	1,862	334	22%
Total Malvern	2,668	3,576	3,811	4,067	4,322	4,485	909	25%

The remaining growth in the ward (200 MECs) is expected to be distributed throughout Malvern, with Hororata, Sheffield and Coalgate each expected to see employment grow by 30-35 MECs, or around 20-30%. Most of the smaller settlements are projected to have no noticeable change in employment, with only single figure MEC growth.



# 4 Land Use

### 4.1 Zoned and Vacant Land

Two key components to assessing whether additional zoned land will be required to accommodate economic growth are the total current zoned area and the amount of that which is vacant. SDC has provided GIS mapping files of zoned area within Malvern with associated land areas included, and we have measured the part of that which is vacant based on our observations from our site visits conducted in April and May 2015.

For this assessment we have provided two different measures of vacant land: vacant and vacant potential. Vacant land is land that is currently not built on at all, or is built on but the building is unoccupied. Vacant potential land is land that has a building on which is occupied by a land use but which could be converted to another land use (e.g. residential activity in a Business 1 zone). We have assumed that vacant potential land is not in fact available for development, given that it is occupied by an activity now, although the presence of that land indicates some potential to accommodate additional business activity in the future.

It can be difficult to accurately capture all of the vacant land in any place, especially given changing land uses and the fact that activities may be using premises which appear vacant from the outside. Achieving a better understanding of this vacant land could be an objective in developing the area plans.

Appendix 4 provides a map (for Darfield) and descriptions (for the smaller towns) showing the parcels of land which have been categorised as vacant for the purposes of this assessment. We note that there is a relatively large area of Business 1 zoned land in Darfield that is not developed, or available for development, including land that is occupied by parks and reserves. This 'not available' land is considered in the model as being not available, and is excluded from calculations, including the carparking area (owned by Kiwirail) and reserves (Council-owned) including that around the railway station where the Farmlands store is.

### 4.2 Land Area Required

The assessment of land required applies (as described in section 2.4) average employment density data to the employment projections in section 3.2.3 to calculate the additional business land that will be required in each town. That total is then adjusted to take into account that some of that additional activity is likely to be in existing businesses, and therefore not require any additional land to accommodate it. This capacity is an assumption in the modelling process, and therefore subject to uncertainty as explained in section 2.5.

#### 4.2.1 Business 1 Land

There is currently 28.6 ha of Business 1 zoned land in Malvern, 18.8 ha of which is in Darfield and 1.5 ha in Coalgate. There is also 8.4 ha in Castle Hill, although that land has never been



developed and is a greenfields site. Excluding Castle Hill, Darfield has 93% of the Business 1 zoned land in Malvern (Figure 4.1).

Figure 4.1: Malvern Business 1 Land Demand Projections to 2031

	Current Zoned Land a	Vacant b	Vacant Potential*	Total Vacant d=b+c	Land Demand Growth e	Locate in Existing Business f	Add. Land reqd g=e-f	Land Shortfall by 2031 h=g-b
Darfield	18.8	0.5	0.7	1.2	3.2	1.0	2.2	1.7
Hororata	-	-	_	-	0.1	-	0.1	0.1
Coalgate	1.5	-	-	-	0.1	-	0.1	0.1
Kirwee	-	-	-	-	0.1	-	0.1	0.1
Sh effi el d	-	-	-	-	0.1	-	0.1	0.06
Springfield	-	-	-	-	0.1	-	0.1	0.1
Waddington	-	-	-	-	0.0	-	0.0	0.0
Lake Coleridge	-	-	-	-	0.0	-	0.0	0.0
Arthurs Pass	-	-	-	-	0.0	-	0.0	0.0
Whitecliffs	-	-	-	-	0.0	-	0.0	0.0
Glentunnel	-	-	-	-	0.0	-	0.0	0.0
Castle Hill	8.4	8.4	-	8.4	0.0	-	0.0	0.0
Malvern Towns	28.6	8.9	0.7	9.6	3.6	1.0	2.7	2.1
Rural Malvern	-	-	-	-	1.0	0.7	0.3	0.3
Total Malvern	28.6	8.9	0.7	9.6	4.6	1.7	2.9	2.4

\*e.g. currently residential use

#### **Darfield**

In Darfield all of the Business 1 zoning is located in a single block along the main road (SH73) through the town. There is a range of retail and service activity in the town, although most of the retail is convenience type retail<sup>10</sup>, with little in the way of comparison retail<sup>11</sup>. There is a wide range of service businesses<sup>12</sup>, but as discussed in section 3.2.3 above Christchurch is the main destination for retail and services spend for Darfield residents.

The retail and commercial employment growth (71 MECs) projected in Darfield out to 2031 would equate to around an additional 3.2 ha of Business 1 land, although we anticipate that some of that would be supported in existing businesses, and therefore not require any additional land. In Darfield that is estimated to amount to around one third of employment growth, or some 1.0 of the 3.2 ha.

The net additional land required then would be 2.2 ha. From our assessment there is around 0.5 ha of vacant, and 0.7 ha of vacant potential land in Darfield now, so assuming that the vacant land can be developed for Retail and Commercial uses, and the vacant potential cannot, that indicates that less than 2.0 ha of additional Business 1 land would be required in Darfield out to 2031. The amount of Business 1 land that will be required will depend on:

 The amount of new Retail and Commercial employment growth that is likely to be accommodated in existing businesses. Projected employment growth in that category

<sup>12</sup> vet, real estate, childcare, library, physio, hairdresser



<sup>&</sup>lt;sup>10</sup> cafes, takeaways, dairy/superettes, post shop, service station

<sup>&</sup>lt;sup>11</sup> Which in Darfield is limited to several clothing stores, second hand shops, fabric shops, rural supplies, timber etc.

to 2031 is 71 MECs and there are around 120 businesses in the town in this category now, so the projected growth equates to less than one extra employee per business.

- Whether any of the vacant potential land can be converted from existing (nonbusiness) uses to commercial activities.
- Future retail preferences, and whether local consumers direct an increased proportion of their spend to Rolleston as Rolleston's retail offer grows.

In total then up to 2.0 ha of additional Business land may be required in Darfield out to 2031, although that figure may be somewhat lower if some of the current Business 1 zoned area that is not developed (e.g. around the Farmlands store/railway station) can be developed. There does not appear to be any current undersupply of Business 1 land, given there is vacant land and vacant tenancies in the town centre now, and retail space that is in the pipeline (e.g. the development site on the corner of Bray St) has been slow coming to market. Based on this, any demand for additional Business 1 land will be some way away, and maybe not until the 2020s. This is also supported by the current high rates of leakage of this type of spending to businesses in Christchurch (per section 3.2.3), and the fact that Lincoln and Rolleston have been accorded Key Activity Centre (KAC) status and this type of growth is to be prioritised in those centres (and in the KACs in Christchurch).

#### **Other Towns**

From the employment projections, no additional Business 1 land is projected to be required elsewhere in Malvern, and the towns are expected to retain their current role:

- In Coalgate current retail and commercial activity is focussed in the service station and tavern, although the service station is zoned Living. No significant additional retail and commercial activity is projected, and Darfield (only 12 km away) is likely to remain the main service centre for Coalgate residents. Our assessment indicates that most growth would be either additional employment in existing businesses or small homebased office-type businesses.
- Hororata is only 17 km from Darfield, and has no Business 1 zoned land, and the only retail and commercial activity is limited to several home-based offices. This is not expected to change.
- Kirwee has not developed any real retail and commercial role, probably because of its proximity to Darfield (9 km), Rolleston and Christchurch and its relatively small population (1,100 people). Like Hororata, retail and commercial activity is unlikely to develop beyond the current small number (<10) of home-based offices.

There is currently no Business 1 land elsewhere in Malvern, and growth projections indicate that none will be required in the future. Other retail and commercial activity tends to be limited to single businesses which have established outside Business 1 the zone.



#### 4.2.2 Business 2 Land

There is 67.2 ha of Business 2 zoned land in Malvern, the vast majority of which (59.3 ha) is in Darfield. The only other location with any Business 2 land is Coalgate (7.7 ha) (Figure 4.2).

Figure 4.2: Malvern Business 2 Land Demand Projections to 2031

	Current Zoned Land	Vacant	Vacant Potential*	Total Vacant	Land Demand Growth	Locate in Existing Business	Add. Land reqd	Land Shortfall by 2031
	a	b	С	d=b+c	е	f	g=e-f	h=g-b
Darfield	59.5	22.8	-	22.8	10.3	8.2	2.1	0.0
Hororata	-	-	-	-	0.7	0.7	0.1	0.1
Coalgate	7.7	=	-	-	0.5	0.5	0.0	0.0
Kirwee	=	=	-	-	0.4	0.3	0.0	0.0
Sheffield	=	=	=	=	1.1	0.9	0.1	0.1
Springfield	=	=	-	-	0.1	-	0.1	0.1
Waddington	=	=	-	-	0.0	-	0.0	0.0
Lake Coleridge	=	=	=	=	0.0	=	0.0	0.0
Arthurs Pass	=	=	-	-	0.2	0.2	=	=
Whitecliffs	-	-	-	-	0.0	-	0.0	0.0
Glentunnel	=	=	=	=	0.0	=	0.0	0.0
Castle Hill	-	-	-	-	0.0	-	0.0	0.0
Malvern Towns	67.2	22.8	-	22.8	13.4	10.7	2.6	0.5
Rural Malvern	-	-	=	-	5.6	5.6	0.0	0.0
Total Malvern	67.2	22.8	-	22.8	19.0	16.3	2.7	0.6

\*e.g. currently residential use

#### Darfield

In Darfield there are three separate areas with Business 2 zoning: the area at the western entrance to town either side of SH73 (ITM and sawmill); the area adjacent to the eastern end of the town centre along Mathias and Cardale Streets (transport oriented businesses and a large greenfields area) and the large block at the eastern entrance to the town accessed off Horndon St (various light industry firms, a brick factory, construction company etc. and a significant amount of greenfields vacant land).

There are a number of vacant and underutilised parcels in Darfield's Business 2 zone which from our calculations could yield nearly 23 ha of additional Business 2 land for development. It has been difficult to ascertain the status of some of this land, and parts have no road frontage (e.g. the large block east of Horndon St that was previously occupied by the Selwyn Plantation Board). It appears as though there is significant Business 2 zoned land that could be developed to cater for any industrial-type growth, although this vacant status would warrant some checking through discussions with landowners/occupiers if possible.

Our assessment indicates that economic growth will result in employment growth of around 260 MECs out to 2031, the equivalent of around 10 ha if all that employment were to locate in new businesses. However we anticipate that much of that growth will locate in existing businesses, including the Fonterra plant (which is inside the Darfield town boundary as defined for this assessment), and that the remaining employment would occupy around 2-3 ha of additional Business 2 land. Given the large amount of vacant land that appears to be present



in Darfield now (>20 ha), this indicates that no additional Business 2 land will be required in Darfield out to 2031.

Further, this large amount of vacant Business 2 land in Darfield will also be able to accommodate Industrial growth in other parts of Malvern, which will offer operational efficiencies to businesses in Darfield through their ability to share infrastructure, support services and access to suppliers. We recognise that not all prospective industrial businesses would see Darfield as an attractive location option and may instead wish to establish near other towns for a range of reasons (e.g. proximity to owners' homes), but Darfield does offer significant capacity that can support future economic growth in Malvern.

#### Sheffield

The second largest quantum of growth (26 MECs) in Industrial employment is projected in Sheffield. There is no Business 2 land in Sheffield now, and most Industrial employment is identified as being in a single business in Agricultural Machinery manufacturing, which we have identified as being located on the southern edge of town on SH73 in the Living 1 zone. Other Industrial activity is in firms of less than 5 MECs, and none of this activity indicates any need for a Business 2 zone to be created at Sheffield, unless SDC wishes to have the manufacturing company's site rezoned to reflect the existing activity there.

Figure 4.2 indicates demand for an additional 0.1 ha of Business 2 land. This number is rounded, and is actually only slightly over 500m<sup>2</sup> (0.05 ha), or less than one lot. That very small amount of additional land would not, in our opinion, warrant the creation of a new Business 2 zone in Sheffield.

That is, we expect that either existing business will accommodate this growth, or it will be smaller operators who establish via resource consent, and there is no need to accommodate this in a distinct B2 zone

#### Hororata

A similar situation applies in Hororata, where the projected 24 MECs growth would require some additional land, but there is no existing Business 2 zone in the town. In Hororata the existing Industrial businesses are an earthmoving company (in the Outer Plains zone 3 km east of the town, but inside the town boundary as defined for this assessment) and a seafood processing factory (in the Outer Plains zone 1.5 km north of the town).

#### **Other Places**

Growth of 13 or fewer MECs is projected in all other Malvern towns out to 2031, and none of those locations are expected to need any Business land to be zoned to accommodate that activity. Those businesses tend to be located in rural areas and to be not inconsistent with the rural feel of the areas they are in, often being in sheds or small warehouses similar to farm outbuildings. As with Sheffield and Hororata, zoning of Business land in these other towns, and in Rural Malvern, would only be required for consistency with SDC policy directions, and



could, where appropriate in line with growth polices, rezone existing business to recognise their existing use.



# **5** Supporting Centres

Centres play an important role for local communities, providing a range of goods and services that have benefits not only for consumers, but also for the businesses themselves. The benefits from centres stem from the co-location and concentration of similar or related activities, providing an ability for businesses to access customers and suppliers, share facilities and infrastructure, and for customers to conveniently access a range of goods and services in one location. This applies to commercial activities, retail, service and hospitality businesses, and from a business to business point of view also to industrial activities.

In addition to the functional amenity of convenient access to goods and services in one location, and having greater choice and ability to compare among providers, town centres provide less tangible benefits such as opportunities for social interaction, a sense of place and community belonging (social amenity). Both aspects of amenity contribute to community social and economic well-being, and justify Council involvement in managing the role played by these centres.

The only town centre in Malvern towns is in Darfield. Retail and commercial activity in other towns is limited to single stores or several commercial businesses spread throughout residential areas. While most retail spend flows out of Malvern to Christchurch, the Darfield town centre serves as the focal point for retail and commercial activity in the ward, and plays an important role in providing the amenity and benefits described above. Darfield is identified as a Key Activity Centre, and provides a much lower higher of functional amenity for its community than do the smaller Rural Activity Centres, which provide a more limited range of services to the community. It is important that Council recognises and supports Darfield's role for the good of the community and local businesses, and this is true also (although to a lesser degree due to the smaller size of the community served) for other centres in Malvern.

There are several main ways this can be achieved:

- The physical environment is important in creating a place that encourages people to
  visit and to spend time in. Council can contribute to the attractiveness of the Darfield
  town centre by creating and maintaining a built environment in the public realm
  (footpaths, gardens, parks etc.) that is aesthetically pleasant and safe. Methods for
  achieving this would require input from an urban designer.
- Having a business group that contributes to establishing and achieving objectives for the town centre. Such a group can have input into any plans for the town centre to achieve a shared vision, support centre marketing initiatives (such as targeting skiers as Porters develops), form the basis of ongoing financial support for achieving those plans (e.g. through targeted rates) and provide a support network for business owners.
- Anchor activities are important in centres. Anchors are destinations that are very attractive to people, such as large retail stores or community facilities that draw people into a centre, providing potential consumers for other businesses. Darfield is



not large enough to support large retail anchors like large supermarkets or department stores, rather Darfield's anchors are the businesses visited most frequently, such as the Four Square grocery store, service stations, the Farmlands store and the library. These businesses and organisations are important in supporting the functioning of the town centre, so Council support for those businesses (assisting with carpark provision, access, street appeal etc.) will support the wider town centre.



# 6 Conclusion

The fastest growing parts of Selwyn District are those closest to Christchurch, and the area around Rolleston and Lincoln is expected to continue to grow at a much faster rate than the western and northern parts of the District. Malvern's recent growth and the growth expected in the future will be predominantly directed to Darfield with the smaller towns not expected to experience any significant growth in population or economic activity.

Total population growth in the Malvern ward is projected to be 2,500 people out to 2031, with Darfield expected to remain the focal point with growth of 1,100 people out to 2031 (2.0% average annual growth), 44% of Malvern population growth. Population growth in the rest of Malvern will amount to some 1,400 people, which will be spread around a number of small towns and throughout the rural area.

There are currently 3,580 MECs engaged in all industries in Malvern, 37% of which are engaged in Darfield and 43% in rural areas. No other town has more than 150 MECs. The economy is dominated by the Rural sector (agriculture, horticulture etc.) which employs 38% of workers (1,370 MECs) and Industry, which employs 34% of workers.

Much of the demand for Retail and Commercial is served in either Darfield or Christchurch, and the only notable concentration of Retail and Commercial activity in Malvern is in Darfield. Activity in the smaller towns is limited to individual convenience type stores or home-based office businesses. Darfield very much functions as the commercial centre for Malvern, and growth in that sector there is projected to be 70 MECs by 2031, equivalent to an additional 3.2 ha of Business 1 land. Much of that additional employment is likely to be accommodated within existing businesses and therefore not require any additional land, and from our assessment, given current vacant land in the Business 1 zone, less than 2.0 ha of additional Business 1 land would be required in Darfield out to 2031.

The only other Business 1 land in Malvern is at Coalgate (1.5 ha occupied by the Tavern) and Castle Hill (8.4 ha vacant land), and growth projections indicate that no additional Business 1 land will be required in those places or anywhere else in Malvern in the future, as any growth will be of a small scale and in a number of businesses spread throughout the ward.

Darfield is also the focal point for Industrial activity in Malvern. There are only two towns with any Business 2 zoning in the ward: Darfield (59.3 ha) and Coalgate (7.7 ha). There is a significant amount of vacant Business 2 land in Darfield, and that will from our assessment be more than sufficient to cater for the 2-3 ha of Industrial growth projected out to 2031. This large amount of vacant Business 2 land in Darfield will also be able to accommodate Industrial growth in other parts of Malvern, should there be any demand for large amounts of Business 2 zoned land, although given the low levels of current activity and modest growth projected this is unlikely to be a concern.

Elsewhere in Malvern Industrial activity is limited to individual businesses that are widely distributed throughout the ward, and mostly located outside Business zoned land. The growth projections indicate only small increase in Industrial employment outside Darfield, none of



which indicates any need for additional Business 2 zones to be created, unless SDC wishes to have the occupied sites rezoned to reflect the existing activity there. However, it appears that the current planning rules enable these standalone Industrial businesses to establish and so do not constrain economic growth.



# **Appendix 1: Location Maps**

Figure A1.1: Darfield Location and Zoning Overview



Figure A1.2: Hororata Location and Zoning Overview





Legend
Aggregated Zone Type
Business 1, 1A and 1B
Business 2 and 2A
Living, DLA and EDA
State Highway
— Principal road

Malvern Hills

Coalgate

Figure A1.3: Coalgate/Glentunnel Location and Zoning Overview

Figure A1.4: Kirwee Location and Zoning Overview







Figure A1.5: Sheffield/Waddington Location and Zoning Overview







# **Appendix 2: Town Definition**

As explained in section 1.3.2, the spatial extent of each town is defined using the grouping of meshblocks that intersect the Township boundary in the zoning file. In some cases meshblocks that are inside the Township boundary may also extend into the surrounding rural area, which means that the meshblock-based town definition is usually larger than the zoned area. Rural meshblocks can be large, and so can increase the spatial area of the town used in our assessment, although it has been necessary to include these peripheral meshblocks to capture all of the economic activity that may or may not be located within the Township proper.

The meshblock-based town boundaries are shown below.



Figure A2.1: Darfield Meshblock-Defined Town Boundary



egated Zone Type
Business 1, 1A and 1B
Business 2 and 2A
Living, DLA and EDA

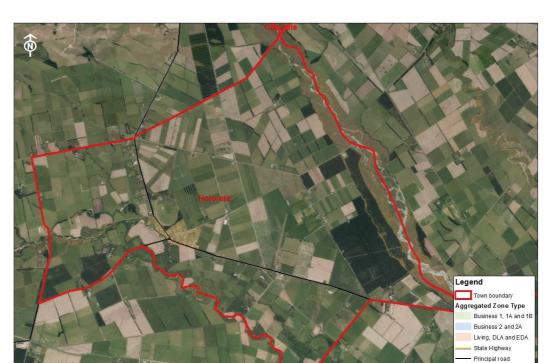


Figure A2.2: Hororata Meshblock-Defined Town Boundary

Figure A2.3: Coalgate, Glentunnel and Whitecliffs Meshblock-Defined Town Boundaries

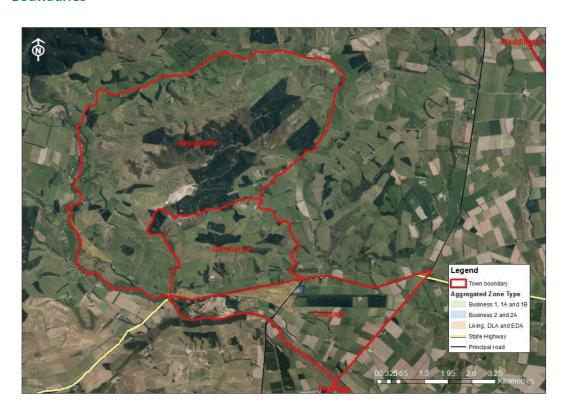




Figure A2.4: Kirwee Meshblock-Defined Town Boundary



Figure A2.5: Sheffield and Waddington Meshblock-Defined Town Boundary

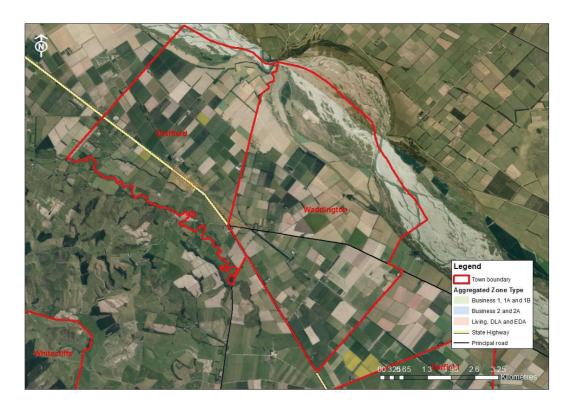




Figure A2.6: Springfield Meshblock-Defined Town Boundary



Figure A2.7: Lake Coleridge and Castle Hill Meshblock-Defined Town Boundaries

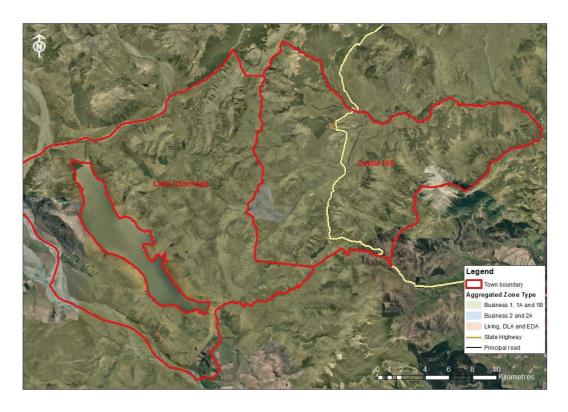
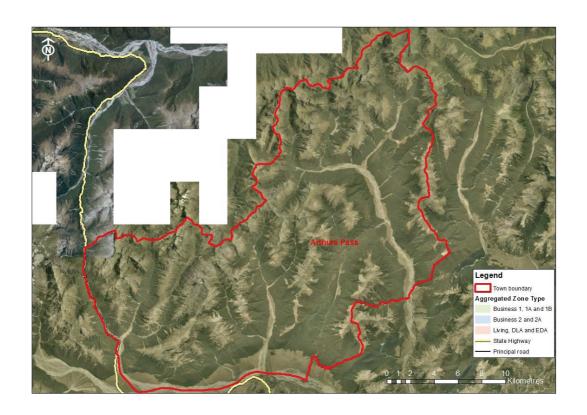




Figure A2.8: Arthurs Pass Meshblock-Defined Town Boundary





# **Appendix 3: Employment Projections**

This Appendix provides breakdowns for the four key employment sectors which make up the total Malvern economy, as described in Figure 3.2: Malvern Employment Distribution 2014 (MECs)

.

Figure A2.1: Malvern Employment Projections: Retail and Commercial

						Growth 2	014-31
	2014	2016	2021	2026	2031	n	%
Darfield	259	270	293	312	330	71	28%
Hororata	12	13	14	15	16	4	29%
Coalgate	51	53	58	61	65	14	28%
Kirwee	30	31	34	35	37	7	24%
Sheffield	20	21	22	23	24	4	20%
Springfield	18	19	20	21	22	4	20%
Waddington	4	4	5	5	5	1	26%
Lake Coleridge	6	6	7	7	7	1	22%
Arthurs Pass	7	7	7	8	8	1	17%
Whitecliffs	3	3	3	3	4	1	29%
Glentunnel	4	4	5	5	5	1	30%
Castle Hill	4	4	5	5	6	1	31%
Malvern Towns	419	437	472	502	530	111	26%
Rural Malvern	206	213	233	253	264	59	29%
Total Malvern	624	650	704	754	794	169	27%

Figure A2.2: Malvern Employment Projections: Industrial

						Growth 2	Growth 2014-31		
	2014	2016	2021	2026	2031	n	%		
Darfield	733	869	914	958	992	259	35%		
Hororata	90	94	102	108	114	24	27%		
Coalgate	42	44	48	52	55	13	31%		
Kirwee	33	35	39	42	45	12	35%		
Sheffield	60	64	72	79	86	26	44%		
Springfield	15	16	17	19	20	5	31%		
Waddington	5	6	6	7	7	2	31%		
Lake Coleridge	1	1	1	1	1	0	32%		
Arthurs Pass	15	16	17	18	19	4	26%		
Whitecliffs	2	2	2	2	2	0	28%		
Glentunnel	3	3	4	4	4	1	30%		
Castle Hill	2	2	2	2	2	1	28%		
Malvern Towns	1,001	1,153	1,223	1,292	1,347	347	35%		
Rural Malvern	224	236	263	293	308	85	38%		
Total Malvern	1,224	1,389	1,487	1,585	1,656	431	35%		



Figure A2.3: Malvern Employment Projections: Rural

						Growth 2	014-31
	2014	2016	2021	2026	2031	n	%
Darfield	95	98	102	107	110	15	16%
Hororata	32	34	35	36	37	5	15%
Coalgate	14	15	15	16	17	2	17%
Kirwee	62	63	64	65	65	4	6%
Sheffield	22	23	23	22	22	- 0	-1%
Springfield	3	3	3	3	3	0	5%
Waddington	38	39	41	43	44	6	16%
Lake Coleridge	37	37	37	37	37	- 1	-1%
Arthurs Pass	-	=	=	=	-	-	0%
Whitecliffs	21	21	21	21	21	0	1%
Glentunnel	8	8	9	10	10	2	26%
Castle Hill	4	4	4	4	4	0	7%
Malvern Towns	336	344	354	364	370	34	10%
Rural Malvern	1,037	1,062	1,123	1,190	1,208	171	16%
Total Malvern	1,374	1,406	1,478	1,554	1,579	205	15%

Figure A2.3: Malvern Employment Projections: Other

						Growth 2014-31	
	2014	2016	2021	2026	2031	n	%
Darfield	233	241	263	283	302	69	29%
Hororata	9	10	11	11	12	3	30%
Coalgate	20	21	22	23	24	4	20%
Kirwee	1	1	1	1	1	0	30%
Sheffield	9	9	10	11	12	3	30%
Springfield	13	14	15	16	17	4	28%
Waddington	-	-	-	-	-	-	0%
Lake Coleridge	-	-	-	-	-	-	0%
Arthurs Pass	6	6	7	7	8	2	28%
Whitecliffs	-	-	=	-	-	-	0%
Glentunnel	-	-	=	-	-	-	0%
Castle Hill	-	-	=	-	-	-	0%
Malvern Towns	292	302	329	353	376	84	29%
Rural Malvern	62	64	70	76	81	19	31%
Total Malvern	354	366	398	429	457	103	29%



# **Appendix 4: Vacant Land Parcels**

This Appendix identifies the parcels of land that have been identified as vacant for the purposes of this assessment. Vacant parcels in Darfield are shown in Figure A3.1. In the other towns:

- Coalgate: The Business 1 zone is occupied by the Coalgate tavern and two residential dwellings, leaving no vacant land. The only Business 2 site is occupied by Palmer Industrial Minerals (formerly Transform Minerals) and appears to be fully utilised, with no vacant land.
- The 8.4 ha of Business 1 zoned land at Castle Hill is all vacant as a greenfields site.
- There is no Business zoned land anywhere else in Malvern.

Legend

Indication secant land

Business 2 Cones

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Guiness 18

Guiness 2

Guiness 2

Guiness 2

Guiness 2

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Figure A3.1: Darfield Vacant Land

