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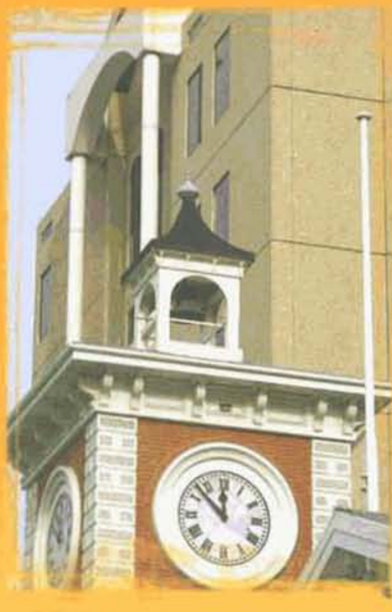

Selwyn District Council

Tracy-Anne Cross
Paul Dalziel
and
Caroline Saunders

Research Report No. 271
October 2004

Christchurch New Zealand

AERU

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Preface

This report is part of the ongoing economic development research in the AERU. It provides an economic baseline report of the current level of resources in the Selwyn District and how they have changed over recent times. This includes the overall macro economic and policy context; the business sector and employment; population and how this is changing; as well as the natural resources and the infrastructure in the district. This is of vital importance to planners and developers, among others, in the region in providing important information about the region to help facilitate economic development. We welcome the opportunity to be involved in this work especially in our local district and to contribute to local economic development.

Professor Caroline Saunders
Director

Acknowledgements

This Report was commissioned by the Selwyn District Council. The authors are particularly grateful to the Economic Development Officer of the Selwyn District Council, Ann Jarman, for helping us to identify data sources and providing us with full access to information already gathered. We are also pleased to acknowledge the information we received from Bill Murch (Telecom New Zealand Limited).

Executive Summary

This report identifies important characteristics of the Selwyn District as summarised below.

Economic Background

1. The New Zealand economy has enjoyed steady or strong economic growth over the last ten years. Unemployment is low, inflation is stable and the terms of trade have been favourable. Despite these positive trends, policymakers are concerned that current growth rates are not fulfilling New Zealand's potential. This has led to a much greater policy focus on regional resources and opportunities.

2. Two data sources provide details of employment for the Selwyn District – the five-yearly Census (which includes direct employment in agriculture) and the annual Business Frame Update Survey (which does not). The later identified 1,905 business locations in the Selwyn District, employing 7,540 full-time equivalent employees. A high proportion of these are small businesses (five or fewer full-time equivalent employees), and only six businesses employ more than 100 full-time equivalents. Excluding direct agriculture employment, the largest areas of employment in the Selwyn District are in the education, property and business services, and government, administration and defence sectors.

3. The 2001 Census records that 3,054 of Selwyn District's employed residents have jobs in the Agriculture, Forestry and Fishing industry (20.3 percent). A further 1,782 residents (11.9 percent) are employed in manufacturing, with 1,314 residents (8.8 percent) employed in retail trade. This Census data includes commuters to jobs outside the region (especially Christchurch City).

Area Demographics

1. The number of people living in The Selwyn District increased by 10.2 percent between 1996 and 2001, and is expected to grow by 33.2 percent over the next twenty years.

2. On Census night 2001, the Selwyn District labour force was comprised of 11,601 full-time workers, 3,408 part-time workers, and 513 unemployed workers.

3. There is little ethnic diversity in the Selwyn District, with the region's Pacific and Asian populations being significantly lower than nationally. One of the 18 Papatipu Rūnanga of Ngāi Tahu spread throughout the South Island, is based in the Selwyn District. There is a marae at Taumutu near the mouth of Lake Ellesmere (Te Waihora).
4. The percentage of people living in the Selwyn District with a tertiary education is above the national average, while the percentage with no formal qualifications is lower. The Selwyn District has a higher than average proportion of people with vocational qualifications. Between 1999 and 2003, school rolls in the Selwyn District increased by 5.0 percent.

5. The most significant increase in the Selwyn District's population was recorded in the group aged 50-54 years. The median age of people living in the Selwyn District is slightly higher than the national median, and is projected to rise further over the next 20 years. This is likely to have an impact on future employment in the area.

6. Between 1996 and 2001, the number of occupied private dwellings increased by 16.3 percent in the Selwyn District. The Selwyn District Council issued considerably more building consents in 2003 than in 2002 and 2001.

7. The 2001 Census recorded that the median income of people aged 15 years and above in the Selwyn District was $21,000.

Natural Resources of the Selwyn District

1. The Selwyn District has an approximate land area of 649,200 hectares. It has long been recognised that the Canterbury region possesses major comparative advantages such as fertile lands, temperate climate, significant water resources and an extensive agri-research and educational community.

2. Of the total 649,200 hectares identified for use in the Selwyn District, 176,544 hectares are grassland, and a further 98,190 hectares are tussock and danthonia used for grazing.

3. Canterbury is a very high user of water. Although Canterbury has enough water to meet annual demand, the region is "water short" under low flow conditions. The may also be water shortages in some water resource areas, indicating a need for significant increases in water storage and redistribution across water resource areas in the future. There is a continual demand for irrigation water due to the changes in land use in the region.

4. The Selwyn District consists principally of greyish brown soils which are predominantly formed on stony grave and sandy gravel structures. Currently the threat of good agricultural and horticultural soils being used for residential and industrial purposes is minimal, however this concern may develop in the future as the District grows.

5. The seasons in the Selwyn District can vary dramatically, and the climate is heavily influenced by the Southern Alps to the west of the District. Climate data indicate that the area has between 1,900 and 2,100 bright sunshine hours a year and a mean annual air temperature of approximately 12 degrees Celsius.

Physical Infrastructure of the Area

1. The Selwyn District has 2,341 kilometres of road and 126 bridges. The roads cover both urban and rural areas and road transport in the District is serviced by State Highways 1, 73 and 75.

2. Both the Lyttelton Port and the Port of Timaru are invaluable services for businesses in the Selwyn District, providing a key source of transportation for both exporters and importers.

3. The main airport for the Selwyn District is the Christchurch International Airport which can be reached by most of the District within approximately 60 minutes drive.

4. The Toll Rail freight services play a central role for the Selwyn District businesses. The TranzAlpine passenger service travels between Christchurch City and Greymouth on the west coast of the South Island, passing through the Selwyn District for a large portion of its journey.

5. The Selwyn District Council operates water supply schemes to urban and rural residents. The District provides 28 reticulated potable water supplies and has systems in place for the collection, treatment and disposal of sewerage in 11 townships.

6. Orion New Zealand Limited is the electricity distributor responsible for the Selwyn District and most of the Canterbury region. Orion distributes power to the area from 10 major substations on the National Grid.

7. A high number of households and businesses in the Selwyn District have access to telecommunications systems, and most townships and their surrounding areas have cellular phone coverage.

Appendices

1. The report concludes with appendices on the agriculture and horticulture sector, the forestry sector, the tourism sector, and employment data analysed by sector.

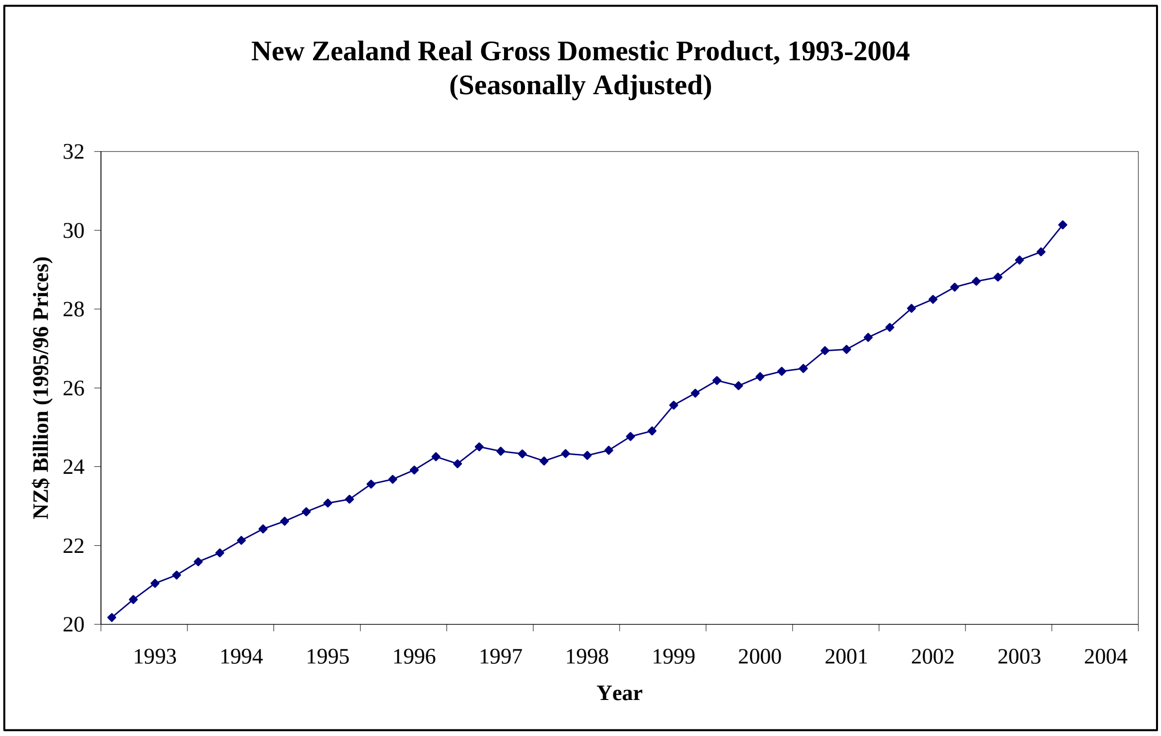
Chapter 1
Economic Background

1.1 The Macro-Economy and Policy Context

The Macro-Economy and Policy Context

The New Zealand economy has enjoyed steady or strong economic growth over the last ten years, punctuated by a lengthy recession in 1997/98 (associated with domestic drought, the South-East Asian currency crisis and tight domestic monetary policies) and a much shorter slowdown in June 2000. Annual growth for the year ending March 2004 was 3.6 per cent. Over the last four years, the services sector has experienced the strongest growth (16.7 per cent in total), followed by the goods producing industries (11.6 per cent) and the primary sector (5.8 per cent)– see Table 1 below.

Figure 1
New Zealand Real Gross Domestic Product (1993-2004)
Seasonally Adjusted



Source: Statistics New Zealand

The strong economic performance is reflected in labour market data. Total employment increased by 200,000 between March 1999 and December 2003, and the official unemployment rate fell from 7.2 to 4.6 percent. Between March 1999 and December 2002, the number of jobseekers registered with Work and Income New Zealand reduced by 29,645 people, or 15.0 percent.

The second table below presents some key financial indicators that help explain this performance. The Reserve Bank of New Zealand has maintained low inflation, which has not risen above 4 per cent in recent years (in contrast to the 1970s and 1980s when inflation was typically in double figures). Interest rates have been well below their high levels of 1997, although starting to rise again in 2004. The value of the exchange rate was very low by historical standards in the second half of 2000 and throughout 2001, but returned to higher values at the end of 2002. New Zealand's terms of trade were also favourable in the second half of 2000 and throughout 2001, indicating good returns to New Zealand farmers and other export industries. New Zealand continued to operate a deficit on its balance of payments with the rest of the world, so that revenue from the trade of goods and services did not cover payments. There was, however, no indication that this situation might be unsustainable given New Zealand's continued economics growth.

Despite these positive trends, central government policymakers are concerned that current growth rates are not fulfilling New Zealand's potential. High-level targets have been set for sustainable development that will lift New Zealand to the top half of the OECD countries ranked by per capita incomes. An important policy change to bring this about involves a much greater focus on regional resources and opportunities. This report will identify important characteristics of the Selwyn District.

Table 1
Selected Economic Indicators (March 1999 – December 2003)

Quarter	Real Gross Domestic Product	Primary Industries	Goods Producing Industries	Services Industries	Total Number Employed	Official Unempl. Rate	Registered Job-Seekers
Mar-99	24,766	1,981	5,511	16,303	1,739	7.2	197,982
Jun-99	24,908	2,005	5,520	16,326	1,746	7.0	213,760
Sep-99	25,562	2,111	5,708	16,695	1,749	6.8	227,737
Dec-99	25,866	2,095	5,810	16,893	1,767	6.3	245,951
Mar-00	26,186	2,158	5,944	17,059	1,763	6.3	232,677
Jun-00	26,057	2,091	5,691	17,160	1,763	6.1	231,135
Sep-00	26,285	2,139	5,793	17,252	1,787	5.8	227,604
Dec-00	26,420	2,162	5,787	17,401	1,802	5.6	216,147
Mar-01	26,493	2,146	5,675	17,629	1,803	5.4	199,601
Jun-01	26,945	2,145	5,835	17,799	1,820	5.3	191,801
Sep-01	26,977	2,168	5,686	18,030	1,826	5.2	186,011
Dec-01	27,283	2,178	5,787	18,221	1,844	5.4	191,541
Mar-02	27,536	2,177	5,752	18,502	1,867	5.2	173,280
Jun-02	28,017	2,219	5,959	18,639	1,876	5.1	167,698
Sep-02	28,247	2,175	6,199	18,642	1,876	5.4	163,888
Dec-02	28,556	2,228	6,250	18,887	1,888	4.9	168,337
Mar-03	28,706	2,186	6,287	19,050	1,895	5.0	n.a.
Jun-03	28,811	2,155	6,182	19,166	1,913	4.7	n.a.
Sep-03	29,244	2,177	6,339	19,397	1,937	4.4	n.a.
Dec-03	29,453	2,148	6,368	19,681	1,939	4.6	n.a.

Notes:
(1) Real GDP and Industries data are seasonally adjusted, measured in thousands of dollars at 1995/96 prices.
(2) Total number employed is seasonally adjusted, measured in thousands of individuals.
(3) Official unemployment rate is seasonally adjusted, measured as a percent of the total labour force.
(4) Registered Jobseekers data are based on Work and Income New Zealand data (3 monthly averages).
Source: Statistics New Zealand and Work and Income New Zealand.

Table 2
Selected Financial Indicators (March 1999 – December 2003)

Quarter	Inflation Rate (CPI)	90-day Interest Rate	Base Lending Rate	US Exchange Rate	TWI Exchange Rate	Terms of Trade Index	Balance of Payments
Mar-99	-0.1	4.5	8.5	0.5386	57.6	953	-1,071
Jun-99	-0.4	4.7	8.4	0.5424	59.1	959	-1,440
Sep-99	-0.5	4.8	8.4	0.5254	56.7	991	-1,655
Dec-99	0.5	5.4	8.7	0.5119	54.4	958	-1,691
Mar-00	1.5	6.0	9.4	0.4988	54.1	942	-1,617
Jun-00	2.0	6.7	10.3	0.4793	53.5	956	-1,451
Sep-00	3.0	6.7	10.6	0.4420	50.2	1005	-1,221
Dec-00	4.0	6.7	10.6	0.4095	47.8	1001	-1,076
Mar-01	3.1	6.4	10.4	0.4331	50.5	1057	-883
Jun-01	3.2	5.9	10.0	0.4145	49.7	1045	-601
Sep-01	2.4	5.7	9.9	0.4197	50.0	1057	-483
Dec-01	1.8	5.0	9.2	0.4154	49.6	1034	-760
Mar-02	2.6	5.0	9.1	0.4251	51.6	1050	-816
Jun-02	2.8	5.8	9.9	0.4642	54.6	1000	-876
Sep-02	2.6	5.9	10.2	0.4718	53.9	982	-1,138
Dec-02	2.7	5.9	10.2	0.4956	56.5	971	-1,241
Mar-03	2.5	5.8	10.2	0.5493	60.6	996	-1,241
Jun-03	1.5	5.5	9.9	0.5693	61.1	1007	-1,498
Sep-03	1.5	5.1	9.6	0.5840	62.5	1004	-1,592
Dec-03	1.6	5.3	9.5	0.6251	63.9	1035	-1,332

Notes:
(1) Inflation rate is the annual percentage change in the Consumers Price Index.
(2) 90-day interest rate is the annualised yield on 90-day bank bills.
(3) Base lending rate is base interest rate for loans from M3 financial institutions.
(4) US exchange rate is the average market price of NZ$1 measured in United States dollars.
(5) TWI exchange rate is the average value of the New Zealand dollar in foreign exchange markets, weighted by the value of five major currencies in New Zealand's international trade, set equal to 100 in June 1979.
(6) Balance of Payments data refers to the difference between current account receipts from overseas and current account payments to overseas. A negative sign indicates a balance of payments current account deficit. The data are seasonally adjusted and measured in thousands of New Zealand dollars.
(7) Terms of Trade Index is the average price of exported merchandise goods divided by the average price of imported merchandise goods, set equal to an average value of 1000 in June 2002. A high value of the index indicates favourable terms of trade for New Zealand.
(8) Balance of Payments is the current account surplus, seasonally adjusted, in millions of dollars. A negative value indicates that New Zealand is making a greater value of current payments overseas than it is receiving from overseas.

Source: Statistics New Zealand and Reserve Bank of New Zealand.

1.2 Size and Characteristics of the Business Sector in North Canterbury

The Formal Sector

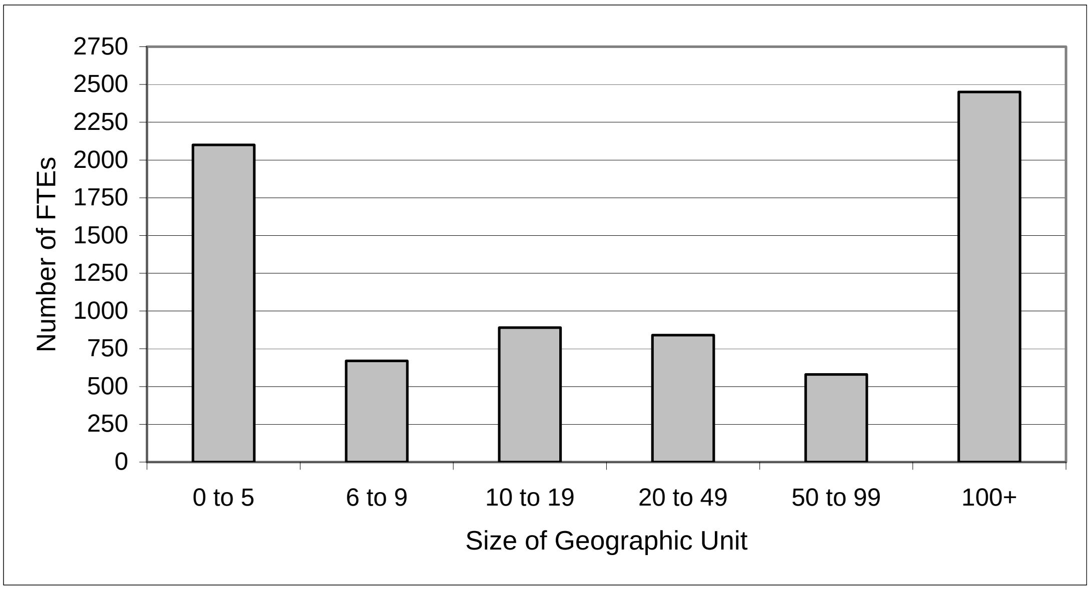
The Annual Business Frame Update Survey conducted by Statistics New Zealand is the best source of data on the business sector in the Selwyn District. This survey covers enterprises that are economically significant, *excluding* the Agriculture Sector, A01. Statistics New Zealand defines Economically Significant Enterprises (ESE) as those enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

This source provides a detailed breakdown of Selwyn District employment in various industry sectors, but note that direct employment in the Agricultural sector is excluded. For information on this sector it is necessary to use Census data, which are available every five years. The Census covers *households* in the region (rather than businesses) and therefore includes people who commute to employment outside the Selwyn District (particularly to Christchurch city) and excludes people from outside the District who commute to employment within the District. Both data sources have been included in this section, however, their respective limitations need to be kept in mind.

As at February 2003, the Business Frame Update Survey data identified 1,905 geographic units, or business locations, in the Selwyn District employing 7,540 full-time equivalent (FTE) employees[1].

The majority (89 percent) of geographic units in the Selwyn District employ between zero and five FTEs, equating for 2,100 (28 percent) of the total FTEs employed in the District. Although there are only six geographic units in the District employing over 100 FTEs, these businesses employ 2,450 (32 percent) of the District's FTEs. The number of FTEs by size of geographic unit is shown in Figure 2.

Figure 2
Selwyn District Employment
Number of Full-Time Equivalents by Size of Geographic Unit
As at February 2003 (Excludes A01, Agriculture)



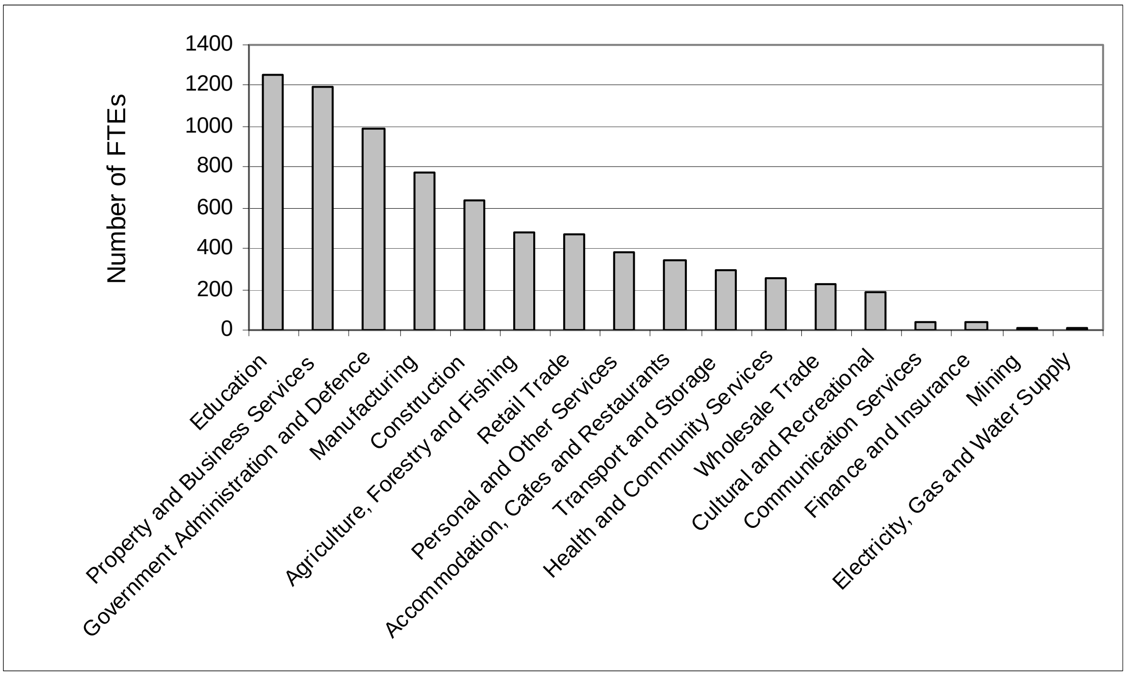
Notes:
(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.
(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.
(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey

[1] For more detailed employment figures refer to Appendix 4 of this report.

The largest areas of employment in the Selwyn District in terms of FTEs employed are the Education (16.6 percent), Property and Business Services (15.8 percent), and Government Administration and Defence (13.1 percent) industry sectors. Employment in these industry sectors is strong due to the presence of Lincoln University, and the Crown Research Institutes based in Lincoln. Lincoln University and the Crown Research Institutes are important to Selwyn District, providing employment to a large number of people and injecting significant wealth into the District's economy.

Figure 3
Selwyn District Employment by Industry
By Number of Full-Time Equivalents Engaged
As at February 2003 (Excludes A01, Agriculture)



Notes:
(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.
(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.
(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey

In terms of the total persons employed in the District, the 2001 Census identified the Agriculture, Forestry and Fishing (3,054 persons or 20.3 percent), Manufacturing (1,782 persons or 11.9 percent), and Retail Trade (1,314 persons or 8.8 percent) industries as the three main areas of employment.

The smallest areas of employment in the Selwyn District identified in the 2001 Census were in the Communication Services, Electricity, Gas and Water Supply, and Mining industries. These three industries have 27 geographic units and employ a total of 186 persons (1.2 percent). The number of employees in each industry along with the percentage of employment is shown in Table 3.

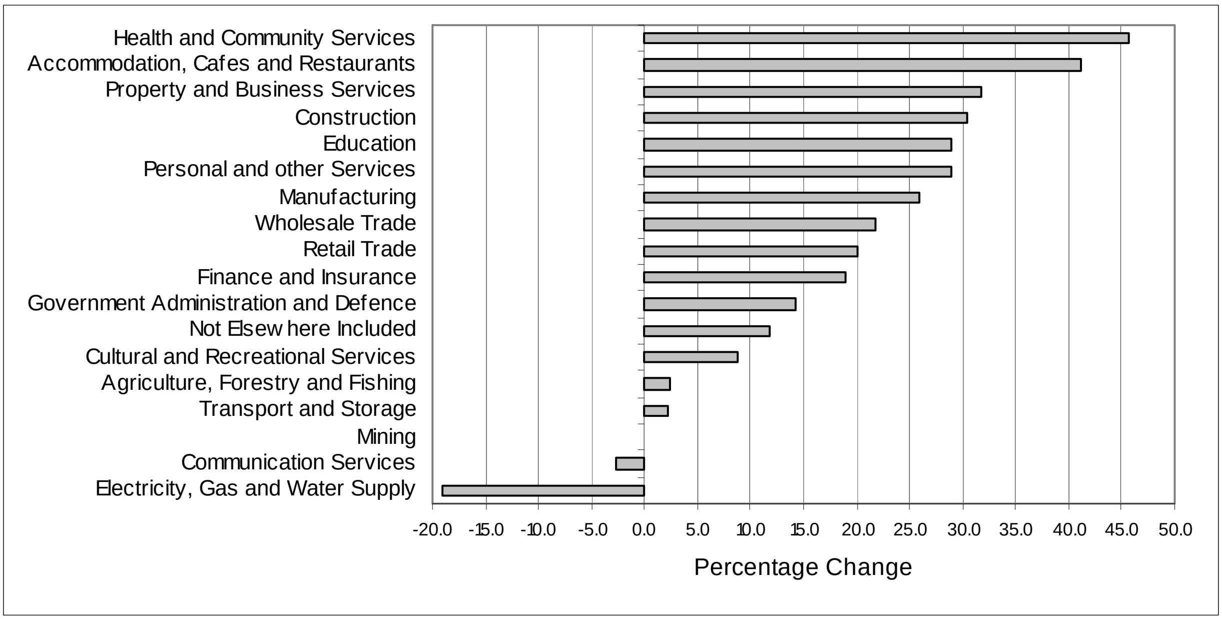
Table 3
Selwyn District Employment
Number of Employees and Percentage of Employment

Industry	Persons Employed	Percentage of District Employment
Agriculture, Forestry and Fishing	3,054	20.3
Mining	27	0.2
Manufacturing	1,782	11.9
Electricity, Gas and Water Supply	51	0.3
Construction	771	5.1
Wholesale Trade	690	4.6
Retail Trade	1,314	8.8
Accommodation, Cafes and Restaurants	546	3.6
Transport and Storage	552	3.7
Communication Services	108	0.7
Finance and Insurance	264	1.8
Property and Business Services	1,272	8.5
Government Administration and Defence	990	6.6
Education	990	6.6
Health and Community Services	1,062	7.1
Cultural and Recreational Services	297	2.0
Personal and other Services	495	3.3
Not Elsewhere Included	735	4.9
TOTAL	**15,012**	**100.0**

Source: Statistics New Zealand, Census 2001

The Health and Community Services industry experienced the greatest percentage increase in employment (45.7 percent) during the 1996 – 2001 period, while the Manufacturing industry experienced the greatest increase in persons employed (366 persons) during the same period. The highest decrease in employment (19.0 percent or 12 persons) during the 1999 – 2001 period was in the Electricity, Gas and Water Supply industry.

Figure 4
Selwyn District Employment
Percentage Change by Industry (1996 – 2001)



Source: Statistics New Zealand, Census 1996 and 2001

1.3 Estimating the District's GDP

As for all other districts in New Zealand no estimate of Selwyn District's GDP is available. Theoretically it is feasible, given certain key data on income and employment, to estimate the GDP from the New Zealand national input-output tables. However, these estimates would suffer from a number of biases due to the relative size of the Selwyn District and its high dependence on imports and exports, for both goods and people.

Chapter 2
Area Demographics

2.1 Population

The Selwyn District is an area within easy commuting distance of Christchurch City and has an attractive lifestyle and rural atmosphere. The District has 15 territorial authorities and the number of people living in the Selwyn District has been increasing in recent years. The main areas of growth in the Selwyn District are Rolleston, Lincoln, Prebbleton, West Melton and Kirwee.

The usually resident population of the District increased 10.2 percent, from 24,783 people in 1996 to 27,312 people in 2001. As shown in Table 4, the most significant increase in population during the 1996-2001 period was in the Rolleston territorial authority (88.0 percent), while the population of the Burnham Military Camp territorial authority decreased by 22.5 percent.

Table 4
Selwyn District Population
Usually Resident Population of Territorial Authority Areas

Territorial Authority	Total Population			Increase or Decrease (-)			
	Census Year			Number		Percent	
	1991	1996	2001	1991–1996	1996–2001	1991–1996	1996–2001
Darfield	1,164	1,296	1,404	132	108	11.3	8.3
Kirwee	1,680	2,253	2,643	573	390	34.1	17.3
Burnham Military Camp	1,335	1,467	1,137	132	-330	9.9	-22.5
Malvern	2,373	2,517	2,595	144	78	6.1	3.1
Prebbleton	1,515	1,674	1,836	159	162	10.5	9.7
West Melton	3,492	4,113	4,647	621	534	17.8	13.0
Taitapu	435	453	417	18	-36	4.1	-7.9
Lincoln	1,629	2,316	2,139	687	-177	42.2	-7.6
Leeston	1,110	1,233	1,200	123	-33	11.1	-2.7
Southbridge	636	672	717	36	45	5.7	6.7
Rolleston	1,044	1,050	1,974	6	924	0.6	88.0
Dunsandel	312	387	402	75	15	24.0	3.9
Springston	2,142	2,607	3,042	465	435	21.7	16.7
Inland Water-Lake Ellesmere North	-	-	-	-	-	...	...
Selwyn-Rakaia	2,457	2,748	3,156	291	408	11.8	14.8
Total, Selwyn District	21,321	24,783	27,312	3,462	2,529	16.2	10.2

Source: Statistics New Zealand, Census 1991, 1996, and 2001

Table 5 shows the estimated change in resident population each year from 1996 – 2003 has been increasing.

Table 5
Selwyn District Population
Estimated Resident Population at 30 June 1996 - 2003

Estimated Resident Population at 30 June:	1996	1997	1998	1999	2000	2001(1)	2002(1)	2003(1)
Selwyn District								
Resident Population	25,500	26,100	26,500	26,900	27,600	28,300	29,200	30,000
Estimated Annual Change	*N/A*	*1,100*	*400*	*400*	*700*	*700*	*900*	*800*

Note:
(1) The resident population estimates were obtained by updating census usually resident population counts at 6 March 2001, for births, deaths and net migration of residents during the period 7 March 2001 to the given date. The base population has also been adjusted for the number of residents undercounted by the census, as measured by the 2001 Post-enumeration Survey, and for the estimated number of residents temporarily overseas.

Source: Statistics New Zealand, Population Estimates

The usually resident population by gender, Table 6, indicates the female population accounted for 61.1 percent of the total population increase in Selwyn District during the period 1996 – 2001. This compares with the Canterbury Region which experienced a 63.2 percent increase in the female population during the same period.

Table 6
Selwyn District Population
Usually Resident Population by Gender, 1996 - 2001

Area	1996			2001			Change (1996 - 2001)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Selwyn District	13,080	11,703	24,783	14,067	13,248	27,312	987	1,545	2,529
Canterbury Region	229,593	238,449	468,039	234,516	246,915	481,431	4,923	8,466	13,392

Source: Statistics New Zealand, Census 1996, 2001

The population of Selwyn District is projected to increase by 9,400 people (33.2 percent during the period 2001 – 2021, based on a medium projection. Table 7 shows the projected resident population based on low, medium and high projections, and indicates the population in 2021 will range between 9,400 people (low projection) and 14,700 people (high projection).

Table 7
Selwyn District Projected Resident Population
2001 (Base) – 2021 (November 2003 Release)

Territorial Authority	Variant(1)	Projected Population at 30 June					Change 2001-2021	
		2001 Base(2)	2006	2011	2016	2021	Number	Percent
	High		32,000	35,600	39,200	43,000	14,700	51.9
Selwyn District	Medium	28,300	31,400	34,300	37,300	40,300	12,000	42.4
	Low		30,800	33,100	35,400	37,800	9,400	33.2

Notes:
(1) There are three alternative projection series incorporating different fertility, mortality and migration assumptions for each area.
(2) These projections have as a base the estimated resident population of each area at 30 June 2001.
All derived figures have been calculated using data of greater precision than published. Owing to rounding, individual figures may not sum to give the stated totals.

Source: Statistics New Zealand, Population Projections

2.2 Labour Force

A total of 15,525 people were identified in the Selwyn District labour force in the 2001 Census[2]. On Census night the labour force comprised of 11,601 full-time workers, 3,408 part-time workers, and 513 unemployed people. The composition of the labour force in Selwyn District, Christchurch City, the Canterbury region, and New Zealand is shown in Table 8.

The unemployment rate in the District is only 3.30 percent. This is much lower than the unemployment rate of Christchurch City (6.79 percent) and the Canterbury region (5.96 percent).

Table 8
Selwyn District Labour Force Status 2001

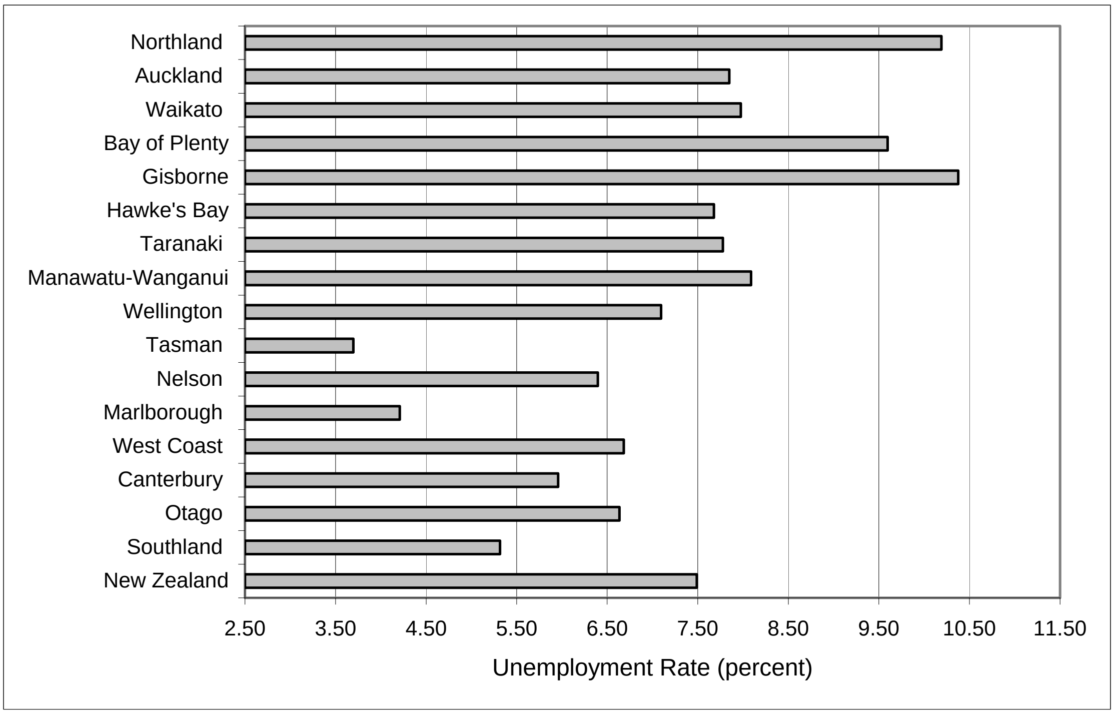
Area	Work and Labour Force Status					Unemployment Rate
	Employed Full-time	Employed Part-time	Total Employed	Unemployed	Total Labour Force	
Selwyn District	11,601	3,408	15,009	513	15,525	3.30
Christchurch City	113,667	37,566	151,230	11,013	162,246	6.79
Canterbury Region	176,397	57,822	234,216	14,838	249,054	5.96
New Zealand	1,328,118	399,150	1,727,268	139,908	1,867,176	7.49

[2] For more detailed information about Selwyn District employment refer to Section 1.2 and Appendix 4 of this report.

Source: Statistics New Zealand, Census 2001

A regional comparison of unemployment rates as at Census night 2001 is shown in Figure 5. The Canterbury region unemployment rate is among one of the lowest in the country, and the Selwyn District unemployment rate is lower than any regional unemployment rate.

Figure 5
Regional Unemployment Rates 2001



Source: Statistics New Zealand, Census 2001

2.3 Ethnicity

Selwyn District is an area with little ethnic diversity, with the majority of the usually resident population identifying themselves with the European and Maori ethnic groups. As at Census night 2001, 95.2 percent of people in the District identified themselves with the European ethnic group compared to 80.1 percent nationally. People identifying themselves with the Maori ethnic group equated to 5.9 percent, compared to 14.7 percent nationally.

Other ethnic groups in the Selwyn District include Pacific (0.9 percent) and Asian (2.0 percent). The population in these ethnic groups is significantly lower in the Selwyn District than the national populations of 6.5 percent Pacific and 6.6 percent Asian.

One of the 18 Papatipu Rūnanga of Ngāi Tahu spread throughout the South Island, is based in the Selwyn District. There is a marae at Taumutu near the mouth of Lake Ellesmere (Te Waihora).

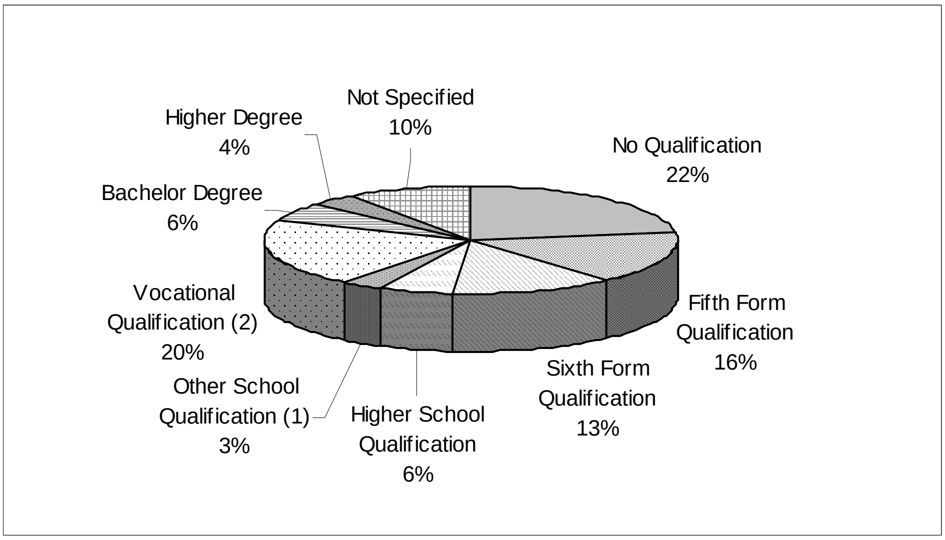
2.4 Academic Achievement

The Selwyn District has a range of education facilities including primary schools, secondary schools, a tertiary institution, and private training establishments. Residents in the District are also within close distance of other education facilities based in Christchurch City.

On Census night 2001, 33.0 percent of people over the age of 15 years in Selwyn District had a tertiary qualification. This is above the national average of 32.2 percent and is likely to be influenced by the presence of Lincoln University in the District. The proportion of people in the District without any formal qualification was 24.9 percent, which compares well to the national level of 27.6 percent.

The Selwyn District has a relatively high proportion of people (20.3 percent) with a vocational qualification, which is a qualification obtained for training related to a specific vocation in industry, agriculture, or trade. This is above the national level on Census night 2001 of 17.7 percent. Other levels of academic attainment in the District are shown in Figure 6.

Figure 6
Selwyn District Academic Attainment
As at Census night 2001



Notes:
(1) Includes overseas school qualifications and other secondary school qualifications.
(2) Includes Basic, Skilled, Intermediate and Advanced Vocational Qualifications. Vocational qualifications are qualifications obtained for training related to a specific industry, agriculture, or trade.

Source: Statistics New Zealand, Census 2001

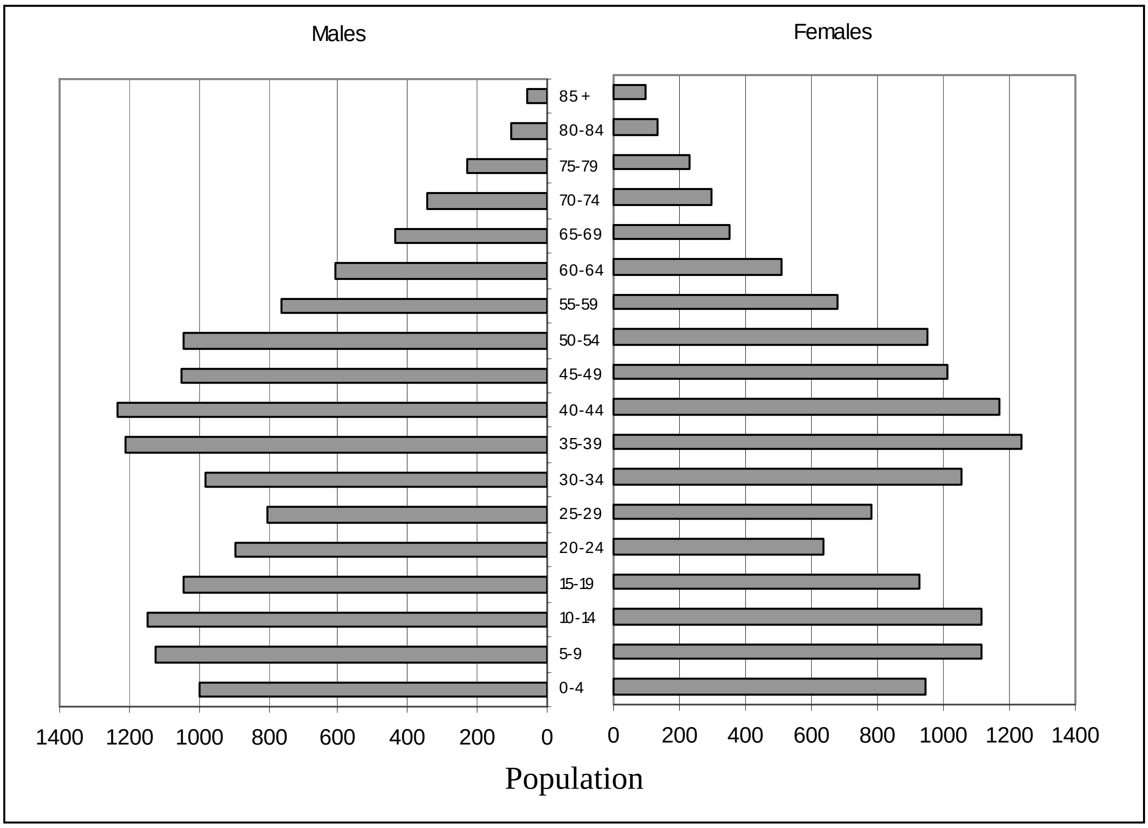
The 26 schools in the Selwyn District are comprised of 12 primary schools, 11 composite schools, and three secondary schools. Schools in the Selwyn District have 2003 decile ratings ranging from 6 to 10. Nine schools have the same decile rating as 2002, while most of the other 17 schools have a one point change in decile rating from 2002.

Over the last five years 17 schools experienced either no change or an increase in their school rolls, with nine primary and contributing schools experiencing a decline in school rolls. During the five-year period 1999 - 2003 only one small contributing school in the area closed. Overall the school rolls in the District increased five percent from 4,991 students in 1999 to 5,240 students in 2003. Secondary school rolls continue to increase in the District with a 7.25 percent increase during the five-year period 1999 - 2003.

2.5 Age Groups

During the 1996 – 2001 Census period the Selwyn District usually resident population increased by 2,529 people. Population increases occurred for the majority of age groups, however the 15-19, 20-24, 25-29, and 30-34 year age groups experienced a decline in population. The age group composition is shown by sex in Figure 7.

Figure 7
Selwyn District Usually Resident Population
By Age Group and Sex, 2001



Source: Statistics New Zealand, Census 2001

The most significant increases in population during the 1996 – 2001 Census period were recorded in the 50-54 years (570 people or 40.0 percent) and 40-44 years (504 people or 26.6 percent) age groups. The 20-24 years age group recorded the most significant decrease in population during the same period, with a decrease in population of 414 people (21.3 percent). Age group population changes are shown in Table 9.

The proportion of the District's elderly population (65 years and above) is 8.3 percent which is significantly lower that the national level of 12.1 percent. The District's population below 15 years of age (23.6 percent) is comparative to the national level (22.7 percent).

Table 9
Selwyn District Usually Resident Population
By Selected Age Groups, 1996, 2001

Year	0-4 years	Change	5-19 years	Change	20-64 years	Change	65 + years	Change	Total	Change
1996	1,809		5,937		15,072		1,965		24,783	
2001	1,947	7.63%	6,477	9.10%	16,614	10.23%	2,274	15.73%	27,312	10.20%

Source: Statistics New Zealand, Census 1996, 2001

The majority of the working age population is in the 20-64 years age group. The population in this age group increased by 10.2 percent during the 1996 - 2001 Census period. The projected increases in the working age population, particularly in the higher age groups, are expected to have an impact on future employment in the Selwyn District.

The median age of people living in the Selwyn District is 35.2 years, which is similar to the national median age of 34.8 years. The District's median age is projected to increase by 4.6 years to 39.8 years by 2021 based on a medium population projection, shown in Table 10. This increase in median age is likely to have a future impact on services in the District as well as employment.

Table 10
Selwyn District Projected Population Change
Medium Projection: 2001 (Base) - 2021

Year(1)	Population by Age Group (Years) at 30 June				Population Change by Age Group (Years), Five Years Ended 30 June				Components of Population Change, Five Years Ended 30 June				Median Age(2) at 30 June
	Under 15	15-64	65+	All Ages	Under 15	15-64	65+	All Ages	Births	Deaths	Natural Increase	Net Migration	
2001	6.6	19.4	2.3	28.3	…	…	…	…	…	…	…	…	35.0
2006	6.8	21.6	2.9	31.4	0.3	2.2	0.6	3.1	1.5	0.5	1.1	2.0	36.8
2011	6.8	23.7	3.8	34.3	0.0	2.1	0.8	2.9	1.5	0.6	0.9	2.0	38.3
2016	6.8	25.4	5.1	37.3	0.0	1.7	1.3	3.0	1.6	0.7	1.0	2.0	39.5
2021	7.1	26.7	6.5	40.3	0.3	1.3	1.4	3.0	1.9	0.8	1.0	2.0	39.8

Notes:
(1) These projections have as a base the estimated resident population of each area at 30 June 2001 and incorporate medium fertility, medium mortality and medium migration assumptions for each area.
(2) Half of the population is younger, and half older, than this age. Not applicable.
Notes: All derived figures have been calculated using data of greater precision than published. Owing to rounding, individual figures may not sum to give the stated totals.

Source: Statistics New Zealand, Population Projections

2.6 Housing

The Selwyn District recorded a 16.3 percent increase in the number of occupied private dwellings during the 1996 – 2001 Census period, as shown in Table 11. As at Census night 2001 there were 9,333 private occupied dwellings in the Selwyn District. Most areas in the District have experienced growth during the ten year period 1991 – 2001. This growth was slower for some areas during the 1996 – 2001 period compared to the 1991 – 1996 period.

Rolleston and West Melton recorded the highest growth during the 1996 – 2001 period, with increases of 321 dwellings (90.7 percent) and 246 dwellings (19.3 percent) respectively. The slowest area of growth during this period was Leeston with only 9 new dwellings (2.0 percent). Two areas suffered a decline in the number of occupied private dwellings during the period 1996 – 2001. These areas were Taitapu (9 dwellings or 6.1 percent) and Burnham Military Camp (57 dwellings or 17.8 percent).

Table 11
Number of Occupied Private Dwellings
Area Units, 1991, 1996, 2001

Area Unit	Census Year			Increase or Decrease (-)			
				Number		Percent	
	1991	1996	2001	1991–1996	1996–2001	1991–1996	1996–2001
Darfield	399	474	528	75	54	18.8	11.4
Kirwee	528	729	897	201	168	38.1	23.0
Burnham Military Camp	279	321	264	42	-57	15.1	-17.8
Malvern	846	945	999	99	54	11.7	5.7
Prebbleton	507	570	615	63	45	12.4	7.9
West Melton	1,092	1,275	1,521	183	246	16.8	19.3
Taitapu	129	147	138	18	-9	14.0	-6.1
Lincoln	525	579	672	54	93	10.3	16.1
Leeston	396	444	453	48	9	12.1	2.0
Southbridge	213	231	249	18	18	8.5	7.8
Rolleston	303	354	675	51	321	16.8	90.7
Dunsandel	114	135	150	21	15	18.4	11.1
Springston	690	867	1,038	177	171	25.7	19.7
Inland Water-Lake Ellesmere North	-	-	-	-	-	...	...
Selwyn-Rakaia	816	954	1,131	138	177	16.9	18.6
Total, Selwyn District	6,837	8,022	9,333	1,185	1,311	17.3	16.3

Source: Statistics New Zealand, Census 1991, 1996, 2001

The number of building consents issued for new residential dwellings in the Selwyn District during 2003 was significantly higher than in 2002 and 2001. For the year ended December 2003, 516 consents were issued, compared to 457 in 2002 and 337 for the same period in 2001. Although the increase in building consents during each quarter in 2003 was lower than the quarterly increase in 2002 there is continued growth in Rolleston, Lincoln, and

Prebbleton. These are some of the main areas in the District continuing to develop new housing subdivisions for new and existing residents.

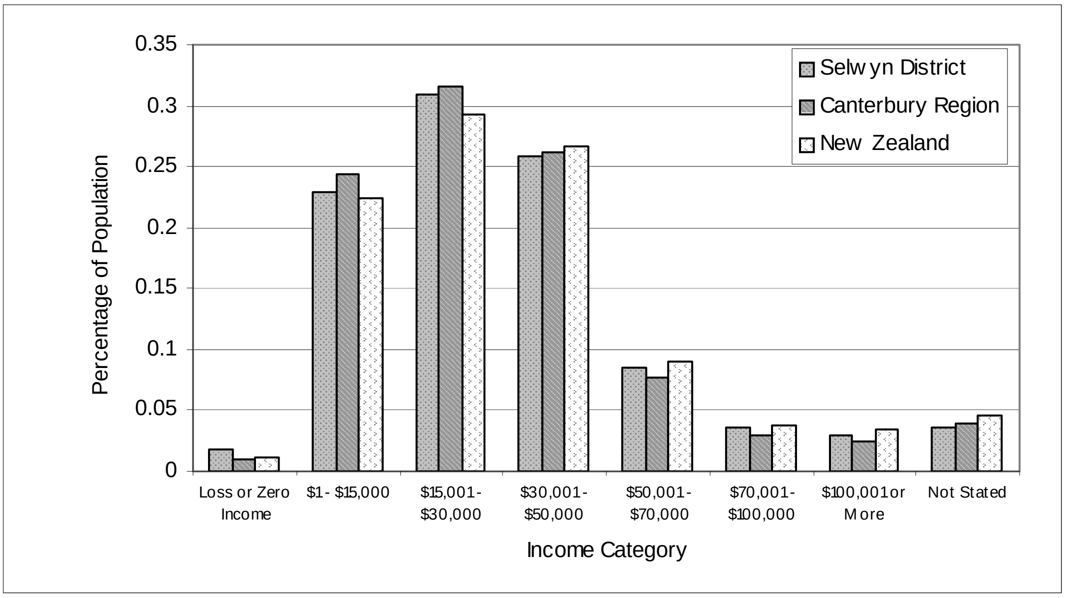
2.7 Income and Expenditure

The median income of people aged 15 years and over in the Selwyn District was $21,000 on Census night 2001. Of those aged 15 years and over, 12.0 percent had an annual income of more than $50,000 while 48.2 percent had an annual income of $20,000 or less.

The national median income for people aged 15 years and over was $18,500 on Census night 2001. Nationally, 11.5 percent of the people aged 15 years and over earned more than $50,000 per year while 52.8 percent had an annual income of $20,000 or less.

The annual income for Selwyn District is compared to the Canterbury Region and New Zealand as a whole in Figure 8.

Figure 8
Total Personal Income for Usually Resident Population
Aged 15 Years and Over, Census 2001



Source: Statistics New Zealand, Census 2001

The total average annual spending for households in the Selwyn District, the Canterbury Region, and New Zealand as a whole is shown in Table 12. Expenditure on all three categories, food, housing + housing operation, is higher in the Selwyn District than in the Canterbury Region and New Zealand.

Table 12
Average Annual Household Spending 2001

	Selwyn District	Canterbury Region	New Zealand
Food	$7,437	$6,242	$7,004
Housing	$11,367	$8,543	$10,159
Housing Operation	$5,898	$4,942	$5,472
Total	**$47,312**	**$38,669**	**$43,682**

Source: Statistics New Zealand, Household Economic Survey 2001

Chapter 3
Natural Resources

3.1 Land

The Selwyn District's current boundaries were established in 1989 after an amalgamation of the Ellesmere County, the Malvern County, and half of the Paparua County. The Selwyn District is bordered by the Pacific Ocean on the east, the Southern Alps on the west, the Waimakariri River on the north, and the Rakaia River on the south. The District extends 150 kilometres west from the edge of Christchurch City to the Southern Alps.

Steep glacial mountains cover the western half of the District, rolling foothills cover the middle, and the east of the District consists of plains, farms and small towns. Arthur's Pass National Park and the Department of Conservation protect some of the mountain area in the District, and the number of ski-fields in the Selwyn District is greater than in any other district.

The District has a total land area of 649,200 hectares (1,604,173 acres), covers 6,492 square kilometres (2,506 square miles), and in 2003 had a rateable land value of $1,899,964,800 and a rateable capital value of $3,595,041,440. The main urban areas in the Selwyn District are Kirwee, Lincoln, Malvern, Prebbleton, Rolleston, Springston, and West-Melton.

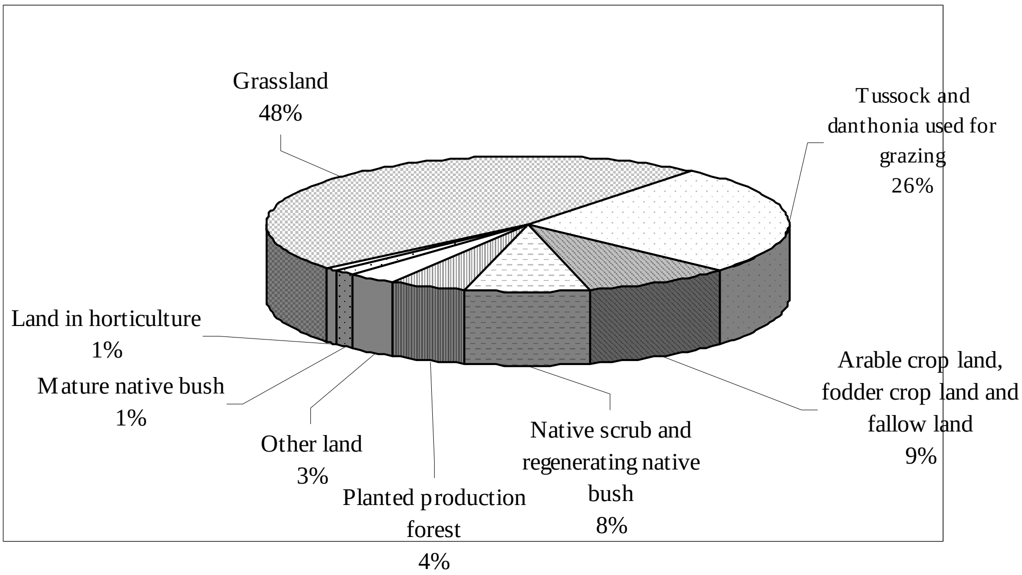
Major comparative advantages of the Canterbury region and its districts have long been recognised, and include flat fertile lands, temperate climate, significant water resources, and an extensive agri-research and educational community. Selwyn District's contribution to these comparative advantages is discussed below.

Land Use

Land in the Selwyn District is used for a number of purposes including recreation, livestock farming, cropping and research and education. The District has a number of reserves and domains, swimming pools, and playgrounds which are managed by the Selwyn District Council.

Figure 9 indicates grassland (176,544 hectares), and tussock and danthonia used for grazing (98,190 hectares) are the most common uses of land in the Selwyn District.

Figure 9
Selwyn District Land Usage
Percentage of Total Hectares



Source: Statistics New Zealand, Agricultural Census 2002

3.2 Water

The Canterbury Strategic Water Study undertaken in 2002 identified the Canterbury Region as a very high user of water, with 70 percent of New Zealand's irrigated land located in the region and 58 percent of all water allocated for consumptive use in New Zealand being used in Canterbury.

Water is highly valued by the Canterbury Regional community for a number of different reasons including economic, environmental, health, cultural and recreational. The increase for water abstraction continues to increase as land use changes and the demand for irrigation increases. The current levels of water allocation in the Selwyn water resource zone are shown in Table 13.

Table 13
Maximum Allocated Weekly Rate of Take (*l*/s) in Canterbury
As at April 2001

Water Resource Area	Source	Use				Total by resource zone	
		Irrigation	Stockwater	Municipal	Industrial		SW + GW
Selwyn	SW	1,266	126	238	0	1,630	**49,181**
	GW	36,898	785	8,320	1,549	47,552	
Rest of Canterbury	SW	150,783	21,509	3,994	4884	181,169	**240,942**
	GW	53,040	20,850	2,914	2,921	59,772	
Total by Use	SW	152,049	21,635	4,232	4,884	182,799	**290,123**
	GW	89,938	1,682	11,234	4,470	107,324	
	SW + GW	**241,987**	**23,317**	**15,466**	**9,354**	**290,123**	

Notes: SW = Surface water, GW = Ground water

Source: Environment Canterbury, Canterbury Strategic Water Study 2002

Ground water is significantly over-allocated in a number of water resource areas (WRAs), and although Canterbury has enough water to meet annual demand, the region is ‘water short’ under low flow conditions. It is estimated that there is enough water in the region for the foreseeable future, but the water will not always be available in the WRA where the demand is. Thus, there is a perceived need for significant increases in water storage and redistribution across WRAs in the future.

Irrigation is expected to be 89 percent of the future potential peak demand for water in the Canterbury Region, with five percent for stock water, three percent for municipal supplies, two percent for industrial use, and one percent for plantation forestry demand. The area of irrigated land in Canterbury increased from 350,000 hectares in 1999 to 438,000 ha in 2001 and continues to grow. A summary of estimated future irrigation water demand is shown in Table 14.

Table 14
Summary of Estimated Future Irrigation Water Demand

Water Resource Zone	Peak 7-day current irrigation allocaton (m^3/s)	Peak 7-day potential irrigation demand (m^3/s)	Average annual potential irrigation demand (m^3/s)
Selwyn	38.16	84.00	28.88
Rest of Canterbury	203.83	424.90	144.23
Total	**241.99**	**508.90**	**173.11**

Source: Environment Canterbury, Canterbury Strategic Water Study 2002

The current irrigated land area in Canterbury is less than half of the potentially irrigated land area. The peak seven-day potential irrigation demand for Selwyn District is estimated at over twice the peak seven-day current irrigation allocation for the District. The future peak seven-day water demand is shown in more detail in Table 15.

Table 15
Summary of Estimated Future Peak 7-day Water Demand (*l*/s)

Water Resource Zone	Irrigation	Stock	Municipal	Industrial	Forestry	Total
Selwyn	84,000	1,125	10,523	1,904	161	97,714
Rest of Canterbury	424,904	25,309	7,738	8,600	4,424	470,974
Total	**508,904**	**26,434**	**18,261**	**10,504**	**4,585**	**568,688**

Source: Environment Canterbury, Canterbury Strategic Water Study 2002

The Selwyn water resource zone has a potentially irrigatable area of 215,679 hectares with peak demand of 97.87 m^3/s and annual average demand of 40.40 m^3/s. A summary of the Selwyn water resource zone is shown in Table 16.

Table 16
Selwyn Water Resource Zone

	Ground water	Selwyn Riparian	Riparian + Community
Gross irrigable area (ha)	118,877	10,380	96,802
Peak 7-day demand (m^3/s)	55.84	4.11	42.03
Average irrigation season demand (m^3/s)	35.03	2.21	20.97
Average annual demand (m^3/s)	26.44	1.52	13.96
Average irrigation season allocable flow (m^3/s)		2.62	2.62
Average annual allocable flow (m^3/s)	8.63* 18.31#	2.97	2.97
No of years with noticeable restrictions		28/28	28/28
No of years with severe restrictions		27/28	28/28
Average annual supply/demand ratio	0.90* 1.92#	1.95	0.21
Minimum annual supply/demand ratio	0.51* 0.98#	0.87	0.09
Average irrigation season supply/demand ratio		1.19	0.12
Minimum irrigation season supply/demand ratio		0.38	0.04

Notes:
* Assumes remainder of zone is dryland
# Assumes remainder of zone is fully irrigated (i.e. additional recharge occurs)

Source: Environment Canterbury, Canterbury Strategic Water Study 2002

In order to meet the demand from the Selwyn riparian area the flows from wet years will need to be maximised by storing a large amount of water. The remaining (community) area is unable to be supplied from the resources within the zone.

3.3 Soils

A number of different soil types cover the Selwyn District, with the main specific soil types being the Lismore series, the Templeton series, the Eyre series, and the Selwyn series.

The soils are principally greyish brown soils, and are predominantly formed on stony grave and sandy gravel structures. The soils are typically sandy loam and silty loam, with most depths ranging from very shallow to deep. The soils are seasonally droughty, have moderately free to very free internal drainage. The Templeton soils are best suited for mixed farming, market gardening, and fruit growing if irrigated, while the Eyre and Selwyn soils are best suited for extensive grazing of sheep and urban use where there is low flood risk.

Lismore soils are shallow or stony soils and are developed from fine to coarse textures alluvium and loess. These soils range from being well drained to being excessively drained with low available moisture storage capacity, and are prone to wind erosion.

Templeton soils are deep, free draining soils and are sometimes found near Eyre soils. Most of the Templeton series is fine alluvium with some loess, and fine sandy loam on gravel. The shallower Templeton soils have limited moisture-holding capacity and dry off much earlier than the deeper Templeton soils.

Eyre soils range from excessively drained stony sandy loam to well drained shallow silt loam. The structures of Eyre soils are more weakly developed compared to the Templeton soils. The Eyre soils are generally shallow soils and include silt loam and sandy loam scattered over gravels. There is some danger of wind erosion, but only if the soils are over-cultivated.

Selwyn soils occur on alluvium deposited flood plains and are mostly shallow, stony and porous. Topsoils in the Selwyn series are low in organic matter. The structures of Selwyn soils are weakly developed and if cultivated break down readily. There is a danger of wind erosion when the soils are ploughed.

The growth in subdivisions and housing developments in the Selwyn District, particularly in the Lincoln, Prebbleton, and Rolleston areas has highlighted the need to ensure good agricultural and horticultural soils are not used for residential and industrial purposes. Currently the threat is minimal with the majority of good soils still being used for agricultural and horticultural purposes.

3.4 Climate

The Selwyn District climate can vary significantly between seasons and is heavily influenced by the Southern Alps to the west of the District. The District is drier and sunnier than most parts of New Zealand, with long drought spells occurring in summer. The number of frosts and rainfall in the winter has been decreasing, however, south-westerlies remain common during the winter months.

An indication of the climate in the Selwyn District can be obtained from the Christchurch and Lincoln weather stations as well as other smaller stations throughout the District. However, the climate a few kilometres away from the weather stations may be considerably different from the recorded values of the stations due to the number of microclimates in the Canterbury Region.

Selwyn District often has annual sunshine hours of between 1,900 and 2,100 hours, an annual rainfall of between 600 and 6,400 millimetres, and a mean annual air temperature of approximately 12 degrees Celsius. Details on Selwyn District's climate are shown in Table 17.

Table 17
Climate Data for Selected Weather Stations
April, 2003 – March, 2004

	Lincoln, Broadfield				Darfield				Hororata, Illona				Arthurs Pass			
	Air Temperature		Rainfall		Air Temperature		Rainfall		Air Temperature		Rainfall		Air Temperature		Rainfall	
Month, Year	Max Mean	Min Mean	Total mm	No of rain days	Max Mean	Min Mean	Total mm	No of rain days	Max Mean	Min Mean	Total mm	No of rain days	Max Mean	Min Mean	Total mm	No of rain days
April, 2003	15.1	6.0	65	8	15.9	5.4	82	10	15.6	3.9	70	12	12.8	2.5	78	6
May, 2003	15.8	4.6	23	8	15.1	4.5	58	11	15.3	2.4	42	13	9.9	2.4	709	..
June , 2003	14.5	3.3	23	5	13.8	4.4	39	9	14.4	1.3	43	12	8.1	1.4	651	22
July, 2003	10.9	0.3	53	12	10.3	0.3	78	14	-	-	-	-	5.8	-2.5	161	14
August, 2003	11.9	2.5	48	9	11.7	1.9	51	12	1.9	0.5	45	13	8.0	-0.9	193	13
September, 2003	14.5	4.6	88	12	14.8	3.8	116	15	14.1	2.5	102	16	7.7	0.9	786	26
October, 2003	16.0	5.6	27	8	17.0	5.9	39	13	16.6	4.3	45	12	11.2	2.6	349	18
November, 2003	18.7	7.2	36	8	19.6	6.9	44	7	18.7	5.3	49	9	13.1	3.6	401	14
December, 2003	21.8	10.4	1	3	24.2	9.6	6	3	23.2	8.3	7	6	16.5	7.2	416	..
January, 2004	23.4	13.3	21	9	25.3	12.8	52	16	..	12.1	43	12	19.2	9.3	538	17
February, 2004	20.3	11.2	43	13	20.9	9.6	77	13	21.0	9.0	78	14	14.8	6.9	687	25
March, 2004	19.9	9.0	37	8	20.7	8.8	33	10	20.3	7.8	40	8	14.3	5.8	381	15
12 Month Average	16.9	6.5	38.8	8.6	17.4	6.2	56.3	11.1	16.1	5.2	51.3	11.5	11.8	3.3	445.8	17

Notes:
A rain day is a day with rainfall equal to or greater than 0.1 mm.
Lincoln, Broadfield Station is 18 metres above M.S.L., Darfield Station is 195 metres above M.S.L., Hororata, Illana Station is 196 metres above M.S.L., and Arthurs Pass Station is 738 metres above M.S.L.

Source: National Institute of Water and Atmospheric Research (NIWA), New Zealand Climate Digest

Current weather data for the Selwyn District can be obtained from the Selwyn District Council's website[3]. Data is available for the Lincoln, Leeston, Darfield and Arthur's Pass weather stations in the Selwyn District. The information available on the website is very detailed and includes temperature, rainfall, wind speed, wind direction, humidity, and dew point.

[3] http://weather.selwyn.govt.nz/

Chapter 4
Physical Infrastructure

4.1 Roads

Road transport in the Selwyn District is serviced by State Highways 1, 73 and 75. State Highway 1 is the primary north-south highway through the South Island of New Zealand. State Highway 1 passes through the Rolleston, Burnham, and Dunsandel areas in the Selwyn District. State Highways 73 and 75 are both secondary highways in the South Island and travel through the areas of Taitapu, Kirwee, Darfield, and West Melton.

The Selwyn District has 2,341 kilometres of road, with 1,264 kilometres (54 percent) of sealed road, and 1,077 kilometres (46 percent) of unsealed road. Of the roads in Selwyn District 52 percent are classified as rural roads and the remaining 48 percent are classified as urban roads[4]. The District also has 126 bridges, all in rural areas.

Transfund New Zealand provides funding (approximately 33 percent) for maintenance and construction undertaken on roads in the Selwyn District. During the year ended June 2003 four construction projects were completed in the District and 94.8 kilometres of road was resealed.

4.2 Harbours

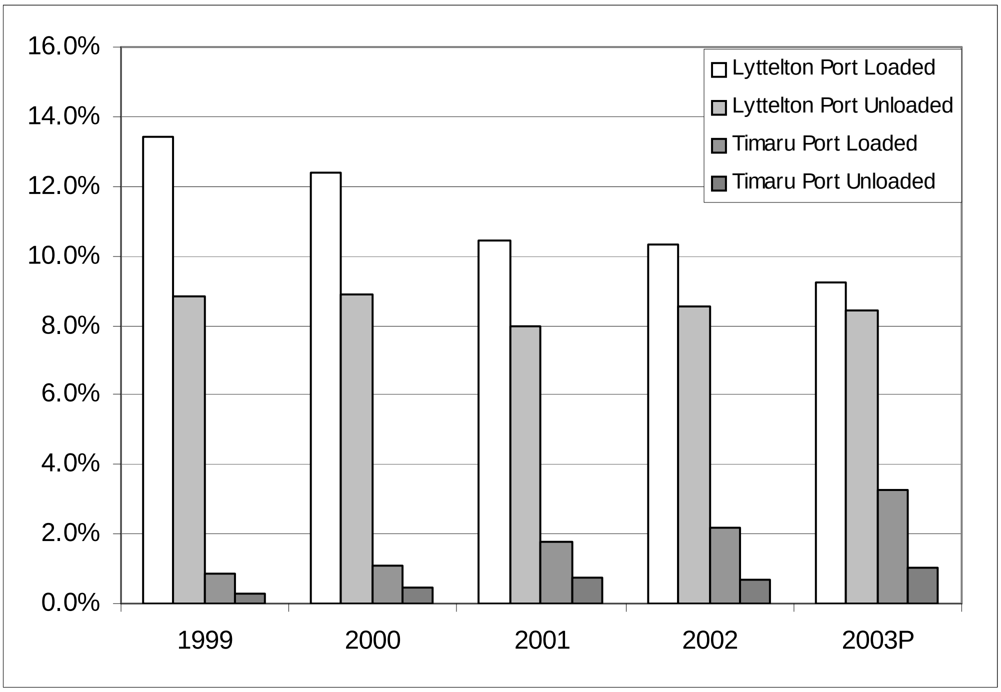
The Lyttleton Port and the Port of Timaru are invaluable services for businesses in the Selwyn District, providing a key source of transportation for both exporters and importers. The Lyttelton Port is a commercial deep-water port situated on the east coast of the South Island, 12 kilometres from Christchurch City, and is the only port in the South Island with a graving dock.

The Lyttelton Port is owned and operated by the Lyttleton Port Company Limited and is divided into three main activities: marine services, cargo handling, and port facilities. Lyttelton Port is used 24 hours a day, seven days a week by a range of vessels including "container and conventional cargo vessels, bulk carriers, roll-on roll-off vessels, tankers and deep water trawlers" (CDC, *Canterbury Facts*). A number of cruise ships also berth at the Lyttelton Port.

The Port of Timaru is operated by PrimePort Timaru and is the most centrally located South Island port providing all-tide access and a 24 hour a day pilotage service all year round. PrimePort Timaru works alongside PrimePort Canterbury providing Canterbury importers and exporters with the option of having goods shipped to and from Christchurch City to the Port of Timaru twice daily.

[4] Rural is defined as an area within a permanent speed limit of greater than 70 km/h, while urban is defined as an area within a permanent speed limit of less than of equal to 70 km/h.

Figure 10
Share of New Zealand Seaport Cargo ($millions)
Lyttelton Port and Timaru Port



Note: P Provisional (Statistics for the last three months are provisional).

Source: Statistics New Zealand, Overseas Cargo Statistics

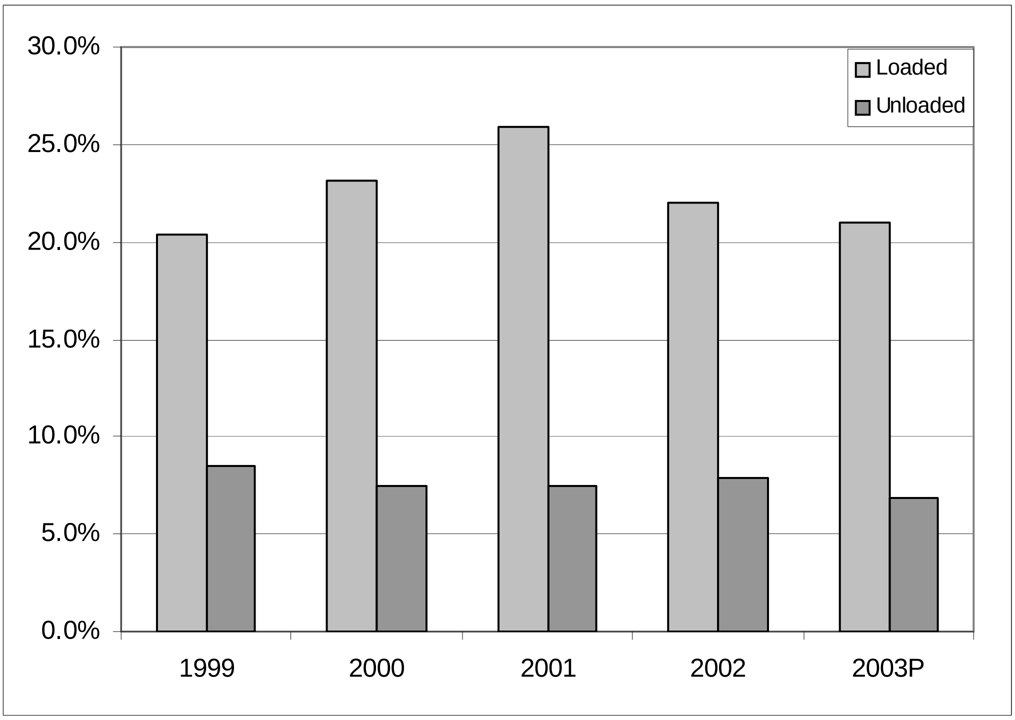
As shown in Figure 10, the value and weight of cargo loaded at both Lyttelton Port and the Port of Timaru is more than the value and weight of cargo unloaded. Lyttelton Port handles more cargo, in terms of value and weight, than the Port of Timaru, however both ports are important to the businesses in the Selwyn District.

The Lyttelton Port had the third highest share of loaded seaport cargo and fourth highest share of unloaded seaport cargo in terms of value in 2002, behind Auckland, Tauranga, and Whangarei. The Port of Timaru had the tenth highest share in terms of value in 2002 for both loaded and unloaded seaport cargo. In 2002, the Lyttelton Port and Port of Timaru unloaded a total of 1,446,001 tonnes of cargo worth $2,251 million and loaded 3,170,575 tonnes of cargo worth $3,501 million.

4.3 Airport

The main airport for the Selwyn District is the Christchurch International Airport, which has regular flights to all main centres in New Zealand as well as a number of overseas destinations. The Christchurch International Airport is important to businesses in the District, providing support for exporters and importers of products and for the tourism industry. The airport can be reached by most of the District within 60 minutes drive.

Figure 11
Share of New Zealand Airport Cargo ($millions)
Christchurch International Airport



Note: P Provisional (Statistics for the last three months are provisional).

Source: Statistics New Zealand, Overseas Cargo Statistics

The Christchurch International Airport's share of New Zealand airport cargo, shown in Figure 11, is the second highest, behind Auckland Airport. The Christchurch International Airport has a significant share of the total value of loaded airport cargo, however, its share of unloaded airport cargo is much smaller. In 2002, 18,127 tonnes of cargo worth $1,098 million were loaded at the Christchurch International Airport, while only 8,832 tonnes of cargo worth $557 million were unloaded.

4.4 Rail

The South Island's main trunk railway line passes through the Selwyn District. The trunk line splits at the township of Rolleston with one branch travelling south and the other branch travelling west. The south branch of the trunk travels south via a similar route to State Highway 1, passing through the Burnham and Dunsandel areas, and is mainly used by the Toll Rail[5] freight service. The west branch travels to the West Coast, passing through Kirwee and Darfield, and is used for both Toll NZ's freight services and passenger services.

The TranzAlpine is the passenger service operated by Toll NZ which travels through the Selwyn District towards Greymouth on the West Coast of New Zealand's South Island. The service departs Christchurch and Greymouth daily and travels 223.8 kilometres across the South Island.

[5] Toll NZ services were formerly known as TranzRail services.

4.5 Water and Sewerage

The Selwyn District has 12 separately classified land drainage and protection systems. The length of water races in 2003 was 2,063 kilometres and there was 366 kilometres of classified drains.

The Selwyn District Council provides 28 reticulated potable water supplies of varying sizes and capacities to community areas and townships in the District. There are also systems in place for the collection, treatment, and disposal of sewerage in 11 township areas: Arthur’s Pass, Castle Hill, Lake Coleridge, Leeston, Doyleston, Lincoln, Prebbleton, Selwyn Huts, Springston, Tai Tapu, and the new residential, rural residential and existing areas of Rolleston.

The requirements of rural users in the area between the Rakaia River and the Waimakariri River are met by the stock water supply through a gravity-fed water race network.

The three main residential growth areas in the District are Rolleston, Lincoln and Prebbleton. The Selwyn District Council has an operative, Plan Change 60, which allows for growth in Rolleston to 14,000 residents. Current sewerage capacity is sufficient to cope with the increase in household numbers. Prebbleton’s sewerage is connected to the Christchurch City town supply and is nearing capacity. The capacity can be increased by laying new sewerage pipes.

4.6 Power Distribution

Orion New Zealand Limited is the electricity distributor, or lines company, responsible for the Selwyn District and most of the Canterbury Region. Orion's network covers 8,000 square miles in central Canterbury between the Waimakariri River and the Rakaia River. Orion transports electricity from 10 major substations, owned by the national transmission company Transpower, to homes and businesses within Orion’s network area.

The network delivers 3,000 GWh each year and supplies a maximum demand of 565MW. Orion is responsible for the provision of a reticulation system comprising 5,000 kilometres of overhead line, 3,000 kilometres of underground cable, and 9,000 distribution substations and pole-mounted transformers.

4.7 Telecommunications

A high proportion of households and businesses in the Selwyn District have access to telecommunications systems, with fibre transport being available in each of the 20 Telecom exchange areas in the District. The District also has cellular phone coverage with both Telecom New Zealand Limited and Vodafone New Zealand. Multiple cellular phone sites are situated in the area and the more populated areas of the District have primary land coverage while other areas have secondary land coverage. There is also marine coverage near Lake Ellesmere and 8 watt carphone coverage in some of the more remote areas of the District.

Selwyn District’s access to telecommunication systems, shown in Table 18, compares well to the Canterbury region and national averages recorded on Census night 2001. The percentage of total households with access to a telephone, facsimile and the Internet is higher for the Selwyn District than for the Canterbury Region and New Zealand. The percentage of total households in the Selwyn District (1.4 percent) without access to any telecommunications systems is below the Canterbury regional average (2.4 percent) and the national average (3.6 percent).

Table 18
Access to Telecommunication Systems (Total Responses)(1)
For Households in Private Occupied Dwellings, 2001

Area	Access to a Telephone		Access to a Fax Machine		Access to the Internet		No Access to Telecommunication Systems		Total Households
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	
Selwyn District	8,910	98.5	3,354	37.1	3,801	42.0	123	1.4	9,045
Canterbury Region	175,497	97.5	43,680	24.3	65,148	36.2	4,326	2.4	180,024
Total New Zealand	1,240,830	96.3	325,557	25.3	482,361	37.4	46,815	3.6	1,289,127

(1) Households reporting more than one means of access to telecommunication systems have been counted in each stated category. Therefore, the total number of responses in the table will be greater than the total number of households.

Source: Statistics New Zealand, Census 2001

Access to Jetstream or Xtra Wireless is provided to 17 of the 20 exchange areas with seven exchange areas having access to remote office and secure business direct. Selwyn District data capability varies in terms of digital data services, frame relay services, and integrated services digital network as shown in Table 19. The Lincoln and Rolleston exchange areas have the most data capability due to the increased growth in these areas and the presence of Lincoln University and numerous Crown Research Institutes in the Lincoln area. Other areas in the District have Internet access, however, connections are often slow.

Table 19
Selwyn District Data Capability
Telecom New Zealand Limited

Exchange Name (Code)	Jetstream		Remote Office/ Secure Business Internet	DSL Status	Digital Data Services (DDS)			Frame Relay Services			Integrated Services Digital Network (ISDN)	
	Jetstream	Xtra Wireless			64K	128K	2M	64K	128K	2M	Basic Rate	Primary Rate
Arthurs Pass (AHP)	N	N	N	No	N	N	Y	N	N	Y	N	N
Burnham (BHN)	Y	Y	Y	Done	Y	N	Y	Y	N	Y	N	Y
Darfield (DRF)	Y	Y	Y	Done	Y	N	Y	Y	N	Y	N	Y
Dunsandel (DSD)	N	Y	N	No	N	N	Y	N	N	Y	N	N
Glentunnel (GLU)	N	Y	N	No	N	N	N	N	N	N	N	N
Glenroy (GLY)	N	Y	N	No	N	N	N	N	N	N	N	N
Greenpark (GPK)	N	Y	N	No	N	N	N	N	N	N	N	N
Hororata (HO)	N	Y	N	No	N	N	Y	N	N	Y	N	N
Irwell (IRW)	N	Y	N	No	N	N	N	N	N	N	N	N
Kirwee (KWI)	Y	Y	Y	Done	N	N	N	N	N	N	N	N
Lincoln (LCN)	Y	Y	Y	Done	Y	N	Y	Y	Y	Y	N	Y
Lake Coleridge (LCR)	N	N	N	No	N	N	N	N	N	N	N	N
Leeston (LSN)	Y	Y	Y	Done	Y	N	Y	Y	N	Y	N	Y
Motukarara (MOT)	N	Y	N	No	N	N	N	N	N	N	N	N
Rolleston (ROL)	Y	Y	Y	Done	Y	N	Y	Y	N	Y	Y	Y
Sheffield (SD)	N	Y	N	No	N	N	N	N	N	N	N	N
Southbridge (SOU)	N	Y	N	No	N	N	Y	N	N	Y	N	Y
Springfield (SPF)	N	N	N	No	N	N	N	N	N	N	N	N
Springston (SPN)	N	Y	N	No	N	N	N	N	N	N	N	Y
Taitapu (TAA)	Y	Y	Y	Done	N	N	N	N	N	N	N	N

Source: Telecom New Zealand Limited

Nine of the 20 exchange areas in the Selwyn District have access to Asymmetric Digital Subscriber Line (ADSL) based Private Office products as shown in Table 20. These nine areas have access to at least two of the six private office products, with Lincoln, Leeston, and Rolleston having access to five of the six products.

Table 20
Selwyn District Access to ADSL Based Private Office Products

Exchange Name (Code)	Private Office					
	PO 128	PO 256	PO 512	PO 1000	PO 2000	PO 2M - 9.5M
Burnham (BHN)	Y	Y	Y	N	N	N
Darfield (DRF)	Y	Y	Y	N	N	N
Dunsandel (DSD)	N	N	N	Y	Y	N
Kirwee (KWI)	Y	Y	Y	N	N	N
Lincoln (LCN)	Y	Y	Y	Y	Y	N
Leeston (LSN)	Y	Y	Y	Y	Y	N
Rolleston (ROL)	Y	Y	Y	Y	Y	N
Southbridge (SOU)	N	N	N	Y	Y	N
Taitapu (TAA)	Y	Y	Y	N	N	N

Source: Telecom New Zealand Limited

Appendix 1
Agriculture/Horticulture Sector Profile

Overview

The agriculture and horticulture sector is a key area of employment and growth in the Selwyn District. A range of agriculture and horticulture related activities are undertaken in the District including those related to research undertaken at Lincoln University and the Crown Research Institutes in the area. The 376,735 hectares identified as farming land in the Selwyn District equates to approximately 58 percent of the total land area in the Selwyn District.

Farms in Canterbury and the Selwyn District are mainly dedicated to grazing, cropping and horticulture. Predominant farm usage includes sheep, beef, dairy, and horse farming, vegetable growing, forestry, fruit growing, and nurseries and flower growing.

Current concerns for New Zealand farmers include the continued shortage of skilled labour and subsequent increased demand for contractors, the proposal to restructure the wool industry, irrigation of farm land, falling meat prices, and falling dairy payouts. Sharemilker positions in Canterbury are also becoming difficult to find with large farm owners and corporate owners opting to employ managers or equity managers.

At the time of writing it is expected that prices for meat products, including beef, cow and sheep, will fall as a result of numerous international market factors. Prices for dairy products and venison are expected to recover and remain relatively stable over the next few years, while wool prices are expected to increase out until the year 2008.

Market Trends

The 2002/03 season resulted in livestock farmers experiencing falling levels of gross and net income. Declining beef schedules affected beef farmers while sheep farmers largely maintained historically high income levels. Canterbury arable farmers experienced excellent growing and harvesting conditions and combined with high prices this resulted in the best year in many seasons for arable farmers. Farm revenue was above budget for arable farmers and profitability improvements are expected to remain during the next few seasons.

Farm expenditure on fertiliser is expected to remain stable over the next few seasons, however, a further decline in expenditure on capital items, repairs and maintenance, and development is expected. Farm values remained fairly stable throughout the 2002/03 season with some appreciation in sheep farms. Most farms were purchased as expansions and it is increasingly difficult for new and young farmers to enter the market.

The shortage of skilled labour remains a problem for New Zealand farmers and as a result many farmers are making greater use of contractors. Other issues of concern to New Zealand livestock farmers include the proposal to restructure the wool industry, irrigation of farm land, and falling meat prices. Arable farmers are still affected with the continuing problem of birds that appear to be feeding on crops more and more every season. Arable farmers are still concerned about the genetic engineering (GE) issue and are proactively addressing environmental issues.

Physical factors affecting the 2002/03 season in Canterbury included the slow cold spring followed by a dry summer. This resulted in feed pressures with pasture growth slower than the demand from livestock. The dry summer also resulted in livestock being drafted earlier and sold at lower weights. Weaning weights of calves and fawns were also lower than usual during the 2002/03 season. Pressures on irrigation and the benefits of irrigated land were evident as a result of the dry season. The pressures on irrigation are expected to continue over the next few seasons.

The 2002/03 season was the first full season of operation for Fonterra. Some issues have caused concern for farmers, including the decrease in payout. The value of dairy cows also reduced significantly during the season, affecting not only financial conditions but also sharemilker opportunities. Sharemilker positions in Canterbury are becoming more difficult to find with large farm owners and corporate owners opting to employ managers or equity managers. Despite the financial difficulties milk production in Canterbury increased in the 2002/03 season due to increased production per cow and increased cow numbers.

The 2002/03 season also saw the formation of Deer Industry New Zealand, a combination of two previous organisations. Deer Industry New Zealand seems to have been accepted by most farmers and has reduced levies for the industry by 50 percent. Deer farmers still appear to be concerned with the marketing of their products, particularly venison marketing. Other concerns, particularly for southern farmers, include for the deer industry include the presence of tuberculosis (Tb) which is compounded by the increasing prevalence of Johnes disease which masks Tb tests. A positive outlook for the deer industry is the introduction of drug-free velvet removal which is expected to be available for use in the 2004/05 season.

Most meat prices are expected to decline over the next few years, while wool prices are expected to increase out until the year 2008. New Zealand beef and manufacturing cow meat prices are strongly influenced by United States market trends and are expected to decline over the next few years with some recovery expected in 2005 and prices projected to fall until 2008. Sheep meat prices are more strongly influenced by the London wholesale market and are expected to fall until 2005 with a fairly static projected price until 2008. Venison prices are largely affected by the European markets and are projected to increase slightly over the next few years as the market recovers.

Prices for dairy products were at their lowest levels for over a decade early in the 2002/03 season. By the end of the season prices had improved and are expected to rise over the medium-term due to recovering world growth and increased demand from Asian and non-OECD countries for New Zealand dairy products.

Employment

The agriculture and horticulture sectors provide both direct and indirect employment to a large number of people in the District. Based on the 2001 Census Selwyn District directly employs 3,054 people in the agriculture, forestry and fishing industry. This equates to 20.3 percent of employment in the District as identified by the 2001 Census. A portion of this employment is detailed in the Business Frame Update Survey data, however employment in the agriculture (A01) industry is excluded from this data. Significant areas of agricultural and horticultural employment in the District include the many farms in the area and the numerous research farms owned by Lincoln University and the Crown Research Institutes. These research farms also bring significant funding into the Selwyn District.

The Business Frame Update Survey data, shown in Table 21, indicates there are 739 FTEs employed in agriculture and horticulture services. This employment is supplied by 179 business locations. The highest employment is in the services to agriculture industry, with 126 business locations employing 370 FTEs.

The second highest source of employment is the meat and meat product manufacturing industry where 250 FTEs are employed by 10 business locations. The third main source of employment in the agriculture and horticulture sector is the farm produce wholesaling industry where 31 business locations employ 95 FTEs.

Table 21
Agriculture/Horticulture Sector Employment
Geographic Units and Full-time Equivalent Persons Engaged
As at February 2003

Industry	Geographic Units							Full-time Equivalents						
	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total
Services to Agriculture	112	8	4	1	1	0	126	190	45	50	25	50	0	370
Marine Fishing	8	0	0	0	0	0	8	12	0	0	0	0	0	12
Aquaculture	3	1	0	0	0	0	4	3	9	0	0	0	0	12
Meat and Meat Product Manufacturing	3	0	1	5	1	0	10	3	0	15	180	50	0	250
Farm Produce Wholesaling	27	2	1	1	0	0	31	40	15	12	30	0	0	95
Total Employment	**153**	**11**	**6**	**7**	**2**	**0**	**179**	**248**	**69**	**77**	**235**	**100**	**0**	**739**

Notes:
(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.
(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.
(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey

Land Use

The majority of farming land identified in the Selwyn District is used for grazing, cropping, and horticulture as shown in Table 22. The land area identified for farming is approximately 58 percent of the total land area in the Selwyn District.

Table 22
Selwyn District Number of Farms and Land Area
As at June 2002

Predominant Land Use	Number of Farms	Area in Hectares	Area as % of Total
Tussock and danthonia used for grazing	140	98,190	26.1
Grassland	1,700	176,544	46.9
Arable crop land, fodder crop land and fallow land	590	35,217	9.3
Land in horticulture	370	3,012	0.8
Planted production forest	360	16,906	4.5
Mature native bush	45	4,987	1.3
Native scrub and regenerating native bush	85	29,626	7.9
Other land	1,300	12,254	3.3
Total Land	**2,100**	**376,735**	**100**

Notes:
Figures may not add to the totals due to rounding.

Source: Statistics New Zealand, 2002 Agricultural Production Census

The number of farms in the District used for grazing, cropping and horticulture is shown in more detail in Table 23. Table 23 indicates the predominant farm types in Selwyn District are sheep, beef cattle, horse, and dairy farming and vegetable growing. Forestry is also a popular farm type[6]. Currently over 800 farms in the Selwyn District are fully organic and over 100 farms are in the transitional stage to becoming organic. These farms are mostly involved with sheep and beef farming, arable cropping, and horticulture.

[6] Refer to the Forestry Sector Appendix for more detail on Forestry in the Selwyn District.

Table 23
Selwyn District Farm Numbers by Farm Type
As at June 2002

Farm Type	Number of Farms	% of Total Farms
Sheep Farming	500	22.7
Beef Cattle Farming	290	13.2
Horse Farming	180	8.2
Dairy Cattle Farming	170	7.7
Deer Farming	100	4.5
Grain-Sheep and Grain-Beef Cattle Farming	60	2.7
Sheep-Beef Cattle Farming	60	2.7
Livestock Farming nec	50	2.3
Pig Farming	40	1.8
Mixed Livestock	40	1.8
Poultry Farming (Meat)	18	0.8
Poultry Farming (Eggs)	9	0.4
Vegetable Growing	140	6.4
Other Fruit Growing n.e.c.	80	3.6
Plant Nurseries	40	1.8
Cut Flower and Flower Seed Growing	35	1.6
Grape Growing	25	1.1
Apple and Pear Growing	25	1.1
Berry Fruit Growing	15	0.7
Kiwi Fruit Growing	3	0.1
Citrus Growing	..S	-
Stone Fruit Growing	-	-
Grain Growing	60	2.7
Cultivated Mushroom Growing	6	0.3
Crop and Plant Growing nec	40	1.8
Tobacco and Hops Growing	-	-
Services to Agriculture nec	60	2.7
Forestry	110	5.0
Other	35	1.6
Total Farms	**2,200**	**100**

Notes:
Figures may not add to the totals due to rounding.
- nil or zero.

Source: Statistics New Zealand, 2002 Agricultural Production Census

The majority of the 2,200 farms in the Selwyn District identified in Table 23 are small. Nearly 60 percent of farms are smaller than 40 hectares each and over 60 percent are smaller than 100 hectares each. Nine farms (0.4 percent) in the District are over 4,000 hectares each.

Livestock numbers and farm numbers for the predominant livestock in the Selwyn District are shown in Table 24. Sheep, dairy cattle, and pigs are the main livestock in the District. Pig production equals 18.8 percent of the national production, positioning Selwyn District as the leading pig producer. Pig farms range in herd size within the District. Over 50 percent of the pig farms stock less than 20 pigs each, while 3 farms (2.3 percent) stock 40,902 pigs (63.7 percent) between them.

Table 24
Livestock and Farm Numbers

Livestock Type	Selwyn District				New Zealand	
	Number		Farms		Number	Farms
	Selwyn	% of NZ	Selwyn	% of NZ		
Sheep	1,049,428	2.7	1,000	3.7	39,545,609	27,000
Deer	45,420	2.8	150	3.5	1,643,938	4,300
Beef Cattle	53,838	1.2	820	2.4	4,494,678	34,000
Dairy Cattle	105,069	2.0	340	1.7	5,161,589	20,000
Pigs	64,248	18.8	130	3.5	341,377	3,700
Goats	4,174	2.7	-	-	153,084	-
Horses	3,870	5.1	-	-	75,856	-
Other Livestock	1,276	5.8	-	-	21,901	-
Total Livestock	**1,327,323**	**2.6**	**2,440**	**2.7**	**51,438,032**	**89,000**

Source: Statistics New Zealand, 2002 Agricultural Production Census

There are a range of arable crops produced in the District as shown in Table 25. Barley and wheat are the dominant crops in the area, both in terms of tonnes harvested and hectares planted. On a national scale arable farming in Canterbury is still relatively small and is dependent on North Island and global markets.

Table 25
Grain and Seed Crops

Crop	Tonnes harvested	Hectares planted
Wheat for bread / milling	24,027	3,475
Wheat for other uses	13,674	1,803
Barley	53,442	8,871
Oats	2,747	593
Other cereal grains	2,258	423
Maize grain	..C	..C
Field/seed peas	5,209	1,776
Other pulses	615	365
Other crops		4,111

Notes:
Figures may not add to the totals due to rounding.
..C cell estimate suppressed for reasons of respondent confidentiality

Source: Statistics New Zealand, 2002 Agricultural Production Census

The Selwyn District has seen an increase in horticulture in recent years with farmers growing a variety of crops including apples, pears, grapes, blackcurrants, olives, and nuts. Selwyn

District is the second largest grower of blackcurrants and has a significant production area of chestnuts and walnuts. On a national scale Selwyn's production of olives and grapes is small, however, the District has a number of hectares dedicated to the production of these crops.

Table 26
Fruit Trees and Vines

Crop	Hectares	Crop	Hectares
Apples	50	Wine grapes	63
Pears	36	Blackberries/brambles	..C
Nashi (asian) pears	..C	Blackcurrants	239
Peaches	7	Blueberries	8
Apricots	1	Raspberries	..C
Nectarines	2	Strawberries	..C
Cherries	..C	Olives	83
Plums	..C	Chestnuts	43
Kiwifruit	..C	Macadamias	..C
Feijoas	1	Walnuts	98
Tamarillos	..C	Other fruit	..C
Persimmons	..C	Other nuts	27

Notes:
C cell estimate suppressed for reasons of respondent confidentiality

Source: Statistics New Zealand, 2002 Agricultural Production Census

There is a higher demand in the Canterbury region than other regions for pea, sweetcorn, bean and particularly potato processors. The horticulture industry, and in particular vegetable growing, is supported by a number of processors in and around the District. The three main vegetable processing companies that Selwyn District cropping farmers supply to are Heinz Watties Limited in Christchurch, Talley's Frozen Foods Limited in Ashburton, and McCain Foods (NZ) Limited in Timaru.

Table 27
Area in Outdoor Crops

Crop	Hectares	Crop	Hectares
Asian vegetables	..C	Lettuce	..C
Asparagus	61	Onions	195
Broadbeans	..C	Parsnips	..C
Green beans	478	Peas (fresh/processed)	1,826
Broccoli	89	Potatoes	1,280
Brussels sprouts	..C	Pumpkin	39
Cabbage	..C	Silver beet/spinach	3
Carrots	151	Spring onions	2
Cauliflower	5	Squash	3
Celery	..C	Sweet corn	55
Courgettes / zucchini	..C	Tomatoes (outdoor)	..C
Garlic	2	Other	20

Notes:
Figures may not add to the totals due to rounding.
. .C cell estimate suppressed for reasons of respondent confidentiality

Source: Statistics New Zealand, 2002 Agricultural Production Census

Selwyn District has more hectares planted in processed beans and beans than any other area in New Zealand and also has significant production in potatoes, carrots, onions, and broccoli. A range of indoor crops are also grown in the Selwyn District as shown in Table 28.

Table 28
Area in Indoor Crops

Crop	Square Metres
Vegetables	
Capsicum	2,044
Cucumber	..C
Tomatoes	8,827
Nursery Crops	
Ornamental trees and shrubs	8,099
Fruit trees	..C
Perennials	..C
Bedding plants	..C
Flower bulb, corm and tuber crops	4,400
Flowers and Foliage	
Orchids	..C
All other flowers and foliage	65,687
Other indoor crops	15,594

Notes:
Figures may not add to the totals due to rounding.
..C cell estimate suppressed for reasons of respondent confidentiality

Source: Statistics New Zealand, 2002 Agricultural Production Census

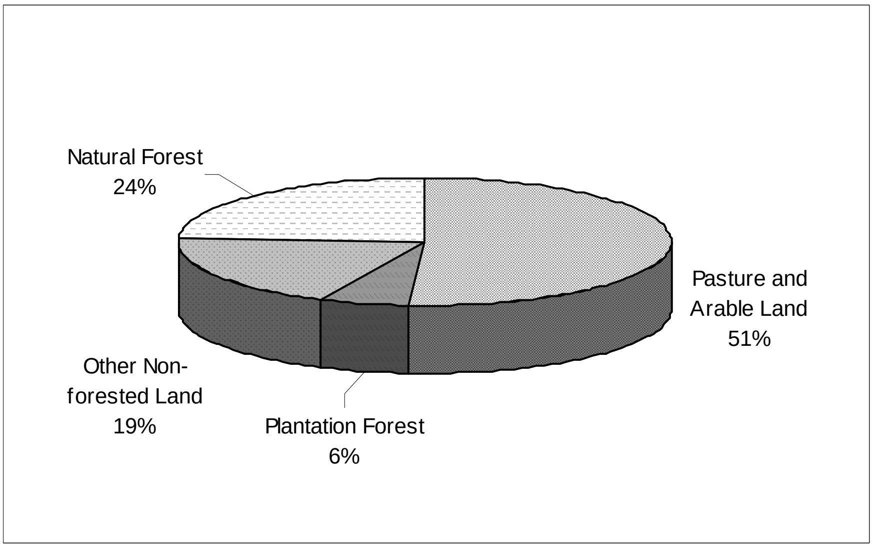
Appendix 2
Forestry Sector Profile

Overview

New Zealand has ten wood supply regions representing wood supply and processing catchments formed from groups of New Zealand's 73 districts based on broadly similar growth patterns for Radiata pine. The Selwyn District belongs to the Canterbury wood supply region, which has an area of approximately 3.8 million hectares.

Approximately 24 percent of New Zealand's land is covered in natural forest, however, only a small proportion of this natural forest is managed for production purposes. The majority of New Zealand's wood products are sourced from 1.7 million hectares of plantation forests, of which 97 percent are planted in softwoods. The dominant softwood in New Zealand is Radiata pine, which makes up approximately 89 percent, or 1.5 million hectares of New Zealand's plantation forests. The remaining area is planted with Douglas-fir (six percent), other softwoods (two percent) and hardwoods (three percent).

Figure 12
Land Use in New Zealand



Source: Forestry Insights

In the year ended 31 March 2002, an estimated 20.1 million cubic metres of hardwood was harvested from New Zealand's plantation forests. Clear felling 42,000 hectares of planted forest led to the production of an estimated 19.3 million cubic metres (96 percent) of hardwood, with the remaining 0.8 million cubic metres coming from production thinning.

The amount of previously clear felled planted forest replanted in 2001 was estimated at 35,800 hectares. It is also estimated that new planting amounted to a further 30,100 hectares in 2001, giving a total planting for 2001 of approximately 65,900 hectares.

New Zealand’s forestry sector continues to grow, contributing approximately five percent of national gross domestic product. Exports of plantation timber are continuing to expand, and now earn about seven percent of New Zealand’s export receipts. New Zealanders have become the highest per capita consumers of sawn lumber and medium density fibreboard (MDF), and New Zealand is now one of the world’s major traders of sustainably grown softwood products.

Forestry Plantings

The summer droughts, dry northwesterly winds and relatively well drained soils in Canterbury result in timber of relatively low density with more resin pockets than other timber. These factors can also limit growth, although the large water resource in the area reduces the effect. Canterbury’s forestry sector benefits generally from low harvesting and transport costs due to the area’s topography, well-established road and rail infrastructure, the close proximity of both Lyttelton Port and the Port of Timaru, and established links to other South Island forest resources.

The largest forestry area by age class in the Selwyn District is young plantings less than ten years old, and more specifically between six and ten years old. Table 29 indicates future growth for the forestry sector in the Selwyn District.

Table 29
Net Stocked Forest Area (hectares)(1) by Age Class
As at April 1 2002

Age class (years)	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 80	Total	% of Canterbury
Selwyn District	2,687	2,398	3,062	1,685	2,798	2,404	367	179	559	16,139	13.5
Canterbury Region	24,615	34,161	14,767	16,173	15,431	8,173	2,171	1,404	2,891	119,786	100

(1) Net Stocked Forest Area is the planted production forest area occupied by trees excluding mappable gaps such as landings, roads and other unstocked areas.

Source: Ministry of Agriculture and Forestry, National Exotic Forest Description (NEFD) 2002.

Approximately 13.5 percent of the Canterbury wood supply region’s net stocked forest area is located in the Selwyn District. As shown in Table 30 Selwyn District’s plantation forests contribute to 14 percent of Canterbury’s Radiata pine plantings, 13 percent of the region’s Douglas-fir plantings, and 8 percent of the region’s other softwoods and hardwoods. The total land area in the Selwyn District used for forestry is 16,139 hectares which is approximately 4.5 percent of total land use in the District. The total volume of Selwyn District’s plantation forests is estimated at 3,425 cubic metres with an average area-weighted age of 17.28 years.

Table 30
Net Stocked Planted Production Forest Area(1)

Area	Radiata Pine		Douglas-fir		Other Softwoods		Hardwoods	
	Hectares	% of Canterbury	Hectares	% of Canterbury	Hectares	% of Canterbury	Hectares	% of Canterbury
Selwyn District	14,023	14%	1,403	13%	589	8%	124	8%
Canterbury Region	99,631	100%	11,118	100%	7,555	100%	1,482	100%
New Zealand	1,622,329	N/A	103,801	N/A	33,821	N/A	54,315	N/A

(1) Net Stocked Forest Area is the planted production forest area occupied by trees excluding mappable gaps such as landings, roads and other unstocked areas.

Source: Ministry of Agriculture and Forestry, National Exotic Forest Description (NEFD) 2002.

Employment

Employment levels in the forestry sector are expected to increase over the next few years as harvest and production levels in the District increase. Currently 112 business locations employ 155 FTES. This employment is in the forestry and logging industry (95 business locations employing 85 FTEs), the log sawmilling and timber dressing industry (4 business locations employing 50 FTEs), other wood product manufacturing (12 business locations employing 18 FTEs), and paper and paper product manufacturing (1 business location employing 3 FTEs).

Selwyn District businesses in the forestry sector are small with 93.75 percent employing five or fewer FTEs. The largest forestry sector business in the District employs between 20 and 49 FTEs.

Table 31
Forestry Sector Employment
Geographic Units and Full-time Equivalent Persons Engaged
As at February 2003

Industry	Geographic Units							Full-time Equivalents						
	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total
Forestry and Logging	90	3	2	0	0	0	95	40	18	25	0	0	0	85
Log Sawmilling and Timber Dressing	2	0	1	1	0	0	4	3	0	18	30	0	0	50
Other Wood Product Manufacturing	12	0	0	0	0	0	12	20	0	0	0	0	0	18
Paper and Paper Product Manufacturing	1	0	0	0	0	0	1	6	0	0	0	0	0	3
Total Employment	**105**	**3**	**3**	**1**	**0**	**0**	**112**	**69**	**18**	**43**	**30**	**0**	**0**	**156**

Notes:
(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.
(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.
(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey

Harvesting, Production, and Processing

Harvesting from planted production forests in the Canterbury wood supply region has been increasing over the years. Approximately 400,000 cubic metres was harvested in 1990, increasing to 800,000 cubic metres in 2000, with annual production having the potential to exceed 1.2 million cubic metres by 2005.

The Canterbury wood supply region is mainly comprised of two significant wood processing plants located in North Canterbury and Christchurch, and a number of medium and small-scale sawmills. The processing plants, owned by Carter Holt Harvey Panels, process the majority of Canterbury's log harvest. The medium density fibreboard (MDF) plant in Rangiora, North Canterbury has a production capacity of over 200,000 cubic metres of panel products. The second processing plant, a veneer and panel overlay plant, is situated in Sockburn, Christchurch.

There are 21 sawmills in Canterbury processing more than 500 cubic metres of sawn timber per annum and a number of smaller sawmills processing less than 500 cubic metres. A number of smaller fixed sawmills in Canterbury use outdated technology, however, the number of portable or chainsaw operated sawmills has been increasing in recent years. Eight sawmills produce over 10,000 cubic metres of sawn timber per annum, and the largest six sawmills account for nearly 70 percent of total production in the Canterbury area. The largest sawmills mainly produce for export to Australia. The main sawmills in the Selwyn District are shown in Table 32.

Table 32
Selwyn District Sawmills
As at 31 March 2001

Location	Sawmill	Production level (sawn timber per annum)
Darfield	Mitchell Bros Sawmillers	10,000 m3 – 24,999 m3
Rolleston	Shands Road Sawmills Limited	10,000 m3 – 24,999 m3
Hororata	Selwyn Sawmills Limited	5,000 m3 – 9,999 m3

Source: Ministry of Agriculture and Forestry, Regional Study: Canterbury 2001

The clearfell age scenarios published in the National Exotic Forest Description indicate production in the Canterbury wood supply region will fluctuate over the next ten to fifteen years, at which point a relatively significant increase in recoverable volume is expected. These estimates of recoverable volume reflect the large proportion of young age class plantings in Canterbury and the Selwyn District.

Table 33
Canterbury Clearfell Age Scenarios

Year ending 31 March	Base cut		Early cut		Late cut	
	Recoverable volume (000 m3 i.b.)	Avg. Age Radiata Pine (years)	Recoverable volume (000 m3 i.b.)	Avg. Age Radiata Pine (years)	Recoverable volume (000 m3 i.b.)	Avg. Age Radiata Pine (years)
2005	1 219	29	1 317	29	841	32
2010	1 227	28	1 333	27	775	33
2015	1 227	28	1 332	25	1 321	34
2020	1 359	27	1 290	25	1 444	33
2025	1 496	29	1 447	27	1 585	33
2030	1 516	30	1 477	26	1 584	35
2035	1 514	29	1 454	25	1 590	38
2040	1 513	29	1 394	25	1 614	38

Notes:
Base cut uses a target clearfell age for radiata pine of 28 years.
Early cut uses a target clearfell age for radiata pine of 25 years.
Late cut uses a target clearfell age for radiata pine of 35 years
i.b. denotes inside bark, i.e., the recoverable volume of wood excluding bark.

Source: Ministry of Agriculture and Forestry, National Exotic Forest Description Wood Supply Forecasts 2000

Table 34
Actual (1999) and Base Cut Forecast (2000 to 2025)
Millions Cubic Metres/Year

Wood Supply Region	Actual harvest 1999	Base cut forecast 2000	Base cut forecast (5 year averages)				
			2001-05	2006-10	2011-05	2016-20	2021-25
Northland	1.0	1.2	3.5	4.1	4.1	4.1	4.0
Auckland	0.6	0.7	0.9	0.9	0.9	1.0	1.0
Central North Island	9.6	10.3	10.2	11.7	11.6	11.8	12.0
East Coast	0.6	0.7	1.6	2.6	2.8	3.4	3.4
Hawkes Bay	0.6	0.8	1.7	2.4	2.4	2.6	2.7
Southern North Island	0.5	0.6	2.0	2.5	2.3	3.0	3.4
Nelson & Marlborough	1.3	1.4	2.5	2.7	2.9	3.0	3.1
West Coast	0.2	0.2	0.3	0.4	0.4	0.4	0.4
Canterbury	**0.5**	**0.6**	**1.2**	**1.2**	**1.2**	**1.3**	**1.5**
Otago & Southland	1.5	1.8	2.2	2.3	2.4	2.6	3.0
New Zealand Total	**16.5**	**18.4**	**26.3**	**30.8**	**31.0**	**33.1**	**34.4**

Notes:
Base cut uses a target clearfell age for radiata pine of 28 years.
The sum of the regions may not exactly equal the New Zealand totals due to rounding.

Source: Ministry of Agriculture and Forestry, National Exotic Forest Description Wood Supply Forecasts 2000

Ownership

The majority of forestry (92 percent) in New Zealand is owned privately or by registered public companies. Although three companies (Carter Holt Harvey Forests, Selwyn Plantation Board Limited, and Blakely Pacific Limited) own approximately 45 percent of the forestry in the Canterbury wood supply region, the majority is owned by local authorities, partnerships, farmers and other small forest owners.

The Selwyn Plantation Board Limited is a Council control trading organisation which manages 13,345 hectares of land in the Canterbury region. Of this area, 10,787 hectares were stocked with an assessed wood volume of 1.51 million tonnes at March 31, 2003.

Appendix 3
Tourism Sector Profile

Overview

A number of international and domestic visitors are attracted to the Selwyn District each year. The close proximity of Selwyn District to Christchurch City makes it easier for visitors to make day trips. The close proximity also enables Selwyn District to play a support role to the tourism based in Christchurch City and the Canterbury Region.

Attractions accessible to tourists in the Selwyn District or by travelling through the District include the Arthur's Pass National Park, the Craigieburn Forest Park, and numerous skifields.

As at March 2004 there were 21 accommodation establishments operating in the Selwyn District. This was down on December 2003 quarter when there were 25 establishments operating as shown in Table 35. Selwyn District's average daily capacity and quarterly capacity have decreased over the last few years. Stay unit nights in Selwyn are highest in the December and March quarters as is the case with New Zealand as a whole.

Table 35
Accommodation Establishments and Capacity

Quarter ended	Establishments at end of quarter	Average Daily Capacity	Quarterly Capacity	Stay Unit Nights
Mar-01	27	533.3	48,007	11,075
Jun-01	25	529.3	48,176	4,814
Sep-01	25	520.7	47,889	5,304
Dec-01	24	528.3	48,608	7,335
Mar-02	27	536.0	48,234	11,441
Jun-02	26	531.7	48,384	5,970
Sep-02	27	505.3	46,458	6,455
Dec-02	25	470.7	43,330	8,027
Mar-03	26	449.0	40,401	11,147
Jun-03	22	439.7	40,008	6,690
Sep-03	23	464.3	42,717	6,109
Dec-03	25	473.3	43,548	9,449
Mar-04	21	459.7	41,835	13,566

Notes:
Daily capacity is measured on the last day of the month. For hotel, motel and hosted accommodation types, daily capacity equates to the number of rooms available on the last day of the month. For backpackers daily capacity equates to the number of beds available. For caravan parks, daily capacity is the same as the number of sites available.

Establishments that are temporarily closed for more than 14 days during a month, and establishments primarily offering accommodation for periods of one month or more are excluded from the survey. Establishments with a GST turnover of less than $30,000 are generally excluded from the survey.

Source: Statistics New Zealand, Accommodation Survey

The number of guest arrivals in the Selwyn District has been increasing over the years with the March 2004 quarter showing significant increases on previous quarters. The latter along with other accommodation statistics are shown in Table 36. The average stay length in Selwyn District accommodation is between one and two days and has remained fairly stable in recent years. The occupancy rate has been showing improvements and is highest in the December and March 2004 quarters, consistent with stay unit nights.

Table 36
Accommodation Statistics

Quarter ended	Guest Nights	Guest Arrivals	Stay Length	Occupancy Rate %	Guests per Stay Unit Night	Stay Units per Establishment
Mar-01	19,669	11,628	1.69	23.07	1.78	19.75
Jun-01	7,762	5,111	1.52	9.99	1.61	21.17
Sep-01	7,546	4,451	1.70	11.08	1.42	20.83
Dec-01	10,961	8,047	1.36	15.09	1.49	22.01
Mar-02	17,823	12,221	1.46	23.72	1.56	19.85
Jun-02	9,518	6,377	1.49	12.34	1.59	20.45
Sep-02	10,366	5,920	1.75	13.89	1.61	18.72
Dec-02	11,973	8,069	1.48	18.53	1.49	18.83
Mar-03	16,757	10,992	1.52	27.59	1.50	17.27
Jun-03	9,613	6,446	1.49	16.72	1.44	19.98
Sep-03	9,785	5,704	1.72	14.30	1.60	20.19
Dec-03	16,182	9,828	1.65	21.70	1.71	18.93
Mar-04	23,761	13,816	1.72	32.43	1.75	21.89

Notes:
Establishments that are temporarily closed for more than 14 days during a month, and establishments primarily offering accommodation for periods of one month or more are excluded from the survey. Establishments with a GST turnover of less than $30,000 are generally excluded from the survey.

Source: Statistics New Zealand, Accommodation Survey

Market Trends and Estimated Contribution to the Economy

Tourism plays a key role in the growth of the New Zealand economy through employment, foreign exchange earnings, investment and regional development. In 2002 international visitors spent a total of 43.6 million nights in New Zealand, up 12.3 percent from 38.8 million nights in 2001. Total nights are expected to reach 50.1 million in 2004, increasing further to 68.0 million by 2009, representing an average increase of 6.5 percent per annum.

International visitor arrivals to New Zealand reached an all-time high of 2.05 million in 2002, an increase of 7.1 percent from 2001. Total arrivals to New Zealand are expected to increase by an average of 5.7 percent per annum over the next few years, reaching 3.02 million by 2009. Domestic visitor nights are also increasing and are expected to increase by 1.4 percent per annum over the next few years to 57.8 million by 2009.

A total of $6.14 billion was spent in New Zealand in 2002 by international visitors and $4.89 billion by domestic visitors. International visitors have a higher average daily spend than domestic visitors. The amount of international visitor expenditure is expected to increase to $11.74 billion by 2009. This equates to a 91 percent increase in expenditure over the 2003 –

2009 period. Domestic expenditure is expected to increase by 15.3 percent over the same period

Canterbury is the second largest tourism destination in terms of visitor nights and the third largest tourism destination in terms of visitors. The majority (67 percent) of visitor nights in the Canterbury Region are in Christchurch accommodation establishments. The dominance of Canterbury along with Auckland and Otago (combined currently 60 percent of international nights and 63 percent of international expenditure) is expected to continue as visitor nights and visitor expenditure in these areas continues to grow in the medium term.

Total visitor expenditure in Canterbury during 2002 was $1.6 billion from 3.4 million visitors staying 13.2 million nights. Tourism in Canterbury is expected to grow by 3 percent per annum with 4.2 million visitors expected in 2009, as shown in Table 37.

Table 37
Canterbury Market Share

	2002	2009	Growth (%) 2002-2009	Share of NZ (%)	
				2002	2009
Visitors (000s)	3,429	4,228	23.3	11.4	11.6
International	1,036	1,591	53.6	13.3	13.5
Domestic	2,394	2,637	10.2	10.7	10.7
Expenditure (NZ$m)	1,640	2,624	60.0	14.9	15.1
International	974	1,856	90.6	15.9	15.8
Domestic	666	767	15.2	13.6	13.6
Nights (000s)	13,155	17,148	30.4	12.4	12.5
International	5,918	9,175	55.0	13.6	13.5
Domestic	7,237	7,973	10.2	11.6	11.6
Nights by Purpose	13,155	17,148	30.4	12.4	12.5
Holiday	6,390	8,385	31.2	13.6	14.1
VFR	3,818	4,635	21.4	10.8	10.5
Business	1,156	1,385	19.9	12.4	12.1
Other	1,792	2,743	53.1	12.7	12.5
CAM Nights 2002 (000s)*					
Hotels	1,649	na	na	17.7	na
Motels	1,450	na	na	14.8	na
Hosted	119	na	na	22.1	na
Backpackers	576	na	na	17.1	na
Caravan/Camping	823	na	na	14.0	na

Notes:
Data excludes domestic day trips.
* This shows the CAM count of commercial nights – does not include non-commercial accommodation (eg, private homes).

Source: Tourism Research Council New Zealand, Regional Tourism Forecasts 2003-2009 Canterbury Region

Visitor nights in Canterbury are dominated by holiday nights (49 percent of total visitor nights), and visiting friends or relatives. Business and other travel to Canterbury is less dominant than in some other regions. Most Canterbury commercial visitor nights are spent in hotel accommodation (36 percent) and motel accommodation (31 percent).

Visitor arrivals in the Selwyn District in the March 2004 quarter were 25.7 percent higher than for the March 2003 quarter. This increase is significantly above the national average of 4.8 percent and highlights the increasing prominence of the Selwyn District in the tourism market. Visitor nights for Selwyn District also increased in the March 2004 quarter and were 41.8 percent higher than the March 2003 quarter. This compares favourably to the national increase of 4.1 percent.

Employment

Various industries within the tourism sector in the Selwyn District employ 437 FTEs in 202 businesses, as shown in Table 36. Employment in the tourism sector through accommodation, cafes and restaurants equates to 340 FTEs in 72 businesses, with the remainder 97 FTEs being employed in 130 businesses in the cultural and recreation services industry.

Selwyn District businesses operating in tourism related industries as shown in Table 38 are small with the largest business employing 25 FTEs. The main source of employment is in the cafes and restaurants industry (150 FTEs in 26 businesses) followed by the accommodation industry (110 FTEs in 31 businesses).

Table 38
Tourism Sector Employment
Geographic Units and Full-time Equivalent Persons Engaged
As at February 2003

Industry	Geographic Units							Full-time Equivalents						
	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100+	Total
Accommodation	27	1	3	0	0	0	31	50	6	45	0	0	0	110
Pubs, Taverns and Bars	6	5	1	0	0	0	12	25	35	18	0	0	0	75
Cafes and Restaurants	17	5	3	1	0	0	26	50	40	40	25	0	0	150
Clubs (Hospitality)	3	0	0	0	0	0	3	6	0	0	0	0	0	3
Total Accommodation, Cafes and Restaurants	53	11	7	1	0	0	72	130	75	100	25	0	0	340
Cultural and Recreational Services	2	1	2	0	0	102	130	12	12	40	0	0	190	97
Total Employment	**55**	**12**	**9**	**1**	**0**	**102**	**202**	**142**	**87**	**140**	**25**	**0**	**190**	**437**

Notes:
(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.
(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.
(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey

Tourism in the District

A large proportion of the mountain area in the Selwyn District is protected by the Arthur's Pass National Park and the Department of Conservation. The total Conservation land in the District is 201,000 hectares.

A number of attractions are accessible to tourists in the Selwyn District or by travelling through the District. These include the Arthur's Pass National Park, the Craigieburn Forest Park, and the Mt Hutt, Porter Heights, Mt Cheeseman, Craigieburn, My Olymbus, and Broken River ski-fields. The Selwyn District has more ski-fields than any other district in New Zealand.

The average annual daily traffic counts for State Highway 73 (Table 39) and the visitor numbers to the Arthur's Pass Department of Conservation Visitor Centre (Table 40) provide an indication of the tourism in the Selwyn District. It is important to note that alternative routes to some destinations are able to be taken and thus the traffic counts at each point do not include all vehicles travelling to a further destination. Also in 2000 Arthur's Pass and the surrounding area was closed to traffic and visitors to allow for upgrades to be undertaken.

Table 39
Average Annual Daily Traffic Counts for State Highway 73

						Percentage Increase		
Location	**1989**	**1992**	**2000**	**2001**	**2002**	**1989 - 2002**	**1992 - 2002**	**2000 - 2002**
West Melton	2,240	n/a	4,100	5,830	5,550	148	n/a	35
West of Aylesbury Corner	1,750	2,100	2,600	2,780	2,720	55	30	5
East of Darfield	1,750	1,700	2,500	3,570	3,270	87	92	31
West of Springfield	795	940	1,270	1,380	1,470	85	56	16
Arthur's Pass	790	865	1,210	1,160	1,320	67	53	9
Otira	505	705	1,090	1,000	1,090	116	55	0

Source: Highway 73 Tourism Strategic Plan

Table 40
Visitor Numbers to Department of Conservation's Arthur's Pass Visitor Centre

	1995-1996	**1999-2000**	**2000-2001**	**2001-2002**	**2002-2003**	**Percentage Increase**
July	4,865	5,291	6,277	6,561	6,771	39
August	5,530	5,676	4,765	5,739	6,577	19
September	4,500	6,779	5,593	6,337	6,635	47
October	6,210	7,585	8,127	8,097	9,739	57
November	7,456	12,489	11,323	11,776	13,980	88
December	10,637	12,822	14,518	8,502	16,807	64
January	9,571	16,812	17,258	13,000	23,224	143
February	12,067	14,999	15,483	17,006	17,845	48
March	9,774	14,641	14,903	16,436	17,910	83
April	9,945	13,194	12,221	12,291	15,499	56
May	5,016	6,975	5,586	10,761	7,345	46
June	4,008	3,999	4,431	5,721	4,857	21
Total	**89,579**	**121,262**	**120,485**	**122,227**	**147,954**	**33**

Source: Highway 73 Tourism Strategic Plan

The information in Tables 37 and 38 show that the traffic use of State Highway 73 and the number of visitors at the Arthur’s Pass visitor centre are continuing to increase. The summer period from November to February continues to be the most popular time to visit the Arthur’s Pass area.

Due to the close proximity of Selwyn District to Christchurch City a number of tourists take day trips to the District, reducing the number of visitor nights spent in the District. Day trips to the District are popular as are trips to the Waimakariri District. A recent survey[7] indicated that 26 percent of respondents had visited Selwyn District on a day trip during the last three months and the primary reasons for day trips were identified as visiting family and friends, and leisure and recreation activities. This may indicate that a number of tourists undertaking day trips to the District are domestic tourists.

Tourism Future

A number of projects are in place to improve the use of State Highway 73 in the Selwyn District and surrounding Districts in the Canterbury Region[8]. These projects must achieve the Vision for the Great Alpine Highway (State Highway 73) including benefits for visitors, businesses, communities and the environment. One of the projects is to formally adopt the name “The Great Alpine Highway” for State Highway 73.

Other projects being developed include the preparation of a traffic and landscape plan (image enhancement) for Arthur’s Pass, developing a theme for Darfield based on its rural image and servicing of the agricultural sector, developing a theme for Springfield based on its location as the ‘gateway to the Alps’ and ‘Rail history/heritage’, and developing key visitor stopping nodes that include some of the critical components that encourage people to stop for short breaks of overnight (information, interpretation, toilets, food and beverage, fuel).

[7] Christchurch Visitor Survey Results, July 2003, prepared by The Tourism and Leisure Group Limited.
[8] Sourced from Highway 73 Tourism Strategic Plan.

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- Annual Business Frame Update Survey

Ministry of Agriculture and Forestry
- National Exotic Forest Description 2002
- National Exotic Forest Description, Wood Supply Forecasts 2000
- New Zealand's Forest Growing & Wood Processing Sectors: Regional Study Canterbury 2001

Selwyn District Council
- Annual Report 2003

Forestry Insights (http://www.insights.co.nz)

Tourism

Statistics New Zealand
- Annual Business Frame Update Survey
- Accommodation Survey

Tourism Research Council New Zealand
- New Zealand Regional Tourism Forecasts 2003 - 2009, Canterbury Region
- New Zealand Tourism Forecasts 2003 – 2009, Summary Document

EDANZ Economic Monitoring Report March 2004 Quarter, prepared for Selwyn District Council by APR Consultants.

Highway 73 Tourism Strategic Plan May 2004, prepared by The Tourism and Leisure Group Limited.

Waimakariri and Selwyn District Councils Christchurch Visitor Survey Results, July 2003, prepared by The Tourism and Leisure Group Limited.

APPENDIX FOUR - DETAILED BREAKDOWN OF INDUSTRY EMPLOYMENT IN THE SELWYN DISTRICT

Number of Geographic Units (Business Locations) and Full-time Equivalent Persons Engaged

By 3-digit Australian and New Zealand Standard Classification Category

As at February 2003 (excludes A01: Agriculture)

	Geographic Units							Full-time Equivalents						
3-digit ANZSIC Category	**0 to 5**	**6 to 9**	**10 to 19**	**20 to 49**	**50 to 99**	**100 or more**	**Total**	**0 to 5**	**6 to 9**	**10 to 19**	**20 to 49**	**50 to 99**	**100 or more**	**Total**
Agriculture, Forestry and Fishing														
A021 Services to Agriculture	112	8	4	1	1	0	**126**	190	45	50	25	50	0	**370**
A022 Hunting and Trapping	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
A030 Forestry and Logging	90	3	2	0	0	0	**95**	40	18	25	0	0	0	**85**
A041 Marine Fishing	8	0	0	0	0	0	**8**	12	0	0	0	0	0	**12**
A042 Aquaculture	3	1	0	0	0	0	**4**	3	9	0	0	0	0	**12**
Total Agriculture, Forestry and Fishing	**213**	**12**	**6**	**1**	**1**	**0**	**233**	**240**	**75**	**80**	**25**	**50**	**0**	**480**
Mining														
B110 Coal Mining	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
B120 Oil and Gas Extraction	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
B131 Metal Ore Mining	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
B141 Construction Material Mining	2	2	0	0	0	0	**4**	0	12	0	0	0	0	**12**
B142 Mining nec	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**

B151 Exploration	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
B152 Other Mining	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
Total Mining	**2**	**2**	**0**	**0**	**0**	**0**	**4**	**0**	**9**	**0**	**0**	**0**	**0**	**12**
Manufacturing														
C211 Meat and Meat Product Manufacturing	3	0	1	5	1	0	**10**	3	0	15	180	50	0	**250**
C212 Dairy Product Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C213 Fruit and Vegetable Processing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C214 Oil and Fat Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C215 Flour Mill and Cereal Food Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C216 Bakery Product Manufacturing	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**3**
C217 Other Food Manufacturing	2	0	3	2	0	0	**7**	0	0	45	50	0	0	**100**
C218 Beverage and Malt Manufacturing	5	1	0	1	0	0	**7**	6	6	0	35	0	0	**45**
C219 Tobacco Product Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C221 Textile Fibre, Yarn and Woven Fabric Manufacturing	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**
C222 Textile Product Manufacturing	4	0	0	0	0	0	**4**	6	0	0	0	0	0	**9**
C223 Knitting Mills	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**0**
C224 Clothing Manufacturing	5	1	0	0	0	0	**6**	12	6	0	0	0	0	**15**
C225 Footwear Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C226 Leather and Leather Product Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C231 Log Sawmilling and Timber Dressing	2	0	1	1	0	0	**4**	3	0	18	30	0	0	**50**
C232 Other Wood Product Manufacturing	12	0	0	0	0	0	**12**	20	0	0	0	0	0	**18**
C233 Paper and Paper Product Manufacturing	1	0	0	0	0	0	**1**	6	0	0	0	0	0	**3**
C241 Printing and Services to Printing	2	0	0	0	0	0	**2**	3	0	0	0	0	0	**6**
C242 Publishing	8	0	0	0	0	0	**8**	9	0	0	0	0	0	**12**

C243 Recorded Media Manufacturing and Publishing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C251 Petroleum Refining	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C252 Petroleum and Coal Product Manufacturing nec	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C253 Basic Chemical Manufacturing	1	0	1	0	0	0	**2**	3	0	12	0	0	0	**12**
C254 Other Chemical Product Manufacturing	2	0	0	0	0	0	**2**	3	0	0	0	0	0	**3**
C255 Rubber Product Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C256 Plastic Product Manufacturing	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**3**
C261 Glass and Glass Product Manufacturing	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**0**
C262 Ceramic Manufacturing	0	0	1	0	0	0	**1**	0	0	15	0	0	0	**15**
C263 Cement, Lime, Plaster and Concrete Product Manufacturing	2	0	0	0	0	0	**2**	6	0	0	0	0	0	**6**
C264 Non-Metallic Mineral Product Manufacturing nec	0	0	1	0	0	0	**1**	0	0	12	0	0	0	**12**
C271 Iron and Steel Manufacturing	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**
C272 Basic Non-Ferrous Metal Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C273 Non-Ferrous Basic Metal Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C274 Structural Metal Product Manufacturing	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**3**
C275 Sheet Metal Product Manufacturing	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**3**
C276 Fabricated Metal Product Manufacturing	15	1	0	0	0	0	**16**	25	9	0	0	0	0	**30**
C281 Motor Vehicle and Part Manufacturing	4	0	0	0	0	0	**4**	9	0	0	0	0	0	**12**
C282 Other Transport Equipment Manufacturing	1	0	0	0	0	0	**1**	3	0	0	0	0	0	**3**
C283 Photographic and Scientific Equipment Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C284 Electronic Equipment Manufacturing	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**3**
C285 Electical Equipment and Appliance Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
C286 Industrial Machinery and Equipment Manufacturing	25	3	2	1	0	0	**31**	45	20	18	30	0	0	**110**
C291 Prefabricated Building Manufacturing	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**

C292 Furniture Manufacturing	7	0	0	0	0	0	**7**	18	0	0	0	0	0	**18**
C294 Other Manufacturing	7	1	0	0	0	0	**8**	12	6	0	0	0	0	**18**
Total Maunfacturing	**117**	**7**	**10**	**10**	**1**	**0**	**145**	**200**	**55**	**140**	**330**	**50**	**0**	**770**
Electricity, Gas and Water Supply														
D361 Electricity Supply	0	1	0	0	0	0	**1**	0	6	0	0	0	0	**6**
D362 Gas Supply	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
D370 Water Supply, Sewerage and Drainage Services	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
Total Electricity, Gas and Water Supply	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**0**	**0**	**0**	**0**	**6**
Construction														
E411 Building Construction	74	3	3	0	0	0	**80**	120	20	40	0	0	0	**170**
E412 Non-Building Construction	8	3	1	0	1	0	**13**	9	20	15	0	80	0	**120**
E421 Site Preparation Services	15	2	3	1	0	0	**21**	18	15	30	40	0	0	**100**
E422 Building Structure Services	18	0	1	0	0	0	**19**	25	0	9	0	0	0	**40**
E423 Installation Trade Services	39	1	1	0	0	0	**41**	70	9	12	0	0	0	**90**
E424 Building Completion Services	34	1	0	2	0	0	**37**	50	6	0	65	0	0	**120**
E425 Other Construction Services	8	0	0	0	0	0	**8**	12	0	0	0	0	0	**12**
Total Construction	**196**	**10**	**9**	**3**	**1**	**0**	**219**	**300**	**70**	**100**	**100**	**80**	**0**	**640**
Wholesale Trade														
F451 Farm Produce Wholesaling	27	2	1	1	0	0	**31**	40	15	12	30	0	0	**95**
F452 Mineral, Metal and Chemical Wholesaling	4	1	0	0	0	0	**5**	12	6	0	0	0	0	**15**
F453 Builders Supplies Wholesaling	5	0	0	0	0	0	**5**	12	0	0	0	0	0	**9**
F461 Machinery and Equipment Wholesaling	16	2	2	0	0	0	**20**	20	15	25	0	0	0	**60**

F462 Motor Vehicle Wholesaling	2	1	0	0	0	0	**3**	3	6	0	0	0	0	**9**
F471 Food, Drink and Tobacco Wholesaling	11	0	0	0	0	0	**11**	12	0	0	0	0	0	**12**
F472 Textile, Clothing and Footwear Wholesaling	2	0	0	0	0	0	**2**	3	0	0	0	0	0	**0**
F473 Household Good Wholesaling	2	0	0	0	0	0	**2**	3	0	0	0	0	0	**3**
F479 Other Wholesaling	14	1	0	0	0	0	**15**	18	6	0	0	0	0	**25**
Total Wholesale Trade	**83**	**7**	**3**	**1**	**0**	**0**	**94**	**120**	**45**	**35**	**25**	**0**	**0**	**230**
Retail Trade														
G511 Supermarket and Grocery Stores	8	1	3	0	1	0	**13**	25	9	35	0	55	0	**120**
G512 Specialised Food Retailing	21	1	1	0	0	0	**23**	40	6	9	0	0	0	**60**
G521 Department Stores	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
G522 Clothing and Soft Good Retailing	3	0	0	0	0	0	**3**	3	0	0	0	0	0	**6**
G523 Furniture, Houseware and Appliance Retailing	6	1	0	0	0	0	**7**	15	6	0	0	0	0	**25**
G524 Recreational Good Retailing	5	0	0	0	0	0	**5**	6	0	0	0	0	0	**9**
G525 Other Personal and Household Good Retailing	26	2	1	0	0	0	**29**	45	12	15	0	0	0	**70**
G526 Household Equipment Repair Services	4	0	0	0	0	0	**4**	3	0	0	0	0	0	**3**
G531 Motor Vehicle Retailing	6	0	0	0	0	0	**6**	9	0	0	0	0	0	**9**
G532 Motor Vehicle Services	46	5	1	1	0	0	**53**	100	30	12	25	0	0	**170**
Total Retail Trade	**125**	**10**	**6**	**1**	**1**	**0**	**143**	**250**	**70**	**70**	**25**	**55**	**0**	**470**
Accommodation, Cafes and Restaurants														
H571 Accommodation	27	1	3	0	0	0	**31**	50	6	45	0	0	0	**110**
H572 Pubs, Taverns and Bars	6	5	1	0	0	0	**12**	25	35	18	0	0	0	**75**
H573 Cafes and Restaurants	17	5	3	1	0	0	**26**	50	40	40	25	0	0	**150**
H574 Clubs (Hospitality)	3	0	0	0	0	0	**3**	6	0	0	0	0	0	**3**
Total Accommodation, Cafes and Restaurants	**53**	**11**	**7**	**1**	**0**	**0**	**72**	**130**	**75**	**100**	**25**	**0**	**0**	**340**

Transport and Storage														
I611 Road Freight Transport	31	2	1	1	1	0	**36**	70	12	12	40	60	0	**200**
I612 Road Passenger Transport	15	1	3	0	0	0	**19**	25	6	35	0	0	0	**65**
I620 Rail Transport	1	0	0	0	0	0	1	0	0	0	0	0	0	0
I630 Water Transport	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I640 Air and Space Transport	2	0	0	0	0	0	2	0	0	0	0	0	0	3
I650 Other Transport	1	0	0	0	0	0	1	3	0	0	0	0	0	3
I661 Services to Road Transport	1	0	0	0	0	0	1	3	0	0	0	0	0	0
I662 Services to Water Transport	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
I663 Services to Air Transport	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
I664 Other Services to Transport	6	0	0	0	0	0	**6**	12	0	0	0	0	0	**12**
I670 Storage	3	0	0	0	0	0	3	6	0	0	0	0	0	6
Total Transport and Storage	**60**	**3**	**4**	**1**	**1**	**0**	**69**	**120**	**20**	**50**	**40**	**55**	**0**	**290**
Communication Services														
J711 Postal and Courier Services	22	0	0	0	0	0	**22**	35	0	0	0	0	0	**35**
J712 Telecommunication Services	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
Total Communication Services	**22**	**0**	**0**	**0**	**0**	**0**	**22**	**35**	**0**	**0**	**0**	**0**	**0**	**35**
Finance and Insurance														
K731 Central Bank	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
K732 Deposit Taking Financiers	3	1	0	0	0	0	**4**	9	9	0	0	0	0	**18**
K733 Other Financiers	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
K734 Financial Asset Investors	24	0	0	0	0	0	**24**	0	0	0	0	0	0	**3**
K741 Life Insurance and Superannuation Funds	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**

K742 Other Insurance	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
K751 Services to Finance and Investment	7	0	0	0	0	0	**7**	3	0	0	0	0	0	**0**
K752 Services to Insurance	8	0	0	0	0	0	**8**	12	0	0	0	0	0	**12**
	42	**1**	**0**	**0**	**0**	**0**	**43**	**20**	**9**	**0**	**0**	**0**	**0**	**35**
Property and Business Services														
L771 Property Operators and Developers	319	0	0	0	0	0	**319**	45	0	0	0	0	0	**50**
L722 Real Estate Agents	23	0	0	0	0	0	**23**	25	0	0	0	0	0	**25**
L773 Non-Financial Asset Investors	14	0	0	0	0	0	**14**	9	0	0	0	0	0	**9**
L774 Machinery and Equipment Hiring and Leasing	20	0	0	0	0	0	**20**	20	0	0	0	0	0	**18**
L781 Scientific Research	4	1	1	0	1	3	**10**	3	6	15	0	50	550	**630**
L782 Technical Services	21	1	0	1	0	0	**23**	30	9	0	35	0	0	**65**
L783 Computer Services	16	0	0	0	0	0	**16**	20	0	0	0	0	0	**18**
L784 Legal and Accounting Services	10	2	0	0	0	0	**12**	15	12	0	0	0	0	**25**
L785 Marketing and Business Management Services	46	2	1	1	0	0	**50**	65	15	12	45	0	0	**140**
L786 Other Business Services	24	2	2	2	1	0	**31**	40	12	20	85	50	0	**210**
Total Property and Business Services	**497**	**8**	**4**	**4**	**2**	**3**	**518**	**270**	**55**	**45**	**160**	**100**	**550**	**1190**
Government Administration and Defence														
M811 Government Administration	6	1	2	0	1	0	**10**	12	6	25	0	55	0	**110**
M812 Justice	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
M813 Foreign Government Representation	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
M820 Defence	1	0	0	0	0	1	**2**	0	0	0	0	0	890	**890**
Total Government Administration and Defence	**7**	**1**	**2**	**0**	**1**	**1**	**12**	**12**	**6**	**25**	**0**	**60**	**890**	**990**

Education														
N841 Preschool Education	19	2	1	0	0	0	**22**	30	12	12	0	0	0	**55**
N842 School Education	7	5	9	2	2	0	**25**	25	40	120	70	140	0	**390**
N843 Post School Education	0	1	0	0	0	1	**2**	0	6	0	0	0	780	**780**
N844 Other Education	6	2	0	0	0	0	**8**	6	15	0	0	0	0	**18**
Total Education	**32**	**10**	**10**	**2**	**2**	**1**	**57**	**60**	**70**	**140**	**70**	**130**	**780**	**1250**
Health and Community Services														
O861 Hospitals and Nursing Homes	0	1	2	0	0	0	**3**	0	6	20	0	0	0	**35**
O862 Medical and Dental Services	15	1	1	0	0	0	**17**	30	6	12	0	0	0	**50**
O863 Other Health Services	19	0	1	0	0	0	**20**	20	0	12	0	0	0	**35**
O864 Veterinary Services	4	4	0	0	0	0	**8**	9	30	0	0	0	0	**40**
O871 Child Care Services	2	4	1	0	0	0	**7**	3	30	9	0	0	0	**45**
O872 Community Care Services	3	1	3	0	0	0	**7**	6	6	30	0	0	0	**45**
Total Health and Community Services	**43**	**11**	**8**	**0**	**0**	**0**	**62**	**70**	**85**	**90**	**0**	**0**	**0**	**250**
Cultural and Recreational														
P911 Film and Video Services	4	0	0	0	0	0	**4**	3	0	0	0	0	0	**3**
P912 Radio and Television Services	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
P921 Libraries	2	0	0	0	0	0	**2**	6	0	0	0	0	0	**6**
P922 Museums	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**
P923 Parks and Gardens	0	0	0	1	0	0	**1**	0	0	0	20	0	0	**20**
P924 Arts	4	0	0	0	0	0	**4**	3	0	0	0	0	0	**3**
P925 Services to the Arts	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
P931 Sport	76	2	1	1	0	0	**80**	110	12	12	20	0	0	**150**
P932 Gambling Services	1	0	0	0	0	0	**1**	0	0	0	0	0	0	**0**
P933 Other Recreation Services	9	0	0	0	0	0	**9**	12	0	0	0	0	0	**12**

Total Cultural and Recreational	**97**	**2**	**1**	**2**	**0**	**0**	**102**	**130**	**12**	**12**	**40**	**0**	**0**	**190**
Personal and Other Services														
Q951 Personal and Household Goods Hiring	4	0	0	0	0	0	**4**	9	0	0	0	0	0	**9**
Q952 Other Personal Services	51	0	1	0	0	0	**52**	70	0	15	0	0	0	**85**
Q961 Religious Organisations	4	0	0	0	0	0	**4**	0	0	0	0	0	0	**3**
Q962 Interest Groups	20	2	0	0	0	0	**22**	3	15	0	0	0	0	**15**
Q963 Public Order and Safety Services	26	0	0	0	0	1	**27**	35	0	0	0	0	230	**260**
Q970 Private Households Employing Staff	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**
Total Personal and Other Services	**105**	**2**	**1**	**0**	**0**	**1**	**109**	**120**	**15**	**15**	**0**	**0**	**230**	**380**
TOTAL ALL INDUSTRIES	**1694**	**98**	**71**	**26**	**10**	**6**	**1905**	**2100**	**670**	**890**	**840**	**580**	**2450**	**7540**

Notes:

(1) Full-time equivalent persons engaged (FTE) equals the sum of the full-time employees and working proprietors plus half the part-time employees and working proprietors.

(2) Employment figures are rounded, and discrepancies may occur between sums of component items and totals.

(3) Coverage is of all Economically Significant Enterprises (ESE). These are generally defined as enterprises with greater than $30,000 annual GST expenses or sales, or enterprises in a GST exempt industry.

Source: Statistics New Zealand, Annual Business Frame Update Survey