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# Regional migration to Selwyn District

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## Report overview

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This report provides a detailed analysis of regional migration to Selwyn.

Regional migration is defined as internal movements of people from other parts of New Zealand to Selwyn.

The report investigates where in New Zealand these regional migrants have come from (or left to) and the age profile of migrants compared to the general population of Selwyn. Mobility of existing Selwyn residents within Selwyn are also considered. Some of the rationale of these migratory patterns are discussed.

The period covered for the regional migration insight in this report is the four years to June 2017.

### Key findings

The key findings of the report are:

- Selwyn's population growth was the fastest in the country over the four years to June 2017. Population growth averaged 6.2%pa over the period, compared to 1.9%pa nationally.
- Approximately 59% of Selwyn's population growth was driven by regional migration from other parts of New Zealand.
- Selwyn District on average gained a net 1,865 people per annum from other parts of New Zealand over the four years to June 2017.
- Most migrants were from Christchurch City as people sought safe and modern housing options around the city fringe in the wake of the earthquakes.
- Auckland was the second largest contributor to regional migration in Selwyn District.
- The other key sources of regional migration to Selwyn were from surrounding districts and other parts of the South Island.
- Waimakariri District was the only territorial authority to which Selwyn had average net migration loses of 10 or more people per annum.
- Net regional migration to Selwyn is characterised by high net inflows of young adults and their children.
- Selwyn experienced net regional migration loses to other areas for people aged over 80.
- Selwyn residents had relatively low mobility within the district. Approximately 5.8% of Selwyn residents moved within Selwyn in 2017. By comparison, 9.6% of people on average across New Zealand moved within the territorial authority in which they already resided.

### Data sources

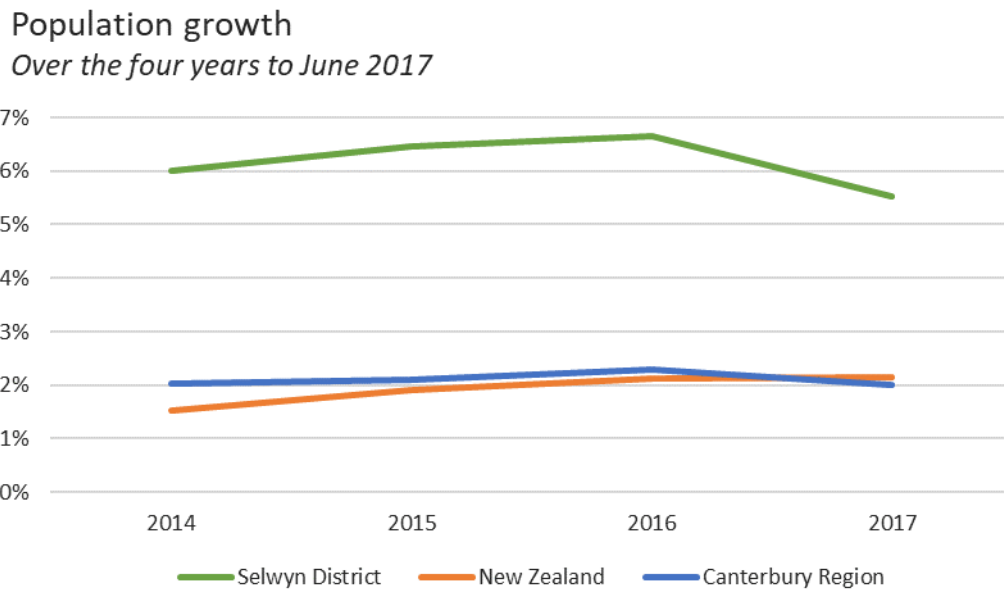
Net regional migration has been estimated by analysing flows of people in Statistics New Zealand's experimental internal migration dataset. More details of data sources can be found in the technical appendix to the report.

## Explaining Selwyn's population growth

Selwyn's population increased from 46,700 to 59,300 over the four years to June 2017, at an average growth rate of 6.2%pa.

By comparison, population growth averaged 1.9%pa nationally and 2.1%pa across Canterbury over the same period.

**Graph 1**



Selwyn's population growth was the fastest in the country. The next fastest growing territorial authority was Queenstown Lakes District with 5.7%pa population growth.

## Regional migration the key contributor

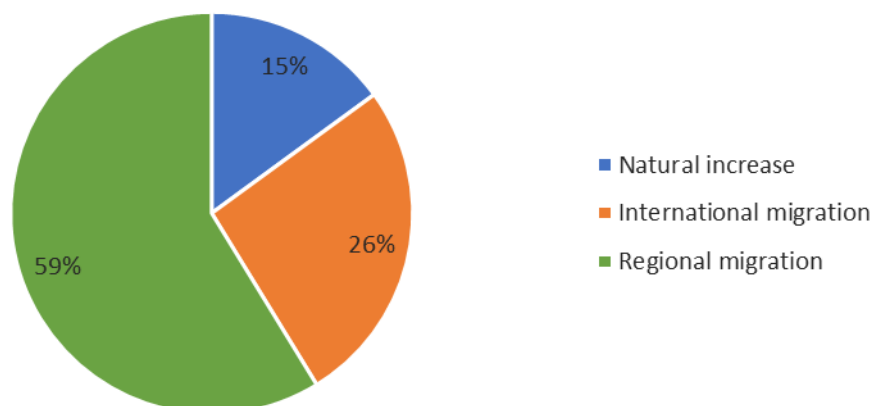
Regional migration was the key contributor to Selwyn's population growth.

In this report we define regional migration as net flows of people to Selwyn from all other parts of New Zealand. This concept is sometimes called internal migration.

An analysis of these internal migration movements shows that 59% of the increase in Selwyn's population over the four years to June 2017 was due to regional migration from other parts of New Zealand.

**Graph 2 – Contributions to population growth in Selwyn District**

Contributions to population growth  
Over the four years to June 2017



Selwyn's cumulative net regional migration gain from other parts of New Zealand over this four-year period was almost 7,500 people.

Table 1 shows that net regional migration flows to Selwyn ranged from 1,620 people in 2014 to 2,154 people in 2015. Selwyn District on average gained a net 1,865 people per annum from other parts of New Zealand over the four years to June 2017.

**Table 1 – Net regional migration to Selwyn District from other parts of New Zealand****Net regional migration***People from all other parts of NZ, June years*

Year	Net migration
2014	1,620
2015	2,154
2016	1,914
2017	1,773
Average (2014-17)	1,865

By comparison, neighbouring territorial authorities have not gained as many regional migrants. Table 2 shows the average annual net regional migration levels for the territorial authorities that border Selwyn District.

**Table 2 – Net regional migration flows for territorial authorities that neighbour Selwyn District****Net regional migration***From all other parts of NZ, June years*

Year	Selwyn District	Christchurch City	Waimakariri District	Ashburton District
2014	1,620	-2,115	1,215	120
2015	2,154	-1,314	960	30
2016	1,914	-474	600	-159
2017	1,773	-453	627	-180
Average (2014-17)	1,865	-1,089	851	-47

## Where are Selwyn residents moving from and to?

This section of the report explores Selwyn District's regional migration gain in more detail by looking at the key parts of New Zealand which the migrants have come from.

Although Selwyn has experienced a net regional migration gain from most territorial authorities, we also explore places that Selwyn has lost residents to.

A full summary table of net regional migration flows with Selwyn on a territorial authority by territorial authority basis is contained in Table 5.

### Key sources of regional migrants

The following table summarises the ten territorial authorities from which Selwyn District has gained the most regional migrants over the four years to June 2017.

**Table 3 – Key sources of regional migration to Selwyn District**

<b>Top 10: Net regional migration gains</b>		
<i>Regional migration gain from selected areas</i>		
<b>Net gain from:</b>	<b>Average migration 2014-17 (pa)</b>	<b>Total migration 2014-17</b>
Christchurch City	1,412	5,649
Auckland	129	516
Timaru District	29	114
Ashburton District	28	111
Buller District	25	99
Invercargill City	20	78
Dunedin City	17	69
Lower Hutt City	17	66
Tasman District	15	60
Hurunui District	14	54

Not surprisingly, most migrants were from Christchurch City as people sought safe and modern housing options around the city fringe in the wake of the earthquakes.

Auckland was the second largest contributor to regional migration in Selwyn District. Severely unaffordable housing has pushed people from Auckland into regional New Zealand. Auckland lost an average of 8,231 people per annum to other parts of New Zealand over the four years to June 2017.

The other key sources of regional migration to Selwyn were from surrounding districts and other parts of the South Island. These gains were sustained by strong employment prospects in Selwyn and neighbouring Christchurch City.

### Where Selwyn lost residents to in New Zealand

The following table summarises the ten territorial authorities that Selwyn lost the most migrants to over the four years to June 2017.

Waimakariri District was the only territorial authority to which Selwyn had average net migration losses of 10 or more people per annum. This trend may be due to Waimakariri's relatively more affordable

existing housing stock, while still being close enough to Selwyn for the regional migrant to maintain existing social and professional networks.

**Table 4 – Key destinations for regional migration from Selwyn District**

**Bottom 10: Net regional migration losses**

*Regional migration loss from selected areas*

<b>Net loss to:</b>	<b>Average migration 2014-17 (pa)</b>	<b>Total migration 2014-17</b>
Waimakariri District	-10	-39
Marlborough District	-9	-36
Queenstown-Lakes District	-6	-24
Far North District	-5	-18
Mackenzie District	-4	-15
Tauranga City	-4	-15
Rangitikei District	-2	-9
Tararua District	-2	-9
Manawatu District	-2	-6
Opotiki District	-2	-6



Table 5 – Net regional migration flows to Selwyn District from other territorial authorities

<b>Net regional migration</b>					
<i>Regional migration from other territorial authorities</i>					
<b>Net migration from:</b>	<b>Average migration 2014-17 (pa)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Christchurch City	1,412	1,491	1,566	1,251	1,341
Auckland	129	30	135	102	249
Timaru District	29	21	21	18	54
Ashburton District	28	-24	51	63	21
Buller District	25	24	36	24	15
Invercargill City	20	-24	24	12	66
Dunedin City	17	12	15	30	12
Lower Hutt City	17	33	21	6	6
Tasman District	15	0	24	21	15
Hurunui District	14	3	18	18	15
Grey District	13	12	36	3	0
Southland District	13	21	12	12	6
Waikato District	12	12	6	21	9
Hamilton City	11	15	9	24	-3
Clutha District	11	-3	6	21	18
Palmerston North City	11	3	12	30	-3
Waitaki District	11	-9	36	21	-6
Hastings District	9	30	6	-9	9
Rotorua District	9	6	-3	21	12
Horowhenua District	8	6	12	3	9
Kapiti Coast District	8	-6	-6	12	30
Porirua City	8	-3	18	3	12
Wellington City	8	45	-3	-3	-9
Whangarei District	8	0	21	0	9
Waimate District	7	9	-3	15	6
Westland District	7	-9	-9	42	3
Central Otago District	6	-3	24	9	-6
Napier City	6	3	12	3	6
Upper Hutt City	6	12	-6	0	18
Whanganui District	6	12	12	3	-3
Central Hawke's Bay District	5	12	0	0	6
Taupo District	5	9	9	3	-3
Gisborne District	4	0	6	12	-3
South Waikato District	4	0	6	0	9
Hauraki District	3	-3	3	9	3
Ruapehu District	3	12	3	6	-9
Stratford District	3	-3	3	3	9
Waipa District	3	3	6	0	3
Matamata-Piako District	2	-6	0	6	9
Carterton District	2	0	0	9	-3
Kaipara District	2	9	6	0	-9
Nelson City	2	-9	0	9	6
Whakatane District	2	3	-3	6	0
South Taranaki District	1	-3	6	6	-6
Kaikoura District	0	-3	-3	6	0
Masterton District	0	0	0	3	-3
New Plymouth District	0	9	9	-12	-6
Otorohanga District	0	-3	3	3	-3
South Wairarapa District	0	-6	0	9	-3
Gore District	-1	-9	3	-6	9
Kawerau District	-1	0	0	-3	0
Thames-Coromandel District	-1	0	0	-3	0
Wairoa District	-1	0	3	0	-6
Western Bay of Plenty District	-1	-3	6	0	-6
Manawatu District	-2	-9	-9	21	-9
Opotiki District	-2	-6	0	0	0
Waitomo District	-2	-6	9	-3	-6
Rangitikei District	-2	3	-3	-9	0
Tararua District	-2	6	-3	3	-15
Mackenzie District	-4	3	-6	3	-15
Tauranga City	-4	-3	-12	15	-15
Far North District	-5	12	0	-18	-12
Queenstown-Lakes District	-6	-18	12	-12	-6
Marlborough District	-9	-36	-15	24	-9
Waimakariri District	-10	-54	12	48	-45
<b>Total migration into Selwyn</b>	<b>1,865</b>	<b>1,620</b>	<b>2,154</b>	<b>1,914</b>	<b>1,773</b>

## At what age are people migrating regionally to Selwyn?

This section considers the age profile of Selwyn's net migration. The analysis identifies whether migrants are of working age, and if they are older or younger than Selwyn's existing population.

Rates of net regional migration to Selwyn by 5-year age group, measured as a percentage of the total population in Selwyn, can vary widely. Graph 3 shows that net regional migration to Selwyn is characterised by high net inflows of young adults and their children. Regional migration gradually tapers off in middle age and into retirement. Selwyn experiences net regional migration losses to other areas for people aged over 80.

**Graph 3**

**Net regional migration to Selwyn by 5-year age group**  
*Average annual migration 2014-17 as % of 2017 population*



The median age of a regional migrant to Selwyn over the four years to June 2017 was in the 25-29 year age bracket. By comparison the median age of residents in Selwyn as at June 2017 was 37 years old.

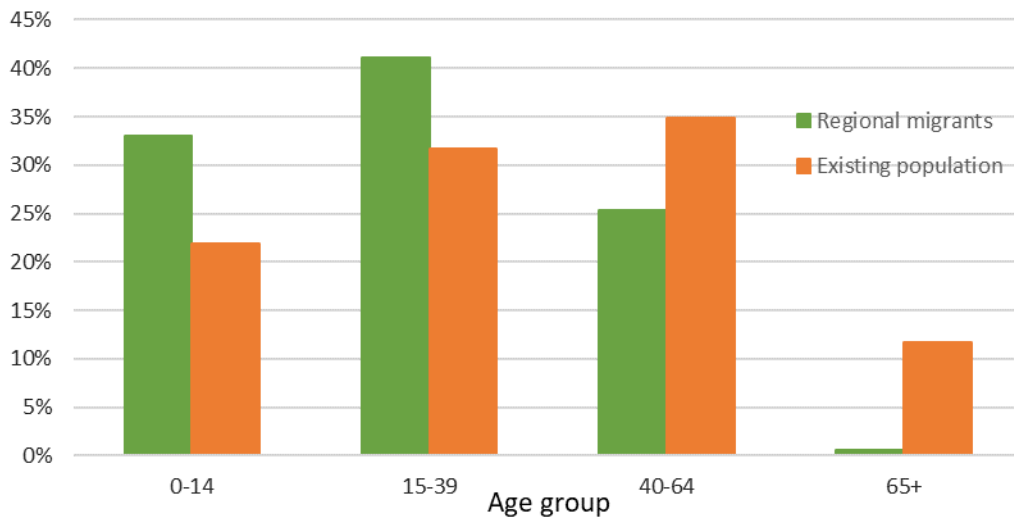
The younger age profile of regional migrants is adding capacity to Selwyn's workforce. Graph 4 shows that 41% of regional migrants to Selwyn across the 2014-2017 period were in the first half of their working life (15-39 years). By comparison, this cohort represented just 32% of Selwyn's existing population in 2017. People of this age have many productive working years ahead of them and so gaining these regional migrants is helping ensure replacement of older workers who are nearing retirement.

Graph 4 also shows that regional migration is a key source of demand for schooling in Selwyn District. One third (33%) of regional migrants to Selwyn are aged 0-14 years, compared to 22% of existing residents in Selwyn sitting in this age bracket. New schools have opened up in the area as a result of this growth. A challenge for the future will be retaining these people after their school years, or enticing those that leave for tertiary education or life experience to return to start their own families.

**Graph 4 – Age profile of regional migration to Selwyn compared to Selwyn’s existing population**

Are migrants more likely to be of working age?

*Regional migrants & existing population split into age groups*



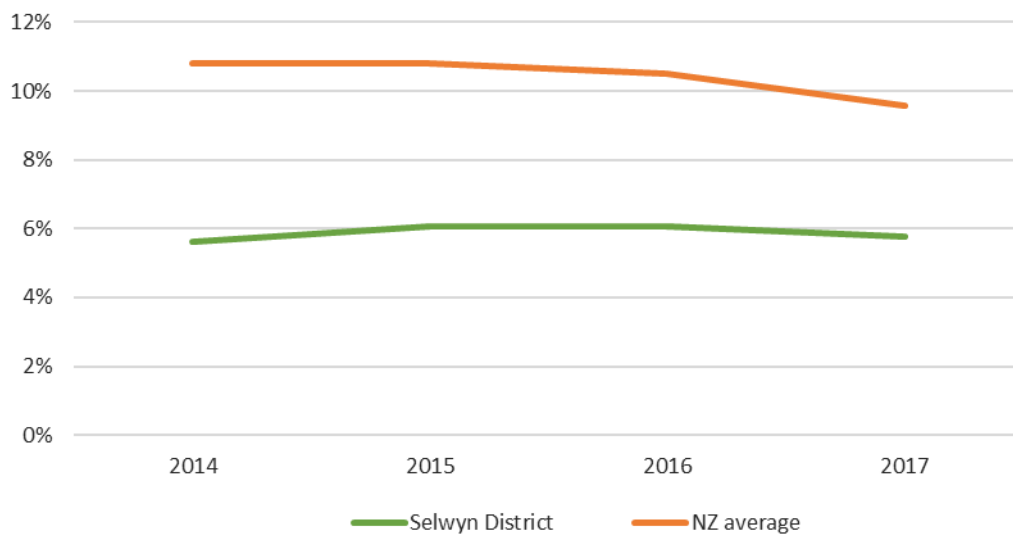
## How likely are people to move within Selwyn?

This section takes a slightly different tack. Rather than considering migration flows with other parts of New Zealand, here we investigate the likelihood of existing residents of Selwyn to move within Selwyn.

The data shows that Selwyn residents have relatively low mobility within the district (see Graph 5). In 2017, approximately 5.8% of Selwyn residents moved within Selwyn. By comparison, the average across New Zealand was 9.6% of people moving within the territorial authority in which they already resided.

**Graph 5**

### People also move within the same territorial authority *% of population moving within the same territorial authority*



The propensity of Selwyn residents to move within the district is also lower than neighbouring areas as evident by Table 6.

**Table 6**

### Movements of people within the same territorial authority

*Proportion of the population who move within the same territorial authority in a given year*

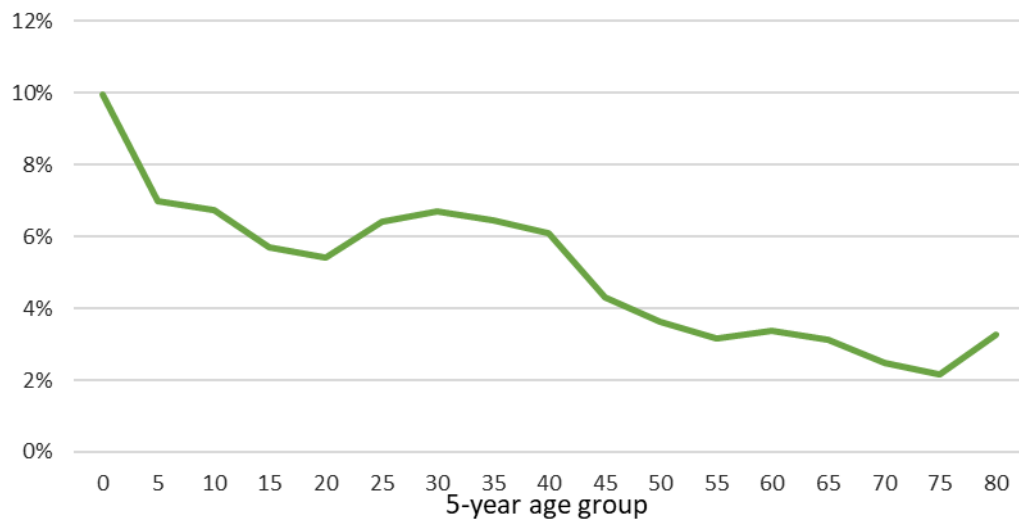
Year	Selwyn District	Christchurch City	Waimakariri District	Ashburton District
2014	5.6%	13.1%	7.3%	11.0%
2015	6.1%	14.6%	7.5%	11.9%
2016	6.1%	14.8%	7.6%	11.4%
2017	5.8%	13.9%	7.2%	10.2%
Average (2014-17)	5.9%	14.1%	7.4%	11.1%

An analysis of mobility within Selwyn by age group shows that young families are most likely to move within the district (see Graph 6).

The likelihood of residents moving within Selwyn generally decreases as people age, but pushes higher again for people aged over 80. The peak among elderly is likely to be related to downsizing homes or moving into retirement villages and aged-care facilities.

Graph 6

People moving within Selwyn by 5-year age group  
*Annual moves within Selwyn 2014-17 as % of 2017 population*



# Technical appendix

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## About the regional migration data source

Net regional migration has been estimated by analysing flows of people in Statistics New Zealand's experimental internal migration dataset.

The data has ultimately been extracted from the Integrated Data Infrastructure (IDI) for the period 2014-17. The IDI is a large administrative dataset that links together several government sources into a centralised database about people and households. The data in IDI is being used by Statistics NZ to patch up Census 2018.

Using the IDI, Statistics NZ has been able to form detailed population estimates, with characteristics of individuals also available based on the sorts of personal details consistently captured by government forms. Administrative data performs well for core demographic details such as age and sex, while residential addresses are also captured in the data.

When an individual engages with a government service in New Zealand (such as health care, education, or tax services), or when a New Zealand resident notifies an agency of an address change, the address information is updated in an individual's address history in the IDI. These observed changes in residential address across all individuals form the basis for estimating migration internally within New Zealand.

The sources in IDI that are used for collecting information on residential address and address changes are:

- 2013 Census (Stats NZ)
- tax registrations (Inland Revenue)
- National Health Index and Primary Health Organisation enrolments (Ministry of Health)
- working age benefits and superannuation (Ministry of Social Development)
- primary and secondary school rolls (Ministry of Education)
- ACC claims (Accident Compensation Corporation).

For confidentiality reasons Statistics NZ has released its most detailed internal migration on movements of people between places by sex and age bracket into groupings of three people. The provision of this data allows for granular analysis of regional migration, but can cause rounding errors in aggregate.

## About the population data source

The estimated resident population of an area in New Zealand is an estimate of all people who usually live in that area at a given date. Estimates have been sourced from Statistics New Zealand.

The estimated resident population used in this report spans the June 2013 to 2017 years and is based on the 2013 Census usually resident population count, updated using IDI for the following:

- net census undercount (based on the 2013 Post-enumeration Survey)
- residents temporarily overseas on census night
- births, deaths, and net migration between census night and the date of the estimate
- reconciliation with demographic estimates at ages 0–9 years.

The estimated resident population is not directly comparable with the census usually resident population count because of these adjustments.