

Population Growth

Key Information	Why is this Useful?	What is Happening?
Overall size of Christchurch City's resident population.	The overall size of a population has a major impact on the wider environment. It directly affects land use patterns, air quality, solid waste generation and water quality. It can also influence the size and composition of the labour force, place pressure on existing social services and recreational facilities and alter demand for goods and services.	● At June 1999 Christchurch City had an estimated 324,300 residents.
Annual rate of population growth.	The rate at which a population grows can potentially affect levels of resource use and demand for goods and services.	↓ Although the City's population is growing, the rate of growth has slowed. In 1999 the population grew by 0.5 per cent compared with 0.7 per cent in 1998 and 1.2 per cent in 1997.
Size of the resident population of districts immediately adjoining Christchurch ie Waimakariri District, Selwyn District, Banks Peninsula District.	The populations of districts surrounding Christchurch may have a significant impact on the City's natural, physical and social resources and contribute to the local economy.	● At June 1999 the combined population of Christchurch's neighbouring districts was 70,700 people.
Level of net external migration.	Net external migration is a key component of population growth and is largely responsible for variations in the rate of population growth in Christchurch during the 1990s.	↓ Christchurch's net migration has steadily declined since the mid-1990s, dropping from a net gain of 1,895 in 1996 to a net loss of 987 in 1999.
Projected resident population.	Population projections give an indication of future changes in the number of people living in Christchurch. This information can be used to help assess the demand for resources such as housing, land, water and related services required to meet the needs of future residents.	↑ The City's population is projected to reach 358,000 people by 2021.

Other Related Sections: Part 1: The City's People, Part 2: The City's Natural and Physical Environment, Part 3: The City's Economy.

The following section focuses on the changing size of Christchurch City's population. It looks at overall population growth during the 1990s and the influence of migration on growth rates. It provides information on expected changes to the size of the population and number of households over the next 20 years. Finally, this section gives details of how the Christchurch City Council intends to manage population growth in the City over the next 10 to 20 years.

Population Growth 1991 to 1999

At June 1999 Christchurch had an estimated 324,300 residents (Table 1.1). The City had the largest population of all the territorial local authorities in the South Island and the second largest population in New Zealand. It contained about 8.5 per cent of the country's 3.8 million residents and 35 per cent of the 926,100 people living in the South Island.

Table 1.1 Christchurch City Estimated Usually Resident Population

	1991 Census March	1992 Estimated March	1993 Estimated March	1994 Estimate March	1995 Estimated March	1996 Census March	1996 Estimated June (1)	1997 Estimated June (1)	1998* Estimated June (1)	1999 Estimated June (1)
Resident Population	289,077	291,200	294,700	299,900	306,000	309,030	316,700	320,500	322,600	324,300
Numeric Change Over 1 Year	—	2,123	3,500	5,200	6,100	3,030	—	3,800	2,100	1,700
% Annual Change	—	.70	1.2	1.8	2.0	1.0	—	1.2	0.7	0.5

(1) Adjusted for the estimated undercount at the 1996 Census and for the estimated number of NZ residents temporarily overseas.

* Revised.

Source: Statistics New Zealand, *Census of Population and Dwellings 1991-1996* and *Annual Sub-national Population Estimates 1996-1999*.

Between 1991 and 1996 Christchurch recorded the third highest growth of New Zealand's cities behind Auckland City and Manukau. During this period the City grew by around 20,000 people or 6.9 per cent, while annual growth averaged 1.3 per cent or about 4,000 people (Table 1.2 and 1.3).

In contrast to this relatively high population growth recorded during the early to mid-1990s, the rate of increase has slowed. During 1999 the City's population increased by 1,700 (0.5 per cent) compared with 2,100 (0.7 per cent) in 1998 and 3,800 (1.2 per cent) in 1997¹ (Table 1.1). Despite lower growth in recent years, latest levels remain higher than those recorded during the 1980s.

The pattern of population growth in Christchurch during the 1990s is consistent with national trends. New Zealand's population grew by 7.2 per cent in the five years to 1996, or 1.4 per cent annually. However, annual growth declined to 0.5 per cent in 1999. Similarly, population growth in all the main cities throughout New

	1981-1986	1986-1991	1991-1996
Usually Resident Population	282,216	289,077	309,030
Numeric Change Over 5 Years	6,243	6,861	19,953
% Change over 5 Years	2.3	2.4	6.9
% Annual Average Change	0.4	0.5	1.3

Source: Statistics New Zealand, Census of Population and Dwellings 1981-1996.

Zealand has also slowed significantly (Table 1.3 and 1.4).

Cities	1986 Population	1991 Population	1996 Population	Increase or Decrease 1986 - 1991 Number	Increase or Decrease 1986 - 1991 %	Increase or Decrease 1991 - 1996 Number	Increase or Decrease 1991 - 1996 %
Auckland	294,163	306,208	345,768	12,045	4.1	39,560	12.9
Manukau	206,823	225,998	254,278	19,175	9.3	28,280	12.5
Christchurch	282,216	289,077	309,030	6,863	2.4	19,953	6.9
North Shore	144,808	152,647	172,164	7,839	5.4	19,517	12.8
Waitakere	123,308	137,001	155,565	13,693	11.1	18,564	13.6
Wellington	147,711	148,439	157,646	728	0.5	9,207	6.2
Hamilton	94,524	99,414	108,428	4,890	5.2	9,014	9.1
Nelson	35,160	36,457	40,240	1,297	3.7	3,783	10.4
Dunedin	114,092	114,503	118,143	411	0.4	3,640	3.2
Napier	51,764	51,286	53,462	-478	-0.9	2,176	4.2
Palmerston	66,382	69,537	73,095	3,155	4.8	3,558	5.1
Lower Hutt	95,230	94,882	95,872	-348	-0.4	990	1
Upper Hutt	36,756	36,881	36,716	125	0.3	-165	-0.4
Porirua	45,929	46,543	46,626	614	1.3	83	0.2
Invercargill	57,206	55,708	53,209	-1,498	-2.6	-2,499	-4.5
New Zealand	3,263,284	3,373,927	3,618,302	110,643	3.4	244,375	7.2

Source: Statistics New Zealand, Census of Population and Dwellings, 1986-1996.

¹ Population estimates have been calculated using a 1996 base population which takes into account those people who were out of the country temporarily on census night, and the census undercount which was highlighted by the 1996 Post Enumeration Survey (an average of 1.2 per cent for the total New Zealand population). The base population has been further adjusted with birth, death and migration figures to enable a change in the reference date from March to June.

Pre 1996 estimates and census counts used in earlier Christchurch City Update reports (and elsewhere in this report) have been based on the resident population on census night with no allowance made for residents temporarily overseas or a possible census undercount. The change in the estimate methodology essentially means that estimates produced prior to 1996 and census counts are not directly comparable with the latest figures. However, it is possible to compare annual growth rates.

PART 1. THE CITY'S PEOPLE

Table 1.4 Change in the Usually Resident Population of New Zealand's Cities, 1996-1999 (1)(2)

Cities	Adjusted Population at March 1996	Estimated Population at 30 June 1996 (3)	Estimated Population at 30 June 1997 (3)	Estimated Population at 30 June 1998 (3)	Estimated Population at 30 June 1999	Annual Rate of Population Change 1998-1999 Number	Annual Rate of Population Change 1998-1999 Per cent
Auckland	357,400	361,900	372,500	377,800	381,800	4,000	1.1
Manukau	262,600	264,200	271,300	277,300	281,700	4,400	1.6
Waitakere	159,500	160,200	164,200	167,500	170,700	3,200	1.9
North Shore	177,600	178,400	182,300	185,700	187,700	2,000	1.1
Christchurch City	315,900	316,700	320,500	322,600	324,300	1,700	0.5
Hamilton	110,900	111,100	113,700	115,600	117,100	1,500	1.3
Wellington	162,300	162,700	164,600	165,800	166,800	1,000	0.6
Nelson	41,000	41,000	41,400	41,400	41,400	-	0.0
Napier	54,500	54,600	54,800	54,800	54,600	-200	-0.4
Palmerston North	74,600	74,900	75,000	74,900	75,200	300	0.4
Lower Hutt	98,200	98,300	98,600	98,500	98,200	-300	-0.3
Porirua	47,800	47,800	47,800	47,700	47,600	-100	-0.2
Upper Hutt	37,500	37,500	37,500	37,400	37,300	-100	-0.3
Dunedin	120,400	120,300	120,300	119,000	119,700	-200	-0.2
Invercargill	54,100	54,000	53,100	51,900	50,800	-1,100	-2.1
New Zealand	3,703,000	3,714,100	3,761,100	3,791,900	3,811,000	19,100	0.5

(1) Figures have been rounded.

(2) Adjusted for the estimated undercount at the 1996 Census and for the estimated number of NZ residents temporarily overseas.

(3) Revised.

Source: Statistics New Zealand, Annual Sub-national Population Estimates 1996-1999.

Growth in Christchurch City's Neighbouring Districts

Christchurch City is bounded by Waimakariri District to the north, Banks Peninsula District to the south-east and Selwyn District to the west (Figure 1.1). These territorial local authorities had a combined population of 70,700 at June 1999 (Table 1.5).

Between 1991 and 1996 the combined populations of these areas increased by 15.2 per cent from 56,178 to 64,711 people. This was a growth rate of about 3 per cent annually, a higher rate than that experienced in Christchurch City at the same time (Table 1.2 and 1.6).

Like Christchurch, the annual rate of population growth in the surrounding districts has reduced in recent years, dropping to 2.1 per cent in 1999. However, this is still higher than the rate recorded in Christchurch at the same time. Current growth is mainly concentrated in the Waimakariri and Selwyn Districts, reflecting substantial building activity in these areas in recent years.

Over the next 20 years the combined population of Christchurch's neighbouring districts is expected to reach about 90,000 people (medium projection) (Figure 1.2). The overall rate of growth in these areas during this period is expected to exceed that of Christchurch. However, like the City, this will gradually ease, declining from 1.3 per

cent annually between 2001 and 2006 to just under 1 per cent between 2016 and 2021.

Fig 1.1 Christchurch City and Neighbouring Districts



Source: Statistics New Zealand.

Table 1.5 Usually Resident Population of Christchurch's Neighbouring Districts (1)

District	1996 Estimated June	1997 Estimated June	1998 Estimated June (2)	1999 Estimated June
Selwyn	25,400	26,200	26,800	27,400
Waimakariri	32,900	33,700	34,600	35,400
Bank Peninsula	7,730	7,730	7,800	7,900
Combined Total	66,030	67,630	69,200	70,700
Annual Numeric Change		1,600	1,570	1,500
Annual % Change		2.4	2.5	2.1

(1) Adjusted for the estimated undercount at the 1996 Census and for the estimated number of NZ residents temporarily overseas.

(2) Revised

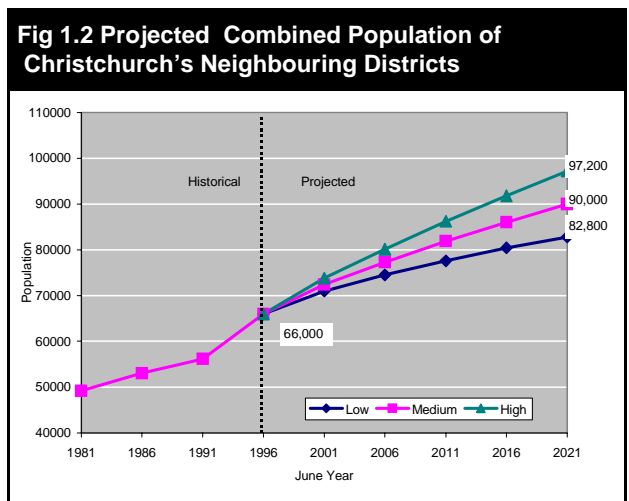
Source: Statistics New Zealand, Annual Sub-national Population Estimates 1996-1999.

Net External Migration

Net external migration² (from overseas) was largely responsible for variations in the rate of population growth in Christchurch during the 1990s. The City's net migration grew steadily during the early to mid-1990s, peaking at 1,895 in 1996. Between 1992 and 1997 net migration contributed over 8,000 people to the City's population. During the same period New Zealand's population increased by around 99,000 as a result of net migration (Table 1.7).

Over the last few years, however, there has been a substantial turnaround in the migration balance, both locally and nationally, resulting in lower overall population growth. During the year to March 1998, Christchurch had a net external migration loss of 508 people and a further net loss of 987 people in 1999. New Zealand-wide, numbers dropped to 2,707 in 1998, then slipped to -10,199 in 1999 (Table 1.7 and Figure 1.3).

Latest migration statistics show that recent net migration losses were largely driven by New Zealanders emigrating overseas. In the year to March



Source: Statistics New Zealand Population Projections (Adjusted 1996 Base).

1999, 4,194 New Zealanders left Christchurch for overseas destinations on a permanent long-term basis and only 1,722 returned, resulting in a total net loss of 2,472 people. The most popular destinations for New Zealanders leaving Christchurch were Australia (net loss of 1,505 people) and the British Isles (net loss of 625 people).

It is interesting to note that although net migration of other nationalities was lower than during the mid-1990s, the City still gained people from overseas (1,485 in 1999) (Figure 1.4). The greatest net gains were from Asian countries including Japan, Taiwan and China.

The trend toward lower net migration, both locally and nationally, is attributable to a number of factors including the tightening of immigration policy by central government during the mid-1990s, economic problems abroad, particularly in Asia, and the relative economic condition of New Zealand compared with other countries. The government has addressed the overall decline in net migration by adjusting various residency approval criteria and by increasing the annual target for new permanent residents. These changes and the brighter domestic economic outlook may result in some increase in migration flows during the next few years.

² Net external migration is the number left when permanent and long-term departures - including New Zealanders and Australians - are subtracted from permanent and long-term arrivals.

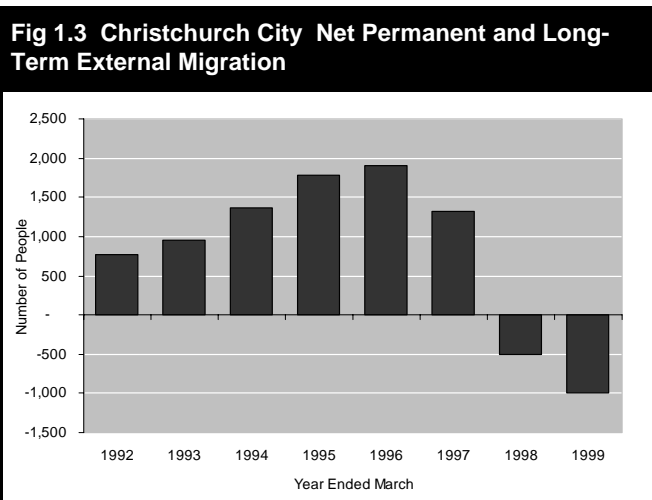
Table 1.6 Five Yearly Usually Resident Population of Christchurch's Neighbouring Districts

District	1986 Census Count	1991 Census Count	1996 Census Count	Numeric Change 1991- 1996	% Change 1991-1996	Annual Average Change
Selwyn District	20,685	21,321	24,783	3,462	16.2	3.2
Waimakariri District	25,608	27,873	32,347	4,474	16.1	3.2
Bank Peninsula	6,732	6,984	7581	597	8.5	1.7
Combined Total	53,025	56,178	64,711	8,533	15.2	3.0

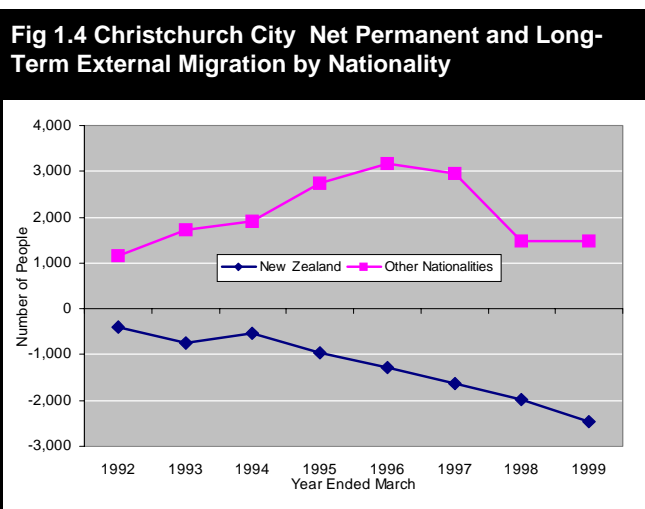
Source: Statistics New Zealand, Census of Population and Dwellings 1986-1996.

City	1992	1993	1994	1995	1996	1997	1998	1999
Auckland	2,270	3,559	6,744	9,758	13,126	9,078	4,577	2,360
Manukau	189	347	1,121	1,739	2,077	1,626	341	-896
North Shore	-163	625	1,381	2,067	2,681	1,214	673	-660
Waitakere	-380	-118	308	543	698	213	-559	-902
Porirua	-314	-396	-164	-231	-241	-187	-197	-355
Wellington	309	267	80	471	844	736	-994	-1,619
Upper Hutt	-65	-67	-84	-132	-156	-94	-104	-148
Lower Hutt	-268	-445	-123	-260	-290	-137	-221	-640
Nelson	1,227	648	174	127	125	156	-207	-283
Christchurch	770	953	1,362	1,784	1,895	1,321	-508	-987
Dunedin	-15	97	163	323	327	-186	-461	-402
Total New Zealand	4,287	6,848	15,587	21,697	29,832	20,948	2,707	-10,199

Source: Statistics New Zealand, Migration Data.



Source: Statistics New Zealand, Migration Data.



Source: Statistics New Zealand, Migration Data.

Migration From Other Parts of New Zealand (Internal Migration)³

The movement of residents between Christchurch and other parts of New Zealand is another key force behind Christchurch's changing population. Between 1991 and 1996, 37,812 people moved to Christchurch from other parts of New Zealand. At the same time the City lost 34,833 residents to other parts of the country. The resulting internal migration gain was 2,979 people. This contrasts with the 5,430 people gained through internal migration between 1986 and 1991.

Figure 1.5 and Table 1.8 show the movements of people between Christchurch and other parts of New Zealand between 1991 and 1996. There have been substantial flows between Christchurch and the Southern, Canterbury, Auckland, Wellington and Nelson areas. Some of these flows have resulted in net population gains to Christchurch eg from Southern areas, while Christchurch has actually lost population to other parts of Canterbury and the Auckland and Wellington areas.

Migration Between Christchurch and Surrounding Local Authorities

The Canterbury Region experienced the largest flows of people from and to Christchurch between 1991 and 1996. While 10,917 people moved to Christchurch

³ The only source of internal migration information is Statistics New Zealand's five yearly Census of Population and Dwellings.

Internal migration is determined by matching details supplied in "usual address five years ago" question on the census form against the current usual address. If the two are the same then the person is classified as a non-mover. If there are differences then it is assumed that the person has changed where he or she usually lives. Internal migration recorded in this way tends to under-estimate the magnitude of movements that have taken place because the census only looks at two points in time.

from elsewhere in Canterbury, 13,767 people moved from Christchurch into Canterbury. The resulting net migration loss was 2,850 people (Figure 1.6 and Table 1.8). This loss was largely a result of significant flows of people between Christchurch and its neighbouring local authorities; Waimakariri, Selwyn and Banks Peninsula Districts. These flows resulted in a 4,350 net internal migration loss from Christchurch to the surrounding area. Waimakariri had a net gain of 2,205 people, while Selwyn District and Banks Peninsula had a net gain of 1,968 and 177 respectively (Table 1.9 and Figure 1.6).

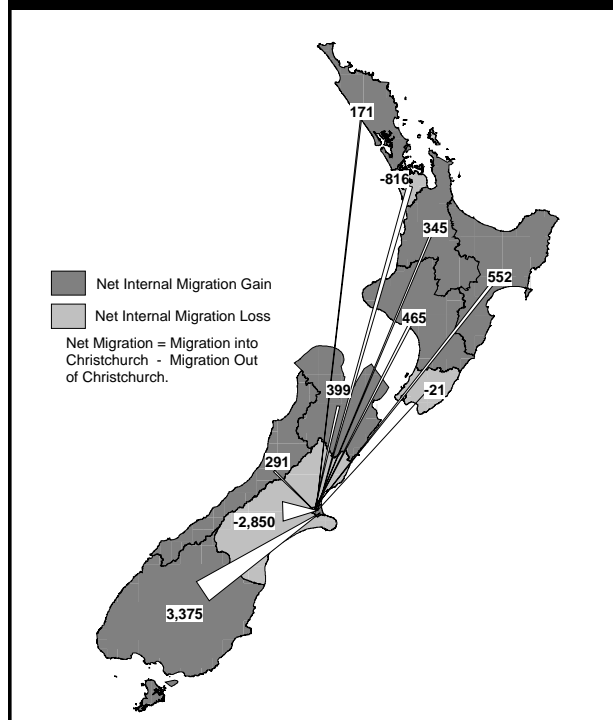
Migration Within Christchurch

Besides inward and outward internal migration, considerable movement occurred within the City. During the 1991-96 period 93,798 residents changed their address within Christchurch boundaries. Those aged between 25 and 34 years were the most mobile group, accounting for 24 per cent of 'movers'. Eighteen per cent were aged 15-24 years and a further 17 per cent were aged 35 - 44 years.

Future Population Growth

Population projections⁴ (prepared using the adjusted 1996 base) suggest that Christchurch's population will continue to grow, reaching 358,000 people by 2021. However, the rate at which growth occurs will continue to decline from an annual average rate of 0.8 per cent in 1996-2001 to 0.3 per cent in 2016-2021. This slower growth will result from a gradual reduction in natural increase and also relatively low migration from other parts of the the country and from overseas (Figure 1.7 and Table 1.10)

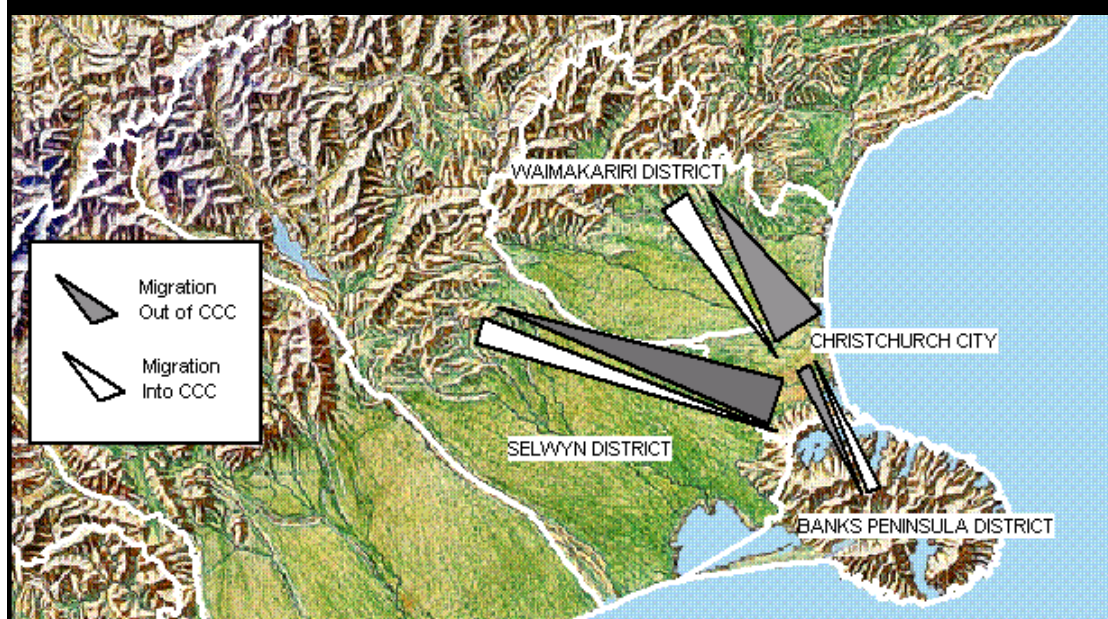
Fig 1.5 Christchurch City Net Migration Flows by Area of Origin or Destination, 1991-1996



Source: Statistics New Zealand, Census of Population and Dwellings, 1996.

⁴ Population projections estimate the future size and characteristics of a population based on an assessment of past trends and assumptions about the future course of demographic behaviour (fertility, mortality and net migration). Statistics New Zealand, A Regional Profile: Canterbury, 1999.

Fig 1.6 Migration Between Christchurch City, Waimakariri, Selwyn and Banks Peninsula Districts, 1991-1996



Source: Statistics New Zealand, Census of Population and Dwellings, 1996.

PART 1. THE CITY'S PEOPLE

Table 1.8 Internal Migration Flows, 1991-1996

Area	Moved to Christchurch City from Area (Inward Migration)	Moved out of Christchurch City to Area (Outward Migration)	Net Migration Gain/Loss to Christchurch City
Northern Area	657	486	171
Auckland Area	3,951	4,767	-816
Waikato Area	1,434	1,086	345
East Coast Area	1,854	1,302	552
West Coast (NI) Area	1,965	1,500	465
Wellington Area	3,633	3,654	-21
Nelson Area	3,516	3,117	399
West Coast (SI) Area	1,734	1,443	291
Canterbury Area (excl ChCh)	10,917	13,767	-2,850
Southern Area	7,044	3,669	3,375
Other Areas	1,107	42	1,065
Total	37,812	34,833	2,979

Source: Statistics New Zealand, Census of Population and Dwellings, 1996.

Table 1.9 Internal Migration Flows Between Christchurch and Surrounding Districts, 1991-1996

Local Authority	Moved to Christchurch City from District (Inward Migration)	Moved out of Christchurch City to District (Outward Migration)	Net Migration Loss to Christchurch City
Waimakariri District	2,688	4,893	-2,205
Banks Peninsula District	1,173	1,350	-177
Selwyn District	2,307	4,275	-1,968
Total	6,168	10,518	-4,350

Source: Statistics New Zealand, Census of Population and Dwellings, 1996.

Projected Net Migration (Internal and External)

The net gain from people moving to the City is expected to be around 4,000 people per five year period from 2006 to 2021.

Although migration projections are carefully developed, it is important to note that predicting long-term net migration gains is particularly difficult. Variations to government immigration policy or changes in social, political and economic conditions, both nationally and internationally, could have a significant impact on future flows.

Projected Natural Increase

The net population gain from natural increase is projected to shrink from 6,390 for the period 1996-2001 to 1,290 people between 2016 and 2021. This will result from fewer births and more deaths during this period (Table 1.10).

The projected decline in births reflects a range of current demographic, social and economic trends such as changes in family formation patterns, later marriage, delayed childbearing and the increasing participation of women in the labour force. An increase in the number of deaths is attributable to the larger overall size of the population, particularly the higher number of elderly as the population ages.

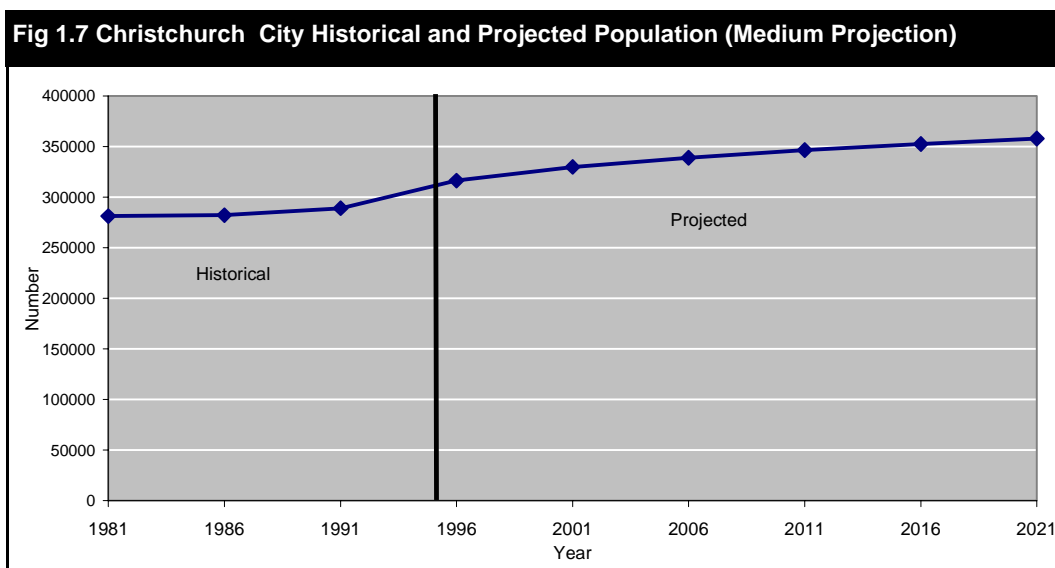
The downward trend in natural increase reinforces the importance of migration to Christchurch if the City is to continue to grow.

Future Household Growth

Private households in the City are forecast to increase from 117,800 in 1996 (adjusted 1996 figure) to 146,800 by 2021. During the next two decades household growth will become progressively slower. Between 2001 and 2006 household numbers will grow on average by 1.3 per cent each year, falling to 0.7 per cent annually between 2016 and 2021 (Table 1.11).

Managing Population and Household Growth in Christchurch

Population growth and its distribution around the City has a major bearing on the use of the City's natural and physical resources, as well as affecting the demand for Council services. Over the next 10-15 years the Council intends to manage population growth through its urban growth strategy incorporated in the Christchurch City Plan. The strategy aims to minimise adverse affects on the environment while enabling people and communities within the City to pursue their social and economic objectives. It intends to accommodate projected population growth through a combination of urban consolidation and targeted fringe development.



Source: Statistics New Zealand Population Projections (Adjusted 1996 Base).

Year	Usually Resident Population	Population Change	Population Average Annual Change	Births	Births Annual Rate	Deaths	Deaths Annual Rate	Natural Increase	Total Fertility rate	Net Migration
Historical										
1986	282,216	6,243	0.4	18,272	13.1	12,721	9.1	5,551	1.6	710
1991	289,077	6,861	0.5	20,638	14.5	13,359	9.4	7,279	1.76	-400
1996	309,030	19,953	1.3	20,766	13.9	13,405	9	7,361	1.69	12,590
1996 Adjusted	316,500									
Projected (Medium)										
2001	330,000	13,500	0.8	20,075	12.4	13,685	8.5	6,390	1.54	7,000
2006	339,000	9,000	0.5	19,140	11.4	14,120	8.4	5,020	1.50	4,000
2011	346,500	7,500	0.4	17,955	10.5	14,600	8.5	3,355	1.48	4,000
2016	352,500	6,000	0.3	17,170	9.8	15,170	8.7	2,000	1.47	4,000
2021	358,000	5,500	0.3	17,065	9.6	15,775	8.9	1,290	1.47	4,000

*Note: Statistics New Zealand cautions users of its projections that "population and household projections are guidelines and not exact forecasts. They measure the future changes that will occur if the projection assumptions were to apply over the projection period. They ignore non-demographic factors (eg catastrophes, war, and major government and business decisions) which could have significant effects on future regional population growth and which may invalidate the projections".

Source: Statistics New Zealand, Population Projections (Adjusted 1996 Base).

Urban consolidation involves the development of vacant land in existing suburban parts of the City at low to medium densities and the redevelopment of land at higher densities in the inner City and around suburban focal points such as major shopping centres.

Fringe development is earmarked for the approximately 1,000 hectares of land rezoned on the outskirts of the built-up area of the City. This land comprises about 400 hectares of land rezoned in the notified City Plan and an additional 600-700 hectares added through the City Plan

hearings process. The existing urban growth strategy has taken into account rates of population expansion above those considered to be most likely at the time of formulation (1996 medium projections). However, if population growth significantly exceeds this, it may be necessary to identify additional land for residential and possibly industrial and commercial use. The Council has begun working with neighbouring districts and the Regional Council to formulate a long-term urban development strategy beyond the district plan period.

PART 1. THE CITY'S PEOPLE

Table 1.11 Christchurch City Historical and Projected Households

	Households	Numeric Change (Five Yearly)	Average Annual Change
Historical			
1986	101,244		
1991	107,223	5,979	1.2
1996	116,166	8,943	1.7
1996 Adjusted	117,800		
Projected (Medium)			
2001	125,200	7,400	1.3
2006	130,800	5,600	0.9
2011	136,200	5,400	0.8
2016	141,600	5,400	0.8
2021	146,800	5,200	0.7

*See Note for Table 1.10.

Source: Statistics New Zealand, Population Projections (Adjusted 1996 Base).