Part 1 The City's People

Christchurch City Update 2000

Introduction

Christchurch City experienced significant population growth during the first half of the 1990s. This trend was fuelled by high levels of international migration, influenced by liberal central government immigration policies and a strong national economy. In recent years, however, changes to immigration policy, the sluggish New Zealand economy and international economic problems, particularly in Asia, have contributed to a considerable drop in net migration. This resulted in lower overall population growth, both locally and nationally, during the last few years of the 1990s.

Although there will be around 30,000 extra people living in the City by 2021, the City's population is expected to grow at a progressively slower pace over the next two decades. During this time major demographic changes are expected to occur in line with those occurring New Zealand-wide. Two of the most significant of these will be the continued ageing of the population and the general reduction in average household size.

Variations in the size and composition of the City's population will provide momentum for changes within the City's natural, physical, economic and social environments. As the population grows, demand will intensify for natural resources such as water, land and energy, and there will be increased pressure on existing roading, transport, water and waste systems.

A larger population in Christchurch is likely to have a positive spin-off for the local economy as the consumption of goods and services grows. However, greater economic activity will require more resources and supporting infrastructure.

Demographic changes, particularly the ageing population, will boost demand for specialist housing, health and support services, and community facilities. The ageing population may affect the structure of families as they are increasingly required to take responsibility for the care of elderly members. Changing household formation patterns and lifestyles will influence the location and types of future housing.

The following section on The City's People is designed to provide the human context for the subsequent discussions of trends in the natural, physical and economic environments. It describes Christchurch's current and projected populations, highlights key demographic features and provides information relating to other aspects of people's lives, including health, personal safety and education.

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 Ch	ristchurch	City Esti	mated Usi	ually Resid	dent Popul	ation				
	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.

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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

Table 1.2 Christchurch City Usually Resident Population								
	1981-1986	1986-1991	1991-1996					
Usually Resi- dent 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 Aver- age 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).

Table 1.3 Char	nges in the Usu	ually Resident	Population of	New Zealand's	s Cities, 1986-1	1996	
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.

¹Population 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.

Table 1.4 Change in t	he Usually Re	sident Popula	tion of New Ze	ealand's Cities	s, 1996-1999 (1	1)(2)	
Cities	Adjusted Popu- lation 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
Invergargill	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.



Source: Statistics New Zealand.

Christenure	n s weignb	ouring Dis	stricts (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 Nu- meric Change		1,600	1,570	1,500
Annual % Change		2.4	2.5	2.1

Table 1.5 Usually Resident Population of Christopurch's Neighbouring Districts (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.

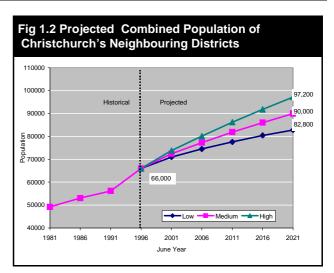
Net External Migration

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

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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.

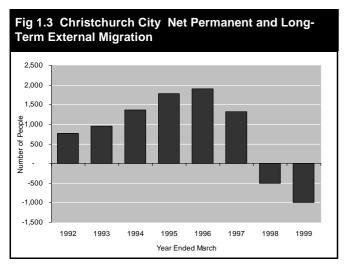
²Net external migration is the number left when permanent and long-term departures - including New Zealanders and Australians - are subtracted from permanent and long-term arrivals.

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.

Table 1.7 Net Migration I	lows by s	Selected	Territoria	Authori	ties			
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.

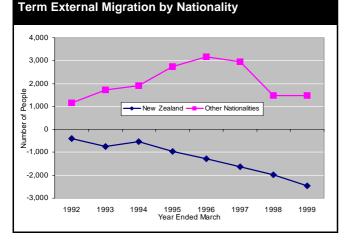
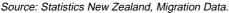


Fig 1.4 Christchurch City Net Permanent and Long-



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

³The 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.

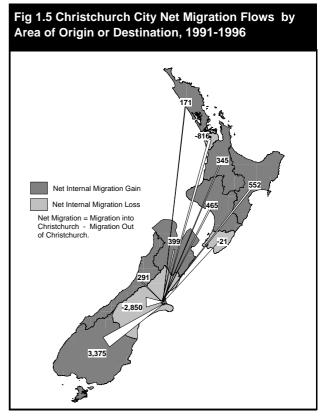
from elsewhere in Canterbury, 13,767 people moved from Christchurch into Canterbury. The resulting net migration loss was 2,850 people (Figure 1.6 and Table 1.8). This loss was largely a result of significant flows of people between Christchurch and its neighbouring local authorities; Waimakariri, Selwyn 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.

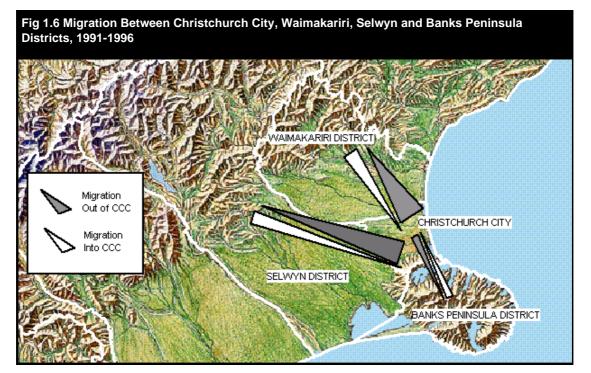
Future Population Growth

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 (Figure1.7 and Table 1.10)



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, <u>A Regional Profile: Canterbury, 1999</u>.



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

Area	Moved to Christchurch City from Area	Moved out of Christchurch City to Area	Net Migration Gain/Loss to Christchurch City
	(Inward Migration)	(Outward Migration)	
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 BetweenChristchurch 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.

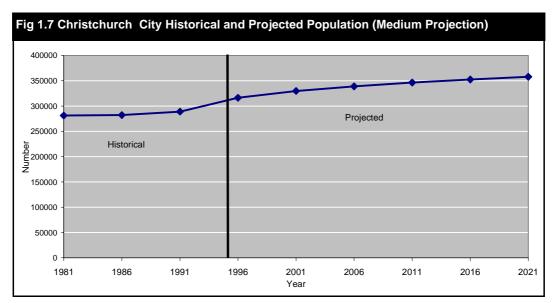
The downward trend in natural increase reinforces the importance of migration to Christchurch if the City is to continue to grow.

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).

Table 1.10 Ch	ristchurch	City Histo	rical and P	rojected P	opulation*					
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.

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).

Profile of Christchurch Residents

Key Information	Why is this Useful?	What is Happening?
Median age of City residents.	 Changes in the median age of a population indicate whether the overall age distribution of residents is changing. Variations in the age structure affect: the type and size of households demand for educational, health and social services type and location of housing recreational needs the size and composition of the labour force local markets for goods and services. 	The median age of Christchurch City's population has increased substantially over the last two dec- ades from 27.9 in 1976 to 33.7 in 1996, indicating that the population is ageing.
Residents who identify with non- European ethnic groups.	Changes in the proportion of residents who identify with non-European ethnic groups provide an indication of how ethnically diverse the City's population is becoming.	There has been an increase in the proportion of City residents who identify with non-European ethnic groups.
Proportion of privately-owned homes.	This can provide insight into population stability, the relative wealth of a community and change in lifestyles.	In 1996 just under 70 per cent of dwellings were owner occupied compared with 74 per cent in 1991.
Proportion of one-family households.	This is an indicator of changes in household composition. Variations in household type is a major driving force behind the decrease in average household type.	Une-family households in Christchurch have decreased from 70 per cent of households in 1986 to 66 per cent in 1996.
Average size of households.	Again this is an indicator of changing household composition. Over time, changes in the average size of households will have a sig- nificant impact on the City's existing housing stock, the rate of residen- tial land take up, the level and type of building activity and growth in associated infrastructure.	The average number of people living in private households in the City has continued to decline, dropping to 2.6 in 1996.
Proportion of two-parent families.	This shows how families in Christchurch are changing.	Two-parent families in the City have declined from 49.4 per cent of all families in 1986 to 42.2 per cent in 1996.
Five yearly employment.	Employment enables people to meet their needs and improve their liv- ing standards.	Total employment in the City increased from 120,624 in 1991 to 143,082 in 1996. (also see Part 3, The City's Economy)
Population aged 15 years and over re- ceiving one or more government- funded benefits.	This data can be used as a indicator of the community's reliance on the government for economic well-being. However, it is important to note that this information is significantly affected by variations in government policy. Therefore it is difficult to show comparisons over time.	During the 12 months to 1996, 38 per cent of the Christchurch's population aged 15 years and over received one or more government-funded bene-fits .
Population aged 15 years and over receiving a total annual personal income of under \$30,000.	Personal income is an indicator of material well-being. An individual's level of income can determine his or her ability to purchase the goods and services needed to maintain a good quality of life.	In 1996, 73 per cent of residents aged 15 years and over had an annual personal income of \$30,000 or less.
Median family income.	Family income is an indicator of material well-being. Income received by families has a major impact on their ability to meet basic needs such as food and clothing, to make rent or mortgage payments and to meet other costs such as health care and education.	The median annual income for Christchurch fami- lies was just under \$39,000 in 1996.

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 provides a profile of the people who normally live in Christchurch City and illustrates how the City's population has changed in recent years. This type of information may be used as a tool to help decision makers develop an understanding of the changing needs of the community and anticipate potential pressures on the wider environment.

The commentary and statistics which follow cover a wide range of topics including shifts in the age structure, ethnic diversity, changes in family type and household size, labour force participation and income and income maintenance.

Data used in this section has been obtained from Statistics New Zealand's 1996 Census of Population and Dwellings. Comparative information from previous censuses and population projections has also been incorporated where appropriate. More detailed tables are included in Appendix 1.

Gender

In line with national statistics, more females than males live in Christchurch. In 1996 females outnumbered males by about 10,000. Females and male comprised 52 per cent (159,393) and 48 per cent (149,643) of residents respectively (Appendix 1: Table 1).

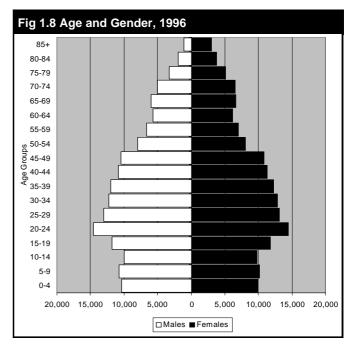
The gender imbalance reflects differences in mortality at various ages and greater longevity amongst women. Although generally more boys than girls are born in any year, males normally experience a higher death rate than females at most ages and this gradually erodes their numerical advantage⁵. Figure 1.8 shows that in Christchurch during 1996 males outnumbered females in the early age groups. However, after the younger years, the number of females in each age group was generally higher. This disparity becomes particularly pronounced in the later age groups where nearly 62 per cent of residents older than 70 were female.

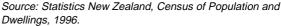
Age and gender projections suggest that although men can be expected to make up an increasing proportion of the elderly, it is likely that elderly women will still greatly outnumber elderly men in the foreseeable future (Figure 1.9 and Appendix 1: Table 1).

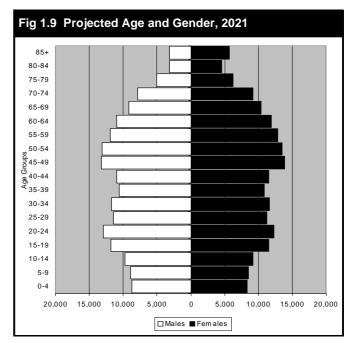
Age Composition

The age structure of Christchurch's population has undergone major changes in recent decades. Consistent with national trends the City's population is progressively ageing. Table 1.12 provides a series of indices which demonstrate this phenomenon.

The median age (the point at which half the population is older) is a particularly useful measure of change. Table 1.12 shows that the City's median age increased markedly from 27.9 years in 1976 to nearly 34 years in 1996. Over the next few decades the median age is expected to increase further to 42.1 years.







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

⁵ Statistics New Zealand, <u>New Zealand Now People and Places</u>, 1994, P.23

Table 1.12 highlights a general reduction in the proportion of people aged 0-14 years (children)⁶ and an increase in the proportion and number of people aged 65 years and over. The changing balance of young and elderly is also reflected in the drop in the child/elderly ratio from two children for every person aged over 65 years in 1981 to 1.4 per elderly person in 1996. This overall trend is a result of lower birth rates, the passage of the large baby boom generation (born between 1946 and 1965) up the age scale, and increases in life expectancy. Long-term, both the number and proportion of children is expected to shrink while the City's elderly population will continue to swell. The wide-ranging effects of Christchurch's ageing population will become much more pronounced from 2011 when the baby boomers start to reach retirement age.

Ethnic Diversity

European

Christchurch's European ethnic group is large and also very diverse. It includes people who have migrated to New Zealand from countries such as Australia, England, Ireland, Scotland, Wales and other European countries. It also comprises residents who were born in New Zealand and are descendants of European settlers and migrants.

Although Christchurch's population is gradually

becoming more ethnically diverse, proportionately more residents in the City still identify with the European ethnic group than in New Zealand as a whole. In 1996, 83.6 per cent of residents (258,378) in Christchurch City were European compared with 71.7 per cent nationally (Figure 1.10 and Appendix 1: Table 2).

Maori

In 1996, 21,462 Christchurch residents identified with the Maori ethnic group, up from 15,354 in 1991. This group was the second largest in Christchurch, comprising 6.9 per cent of residents compared with 5.3 per cent in 1991⁷. Nationally, 14.5 per cent of residents were Maori (Figure 1.10 and Appendix 1: Table 2).

Pacific Island

Christchurch has a small Pacific Island community which has grown marginally since 1991. In 1996 the Pacific Island ethnic group comprised 1.9 per cent of the population (5,979 people) compared with 1.7 per cent in 1991. Nationally, nearly 5 per cent of the population were Pacific Islanders in 1996 (Figure 1.10 and Appendix 1: Table 2).

⁷ Some of this increase may be due to changes in the Census question relating to ethnicity.

Table 1.12	12 Historical and Projected Usually Resident Population								
Year	0-14 years	%	15-64 years	%	65+ years	%	Total	Median Age	Ratio Children per Elderly Person*
Historical									
1976								27.9	
1981	63,531	23.1	179,889	65.3	32,070	11.6	275,490	30.0	2.0 : 1
1986	58,020	20.6	187,950	66.8	35,313	12.6	281,283	31.7	1.6 : 1
1991	56,448	19.5	193,662	67.0	38,793	13.4	288,903	32.8	1.5 : 1
1996	59,997	19.4	207,129	67.0	41,904	13.6	309,030 (Unadjusted)	33.7	1.4:1
Projected									
2001	63,000	19.1	223,450	67.7	43,650	13.2	330,100	35.2	1.4:1
2006	61,200	18.0	232,350	68.5	45,550	13.4	339,100	37.0	1.3 : 1
2011	58,600	16.9	238,900	68.9	49,000	14.1	346,500	38.9	1.2 : 1
2016	55,450	15.7	240,450	68.2	56,550	16.0	352,450	40.8	1.0 : 1
2021	53,400	14.9	239,850	67.0	64,600	18.1	357,850	42.1	0.8:1

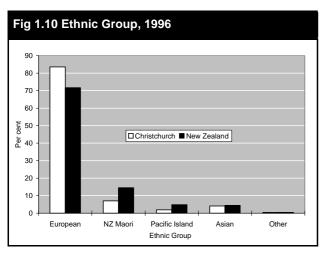
* Children = 0-14 yrs , Elderly = 65 years and over.

Source: Statistics New Zealand, Census of Population and Dwellings 1976-1996 and Population Projections (Adjusted 1996 base).

⁶ The actual number of children grew during the early 1990s in response to a brief increase in births.

Asian

Christchurch has a growing Asian community. Numbers have been boosted by a significant increase in migration during the early to mid-1990s, resulting from shifts in immigration policy. In 1996 Asians comprised 4.1 per cent of residents (12,597 people), up from 2.0 per cent (5,934 people) in 1991. New Zealand-wide, the Asian ethnic group comprised 4.4 per cent of the population in 1996 (Figure 1.10 and Appendix 1: Table 2).



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

Country of Birth

In 1996 the vast majority of Christchurch residents (251,115 people or 81.2 per cent) were born in New Zealand. This compared with 78.7 per cent of residents nationally.

Of the 57,915 Christchurch residents born overseas in 1996, 30 per cent had lived in New Zealand under 10 years and 21 per cent for less than five years.

Between 1991 and 1996 there were some notable changes to the number of foreign-born residents in Christchurch and their birthplace distribution, reflecting changes in immigration policy during the 1990s. Overall, the number of overseas-born residents increased by over 15,500 during the five years to 1996. They included more residents born in Australia, the United States of America and Canada.

There was also a substantial increase in the number of residents indicating one of several Asian countries as their place of birth. The number of those born in Korea, for example, grew from 96 to 1,800. A similar trend can be seen among those who stated their birthplace as Taiwan or Malaysia (Figure 1.11). In contrast, fewer people in 1996 named the United Kingdom – New Zealand's traditional migrant source – as their place of birth. However, those born in the United Kingdom still made up the largest overseas-born group. They were followed by people born in Asia, Europe, Australia and the Pacific Islands. A large group of residents did not specify their country of birth in 1996 (Table 1.13 and Appendix 1: Table 3).

Type of Dwellings

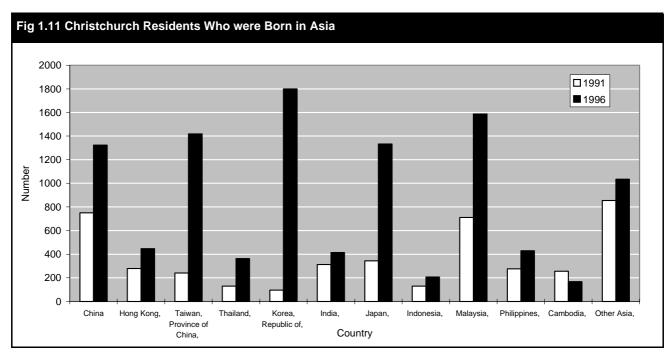
Most Christchurch residents (298,500) live in private dwellings. City-wide, there were 116,166 private dwellings in 1996 and 453 non-private dwellings such as rest homes, hospitals and prisons.

Christchurch residents live in a variety of different types of private dwellings. They do so for various reasons including family circumstances, financial necessity, location and lifestyle preferences. In 1996 the most popular type of home was the conventional detached house (75.4 per cent of private dwellings), detached house (75.4 per cent of private dwellings),

Table 1.13 Country of Birth (Usually Resident in NZ and Born Overseas), 1996							
Country Of Birth	New Zealand	%	Christchurch City	%			
Australia	54,585	7.1	4,863	8.4			
United States of America	11,625	1.5	1,215	2.1			
Canada	7,440	1.0	699	1.2			
United Kingdom	230,049	29.9	19,821	34.2			
Europe	55,875	7.3	5,091	8.8			
Pacific Island	99,402	12.9	3,216	5.6			
Asia	117,792	15.3	10,524	18.2			
Other	29,448	3.8	2,172	3.8			
Not Specified	163,875	21.3	10,314	17.8			
Total (Residents Born Overseas)	770,091	100.0	57,915	100.0			

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

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

followed by two or more houses or flats joined together (24 per cent). In contrast, less than 1 per cent of dwellings were baches, huts or temporary premises intended for short-term accommodation (Appendix 1: Table 4 also see Table 2.20 in Part 2: The Natural and Physical Environment).

Home Ownership and Renting

Privately-owned homes (with and without a mortgage) still vastly outnumber those that are rented. However, in recent years, home ownership in the City has declined while the amount of rental accommodation has grown proportionately.

In 1996 just under 70 per cent of dwellings were owner occupied compared with 74 per cent in 1991. In contrast, around 25.4 per cent of private dwellings in the City were rented in 1996, up from 22.8 per cent in 1991.

Possible influences on declining home ownership include the burden of student loan obligations, a return to later forming of couple households, later childbirth and the increase in child-free couples.

Rental accommodation in Christchurch is provided by private individuals and a number of organisations including Housing New Zealand, real estate agencies and the Christchurch City Council. Since 1991 there has been a marked increase in the amount of privately provided rental accommodation in the City. In 1996, 17,919 rental properties were provided privately compared with 12,069 in 1991. Conversely, the amount of rental accommodation provided by a variety of other organisations has decreased (Appendix 1: Table 5).

⁸ A 'household' for census purposes comprises a person or persons.

For those who rent in Christchurch the average weekly rent paid for permanent private dwellings in 1996 was \$155.22, compared with \$160.93 for New Zealand as a whole.

Household Type

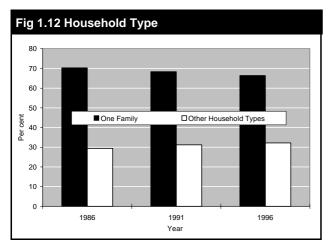
The majority of households⁸ in the City comprise one family. Although this type of household has grown numerically in recent years, proportionately it actually decreased from 70.2 per cent in 1986 to 66.3 per cent in 1996. In contrast, there has been a small percentage increase in some other household types:-one family plus other, multiple family and single person households (Figure 1.12 and Appendix 1: Table 6).

The proportional decline in one-family households and growth in other household types in Christchurch is similar to New Zealand as a whole and reflects a variety of demographic and social changes. These include:

- An increasing number of elderly people (particularly women) who are more likely to live alone;
- More divorces and separations and the trend towards later marriage, leading to an increase in single-person and non-family households; and
- Increased migration from Asia (statistics show that Asian families are twice as likely as New Zealand families to share their homes with others).

Average Household size

The 'type' of households in Christchurch is not only changing, but households are also getting smaller. In 1976 the average household occupancy rate for the City was 3.1 people. This declined to 2.8 by 1986 and



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

reached an all time low of 2.6 in 1996. This trend is expected to continue in the future, placing additional pressure on existing housing and residential land stocks and associated services.

Average household size is decreasing because the rate of household formation is exceeding the rate of population growth. Factors which have contributed to the accelerating rate of household formation in recent years include:

- The rise in divorce and separation which has the tendency to split households into two;
- The trend toward marriage at older ages, resulting in people spending greater time in multiple person households (eg flats) or living alone rather than in family households; and
- More elderly people and greater life expectancy (particularly among women) resulting in more people living for longer periods on their own.

Families

Family Type⁹

The make-up of Christchurch families has changed significantly over the last decade. The once typical family, comprising two parents with at least one dependent child, now accounts for a smaller share of total families than it did ten years ago. In 1986 two-parent families comprised 49.4 per cent of families compared with 42.2 per cent in 1996.

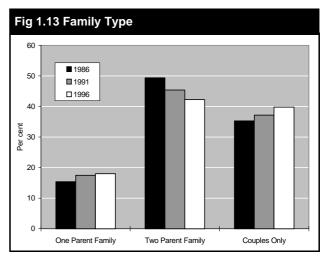
The decline in the two-parent family has been offset by an increase in one-parent families and couples without children¹⁰. During the ten years to 1996, one-parent families increased from 15.3 to 18 per cent while couples without children grew from 35.3 to 39.8 per cent (Figure 1.13 and Appendix 1: Table 7).

The increase in divorce and separation and falling marriage rates as couples delay or avoid formal marriage ties have been major contributors to the growing number of one-parent families in recent years. Growth in the number of couples without children reflects two main trends: the general ageing of the population, which has shifted large numbers of people into the age groups where life without children is likely, and the postponement of childbearing by young couples.

Dependent Children Families

In line with national trends, the traditional two-child family has been overtaken by the one-child family as the most common type in Christchurch (Appendix 1: Table 8). In the latest census, around 20 per cent of all families with children (including adult and dependent) contained three or more children, 37.2 per cent had two children, while nearly 42.6 per cent contained just one.

Most of the focus on families centres around those with dependent children. The 1996 census defines a 'dependent' child as one who is under 18 years old and not in full-time employment (that is, still at school, in tertiary training, unemployed or working less than 30 hours per week). Of those families with dependent children only 19 per cent had three or more children, 39 per cent comprised two children and 42 per cent comprised one child.



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

Workforce¹¹

The City's labour¹² force grew considerably between 1991 and 1996 from 134,655 to 154,788. During this period full and part-time employment increased numerically while unemployment declined (Table 1.14).

Figures from the 1996 census contrasted dramatically to those of the previous five years from 1986 to 1991

⁹ A 'family' is defined as either a couple (from a legal or a de facto marriage) with or without a child (or children) who usually live in the same household.

¹⁰ The 'couples' family type include all couples who have chosen to remain childless, as well as younger couples who have not yet had children and older couples who have reached the 'empty nest' stage ie their children have grown up and left home.

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Table 1.14 Labour Force Status (Population Aged 15 years and Over)								
	1991	% of Labour Force 1991	1996	% of Labour Force 1996	Numeric Change 1991- 1996	% Change 1991-1996		
Labour Force								
Full time in Labour Force	97,551	72.4	108,000	69.8	10,449	10.7		
Part time in Labour Force	23,073	17.1	35,082	22.7	12,009	12.3		
Unemployed and Actively Seek- ing Work	14,031	10.4	11,706	7.6	-2325	-2.4		
Total Labour Force	134,655	100.0	154,788	100.0	20,133	20.6		
Non Labour Force	97,107		89,616		-7491	-7.7		
Not Specified	1,305		4,629		3324	254.7		
Total Working Age Population	233,067		249,033		15,966	6.9		

Source: Statistics New Zealand, Census of Population and Dwellings, 1991-1996.

when the labour force actually contracted. This was largely in response to the 1987 share market crash and the restructuring of the New Zealand economy. In 1996, 69.8 per cent of people in Christchurch's labour force were employed full time (working 30 hours or more per week), 22.7 per cent were employed on a part-time basis and 7.6 per cent were unemployed (Figure 1.14 and Table 1.14). These figures were similar to those recorded nationally at that time (Appendix 1: Table 9).

Participation in full-time and part-time work varied in relation to gender. Males accounted for 62 per cent of people working full time in 1996, while females dominated the part-time category comprising 71.3 per cent of part-time workers.

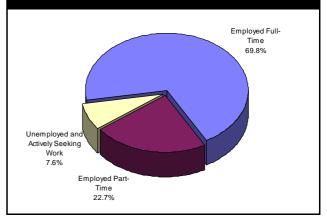
The growth of part-time employment was a major trend. While the majority of workers still worked full time, the level of part-time employment increased steadily. In 1996 part-time workers comprised 22.7 per cent of the labour force compared with 17.1 per cent in 1991. Part-time employment was boosted by large numbers of women combining unpaid work at home with paid employment, and increasing numbers of young people combining study with part-time jobs (Table 1.14 and Appendix 1: Table 9).

In addition to residents who were either working or looking for employment in 1996, just over 89,600 people aged 15 years and over were not involved in regular paid work. According to the census, many of these residents were involved in a variety of other activities both for their own household and other households including housework, gardening and caring for others.

Occupation

Christchurch residents were involved in a diverse range of occupations in 1996. In line with national trends, *service and sales* was the largest occupational group in Christchurch, accounting for 16 per cent of residents aged 15 years and over. This group was followed by *clerks* (14.5 per cent) and people engaged

Fig 1.14 Work Status 1996 (Population Aged 15 years and Over)



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

in *professional* occupations (12.5 per cent). In contrast, the proportion of *agricultural and fishery* workers was considerably less in the City than in the whole country (Figure 1.15 and Appendix 1: Table 10).

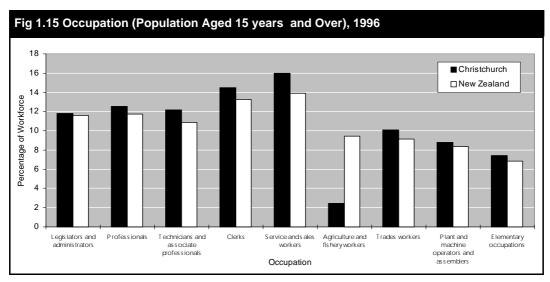
Incomes Sources and Incomes¹³ Income Sources

Although few people in Christchurch have no income at all, there is considerable variation in the sources and the amount of income that individuals receive. In 1996 *wage and salaries* was the most common source of income for Christchurch residents. In the 12 months prior to the 1996 census, nearly 57 per cent of residents aged 15 years and over received income from wages and salaries (Appendix 1: Table 11).

¹¹ Also see Part 3, The City's Economy.

¹² Christchurch City's labour force includes people aged over 15 years who regularly work full or part time and those who are unemployed but are actively looking for either full or part-time work. Full-time workers work 30 hours or more per week. Part-time workers work between 1 and 29 hours per week.

¹³ Data on sources of income includes all the persons who specified each income source, whether as their only source or one of several sources. Where a person reported more than one, they have been counted in each applicable source.



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

Government-funded benefits were also a major income source. Of Christchurch residents aged 15 years and over, 94,719 said that they had received one or more government benefits during the 12 months to March 1996. They represented 38 per cent of the 15 plus population. New Zealand superannuation made up the largest number of payments, followed by the unemployment benefit. (Table 1.15, Appendix 1:

Table 11.) Sources of income varied markedly with gender.

More males received income from wage and salaries and from self employment than females in 1996, reflecting their higher rates of participation in the paid labour force. Females more commonly received income from government benefits.

Personal Income

Seventy three per cent of all Christchurch residents aged 15 years and over indicated they had an annual personal income of \$30,000 or less in 1996. At the other end of the scale, only 2.3 per cent of residents received an annual income of more than \$70,000

(Figure 1.16, Appendix 1: Table 12).

The income distribution of residents who worked full and part-time showed a somewhat different picture. Just under 55 per cent of people who worked full time (30 hours or more) had an annual gross income of \$30,000 or less, while 6.2 per cent received \$70,000 or more.

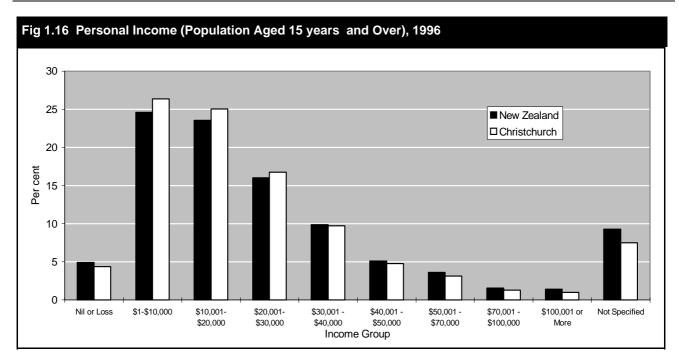
The majority of part-time workers (79.5 per cent), who worked less than 30 hours per week, had incomes under \$20,000.

Family Income

Family income is defined as the income of couples and people with children. Thirty two per cent of families in Christchurch received a before tax income of \$30,000 or less for the 12 months to March 1996, while 31 per cent of families had an annual income over \$50,000 (Figure 1.17 and Appendix 1: Table 13). The median income for Christchurch families was \$38,947 compared with \$39,205 nationally.

Table 1.15 Populations Receiving Government Benefit Payments (Population Aged 15 years and Over), 1996							
Number of Benefit Payments	New Zealand	%	Christchurch City	%			
One Income Support Payment	892,386	32.0	84,627	34.0			
Two or More Income Support Payments	94,842	3.4	10,092	4.1			
No Income Support Pay- ments	1,643,874	59.0	144,150	57.9			
Not Specified	155,118	5.6	10,164	4.1			
Total Residents Aged 15	2,786,220	100.0	249,033	100.0			

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



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

Monitoring Poverty, Hardship and Community Well-Being in Christchurch City

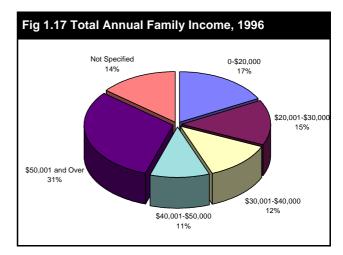
The Christchurch City Council is actively involved in monitoring well-being issues in the city.

A web site currently provides a range of information relating to the Social Monitoring Programme, a three year research study of poverty and hardship in Christchurch. This includes an overview of the programme and the methodology used, a summary of main findings, copies of reports produced, longer term goals of the programme and references to related work.

This can be accessed at: http://www.ccc.govt.nz/ programmes/socialmonitoring/

New Zealand's six largest local authorities are currently developing a social indicators project to measure quality of life and well-being issues in our largest cities. The selected indicators will provide an understanding of how strong our communities are and the pressures they are under. A joint report will be produced by the six councils in September/October 2000.

For further information about the Christchurch City Council's monitoring of well-being issues, please contact the Co-ordinator, Kath Jamieson, Research and Policy Adviser at the Christchurch City Council, PO Box 237, Christchurch, phone 371 1885, fax 371 1572 or e-mail Kath.Jamieson@ccc.govt.nz



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

Health

Key Information	Why is this Useful?	What is Happening?
Life expectancy for Christchurch residents.	Life expectancy calculates the age an individual can expect to live given certain factors. This information can be used as an indicator of the health of a population.	In 1996 the life expectancy of a new born baby boy in Christchurch was 73.5 years and 79.1 years for a female. This compares with 70.3 and 76.4 years for boys and girls respectively in 1986.
The infant mortality rate.	This is the number of infant deaths per 1,000 live births. It is a useful indicator of the relative health of a population.	In 1997 there were 5.2 infant deaths per 1,000 live births in Christchurch City compared with 15.7 in 1988.
Major causes of death in Christchurch.	This type of data can be used to help target campaigns directed at encouraging healthy lifestyles and preventing ill-health. It may also be used to assess the success of health strategies and programmes.	In 1997, cancer, ischaemic heart disease, and stroke were the major causes of death in Christ-church City.
Proportion of Christchurch's population who smoke regularly.	The smoking rate is a useful indicator of the relative health of the popu- lation because of its links to a variety of cancers, chronic bronchitis and emphysema, lower birth weight and increased health problems in in- fants.	In 1996, 50,334 or 20 per cent of Christchurch residents aged 15 years and over smoked cigarettes regularly (ie one or more per day).

Other Related Sections: Population Growth, Profile of Christchurch Residents, Part 2: The City's Natural and Physical Environment.

The following section provides information on the health of Christchurch residents. It focuses on three traditional quantitative indicators of health: life expectancy, infant mortality and major causes of death. It also includes information from the 1996 Population Census relating to smoking.

Life Expectancy

Medical advances, improvements in preventative health care and lifestyle changes have resulted in New Zealanders living longer. Before the mid-1960s much of the improvement in life expectancy was due to declining infant mortality rates. This has continued to be a major factor in the last three decades. Significant gains have also resulted from falling death rates at older ages.

At a national level, life expectancy at birth has increased substantially during this century, although marked variations remain between men and women¹⁴. Between 1995 and 1997 the life expectancy for males at birth was 74.3 years, seven years longer than those born between 1950 and 1952. For females, life expectancy increased by eight years during this period to over 79.6 years.

Although New Zealand ranks among the top 20 countries worldwide in terms of longevity, there is some way to go before New Zealand's life expectancy reaches the high levels achieved by other developed countries such as Japan, Hong Kong and Sweden (Table 1.16).

Expectancy at Birth (in Years) Male Female Differ-Country Year / Period ence 77.0 83.6 Japan 1996 6.6 France⁽¹⁾ 74.0 81.9 7.9 1996 Hong Kong⁽¹⁾ 76.4 5.5 1997 81.9 Switzerland⁽¹⁾ 1996 75.7 81.9 6.2 Canada⁽¹⁾ 1996 75.7 81.5 5.8 Sweden⁽¹⁾ 1996 76.5 81.5 5 Australia 1994-96 75.2 81.1 5.9 Norway⁽¹⁾ 75.1 81.1 6 1996 Finland 7.5 1996 73.0 80.5 Netherlands 1996 74.7 80.4 5.7 Austria 1996 73.9 80.2 6.3 Germany⁽¹⁾ 1996 73.3 79.8 6.5 England and Wales 1994-96 74.4 79.6 5.2 Ne

Table 1.16 International Comparison of Life

England and Maloo	100100		10.0	0.2
New Zealand	1995-97	74.3	79.6	5.3
United States ⁽¹⁾	1996	72.7	79.4	6.7
Northern Ireland	1994-96	73.3	78.7	5.4
Portugal ⁽¹⁾	1996	71.0	78.5	7.5
Denmark	1995-96	72.9	78	5.1
Scotland	1994-96	72.1	77.6	5.5

(1) Provisional.

Source: Statistics New Zealand.

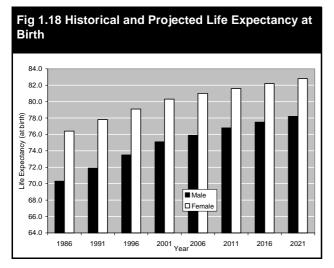
¹⁴ It is interesting to note that the gender gap in life expectancy at birth has narrowed. Overseas research has identified changes in risk factors such as smoking and alcohol consumption as possible contributors.

In 1996 life expectancy at birth in Japan was 83.6 years for females and 77 years for males. A new-born Japanese baby can therefore expect to outlive its New Zealand counterpart by 3.4 years (Table 1.16).

Life expectancy has increased markedly in Christchurch City. In 1996 the life expectancy of a new-born baby boy was 73.5 years and 79.1 years for a baby girl. This compares with 70.3 and 76.4 years for boys and girls respectively in 1986.

Over the next 20 years the life expectancy of people born in Christchurch is expected to steadily increase. According to latest population projections, a male born in 2021 can expect to live about 78.2 years and a female to around 82.8 years (Figure 1.18).

It is important to note, however, that increasing longevity may not necessarily mean an increase in disability-free life. Ageing is generally associated with increasing risk of disability. As a person ages there is both a higher incidence of chronic disease and a greater risk of injury. This has major implications for health and social services providers in the future. These will not only have to make provision for a large elderly population but one with potentially greater needs.



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

Infant Mortality¹⁵

The infant mortality rate¹⁶ is recognised as being a sensitive indicator of social and economic conditions and is often used to make international comparisons, especially in less developed countries.

Infant mortality in New Zealand has steadily declined over the last three decades from a rate of 22.6 per 1,000 total births in 1960 to 16.7 in 1970, 13.0 in 1980 and 6.8 in 1997. However, New Zealand's rate is still notably higher than a number of other developed countries. Some of these have achieved a rate of 4.0 per 1,000 live births, or about 40 per cent below the

Table 1.17 International Comparisons of Infant Mor-tality					
Country	Year	Infant Mortality Rate			
Finland	1996	4.0			
Hong Kong ⁽²⁾	1997	4.0			
Norway	1996	4.0			
Sweden	1996	4.0			
Japan	1996	4.5			
Switzerland ⁽²⁾	1996	4.8			
France	1996	5.0			
Germany ⁽²⁾	1996	5.0			
Austria	1996	5.1			
Netherlands ⁽²⁾	1996	5.3			
Denmark	1996	5.6			
Northern Ireland ⁽²⁾	1996	5.8			
Canada	1995	6.1			
England and Wales ⁽²⁾	1996	6.1			
Scotland ⁽²⁾	1996	6.2			
New Zealand	1997	6.8			
Portugal	1996	6.9			
United States	1996	7.2			

(1) Deaths of Infants under one year of age per 1,000 live births.

(2) Provisional

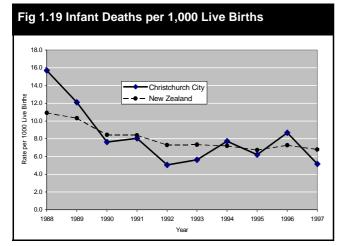
current New Zealand level (Table 1.17).

Like New Zealand, the infant mortality rate in Christchurch has declined. In 1997 the death rate was 5.2 deaths per 1,000 live births, compared with 15.7 deaths per 1,000 live births recorded in 1988 (Figure 1.19).

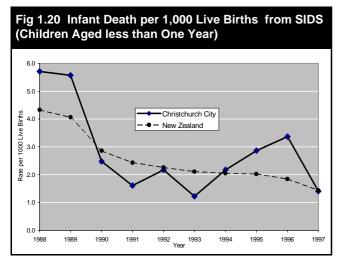
The primary cause of death for children aged under one year (in both Christchurch and New Zealand) between 1988 and 1997 was sudden infant death syndrome (SIDS), also known as 'cot death'. Despite being the major cause of infant death, the number of deaths per 1,000 live births due to SIDS generally declined during this period both in Christchurch and at a national level (Figure 1.20). This overall decline coincided with a major educational campaign on known factors associated with SIDS.

¹⁵ Infant death is defined as a live born infant dying before the first year of life is completed. Infant deaths consist of early neonatal deaths, late neonatal deaths and postneonatal deaths.

¹⁶ Deaths of children under one year per 1,000 live births.



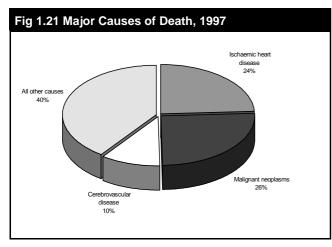
Source: Ministry of Health Information Service, Mortality Data.



Source: Ministry of Health Information Service, Mortality Data.

Major Causes of Death

The three leading causes of death in Christchurch, as in the rest of New Zealand, are malignant neoplasm (cancer), ischaemic heart disease and cerebrovascular disease (stroke). In 1997 these causes collectively accounted for almost 60 per cent of all deaths in the City (Figure 1.21).



Source: Ministry of Health Information Service, Mortality Data.

Each age group has its own characteristic health problems causing death. Mortality statistics relating to Christchurch City show that death through suicide and motor vehicle accidents is higher for younger age groups, while the incidence of death from ischaemic heart disease, cancer and strokes increases as people get older (Figure 1.22 and 1.23).

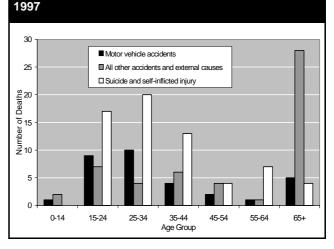
In 1997 suicide and self-inflicted injury was the leading cause of death in the 15-24 and 25-34 year age groups. Motor vehicle accidents were also a major cause of death for these age groups. Significantly more males died from these causes than females.

Cancer was the major cause of death for the 35-44 age group, followed by suicide and self-inflicted injury and accidental causes. Christchurch residents, aged 45-64 years, died predominantly from cancer and ischaemic heart disease.

For people aged 65 years and over, ischaemic heart disease and cancer were the main causes of death, followed by stroke. Death from respiratory disorders and accidental causes was also comparatively high for this group, especially among the very old.

The number of deaths from ischaemic heart disease was higher for men in the 65-74 age group, but this trend was reversed in the 75 years and over age group, reflecting gender differences in life expectancy.

Fig 1.22 Deaths from Accidents and Suicide by Age,



Source: Ministry of Health Information Service, Mortality Data.

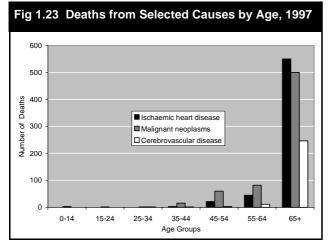
People Who Smoke Regularly

Smoking is estimated to be the largest single preventable cause of disease and is a major causal factor in deaths from lung cancer, chronic bronchitis and emphysema. It is also linked to a number of other cancers and is associated with lower birth weight and increased health problems in infants¹⁷.

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Table 4 40

D.



Source: Ministry of Health Information Service, Mortality Data.

According to the 1996 Population Census, 50,334 Christchurch residents aged 15 years and over - or 20 per cent of adults - smoked cigarettes regularly (one or more per day). This percentage was slightly lower than the national figure (Table 1.18).

Of those who said that they did not currently smoke regularly, 51,570 (27.5 per cent) indicated that they were once regular smokers. This compares with 28.5 per cent of adults New Zealand-wide who were former smokers.

Table 1.18 Re	Table 1.18 Residents who Smoke, 1996								
	Christchurch City	% of Popn Aged 15 years +	New Zealand	% Popn Aged 15 years +					
Smoke Regularly	50,334	20.2	609,297	21.9					
Do Not Smoke Regularly	187,758	75.4	2,016,489	72.4					
Not Specified	10,944	4.4	160,434	5.8					
Total	249,036	100.0	2,786,220	100.0					
Ex Smokers ie non smokers who once smoked	51,570	27.5 % of non smokers	565,722	28.1 % of non smokers					

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

¹⁷ Statistics New Zealand, New Zealand <u>A Regional Profile:</u> <u>Canterbury</u>, 1999.

Personal Safety

Key Information	Why is this Useful?	What is Happening?
Number of reported crashes and casu- alties in Christchurch.	Long-term trends relating to crash and casualty data provide insight into local driving habits and traffic conditions. This can also be used to help target and assess road safety campaigns or enforcement programmes.	Crash and casualty numbers in Christchurch re- duced during 1998, continuing a long-term down- ward trend.
Crashes and casualties per 10,000 residents in Christchurch .	Crash and casualty rates per 10,000 population provide information which is unaffected by overall population size. This enables compari- sons of rates over time and with other parts of New Zealand.	Both injury crash and casualty rates declined significantly during the 1990s.
Proportion of residents who feel safe from outside intruders in their own home during the day and after dark.	This provides insight into how safe City residents feel within their own homes. Perceived level of safety has a significant bearing on an individual's general well-being.	In 1999, 91 per cent of Christchurch residents said that they felt safe in their homes from intrud- ers during the day. Seventy six per cent felt safe at night.

Other Related Sections: Profile of Christchurch Residents, Health, Transportation, Built Environment, Urban Amenity.

Official statistics on road crashes and casualties provide one of the main sources of information currently available on individuals' personal safety and their risk of physical injury. Surveys, such as the City Council's Annual Survey of Residents, are a useful supplement to official statistics as they can provide valuable information on how safe people feel within their environment.

The following section provides a statistical overview of recent trends in reported road injury crashes and road casualties in the City and highlights Christchurch residents' perceptions of safety.

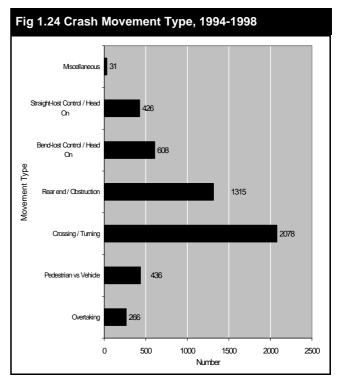
Road Safety¹⁸

Road Crash Statistics

Injury crash statistics relate to the number and severity of crashes or collisions involving injury reported to police. The severity of a crash is based on the severity of the most seriously injured casualty in the crash.

Overall, the number of injury crashes¹⁹ in Christchurch declined during the 1990s. Latest figures show a continuation of this trend, with numbers falling to their lowest level for many years (Table 1.19). This pattern of decline is generally in line with national trends over the same period and reflects efforts by the Land Transport Safety Authority and police to reduce the road toll through stricter traffic laws, speed cameras, random drink-driving checks and public safety campaigns.

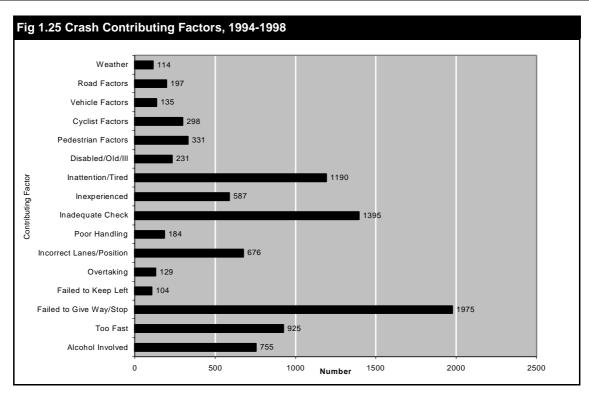
Figure 1.24 shows the types of reported injury crashes in Christchurch between 1994 and 1998 (ie what the vehicle was physically doing at the time of the crash). During this period the main crash type involved vehicles crossing and turning at intersections²⁰ followed by rear end/obstruction crashes.



Source: Land Transport Safety Authority, Christchurch City Road Safety Report, 1998.

¹⁸ More detail is available from the Christchurch City Road Safety Reports produced by the Land Transport Safety Authority (LTSA). Also see the LTSA wed site at www.ltsa.govt.nz
¹⁹ Including motor vehicle, cyclist and motorcyclist.

²⁰ This crash type includes most collisions between vehicles at intersections and driveways.



Note: Changes to the coding of contributing factors introduced for 1998 may affect some trends Source: Land Transport Safety Authority, Christchurch City Road Safety Report, 1998.

Factors contributing to crashes help explain why they actually happen²¹. The main contributing factors to crashes between 1994 and 1998 were associated with intersections and driveways, namely *failed to give way or stop*, and *inadequate check*. *Inattention/tired* was the third major contributing factor during this period and also relates in part to intersection crashes²² (Figure 1.25).

The injury crash rate per 10,000 people in Christchurch has been consistently higher than the national figure for many years but declined significantly from 52 to 26 per 10,000 people between 1980 and 1998 (Figure 1.26). During the same period New Zealand's crash rate dropped from 34 to 23 crashes per 10,000 people.

Despite the overall decline in crashes per 10,000 people, Christchurch's crash rate is still high compared with many other main centres, although latest statistics show the gap appears to be closing (Table 1.20).

²¹ The coding of contributing factors is somewhat subjective and interpretation of these statistics needs to be made with caution.
²² Traffic crashes generally have more than one contributing factor. Therefore the number of crashes with each factor when added, will be greater than the total number of crashes in the City.

Table 1.19 Number of Reported Road Crashes in Christchurch										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total
Fatal Crashes	30	26	27	32	19	27	14	22	22	219
Serious Crashes	266	278	236	250	261	197	186	187	153	2,014
Minor Crashes	1,123	983	946	874	906	908	845	703	678	7,966
Total Injury Crashes	1,419	1,287	1,209	1,156	1,186	1,132	1,045	912	853	10,199
Non-Injury Crashes	2,085	1,967	1,841	1,519	1,645	1,723	1,973	2,016	1,635	16,404

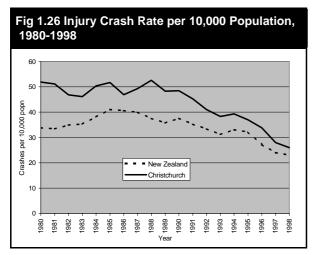
Injury severity is classified as Fatal, Serious or Minor as follows:

Fatal – Injury that results in death within 30 days of the crash

Serious – Fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock necessitating medical treatment, and any injury involving removal to and detention in hospital. Minor – Injuries which are not serious but require first aid or cause discomfort or pain to the person injured eg sprains and bruises.

Source: Land Transport Safety Authority, Christchurch City Road Safety Reports 1990-1998.

The law does not require non-injury crashes to be reported to Police. Reporting rates will vary widely. A comparison of insurance and police reports indicates that on average only one non-injury crash in fourteen is reported to the Police (LTSA).



Source: Source: Land Transport Safety Authority.

One of the main factors contributing to Christchurch's high crash rate is the large number of intersections, particularly crossroads, in the City's road network. This provides more opportunity for crashes to happen.

Road Casualty Statistics

Road casualty statistics refer to the number of people injured during crashes and the severity of those injuries. This differs from road crash statistics which relate to the number and severity of crashes involving injury. Table 1.21 shows the number of road casualties from 1990 to 1998 for Christchurch by their severity. With the exception of 1994, the number of casualties in the City consistently declined. This overall reduction was mainly due to fewer minor casualties. Road casualties in Christchurch show a similar downward pattern to national figures.

The number of deaths from road accidents fluctuated last decade from a high of 38 in 1993 to a low of 15 in 1996. A total of 240 people died on City roads between 1990 and 1998 (Table 1.21).

Car and van drivers and passengers experienced the greatest number of casualties in Christchurch between 1994 and 1998. Motorcyclists and cyclists were also significant casualty groups, although the number of casualties in both these groups has declined noticeably in recent years. This decrease may reflect changing road safety practices such as the wearing of cycle helmets. It also may be a result of more people choosing to travel by car (Figure 1.27).

Table 1.20 Injury Crash and Casualty Rates per 10,000Population

City	Crashes Per 10,000 Population	Casualties Per 10,000 Population
Auckland	23	31
Christchurch	26	35
Dunedin	17	24
Hamilton	25	32
Lower Hutt	24	30
Manukau	19	27
North Shore	15	20
Waitakere	19	26
Wellington	22	29
All New Zealand	23	34

The cities included in this table feature major urban areas with some rural areas on the outskirts. (Population > 90,000 and % Rural crashes <30).

Source: Land Transport Safety Authority, Christchurch City Road Safety Report, 1998.

Fig 1.27 Annual Casualties by Road User Type,

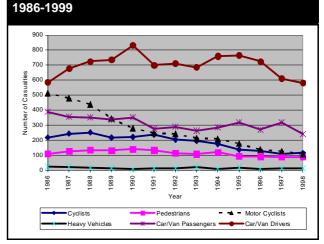




Table 1.21 Number of Reported Casualties in Christchurch,1990-1998										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total
Fatal Casualties	33	27	29	38	20	27	15	24	27	240
Serious Casualties	306	319	255	279	293	228	206	209	173	2,268
Minor Casualties	1,496	1,263	1,295	1,170	1,239	1,252	1,140	1,033	942	10,830
Total Casualties	1,835	1,609	1,579	1,487	1,552	1,507	1,361	1,266	1,142	13,338

Source: Land Transport Safety Authority, Christchurch City Road Safety Reports, 1990-1998.

During 1998 the casualty rate per 10,000 people in Christchurch was noticeably higher than the other main centres. Despite this higher casualty rate levels have declined significantly over recent years in line with national trends (Figure 1.28).

Public Perceptions or Sense of Safety

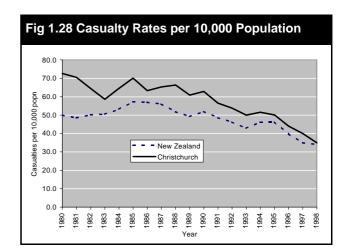
The Christchurch City Council has attempted to gain insight into how safe residents feel in the City by including in its Annual Survey of Residents questions on traffic safety, street lighting, safety in the Central City and, most recently, perceptions of safety in homes and neighbourhoods (Table 1.21). Over recent years responses to questions on safety have remained relatively consistent, with most concern focusing on safety for cyclists and public safety within the Central City at night.

The 1999 survey revealed that 50 per cent of respondents thought travelling around suburban roads in the City was safe (46 per cent) or very safe (4 per cent). However, 14 per cent thought that suburban roads were dangerous to travel on and 1 per cent thought they were very dangerous.

Sixty per cent of respondents to the 1999 survey (cyclists and non-cyclists) thought travelling around the City on a bicycle was not a particularly safe activity. Forty eight per cent said riding a bicycle was dangerous and 12 per cent said it was very dangerous. In contrast, there was much less concern about pedestrian safety in relation to traffic. The majority of respondents thought walking in the City was safe (57 per cent) or very safe (8 per cent).

Street lighting did not appear to be of major concern to respondents. Forty four per cent thought that all or most suburban streets were adequately lit for pedestrians while 11 per cent said few roads or no roads were lit adequately. Nineteen per cent said they did not go walking after dark. This was a noticeable drop since the 1997 survey when 28 per cent said they did not go walking at night. Seventy two per cent of respondents said that they had not been prevented from going anywhere in the City at night through lack of street lighting.

Questions relating to safety in the home and in neighbourhoods were included in the 1999 survey. Results showed that the majority of respondents felt safe in their homes both at night (76 per cent) and during the day (91 per cent). Most respondents felt safe in their neighbourhoods during the day although 36 per cent said they felt unsafe at night.



Source: Land Transport Safety Authority.

Table 1.22 Christchurch City Annual Survey of Residents	– Issues R	elating to	Safety			
	% of City Residents Agreeing					
Responses	1994	1995	1996	1997	1998	1999
Travelling around suburban roads is safe or very safe.	45	48	46	49	*	50
Travelling around suburban roads is dangerous or very dangerous.	18	18	20	18	*	15
Riding a bicycle is safe or very safe in Christchurch.	19	17	20	16	*	19
Riding a bicycle is dangerous or very dangerous in Christchurch.	53	58	56	60	*	60
Christchurch is safe or very safe to walk around.	64	57	67	64	*	65
Christchurch is dangerous or very dangerous to walk around.	12	18	10	16	*	11
All or most suburban streets are well enough lit for pedestrians.	42	36	46	36	*	44
Some suburban streets are well enough lit for pedestrians.	17	21	15	20	*	25
Few or no suburban streets are well enough lit for pedestrians.	9	16	12	15	*	11
Respondent does not go walking at night.	31	25	27	28	*	19
Lack of street lighting has not prevented respondents from going out at night.	81	84	82	87	*	72
Feel unsafe or very unsafe in the Central City during the day.	10	*	11	*	6	*
Feel unsafe or very unsafe in the Central City after dark.	69	*	69	*	61	*
Feel safe or very safe in their own home from outside intruders dur- ing the daytime.	*	*	*	*	*	91
Feel unsafe or very unsafe in their own home from outside intruders during the daytime.	*	*	*	*	*	9
Feel safe or very safe in their own home from outside intruders after dark.	*	*	*	*	*	76
Feel unsafe or very unsafe in their own home from outside intruders after dark.	*	*	*	*	*	24
Feel safe or very safe in their neighbourhood during the day.	*	*	*	*	*	94
Feel unsafe or very unsafe in their neighbourhood during the day.	*	*	*	*	*	6
Feel safe or very safe in their neighbourhood after dark.	*	*	*	*	*	63
Feel unsafe or very unsafe in their neighbourhood after dark.	*	*	*	*	*	36

* Question not included this year. Source: Christchurch City Council, Annual Survey of Residents, 1994-1999.

Education

Key Information	Why is this Useful?	What is Happening?
Residents with no formal qualifications.	Education is often seen as the first step towards employment and eco- nomic independence. Those without qualifications are more likely to receive lower incomes, have fewer employment opportunities and be more reliant on government funded benefits.	In 1986, 38 per cent of Christchurch residents aged 15 years and over had no formal qualifications. This dropped to 30 per cent in 1996.

Other Related Sections: Profile of Christchurch Residents, Businesses, Employment and Unemployment.

The following section provides information on the number of early childcare centres and educational facilities within Christchurch City, and also levels of education.

Early Childcare Centres and Education Facilities

In July 1998²³ the City's 215 early childcare centres had 13,124 enrolments²⁴ (Table 1.19).

One hundred and fifty four state and private primary and secondary schools in 1999 provided education and training for 55,532 pupils (Table 1.20).

According to the Ministry of Education, 48 tertiary training institutions operated in Christchurch City during 1999. They included the City's three main facilities - University of Canterbury, Christchurch College of Education, the Christchurch Polytechnic - and 45 private training establishments. Lincoln University, which is located outside the City boundaries, is also a major tertiary education provider for the City.

At 31 July 1999 there were 25,455 full and part-time enrolments for formal programmes of study at Christchurch's three main tertiary institutions and Lincoln University. This figure excludes students with enrolments finishing before or starting after 31 July 1999.

Formal Education

The general level of educational attainment in Christchurch appears to be very similar to that of the rest of New Zealand. In 1996, 33.4 per cent of Christchurch residents aged 15 years and over had some form of tertiary qualification compared with 32.2 per cent nationally. The proportion with no qualifications in Christchurch was slightly lower than the national figure (30.1 per cent compared with 32.2 per cent) (Figure 1.24 and Appendix 1: Table 14). The slightly higher level of tertiary education may reflect the presence of the four major tertiary institutions in or near the City.

The proportion of Christchurch residents aged 15 years and over with no formal qualifications fell from 38 per cent in 1986 to 30.1 per cent in 1996 (Figure 1.25 and Appendix 1: Table 14).

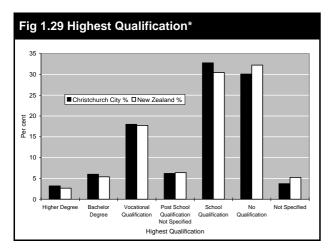
Table 1.23 Number of Early Childcare Facilities,1998					
Type of Centre	Total Centres	Total Enrol- ments			
Childcare (Casual)	3	_			
Education and Care Centres	120	7,573			
Free Kindergarten	52	4,196			
Home-based Childcare Network	10	483			
Play Centre	22	746			
Te Kohanga Reo Trust	8	126			
Total	215	13,124			

Source: Ministry of Education.

Table 1.24 Number of Schools and Students, 1999				
Type of School	Total Schools	Total Students		
Full Primary (Year 1-8)	61	15,238		
Contributing (Year 1-6)	44	12,533		
Intermediate (Year 7-8)	11	4,413		
Secondary (Year 7-15)	4	2,118		
Composite (Year 1-15)	9	3,723		
Secondary (Year 9-15)	17	17,232		
Special Schools	8	275		
Total	154	55,532		

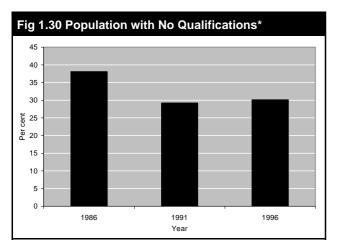
Source: Ministry of Education.

 ²³ This was the most up to date data at the time of writing.
 ²⁴ A child can be enrolled at more than one early childcare centre.



*Population age 15 years and over.

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



*Population age 15 years and over.

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