

# appendix I

## Population Growth

The pattern of demographic change can be expected to have a substantial influence on demand for the Council’s services in the next two decades. These changes will include an increase in the overall population base of the City, but a relatively slow rate of population growth, a gradual decline in the population aged under 15 years and progressive ageing of the population.

### Future Population Growth

Population projections (prepared using the adjusted 1996 base) suggest that Christchurch’s population will continue to grow over the next century, reaching 358,000 people by 2021. (Tables 1 and 2).

Although the City’s population is expected to grow, the rate at which growth occurs will continue to decline from an annual average rate of 0.8 percent in 1996-2001 to 0.3 per cent in 2016-2021. Slower growth will result from a gradual reduction in natural increase and also relatively low migration from other parts of the country and from overseas.

### Projected Net Migration (Internal and External)

While migration is the largest component of projected population growth, historically it is also the most volatile. The net gain from people moving to the City is expected to be around 4,000 people per five year period from 2001 to

2021 (Table 2). However, it is important to note that predicting long term net migration gains is particularly difficult. Any changes to immigration policy by Central Government or changes in social, political and economic conditions both nationally and internationally could significantly impact on future migration flows.

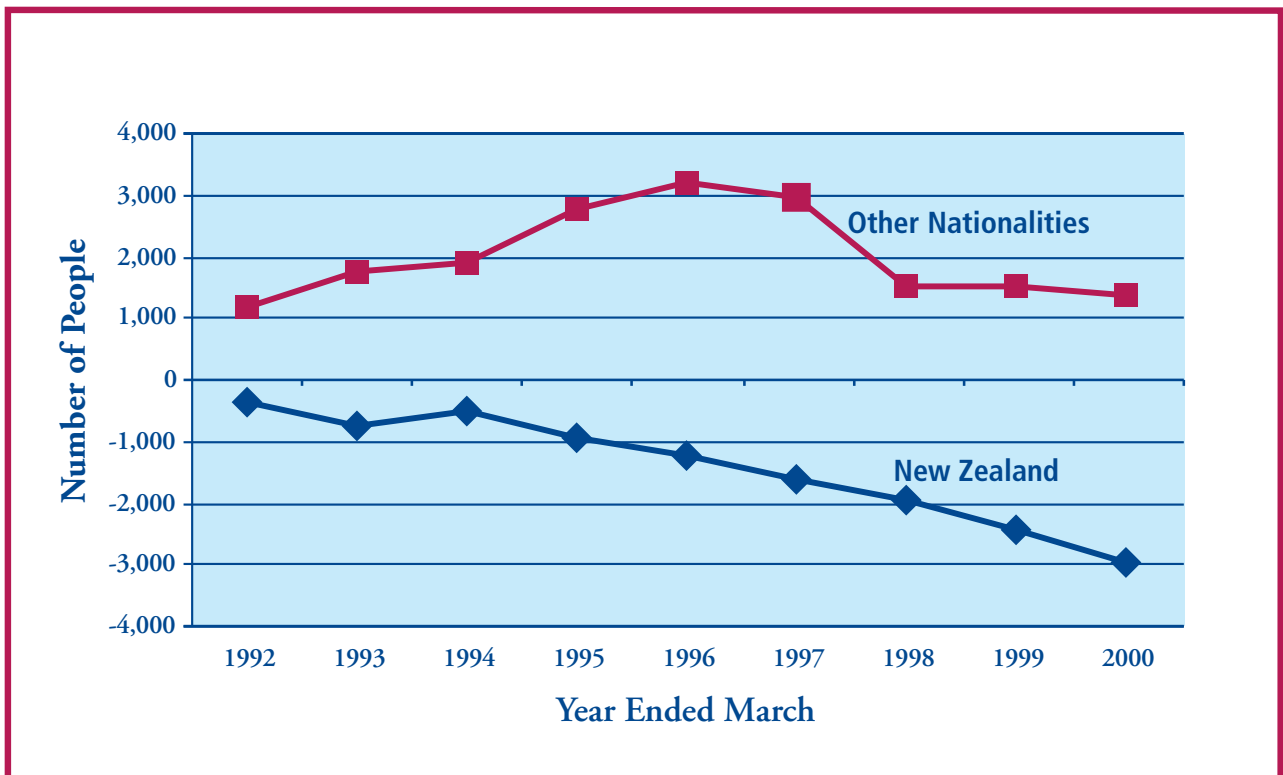
### Projected Natural Increase

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 during this period and more deaths (Table 2).

The projected decline in births reflects a range of current demographic, social and economic trends such as the shift to different 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 highlights the importance of migration for Christchurch if the City is to continue to grow.

**Table 1. Historical and Projected Population (Medium)**



Source: Statistics New Zealand, Census of Population and Dwellings 1981-96 and Population Projections (Adjusted 1996 Base)

**Table 2. Population Projection Summary for Christchurch City**

Year	Usually Resident Population	Population Change	Population Change Average Annual Change	Births	Births (Annual Rate)	Deaths	Deaths (Annual Rate)	Natural Increase	Total Fertility Rate	Net Migration
<b>Historical</b>										
1986	282,216	6243	0.4	18,272	13.1	12,721	9.1	5551	1.6	710
1991	289,077	6861	0.5	20,638	14.5	13,359	9.4	7279	1.76	-400
1996	309,030	19,953	1.3	20,766	13.9	13,405	9	7361	1.69	12,590
	(Unadjusted)									
1996	316,500									
	(Adjusted March 1996)									
<b>Medium Projection</b>										
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

Usually resident population figures have been rounded. Source: Statistics New Zealand, Population Projections (Adjusted 1996 Base)

### Age Composition

The age structure of Christchurch’s population has undergone major changes in recent decades. In line with national trends the City’s population is progressively ageing. Table 3 provides a series of indices which demonstrate this phenomenon. The median age, or the point at which half the population is older, is a particularly useful summary of change. Table 3 shows that the City’s median age has increased substantially 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.

Table 3 highlights a general reduction in the proportion of people aged 0-14 years (children)<sup>2</sup> and an increase in the population aged 65 years and over. The changing balance of

young and old is also reflected in the drop in the children / elderly ratio from two children for every person aged over 65 years in 1981 to 1.4 per elderly person in 1996. These trends are a result of lower fertility, the passage of the large baby boom generation up the age scale (those born between 1946 and 1965), 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.

**Table 3. Historical and Projected Usually Resident Population**

Year	0-14 years	%	15-64 years	%	65+ years	%	Total	Median Age	Ratio Children per Elderly Person*
<b>Historical</b>									
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	33.7	1.4:1
							(Unadjusted)		
<b>Medium Projection</b>									
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, Population Projections (Adjusted 1996 Base)

<sup>2</sup> The actual number of children grew during the early 1990s in response to a brief increase in births.