POSITIVE AGEING
INDICATORS 2007

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MINISTERIAL FOREWORD

The Government welcomes *Positive Ageing Indicators 2007*, which provides us with a wealth of information about older people in New Zealand. This is the first step in establishing a regular reporting programme to assess their overall wellbeing.

Positive Ageing Indicators 2007 provides a picture of older people's quality of life in the areas of income, health, housing, transport, and access to facilities and services. It also examines levels of cultural engagement among older Māori, attitudes to ageing and older people, older people living in the community, and their employment and opportunities.

Positive Ageing Indicators 2007 finds that most older New Zealanders are well-equipped to participate positively in society. Most have adequate incomes that provide them with a reasonable standard of living and most are living longer, healthier lives than their predecessors.

Older people have high home ownership rates and most are satisfied with the quality of their accommodation. Increasing numbers of older people are living at home and receiving the support to do so. Older people generally have good access to facilities and services, and are taking advantage of opportunities for personal growth and development.

Through listening to New Zealanders, our Government has a clear sense of how older people would like to live. They want to be included in society, and they want the rights, benefits, and responsibilities associated with that inclusion. This broadly-agreed understanding of positive ageing, which recognises the aspirations of our many diverse communities, is set out in the New Zealand Positive Ageing Strategy.

We know that older people have skills, knowledge and experience to contribute to society and that the government has a large part to play in ensuring they are able to remain active participants in society for as long as possible.

Our Government is committed to social investment through the wide range of initiatives highlighted under the New Zealand Positive Ageing Strategy. Through the series of positive ageing indicator publications, we will be able to see, over time, how older New Zealanders are faring, and where further investment is needed. The reports will also facilitate informed debate among all stakeholders over policy making and priority setting for advancing positive ageing. We will also be able to measure how the wellbeing of older people in New Zealand compares with that of older people internationally.

I look forward to seeing our continuing progress reflected in future editions of Positive Ageing Indicators.

RUTH DYSON
Minister for Senior Citizens

CHIEF EXECUTIVE'S PREFACE

This first edition of Positive Ageing Indicators is an excellent addition to our information resources for social development. *Positive Ageing Indicators 2007* is designed to provide specific information about older people in New Zealand. It sits alongside the information in the Social Report.

The report tells us how well older people are doing in New Zealand across a range of social indicators including income, health, housing and access to services. These indicators will help to identify key issues and areas where action is needed. *Positive Ageing Indicators 2007* is a significant source of information that gives us the opportunity to improve our understanding of, and responses to, older New Zealanders' needs.

Positive Ageing Indicators 2007 uses a wide range of statistics from various agencies, in particular customised data from the 2006 Census of Population and Dwellings. It will be produced every five years following the five-yearly release of Census data. The Ministry of Social Development will be working with other relevant agencies to investigate options for improving the scope and quality of the statistical data for the 2012 Positive Ageing Indicators report.

Positive Ageing Indicators 2007 was developed by the Ministry of Social Development in consultation with the Office for Senior Citizens, Statistics New Zealand and a range of other experts and departments. I thank all of those people who have worked hard to produce this first report. I am certain that *Positive Ageing Indicators 2007* will be of great interest and use to its readers.

PETER HUGHES
Chief Executive
Ministry of Social Development

INTRODUCTION

POSITIVE AGEING INDICATORS 2007

This *Positive Ageing Indicators 2007* report is the first step in the establishment of a regular programme of social monitoring focused on older people. The aim of the report is to provide information on the overall wellbeing of older people in New Zealand. In most of the indicators, the terms "older population" and "older people" refer to people aged 65 years and over (unless otherwise stated) living in private dwellings (this is noted in the introductory section of each indicator). "Private dwellings" includes retirement villages, but not rest homes and hospitals.

The report uses a set of statistical indicators to assess trends across 10 "outcome domains", or areas of older people's lives. These domains are Income, Health, Housing, Transport, Living in the Community, Māori Cultural Identity, Access to Facilities and Services, Attitudes to Ageing and Older People, Employment, and Opportunities. Together, these domains provide an overall picture of older New Zealanders' wellbeing and quality of life.

From 2007, the Ministry of Social Development will publish a positive ageing indicators report every five years.

PURPOSE OF THE POSITIVE AGEING INDICATORS REPORT

The positive ageing indicators report has three main aims:

- to provide and monitor over time, measures of older New Zealanders' overall wellbeing and quality of life using indicators selected from available data sources
- to present objective statistical information on the wellbeing of older New Zealanders to contribute to better-informed public debate
- to help identify key issues and areas where we need to take action, which can in turn help with planning and decision making.

This first report enables us to examine the current level of wellbeing of older people in New Zealand, and it sets up some initial benchmarks against which to measure New Zealand's progress over time. It also identifies gaps where more information and research are needed. It is intended that the report provide useful information for a wide range of people, as well as for government officials and academics. The information it contains will help people and groups to identify important issues of concern for older people, to identify key areas for further research and evaluation, and to participate in debates over decision making and priority setting for advancing positive ageing in New Zealand.

CONTEXT

The monitoring framework of outcome domains and indicators used in *Positive Ageing Indicators 2007* reflects the broadly-agreed understanding of positive ageing set out in the New Zealand Positive Ageing Strategy (Office for Senior Citizens 2001).

THE NEW ZEALAND POSITIVE AGEING STRATEGY

The objective of the New Zealand Positive Ageing Strategy is to improve opportunities for older people to participate in the community in ways that they choose. It provides a framework within which all policies and services with implications for older people can be understood and developed.

The concept of positive ageing embraces a number of factors, including financial security, health, independence, self-fulfilment, community attitudes, and personal safety and security. The underpinning premise is that the years of older age are both viewed and experienced positively. The Strategy's focus is not just on the experiences of older people but also on the attitudes, expectations and actions towards older people of younger generations.

The New Zealand Positive Ageing Strategy recognises older people have skills, knowledge and experience to contribute to society and Government is committed to ensuring older people are able to remain active participants in society for as long as possible. The strategy sets out an agreed set of principles and 10 goals for positive ageing according to priority areas identified during consultations with community and stakeholder groups. The 10 goals are used to develop annual action plans for promoting and supporting positive ageing in policy and service development across a broad range of portfolio areas.

The Strategy provides a strong context for this Positive Ageing Indicators 2007 report. This is reflected in the explicit links made in the report between each outcome domain and the New Zealand Positive Ageing Strategy's principles and priority goals. The Strategy's vision, principles and priority goals are set out in Appendix 1.

It should be noted the positive ageing indicators report provides information to enable us to examine the current level of wellbeing experienced by older people in New Zealand. The report is not a tool for evaluating or measuring the progress of the New Zealand Positive Ageing Strategy or the effectiveness of specific government policies.[1]

THE SOCIAL REPORT

The social report, published annually by the Ministry of Social Development, provides information on the social health and wellbeing of New Zealand society. The report uses indicators to measure levels of wellbeing, to monitor trends over time, and to make comparisons with other countries. The 10 key concerns of the social report are health, knowledge and skills, paid work, economic standard of living, civil and political rights, cultural identity, leisure and recreation, physical environment, safety, and social connectedness.[2]

In conjunction with the New Zealand Positive Ageing Strategy, the social report provides a context for assessing the wellbeing of older people in New Zealand. While the social report provides some age breakdowns, it focuses on the New Zealand population as a whole. It does not provide detailed information on older people.

The positive ageing indicators report focuses solely on older people. While structured along a similar line to the social report, it has different outcome domains, although some of the desired outcomes for the positive ageing indicators are based on those in the social report.

SELECTION OF INDICATORS

The *Positive Ageing Indicators 2007* report is compiled using a wide range of statistics from various agencies. In particular, we have used customised data from the 2006 Census of Population and Dwellings for several indicators. For further information on the data sources used in this report, see Technical Details and Bibliography.

Indicators were selected against the following criteria, based on those established in the social report. They must be:

- relevant to the desired outcomes
- based on broad support
- grounded in research
- able to be disaggregated
- consistent over time
- statistically sound
- timely.

Some indicators perform well against certain criteria and poorly against others, so trade-offs are often necessary. For example, the indicators related to real (disposable and private) incomes of older people are relevant to their financial security, but the data comes from a survey repeated every three years (see Technical Details: Income for more details on the Household Economic Survey). Although this will enable us to monitor the income levels of older people consistently over time, the number of respondents aged 65 years and over is not large enough for fine breakdowns by age or ethnicity.

There is also a significant interconnection between outcomes. Many indicators relate to more than one desired outcome but, for the sake of simplicity, appear in one domain only. Paid work, for instance, is important not only for the income it provides but also as a major source of social interaction for many older people. It has been reported under the Employment domain rather than the Opportunities or Income domains.

A full list of the 10 domains and 34 indicator areas selected for this report is contained in Table 1. The indicators are reported on in detail in the chapters that follow.

LIMITATIONS OF THE INDICATORS

DATA AVAILABILITY AND QUALITY

This first report has been limited by the availability of current information. Data on employment indicators, for example, has been gathered and analysed consistently over time, which adds confidence in its reliability. In contrast, the measurement of outcomes in some areas is relatively underdeveloped. For example, there is a clear scope for future reports to include indicators relating to Pacific peoples, Asian and Other ethnic groups in the "cultural identity" domain. The measurement of the experiences of older people in rural areas also needs attention.

Some of the indicators included are more robust than others. Results based on census data, for example, are complete. On the other hand, results which depend on sample surveys will include sampling errors to a greater or lesser extent. For example, the Quality of Life in New Zealand's Largest Cities Survey 2004 (Auckland City Council et al, 2005) had a low response rate (22 percent), so indicators based on this data source may be unreliable and should be interpreted with care.

BREAKDOWNS OF FINDINGS

Wherever possible, we have tracked changes over time and broken each indicator down by age, sex, ethnicity, and region. We do this to show issues for particular groups, which can be lost when only aggregate information is provided.

It should be noted that such breakdowns are particularly problematic for older ages (65 years and over) where the sample size (relative to younger ages) is small. This means the results from detailed breakdowns may not be statistically sound. Some of the estimates presented in this report have large standard errors associated with them, so differences shown between groups, while of interest, are often not statistically significant. Unless we specifically state that the differences presented between groups are statistically significant (or can be established to be statistically significant based on available data), the data should be interpreted with care.

OTHER DATA CONSTRAINTS

Two other aspects of the data used in this report should be noted. Firstly, there is little information that links older people's experiences across a range of indicators. Thus, there are no indicators that show multiple disadvantage across a range of outcomes. For example, to what extent do older people with low incomes also have poor health? Do older people with low incomes also feel isolated or unable to participate in social and cultural activities?

Secondly, the indicators generally represent aspects of older people's lives at a particular time. For instance, they do not tell us how long people have been in poor-quality housing or on a low income.

There is a need to improve the social statistics pertaining to older people. This may involve investigating options such as making better use of existing data, expanding the scope of existing regular surveys, establishing a focused social indicators survey of older people or further utilising longitudinal and panel studies.

For more discussion on the statistical data used in this report, see Technical Details.

STRUCTURE OF THE REPORT

The report is divided into three sections. The first section provides background and contextual information on the size and composition of New Zealand's older population.

The second section is the core of the report and is organised around the 10 outcome domains. For each domain, we provide a statement of desired outcomes, followed by a brief discussion of the domain's relevance to the wellbeing of older people. Links between the domain area and the New Zealand Positive Ageing Strategy's vision, principles and goals are also made. The set of indicators for the domain is then introduced, followed by reports on each indicator. These reports form the main part of each chapter.

The final section summarises the report's overall findings and provides a picture of how older people (and different subgroups of older people) are faring. This section also discusses the major gaps in available data on older people and makes recommendations for further research and data-gathering on the wellbeing of older people.

FUTURE REPORTS

This *Positive Ageing Indicators 2007* report is the first in a series of reports. It establishes a monitoring framework of outcome domains and indicators for future reports. So we can use the most up-to-date census data, we intend to publish a report every five years in the year following the New Zealand Census of Population and Dwellings.

As in other countries that produce social monitoring reports, the choice of indicators is a matter of debate. As part of the review of this report, the Ministry of Social Development will be seeking opinions from a wide range of groups and individuals about this first report. Feedback will be sought about the overall approach taken, the nature of the indicators chosen, and the areas where data and research could improve the future monitoring of older people's wellbeing. The purpose of such a review is to ensure a wider range of information and more comprehensive coverage of the issues of concern can be included in future reports.

INDICATORS FRAMEWORK

The framework used in this report is presented below.

Table 1 Positive ageing outcome domains and indicators

DOMAIN	DESIRED OUTCOMES	INDICATORS: what we look at to assess outcomes
INCOME	Older people have access to adequate incomes that afford security and stability in retirement, provide a reasonable standard of living, and enable them to participate fully in society, exercising choice about how to live their lives.	• Disposable incomes • Private incomes • Living standards • Low incomes
HEALTH	Older people choose healthy lifestyles, are able to get the health services they need, and have the opportunity to enjoy a long and healthy life. Avoidable deaths, disease and injuries are prevented. Older people have the ability to function, participate and live independently or appropriately supported in society.	• Life expectancy at age 65 years • General health • Fatal and serious non-fatal injuries from falls • Cigarette smoking • Unmet need for primary health care • Flu vaccination
HOUSING	Older people live in good quality, affordable and appropriate housing that – in addition to serving the basic human need for shelter – helps to meet other important needs such as security, independence, health, privacy, community participation, and the expression of personal and cultural identity.	• Housing quality • Home ownership • Housing affordability
TRANSPORT	Older people have access to appropriate and affordable transport options to keep them mobile. As well as the ability to undertake the routine tasks of living, older people have the mobility to live stimulating, socially connected lives.	• Licensed drivers • Public transport use
LIVING IN THE COMMUNITY	Older people feel safe and secure. They are able to make choices in later life about where to live and they receive the support needed to do so.	• Living at home • Disability Allowance • Criminal victimisation • Fear of crime • Trust in others
MĀORI CULTURAL IDENTITY[3]	Older Māori people who identify with Māori culture participate and engage in te ao Māori (the Māori world). They enjoy sharing values and aspirations, support, and the sense of security and belonging that cultural participation provides.	• Te ao Māori • Te reo Māori speakers
ACCESS TO FACILITIES AND SERVICES	Older people in both rural and urban areas receive the facilities and services they need to live confidently in the community. When accessing these facilities and services, older people are not disadvantaged by their geographic location.	• Non-big city access to services • Internet access

DOMAIN	DESIRED OUTCOMES	INDICATORS: what we look at to assess outcomes
ATTITUDES	New Zealanders have positive attitudes towards ageing and older people. Ageing is viewed as a positive experience by older people themselves, and others value and respect older people and encourage their contributions.	• Life satisfaction • Physical activity • Perceived age discrimination
EMPLOYMENT	Older people have access to meaningful and rewarding employment. Older people are provided with incentives and flexible work options to encourage them to remain in the workforce longer.	• Paid employment • Average hourly earnings
OPPORTUNITIES	Older people live rich, fulfilling lives with plentiful opportunities for personal development and participation in the community in the ways that they choose.	• Formal voluntary work • Loneliness • Participation in education • Community inclusion • Participation in cultural and arts activities

SECTION 1

OLDER PEOPLE: A STATISTICAL OVERVIEW

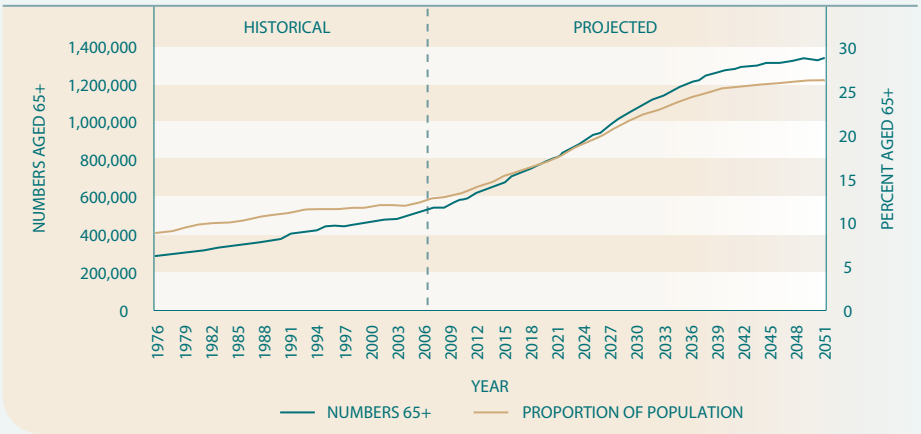
This section contains background information on the size and characteristics of New Zealand's older population to provide a context for the indicators that follow.

POPULATION SIZE AND GROWTH

The population in New Zealand aged 65 years and over was 519,940 at the end of December 2006, increasing from 275,030 people in 1976. Over this 30-year period, the proportion of the older population increased from 9 percent to 12 percent of New Zealand's total population.

Statistics New Zealand's projections indicate the older population will continue to grow, and will double to reach over a million by 2028. By 2051, there is projected to be more than 1.3 million older people, and they will comprise more than a quarter of the total population.

Figure 1 Estimated and projected resident population aged 65 years and over, 1976–2006 (estimated) and 2007–2051 (projected)



Source: Statistics New Zealand (2004) population estimates and 2004-based series 5 projections
Note: The series 5 projections assume medium fertility, mortality and net migration

DISTRIBUTION OF THE OLDER POPULATION

At the 2006 Census, 73 percent of older people (359,970 people) were resident in the North Island. The older population is concentrated in urban regions with over 60 percent living in Auckland, Waikato, Wellington, or Canterbury. Twenty-six percent of older people resided in the Auckland region (128,415 people), 15 percent in Canterbury (72,612 people), 10 percent in Wellington (51,405 people) and 10 percent in Waikato (47,631 people).

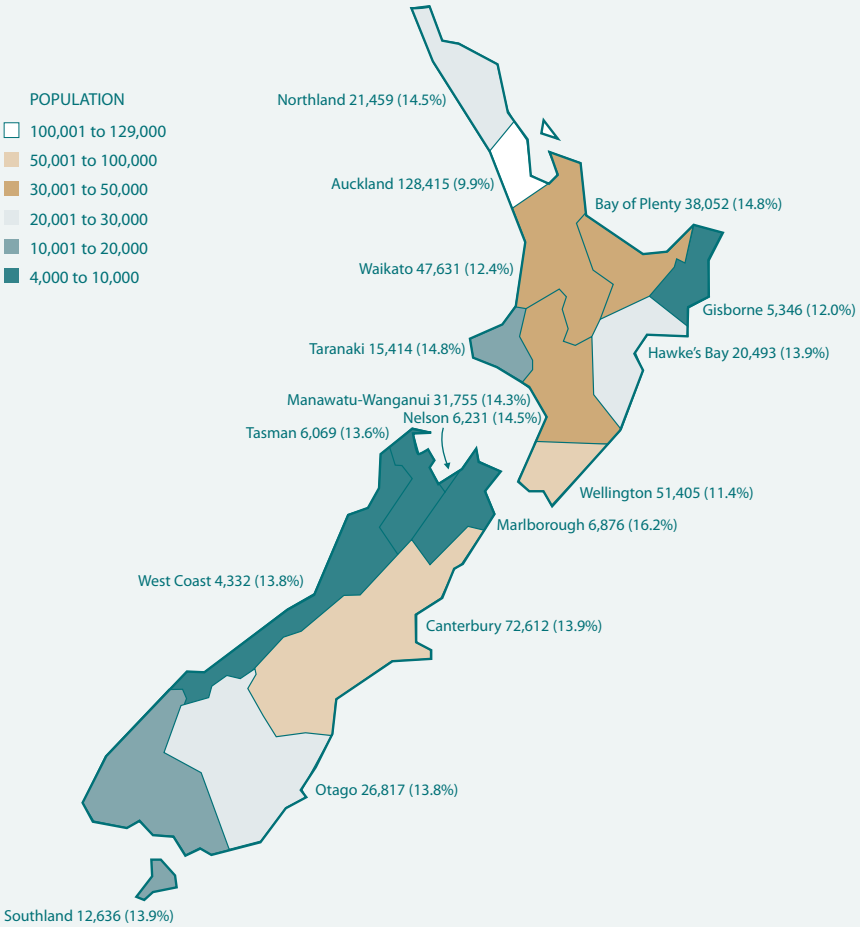
Although the vast majority of older people lived in urban areas, the number of older people as a proportion of the total population (ie all ages) varied significantly by region. Figure 2 illustrates the geographical distribution of the older population and what proportion they made up of each region's total population (in brackets).

Although more than a quarter of older people (128,415 people) in New Zealand lived in Auckland, Figure 2 shows Auckland was the "youngest" region (only 10 percent of its population were older people). By contrast, Marlborough only accounted for 1.4 percent of the total older population (6,876 people), but the region had the oldest population (16 percent aged 65 years and over).

Nelson, Taranaki, Northland, and Bay of Plenty all had relatively older populations – 15 percent aged 65 years and over. After Auckland, Wellington and Gisborne had the youngest populations, with 11 percent and 12 percent of their populations aged 65 years and over, respectively.

Figure 2 Distribution of population aged 65 years and over, 2006

Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006; Statistics New Zealand (2005c) subnational 2001 (base) population projections

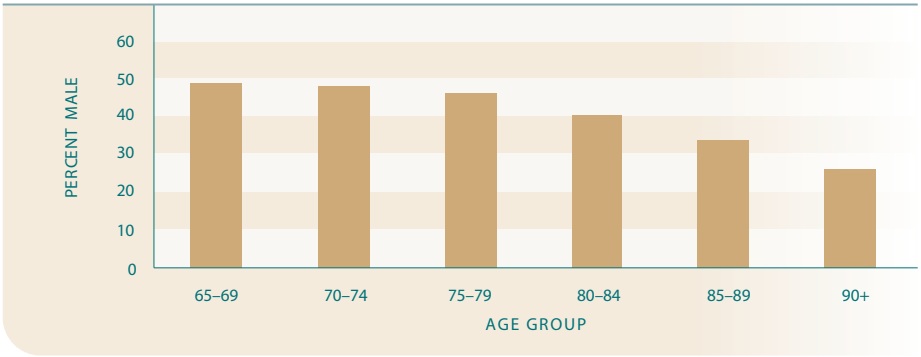


AGE AND SEX STRUCTURE OF THE OLDER POPULATION

SEX DISTRIBUTION

In 2006, 45 percent (221,139 people) of the older population were men, and 55 percent (274,464 people) were women. The over-representation of women is largely attributable to their lower mortality rates. This is evident in Figure 3, where the proportion of men declined with age. At the 2006 Census, 49 percent of 65–69 year olds were men, but only 34 percent of the 85–89 years age group were men and the proportion was lower still at 26 percent for 90 years and over.

Figure 3 **Proportion of the population aged 65 years and over who are male, by age group, 2006**

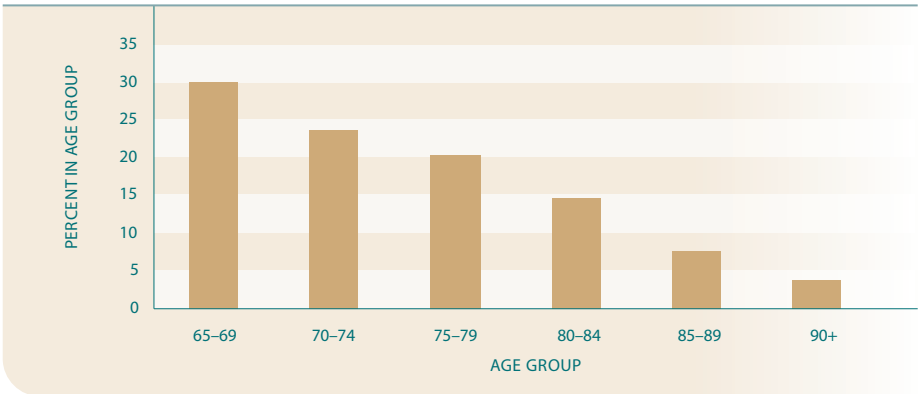


Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

AGE DISTRIBUTION

At the 2006 Census, the age distribution of the older population was skewed towards the "younger" old. Figure 4 shows that, in 2006, 54 percent of the older population were aged 65–74 years. The 85 years and over age group accounted for only 12 percent of the older population.

Figure 4 **Age structure of population aged 65 years and over, 2006**



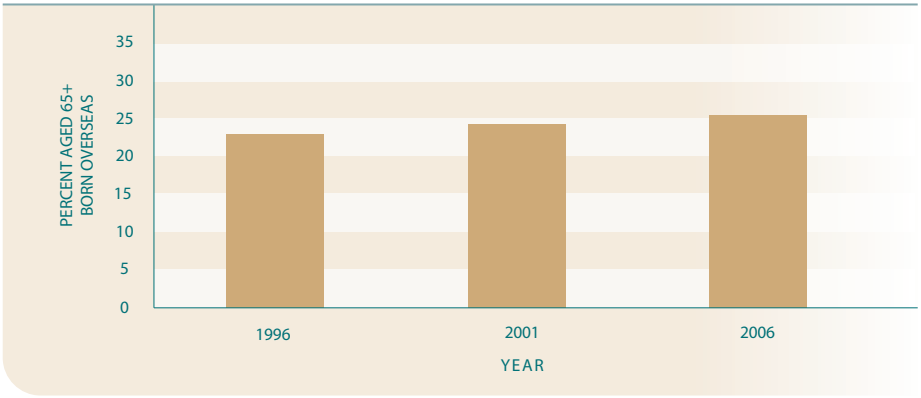
Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

BIRTHPLACE AND ETHNICITY

OLDER PEOPLE BORN OVERSEAS

At the 2006 Census, one-quarter of older people were born overseas. The proportion of older people born overseas has been slowly increasing in recent years (see Figure 5). Between the 1996 and 2006 censuses, the proportion of overseas-born older people increased from 23 percent to 25 percent.

Figure 5 **Proportion of the older population born overseas, 1996–2006**



Source: Statistics New Zealand (1997; 2002b; 2007c) Census of Population and Dwellings 1996, 2001 and 2006

Of those overseas-born older people, the single largest group (55 percent) were born in the United Kingdom or Ireland. Asia (12 percent), North-west Europe (10 percent), and the Pacific Islands (9 percent) were the next most common birthplaces of older people (see Table 2).

Table 2 **Birthplace of overseas-born older people, 2006**

Country of birth	Count	Percent
United Kingdom and Ireland	69,516	55.1
Asia	15,414	12.2
North-west Europe	12,135	9.6
Pacific Islands	11,682	9.3
Australia	6,369	5.0
Other Europe	5,232	4.1
Africa and Middle East	3,726	3.0
Americas	2,472	2.0

Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

ETHNIC COMPOSITION OF THE OLDER POPULATION

Table 3 summarises the ethnic distribution of the older population as at the 1996, 2001, and 2006 censuses. Ethnicity was defined using the total response concept. This allowed individuals to make multiple responses to the ethnicity question in the census.

It should also be noted the ethnicity question changed in the 2006 Census with the introduction of the "New Zealander" ethnic group. Consequently, the "European" ethnic group from the 1996 and 2001 censuses is not directly comparable to the "European and New Zealander" ethnic group from the 2006 Census. Table 3 assumes the majority of people reporting "New Zealander" ethnicity belonged to the European ethnic group.

In the 2006 Census, the large majority of older people (88 percent) reported themselves to be European (including the "New Zealander" group). Only 5 percent of older people reported Māori ethnicity, even though 14 percent of the total (ie all ages) New Zealand population reported themselves as being Māori. The under-representation of Māori at the older ages was largely due to the much higher mortality rates faced by this group (see Health: Life Expectancy at Age 65 Years). The Asian and Pacific populations aged 65 years and over accounted for 3 percent and 2 percent of the total older population respectively.

Table 3 summarises the ethnic distribution of the older population in 1996, 2001 and 2006. Although the European ethnic group has consistently been the largest, the share of each minority ethnic group has increased between 1996 and 2006. The proportion of the older population reporting Māori ethnicity rose 1 percentage point between 1996 and 2006. The greatest growth was observed for the Asian ethnic group, where the proportion of older people reporting Asian ethnicity trebled from 1 percent in 1996 to 3 percent in 2006.

Table 3 Number and proportion of the population aged 65 years and over, by self-reported ethnic group (total responses), 2001–2006

	1996		2001		2006	
Ethnic group	Number	%	Number	%	Number	%
European – includes New Zealander ethnic group in 2006 Census	376,401	89.1	399,024	88.6	434,157	87.6
Māori	15,834	3.7	17,637	3.9	23,127	4.7
Pacific	5,613	1.3	7,632	1.7	10,083	2.0
Asian	5,079	1.2	9,759	2.2	16,071	3.2
Other	447	0.1	756	0.2	1,023	0.2

Source: Statistics New Zealand (1997; 2002b; 2007c) Census of Population and Dwellings 1996, 2001 and 2006
Note: Rows do not add to 100 percent as the figures exclude non-respondents and include multiple responses

OLDER HOUSEHOLDS AND FAMILY ROLES

PRIVATE DWELLINGS[4]

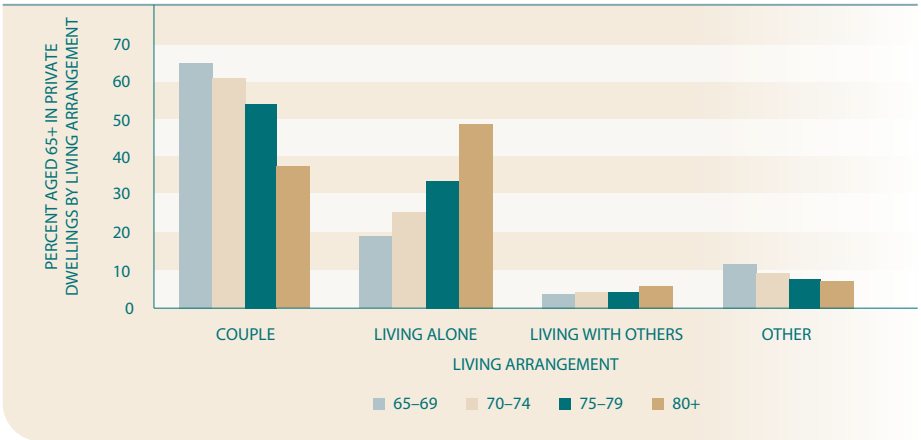
At the 2006 Census, 90 percent of the older population lived in private dwellings. Fifty-six percent of this group were living with a spouse or partner, 31 percent were living alone, and 5 percent were living with others. Nine percent of older people in private dwellings lived in some other arrangement (not further defined).

The proportion of older people (resident in private dwellings) that lived with a spouse or partner declined with age, while the proportion living alone increased with age (see Figure 6). The proportion of older people in private dwellings that lived with others remained constant at 4 percent for ages 65–79 years, but increased to 6 percent for the group aged 80 years and over. This is likely to reflect older people moving in with family or friends (as opposed to residential care) if they became unable to look after themselves.

Figure 7 shows the proportion of older people resident in private dwellings who lived with their spouse or partner, by age and sex. At every age, women were less likely than men to live with a spouse or partner. The proportion living with a spouse or partner decreased much more sharply for women than for men. For example, the proportion of women living with a partner fell from 59 percent for 65–69 year olds to 42 percent for 75–79 year olds. The corresponding decrease for men in this age range was from 71 percent (65–69 years) to 69 percent (75–79 years).

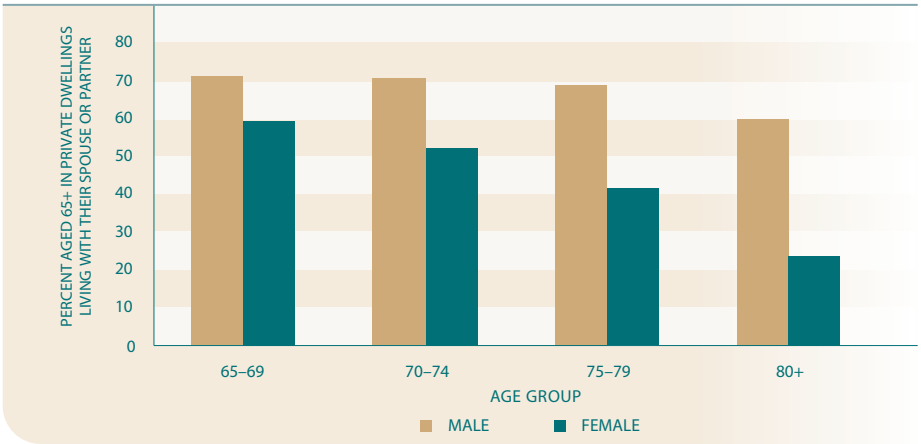
These differences can be attributed to women living longer than their male partners, and therefore being more likely than men to be widowed at any given age.

Figure 6 **Living arrangements of the population aged 65 years and over residing in private dwellings, by age group, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

Figure 7 **Proportion of the population aged 65 years and over residing in private dwellings and living with their spouse or partner, by age group and sex, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

NON-PRIVATE DWELLINGS[5]

At the 2006 Census, 8 percent of the older population resided in non-private dwellings. Around two-thirds of these – approximately 27,000 people making up some 5 percent of the total older population – were living in residential care facilities. The number of older people living in such institutions increased sharply with age, rising from 0.7 percent of older people aged 65–69 years to 16 percent of those aged 80 years and over (see Table 4).

Table 4 **Number and proportion of population aged 65 years and over in residential care facilities, by age group, 2006**

Age	Number in residential care	Percent in residential care
65–69	1,083	0.7
70–74	1,917	1.6
75–79	3,630	3.6
80+	20,349	15.8
Total 65+	26,982	5.4

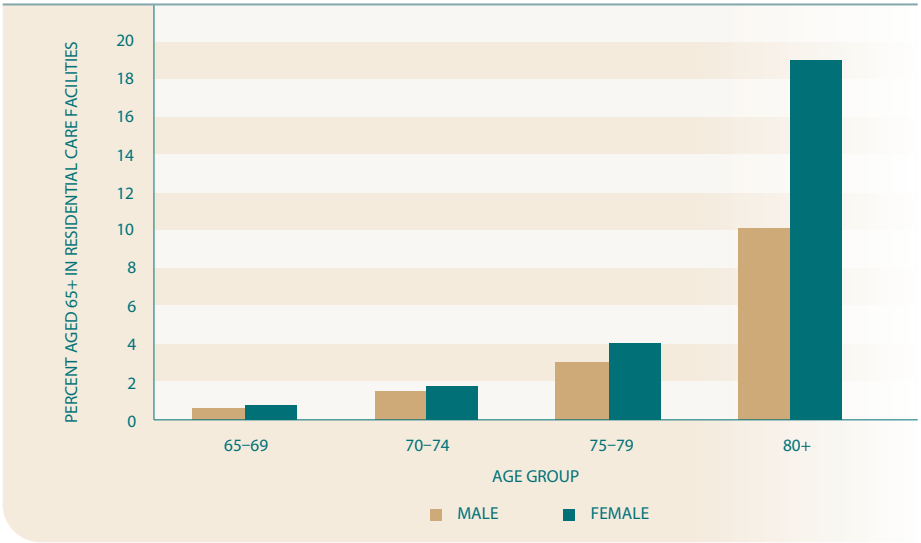
Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

Of this older population resident in non-private dwellings, another 8 percent (approximately 3,000 older people) were in a hospital on census night. The remaining 27 percent of this group (approximately 10,000 people) resided in temporary dwellings such as hotels, motels and boarding houses or other institutions such as shelters or prisons.

For the rest of this section, we focus on older people living in residential care facilities.

Figure 8 shows the proportion of the older population living in residential care by age group and sex. In 2006, 7 percent of older women (19,479 people) and 3 percent of older men (7,503 people) lived in residential care. At every age, women were more likely than men to live in residential care. The difference between the proportion of men and women living in residential care increased with age. For example, in the oldest (80 years and over) age group, 19 percent of women (15,627 people) were in residential care compared with 10 percent of men (4,722 people) in the same age group.

Figure 8 **Proportion of the population aged 65 years and over residing in residential care facilities, by age group and sex, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

OLDER PEOPLE WITH DISABILITY

While the earlier information in this section is drawn from the 2006 Census, information on disability is derived from a post-censal survey and 2006 results were not available at the time of publication. Results here are taken from the 2001 post-censal survey.

In 2001[6], approximately 241,000 older people (54 percent) reported some form of disability. The prevalence of disability was slightly higher for women aged 65 years and over (56 percent) than for men (51 percent) in the same age group. This was due to the

varying age structures of the older male and female populations – there was a higher proportion of women in the oldest age groups where disability prevalence was the highest.

Between 1996 and 2001, disability prevalence increased 2 percentage points from 52 percent to 54 percent. This was driven by an increase in female disability prevalence, which increased from 53 percent in 1996 to 56 percent in 2001. There was no change in disability prevalence for older men.

Table 5 Disability counts and prevalence in the population aged 65 years and over, by sex, 1996 and 2001

	1996		2001	
Sex	Number	Prevalence (%)	Number	Prevalence (%)
Male	88,700	51.3	100,297	51.3
Female	130,000	53.0	140,335	55.9
Total	**218,800**	**52.0**	**240,632**	**53.9**

Sources: Statistics New Zealand (1996; 2001b) Household Disability Survey; Statistics New Zealand (2001a) Disability Survey of Residential Facilities

Table 6 summarises disability in the older population by severity of limitation.

Table 6 Percent of disabled population aged 65 years and over, by severity of disability, 2001

Severity of limitation	Count	Percent
Mild	66,397	27.6
Moderate	119,624	49.7
Severe	54,611	22.7

Sources: Statistics New Zealand (2001b) Household Disability Survey; Statistics New Zealand (2001a) Disability Survey of Residential Facilities

SECTION 2

This section forms the core of the report. It contains information on the 10 outcome domains and their associated indicators.

DESIRED OUTCOMES

Older people have access to adequate incomes that afford security and stability in retirement, provide a reasonable standard of living, and enable them to participate fully in society, exercising choice about how to live their lives.

INCOME

INTRODUCTION

Older people need a secure income that will provide them with the basic necessities such as adequate food, clothing and housing. An income that enables participation is also important to an older person's wellbeing. The 1972 Royal Commission on Social Security agreed that a useful standard for adequacy was a level of resources that allowed individuals not just to survive but also to participate. The Commission defined participation as meaning "no-one is ... so poor that they cannot eat the sort of food that New Zealanders usually eat, wear the same sort of clothes, [and] take a moderate part in those activities which the ordinary New Zealander takes part in as a matter of course".[7]

The desired outcomes statement is consistent with the New Zealand Positive Ageing Strategy's goal of "secure and adequate income for older people" and reflects the Strategy's principles of empowerment, participation and choice. The statement points to the importance of older people not only enjoying a decent standard of living, but also enjoying prosperity as much as possible. Such prosperity gives older people choice over how to live their lives.

INDICATORS

The four indicators in this chapter provide information on different aspects of older people's resources – how their income meets their basic needs, contributes to their material comfort, and provides them with options for how they live their lives. We also include information relating to overall living standards, which depend not only on income but other factors as well.

Income as used here refers to regular income: wages, annuities and pensions (including New Zealand Superannuation), interest, rent and dividends, and any other recurring income from for example, trusts. It does not include drawing down of capital, even where this is done on a quasi-regular basis. Since older people may be in the position of having material financial assets but little by way of regular income, indicators based on income alone need to be treated with care.

The first two indicators provide measures of disposable income and are directly related to older people's access to adequate income. The first indicator provides a measure of the real growth in the median disposable family income of older people. Trends over time reflect the extent to which older people have experienced income growth over and above the effects of inflation, but they may be affected by the decisions of older people to hold retirement savings in assets such as stocks, bonds and property, rather than in pension and annuity form.

Disposable income can be divided into the state provision of retirement income, and private income. For nearly all older New Zealanders, state provision consists of New Zealand Superannuation (NZS). The aims of NZS are to provide an adequate level of income and to keep older people out of poverty. The balance of disposable income, the private income component, consists mainly of income derived from building up voluntary savings, which some people use to supplement their NZS and to maintain parity with their pre-retirement income. The second indicator provides a measure of the real growth in the median private family incomes of older people. This removes the "masking" effect of NZS and makes more visible the extent to which income derived from voluntary savings is available at the median to supplement New Zealand Superannuation.

The final two indicators measure the extent to which older people experience hardship or deprivation. One indicator provides a measure of living standards by showing whether older people are living in hardship in terms of their possessions, activities and finances. The other indicator provides a measure of the proportion of older people with low incomes.

DISPOSABLE INCOMES

DEFINITION

The median[8] annual disposable (net of tax) family income of the older population (living in permanent private dwellings) adjusted for inflation (to represent 2004 dollars) over the years 1988 to 2004. The measure has been constructed using economic family unit (EFU) as the base unit of analysis. See Technical Details: Income: Disposable Incomes for a full definition of an EFU. As with all measures that depend on the Household Economic Survey, the small sample of older Māori means that ethnic breakdowns are not viable.

RELEVANCE

This indicator provides a measure of the median income available to older New Zealanders over time. Higher median incomes contribute to a better quality of life and standard of living for the older population. However, this indicator, although reflecting income derived from assets, does not include the contribution made by the availability of assets.

POPULATION COVERAGE

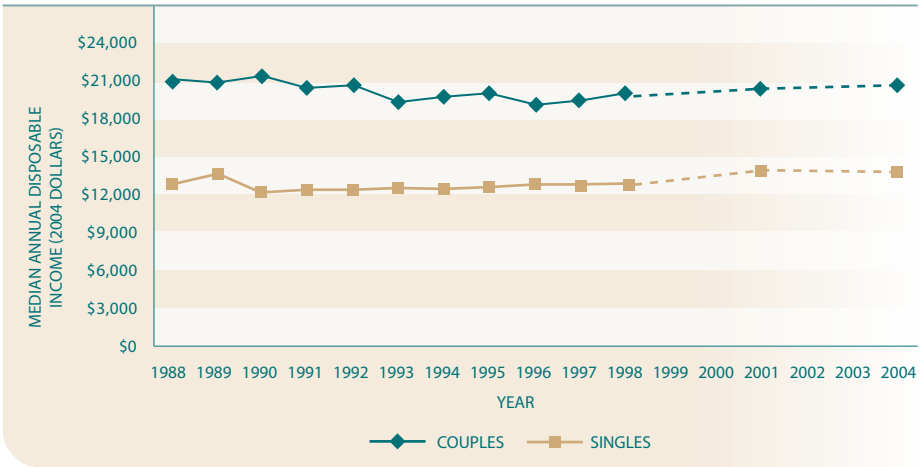
Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In 2004, the median disposable family income for older people living with a spouse or a partner was $21,000 per annum. The median disposable income for a single older person was $14,000 per annum in the same period.

Since 1988, the real incomes of both older couples and older singles have remained flat. The median family income of older couples has ranged between $20,000 and $21,000 per annum, while the median income of older singles has ranged between $12,000 and $14,000 per annum.

Figure 9 Median real disposable family income for the population aged 65 years and over, 1988–1998, 2001 and 2004



Source: Derived from Statistics New Zealand (2005b) Household Economic Survey (1988–1998, 2001 and 2004), by the Ministry of Social Development
Note: Revised data (see Technical Details: Income: Disposable Incomes)

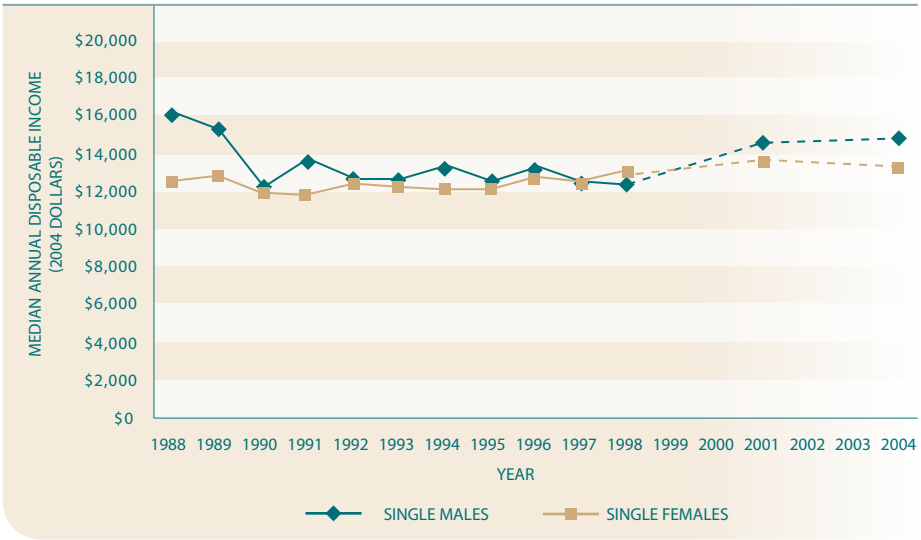
SEX DIFFERENCES

Since individuals in a married or partnered couple are assumed to have reasonably similar access to the household's income, the only comparison that can be made is between older single men and older single women.

Figure 10 summarises the trends in the median real disposable income of older single people between 1988 and 2004. Generally, the median incomes of single men and single women were similar over the 1990 to 2004 period.

The median real income of older single people has shown little change between 1988 and 2004, ranging from $12,000 to $13,000 per annum for women and from $12,000 to $16,000 per annum for men.

Figure 10 Median real disposable family income for the single population aged 65 years and over, by sex, 1988–1998, 2001 and 2004



Source: Derived from Statistics New Zealand (2005b) Household Economic Survey (1988–1998, 2001 and 2004), by the Ministry of Social Development
Note: Revised data (see Technical Details: Income: Disposable Incomes)

PRIVATE INCOMES

DEFINITION

The median annual private family income (before tax) of the older population (living in permanent private dwellings) adjusted for inflation (to represent 2004 dollars) over the years 1988 to 2004. Private income is defined as income from all sources excluding government transfers such as public pensions or means-tested welfare benefits.

The measure has been constructed using the economic family unit (EFU) as the base unit of analysis. See Technical Details: Income: Disposable Incomes for a full definition of an EFU. As with all measures that depend on the Household Economic Survey, the small sample of older Māori means that ethnic breakdowns are not viable.

RELEVANCE

This indicator provides a measure of the median private income available to older New Zealanders over time. Higher median private incomes indicate that older people have non-government sources of income they can use to supplement their retirement income and to improve their standard of living. However, as for the previous indicator, this indicator includes income derived from assets, but does not take into account any contribution made by the availability of assets.

POPULATION COVERAGE

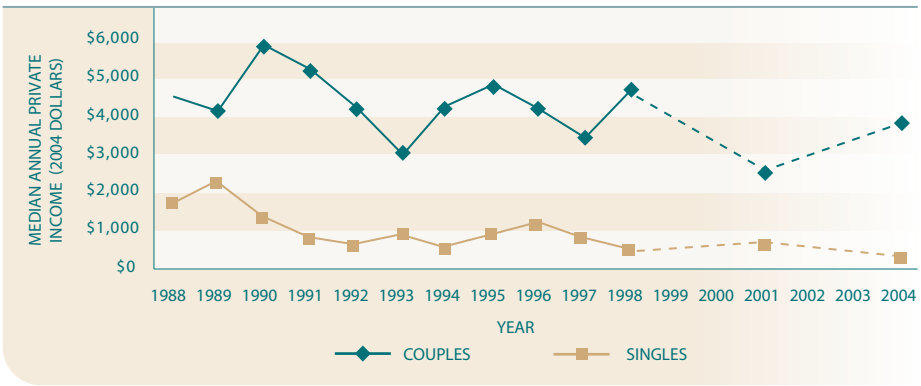
Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

The median (real) private income for older couples has fluctuated since 1988, but has generally declined in real terms from a high of $5,800 in 1990 to $3,800 in 2004.

The median private income for older single people also decreased over the 1988–2004 period in real terms. In 1989, the median (real) private income for older single people was $2,200 per annum compared with $260 per annum in 2004.

Figure 11 Median real private family income for the population aged 65 years and over, 1988–1998, 2001 and 2004



Source: Derived from Statistics New Zealand (2005b) Household Economic Survey (1988–1998, 2001 and 2004), by the Ministry of Social Development
Note: Revised data (see Technical Details: Income: Private Incomes)

An isue for further research is whether or not the median is in practice the most useful measure here, given the dispersion of private income and the relatively small sample size.

LIVING STANDARDS

DEFINITION

The proportion of the older population who are living in permanent private dwellings, with living standards characterised as involving "some degree of hardship" on the basis of the Economic Living Standard Index (ELSI).

The ELSI measure distinguishes between three levels of hardship, designated as "severe hardship", "significant hardship", and "some hardship". The term "some degree of hardship" refers to people at any one of these three levels. The measure includes some subjective elements and comparisons across time need to be treated with caution.

RELEVANCE

ELSI is an indicator of how people are living in terms of their possessions and activities and how they get by financially. Having a low living standard limits a person's ability to participate in their wider society, curtails their quality of life, and can have negative long-term consequences across a wide range of social and economic outcomes.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In the New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al 2006), 8 percent of older New Zealanders were living in hardship (severe, significant or some), compared to 21 percent of working age (18–64 years) New Zealanders.

FAMILY TYPE DIFFERENCES

In 2004, the average living standards of older single people were slightly lower than those of older couples. Older single people were more likely to be in some degree of hardship than older couples. In 2004, the proportion of older single people in some degree of hardship was 11 percent. By comparison, only 5 percent of older couples were in some degree of hardship.

AGE AND SEX DIFFERENCES

Because older couples living together were assigned the same ELSI score, sex differences are only apparent between older single men and older single women. In 2004, 12 percent of older single women were recorded as being in some degree of hardship compared to 8 percent of older single men. Overall, there were statistically significant differences between the three groups (older single women, older single men, and older couples). The most marked difference was between single women and couples, with 12 percent of older single women in some degree of hardship compared with 5 percent of older couples.

On average, the living standards of older people in the community appeared to improve with age, with fewer people facing hardship at ages 80 years and over than at ages 65–69 years. In 2004, the proportion of older people in some degree of hardship was 12 percent for 65–69 year olds, 11 percent for 70–74 year olds, 4 percent for 75–79 year olds, and 4 percent for people aged 80 years and over.

This trend is contrary to many people's expectations. It is likely to be due to a "survivor effect": people who have higher socio-economic status (and hence who are more likely to have higher living standards) are known to have better health and greater life expectancy. Therefore, a higher proportion of those surviving into their 80s and living in private dwellings are likely to have comparatively high living standards.

INCOME GROUP DIFFERENCES

As would be expected, the average living standard of older New Zealanders increased slightly as equivalent disposable income increased, and the likelihood of hardship decreased as income increased. However, the trend was not statistically significant and there was a great deal of variability in living standards within each income band. One important factor in this variability was accommodation costs. Mortgage-free homeowners were more likely to report higher living standards than renters on the same income (see Home Ownership indicator).

Table 7 Proportion of the population aged 65 years and over in some degree of hardship, by selected characteristics, 2004

Family type and sex differences	Percent in hardship
Couple	5
Single male	8
Single female	12
Age differences	
65–69	12
70–74	11
75–79	4
80+	4
Equivalent income group differences	
$10,000 or less	14
$10,001–$20,000	10
$20,001–$40,000	5
$40,001 or higher	2

Source: New Zealand Living Standards Survey 2004 (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006)

LOW INCOMES

DEFINITION

The proportion of the older population (living in permanent private dwellings) in economic family units with equivalent disposable income below a certain low-income threshold. The equivalent disposable income is net of housing cost (ie housing costs are subtracted from income). The low-income threshold is set at 60 percent of the 1998 (population) median family income, which is equivalised and net of housing cost. The measure takes account of incomes, housing costs and family size and is adjusted for inflation and taxes. As with all measures that depend on the Household Economic Survey, the small sample of older Māori means that ethnic breakdowns are not viable.

RELEVANCE

Not having enough economic resources limits people's ability to participate in their community and wider society, and otherwise restricts their quality of life. This measure shows whether New Zealand's retirement income framework is ensuring older New Zealanders have a sufficient level of income relative to the rest of the population. This indicator takes into account housing situations, unlike the first two indicators. The inclusion of housing costs aligns this indicator more closely with the Living Standards indicator above.

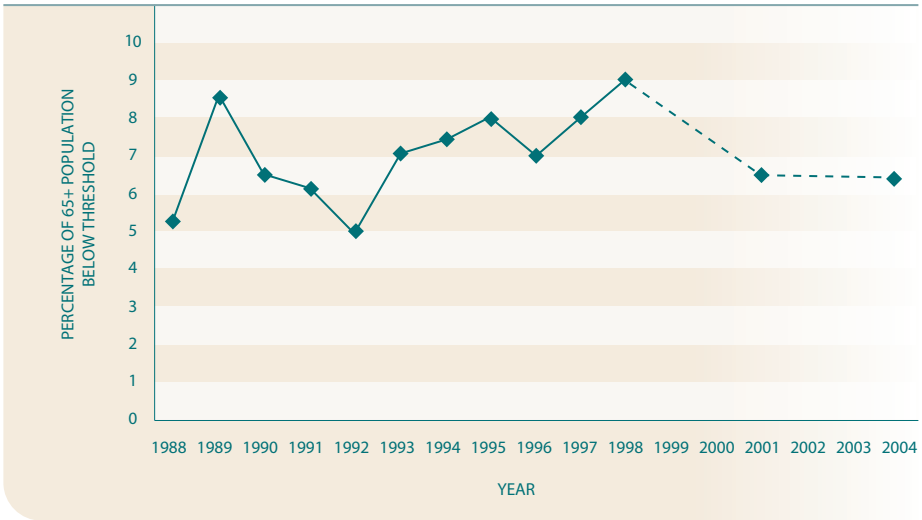
POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In the year to June 2004, 6.4 percent of the older population were living below the 60 percent low-income threshold. Over the 1988 to 2004 period, the proportion of older people living below the threshold fluctuated between 6 percent and 8 percent, stabilising at 6.4 percent from 2001.

Figure 12 Proportion of the population aged 65 years and over with net-of-housing-cost incomes below the low-income threshold, 1988–1998, 2001 and 2004

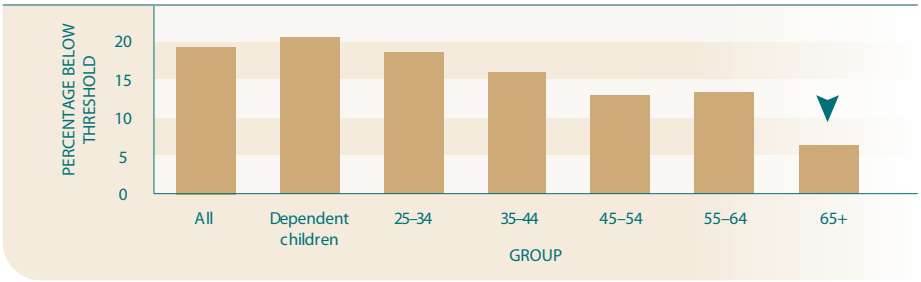


Source: Derived from Statistics New Zealand (2005b) Household Economic Survey (1988-1998, 2001 and 2004), by the Ministry of Social Development
Note: Revised data (see Technical Details: Income: Low Incomes)

POPULATION GROUP DIFFERENCES

Figure 13 compares the proportion of older people with low incomes to the rest of the population. In 2004, 19 percent of all New Zealanders were living below the 60 percent low-income threshold. The proportion with low incomes was highest for the 25–34 years age group (18 percent) and those with dependent children (21 percent). Older age groups had the lowest proportions living below the low-income threshold.

Figure 13 Proportion of population with net-of-housing-cost incomes below the low-income threshold, selected population groups, 2004



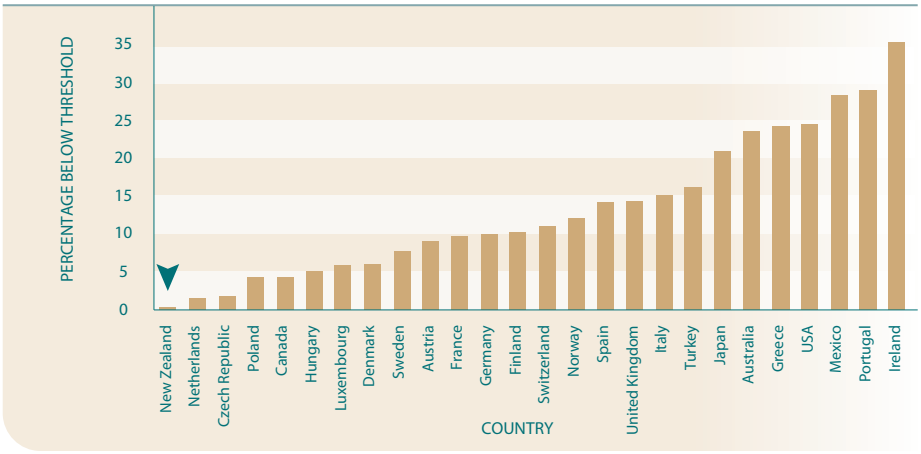
Source: Derived from Statistics New Zealand (2005b) Household Economic Survey (2004), by the Ministry of Social Development
Note: Revised data (see Technical Details: Income: Low Incomes)

INTERNATIONAL COMPARISONS

In international terms, Figure 14 gives some indication of where New Zealand is placed. The measure used here is, however, different from that used earlier. It shows the proportion of the population aged 66 years and over with low incomes, reported by the Organisation for Economic Co-operation and Development (OECD) for 26 participating countries, based on year-2000 data. The measure of low incomes is based on 50 percent of current median household income (rather than 60 percent), is not adjusted for housing costs, and is a relative value measure (ie based on the current year median, as opposed to the 1998 constant value measure used above). New Zealand has the best overall ranking (at 0.4 percent) because NZS provides a universal floor which is above the 50 percent median threshold. The OECD average rate in 2000 was 14 percent.

New Zealand's international placing can differ quite markedly depending which measure is used. For instance, the European Union uses a 60 percent low-income threshold. This would place New Zealand at the upper end of the table as this threshold is above NZS and a sizeable proportion of those aged 65+ years have incomes equal to NZS plus only a little more, before housing costs are taken into account.

Figure 14 **Proportion of the population aged 66 years and over, with low incomes, for selected OECD countries, 2000**



Source: Förster and d'Ercole (2005)

DESIRED OUTCOMES

Older people choose healthy lifestyles, are able to get the health services they need, and have the opportunity to enjoy a long and healthy life. Avoidable deaths, disease and injuries are prevented. Older people have the ability to function, participate and live independently or appropriately supported in society.[9]

HEALTH

INTRODUCTION

Good health is critical to the wellbeing of older people. Without good health, older people are less able to enjoy their lives to the fullest extent, their options are limited, and their general levels of contentment and happiness are likely to be reduced.

Good health has two core dimensions: how long people live and the quality of their lives. The desired outcomes statement recognises both aspects. As well as enjoying long lives, older people want to be free from the pain, suffering and incapacity that result from disability or lack of fitness.

The desired outcomes statement also acknowledges that not everybody can live a fully-independent life. For some older people, illness or disability means they need support from families, government agencies or other networks to overcome barriers to their participation in society. Getting this support is an important part of social wellbeing, and it is acknowledged in the New Zealand Positive Ageing Strategy's goal of equitable, timely, affordable and accessible health services for older people.

INDICATORS

Six indicators are used for the Health domain. Together they provide a picture of the current state of older New Zealanders' health. They cover both the length and quality of life. The first two indicators provide direct measures of the desired outcomes relating to long and healthy lives and older people's ability to participate in society. Life expectancy measures the survival experience of the population: how long people live. Self-reported health measures general health status from the point of view of an individual. This provides an indication not only of a person's general health, but also of their sense of wellbeing.

Older people are more likely to suffer ongoing health problems from falls than younger age groups. The third indicator measures fatal and serious non-fatal injuries from falls.

The fourth indicator reports on the prevalence of smoking among the older population. Tobacco smoking is a well-recognised risk factor for many cancers and for respiratory and cardiovascular diseases. Non-smoking is linked with better health and fitness and increased life expectancy.

The last two indicators are related to access to and the take up of health services. The first of these provides a measure of the unmet need for primary health care among older people, by asking older people if there has been any time in the past 12 months that they didn't see a general practitioner (GP), when they needed to.

A further indicator of access can be measured by the take up of free preventive services available to the older population. Preventive services such as vaccinations are an important component of any population health strategy. The influenza vaccination indicator measures the take up by older people of one such preventive service particularly relevant to older people's health.

LIFE EXPECTANCY AT AGE 65 YEARS

DEFINITION

Life expectancy at age 65 years indicates the additional number of years a person could expect to live on average having reached age 65, based on the mortality rates of the population at each age in a given year.

This indicator reports "period" life expectancy, ie life expectancy based on the mortality rates of the population at each age for the specified years.[10] The mortality rates on which life expectancy is based are derived from three years of experience, the census year and the year before and the year after. For example, reference below to "2000–2002" is to the results from tabulating the deaths from 1 January 2000 to 31 December 2002 for to the population "at risk" during that period.

RELEVANCE

Life expectancy is a key summary indicator of fatal health outcomes and is often used as a population-level health measure. Increasing life expectancy over time implies, among other things, an improving health status. Health status is related to the quality of, and access to, the health system (including preventive services), and people choosing healthier lifestyles.

POPULATION COVERAGE

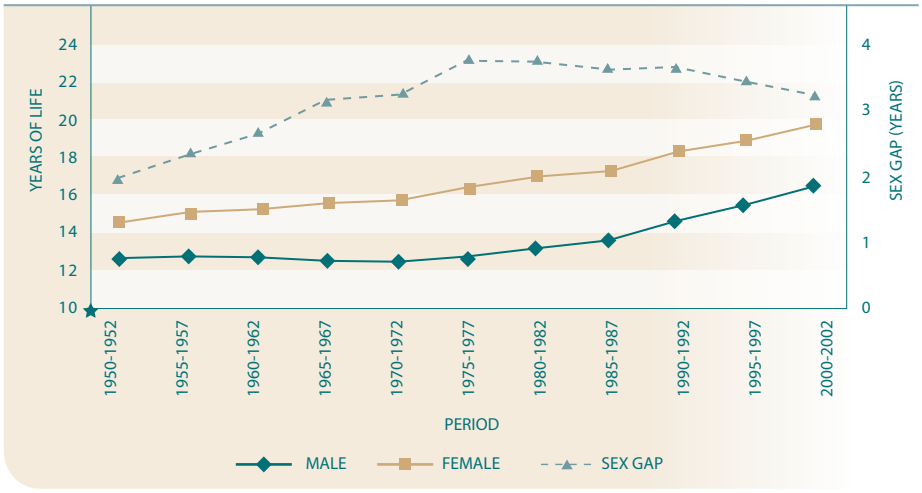
Older people aged 65 years.

CURRENT LEVELS AND TRENDS

Based on the mortality experience of New Zealanders in the period 2000–2002, life expectancy at age 65 was 16.7 years for men, and 20.0 years for women. Since the 1950s, the gain in female life expectancy at age 65 has been 5.2 years, compared to a male gain of 3.9 years.

Life expectancy at age 65 years has been increasing steadily for women since the 1950s. For men, however, life expectancy at age 65 declined between 1955–1957 and 1970–1972, showing a widening sex gap over this period. Between 1950 and 1977, the sex gap in life expectancy at age 65 widened from 2.0 years to 3.8 years. Since the mid-1970s, however, the gain in life expectancy at age 65 has been slightly greater for men than women. Between 1975–1977 and 2000–2002, life expectancy at age 65 increased by 3.9 years for men and 3.4 years for women. As a result, the sex gap decreased from 3.8 years to 3.3 years over this period (Statistics New Zealand Life Tables).

Figure 15 Life expectancy at age 65, by sex, 1950–1952 to 2000–2002



Source: Statistics New Zealand Life Tables

ETHNIC DIFFERENCES[11]

The census-based New Zealand Life Tables series produced by Statistics New Zealand shows distinct differences between Māori and non-Māori for life expectancy at age 65 years. However, because of the way ethnicity was provided on death registration forms before 1995 the ethnic mortality measures given by the Tables from 1995–1997 onwards are not comparable with those from earlier years.[12] Accordingly only results for 1995–1997 and 2000–2002 are shown in Table 8 below.

Table 8 shows similar improvements in the number of years of life expectancy at age 65 for Māori and non-Māori women and men. All improved by about one year between 1995–1997 and 2000–2002.

Table 8 also shows the gap between Māori and non-Māori life expectancy at age 65 for women is reasonably stable at a little over 5 years between 1995–1997 and 2000–2002. The gap between older Māori and older non-Māori men is also reasonably stable at a little over 4 years over the same period.

Table 8 Life expectancy at age 65, by sex and ethnicity, 1995–1997 to 2000–2002

	Māori		Non-Māori		Difference	
Life expectancy at age 65 (years)	Male	Female	Male	Female	Male	Female
1995–1997	11.7	14.1	15.8	19.3	4.1	5.2
2000–2002	12.7	15.1	16.9	20.2	4.2	5.1
Increase between 1995–1997 report and 2000–2002 report (years)	1.0	1.0	1.1	0.9		

Source: Statistics New Zealand (2002c) Life Tables

ETHNIC MORTALITY RATES

The mortality rate is the number of people who die each year per 100,000 of population. Measured per cohort of people, a mortality rate of 9.5 for example means 950 people in that group are expected to die out of 100,000.

The ratio of mortality compares annual mortality between, in this case, Māori and non-Māori populations. For example, with a mortality rate of 9.5 for non-Māori, and 19 for Māori, the ratio of mortality will be 2 (19 being two times greater than 9.5). On the other hand, if the rate for non-Māori is 9.5 and for Māori 9.5, then the ratio of mortality will be 1.

Unpublished data from the Ministry of Health in Table 9 shows the ratio of mortality between Māori and non-Māori by sex.

Table 9 Ratios of Māori to non-Māori average death rates, by cohort groups, 1981–1984 to 2001–2004

Ratio of Māori to non-Māori deaths (in cohort groupings)	Male		Female	
Cohort	1–74 years	65–74 years	1–74 years	65–74 years
1981–1984	1.8	1.5	2.3	2.2
1986–1989	1.8	1.5	2.3	2.1
1991–1994	2.2	1.9	2.5	2.1
1996–1999	2.4	2.1	2.7	2.7
2001–2004	2.4	2.2	2.7	2.7

Source: Ministry of Health (2007b) unpublished Ministry of Health data, 2007
Note: This data is age standardised[13]

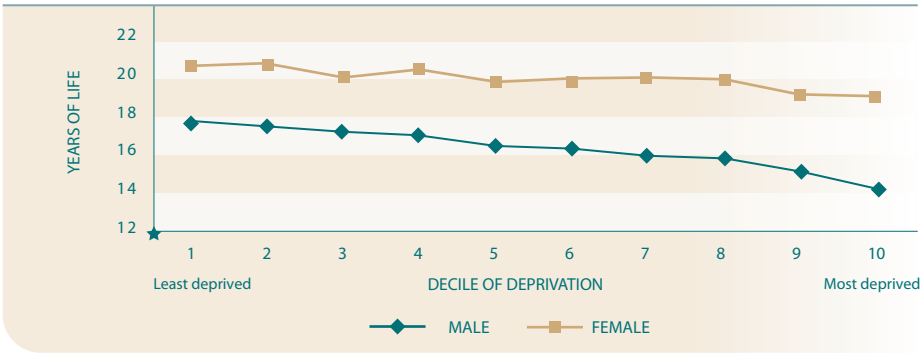
Table 9 shows the ratio of mortality is considerably higher for Māori than for non-Māori over all cohorts and age groups. For males aged 1–74 years, the ratio actually increased from 1.8 to 2.4 between 1981–1984 and 2001–2004 but the ratio has virtually stabilised since 2000. A similar picture appears for females aged 1–74 years.

For males aged 65–74 years, the ratio increased from 1.5 to 2.2 between 1981-1984 and 2001–2004 and for females from 2.2 to 2.7 over the same period. However, the ratio for both males and females in this age group stablised between 1996–1999 and 2001–2004. This means that we might expect some narrowing of the gap in life expectancy at age 65 between Māori and non-Māori in the future.

SOCIO-ECONOMIC DIFFERENCES

There is an association between longevity and the level of deprivation in the area in which people live. In 1998–2000, men aged 65 years in the least deprived decile of small areas (as measured by the New Zealand Deprivation Index 1996 (NZDep1996)[14] scores) in New Zealand could expect to live 3.5 years longer than men in the most deprived decile of small areas. For women, the difference was smaller at 1.6 years. Figure 16 illustrates the association between life expectancy at age 65 years and neighbourhood deprivation.

Figure 16 **Life expectancy at age 65, by sex and deprivation decile, 1998–2000**

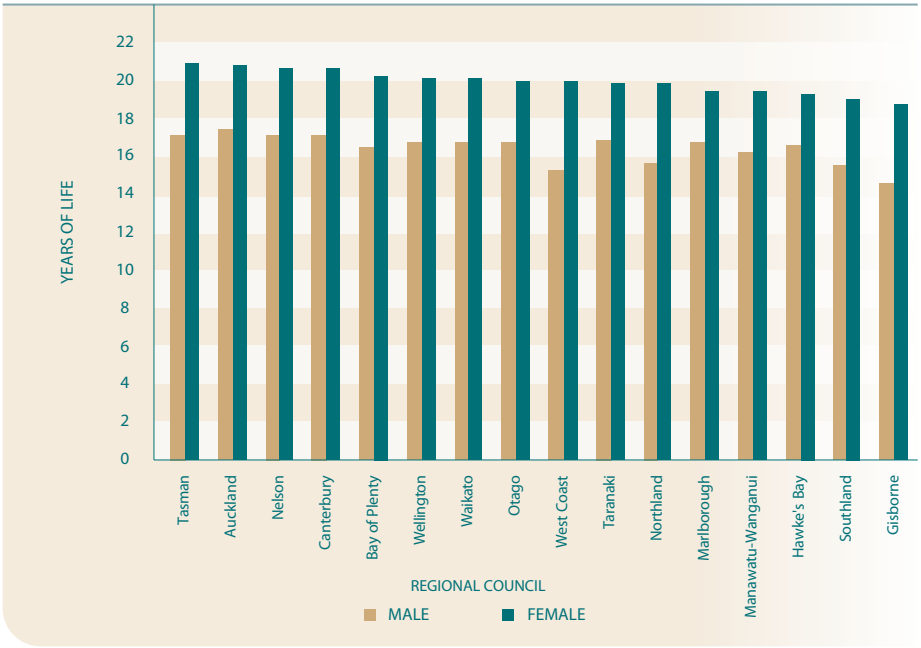


Source: Ministry of Health (2001)

REGIONAL DIFFERENCES

There was minimal variation in life expectancy at age 65 years across most regional councils, with two marked exceptions. Gisborne had the greatest disparity in longevity. In the 2000–2002 Life Tables, men aged 65 living in Gisborne could expect to live 2.2 years less than New Zealand men in general. The disparity was lower for Gisborne women, but still substantial at 1.5 years. Men aged 65 living on the West Coast could expect to live 1.6 years less than the average New Zealand male. Other areas that fell short of the national average by at least one year include Southland and Northland. Figure 17 illustrates the variation in life expectancy at age 65 years by sex and regional council.

Figure 17 **Life expectancy at age 65, by regional council, 2000–2002**



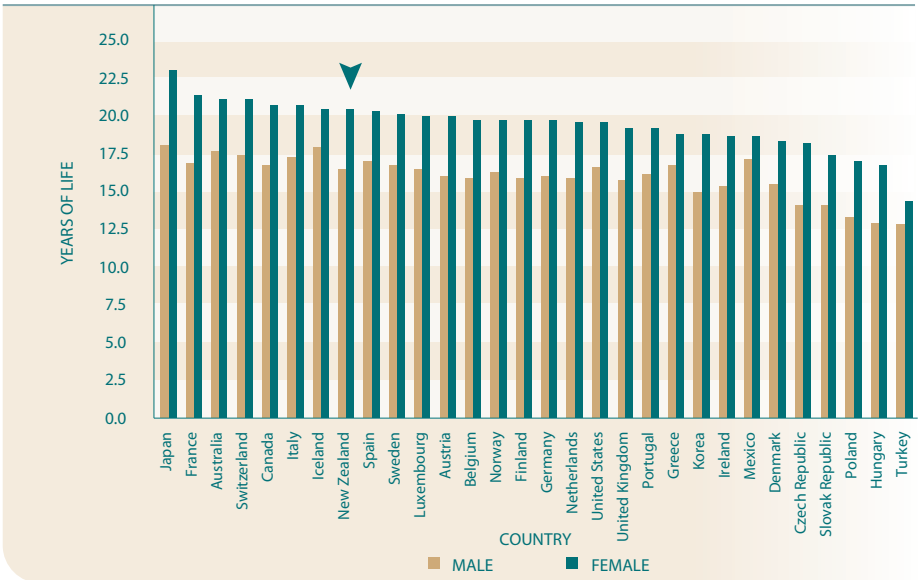
Source: Statistics New Zealand (2002c) Subnational Life Tables

INTERNATIONAL COMPARISONS

The 2000–2002 Life Tables shows that in 2003 New Zealanders' life expectancy at age 65 was 16.7 years for men and 20.0 years for women. This was above the OECD average of 15.9 years for men and 19.4 years for women. New Zealand was ranked 10th highest out of 30 countries for male and female life expectancy at age 65 years.

The OECD study reports that over the 1970–2003 period, the gains in life expectancy at age 65 in New Zealand were above the OECD average. New Zealand male life expectancy increased by 4.3 years over this period, compared to an OECD average for men of 3.2 years. For New Zealand women, the gain was 4 years compared to an OECD average for women of 3.7 years.

Figure 18 **Life expectancy at age 65 across selected OECD countries, 2003**



Source: OECD Indicators 2005

GENERAL HEALTH

DEFINITION

The proportion of the population aged 65 years and over (living in permanent private dwellings) self-reporting to be in excellent, very good or good health (as measured in the New Zealand Health Survey 2002/2003).

Due to the small number of people aged 65 years and over in the New Zealand Health Survey 2002/2003, it is difficult to produce breakdowns at a fine level (eg ethnic, age and deprivation). All prevalence estimates and group differences presented in this indicator should be interpreted with caution (see Technical Details: General Health).

RELEVANCE

Self-reported good health is correlated with objectively-measured health outcomes, including mortality. High levels of self-reported good health are also likely to reflect healthy life choices (eg not smoking and a healthy diet) and a general sense of wellbeing.

POPULATION COVERAGE

Older people aged 65 years and over.

AGE AND SEX DIFFERENCES

In 2002/2003, 82 percent of the older population reported themselves to be in good, very good or excellent health. There is a minimal difference between older women (84 percent) and older men (81 percent) self-reporting good, very good or excellent health.

Table 10 Proportion of the population aged 65 years and over reporting good, very good or excellent health, by sex, 2002/2003

Sex	Percent
Male	81.0
Female	83.6
Total	**82.4**

Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

The proportion of older people reporting good, very good or excellent health decreases with age (Table 11). The highest prevalence is noted for the 65–69 years age group, with 86 percent reporting good, very good or excellent health. This decreases to 79 percent for ages 75 plus years.

Table 11 Proportion of the population aged 65 years and over reporting good, very good or excellent health, by age group, 2002/2003

Age group	Percent
65–69	86.4
70–74	83.6
75+	79.2

Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

ETHNIC DIFFERENCES

Table 12 shows the prevalence of self-reported good, very good or excellent health among the older population by ethnic group. The European/Other ethnic group had the highest prevalence of self-reported good, very good or excellent health (83 percent of the 65 years and over population). The next highest prevalence was noted for the Pacific peoples and Māori ethnic groups, with 76 percent reporting good, very good or excellent health. The lowest prevalence of self-reported good, very good or excellent health was recorded for the Asian group, with a prevalence of 62 percent. This contradicts the earlier statement about the co-relationship between self-reported and objectively-measured health outcomes, and is inconsistent with objective measures of the health status of older Asian people.

Table 12 Proportion of the population aged 65 years and over reporting good, very good or excellent health, by ethnic group, 2002/2003

Ethnic group	Percent
European/Other	83.3
Māori	75.7
Pacific peoples	76.1
Asian	62.2

Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

SOCIO-ECONOMIC DIFFERENCES

There is an association between self-reported health and the level of deprivation in the area in which people live. In 2002/2003, 85 percent of older people living in the least deprived quintile (or fifth) of areas (as measured by the NZDep2001 index) reported themselves to be in good, very good or excellent health. The prevalence generally declined with quintile of deprivation (with the exception of quintile 3, where 86 percent self-reported good, very good or excellent health). The lowest prevalence of self-reported good health was recorded for the most deprived quintile, with 79 percent reporting good, very good or excellent health.

Table 13 Proportion of the population aged 65 years and over reporting good, very good or excellent health, by quintile of deprivation, 2002/2003

Deprivation quintile	Percent
Quintile 1 (least deprived)	85.0
Quintile 2	82.3
Quintile 3	85.9
Quintile 4	80.1
Quintile 5 (most deprived)	79.1

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

FATAL AND SERIOUS NON-FATAL INJURIES FROM FALLS

DEFINITION

The proportion of the population aged 75 years and over who died as a result of a fall (as recorded by the New Zealand Health Information Service Mortality Collection, 2003), expressed as an age standardised rate, or who were discharged from a New Zealand publicly-funded hospital (as recorded by the New Zealand Health Information Service National Minimum Dataset, 2005) with a serious non-fatal injury[15] attributed to a fall, expressed as an age standardised rate.

Note the 2003 mortality data and the 2005 serious non-fatal injury data is provisional. Patients who were treated for injuries from a fall in a private hospital and who were not publicly funded are not included.

RELEVANCE

Death from a fall is a leading cause of injury-related death in older people. Serious non-fatal injuries from falls can have a major impact on their health, fitness and life expectancy, and their ability to participate fully in society.

POPULATION COVERAGE

Older people aged 75 years and over. Many people in this age group are quite frail and suffer other adverse health problems, so there is an increased likelihood of death from a fall or ongoing health affects from a fall compared with those in younger age groups.

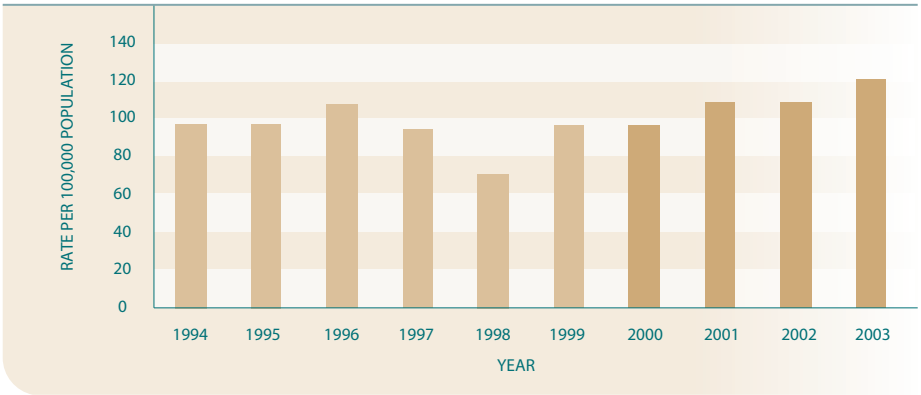
CURRENT LEVELS AND TRENDS

Fatal injury falls

In 2003, there were 266 fatalities resulting from a fall for people aged 75 years and over. This was an age standardised rate of 121 per 100,000 people aged 75 years and over. The rate in 2002 was 109 per 100,000 people aged 75 years and over.

Because of the change in the coding scheme used to classify whether a death was the result of a fall, it is not possible to compare the period 1994–1999 with the period 2000–2003. Overall, between 2000 and 2003 there has been a small increase in the age standardised rate.

Figure 19 Age standardised falls fatality rate for the population aged 75 years and over, 1994–2003



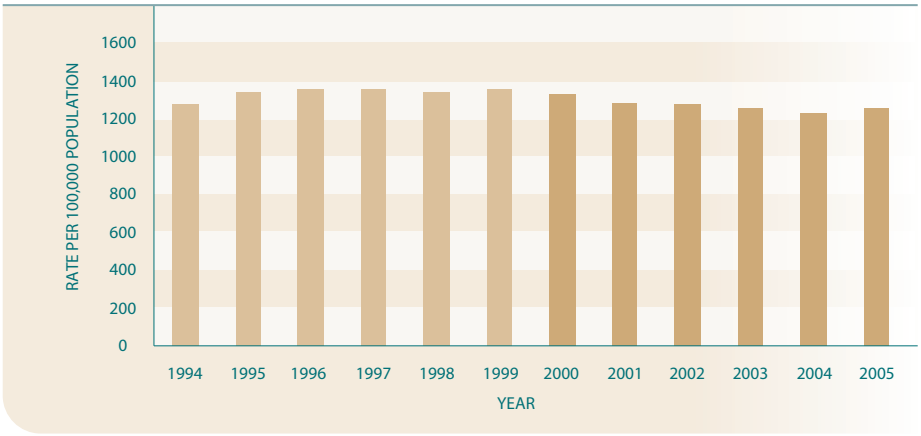
Source: Cryer, C., Davie, G. and Langley, J. (2006)
Note: The 2003 mortality data is provisional; 1994–1999 data was coded with International Centre for Disease (ICD) version 9; 2000–2003 data was coded with ICD version 10

Non-fatal injury falls

There were 2,946 serious non-fatal injury falls suffered by people aged 75 years and over in 2005 (provisional data only). The age standardised rate was 1,255 per 100,000 population aged 75 years and over in 2005 compared with 1,231 per 100,000 in 2004.

As with the mortality data, comparisons between the two periods 1994–1999 and 2000–2005 are not possible because of changes to the coding scheme. There has been little change in the age standardised serious non-fatal injury rate for people aged 75 years and over since 2000.

Figure 20 Age standardised falls serious non-fatal injury rate for population aged 75 years and over, 1994–2005



Source: Cryer, C., Davie, G. and Langley, J. (2006)
Note: The data for 2005 is provisional. The serious non-fatal injury measure was calculated by the Injury Prevention Research Unit at the University of Otago. The 1994–1999 data in the graph was coded with the ICD version 9 and the 2000–2005 data was coded with ICD version 10

AGE DIFFERENCES

Fatal injury falls

People aged under 75 years experience a very small number of fatalities caused by falls, so the data is presented as three-year moving averages to increase the precision of the estimates. The provisional three-year moving average age standardised rate was 1.69 per 100,000 people aged 0–74 years in the 2001–2003 period. This compares with an aged standardised rate of 108 per 100,000 people aged 75 years and over in 2001, 109 in 2002 and provisionally 121 in 2003.

Non-fatal injury falls

There is a lower frequency of serious non-fatal injuries resulting from a fall in people aged 0–74 years than in people aged 75 years and over. In 2005 the provisional age standardised serious non-fatal injury rate was 37 per 100,000 people aged 0–74 years compared with a rate of 1,255 per 100,000 people aged 75 years and over.

CIGARETTE SMOKING

DEFINITION

The proportion of the older population (living in permanent private dwellings) who reported smoking one or more tobacco cigarettes a day (as measured in the New Zealand Health Survey 2002/2003). This includes tailor-made and roll-your-own tobacco cigarettes, and excludes cigars.

Due to the small number of people aged 65 years and over in the New Zealand Health Survey 2002/2003, it is difficult to produce breakdowns at a fine level (eg ethnic, age and deprivation). All prevalence estimates and group differences presented in this indicator should be interpreted with caution (see Technical Details: General Health).

RELEVANCE

Tobacco smoking is a well-recognised risk factor for many cancers and for respiratory and cardiovascular diseases. It is second only to the joint effects of poor diet[16] as the major cause of preventable deaths in New Zealand (Ministry of Health, 2004). Low smoking prevalence among the older population indicates a move towards healthier lifestyle choices, and can be linked to increased life expectancy and better health for older people.

POPULATION COVERAGE

Older people aged 65 years and over.

AGE AND SEX DIFFERENCES

In 2002/2003, 9 percent of the older population were current smokers. This is lower than the 1996/1997 smoking prevalence rate of 12 percent. The difference between older men and older women was minimal (see Table 14).

Table 14 Proportion of the population aged 65 years and over who are current smokers, by sex, 2002/2003

Sex	Percent
Male	9.1
Female	8.2
Total	**8.6**

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

In 2002/2003, although the prevalence of current smoking was relatively low in the older population, 44 percent of the older population reported they were ex-smokers. Forty-seven percent of the older population reported they had never been smokers.

Table 15 breaks down smoking prevalence by age group. The prevalence of smoking decreased with age from 12 percent for the 65–69 years age group to 5 percent for the 75 years and over age group. Note that most of the downward trend in smoking with age will be due to a survivor effect: non-smokers are more likely to survive to older ages.

Table 15 **Proportion of the population aged 65 years and over who are current smokers, by age group, 2002/2003**

Age group	Percent
65–69	12.3
70–74	11.5
75+	4.7

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

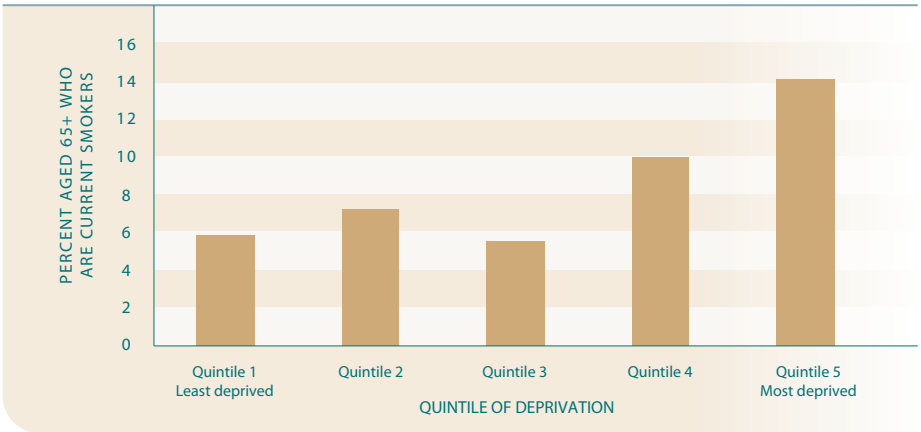
ETHNIC DIFFERENCES

In 2002/2003, older Māori were more than twice as likely to be current smokers as older people belonging to the European/Other ethnic group. The prevalence of smoking was 18 percent for older Māori, compared with 8 percent for the European/Other ethnic group. The sample sizes for the Asian and Pacific peoples groups were too small to be included in this comparison.

SOCIO-ECONOMIC DIFFERENCES

There is an association between smoking prevalence in older people and neighbourhood deprivation as measured by the NZDep2001 index. In 2002/2003, the prevalence of smoking in the older population increased with the level of neighbourhood deprivation (see Figure 21). Six percent of older people living in the least deprived quintile of small areas in New Zealand were current smokers. By contrast, 14 percent of older people living in the most deprived quintile of small areas were current smokers.

Figure 21 **Proportion of the population aged 65 years and over who are current smokers, by deprivation quintile, 2002/2003**



Sources: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003; Salmond, C. and Crampton, P. (2002)

UNMET NEED FOR PRIMARY HEALTH CARE

DEFINITION

The proportion of older people (living in permanent private dwellings) who reported they needed to see a GP in the past 12 months but did not, as measured by the New Zealand Health Survey 2002/2003.

Due to the small number of people aged 65 years and over in the New Zealand Health Survey 2002/2003, it is difficult to produce breakdowns at a fine level (eg ethnic, age and deprivation). All prevalence estimates and group differences presented in this indicator should be interpreted with caution (see Technical Details: General Health).

RELEVANCE

The proportion of older people who needed to see a GP but did not, is a measure of an unmet need associated with access to and the affordability of health care. Note that in some cases a person may not be able to get to see a GP for reasons unrelated to access. Under such circumstances, this indicator may not necessarily reflect a lack of access (see Reasons for Unmet Need below).

POPULATION COVERAGE

Older people aged 65 years and over.

AGE AND SEX DIFFERENCES

In 2002/2003, 6 percent of the older population had at some time needed to visit a GP in the last 12 months but did not get to see a GP at all. Older men were slightly less likely to have unmet need for primary health care with 5 percent unable to see a GP, compared to 7 percent of older women.

Table 16 Proportion of population aged 65 years and over reporting unmet need for primary health care, by sex, 2002/2003

	Male	Female	Total
Needed to see a GP in the last 12 months but did not (percent)	5.2	7.1	**6.3**

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

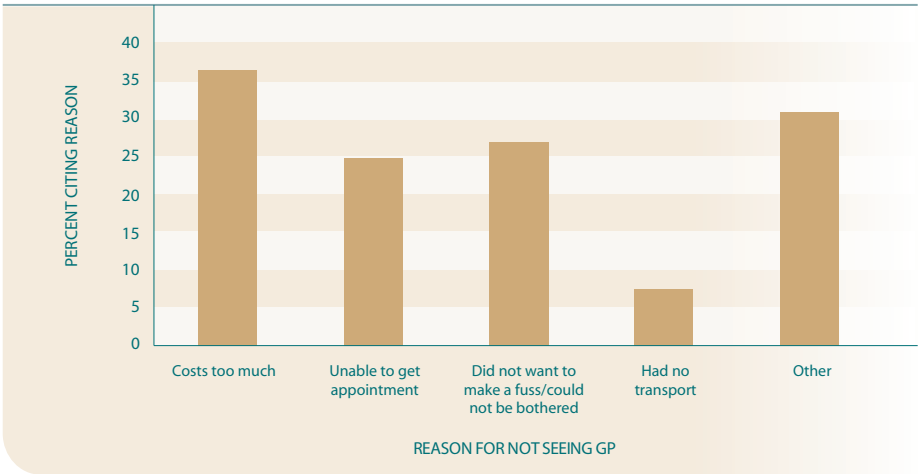
In 2002/2003, the proportion of older people unable to see a GP when they needed to decreased with age (9 percent of 65–69 year olds compared with 7 percent of 70–74 year olds). The proportion was lowest for the 75 plus years age group at 4 percent. Because of the small sample size, however, these differences may not be material.

REASONS FOR UNMET NEED

Figure 22 summarises the reasons older people did not get to see a GP when they needed to. The most common reason (at 36 percent) was high cost. Around a quarter of older people reported it was because they were unable to get an appointment. A similar proportion "did not want to make a fuss" or "could not be bothered". Only a small proportion (7 percent) did not visit a GP due to lack of transport.

However, the second most common reason quoted for why a need for a GP's services went unmet was "other". Thirty-one percent cited this as a reason, indicating the factors that influence whether or not an older person goes to a GP (when they need to) may be wide-ranging and complex, and not limited to access and affordability issues alone. Note that primary care subsidies for people aged 65 years and over have been introduced since the New Zealand Health Survey 2002/2003. This means older people enrolled with a PHO (Primary Health Organisation) are eligible to pay reduced fees when visiting their doctor and a minimal charge for a fully-subsidised prescription medicine.

Figure 22 Reasons for unmet need for primary health care for population aged 65 years and over, 2002/2003



Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003
Note: The reasons are based on a total response, ie a person is able to choose multiple reasons

ETHNIC DIFFERENCES

In 2002/2003, older Māori were more likely to have unmet need for primary health care than those in the older European/Other group. Nine percent of older Māori did not get to see a GP when they needed to, compared with 5 percent of the older European/Other group. The sample sizes for the older Asian and Pacific peoples groups were too small to be included in this comparison.

FLU VACCINATION

DEFINITION

The proportion of the older population (living in permanent private dwellings) whose primary health provider (eg GP, nurse or other practitioner) carried out or arranged a flu injection (ie influenza vaccination) for them in the past 12 months, as measured by the New Zealand Health Survey 2002/2003.

Due to the small number of people aged 65 years and over in the New Zealand Health Survey 2002/2003, it is difficult to produce breakdowns at a fine level (eg ethnic, age and deprivation). All prevalence estimates and group differences presented in this indicator should be interpreted with caution (see Technical Details: General Health).

RELEVANCE

Older people are more likely to develop complications from influenza-related illnesses than younger people, due to their increasing frailty with age. Flu injections are free for people aged 65 years and over. A high proportion of older people being vaccinated against influenza viruses is an indicator of successful preventive measures in the health system for older people.

POPULATION COVERAGE

Older people aged 65 years and over.

AGE AND SEX DIFFERENCES

In 2002/2003, 60 percent of the older population reported a medical practitioner had carried out or arranged a flu injection for them. There was minimal variation between the sexes.

Table 17 summarises vaccination rates broken down by age group. The proportion of older people receiving flu injections increased with age. In 2002/2003, 51 percent of 65–69 year olds received a flu injection from their medical practitioner. By comparison, the proportion receiving a vaccination in the 75 plus years age group was 66 percent.

Table 17 Proportion of the population aged 65 years and over who received a flu injection, by age group, 2002/2003

Age group	Percent
65–69	51.5
70–74	61.7
75+	65.8

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

ETHNIC DIFFERENCES

Table 18 shows the European/Other ethnic group had the highest vaccination rate (61 percent), followed by Māori and Pacific peoples. Asians had the lowest proportion (45 percent) of older people receiving a flu injection.

Table 18 Proportion of the population aged 65 years and over who received a flu injection, by ethnic group, 2002/2003

Ethnic group	Percent
European/Other	61.2
Māori	56.1
Pacific peoples	53.4
Asian	45.4

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

SOCIO-ECONOMIC DIFFERENCES

Table 19 summarises the proportion of the older population who received a flu injection in the last year broken down by quintile of neighbourhood deprivation (as measured by NZDep2001 scores). There is little variation between the quintiles.

Table 19 Proportion of the population aged 65 years and over who received a flu injection, by quintile of deprivation, 2002/2003

Deprivation quintile	Percent
Quintile 1 (least deprived)	57.7
Quintile 2	57.6
Quintile 3	62.6
Quintile 4	62.0
Quintile 5 (most deprived)	61.2

Sources: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003; Salmond, C. and Crampton, P. (2002)

DESIRED OUTCOMES

Older people live in good quality, affordable and appropriate housing that – in addition to serving the basic human need for shelter – helps to meet other important needs such as security, independence, health, privacy, community participation, and the expression of personal and cultural identity.

HOUSING

INTRODUCTION

Good quality, appropriate and affordable housing is an important factor in older people's maintenance of independence and ability to age positively.

Housing that is appropriate to the older person's level of independence and supports the maintenance of their health and wellbeing, is likely to help to prevent premature entry into hospital and residential care and to reduce the costs of health and social support.

The majority of older New Zealanders wish to live in their homes for as long as possible, and most do so until the end of their lives. For older people on lower incomes, housing costs need to be at a level where the costs of other basic needs such as food, clothing, transport, medical care, and education can be met comfortably. Mortgage-free home ownership contributes significantly to the adequacy of income by freeing up funds that would otherwise be required for rent or mortgage. Older people who are still mortgage holders or who live in rental accommodation are a minority, but this group includes many of the most disadvantaged older people who face issues of housing quality, security and suitability (see Living Standards indicator).

The desired outcomes statement points to the importance of older people enjoying the material, personal and social benefits of good quality, affordable housing. It also indicates the need for older people to be supported to live in the community in appropriate housing – whether in home ownership, private rental or social housing. The statement aligns with the New Zealand Positive Ageing Strategy's goal and vision of affordable and adequate housing options for older people to enable them to live with dignity.

INDICATORS

Three indicators are used in this chapter to provide information on different aspects of housing for older people.

The indicator for accommodation quality focuses on accommodation problems experienced by older people. Accommodation in this sense includes aspects of the wider environment (eg noise in the neighbourhood or neighbourhood crime) as well as issues relating to the dwelling itself. This indicator also includes older people's overall ratings of the quality and suitability of their accommodation.

The other indicators, which are closely inter-related, look at home ownership and housing costs relative to income. Home ownership – which is firmly entrenched in the New Zealand psyche – remains important for the wellbeing of and income adequacy for older people. As older people who own their own homes mortgage-free generally have lower housing costs than those who rent, the level of home ownership is used as an indicator of wellbeing.

There is also an indicator looking at housing costs relative to income. Rising insurance premiums and local authority rates in recent years can cause financial stress, and older home owners face costs of maintenance, renovation and modification.

HOUSING QUALITY

DEFINITION

The proportion of older people who have problems with the accommodation they live in. Accommodation in this sense includes aspects of the wider environment (eg noise in the neighbourhood or neighbourhood crime) as well as problems relating to the dwelling itself. The New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. e al 2006) collected a range of self-reported variables about the quality of housing, including an overall rating of its suitability. This indicator focuses on accommodation problems identified, but also includes two overall ratings of the quality and suitability of the accommodation. The small sample of older Māori means that ethnic breakdowns are not viable.

RELEVANCE

Good quality housing is associated with positive ageing in terms of health and general wellbeing.[17]

POPULATION COVERAGE

Older people aged 65 years and over.

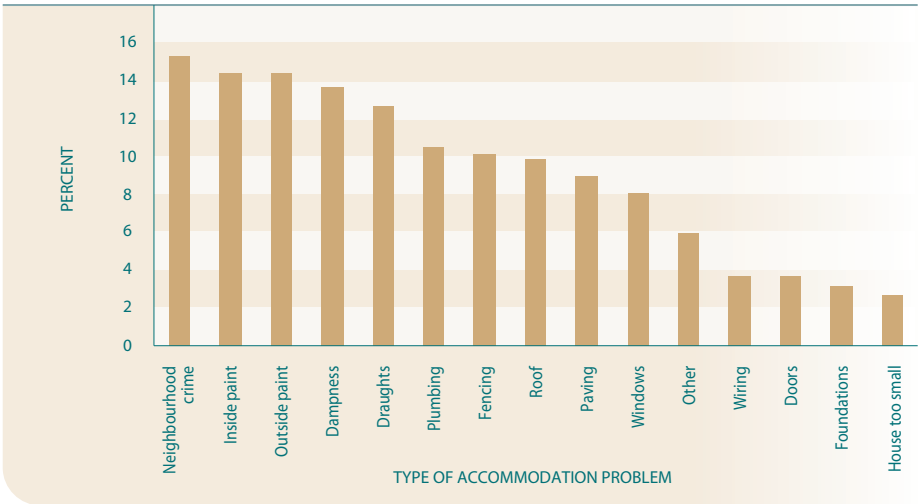
CURRENT LEVELS AND TRENDS

In 2004, 53 percent of older people reported having a problem with their accommodation. This was an increase over the proportion (28 percent) that had accommodation problems in 2000.

Older people were less likely to report accommodation problems than the population aged 18–64 years. In 2004, the proportion of people in the 18–64 years age group who reported one or more accommodation problems was 71 percent.

Twenty percent of all older people reported only one accommodation problem, 11 percent reported two problems and 21 percent reported three or more problems. The types of accommodation problems identified by older people are summarised in Figure 23.

Figure 23 Type of accommodation problem identified by older people, aged 65 years and over, 2004



Source: Unpublished analysis of the New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006), by the Ministry of Social Development
Note: Items are based on a total response, ie a person is able to choose multiple problems

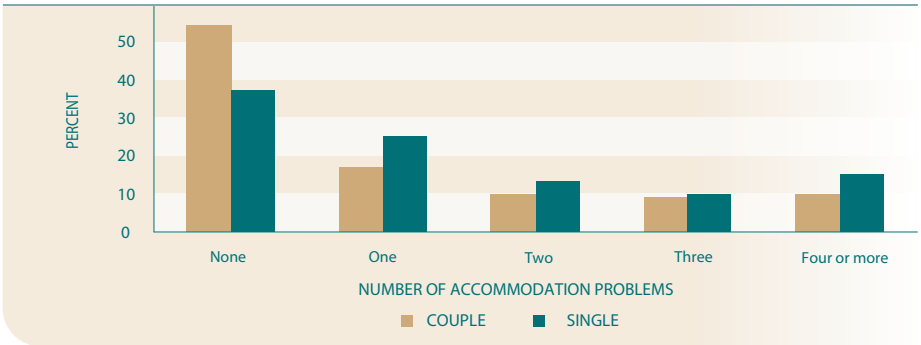
AGE AND SEX DIFFERENCES

Older women were more likely to report problems with their accommodation than older men. Fifty-eight percent of older women and 48 percent of older men had accommodation problems in 2004. Reported accommodation problems were also slightly more prevalent

among those aged 75 years and over than those aged 65–75 years (56 percent and 51 percent respectively).

Whether older people were living as a couple or on their own had a big impact on the prevalence of reported accommodation problems. Whereas less than half (46 percent) of older couples reported problems with accommodation, almost two-thirds (63 percent) of single older people did so.

Figure 24 Number of accommodation problems identified by older people, aged 65 years and over, by social marital status (including de facto partnerships), 2004



Source: Unpublished analysis of the New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006), by the Ministry of Social Development

The types of accommodation problems identified varied slightly between men and women. The top problems reported by older women were inside paint, outside paint and crime in the neighbourhood, whereas for older men they were crime in the neighbourhood, dampness and outside paint.

INCOME DIFFERENCES

Older people reporting a problem with their accommodation showed some differences by income levels. Sixty-four percent of those with equivalised income in the range $10,001 to $20,000 reported a problem, compared to 50 percent of those with equivalised income below $10,000, and 45 percent of those with equivalised income above $20,000. This is likely to be linked to marital status (see Figure 24 above), as people with equivalised income in the $10,001 to $20,000 range are more likely to be single than those with income below or above this range.

OVERALL QUALITY AND SUITABILITY RATING OF DWELLING

Although just over half of older people reported particular problems with their accommodation, when they were asked for an overall rating 86 percent of older people said the house they lived in was of very good or good quality. Older men were slightly more likely to say their accommodation was of very good or good quality (89 percent) than older women (84 percent). Older women are more likely to live alone than older men and, as recorded above, single older people are more likely to have accommodation problems.

The quality of older people's accommodation was also associated with living standards (as measured by the ELSI scale, see Living Standards). In 2004, around 8 percent of older people were experiencing some degree of hardship, and this group was less likely to have very good or good quality accommodation (64 percent compared with 88 percent of those whose living standards were comfortable or better).

The rating of the suitability of the dwelling indicates whether older people feel their housing meets their needs. Ninety-four percent of older people said their dwelling was very suitable or suitable. There was no difference between older men and older women on this rating.

HOME OWNERSHIP

DEFINITION

The proportion of older people who own or partly own their residence, as measured by the tenure holder question in the Census of Population and Dwellings, 2001 and 2006, (Statistics New Zealand 2002b; 2007c).

RELEVANCE

Home ownership at older ages has been shown to be associated with higher living standards. Rental costs are often a burden for people on fixed incomes. Owning a house is therefore related to positive ageing in terms of general wellbeing.

POPULATION COVERAGE

Older people aged 65 years and over.

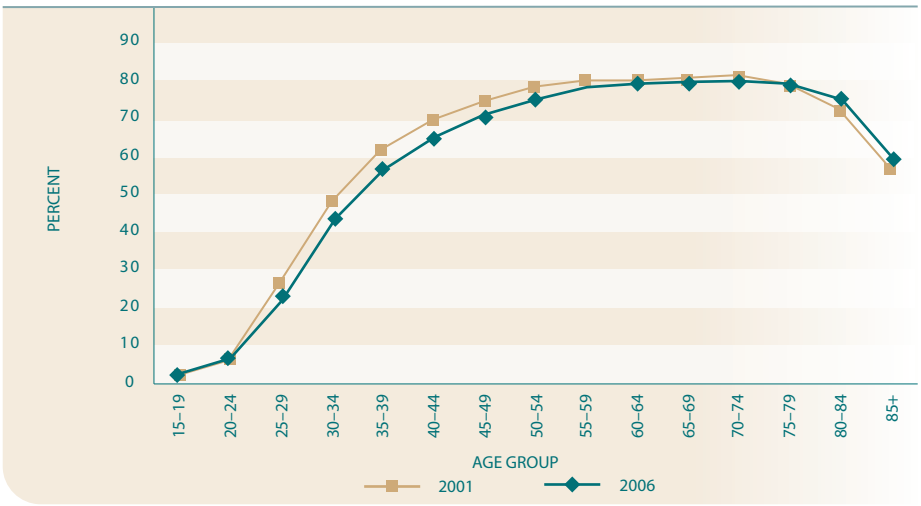
CURRENT LEVELS AND TRENDS

In 2006, 76.2 percent of older people owned or partly owned the dwelling they usually lived in. This compared to an ownership rate of 76.4 percent in 2001. While the overall rate of home ownership had not changed for this age group as a whole, there was an increase (from 65 percent to 68 percent, or 64,890 to 80,160 home owners) in the number of people aged 80 years and over living in a home they owned. This probably reflects the provision of services that encourage older people to live in their community with appropriate support.

AGE AND SEX DIFFERENCES

In 2006, just over half of all people aged 15 years and over owned or partly owned their residence. This was lower than the 55 percent who owned their home in 2001.

Figure 25 Home ownership rates, by age group, 2001 and 2006



Sources: Statistics New Zealand (2002b; 2007c) Census of Population and Dwellings 2001 and 2006

Home ownership rates increased steeply from ages 20–24 years, levelled off between ages 60–70 years and declined after that.

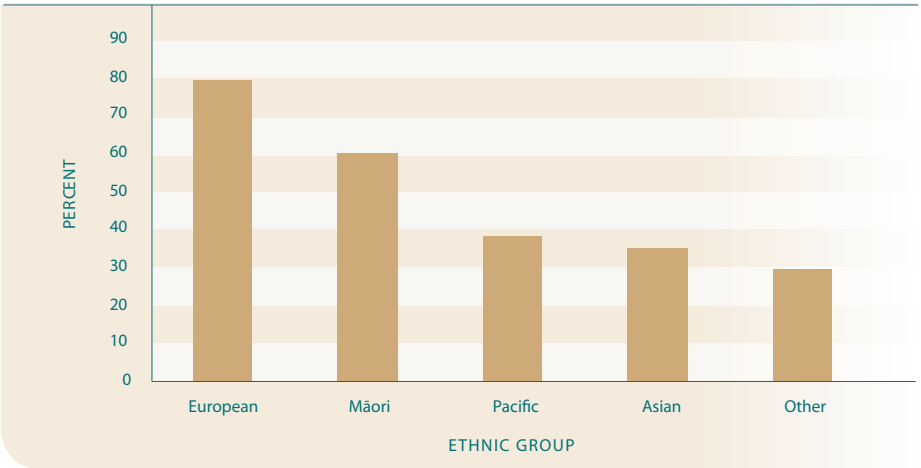
Older men were slightly more likely to own their home than older women. In 2006, home ownership rates for men and women were 79 percent and 74 percent respectively. Home ownership rates remained similar for men and women until the 80 years and over age group, where 75 percent of older men owned or partly owned their own home, compared to 64 percent of older women.

The home ownership sex gap is partly explained by the fact older women are more likely than older men to live in residential care. As stated in Older People: a Statistical Overview, this difference is likely to be associated with women outliving their male partners in most cases and therefore not having a partner or a spouse to care for them in their own home.

ETHNIC DIFFERENCES

The home ownership rates of older people varied considerably by ethnicity. Pacific peoples, Asian and Other older people had very low rates of home ownership compared to European and Māori older people. European older people's home ownership rate (79 percent) was double that of Pacific peoples (38 percent), Asian (35 percent) and Other (30 percent) ethnicities in the age group. Sixty percent of Māori older people owned or partly owned their residence.

Figure 26 Home ownership rates of people aged 65 years and over, by ethnic group, 2006



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006
Note: The European grouping includes the "New Zealander" ethnic group

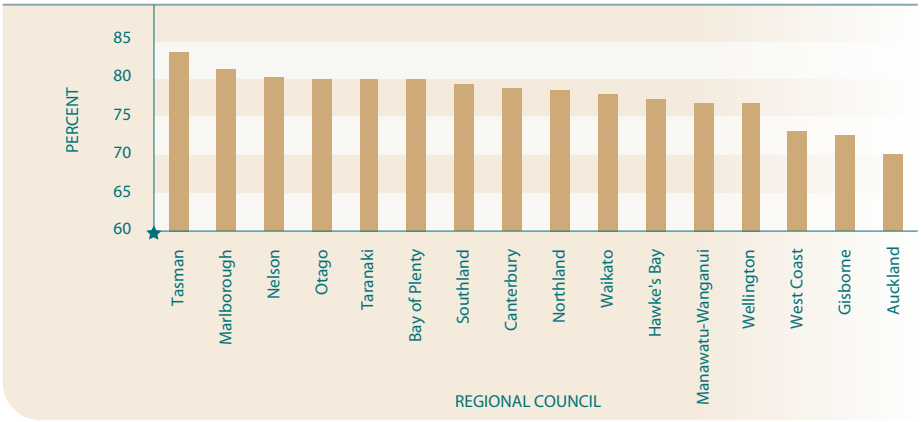
INCOME DIFFERENCES

Home ownership rates, not surprisingly, rose with income. In 2006, 73 percent of older people with an income of $20,000 or less owned or partly own their residence, compared with 89 percent of those with an income of $30,000 or more.

REGIONAL DIFFERENCES

In 2006, older people living in rural areas were more likely to own or partly own their residence (82 percent) than those living in urban areas (75 percent). Home ownership rates for older people were 80 percent or higher in six regional council areas (Tasman, Marlborough, Nelson, Otago, Taranaki and Bay of Plenty).

Figure 27 **Home ownership rates of people aged 65 years and over, by regional council, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

DIFFERENCES BY LIVING ARRANGEMENTS

Eighty-one percent of older people living in private dwellings with a partner or other people, owned or partly owned their own home. This compared to 77 percent of older people living alone who owned or partly owned their own residence.

HOUSING AFFORDABILITY

DEFINITION

The proportion of older people who live in households that spend more than 30 percent of their income on housing.[18]

RELEVANCE

Affordable housing is an important factor in older people's wellbeing. Older people have lower levels of income than the working-age population. High housing costs relative to income are often associated with severe financial difficulty, and can leave older people on low incomes with insufficient income to meet other basic needs such as food, clothing, transport, medical care, and education.

POPULATION COVERAGE

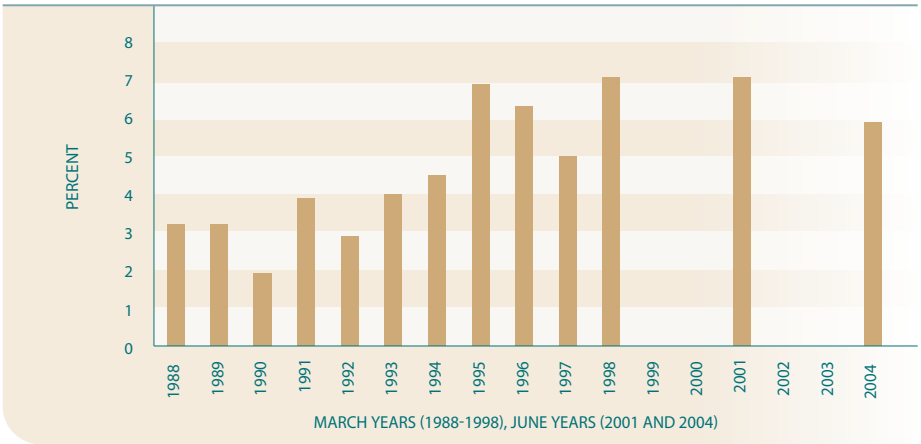
Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In 2004, 6 percent of older people lived in households that spent more than 30 percent of their income on housing costs, close to the 2001 figure (7 percent). Other age groups were much more likely to live in households that spent more than 30 percent of their income on housing than older people (over the whole population the proportion was 21 percent). One factor associated with this difference is the high home-ownership rates, mostly mortgage-free, in the older population compared to younger people (see Home Ownership indicator).

Since the late 1980s, however, there has been a substantial increase in the proportion of older people living in households spending more than 30 percent of their income on housing. Between 1988 and 1995, the proportion rose from 3 percent to 7 percent, before declining and then rising again to level off in 1998 and 2001 (both 7 percent). The trend in the general population was similar but less volatile. The proportion of people of all ages living in households spending more than 30 percent of their income on housing rose between 1988 and 1998, from 11 percent to 25 percent of households, before declining steadily. By 2004, the proportion was 21 percent.

Figure 28 Proportion of the population aged 65 years and over with housing cost outgoings to income ratio greater than 30 percent, 1988–2004



Source: Derived from Statistics New Zealand (2005b) Household Economic Surveys 1988–2004, by the Ministry of Social Development

DESIRED OUTCOMES

Older people have access to appropriate and affordable transport options to keep them mobile. As well as the ability to undertake the routine tasks of living, older people have the mobility to live stimulating, socially connected lives.

TRANSPORT

INTRODUCTION

Mobility is an important factor in enabling older people to remain healthy, socially connected, and active in their communities. In New Zealand, a range of transport options is available to older people, such as private cars, public transport, taxis and increasingly, mobility scooters. Affordability and accessibility (which includes convenience, safety, security, comfort and flexible timetabling as well as availability) are key determinants of which options they choose to use. However, the health status of older people also influences their choice of transport. The more independent modes of transport such as private cars, public transport, or mobility scooters are linked with higher levels of physical mobility and independence (Davey, 2004:31).

The desired outcomes statement reflects the New Zealand Positive Ageing Strategy's principles of self reliance, participation, and choice. It also aligns with the Strategy's vision and goal of affordable and accessible transport options supporting older people to participate fully in the community.

INDICATORS

Two indicators are used in this chapter. They summarise the two major types of transport options used by older people: private and public.

The first indicator provides a measure of the proportion of older people aged 75 years and over who have a driver licence. The ability to carry on driving is an important indicator of wellbeing and allows people to remain independent.

Public transport can be an important option for older people, either as part of a range of transport modes, or for those who don't have access to a private car. The second indicator looks at the proportion of older people using public transport.

LICENSED DRIVERS

DEFINITION

The proportion of people aged 75 years and over who have a driver licence, as measured by Land Transport New Zealand.

RELEVANCE

The ability to carry on driving is often an important indicator of wellbeing and allows older people flexibility in getting out and about.[19]

POPULATION COVERAGE

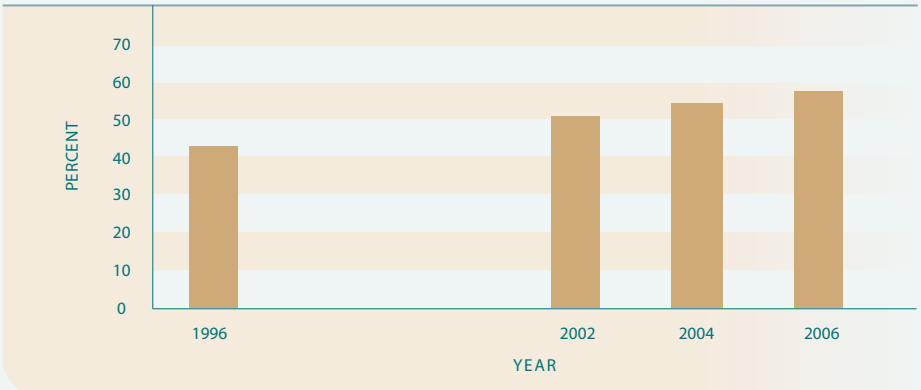
Older people aged 75 years and over. The subject population for this indicator is 75 years and over because legislation imposes special procedures for keeping a driver licence from 75 years.

CURRENT LEVELS AND TRENDS

In August 2006, 136,315 people aged 75 years and over had a driver licence. This represented approximately 57 percent of the population in this age group.

The proportion of people aged 75 years and over with a driver licence has increased over time. In 1996, 43 percent of people aged 75 years and over (76,568 people) held a driver licence, increasing to 51 percent in 2002 (108,664 people) and to 54 percent in 2004 (122,680 people).

Figure 29 Proportion of the population aged 75 years and over with a driver licence, 1996–2006



Source: Land Transport New Zealand (2007) unpublished analysis

AGE AND SEX DIFFERENCES

Men aged 75 years and over were more likely than women of that age to hold a driver licence. Just over three-quarters (76 percent) of men in this age group had a driver licence in August 2006, compared with 45 percent of women.

The proportion of older (75 years and over) people with a driver licence decreased markedly with age (see Table 20). In August 2006, just over three-quarters of people aged 75–79 years had a driver licence, dropping to 54 percent for those aged 80–84 years, to 36 percent for those aged 85–89 years and just to 14 percent for those aged 90 years and over.[20]

Table 20 The number and proportion of people aged 75 years and over with a driver licence, by age group and sex, August 2006

Age group	75–79		80–84		85–89		90+	
	number	%	number	%	number	%	number	%
Males	42,449	88.8	21,656	71.2	7,733	56.6	1,711	32.2
Females	36,728	65.2	19,009	42.9	6,706	25.3	1,131	7.8
Total	**79,177**	**76.0**	**40,665**	**54.4**	**14,439**	**36.0**	**2,842**	**14.4**

Source: Land Transport New Zealand (2007) unpublished analysis

PUBLIC TRANSPORT USE

DEFINITION

The proportion of older people who used public transport in the previous year, as measured by the Quality of Life Survey 2006 (TNS, 2007).

This Survey has a sample in each of New Zealand's 12 largest cities and districts and a sample covering the rest of the country (see Technical Details: Public Transport Use).

RELEVANCE

The availability and use of public transport enables older people to keep mobile, particularly those who cannot or do not drive a car. Older people are known to face significant barriers to using public transport. Barriers to using buses include distance from bus routes, access on and off the bus, timetabling, fares, and facilities at bus stops and interchanges.[21] A high proportion of this age group making good use of public transport means that older people are using transport options available to them to keep mobile. See Non-Big City Access to Services.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In 2006, 38 percent of older people had used public transport in the last year. Twenty-two percent used public transport at least once a month and 16 percent used it less often.

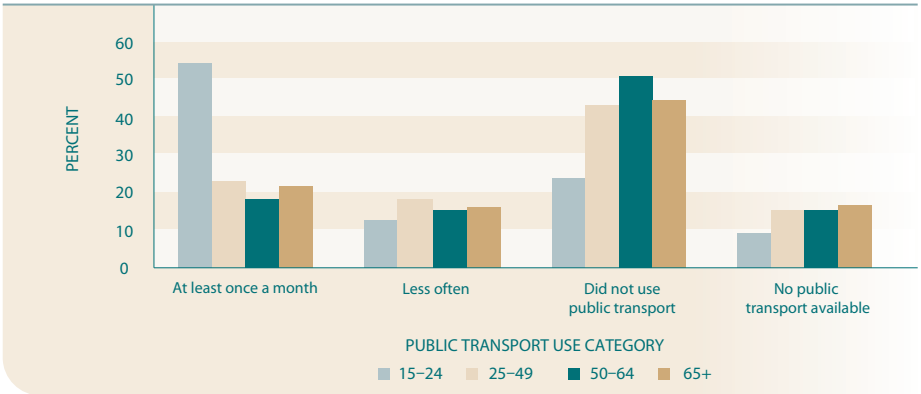
Seventeen percent of older people said there was no public transport available in their area. Of those who had some public transport in their area around half (54 percent) did not use it, and a majority of people in this situation said that public transport was not convenient.[22]

AGE AND SEX DIFFERENCES

Older women were slightly more likely to use public transport in the last year than older men (42 percent and 34 percent respectively). However, for more regular use, male and female public transport use rates were very similar. A total of 23 percent of older women used public transport at least once a month, compared to 21 percent of older men.

The rate of public transport use by older people was similar to that of the rest of the population, except the 15–24 years age group which was much more likely than any other to use public transport on a regular basis. Older people were slightly more likely than people aged under 65 years to say there was no public transport in their area.

Figure 30 **Use of public transport, by age group, 2006**



Source: Quality of Life Survey 2006 (TNS, 2007)

DIFFERENCES BY LIVING ARRANGEMENTS

Around 42 percent of older people who lived alone said they had used public transport in the last year, compared to 37 percent of those who lived with a partner or other people.

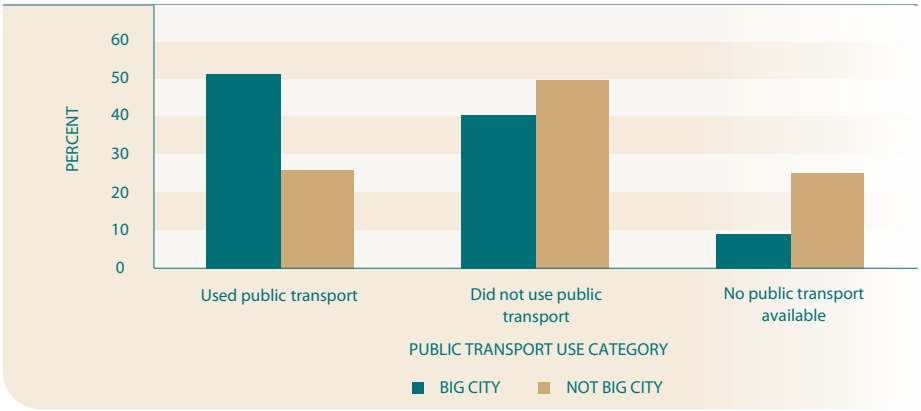
DIFFERENCES BY NET PERSONAL INCOME

The use of public transport varied by income. Older people with a personal income of less than $20,000 per year (35 percent) used public transport less than those with higher incomes (40 percent).

DIFFERENCES BY LOCATION

Half of the older people who lived in one of the 12 big cities (see Technical Details: Public Transport Use for a list of the cities) used public transport in the previous year, compared to only one-quarter of those who lived in smaller towns or rural areas. Approximately equal numbers of older people were living in each location (49 percent in the big cities and 51 percent in the remainder). Almost three times as many people living outside the big cities had no access to public transport, compared to those living in the big cities (25 percent and 9 percent respectively).

Figure 31 Use of public transport by population aged 65 years and over, by location of residence, 2006



Source: Quality of Life Survey 2006 (TNS, 2007)

DESIRED OUTCOMES

Older people feel safe and secure. They are able to make choices in later life about where to live and they receive the support needed to do so.

LIVING IN THE COMMUNITY

INTRODUCTION

The Living in the Community domain is closely aligned with positive ageing. The positive ageing approach promotes the ability for older people, as they age, to live well in safety and security in the community and residence of their choice whenever possible. This may include living alone, or with family, friends or carers.

Changes arising from life transitions will affect the meaning of home for older people and influence their ability to manage. Such transitions include the death of a spouse, the loss of mobility, and changes to social networks or health status.

The main components of the desired outcomes statement for Living in the Community are choice, location, safety, security and support.[23] These values are consistent with the New Zealand Positive Ageing Strategy's goal of "ageing in place" and the Strategy's principles that recognise the diversity of older people and promote their empowerment to make choices that enable them to live a secure, satisfying life and to participate in and contribute to family, whānau and community.

INDICATORS

Even late in life, most older New Zealanders live in their homes and want to remain there for as long as possible. Most older people do not require support services to live at home, although people aged 85 years and over are more likely to require assistance due to increasing disability at this age. The first indicator provides a measure of the proportion of the "older old" aged 85 years and over who are still living in their own homes.

For older people to maintain their independence and live in the community successfully, it is important their living conditions continue to meet their needs. The second indicator looks at the proportion of older people receiving the means-tested Disability Allowance, which is available to low-income people who have ongoing, additional costs because of a disability. Assistance with a range of expenses (including help with the costs of home maintenance, medical needs, transport, power and phone) is available to help older people feel confident to live in their own home longer.

The remaining three indicators relate to older people's actual and/or perceived safety and security. Safety and security are important for older people's wellbeing as they can affect people's ability to interact with others and to participate in the community. Older people's concerns about safety and security are related to vulnerability through frailty, lack of resources, or isolation. The first of these indicators shows the number of older people who have been victims of criminal offending, as a measure of personal safety and security. The other two indicators focus on how safe and secure older people feel within their environment, and the degree of trust they feel about others in their communities.

LIVING AT HOME

DEFINITION

The proportion of the population aged 85 years and over who live in private dwellings as measured by the Census of Population and Dwellings, 1996, 2001 and 2006.[24]

RELEVANCE

Even late in life, most older New Zealanders live in their homes and want to remain there for as long as possible. A high proportion of people in the very oldest age group living at home (as measured by the proportion in a private dwelling) indicates people are likely to be receiving the support to live at home as opposed to moving into residential care.

POPULATION COVERAGE

Older people aged 85 years and over. This indicator focuses on the very late years when the proportion of older people moving out of their homes and into residential care increases dramatically.

CURRENT LEVELS AND TRENDS

The proportion of older people aged 85 years and over living in private dwellings increased between the 1996 and 2006 censuses. At the 1996 Census, 67 percent (25,974 people) of those aged 85 years and over were living in a private dwelling. This increased to 70 percent (56,673 people) at the 2006 Census.

Table 21 Proportion of the population aged 85 years and over living in a private dwelling, 1996, 2001 and 2006

	1996	2001	2006
Number in private dwellings	25,974	33,453	39,924
Percent in private dwellings	67.5	68.8	70.4

Source: Statistics New Zealand (1997; 2002b; 2007c) Census of Population and Dwellings 1996, 2001 and 2006

AGE AND SEX DIFFERENCES

The proportion of older people living in private dwellings decreased sharply with age. At the 2006 Census, 95 percent of the population aged 65–69 years lived in a private dwelling. By comparison, 94 percent of 70–74 year olds, 93 percent of 75–79 year olds, and 88 percent of 80–84 year olds lived in private dwellings. The proportion living in private dwellings dropped sharply to 70 percent for the 85 years and over age group.

Men aged 85 years and over were more likely to reside in a private dwelling than women in the same age group. In 2006, 80 percent of men aged 85 years and over were living in a private dwelling. By comparison, two-thirds (66 percent) of women in the same age group were resident in a private dwelling.[25]

ETHNIC DIFFERENCES

At the 2006 Census, the European ethnic group had the lowest proportion of people aged 85 years and over living in a private dwelling (69 percent). Seventy-eight percent of Māori and Asians aged 85 years and over were living in a private dwelling, compared with 77 percent of Pacific peoples.

Table 22 Proportion of the population aged 85 years and over living in a private dwelling, by ethnic group, 2006

Ethnic group	Number aged 85 years and over living in private dwellings	Proportion aged 85 years and over living in private dwellings (%)
European (includes "New Zealander")	36,459	69.2
Māori	690	77.7
Pacific peoples	369	77.3
Asian	606	78.3
Other	51	85.0

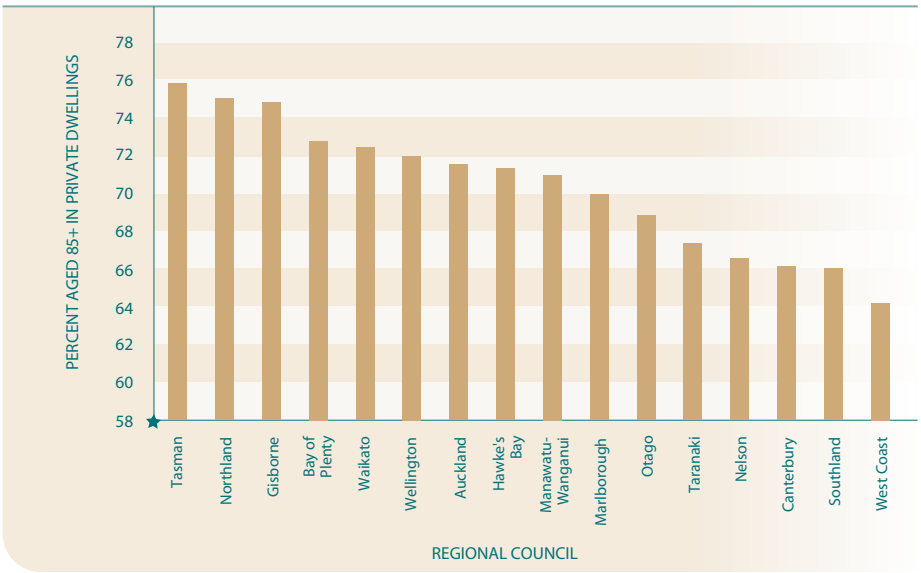
Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006
Note: Figures exclude non-respondents and include multiple responses

REGIONAL DIFFERENCES

In 2006, the proportion of people aged 85 years and over living in private dwellings varied regionally. Overall, older people (aged 85 years plus) in rural areas were much more likely to live in a private dwelling (84 percent) than those living in urban areas (68 percent).

At the regional council level, Tasman had the highest proportion of people aged 85 years and over living in private dwellings (76 percent) and West Coast the lowest (64 percent).

Figure 32 Proportion of the population aged 85 years and over living in a private dwelling, by regional council, 2006



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

DISABILITY ALLOWANCE

DEFINITION

The number of older people receiving the Disability Allowance (as reported in the Ministry of Social Development's administrative database) divided by the older population (as estimated by Statistics New Zealand).

RELEVANCE

The Disability Allowance (DA) is a means-tested supplementary (ie second tier) benefit available to low income people. It provides non-taxable assistance to people who have ongoing, additional costs because of a disability. Recipients can claim a wide variety of costs including (but not restricted to):

- medical expenses, such as medical and pharmaceutical costs, counselling, residential care services[26], day care costs, medical alarms, ambulance fees and subscriptions
- home maintenance costs, such as gardening and outside window cleaning
- transport costs related to disability
- special foods
- power and phone costs related to disability.

Assistance with home maintenance costs enables older people to live in their own homes longer, while assistance with medical expenses (particularly medical alarms) helps older people feel safe and secure.

POPULATION COVERAGE

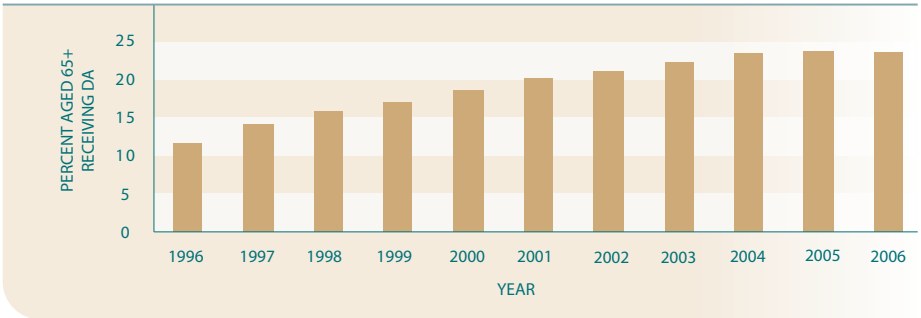
Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

Between 1996 and 2001 the Household Disability Survey (Statistics New Zealand 1996; 2001b) showed that the proportion of the older population with a disability increased from 52 percent (219,000 people) to 54 percent (241,000 people).[27] The increase in the prevalence of moderate or severe disability was steeper, increasing from 23 percent (113,000 people) in 1996 to 35 percent (174,000 people) in 2001 (Statistics New Zealand post-censal disability surveys).[28] Since 2004, the trend in the proportion receiving DA appears to have flattened.

As at the year ending 30 June 2006, 23 percent of the older population (120,276 people) were receiving DA. The proportion of older people on DA has been steadily increasing over the last 10 years. In 1996, 11 percent (49,662 people) were receiving DA. By 2001, the proportion of older people on DA had increased to 20 percent (91,828 people).[29]

Figure 33 **Proportion of the population aged 65 years and over receiving DA, 1996–2006**



Source: Ministry of Social Development administrative data (SWIFTT)

AGE AND SEX DIFFERENCES

Older women were more likely to receive DA than older men. As at the year ending 30 June 2006, 27 percent of older women (77,515 people) were receiving DA compared with 19 percent of older men (42,761 people).[30]

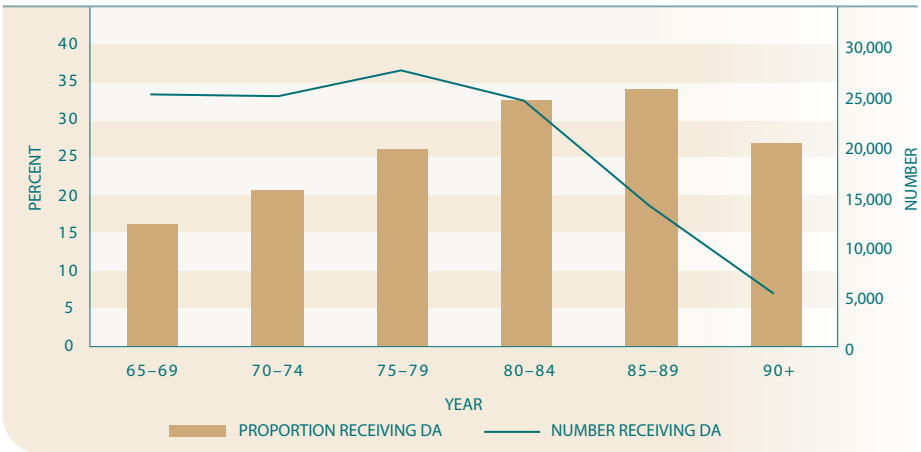
Table 23 **Proportion of the population aged 65 years and over receiving DA, by sex, as at 30 June 2006**

Sex	Number receiving DA	Percent aged 65+ on DA (%)
Male	42,761	18.6
Female	77,515	27.4
Total	**120,276**	**23.4**

Source: Ministry of Social Development administrative data (SWIFTT)

The proportion of older people receiving DA increased with age. For the year ending 30 June 2006, the 65–69 year old age group had the lowest proportion receiving DA, with 16 percent (24,997 people) in receipt of the benefit. The highest proportion was noted for 85–89 year olds, with 34 percent (13,703 people) receiving DA. The proportion was slightly lower for the oldest age group, with 27 percent of the population aged 90 years and over receiving DA in 2006.[31]

Figure 34 **Proportion of the population aged 65 years and over receiving DA, by age group, as at 30 June 2006**

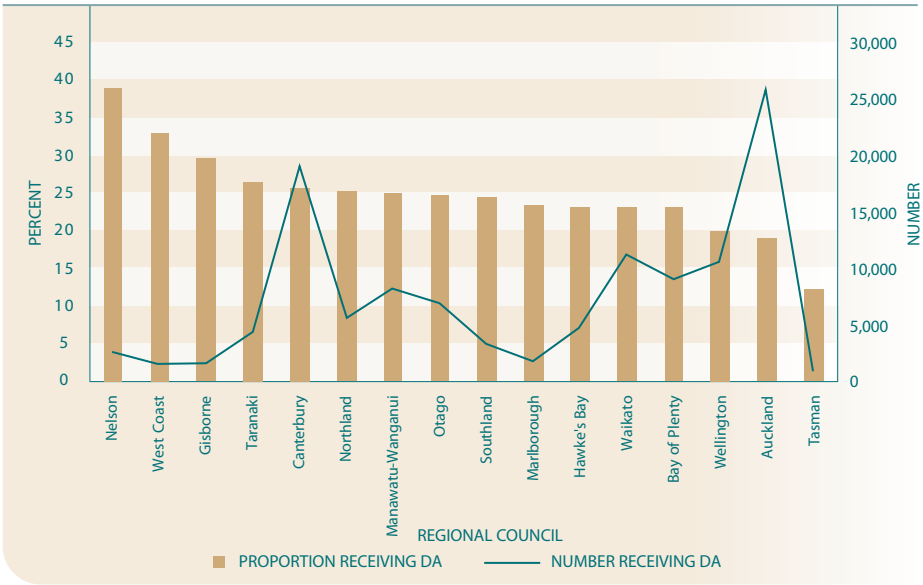


Source: Ministry of Social Development administrative data (SWIFTT)

REGIONAL DIFFERENCES

There were some regional variations in the proportions of older people receiving DA. Figure 35 illustrates the proportions of the older population in receipt of DA by regional council. For the year ending 30 June 2006, the Nelson region had the highest proportion of older people receiving DA, 39 percent of its older population (2,513 people). West Coast had the next highest proportion with 33 percent of its older population (1,490 people) receiving DA. The lowest proportions were noted for the Wellington, Auckland and Tasman regions, where 20 percent (10,504 people), 19 percent (25,902 people), and 12 percent (796 people) of the older population were in receipt of DA respectively. Although Auckland ranked second lowest in terms of the proportion receiving DA, it ranked highest in terms of the number receiving it.

Figure 35 Proportion of the population aged 65 years and over receiving DA, by regional council, as at 30 June 2006



Source: Ministry of Social Development administrative data (SWIFTT)

CRIMINAL VICTIMISATION

DEFINITION

The proportion of the older population living in private households who had been victims of one or more incidents of criminal offending in 2005, as measured by the New Zealand Crime and Safety Survey 2006 (NZCASS) (Mayhew, P. and Reilly, J., 2007).

RELEVANCE

The criminal victimisation prevalence rate provides a broad measure of personal safety and wellbeing. Being a victim of a criminal offence is likely to negatively affect an older person's sense of safety and security. This indicator is a measure of security for the older population.

POPULATION COVERAGE

Older people aged 60 years and over. Age 60 years is used as the cut-off in this indicator because this is how the data was published by the Ministry of Justice.

CURRENT LEVELS AND TRENDS

Around 20 percent of New Zealanders aged 60 years and over experienced victimisation in 2005. The prevalence of victimisation drops with age and the victimisation rate of people aged 60 years and over is low compared to that of the total population aged 15 years and over. In 2005, 39 percent of all adults (aged 15 years and over) experienced victimisation. Comparisons with data from earlier surveys are not possible because the survey design has changed.

SEX DIFFERENCES

In 2005, males and females aged 60 years and over had a similar rate of victimisation (21 percent and 19 percent respectively).

Table 24 Criminal victimisation prevalence rate for the population aged 60 years and over, by sex, 2005

Sex	Percent
Male	21
Female	19
Total	**20**

Source: Mayhew, P. and Reilly, J. (2007) Table C3

VICTIM SATISFACTION WITH POLICE RESPONSE

In 2005, 70 percent of victims aged 60 years and over, who had been a victim of one or more incidents of criminal offending and had reported it to the police, said they were very satisfied or satisfied with the police response. This compares with 51 percent of all victims.

FEAR OF CRIME

DEFINITION

The proportion of the population aged 60 years and over who reported that fear of crime had a moderate or high impact on their quality of life (scoring its effect at 4 or higher on a scale from 0–10, where 0 is no effect and 10 is total effect), as measured by the New Zealand Crime and Safety Survey 2006, (Mayhew, P. and Reilly, J., 2007).

RELEVANCE

Feeling safe is fundamental to wellbeing. Feeling anxious and worrying about crime detracts from wellbeing, and may cause older people to alter their behaviour to avoid being a victim of crime. However, older people's subjective perceptions about safety do not always reflect the actual risk of them becoming a crime victim. This indicator relates to how safe and secure older people feel.

POPULATION COVERAGE

Older people aged 60 years and over. Age 60 years is used as the cut off in this indicator because this is how the data was published by the Ministry of Justice.

CURRENT LEVELS

In 2005, 33 percent of people aged 60 years and over said fear of crime had a moderate or high impact on their quality of life, scoring its effect at 4 or higher on a scale from 0–10. Twenty-eight percent reported the impact was moderate (scoring it at 4–7), while 5 percent reported it was high (scoring it at 8–10). This compares with 40 percent of all New Zealanders reporting fear of crime had a moderate or high impact on their quality of life. People aged 60 years and over were the least likely of all age groups (15–24 years, 25–39 years, 40–59 years and 60 years or older) to report fear of crime affected their quality of life.

SEX DIFFERENCES

Older women were more likely than older men to report fear of crime had a moderate or high impact on their quality of life, with 37 percent of women and 29 percent of men aged 60 years and over scoring its effect at 4 or above on the impact scale. Thirty-one percent of older women and 24 percent of older men reported a moderate impact (scoring it at 4–7), while 6 percent of older women and 4 percent of older men reported a high impact on their quality of life (scoring it at 8–10). In all age groups, and in each ethnic group, women were more likely than men to say fear of crime had an impact on their quality of life.

TRUST IN OTHERS

DEFINITION

The proportion of the older population reporting that people can "almost always" or "usually" be trusted, as reported in the Quality of Life Survey 2006 (TNS, 2007).

RELEVANCE

Trust in others is an important indicator of how older people feel about members of their community. This in turn is associated with their sense of security, wellbeing, and social connectedness. High levels of trust facilitate co-operative behaviour between people and the development of positive relationships.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS

In 2006, 76 percent of older people said people can almost always or usually be trusted. This was the same level of trust as that measured in the total population of all ages.

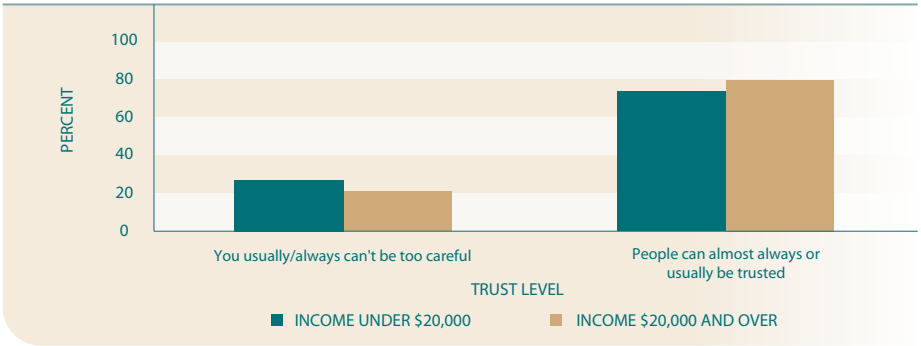
SEX DIFFERENCES

There was quite a difference in the reported levels of trust in others between older men (79 percent said people can almost always or usually be trusted) and older women (73 percent).

INCOME DIFFERENCES

Older people with personal incomes of $20,000 and over had higher levels of trust than those with incomes under this amount. Around 73 percent of those older people with an income of under $20,000 said people can almost always or usually be trusted, compared with 79 percent of those older people with a personal income of $20,000 and over.

Figure 36 Levels of trust by personal income group for people aged 65 years and over, 2006



Source: Quality of Life Survey 2006 (TNS, 2007)

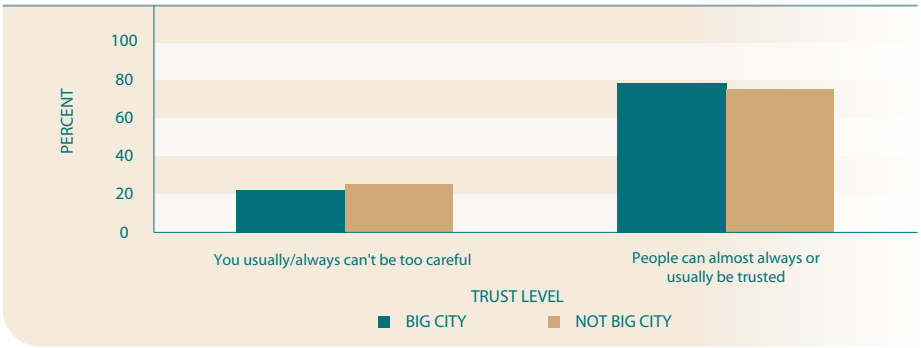
DIFFERENCES BY LIVING ARRANGEMENTS

Seventy-two percent of older people living alone and 78 percent of those not living alone said they almost always or usually trusted other people.

LOCATION DIFFERENCES

Older people who lived in one of the 12 big cities covered by the Quality of Life Survey 2006 were slightly more likely to trust others than older people who lived outside these cities in smaller towns and rural areas. Seventy-eight percent of older people living in the big cities said they believed people can almost always or usually be trusted, compared to 75 percent of those living outside those cities.

Figure 37 Levels of trust by location of residence for people aged 65 years and over, 2006



Source: Quality of Life Survey 2006 (TNS, 2007)

DESIRED OUTCOMES

Older Māori people who identify with Māori culture participate and engage in te ao Māori (the Māori world). They enjoy sharing values and aspirations, support, and the sense of security and belonging that cultural participation provides.

MĀORI CULTURAL IDENTITY

INTRODUCTION

This section focuses on older Māori only. Data on older people from other ethnic groups is limited. There are some indicators elsewhere in this report that do provide ethnic breakdowns for other ethnic groups such as Asians and Pacific peoples. These indicators are General Health, Flu Vaccination, Home Ownership, Living at Home, Internet Access, Physical Activity, Paid Employment, Voluntary Work, and Participation in Education. Older People: a Statistical Overview also discusses the ethnic composition of New Zealand's older population.

Cultural identity is an important contributor to wellbeing as it is associated with a sense of belonging and security. For older Māori, engagement with one's culture provides "a place to stand" and access to whānau, hapu and iwi, where cultural and spiritual values, aspirations and support may be shared. An important part of this engagement is the elders' role in passing on their cultural knowledge to younger generations.

The desired outcomes statement aligns with the New Zealand Positive Ageing Strategy's principle to affirm the values and strengthen the capabilities of older Māori and their whānau.

INDICATORS

Two indicators are used in this chapter to provide information about the cultural identity and participation of older Māori. The first reflects a person's engagement with te ao Māori. Engagement with te ao Māori includes identifying with Māori ethnicity; fluency with the Māori language; whānau interactions; ability to trace whakapapa; contact with marae; contact with other Māori; and holding financial interests in Māori land.

The second indicator looks specifically at te reo Māori. Spoken language is related to the preservation of cultural identity and the ability to participate in one's culture.

TE AO MĀORI

DEFINITION

Engagement with te ao Māori by older Māori aged 65–69 years living in private households who receive New Zealand Superannuation (NZS)[32], as measured by a set of questions developed for the Living Standards of Older Māori study (Cunningham, C., Durie, M., Fergusson, D. et al, 2002)[33] relating to Māori cultural identity and participation. Engagement in te ao Māori includes the following:

- **identifying with Māori ethnicity**
- **fluency with the Māori language**
- **whānau interactions**
- **ability to trace whakapapa**
- **contact with marae**
- **contact with other Māori**
- **holding financial interests in Māori land.**

RELEVANCE

Engagement with te ao Māori reflects a person's identification with Māori culture. Cultural identity is an important contributor to wellbeing. It is associated with a sense of belonging and security. Cultural identity also provides access to social networks, where support, values, and aspirations may be shared.

POPULATION COVERAGE

Older Māori aged 65–69 years. This age restriction was applied because of the way the population was sampled. The quality of ethnic data was robust only for the "younger old" – in this case Māori recipients of NZS aged 65–69 years.

CURRENT LEVELS AND TRENDS

Table 25 summarises the proportion of older Māori participating in Māori cultural activities or identifying with Māori cultural issues, by living arrangement.

The proportion of older Māori identifying as being Māori was high, with single older people slightly more likely to identify themselves as Māori (91 percent) than those in a couple (85 percent).[34]

There was also a high prevalence of marae attendance among older Māori. Eighty-one percent of single older Māori and 72 percent of coupled older Māori had visited a marae in the last 12 months.

Whānau interactions formed an important part of older Māori people's lives for 78 percent of single older Māori and 68 percent of coupled older Māori.

Overall, single older Māori were more likely to participate in or identify with te ao Māori than married or partnered older Māori.

Table 25 Proportion of older Māori (aged 65–69 years) participating in te ao Māori, by living arrangement, 2002

Cultural indicator	Single (%)	Couple (%)
Identified as Māori	91	85
Was able to report whakapapa for more than three generations	64	71
Attended marae (ever)	96	93
Visited marae (last 12 months)	81	72
Reported whānau played a large or very large part in their life	78	68
Held financial interest in Māori land	70	70
Reported contact with some or mainly with Māori	29	27
Reported excellent, very good or good Māori language ability	51	44

Source: Li ving Standards of Older Māori (Cunningham, C., Durie, M., Fergusson, D. et al, 2002)

Table 26 breaks down participation and identification with te ao Māori by the level of cultural identity and awareness, as measured by a cultural identity scale.[35]

A strong sense of cultural identity was positively associated with all seven cultural indicators – ie older Māori with a strong sense of cultural identity were more likely to engage in te ao Māori.

Table 26 Proportion of older Māori (aged 65–69 years) participating in te ao Māori, by level of Māori cultural identity, 2002

Cultural indicator	Notional (low level), %	Positive (medium level), %	Secure (high level), %
Identified as Māori	31	97	100
Reported excellent, very good or good Māori language ability	0	16	59
Reported whānau played a large or very large part in their life	15	81	85
Was able to report whakapapa for more than three generations	15	17	73
Visited marae (last 12 months)	46	85	99
Reported contact with some or mainly Māori	39	88	96
Held financial interest in Māori land	15	39	81

Source: Living Standards of Older Māori (Cunningham, C., Durie, M., Fergusson, D. et al, 2002)

TE REO MĀORI SPEAKERS

DEFINITION

The number of older Māori who reported in the census that they could hold a conversation about everyday things in Māori, as a proportion of the older Māori population.

RELEVANCE

As a central component of Māori culture, Māori language is an important aspect of participation and identity.

POPULATION COVERAGE

Older Māori aged 65 years and over.

CURRENT LEVELS AND TRENDS

The proportion of older Māori who can speak Māori has declined over the last 10 years. At the 1996 Census, 53 percent of older Māori reported they were able to converse comfortably in Māori. This increased to 54 percent in 2001, but has decreased since to 48 percent in 2006.

Table 27 Number and proportion of Māori aged 65 years and over who can have a conversation about everyday things in Māori, 1996, 2001 and 2006

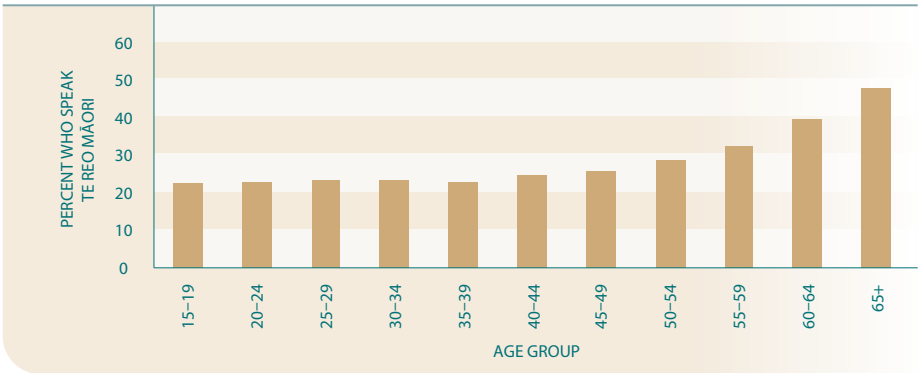
Year	Number	Percent speaking te reo Māori
1996	8,412	53.1
2001	9,363	54.3
2006	11,028	47.7

Source: Statistics New Zealand (1997; 2002b; 2007c) Census of Population and Dwellings 1996, 2001 and 2006

AGE AND SEX DIFFERENCES

There was a small difference in Māori language ability between older Māori men and women. At the 2006 Census, 49 percent of older Māori men could speak Māori. The proportion was slightly lower for older Māori women (47 percent). Figure 38 summarises the proportion of the Māori population able to converse in Māori by age group.
The proportion of te reo Māori speakers increases with age. At the 2006 Census, the proportion of Māori who could speak te reo was 23 percent for all age groups between 15 and 39 years. From age 40 years onward, the proportion increased from 25 percent for the 40–44 years age group to 40 percent for the 60–64 years age group. The proportion of Māori language speakers was highest for the 65 years and over age group (48 percent).

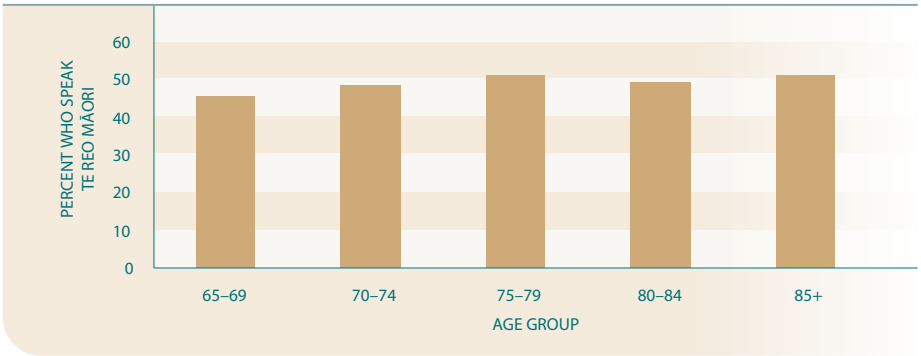
Figure 38 Proportion of Māori who can have a conversation in Māori about everyday things, by age group, 2006



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

The proportion of older Māori language speakers is broken down further by age group (below). At the 2006 Census, the proportion of older Māori who could speak Māori generally increased with age, from 45 percent for ages 65–69 years to 51 percent for ages 75–79 years. The proportion was slightly lower for the 80–84 years age group (49 percent) but similar for ages 85 years and over (also 51 percent).

Figure 39 Proportion of Māori aged 65 years and over who can have a conversation in Māori about everyday things, by age group, 2006



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

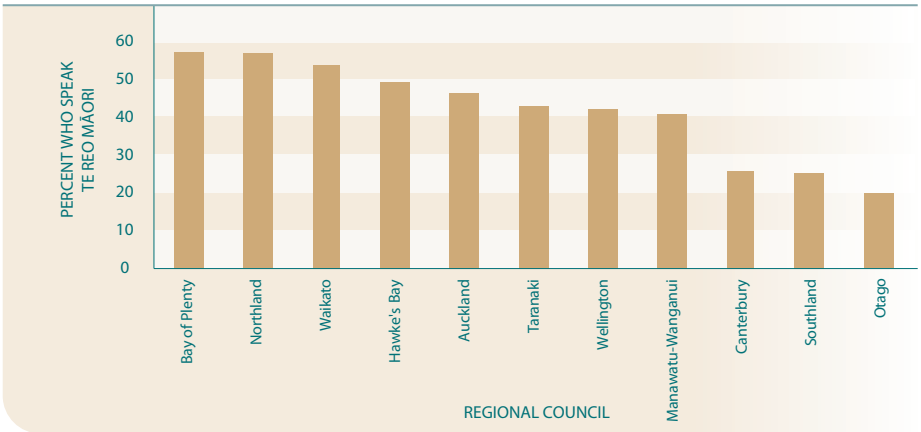
REGIONAL DIFFERENCES

Figure 40 summarises the proportion of older Māori language speakers by regional council. Note the figures for five regional councils are missing because the data in these regions has been restricted for confidentiality reasons.

The Bay of Plenty and Northland regions had the highest proportions of older Māori who could converse in te reo (both 57 percent). Waikato and Hawke's Bay were also above the national average of 47 percent, with 53 percent and 49 percent of their older Māori populations able to speak Māori respectively. These regions have an above-average representation of Māori in their populations. At the 2006 Census, 5 percent of the older population in New Zealand was Māori. The corresponding regional proportions were higher in Northland (12 percent), Bay of Plenty (9 percent), Waikato and Hawke's Bay (both 7 percent).

Canterbury, Southland and Otago had the lowest proportions of older Māori able to speak te reo (26 percent, 25 percent, and 20 percent respectively). Again, this may be related to the low Māori population density in these areas. In 2006, the proportions of the older population who reported Māori ethnicity were 1 percent in Otago, 2 percent in Canterbury and 4 percent in Southland.

Figure 40 **Proportion of Māori aged 65 years and over who can have a conversation in Māori about everyday things, by selected regional council, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

DESIRED OUTCOMES

Older people in both rural and urban areas receive the facilities and services they need to live confidently in the community. When accessing these facilities and services, older people are not disadvantaged by their geographic location.

ACCESS TO FACILITIES AND SERVICES

INTRODUCTION

It is important for older people's wellbeing and ability to age positively that they have the confidence and certainty that facilities and services will be available to them when they need them. Geographic inequalities outside big cities – through high per capita costs of delivering services to small numbers over large areas, limited transport options, and labour shortages – may disadvantage older people by forcing them to migrate away from their communities and lead to increased admissions to long-term care.

This desired outcomes statement is consistent with the New Zealand Positive Ageing Strategy's principle that older people in both rural and urban areas live with confidence in a secure environment and receive the services they need to do so; and the Strategy's goal that older people living in rural communities are not disadvantaged when accessing services.

INDICATORS

The first indicator provides a measure of the access of older people living in non-big city areas to a shopping mall, shopping centre, or supermarket; a bank or cash machine; a local park or other green space; and public transport facilities such as a bus stop or train station. Access to these facilities and services is important to older people for maintaining independence and control over their personal affairs, and for social interaction and engagement with their communities.

The second indicator looks at internet access for older people as another measure of access to facilities and services. Information technology has the potential to reduce isolation and to bring facilities and services to older people in ways that maintain choice, control, independence, and interdependence. For older people who are housebound (eg due to a disability) or who live some distance away from family and friends, the internet may provide important social links and information, as well as access to facilities and services.

NON-BIG CITY ACCESS TO SERVICES

DEFINITION

The proportion of older people living outside the 12 largest cities in New Zealand, as measured in the Quality of Life in New Zealand's Largest Cities Survey 2004 (Auckland City Council et al, 2005), who found it easy or very easy to access a shopping mall, shopping centre or supermarket; a bank or cash machine; a local park or other green space; or public transport facilities such as a bus stop or train station.

This indicator does not specifically cover the rural population, but looks at the difference between those living inside the biggest New Zealand cities and those who live elsewhere. The non-big city population could still be living in small cities and towns.

In other places in this report, data is taken from the 2006 Quality of Life Survey (TNS, 2007) rather than this 2004 survey. However, the 2006 survey did not ask all the questions on this topic that were included in the 2004 survey, and as the results are otherwise not dissimilar, the more comprehensive 2004 results are used.

RELEVANCE

Being unable to easily access services such as a bank or public transport can negatively affect wellbeing. It is important to ensure older people living outside major centres are not disadvantaged in their ability to access services. This indicator is also relevant to Transport: Public Transport.

POPULATION COVERAGE

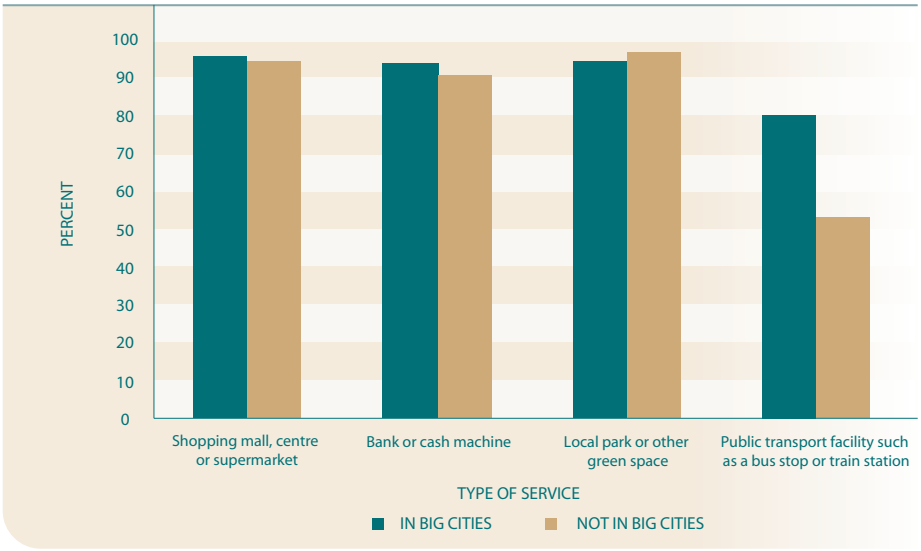
Older people aged 65 years and over.

CURRENT LEVELS

The ability to access most of the services was similar for older people living outside New Zealand's 12 largest cities to those living inside the 12 cities. For shopping malls, shopping centres or supermarkets; banks or cash machines; and local parks or other green areas, over 90 percent of all older people said they could access them very easily or easily, irrespective of where they lived.

There were differences, however, in the ability of older people living outside the 12 largest cities in accessing a public transport facility such as a bus stop or train station, compared to those living in the cities. Just over half (53 percent) of older people living outside New Zealand's 12 largest cities said they could access transport facilities very easily or easily, compared to 80 percent of those living in the cities. A further 29 percent of the non-big city older population said ease of access to public transport was not applicable to them because public transport was not available in their area. Only 7 percent of city dwellers were in this situation. See also the Transport Indicators.

Figure 41 **Proportion of the population aged 65 years and over able to access services easily or very easily, by location and type of service, 2004**



Source: Quality of Life in New Zealand's Largest Cities Survey 2004 (Auckland City Council et al, 2005)

Those people who lived outside the 12 biggest cities who found access to services difficult were asked why they experienced the difficulty. The most common reason, given by 37 percent of older people living in these areas, was "not really accessible by public transport/no public transport". The second most common reason, given by 22 percent, was "very long walk".

INTERNET ACCESS

DEFINITION

The proportion of the older population (living in permanent private dwellings) who live in a household with internet access.[36]

RELEVANCE

Access to the internet is important for older people. The internet has the potential to remove barriers of distance and physical limitation and to keep older people socially connected. It also enables older people to access some services without leaving their homes – eg banking and grocery shopping.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

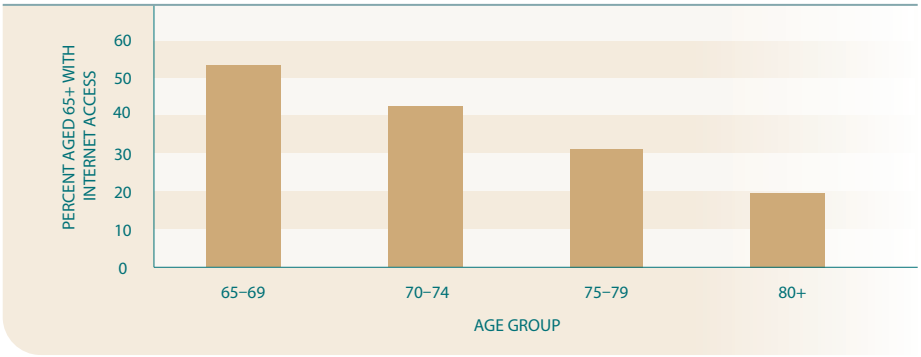
Since the 2001 Census, the proportion of older people living in permanent private dwellings with internet access has more than doubled – from 16 percent (or 64,593 people) in 2001 to 38 percent (or 171,201 people) in 2006.

AGE AND SEX DIFFERENCES

Older men were more likely than older women to live in a household with internet access. In 2006, 43 percent of older men (205,119 people) compared with 34 percent of older women (244,443 people) had access to the internet.

The proportion of older people living in households with internet access decreased with age. In 2006, 53 percent of 65–69 year olds resided in a household with internet access. The proportion was much lower for ages 80 years and over, at 20 percent.

Figure 42 Proportion of the population aged 65 years and over (living in permanent private dwellings) with internet access, by age group, 2006

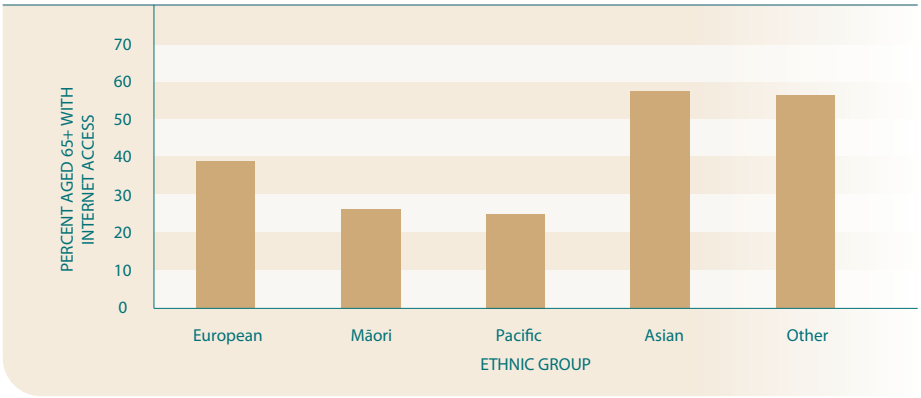


Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

ETHNIC DIFFERENCES

There was some variation between ethnic groups in internet access for older people. In 2006, older Asians were most likely to reside in a household with internet access (57 percent).[37] Fifty-six percent of older people in the Other ethnic group had internet access, while 39 percent of the European (including New Zealander) group had access. Older Māori and Pacific peoples were the least likely to live in a household with internet access – 26 percent and 25 percent respectively.

Figure 43 **Proportion of the population aged 65 years and over (living in permanent private dwellings) with internet access, by ethnic group, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006
Note: The European ethnic grouping includes the "New Zealander" category

SOCIO-ECONOMIC DIFFERENCES

In 2006, internet access for older people was associated with socio-economic status as measured by personal income. Table 26 summarises this information. The proportion of older people with internet access was lowest for the lowest income group (34 percent for those with an annual income of under $20,000) and highest for those in the highest income group (59 percent for those with an annual income of $30,001 or more).[38]

Table 28 **Proportion of the population aged 65 years and over (living in permanent private dwellings) with internet access, by personal income, 2006**

Personal income (annual)	Percent aged 65 years and over residing in a household with internet access
Under $20,000	34.5
$20,001–$30,000	44.6
$30,001 or more	59.2
Not elsewhere included	20.2

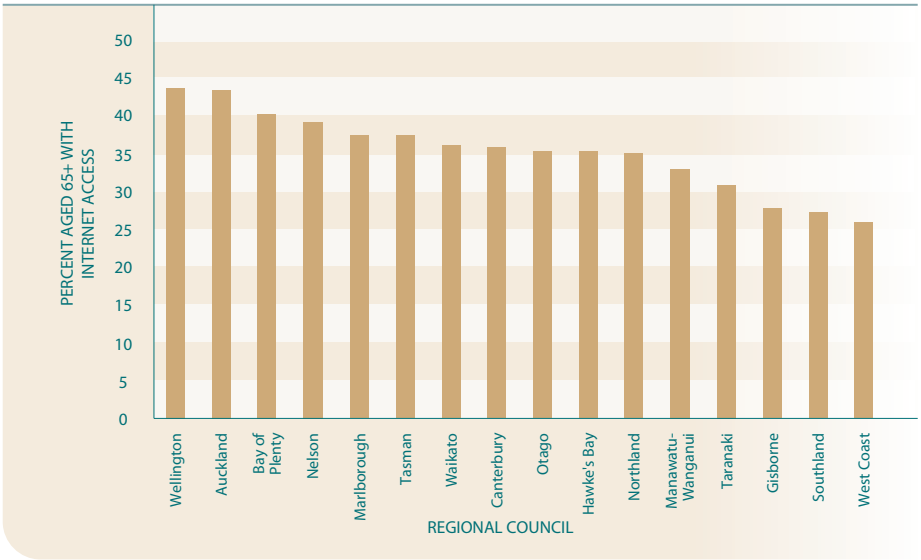
Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

REGIONAL DIFFERENCES

At the 2006 Census, there was no difference in internet access for older people in rural and urban regions (38 percent for both).

Figure 44 breaks this down at the regional council level. In 2006, internet access was highest in Wellington and Auckland – with 43 percent of older people in these regions living in a household where the internet was available. In most regional council areas, more than 30 percent of the older population had internet access. Regions where the proportion was lower included Gisborne (28 percent), Southland (27 percent), and the West Coast (26 percent). The latter two are mostly rural areas. Although no overall differences in internet access for older people between rural and urban regions emerged, there were some rural regions where internet access was much lower than the national average.

Figure 44 Proportion of the population aged 65 years and over (living in permanent private dwellings) with internet access, by regional council, 2006



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

DESIRED OUTCOMES

New Zealanders have positive attitudes towards ageing and older people. Ageing is viewed as a positive experience by older people themselves, and others value and respect older people and encourage their contributions.

ATTITUDES

INTRODUCTION

The concept of positive ageing embraces a number of factors, including health, financial security, independence, self-fulfilment, community attitudes, personal safety and security, and the physical environment. The underpinning premise is that the years of "older age" should be viewed and experienced positively. The focus is on both the attitudes and experience of older people, and on the attitudes, expectations and actions towards ageing and older people of younger generations.[39]

For older people, positive attitudes towards ageing are evident when ageing is viewed as a normal part of the life cycle with opportunities for furthering self-development and for contributing to community life.

Integral to positive attitudes towards ageing is recognising the benefits derived from living a healthy, independent lifestyle. Good nutrition and regular exercise are associated not only with good physical health, functional capacity, and the prevention of illness and injury, but with other aspects of wellbeing, for instance mental health, social functioning, and self worth.

Positive attitudes of younger generations towards ageing and older people are evident when the contribution, abilities, achievements and diversity of older people are recognised and valued by society.

The desired outcomes for positive attitudes towards ageing are aligned with the New Zealand Positive Ageing Strategy's vision to empower older people to make choices that enable them to live a satisfying life and lead a healthy lifestyle; and the Strategy's goal that people of all ages have positive attitudes to ageing and older people.

INDICATORS

Three indicators are used in this chapter to provide information on different aspects of positive attitudes towards ageing and older people. The first indicator looks at older people's life satisfaction as a key factor in the measurement of wellbeing. Older people's satisfaction with life is associated with positive attitudes to ageing and the overall quality of their lives.

The second indicator focuses on the regular physical activity of older people as a measure of older people's attitudes towards living a healthy, active lifestyle.

The third indicator gives an indication of the general population's attitudes to older people and ageing by measuring perceptions of age discrimination against older people.

LIFE SATISFACTION

DEFINITION

The proportion of people aged 65 years and over who were in general very satisfied or satisfied with their life, as measured in the New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006).

RELEVANCE

Older people's satisfaction with life is associated with positive attitudes to ageing and with the overall quality of their lives. Life Satisfaction is one of the key factors in the measurement of wellbeing. See Living Standards indicator.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS

In 2004, the vast majority of older people, 89 percent, said they were either very satisfied or satisfied with life in general.

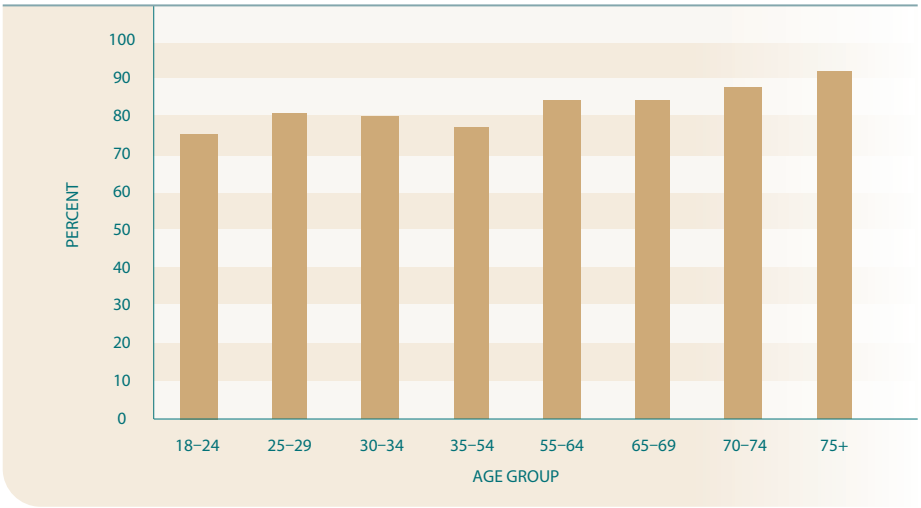
Figure 45 Proportion of population aged 65 years and over very satisfied or satisfied with life in general, by sex, 2004

Source: New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006)

AGE AND SEX DIFFERENCES

There was no difference in the prevalence of satisfaction with life between older men and older women, but there was some variation by age. Those aged 75 years and over were slightly more likely to be very satisfied or satisfied than those aged 65–69 years (92 percent and 84 percent respectively were either very satisfied or satisfied).
The 65 years and over age group as a whole was more likely to be satisfied with life than younger age groups, particularly those aged under 55 years. Satisfaction levels for those aged 18–24 years, for example, were 17 percentage points below those for people aged 75 years and over.

Figure 46 **Proportion of the population very satisfied or satisfied with life in general, by age group, 2004**

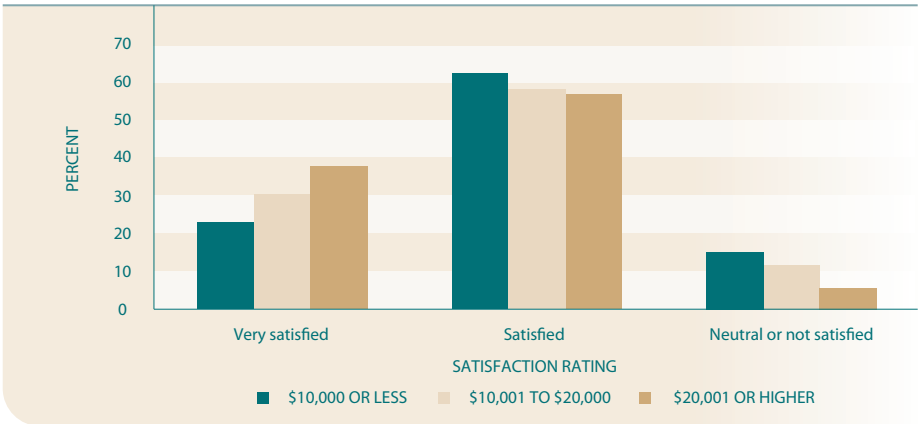


Source: New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006)

INCOME DIFFERENCES

Satisfaction levels varied according to net personal income levels. Older people with a personal income of $10,000 or less had a lower level of satisfaction (85 percent were satisfied or very satisfied with life) than those older people with a personal income of $20,001 or higher (94 percent satisfied or very satisfied). Eighty-eight percent of older people with a personal income of $10,001 to $20,000 were satisfied or very satisfied with life in general.

Figure 47 **Proportion of the population aged 65 years and over very satisfied or satisfied with life in general, by net personal income, 2004**



Source: New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006)

LIVING STANDARD DIFFERENCES

Satisfaction with life in general had a strong relationship with older people's standard of living (as measured by the ELSI scale). For more detail on the ELSI scale see the Living Standards indicator and Technical Details: Attitudes: Life Satisfaction. Only 63 percent of the group with low living standards said they were satisfied or very satisfied with life. In comparison, 91 percent of those with a good or very good standard of living were satisfied or very satisfied with life.

The strong relationship between life satisfaction and standard of living compared with the weak relationship between it and personal income shows the factors that make older people satisfied with life are complex. The information used to calculate the standard of living scale includes household amenities, personal possessions, social and recreational activities, the ability to have preferred foods, access to important services, and such like. The results suggest these sorts of factors influence life satisfaction more than simply the amount of money a person has.

Figure 48 **Proportion of the population aged 65 years and over very satisfied or satisfied with life in general, by standard of living, 2004**

Source: New Zealand Living Standards 2004 survey (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006)

PHYSICAL ACTIVITY

DEFINITION

The proportion of the older population (living in permanent private dwellings) who were physically active for at least 30 minutes a day on five or more days over the last week, as measured by the New Zealand Health Survey 2002/2003.

Due to sample size restrictions, it was difficult to produce breakdowns at a fine level (eg ethnic, age and deprivation). All prevalence estimates and group differences presented in this indicator should be interpreted with caution.

RELEVANCE

Regular physical activity is associated with good mental and physical health, functional capacity, and self worth. A high proportion of older people exercising regularly indicates positive attitudes towards living a healthy active lifestyle.

POPULATION COVERAGE

Older people aged 65 years and over.

AGE AND SEX DIFFERENCES

In 2002/2003, 41 percent of the older population were regularly active for at least 30 minutes daily, on five or more days over the past week. Older men (44 percent) were more likely than older women (39 percent) to report being regularly physically active.

Table 29 Proportion of the population aged 65 years and over who were regularly physically active, by sex, 2002/2003

Sex	Percent
Male	44.5
Female	38.7
Total	**41.3**

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

Table 30 summarises the proportion of the older population who were regularly physically active in the past week broken down by age group. The proportions reporting to be regularly physically active were 49 percent for the 65–69 years and 70–74 years age groups and 33 percent for the 75 plus years age group. The low prevalence of physical activity for those aged 75 plus years is due to the higher prevalence of frailty in this age group.

Table 30 Proportion of the population aged 65 years and over who were regularly physically active, by age group, 2002/2003

Age group	Percent
65–69	48.7
70–74	48.6
75+	32.6

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

ETHNIC DIFFERENCES

Table 31 shows the older European/Other ethnic group was the most likely to report regular physical activity (42 percent). Older Māori and Asians had similar activity levels, with 34 percent and 33 percent respectively reporting regular physical activity. Older Pacific peoples were the least likely to report regular physical activity (25 percent).

Table 31 Proportion of the population aged 65 years and over who were regularly physically active, by ethnic group, 2002/2003

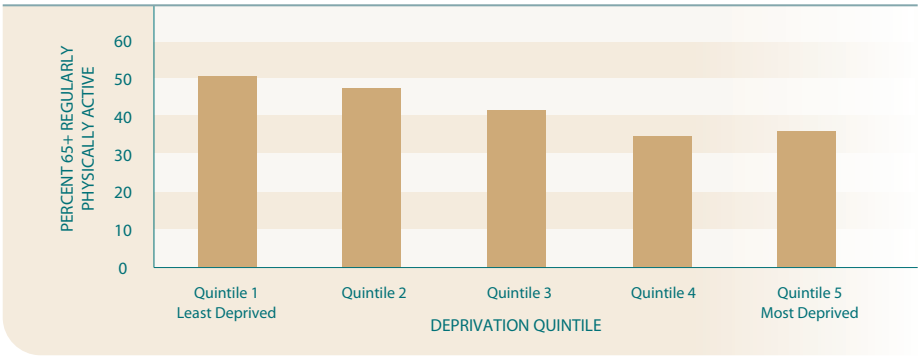
Ethnic group	Percent
European/Other	42.1
Māori	34.0
Pacific peoples	25.0
Asian	33.1

Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

SOCIO-ECONOMIC DIFFERENCES

Figure 49 shows an association, for older people, between regular physical activity and the level of small area deprivation (as measured by NZDep2001 scores). Older people living in the least deprived quintiles of small areas had the highest reported rate (50 percent) of regular physical activity. The proportion of older people reporting regular physical activity was lower for those living in the two most deprived quintiles of small areas.

Figure 49 Proportion of the population aged 65 years and over who were regularly physically active, by quintile of deprivation, 2002/2003



Source: Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003

PERCEIVED AGE DISCRIMINATION

DEFINITION

The proportion of people aged 18 years and over who perceived that older people were targets of "some" or "a great deal" of age discrimination, as reported in repeated surveys commissioned by the Human Rights Commission (2006). Actual grounds for the perceived discrimination were not given.

RELEVANCE

This indicator provides a measure of the adult (aged 18 plus years) population's perceptions of age discrimination against older people. It shows the general population's attitudes to older people and ageing.

POPULATION COVERAGE

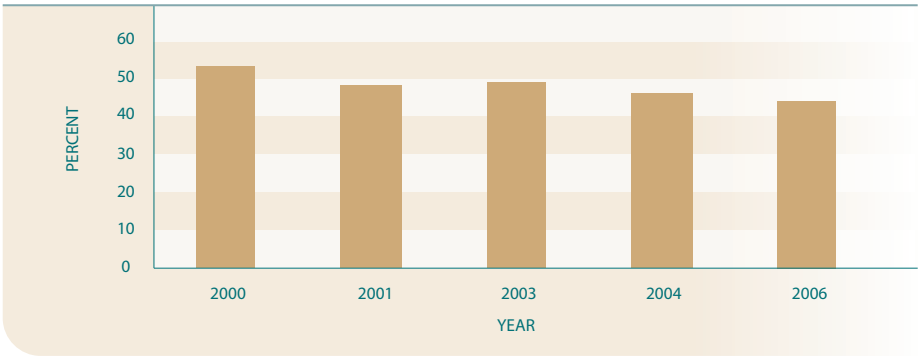
Population aged 18 years and over.

CURRENT LEVELS AND TRENDS

In February 2006, around two-fifths of the 750 respondents to the Human Rights Commission Survey 2006 thought older people were subject to some or a great deal of age discrimination.

There has been a decrease in the proportion of people who thought older people were the target of age discrimination since the first Human Rights Commission survey in December 2000. At that time, 53 percent of respondents thought older people were subject to some or a great deal of age discrimination. In subsequent years the proportions were 48 percent (2001), 49 percent (2003), and 46 percent (2004).

Figure 50 Proportion of survey respondents who perceived older people were subject to some or a great deal of age discrimination, 2000–2006



Source: Human Rights Commission (2006)

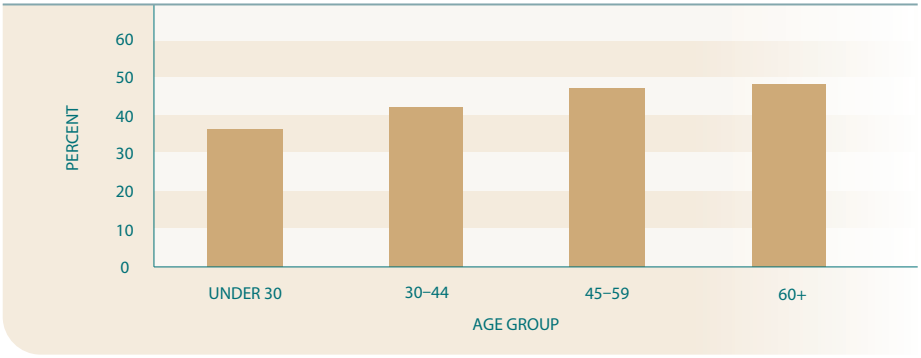
AGE AND SEX DIFFERENCES

Women (49 percent) were more likely than men (38 percent) to think older people were targets of some or a great deal of age discrimination.

More older than younger survey respondents thought older people were subject to age discrimination. Just under half of each of the age groups 45–59 years (47 percent) and

60 plus years (48 percent) thought older people were subject to some or a great deal of age discrimination, compared to just over a third (36 percent) of those aged under 30 years.

Figure 51 Proportion of survey respondents who perceived older people were subject to some or a great deal of age discrimination, by age group, 2006



Source: Human Rights Commission (2006)

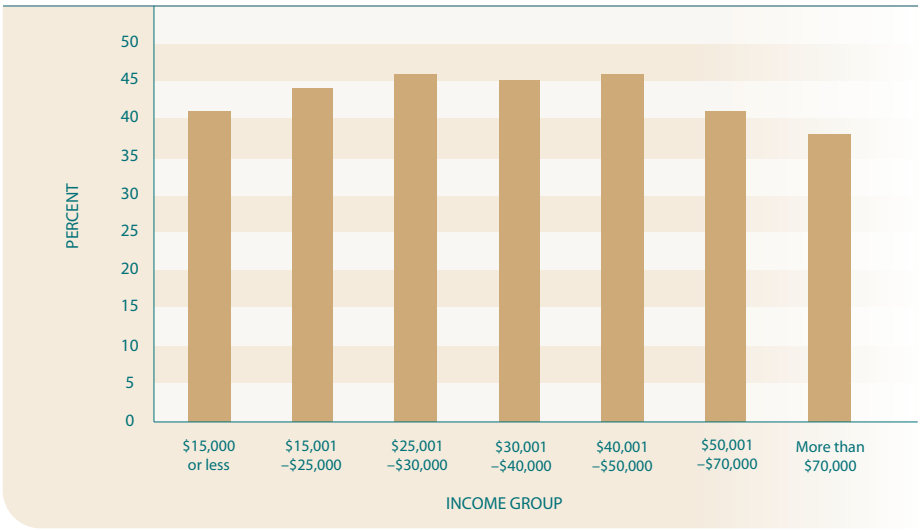
ETHNIC DIFFERENCES

Māori were much more likely than non-Māori to think older people were subject to age discrimination. Almost two-thirds (65 percent) of Māori thought older people were subject to some or a great deal of age discrimination, compared to 41 percent of non-Māori.

INCOME DIFFERENCES

The perception of age discrimination against older people was highest for people with incomes between $25,001 and $50,000, with about 46 percent of people in this income range identifying older people as being subject to age discrimination. Slightly lower rates of perceived age discrimination were experienced by the respondents in lower and higher income groups.

Figure 52 Proportion of survey respondents who perceived older people were subject to some or a great deal of age discrimination, by income, 2006



Source: Human Rights Commission (2006)

DESIRED OUTCOMES

Older people have access to meaningful and rewarding employment. Older people are provided with incentives and flexible work options to encourage them to remain in the workforce longer.

EMPLOYMENT

INTRODUCTION

Many older people indicate they want to remain in the workforce longer.[40] For some this means full-time paid employment. For others, part-time work provides a means of balancing employment, family and friends and other interests.

In addition to having an important role in social wellbeing, paid employment contributes to a person's standard of living. New Zealand Superannuation is not means tested, so an older person can choose to work longer without having to forgo their pension. This means older people can continue to work and to use their earnings to increase their total incomes and to build their savings before their eventual retirement.

Incentives to encourage and support older people to remain in the workforce longer include providing family-friendly workplaces that recognise those with caring responsibilities; allowing flexible and reduced hours of work; providing training and professional development for all workers including older staff; and human resources and recruitment policies that harness the skills and experience of older workers.

The desired outcomes statement reflects the New Zealand Positive Ageing Strategy's vision that flexible employment practices support older people in the workforce and the Strategy's goal to eliminate ageism and promote flexible work options.

INDICATORS

Two indicators are used in this chapter to provide a picture of older people's access to employment, their financial rewards from employment, and the availability of flexible work options for older people.

The first indicator provides the employment rate. The employment rate gives a picture of access to paid work. It is influenced not only by the amount of work available but also by trends in older people making themselves available to work.

It is important older people have good quality jobs that are well paid. The second indicator provides a measure of average hourly earnings from waged and salaried employment.

PAID EMPLOYMENT

DEFINITION

The proportion of the older population (living in permanent private dwellings) who are in paid employment for at least one hour per week.

RELEVANCE

This indicator provides a picture of access to paid work. Higher levels of employment in the older population indicate more opportunities for older people to participate in the labour market and to increase their income. However, whether or not older people want employment is likely to differ according to individual circumstances, and the indicator does not distinguish between, for example, those who choose to work and those who need to work.

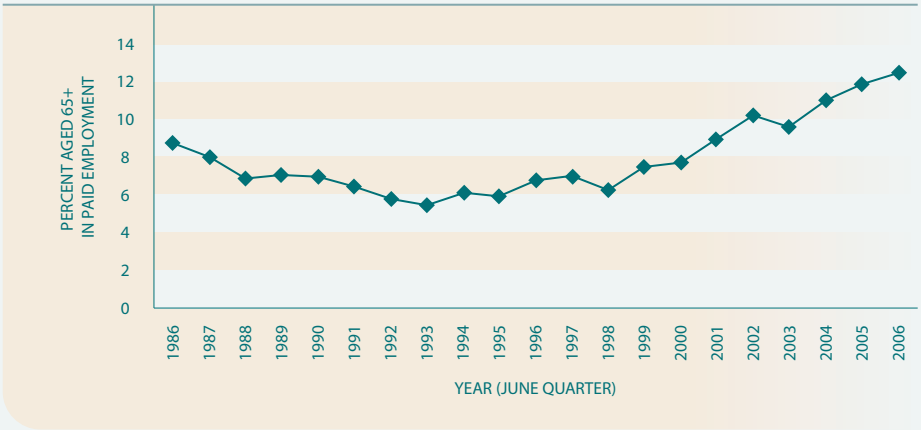
POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In June 2006, 12.2 percent of the older population (58,600 people) were employed for one or more hour(s) per week. This was a 3.7 percentage point increase on the rate recorded in June 1986. Employment rates among the older population declined over the late 1980s and early 1990s. From the mid-1990s, employment rates for those aged 65 years and over increased steadily – doubling from 5.9 percent in June 1994 to 12.2 percent in June 2006. This was driven, at least in part, by the increase in the entitlement age for New Zealand Superannuation from 60 to 65 years between 1991 and 2001.

Figure 53 Proportion of the population aged 65 years and over in paid employment, by year, June 1986–June 2006



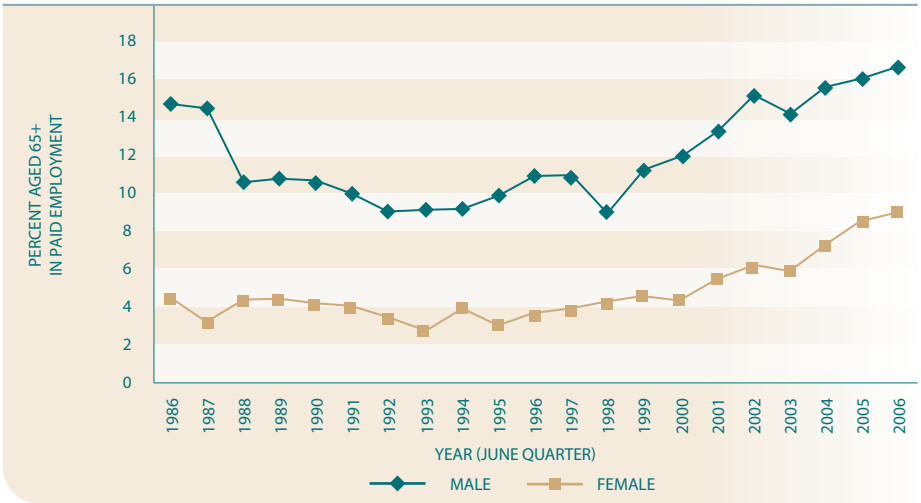
Source: Statistics New Zealand (2007b) Household Labour Force Survey, June quarter results

SEX DIFFERENCES

Older men were more likely to be employed than older women. While employment rates for both older men and older women increased between 1986 and 2006, rates for men were consistently higher than those for women. In June 1986, 14.5 percent of older men were employed for at least one hour per week, compared to 4.1 percent of older women. This gap narrowed somewhat in the 1990s, but has since widened. In June 2006, 16.5 percent of older men were employed, compared to 8.7 percent of older women.

By contrast, the growth in employment rates over the last 20 years shows the rate for older women more than doubled between June 1986 and June 2006. The employment rate for older men only increased by 2 percentage points over the same period.

Figure 54 **Proportion of the population aged 65 years and over in paid employment, by sex and year, June 1986–June 2006**



Source: Statistics New Zealand (2007b) Household Labour Force Survey, June quarter results

ETHNIC DIFFERENCES

In June 2006, older Māori had the highest employment rates, with 19.4 percent employed for one hour or more per week. This may be due to the younger age structure of the older Māori population. The European ethnic group had the next highest employment rate at 12.1 percent, followed by the Other ethnic group (including Asian and non-responses) at 10.8 percent. Older Pacific peoples had the lowest employment rate – 8.9 percent.

SOCIO-ECONOMIC DIFFERENCES

Table 32 summarises employment rates among the older population by highest educational qualification attained. Older people with a higher level of education were more likely to be employed than those with fewer qualifications. In June 2006, the employment rate for older people with no qualification or a school qualification was 9 percent and 10 percent respectively. By contrast, the employment rate among older people with a post-school qualification was almost double that, at 18 percent.[41]

Table 32 **Proportion of the population aged 65 years and over in paid employment, by highest level of qualification, June 2006**

Qualification type	Employment rate (%)
No qualification	8.6
School qualification	9.7
Post-school but no school qualification	18.2
Post-school and school qualification	18.3

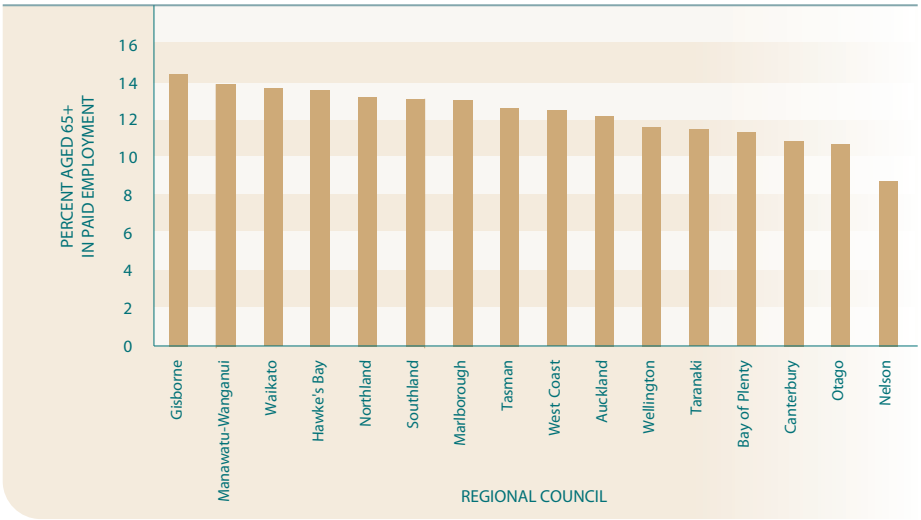
Source: Statistics New Zealand (2007b) Household Labour Force Survey, June quarter results

REGIONAL DIFFERENCES

There was some regional variation in employment rates for the older population. In June 2006, estimated employment rates[42] for the older population were highest for Gisborne (14.5 percent), Manawatu–Wanganui (14.0 percent) and Waikato and Hawke's Bay

(both 13.7 percent). Employment rates were lowest in Nelson (8.9 percent), Otago (10.8 percent), and Canterbury (11.0 percent). By and large, most regional councils were on par with the national average of 12.2 percent.

Figure 55 Estimated proportion of the population aged 65 years and over in paid employment, by regional council, June 2006

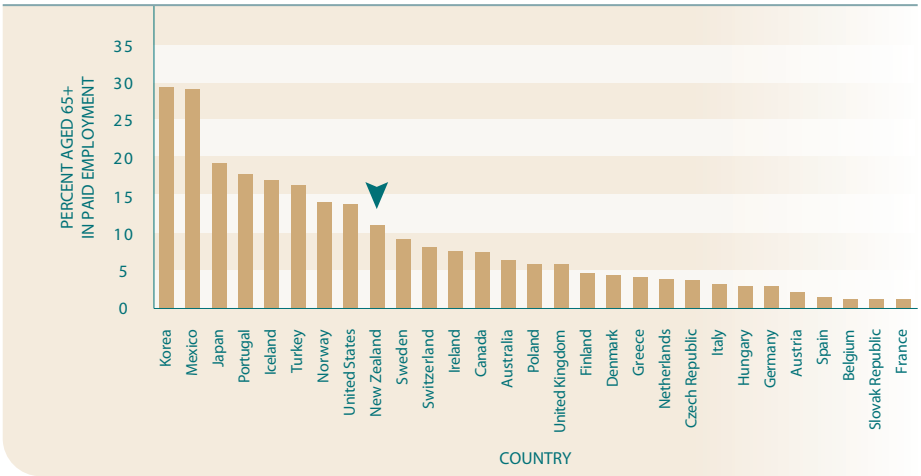


Sources: Derived from Statistics New Zealand (2007b) Household Labour Force Survey, June 2006, by the Ministry of Social Development; Statistics New Zealand (2007c) Census of Population and Dwellings 2006, regional employment trends

INTERNATIONAL COMPARISONS

In 2004, the New Zealand employment rate of 11.1 percent for older people was slightly above the OECD average of 10.8 percent. New Zealand ranked ninth highest out of 29 OECD countries. It should be noted, however, that there are differences between the countries in other factors such as policy environment (eg age of retirement or semi-retirement), levels and eligibility of social provisions, age and sex structure (the reported proportion is not age standardised), and how employment is defined and measured.

Figure 56 Proportion of the population aged 65 years and over in paid employment, selected OECD countries, 2004



Source: OCED (2006)

AVERAGE HOURLY EARNINGS

DEFINITION

Real average hourly earnings from all wages and salaries for older employees, as measured by Statistics New Zealand (2007d) Income Survey. Average hourly earnings are adjusted for inflation to represent 2006 dollars.

RELEVANCE

Average hourly earnings from wage and salary jobs is an indicator of the financial return from paid employment, independent of the number of hours worked. Overall, increasing hourly earnings over time and similar earning levels across the working-age population are likely to encourage older people to remain employed for longer.

POPULATION COVERAGE

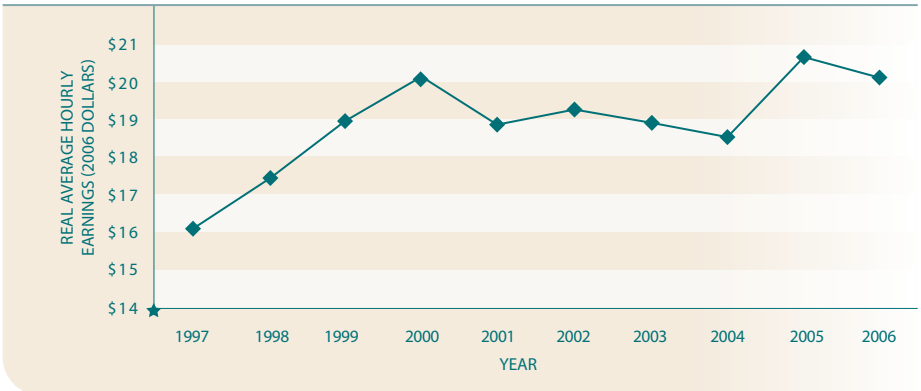
Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

In June 2006, the average hourly wage for older employees was $20.05 an hour. The average hourly rate for all employees (aged 15 years and over) was $20.04.

Real average hourly earnings increased by $4 an hour or 25 percent in the nine years to June 2006. The average hourly rate for older employees increased steadily (in real terms) from $16.05 an hour in 1997 to $20.05 an hour in 2000. Between 2000 and 2004, however, average hourly earnings for older workers fell by 8 percent to $18.48 an hour. Since then, the average hourly wage has increased to reach $20.05 in 2006.

Figure 57 **Real average hourly earnings from wages and salaries for employees aged 65 years and over, June 1997–June 2006 (June 2006 dollars)**



Source: Statistics New Zealand (2007d) Income Survey June 1997–June 2006

DIFFERENCES BY EMPLOYMENT STATUS

The number of hours worked did not greatly affect the hourly rate of older workers. In June 2006, the average hourly earnings of older workers did not vary greatly whether or not they worked full-time or part-time.

Table 33 Average hourly earnings from wages and salaries for employees aged 65 years and over, by employment status, June 2006

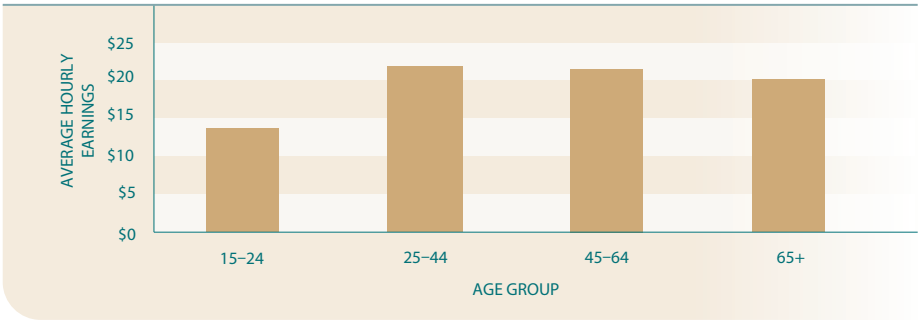
	Full-time[43]	Part-time	Total
Average hourly earnings ($ per hour)	20.38	19.71	**20.05**

Source: Statistics New Zealand (2007d) Income Survey June 2006

POPULATION GROUP DIFFERENCES

In June 2006, the 15–24 years age group had the lowest average hourly earnings at $13.58 an hour. The difference between hourly earnings for other age groups was minimal, with an average hourly wage differential of $1.72 an hour between 25–44 year olds and older workers.

Figure 58 Average hourly earnings of the working population aged 65 years and over and selected younger age groups, June 2006



Source: Statistics New Zealand (2007d) Income Survey June 2006

DESIRED OUTCOMES

Older people live rich, fulfilling lives with plentiful opportunities for personal development and participation in the community in the ways that they choose.

OPPORTUNITIES

INTRODUCTION

Positive ageing challenges the notion of older age as a time of retirement and withdrawal from society. Rather, the positive view sees ageing as an opportunity for ongoing personal growth and life experience. This may include making the most of one's talents, continuing to learn or working in paid or unpaid jobs. Engagement in such pursuits enables older people to continue to enjoy their lives as valued, contributing members of society.

Formal and informal education programmes, social, cultural and recreational activities, paid work, caring, volunteering and community work may all present learning and personal development opportunities for the older person. The focus is on activities according to the older person's needs, preferences, capacities, and changing circumstances.

Older people may assume a range of roles in these activities: as employees, volunteers, family members, neighbours, caregivers, committee and trust members, kaumātua, business mentors and advisors, and members of communities. In many of these roles, older people share their knowledge, skills, experience, wisdom and stories. Such participation – often in a spirit of reciprocity between all parties – contributes to older people remaining integrated into society through interacting regularly and positively with younger generations.

The desired outcomes statement for personal growth and participation aligns with the New Zealand Positive Ageing Strategy's vision for a society where people can age positively, where older people are highly valued and where they are recognised as an integral part of families and communities.

INDICATORS

The first indicator looks at participation in formal voluntary work as a measure of older people's engagement with their communities. Society benefits from the knowledge and experience of older volunteers, and older people themselves benefit from the opportunity volunteering offers them to keep socially connected with their communities.

The second indicator provides a measure of the number of older people who reported feeling lonely. Social contact is fundamentally important to people. Self-assessed loneliness is a proxy indicator of whether older people are happy with the amount and quality of social contact they get. As well as being an undesirable state in itself, loneliness may contribute to poor outcomes in other areas, including health problems such as stress, anxiety or depression. Loneliness is a particular issue for older people. They are less likely to be working than younger people so they are not meeting people through that avenue. Older people are also more likely to have lost a partner.

Increased participation in tertiary education indicates a trend toward life-long learning and shows older people are taking advantage of opportunities for personal growth and social participation through study. The third indicator provides a measure of older people's participation in formal tertiary education.

Older people who feel part of a community, whether based on their interests or where they live, are likely to participate in that community and to be engaged in reciprocal relationships, giving and receiving support as appropriate. The fourth indicator looks at the number of older people who feel a sense of community with others in their neighbourhood.

Finally, the fifth indicator looks at the number of older people participating in cultural and arts activities. People participate in these activities for a wide variety of reasons: for enjoyment and entertainment, for personal growth and development, as a means of expression, to learn new skills, to meet new people and to pass on cultural traditions.

VOLUNTARY WORK

DEFINITION

The proportion of the population aged 65 years and over who were involved in formal voluntary work for or through any organisation, group or marae in the four weeks leading up to the 2006 Census night. This does not include informal volunteering an older person may engage in, such as the older person's own informal arrangements to look after a sick person or child who is not part of the older person's household.

RELEVANCE

Volunteer work is a way of keeping older people socially connected with their communities. Volunteering can also be rewarding to older people – contributing to their general sense of wellbeing.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

At the 2006 Census, 15 percent of the older population (75,633 people) reported being involved in formal volunteer work in the last four weeks. The proportion of older people participating in formal volunteer work increased 1 percentage point between 2001 and 2006.

Table 34 Number and proportion of the population aged 65 years and over that participated in formal voluntary work in the last four weeks, 2001 and 2006

Year	Numbers volunteering	Proportion involved in formal voluntary work (%)
2001	64,443	14.3
2006	75,633	15.3

Source: Statistics New Zealand (2002b; 2007c) Census of Population and Dwellings 2001 and 2006

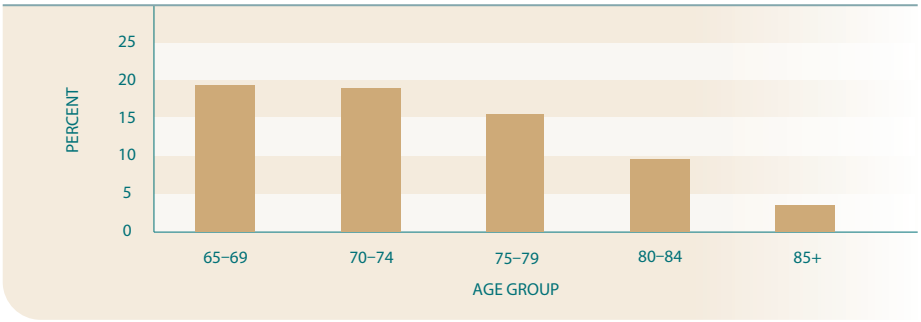
AGE AND SEX DIFFERENCES

According to the 2006 Census, the proportion of older people involved in formal volunteer work was similar for both men and women. Sixteen percent of older women reported participating in formal volunteer work in the past month, compared with 15 percent of older men.

At the 2006 Census, the 15–24 years age group was the least likely to have volunteered in the past month (9 percent). The 45–64 years age group was the most likely – with 16 percent reporting they participated in formal voluntary work. The proportion was slightly lower for the 65 years and over age group (15 percent).

The decrease in formal volunteering between age groups 45–64 years and 65 plus years is attributable to the fact the "oldest old" had low rates of volunteering. Figure 59 shows the proportion of older people who volunteered in the past month by age group. The 65–69 years and 70–74 years age groups were more likely to have volunteered than the 45–64 years age group – with 19 percent participating in the month leading up to census night. The proportion of older people volunteering decreased with age, with the lowest proportion being recorded for the 85 years and over age group (4 percent).

Figure 59 **Proportion of the population aged 65 years and over who participated in formal voluntary work in the last four weeks, by age group, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

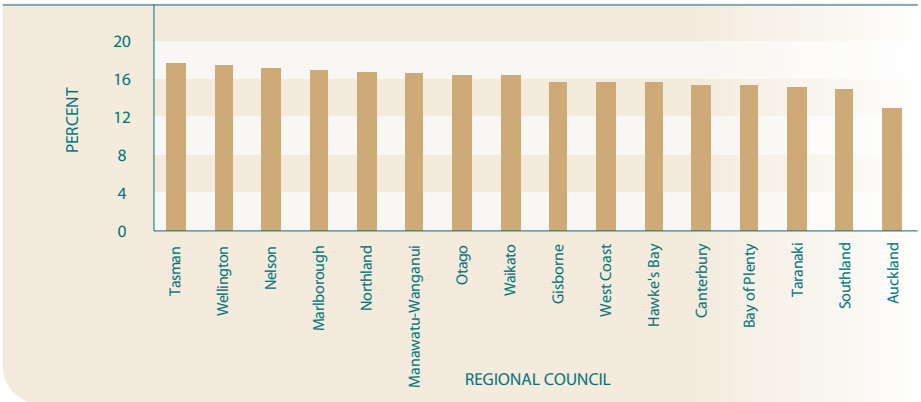
ETHNIC DIFFERENCES

At the 2006 Census, formal volunteering rates varied by ethnic group. Older Māori and Europeans (including "New Zealanders") were most likely to volunteer (17 percent and 16 percent respectively). Ten percent of older Pacific peoples participated in formal voluntary work. The Asian ethnic group had the lowest proportion, with 5 percent of older Asians being involved in formal voluntary work in the past month.

REGIONAL DIFFERENCES

The proportion of older people involved in formal voluntary work across the various regional councils ranged from 13 percent to 18 percent. Tasman and Wellington had the highest rates of formal volunteering (18 percent and 17 percent respectively) while Auckland had the lowest (13 percent).

Figure 60 **Proportion of the population aged 65 years and over who participated in formal voluntary work in the last four weeks, by regional council, 2006**



Source: Statistics New Zealand (2007c) Census of Population and Dwellings 2006

LONELINESS

DEFINITION

The proportion of the older population who reported feeling lonely "sometimes", "most of the time" or "always" during the previous 12 months, as reported in the Quality of Life Survey 2006 (TNS, 2007).

The survey had a low response rate so the information in the indicator needs to be treated with caution.

RELEVANCE

Social contact is fundamentally important to people. Self-assessed loneliness provides a proxy indicator of whether older people are happy with the amount and quality of social contact they get. As well as being an undesirable state in itself, loneliness may also contribute to poor outcomes in other areas, including adverse health problems such as stress, anxiety or depression. This can lead to older people being unable to participate in their community.

POPULATION COVERAGE

Older people aged 65 years and over.

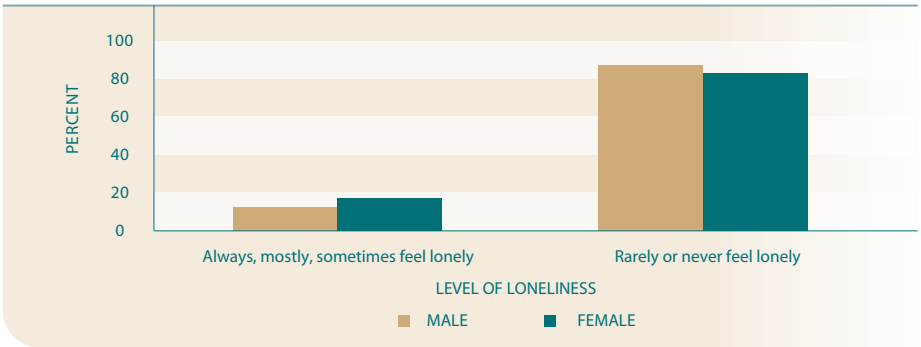
CURRENT LEVELS

In 2006, 15 percent of older people said they either always, mostly or sometimes felt lonely over the last 12 months.

SEX DIFFERENCES

There was a small difference in the incidence of loneliness between older men and older women. Thirteen percent of older men experienced loneliness, compared to 17 percent of women in the age group.[44]

Figure 61 Proportion of people aged 65 years and over experiencing loneliness, by sex, 2006

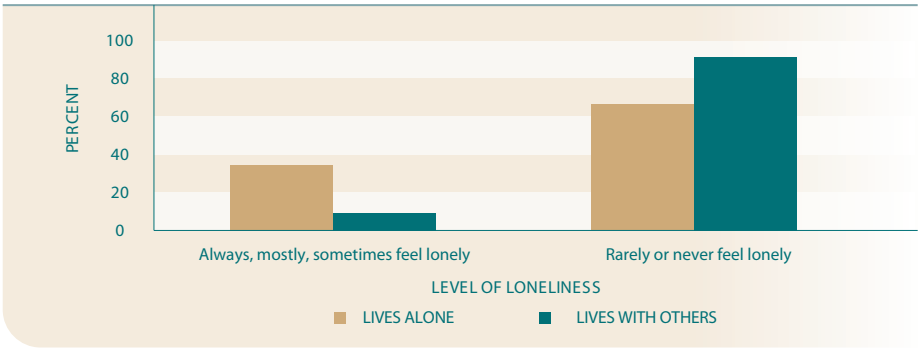


Source: Quality of Life Survey 2006 (TNS, 2007)

DIFFERENCES BY LIVING ARRANGEMENTS

Older people who lived alone experienced much higher rates of loneliness than those older people who lived with a partner or other people. Of those older people who lived with a partner or someone else, 9 percent felt lonely always, usually or sometimes. This compares with a considerably larger proportion (34 percent) of older people who lived alone who experienced loneliness.

Figure 62 Proportion of people aged 65 years and over experiencing loneliness, by living arrangements, 2006



Source: Quality of Life Survey 2006 (TNS, 2007)

INCOME DIFFERENCES

Older people with net personal incomes over $20,000 had slightly lower levels of loneliness than those with incomes under this amount. Around 19 percent of those older people with an income of $20,000 or less said they had felt lonely during the year, compared with 11 percent of those older people with a personal income of more than $20,000.

LOCATION DIFFERENCES

There was no difference in the level of loneliness experienced by older people living in the big cities or outside them. Fifteen percent of older people living in either area said they felt lonely always, most of the time or sometimes.

PARTICIPATION IN EDUCATION

DEFINITION

The proportion of the older population enrolled over a calendar year in formal tertiary education leading to a recognised New Zealand qualification.[45]

This is calculated by dividing the total number enrolled over a calendar year by Statistics New Zealand's estimated resident population for the mean year ending 31 December[46] (except where otherwise stated).

RELEVANCE

Increased participation in tertiary education indicates a trend towards life-long learning and shows older people are taking advantage of opportunities for personal growth and social participation through study.

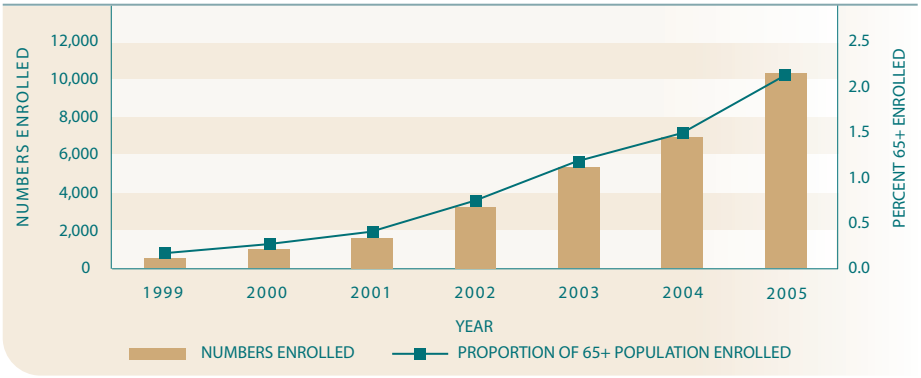
POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS AND TRENDS

The number of older people participating in tertiary education has been increasing over the past seven years. In 1999, 0.1 percent of the older population (or 537 people) were enrolled in a tertiary programme. By 2005, the proportion of the older population enrolled in tertiary education had risen to 2 percent (or 10,295 people).

Figure 63 Number and proportion of the population aged 65 years and over enrolled in tertiary education programmes, 1999–2005



Source: Ministry of Education (2007)

DIFFERENCES BY QUALIFICATION TYPES

Older students were most likely to enrol in certificate-type programmes. Eighty-one percent of all enrolments of older students (8,953 enrolments) in 2005 were for such programmes. Thirteen percent (1,472 enrolments) enrolled in diploma qualifications while 6 percent enrolled for an undergraduate or postgraduate degree (674 enrolments).

Table 35 Enrolments by students aged 65 years and over, by type of qualification, July 2005

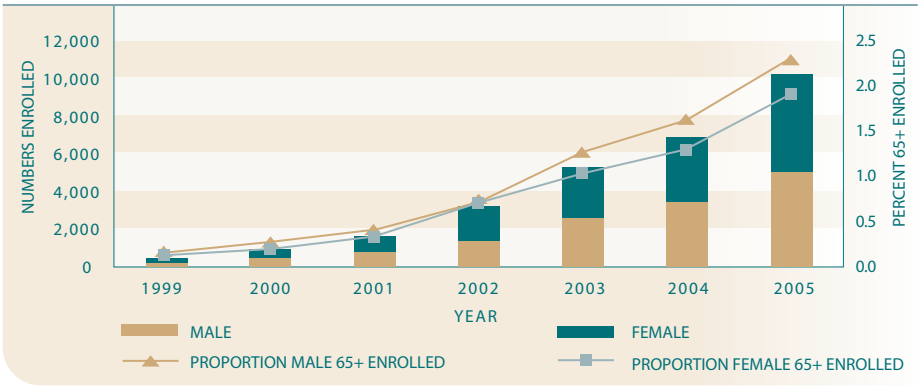
	Number aged 65 plus enrolled	Proportion of all aged 65 plus enrolments
Postgraduate	180	1.6
Degree	494	4.5
Diploma	1,472	13.3
Certificate	8,953	80.7

Source: Ministry of Education (2007)

AGE AND SEX DIFFERENCES

The proportion of older people enrolled in tertiary study increased at a similar rate for both sexes between 1999 and 2001. Since then, although the number of female students has been higher than that of male students, proportionately the growth in male (aged 65 plus years) enrolments has been slightly greater. In 2005, the proportion of older men enrolled in tertiary study was equal to the older female enrolment rate (2 percent).

Figure 64 Proportion of the population aged 65 years and over enrolled in tertiary education programmes, by sex, 1999–2005

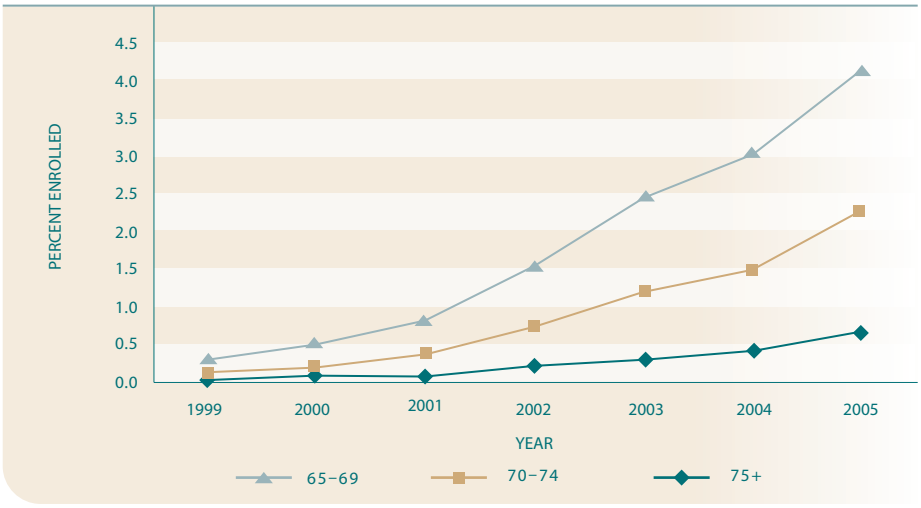


Source: Ministry of Education (2007)

In 2005, 4 percent of 65–69 year olds (6,072 people), 2 percent of 70–74 year olds (2,686 people) and 0.7 percent of 75 plus year olds (1,537 people) were enrolled in a tertiary education programme. Of all tertiary students aged 65 years and over, 59 percent were in the 65-69 years age group.

All three age groups have experienced very sharp increases in the proportions enrolled between 1999 and 2005. The proportion enrolled in the 65–69 years age group increased from 0.3 percent in 1999 to 4 percent in 2004. Enrolment rates for the 70–74 years age group increased from 0.1 percent in 1999 to 2 percent in 2005. The proportion enrolled in the 75 plus years age group increased from 0.03 percent in 1999 to 0.7 percent in 2005.

Figure 65 **Proportion of the population aged 65 years and over enrolled in tertiary education programmes, by age group, 1999–2005**



Source: Ministry of Education (2007)

ETHNIC DIFFERENCES[47]

The European ethnic group comprised the majority of older tertiary students with 6,185 enrolments in 2005. Proportionately, only 1 percent of the European population aged 65 years and over was enrolled in a tertiary programme. The Asian ethnic group had the highest proportionate representation with 14 percent of the older population enrolled (2,269 enrolments).[48] Nine percent of older Māori (2,142 enrolments) and 2 percent of older Pacific peoples (207 enrolments) were enrolled in a tertiary education programme in 2005.

Table 36 Proportion of population aged 65 years and over enrolled in tertiary education programmes, by ethnic group, July 2005

Ethnic group	Numbers enrolled	Percent enrolled
European	6,185	1.4
Māori	2,142	8.8
Pacific peoples	207	1.9
Asian	2,269	13.6

Source: Ministry of Education (2007)

COMMUNITY INCLUSION

DEFINITION

The proportion of older people who feel a sense of community with others in their neighbourhood, as reported in the Quality of Life Survey 2006, (TNS, 2007).

RELEVANCE

Older people have a wealth of skills, knowledge and experience which should be valued and used for the benefit of the older person and for the community in which they live. Those older people who feel part of a community, whether based on their interests or where they live, are likely to have opportunities for community participation and personal growth.

POPULATION COVERAGE

Older people aged 65 years and over.

CURRENT LEVELS

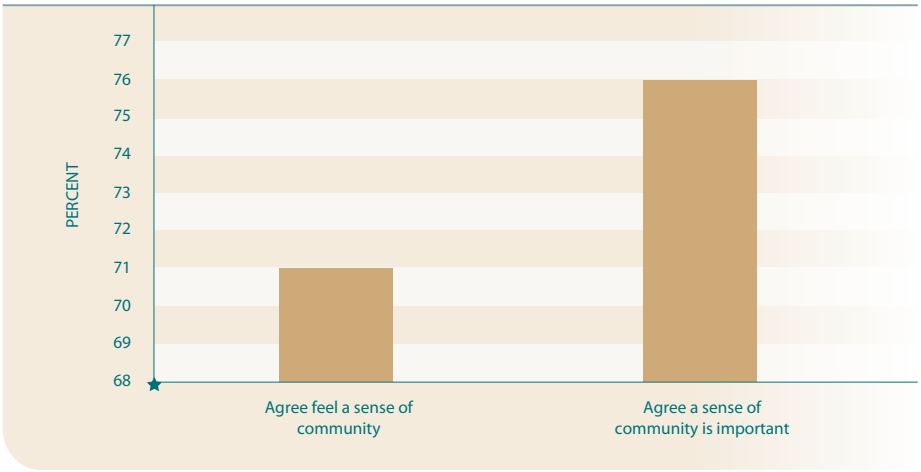
In 2006, around seven out of 10 older people agreed they felt a sense of community with others in their local neighbourhood. Twenty-seven percent strongly agreed and 44 percent agreed. Older people were more likely to feel a sense of community than younger people. In 2006, only 58 percent of people aged 18–64 years said they felt a sense of community with others in their local neighbourhood.

The main reasons given by older people for not having a sense of community were that people had busy lives or were working hard, that there was a lack of communication/events within the neighbourhood, or that people and neighbours were not very welcoming/they don't see the neighbours.

Older people were asked whether it was important to them to feel a sense of community with other people in their local neighbourhood. A total of 76 percent of older people agreed with this statement (36 percent of older people strongly agreed, with 40 percent agreeing).

There was a 5 percentage point difference between the proportion of older people who thought a sense of community was important, and the proportion who actually felt a sense of community. This implies some older people do not have the sense of community with their neighbourhood they would like.

Figure 66 **Proportion of older people aged 65 years and over reporting a sense of community with others in their community, 2006**



Source: Quality of Life Survey 2006 (TNS, 2007)

SEX DIFFERENCES

There was little difference between older men and older women in the proportion that agreed or strongly agreed they felt a sense of community with others in their local community (70 percent for men and 73 percent for women).

LOCATION DIFFERENCES

Older people who lived outside the 12 biggest cities in New Zealand (see Technical Details: Transport: Public Transport Use for a list of the 12 cities) were more likely to agree or strongly agree they felt a sense of community with others in their local community than people living in the 12 biggest cities (76 percent and 66 percent respectively).

DIFFERENCES BY LIVING ARRANGEMENTS

Seventy-three percent of older people living with a partner or family member agreed they had a sense of community, compared to 67 percent of those older people who lived alone.

DIFFERENCES BY TYPE OF SOCIAL NETWORK

The main types of social networks older people said they belonged to were based around their family (66 percent), a hobby (47 percent), the community (44 percent) and church (36 percent). Older people were much more likely than those aged 18–64 years to belong to a community-based network, but surprisingly similar proportions reported belonging to an online social network or a sports network.

PARTICIPATION IN CULTURAL AND ARTS ACTIVITIES

DEFINITION

The proportion of older people who experienced one or more of the cultural activities included in the Cultural Experiences Survey 2002 (Statistics New Zealand 2002a).

Respondents were asked to report on activities they experienced over either a 12-month period (for goods and services accessed or experienced relatively infrequently) or a four-week recall period (for activities experienced on a more regular basis).

RELEVANCE

Cultural activities are an integral part of leisure and recreation. People participate in cultural activities for a wide variety of reasons: for enjoyment and entertainment, for personal growth and development, as a means of expression, to learn new skills, to meet new people and to pass on cultural traditions. A large proportion of older people taking part in cultural and arts activities is related to increased community participation. It may also show older people are taking up opportunities for personal growth.

POPULATION COVERAGE

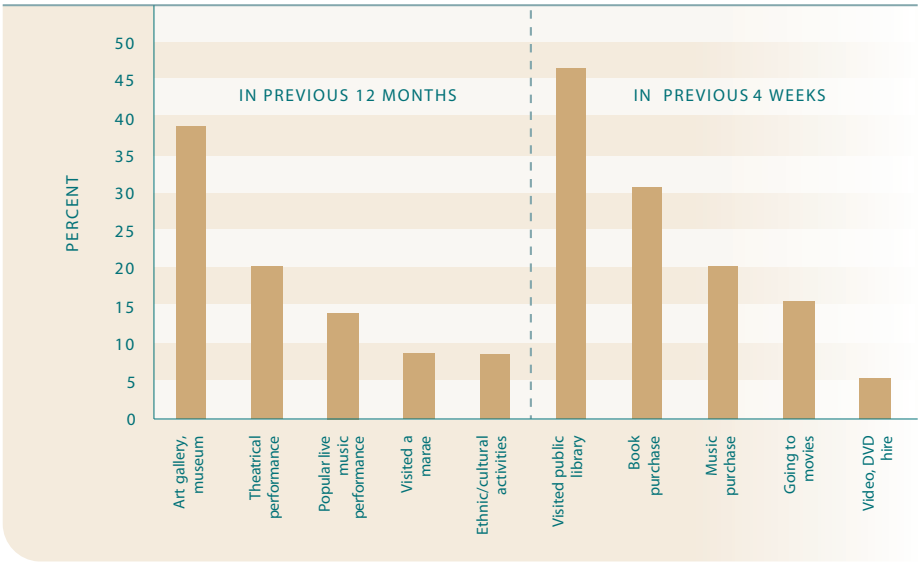
Older people aged 65 years and over.

CURRENT LEVELS

Eighty-one percent of older people (or 314,502 people) experienced one or more of the cultural activities included in the Cultural Experiences Survey 2002 (Statistics New Zealand 2002a). This level of participation was slightly lower than that for the population as a whole – 93 percent took part in at least one activity. The most popular activity experienced by older people in the four weeks before the survey was visiting a library (46 percent). This level of participation was higher than for any other age group. The second most popular four-week activity was purchasing books (31 percent). Of the less frequent activities (those experienced over the last 12 months) the most preferred were visiting an art gallery or museum (39 percent) and attending a theatrical performance (20 percent).

Older people were particularly under-represented in hiring videos or DVDs – 5 percent were involved in this activity, compared to 53 percent of 15–24 year olds and 41 percent of 25–44 year olds.

Figure 67 **Proportion of the population aged 65 years and over who experienced cultural activities, by activity type, 2002**



Source: Statistics New Zealand (2002a) Cultural Experiences Survey 2002

ETHNIC CULTURAL ACTIVITIES

A very small proportion of older people reported experiencing ethnic cultural activities. Five percent of older people reported experiencing Māori performing arts and 6 percent reported experiencing Other ethnic performing arts, in the 12 months before the survey. Nine percent visited a marae; while 8 percent went to wahi taonga (a place associated with valued items of Māori origin) and viewed exhibitions of taonga (valued historical objects of Māori origin). See Māori Cultural Identity indicators.

SECTION 3

This section contains the key findings of this report and suggestions for future research. It also includes summaries of the findings for older people by sex, and the findings related to older Māori. The section concludes with a summary table of indicator results.

CONCLUDING SUMMARIES

This report has described a range of desirable outcomes for older people and used a combination of direct and proxy indicators to measure these outcomes. The indicators provide a snapshot of the current quality of life for older people in New Zealand, and of how different subgroups of older people fare. Some also show whether certain aspects of quality of life for older people have improved or deteriorated over time.

The key findings are discussed below.

KEY FINDINGS

The overall finding of this report is that most older New Zealanders are well-equipped to participate positively in society.

Most older people have adequate incomes that provide them with a reasonable standard of living, although older single women fare less well

New Zealand Superannuation (NZS) is an effective way of providing older people with a reasonable living standard. However, the proportion of older single women who are in some degree of hardship is significantly higher than the corresponding proportions of older couples and older single men.

Overall, the adequacy of NZS is reflected in the low levels of poverty and hardship among the older population. This balance is achieved in conjunction with mortgage-free home ownership, which is highly prevalent in the current cohort of older people.

Older people are living longer and are healthier than their predecessors, but the gap for life expectancy at age 65 years between Māori and non-Māori remains static

Overall, there have been vast improvements in life expectancy for the older population over the last 50 years, although there are inequalities for subgroups within the population, specifically older Māori. Māori life expectancy at age 65 years remains lower than the life expectancy at age 65 years for the general population.

Despite older people having higher levels of disability than younger age groups, the proportion reporting good health is still high. The low prevalence of smoking in the older population indicates that older people are generally choosing healthier lifestyles than their predecessors. While most older Māori do not smoke, 18 percent are current smokers compared with only 8 percent of older people belonging to the European/Other ethnic group.

In terms of access to health services, there is little unmet need for primary health care with most older people able to see a doctor when they need to. This indicates older people have good access to primary health services. The proportion receiving flu injections (available free to those aged 65 years and over) is moderately high, with three-fifths of older people vaccinated. The vaccination rate could be higher, however, particularly for the oldest age groups who are most at risk of developing complications from the flu.

Home ownership rates are high among older people, with most satisfied with the quality of their accommodation

Over three-quarters of older New Zealanders own their own home. Older Pacific peoples and Asians have very low levels of home ownership and older women are also less likely to own their own homes.

The majority of older people spend less than 30 percent of their income on housing. Since 1988, however, the proportion spending over 30 percent has increased substantially.

Although over half of older people (particularly older single people) report some problem with their accommodation, most are satisfied overall with the quality of their accommodation and feel it suits their needs.

A high proportion of older people are not using public transport even where it is available

The use of public transport is quite low. Twenty percent of older people report no public transport in their area, but even where it is available, only 52 percent are using it.

The proportion of people aged 75 years and over with a driver licence has been increasing over the last 10 years, although there is still a sizeable proportion with no licence, particularly older women and those aged 85 years and over.

Increasing numbers of older people are living at home and receiving the support to do so

The proportion of people aged 85 years and over living at home has been increasing over time. This increase may be due to improved health and the provision of services enabling older people to remain at home. The latter is reflected in the increased uptake of the Disability Allowance.

The prevalence of criminal victimisation of older people living in private dwellings is low, and older people are less likely than those in younger age groups to report that fear of crime affects their quality of life.

There are high levels of cultural engagement among older Māori

A high proportion of older Māori participate in their culture by attending marae, being aware of their whakapapa, and engaging with their whānau. Almost half of older Māori report being able to speak te reo.

Older people generally have good access to facilities and services

Older people living in New Zealand have good access to facilities and services such as banks, shopping malls and supermarkets. Access to public transport is uneven – particularly outside the 12 big cities (as defined by the Quality of Life Survey 2006).

The proportion of older people with access to the internet has more than doubled over the last five years (from 16 percent in 2001 to 38 percent in 2006).

Overall, older people's attitudes to ageing are positive and rates of perceived discrimination have fallen, although there is still some perception among the general population that older people are subject to age discrimination

Most older people are satisfied with their lives, although satisfaction levels are lower for those with low living standards. Regular physical activity, which is associated with good mental health and positive attitudes is moderately prevalent among the older population, with over two-fifths of older people being physically active.

In terms of attitudes of the general population to ageing, around two-fifths feel older people are subject to some age discrimination, but rates of perceived age discrimination have been falling over the past five years.

Paid employment among the older population is increasing

Over the last 12 years there has been a large increase in the proportion of older people in paid employment for at least one hour per week (from 5.9 percent in June 1994 to 12.2 percent in June 2006). Employment rates for older people with post-school qualifications are higher than those for older people with no post-school qualifications. The data on average hourly earnings suggests low pay is not a disincentive to working. The average hourly rate for older people is similar to the rate for younger age groups, and has been growing in real terms over time.

Older people are taking advantage of opportunities for personal growth and development

Participating in their community is important to older people, and a large proportion feel a sense of community in their local neighbourhood. This is reflected in the higher formal volunteering rates among people aged 65–74 years compared to younger age groups.

Community inclusion is just one aspect of participation. Older people also participate in activities that contribute to their learning and further self-development, such as tertiary education programmes. While the overall proportion of older people currently enrolled in tertiary programmes is low, there has been a considerable growth over the past eight years.

Although a large number of older people are participating in their communities, around a sixth report feeling lonely – particularly older single people and older women.

FUTURE RESEARCH

The process of developing the indicators for this report has highlighted areas where more detailed and robust data for older people is required. These are summarised briefly below:

- detailed income and wealth data on older people, to enable finer age breakdowns
- data on the specific issues of older Māori people, including regional data
- data on older Asian and Pacific peoples
- detailed health data on older people, such as avoidable mortality, disease rates and injuries
- quantitative data on housing quality, such as house temperatures, insulation and dampness
- public transport data – particularly use, barriers to use and regional variations
- data on home-based care and support services
- data on carers
- data on elder abuse and neglect (such as physical, psychological and financial abuse of older people)
- data on access to residential care – eg demand for residential care and unmet needs
- data on older people living in rural areas – eg access to transport and health services.

SUMMARY OF DIFFERENCES BETWEEN OLDER WOMEN AND OLDER MEN

The *Positive Ageing Indicators 2007* report highlights a number of differences between older men and older women in some outcome areas. It should be noted that, where the sample size for older ages (relative to younger ages) is low, results from detailed breakdowns may be statistically unsound.

Women have a higher life expectancy than men but older women and older men have similar rates of smoking and self-reported health. The overall prevalence of disability is slightly higher for older women due to the higher proportion of women in the oldest age groups where disability prevalence is the highest. At every age, women are less likely than men to live with a spouse or partner and more likely than men to live in residential care. Due to the sex gaps in mortality, the difference between the proportions of men and women living in residential care increases with age.

Older single women's median real incomes and living standards are lower overall, than older single men's. Older single women are also significantly more likely than older couples to be living in some degree of hardship and to report problems with accommodation. Home ownership rates remain similar for older men and older women until they are in the 80 years and over age group, where women are less likely than men to own or partly own their own homes. This difference is likely to be associated with older women outliving their male partners, in most cases, and not having a partner or a spouse to care for them in their own home.

There is little difference in the prevalence of satisfaction with life reported by older women and older men. But older women are more likely than older men to think older people are targets of some or a great deal of discrimination. On the other hand, 79 percent of older women said people can almost always or usually be trusted compared to 73 percent of older men. There are higher rates of older women reporting they feel lonely, possibly because women are more likely to have lost a partner given that, on average, men die at an earlier age than women. Older women are less likely than older men to be regularly physically active (for at least 30 minutes a day, on five or more days over the past week).

While employment rates for both older men and older women have increased over the last 20 years, rates for men have been consistently higher than those for women. However, the employment rate for older women more than doubled over that time, in contrast with the 2 percent increase for older men. The proportion of older people involved in formal volunteer work is similar for both men and women.

Older women and older men have similar rates of enrolment in tertiary study, and about the same proportion of older women and older men agree or strongly agree they feel a sense of community with others in their local neighbourhood. Women aged 75 years and over are much less likely than men of the same age to hold a driver licence, and are slightly more likely to use public transport than older men.

SUMMARY OF RESULTS FOR OLDER MĀORI

This summary draws together all the findings for older Māori in the *Positive Ageing Indicators 2007* report. It should be noted there is an under-representation of Māori in the older age groups. Where the sample size for older ages (relative to younger ages) is low, results from detailed breakdowns may be statistically unsound.

Most older Māori have a strong sense of cultural identity and engage in te ao Māori. There is a high prevalence of marae attendance among older Māori, and whānau interactions are important. About one-half of older Māori report they are able to converse comfortably in te reo Māori, with the proportion increasing with age. Not surprisingly, the regional proportions of te reo Māori speakers reflect the Māori population density of each area.

Most older Māori own or partly own their residence, and most older Māori aged 85 years and over live in a private dwelling. About a quarter of older Māori live in a household with internet access and about a third report engaging in regular physical activity.

About one-fifth of older Māori are employed for at least one hour or more per week. This is the highest employment rate of all ethnic groups. This may be due to the younger age structure of the older Māori population (ie there are proportionately more Māori in the 65–69 years age group than in the general population). It may, however, also reflect a greater need for income. About one-fifth of older Māori participate in formal voluntary work – a higher rate than that for other ethnic groups. Older Māori also have a higher rate of tertiary education enrolment compared with most other ethnic groups.

Most older Māori report good (or better) health and have their needs met in primary healthcare, are non-smokers and receive a flu vaccination. However, in each of these findings older Māori fare less well than the European/Other ethnic group. While there was no clear change in the gap between Māori and non-Māori between the mid-1990s and early 2000s, Māori life expectancy at age 65 years shows improvement over this period. Māori are much more likely than non-Māori to think older people are subject to age discrimination.

A very small proportion of older people in the general population reported experiencing Māori cultural activities. Five percent of older people reported experiencing Māori performing arts in the 12 months before being surveyed. Nine percent visited a marae; while 8 percent went to wahi taonga (a place associated with valued items of Māori origin) and viewed exhibitions of taonga (valued historical objects of Māori origin).

SUMMARY OF INDICATOR RESULTS

Table 37 provides a brief summary of the main trends and findings presented in this report. Unless otherwise stated in the indicator column, the population of interest is those aged 65 years and over.

Table 37 Summary table of indicator results ☺ Improving ☹ Deteriorating 😐 No change ⊘ No time series available

Indicator titles	Current overall level of indicator for older population (most recent year)	Variation between subgroups/ comparison with other population groups	Is this aspect of the quality of life for older people improving overall?
INCOME			
Disposable incomes	Median (net of tax) income of $21,000 a year for couples and $14,000 a year for singles (2004)	-	😐 No change over the last 20 years
Private incomes	Median private family income (before tax) of $3,800 a year for couples and $260 a year for singles (2004)	-	☹ Has decreased since 1988
Living standards	8 percent facing some degree of hardship (2004)	Older people less likely than younger ages to face hardship; older singles more likely to face hardship than older couples – with the difference most marked between single women (12 percent facing hardship) and couples (5 percent)	⊘
Low incomes	6.4 percent below the low income threshold (2004)	Older people less likely than other population groups to have low incomes	😐 No change in the rate, which has fluctuated between 6–8 percent over the last 15 years
HEALTH			
Life expectancy at age 65 years	16.7 years for men, 20.0 years for women (2000–2002)	Higher for women (by 3.3 years); lower for Māori (by 4.2 years for Māori men and 5.2 years for Māori women when compared to non-Māori); lower for people living in the most deprived decile of small areas	☺ For the total population, improved from 12.8 years to 16.7 years for New Zealand men, and from 14.8 years to 20 years for New Zealand women (all ethnic groups) since 1950s ☺ Improvements of about one year in Māori life expectancy at age 65 between the 1995–1997 and 2000–2002 reports 😐 No clear change in the gap between Māori and non-Māori life expectancy at age 65 years between the mid-1990s and early 2000s
General health	82 percent reporting to be in good, very good or excellent health (2002/2003)	Higher for European/Other (83 percent) than older Māori and Pacific peoples (both 76 percent) and Asians (62 percent)	⊘

Indicator titles	Current overall level of indicator for older population (most recent year)	Variation between subgroups/ comparison with other population groups	Is this aspect of the quality of life for older people improving overall?
HEALTH (continued)			
Fatal and serious non-fatal injuries from falls (ages 75+ years)	121 fatal injury falls per 100,000 people aged 75 years and over (age standardised rate) (2003) 1,255 serious non-fatal injury falls per 100,000 population aged 75 years and over (age standardised rate, provisional data only) (2005)	Both fatalities and serious non-fatal injuries from falls are much higher for people aged 75+ years than younger age groups	☹ A small increase in fatal injury falls between 2000 and 2003 😐 Little change in serious non-fatal injury falls between 2000 and 2005
Cigarette smoking	9 percent current smokers (2002/2003)	Significantly lower for 65+ years age group when compared to younger ages; significantly higher for older Māori (18 percent); higher for those living in most deprived quintile (5th) of small areas (more than twice as likely to smoke than those living in the least deprived quintile)	☺ Decreased from 12 percent in 1996/1997
Unmet need for primary health care	6 percent did not see a doctor when they needed to, with high cost the most common reason for not visiting the doctor (36 percent) (2002/2003)	Unmet need decreases with age (even within the 65+ years age group – although these results were not statistically significant)	⃠
Flu vaccination	60 percent received a flu injection from a medical practitioner (2002/2003)	Highest for European/Other group, and lowest for Asians	⃠
HOUSING			
Housing quality	53 percent reported some problem with their accommodation (2004) 86 percent reported their house was of good or very good quality (2004)	Older people less likely than younger age groups to report some accommodation problem; older women more likely to report some accommodation problem than older men; older single people more likely to report some accommodation problem than older couples	☹ Proportion reporting some accommodation problem has increased since 2000, when it was 28 percent
Home ownership	76.2 percent owned their own home (2006)	Older people more likely to own their home than younger (15–64 years) population; lower for ages 75+ years; higher for Europeans (including "New Zealander") and much lower for Māori (60 percent), Pacific peoples (38 percent) and Asian (35 percent); higher for those on higher incomes	😐 No change since 2001 (76.4 percent)
Housing affordability	6 percent spent more than 30 percent of their income on accommodation costs (2004)	-	☹ Generally higher than 1980s levels but decreasing since 2001

Indicator titles	Current overall level of indicator for older population (most recent year)	Variation between subgroups/ comparison with other population groups	Is this aspect of the quality of life for older people improving overall?
TRANSPORT			
Licensed drivers (ages 75+ years)	57 percent had a driver licence (August 2006)	Decreases markedly with age (from 76 percent for ages 75–79 years to 14 percent for ages 90+ years); lower for women	☺ Has been increasing since 1996 (when it was 43 percent)
Public transport use	38 percent reported using public transport in past year; 17 percent reported there was no public transport in their area (2006)	Older people living in the 12 big cities more likely to use public transport (50 percent) than those living outside the 12 big cities (25 percent)	⊘
LIVING IN THE COMMUNITY			
Living at home (ages 85+ years)	70 percent living in a private dwelling (2006)	Higher for males; lower for European (including "New Zealander") compared with Māori, Asians and Pacific peoples	☺ Increased since 1996 (when it was 67 percent)
Disability Allowance	23 percent receiving DA (30 June 2006)	Higher for women; proportion receiving DA increases with age till the 85–89 years age group, with a slight drop-off for ages 90+ years	☺ Increased since 1996, but has flattened since 2004
Criminal victimisation (ages 60+ years)	20 percent experienced victimisation (2005)	Older people less likely to be victims of crime than New Zealand population overall	⊘
Fear of crime (ages 60+ years)	33 percent reported that fear of crime had a moderate or high impact on their quality of life (2005)	Higher for women; lower for older people aged 60+ years than younger age groups	⊘
Trust in others	76 percent said people can almost always or usually be trusted (2006)	Higher level of trust in others for older men (79 percent) than for older women (73 percent)	⊘
MĀORI CULTURAL IDENTITY			
Te ao Māori (Māori aged 65–69 years)	Most older Māori (aged 65–69 years) participated in te ao Māori as per cultural indicators developed for the Living Standards of Older Māori (2002) study (see Māori Cultural Identity for details)	Single Māori (aged 65–69 years) were more likely to participate in or identify with te ao Māori than partnered Māori (aged 65–69 years)	⊘
Te reo Māori speakers (Māori aged 65+ years)	48 percent able to converse in te reo Māori (2006)	Higher for 65+ years age group when compared to younger ages; within the 65+ years age group, proportion speaking Māori generally increased with age	☹ Decreased since 1996 (when it was 53 percent)

Indicator titles	Current overall level of indicator for older population (most recent year)	Variation between subgroups/ comparison with other population groups	Is this aspect of the quality of life for older people improving overall?
ACCESS TO FACILITIES AND SERVICES			
Non-big city access to services	90 percent reported being able to access services easily (2004)	Older people living outside the 12 big cities less likely to be able to access public transport (53 percent reported easy to access) than those living in the 12 big cities (80 percent)	⊘
Internet access	38 percent in a household with internet access (2006)	Higher for males; decreases with age (for both sexes); higher for Asians (57 percent) and for older people with higher incomes	☺ Has more than doubled since 2001 (16 percent)
ATTITUDES			
Life satisfaction	89 percent satisfied with life in general (2004)	Life satisfaction increases with living standards	⊘
Physical activity	41 percent reported being regularly physically active (2002/2003)	Lower for women; highest for European/Other group	⊘
Perceived age discrimination (ages 18+ years)	44 percent thought older people subject to some or great deal of age discrimination (2006)	Women more likely to perceive age discrimination; perception of age discrimination increases with age, and is more prevalent in Māori	☺ Decreasing since 2000 (when it was 53 percent)
EMPLOYMENT			
Paid employment	12.2 percent in paid employment for at least one hour per week (June 2006)	Higher for males; highest for Māori; higher for older people with post-school qualifications	☺ Increasing over last 12 years – doubling from approximately 6 percent to 12 percent
Average hourly earnings	$20.05 an hour (June 2006)	Small difference between ages 25–44 years and 65+ years ($1.72 an hour)	☺ Increasing since the late 1990s (from $16.05 an hour in 1997)
OPPORTUNITIES			
Voluntary work	15 percent participated in formal voluntary work for or through any organisation, group or marae (2006)	Higher for 65+ years age group compared to those aged 15–44 years; highest for age groups 65–74 years; higher for Māori and Europeans (including "New Zealanders") (17 percent and 16 percent respectively) and lowest for Pacific peoples and Asian (10 percent and 5 percent respectively)	☺ Increased 1 percentage point between 2001 and 2006
Loneliness	15 percent reported they always, mostly or sometimes felt lonely (2006)	Higher in women; higher in older people living alone	⊘
Participation in education	2 percent enrolled in a tertiary education programme (2005)	Decreases with age – with enrolment rates highest for 65–69 years age group; highest for Asians and Māori (14 percent and 9 percent respectively)	☺ Increasing since 1999 when the rate was only 0.1 percent
Community inclusion	71 percent felt sense of community in their local neighbourhood; 76 percent agreed sense of community was important (2006)	Higher for those living outside 12 big cities; slightly higher for older people living with other(s)	⊘
Participation in cultural and arts activities	81 percent experienced one or more cultural activities (2002)	-	⊘

BIBLIOGRAPHY

Auckland City Council, Christchurch City Council, Dunedin City Council, Hamilton City Council, Hutt City Council, Manukau City Council, North Shore City Council, Porirua City Council, Rodney District Council, Tauranga City Council, Waitakere City Council and Wellington City Council (2005) *Quality of Life in New Zealand's Largest Cities 2004* Quality of Life Project and the Ministry of Social Development: New Zealand.

Boston, J. and Davey, J. (eds) (2006) *Implications of Population Ageing. Opportunities and Risks* Institute of Policy Studies, School of Government, Victoria University of Wellington: Wellington.

Cryer, C., Davie, G. and Langley, J. (2006) *A Chartbook of the New Zealand Injury Prevention Strategy Serious Injury Outcome Indicators: 1994–2004* New Zealand Injury Prevention Strategy Secretariat and ACC: Wellington.

Cunningham, C., Durie, M., Fergusson, D., Fitzgerald, E., Hong, B., Horwood, J., Jensen, J., Rochford, J. and Stevenson, B. (2002) *Living Standards of Older Māori* Ministry of Social Development: Wellington.

Davey, J. (2004) *Coping Without a Car* Report prepared for the Office for Senior Citizens, Ministry of Social Development: Wellington.

Davey, J. and Nimmo, K. (2003) *Older People and Transport, Scoping Paper* New Zealand Institute for Research on Ageing, Victoria University of Wellington: Wellington.

Förster, M. and d'Ercole, M. (2005) *Income distribution and poverty in OECD countries in the second half of the 1990s* OECD Social, Employment and Migration Working Papers, 22 *http://www.oecd.org/dataoecd/48/9/34483698.pdf*

Human Rights Commission (2006) *Omnibus Survey Results* Human Rights Commission: Wellington.

Human Rights Commission (2005) *The Accessible Journey: Report of the Inquiry into Accessible Public Land Transport http://www.hrc.co.nz/report2/index.html*

Jensen, J., Krishnan, V., Hodgson, R., Sathiyandra, S., Templeton, R., Jones, D., Goldstein-Hawes, R. and Beynon, P. (2006) *New Zealand Living Standards 2004* Centre of Social Research and Evaluation, Ministry of Social Development: Wellington.

Land Transport New Zealand (2007) Unpublished data on proportion of the population aged 75 years and over with a driver licence, selected years.

Mayhew, P. and Reilly, J. (forthcoming) *New Zealand Crime and Safety Survey 2006* Ministry of Justice: Wellington.

Mayhew, P. and Reilly, J. (2007) *New Zealand Crime and Safety Survey 2006: Key Findings* Ministry of Justice: Wellington.

Mermin, G., Johnson, R. and Murphy, D. (2006) *Why do Baby Boomers Plan to Work So Long?* Center for Retirement Research at Boston College *http://www.bc.edu/centers/crr/papers/wp_2006-19.pdf*

Ministry of Education (2007) *Customised tables, number and proportion of population aged 65 years and over enrolled in tertiary education, 1999–2005* Data Management Unit, Ministry of Education: Wellington.

Ministry of Health (2007a) Unpublished data from the New Zealand Health Survey 2002/2003.

Ministry of Health (2007b) Unpublished data on standardised mortality rate ratios, 2007.

Ministry of Health (2006) *Mortality and Demographic data 2002 and 2003* New Zealand Health Information Service, Ministry of Health: Wellington.

Ministry of Health (2004) *A Portrait of Health: Key results of the 2002/03 New Zealand Health Survey* Ministry of Health: Wellington.

Ministry of Health (2001) Life Expectancy and Small Area Deprivation in New Zealand *Public Health Intelligence Occasional Bulletin 6 http://www.moh.govt.nz/moh.nsf/ea6005dc347e7bd44c2566a40079ae6f/cc05e78de5479523cc256af00021027d/$FILE/LifeExpectancy.pdf*

Ministry of Social Development (2006) *The Social Report 2006* Ministry of Social Development: Wellington.

Ministry of Transport (2007) *Household Travel Survey*, Driver Travel v1.2 revised May 2007.

OECD (2006) *OECD Statistical Database Annual Labour Force Statistics* OECD: Paris.

OECD (2005) *Health at a Glance: OECD Indicators 2005* OECD: Paris.

Office for Senior Citizens (2006) *The New Zealand Positive Ageing Strategy Progress Report 2006* Ministry of Social Development: Wellington.

Office for Senior Citizens (2001) *The New Zealand Positive Ageing Strategy* Ministry of Social Policy: Wellington.

Reserve Bank (2007) *Consumer Price Index Historical Series* Reserve Bank: Wellington.

Royal Commission on Social Security (1972) *Social Security in New Zealand* Royal Commission on Social Security in New Zealand: Wellington.

Salmond, C. and Crampton, P. (2002) *NZDep2001 Index of Deprivation User's Manual* Department of Public Health, Wellington School of Medicine and Health Sciences: Wellington.

Schofield, V., Davey, J., Keeling, S. and Parsons, A. (2006) Ageing in Place, in Boston, J. and Davey, J. (eds) *Implications of Population Ageing: Opportunities and Risks* Institute of Policy Studies, School of Government, Victoria University of Wellington: Wellington, pp 275–306.

Statistics New Zealand (2007a) *Consumer Price Index Data (June 2006 quarter)* Statistics New Zealand: Wellington.

Statistics New Zealand (2007b) *Household Labour Force Survey 1985–2006* Statistics New Zealand: Wellington.

Statistics New Zealand (2007c) *New Zealand Census of Population and Dwellings 2006* Statistics New Zealand: Wellington.

Statistics New Zealand (2007d) *New Zealand Income Survey (June 1997–June 2006)* Statistics New Zealand: Wellington.

Statistics New Zealand (2006) *Population estimates for the year ending 30 June 1996–2006 http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-est-info-releases.htm*

Statistics New Zealand (2005a) *Demographic Trends 2004* Statistics New Zealand: Wellington.

Statistics New Zealand (2005b) *Household Economic Survey 1988–2004* Statistics New Zealand: Wellington.

Statistics New Zealand (2005c) *Subnational Population Projections 2001(base)–2026 update* Statistics New Zealand: Wellington.

Statistics New Zealand (2004) *National Population Projections 2004(base)–2051* Statistics New Zealand: Wellington.

Statistics New Zealand (2002a) *Cultural Experiences Survey* Statistics New Zealand: Wellington.

Statistics New Zealand (2002b) *New Zealand Census of Population and Dwellings 2001* Statistics New Zealand: Wellington.

Statistics New Zealand (2002c) *New Zealand Life Tables: 2000–2002* Statistics New Zealand: Wellington.

Statistics New Zealand (2001a) *Disability Survey of Residential Facilities 2001* Statistics New Zealand: Wellington.

Statistics New Zealand (2001b) *Household Disability Survey 2001* Statistics New Zealand: Wellington.

Statistics New Zealand (1997) *New Zealand Census of Population and Dwellings 1996* Statistics New Zealand: Wellington.

Statistics New Zealand (1996) *Household Disability Survey* Statistics New Zealand: Wellington.

TNS (2007) *Quality of Life Survey 2006 National Report http://www.bigcities.govt.nz/pdf2006/Quality_of_Life_National_Report_2007.pdf*

TECHNICAL DETAILS

OLDER PEOPLE

ETHNICITY

In the 2006 Census, a new category was introduced into the ethnic question – New Zealander. This group has been included under the European category when comparing ethnicity of older people over time. This grouping is done on the assumption the vast majority of respondents choosing New Zealander as an ethnic group were of European descent. It may also include a small number of individuals from other ethnic groups. For this reason, ethnic data from the 2006 Census may not be directly comparable with earlier ones.

Ethnicity is defined using the total response concept. This allows for multiple responses by an individual to the ethnicity question in the census. Consequently, adding over all ethnic groups sums to more than the population total.

POPULATION ESTIMATES VERSUS CENSUS COUNTS

The estimate of the total New Zealand population aged 65 years and over is based on Statistics New Zealand's estimates of the usually resident population. However, in subsequent sections (eg when we use subnational and ethnic counts), the number of older people is based on the 2006 Census estimate. The two estimates will not be the same, as individuals who are overseas on census night (or unavailable) will not be included in the census counts.

POPULATION PROJECTIONS

The subnational and ethnic population projections are based on the 2001 Census, while the current population counts are based on the 2006 Census.

Data source(s)

1. Statistics New Zealand household estimates of usually resident population 1976–2005, *http://www2.stats.govt.nz/domino/external/omni/omni.nsf/outputs/population+estimates*
2. Statistics New Zealand (2004-based) medium series (5) population projections, *http://www.stats.govt.nz/store/2006/07/national-population-projections-04%28base%29-51-hotp.htm?page=para024Master*
3. Statistics New Zealand (2001-based) medium series (5M) subnational population projections, *http://www.stats.govt.nz/store/2006/07/subnational-population-projections-01%28base%29-26update.htm?page=para017Master*
4. Statistics New Zealand (2001-based) medium series (6) ethnic population projections, *http://www.stats.govt.nz/store/2006/07/national-ethnic-population-projections-01%28base%29%E2%80%9321-update-hotp.htm?page=para036Master*
5. Statistics New Zealand Census of Population and Dwellings 1996, 2001 and 2006 (1997; 2002b; 2007c).
6. Statistics New Zealand post-censal disability surveys 1996 and 2001, *http://www2.stats.govt.nz/domino/external/pasfull/pasfull.nsf/7cf46ae26dcb6800cc256a62000a2248/4c2567ef00247c6acc256e6e006bcf37?OpenDocument*

   The target population for the post-censal disability surveys included individuals living in households and residential facilities. The household surveys involved clustered random samples of private households and were post-censal surveys, allowing linkage to and use of information collected in the 1996 Census and the 2001 Census, respectively. The censuses also provided the sampling frames for the surveys. The data was collected by personal interview. A series of screening questions was used to identify participants with disability, the others forming the control group. A more detailed "content" questionnaire was then administered to respondents with disability. Disability was defined on the basis of self-report, or proxy (caregiver) report when necessary.

   The surveys of residential facilities were based on a stratified random sample of long-term residential institutions for the disabled and older persons (hospitals, long-stay institutions for the intellectually, psychiatrically and physically disabled, and rest homes). These surveys were designed so the data collected could be fused with the data from the corresponding household survey, enabling the calculation of population-based disability prevalence rates, including persons in health and disability-related institutions as well as those resident in the community.

   Both household and institutional samples were nationally representative. The achieved sample sizes were 4,100 and 1,016, respectively, in 1996/1997 and 7,256 and 1,016 (again) in 2001, representing response rates of 86 percent and 94 percent, respectively, in 1996/1997 and 73 percent and 90 percent in 2001.

INCOME

DISPOSABLE INCOMES

Definition/formulae

The median annual disposable (net of tax) family income of the older population adjusted for inflation (to represent 2004 dollars) over the years 1982 to 2004. The measure has been constructed using economic family unit (EFU) as the base unit of analysis. An economic family unit is operationally-defined as:

- financially independent single adult (not married nor living as married, not caring for dependent children)
- sole parent family – ie financially independent single adult (not married nor living as married caring for one or more dependent children)
- couple (married or living as married, not caring for dependent children)
- two parent family – ie couple (married or living as married caring for one or more dependent children).

All young adults are considered financially independent at 18 years of age; 16 and 17 year olds are also considered financially independent if they are receiving a benefit in their own right or if they are employed for 30 hours or more per week.

Conceptually, an economic family is a group of co-resident people whose financial affairs are common or have been merged to the extent the people are substantially interdependent (with an individual not part of such a group being considered to constitute an economic family in its minimal form).

Nominal median incomes were derived using data from the Household Economic Surveys (HES). Historical Consumers Price Index for all groups (CPI) data (1982–2004) was used to convert nominal median incomes to real (see Equation 1).

Equation 1: Converting nominal incomes to real using historical CPI data

$$\text{Real income (t)} = \text{Nominal income (t)} \times \frac{\text{CPI @ Dec 2003}}{\text{CPI (t)}}$$

t denotes a HES year, eg 1997/98, 2003/04.

The period over which the HES has been sampled has varied over time, and the CPI quarters used in the conversion above have been selected to reflect this. For years 1982 to 1998, the June quarter CPI is used (to reflect sampling from January to December). From 2001 onward, the December quarter CPI from the previous year is used (to reflect sampling from July to June).

Limitations of the data

The sample size for older people in the survey means very detailed breakdowns of the data are not possible. The income data in this analysis excludes draw downs older people may make from lump sum savings.

Since individuals belonging to a married or partnered couple are assumed to have reasonably similar access to the household's income, the only comparison that can be made is between single men and single women.

Data source(s)

1. Statistics New Zealand (2005b) Household Economic Surveys 1988–1998, 2001 and 2004.
   The target population for the Household Economic Surveys (HES) is New Zealand resident private households living in permanent private dwellings. The 2003/2004 HES sample contains 2,854 private households, sampled on a statistically representative basis from rural and urban areas throughout New Zealand. Information is obtained for each member of a sampled household. The overall response rate was 73 percent for the 2003/2004 year. Over time, the number of sampled respondents aged 65 years and over has ranged between 800 and 1,400. For the 2003/2004 year, the sample size for older people was 839.

   Note: Access to HES data was provided by Statistics New Zealand under conditions designed to give effect to the confidentiality provisions of the Statistics Act 1975. The results presented in this analysis are the work of the Ministry of Social Development, except where otherwise stated.
2. Reserve Bank (2007) Consumer Price Index Historical Series, *http://www.rbnz.govt.nz/statistics/econind/a3/data.html*

PRIVATE INCOMES

Definition/formulae

The median annual private family income (before tax) of the older population aged 65 years and over (living in permanent private dwellings) adjusted for inflation (to represent 2004 dollars) over the years 1982 to 2004. Private income is defined as income from all sources excluding government transfers such as public pensions or means-tested welfare benefits.

The measure has been constructed using economic family unit (EFU) as the base unit of analysis. See Disposable Incomes for a full definition of an EFU.

Nominal median private incomes were derived using data from the Household Economic Survey (HES) by subtracting welfare benefits and New Zealand Superannuation from total income. Historical Consumers Price Index for all groups (CPI) data (1982–2004) was used to convert nominal median Incomes to real (see Disposable Incomes for more details).

Limitations of the data

The small sample size for older people in the survey means very detailed breakdowns of the data are not possible. The income data in this analysis excludes draw downs older people may make from lump sum savings.

Data source(s)

1. Statistics New Zealand (2005b) Household Economic Surveys 1988–1998, 2001 and 2004.
   See Disposable Incomes for details on the Household Economic Survey.
2. Reserve Bank (2007) Consumer Price Index Historical Series, *http://www.rbnz.govt.nz/statistics/econind/a3/data.html*

LIVING STANDARDS

Definition/formulae

The proportion of the New Zealand resident population aged 65 years and over who are living in permanent private dwellings, with living standards characterised as involving "some degree of hardship" on the basis of the Economic Living Standard Index (ELSI). ELSI is a direct measure of material standard of living. It is based on information about the extent to which respondents economise on consumption because of cost; have ownership restrictions because of cost; people's own rating of their standard of living; and people's rating of the adequacy of their incomes to meet daily needs. The ELSI scale has seven reporting levels for living standards: level 1 "severe hardship", level 2 "significant hardship", level 3 "some hardship", level 4 "fairly comfortable", level 5 "comfortable", level 6 "good", level 7 "very good".

The ELSI measure distinguishes between three levels of hardship, designated as "severe hardship", "significant hardship" and "some hardship". The term "some degree of hardship" refers to people at any one of these three levels.

Tests of statistical significance are based on the Rao-Scott Chi-square statistic (5 percent significance level).

See Disposable Incomes for the definition of disposable equivalent income and economic family units.

Limitations of the data

The ELSI scale measures only material wellbeing not quality of life generally. Additionally, the ELSI measure is a relatively new tool and there is still more to be understood about some of its properties. It is not a final product and ongoing scrutiny and analysis are expected to lead to improvements.

Data source(s)

1. *New Zealand Living Standards 2004* (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006).
   New Zealand Living Standards 2004 was based on a statistically representative sample of the population of New Zealand resident adults aged 18 years and over, and living in permanent private dwellings. The sample was selected from the two main islands of New Zealand and Waiheke Island. Each respondent answered on behalf of their economic family unit (EFU). An EFU consists of an adult, their partner or spouse, if they have one, and any dependent children aged under 18 years living in the household. The survey had an overall response rate of 62 percent and obtained a sample of 4,989 people aged 18 years or over, of whom 1,519 were 65 years or over.

LOW INCOMES

Definition/formulae

The proportion of the population aged 65 years and over in economic family units with equivalent disposable income net-of-housing-cost below a low-income threshold. The measure takes account of incomes, housing costs and family size and is adjusted for inflation and taxes. The low-income threshold is 60 percent of the 1998 (population) median equivalent net-of-housing-cost family incomes.

The measure has been constructed using economic family units as the base unit of analysis. See Disposable Incomes for the definition of disposable equivalent income and economic family units.

Housing costs have been apportioned to economic family units. Account was taken of the housing costs of an economic family unit by subtracting its housing cost from its after-tax income. The resulting amounts were inflation-adjusted using the Consumers Price Index for all groups, excluding housing.

The adjustment for family size was made by means of a per capita equivalisation process based on the 1988 Revised Jensen Equivalence Scale. The resulting amount – Housing-adjusted Equivalised Disposable Income (HEDY) – can be regarded as an income-based proxy measure of standard of living. The HEDY is the metric on which low-income thresholds are specified.

Changes from 1988 to 2004 have been tracked in terms of the proportion of economic families with HEDY values below 60 percent of the median HEDY in 1998. This definition means the measures are based on constant-value benchmarks.

Note: While technical analysis done to date indicates the measurement approach is well-grounded and robust, it is worthwhile pointing out that New Zealand Superannuation provides a universal floor which is above the 60 percent median threshold. Since the vast majority of older people (over 95 percent) receive New Zealand Superannuation (or Veteran's Pension – an equivalent pension payable to certain war veterans), poverty among the population aged 65 years and over, as measured by this particular threshold, will always be very low. Future work may point to the use of other thresholds as more informative for social monitoring.

The methodology used to calculate the figures in the international comparison section follows that used by the OECD: the income concept is equivalised household disposable income; the equivalence scale is the square root scale (ie equivalence scale elasticity = 0.5); equivalent household income is attributed to all individuals in the household; individuals are ranked by their attributed equivalent disposable income to get the median for that year; the thresholds are set at 50 percent of this contemporary median.

Limitations of the data

The HEDY metric is an imperfect indicator of living standards, which are influenced by factors other than income and housing cost. People with the same income level can have greatly different standards of living as a result of their lifecycle stage (youth, middle age, older people), their ownership of assets, the extent to which they receive assistance from others, and the extent to which they have atypical expenditure commitments (eg unusually high medical costs, debt repayments, transport costs and electricity costs). People who experience a lengthy period of substantial restriction are likely to have different life outcomes from those who experience only a transient episode.

Data source(s)

1. Derived from Statistics New Zealand (2005b) *Household Economic Survey* by the Ministry of Social Policy/Ministry of Social Development.
See Income: Disposable Incomes for details on survey.
2. Förster, M. and d'Ercole, M. (2005). Income distribution and poverty in OECD countries in the second half of the 1990s, *OECD Social, Employment and Migration Working Papers, 22 http=//www.oecd.org/dataseed/48/9/34483698.pdf*

HEALTH

LIFE EXPECTANCY AT AGE 65 YEARS

Definition/formulae

The expected number of years a person would live (having reached age 65 years) if they were subject throughout their lives to the current age-specific mortality rates.

The analysis associating life expectancy with levels of deprivation is based on NZDep1996, a small area index of deprivation based on a principal components analysis of nine socio-economic variables from the 1996 Census. The index has been converted to a scale of 1 to 10, where 1 represents the least deprived 10 percent of small areas and 10 represents the most deprived 10 percent. The small areas are about the size of a census meshblock and have populations of at least 100 people.

Limitations of the data

Ethnic specific estimates for the periods 1980–1982 to 1995–1997 have not been adjusted to reflect the undercounting in ethnic mortality statistics using census ethnic definitions. Consequently, the disparity between Māori and non-Māori life expectancy at age 65 years presented here will be underestimated.

Data source(s)

1. Statistics New Zealand (2005a) Demographic Trends 2004 mortality tables, *http://www.stats.govt.nz/analytical-reports/dem-trends-05/downloadable-excel-tables.htm*
2. Ministry of Health (2001) *Life Expectancy and Small Area Deprivation in New Zealand*, Public Health Intelligence Occasional Bulletin 6, Tables A1–A10.
3. Ministry of Health (2007b) unpublished data on standardised rate ratios, 2007.
4. OECD (2005) *Health at a Glance: OECD Indicators*, 2005.

GENERAL HEALTH

Definition/formulae

The proportion of the population aged 65 years and over self-reporting to be in good, very good or excellent health.

The prioritised definition of ethnicity is used for the ethnic breakdowns. Under this definition, ethnicity is assigned as Māori if one of the multiple self-identified ethnicity responses in the health survey questionnaire was Māori. Therefore, for Māori, the prioritised ethnic group represents the total Māori ethnic group. For those not allocated as Māori, the prioritised ethnic group was assigned as Pacific if one of the self-identified ethnic groups was Pacific. The next prioritised group was Asian (ie for those not allocated Māori or Pacific, the prioritised ethnic group was assigned as Asian if one of the self-identified ethnic groups was Asian). The remaining records were assigned as European or Other ethnic group.

The analysis associating self-reported good, very good or excellent health with levels of deprivation is based on NZDep2001, a small area index of deprivation based on a principal components analysis of nine socio-economic variables from the 2001 Census. Deciles of the deprivation index were aggregated to provide the quintile breakdown. See Life Expectancy at Age 65 Years for an interpretation of deciles of deprivation and the definition of a small area.

Limitations of the data

Due to sample size restrictions, breakdowns at a fine level (eg ethnic, age and deprivation) produced wide confidence intervals about the prevalence estimates. Such prevalence estimates should be interpreted with caution. Due to the large sampling errors there were very few statistically significant differences when comparing groups. It is therefore important to treat all group differences presented in this indicator with caution as well.

Also note that the self-reported data was not calibrated to reflect varying expectations among different population groups. For example, an older person may have a different concept of "excellent health" when compared to the expectations of a younger individual. The concept of good, very good or excellent health also varies considerably by ethnic group.

Data source(s)

1. Ministry of Health (2007a) unpublished analysis of the New Zealand Health Survey 2002/2003.
   The target population for the New Zealand Health Survey 2002/2003 was the total usually resident civilian adult population (aged 15 years and over) residing in permanent private dwellings. A stratified multi-stage cluster sampling process was undertaken to select a sample from this population. Approximately 12,900 adults responded to the survey, 2,206 of whom were aged 65 years and over. The survey attained an overall response rate of 72 percent. More details on survey methodology can be found in "A Portrait of Health" (see below).
2. Ministry of Health (2004) *A Portrait of Health Key Results of the 2002/2003 New Zealand Health Survey*, Public Health Intelligence Occasional Bulletin no 21.

FATAL AND SERIOUS NON-FATAL INJURIES FROM FALLS

Definition/formulae

The proportion of people aged 75 years and over who died as the result of a fall, expressed as an age standardised falls fatality rate, or suffered serious non-fatal injury from a fall, expressed as an age standardised falls injury rate.

Limitations of the data

Not all falls that result in death or injury will be coded as such. Sometimes other factors will be involved, and the role of the fall may not be fully acknowledged. Delays in deciding on the cause of death by Coroners mean the fatality data is not up to date. Patients who are treated for injuries from a fall in a private hospital are not included. There were changes between 1999 and 2000 in the way data was coded in the datasets from which the indicator data has been derived. Care must be taken therefore in interpreting change over that period.

Data source(s)

1. The New Zealand Health Information Service Mortality Collection, 2003 (based on death registrations and Coroner's reports) was the source for the falls fatality indicator.
2. The New Zealand Health Information Service National Minimum Dataset, 2005 with records information on all publicly-funded hospital discharges in New Zealand was used for the non-fatal falls injury indicator.
3. Cryer, C., Davie, G. and Langley, J. (2006) *A Chartbook of the New Zealand Injury Prevention Strategy Serious Injury Outcome Indicators: 1994–2004* The New Zealand Injury Prevention Strategy Secretariat: Wellington, New Zealand.

CIGARETTE SMOKING

Definition/formulae

The proportion of the population aged 65 years and over (living in permanent private dwellings) who reported smoking one or more tobacco cigarettes a day (as measured in the New Zealand Health Survey 2002/2003).

The prioritised definition of ethnicity is used for the ethnic breakdowns. See General Health for a definition of prioritised ethnicity.

The socio-economic breakdown is based on NZDep2001 scores. See Life Expectancy at Age 65 Years for an interpretation of deciles of deprivation and the definition of a small area.

Limitations of the data

See General Health for limitations relating to sample size.

Data source(s)

1. Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003.
   See General health for details on survey methodology.
2. Ministry of Health (2004) *A Portrait of Health Key Results of the 2002/2003 New Zealand Health Survey* Public Health Intelligence Occasional Bulletin no 21.

UNMET NEED FOR PRIMARY HEALTH CARE

Definition/formulae

The proportion of older people who reported they needed to see a GP in the past 12 months but they were not able to.

The prioritised definition of ethnicity is used for the ethnic breakdowns. See General Health for a definition of prioritised ethnicity.

The socio-economic breakdown is based on NZDep2001 scores. See Life Expectancy at Age 65 Years for an interpretation of deciles of deprivation and the definition of a small area.

Limitations of the data

See General Health for limitations relating to sample size.

Note: In some cases a person may not be able to see a GP for reasons unrelated to access. Under such circumstances, this indicator may not necessarily reflect lack of access.

Data source(s)

1. Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003. See General Health for details on survey methodology.
2. Ministry of Health (2004) *A Portrait of Health Key Results of the 2002/2003 New Zealand Health Survey*, Public Health Intelligence Occasional Bulletin no 21.

FLU VACCINATION

Definition/formulae

The proportion of the population aged 65 years and over whose primary health provider (eg GP, nurse or other practitioner) carried out or arranged a flu injection (ie influenza vaccination) for them in the past 12 months.

The prioritised definition of ethnicity is used for the ethnic breakdowns. See General Health for a definition of prioritised ethnicity.

The socio-economic breakdown is based on NZDep2001 scores. Deciles of the deprivation index were aggregated to provide the quintile breakdown. See Life Expectancy at Age 65 Years for an interpretation of deciles of deprivation and the definition of a small area.

Limitations of the data

See General Health for limitations relating to sample size. The data excludes individuals who may have received a flu vaccine outside a clinical setting (eg through an employer at work).

Data source(s)

1. Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003. See General Health for details on survey methodology.
2. Ministry of Health (2004) *A Portrait of Health Key Results of the 2002/2003 New Zealand Health Survey*, Public Health Intelligence Occasional Bulletin no 21.

HOUSING

HOUSING QUALITY

Definition/formulae

The proportion of people aged 65 years and over living in private dwellings who report the existence of accommodation problems listed in the New Zealand Living Standards 2004 survey questionnaire. The indicator also reports on an overall rating made by older respondents of the quality and suitability of their accommodation.

Limitations of the data

The small sample size for older people in the survey means very detailed breakdowns of the data are not possible.

Data source(s)

1. *New Zealand Living Standards 2004* (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006) unpublished analysis results produced by the Ministry of Social Development.
   See Income: Living Standards for details on survey methodology.

   See *New Zealand Living Standards 2004* report (Ministry of Social Development 2006) for more detail on the topic.

HOME OWNERSHIP

Definition/formulae

The proportion of people aged 65 years and over who own or partly own their own residence, as measured by the tenure holder question in the Census of Population and Dwellings 2001 and 2006.

Limitations of the data

The question has a non-response rate of around 6 percent and all the percentages have been calculated on the population that answered the question. This assumes the non-respondents are similar to the respondents. The tenure holder question is on the personal questionnaire, so if two people both own the dwelling they will both be counted.

Ethnicity is defined using the total response concept. This allows for multiple responses by an individual to the ethnicity question in the census. Consequently, adding over all ethnic groups sums to more than the population total.

In the 2006 Census, a new category was introduced into the ethnic question – New Zealander. This group has been included under the European category for this indicator. This grouping is done on the assumption the vast majority of respondents choosing New Zealander as an ethnic group were of European descent. It may also include a small number of individuals from other ethnic groups.

Data source(s)

1. Statistics New Zealand (2006b; 2007c) *Census of Population and Dwellings* 2001 and 2006.

HOUSING AFFORDABILITY

Definition/formulae

The proportion of people aged 65 years and over living in households where the housing cost outgoings-to-income ratio is greater than 30 percent.

Household incomes have been equivalised using the 1998 Revised Jensen Equivalence Scale. See Income: Disposable Incomes for more details on disposable equivalent incomes.

Housing costs are the sum of annualised accommodation expenditure (includes mortgage payments (principle and interest), payments to local authorities, property rent, rent of a private dwelling, boarding house and student accommodation (not paid with formal fees)). In this indicator the Accommodation Supplement (AS) is counted as income. AS is a second-tier means-tested benefit administered by the Ministry of Social Development and is aimed at helping low to middle income New Zealanders with their housing costs.

Limitations of the data

Measures of housing affordability do not shed light on the issues of housing quality, suitability or sustainability, nor do they explain why affordability problems might exist, or the extent to which inadequate housing is occupied to avoid affordability problems.

Note: A household is included in the statistics if one or more people aged 65 years and over is living in the household. This means that in some cases the household income and household housing costs do not strictly relate to the older person, if they are living with other younger people.

Data source(s)

1. Derived from Statistics New Zealand (2005b) Household Economic Survey, by the Ministry of Social Development. See Income: Disposable Incomes for details on survey.
2. Statistics New Zealand population estimates for the year ending 30 June 1996–2006, *http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-est-info-releases.htm*
3. Statistics New Zealand 2001 (base)–2026 subnational population projections, *http://www.stats.govt.nz/store/2006/07/subnational-population-projections-01%28base%29-26update.htm?page=para017Master*

TRANSPORT

LICENSED DRIVERS

Definition/formulae

The number of people aged 75 years and over who have a driver licence expressed as a percentage of the population aged 75 years and over estimated by Statistics New Zealand.

Limitations of the data

The reason the subject population for this indicator is 75 years and over (when the 65 years and over population is the subject of most of the other indicators) is because legislation imposes special procedures for keeping a driver licence at this age.

Data source(s)

1. Land Transport New Zealand (2007) customised tables.
2. Statistics New Zealand population estimates for the year ending 30 June 1996–2006, *http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-est-info-releases.htm*

LIVING IN THE COMMUNITY

PUBLIC TRANSPORT USE

Definition/formulae

The proportion of people aged 65 years and over who used public transport in the previous year from the Quality of Life Survey 2006. People were also asked to rank the safety, affordability and convenience of public transport.

Living in the 12 big cities means living in the territorial local authority areas of Rodney, North Shore, Waitakere, Auckland, Manukau, Tauranga, Hamilton, Porirua, Lower Hutt, Wellington, Christchurch or Dunedin cities. Living outside the 12 big cities means living in any town, city or rural area outside these 12 cities.

Limitations of the data

The survey had a low response rate (22 percent) which means care should be taken in interpreting the data.

The Survey was commissioned by 12 of New Zealand's cities and districts in partnership with the Ministry of Social Development, to monitor trends in wellbeing. The total (national) sample size in the 2006 survey was 7,720, which has a maximum margin of error of +/- 1.1 percent at the 95 percent confidence interval.

Data source(s)

1. *Quality of Life Survey 2006* (TNS, 2007) unpublished analysis produced by the Ministry of Social Development. Approximately 500 interviews of people aged 18 years and over were conducted in each of the 12 cities and 1,500 interviews were conducted outside the big cities. The total achieved sample size was 7,720. Interviews were conducted by telephone, using CATI. The interviewing scheme involved a quota system to get age group, ethnicity and local ward numbers based on proportions in the 2001 Census, so exact numbers of interviews in each territorial authority varied slightly. The Quality of Life Survey has been repeated over time, but the 2004 survey was the first to have a sample outside the big cities. The number of cities included in the survey has expanded over time too (the 2001 data, for example, covered six big cities). The survey achieved a response rate of 22 percent in 2006, and there were 925 respondents aged 65 years and over, of whom 449 lived in the 12 big cities.

LIVING AT HOME

Definition/formulae

The proportion of the population aged 85 years and over who live in private dwellings.

Limitations of the data

This indicator is used to measure the proportion of older people who still live in their own home. Census data is used to obtain the numbers living in private dwellings. This group comprises older people who are living in their own home (eg with their spouse or by themselves) as well as those who are living with family or friends in a home they do not necessarily own or rent.

See Home Ownership for issues around ethnic breakdowns using the 2006 Census data.

Data source(s)

1. Statistics New Zealand (2002b; 2007c) *Census of Population and Dwellings* 2001 and 2006.

DISABILITY ALLOWANCE

Definition/formulae

The number of people aged 65 years and over receiving the Disability Allowance (as reported in the Ministry of Social Development's administrative database) divided by the population aged 65 years and over (as estimated by Statistics New Zealand).

The proportion receiving DA is calculated by dividing the number of recipients by Statistics New Zealand's population estimate as at 30 June. DA recipients are aggregated into regions by mapping Work and Income service centres onto regional council areas as defined by Statistics New Zealand.

Limitations of the data

A small number of service centres could not be mapped onto regional council areas. These have been omitted from the analysis. Ethnic breakdowns are not currently available due to large numbers of clients not specifying their ethnicity.

Data source(s)

1. Ministry of Social Development administrative data from SWIFTT database.
2. Statistics New Zealand population estimates for the year ending 30 June 1996–2006, *http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-est-info-releases.htm*
3. Statistics New Zealand 2001(base)–2026 subnational population projections, *http://www.stats.govt.nz/store/2006/07/subnational-population-projections-01%28base%29-26update.htm?page=para017Master*

CRIMINAL VICTIMISATION

Definition/formulae

The proportion of the population aged 60 years and over who had been victims of one or more incidents of criminal offending in 2005 as measured by the New Zealand Crime and Safety Survey 2006 (NZCASS).

The survey covers older people in private households. It does not cover commercial victimisation or "victimless crimes" (such as drug and alcohol abuse). Victims were also asked how satisfied they were with the police response, if they had been a victim of an offence and reported it to the police.

Limitations of the data

Changes in the survey design limit the comparisons that can be made between NZCASS and the two earlier surveys, the 1996 and 2001 New Zealand National Survey of Crime Victims (NZNSCV).

The response rate in the 2006 NZCASS was 59 percent in the main sample and 56 percent in the Māori booster sample. The respective figures in the 2001 survey were 65 percent and 57 percent and in 1996, 56 percent and 66 percent. In the authors' view, it is difficult to say how the small drop in the response rate in the 2006 NZCASS has affected risk estimates (Mayhew and Reilly, 2007 p 23).

Victimisation surveys are subject to a number of methodological limitations such as selective recounting and differences between groups in willingness to report offences, particularly offences of a sexual or domestic nature where the offender is known. There are also limitations in asking people to remember victimisation incidents and to locate them accurately in time.

A victimisation survey will give a higher count of crime because it counts unreported crime. A third of all NZCASS offences were reported to the police. Offences regarded as serious were more likely to be reported, but there was a wide variation between offence types. Eighty-four percent of vehicle thefts were reported compared with 9 percent of sexual offences (Mayhew and Reilly, 2007 p 35).

Data source(s)

1. Mayhew, P. and Reilly, J. (2007) *New Zealand Crime and Safety Survey 2006: Key Findings* Ministry of Justice: Wellington.

FEAR OF CRIME

Definition/formulae

The proportion of people aged 60 years and over who reported that fear of crime had a moderate or high impact on their quality of life (scoring its effect at 4 or higher on a scale from 0–10, where 0 is no effect and 10 is total effect), as measured by the New Zealand Crime and Safety Survey 2006.

The data comes from the survey question "How much is your own quality of life affected by fear of crime, on a scale from 0 to 10, where 0 is no effect and 10 is total effect on your quality of life?" The response rate in the 2006 NZCASS was 59 percent for the main sample, and 56 percent for the Māori booster sample.

Note: When high and moderate scores get added together, the decimal points have to be taken into account. For that reason, the 60+ years male score changes by one. This means 29 no longer makes sense when adding up 24 + 4. Female scores remain unchanged.

Limitations of the data

The question elicits a subjective assessment of the extent to which fear of crime affects respondents' quality of life, which is also subjectively defined. While the question demonstrated an ability to differentiate between groups, it is not a reliable measure of the actual status of respondents. Also, although the results reflect people's perceptions of their own situation in a general and ongoing way, they may be influenced by significant events and subject to fluctuation over time.

Data source(s)

1. Mayhew, P. and Reilly, J. (forthcoming) *New Zealand Crime and Safety Survey 2006: Community Safety* Ministry of Justice: Wellington.

TRUST IN OTHERS

Definition/formulae

The proportion of the population aged 65 years and over who report people can "almost always" or "usually" be trusted, as reported in the Quality of Life Survey 2006.

Limitations of the data

For more information see Public transport.

Data source(s)

1. Quality of Life Survey 2006 (TNS, 2007) unpublished analysis produced by the Ministry of Social Development.
   See Transport: Public Transport for details on survey methodology.

MĀORI CULTURAL IDENTITY

TE AO MĀORI

Definition/formulae

The proportion of Māori aged 65–69 years that participate in or identify with te ao Māori. Engagement with te ao Māori (the Māori world) is measured using a set of questions relating to Māori cultural identity and participation developed for the Living Standards of Older Māori study.

Limitations of the data

The survey population for the survey of older Māori was defined as the usually resident, non-institutionalised New Zealand Māori population aged 65–69 years living in permanent private dwellings and receiving New Zealand Superannuation (NZS). Māori aged 65–69 years but not receiving NZS were excluded. The data presented in this indicator, therefore, is not representative of the entire older (65 years and over) Māori population. The age restriction is applied because of the way the population was sampled. The Ministry of Social Development's benefits database was used as a sampling frame to randomly select older Māori. The collection of ethnic data was made compulsory only recently, so the quality of ethnic data for individuals who have been on the database for some time is very poor and sparse. The quality of ethnic data is robust only for the "younger old" – in this case Māori recipients of NZS aged 65–69 years.

Due to the small sample size (500 people), detailed breakdowns are not possible.

Data source(s)

1. Cunningham, C. Durie, M. Fergusson, D. et al, (2002) *Living Standards of Older Māori*.

TE REO MĀORI SPEAKERS

Definition/formulae

The number of Māori aged 65 years and over who reported in the census they could hold a conversation about everyday things in Māori, as a proportion of the Māori population aged 65 years and over.

Limitations of the data

Due to confidentiality reasons, some of the regional data for this indicator has been restricted.

Data source(s)

1. Statistics New Zealand (1997; 2002b; 2007c) *Census of Population and Dwellings 1996, 2001 and 2006*.

ACCESS TO FACILITIES AND SERVICES

NON-BIG CITY ACCESS TO SERVICES

Definition/formulae

The number of older people living outside the 12 largest cities in New Zealand, who found it easy or very easy to access a shopping mall, shopping centre or supermarket; a bank or cash machine; a local park or other green space; or public transport facilities such as a bus stop or train station expressed as a proportion of the total number of people aged 65 years and over. People in the Quality of Life in New Zealand's Largest Cities Survey 2004 who found access to these services difficult, were also asked why this was the case.

Limitations of the data

Not all services relevant to older people were included in the survey (eg accessing a doctor or a hospital). People living outside the 12 biggest cities are not necessarily residing in rural areas – they could be in smaller cities or towns. See Transport: Public Transport for more information on the Quality of Life in New Zealand's Largest Cities Survey 2004.

Data source(s)

1. *Quality of Life in New Zealand's Largest Cities Survey 2004* (Auckland City Council et al, 2005) unpublished analysis produced by the Ministry of Social Development. See Transport: Public Transport for details on survey methodology.

INTERNET ACCESS

Definition/formulae

The proportion of the population aged 65 years and over (living in permanent private dwellings) who live in a household with internet access.

Limitations of the data

The indicator measures whether or not the dwelling the person lives in has internet access. In most cases this translates to the people within the household using the internet as well. There may be cases where persons living within the household do not use the internet even though there is access. For example, older people living with their adult children in a household with internet access may be unable to use it.

A further limitation is the indicator does not measure the frequency of or reason for use – it only shows the person in the household has access to the internet.

See Home Ownership for issues around ethnic breakdowns using the 2006 Census data.

Data source(s)

1. Statistics New Zealand (2002b; 2007c) *Census of Population and Dwellings 2001 and 2006*.

ATTITUDES

LIFE SATISFACTION

Definition/formulae

The proportion of people aged 65 years and over who in general were very satisfied or satisfied with their life, as measured in the New Zealand Living Standards 2004 survey.

Limitations of the data

Satisfaction with life is self-defined and may mean different things to different people.

Data source(s)

1. *New Zealand Living Standards 2004* (Jensen, J., Krishnan, V., Hodgson, R. et al, 2006) unpublished analysis produced by the Ministry of Social Development.
   See Income: Living Standards for more details on survey methodology.

PHYSICAL ACTIVITY

Definition/formulae

The proportion of the population aged 65 years and over who were physically active for at least 30 minutes a day on five or more days over the last week. Physical activity includes moderate physical activities like brisk walking, carrying light loads, bicycling at a regular pace or doubles tennis; and vigorous activities such as heavy lifting, digging, aerobics or fast bicycling. The level of physical activity is equivalised such that two minutes of moderate activity is equivalent to one minute of vigorous activity.

The prioritised definition of ethnicity is used for the ethnic breakdowns. See General Health for a definition of prioritised ethnicity.

The analysis associating regular physical activity with levels of deprivation is based on the NZDep2001 index. Deciles of the deprivation index were aggregated to provide the quintile breakdown. See Health: Life Expectancy at Age 65 Years for an interpretation of deciles of deprivation and the definition of a small area.

Limitations of the data

See General Health for limitations relating to sample size. Regular physical activity declines with age, due to the increasing prevalence of frailty at older ages. This should be taken into consideration when interpreting age-specific trends for this indicator.

Data source(s)

1. Ministry of Health (2007a) unpublished analysis from the New Zealand Health Survey 2002/2003.
   See General Health for details on survey methodology.
2. Ministry of Health (2004) *A Portrait of Health Key Results of the 2002/2003 New Zealand Health Survey*, Public Health Intelligence Occasional Bulletin no 21.

PERCEIVED AGE DISCRIMINATION

Definition/formulae

The proportion of people aged 18 years and over who perceived older people were targets of "some" or "a great deal" of age discrimination, as reported in surveys commissioned by the Human Rights Commission.

Limitations of the data

Surveys on perceived age discrimination do not measure actual levels of age discrimination against groups. The margin of error for a 50 percent figure at the 95 percent confidence level is 3.6 percent.

Data source(s)

1. Human Rights Commission (2006) Omnibus Results.

EMPLOYMENT

PAID EMPLOYMENT

Definition/formulae

The proportion of the population aged 65 years and over who are in paid employment for at least one hour a week. The employed are those who worked for pay or profit for one hour or more in the week before the survey, or who worked unpaid in a relative's business or who have a job but did not work that week because of leave, sickness or industrial disputes.

Regional employment rates were imputed using the employment rate for the population aged 65 years and over from the Household Labour Force Survey (HLFS, June 2006 quarter) and the regional differentials in employment of older people observed at the 2006 Census. Specifically, the ratio of regional employment rate to national employment rate from the 2006 Census was applied to the national HLFS employment rate to estimate regional rates.

Limitations of the data

The regional employment rates should be treated with caution as they are imputed statistics. Also, due to the small sample size of older people in the HLFS, detailed breakdowns are not possible.

Data source(s)

1. Statistics New Zealand (2007b) *Household Labour Force Surveys* 1986–2006.
   The target population for the Household Labour Force Survey (HLFS) is the civilian non-institutionalised usually resident New Zealand population aged 15 years and over. The HLFS sample contains about 15,000 private households and about 30,000 individuals each quarter. Households are sampled on a statistically representative basis from rural and urban areas throughout New Zealand, and information is obtained for each member of the household. For the June 2006 quarter the overall response rate was 84.4 percent. On average, the achieved sample size for the population aged 65 years and over in the HLFS is about 5,000.
2. Statistics New Zealand (2007c) *Census of Population and Dwellings* 2006.
3. OECD Statistical Database (2006) *Annual Labour Force Statistics*.

OPPORTUNITIES

AVERAGE HOURLY EARNINGS

Definition/formulae

Real average hourly earnings from all wages and salaries for employees aged 65 years and over earning income from wage and salary jobs, as measured by the New Zealand Income Survey.

Historical Consumers Price Index for all groups (CPI) data (1997–2006) was used to adjust the private income threshold over time. See Technical Details: Disposable Incomes for more information.

Limitations of the data

The sample of people aged 65 years and over is relatively small. Consequently, detailed breakdowns of the data are not possible.

The June quarter value of the CPI was used to convert nominal earnings to real earnings. CPI data for the month of May would be ideal, as the New Zealand Income Survey is run between the months of April and June (see below). However, the CPI survey is run quarterly, and is available only for the months March, June, September and December.

Data source(s)

1. Statistics New Zealand (2007d) *Income Survey June 1997–June 2006*.
   The New Zealand Income Survey (NZIS) is run annually as a supplement to the Household Labour Force Survey (HLFS) during the June quarter (April to June). See Technical Details: Paid Employment for information about the HLFS. The NZIS collects pre-tax income information on self-employment, wages and salaries, government transfers, other transfers (ie private superannuation, pension schemes and annuities) and investments (from 2002).
2. Reserve Bank Consumer Price Index Historical series, *http://www.rbnz.govt.nz/statistics/econind/a3/data.html*
3. Statistics New Zealand Consumer Price Index data (June 2006 quarter), *http://www.stats.govt.nz/store/2006/07/consumers-price-index-jun06qtr-hotp.htm?page=para016Master*

VOLUNTARY WORK

Definition/formula

Proportion of population aged 65 years and over who have been involved in unpaid formal voluntary work over the last four weeks. This does not include informal volunteering an older person may engage in, such as the older person's own informal arrangements to look after a sick person or child who is not part of the older person's household.

Limitations of the data

The data is only representative of the last four weeks – for some people this may be a one-off activity. The 1996 Census did not have a breakdown that included voluntary work – as a consequence only comparisons with the 2001 Census are possible.

See Home Ownership for issues around ethnic breakdowns using the 2006 Census data.

Data source(s)

1. Statistics New Zealand (1997; 2002b; 2007c) *Census of Population and Dwellings* 1996, 2001 and 2006.

LONELINESS

Definition/formulae

The proportion of population aged 65 years and over who reported feeling lonely "sometimes", "most of the time" or "always" during the previous 12 months, in the Quality of Life Survey 2006.

Limitations of the data

See Public Transport for more information on the Quality of Life Survey 2006.

Data source(s)

1. Quality of Life Survey 2006 (TNS, 2007) unpublished analysis produced by the Ministry of Social Development. See Transport: Public Transport for details on survey methodology.

PARTICIPATION IN EDUCATION

Definition/formulae

The proportion of the population aged 65 years and over enrolled over a calendar year in formal tertiary education leading to a recognised New Zealand qualification. This is calculated by dividing the total number enrolled over a calendar year by Statistics New Zealand's estimated resident population for the mean year ending 31 December (except where otherwise stated).

The enrolment count includes all students enrolled between January and December (as opposed to a snapshot). The enrolment data excludes non-formal learning, community education courses, on-the-job industry training, and private training establishments which neither received tuition subsidies nor were approved for student loans and allowances.

Public tertiary education institutions include universities, polytechnics, colleges of education, and wānanga. Private tertiary education consists of private providers receiving a tuition subsidy, private providers with qualifications approved for loans and allowances, private providers receiving a Ministry of Education grant, and other private providers registered with the New Zealand Qualifications Authority.

The estimated resident population for the mean year ending 31 December is chosen as the population denominator to reflect the average number of people over the calendar year. When calculating ethnic proportions, Statistics New Zealand's ethnic population projections (Series 6) are used, as ethnic population estimates for the mean year ending 31 December are not available.

Limitations of the data

The ethnicity data could only be extracted as enrolment counts. The enrolment count may be higher than a headcount, in cases where students have enrolled in more than one programme. Regional breakdowns are not possible due to a large number of enrolled students who could not be grouped into regions. There are a few likely reasons for this. Courses offered online cannot necessarily be grouped into a region. A second reason is the address of extra-mural students is often unknown – with only the name of the institute recorded. Alternatively, students may be studying at a new training establishment that has not been assigned a regional grouping by the Ministry of Education. The latter affects only a small number of institutions. Additionally, changes in the number of institutions, the status of institutions, and the types of courses offered will affect comparisons over time.

Data source(s)

1. Ministry of Education (2007) customised tables from Data Management Unit.
2. Statistics New Zealand population estimates for the year ending 30 June 1999–2005, *http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-est-info-releases.htm*
3. Statistics New Zealand ethnic population estimates as at 30 June 2005, *http://www.stats.govt.nz/store/2006/07/national-ethnic-population-projections-01%28base%29%E2%80%9321-update-hotp.htm?page=para036Master*

COMMUNITY INCLUSION

Definition/formulae

The proportion of people aged 65 years and over who feel a sense of community with others in their neighbourhood. The indicator also includes what type of social networks older people have. The information is sourced from the Quality of Life Survey 2006.

Limitations of the data

See Public Transport for more information on the Quality of Life Survey 2006.

Data source(s)

1. *Quality of Life Survey 2006* (TNS, 2007) unpublished analysis produced by the Ministry of Social Development. See Public Transport for details on survey methodology.

PARTICIPATION IN CULTURAL AND ARTS ACTIVITIES

Definition/formulae

The proportion of people aged 65 years and over who experienced one or more of the cultural activities included in the Cultural Experiences Survey 2002.

Respondents were asked to report on activities they experienced over either a 12-month period (for goods and services accessed or experienced relatively infrequently) or a four-week recall period (for activities experienced on a more regular basis).

Limitations of the data

This was an ad hoc survey so no time series data is available. It is unclear whether the survey will ever be repeated.

The focus of the survey was on experience/consumption; it did not include participation such as acting or performing.

Data source(s)

1. Statistics New Zealand (2002a) *Cultural Experiences Survey 2002*.

APPENDIX I
The New Zealand Positive Ageing Strategy

VISION

The New Zealand Positive Ageing Strategy developed the following vision for positive ageing in New Zealand:

Our vision is for a society where people can age positively, where older people are highly valued and where they are recognised as an integral part of families and communities. New Zealand will be a positive place in which to age when older people can say that they live in a society that values them, acknowledges their contributions and encourages their participation.

PRINCIPLES

The positive ageing principles state that effective positive ageing policies will:

- Empower older people to make choices that enable them to live a satisfying life and lead a healthy lifestyle
- Provide opportunities for older people to participate in and contribute to family, whānau and community
- Reflect positive attitudes to older people
- Recognise the diversity of older people and ageing as a normal part of the lifecycle
- Affirm the values and strengthen the capabilities of older Māori and their whānau
- Recognise the diversity and strengthen the capabilities of older Pacific peoples
- Appreciate the diversity of cultural identity of older people living in New Zealand
- Recognise the different issues facing men and women
- Ensure older people, in both rural and urban areas, live with confidence in a secure environment and receive the services they need to do so
- Enable older people to take responsibility for their personal growth and development through changing circumstances.

GOALS

The 10 priority areas for action or positive ageing strategy goals are:

- Secure and adequate income for older people
- Equitable, timely, affordable and accessible health services for older people
- Affordable and appropriate housing options for older people
- Affordable and accessible transport options for older people
- Older people feel safe and secure and can "age in place"
- A range of culturally appropriate services allows choices for older people
- Older people living in rural communities are not disadvantaged when accessing services
- People of all ages have positive attitudes to ageing and older people
- Elimination of ageism and the promotion of flexible work options
- Increasing opportunities for personal growth and community participation.

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ENDNOTES

1. The Office for Senior Citizens reports annually on the progress and achievements related to the priority goals and action plans of the New Zealand Positive Ageing Strategy. These reports are available on the Office for Senior Citizens website *www.osc.govt.nz*
2. The *Social Report* is available on the Ministry of Social Development's website *www.socialreport.msd.govt.nz*
3. The availability of data for the "cultural identity" domain is currently very limited, and there is a clear scope for future reports to include indicators relating to Pacific, Asian and Other ethnic groups.
4. A private dwelling accommodates a person or a group of people, but is not available to the public. A private dwelling may be permanent or temporary. Permanent private dwellings include houses and flats, residences attached to a business or institution, baches, cribs and huts. Caravans, cabins, tents and other makeshift dwellings that are the principal or usual residence of households are classified as temporary private dwellings.
5. Non-private dwellings are available to the public. They may be available for use generally, or by virtue of occupation or study, special needs, or legal requirements. Such dwellings may have facilities (such as a dining room) for shared use.
6. Only disability statistics from the 1996 and 2001 disability surveys are presented here. The 2006 post-censal disability survey was in the field at the time this report was prepared, and the results will be included in the next positive ageing indicators report.
7. Royal Commission on Social Security in New Zealand (1972) *Social Security in New Zealand* Royal Commission on Social Security in New Zealand: Wellington.
8. The median of a sample is the value for which one-half (50 percent) of the observations (when ranked) will lie above that value and one-half will lie below that value. For example, 50 percent of older people will have an income above the median income value, and 50 percent below. The median is a better measure of income than the mean (or average) as it is not as sensitive to the skewness of the income distribution of the older population.
9. Adapted from *The Social Report 2006* Ministry of Social Development: Wellington, p 20.
10. An alternative to period life expectancy is cohort life expectancy, where cognisance is taken of the projected improvement in mortality in the light of existing trends. Cohort life expectancy may be a better measure of the expectation of future life, but period life expectancy from year to year presents a good picture of improvements in mortality summarised over the age range.
11. Statistics New Zealand has produced life tables for the Māori and non-Māori populations in addition to life tables for the total New Zealand population. Following the introduction of new birth and death registration forms in September 1995, Statistics New Zealand has also evaluated the production of life tables for other ethnic groups such as Asian and Pacific peoples. However, life tables for other ethnicities have not been produced because of the small number of death registrations and uncertainty associated with ethnic identification and measurement. For example, a person's ethnic identity can change over time and between different data collections, depending on the respondent and the context of collection. Ethnic mortality measures should therefore be interpreted with due caution.
12. Historical Māori and non-Māori life tables should be interpreted with caution because of changes in ethnic concept and data sources. There is evidence that Māori deaths were significantly under-reported, and hence non-Māori deaths were over-reported, before the new vitals registration forms were introduced in 1995. Following the redesign of the forms, death registrations and population data are broadly comparable for ethnic groups. The 1995–1997 Māori and non-Māori life tables published in July 1998 were the first to be constructed using data derived from the new registration forms. However, because numerator-denominator ethnic differences are significant before 1995–1997, ethnic mortality measures from 1995–1997 are not comparable with those from earlier years.
13. Data collected over a range of ages may show differences by age. Where this occurs, the proportion of people in the different age groups will affect the average. Age standardised rates give equal weighting to each age, allowing valid comparisons between populations with different age structures.
14. NZDep1996 is a small area index of deprivation based on a principal components analysis of nine socio-economic variables from the 1996 Census. The index has been converted to a scale of 1 to 10, where 1 represents the least deprived 10 percent of small areas and 10 represents the most deprived 10 percent. The small areas are about the size of a census meshblock and have populations of at least 100 people.
15. The serious non-fatal measure was devised by Cryer et al at the Injury Prevention Research Unit at Otago University, on data provided by the New Zealand Health Information Service (2006).
16. The joint effects of poor diet are high blood pressure, high cholesterol, high BMI (Body Mass Index) and inadequate fruit and vegetable intake. The Body Mass Index (or BMI) is a formula used to determine the amount of body fat you carry. The formula is your weight divided by your height squared (BMI = kg/m2).

17. This is supported by research, for example that carried out by the Wellington School of Medicine and Health Services in the *Housing Insulation and Health Study 2001 and 2002 http://www.otago.ac.nz/wsmhs/academic/dph/research/housing/insulation.html.*
18. Older people with high housing costs and low incomes can claim a range of benefits. For example, Work and Income administers the Accommodation Supplement, a means-tested second-tier benefit aimed at making housing more affordable. As at 30 June 2006, there were over 26,500 older people receiving the Accommodation Supplement. Housing New Zealand offers income-related rents (IRR) to low-income families who are tenants in Housing New Zealand Corporation (HNZC) properties. The rent paid is related to the tenants' incomes, and is a form of low-cost state housing. As at 30 June 2006, there were 11,550 IRR tenancies with at least one older person resident. Although a large proportion of older people are currently mortgage-free, some face high local council rates. Such individuals can participate in the means-tested Rates Rebate Scheme, where they can annually claim up to $500 to contribute towards their local council rate payments. Local governments also provide help in the form of low-cost housing to older renters (eg council flats).
19. The ongoing *New Zealand Household Travel Survey* (Ministry of Transport, 2007) found that during 2003–2006 people aged 80 years and over generally drove short distances, with 50 percent of trips 2.5 kilometres or less and 75 percent of trips 5 kilometres or less. The average length of a driving trip by drivers aged 80 years and over was 5.2 kilometres. People living in small towns and in rural areas made more very short trips (50 percent of trips less than 1.5 kilometres) than people living in cities. Overall, just over half of the total distance driven by drivers 80 years and over was on urban roads with a speed limit of 70 kilometres an hour or less. The most frequent driving destinations for this age group were those for social and recreational activities (such as visiting friends, sport and leisure activities, church and other social activities), shopping, and personal business (such as medical, social welfare, banking, car servicing and other necessary activities). See *http://www.transport.govt.nz/ongoing-travel-survey-index/*
20. Research shows deteriorating health can affect an older person's ability to drive (eg failing eyesight, cardiac conditions and stroke, side effects from medication and dementia). Some older people also give up driving when the cost of maintaining and running a car becomes a burden and others because their ability to react to changing situations is slowed with age. Another reason for the fall in licence holding as age increases is the legislative requirements that apply to this age group. Current legislation requires older drivers to have an age-based medical test at ages 75 years and 80 years, and two-yearly after that. Legislation before December 2006 required an age-based on-road test (at age 80 years), which was also carried out two-yearly thereafter. See *http://www.transport.govt.nz/older-license-qa-june-2006/*
21. Davey, Judith and Katie Nimmo (2003) *Older People and Transport, Scoping Paper*, November 2003 New Zealand Institute for Research on Ageing: Wellington. See also Human Rights Commission (2005) *The Accessible Journey: Report of the Inquiry into Accessible Public Land Transport*.
22. The survey showed that, overall, older people had a positive attitude about whether public transport was affordable, safe or convenient, with convenience ranking worst. Seventy-five percent agreed it was affordable, 85 percent agreed it was safe and only 66 percent agreed it was convenient.
23. Schofield et al "Ageing in Place" p276 in Jonathan Boston and Judith A Davey eds (2006) *Implications of Population Ageing: Opportunities and Risks* Institute of Policy Studies, School of Government, Victoria University of Wellington: Wellington.
24. This indicator is used to measure the proportion of older people who still live in their own home. The 2006 Census is used to obtain the numbers living in private dwellings, under the assumption most people in private dwellings will be living "at home" whether by themselves, or with family.
25. Women aged 85 years and over are more likely to be widowed than men in the same age group (see Older People: a Statistical Overview). By comparison, men in this age group are more likely still to be partnered and to have a carer (in their spouse or partner), thus enabling them to remain at home.
26. When a person is receiving Residential Support Subsidy, Disability Allowance can be paid to cover costs relating to a person's disability which are not covered by their contract with the residential care services provider.
27. Disability statistics are from the post-censal disability surveys conducted by Statistics New Zealand. A disability was defined as any limitation in activity resulting from a long-term condition or health problem. The focus, therefore, was not on identifying the nature of the disorder or disabling condition, but rather on the limitation resulting from it. Disability was determined by responses to a series of questions that assessed difficulties performing certain day-to-day activities. Answers reflected respondents' own perception of their situation and were, therefore, subjective. See *http://www2.stats.govt.nz/domino/external/pasfull/pasfull.nsf/7cf46ae26 dcb6800cc256a62000a2248/4c2567ef00247c6acc256e6e006bcf37?OpenDocument*
28. Even this increase is unlikely to account for the doubling of the Disability Allowance numbers between 1996 and 2001. Much of the increase, therefore, is likely to be attributable to the increased take up by those eligible.
29. This increase may be a combination of increasing disability rates and increasing awareness about entitlement leading to more people taking up the Disability Allowance.
30. This difference between the sexes is due to the varying age structures of older men and older women. Disability incidence increases with age, and is highest at ages 85 plus years. Due to higher longevity among women, a larger proportion of older women survive to the ages where disability incidence is the highest.

31. This lower proportion for the oldest age group is likely explained by the "oldest old" moving into residential care (persons receiving a Residential Care Subsidy from the Government are currently ineligible to concurrently receive Disability Allowance). As at the year ending 30 June 2006, there were 18,265 people aged 65 years and over receiving a Residential Care Subsidy. Over half of these recipients (9,496 people) were aged 85 years and over.
32. The age restriction is applied because of the way the population was sampled. The Ministry of Social Development's benefits database was used as a sampling frame to randomly select older Māori. The collection of ethnic data was made compulsory only recently, and so the quality of ethnic data for individuals who have been on the database for some time is very poor and sparse. The quality of ethnic data is robust only for the "younger old" – in this case Māori recipients of NZS aged 65–69 years. For more details see Technical Details: Māori Cultural Identity: Te Ao Māori.
33. Cunningham, C, Durie, M, Fergusson, D et al (2002) *Living Standards of Older Māori*.
34. The ethnicity field in the Ministry's benefits database was used to sample individuals. Even though the sampled individuals included Māori as their ethnicity when applying for NZS, they may not necessarily identify as being Māori.
35. Cunningham, C, Durie, M, Fergusson, D et al (2002) *Living Standards of Older Māori* incorporated the seven indicators of cultural identity in Table 26 into a cultural identity scale that measures strength of identity with Māori culture.
36. This indicator measures whether or not the dwelling the person lives in has internet access. In most cases this translates to the people within the household using the internet as well. There may be cases where persons living within the household do not use the internet even though there is access. For example, older people living with their adult children in a household with internet access may be unable to use it.
37. This high proportion may be due to a higher proportion of older Asians living in the same household as their adult children (who have internet access) – eg older Chinese migrants who have immigrated to New Zealand on a family unification visa.
38. This socio-economic trend may be confounded by an age effect – as people aged 65–69 years are more likely to have both internet access and a higher level of income than other older people.
39. The *New Zealand Positive Ageing Strategy* (2001) Ministry of Social Policy: Wellington, p9.
40. Mermin, GBT, Johnson, RW and Murphy D (2006) Why do Baby Boomers Plan to Work So Long? *http://www.bc.edu/centers/crr/papers/wp_2006-19.pdf*
41. There may be implications here for future rates of paid employment among the older population, to the extent that the generations now coming towards retirement have higher educational qualifications than those that went before them.
42. Regional employment rates were estimated by applying 2006 Census regional employment trends to the Household Labour Force Survey data for the June 2006 quarter. For more details refer to Technical Details: Employment: Paid Employment.
43. Full-time is defined as those people working 30 hours or more a week as recorded in the New Zealand Income Survey, while part-time is defined as those people working less than 30 hours a week.
44. The difference is probably because older women are more likely to have lost a partner given that, on average, men die at an earlier age than women.
45. See Technical Details: Opportunities: Participation in Education for definitions of qualifications.
46. The enrolment count includes all students enrolled between January and December (as opposed to a snapshot). The estimated resident population for the mean year ending 31 December is chosen as the population denominator to reflect the average number of people over the calendar year.
47. Ethnic proportions were derived using Statistics New Zealand's Series 6 ethnic population projections as at 30 June.
48. The high proportion of Asian older people taking part in tertiary education may be attributable to the compulsory participation in English as a second language (ESOL) programmes for immigrants without fluent English language skills.

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