Informing the Debate on Population Ageing in New Zealand: the role of Statistics New Zealand

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Abstract
As the national agency responsible for regularly updating and publishing demographic projections and related series, Statistics New Zealand has been in the forefront in highlighting emerging changes in New Zealand’s population size and structure, especially the greying of the country’s population. It has ushered the key findings from a formal socio-demographic sphere to the public domain, to facilitate an informed debate on the social, financial and resource implications of an ageing population. This paper will review Statistics New Zealand’s contribution to this debate, and then under the broad banner of ‘what we have learnt’, highlight selected results of the organisation’s various analytical studies, focusing on longevity gains, the impending burgeoning of the population aged 65 years and over, the ageing of the aged, and ethnic and regional variations in ageing. Implicit in these findings is that in the coming decades mature societies like New Zealand are set to face increasing demands for health provisions, aged care services, retirement housing as well as leisure and recreation opportunities.

Introduction
It is now widely acknowledged that the global population is in the throes of some unprecedented demographic changes. In common with other OECD countries, and a growing number of developing nations, the population of New Zealand is ageing (United Nations, 2009). Its most documented features are the rise in average age of population, a burgeoning

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number of senior citizens, as well as their rising share of the total population (Statistics New Zealand, 2000; 2007a).

Because of its implications for economic and social planning at both the national and local level, the subject of population ageing has generated widespread interest among policy planners, administrators, decision makers, economists, social researchers and the general public.

The impending rise in the number of senior citizens, as babyboomers (large cohorts born after World War II) move into pensionable ages, has raised concerns about the sustainability of the state-funded pension and the increased cost of providing health and related age care services.

To assist this debate, and to enhance greater understanding of evolving demographic changes, Statistics New Zealand has published an array of analytical reports over the last three decades. This is consistent with its overall strategic goal as the national statistical agency, to provide relevant and good quality statistics for government and communities on key aspects of New Zealand’s economy, environment and society. A host of other public service agencies, academics and social analysts have also researched and contributed to the growing body of knowledge on the determinants and consequences of population ageing in New Zealand. These have included, to name a few, the Ministry of Social Development (2001, 2007), Retirement Commission (2007), Ministry of Health (2002), academics at various New Zealand universities (for example, see Boston and Davey, 2006; Koopman-Boyden, 1993; Koopman-Boyden & Waldegrave, 2009; Zodgekar, 2000); and the Treasury (2008) as a part of its long-term fiscal projections.

This research note comprises of two broad parts. The first section reflects on Statistics New Zealand’s contribution to the debate on population ageing, which includes the establishment of a web-based statistical volume, dedicated to the 65+ population. The overriding objective has been to inform, to provide an insight, and to stimulate discussion about implications for New Zealand.

The second section defines and highlights some key findings on ageing-related issues that have emerged from perennial analyses of demographic trends, patterns and differentials, and in the process have facilitated useful indicators for evidence-based planning.
Major Reports/Papers Published by Statistics New Zealand

A number of major reports and papers on population ageing and related subjects have been released by Statistics New Zealand over the last three decades (see Appendix A). The organisation’s initial excursion into ageing related issues was driven by a cohort analysis of the post-World War II baby boom phenomenon as well as a long-standing interest in age distribution shifts, largely because changing age structures of populations are important for the planning of many products, infrastructure and services.

Three decades ago, a paper titled ‘The influence of fertility on New Zealand’s population age structure, 1936-2006’ was published in the Quarterly Population Bulletin (a precursor of the agency’s current Demographic Trends) (Department of Statistics, 1977). The baby boom had just completed, and there was a growing interest about its likely impact on various spheres of society, such as education, health, labour market, and social welfare – as the bulge moved up the age scale. The first impacts of the baby boom related to planning for maternity services, child care centres, kindergartens, primary and post-primary schools. At that time population ageing was in the distant future and little attention was paid to it.

Drawing on a cohort analysis, and allowing for the passage of baby bulge up the age scale, the paper concluded:

Over the next 25 years the dependency burden on the economically active population in New Zealand will decrease considerably as the large birth cohorts from the ‘baby boom’ years enter the labour force and the smaller post-boom cohorts are in the ‘dependent youth’ category. However, like all the past demographic phases this ‘favourable’ dependency situation will be only temporary and will tend to reflect only the initial outcome of a demographic phenomenon which began over 40 years ago.

It added:

After the turn of the century, when the ‘boom’ babies start leaving the labour force through retirement, there will be an increase in the burden of old-age dependency, the final outcome of this demographic phenomenon. It is at that time that the demands upon the economically active population, to meet the needs of the ‘retired’ population will be at their greatest.
Note the emphasis on the financial burden of an ageing population! In the late 1980s baby boom cohorts started to enter mature working ages. The oldest of them (those born in 1946) reached age 44 years in 1990, and was just one and a half decades away from the then minimum age of eligibility for universal superannuation, and thus the public concern about its socio-economic implications was not unfounded.

‘Elderly Population of New Zealand’, published in 1990, was the first statistical report which brought together demographic and related information to promote and assist discussion and research on, and encourage a greater understanding of, the ageing issues. This report covered a myriad of topics on New Zealanders aged 60 years and over, in relation to future growth pattern, age structure, marital status, living arrangements, income, ethnicity, and spatial distribution (Department of Statistics, 1990).

Two points are worth noting here: one, the use of the term ‘elderly’, and second, the focus on ages 60 years and over. Life expectancy at birth at that time was 71 years for men and 77 years for women, and the age of eligibility for the old-age pension was 60 years. Given this, people were probably accepting of the word ‘elderly’ to describe the 60+ group. Things were about to change, however. An increase in the age of entitlement for New Zealand Superannuation from 60 to 65 years was phased in gradually between 1992 and 2001. Similarly, the Human Rights Act, introduced in 1999, abolished the compulsory age for retirement. Prior to that, workers were generally expected to, or were forced to retire after about 40 years of service, often while still in their mid- or late-50s (Khawaja & Boddington, 2009).

The United Nations designated 1999 as the International Year of Older Persons, and one of its goals was to promote discussion and research on ageing-related issues. To commemorate the occasion a research paper aptly titled ‘Population Ageing in New Zealand’ was prepared and published in the Monthly Abstract of Statistics (Khawaja, 2000). That paper traversed the demographic background to the expected spurt in the country’s 65+ population after 2010, when baby boomers would start to reach pensionable ages, it highlighted the changing socio-economic profile of senior New Zealanders, and it also commented on the numerous challenges and opportunities that lay ahead.
After 2001, Statistics New Zealand produced a number of census-based updates with a focus on the 65+ population (see Appendix A). It also organised seminars on the changing face of New Zealand society, beginning with three public seminars on population ageing held at the dawn of the new millennium in the major urban centres of Auckland, Christchurch and Wellington. At these inaugural seminars, the organisation’s population analysts presented a demographic overview, while invited experts covered the economic, social and health perspectives.

Since then Statistics New Zealand staff have regularly given lectures on population trends to professionals, managers and researchers, in both the public and private sectors to highlight the changing demographic profile of New Zealand.

The statistical volume on the 65+ population first compiled in 2007 (Statistics New Zealand, 2007b) has a much broader scope than any previous official publication. It brings together key information on the demographic and socio-economic characteristics of older New Zealanders to assist researchers, planners, administrators and others interested in ageing-related issues. The publication draws on a rich diversity of data sources, including the five-yearly Census of Population and Dwellings, national and sub-national population estimates and projections, ethnic, labour force and household projections, social surveys and other administrative sources. Besides standard information on population size and structure, health, ethnicity, housing and migration, it covers topics such as employment and retirement, ageing in place, living standards and well-being. The volume is envisaged as a living document, is web-based and is accessible on the Statistics New Zealand website.
An Overview of Selected Findings of Statistics New Zealand Publications

Older citizens constitute a special and important segment of any society. Relatively few participate actively in the labour force, while a majority have relatively low income, and high incidence of morbidity. This makes many of them dependent on public agencies for financial assistance, and for medical and hospital treatment, and social care. From a planning perspective, therefore, it is important to accurately determine the future numbers and socio-demographic characteristics of the older population, as well as changes over time. The rest of this paper will describe and discuss principal findings of Statistics New Zealand’s investigations.

There are two broad categories of population ageing - numerical ageing and structural ageing. Numerical ageing refers to the increase in the number of older persons (say, aged 65+ years). Structural ageing relates to their growing share of the country’s total population. The latter may result from a drop in the share of other segments of population, e.g. fewer children or fewer residents of working ages. As an example of structural ageing, Figure 1 illustrates the expected shift in the relative position of children (aged below 15 years) and superannuitants (aged 65+ years) in New Zealand in the foreseeable future.

Figure 1: Age structure changes: fewer children and more senior citizens (aged 65+ years), New Zealand, 1951-2051

Source: Statistics New Zealand, Demographic Trends (various years); National Population Projections (2006-base), series 6 (assuming medium fertility, medium mortality and annual net immigration of 10,000), 2006-2061.
At the 2006 Census, children under 15 outnumbered the 65+ group by two to one. Given low fertility and the large cohorts born during the post-WWII years moving into pensionable ages, senior citizens are expected to outnumber children by 2023. This is already the case in some countries such as Austria, Germany, Japan, Poland, Spain, and Sweden which have much lower fertility levels than New Zealand (United Nations, 2009). Nevertheless, given the prospects of sub-replacement fertility, longer life expectancy and the passing of the baby boom cohorts into older ages, New Zealand population will continue to age further (Figure 2). Half a century ago, in 1961, the age-sex structure of New Zealand population had a pyramid shape - a broad base and a slim top. In the coming years, it has progressively taken on a barrel shape, and is projected to change to an almost rectangular shape, indicating a growing number of older citizens.

Figure 2: Age-sex pyramids, New Zealand, 1961-2061

Source: Statistics New Zealand, Demographic Trends (various years); National Population Projections (2006-base), series 6 (assuming medium fertility, medium mortality and annual net immigration of 10,000), 2006-2061.
The median age of population is projected to rise from 36 years at the 2006 Census to 39 years by 2021, and to 44 years by 2061. A century ago, the median age was only 22 years. This suggests that population ageing has been a part of our changing demographic landscape for over a century now, and the transition is not over yet.

How many senior citizens? The 2006 Census enumerated about half a million persons who were aged 65 years and over. Official population projections indicate a significant acceleration in the growth of senior citizens in the coming decades, as large cohorts born during the post-WWII years enter pensionable ages in increasing numbers after 2010. Between 1996 and 2006, the 65+ population grew at a rate of 1.8 percent per annum, and this is projected to climb to over 3.0 percent per annum during 2011 and 2031. The 65+ population is expected to reach between 1.17 million (Projection series 1) and 1.48 million (Projection series 9) by 2061, when they will make up 25 percent or a quarter or more of all New Zealanders – double the 2006 figure of 12.5 percent (Statistics New Zealand, 2007).

Previously, some analysts had asserted that as people who will reach age 65 years over the next five decades have already been born, their future numbers can be estimated fairly accurately. However, it is also acknowledged that the return of some expatriate Kiwis – currently estimated at over half a million in Australia alone (Australian Government: Department of Immigration and Citizenship, 2010) could boost this figure, as would any significant upturn in the numbers of new migrants.

Continuing longevity gain has emerged as another vital factor. Under the ‘medium’ mortality variant, the 1996-base projections had assumed a gain in the life expectancy at birth for men of 6.7 years, up from 74.4 years in 1996 to 81.0 years by 2051 (Table 1). For women the projected gain over this period was 6.0 years – from 79.7 years to 85.5 years. Yet, during the ten years from 1996 to 2006, the life expectancy at birth in New Zealand increased by 3 years, at a remarkable rate of improvement of 3.5 months a year for men, and 2.5 months for women. This presumably prompted an upward revision of the future life expectancy levels. Incidentally, elsewhere in the developed world official statisticians seem to have taken a rather conservative view on the likely future gains in life expectancy.
Table 1: Life expectancy at birth, New Zealand, 1951-2051

<table>
<thead>
<tr>
<th>Period</th>
<th>Observed Men</th>
<th>Observed Women</th>
<th>Projected to 2051 Men</th>
<th>Projected to 2051 Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>67.2</td>
<td>71.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>68.5</td>
<td>74.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>72.9</td>
<td>78.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>74.4</td>
<td>79.7</td>
<td>1996 base</td>
<td>81.0</td>
</tr>
<tr>
<td>2001</td>
<td>76.3</td>
<td>81.1</td>
<td>2001 base</td>
<td>82.5</td>
</tr>
<tr>
<td>2006</td>
<td>78.0</td>
<td>82.2</td>
<td>2006 base</td>
<td>84.5</td>
</tr>
</tbody>
</table>

Increase between 1996 and 2006: 3.6 Men, 2.5 Women

Source: Statistics New Zealand, Demographic Trends (various years).

The net outcome of the longevity gain has been a significant increase in the projected size of the future 65+ population (Table 2). Whereas the 1996-base projections had generated a 65+ population of 1.193 million by 2051, with an improved mortality assumption, the 2006-base projections gave a corresponding figure of 1.353 million - that is, 160,000 or 13 percent more 65+ people than the 1996-base series. What this illustrates is that future population projections will require constant vigilance on the part of official statisticians in monitoring international progress in reducing mortality by cause of death at older ages, as well as a rigorous analysis and assessment of the impact of advances in medical knowledge and treatment, is necessary to ensure a more realistic figure on future longevity levels and numbers of senior New Zealanders.

Table 2: Upward revision of projected population aged 65 years and over, New Zealand, 2051

<table>
<thead>
<tr>
<th>Projection base</th>
<th>Projected population in 2051 (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 base</td>
<td>1.193</td>
</tr>
<tr>
<td>2001 base</td>
<td>1.256</td>
</tr>
<tr>
<td>2006 base</td>
<td>1.353</td>
</tr>
</tbody>
</table>

Note. All series assume medium fertility, medium mortality and annual net immigration of 10,000 during the projection period.

Population ageing is more advanced in some countries, notably Germany, Italy, Japan, Singapore and Spain, all of whom have lower fertility rates than New Zealand. Latest United Nations (2009) projections indicate that by 2050, the median age in these nations will be 50 years or more, and their 65+ citizens will make up over 30 percent of their total population.
With developing nations following suit, we have the blueprints of a greyer global society.

In 1977 the Department of Statistics noted:

One useful method of illustrating the social and economic significance of changing age structure of population is to examine trends in the ‘dependency ratio’. This ratio is an approximate measure of the burden placed on the productive segment of the population by the so-called ‘dependent’ population, the relationship between the dependent or productive components being defined either in terms of age or economic status.

The ‘old-age dependency ratio’ (defined here as the ‘number of persons aged 65+ years per 100 persons aged 15-64’), increased significantly between 1936 and 1951 and then remained almost unchanged until the mid-1970s. Over the next two decades, it rose slowly but steadily, partly reflecting the growth of the 65+ population. The ratio is projected to more than double from less than 20 persons aged 65+ years per 100 persons aged 20-64 years in 2006 to over 40 persons per 100 aged 20-63 years by 2051 (Figure 3).

The rise needs to be interpreted with care, because of the limitations inherent in this demographic measure. Many persons of working age are not in the labour force, while a growing proportion of superannuitants are ‘actively engaged’. Moreover, the true extent of the economic burden placed on the labour force, also depends on age-specific labour force participation, the level of earnings as well as Government’s commitment to various socio-economic goals and welfare policies.
A Demographic Profile of Senior Citizens

Senior citizens are not a homogenous group. There are noticeable differences by age in terms of sex ratio, marital status, living arrangements, employment, income, mobility and spatial distribution.

Table 3: Ageing of the aged, New Zealand, 2006 - 2061

<table>
<thead>
<tr>
<th>Age group</th>
<th>Population</th>
<th>Sex ratio (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td>2006</td>
<td>2061</td>
</tr>
<tr>
<td>65-69</td>
<td>155,500</td>
<td>316,300</td>
</tr>
<tr>
<td>70-74</td>
<td>120,200</td>
<td>297,900</td>
</tr>
<tr>
<td>75-79</td>
<td>103,600</td>
<td>258,000</td>
</tr>
<tr>
<td>80-84</td>
<td>74,200</td>
<td>208,300</td>
</tr>
<tr>
<td>85+</td>
<td>58,200</td>
<td>360,400</td>
</tr>
<tr>
<td>Total 65+</td>
<td>511,600</td>
<td>1,440,800</td>
</tr>
</tbody>
</table>

(1) Number of women per 100 men.

Note. There were 531 centenarians in New Zealand at the 2006 Census, up from 399 in 2001.


The first consideration here is the ageing of the aged (Table 3), because the positive impact of the further longevity gains would be particularly pronounced at advanced ages. The New Zealand Life Tables for
2005-07, gave the remaining life expectancy at age 65 years of 17.8 years for men and 20.5 years for women. The 2006-base projections assumed (under series 5) that by 2061, this would have increased to 22.7 years for men and 25.2 years for women - a gain of about five years for both men and women. The overall effect is that the size of population aged 80-84 years will go up by nearly three times from 74,000 in 2006 to over 208,000 by 2061. The relative growth for the 85+ group would be much larger – up six times from just 58,000 to 360,000. By 2061, the 80+ group could make up forty percent (or two out of every five) of all pensioners, as against 26 percent (or one in four) in 2006. This is important from a health expenditure perspective, as this group requires and utilizes medical and hospital services (for example for cataract, hip replacement, heart operations, diabetes, orthopaedics) and special aged-care services far more than any other group.

Women outnumber men among the 65+ group. As they have longer life expectancy than men, the differential grows with increasing age, leading to marked feminization of the aged (see last column in Table 3). Less than half of older women are married or living in de-facto relationships.

Statistics New Zealand studies have found that the incidence of living alone increases significantly with advancing age. Given the high rate of home ownership, a majority presumably prefer to live independently. In 2006, half of the 85+ population lived alone. This raises issues of social isolation, security, and assistance with daily chores, among other things.

**An Ethnic Dimension**

There is also a broad ethnic dimension to the ageing process in New Zealand, arising from significant disparities in the demographic experience and make-up of various ethnic groups. The majority European population, which has consistently experienced sub-replacement fertility over the last three decades along with the Asian group, heads the ethnic longevity stakes (Table 4), has a substantially older age structure – a median age of 38 years in 2006. By contrast, the indigenous Maori and the Pacific Island groups which together make up one-quarter of the country’s population, have much higher fertility rates – well above the replacement level – and with a median age of less than 23 years, have a much more youthful age structure. Even 15 years on, their median age (projected to be around 25 years by 2026) will be
18-20 years less than for the European group. Currently, children (<15) among the Maori and Pacific Island communities outnumber the older group (65+) by a margin of eight to one, and the latest ethnic population projections (Statistics New Zealand, 2008a) suggest that children would continue to dominate their age structures in the foreseeable future. Among the European group, pensioners (65+) are likely to outnumber children within the current decade.

Table 4. Estimated life expectancy at birth, 2005-07, and 65+ group as a percentage of total population, by ethnic group, New Zealand, 2006 and 2026

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Males</th>
<th>Females</th>
<th>2006</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years</td>
<td>Percent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maori</td>
<td>70.4</td>
<td>75.2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Pacific</td>
<td>72.8</td>
<td>77.2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>European/Other (2)</td>
<td>79.4</td>
<td>83.2</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Asian</td>
<td>84.0</td>
<td>87.2</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>New Zealand total</td>
<td>78.2</td>
<td>82.2</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>


Notes
(1) As a percentage of total population
(2) Includes ‘New Zealander’

Although substantial progress has been made in bridging inter-ethnic disparities in socio-economic standards, some significant areas of disadvantage remain, especially in terms of educational achievements, income and health standards. Both the indigenous Maori and the Pacific Island groups have higher mortality rates and lower life expectancy – at least 6 to 7 years lower than that for their European counterparts (Table 4). According to the latest (2006-base) official ethnic population projections, the 65+ group will make up 23 percent of the European population by 2026, compared with 9 to 12 percent of the Maori, Pacific Island and Asian communities.

Disability Studies

One factor common to all older New Zealanders is the high incidence of disability. Disability surveys conducted after the last three Censuses of Population and Dwellings have added considerably to our knowledge about the prevalence, nature, duration and cause of disability and on the barriers
that people with disability encountered in everyday life (Statistics New Zealand, 2009b). The most common disability types for older adults are physical and sensory disabilities. Disease or illness, and accidents or injuries are the most common causes of disability for adults, in general. Judging by the results of the 2006 Disability Survey (Statistics New Zealand, 2008b), the percentage of people with disability increases with advancing age, from 10 percent for children aged below 15 years to a high of 45 percent for those aged 65 years and over. Older women have a higher rate of disability than older men. Also, 73 percent of the 65+ group had multiple disabilities, compared with 53 percent of those aged 45-64 years.

Following the 2006 Disability Survey, several reports were prepared that presented information on the lives of people with disabilities in New Zealand. One report titled Disability and the Labour Market focused on the experience of disabled people in the labour force, examining their labour force participation by educational qualification and type of disability, and the types of industries and occupations that disabled people are employed in, the need for workplace modifications and support, and the extent to which these needs are currently met among employed disabled people.

**Spatial Variations in Population Ageing**

While national experience is valuable for identifying policies required by the national planners to deal with problems, issues and concerns arising from changing population structure, at the regional or local level, there is a complexity of experiences involved, which require ‘sensitivity on the part of policy makers to the implications of emerging demographic changes’.

Within New Zealand, there is a remarkable variation in population ageing. The South Islanders are older than their northern cousins. Similarly, urban residents are older than the rural dwellers. Latest sub-national population projections indicate that all regional and local populations would age, though at different paces. This reflects their current age structure, future fertility levels as well as patterns of internal and external migration. Areas with low fertility or a history of out-migration of young people in pursuit of better educational or employment opportunities elsewhere, tend to have an older age structure. Influx of older migrants, for example to retirement centres, similarly exerts an ageing effect. Regional disparities in fertility and mortality have already been documented (Department of Statistics, 1985,
Informing the debate on population ageing in New Zealand

1990; Khawaja & Boddington, 2006). Available evidence suggests that population ageing is advancing at a faster pace in some South Island regions than others. By 2031, the populations of Tasman, West Coast, and Marlborough regions are expected to have 29-30 percent of their population aged 65 years and over, compared with less than 21 percent nationally. For Auckland and Wellington regions the corresponding figures would be 17 and 20 percent, respectively.

For the country's territorial authorities, the percentage of population aged 65+ years in 2006 and 2031 are compared using maps in Figure 4. In a great majority of the cities and districts, the 65+ group made up less than 20 percent of all residents at the 2006 Census. By 2031, the figure will be 30 percent or more in at least five districts in the North Island – Thames Coromandel (32.1 percent), Hauraki (32.0 percent), Horowhenua (31.4 percent), Kapiti Coast (29.7 percent) and South Wairarapa (31.6 percent) and three districts/cities in the South Island – Buller (30.0 percent), Timaru (29.3 percent) and Waitaki (34.2 percent). There are another 17 areas fairly close behind, and these include Far North, Whangarei, Matamata-Piako, Taupo, Central Hawke’s Bay, New Plymouth, Stratford, Masterton, Carterton in the North Island, and Tasman, Marlborough, Kaikoura, McKenzie, Waimate and Central Otago in the South Island, with the projected figures ranging between 25 and 29 percent by 2031. What this variation suggests is that some regions/local areas will have less lead-in time to develop strategies for improving the general quality of life of their older residents.
Other research studies have focussed on issues relevant to planning in various spheres, including, ageing in place, spatial mobility, labour force participation, etc. Recent Statistics NZ investigations have found that more and more New Zealanders have started to extend their working life, buoyed by the abolition of the retirement age, or driven perhaps by economic necessity to maintain a desired standard of living. In 2006, one-third of those aged 65-69 years were in paid employment (Statistics New Zealand, 2009a). The labour force participation rate at ages 70-74 years is the same as that for 65-69 year olds, a decade ago, in 1996. Overall, this trend would also contribute to the ageing of the labour force.
Concluding Thoughts

The population of New Zealand is ageing, and the trend is expected to accelerate as baby boomers move into pensionable ages in growing numbers over the next two decades. The demographic evidence is compelling. The challenges of the greying phenomenon are manifold, and a basic role of demographic analyses and social surveys undertaken by Statistics New Zealand and others is to provide insight into its likely implications for decision making, to assist evidence-based planning for a successful outcome.

At the national level the primary concern about the impending burgeoning of the third age population is the sustainability of the state-funded superannuation and the increased expenditure on health and aged-care services. Beneath the national scene, there are direct implications for planning for housing, health-related issues, provisions of aged care, transport, and community support services. Some analysts also see a need for further research on conceptualizing measures of personal well-being, and the need for social surveys to gather information on life and health satisfaction, perceived poverty, safety, social interaction, and participation in leisure activities and voluntary work.

Notes

This is a revised version of a paper presented by the authors at the 2010 Users Forum, held in Wellington on 24-25 March 2010. The forum was organised by Statistics New Zealand. The paper also benefited from comments received from an anonymous referee. Views expressed in this paper are those of the authors and do not necessarily reflect the views of Statistics New Zealand.

Appendix A

A list of research papers/reports prepared and published by Statistics New Zealand since 1970, by year of publication.

• *The changing face of New Zealand’s population* (2000b).
• *Demographic aspects of New Zealand’s ageing population* (2006).
• *New Zealand’s 65+ population: A statistical volume* (2007).
• *Structural change and the 65+ Population*, A series of articles, incl. Impact of structural change, Ageing of ethnic groups; The legacy of past childbearing decisions; Internal migration of New Zealand's 65+ Population (2009c).

**References**


___________________ (2009c). *Structural Change and the 65+ Population*


