Across the next few decades, New Zealand will face significant demographic challenges—and opportunities, some in common with other countries, such as population ageing and the end of growth in many subnational areas, and some unique, such as the disproportionate concentration of the nation's population in one region, the relative youthfulness of the Anglo-Settler countries' largest Indigenous population, and a rapidly changing ethnic composition. These intertwining factors are considered here under three broad headings: Population and Workforce Ageing; Regional Diversity; and Ethnic and Social Composition.

## **Population and Workforce Ageing**

- 1. **Population ageing**. By OECD standards, New Zealand has a relatively youthful population, with a median age in 2011 of 36.8 years against the OECD average of 40 years. However as elsewhere, New Zealand's population is also ageing numerically, as more people live longer, and structurally, as low birth rates cause the increased numbers of elderly to also increase as a proportion. Numbers aged 65+ years are projected to more than double by 2031, from around 615,000 at present to 1.2 million, and to 1.5 million by 2061, while the proportion aged 65+ years will increase from its present 14 per cent to around 21 per cent by 2031, and 26 per cent by 2061¹. These trends mean that while the New Zealand population will continue to grow for the foreseeable future, reaching around 5,200,000 by 2031 (+18 per cent over 2011), two-thirds of that growth will be at 65+ years.
- 2. **Age structural transitions**. The number of New Zealanders aged 65+ years will grow at an accelerating annual rate until the late 2020s, following which the annual increment will begin to reduce. At the other end of the age spectrum, New Zealand is facing a decline of some 20,000 school-leavers over the next five years, and a further 8,000 the following five years, the legacy of falling birth rates during the 1990s. Around 2021, school-leaver numbers will again surge, as a recently born baby blip reaches those ages. In the interim, this extended cohort will work its way through New Zealand's schooling system, generating waves and troughs as it passes through each age group.
- 3. Workforce ageing. These demographic trends are also causing New Zealand's workforce to age. The prime working age population aged 15-64 vears has just peaked at 66 per cent of the population and is projected to shrink to 60 per cent by 2031 and 58 per cent by 2061. The ratio of those at labour market entry age (15-24 years) to those in the retirement zone (55+ years) has fallen from ten per ten in the 1970s to six per ten todav. and is projected to decline to four per ten by 2031. The trend is equally evident in the employed workforce, which by 2006 had only nine people at entry age (15-24 years) for every ten in the retirement zone (55+ years), down from 16 per ten in 1996. Notably, this is despite a trebling of labour force participation at 65+ years across the period 1986-2011. In 2011 New Zealanders recorded the second highest employment rates in the OECD at 55-64 years and 4th highest at 65-69 years. The declining labour force entry:exit ratios are particularly pronounced in key industries. In 2006, New Zealand's largest industry at 3-digit level (School Education) had just two people at entry age for every ten in the retirement zone, down from six per ten in 1996; and the second-largest industry, Government Administration, just four per ten, down from eight per ten in 1996.

## **Regional Diversity:**

- 4. **Geographic mal-distribution of the population**. While Auckland currently accounts for one-third of New Zealand's population, the region's share of annual growth is projected to increase from just over 50 per cent in 2011 to two-thirds by 2031, taking Auckland's share of the population to 38 per cent. Of the remaining Regional Council areas, only Canterbury is projected to see an increase in population share, driven largely by the rebuild of Christchurch and related immigration. Other regions will also continue to grow, but at a decelerating rate, with Southland likely to be declining in size by 2031.
- 5. **Ageing-driven growth**. Between 2011 and 2031, the trends will see all growth in 56 (84 per cent) of New Zealand's 67 Territorial Authority areas (TAs) at 65+ years. In 33 TAs, that growth will offset decline in most other age groups, but in 23 TAs it will be insufficient to prevent overall decline. Only 17 TAs (25 per cent) are projected to see growth at 0-14 years, and 23 (34 per cent) at 15-39 years; in all other TAs, numbers at these ages are projected to decline. At Regional Council level, only Auckland is projected to see an increase in numbers aged less than 39 years.
- 6. **Diminishing role of natural increase**. Despite New Zealand's reputation as a country of high international migration, the primary driver of growth remains natural increase (the difference between births and deaths), and this is the case even for Auckland. However as population ageing progresses, natural increase will diminish, becoming negative in 16 TAs (23 per cent) by 2031 (compared with just one at present). In regions where there is a net migration loss of people of reproductive age and net gain of people at older ages, natural increase will decline quite rapidly. Only Selwyn and Auckland are expected to see a growth in natural increase across the period.
- 7. Increasing role of migration. Although regionally differing birth rates and life expectancy are involved, New Zealand's subnational diversity is primarily driven by differences in migration trends and patterns. Where net migration is negative, the loss is mostly concentrated at the key reproductive ages, 20-39 years; this removes both the young people and their reproductive potential, and accelerates structural ageing. Between 2011 and 2031, 33 TAs (49 per cent) are projected to experienced net migration loss. By contrast, net migration gains at retiree ages are projected to continue for many coastal sun-belt areas, such as Northland, the Bay of Plenty, Kapiti Coast and Marlborough. Gains at these ages add to the increased numbers deriving from longer life expectancy, and further increase the proportions at older ages. In some cases, such as Thames-Coromandel, the joint effects of migration loss at younger ages and gains at older ages will accelerate the shift to natural decline, at the same time as the population grows.
- 8. **Diverging median ages**. By comparison with the national median age of 36.8 years, this index presently ranges from 34.2 years in Auckland to 43.8 years in Marlborough (region), and will increase nationally to around 40 years by 2031, 37.5 years in Auckland and 50.6 years in Marlborough. The trends are even more marked at TA level, with the youngest median age both currently and in 2031 for Hamilton City (31.5 and 34.5 years respectively) and the oldest for Thames-Coromandel (48.4 and 54.7 years respectively)—both notably located in the one regional council area: Waikato.

9. **The subnational ending of population growth.** The different rates of natural increase, migration and population ageing across the country are ushering in the permanent end of growth for many regions—a trend which has to be understood in the broader context of global population ageing. Between 2011 and 2031, 23 TAs (34 per cent) are projected to experience absolute decline. This is a similar proportion to that for the period 1996-2011, but includes 5 'new' TAs that did not decline during that period.

## **Ethnic and Social Composition**

- 10. **Ethnic diversity**. New Zealand is rapidly transitioning from a predominantly European-origin population to a multi-ethnic society, although this trend differs markedly by region. In 1996, New Zealand's European-origin population accounted for 82 per cent of the population; by 2026 it is projected to account for 62 per cent, and for just half of all children (0-14 years), down from 77 per cent in 1996. Sub-nationally, 52 per cent of Auckland's growth 2011-2021 is projected to come from its Asian population, and 25 per cent from its Pacific population, compared with 25 and 15 per cent respectively elsewhere in New Zealand, while the European-origin population will account for just 15 per cent of Auckland's growth and 34 per cent elsewhere. The age structures of each population also differ markedly, with the median age of the European-origin population currently just on 40 years of age and that for Maori and Pacific Island populations just 23 and 22 years respectively. People of Asian origin fall somewhere between these extremes, with a median age of 29 years. These differences disproportionately expose each population to different life course 'risks', such as seeking education, beginning family formation, and entering the labour market for the younger populations. However they also present New Zealand with a unique opportunity as the older European-origin population disproportionately retires. Over the next two decades, young Maori and Pacific adults will together account for almost one-third of all labour market entrants, and young Asians will swell that to almost half.
- 11. **Family size and structure.** Declining birth rates and an increasing age at childbearing over the past half-century have seen New Zealand's average family size decline from four to two children. Between 1981 and 2006 the proportion of New Zealand women with three or more children fell from 29 to 19 per cent. By 2006, 44 per cent of women of reproductive age had no children, up from 39 per cent in 1981, and the proportion with just one child rose from 11 to 14 per cent. This means that in 2006, more than half of New Zealand women of reproductive age had on average less than half a child. At the same time, New Zealand's fertility rate remains one of the highest in the developed world, and is held up by a small increase in the proportion having two children, and by Maori fertility rates which are slightly higher and occur at somewhat younger ages than for non-Maori (peak ages 23 and 31 years respectively). Accompanying these trends, and contrary to popular opinion, teenage fertility is today less than half its 1970s levels, with less than 3 per cent of teenage girls having a child. New Zealand's household structure has changed as a result of these trends, with two-parent households declining (from 37 to 29 per cent), and couple-only, single-person and sole-parent households all increasing across the period 1986 to 2006.

12. **Role of life expectancy.** New Zealand's life expectancy at birth today falls around the middle of the range across OECD countries, and is increasing at the rate of around 1 year of life expectancy for every three years in time (slightly more for non-Maori males and Maori females, slightly less for Maori males and non-Maori females). The increase is especially notable at 70 years and above. As a result of these trends, the long-standing gap between Maori and total life expectancy is diminishing, but in 2005-07 remained greater than seven years, around half the gap of 1951. More people living longer also means more older people living alone, although slightly greater improvements in life expectancy for males than females between 2001 and 2006 appear to have slowed the rate of increase in that household type.

<sup>1</sup> All projections referred to are based on Statistics New Zealand (2012) medium case (50<sup>th</sup> percentile) assumptions. At national level these are: an international net migration gain of 12,000 per year from 2015 and then remaining constant; the Total Fertility Rate falling to 1.9 births per woman by 2036 and then remaining constant; and life expectancy at birth increasing by 2061 to 88.1 and 90.5 years for males and females respectively.

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