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Statistics New Zealand
TATAURANGA AOTEAROA

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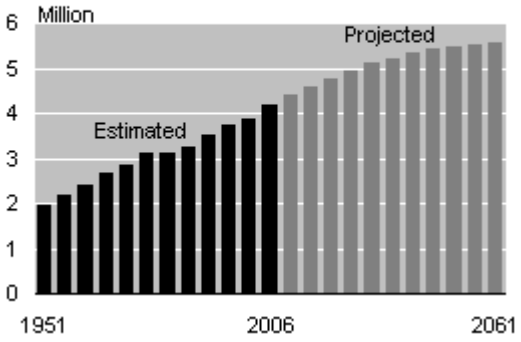
National Population Projections: 2006 (base) – 2061

Highlights

- New Zealand's population will reach five million by the late 2020s, according to the mid-range projection scenario (series 5).
- The population growth rate will slow steadily under all projection scenarios because of the narrowing gap between births and deaths.
- Deaths are projected to exceed births in the 2050s under series 5.
- The age structure of the population will continue to undergo gradual but significant changes resulting in more older people and further ageing of the population.
- Under all projection scenarios, the number of New Zealanders aged 65 years and over is projected to exceed one million by the late 2020s, compared with half a million in 2006.
- People aged 65 years and over are projected to outnumber those aged under 15 years in the mid-2020s.

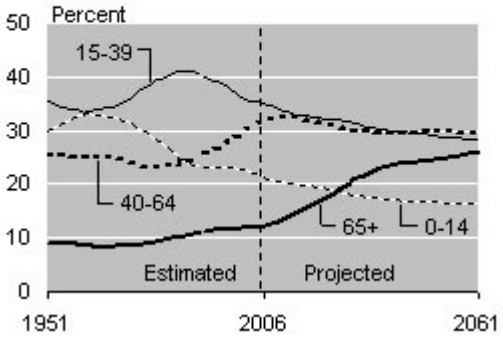
New Zealand Population

1951–2061, series 5



Age Distribution of Population

1951–2061, series 5



Geoff Bascand
Government Statistician

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There is a companion Media Release published – *National Population Projections: 2006 (base) – 2061*.

Commentary

Alternative projection series

Nine series of population projections have been produced by Statistics New Zealand using different combinations of fertility, mortality and migration assumptions (table 1). A further five series are presented in the Additional 'what if?' scenarios section and in table 4. More detailed projection results, including projections for individual years and projections by age and sex, are available from Table Builder on the Statistics New Zealand website.

Alternative projection assumptions

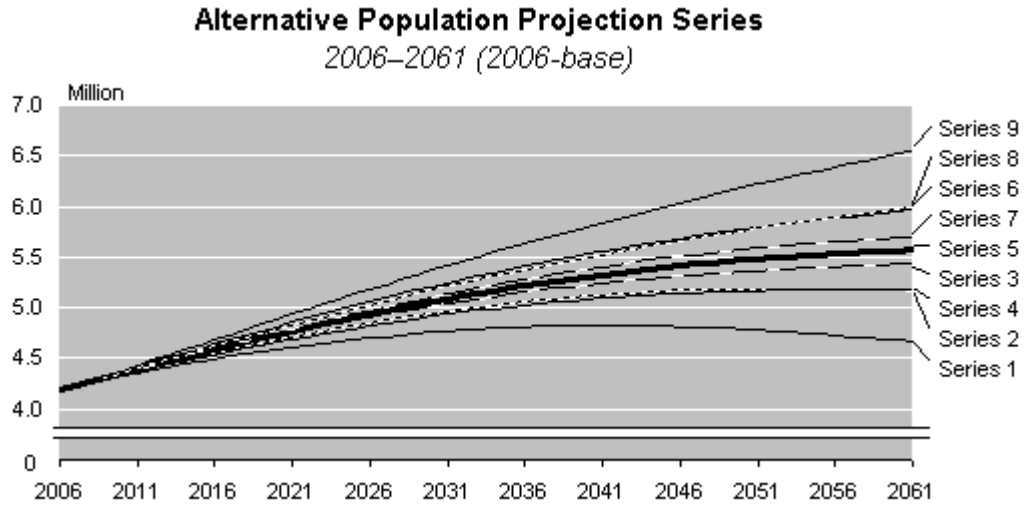
Projection series	**Fertility** (long-run total fertility rate)	**Mortality** (male and female life expectancy at birth in 2061)	**Migration** (long-run annual net migration)
1	Low (1.7)	High (82.0, 86.0)	Low (5,000)
2	Low (1.7)	Medium (84.5, 88.0)	Medium (10,000)
3	Medium (1.9)	High (82.0, 86.0)	Medium (10,000)
4	Medium (1.9)	Medium (84.5, 88.0)	Low (5,000)
5	Medium (1.9)	Medium (84.5, 88.0)	Medium (10,000)
6	Medium (1.9)	Medium (84.5, 88.0)	High (15,000)
7	Medium (1.9)	Low (87.0, 90.0)	Medium (10,000)
8	High (2.1)	Medium (84.5, 88.0)	Medium (10,000)
9	High (2.1)	Low (87.0, 90.0)	High (15,000)
Very high fertility	Very high (2.5)	Medium (84.5, 88.0)	Medium (10,000)
Very low mortality	Medium (1.9)	Very low (95.0, 95.0)	Medium (10,000)
No migration	Medium (1.9)	Medium (84.5, 88.0)	None (zero)
Cyclic migration	Medium (1.9)	Medium (84.5, 88.0)	Cyclic (10,000 average)
Very high migration	Medium (1.9)	Medium (84.5, 88.0)	Very high (25,000)

The projections are neither predictions nor forecasts. They provide an indication of possible future changes in the size, growth rate and age-sex structure of the population. While the assumptions are formulated from an assessment of short-term and long-term demographic trends, both in New Zealand and overseas, there is no certainty that any of the assumptions will be realised.

The population projections have as a base the estimated resident population of New Zealand at 30 June 2006. These are the first set of national population projections to use data from the 2006 Census of Population and Dwellings, and cover the period to 2061 at one-year intervals.

Among the projections, series 9 uses high population growth assumptions and yields the highest population throughout the projection period. Series 9 projects the population to reach 6.55 million in 2061, an increase of 2.36 million or 56 percent from 2006. Series 9 assumes high fertility (a long-run average of 2.1 births per woman), low mortality (life expectancy at birth increasing to 87.0 years for males and 90.0 years for females by 2061), and high migration (long-run annual net migration of 15,000 people).

In contrast, series 1 uses low population growth assumptions and projects the lowest population throughout the projection period. Series 1 projects the population to peak at 4.83 million in 2041, before deaths begin to outnumber the combined effect of births and net migration and the population decreases to 4.66 million in 2061. Series 1 assumes low fertility (a long-run average of 1.7 births per woman), high mortality (life expectancy at birth increasing to 82.0 years for males and 86.0 years for females by 2061), and low migration (long-run annual net migration of 5,000 people). Series 2 (low fertility) and series 4 (low migration) also project the population to start declining before 2061.



Which projection series should I use?

Nine projection series have been produced to illustrate a range of possible scenarios. Users can make their own judgement as to which projection series is/are most suitable for their purposes. However, at the time of release, Statistics New Zealand considers mid-range projection series 5 to be the best indication of future population changes. Series 5 assumes:

1. Fertility: the total fertility rate will decrease to 1.9 births per woman by 2026 and then remain constant.
2. Mortality: life expectancy at birth will increase to 84.5 years for males and 88.0 years for females by 2061.
3. Migration: a long-run annual net migration gain of 10,000 people from 2010.

What has changed from the 2004-base projections?

The base population at 30 June 2006 is 4.18 million. This is 58,000 or 1.4 percent higher than the 4.13 million projected at 30 June 2006 from the 2004-base national population projections (series 5), mainly because observed net migration was higher than had been assumed. Net migration between 30 June 2001 and 2006 was an estimated 161,000, based on estimated population change less natural increase (births minus deaths), compared with the medium migration variant of 104,000 in the 2004-base projections.

Although observed annual net migration averaged over 30,000 during 2002–2006, net migration was about 10,000 in the year ended June 2007 and an average level of 10,000 is considered to reflect future long-run annual net migration trends. The low, medium and high long-run annual net migration levels of 5,000, 10,000 and 15,000, respectively, are the same as used in the 2004 -base projections. In the short-run, the medium migration variant of the 2006-base projections assumes a net migration gain of 46,000 in the five years to 30 June 2011. By comparison, the corresponding variant of the 2004-base projections assumed a net migration gain of 38,000 in the five years to 30 June 2011.

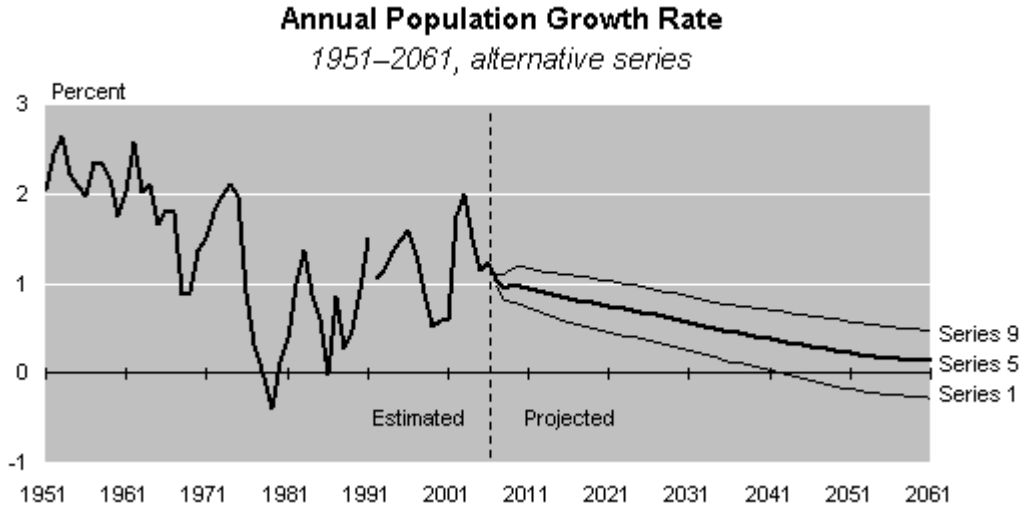
The 2006-base fertility assumptions are higher than assumed for the 2004-base projections. The medium fertility variant of the 2006-base projections assumes that the total fertility rate will average 2.09 births per woman during 2007–2011, 2.00 during 2012–2016, 1.94 during 2017–2021, 1.91 during 2022–2026, and 1.90 thereafter. This is an increase in both the short-run and long-run compared with the 2004-base medium fertility variant, which assumed an average total fertility rate of 1.95 births per woman during 2007–2011, 1.88 during 2012–2016, and 1.85 thereafter. The new assumptions incorporate the recent rise in the total fertility rate, from about 1.9 in the year ended June 2002, to 2.0 in the year ended June 2006, and to 2.1 in the year ended June 2007.

The 2006-base mortality assumptions translate to slightly higher life expectancies for most of the projection period than assumed for the 2004-base projections, but give the same range between the low and high variants at the end of the projection period: 5 years for males and 4 years for females. The low, medium and high mortality variants of the 2006-base projections assume that male life expectancy at birth will reach 87.0, 84.5 and 82.0 years, respectively, in 2061. The corresponding assumptions for females are 90.0, 88.0 and 86.0 years, respectively.

The combined effect of these changes is that the New Zealand population is expected to reach 5.09 million in 2031 and 5.57 million in 2061 (series 5, 2006-base projections). The five million population mark is projected to be reached in 2028. By comparison, under series 5 of the 2004-base projections the New Zealand population was not expected to reach five million until 2041.

Population growth

The New Zealand population grew at an average rate of 1.4 percent a year between 1951 and 2006. Under all projection series, the population growth rate will slow. In series 5, the growth rate drops from 1.0 percent in 2007, to 0.6 percent in 2031, to 0.1 percent in 2061.



Note: In the above and following graphs, a break in data between 1990 and 1991 denotes a change from the de facto population concept to the resident population concept.

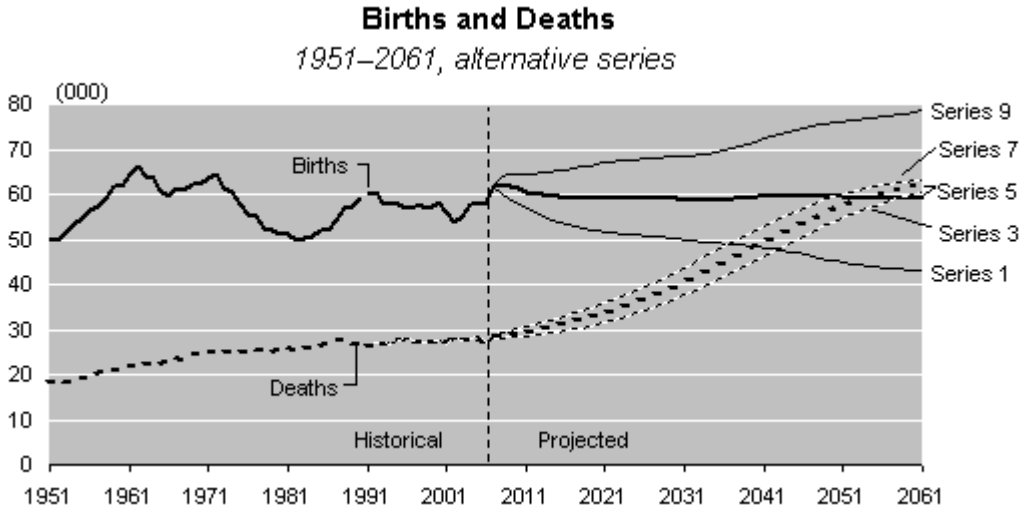
Births and deaths

The slowing of population growth during the projection period is driven by the narrowing gap between births and deaths. Under projection series 5, annual births are expected to initially increase from 58,000 in 2006 to 62,000 in 2007–2009, and then average 59,000 for the remainder of the projection period. This trend reflects the assumed decrease in total fertility rates, although a small increase in the number of women in the childbearing ages is projected between 2006 and 2061.

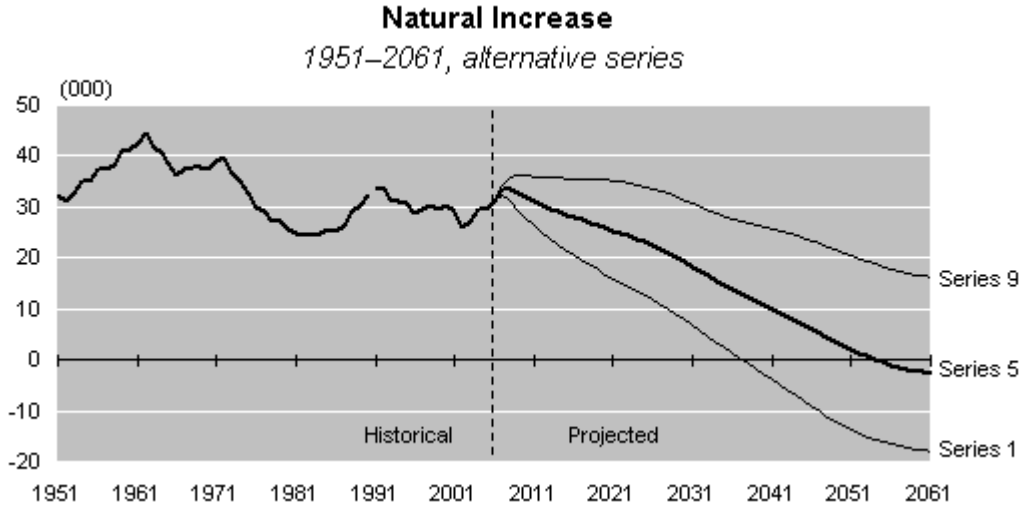
In contrast, deaths are expected to increase steadily from 27,000 in 2006 to 45,000 in 2036 and to 62,000 in 2061, despite assumed lower death rates and increasing life expectancy. This is because of the large number of people born during the 1950s to early 1970s reaching the older ages. About 73 percent of male deaths and 82 percent of female deaths currently occur at ages 65 years and over.

Under the low fertility projection (series 2), which assumes a long-run average of 1.7 births per woman, births are expected to fall to 47,000 a year in 2061. If low fertility is also combined with low migration and high mortality (series 1), births are projected to fall to 43,000 a year. In contrast, under the high fertility projection (series 8), which assumes long-run replacement fertility of 2.1 births per woman, births increase to 72,000 in 2061. Series 9, which assumes high migration and low mortality as well as high fertility, projects that births will increase to 78,000 in 2061.

There is much less variation in the number of deaths between projection series, ranging from 60,000 deaths in 2061 under the low migration projection (series 4) to 64,000 under the high migration projection (series 6). For most of the 55-year projection period, however, series 3 (high mortality) and series 7 (low mortality) give the highest and lowest number of annual deaths, respectively. The wider range of projected births compared with deaths reflects that the trends in age-specific fertility rates are less certain than the trends in age-specific death rates. It also reflects that future births are affected by people born in the projection period who themselves have children during the projection period. In contrast, nearly all those who will die during the projection period are already alive at the beginning of the projection period.



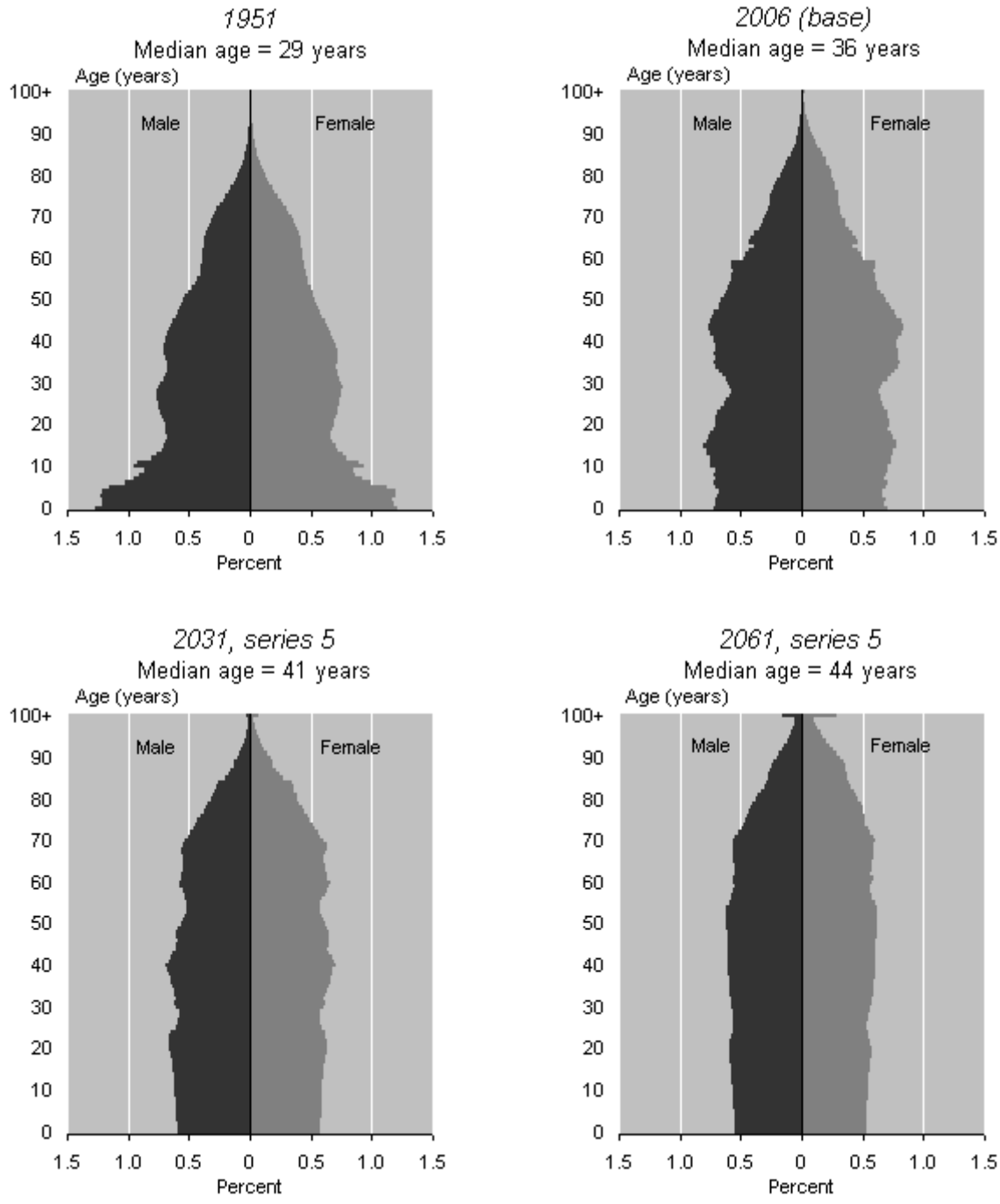
Under series 5, annual natural increase (births minus deaths) is projected to initially increase from 31,000 in 2006 to 33,000 in 2007–2009. Thereafter, natural increase is projected to decline significantly to 18,000 in 2031 and to just above zero in 2054. From 2055, deaths are expected to outnumber births by a growing margin. In 2061, series 5 projects 3,000 more deaths than births. Only in projection series that assume high fertility and/or high migration (series 6, 8 and 9) do births continue to outnumber deaths by 2061.



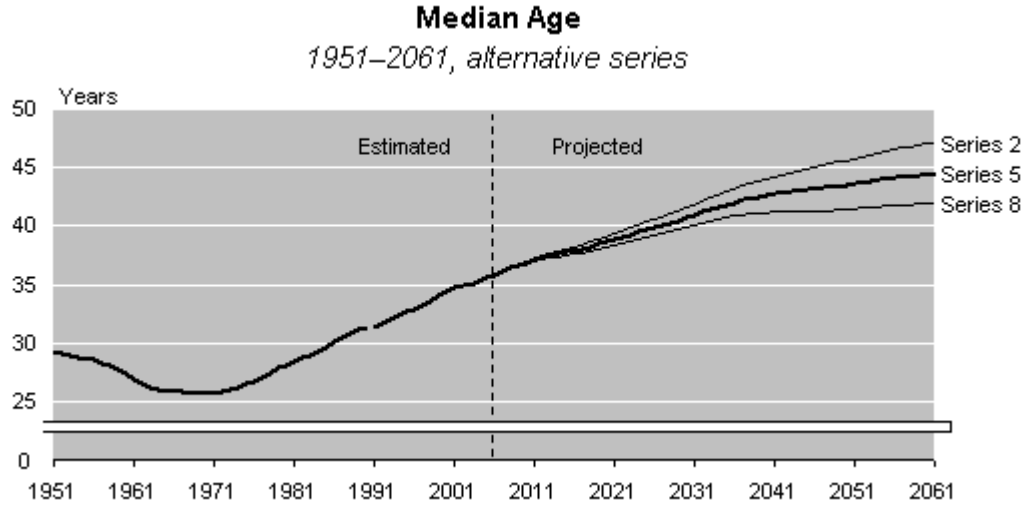
Ageing population

Regardless of which projection series is chosen, there will be significant changes in the age structure of the population. All series project more older people and further ageing of the population. The median age (half the population is older, and half younger, than this age) of New Zealand's population increased from 26 years in 1971 to 36 years in 2006. According to projection series 5, half of the population will be aged 40 years and older by 2027, and by 2061 half the population will be aged 44 years and older. This gradual ageing reflects the combined impact of sub-replacement fertility, increasing longevity, and the movement of the large number of people born during the 1950s to early 1970s into the older ages.

Population Age Pyramids



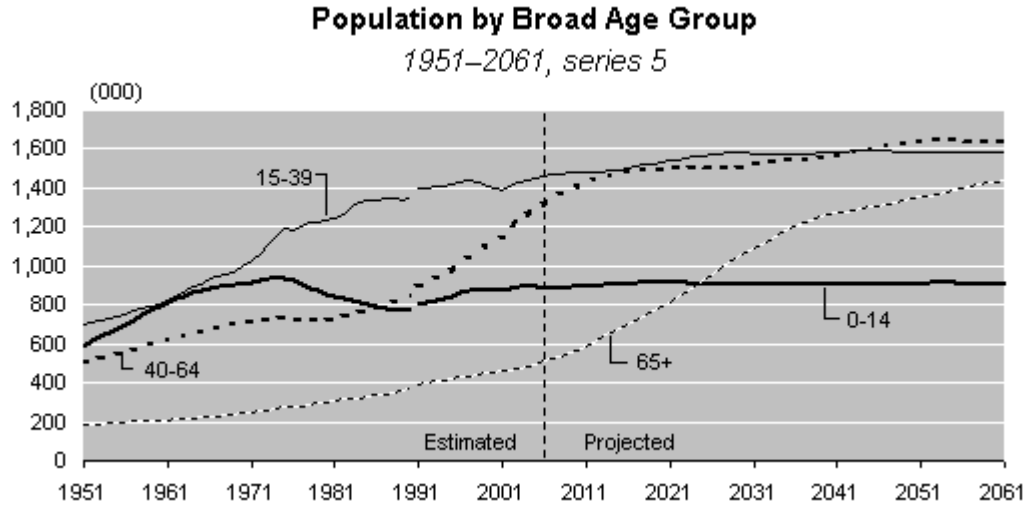
Higher migration levels are unlikely to significantly slow the ageing of the population. The median age of the population in 2061 is projected to be about 44 years assuming net migration of 15,000 a year (series 6) or 10,000 a year (series 5), and 45 years assuming net migration of 5,000 a year (series 4). Fertility has a much more significant impact on the age structure, with the lowest median age in 2061 (42 years) provided by the high fertility series 8, while the highest median age in 2061 (47 years) is provided by the low fertility series 2.



Children

The number of children (aged 0–14 years) peaked at 940,000 in 1974, then decreased steadily to 770,000 in 1989, before generally increasing to 890,000 in 2006. Under projection series 5, the number of children is expected to increase to 900,000 in 2013 and then remain relatively stable between 900,000 and 920,000 over the remainder of the projection period. The small projected fluctuations will reflect birth numbers in preceding years. By 2061, children will account for only 16 percent of the population compared with 21 percent in 2006 and about 33 percent during the early 1960s.

Fertility levels have the largest impact on the number of children. Series 1 projects the fewest children throughout the projection period, with a steady decline to 680,000 in 2061. In contrast, series 9 projects the most children throughout the projection period, with a steady increase to 1.18 million in 2061. Assuming medium mortality and migration, 740,000 children are projected in 2061 assuming low fertility (series 2), and 1.09 million are projected in 2061 assuming high fertility (series 8). In comparison, the range in the number of children given by the alternative migration assumptions is from 830,000 (series 4) to 980,000 (series 6). Differences in mortality assumptions have a negligible effect on the number of children.



Working-age population

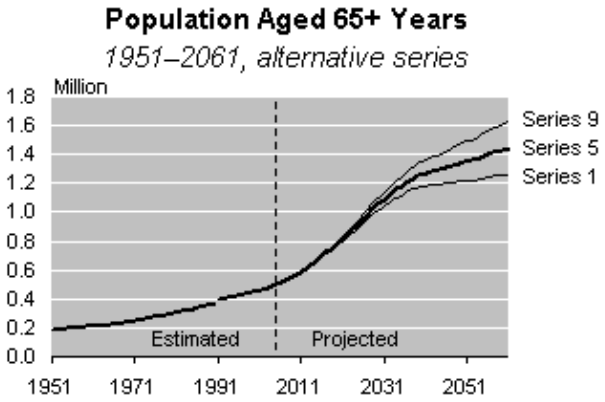
The working-age population (those aged 15–64 years) more than doubled from 1.20 million in 1951 to 2.78 million in 2006. Over the next 20 years, it is projected to grow by 290,000 to 3.08 million in 2026 (series 5). It will then increase further, but only by 150,000, to 3.22 million in 2061. The working-age population will then make up 58 percent of the total population, compared with 67 percent in 2006.

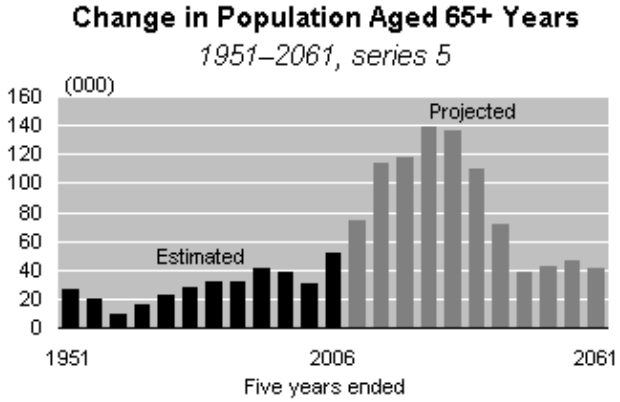
Most of the increase in the working-age population will be in the older half of the age bracket, and thus it will take on an older profile. The population aged 40–64 years has been increasing rapidly since the early 1980s as the baby boomers move into this age group. This will continue for the next decade, with the number of people in this age group expected to increase from 1.32 million in 2006 to 1.48 million in 2016 (series 5). Thereafter, growth will slow as the number entering the age group only slightly exceed those leaving it. In 2061, 1.64 million people (29 percent of the population) will be aged 40–64 years. The proportion was 32 percent in 2006, will peak at 33 percent in 2011–2013, and will vary between 29 and 30 percent after 2028.

The number of people aged 15–39 years is projected to increase from 1.46 million in 2006 to 1.58 million in 2027 (series 5). The population will then fluctuate in a narrow range – 1.57 to 1.60 million – for the remainder of the projection period. This age group accounted for about 41 percent of the population in the mid-1980s and 35 percent of the population in 2006, but is expected to account for only 31 percent in 2031 and 28 percent in 2061. The ratio of the 40–64 years age group to the 15–39 years age group is projected to rise from 0.90 in 2006 to 1.04 in the 2050s. The ratio was 0.57 in 1984.

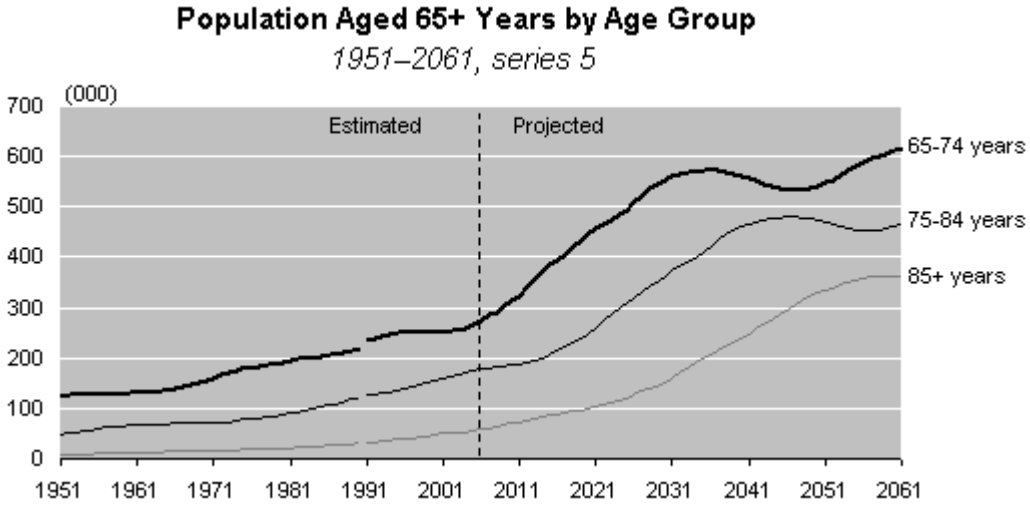
Older people

The number of people aged 65 years and over has doubled since 1972, to 510,000 in 2006. Projection series 5 indicates that there will be 1.44 million people aged 65 and over in 2061, 2.8 times the 2006 total. The largest growth will occur between 2011 and 2037 as the baby boomers move into this age group. After 2026, the 65 and over age group will make up over 20 percent of all New Zealanders, compared with 12 percent in 2006. From the late 2040s, this age group will comprise over 25 percent of the population.





Within the 65 and over age group, the number of people aged 85 and over is expected to increase from 58,000 in 2006 to about 360,000 in 2061 (series 5). They will make up one in four of the 65 and over population, compared with one in nine in 2006. The number of people aged 85 and over is projected to increase substantially even under the high mortality projection (series 3), to 290,000 in 2061. Under the low mortality projection (series 7), there would be 440,000 people aged 85 and over in 2061.



Although more males are born than females (at a ratio of about 105 to 100), the higher mortality of males at all ages means that females outnumber males by a growing margin in the older ages. In 2006, there were 81 males for every 100 females in the 65 and over age group. At ages 85 and over there were only 45 males for every 100 females. The projections assume some catch-up in male life expectancy relative to that of females. By 2061 there will be 85 males for every 100 females aged 65 and over. For ages 85 and over, the sex ratio is expected to increase to 68 per 100 by 2061.

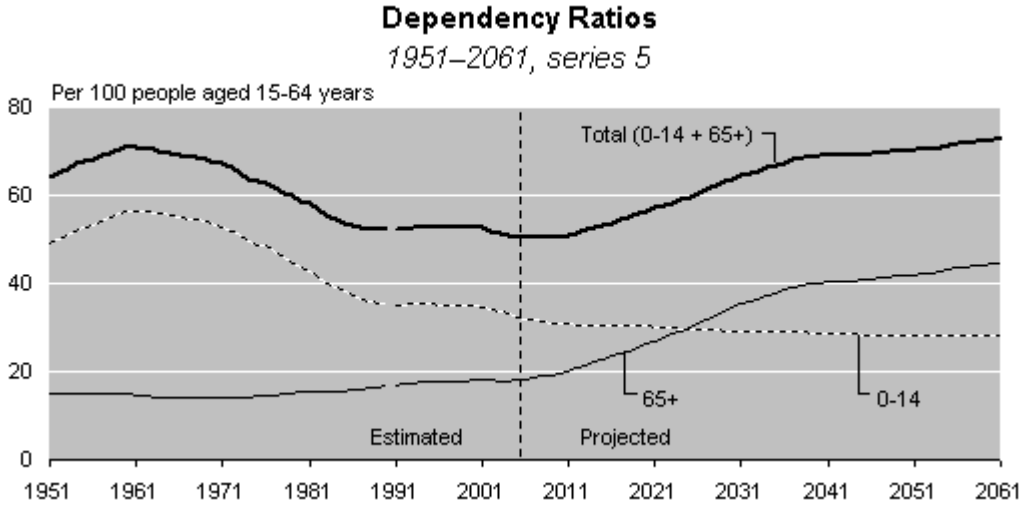
Dependency ratios

Dependency ratios relate the number of people in the 'dependent' age groups (defined here as 0–14 years and 65 years and over) to the 'working-age' population (15–64 years). They are crude measures because they do not allow for the fact that some people in the working-age population may not be in the workforce, while some people aged 65 and over may be in the workforce. Furthermore, in the case of those aged 65 and over, the term 'dependency' need not imply financial or economic dependency. The life expectancy, physical well-being and labour force status of those aged 65 and over continues to change over time.

The 0–14 and 65+ dependency ratios are projected to follow contrasting paths over the projection period. The 0–14 dependency ratio (the number of people aged 0–14 years per 100 people aged 15–64 years) decreased from a peak of 57 per 100 in 1961 to 32 in 2006. This downward trend is expected to continue, with the ratio dropping to 30 in 2021 and 28 in 2061 (series 5).

The 65+ dependency ratio (the number of people aged 65 years and over per 100 people aged 15–64 years) increased from 15 per 100 in 1951 to 18 in 2006. It is expected to increase substantially after 2011 to reach 40 per 100 in 2039, and then increase at a slower rate to 45 in 2061 (series 5). This means that for every person aged 65 and over, there will be 2.2 people in the working-age group in 2061, compared with 5.4 people in 2006. The 65+ dependency ratio is projected to overtake the 0–14 dependency ratio in the mid-2020s.

The total dependency ratio (sum of the 0–14 and 65+ dependency ratios) is now at its lowest level since the mid-1930s. It is projected to increase from 50 per 100 in 2006 to 69 in the early 2040s and reach 73 in 2061 (series 5). All projection series show a similar increase in the total dependency ratio, ranging from 69 (series 3) to 76 (series 7). Beyond 2050, the 65+ dependency ratio will contribute about 60 percent of the total dependency ratio. A total dependency ratio of about 70 per 100 was also experienced around 1960, but then the 0–14 dependency ratio contributed about 80 percent of the total dependency ratio.



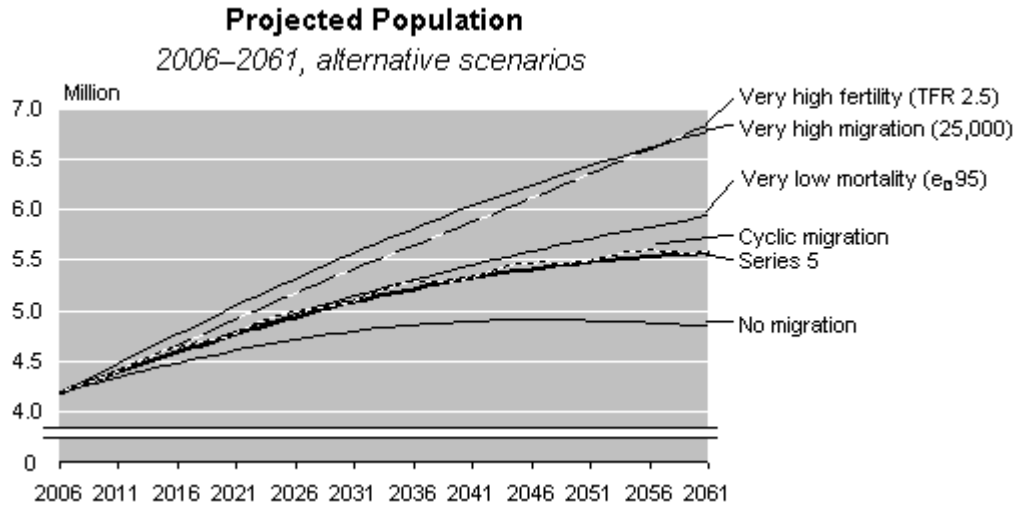
Additional 'what if?' scenarios

Projection series 1–9 cover selected combinations of a plausible, but not exhaustive, range of assumptions for each component (mortality, fertility, migration). Five additional projection series have been derived to explore other scenarios of interest.

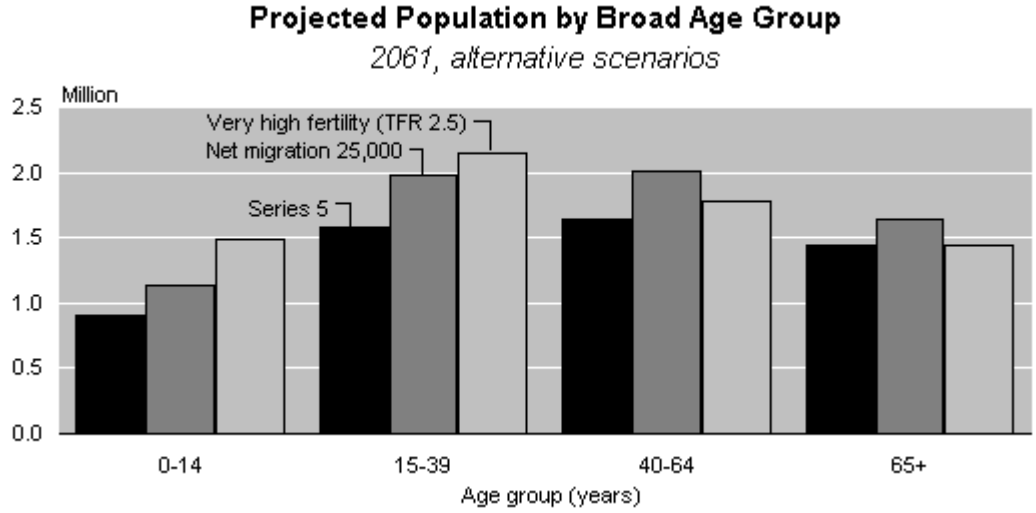
Under projection series 5, the population increases by about 1.4 million people between 2006 and 2061 to 5.6 million. Population growth would be higher if either fertility or migration levels were assumed to be higher. The population would reach 6.8 million in 2061 with either a total fertility rate of 2.5 births per woman (very high fertility series) or annual net migration of 25,000 (very high migration series). While these scenarios produce a similar population size, the higher fertility assumption would produce a much younger age structure.

With a total fertility rate of 2.5 births per woman, births would continue to outnumber deaths by 35,000–42,000 throughout the projection period. There would be 102,000 births in 2061 under this scenario, compared with 59,000 under projection series 5. The increased number of births would see the number of children increase by 67 percent over the projection period, compared with 2 percent under series 5. Population ageing would continue but at a much slower rate, with the median age increasing from 36 years in 2006 to 38 years in 2061. By comparison, series 5 projects the median age to increase to 44 years in 2061.

Net migration of 25,000 a year would also slow the ageing of the population, but much less than the very high fertility level. The median age is projected to increase to 43 years in 2061 with very high net migration – just one year below that for series 5. Because of the higher population, there would be 26 percent more births and 10 percent more deaths in 2061 than projected under series 5. By 2061, births would exceed deaths by 7,000, compared with a natural decrease of 3,000 in series 5.



The nine official projection series all assume that the gain in life expectancy will slow over the projection period. If gains seen over the last three decades continue so that life expectancy at birth reaches 95.0 years for males and females in 2061, the population would reach 5.9 million in 2051. This is 370,000 more than under series 5. Almost 340,000 of this difference would be in the 65 years and over age group, which would more than triple in size to 1.78 million in 2061. The 85 years and over age group would increase to over 610,000 in 2061 – about 250,000 more than under projection series 5. With more people in the older ages, the population would age even faster than projected by series 5 – the median age of the population reaching 47 years in 2061. The 65+ dependency ratio would also be higher, reaching 55 per 100 in 2061 compared with 45 per 100 under series 5. Deaths would total 48,000 in 2061 compared with 62,000 under series 5.



An interesting projection series for comparative purposes is to assume no migration. This shows the effect on the population solely from births and deaths. With no migration, the population would peak at 4.9 million in the late 2040s then decline as deaths outnumber births. The population would decrease to 4.8 million in 2061, still 660,000 higher than the 2006 population. Compared with series 5, the population would be lower for all three broad age groups (0–14 years, 15–64 years and 65 years and over) and as a result the median age and 65+ dependency ratio would be only slightly higher.

In the long-run, the low, medium and high migration assumptions assume a constant migration level. However, actual net migration tends to fluctuate significantly from year to year. A projection series was constructed assuming cyclic migration levels, fluctuating between -10,000 and +30,000 on a 10-year cycle. This gives exactly the same net migration gain over the projection period as series 5. The resulting population size in 2061 is little different under the cyclic migration series than under projection series 5, being just 16,000 higher. However, during the projection period the population varies between 5,000 below and 71,000 above the series 5 population in the same year, because of the annual differences in net migration. Other characteristics of the population (eg age distribution, dependency ratios, births, deaths) are very similar between the two series. A constant level of migration in the long-run is therefore a sufficient assumption for most purposes.

For technical information contact:
Kim Dunstan or Rino Adair
Christchurch 03 964 8700
Email: demography@stats.govt.nz

Technical notes

Latest projections

This release contains 2006-base projections of the population usually living in New Zealand. The projections supersede the 2004-base series released in December 2004. The new projections cover the period 2007–2061 at one-year intervals. More detailed projection results, including projections for individual years and projections by age and sex, are available from Table Builder on the Statistics New Zealand website. Special projections can also be produced for clients using their own assumptions. For more information and quotes, email: demography@stats.govt.nz or phone toll-free 0508 525 525.

Base population

These projections have as a base the estimated resident population of New Zealand at 30 June 2006. This population (4.185 million) was derived from the census usually resident population count (4.028 million) at 7 March 2006 with adjustments for:

1. net census undercount (+80,000)
2. residents temporarily overseas on census night (+64,000)
3. births, deaths and net migration between census night (7 March 2006) and 30 June 2006 (+9,000)
4. reconciliation with demographic estimates at ages 0–4 years (+3,000).

For information about the base population, refer to Information About the Population Estimates on the Statistics New Zealand website (www.stats.govt.nz).

Alternative series

Nine alternative series have been produced using different combinations of fertility, mortality and migration assumptions. At the time of release, projection series 5 is considered the most suitable for assessing future population changes. The other projection series allow users to assess the impact on population size and structure resulting from changes in the assumptions for each of the components of population change. Series 4, 5 and 6 can be used for assessing the effect of the different migration assumptions; series 3, 5 and 7 allow for a comparative mortality analysis; and series 2, 5 and 8 allow for a comparative fertility analysis.

Series 1 and 9 give the lowest and highest projected population, respectively, based on the adopted assumptions. Series 1 uses low fertility, high mortality and low net migration. Series 9 uses high fertility, low mortality and high net migration. Five additional series have also been produced to illustrate how the population will change if certain demographic events were to occur:

1. Very high fertility. The total fertility rate increases from 1.99 births per woman in 2006 to 2.27 in 2011, 2.39 in 2016, 2.47 in 2021, 2.50 in 2026, and then remains constant.
2. Very low mortality. Life expectancy at birth increases at a similar rate as in the 1975–1977 to 2005–2007 period, by 0.31 and 0.23 years of life per year for males and females, respectively, to reach 95 years of life for both males and females in 2061.
3. No migration. No external migration at any age throughout the projection period (ie a 'closed' population).
4. Cyclic migration. Annual net migration fluctuates between -10,000 and 30,000 over a 10-year cycle, with an average of 10,000.
5. Very high migration. Annual net migration of 25,000 throughout the projection period.

Method

The cohort component method was used to derive the population projections. By this method, the base population is projected forward by calculating the effects of deaths and migration within each age-sex group according to specified mortality and migration assumptions. New birth cohorts are generated by applying specified fertility assumptions to the female population of childbearing age.

Projection assumptions

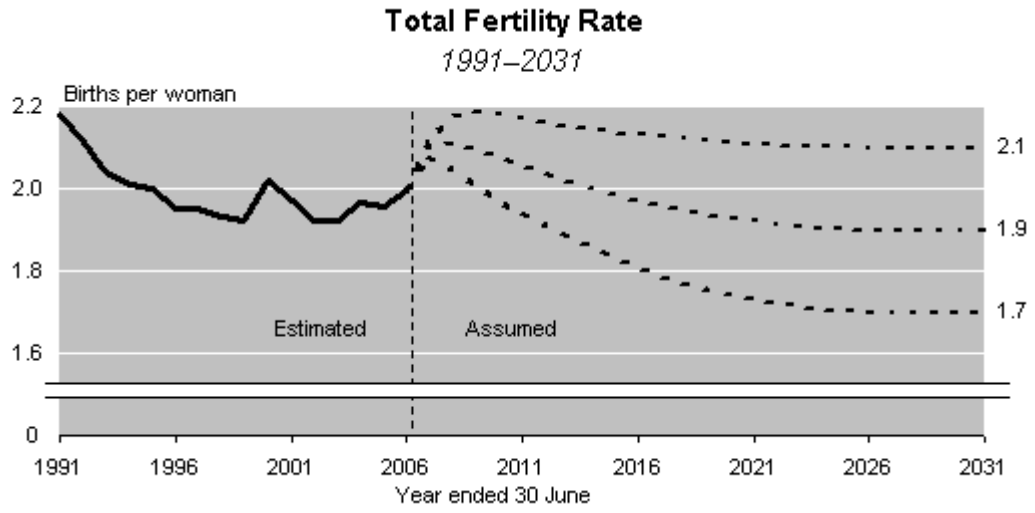
Projection assumptions are formulated after analysis of short-term and long-term historical trends, recent trends and patterns observed in other countries, government policy, and any other relevant information.

Fertility

There are three alternative fertility variants – designated low, medium and high – which assume that fertility rates will vary until the year 2026 when the total fertility rate will reach 1.70, 1.90 and 2.10 births per woman, respectively. After 2026, fertility rates are assumed to stay constant. The base total fertility rate in 2006 was 1.99 births per woman (based on estimated births by date of occurrence).

The medium fertility variant assumes fertility rates of women aged under 32 years will decline between 2006 and 2026, while rates for women aged 32 years and over will increase. By comparison, the low fertility variant assumes fertility rates will decrease between 2006 and 2026 for most ages. The high fertility variant assumes that fertility rates will drop between 2006 and 2026 for women aged under 31 years and increase for women aged 31 years and over.

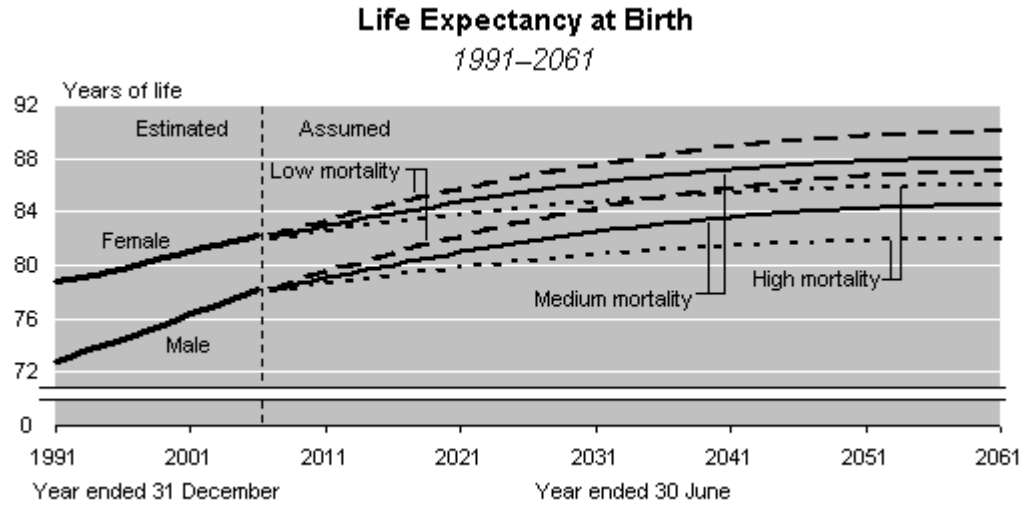
A sex ratio at birth of 105.5 males per 100 females is assumed, based on the historical annual average.



Mortality

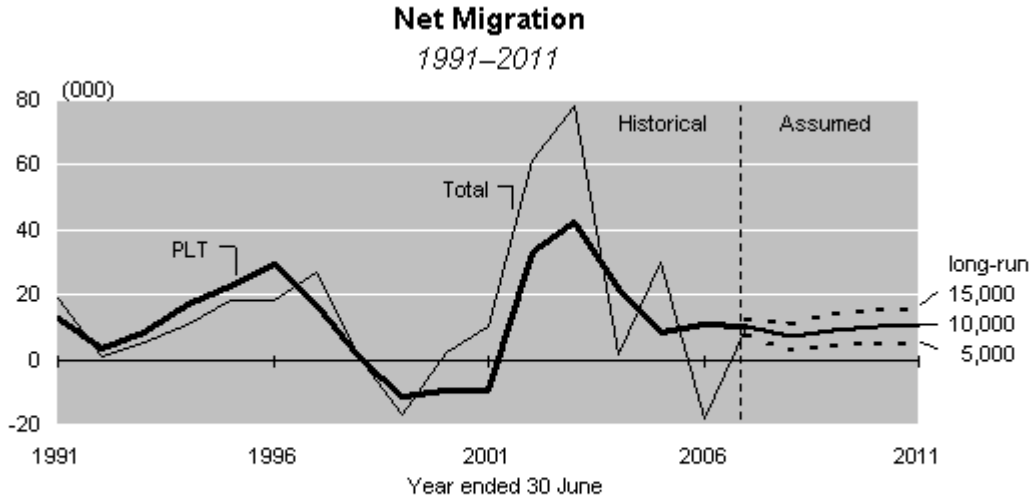
There are three alternative mortality variants – designated low, medium and high – which assume that mortality rates will continue to drop so that life expectancy at birth will increase to 87.0, 84.5 and 82.0 years for males, respectively, by 2061. The corresponding life expectancies for females in 2061 will be 90.0, 88.0 and 86.0 years. The base life expectancy at birth in 2005–2007 was 78.2 years for males and 82.2 years for females.

Mortality rates are assumed to decrease at the same rate at all ages. Between 2006 and 2061, male mortality rates are assumed to decrease by about 55, 44 and 29 percent for the low, medium and high mortality variants, respectively. By comparison, female mortality rates are assumed to decrease by about 53, 44 and 31 percent for the low, medium and high mortality variants, respectively.



Migration

There are three alternative migration variants – designated low, medium and high – which assume long-run annual net migration levels of 5,000, 10,000 and 15,000, respectively. Short-run migration levels converging to the long-run levels are assumed for 2007–2009. These short-run levels are based on an analysis of immigration permits, residence applications and approvals, overseas student numbers, and arrivals and departures analysed by characteristics such as citizenship, country of last/next permanent residence and age.



Note: PLT refers to permanent and long-term (12 months or more) migration. Total includes the short-term (less than 12 months) movement of overseas and New Zealand residents, as well as permanent and long-term migration.

Consistent with historical and recent trends, the age-sex patterns of net migration assume the main net outflow at ages 21–25 years, mainly due to young New Zealanders embarking on overseas travel and the departure of students from overseas after studying in New Zealand. Net inflows are assumed for most other ages, with the highest net inflows at 15–19 and 27–38 years.

Nature of projections

Demographic projections are designed to meet both short-term and long-term planning needs, but are not designed to be exact forecasts or to project specific annual variation. These projections are based on assumptions made about future fertility, mortality and migration patterns of the population. Although the assumptions are carefully formulated to represent future trends, they are subject to uncertainty. Therefore, the projections should be used as guidelines and an indication of the overall trend, rather than as exact forecasts.

The projections do not take into account non-demographic factors (eg war, catastrophes, major government and business decisions) which may invalidate the projections. Demographic trends are monitored regularly and, when it is necessary, the projections are revised to reflect new trends and to maintain their relevance and usefulness.

For more information about the projections, refer to Information About the Demographic Projections on the Statistics New Zealand website (www.stats.govt.nz).

Definitions

A baby boomer is usually someone born in the years 1946–1965, although the definition of the baby boom period varies between sources and between countries.

The de facto population concept is a statistical basis for a population in terms of those present in a given area at a given time. The census night population count is a census measure of the de facto population concept, and the estimated de facto population is a demographic measure of the de facto population concept.

The estimated resident population of New Zealand is an estimate of all people who usually live in New Zealand at a given date. It includes all residents present in New Zealand and counted by the census (census usually resident population count), residents who are temporarily overseas (who are not included in the census), and an adjustment for residents missed or counted more than once by the census (net census undercount). Visitors from overseas are excluded.

Life expectancy (e_x) is the average length of life remaining at a given age. As derived from a period life table, it assumes that a person experiences the age-specific mortality rates of a given period from the given age onwards. It represents the average longevity of the whole population and does not necessarily reflect the longevity of an individual.

Replacement fertility generally refers to a total fertility rate of 2.1 children per woman, which equates to the average number of children each woman is required to have for a population to replace itself in the long term, without migration. The rate allows for the sex ratio at birth (roughly 105 males born for every 100 females) and for some mortality of females between birth and childbearing.

The resident population concept is a statistical basis for a population in terms of those who usually live in a given area at a given time. The census usually resident population count is a census measure of the resident population concept, and the estimated resident population is a demographic measure of the resident population concept. In terms of vital statistics, the resident population concept refers to events that relate to residents of New Zealand only.

The total fertility rate is the average number of live births that a woman would have during her life if she experienced the age-specific fertility rates of a given period (usually a year).

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Tables

The following tables can be downloaded from the Statistics New Zealand website in Excel 97 format. If you do not have access to Excel 97 or higher, you may use the Excel file viewer to view, print and export the contents of the file.

List of tables

1. Projected population of New Zealand, 1991–2061 (2006-base)
2. Projected components of population change, 1996–2061 (2006-base)
3. Projected population by age group, 1991–2061 (2006-base)
4. Summary characteristics of alternative scenarios, 2006–2061 (2006-base)