National Family and Household Projections: 2006(base)–2031 update

Highlights

The following highlights are based on series 5B:

- The number of families is projected to reach 1.46 million by 2031, an increase of 288,000 (an average of 0.9 percent a year) from an estimated 1.17 million families at 30 June 2006.
- Most of the growth in families will be in couple-without-children families, which are projected to overtake two-parent families to become the most common family type by 2011.
- The number of households is projected to reach 2.09 million by 2031, an increase of 536,000 (an average of 1.2 percent a year) from an estimated 1.55 million households at 30 June 2006.
- One-person households are projected to increase by an average of 2.0 percent a year, from 363,000 in 2006 to 602,000 in 2031.
- The average size of households will decrease to 2.4 people by 2031, from 2.6 people in 2006.
- The numbers of families and households will grow faster than the population, which is projected to increase by an average of 0.8 percent a year between 2006 and 2031.

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Commentary

Background

This release contains updated 2006-base family and household projections for New Zealand. These supersede the 2006-base national family and household projections released in December 2008. The projections have as a base the estimated resident population, estimated families, and estimated households at 30 June 2006, and cover the period to 2031 at one-year intervals. These projections are neither predictions nor forecasts. They provide an indication of possible future changes in the number and composition of families and households.

A family, as defined here, consists of a couple, with or without child(ren), or one parent with child(ren), usually living together in a household. Couples include opposite-sex and same-sex couples. A household is defined as one person usually living alone, or two or more people usually living together and sharing facilities (for example, eating facilities, cooking facilities, bathroom and toilet facilities, a living area) in a private dwelling.

Detailed projection results, with projections for individual years are freely available from Infoshare on the Statistics NZ website (www.stats.govt.nz), or on request email demography@stats.govt.nz. Updated subnational family and household projections for regional council and territorial authority areas will be released on 13 December 2010.

Alternative projection series

Six alternative series have been produced from combinations of three population series (series 1, 5, and 9) and two variants of living arrangement type rates (A and B). Series 1, 5, and 9 of the 2009-base national population projections released in October 2009 are used. Series 1 assumes low fertility, high mortality, and low migration; series 5 assumes medium fertility, medium mortality, and medium migration; and series 9 assumes high fertility, low mortality, and high migration.

The two variants of living arrangement type rates are:

A. Rates will remain constant at 2006 levels.

B. Rates will change linearly between 2006 and 2031, based on an assessment of observed trends between 1986 and 2006 and likely future trends, by sex and single-year of age.

Variant B is the preferred variant, because it has been formulated to produce demographically plausible results by assessing both historical trends and likely future trends. For comparison, variant A is formulated solely on the basis of historical rates.

Each family and household projection series is denoted by the population projection series and variant of living arrangement type rates. For example, series 5B denotes that variant 'B' living arrangement type rates have been applied to population projection series 5. Further details of the assumptions are contained in the Technical notes.
Which projection series should I use?

The six alternative 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 projection series 5B the most suitable for assessing future family and household changes. The following analysis is based on series 5B unless otherwise stated.

<table>
<thead>
<tr>
<th>Projection series</th>
<th>Fertility</th>
<th>Mortality</th>
<th>Migration</th>
<th>Living arrangement type variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>A</td>
</tr>
<tr>
<td>1B</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>B</td>
</tr>
<tr>
<td>5A</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>A</td>
</tr>
<tr>
<td>5B</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>B</td>
</tr>
<tr>
<td>9A</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>A</td>
</tr>
<tr>
<td>9B</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>B</td>
</tr>
</tbody>
</table>

What has changed from the previous 2006-base projections?

National family and household projections are updated every 2–3 years. These national family and household projections have been updated to incorporate the latest demographic information, notably the 2009-base national population projections (released 27 October 2009).

Compared with the previous 2006-base national population projections (released 24 October 2007), mid-range series 5 of the 2009-base projections assumes higher fertility, higher mortality, and higher net migration in the short term. The projection assumptions for the national family and household projections incorporate these changes. The combined effect of these changes, with updated living arrangement type rates, is that under series 5B there will be 1.46 million families in 2031 (from the updated 2006-base projections) compared with 1.44 million families in the previous 2006-base projections. The number of households remains similar, at 2.09 million in 2031 under series 5B.

Families

Under series 5B, the number of families is projected to increase by 288,000 (an average of 0.9 percent a year) between 2006 and 2031, from 1.17 million to 1.46 million. Because of the changing age structure of the population, this will exceed the population growth, which will average 0.8 percent a year over the same period. Like population growth, growth in the number of families is expected to slow over the projection period – from an average of 14,000 a year in 2007–11 to 9,000 a year in 2027–31.

Series 9A, which assumes high fertility, low mortality, high migration, and living arrangement type rates constant at 2006 levels, projects the highest number of families in 2031, with an increase of 358,000 (an average of 1.1 percent a year) to 1.53 million in 2031. The smallest increase in the number of families is given by series 1B, with an increase of 237,000 (an average of 0.7 percent a year) to 1.40 million in 2031. This series assumes low fertility, high mortality, low migration, and living arrangement type rates changing linearly between 2006 and 2031, based on the observed trends between 1986 and 2006 and likely future trends.
Family type

Couple-without-children families will account for the majority of growth in the number of families. There are projected to be 253,000 more couple-without-children families in 2031 than in 2006, increasing from 468,000 to 721,000 (at an average of 1.7 percent a year). Couple-without-children families include (a) couples who will never have children, (b) couples who will have children in the future, and (c) couples whose children have left the parental home. Growth in (c) is expected to be the most significant, as the large number of people born during the 1950s to early 1970s reach the older ages. An increasing proportion of couples in (a) is also assumed to contribute to the growing number of couple-without-children families, but to a lesser extent.

The number of one-parent families is projected to increase by 48,000 (an average of 0.8 percent a year), from 219,000 in 2006 to 267,000 in 2031. This increase is because of population growth, changes in population age structure, and an assumed higher rate of single parenting. The latter is due to increasing numbers of separations and divorces, increasing rates of childbearing outside couple relationships, and more complex shared-care arrangements with parents residing in different households. If the rate of single parenting was to remain at the 2006 level, series 5A (which assumes medium fertility, medium mortality, high migration, and living arrangement type rates constant at 2006 levels) shows that the number of one-parent families would increase by 41,000 (an average of 0.7 percent a year), to 260,000 in 2031. It should be noted that children in families can be of any age, and can include a mature child living with older parent(s).

The number of two-parent families is projected to decrease because of the continuing trends towards single parenting and fewer couples having children. Under series 5B, the number of two-parent families is projected to decrease from 481,000 in 2006 to 468,000 by 2031. If living arrangement type rates were to remain at 2006 levels, series 5A projects an increase in the number of two-parent families between 2006 and 2031, to 540,000.

Two-parent families were the most common family type in 2006, accounting for 41 percent of all families. Couple-without-children families accounted for 40 percent of all families in 2006. Under series 5B, couple-without-children families are projected to have surpassed two-parent families as the most common family type in 2008. Couple-without-children families will account for 50 percent of all families by 2031, while two-parent families will account for 32 percent. Despite increasing in number, one-parent families are projected to account for 18 percent of all families in 2031, down from 19 percent in 2006.
Families with dependent children

As children can be of any age, it is useful to distinguish families with dependent children (people aged under 18 years and not in full-time employment) from families with older children. In 2006, about 83 percent of two-parent families and 75 percent of one-parent families contained dependent children. Assuming these proportions remain constant during the projection period, the number of families with dependent children is projected to increase from 565,000 in 2006 to 591,000 in 2031.

Within these families, the number of two-parent families with dependent children is projected to decrease from 400,000 in 2006 to 389,000 by 2031. In contrast, the number of one-parent families with dependent children will increase throughout the projection period, from 165,000 in 2006 to 201,000 in 2031. Two-parent families will account for 66 percent of families with dependent children in 2031, down from 71 percent in 2006.
Households

Under series 5B, the number of households is projected to increase by 536,000 (an average of 1.2 percent a year), from 1.55 million in 2006 to 2.09 million in 2031. This growth is faster than that of families (an average of 0.9 percent a year) and the population (an average of 0.8 percent a year) over this period, reflecting the trend towards smaller average household size and the increasing number of non-family households.

The number of households is projected to increase under all six projection series. The largest increase is projected under series 9B, where the number of households will increase by 612,000 (an average of 1.3 percent a year) to 2.16 million in 2031. This series assumes high fertility, low mortality, high migration, and living arrangement type rates changing linearly between 2006 and 2031, based on an assessment of observed trends between 1986 and 2006 and likely future trends. The smallest increase is projected under series 1A, which assumes low fertility, high mortality, low migration, and living arrangement type rates constant at 2006 levels. Under this series, the number of households will increase by 434,000 (an average of 1.0 percent a year) over the projection period, reaching 1.99 million by 2031.

![Projected household growth graph](image)

Source: Statistics New Zealand

Household type

One-person households are projected to be the fastest-growing household type, of the three broad types projected, increasing by 240,000 (an average of 2.0 percent a year) from 363,000 in 2006 to 602,000 in 2031. One-person households will account for 29 percent of all households in 2031, up from 23 percent in 2006. The growth in this household type will be mainly due to the increasing number of people at older ages, with almost three-quarters of the growth occurring among those aged 55 years and over. Of all people in one-person households, 68 percent are projected to be aged 55 years and over in 2031, compared with 59 percent in 2006.

Family households are projected to increase by 277,000 (an average of 0.9 percent a year), from 1.12 million in 2006 to 1.40 million in 2031. However, because of the faster increase in the number of one-person households, family households will account for a smaller share of all households in 2031 (67 percent) than in 2006 (72 percent). Family households can contain more than one family, or other people living with (but not in) a family. It is estimated that there was an average of 1.04 families per family household in 2006.
The number of other multi-person households (households containing more than one person, but not containing a family) is expected to increase from 68,000 in 2006 to 88,000 in 2031 — an increase of 20,000 or an average of 1.0 percent a year. Other multi-person households will account for 4 percent of all households throughout the projection period. People aged 19–29 years will continue to account for about half of all people in other multi-person households.

![Projected households by household type](image)

**Average family and household size**

The average size of households is projected to slowly decline between 2006 and 2031, from 2.6 to 2.4 people per household. This continues the decline seen in recent decades, with the average household size falling from 3.7 people in 1951 and 3.0 people in 1981.

The projected decrease in average household size is due to the increasing proportion of one-person households and a decrease in the average size of family households. The latter is projected to fall from 3.2 people in 2006 to 3.0 people in 2031, reflecting changes in both the type and size of families. By 2031, there are expected to be more couple-without-children families and one-parent families, but fewer two-parent families. Two-parent families are generally larger, with an average size of just under 4.0 people in 2006 and increasing slightly to just over 4.0 people by 2031. Couple-without-children families, by definition, contain two people. One-parent families contained an average of 2.6 people in 2006, reducing slightly to 2.5 people in 2031.
The updated 2006-base national family and household projections were produced by allocating people to one of 11 living arrangement types. Assumptions have been made about the future propensity of people to live in each living arrangement type, by age and sex. The projected number of families and households are derived from the projected population by living arrangement type.

Under series 5B, the living arrangement type projected to experience the fastest growth is one-person households. The number of people in this living arrangement type is projected to increase by an average of 2.0 percent a year from 363,000 in 2006 to 602,000 in 2031. The main reason for this growth is the movement of the large number of people born during the 1950s to early 1970s into the older ages. Twelve percent of the population will be living alone in 2031, compared with 9 percent in 2006.

Population ageing also contributes to the projected large increases in the numbers of people living in non-private dwellings (which include retirement homes), up an average of 1.4 percent a year between 2006 and 2031. The number of people aged 80 years and over living in a non-private dwelling is projected to almost double between 2006 and 2031, from 23,000 to 43,000. This increase is despite a small assumed decrease in the proportion of older people living in non-private dwellings, due to assumed increases in life expectancy and well-being in the older ages.

The number of parents in one-parent families is projected to increase by an average of 0.8 percent a year between 2006 and 2031. This increase is due to population growth, changes in population age structure, and a continuing increase in the rate of single parenting. However, because of a decline in the assumed average number of births per woman, the number of children in one-parent families will increase at a slower rate, up an average of 0.6 percent a year between 2006 and 2031. An increase in the rate of single parenting and fewer couples having children will mean there will be 3 percent fewer parents in two-parent families in 2031 than in 2006. The number of children in two-parent families in 2031 (956,000) will be similar to that in 2006 (954,000).

### Table: Average size of families and households

<table>
<thead>
<tr>
<th>Year at 30 June</th>
<th>Couple-without-children</th>
<th>Two-parent</th>
<th>One-parent</th>
<th>All families</th>
<th>Family</th>
<th>Other multi-person</th>
<th>One-person</th>
<th>All households</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 (base)</td>
<td>2.0</td>
<td>4.0</td>
<td>2.6</td>
<td>2.9</td>
<td>3.2</td>
<td>2.6</td>
<td>1.0</td>
<td>2.6</td>
</tr>
<tr>
<td>2011</td>
<td>2.0</td>
<td>4.0</td>
<td>2.6</td>
<td>2.9</td>
<td>3.1</td>
<td>2.6</td>
<td>1.0</td>
<td>2.6</td>
</tr>
<tr>
<td>2016</td>
<td>2.0</td>
<td>4.0</td>
<td>2.6</td>
<td>2.8</td>
<td>3.1</td>
<td>2.6</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2021</td>
<td>2.0</td>
<td>4.1</td>
<td>2.6</td>
<td>2.8</td>
<td>3.1</td>
<td>2.6</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2026</td>
<td>2.0</td>
<td>4.1</td>
<td>2.6</td>
<td>2.8</td>
<td>3.0</td>
<td>2.6</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2031</td>
<td>2.0</td>
<td>4.0</td>
<td>2.5</td>
<td>2.8</td>
<td>3.0</td>
<td>2.6</td>
<td>1.0</td>
<td>2.4</td>
</tr>
</tbody>
</table>

(1) The average size of family households is larger than the average size of families because family households can contain more than one family, and other people living with (but not in) a family.

### Living arrangement types

The updated 2006-base national family and household projections were produced by allocating people to one of 11 living arrangement types. Assumptions have been made about the future propensity of people to live in each living arrangement type, by age and sex. The projected number of families and households are derived from the projected population by living arrangement type.

Under series 5B, the living arrangement type projected to experience the fastest growth is one-person households. The number of people in this living arrangement type is projected to increase by an average of 2.0 percent a year from 363,000 in 2006 to 602,000 in 2031. The main reason for this growth is the movement of the large number of people born during the 1950s to early 1970s into the older ages. Twelve percent of the population will be living alone in 2031, compared with 9 percent in 2006.

Population ageing also contributes to the projected large increases in the numbers of people living in non-private dwellings (which include retirement homes), up an average of 1.4 percent a year between 2006 and 2031. The number of people aged 80 years and over living in a non-private dwelling is projected to almost double between 2006 and 2031, from 23,000 to 43,000. This increase is despite a small assumed decrease in the proportion of older people living in non-private dwellings, due to assumed increases in life expectancy and well-being in the older ages.

The number of parents in one-parent families is projected to increase by an average of 0.8 percent a year between 2006 and 2031. This increase is due to population growth, changes in population age structure, and a continuing increase in the rate of single parenting. However, because of a decline in the assumed average number of births per woman, the number of children in one-parent families will increase at a slower rate, up an average of 0.6 percent a year between 2006 and 2031. An increase in the rate of single parenting and fewer couples having children will mean there will be 3 percent fewer parents in two-parent families in 2031 than in 2006. The number of children in two-parent families in 2031 (956,000) will be similar to that in 2006 (954,000).
Population by living arrangement type
Series 58
2006 and 2031

Source: Statistics New Zealand

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Latest projections

This release contains the updated 2006-base projections of families and households usually living in New Zealand. The family and household projections have been updated using the 2009-base national population projections released on 27 October 2009. The projections cover the period 2007–31 at one-year intervals. The projection period is limited to 25 years because of the uncertainty of family and household projections, as discussed in 'Nature of projections' (below). More detailed projection results, with projections for individual years are freely available from Infoshare on the Statistics NZ website (www.stats.govt.nz), or on request – email demography@stats.govt.nz.

As with the 2001-base (released in June 2003 and June 2005) and previous 2006-base national family and household projections (released in December 2008), a 'propensity' method has been used to produce the latest projections. The family and household projections are derived from estimates (for 2007–09) and projections (for 2010–31) of the New Zealand population, by multiplying the population by assumed living arrangement type rates for each age-sex group. The projections of population by living arrangement type are subsequently aggregated to give projections of families (by broad family type) and households (by broad household type). Before the 2001-base projections, household projections were produced using a 'household head' method.

Family and household concepts

These projections are based on the definitions of family and household used in the 2006 Census of Population and Dwellings. A family is defined as a couple, with or without children, or one parent with children, usually living together in a household. A household is defined as one person usually living alone, or two or more people usually living together and sharing facilities (for example, eating facilities, cooking facilities, bathroom and toilet facilities, a living area) in a private dwelling. No information is available from the census on families and households extending beyond a single dwelling, or on families defined using different concepts (for example, whānau), and minimal information is available on families in non-private dwellings.

In these family and household projections, all people are allocated to one of 11 living arrangement types. The living arrangement type refers to the usual family and household role of a person, based on a combination of individual, family, household, and dwelling information from the census. The projections are based on allocating people to one role from several broad roles they may have within each social structure. These roles vary by age and sex, and are assumed to change over time with changes in social patterns.

The projections do not give a complete picture of the complexity of family and household structures, because people can and do have more than one living arrangement type role in any one entity, and families and households are not necessarily coterminous. Although people can have more than one residence, their living arrangement type role is generally based on the family and household structure where they usually live, as self-identified by them in the census. Because households are defined as discrete units, the fluidity of living arrangements where people are associated with more than one household for study, work, or shared-care purposes is not addressed.

Opposite-sex and same-sex couples are not projected separately, but are included in projections of couple-without-children and two-parent families.
It is also important to note that the definitions of parents and children are social, not biological. For example, parents include people aged 15 years or over usually living with at least one of their natural, step-, adopted, or foster children (who is not usually living with a partner or child of their own). Similarly, a child is a person of any age usually living with one or two natural, step-, or adopted parents (but not usually living with a partner or child of their own). No information is available on the strength of identified parent-child relationships in terms of emotional and/or financial support.

**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 based on 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).

The estimated numbers of families and households are derived indirectly from the estimated resident population and the estimated living arrangement type rates for each age-sex group. The estimated number of families (1.168 million) and households (1.553 million) are equivalent to the census family count (1.068 million) and census household count (1.454 million), respectively, at 7 March 2006, with adjustments for:

1. net census undercount
2. families and households temporarily overseas on census night
3. change between census night (7 March 2006) and 30 June 2006
4. families and households temporarily absent within New Zealand.

For more information about the base population, refer to Information about the population estimates on the Statistics NZ website: [www.stats.govt.nz](http://www.stats.govt.nz).

**Alternative series**

Six alternative series have been produced by combining three population projection series with three variants of living arrangement type rates. The three population projection series are:

- series 1 which assumes low fertility, high mortality, and low migration
- series 5 which assumes medium fertility, medium mortality, and medium migration
- series 9 which assumes high fertility, low mortality, and high migration.

At the time of release, projection series 5B is considered the most suitable for assessing future family and household changes. Moreover, only series 5B has been formulated to produce demographically plausible results, by assessing both observed trends between 1986 and 2006 and likely future trends to 2031. Other series may project significantly different numbers of male and female partners in couple-without-children and/or two-parent families, because the living arrangement type rate A variants are formulated solely from observed historical rates.

The other projection series allow users to assess the impact on the number of families and households resulting from different population and/or living arrangement type scenarios. For example, series 1B, 5B, and 9B can be used for assessing the effect of different population...
outcomes combined with variant B living arrangement type rates; and series 5A and 5B illustrate the effect of different living arrangement type assumptions combined with the mid-range population scenario.

More detailed projection results, including projections for individual years, are available on request. Special projections can also be produced for clients using their own assumptions. For more information and quotes, email demography@stats.govt.nz.

**Method**

The cohort component method has been used to derive the population projections. In this method, the base population is projected forward by calculating the effect 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.

The propensity method has subsequently been used to derive the family and household projections. In this method, living arrangement type rates (or propensities) are applied to population projections to give projections of the population in different living arrangement types. These projections are subsequently aggregated to give projections of families (by broad family type) and households (by broad household type).

The number of couple-without-children families = (male partners in couple-without-children families + female partners in couple-without-children families) ÷ 2.

The number of two-parent families = (male partners/parents in two-parent families + female partners/parents in two-parent families) ÷ 2.

The number of one-parent families = male parents in one-parent families + female parents in one-parent families.

The number of family households = number of families ÷ average number of families per family household.

The number of one-person households = number of people in one-person households.

The number of other multi-person households = number of people in other multi-person households ÷ average number of people per other multi-person household.

**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 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 total fertility rate in the year ended June 2009 was 2.14 births per woman (based on births by date of registration).

The medium fertility variant assumes fertility rates of women aged under 32 years will decline
between 2009 and 2026, but increase for women aged 32 years and over. By comparison, the low fertility variant assumes fertility rates will decrease between 2009 and 2026 at most ages. The high fertility variant assumes that fertility rates of women aged under 32 years will drop between 2009 and 2026, but increase for women aged 32 years and over.

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

**Total fertility rate**

![Graph showing total fertility rate from 1991 to 2031]

Note: The break in data between 2009 and 2010 denotes a change from estimated total fertility rate to assumed total fertility rate.

Source: Statistics New Zealand

**Mortality**

There are three alternative mortality variants – designated low, medium, and high – which assume that mortality rates will continue to drop so that the period life expectancy at birth for males will increase to 83.6, 82.1, and 80.6 years, respectively, by 2031. The corresponding life expectancies for females in 2031 will be 86.6, 85.3, and 84.1 years. The life expectancy at birth in 2005–07, from complete period life tables, was 78.0 years for males and 82.2 years for females.

Mortality rates are assumed to decrease at different rates at different ages. Between 2006 and 2031, male mortality rates are assumed to decrease by an average of 2.2, 1.6, and 1.0 percent per year for the low, medium, and high mortality variants, respectively. By comparison, female mortality rates are assumed to decrease by an average of 2.2, 1.7, and 1.1 percent per year 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 of 5,000, 10,000, and 15,000, respectively. The medium migration variant assumes net migration of 25,000 in 2010, 19,000 in 2011, and 14,000 in 2012. The low and high migration variants are 5,000 lower and higher, respectively, than the medium variant for each year. These 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: The break in data between 2009 and 2010 denotes a change from net migration to assumed net migration.

Source: Statistics New Zealand
Consistent with historical and recent trends, the age-sex patterns of net migration assume the main net outflow at ages 22–25 years, mainly due to young New Zealanders embarking on overseas travel and the departure of overseas students. Net inflows are assumed for most other ages with the highest net inflows at 15–20 and 27–37 years.

**Living arrangement type rates (LATRs)**

There are two alternative LATR variants – designated A and B. Variant A assumes that LATRs will remain constant at 2006 levels. Variant B assumes that LATRs will change linearly between 2006 and 2031, based on an assessment of observed trends between 1986 and 2006 and likely future trends, by sex and single-year of age.

Variant B is the preferred variant, because it has been formulated to produce demographically plausible results. For variant B, the main changes in LATRs assumed between 2006 and 2031 are:

1. **Partner in couple-without-children family**: Increasing rates for males and females at most ages, especially at ages 30–59 years for males, and 25–54 and 70–79 years for females. This reflects lower fertility rates with fewer couples having children, and a slight convergence of male life expectancy to female life expectancy with more couples having both partners living to older ages.
2. **Partner/parent in two-parent family**: Decreasing rates for males and females at most ages, especially at ages 25–64 years for males and 25–54 years for females. This reflects lower fertility rates with fewer couples having children.
3. **Child in two-parent family**: Decreasing rates at most ages, especially at ages 0–24 years. This reflects increased rates of single parenting from separation, divorce, childbearing outside couple relationships, and more complex shared-care arrangements.
4. **Parent in one-parent family**: Increasing rates at most ages. This reflects increased rates of single parenting.
5. **Child in one-parent family**: Increasing rates at most ages, especially at ages 0–24 years. This reflects increased rates of single parenting.
6. **Person in other multi-person household**: Increasing rates at most ages, especially 15–24 years, which is associated with higher numbers of students.
7. **Person in one-person household**: Increasing rates at most ages, especially 15–24 years, which is associated with higher numbers of students. Decreasing rates at older ages, associated with increasing life expectancy and declines in morbidity rates.
8. **Person in non-private dwelling**: Increasing rates at ages 15–24 years, associated with higher numbers of students. Decreasing rates at older ages, associated with increasing life expectancy and declines in morbidity rates.

For variants A and B, the following factors remain constant at the 2006 levels:

- the average number of families per family household is assumed to remain constant at 1.041
- the average number of people per other multi-person household is assumed to remain constant at 2.600
- the proportion of two-parent families with dependent children is assumed to remain constant at 0.832
- the proportion of one-parent families with dependent children is assumed to remain constant at 0.754.
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, net migration, and living arrangement type 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 (for example, war, catastrophes, or major government and business decisions) that 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.

Only series 5B has been formulated to produce demographically plausible results, by assessing both observed historical trends and likely future trends. Other series may project significantly different numbers of male and female partners in couple-without-children and/or two-parent families, because the living arrangement type rate A variants are formulated solely from observed historical rates.

Although living arrangement type rate variant B is formulated to account for changing social patterns, there is uncertainty about how different social patterns will interrelate and vary by age-sex and/or birth cohort. Relevant social patterns include changes in:

- age of cohabitation and/or marriage
- fertility rates, timing of childbearing, and average family size
- morbidity and mortality rates
- rates of partnership formation, including re-partnering, and dissolution
- propensity of young adults to stay in the parental home
- propensity and ability of people to live alone
- presence of other relatives (for example, extended family) and non-related individuals (for example, boarders) in a household
- study, work, and shared-care arrangements where people are associated with more than one household
- geographic location and mobility of the population
- external migration patterns, including students from overseas
- affordability of tertiary education, housing, and healthcare
- ethnic mix of the New Zealand population.

For more information about the projections, refer to Information about the demographic projections on the Statistics NZ website (www.stats.govt.nz).

Definitions

**Average family size** is the mean number of people per family. It is calculated by dividing the number of people in families by the number of families.

**Average household size** is the mean number of people per household. It is calculated by dividing the number of people in households by the number of households.

A **child** is a person of any age usually living with one or two natural, step-, or adopted parents, but not usually living with a partner or child of their own.
A couple consists of two people aged 15 years and over usually living together in a registered marriage or consensual union. Couples can be opposite-sex or same-sex.

A dependent child is a child in a family who is aged under 18 years and not in full-time employment (regularly working for 30 hours or more per week).

A dwelling is a structure, part of a structure, or group of structures that is used, or intended to be used, as a place where people reside.

- A non-private dwelling provides short- or long-term communal or transitory type accommodation. Non-private dwellings are generally available to the public by virtue of employment, study, special need, legal requirement, or recreation. They include institutions and group-living quarters such as hotels, motels, hospitals, retirement homes, prisons, hostels, motor camps, boarding houses, defence barracks, ships, and trains.
- A private dwelling accommodates a person or group of people and is generally unavailable for public use. The main purpose of a private dwelling is as a place of habitation for residents who usually live independently within the community.

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.

A family consists of a couple, with or without child(ren), or one parent with child(ren), usually living together in a household. Related people, such as siblings, who are not in a couple or parent-child relationship, are therefore excluded from this definition.

- Couple-without-children family: A couple without child(ren), with or without other people, usually living together in a household.
- Two-parent family: A couple with child(ren), with or without other people, usually living together in a household. Any children are not usually living with a partner or child of their own.
- One-parent family: One parent with child(ren), with or without other people, usually living together in a household. Any children are not usually living with a partner or child of their own.

A household consists of either one person usually living alone, or two or more people usually living together and sharing facilities (eg eating facilities, cooking facilities, bathroom and toilet facilities, a living area), in a private dwelling.

- Family household: A household containing two or more people usually living together with at least one couple and/or parent-child relationship, with or without other people.
- Other multi-person household: A household containing two or more people usually living together, but not in couple or parent-child relationships with each other.
- One-person household: A household containing one person usually living alone.

Life expectancy is the average length of life from a given age, assuming people experience the age-specific mortality rates of a given period from that given age onwards.

Living arrangement type is the usual family and household role of a person based on a combination of individual, family, household, and dwelling information. As used in these family and household projections, all people are allocated to one of 11 living arrangement types:
• **Partner in couple-without-children family**: A person usually living in a partner role, but not in a parent role.

• **Other person with couple-without-children family**: A person usually living with a couple-without-children family, but not in a partner, parent, or child role.

• **Partner/parent in two-parent family**: A person usually living in a partner and parent role.

• **Child in two-parent family**: A person usually living in a child role with two parents, but not in a partner or parent role.

• **Other person with two-parent family**: A person usually living with a two-parent family, but not in a partner, parent, or child role.

• **Parent in one-parent family**: A person usually living in a parent role, but not in a partner role.

• **Child in one-parent family**: A person usually living in a child role with one parent, but not in a partner or parent role.

• **Other person with one-parent family**: A person usually living with a one-parent family, but not in a partner, parent, or child role.

• **Person in other multi-person household**: A person usually living with one or more people not in partner, parent, or child roles.

• **Person in one-person household**: A person usually living alone.

• **Person in non-private dwelling**: A person usually living in a non-private dwelling.

A **living arrangement type rate** is the proportion of the population in a living arrangement type, usually disaggregated by age and sex.

A **parent** is a person of any age usually living with at least one of their natural, step, adopted, or foster children (not usually living with a partner or child of their own).

A **parent-child relationship** consists of a parent usually living with, and providing care for, at least one natural, step, adopted, or foster child.

A **partner** is a person aged 15 years and over usually living with another person aged 15 years and over in a registered marriage or consensual union.

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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