Subnational Family and Household Projections: 2006(base) – 2031

Highlights

Under all projection series:

- All 16 of New Zealand's regions are projected to have more couple without children families and one-person households in 2031 than in 2006.

- A continued decline in average household size is projected for all regions and territorial authorities between 2006 and 2031.

Under the medium series:

- All 16 of New Zealand's regions are projected to have more households in 2031 than in 2006.

- Auckland region is projected to account for 49 percent of the national growth in the number of households.

- Nine territorial authorities are projected to have fewer households in 2031 than in 2006; 32 are projected to decrease in population.

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Commentary

Subnational family and household projections

This release contains 2006-base family and household projections for the 16 regional council and 73 territorial authority areas of New Zealand. These supersede the subnational family and household projections 2001-base update released in October 2005. The projections have as a base the estimated resident population, estimated families, and estimated households of each area at 30 June 2006, and cover the period to 2031 at five-year intervals.

The projections are neither predictions nor forecasts. They provide an indication of possible future changes in the number and composition of families and households in subnational areas. While projection assumptions are formulated from an assessment of short-term and long-term demographic trends, there is no certainty that any of the assumptions will be realised. Therefore, Statistics New Zealand makes no judgement on the relative merits of the projected changes.

Household numbers should not be confused with building activity or dwelling numbers. 'Households' refers to private dwellings that are usually occupied by a person or group of people. Households therefore exclude non-private dwellings, unoccupied dwellings, and dwellings which are not the usual residence of people (eg holiday homes, second homes).

What has changed from the previous 2001-base projections?

Subnational family and household projections are updated every two to three years. These latest projections have been updated to incorporate the latest national family and household projections and subnational population projections. In turn, these are consistent with the latest national population projections (released 24 October 2007). Mid-range series 5 of the latest national population projections assumes:

1. A base population at 30 June 2006 of 4.18 million. This is 58,000 or 1.4 percent higher than the 4.13 million projected from the 2004-base national population projections (series 5), mainly because observed net migration was higher than 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.

2. An average total fertility rate of 2.09 births per woman during 2007–11, dropping to 2.00 during 2012–16, 1.94 during 2017–21, 1.91 during 2022–26, and 1.90 thereafter. By comparison, the previous 2004-base projections assumed the average total fertility rate dropped from 1.95 during 2007–11 to 1.88 in 2012–16 and 1.85 thereafter. These higher fertility levels 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.

3. Net migration of 46,000 in the five years to 30 June 2011 and 50,000 in each subsequent five-year period. By comparison, the previous 2004-base projections assumed net migration of 38,000 in the five years to 30 June 2011, and 50,000 in each subsequent five-year period.

4. Life expectancy at birth will increase to 82.5 years for males and 86.2 years for females in 2031. By comparison, the previous 2004-base projections assumed life expectancy at birth of 82.1 years for males and 85.9 years for females in 2031.
The combined effect of these changes is that the New Zealand population is expected to reach 4.39 million in 2011, 4.77 million in 2021, and 5.09 million in 2031 (series 5, 2006-base projections). By comparison, under series 5 of the 2004-base projections, the New Zealand population was expected to reach 4.29 million in 2011, 4.59 million in 2021, and 4.85 million in 2031.

Differences in the projected size and age-sex structure of the population contribute to differences between the previous and latest family and household projections in the number, size, and type of families and households. Series 5B of the latest national family and household projections indicates that the number of households will reach 1.66 million in 2011, 1.88 million in 2021, and 2.09 million in 2031. By comparison, series 5B of the previous national family and household projections (released 1 June 2005) indicated that the number of households would reach 1.65 million in 2011 and 1.84 million in 2021.

Which projection series should I use?

Three alternative series (designated low, medium, and high) have been produced for each area, using different combinations of fertility, mortality, migration, and living arrangement type assumptions. 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 NZ considers the medium projection series the most suitable for assessing future family and household changes. This series is consistent with series 5B of the 2006-base National Family and Household Projections (released 8 December 2008) and the medium series of the 2006-base Subnational Population Projections (released 3 December 2007).

Households

Under the medium series, the number of households in New Zealand is projected to increase by 535,000 (an average of 1.2 percent a year), from 1.55 million in 2006 to 2.09 million in 2031. A household is defined as 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.

All 16 regions are projected to have more households in 2031 than in 2006. The largest numerical increase is projected in the Auckland region, up an average of 1.8 percent a year from 466,000 in 2006 to 726,000 in 2031. This accounts for almost half (49 percent) of the national growth in the number of households projected over this period. By comparison, the Auckland region is projected to account for 62 percent of New Zealand's population growth between 2006 and 2031. By 2031, 35 percent of all households in New Zealand will be in the Auckland region, up from 30 percent in 2006.

The Bay of Plenty region, with a projected average increase of 1.3 percent a year, is the only other region projected to experience growth in the number of households that is above the national average.
Among the 73 territorial authority areas in New Zealand, 63 are projected to have more households in 2031 than in 2006. Nine are projected to experience average annual growth of over 1.6 percent: Queenstown-Lakes district (2.3 percent); Manukau city and Selwyn district (2.1 percent); Rodney, Waimakariri, and Franklin districts (1.9 percent); Tauranga and Waitakere cities (1.8 percent); and Auckland city (1.7 percent). These areas are also projected to have the highest rates of population growth.

The greatest numerical growth in households over the 2006–31 period is projected to be in the four cities in the Auckland region – Auckland city (81,000), Manukau city (70,000), North Shore and Waitakere cities (both 36,000) – as well as in Christchurch city (40,000).

### Household type

There are three broad household types that are projected: family households, one-person households, and other multi-person households.

In 2006, there were 1.12 million family households in New Zealand. Under the medium series, this number is projected to increase by 259,000 (an average of 0.8 percent a year), to reach 1.38 million in 2031. The number of households containing a family (or families) is projected to increase in 41 territorial authority areas and decline in the remaining 32 areas. Changes in the number of family households are closely related to changes in the number of families in each area (nationally there was an average of 1.04 families per family household in 2006).
The family household is by far the most common household type, accounting for 72 percent of all New Zealand households in 2006. However, its share of all households nationally is projected to decline to 66 percent by 2031. A decline in share is projected for all territorial authority areas.

The number of one-person households in New Zealand is projected to increase by 257,000 (an average of 2.2 percent per year) from 363,000 in 2006 to 619,000 in 2031. The relatively large increase in this type of household is mainly due to the increasing number of people at older ages, with 80 percent of the growth occurring among those aged 55 years and over. Of all people in one-person households, 67 percent are projected to be aged 55 years and over in 2031, compared with 59 percent in 2006. All territorial authority areas are projected to have more one-person households in 2031 than in 2006, with numbers in Rodney district, Waitakere city, Manukau city, Franklin district, Waikato district, Waimakariri district, Selwyn district, and Queenstown-Lakes district more than doubling over the 25-year period.

One-person households will account for a greater share of households in all territorial authority areas in 2031 compared with 2006. In 2031, the Buller (42 percent), Westland (41 percent), and Ruapehu (41 percent) districts are projected to have the highest shares of one-person households. These figures represent increases from 32, 29, and 28 percent, respectively, in 2006. The lowest shares of one-person households will be in Manukau city (19 percent), Selwyn district (23 percent), and North Shore and Porirua cities (both 25 percent). These shares are higher than the 2006 estimates for these areas of 14, 15, 19, and 18 percent, respectively.

Other multi-person households (households containing more than one person, but not containing a family) are projected to increase nationally 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 18–29 years will continue to account for about half of all people in other multi-person households. The largest numerical increases in the number of other multi-person households between 2006 and 2031 are projected in Auckland city (4,400), Christchurch city (2,100), and Manukau city (2,000). Increases of between 200 and 1,500 are projected in another 13 territorial authority areas.

**Average household size**

Under the medium series, the average size of New Zealand households is projected to decrease from 2.6 people in 2006 to 2.4 people in 2031. Declining average household size is projected for all territorial authority areas, and reflects an increasing proportion of one-person households and a decrease in the average size of family households. Average family size is projected to decline largely because of an increase in the proportion of 'couple without children' families (which contain two people) and a decrease in the proportion of 'two-parent' families (which contain about four people, on average). These trends are driven mainly by the general ageing of the population. The population aged 50 years and over is projected to increase by 63 percent between 2006 and 2031, compared with 5 percent growth for the population aged under 50 years.

Differences in average household size between territorial authority areas reflect differences in family and household type, and to a lesser extent family size. In 2031, average household size is projected to be highest in Manukau city (3.0 people), Papakura district (2.7 people), and Porirua and Waitakere cities (both 2.6 people). These territorial authority areas also had the highest average household sizes in 2006, of 3.4, 2.9, 3.0, and 2.9 people, respectively. These areas have relatively low proportions of one-person households and relatively high proportions of family households with children.
In contrast, the smallest average household size in 2031 is projected to be 1.9 people in the Buller district. In 2006, the smallest average household size was 2.2 people in both the Buller and Thames-Coromandel districts. These areas have relatively high proportions of one-person households and relatively low proportions of family households with children.

### Household change compared with population change

The projections indicate that household growth is likely in all regions and most territorial authority areas, including some areas projected to experience population decline. At the national level, the projected increase in the number of households (an average of 1.2 percent per year) between 2006 and 2031 is greater than the projected growth of both families (0.8 percent) and population (0.8 percent), reflecting the trend towards smaller average household size. The household growth rate is projected to exceed the population growth rate in all regions and territorial authority areas.

The medium series of the 2006-base subnational population projections indicates that three regions – Taranaki, West Coast, and Southland – are projected to have fewer people in 2031 than in 2006. However, all these regions are projected to experience an increase in the number of households. Similarly, 32 territorial authority areas are projected to have fewer people in 2031 than in 2006, but 22 of these are projected to have more households.

These trends are a further reflection of changes in the age structure of the population, with all territorial authority areas projected to have more older people (65 years and over) in 2031 than in 2006. In contrast, 53 territorial authority areas are projected to have fewer children (aged 0–14 years) in 2031.
Families

Under the medium series, the number of families in New Zealand is projected to increase by 269,000 (an average of 0.8 percent per year) between 2006 and 2031, from 1.17 million to 1.44 million. A family refers to a couple, with or without child(ren), or one parent with child(ren), usually living together in a household.

Thirteen of the 16 regions in New Zealand are projected to have more families in 2031 than in 2006. The largest increase in the number of families is projected in the Auckland region, with an annual average increase of 1.5 percent from 376,000 to 546,000. This accounts for 63 percent of the projected increase in the number of families at the national level. By 2031, 38 percent of all families in New Zealand are projected to live in the Auckland region, compared with 32 percent in 2006. The Bay of Plenty region (0.9 percent per year) is also projected to experience growth that exceeds the national average. Fewer families are projected in the Southland, West Coast, and Taranaki regions by 2031.

Among territorial authority areas, 40 are projected to have more families in 2031 than in 2006. Growth in the number of families is projected to slow at the national level over the projection period, and a similar pattern is likely for most subnational areas. This trend reflects the slowing of population growth and the changing age structure of the population. While 20 territorial authority areas are projected to record a decrease in the number of families between 2006 and 2016, 41 are projected to record a decrease between 2021 and 2031.
The four areas projected to experience the highest annual average percentage growth in the number of families between 2006 and 2031 are Queenstown-Lakes district (2.1 percent), Manukau city (1.9 percent), Selwyn district (1.7 percent), and Rodney district (1.5 percent).

These are also the areas projected to have the highest percentage growth in population and households. The largest numerical increases in families between 2006 and 2031 are projected in Manukau city (55,000), followed by Auckland city (49,000), Waitakere and North Shore cities (both 22,000), and Christchurch city (16,000).

**Family type**

There are three broad family types that are projected: 'couple without children' families, 'two-parent' families, and 'one-parent' families.

At the national level, the number of 'couple without children' families is projected to increase by an annual average of 1.8 percent, from 468,000 in 2006 to 730,000 in 2031. 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 after World War II reach 50 years and over. An increasing proportion of couples in (a) is also assumed to contribute to the increasing number of couple without children families, but to a lesser extent. Nearly all territorial authority areas are projected to have an average annual increase of at least 0.5 percent more couple without children families in 2031 than in 2006. The exceptions are South Waikato, Kawerau, Waipu, Ruapehu, Rangitikei, Waimate, and Waitaki districts. The number of couple without children families is projected to more than double in Selwyn district (from 4,300 to 9,200), Queenstown-Lakes district (from 3,800 to 8,000), and Manukau city (from 26,000 to 54,000) over this period.

The number of 'two-parent' families in New Zealand is projected to decrease from 481,000 in 2006 to 425,000 by 2031. This is due to a decreasing likelihood of being in this living arrangement type at most ages, reflecting continued trends towards single parenting and fewer couples having children. However, 7 territorial authority areas are projected to have more two-parent families in 2031 than in 2006. These are areas projected to have significant population growth. Despite the increase in the number of two-parent families in these areas, the share of families in this family type is projected to decrease for all territorial authority areas – due to faster growth in the numbers of couple without children families and one-parent families.

Nationally, the number of 'one-parent' families is projected to increase by 63,000 (1.0 percent per year), from 219,000 in 2006 to 282,000 in 2031. Increases are projected for 45 territorial authority areas, with the highest in Manukau city (2.2 percent), Queenstown-Lakes district (2.1 percent), Selwyn district (2.0 percent), and Rodney district (1.8 percent). As children in families can be of any age, one-parent families include mature children living with an older parent.

By 2031, couple without children families are projected to be the most common family type in nearly all territorial authority areas. The exception is Manukau city, where two-parent families will remain the most common family type. In 2006, couple without children families were the most common family type for 50 territorial authority areas, while two-parent families were the most common family type for the remaining 23.
Next release ...

National Population Projections: 2009(base)–2061 will be released on 27 October 2009.
Technical notes

Latest projections

This release contains 2006-base projections for families and households usually living in the 16 regional council areas and 73 territorial authority areas of New Zealand. The family and household projections have been derived using the 2006-base National Family and Household Projections released on 8 December 2008 and the 2006-base Subnational Population Projections released on 3 December 2007. The projections cover the period 2011–31 at five-year intervals. The projection period is limited to 25 years because of the uncertainty of these projections, as discussed in the 'Nature of projections' section below.

As with the previous 2001-base Subnational Family and Household Projections (released 27 October 2005), a 'propensity' method has been used to produce the latest projections. The family and household projections are derived from estimates (for 2006) and projections (for 2011–31) of the population for each area, by multiplying the population by the 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). Prior to 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, whanau), 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 synonymous. Although people can have more than one residence, their living arrangement type role is generally based on the family and household structure of 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 each area at 30 June 2006. This population was based on the census usually resident population count of each area at 7 March 2006 with adjustments for:

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

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 and households are equivalent to the census family count and census household count, 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 away from their usual residence, but in New Zealand, on census night.

The estimated and projected population, and number of families and households, are not directly comparable with census counts because of these adjustments. For more information about the base population, refer to [Information about the population estimates](http://www.stats.govt.nz) on the Statistics New Zealand website: [www.stats.govt.nz](http://www.stats.govt.nz).

**Alternative series**

Three alternative subnational family and household projection series (designated low, medium, and high) have been produced for each area using different population projection series (with different fertility, mortality, and migration assumptions). One set of living arrangement type assumptions has been used for all three series.
At the time of release, the medium projection series is considered the most suitable for assessing future family and household changes. The medium projection series is derived from the medium series of the *2006-base Subnational Population Projections* (released 3 December 2007), which assumes medium fertility, medium mortality, and medium net migration for each area. The medium subnational family and household projection series is also consistent with series 5B of the *2006-base National Family and Household Projections* (released 8 December 2008) and series 5 of the *2006-base National Population Projections* (released 24 October 2007).

The low and high projection series allow users to assess the impact on the number and types of families and households resulting from different population scenarios. The low and high series have been formulated to give plausible alternative scenarios for each area rather than at any collective geographical level. Neither series is consistent with any of the alternative series of the 2006-base National Family and Household Projections. The low projection series uses low fertility, high mortality, and low net migration for each area. The high projection series uses high fertility, low mortality, and high net migration for each area.

More detailed projection results 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 was 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 child-bearing age.

The propensity method was used subsequently 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 = \((\text{male partners in couple without children families} + \text{female partners in couple without children families}) ÷ 2\).

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

The number of one-parent families = \(\text{male parents in one-parent families} + \text{female parents in one-parent families}\).

The number of family households = \(\text{number of families} ÷ \text{average number of families per family household}\).

The number of one-person households = \(\text{number of people in one-person households}\).

The number of other multi-person households = \(\text{number of people in other multi-person households} ÷ \text{average number of people per other multi-person household}\).
**Projection assumptions**

Projection assumptions are formulated after analysis of short-term and long-term historical trends, government policy, information provided by local planners, and other relevant information. Tables containing the fertility, mortality, and migration assumptions for each territorial authority and regional council area are available in the subnational population projections section of the 'Information about the demographic projections' on the Statistics NZ website (www.stats.govt.nz).

**Fertility**

The assumed fertility rates are based on the registered births for each area during the period 2006–07 and change consistent with the medium fertility variant of the national population projections.

Under the medium fertility assumption, the total fertility rate at the national level is assumed to increase from 1.99 births per woman in 2006 to 2.11 in 2008, decrease to 1.90 in 2026, and then remain constant. The assumed total fertility rate in 2007–11 ranges from 1.40 births per woman for Queenstown-Lakes district to 3.10 for Wairoa district.

The high and low fertility assumptions for each area are for a total fertility rate for each five-year period ±0.1 births per woman from the medium assumption.

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

**Mortality**

The assumed mortality rates for each area are based on the registered deaths for each area during the period 2002–06 and change consistent with the medium mortality variant of the national population projections.

Under the medium mortality assumption, life expectancy at birth at the national level is assumed to increase from 78.2 years for males and 82.2 years for females in 2005–07 to 82.5 years for males and 86.2 years for females in 2031. The assumed life expectancy at birth in 2007–11 ranges from 74.3 years for males and 78.4 years for females for Wairoa district to 82.7 years for males and 86.5 years for females for Queenstown-Lakes district.

The low and high mortality assumptions for each area are for a life expectancy at birth for each five-year period ±0.5 years from the medium assumption.

**Migration**

Migration at the subnational level has both an internal (to/from other areas of New Zealand) and an external (to/from overseas) component, although these separate components are difficult to quantify. The assumed net migration for each area is based on a consideration of observed net migration during each five-year period from 1981 to 2006, the capacity of the area for further growth (for areas with net inflow), whether historical outflows can be sustained (for areas with net outflow), the desirability of the area to new migrants, and information available from and about local authorities relating to current and future developments which may affect population change.
Under the medium migration assumption, net migration at the national level is assumed to be 46,000 in 2007–11 and 50,000 in each subsequent five-year period. Of the 73 territorial authority areas, 59 are assumed to have the same net migration level in each five-year period between 2006 and 2031. The remaining areas are assumed to have differing net migration levels between 2006 and 2011 compared with subsequent periods. Differing levels are generally assumed for areas susceptible to changes in external migration, such as university cities, which have attracted large numbers of overseas students in recent years, and areas where constant net outflows are considered unsustainable.

The low and high net migration assumptions are chosen to represent plausible alternative migration scenarios for each area rather than at the collective national level. The age-sex patterns of net migration for each area are based on observed intercensal net migration patterns during 1981–2006.

Living arrangement type rates (LATRs)

One LATR variant is used for all three subnational family and household projection series. This 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 five-year age group. The LATRs are constrained so that the medium series of the Subnational Family and Household Projections sums to series 5B of the National Family and Household Projections for population (by living arrangement type, five-year age group, and sex), for families (by family type), and for households (by household type).

While assumed trends in LATRs do vary by area, they are generally consistent with assumed trends of LATR variant B at the national level. The main changes assumed at the national level between 2006 and 2031 for this variant are:

1. **Partner in couple without child(ren) family**: Increasing rates for males and females at most ages, especially at ages 30–54 years for males, and 25–54 and 70–84 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 25–59 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 0–19 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, especially at ages 30–45 years. This reflects increased rates of single parenting.

5. **Child in one-parent family**: Increasing rates at most ages, especially at ages 0–19 years. This reflects increased rates of single parenting.

6. **Person in other multi-person household**: Increasing rates at most ages, especially 15–24 years associated with higher numbers of students.

7. **Person in one-person household**: Increasing rates at most ages, especially 30–89 years for males and 35–54 years for females. These increases are associated with increased rates of marriage dissolution, decreasing rates of people forming partnerships, and lower fertility rates. The proportion of females aged 60–79 years living alone is assumed to drop slightly, given a slight convergence of male life expectancy to female life expectancy.
8. **Person in non-private dwelling:** Increasing rates at ages 15–24 years associated with higher numbers of students. Decreasing rates at ages 85+ years associated with increasing life expectancy and declines in morbidity rates.

Additionally, the average number of families per family household and the average number of people per other multi-person household were assumed to remain constant at 2006 levels. At the national level:

- 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.

**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, 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.

Demographic projections should not be confused with economic forecasts. Changes in the number of people, families, and households do not necessarily relate to the social and economic well-being of an area. The number of people, families, and households may change independently of local economic factors.

Household numbers should not be confused with building activity or dwelling numbers. 'Households' refers to private dwellings that are usually occupied by a person or group of people. Households therefore exclude non-private dwellings, unoccupied dwellings, and dwellings which are not the usual residence of people (eg holiday homes, second homes).

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.

Although the LATRs are 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 child-bearing, and average family size
- morbidity and mortality rates
- rates of partnership formation, including repartnering, and dissolution
- propensity of young adults to stay in the parental home
- propensity and ability of people to live alone
- propensity of older people to live in aged-care facilities
- presence of other relatives (eg extended family) and non-related individuals (eg 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 the 'Information about the demographic projections' page 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 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 child(ren) 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 remaining at a given age. In a period life table, it 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 child(ren)' family**: A person usually living in a partner role, but not in a parent role.
- **Other person with couple without child(ren) 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.

**Regional council** areas (regions) were established in 1989. There are 16 regions, covering every territorial authority in New Zealand with the exception of Chatham Islands Territory. There are eight instances where territorial authority boundaries straddle regional boundaries.

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.

**Territorial authority** areas were established in 1989 and are the smallest local government entities. There are 73 territorial authorities, comprising 16 cities, 56 districts, and one territory.

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 households by regional council area, 2006(base)–2031
2. Projected households by territorial authority area, 2006(base)–2031
3. Projected families and households by type and regional council area, medium series, 2006(base)–2031
4. Projected families and households by type and territorial authority, medium series, 2006(base)–2031