

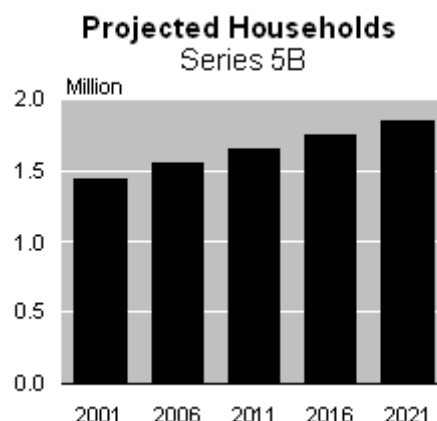
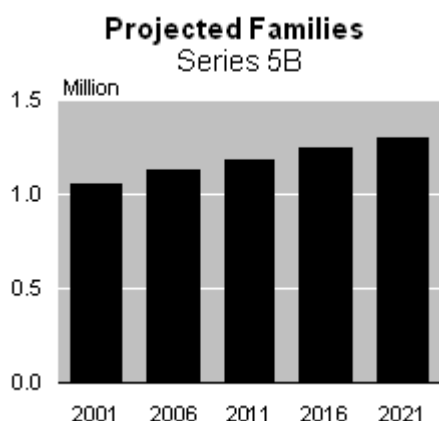
Embargoed until 10:45AM – 01 June 2005

National Family and Household Projections: 2001(base)-2021 Update

Highlights

The following highlights are based on series 5B, which assumes medium fertility, medium mortality, long-term annual net migration of 10,000 and 'B' living arrangement type rates:

- **The number of families is projected to reach 1.30 million by 2021**, an increase of 250,000 (24 percent) from an estimated 1.05 million families at 30 June 2001.
- **Most of the growth in families will be in couple without children families**, which will overtake two-parent families to become the most common family type by 2006.
- **The number of households is projected to reach 1.84 million by 2021**, an increase of 400,000 (28 percent) from an estimated 1.44 million households at 30 June 2001.
- **One-person households are projected to increase by 46 percent**, from 333,000 in 2001 to 488,000 in 2021.
- **The average size of households will decrease to 2.4 people by 2021**, from 2.6 people in 2001.
- **The numbers of families and households will grow faster than the population**, which is projected to increase by 18 percent between 2001 and 2021.



Brian Pink
Government Statistician

1 June 2005
Cat 31.912 Set 04/05 – 205

Commentary

Alternative projection series

This release contains updated 2001-base family and household projections for New Zealand. These supersede the 2001-base national family and household projections released in June 2003. The projections have as a base the estimated resident population, estimated families and estimated households at 30 June 2001, and cover the period to 2021 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.

Nine alternative series have been produced from combinations of three population series and three variants of living arrangement type rates. For 2001–2004, the estimated resident population at 30 June is used for all national family and household projection series. For 2005–2021, series 1, 5 and 9 of the *2004-base national population projections* released in December 2004 are used. Series 1 assumes low fertility, high mortality and low migration; series 5 assumes medium fertility, medium mortality and medium migration; series 9 assumes high fertility, low mortality and high migration.

The three variants of living arrangement type rates are:

1. Rates will remain constant at 2001 levels.
2. Rates will change linearly between 2001 and 2021 based on an assessment of observed trends between 1986 and 2001, and likely future trends, by sex and single-year of age.
3. Rates will change linearly between 2001 and 2021 according to observed trends between 1986 and 2001, 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, variants A and C are 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 nine 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.

What has changed from the previous 2001-base projections?

National family and household projections are updated every 2–3 years. These projections have been updated to incorporate the latest national population projections (released 16 December

2004). Compared with the previous national population projections (series 4, released on 24 October 2002), mid-range series 5 of the latest national population projections assumes:

1. Net migration of 104,000 in the five years to 30 June 2006, 38,000 in the five years to 30 June 2011, and 50,000 in each subsequent five-year period. By comparison, the previous national population projections assumed net migration of 100,000 in the five years to 30 June 2006 and 25,000 in each subsequent five-year period. An average net migration level of 10,000 rather than 5,000 a year in the long-term better reflects recent and likely future migration trends, with changes in immigration policy during the last 20 years being a key factor behind the increase in average annual net migration.
2. A slightly older net migration profile, with lower net inflow among the student ages (around 18 years).
3. A rise in the total fertility rate from 1.97 in 2001 to 2.01 in 2004–2005, then dropping to 2.00 in 2006, 1.92 in 2011 and 1.85 from 2016. By comparison, the previous national population projections assumed the total fertility rate dropped to 1.89 in 2006 and 1.85 from 2011.
4. Life expectancy at birth will increase to 80.7 years for males and 84.8 years for females in 2021. By comparison, the previous national population projections assumed life expectancy at birth of 80.3 years for males and 84.8 years for females in 2021.

The combined effect of these changes is that the New Zealand population is expected to reach 4.13 million in 2006, 4.29 million in 2011, 4.45 million in 2016 and 4.59 million in 2021 (series 5, 2004-base national population projections). By comparison, under series 4 of the 2001-base national population projections, the New Zealand population was expected to reach 4.11 million in 2006, 4.25 million in 2011, 4.38 million in 2016 and 4.51 million in 2021. Differences in the projected age-sex structure of the population will also cause differences in the number, size and type of families and households.

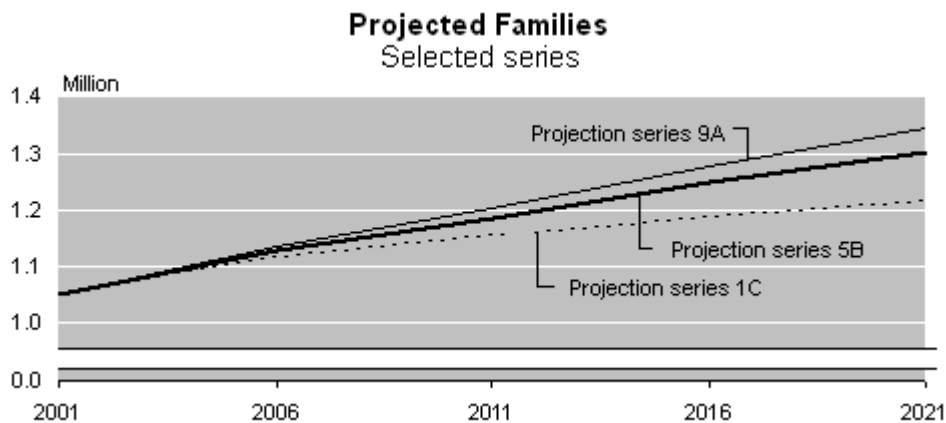
Living arrangement type rate variants 'A' and 'C' are unchanged from the June 2003 release. Small adjustments have been made to the variant 'B' rates to ensure that, under series 5B, there are similar numbers of male and female partners in couple without children families and in two-parent families. Assumptions of the average number of people per other multiperson household, the average number of families per family household, and the proportion of one- and two-parent families with dependent children, also remain unchanged from the previous 2001-base national family and household projections.

Families

Under series 5B, the number of families is projected to increase by 250,000 (24 percent) between 2001 and 2021, from 1.05 million to 1.30 million. Because of the changing age structure of the population, this will exceed the population growth of 18 percent 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 15,000 a year in 2002–2006 to 11,000 a year in 2017–2021. 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.

Series 9A, which assumes high fertility, low mortality, high migration and living arrangement type rates constant at 2001 levels, projects the highest number of families in 2021. Under this series, families would increase in number by 290,000 (28 percent) to 1.34 million in 2021. The

smallest increase in the number of families is given by series 1C, with an increase of 160,000 (16 percent) to 1.22 million in 2021. This series assumes low fertility, high mortality, low migration and living arrangement type rates changing linearly between 2001 and 2021 based on the observed trend between 1986 and 2001.



Family type

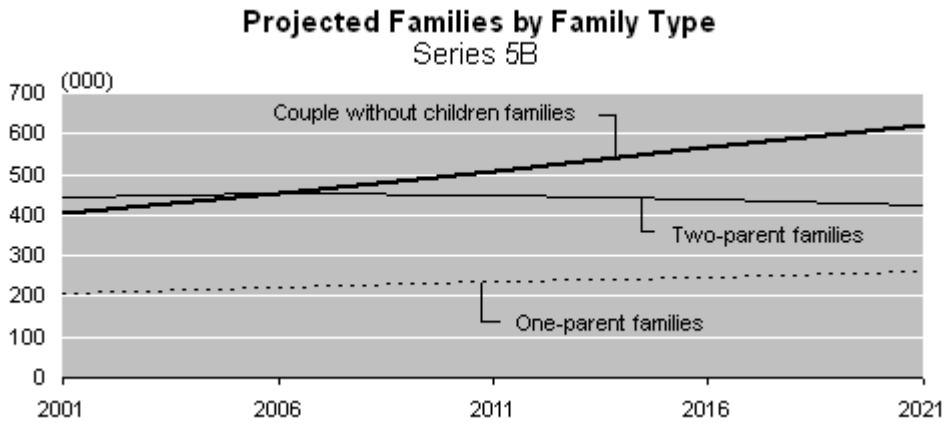
Couple without children families will account for the majority of growth in the number of families. There are projected to be 215,000 (53 percent) more couple without children families in 2021 than in 2001, with an increase from 407,000 to 623,000. Couple without children families include (a) couples 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 ages 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.

The number of one-parent families is projected to increase by 56,000 (28 percent), from 198,000 in 2001 to 254,000 in 2021. This 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 of 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 2001 level, series 5A shows that the number of one-parent families would increase by 29,000 (14 percent), to 227,000 in 2021. 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 after 2006, because of the continuing trends towards single parenting and fewer couples having children. Under series 5B, the number of two-parent families will increase from 446,000 in 2001 to 456,000 in 2006, but then fall to 427,000 by 2021. If living arrangement type rates were to remain at 2001 levels, series 5A projects a 10 percent increase in the number of two-parent families between 2001 and 2021, to 490,000.

Two-parent families were the most common family type in 2001, accounting for 42 percent of all families. Under series 5B, couple without children families are projected to surpass two-parent families as the most common family type by 2006. Couple without children families will account for 48 percent of all families by 2021, while two-parent families will account for 33 percent. Couple without children families accounted for 39 percent of all families in 2001. One-parent

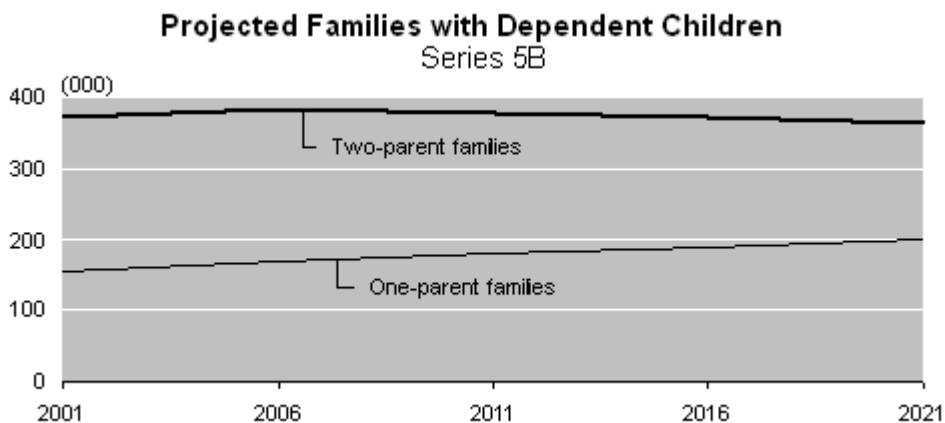
families are projected to account for 19 percent of all families throughout the projection period.



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 2001, about 84 percent of two-parent families and 77 percent of one-parent families contained dependent children. Assuming these proportions increase slightly during the projection period, the number of families with dependent children is projected to increase from 525,000 in 2001 to 561,000 in 2021. Growth will slow throughout the projection period, with an increase of 31,000 families with dependent children in the first ten years of the projection period (2002–2011), but an increase of only 4,000 in the last ten years of the projection period (2012–2021). The slowing growth mainly reflects the projected trends in the total number of two-parent families discussed in the previous section (Family type).

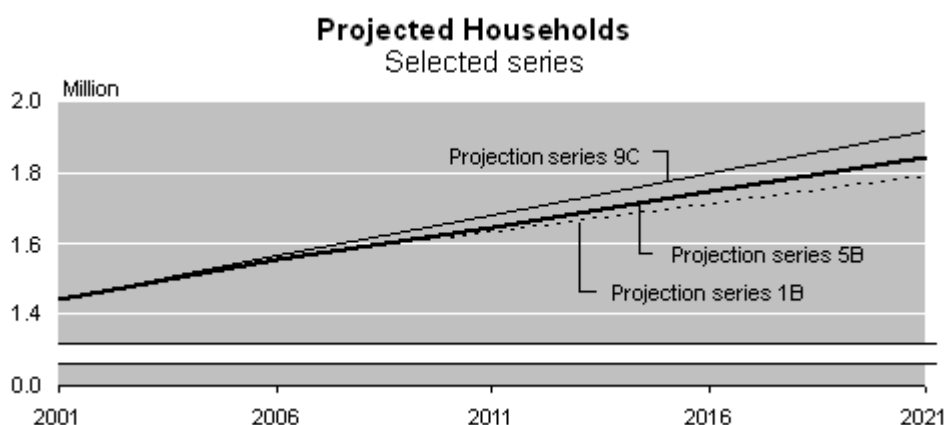
Within these families, the number of two-parent families with dependent children is projected to increase from 372,000 in 2001 to 382,000 in 2006, but then decrease to 363,000 by 2021. In contrast, the number of one-parent families with dependent children will increase throughout the projection period, from 153,000 in 2001 to 178,000 in 2011 and 198,000 in 2021. Two-parent families will account for 65 percent of families with dependent children in 2021, down from 71 percent in 2001.



Households

Under series 5B, the number of households is projected to increase by 400,000 (28 percent), from 1.44 million in 2001 to 1.84 million in 2021. This is faster growth than that of families (24 percent) and the population (18 percent) over this period, reflecting the trend towards smaller average household size and the increasing number of non-family households. 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.

The number of households is projected to increase under all nine projection series. The largest increase is projected under series 9C, which assumes high fertility, low mortality, high migration and living arrangement type rates changing linearly between 2001 and 2021 based on the observed trend between 1986 and 2001. Under this series, the number of households will increase by 470,000 (33 percent) to 1.92 million in 2021. The smallest increase is projected under series 1B, which assumes low fertility, high mortality, low migration and living arrangement type rates changing linearly based on an assessment of trends between 1986 and 2001 and likely future trends. Under this series, the number of households will increase by 350,000 (24 percent) over the projection period, reaching 1.79 million by 2021.

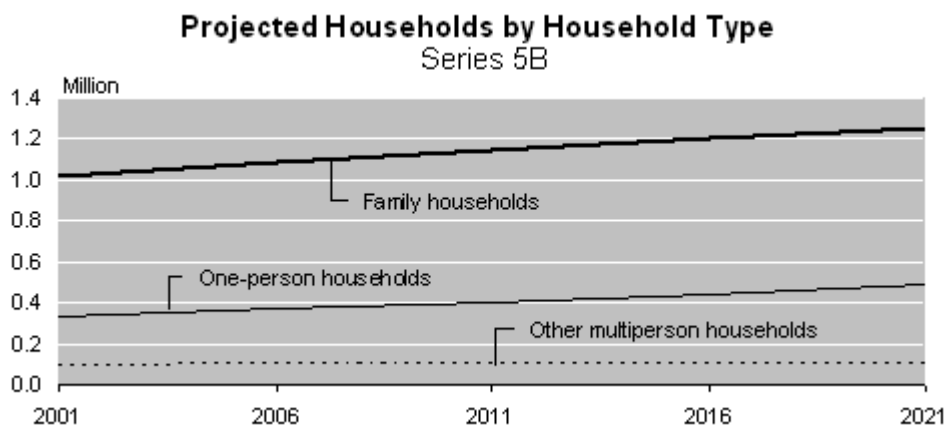


Household type

One-person households are projected to be the fastest-growing household type, increasing by 154,000 (46 percent) from 333,000 in 2001 to 488,000 in 2021. One-person households will account for 26 percent of all households in 2021, up from 23 percent in 2001. The growth in this household type will be 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, 64 percent are projected to be aged 55 years and over in 2021, compared with 57 percent in 2001.

Family households are projected to increase by 230,000 (23 percent), from 1.02 million in 2001 to 1.25 million in 2021. 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 2021 (68 percent) than in 2001 (71 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 1.03 families per family household in 2001.

The number of other multiperson households (households containing more than one person, but not containing a family) is expected to increase from 88,000 in 2001 to 102,000 in 2021. This is an increase of 13,000 or 15 percent. Other multiperson households will account for 6 percent of all households throughout the projection period. People aged 18–28 years will continue to account for about half of all people in other multiperson households.



Average family and household size

The average size of households is projected to slowly decline between 2001 and 2021, 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 2001 to 3.0 people in 2021, reflecting changes in both the type and size of families. By 2021, 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 4.0 people in 2001 falling slightly to 3.9 people by 2021. Couple without children families, by definition, contain two people. One-parent families contained an average of 2.7 people in 2001 and are projected to average 2.5 people by 2021.

Average Size of Families and Households								
Series 5B								
Year at 30 June	Family Type				Household Type			
	Couple without Children	Two-parent	One-parent	All Families	Family ⁽¹⁾	Other Multiperson	One-person	All Households
Average size (people)								
2001 (base)	2.0	4.0	2.7	3.0	3.2	2.7	1.0	2.6
2006	2.0	4.0	2.7	2.9	3.1	2.7	1.0	2.6
2011	2.0	4.0	2.6	2.9	3.1	2.8	1.0	2.5
2016	2.0	4.0	2.6	2.8	3.0	2.8	1.0	2.5
2021	2.0	3.9	2.5	2.7	3.0	2.9	1.0	2.4

(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.

Household size distribution

Households containing one or two people are projected to account for nearly all of the growth in the number of households. Both one-person and two-person households are projected to increase in number by about 50 percent between 2001 and 2021. Over this period, the number of one-person households will increase from 333,000 to 488,000, while the number of two-person households will increase from 489,000 to 719,000. The growth in two-person households is mainly due to the increasing numbers of couple without children families and one-parent families, together with the decrease in the average size of one-parent families (ie more one-parent families will consist of a parent and only one child). Two-person households will account for 39 percent of all households in 2021, up from 34 percent in 2001. The share of households containing only one person will also increase, from 23 percent in 2001 to 26 percent in 2021.

Three-person households are projected to increase by 16,000 (7 percent) between 2001 and 2021. However, they will account for a smaller proportion of all households in 2021 (14 percent) than in 2001 (17 percent). The number of households containing four or more people is projected to increase between 2001 and 2006, but then slowly decline. In 2021, the number of households containing four or more people will be similar to the number in 2001. About 21 percent of households will contain four or more people by 2021, compared with 26 percent in 2001.

Average Size Distribution						
Series 5B						
Year at 30 June	Household size (people)					Total
	1	2	3	4	5+	
	Number (000)					
2001 (base)	333	489	240	213	156	1,441
2006	368	545	251	220	170	1,553
2011	404	601	254	220	169	1,648
2016	444	662	256	218	167	1,748
2021	488	719	256	215	165	1,842
	Percent					
2001 (base)	23	34	17	15	11	100
2006	24	35	16	14	11	100
2011	24	36	15	13	10	100
2016	25	38	15	12	10	100
2021	26	39	14	12	9	100

Note: Owing to rounding, individual figures may not sum to give the stated totals.

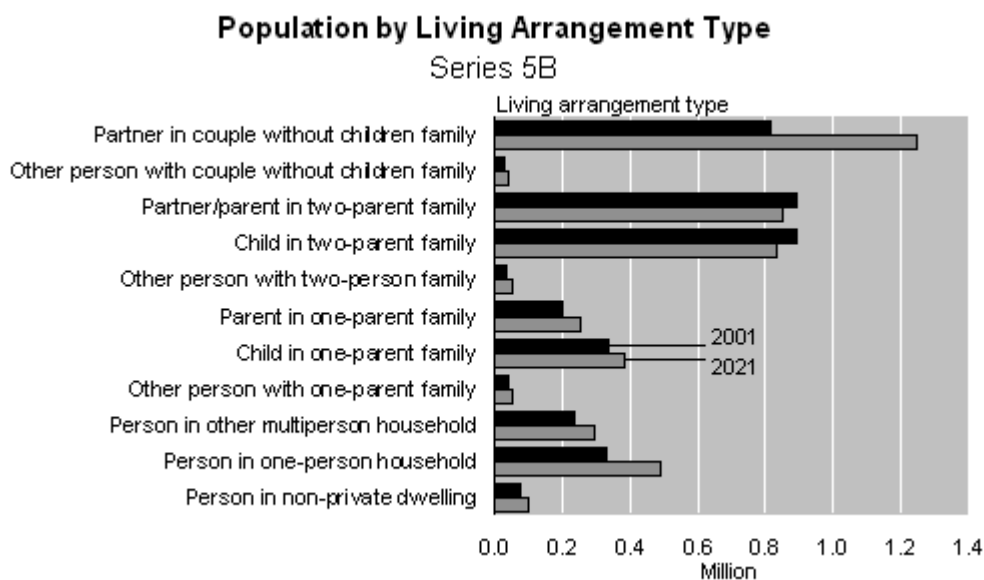
Living arrangement types

The updated 2001-base national family and household projections were produced by allocating people to one of eleven 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 partners in couple without children families. The number of people in this living arrangement type is projected to increase by 53 percent, from 810,000 in 2001 to 1.25 million in 2021. The main factor behind this growth is the increasing number of people in ages 50–90 years, where living in a couple without children family is the most common living arrangement type. Most couples in these ages will have had children who have left the parental home. In 2021, 72 percent of partners in couple without children families are projected to be aged 50 years and over, compared with 63 percent in 2001.

Population ageing is also the main reason for the large projected increases in the numbers of people in one-person households (ie living alone) and people living in non-private dwellings (which includes retirement homes), up 46 percent and 34 percent, respectively, between 2001 and 2021. Almost 11 percent of the population will be living alone in 2021, compared with 9 percent in 2001. The number of people aged 80 years and over living in a non-private dwelling is projected to almost double between 2001 and 2021, from 21,000 to 40,000. This is despite a small assumed decrease in the proportion of older people living in non-private dwellings, due to improvements in life expectancy and well-being in the older ages.

The number of parents in one-parent families is projected to increase by 28 percent between 2001 and 2021. This 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 average number of births per woman, the number of children in one-parent families will increase at a slower rate, up 16 percent between 2001 and 2021. An increase in the rate of single parenting and fewer couples having children will mean there are 4 percent fewer parents in two-parent families in 2021 than in 2001. The number of children in two-parent families will fall by 7 percent over the same period.



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

Technical notes

Latest projections

This release contains updated 2001-base projections of families and households usually living in New Zealand. The family and household projections have been updated using the 2004-base national population projections released on 16 December 2004. The projections cover the period 2002–2021 at one-year intervals. The projection period is limited to 20 years because of the uncertainty of family and household projections, as discussed in Nature of projections (below).

As with the previous 2001-base national family and household projections (released in June 2003), a 'propensity' method has been used to produce the latest projections. The family and household projections are derived from estimates (for 2002–2004) and projections (for 2005–2021) 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). 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 2001 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 (eg 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 (eg 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). There is no information 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 2001. This population (3.880 million) was based on the census usually resident population count (3.737 million) at 6 March 2001 with adjustments for:

1. net census undercount (+81,000)
2. residents temporarily overseas on census night (+55,000)
3. births, deaths and net migration between census night (6 March 2001) and 30 June 2001 (+4,000)
4. reconciliation with demographic estimates at ages 0–9 years (+4,000).

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 (1.052 million) and households (1.441 million) are equivalent to the census family count (968,000) and census household count (1.344 million), respectively, at 6 March 2001, with adjustments for:

1. net census undercount
2. families and households temporarily overseas on census night
3. change between census night (6 March 2001) and 30 June 2001
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 New Zealand website (www.stats.govt.nz).

Alternative series

Nine 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 2001, and likely future trends to 2021. 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 variants A and C 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, 5B and 5C 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 multiperson households = number of people in other multiperson households ÷ average number of people per other multiperson household.

Projection assumptions

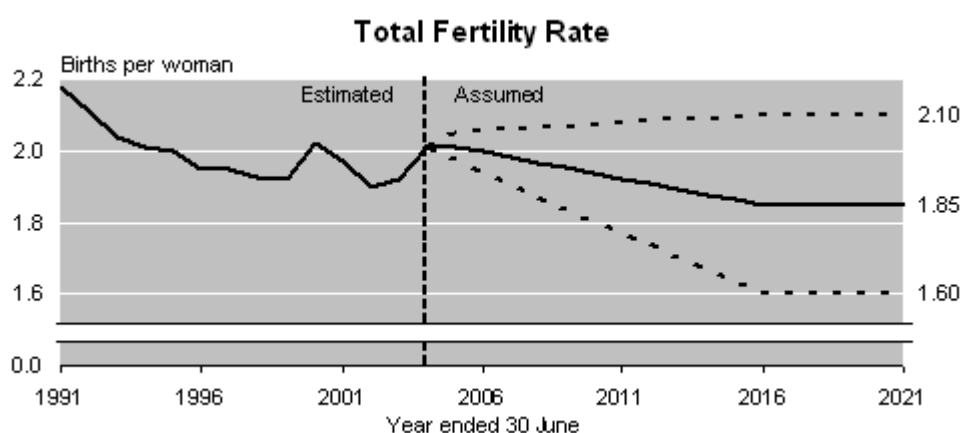
Projection assumptions are formulated after analysis of short-term and long-term historical trends, recent trends and patterns observed in other countries, government policy, and other relevant information.

Fertility

The 2004-base national population projections adopted three alternative fertility variants – designated low, medium and high – which assume that fertility rates will vary until 2016, when the total fertility rate will reach 1.60, 1.85 and 2.10 births per woman, respectively. After 2016, fertility rates are assumed to stay constant. The base total fertility rate in 2004 was 2.01 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 2004 and 2016, while rates for women aged 32 years and over will increase slightly. By comparison, the low fertility variant assumes fertility rates will decrease between 2004 and 2016 for most ages. The high fertility variant assumes that fertility rates will drop between 2004 and 2016 for women aged under 28 years and increase for women aged 28 years and over.

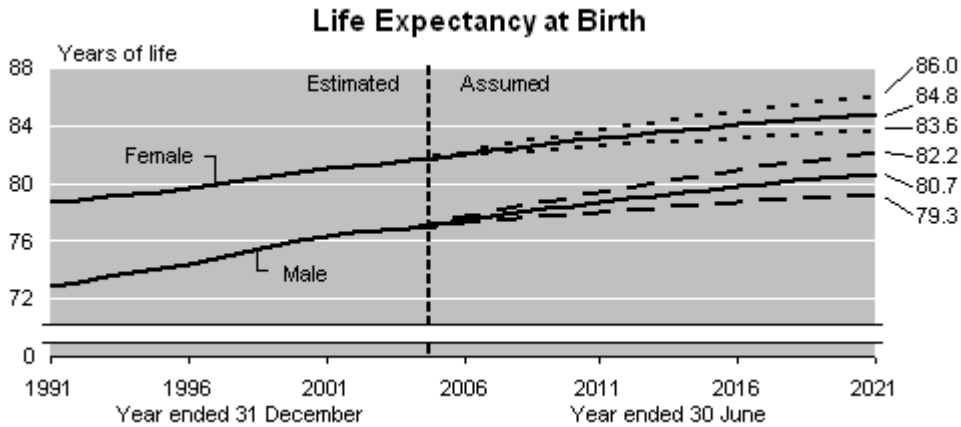
A sex ratio at birth of 105.5 males per 100 females is assumed, based on the historical annual average.



Mortality

The 2004-base national population projections adopted three alternative mortality variants – designated low, medium and high – which assume that mortality rates will continue to drop so that the average life expectancy at birth for males will increase to 82.2, 80.7 and 79.3 years, respectively, by 2021. The corresponding life expectancies for females in 2021 will be 86.0, 84.8 and 83.6 years. The base life expectancy at birth in 2004 was 77.0 years for males and 81.6 years for females.

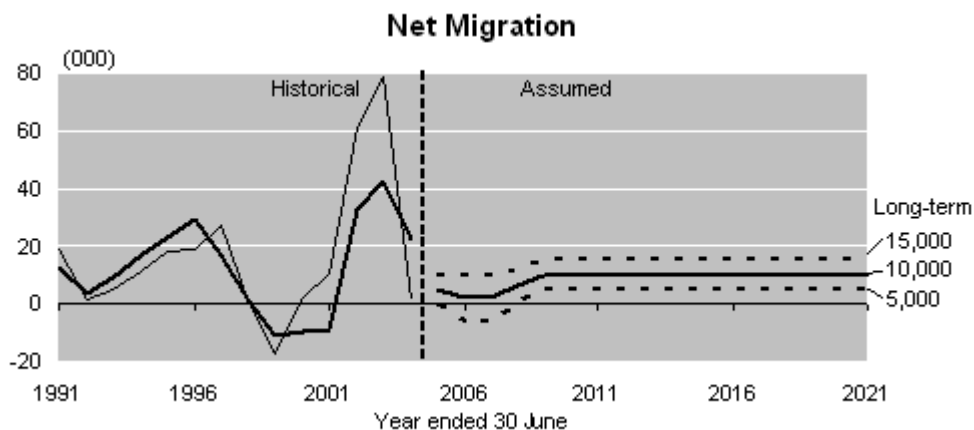
Mortality rates are assumed to decrease at the same rate at all ages. Between 2004 and 2021, male mortality rates are assumed to decrease by about 37, 28 and 19 percent for the low, medium and high mortality variants, respectively. By comparison, female mortality rates are assumed to decrease by about 35, 27 and 18 percent for the low, medium and high mortality variants, respectively.



Migration

The 2004-base national population projections adopted three alternative migration variants – designated low, medium and high – which assume long-term annual net migration levels of 5,000, 10,000 and 15,000, respectively. Short-term migration levels converging to the long-term levels are assumed for 2005–2008. Series with long-term annual net migration of 5,000 assume net migration of 0 in 2005, -6,000 in 2006, -6,000 in 2007 and 0 in 2008. Series with long-term annual net migration of 10,000 assume net migration of 5,000 in 2005, 2,000 in 2006, 2,000 in 2007 and 6,000 in 2008. Series with long-term annual net migration of 15,000 assume net migration of 10,000 in 2005, 10,000 in 2006, 10,000 in 2007 and 12,000 in 2008. These short-term 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.

Consistent with historical and recent trends, the age-sex patterns of net migration assume the main net outflow at ages 21–26 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 0–19 and 28–50 years.



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

Living arrangement type rates (LATRs)

There are three alternative LATR variants – designated A, B and C. Variant A assumes that LATRs will remain constant at 2001 levels. Variant B assumes that LATRs will change linearly between 2001 and 2021 based on an assessment of observed trends between 1986 and 2001, and likely future trends, by sex and single-year of age. Variant C assumes that LATRs will change linearly between 2001 and 2021 according to observed trends between 1986 and 2001, 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 2001 and 2021 are:

1. Partner in couple without children family: Increasing rates for males and females at most ages, especially at ages 30–54 years for males, and 30–44 and 85–94 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 0–19 years. This reflects increased rates of single parenting from separation, divorce, childbearing outside of couple relationships, and more complex shared care arrangements.
4. Parent in one-parent family: Increasing rates at most ages, especially at ages 25–39 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 multiperson household: Increasing rates at ages 15–24 years associated with higher numbers of students.
7. Person in one-person household: Increasing rates at most ages, especially 30–74 years for males and 35–44 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.

For variant A, the following factors remain constant at the 2001 levels, while for variants B and C:

- the average number of families per family household is assumed to increase linearly from 1.032 in 2001 to 1.040 in 2021
- the average number of people per other multiperson household is assumed to increase linearly from 2.65 in 2001 to 2.90 in 2021
- the proportion of two-parent families with dependent children is assumed to increase linearly from 0.835 in 2001 to 0.850 in 2021
- the proportion of one-parent families with dependent children is assumed to increase linearly from 0.77 in 2001 to 0.78 in 2021.

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 (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.

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 variants 'A' and 'C' 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 inter-relate 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 repartnering, and dissolution
- propensity of young adults to stay in the parental home
- propensity and ability of people to live alone
- 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 *Information about the demographic projections* on the Statistics New Zealand 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 divided 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 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.

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:

1. **Partner in couple without children family:** A person usually living in a partner role, but not in a parent role.
2. **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.
3. **Partner/parent in two-parent family:** A person usually living in a partner and parent role.
4. **Child in two-parent family:** A person usually living in a child role with two parents, but not in a partner or parent role.
5. **Other person with two-parent family:** A person usually living with a two-parent family, but not in a partner, parent or child role.
6. **Parent in one-parent family:** A person usually living in a parent role, but not in a partner role.
7. **Child in one-parent family:** A person usually living in a child role with one parent, but not in a partner or parent role.
8. **Other person with one-parent family:** A person usually living with a one-parent family, but not in a partner, parent or child role.
9. **Person in other multi-person household:** A person usually living with one or more people not in partner, parent or child roles.
10. **Person in one-person household:** A person usually living alone.
11. **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).

Copyright

Information obtained from Statistics New Zealand may be freely used, reproduced, or quoted unless otherwise specified. In all cases Statistics NZ must be acknowledged as the source.

Liability

While care has been used in processing, analysing and extracting information, Statistics NZ gives no warranty that the information supplied is free from error. Statistics NZ shall not be liable for any loss suffered through the use, directly or indirectly, of any information, product or service.

Timing

Timed statistical releases are delivered using postal and electronic services provided by third parties. Delivery of these releases may be delayed by circumstances outside the control of Statistics NZ. Statistics NZ accepts no responsibility for any such delays.

Tables

The following tables are printed with this Hot Off The Press and can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the [*Excel file viewer*](#) to view, print and export the contents of the file.

List of tables

1. Projected families by family type, 2001(base)–2021
2. Projected households by household type, 2001(base)–2021
3. Projected population by living arrangement type and sex, 2001(base)–2021