National Population Estimates: December 2011
quarter
Embargoed until 10:45am – 15 February 2012

Key facts

During the December 2011 year:

- Population growth was 29,600 (0.7 percent).
- Natural increase and net migration contributed 31,400 and -1,900, respectively.

At 31 December 2011:

- The estimated resident population of New Zealand was 4.42 million.
- The population comprised 2.17 million males and 2.25 million females.
- There were 97 males for every 100 females.
- The median ages for males and females were 35.6 and 38.0 years, respectively.

### Components of annual population change 1997–2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural increase</th>
<th>Net migration</th>
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</thead>
<tbody>
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Source: Statistics New Zealand

<table>
<thead>
<tr>
<th>Estimated resident population</th>
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</thead>
<tbody>
<tr>
<td>Age group (years)</td>
</tr>
<tr>
<td>All ages</td>
</tr>
<tr>
<td>Under 15</td>
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<td>15–39</td>
</tr>
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<td>40–64</td>
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<tr>
<td>65+</td>
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</table>

**Symbol:** P  provisional

Geoff Bascand
Government Statistician

15 February 2012

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Commentary

• Population growth slows to 0.7 percent
• Median age for females reaches 38.0 years
• One in seven New Zealanders is aged 65 years and over
• Ageing of the working-age population
• More males aged 80 years and over

This information release contains provisional estimates of the resident population of New Zealand at 31 December 2011. National population estimates give the best available measure of the size and age-sex structure of the population usually living in New Zealand.

Population growth slows to 0.7 percent

In the December 2011 year, the estimated resident population grew by 29,600 (0.7 percent), to reach 4,422,700. This compares with an increase of 45,900 (1.1 percent) in the previous December year. The growth during the December 2011 year was due to a natural increase (excess of births over deaths) of 31,400, offset by a net international migration loss of 1,900. Both natural increase and net international migration have fallen, by 4,000 and 12,300, respectively, compared to the previous December year.

In the December 2011 year, New Zealand experienced the lowest population growth for 11 years, caused by both negative net migration and a fall in natural increase. During the December 2000 year the population growth was 0.6 percent, caused by a natural increase of 30,500 and a net migration loss of 11,300. Slow population growth also occurred during the December 1998 and 1999 years, 0.7 and 0.6 percent, respectively.

Source: Statistics New Zealand
Median age for females reaches 38.0 years

New Zealand has an ageing population because of a shift to sustained low fertility and low mortality rates. Latest national population projections (series 5) indicate that the median age of the New Zealand population will be 43.5 years in 2061. At 31 December 2011, the median age of New Zealand’s population was 36.9 years, compared with 34.8 years a decade earlier and 31.5 years two decades earlier.

Median age for females has increased more than for males over the last decade. The median age is now 38.0 years and 35.6 years for females and males, respectively. Female median age has increased by 2.5 years over the last decade, while for males it has increased by 1.7 years. The lower median age for males largely reflects their lower life expectancy of 78.8 years, compared with 82.7 years for females.

One in seven New Zealanders is aged 65 years and over

The age composition of New Zealand’s population has changed over the last decade. At 31 December 2011:

- **Children (aged 0–14 years)** accounted for 20 percent (893,000) of the New Zealand population, down from 22 percent a decade earlier.
- **The younger working-age population (aged 15–39 years)** remained the largest population group at 1,500,800, accounting for 34 percent of the total population, down from 36 percent a decade earlier.
- **The older working-age population (aged 40–64 years)** remained a large proportion of the population, increasing from 30 percent to 32 percent during the decade, to reach 1,429,700.
- **The population aged 65 years and over (aged 65+)** accounted for 14 percent (599,100) of New Zealand’s population, up from 12 percent a decade earlier. That equates to one out of every seven New Zealanders being 65+, up from one in eight a decade earlier.

![Population by broad age group](source: Statistics New Zealand)

![Proportion of the aged 60+ population](source: Statistics New Zealand)
Ageing of the working-age population

Over the past two decades, the proportion of total working-age population (aged 15–64) has remained stable, comprising around two-thirds of the total estimated resident population. However the age structure of the working-age population has changed. At December 1991 around six out of every 10 people aged 15–64 years were in the younger working-age population, while the other four belonged to the older working age population. Twenty years later the population of the younger and older working-age groups has converged, such that they comprise equal proportions of the total working age population. This is due to gradual growth in the older working-age group, while growth in the younger working-age group has plateaued.

More males aged 80 years and over

During the 20-year period ending December 2011, New Zealand’s population aged 80 years and over (80+) has almost doubled, from 80,200 to 157,200. Among the 80+ population, females significantly outnumber males, although the proportion of males in the 80+ population is increasing. In December 1991 among the 80+ population, there were two females to every male. Twenty years later, there are 1.5 females to every male. This is due to male longevity increasing faster than female longevity (Life expectancy).

For more detailed data see the Excel tables in the 'Downloads' box.
Definitions

About national population estimates

National population estimates give the best available measure of the size and age-sex structure of the population usually living in New Zealand. Estimates of the resident population are based on the latest census data and on births, deaths, and migration since the census.

National population estimates are published quarterly and subnational population estimates are published annually.

More definitions

Census usually resident population count: a count of all people who usually live in New Zealand and are present in New Zealand on a given census night. This count excludes visitors from overseas, and residents temporarily overseas on census night. The population counts published from the census are not comparable with the estimated resident population.

Estimated de facto population: the estimated de facto population of New Zealand includes all people present in New Zealand and counted by the census (census night population count). This estimate includes visitors from overseas who are counted on census night, but excludes New Zealand residents who are temporarily overseas.

Estimated resident population: an estimate of all people who usually live in New Zealand on a given date. Visitors from overseas are excluded.

International migration: migration into or out of New Zealand. International migration statistics are based on 'permanent and long-term' migration statistics, which are primarily determined by passengers' responses on arrival and departure cards about how long the person is in or away from New Zealand, and where they last lived or will live for the next 12 months or more.

- International migrant arrivals: people from overseas arriving to live in New Zealand for 12 months or more (including permanently), and New Zealanders returning after an absence of 12 months or more. (Referred to as permanent and long-term arrivals in international migration statistics.)

- International migrant departures: New Zealanders departing for an absence of 12 months or more (including permanently), and people from overseas departing after a stay of 12 months or more in New Zealand. (Referred to as permanent and long-term departures in international migration statistics.)

- Net migration: the difference between the number of people who have moved to, and departed from, New Zealand. At the national level this is the equivalent to international migrant arrivals minus international migrant departures.

Median age: half the population is younger, and half older, than this age.

Natural increase or decrease: natural increase is an excess of births over deaths. Natural decrease is an excess of deaths over births.
Related links

Upcoming releases

The *National Population Estimates: March 2012 quarter* will be released on 14 May 2012.

The *Release calendar* lists all our upcoming information releases by date of release.

Past releases

See *National population estimates – information releases* for links to past releases.

Related information

Māori population estimates: the estimated Māori population of New Zealand by age and sex.

Population clock: Statistics NZ’s online population clock gives a real-time approximation of the estimated resident population of New Zealand.

Subnational population estimates – information releases: Resident population estimates for territorial authority areas (ie cities and districts), and regions in New Zealand.

Base populations for estimates and projections (from Table Builder).

New Zealand abridged life tables, 2008–10: abridged period life tables for the total New Zealand male and female populations provide an indication of the trends in life expectancy in the years between the construction of complete period life tables.

National population projections (2009 base–2061): national projections provide a summary of the projected population of New Zealand, based on different combinations of fertility, mortality, and migration assumptions.
Data quality

Period-specific information
This section contains information about data that has changed since the last release

- Estimates of 'mean year ended' population available in Infoshare
- Upcoming changes to national population estimates series in Infoshare

General information
This section contains information that does not change between releases.

- Base population
- Accuracy of the data
- Provisional and final estimates
- Population clock
- 2006-base population estimates extended
- 2013-base population estimates
- Rounding
- More information

Period-specific information

Estimates of 'mean year ended' population available in Infoshare

This release no longer contains estimates of the resident population for the mean year ended. These estimates can be found in Infoshare, which is a free, online database to access time series data. Infoshare contains estimates of the resident population for the mean year ended, from September 1991 to the current quarter. To access the data, select the following categories from the Infoshare homepage:

Subject category: Population

Upcoming changes to national population estimates series in Infoshare

National population estimates are currently available under two different groups in Infoshare; Demography Population Estimates and Demography Age Estimates. These will be merged to form one group, Population Estimates, where age will be a selection variable. In addition, the as at and mean series will appear in one table, such that they will be available as a selection variable under Estimate Type. These changes will come into effect in mid-2012.

General information

Base population

The estimated resident population at 30 June 2006 forms the base population for deriving post-censal population estimates.

The estimated resident population of New Zealand at 30 June 2006 is the 2006 census usually resident count from the 2006 Census (held on 7 March 2006), updated for:
- residents missed or counted more than once by the census (net census undercount)
- residents temporarily overseas on census night
- births, deaths, and net migration between census night and 30 June 2006
- reconciliation with demographic estimates at ages 0–4 years.

Quarterly national population estimates from September 2006 onwards were derived by updating the estimated resident population at 30 June 2006 for births, deaths, and net migration during the following period.

**Accuracy of the data**

Official national population estimates give the best available measure of how many people usually live in New Zealand. However, uncertainty is inherent in the estimation process. Statistics NZ produces national population estimates using a component methodology, where the components of population change (births, deaths and international migration) are used to update a base population. There is some uncertainty associated with component data, particularly the estimate of international migration. Generally speaking, the uncertainty associated with population estimates increases as the estimates move further away from the base (starting point). Uncertainty also increases as population estimates are broken down by age and sex.

**International migration estimates**

International migration statistics are based on electronic arrival and departure records supplied to Statistics NZ for each international passenger. All arrivals and departures are processed so they can be allocated to one of three passenger types: overseas visitors, New Zealand-resident travellers, and permanent and long-term migrants. The net number of permanent and long-term migrants provide the estimate of international migration used in deriving the national population estimates. Uncertainty arises due to changes in passenger intentions; a person may change their intentions after their arrival or departure, which may mean the recorded passenger type becomes incorrect. Statistics NZ does not revise published statistics to adjust for such changes. As a result, the uncertainty associated with population estimates increases as the time period between the reference date of the base population and the date of the estimate increases.

**Birth and death estimates**

There is some uncertainty associated with birth and death data. Birth and death registrations are used to estimate the number of births and deaths that occurred during each quarter. Not all births and deaths that occur in a quarter are registered by the end of the quarter, and this delay in registration is taken into account when estimating birth and death occurrences in the current quarter.

**Determining data accuracy**

It is not possible to ascertain the accuracy of current national population estimates as no independent or authoritative measure of the resident population exists. The periodic Census of Population and Dwellings remains the cornerstone of population statistics in New Zealand. Following the 2013 Census it will be possible to derive updated estimates of the population, to assess the accuracy of estimates since 2006, and to revise estimates where necessary.
Provisional and final estimates

Provisional and final estimates are produced for the resident population each quarter. Provisional estimates are produced for the information and media releases. This is the first public release of population estimates for a quarter and they are released within six weeks of the end of the reference quarter. The final estimates are derived when an extra quarter of detailed vitals data is available, about five months after the end of the reference quarter. Changes between the provisional and final estimates are most apparent at the younger and older age groups, due to delayed registrations of births and deaths.

Birth estimates

The final estimation for births that occurred in a quarter is less accurate, as births are not registered as closely to their occurrence as are deaths (around 5 percent of births are not registered either in the quarter of occurrence or in the subsequent quarter). The final estimation for quarterly births has a 95 percent confidence interval of ±500 (or about 3.5 percent, based on an average of 14,000 births per quarter).

Death estimates

The estimate of deaths that occurred in the reference quarter is taken as those deaths that were registered either in the reference quarter or in the subsequent quarter, and that occurred in the reference quarter. The provisional estimation for quarterly deaths has a 95 percent confidence interval of ±250 (or about 3.5 percent, based on an average of 7,000 deaths per quarter). This final estimation for deaths is very accurate as very few deaths are registered later than one quarter after their occurrence (about 1 death in a 1,000 is not).

Population clock

Statistics NZ's online population clock gives a real-time approximation of the estimated resident population of New Zealand. The population clock uses the latest quarterly estimated resident population, and estimates of the expected number of births, deaths, and net migration for the coming quarter. The settings for each component (births, deaths, and net migration) are derived by converting the quarterly estimated totals into a ‘per minute’ figure, making allowance for the number of days per quarter.

2006-base population estimates extended


2013-base population estimates

The 2013 Census of Population and Dwellings will take place on Tuesday, 5 March 2013. The 2013 Census website (www.census.govt.nz) provides information about the census.

Population estimates based on the 2013 Census will be released from August 2014. In addition, all population estimates after 30 June 2006 will be revised following results from the 2013 Census.
Rounding

All figures in this release were rounded independently. Estimates of the total population, natural increase, net migration, and broad age groups are rounded to the nearest 100. National population estimates of five-year age groups are rounded to the nearest 10.

All derived figures in this release were calculated using data of greater precision than that published.

More information

Information about the population estimates contains detailed information about the methods used to derive population estimates.

Liability

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+64 4 931 4600 (outside New Zealand)
Email: info@stats.govt.nz
Tables

The following tables are included in this release. They are available in Excel format from the 'Downloads' box of National Population Estimates: December 2011 quarter on the Statistics NZ website.

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.

1. Estimated resident population and population change
2. Estimated resident population by broad age group
3. Estimated resident population by five-year age group

Access more data on Infoshare

Use Infoshare, a free, online database to access time-series data specific to your needs. To access annual and quarterly national population estimates by single-year of age, five-year age groups, and selected age groups, select the following categories from the Infoshare homepage:

Subject category: Population
Group: Demography Population Estimates
Group: Demography Age Estimates