

Subnational Population Projections: 2013(base)–2043 update

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Key facts

Subnational population projections indicate the future population of New Zealand's 16 regional council areas (regions), 67 territorial authority (TA) areas, and 21 Auckland local board areas (ALBAs).

The low, medium, and high growth projections all indicate:

- The population growth rate will slow in all regions, cities, districts (except Buller), and ALBAs between 2013 and 2043.
- All areas will be home to more people aged 65+ in 2043.
- Deaths will increase relative to births in almost all areas as the population ages.

The medium projection indicates:

- Fifteen of New Zealand's 16 regions will have more people in 2043 than in 2013, although 17 TA areas will have fewer.
- Deaths will outnumber births in three-fifths of TA areas by 2043.
- Forty-seven TA areas will have fewer children in 2043 than in 2013.
- More than half of New Zealand's population growth between 2013 and 2043 will be in Auckland.
- Auckland's population will reach 2 million by 2033.

Projected average annual population change

By regional council area
2013–43



Source: Statistics New Zealand

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Commentary

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Important advice for using projections

Subnational population projections indicate the future population usually living in the 16 regional council areas (regions), 67 territorial authority (TA) areas, and 21 Auckland local board areas (ALBAs) of New Zealand. Three projections (low, medium, and high growth) that incorporate different fertility, mortality, and migration assumptions for each geographic area are produced to illustrate a range of possible scenarios.

At the time of release, Statistics NZ considers the medium projection the most-suitable for assessing future population changes. The medium series is consistent with the median projection (50th percentile) of the [National Population Projections: 2016\(base\)–2068](#) (released October 2016). However, customers can judge which projections are most suitable for their purposes.

These projections are not predictions. They should be used as an indication of the overall trend, rather than as exact forecasts. We update the projections every 2–3 years to maintain their relevance and usefulness, by incorporating new information about demographic trends and developments in methods.

The following results highlight the main trends from these projections.

See [Population projections tables](#) for links to more detailed projections, assumptions and results in [NZ.Stat](#).

Reference period

This release contains updated 2013-base projections of the population usually living in the 16 regions, 67 TA areas (cities and districts), and 21 ALBAs of New Zealand. These supersede the 2013-base projections released in February 2015. The new projections incorporate the latest demographic information, including:

[National Population Projections: 2016\(base\)–2068](#) (released 19 October 2016)

[Subnational population estimates](#)

[Birth and death registrations](#)

[International travel and migration data.](#)

The new projections have the estimated resident population at 30 June 2013 as a base, and cover the period to 2043 at five-year intervals.

Choosing which projection to use

Three alternative projections (designated low, medium, and high) are produced for each area using different fertility, mortality, and migration assumptions.

The low and high projections allow users to assess the impact on population size and structure resulting from lower growth and higher growth scenarios, respectively. The low projection uses low fertility, high mortality, and low net migration for each area. The high projection uses high fertility, low mortality, and high net migration for each area. The low and high projections are independent of the national population projections as they represent plausible alternative scenarios for each area.

Population growth slows

New Zealand's population growth is likely to slow in the long term, despite the highest population growth rate since the 1960s (2.1 percent in the year ended June 2016) and the projected growth in 2017–18. Assuming an average net migration of 15,000 people a year from 2022, New Zealand's population growth is projected to average 0.9 percent a year in the decade ending 2030. Growth will average 0.6 percent a year in the decade ending 2040. The growth rate slows as fertility rates fall and the population's age structure changes.

3 in 4 people live in the North Island

The population of the North Island will increase an average 1.0 percent a year between 2013 and 2043, from 3.4 million to 4.6 million (medium projection). Two-thirds of this population growth will be in the Auckland region, which will rise 1.5 percent a year on average. The remainder of the North Island is projected to grow an average of 0.6 percent a year during this period.

Meanwhile, growth in the South Island is projected to increase more slowly (average annual increase of 0.8 percent), from 1.0 million in 2013 to 1.3 million in 2043. About half this growth will occur in the first 10 years of the 30-year period.

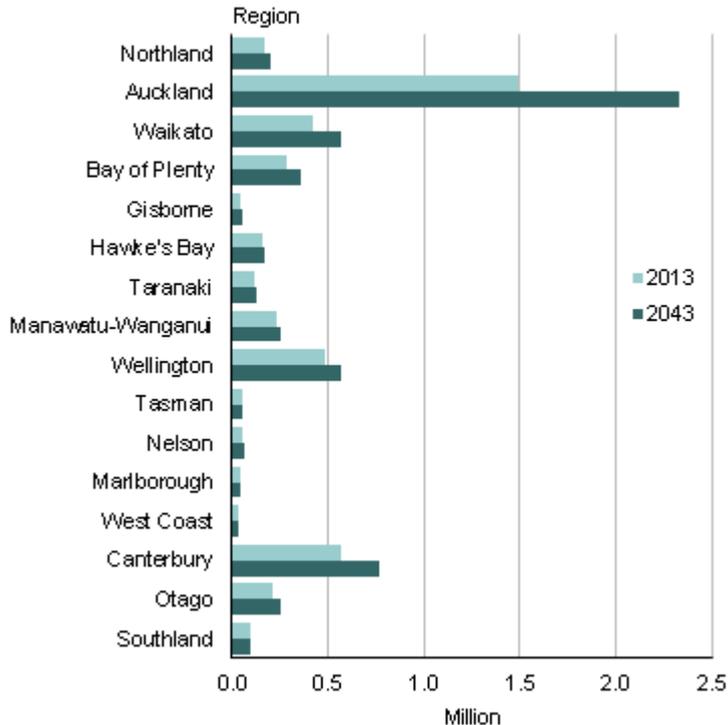
The faster projected growth of the North Island mainly reflects its higher rate of natural increase (births minus deaths), resulting from a higher birth rate and lower death rate than for the South Island. This is partly due to the slightly younger age structure of the North Island's population, which has a median age of 37 years, compared with 40 in the South Island.

Population grows in most regions

Fifteen of New Zealand's 16 regions will have more people in 2043 than in 2013 (medium projection). Even in regions with growing populations, the growth rate will slow over the projection period, as the population ages and deaths increase relative to births. By the 2030s, there may be small population declines in some regions as deaths and departures exceed births and arrivals.

Population of regional council areas

2013 and 2043
Medium projection



Source: Statistics New Zealand

Auckland's population reaches 2 million by 2033

The Auckland region is projected to account for more than half New Zealand's population growth between 2013 and 2043, with an increase of 833,000 – from just under 1.5 million to over 2.3 million (medium projection). Auckland's population is estimated to have passed 1.5 million in the year ended June 2014, and is projected to reach 2 million by 2033. In 2028, Auckland would be home to 37 percent of New Zealand's population, compared with 34 percent in 2013. By 2043, Auckland's population could be 39 percent of New Zealand's population.

Natural increase is projected to account for 55 percent of Auckland's growth, and net migration (arrivals less departures) for the remainder. Auckland's overall fertility rate (2.1 births per woman) in 2009–13 was similar to the national average, but Auckland also has a higher proportion of people in the main childbearing ages (15–44 years). As a result, Auckland has a higher birth rate and lower death rate than most other regions.

Net migration makes a significant contribution to Auckland's population growth. New immigrants and New Zealanders returning from overseas add directly to Auckland's population. As most migrants are aged 15–39 years, they may also contribute births to Auckland's population growth.

More people live in most areas

Of New Zealand's 67 TA areas, 59 are projected to have more people in 2028 than in 2013, and 50 are projected to have more people in 2043 than in 2013 (medium projection). The highest projected population growth rates over the 30-year period (2013–43) are for Selwyn (an average

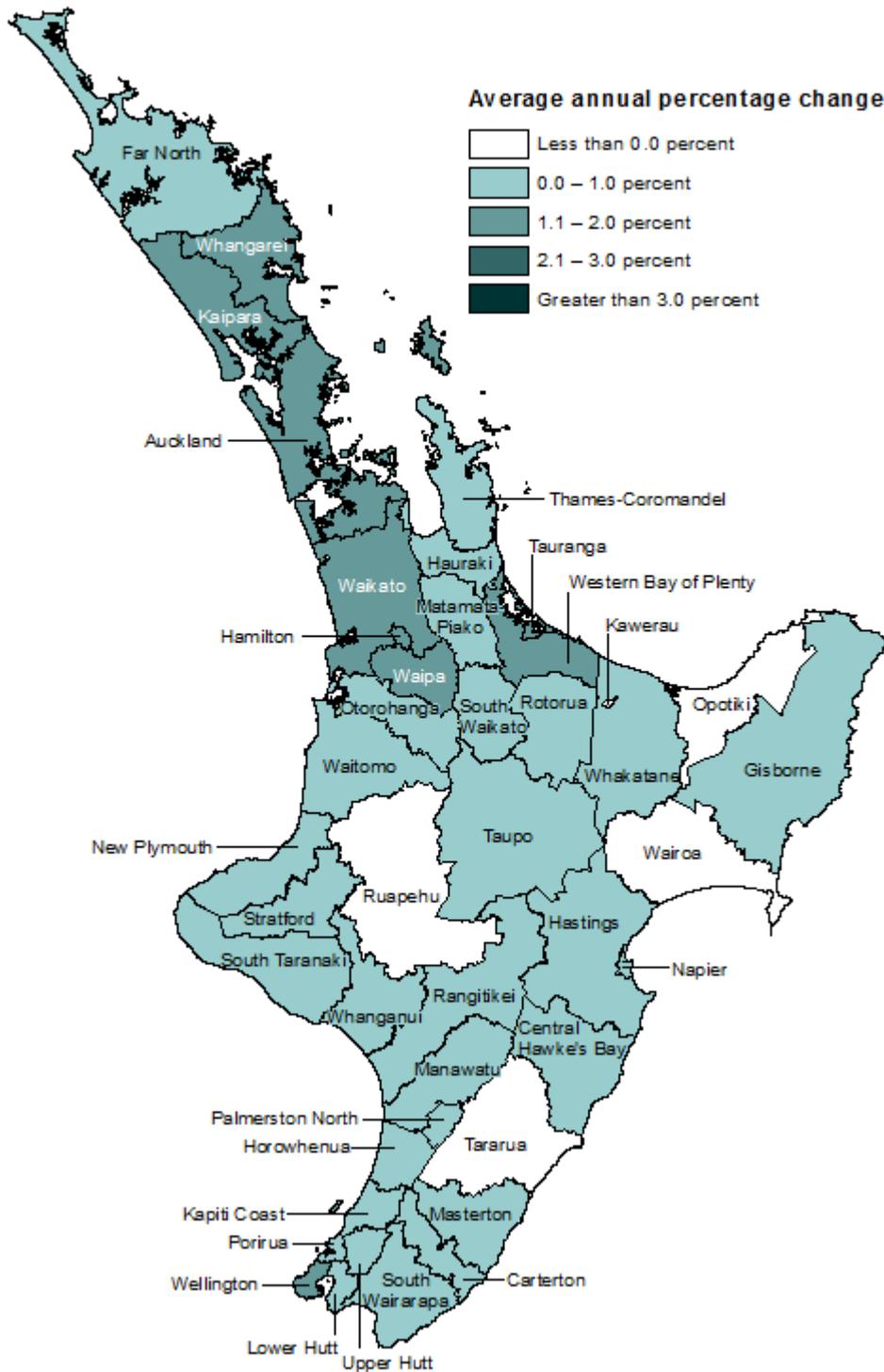
annual increase of 2.6 percent) and Queenstown-Lakes districts (2.2 percent). Population growth in Waimakariri district (1.6 percent), Auckland (1.5 percent), Waikato district, Tauranga and Hamilton cities (all 1.4 percent), and Waipa district (1.0 percent) are also higher than the national average (1.0 percent).

Under the medium projection, the largest percentage decreases in population between 2013 and 2043 are projected for Ruapehu (down an average of 1.1 percent a year), Wairoa, Opotiki (both 0.9 percent), and Kawerau districts (0.8 percent). The decreases in these four areas reflect shrinking natural increase and continuing net migration outflows, although these outflows are assumed to be smaller than experienced historically.

Projected population change

North Island territorial authority areas

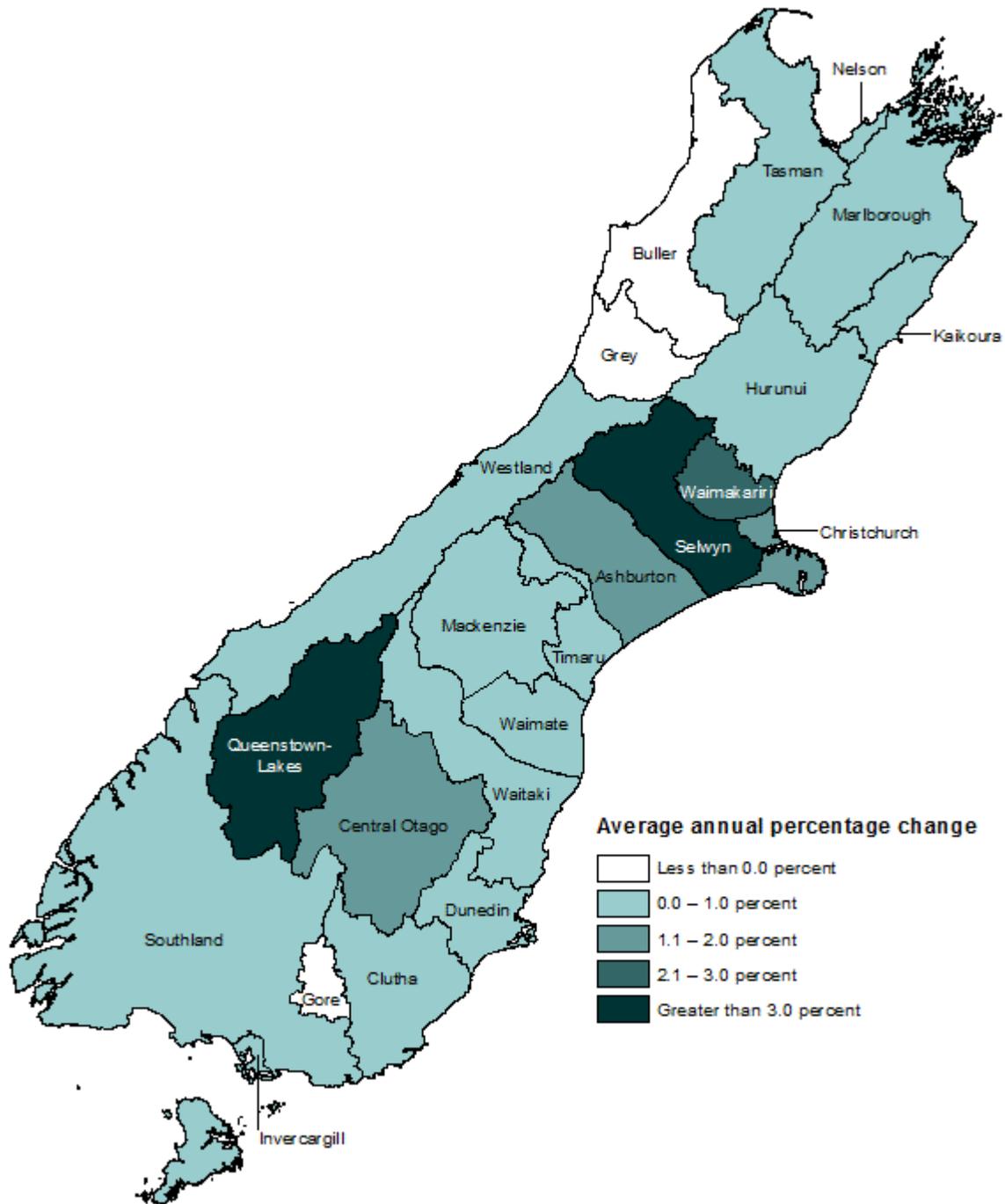
2013–28 (Medium projection)



Source: Statistics New Zealand

Projected population change

South Island territorial authority areas
2013–28 (Medium projection)



Source: Statistics New Zealand

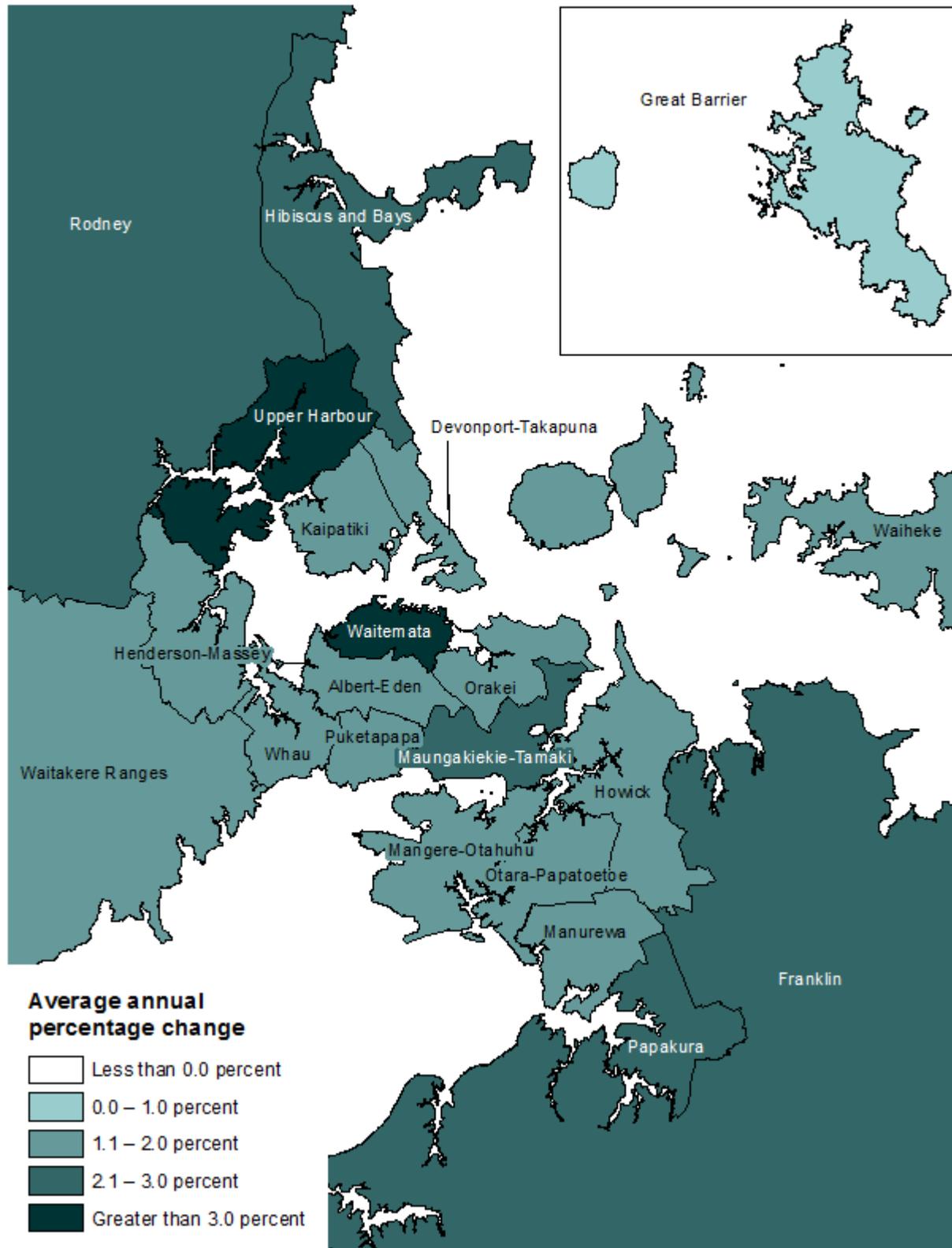
Auckland local board areas have faster growth

Within the 21 ALBAs, 16 are projected to grow at a faster rate than the national average (1.0 percent a year) over the 30-year period (2013–43). The fastest growing ALBAs include Waitemata, Upper Harbour (both 2.6 percent), Rodney (2.1 percent), Franklin, and Papakura (both 2.0 percent). However, population growth will generally slow for ALBAs over the projection period.

Under the medium projection, all ALBAs are projected to have more people in 2043 than in 2013. In 2013, Howick and Henderson-Massey were the only ALBAs with a population over 100,000. Three more areas (Hibiscus and Bays, Waitemata, and Albert-Eden) will have population over 100,000 by 2018 and over half the ALBAs will by 2033.

Projected population change

Auckland local board areas
2013–28 (Medium projection)



Source: Statistics New Zealand

Gap between births and deaths narrows

The projected slower population growth across New Zealand is driven by the narrowing gap between births and deaths. Nationally, natural increase is projected to decrease from 164,000 during 2009–13 to 78,000 during 2039–43 (medium projection). This is due to more deaths, up from 147,000 during the five years to 2013 to reach 238,000 in the five years ending 2043.

In 49 of the 67 TA areas, the number of births is expected to drop between 2009–13 and 2039–43, due to the assumed slightly lower fertility rates (average number of births per woman), combined in many areas with fewer women in the childbearing ages.

In contrast, the number of deaths is expected to increase in all areas, despite continued increases in life expectancy. This is because more people are reaching older ages. In 2016, about 3 deaths in 4 occurred at age 65 years and over. The proportion of New Zealand's population aged 65+ is projected to increase from 14 percent in 2013 to 23 percent in 2043.

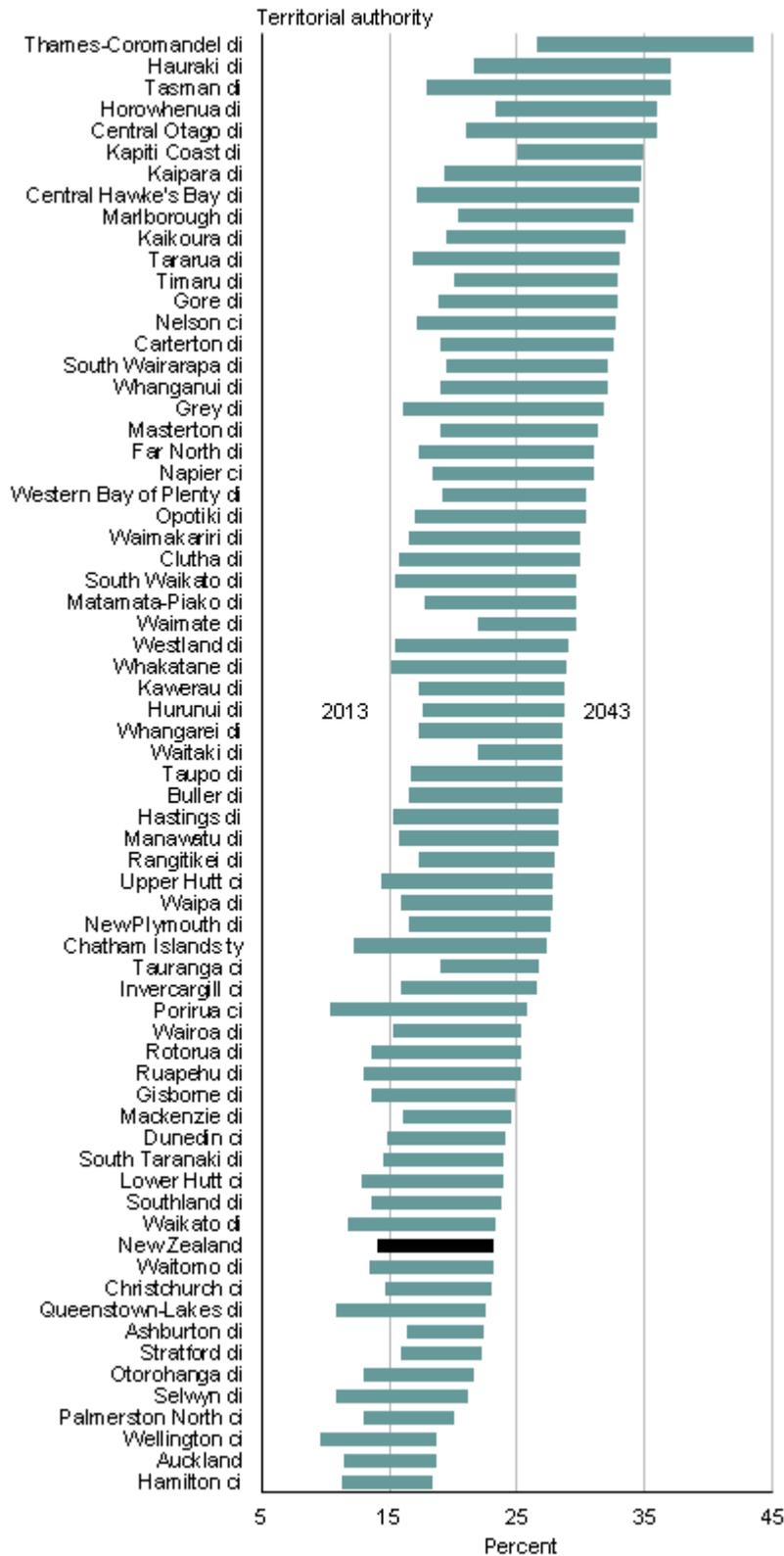
Deaths exceed births in more areas

By 2023, three districts are expected to have more deaths than births: Thames-Coromandel, Horowhenua, and Kapiti Coast. By 2033, they will be joined by another 14 areas: Kaipara, Hauraki, Whanganui, Masterton, Carterton, Tasman, Marlborough, Buller, Timaru, Waimate, Waitaki, Central Otago, and Gore districts, and Nelson city. Deaths will therefore outnumber births in one-quarter of TA areas by 2033 (medium projection). By 2043, 41 of the 67 TA areas could have natural decrease. All these areas have an older-than-average age structure, with relatively high proportions of the population aged 65+.

For areas that have traditionally relied on natural increase for population growth, a natural decrease will mean a shrinking population unless this is offset by net migration gains. However, a net migration inflow would reverse historical migration patterns for many areas.

Proportion of population aged 65+ years

By territorial authority area
2013 and 2043, medium projection



Note: All proportions increase over time.

ci is city; di is district; ty is territory

Source: Statistics New Zealand

Population continues to age

The population of all TA areas is expected to age in future, both in number and percentage of people at older ages. However, there will be considerable variation, largely because of each area's current population age structure and different fertility and migration patterns.

At the national level, the median age (half the population is younger, and half older, than this age) is projected to increase from 37 years in 2013 to 43 years in 2043. In 2013, of the 67 TA areas, the median age ranged from 32 years in Hamilton city to 51 years in Thames-Coromandel district. By 2043, the median age is projected to range from 37 years in Palmerston North city to 60 years in Thames-Coromandel district. A median age of 50 years or older is projected for 12 TA areas in 2043: Kaipara, Thames-Coromandel, Hauraki, Central Hawke's Bay, Horowhenua, Kapiti Coast, South Wairarapa, Tasman, Marlborough, Timaru, and Central Otago districts, and Nelson city.

The oldest median ages are generally in areas experiencing low fertility and/or a net outflow of young adults (aged 15–29 years) and a net inflow of people aged 35–74 years. The youngest median ages are generally in areas experiencing high fertility and/or a net inflow of young adults (such as cities with major tertiary education facilities).

Fewer children live in most areas

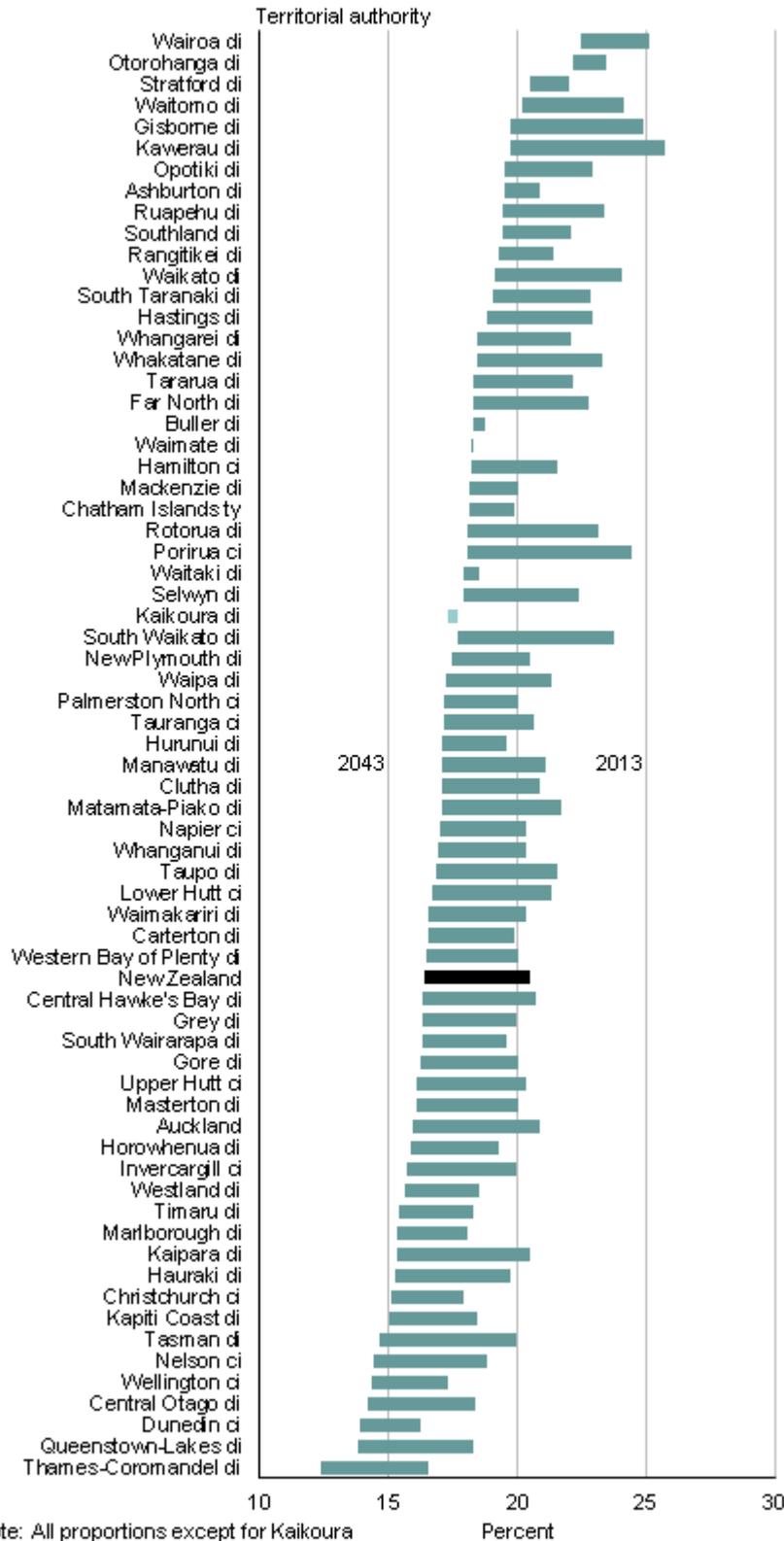
Forty-seven of New Zealand's 67 TA areas are projected to have fewer children in 2043 than in 2013 (medium projection). Fewer births will be the main reason, caused by the assumed slight decline in fertility rates and, in nearly all 47 areas, fewer women in the childbearing ages.

Of the TA areas projected to have more children in 2043, the largest percentage increases will be in Selwyn district (up an average 1.8 percent a year, or 7,300 over 30 years), Queenstown-Lakes district (1.3 percent or 2,500), Waimakariri district (0.9 percent or 3,100), Hamilton city (0.8 percent or 8,600), Tauranga city (0.7 percent or 6,000), Waikato district (0.7 percent or 3,400), Ashburton district (0.6 percent or 1,400), and Auckland (0.6 percent or 60,000). All eight areas will gain children through net migration and an increase in births over the projection period.

Kaikoura district is the only TA area projected to have a slightly higher proportion of children in 2043 than in 2013. Under the medium projection, the areas with the highest proportion of children in 2043 will be Wairoa and Otorohanga districts (both 22 percent), followed by Stratford, Waitomo, Gisborne, Kawerau, Opotiki, and Ashburton districts (all 20 percent). These areas have fertility rates well above the national average.

Thames-Coromandel district is projected to have the lowest proportion of children in 2043, at 12 percent – down from 16 percent in 2013. For New Zealand overall, 16 percent of the population is projected to be aged under 15 years in 2043, down from 20 percent in 2013.

Proportion of population aged under 15 years
 By territorial authority area
 2013 and 2043, medium projection



Note: All proportions except for Kaikoura reduce over time.

ci is city; di is district; ty is territory

Source: Statistics New Zealand

Projection assumptions

The following technical information is useful to help understand the subnational population projection results.

Projection assumptions for fertility, mortality, and migration are formulated after analysing short-term and long-term historical trends, information provided by local planners, and government policy. The [Subnational population projections, projection assumptions, 2013\(base\)–2043 update table in NZ.Stat](#) provides a summary of the low, medium, and high projection assumptions for each area.

Main changes since the previous 2013-base projections

Deriving the projections involved a review of all projection assumptions for each area, as well as being consistent with the latest national population projections. The main changes from the previous 2013-base projections (February 2015) relate to migration and fertility assumptions.

The 2016-base New Zealand population projections assumed higher levels of net migration and lower fertility rates than the previous 2014-base projections.

The median annual net migration gain is assumed to be 276,700 for 2014–18, 129,000 for 2019–23, and 75,000 for each subsequent five-year period. This compares with 149,300 for 2014–18 and 60,000 for each subsequent five-year period from the previous 2013-base projections.

The period total fertility rate decreased from 1.99 in 2014 to 1.90 in 2016. In 2043, it is assumed to decline to 1.85, compared with 1.90 in the previous 2014-base projections.

Geographic classification

The population projections in this release are based on the regional council, territorial authority, and Auckland local board classifications, and boundaries at 1 January 2017.

Base population

These projections have as a base the estimated resident population of each area at 30 June 2013. This population was based on the census usually resident population count of each area at 5 March 2013 and adjusted for:

- net census undercount
- residents temporarily overseas on census night
- births, deaths, and net migration between census night (5 March 2013) and 30 June 2013
- reconciliation with demographic estimates at ages 0–9 years.

Go to [NZ.Stat](#) for [Estimated resident population \(ERP\) and adjustments to derive ERP at 30 June 2013 \(from census usually resident population\)](#).

Fertility

The assumed fertility rates are based on estimated births for each area during the period 2013–16, with change between 2017 and 2043 being consistent with the fertility assumptions from the [National Population Projections: 2016\(base\)–2068](#).

Under the medium fertility assumption, the period total fertility rate at the national level is assumed to decline gradually, from 1.90 births per woman in 2016, to 1.87 in 2025, and 1.85 from 2036. In 2014–18 the medium fertility assumption ranges from 1.30 births per woman for Wellington city to 3.00 for Otago district. In 2039–43 the assumed total fertility rates range from

1.23 births per woman for Wellington city (low fertility assumption) to 3.15 births per woman for Opotiki district (high fertility 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 are based on estimated deaths for each area during the period 2013–16, with change between 2017 and 2043 being consistent with the mortality assumptions from the National Population Projections: 2016(base)–2068.

Under the medium mortality assumption, period life expectancy at birth at the national level is assumed to increase from 80.6 years for males and 84.0 years for females in 2017, to 85.6 years for males and 88.5 years for females in 2043. In 2014–18 the medium mortality assumption ranges from 76.2 years for males and 79.7 years for females for Opotiki district, to 84.8 years for males and 88.1 years for females for Queenstown-Lakes district. In 2039–43 the assumed life expectancy at birth ranges from 79.7 years for males and 83.0 years for females for Opotiki district (high mortality assumption), to 90.9 years for males and 93.5 years for females for Queenstown-Lakes district (low mortality 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 considering observed net migration during each intercensal period from 1996 to 2013, estimated net migration from 2013 to 2016, 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 that may affect population change.

Under the medium migration assumption, net migration at the national level is assumed to be 60,000 in 2017, and decrease by 9,000 annually to reach 15,000 in 2022 and beyond. All TA areas except for Chatham Islands territory and Kaikoura district are assumed to have different net migration levels during at least one of the five-year periods. Different levels are generally assumed for areas susceptible to changes in external migration, such as university cities (which attract large numbers of overseas students in some 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.

The age-sex patterns of net migration for each area are based on observed intercensal net migration patterns during 1996–2013, subnational population estimates since 2013, and the latest migration assumptions from the National Population Projections: 2016(base)–2068.

Accuracy of projections

The accuracy of these projections is unknown at the time of release. While the 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. The projections do not take into account non-demographic factors (eg war, catastrophes, major government and business decisions), which may invalidate the projections.

See [How accurate are population estimates and projections? An evaluation of Statistics New Zealand population estimates and projections, 1996–2013](#) for an evaluation of previous Statistics NZ national and subnational population estimates and projections.

Related links

Next releases

National Ethnic Population Projections: 2013(base)–2038 update will be released on 18 May 2017.

Area unit population projections (2013-base)–2043 update will be released in NZ.Stat in 2017.

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The [release calendar](#) lists all information releases by date of release.

Past releases

[Subnational population projections – information releases](#) has links to past releases.

Related information

[National population projections](#): indicate the future population of New Zealand.

[Area unit population projections](#): indicate the future population of area units ('suburbs').

[Subnational population estimates](#): show historical annual changes in the population of regional council areas, territorial authority areas, and Auckland local board areas.

[Local population trends](#): graphs and tables for each regional council area, territorial authority area, and Auckland local board area.

[Estimated resident population 2013: Data sources and methods](#): describes the data sources and methods used to produce the 2013 estimated resident population following the 2013 Census of Population and Dwellings.

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Tables

See the following Excel tables in the 'Downloads' box on this page. If you have problems viewing the file, see [opening files and PDFs](#).

1. Projected population of regional council areas, 2013(base)–2043 update
2. Projected population of territorial authority areas, 2013(base)–2043 update
3. Projected population of Auckland local board areas, 2013(base)–2043 update
4. Projected population age structure and components of change, regional council areas, 1996–2043 (2013-base) update, medium projection
5. Projected population age structure and components of change, territorial authority areas, 1996–2043 (2013-base) update, medium projection
6. Projected population age structure and components of change, Auckland local board areas, 1996–2043 (2013-base) update, medium projection

Access more data in NZ.Stat

Use [NZ.Stat](#), a free online database to access time-series data specific to your needs. To access the projections in NZ.Stat, select **Population projections** (as the theme), then one of the following tables:

- [Subnational population projections, by age and sex, 2013\(base\)–2043 update](#)
- [Subnational population projections, characteristics, 2013\(base\)–2043 update](#)
- [Subnational population projections, projection assumptions, 2013\(base\)–2043 update](#)

The projections can be downloaded in Excel or comma delimited format.

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