# Hot Off The Press

(Statistics NZ, 2010)

Latest statistics from Statistics New Zealand

Embargoed until 10:45am – 22 April 2010

# **National Ethnic Population Projections:** 2006(base)-2026 update

# **Highlights**

Under all projection series:

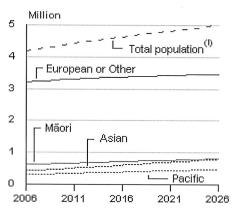
- New Zealand's Māori, Asian, and Pacific populations will continue to grow.
- The 'European or Other (including New Zealander)', Māori, Asian, and Pacific populations will all age, reflected in rising median ages and increasing proportions of people in the older ages.

Under mid-range projection series 6:

- New Zealand's European or Other population is projected to reach 3.47 million by 2026, an increase of 260,000 (0.4 percent a year) over the estimated resident population at 30 June 2006 of 3.21 million.
- New Zealand's Māori population is projected to reach 810,000 by 2026, an increase of 190,000 (1.3 percent a year) over the 2006 estimate of 620,000.
- New Zealand's Asian population is projected to reach 790,000 by 2026, an increase of 390,000 (3.4 percent a year) over the 2006 estimate of 400,000.
- New Zealand's Pacific population is projected to reach 480,000 by 2026, an increase of 180,000 (2.4 percent a year) over the 2006 estimate of 300,000.

#### Projected ethnic populations

2006-26, series 6



(1) From 2009-base national population projections, series 5, released October 2009.

Source: Statistics New Zealand

Geoff Bascand **Government Statistician** 

22 April 2010 ISSN 1178-0592

## Commentary

#### Background

This release contains updated 2006-base population projections of four broad ethnic populations of New Zealand: 'European or Other (including New Zealander)', Māori, Asian, and Pacific. These supersede the 2006-base projections released in April 2008. The new projections have the estimated resident population of each ethnic group at 30 June 2006 as a base, and cover the period to 2026 at one-year intervals.

These ethnic population projections complement the projections of the New Zealand population (national population projections, 2009(base)–2061) released on 27 October 2009. However, only series 6 of the respective ethnic population projections and series 5 of the New Zealand population projections are designed to be directly comparable. Other series cannot be directly compared because the projection assumptions may be incompatible.

Detailed projection results, including projections for individual years and by single-year of age and sex, are available from <u>Table Builder</u> on the Statistics New Zealand website (<a href="www.stats.govt.nz">www.stats.govt.nz</a>). Updated <a href="subnational ethnic population projections">subnational ethnic population projections</a> for regional council and territorial authority areas will be released on 16 September 2010. Special projections can also be produced for clients using their own assumptions. For more information and quotes, email <a href="mailto:demography@stats.govt.nz">demography@stats.govt.nz</a> or phone toll-free 0508 525 525.

Ethnic population projections are produced to assist local and ethnic communities, as well as central government, in planning and policy-making. The projections provide information on the changing characteristics and distribution of the population, which are used to develop social policies in areas such as health and education. For example, where different ethnic groups experience different health conditions, ethnic population projections can help identify likely future service needs.

The projections are neither predictions nor forecasts. They provide an indication of possible future changes in the size and composition of the ethnic populations. While the projection assumptions are formulated from an assessment of short-term and long-term demographic trends, there is no certainty that any of the assumptions will be realised.

Each ethnic population consists of all people who identify with ethnicities within that ethnic group. It is important to note that these ethnic populations are not mutually exclusive because people can and do identify with more than one ethnicity. People who identify with more than one ethnicity have been included in each ethnic population that they identify with.

The Māori, Pacific, and Asian ethnic groups are defined in Level One of the <u>Standard Classification of Ethnicity 2005</u>. The estimates/projections for the 'European or Other (including New Zealander)' group include people who belong to the European or Other Ethnicity groups defined in Level One of the standard classification. If a person belongs to both the European and Other Ethnicity groups they have only been counted once. Almost all people in the Other Ethnicity group belong to the New Zealander sub-group.

# What has changed from the previous 2006-base projections?

These national ethnic population projections have been updated to incorporate the latest demographic information, notably the 2009-base <u>national population projections</u> (released 27 October 2009) and <u>birth and death registrations</u> to December 2009.

Compared with the previous 2006-base national population projections (released 24 October 2007), mid-range series 5 of the 2009-base national population projections assumes higher fertility, higher mortality, and higher net migration in the short term. The projection assumptions for the national ethnic population projections incorporate these changes. The combined effect of these changes is that in 2026 the new ethnic population projections have the European or Other population at 3.47 million, the Māori population at 810,000, the Asian population at 790,000, and the Pacific population at 480,000 according to series 6. By comparison, the previous projections had the European or Other population at 3.43 million and the Māori population at 820,000, while the Asian population was also 790,000 and the Pacific population 480,000 in 2026.

#### Which projection series should I use?

For each ethnic group (European or Other, Māori, Asian, and Pacific), eleven projection series have been produced to illustrate a range of possible scenarios using different combinations of fertility, mortality, migration, and inter-ethnic mobility assumptions. Users can make their own judgement as to which projection series is/are most suitable for their purposes. However, at the time of release, Statistics NZ considers mid-range projection series 6 the most suitable for assessing future population changes. Series 6 is consistent with mid-range series 5 of the national population projections (2009-base, released October 2009), and assumes medium fertility, medium mortality, medium migration, and medium inter-ethnic mobility for each ethnic group.

#### Alternative projection series

Projection series	Fertility	Mortality	Migration	Inter-ethnic mobility
1 .	Low	High	Low	High
2	Low	Medium	Medium	Medium
3	Medium	High	Medium	Medium
4	Medium	Medium	Low	Medium
5	Medium	Medium	Medium	High
6	Medium	Medium	Medium	Medium
7	Medium	Medium	Medium	Low
8	Medium	Medium	High	Medium
9	Medium	Low	Medium	Medium
10	High	Medium	Medium	Medium
11	High	Low	High	Low

#### Series 6 assumes:

- Fertility: By 2026, the total fertility rate will be 1.85 births per woman for European or Other women, 2.50 for Māori women, 1.50 for Asian women, and 2.65 for Pacific women, while the total paternity rate will be 0.165 births per man for European or Other men (with non-European and non-Other women), 0.95 for Māori men (with non-Māori women), 0.23 for Asian men (with non-Asian women), and 1.00 for Pacific men (with non-Pacific women).
- Mortality: Life expectancy at birth will increase for the European or Other population to 82.2 years for males and 85.4 years for females by 2026, for the Māori population to 75.4 years for males and 79.2 years for females, for the Asian population to 86.6 years for males and 89.7 years for females, and for the Pacific population to 77.0 years for males and 80.4 years for females.

- Migration: There will be long-run annual net migration levels of -3,000 for the European or Other population (from 2013), -3,000 for the Māori population (from 2012), 12,000 for the Asian population (from 2010), and 500 for the Pacific population (from 2008).
- Inter-ethnic mobility: There will be a net change to the population, due to people changing their ethnic identification, of 0 percent a year for the European or Other population, -0.3 percent for the Māori population, -0.2 percent for the Asian population, and -0.2 percent for the Pacific population.

Among the projections, series 1 uses low population growth assumptions and gives the lowest population throughout the projection period. In contrast, series 11 uses high population growth assumptions and gives the highest population throughout the projection period.

#### Summary

The ethnic mosaic of New Zealand's population is changing, with the Māori, Asian, and Pacific populations making up a growing proportion of the overall New Zealand population. This reflects past and likely future differentials in fertility, as well as the impact of intermarriage and changes in migration patterns.

In addition, the Māori, Asian, and Pacific populations have a more youthful age structure and thus a greater built-in momentum for growth than the European or Other population. Combined with higher fertility for Māori and Pacific people, and the assumed net migration levels for Asian people, these ethnic populations are likely to grow at a much faster pace than their European or Other counterparts.

All ethnic groups will age in the coming decades, reflected in rising median ages and increasing proportions of people in the older ages. However, even two decades on, the Māori and Pacific populations will still have a younger age structure than the current total New Zealand population.

## Alternative projection series

The 'European or Other (including New Zealander)' population is projected to increase from 3.21 million at 30 June 2006 to 3.47 million in 2026 (series 6). Under the lowest growth scenario (series 1), the European or Other population will be less in 2026 (3.10 million) than in 2006. All other series project higher European or Other populations in 2026 than in 2006, with the highest growth scenario (series 11) projecting a population in 2026 of 3.88 million.

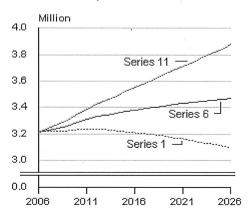
The Māori, Asian, and Pacific populations are projected to increase during the projection period under all series:

- The Māori population is projected to increase from 620,000 at 30 June 2006 to 810,000 (series 6) in 2026, and range between 700,000 (series 1) and 940,000 (series 11) in 2026.
- The Asian population is projected to increase from 400,000 in 2006 to 790,000 (series 6) in 2026, and range between 610,000 (series 1) and 990,000 (series 11).
- The Pacific population is projected to increase from 300,000 in 2006 to 480,000 (series 6) in 2026, and range between 430,000 (series 1) and 540,000 (series 11).

The total New Zealand population is projected to grow from 4.18 million in 2006 to 4.99 million in 2026 (assuming medium fertility, medium mortality, and long-run annual net migration of 10,000 a year). Alternative projections give a range of 4.78 to 5.20 million in 2026.

# Projected European or Other population

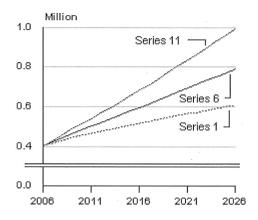
2006–26, alternative series



Source: Statistics New Zealand

#### Projected Asian population

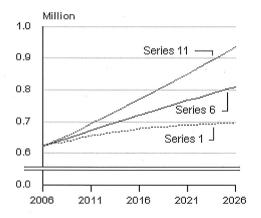
2006-26, alternative series



Source: Statistics New Zealand

#### Projected Māori population

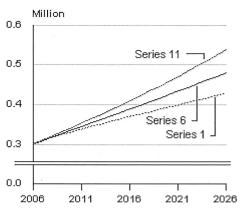
2006-26, alternative series



Source: Statistics New Zealand

#### Projected Pacific population

2006-26, alternative series



Source: Statistics New Zealand

## Population growth

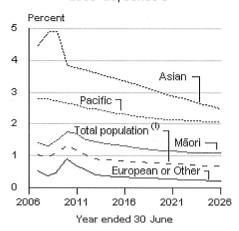
All four ethnic populations are projected to experience growth between 2006 and 2026 under projection series 6. The Asian population is projected to have the largest relative growth, averaging 3.4 percent a year. The Pacific and Māori populations will average annual growth of 2.4 and 1.3 percent, respectively. The European or Other population will increase by an average of 0.4 percent a year. The total New Zealand population is projected to increase by an average of 0.8 percent a year between 2006 and 2026. However, population growth is likely to slow over the projection period for all populations, reflecting a gradual ageing of each population and lower rates of natural increase.

The Māori, Asian, and Pacific populations will all increase their share of the New Zealand population over the projection period because of their higher growth rates. The Māori population will make up 16.2 percent of the New Zealand population by 2026 compared with 14.9 percent in 2006. The Asian population will make up 15.8 percent of the New Zealand population by 2026 compared with 9.7 percent in 2006. The Pacific population will make up 9.6 percent of the New Zealand population by 2026 compared with 7.2 percent in 2006.

These shares are all based on series 6 of the national ethnic population projections compared with series 5 of the national population projections. Other series cannot be directly compared because the projection assumptions are not necessarily compatible.

#### Projected annual population growth rate

By ethnic group 2006–26, series 6

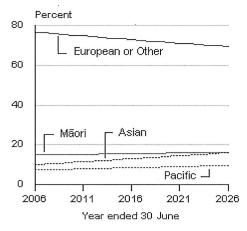


 From 2009-base national population projections, series 5, released October 2009.

Source: Statistics New Zealand

# Projected ethnic share of New Zealand population<sup>(1)</sup>

2006-26, series 6



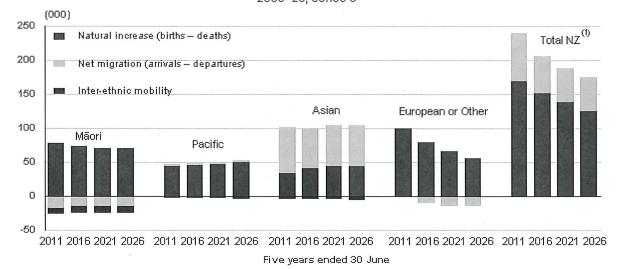
 Derived from 2009-base national population projections, series 5, released October 2009.

Source: Statistics New Zealand

The increase in the Māori and Pacific population shares is mainly driven by their high rates of birth and natural increase. During 2005–07, the Māori and Pacific total fertility rates were 2.8 and 3.0 births per woman, respectively. By comparison, the European or Other and Asian levels were 1.9 and 1.5 births per woman, respectively. The overall New Zealand total fertility rate was 2.0 births per woman in 2005–07.

#### Projected components of population change

By ethnic group 2006–26, series 6



(1) From 2009-base national population projections, series 5, released October 2009.

Source: Statistics New Zealand

Ethnic intermarriage also makes an important contribution to growth. In about one-quarter of Māori births, the mother is non-Māori and the father is Māori. Similarly, in about one-quarter of Pacific births, the mother is non-Pacific and the father is Pacific. In addition, the Māori and Pacific populations have a much younger age structure, with relatively high proportions in the child and childbearing ages and low proportions at the older ages, which provides a built-in momentum for future growth.

The increase in the Asian population share is largely driven by the assumed levels of net migration, with a net inflow of about 250,000 migrants assumed over the 20-year period (series 6). Natural increase (births minus deaths) will account for about 160,000 or two-fifths of the projected Asian population growth.

#### Ethnic share of New Zealand population

By broad age group 2006, 2016, and 2026

	Ethnic share of New Zealand population <sup>(1)</sup> (percent)							
Age group (years)	European or Other (including New Zealander)	Māori	Asian	Pacific	Middle Eastern/ Latin American/ African			
2006 (estimate at 30 June)								
0-14	73	24	9	12	1			
15-39	71	17	13	8	1			
40-64	81	10	8	5	1			
65 and over	91	5	4	2	0			
All ages	77	15	10	7	1			
2016 (projected)								
0-14	69	27	14	15				
15-39	66	17	17	10	# %			
40-64	76	12	11	5	* *			
65 and over	87	6	6	3				
All ages	73	16	13	8	**			
2026 (projected)								
0-14	66	28	18	18	n -			
15–39	64	19	19	12	••			
40-64	70	12	16	7	M W			
65 and over	82	7	9	3	**			
All ages	70	16	16	10				

<sup>(1)</sup> Ethnic population projections from series 6. New Zealand population from series 5 of 2009-base national population projections. People who identify with more than one ethnicity are included in each ethnic population that they identify with.

Symbol: .. not available

The European or Other population will make up 69.5 percent of the New Zealand population by 2026 compared with 76.8 percent in 2006. The lower European or Other share is a result of the lower-than-average European or Other population growth rate. This reflects the combination of lower fertility rates, an assumed net migration outflow of about 40,000 over the 20-year projection period, and an older age structure. The increasingly older age structure of the European or Other population means fewer births (because of fewer women in the childbearing ages), more deaths, and lower momentum for future population growth compared with the Māori and Pacific populations.

About 1 percent of New Zealand's population identified with ethnicities outside of these four broad ethnic groups in 2006. That is, an estimated 39,000 people identified with a Middle Eastern/Latin American/African (MELAA) ethnicity at 30 June 2006.

#### Births and deaths

#### European or Other (including New Zealander)

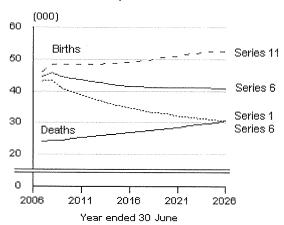
European or Other births are expected to generally decrease from 46,000 in 2008 to 41,000 in 2026 (series 6). The decrease in births is driven partly by the decline in the number of European or Other women in the childbearing ages, and partly by the assumed decline in European or Other total fertility rates from about 2.0 births per woman in 2007–11 to 1.85 in 2026. Under the high growth scenario (series 11), European or Other births increase to 53,000 in 2026. However, the low growth scenario (series 1) sees births dropping to 31,000 by 2026.

The contribution of ethnic paternity rates to European or Other births is relatively small, with about 1 in 12 European or Other births over the projection period contributed by non-European and non-Other mothers where the father is European or Other.

European or Other deaths are expected to increase steadily from 24,000 in 2007 to 31,000 in 2026 (series 6). This trend is due to more European or Other people in the older ages, where most deaths occur. In the low mortality (series 9) and high mortality (series 3) scenarios, European or Other deaths total 29,000 and 33,000, respectively, in 2026.

# Projected European or Other births and deaths

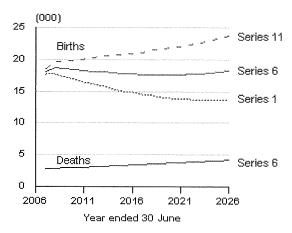
2006-26, alternative series



Source: Statistics New Zealand

## Projected Mãori births and deaths

2006-26, alternative series



Source: Statistics New Zealand