Part One of Three

Tātai Tāngata ki te Whenua
Wāhanga Tuatahi: Te Maha, te Whakatupu, me te Pakeketanga o te Ira Taupori

Future Demographic Trends for Māori
Part One: Population Size, Growth and Age Structure
He mihi

Tātai whetū ki te rangi, mau tonu mau tonu; tātai tāngata ki te whenua, ngaro noa, ngaro noa. E rere ana ngā roimata ki a koutou kua ngaro atu i te tirohanga kanohi, koutou i whakarite i te huarahi mā mātou o tēnei reanga. E moe. Ki a tātou ngā kanohi ora a rātou mā, kia kaha tātou ki te tutuki i a rātou wawata, hei oranga mō ngā whakatupuranga e haere ake nei. Tēnā tātou.

Stars adorn the heavens, standing eternally; humanity adorns the land, bound to perish. We lament those who have disappeared from sight – those who paved the way for the present generation. Be at rest. To us, the living faces of those now gone, may we be strong in pursuing their hopes for our descendants. Greetings to all.

Summary

Future Demographic Trends for Māori – Part One is the first in a series of three reports by Te Puni Kōkiri which collate a range of baseline population statistics, trends and projections for Māori. The series draws together data about the Māori population, the national population and the global population, in order to provide a wider (and at times overlooked) context to the future challenges facing Māori.

The reports are designed to assist Māori, Te Puni Kōkiri, and the wider Government in efforts to advance Māori interests at home and abroad. Equally, the intention is to support the wider Government in upholding its ongoing Treaty obligations to Māori.

Ko te pae tawhiti whāia kia tata, ko te pae tata whakamaua kia tina. Mauri ora ki a tātou.
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Introduction

Future Demographic Trends for Māori: Part One is the first in a series of three reports by Te Puni Kōkiri which collate a range of baseline population statistics, trends and projections for Māori. Together the reports cover ten demographic issues:

- population size, growth and age structure (this report)
- migration, urbanisation, diversity and identity (report two)
- households and families, work and education (report three).

While the primary focus is the Māori population, the reports also seek to understand the wider national and global demographic contexts in which Māori will live. Accordingly, each demographic issue is examined in terms of its bearing on the Māori population, on the national population, and on the global population. The benefit of this approach is highlighted by Ian Pool:

In the past, common misconceptions over New Zealand’s population patterns and trends have come from a failure to place them in a broader context. It is to this more global perspective that one must return, so that purely local phenomena may be better appreciated.¹

Purpose

In recent decades, partly due to the resolution of historic injustices through the Treaty settlements process, Māori focus has shifted more intently to the future, and to the opportunities and challenges presented by an increasingly interconnected world. By shedding light on future demographic challenges, these reports aim to assist Māori, Te Puni Kōkiri, and the wider Government in efforts to advance Māori interests at home and abroad.² Equally, the intention is to support the wider Government in upholding its ongoing Treaty obligations to Māori.³

Apart from demographic trends, there are a number of other factors that will impact Māori in the future. These include major global transitions such as climate change, economic, social, political and technological change. The reason that demographic projections are the primary focus in these reports is not because they are necessarily the most important of these transitions, but because they carry a greater level of certainty than other future forecasting methods.

The overarching purpose is to assist both Māori and Government to anticipate change in order to foster Māori success in the decades ahead. As noted by Durie:

...if we take whānau survival for granted, and simply allow ourselves to go with the flow, we are neglecting the lessons of history and placing future generations at the mercy of whatever comes along. We must be more deliberate than that... a long-term planning capacity is needed.4

### Key findings

#### For the Māori population

The current Māori ethnic population (living in New Zealand) of approximately 720,000 can be expected to grow significantly — possibly by more than 400,000 — over the next 20 years. The Māori population will grow to close to 20 per cent of New Zealand’s total population and one third of New Zealand’s children, by 2038. At the same time, the rate of growth is expected to slow.

Close to nine in ten Māori live in the North Island, and one quarter of Māori live in the Auckland region. This general pattern is expected to persist, with the largest Māori populations projected (by 2038) for Auckland, followed by Waikato and the Bay of Plenty. In terms of Māori living overseas, the vast majority are in Australia. As at 2016, more than 140,000 people with Māori ancestry lived in Australia.

The age structure for the (domestic) Māori population is youthful relative to the European/Other population, with about one third of Māori under the age of 15. While this relative youthfulness is projected to persist, the numbers of elderly Māori will steadily increase. In terms of life expectancy, the gap between Māori and non-Māori has narrowed over the last two decades, but a significant discrepancy remains.

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For the New Zealand population

By 2038 the European/Other share of the population is projected to decrease, while the Māori, Pacific and Asian shares of the population are projected to increase. The Asian population is expected to outnumber the Māori population by the early-2020s. New Zealand’s population is projected to grow more slowly, and to age, across all four ethnic population groupings – with a younger age structure remaining evident amongst the Māori, Pacific and Asian populations. Between 2013 and 2043, the population growth rate will slow in all regions, cities, districts (except Buller) and Auckland local board areas. Over this same period, more than half of New Zealand’s population growth will be in Auckland. Auckland’s population will expand to two million by 2033.

For the world population

The world population’s growth rate is projected to slow. Nevertheless it is currently increasing by about 83 million per annum, and there are concerns that over-population will present real difficulties for the planet within the next century. Africa is the fastest growing major area; Europe is projected to experience a reduction in population; and New Zealand’s wider neighbourhood, Oceania, is expected to undergo significant population growth.

Context

The Māori population from 1800 to 2016

Since 1840, when Māori were the dominant ethnic group in New Zealand, the size of the Māori population has dropped dramatically, recuperated, and from the 1950s, grown steadily.\(^5\)

The depopulation phase was the result of a range of factors associated with European colonisation including new diseases for which there was no immunity, muskets, changes in diet, relative poverty, and dispossession of land and culture. The population fell from an estimated 150,000 in 1800 to a low of around 42,000 by the turn of the century.\(^6\) It was widely predicted at that time that Māori would become extinct, with non-Māori already outnumbering Māori by more than 16 to one.\(^7\)

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\(^7\) Durie, M.H. (2005). Ngā Tai Matatū: Tides of Māori Endurance. Melbourne, Australia: Oxford University Press. p31
But Māori survived and reversed the population decline, gradually until around 1945, and at a significantly higher rate from then on. The population boost from the 1950s was a result of high birth rates, improved life expectancy and reductions in mortality. After the mid-1960s, fertility rates declined but population increases continued, now augmented by increased life expectancy. By 1991 the estimated resident population of people of Māori ethnicity was close to 440,000, and by 2017 had expanded to an estimated 723,500.

**Identifying who is Māori**

The concept of whakapapa (ancestry or descent) is central to Māori notions of identity. The right of Māori to determine their individual and collective identities is endorsed by the United Nations Declaration on the Rights of Indigenous Peoples.

The Government’s approach to classifying Māori (through the census) has changed over time from one based on blood quantum to one which is now based on ethnic self-identification. The blood quantum approach (used until 1986) required at least 50 per cent Māori ‘blood’ to claim Māori affiliation. Since 1986, however, census respondents have been able to identify their own ethnicity, and to identify with up to six ethnicities if they so choose. Self-identification is more in line with Māori social realities, and more in keeping with world-wide approaches.

Statistics New Zealand defines ethnicity as:

> the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affinity, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group.

By this definition, census respondents could potentially identify as being Māori while at the same time not being of Māori descent.

The census also allows us to count the significant number of New Zealanders who acknowledge descent from a Māori ancestor, but do not necessarily identify with the Māori ethnic group.

Since 1991, the census has also collected information on Māori respondents’ tribal affiliations.
Māori population size

According to Statistics New Zealand the total Māori ethnic population living in New Zealand as at December 2016 was approximately 723,500.\textsuperscript{17}

Projections for the Māori ethnic population suggest it will expand substantially over the coming decades. By 2025 the Māori population is expected to reach 830,000–910,000; and by 2038, 0.98–1.16 million.\textsuperscript{18}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{maori_population.png}
\caption{Māori ethnic population 1858–2038}
\end{figure}

\textbf{Note:} The break in the series is a result of a change in the wording of the 1996 Census ethnicity question, which impacted the comparability of data across censuses.


In 2013, the majority of Māori (86 per cent) lived in the North Island, and just under one-quarter of Māori (23.8 per cent) were in the Auckland region. There were 83,454 Māori living in the South Island in 2013, an increase of 10,224 people since the 2006 Census.

By 2038, the largest regional Māori populations are projected to remain in the north of the North Island – in particular Auckland (270,900), Waikato (148,200) and the Bay of Plenty (108,300).

In 2013, the largest iwi was Ngāpuhi, followed by Ngāti Porou and Ngāi Tahu. A total of 110,928 people of Māori descent (about 17 per cent) did not know their iwi.

### Ten largest iwi in 2013

<table>
<thead>
<tr>
<th>Iwi</th>
<th>2001</th>
<th>2006</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngāpuhi</td>
<td>102,981</td>
<td>122,214</td>
<td>125,601</td>
</tr>
<tr>
<td>Ngāti Porou</td>
<td>61,701</td>
<td>71,907</td>
<td>71,049</td>
</tr>
<tr>
<td>Ngāi Tahu / Kāi Tahu</td>
<td>39,180</td>
<td>49,185</td>
<td>54,819</td>
</tr>
<tr>
<td>Waikato</td>
<td>35,781</td>
<td>33,429</td>
<td>40,083</td>
</tr>
<tr>
<td>Ngāti Tūwharetoa</td>
<td>29,301</td>
<td>34,674</td>
<td>35,877</td>
</tr>
<tr>
<td>Ngāti Maniapoto</td>
<td>27,668</td>
<td>33,627</td>
<td>35,361</td>
</tr>
<tr>
<td>Tūhoe</td>
<td>29,259</td>
<td>32,670</td>
<td>34,887</td>
</tr>
<tr>
<td>Ngāti Kahungunu ki Te Wairoa</td>
<td>14,661</td>
<td>20,982</td>
<td>21,060</td>
</tr>
<tr>
<td>Te Arawa</td>
<td>16,713</td>
<td>23,316</td>
<td>19,719</td>
</tr>
<tr>
<td>Ngāti Kahungunu, region unspecified</td>
<td>24,729</td>
<td>18,459</td>
<td>18,285</td>
</tr>
</tbody>
</table>


The projections above exclude the many Māori now living overseas, particularly in Australia. According to the 2016 Australian Census, there were more than 140,000 people of Māori descent living in Australia. Most lived in Queensland (53,600), followed by New South Wales (33,100) and Western Australia (27,400).19 A rapid rise in the number of Māori living in Australia has taken place over the last four decades. In 1986, approximately 26,000 people of Māori descent lived in Australia; by 2001, that figure had risen to around 73,000;20 by 2011 it had risen to 128,00.21

![Māori population spread across Australia and New Zealand](image_url)


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National population size

Population size projections for New Zealand

New Zealand’s current resident population is estimated to be close to 4.7 million. According to Statistics New Zealand, the population has a 90 per cent probability of increasing to:

- 4.89 – 5.14 million in 2020
- 5.01 – 5.51 million in 2025
- 5.29 – 6.58 million in 2043
- 5.30 – 7.88 million in 2068.\(^2\)

![New Zealand population 1948–2068](image)

**Note:** The break in data between 1990 and 1991 denotes a change from the defacto population concept to the resident population concept.


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**Alternative scenarios**

The graph below indicates what New Zealand’s population could be under a range of different assumptions.

- Assuming a total fertility rate of 2.5 births per woman (very-high fertility), the population would grow to 8 million by 2068.
- Assuming a net migration rate of 30,000 per year, the population would reach 7.5 million by 2068.
- Assuming life expectancy reaches 96 years for males and females in 2068 (very low mortality), the population would reach 6.8 million in 2068.
- Assuming no migration (no arrivals and no departures), the population would peak at 5.3 million in the early 2050s then slowly decline as deaths outnumber births.

![Projected New Zealand population 2016–2068](image)

Population size projections by ethnic grouping

Statistics New Zealand provide population projections for specific ethnic groups (for instance, Chinese or Tongan) as well as for four broader ethnic groupings: Māori, Pacific, Asian and European/Other. This series of reports will focus primarily on the four broader ethnic groupings.

Statistics New Zealand’s projections indicate that:

- the proportion of the population identifying with the Māori ethnic group is expected to grow from 15.6 per cent in 2013 to 18.4 per cent in 2038
- the proportion of the population identifying with an Asian ethnicity is expected to grow from 12.2 per cent in 2013 to 22 per cent in 2038
- the proportion of people who identify with a Pacific ethnicity is projected to rise from 7.8 per cent in 2013 to 10.2 per cent in 2038
- the proportion of people who identify with a European/Other ethnicity is projected to decline from 74.6 per cent in 2013 to 65.5 per cent in 2038.23

![Ethnic share of New Zealand population, median projection 2013–2038](chart.png)


The following table sets out the projected population sizes for the four broad ethnic groupings for 2025 and 2038.

### Ethnic population size projections for New Zealand

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2013 (base)</th>
<th>2025</th>
<th>2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori population</td>
<td>0.69 million</td>
<td>0.83–0.91 million</td>
<td>0.98–1.16 million</td>
</tr>
<tr>
<td>Asian population</td>
<td>0.54 million</td>
<td>0.90–1.02 million</td>
<td>1.16–1.38 million</td>
</tr>
<tr>
<td>Pacific population</td>
<td>0.34 million</td>
<td>0.44–0.48 million</td>
<td>0.53–0.65 million</td>
</tr>
<tr>
<td>European/Other population</td>
<td>3.31 million</td>
<td>3.55–3.73 million</td>
<td>3.61–3.97 million</td>
</tr>
</tbody>
</table>


### Regional population projections by ethnic grouping

The proportion of Māori, Asian, and Pacific groups will each grow their share of the population across all regions (as well as most territorial authorities, and most Auckland local board areas) between 2013 and 2038. Over the same period, the proportion of European/Other population is expected to drop in all regions, most territorial authorities, and all Auckland local board areas.\(^{24}\)

The Māori population will make up about 61 per cent of the Gisborne population in 2038, up from 49 per cent in 2013. Other regions with a significant increase in the Māori share include Northland (up 12 percentage points to 45 per cent in 2038), Taranaki (up 10 percentage points to 28 per cent in 2038), Hawke’s Bay (up nine percentage points to 34 per cent in 2038), and Manawatū-Wanganui (up nine percentage points to 31 per cent in 2038).\(^{25}\)

In Auckland, one in three people are likely to identify with an Asian ethnicity in 2038, up from about one in four in 2013. Other regional increases in the Asian share include Wellington (up eight percentage points to 19 per cent in 2038), Bay of Plenty (up seven percentage points to 12 per cent in 2038), and Nelson (up seven percentage points to 12 per cent in 2038).\(^{26}\)

The Pacific population will make up about 18 per cent of the Auckland population in 2038, up from about 15 per cent in 2013. Other regional increases in the Pacific share include Hawke’s Bay (up five percentage points to 10 per cent in 2038), Northland (up five percentage points to eight per cent in 2038), and Gisborne (up five percentage points to nine per cent in 2038).\(^{27}\)

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The European/Other population share in Auckland is projected to drop from about 59 per cent in 2013 to 47 per cent in 2038. Other regional decreases in the European/Other share include Otago (down eight percentage points to 83 per cent in 2038), Marlborough (down seven percentage points to 84 per cent in 2038), Wellington (down six percentage points to 72 per cent in 2038), and Canterbury (down six percentage points to 82 per cent in 2038).\(^{28}\)


Global population size

According to the United Nations, the world’s current population of approximately 7.35 billion is increasing at an estimated 83 million per year – the equivalent of the population of Germany. The increase is largely due to high fertility rates in developing countries and increased life expectancy in developed countries.

The United Nations also projects (with a 95 per cent degree of confidence) that the world population will grow by one billion in the next 14 years: sitting between 8.4 and 8.6 billion in 2030, and between 9.5 and 13.3 billion in 2100. In other words, the world’s population is virtually certain to increase over the short to medium term future. Later in the century, the “...global population is likely to continue to rise, but there is roughly a 23 per cent chance that it could stabilise or begin to fall before 2100.”


The United Nation’s medium variant projections forecast a population of 47 million for the ‘Oceania’ region by 2030. The term ‘Oceania’ is used by the United Nations to describe the combined populations of New Zealand, Australia, Polynesia, Melanesia and Micronesia.

**Population of the world and major areas, 2015, 2030, 2050 and 2100, according to the medium-variant projection**

<table>
<thead>
<tr>
<th>Major area</th>
<th>Population (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>World</td>
<td>7,349</td>
</tr>
<tr>
<td>Africa</td>
<td>1,186</td>
</tr>
<tr>
<td>Asia</td>
<td>4,393</td>
</tr>
<tr>
<td>Europe</td>
<td>738</td>
</tr>
<tr>
<td>Latin American and the Caribbean</td>
<td>634</td>
</tr>
<tr>
<td>Northern America</td>
<td>358</td>
</tr>
<tr>
<td>Oceania</td>
<td>39</td>
</tr>
</tbody>
</table>

Māori population growth

The Māori ethnic group is projected to expand its share of the total population at all ages, a result of higher growth rates on average, in turn driven by a younger age structure and higher birth rates. This will result in the Māori population accounting for close to 20 per cent of New Zealand’s population,\(^{33}\) and one-third of New Zealand’s children,\(^{34}\) by 2038.

The Māori ethnic group’s population increase will consistently rise to a high of about 16,000 people a year in 2038.\(^{35}\)

Drivers of Māori population growth

A population’s growth rate is a reflection of factors such as fertility, intermarriage, age structure and migration. For the sake of brevity the term "intermarriage", as used in these reports, refers to both legally married and de facto couples living in households within private dwellings.

Māori fertility rates

The total fertility rate is an indication of the number of births women will have during their lifetime. During 2012–14 the rate was 2.5 for Māori women, compared with 1.9 for non-Māori women.\(^{36}\) The total fertility rate is projected to decrease for the Māori population from 2.5 to 2.2 births per woman between 2014 and 2038 (under the national median assumption).\(^{37}\)

Māori intermarriage

Māori intermarriage with other ethnicities also makes a significant contribution to the number of people who identify as Māori. According to the 2013 Census, two-thirds of babies born in New Zealand with Māori ethnicity were also registered with at least one other ethnicity. And 54 per cent of people who identified as Māori also acknowledged one or more ethnic groups.\(^{38}\)


Māori age structure

The Māori population has low proportions at the older ages and comparatively high proportions at the child and childbearing ages. Compared to non-Māori, Māori have a much younger age structure, which provides a greater propensity for future growth. But an increase in older Māori is already evident and is likely to increase further over the next three decades.39

National population growth

Population growth projections for New Zealand

The growth of New Zealand’s population is projected to slow in the long term, despite the highest population growth rate since the 1960s (2.1 per cent in the year ended June 2016).40

Statistics New Zealand’s projections (base year 2014) indicated that annual population growth will average about:

- 1.0 per cent in the decade ending 2020
- 0.8 per cent in the decade ending 2030
- 0.6 per cent in the decade ending 2040
- 0.4 per cent in the decade ending 2050
- 0.3 per cent in the decade ending 2060.41

The graph below shows how these projections compare historically. Growth averaged 1.4 per cent a year between 1948 and 2016. The growth rate slowed as fertility rates fell and the population’s age structure changed. Population growth averaged 2.2 per cent during the 1950s but only 0.6 per cent during the 1980s. In the ten years to 2016, growth averaged 1.2 per cent. There is roughly a 25 per cent chance that New Zealand’s population will be declining by the 2060s.42

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Whereas the growth of the Māori population between now and 2038 is expected to be driven by higher than average birth rates and increased life expectancy, Asian population growth will by and large be driven by net migration. Statistics New Zealand’s projections assume Asian net migration gains to exceed 20,000 people a year during 2014–2020, and 15,000 a year after 2021.

By the early-2020s the number of people identifying with Asian ethnicities is likely to exceed the number identifying as Māori.

**Drivers of ethnic population growth**

Between now and 2038, natural increase (births outnumbering deaths) is likely to be the primary contributor to population growth for the Māori, Pacific, and European/Other populations. For the Asian population, net migration is projected to play a more important role. Inter-ethnic mobility (i.e. when people change their response to the ethnicity question between censuses) plays a comparatively marginal role for all four broad ethnic groupings.

The growth rates of the Māori, Pacific and Asian populations will also be driven by a relatively younger age structure. The 2013 Census showed that the median age:

- for the Māori population was 24
- for the Pacific population was 22
- for the Asian population was 31
- for the European/Other population was 41 years.

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The growth rate for the European/Other population is projected to slow, mainly due to an older age structure and lower fertility rates. The increasingly older age structure means fewer births, more deaths, and a relatively lower propensity for future growth in comparison to the Māori and Pacific populations.

**Regional population growth projections**

Statistics New Zealand’s low, medium, and high growth projections all indicate:

- the population growth rate will slow in all regions, cities, districts (except Buller), and Auckland local board areas 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:

- 15 of New Zealand’s 16 regions will have more people in 2043 than in 2013, although 17 territorial authorities will have fewer
- deaths will outnumber births in three-fifths of territorial authority areas by 2043
- forty-seven territorial authority 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 two million by 2033.

**Projected average annual population change**

*By regional council area 2013–43*

![Projected population change graph]

Global population growth

A trend towards slowing population growth is evident throughout most of the world. While this is seen by demographers to be a long term trend, this has not diminished concerns that over-population will present real difficulties for the planet within the next century.

Global growth rate

According to the United Nations, the world’s population of approximately 7.35 billion is growing at a slower rate than in the recent past. In 2015, it grew at 1.18 per cent per year (about 83 million annually), as compared to 1.24 per cent per year ten years prior. A slowing rate of growth is also projected into the future.

Of the world’s major areas, Africa has the highest rate of population growth, growing at a pace of 2.55 per cent annually from 2010–2015. Consequently, between now and 2050, of the additional 2.4 billion people projected to be added to the global population, 1.3 billion of these will be in Africa.

During 2015–2050, half of the world’s population growth is anticipated to be focused in nine countries: India, Nigeria, Pakistan, Democratic Republic of the Congo, Ethiopia, United Republic of Tanzania, United States of America, Indonesia and Uganda.

Global fertility

The United Nations projects a substantial decline in global fertility between now and 2100. According to the medium variant projection, the world’s total fertility rate is estimated to drop from:

2.5 children per woman between 2010–2015, to
2.4 children per woman in 2025–2030, to
2.0 children per woman in 2095–2100.

However the United Nations also notes that for countries with high fertility there remains significant uncertainty in the projections, especially over the long-term.
In 2015, countries with relatively low levels of fertility (where women have fewer than 2.1 children on average over their life-times) accounted for 46 per cent of the world’s population. Countries with intermediate levels of fertility accounted for another 46 per cent (where women have on average between 2.1 and 5 children). The remaining nine per cent of the world’s population lived in high-fertility countries (where the average woman has five or more children over her lifetime).

Low-fertility countries include all of those in Europe and Northern America, plus 20 countries of Asia, 17 in Latin America and the Caribbean, three in Oceania and one in Africa. Of the 21 high-fertility countries, 19 are in Africa and two are in Asia. 52

Māori age structure

The Māori population has a significantly more youthful age structure compared to non-Māori and this is expected to persist, meaning that we can expect Māori population growth well into the future.\(^\text{53}\) At the same time, the number of Māori aged 65 and over is projected to rise significantly.\(^\text{54}\)

The relative youth of the Māori population is highlighted in the graph below. In 2015, the median age for the Māori population was 24 years, compared to 40 for non-Māori.\(^\text{55}\)

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**Māori and non-Māori ethnic populations**

At 30 June 2015

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Māori youth

In 2015, one third of Māori were under the age of 15, whereas one in 17 were 65 years and older. In contrast, one sixth of non-Māori were under the age of 15, and one sixth were 65 and older. The median age for Māori is projected to grow from 24 years in 2015, to an estimated 28 years in 2038.

Māori children (0–14 years) will make up 30.3 per cent of New Zealand’s children in 2038, compared with 25.6 per cent in 2013.

Māori elderly

Between 2001 and 2013, the number of Māori aged 65 and over almost doubled from approximately 18,000 to 32,000. The proportion of Māori aged 65 years and over is projected to increase faster due to both a gradual reduction in birth rates and increased longevity. Māori aged 65 years and over will make up 11.9 per cent of the Māori group in 2038, compared with 5.3 per cent in 2013.

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Māori life expectancy

The graph below shows that between 1950 and the early 1980s, Māori life expectancy increased rapidly, after which point it roughly plateaued until the late 1990s. Over that same time, non-Māori life expectancy continued to rise. Since the late 1990s, Māori life expectancy has increased at about the same rate as for non-Māori.63

The gap between Māori and non-Māori life expectancy has narrowed over the last two decades, from:

- 9.1 years in 1995–97, to
- 8.5 years in 2000–02, to
- 8.2 years in 2005–07, to
- 7.1 years in 2012–14.64

In 2012–14, life expectancy at birth was 77.1 years for Māori females and 73.0 years for Māori males, compared with 83.9 years for non-Māori females and 80.3 years for non-Māori males.65


Māori life expectancy by region

Based on death rates in subnational areas of New Zealand in 2012–14, life expectancy at birth was highest for Māori females and males in the Otago region, and lowest in the Gisborne region.

### Māori life expectancy at birth by regional council

With uncertainty measures (1) 2012–14

<table>
<thead>
<tr>
<th>Region</th>
<th>Years of life</th>
<th>2.5th percentile</th>
<th>Median (50th percentile)</th>
<th>97.5th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northland</td>
<td>86</td>
<td>97.5</td>
<td>84</td>
<td>72</td>
</tr>
<tr>
<td>Auckland</td>
<td>84</td>
<td>97.5</td>
<td>82</td>
<td>72</td>
</tr>
<tr>
<td>Waikato</td>
<td>83</td>
<td>97.5</td>
<td>81</td>
<td>72</td>
</tr>
<tr>
<td>Bay of Plenty</td>
<td>82</td>
<td>97.5</td>
<td>80</td>
<td>72</td>
</tr>
<tr>
<td>Gisborne</td>
<td>78</td>
<td>97.5</td>
<td>76</td>
<td>72</td>
</tr>
<tr>
<td>Hawke’s Bay</td>
<td>76</td>
<td>97.5</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td>Taranaki</td>
<td>74</td>
<td>97.5</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Manawatū-Whanganui</td>
<td>74</td>
<td>97.5</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Wellington</td>
<td>72</td>
<td>97.5</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>Tasman</td>
<td>74</td>
<td>97.5</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Nelson</td>
<td>74</td>
<td>97.5</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Marlborough</td>
<td>74</td>
<td>97.5</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>West Coast</td>
<td>72</td>
<td>97.5</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>Canterbury</td>
<td>72</td>
<td>97.5</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>Otago</td>
<td>70</td>
<td>97.5</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>Southland</td>
<td>70</td>
<td>97.5</td>
<td>70</td>
<td>72</td>
</tr>
</tbody>
</table>

**Note:** Uncertainty measures are shown by the 2.5th and 97.5th percentiles. These percentiles represent a 95 per cent credible interval.

Māori vs non-Māori life expectancies by region

Based on death rates in subnational areas of New Zealand in 2012–14, the gap between Māori and non-Māori life expectancy at birth was widest in Northland (8.6 years for females, 9.3 years for males), and narrowest in Otago (0.9 years for females, 1.2 years for males).

National age structure

Age structure projections for New Zealand

In 1970, the median age of New Zealand’s population was 25.6 years. In 2016, it was 37.1. By the early 2030s, a median age of 40 is projected, and by 2068, this will rise to 46 years. This reflects the combined effect of people living longer and having fewer children. The effect is compounded by the large number of people born between 1950 and the early 1970s moving into the older age brackets.66

Population age-sex pyramids, 1961, 2016, 2043 and 2068

Note: Percentiles shown are 5th, 25th, 50th, 75th, and 95th.


Life expectancy for New Zealand's total population

Girls born in 2012–2014 can expect to live to 83.2 years, and boys can expect to live to 79.67. This is high by international standards and is a change which owes a great deal to healthier lifestyles.

However, significant ethnic differences persist. In 2012-2014, life expectancy at birth was:

- 77.1 for Māori females and 73.0 for Māori males
- 78.7 for Pacific females and 74.5 for Pacific males
- 84.1 for European/Other females and 80.5 for European/Other males
- 87.2 for Asian females and 84.4 for Asian males.

Age structure projections by ethnic grouping

Statistics New Zealand’s projections indicate that the four broad ethnic groupings will gradually age over the coming decades, and that a younger age structure will remain evident amongst the Māori, Pacific and Asian populations.

- The Māori population’s median age will increase from 24.3 years in 2018, to 27.9 years in 2038.
- The Pacific population’s median age will increase from 23.5 years in 2018 to 27.3 years in 2038.
- The Asian population’s median age will increase from 32.5 years in 2018, to 40.4 years in 2038.
- The European/Other population’s median will increase from 40.5 years in 2018 to 42.8 years in 2038.70

Age structure projections for the four broad ethnic groupings

European/Other population
By age
2013 and 2038

Māori population
By age
2013 and 2038

Asian population
By age
2013 and 2038

Pacific population
By age
2013 and 2038

Note: Percentiles shown for 2038 are, left to right, 5th, 25th, 50th, 75th, and 95th.

New Zealand’s children in 2038, by ethnicity

New Zealand’s children (those aged 0-14) will decrease their overall population share from 20 per cent in 2013 to 18 per cent in 2038. At the same time this group will become significantly more ethnically diverse.

By 2038, those aged 0-14 years will account for respectively larger proportions of the Māori, Pacific and Asian populations, but will make up a smaller proportion of the European/Other population.

- Māori children will account for 30.3 per cent of New Zealand’s 0-14 year olds in 2038, compared with 25.6 per cent in 2013.
- Pacific children will account for 17.7 per cent of New Zealand’s 0-14 year olds in 2038, compared with 13.4 per cent in 2013.
- Asian children will account for 21.2 per cent of New Zealand’s 0-14 year olds in 2038, compared with 11.9 per cent in 2013.
- European/Other children will account for 68.2 per cent of New Zealand’s 0-14 year olds in 2038, compared with 71.6 per cent in 2013.71

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Global age structure

The projected ageing Māori population is in line with a wider trend towards an ageing New Zealand population, as well as an ageing global population.

Longevity around the world

According to the United Nations, recent years have seen substantial gains in life expectancy. Worldwide, life expectancy at birth rose by three years between 2000–2005 and 2010–2015, from 67 to 70 years.72

The United Nations projects global life expectancy at birth to rise from 70 years in 2010–2015 to 77 years in 2045–2050. The biggest gains are expected in Africa, which is projected to increase its life expectancy from 57 years in 2010–2015 to 70 years by 2045–2050.73

Global life expectancy

Projected global life expectancy at birth

<table>
<thead>
<tr>
<th>Period</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 – 1995</td>
<td>65 years</td>
</tr>
<tr>
<td>2010 – 2015</td>
<td>70 years</td>
</tr>
<tr>
<td>2045 – 2050</td>
<td>77 years</td>
</tr>
<tr>
<td>2095 – 2100</td>
<td>83 years</td>
</tr>
</tbody>
</table>


Indigenous life expectancies

The lower life expectancies for Māori compared to non-Māori New Zealanders is a pattern that is reflected in other indigenous populations around the world. For example, for Aboriginal and Torres Strait Islanders born in 2010–2012, life expectancy was approximately 10.6 years lower than that of the non-indigenous population for males (69.1 years compared with 79.7) and 9.5 years lower for females (73.7 compared with 83.1). In Canada the life expectancy for the Registered Indian population is 6.5 years below that of the non-indigenous population. For the Inuit regions of Canada, the life expectancy difference is more than 12 years.

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Future Demographic Trends for Māori: Part One was the first in a series of three reports that collate a range of baseline population statistics, trends and projections with relevance to Māori. It focused on the issues of population size, growth and age structure. Part Two will be focused on the issues of migration, urbanisation, diversity and identity, and Part Three will concentrate on households and families, work and education. Some of the key trends noted in this report were the following:

For the Māori population

- The Māori population will expand substantially over the coming decades, from a present population of around 720,000, to a population of approximately 1–1.16 million by 2038.
- Māori will account for almost 20 per cent of New Zealand’s total population and one third of New Zealand’s children, by 2038. At the same time, the rate of growth is expected to gradually slow.
- Close to nine in ten Māori live in the North Island, and one quarter of Māori live in the Auckland region. This general pattern is expected to persist, with the largest Māori populations projected (by 2038) for Auckland, followed by Waikato and the Bay of Plenty.
- As at the 2016 Australian Census, more than 140,000 people of Māori descent lived in Australia.
- The age structure for the (domestic) Māori population is youthful relative to the European/Other population, with about one third of Māori under the age of 15.
- While remaining structurally youthful compared to the European/Other population, the Māori population will steadily age. The number of Māori over the age of 65 is projected to increase faster than other ethnic population groupings. The proportion of Māori over the age of 65 is expected to more than double by 2038 (to 11.9 per cent).
- The gap between Māori and non-Māori life expectancies has narrowed over the last two decades, but a significant discrepancy (7.1 years in 2012–14) remains. This gap was widest in Northland (8.6 years for females, 9.3 years for males); and narrowest in Otago (0.9 years for females, 1.2 years for males).
For the New Zealand population

- New Zealand’s current estimated total population of 4.7 million has a 90 per cent probability of increasing to 5.29–6.58 million by 2043.

- The Māori share of the total population is expected to increase to 18.4 per cent by 2038, the Asian population to 22 per cent and the Pacific population to 10.2 per cent. The European/Other population is projected to decrease to 65.5 per cent.

- The growth of New Zealand’s population is projected to slow (to 0.6 per cent in the decade ending 2040). Population growth will slow in all regions, cities, districts (except Buller), and Auckland local board areas between 2013 and 2043. All areas will be home to more people aged 65+ in 2043.

- More than half of New Zealand’s population growth between 2013 and 2043 will be in Auckland. Auckland’s population will reach two million by 2033.

- Relative to other ethnic groups, the Māori population’s growth rate is constrained by its inability to grow significantly as a result of immigration.

- New Zealand’s total population is projected to age across all four broad ethnic groupings. However, a younger age structure will remain evident amongst the Māori, Pacific and Asian populations.

- Increasing longevity is expected across all ethnic population groups.

- By 2038, children will account for a larger proportion of the Māori, Pacific and Asian populations, and a smaller proportion of the European/Other population.

For the world population

- The current world population of around 7.5 billion is expected to reach between 8.4 and 8.6 billion by 2030.

- New Zealand’s wider neighbourhood, Oceania, is projected to grow to a population of 47 million by 2030.

- The world population’s growth rate is projected to slow. Nevertheless it is currently increasing by about 83 million per annum, and there are concerns that over-population will present real difficulties for the planet within the next century.

- Africa is the fastest growing major area of the world. Of the additional 2.4 billion people projected to be added to the global population by 2050, 1.3 billion of these will be added in Africa.
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