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**Research Report**

## Trends in Māori wellbeing: Background paper to Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022

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TE TAI ŌHANGA  
THE TREASURY

# Trends in Māori wellbeing

## Background Paper to Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022

### Analytical Paper 22/02

December 2022

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**ANALYTICAL PAPER 22/02  
BACKGROUND PAPER TO  
TE TAI WAIORA: WELLBEING IN  
AOTEAROA NEW ZEALAND 2022**

Trends in Māori wellbeing

**MONTH/YEAR**

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# He mihi

Ko te tai whakarunga

Ko te tai whakararo

Ko te Tai Tokerau

Ko te Tai Hauāuru

Ko te Tai Tonga

Ko te Tai Rāwhiti

Ko te Tai Ōhanga e mihi nei

Hui-ē, taiki-ē!

Ka tahi, me mihia te tini me te mano kua mene ki te pō. Ki a koutou ngā toa o mua i tū kaha ai, ki ngā mātua tupuna nā koutou te ara o te waiora I whakatakoto, tēnā koutou. Nā koutou te whawhai pai i kawē, tuku iho mai ai. Nā reira, e moe, okioki mai rā.

Hoki rawa atu ki a tātou ngā kanohi ora o rātou kua riro ki te pō, tēnā tatou. Ka rere ēnei kupu kōrero ki ngā tai e whā, ki ngā amorangi ki mua me ngā ringa raupā o muri e hāpai ana i ngā kaupapa rangatira.

Ka nui ā mātou mihi ki a koutou i piki ai i te mahi tuhinga o te pūrongorongo nei. Arā, ko koutou ngā rangatira i uiuitia, ko koutou i tuku i ngā tākupu, ko ngā pūkenga e arahi ana i ā mātou nei hikoinga o te ara waiora.

Nā reira, kia huri tātou o Aoteroa ki te ara i whakatakotonga i mua i tātou. Kia kaha ā tātou mahi kia mahea ngā parapara me ngā hua kino, kia tupu ai te Ōhanga Māori, ā, kia kaua e ngaua ngā whānau e te rawakore me te whakahawea.

Ko te tūmanako, ka whai take tēnei rīpota me tōna teina ko Te Tai Waiora hei kai mā ā tātou hinengaro, e timata ana tātou hei hoa haere e hīkoi ana ki ā tātou āpōpōtanga.

Tēna tātou katoa.

# Executive summary

This paper is one of a series of background papers designed to support Te Tai Ōhanga | The Treasury's first wellbeing report, *Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022*.

## Approach

This paper applies He Ara Waiora, one of two wellbeing frameworks, alongside the Living Standards Framework, used by Te Tai Ōhanga | The Treasury. He Ara Waiora is grounded in mātauranga Māori and helps us to understand waiora, a term that can be loosely translated as 'wellbeing' but has no direct equivalent in English.

This background paper draws on available data and complements the quantitative analysis with qualitative insights from interview participants. This background paper, and the chapter on Māori wellbeing in the wellbeing report, are intended to inform discussion and debate by providing a deeper dive into key wellbeing indicators that impact on Māori. It is descriptive in nature and does not propose policy solutions to the opportunities and issues identified herein. However, it highlights key issues and provides a repository of evidence that can inform the development of policy advice.

This is a first attempt at applying He Ara Waiora to develop a broad overview of Māori wellbeing. There is work under way to develop measures that capture waiora or wellbeing in terms that more genuinely reflect Māori aspirations. We anticipate that we will be able to build on work in this space for future wellbeing reports.

## Key messages

- He Ara Waiora emphasises that the human realm (Te Ira Tangata) and the wellbeing of the environment (Te Taiao) are intertwined. Human activities are part of the complex system of relationships within Te Taiao.

### *Te Taiao*

- Māori ways of life will be impacted by global environmental issues such as climate change and biodiversity loss, which pose a threat to cultural identities and practices. Māori have the highest level of concern about the state of the environment compared to other ethnic groups in Aotearoa New Zealand.
- Māori perspectives prioritise careful stewardship of natural resources (kaitiakitanga) by iwi and hapū to balance relationships with the natural world and ensure abundance for future generations.

### *Te Ira Tangata*

- He Ara Waiora describes human activities, within which the key aspect is mana (dignity, authority, and agency). A sense of strong identity and belonging to community (Mana Tuku Iho) is a foundation of wellbeing. Many Māori experience high levels of cultural belonging, collective identity and communal sharing and giving. Māori participation in cultural activities remains relatively strong.

- Te reo Māori is a significant element of Māori culture and identity. While the long-term future of te reo Māori is not certain, recent data shows some improvement in its understanding and use across the population of Aotearoa New Zealand. Participation in Māori culture helps sustain it for the benefit of future generations of Māori, safeguarding their capability to achieve wellbeing as Māori.
- There are several positive trends in Māori wellbeing. Mana Āheinga recognises the importance of having hope and aspirations and the capabilities to fulfil them. Māori are gaining qualifications at a faster rate than other ethnic groups, and there are a growing proportion of Māori in higher-skilled employment. There are also fewer whānau and children in hardship than in the past.
- There is evidence that Māori-medium education is associated with improved educational outcomes for tamariki Māori, and this provides a reason for optimism about the future of te reo Māori me ōna tikanga
- However, there are some persistent challenges to the experience and outcomes of Māori and non-Māori across a range of wellbeing domains such as income, material hardship, health and housing. Although some Māori outcomes are gradually improving over time, the gaps are closing slowly at best.
- Mana Tauutuutu encompasses the reciprocal rights and responsibilities between people and their community, which enhances belonging and a sense of contribution and purpose. Despite some of the positive trends mentioned above, there are also high and increasing rates of psychological distress, loneliness and discrimination. Māori also have the lowest level of trust in key government institutions.
- Mana Whanake speaks to the importance of growing sustainable, intergenerational wealth. The Māori economy has been growing faster than the wider economy and now represents 6.8% of national GDP in 2018. Māori business is innovative, often endeavours to incorporate Māori values and has the potential to support wellbeing outcomes in a culturally grounded way.

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# 1 Introduction

## Purpose and scope

This paper is one in a series Te Tai Ōhanga | The Treasury has commissioned to support its first wellbeing report, *Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022*. Following the passage of the Public Finance (Wellbeing) Amendment Act 2020, the Treasury is required to provide an independent report on the state of wellbeing in New Zealand at least every four years.

Using He Ara Waiora as a lens, this paper provides a high-level summary of some current and emerging trends in Māori wellbeing. He Ara Waiora helps Te Tai Ōhanga to understand waiora, a term that can be loosely translated as wellbeing, but has no direct equivalent in English. Developing this understanding is important, as one key enabler of waiora is a healthy relationship between Māori and the Crown. Te Tiriti o Waitangi | the Treaty of Waitangi and Māori-Crown relationships are now both acknowledged in the Public Service Act 2020, and there are ongoing discussions in Aotearoa New Zealand about enabling an inclusive relationship with the Crown (Network Waitangi Ōtautahi, 2016).

Over the years, a number of approaches and frameworks have been developed to better understand waiora.<sup>1</sup> However, the scope of this paper is framed by, and limited to, the principles set out in He Ara Waiora. This paper draws on existing research from across academia and public service agencies wherever appropriate within the scope.

In particular, this paper focuses on two key principles: Te Taiao (the natural world) and Te Ira Tangata (the human realm). Both principles are evidenced by quantitative analysis that draws on work by McMeeking et al. (2019), which identified proxy indicators for He Ara Waiora from the Living Standards Framework Dashboard (The Treasury, 2022b) and Ngā Tūtohu Aotearoa | Indicators Aotearoa New Zealand (Stats NZ, n.d.). The analysis is complemented with qualitative insights in the form of interview excerpts from Māori across academia, government, iwi and business (see Appendix A3 for information on the interview participants and process).

## 1.1 He Ara Waiora

He Ara Waiora helps to place context around what data trends mean when viewed from a Māori perspective, but this report should not be taken as ‘the’ definitive Māori perspective. Concepts of wellbeing for Māori are diverse and can vary along iwi, hapū, whānau and individual lines, though many of these are likely to emphasise similar values to He Ara Waiora. Further, while the Treasury seeks to understand these concepts, it does not ‘own’ them, as mātauranga Māori (traditional Māori knowledge) sits properly within te ao Māori. He Ara Waiora draws on those more universal values that are consistent across an ao Māori world view.

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<sup>1</sup> See Durie (1998) for a review of these approaches. Sir Mason Durie’s conceptual model of Te Whare Tapa Whā features prominently as a holistic wellbeing model that has been incorporated into many policy frameworks. It was also influential upon the experts who developed He Ara Waiora.

Further, it should be noted that many of the concepts in He Ara Waiora are similar to values held by non-Māori people in New Zealand. The concept of manaakitanga, for example, resonates as an ethic of reciprocal care. These familiar concepts can serve as building blocks for deeper understandings of wellbeing stemming from te ao Māori knowledge.

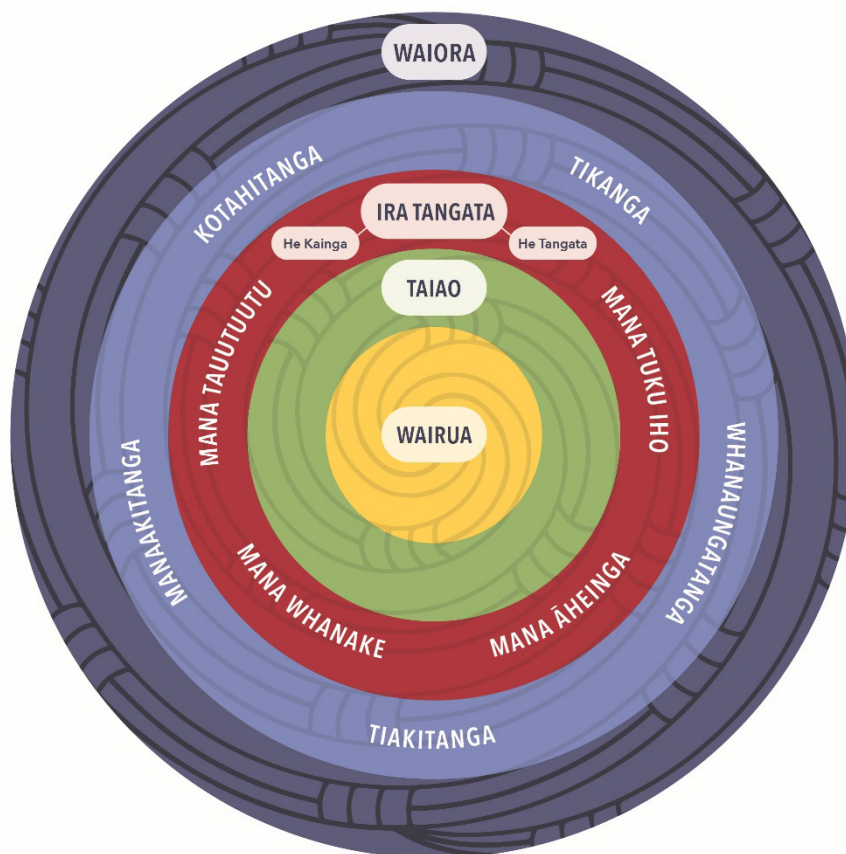
He Ara Waiora demonstrates the connections between and within the elements of waiora (wellbeing), as depicted by the takarangi (connecting spiral pattern) that is the foundation for the framework (Figure 1). The takarangi is emblematic of a complex and connected system where everything interacts. The 'means' (kotahitanga, tikanga, whanaungatanga, manaakitanga, tiakitanga) are the tikanga values or principles that help us to achieve the following 'ends':<sup>2</sup>

- **Wairua** (spirit, intuition, emotion, expression) is at the centre to reflect that it is the foundation or source of wellbeing. Values, beliefs and practices related to wairua are essential to Māori conceptions of waiora. Everything has wairua, and wairua itself can influence anything and everything. Fundamental concepts pertaining to the world and life originate from here.
- **Te Taiao** (the natural and living state of the world – the environment) is close to the centre of the framework to reflect the sequence of Māori creation or cosmology. The concept of wellbeing is not human-centric in He Ara Waiora. Rather, Te Taiao refers to the dynamic systems of which living things and natural phenomena are a part. From a Māori world view, Te Taiao is yet another demonstration of oneness: all phenomena are related. Human beings are part of this. Humans have responsibilities and obligations to sustain and maintain the wellbeing of Te Taiao in order to ensure abundance and wellbeing for current and future generations. Rights and obligations relating to the natural world particularly apply where iwi, hapū and whānau are mana whenua or hold mana in a particular area to which they are tied by whakapapa.
- **Te Ira Tangata** (the human realm) encapsulates human activities and relationships, including the relationships across generations. The concept of mana (dignity, authority, including self-determination, and agency) is seen as key to waiora. People thrive when they are empowered to grow and develop, to connect with others and to access the resources they need. Te Ira Tangata is premised on an interdependence between people's wellbeing (He Tangata) and that of communities (He Kāinga).

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<sup>2</sup> A list of key concepts related to He Ara Waiora can be found in Appendix A1.

**Figure 1: He Ara Waiora framework**



### **The development of He Ara Waiora**

He Ara Waiora was initially developed for the Tax Working Group to understand how tikanga Māori could inform a future-focused tax system. The process began with kōrero with iwi and Māori thought leaders, academics and business leaders. It involved wider engagement across the country for over a year. This process resulted in some deep insights from te ao Māori on a prototype version of He Ara Waiora, focusing on Māori wellbeing and the opportunity to lift Māori living standards.

Expert Māori thought leaders, known collectively as Ngā Pūkenga, continue to engage with this mahi and have further evolved He Ara Waiora. It was subsequently developed alongside the Treasury's Living Standards Framework (The Treasury, 2021c) and the Whānau Ora Outcomes Framework (Te Puni Kōkiri, 2016). The current version of He Ara Waiora further explores a mātauranga Māori-sourced conceptualisation of wellbeing. Ngā Pūkenga continue to work with the Treasury and other agencies as we pilot practical policy tools to support the practical use of He Ara Waiora.

He Ara Waiora also offers principles or the 'means' to guide the way in which government agencies work in developing policy initiatives to lift intergenerational wellbeing for Māori and all people in New Zealand. The principles of He Ara Waiora emphasise coordination and alignment, partnership, collective and strengths-based actions, protecting and building mana, and stewardship. These principles are also closely aligned with the values, beliefs and world views of the Pacific community (Thomsen et al., 2018). The following outlines how the Treasury considers the application of the principles in developing policy advice (The Treasury, 2021a).

- **Kotahitanga** means working in an aligned, coordinated way across the system and in partnership with business, communities, iwi and those in society with unique needs. It may mean finding ways to incorporate both mātauranga Māori and western science to build a more holistic understanding of an issue, including protection of Te Taiao.
- **Tikanga** means that decisions have to be made in accordance with the right processes. This includes working in partnership with the Treaty partner. It is vital to work visibly in partnership with affected communities and to communicate in ways that resonate with those communities.
- **Whanaungatanga** means working with the whakapapa connections, networks and shared aspirations between people. For government, this can mean working with Māori, Pacific and community leaders to develop pathways towards wellbeing, leveraging off the assets and skills in those communities. Collective action is more likely to restore mana to communities and individuals.
- **Manaakitanga** means maintaining a focus on improved wellbeing and enhanced mana for all citizens of Aotearoa. It means supporting each other and demonstrating an ethic of care for our fellow New Zealanders.
- **Tiakitanga** means building the protocols and relationships that enable government institutions and operational systems to support wellbeing. This includes the way that government systems interface with environmental health. The Treasury regards this as distinct from the cultural duty of kaitiakitanga, which sits with iwi and hapū in respect of their own takiwā (territories).

## 1.2 Measuring Māori wellbeing

This section outlines our approach to measuring Māori wellbeing using He Ara Waiora. Most of the data discussed in this paper comes from surveys, which are based on a sample of the population that is taken to be representative of the overall population. When deriving data from population samples, there is always a possibility that an observed effect has occurred due to uncertainty or what is known as sampling error. Smaller sample sizes, as are usually the case with Māori, often result in greater sampling errors. Wherever possible, we have added error bars to the graphs in this paper to reflect this sampling error. Error bars help to interpret the statistical significance of an observed increase or decrease in the data. In general, overlapping error bars suggest a difference is not statistically significant.

This paper seeks to understand long-term trends in the wellbeing of Māori. While the available data does not always have a long time series, we aim to look at longer-term trends over the last 10 to 15 years wherever possible.

We also note that the emergence of COVID-19, and the public health measures taken to respond to it, impacted the daily lives of everyone in Aotearoa New Zealand, including Māori. Variable data release dates mean that the full impact of COVID-19 is not yet clear, and there is also uncertainty around the persistence of some impacts and risks to Māori wellbeing over the longer term. A more detailed analysis of the impacts of COVID-19 on wellbeing is available via two background papers that accompany Te Tai Waiora.<sup>3</sup>

## Indicators and measures in this paper

There are currently no direct indicators and measures of the principles in He Ara Waiora. The selection of indicators for this paper has been derived from McMeeking et al. (2019), which identified existing data sets that could serve as proxy indicators for Te Taiao and Te Ira Tangata. These indicators were identified across the Treasury's Living Standards Framework Dashboard (The Treasury, 2022b), the Whānau Ora Outcomes Framework (Te Puni Kōkiri, 2016) and Ngā Tūtohu Aotearoa | Indicators Aotearoa New Zealand (Stats NZ, n.d.). This paper draws on the indicators from the Living Standards Framework and Ngā Tūtohu Aotearoa only as the data are more frequently updated. The commentary in this paper is focused on headline indicators or where the data is showing a significant trend. Appendix A2 outlines the indicators that have been selected for commentary.

Work is currently under way with Te Puni Kōkiri, with support from the Treasury, to identify a range of bespoke and existing indicators to measure He Ara Waiora. These indicators will not be available in a timeframe consistent with this paper. However, they will be used for future wellbeing reports where appropriate.

Wairua is at the centre of He Ara Waiora, and Waiora forms the outer sphere. Neither are measured directly. However, the interplay within and between Te Taiao and Te Ira Tangata impacts one's Wairua and/or Waiora. Those impacts are difficult to capture authentically through indicators and measures at this point and for that reason are not part of the analysis.

## Limitations of available data

It is well acknowledged, including by McMeeking et al. (2019), that existing quantitative data presents a far from complete picture of what is important to wellbeing from te ao Māori perspectives. Government approaches to measurement are only now beginning to consider issues such as Māori data sovereignty – which holds that Māori data lies with Māori, regardless of who stewards the data – and te Tiriti-based data management.

Most indicators and data mostly focus on individual performance and characteristics and are therefore limited in what they can say about collective and whānau wellbeing. This is an issue as Māori empowerment and resilience stem from collective entities such as whānau, marae and hapū (Independent Māori Statutory Board, 2019).

Data quality is another issue, mainly due to technical issues such as time series inconsistencies and limited ethnicity breakdowns. The data associated with some indicators in this paper make tailoring the analysis to Māori challenging.

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<sup>3</sup> See *Our wellbeing throughout the COVID-19 pandemic* (The Treasury, 2022a) and *Wellbeing in the first year of COVID-19* (Webber et al., 2022).



One interview participant noted a further limitation, in that the selection of a narrow range of indicators might come to define and constrain Māori identity in ways that exclude some whānau.

*“... the markers in regards to connection, belonging, connection to marae, and all of those things are good indicators – but there is a problem with them. There may be a whole range of reasons why people don’t have connections to marae, but their Māoriness is expressed in a whole range of other ways that they feel really strongly about.”* – Tracey McIntosh, University of Auckland

Comparing Māori and non-Māori on historical wellbeing dimensions has been useful in ascertaining the comparative status of populations. However, we note that existing wellbeing frameworks and datasets often fail to capture the strengths of Māori progress, interests and values in a way that is determined by Māori themselves. We have endeavoured to balance these considerations throughout the report.

### 1.3 Demographic context

When considering trends in Māori wellbeing, it is important to acknowledge that Māori have a younger age demographic compared to the total population. As people in younger age brackets often have poorer outcomes across a number of domains,<sup>4</sup> poorer outcomes for Māori may be partly attributable to their younger age structure. We have indicated where age factors may come into play in the paper wherever possible.

As of June 2021, the median ages for Māori were 27.3 years for males and 25.3 years for females (Stats NZ, 2021a). This is in comparison to the median ages of 36.7 years for males and 38.7 years for females for the total population. In 2018, 32% of the Māori population were under the age of 15 years compared to only 17% of the non-Māori population. Similarly, 57% of the Māori population were under the age of 30 years compared to 37% of the non-Māori population (Stats NZ, 2018a).

The younger age structure of Māori is a large contributor to population growth. By 2043, it is projected that the total Māori population will grow to 21% of New Zealand’s population from 17% in 2018 (Stats NZ, 2022d). The share of children who are Māori will increase to 33% (about one in three children) from 27% over the same period. Population projections also show that, within the next 15 years, a large proportion of Māori will enter the labour force and play a pivotal role in the future of the Māori economy and wider New Zealand economy.

There is also a greater proportion of Māori living in urban areas (82.2%) compared to 18.8% living in rural areas (Stats NZ, 2018a).

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<sup>4</sup> More information on this can be found in *Trends in wellbeing in Aotearoa New Zealand, 2000-2020* (The Treasury, 2022d).

## 1.4 Structure of this report

The following analysis of the data paints an overall picture of wellbeing under two main headings:

- Te Taiao – this section provides a more detailed explanation of the concept, measures the health of Te Taiao against the culturally relevant measures currently available and draws some conclusions about cultural impacts.
- Te Ira Tangata – this section discusses the four dimensions of mana within He Ara Waiora that contribute to wellbeing within human activities. It avoids using these four dimensions as rigid framing for the discussion and instead aims for a holistic picture.

The Wairua element of He Ara Waiora is not addressed in a separate section but is assumed to be expressed and impacted through the entire discussion.



## 2 Te Taiao

### Key messages

- The health of Te Taiao and the human realm (Te Ira Tangata) are intertwined. This perspective prioritises careful stewardship (kaitiakitanga) of natural resources to balance relationships with the natural world and ensure abundance for future generations.
- Māori have the highest level of concern about the state of the environment compared to other ethnic groups in Aotearoa New Zealand.
- Global environmental issues such as climate change and biodiversity loss pose a threat to ancestral lands, Māori ways of life and cultural identity as well as economic interests.
- The protection of Te Taiao is a prominent feature of te ao Māori, including the use of mātauranga Māori as a way to encourage sustainable use of resources and to monitor the health of the natural environment.

This section introduces the concept of Te Taiao in more detail. It explores aspects of the natural environment that are affecting the health of Te Taiao that are particularly relevant for Māori wellbeing. An initial stocktake of the indicators shows that there are many challenging trends to environmental outcomes, including indigenous species endangerment, climate change impacts, declining water quality and increasing waste generation. These threats and their cultural impacts are discussed in more detail below in relation to different indicators.

### 2.1 The concept of Te Taiao

He Ara Waiora is not human-centric. Wairua is at the centre, followed by Te Taiao. The two are linked, given that the primary physical element associated with both is wai (water).

Te Taiao has been defined as the ‘natural world’ but this implies a degree of separation from human constructs such as societies, cities and industries. In fact, Te Taiao encompasses all the complex systems that surround us and is symbiotic with Te Ira Tangata (the human realm). Te ao Māori continues to acknowledge and be guided by the natural rhythms in these systems, as seen in the revitalisation of Matariki and Puanga celebrations; the marking of seasons by the behaviour of particular species; and the ongoing use of Maramataka, the Māori lunar calendar, for gardening and fishing.

Humans are seen as part of a web of relationships on which our wellbeing depends. Māori of a particular place may regard the mountains and rivers as ancestors, referring to them in personal terms and often returning to them for healing and guidance (Ministry for the Environment, 2020a). The use of natural resources is therefore exercised through protocols of stewardship, guardianship and keeping relationships in balance.

Close ties to the natural world are expressed through whakapapa relationships that connect humans and the environment in this dynamic system:

*“... a wetland is not just a swamp or a wasteland, it’s actually an ecosystem that has this incredible function and process. So, when you think about land use, for example, you don’t just think about that in isolation and how it can give you an economic return. You’re thinking about how does it protect coastal erosion? What other purposes does it serve in terms of the ecosystem? There are rongoā<sup>5</sup> associated with wetlands, so you look at how that fits into the broader community economy.” – Tia Greenaway, Climate Change Commission*

Te ao Māori approaches tend to be holistic and intergenerational in scope – outcomes achieved in the present should enhance the ability for mokopuna to also achieve waiora in the future.

The measures that make up the indicators for the health of Te Taiao are primarily drawn from measures that track sustainability, environmental quality and shifting environmental health. This is not a comprehensive indicator set but is sufficient to provide a picture of:

- the attitude of Māori and other people in Aotearoa New Zealand to Te Taiao
- the health of key systems within Te Taiao on which human wellbeing depends
- potential changes to the balance and rhythm to these systems, which will impact human wellbeing
- potential impacts on whenua Māori (ancestral land), whakapapa (genealogical ties) and mātauranga Māori.

## 2.2 The health of Te Taiao

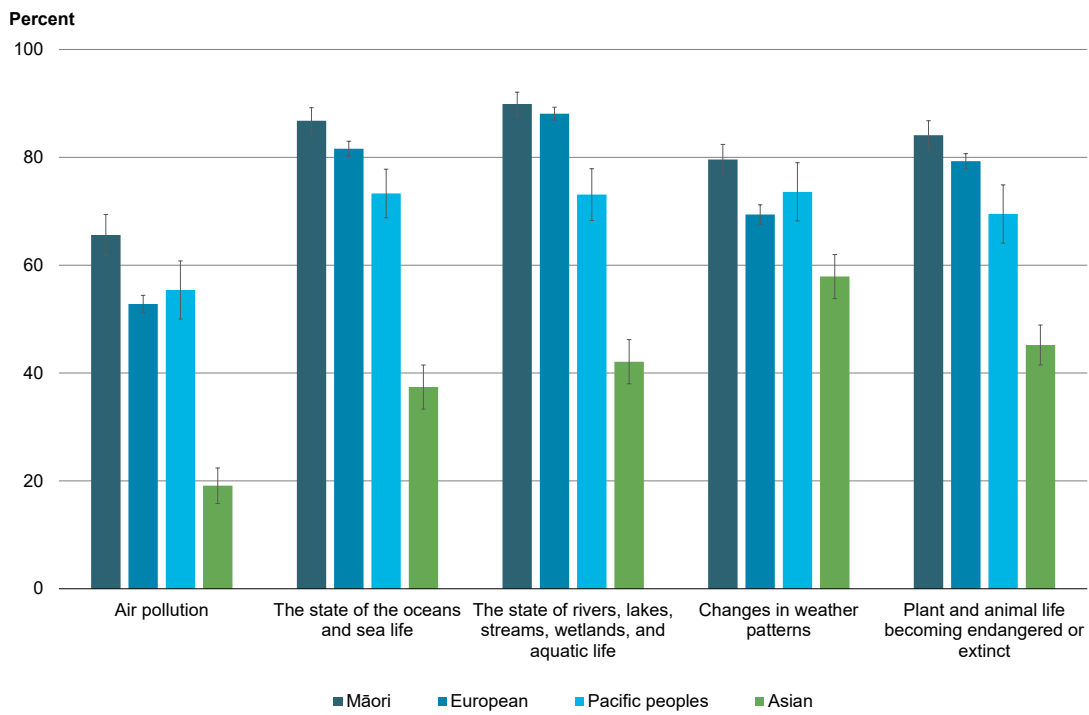
Many Māori are more concerned about the state of the environment than other ethnic groups in Aotearoa New Zealand. Environmental ‘health’ captures a number of factors relating to the natural environment like biodiversity, water and air quality and the quality and connections to the land. While self-reported perceptions of environmental health do not necessarily translate to actual environmental health, it is an important indicator that reflects how individuals experience wellbeing when they interact with the natural environment.

Māori consistently consider Aotearoa New Zealand to have problems with environmental issues such as air pollution, water quality and loss of biodiversity, among others (Figure 2). When considered alongside results that indicate about 92% of Māori rated the importance of the health of Te Taiao as quite or very important to them (Figure 3), this is likely to have an impact on the wairua of places, people and communities (Te Puni Kōkiri, 2022).

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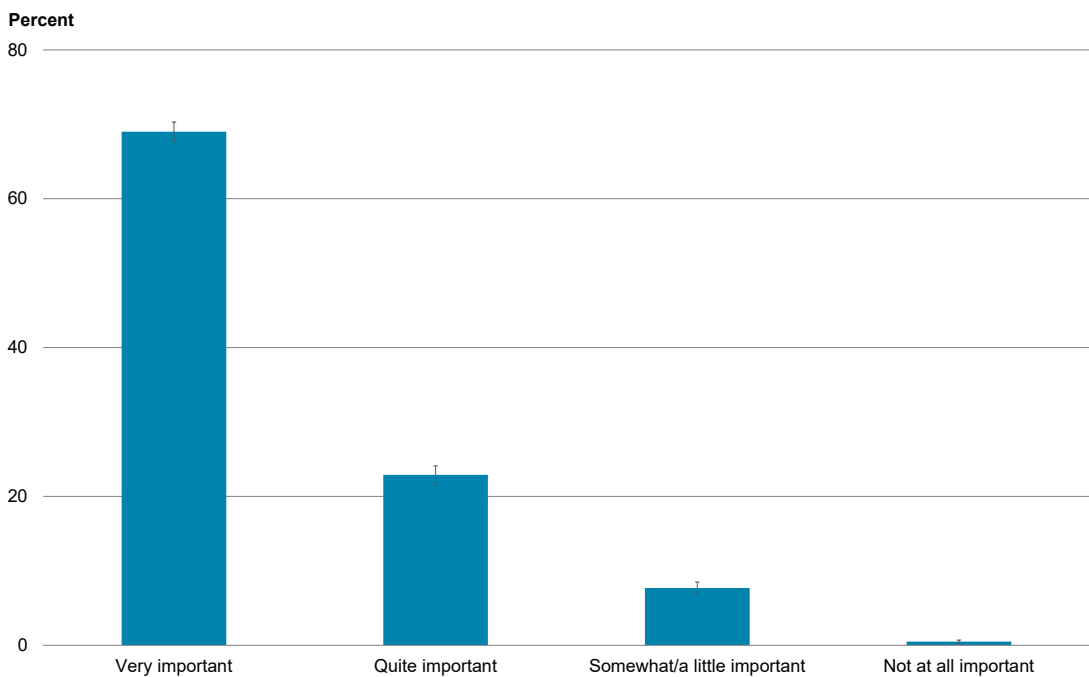
<sup>5</sup> Rongoā Māori is traditional Māori healing, which encompasses herbal remedies, physical therapies and spiritual healing.

**Figure 2: Percentage of people by ethnicity who consider New Zealand to have specific environmental issues, 2018**



Source: Stats NZ, General Social Survey

**Figure 3: Māori overall rated importance of the health of the environment, 2018**

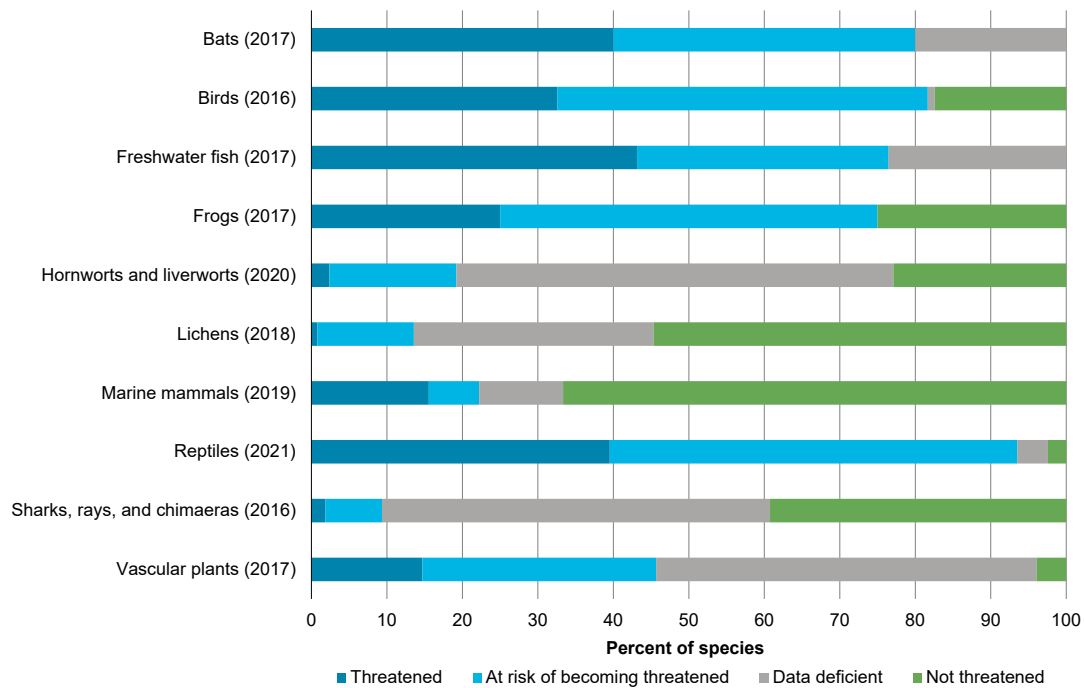


Source: Stats NZ, Te Kupenga Survey

## Threats to biodiversity and taonga species impact the ability of Māori to act as kaitiakitanga...

One key piece of evidence relates to biodiversity, an important indicator of healthy ecosystems, which shows that 77.2% of indigenous species are classified as threatened or at risk of extinction (Ministry for the Environment & Stats NZ, 2019). For example, Figure 4 indicates that around 94% of reptile species are threatened with extinction or at risk of becoming threatened.

**Figure 4: Extinction threat to native species, 2021**



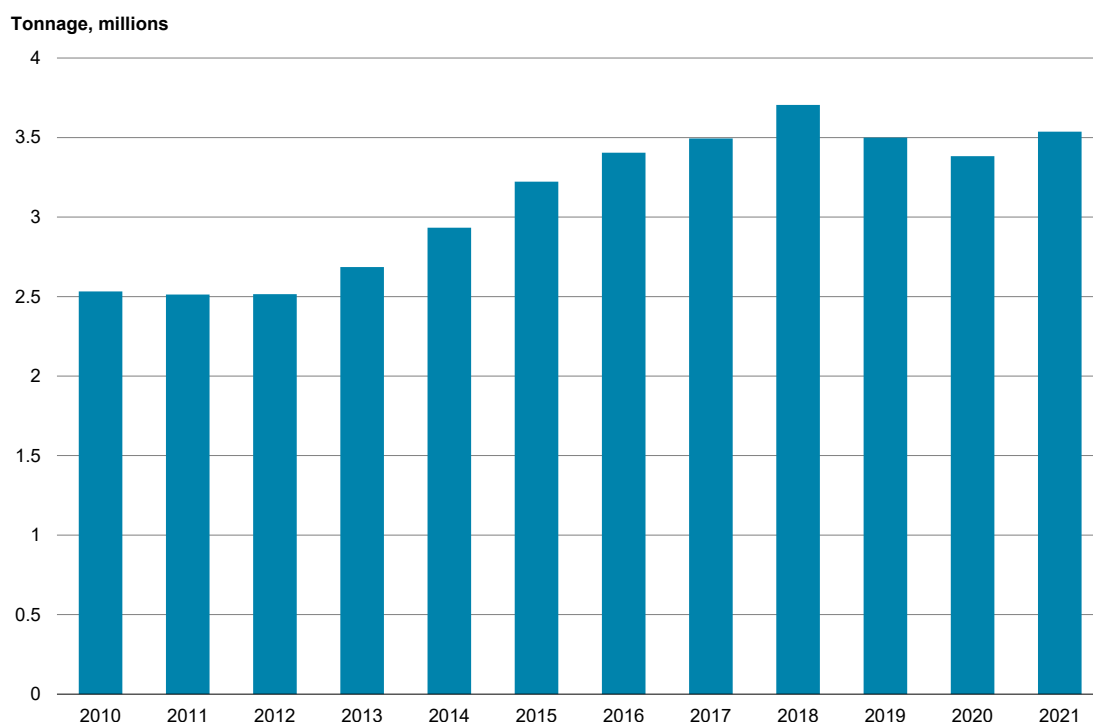
Source: Department of Conservation, New Zealand Threat Classification System

The loss of biodiversity jeopardises the mātauranga associated with taonga (treasured) species. When a species is lost, so is the associated mātauranga and connection iwi and hapū have with Te Taiao through the exercise of kaitiakitanga. Aside from these community impacts, the cumulative loss of biodiversity implies a damaged relationship with Te Taiao at a national level.

## ... and increasing waste presents a risk to the health of Te Taiao

An estimated 17.49 million tonnes of waste is generated per year in Aotearoa New Zealand, of which approximately 72% goes to landfills (Ministry for the Environment, 2021a). The total tonnage of per capita waste from Class 1 landfills (landfills that accept household waste) has increased by 39.6% from 2010 (Figure 5). The decrease in 2020 is likely largely due to COVID-19, suggesting that the rate of waste disposal is increasing for many sites across New Zealand. This increases the risk of hazardous and polluting substances entering the land, fresh waterways and marine environment and contributes to greenhouse gas emissions. At a local level, this can affect sites of cultural significance while also impacting on the gathering of food and other resources.

**Figure 5: Total tonnage of waste to Class 1 landfills, 2010-2021**



Source: Ministry for the Environment and Online Waste Levy System

### **Consistent demand for energy puts pressure on the sustainability of Te Taiao ...**

Aotearoa New Zealand has abundant sources of renewable energy, with the total amount of renewable energy available for use – total primary energy supply (TPES) – steadily increasing from 32.7% in 1990 to 40.8% in 2021 (Figure 6). Around 85% of New Zealand’s electricity is generated using low-emissions renewable sources, particularly hydro and geothermal power (New Zealand Productivity Commission, 2018).

However, TPES is not always the best way to measure the level of renewables being used in New Zealand’s energy system as primary energy supply can overestimate how much renewable energy is available for use.<sup>6</sup> Figure 6 shows that the amount of energy consumed by end users – the renewable share of total final energy consumption (TFEC) – has remained relatively unchanged since 1990.<sup>7</sup>

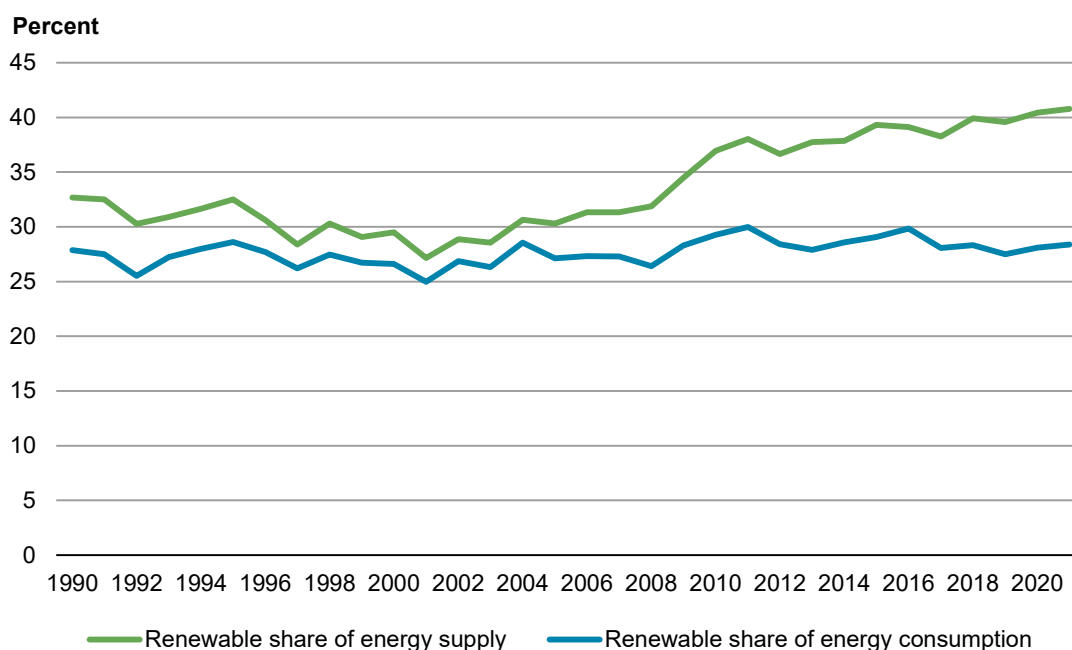
<sup>6</sup> This is due to a loss of energy in the conversion process. An example from the Ministry of Business, Innovation and Employment’s *Energy in New Zealand 2022* report confirms that New Zealand is a country rich in geothermal resources. However, the transformation efficiency to create energy is only around 15%, and for this reason, geothermal energy supplies less than a fifth of New Zealand’s electricity.

<sup>7</sup> Solid biofuels consist of energy derived from woody biomass, which includes charcoal, residual wood and black liquor (Ministry of Business, Innovation and Employment, 2022).

### ... and there are examples of te ao Māori leadership on energy use to help mitigate climate impacts

Kaitiakitanga of natural resources has shown to help prevent further escalation and stem passive damage to the environment. Iwi, hapū and whānau are showing leadership in investing in active management of environmental damage and an increasing responsibility for environmental wellbeing. For example, Te Rūnanga o Ngāi Tahu is implementing its climate change strategy, Te Tāhū o te Whāriki, both as a legacy for future generations and in response to observed impacts such as the melting of Kā Roimata o Hine Hukatere | Franz Josef Glacier (Te Rūnanga o Ngāi Tahu, 2018).

**Figure 6: Share of renewables in total final energy consumption (TFEC) and total primary energy supply (TPES), 1990-2020**



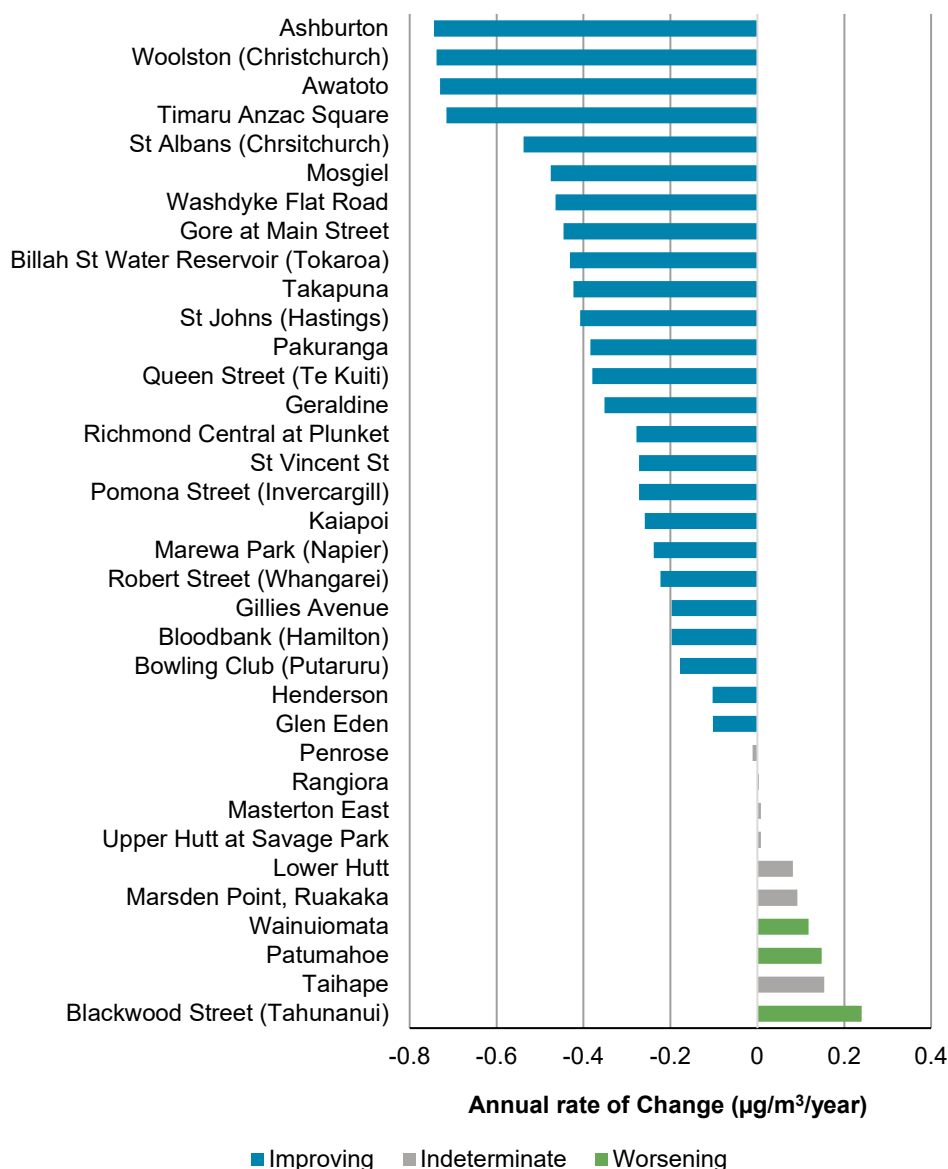
Source: [Ministry of Business, Innovation and Employment](#)

### Air quality is generally improving ...

Air and air quality can be described as taonga that sustain life. Although Aotearoa New Zealand has fewer instances of adverse health effects from air pollutants than most other OECD countries, air pollutants could particularly impact Māori communities as Māori experience far more cases of respiratory illness (such as asthma and emphysema) than non-Māori (Barnard & Zhang, 2021). Wider impacts of air quality on Te Taiao include the deposition of air pollutants onto mahinga kai, wāhi tapu, waterways and marae (Ministry for the Environment, 2002).

Air quality has improved over time, with 72% of measured locations around Aotearoa New Zealand improving since 2011 (Figure 7). However, most sites still have high concentrations at times. PM<sub>10</sub> concentrations at 76% of sites were higher than air quality guidelines from the World Health Organisation at least once between 2017 and 2020, and almost half were higher than the same guidelines for annual PM<sub>10</sub> exposure.

**Figure 7: PM<sub>10</sub> trends, 2011-2020**



Source: [Ministry for the Environment](#)

**...while water quality has not shown much improvement over time**

*Freshwater quality*

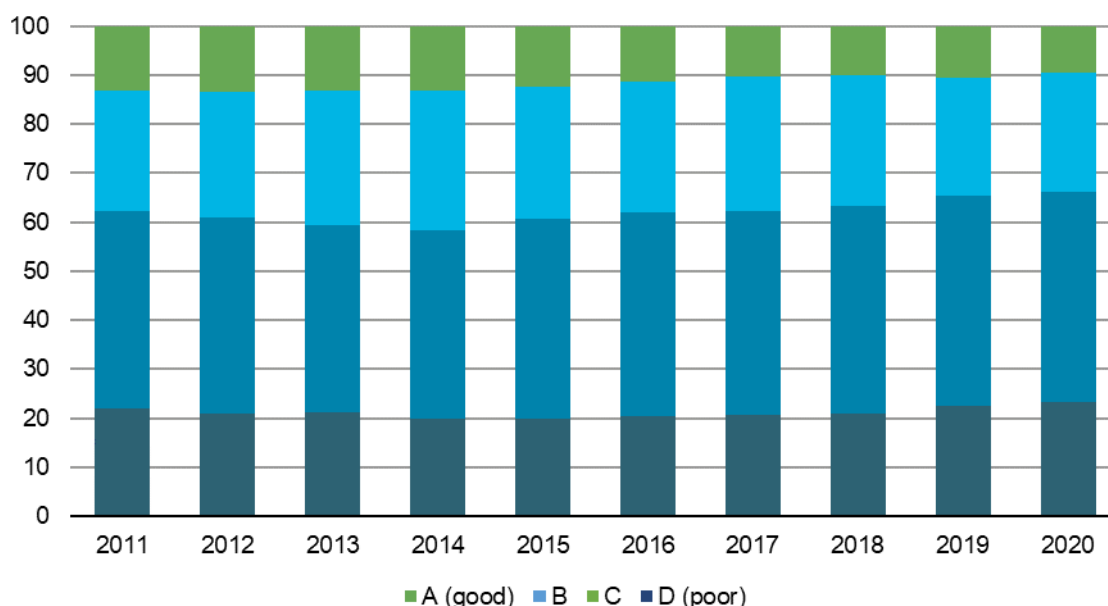
Freshwater quality is considered a taonga for Māori. Iwi identity is linked to freshwater, with each water body having its own mauri or life force. One example of this was the legal recognition of Te Awa Tupua | the Whanganui River as possessing “all the rights, powers, duties, and liabilities” of a legal person since 2017. This speaks to the relationship of interconnection and reflects te ao Māori acknowledgement that a body of water or waterways have needs that should be respected and protected (Ministry for the Environment, 2020b).

Lake and river water quality has not shown significant improvement since 2011. There are many ways to measure river water quality such as concentrations of *Escherichia coli* (*E. coli*), clarity and dissolved phosphorous, among others. Aggregated river samples analysed by Land, Air, Water Aotearoa (LAWA) measure the macroinvertebrate community index, which shows a slight increase in the presence

of macroinvertebrates – an indicator of pollution tolerances of the species at a river site. Species that are sensitive to poor water quality are only found at healthy river sites whereas species that are tolerant of poor water quality tend to dominate the macroinvertebrate community at polluted sites. Attribute bands for freshwater are A (good), B, C or D (poor). Figure 8 shows a decrease in the sites in the A and B bands and an increase in the sites in the C and D bands between 2011 and 2020.

According to the Ministry for the Environment, only 72.5% of river sites were safe to swim in under normal conditions in 2017 (Ministry for the Environment, 2017).<sup>8</sup> Water quality for swimming varies for different bodies of water within regions and from region to region. Iwi will often place rāhui on waterways that are badly affected.

**Figure 8: National river water state change over time, 2011-2020**



Source: Land, Air, Water Aotearoa. Note: LAWA evaluates the conditions at sites nationwide against attribute bands described in the National Policy Statement for Freshwater Management 2020

### Drinking water quality

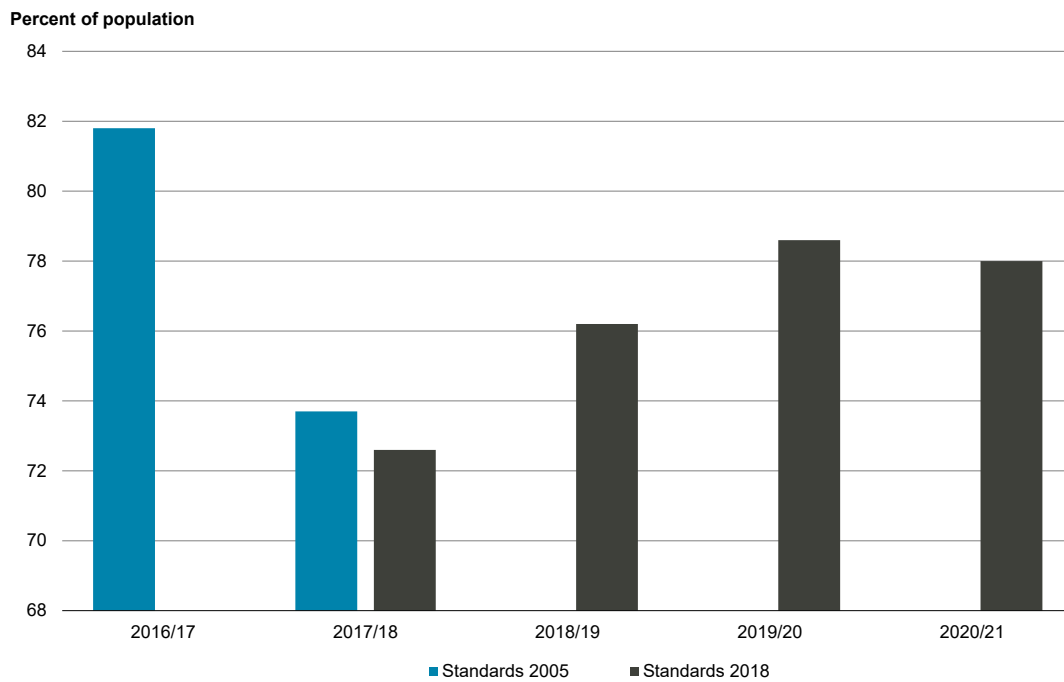
Research with rural Māori settlements in Northland found that the safety and security of drinking water supply is of concern to some iwi and Māori communities in rural areas (Henwood et al., 2019). Many households in the study supplemented or relied entirely on roof and tank water, leaving them vulnerable to changing weather patterns as a result of climate change.

On drinking water quality more broadly, compliance rates with drinking water standards indicate some moderate improvement in drinking water quality since 2017. In 2021, 78% of the reported population received drinking water that fully complied with all standards (Figure 9). The standards are set to the maximum acceptable values of microorganisms and chemicals that may be present in drinking water (Ministry of Health, 2022).

<sup>8</sup> Swimmable water quality refers to concentration of *E. coli* in rivers and toxic algae in lakes. *E. coli* indicates the likely presence of potentially harmful organisms or toxic algae blooms that can make people sick (Ministry for the Environment, 2017).



**Figure 9: Percentage of population with fully compliant drinking water standards, 2016-2021**

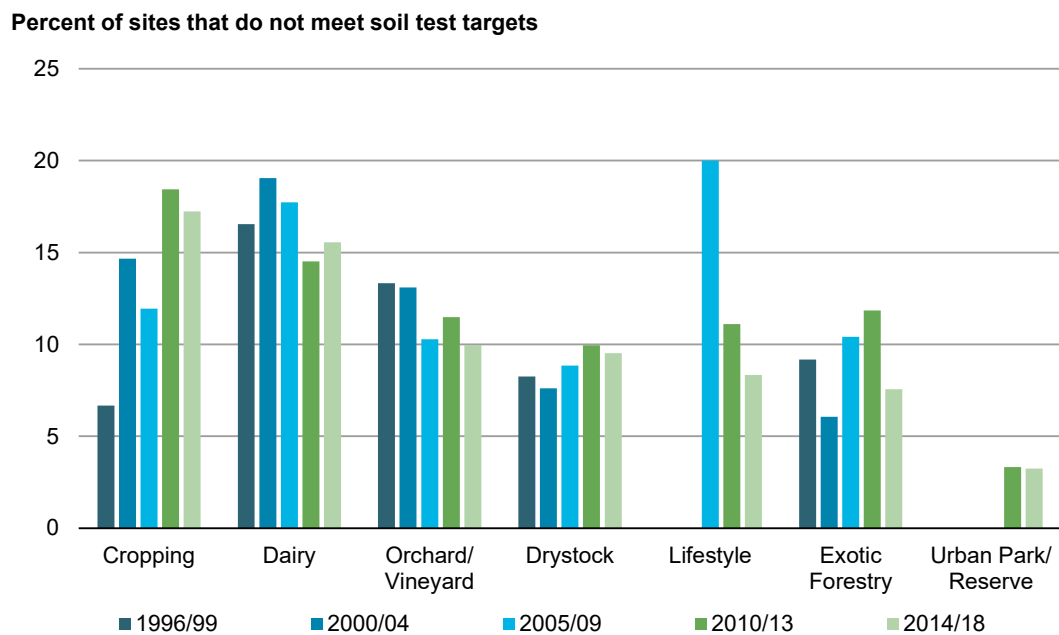


Source: Ministry of Health, 2022. Note: New standards were introduced in 2018, which is reflected in the differently coloured bars

### Soil health is improving at some sites, which benefits sustainable food production and mahinga kai

Soil health has improved somewhat at many testing sites since 1996 (Figure 10) but is nonetheless impacted by high-intensity forms of horticulture and viticulture on non-arable land, which degrades the quality of the soil through intensive nitrification.

**Figure 10: Soil quality, 1996-2018**



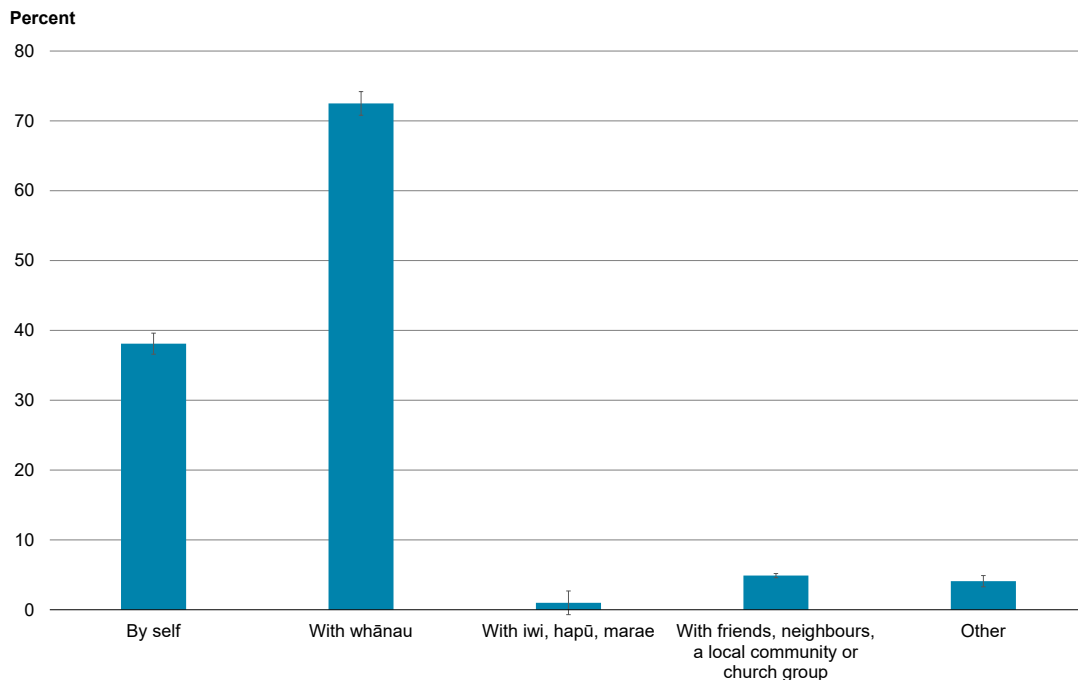
Source: Stats NZ and Ministry for the Environment. Note: Figures based on average over the past four years

The kaitiaki of soil links back to the reciprocal relationship Māori hold with Papatūānuku, the primordial Earth Mother. In an effort to better recognise Māori cultural perspectives and mātauranga Māori, research with Manaaki Whenua – Landcare Research has identified some provisional indicators around soil health, one of which is mahinga kai and māra kai or the ability of the soil to provide sustenance, food sovereignty and prosperity (Harmsworth, 2018). The excerpt below highlights the relationship between access to these cultural resources and wellbeing.

*“... what’s really important for Māori still is that ability to provide manaakitanga to our manuhiri. That’s a leading thing about mana and the wellbeing of the family. Should manuhiri arrive at the house, at their marae or anywhere else, they have the ability to feed them, and feed them well. And for us, that still revolves around the ability to gather kai in the wild ... Ensuring that people are able to access that easily is a really important indicator of moving out of poverty.” – Liz Mellish, Palmerston North Māori Reserve Trust*

Traditionally, food production is significant for Māori not only for kai but for maintaining connections with whānau. In 2018, 58% of Māori said that they had grown some of their own fruit or vegetables in the last 12 months, with most respondents (73%) saying they grew them with their whānau. By comparison, 38% of Māori grew fruit or vegetables by themselves (Figure 11) (Stats NZ, 2020).

**Figure 11: With whom Māori grew their own fruit or vegetables in the last 12 months, 2018**



Source: Stats NZ, Te Kupenga Survey

## 2.3 Cultural impacts of environmental change

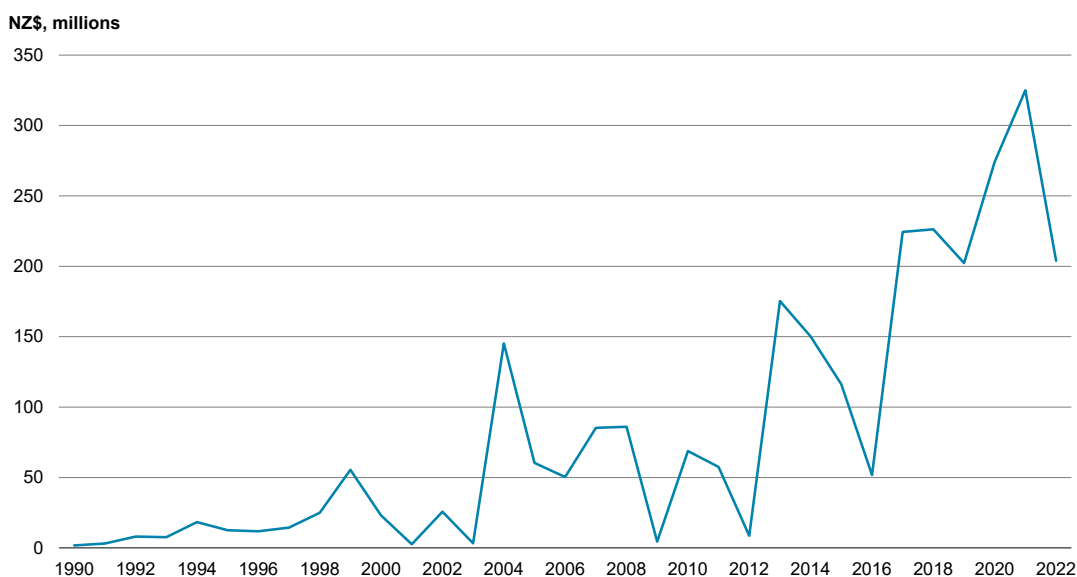
Environmental degradation and global environmental threats impact the wellbeing of everyone in New Zealand but have particular significance for Māori communities and whenua in a number of interconnected ways. Māori communities are concerned about the severance of connections that people have with each other and with their ancestral land. This represents an erosion of the way that kinship is maintained and reduces the ability to exercise tikanga and pass on mātauranga (Dick et al., 2012). In addition, this severance of connection undermines the ability of Māori to fulfil their kaitiakitanga role for the environment and, over the longer term, limits the ability of mokopuna to continue this practice in the future.

### The impacts of climate change carry significant economic, social and cultural costs

Increases in global temperature due to the large volume of greenhouse gas emissions already released into the atmosphere are causing widespread impacts on humans and natural systems and will continue to do so. While the detail of future climate change is uncertain and depends on global mitigation efforts, the most relevant environmental impacts of continued greenhouse gas emissions for Aotearoa New Zealand include sea-level rise, a warmer climate, biodiversity loss, ocean acidification and more frequent extreme weather events (The Treasury, 2021b).

Insurance costs for severe weather events (such as flood and storm events) show that the impact of severe weather events is increasing, likely due to an increase in the severity and frequency of such events (Figure 12).<sup>9</sup> Aotearoa New Zealand's coastal areas are susceptible to erosion and increased risk of flooding due to severe weather events. Losing access to coastal areas carries cultural consequences, including the loss of culturally significant heritage sites such as coastal marae and urupā (burial sites) (Parliamentary Commissioner for the Environment, 2015).

**Figure 12: Insurance-related costs of severe weather events, 1990-2022**



Source: Insurance Council of New Zealand

<sup>9</sup> The data represents only the insurance costs of severe weather events, noting that the data series does not control for inflation. The total costs of events will be much higher.

Other cultural and community risks related to severe weather events include change to the balance and rhythms of natural systems such as the loss of the reliability of tohu (environmental indicators) for planting and gathering kai, the loss of taonga species and their coastal habitats and disruption of how whānau practise manaakitanga (Ministry for the Environment, 2021b). From an economic perspective, climate impacts on the primary sector are particularly relevant for the Māori economy because of its heavy investment in natural resources. For example, Māori interests own or control 50% of fishing quotas and own or control 50% of exotic forests (The Treasury, 2021b).

### **Lessons from kaitiaki point towards the sustainable use of resources**

Historically, Māori communities relied on healthy natural resources to maintain community wellbeing, particularly in areas that were central to food and resource harvesting. From this history, Māori have developed ways to enforce restrictions or protections on how humans interact with the environment, including rāhui and tapu (Pauling & Ataria, 2010). Rāhui is a form of tapu – a restriction of the use of natural resources that might compromise the wellbeing of Te Taiao and thereby preserve the environment. As the following quote shows, there are tikanga around the use and care for the resources of the natural world without undermining its mana or mauri.

*“... it’s everything about the way we live. If you think about our tikanga – you throw back the little fish and only go fishing for different things at certain times. We’ve got so much tikanga.”* – Tia Greenaway, Climate Change Commission

Another example of the use of rāhui is one placed by Te Kawerau ā Maki over Te Wao Nui o Tiriwa | Waitākere Forest to allow time for scientists to work on kauri dieback disease and for the forest to heal (Waitākere Rāhui, 2018). The protection of Te Taiao is a prominent feature of te ao Māori, including the use of mātauranga Māori as a way to monitor the health of Te Taiao through local observation and to adjust behaviours to improve outcomes.

*“... mātauranga is extremely useful in things like environmental matters. I just read an article about weaving mats to kill weeds in the lakes in Rotorua by placing those mats on the lake bed to discourage the weeds ... We use mātauranga to look at the eel populations in our rivers to see how healthy the river is.”* – Liz Mellish, Palmerston North Māori Reserve Trust

## 3 Te Ira Tangata

### Key messages

- Many Māori experience high levels of cultural belonging, collective identity and communal sharing and giving. While the future of te reo Māori is by no means certain, recent data shows some improvement in its wider use. Participation in Māori culture helps sustain it for the benefit of future generations of Māori, safeguarding their capability to achieve wellbeing as Māori.
- There are also several positive trends for Māori. Māori are gaining educational qualifications at a faster rate than other ethnicities, and there are a growing proportion of Māori in higher-skilled employment. There are also fewer whānau and children in hardship than in the past.
- The Māori economy has been growing faster than the wider economy and now represents 6.8% of national GDP in 2018. Māori business is innovative, often endeavours to incorporate Māori values and has the potential to support wellbeing outcomes in a culturally grounded way.
- There are some persistent and growing challenges to the experience and outcomes of Māori and non-Māori across a range of wellbeing domains such as income, material hardship, health and housing. Although some outcomes are gradually improving over time, the gaps are closing slowly at best.
- High and increasing rates of psychological distress and discrimination are among the most challenging indicators for Māori wellbeing, as are low levels of trust in key government institutions.

This section explores Te Ira Tangata, which in this context means the domain of human activities and experiences. The indicators draw upon what is currently available to create a picture of Māori wellbeing in relation to four key concepts:

- **Mana Tuku Iho** encompasses both a sense of identity and belonging to a community. These are foundations upon which other aspects of waiora are built.
- **Mana Āheinga** refers to individuals, whānau and communities having the capability to achieve aspirations that they have identified for themselves. Realising one's aspirations requires the necessary resources and skills, the building blocks of which include good health and education.
- **Mana Tauutuutu** relates to the rights and responsibilities of individuals and collectives to each other, communities and places. Broadly, this links to ideas of social cohesion as articulated in the Living Standards Framework.
- **Mana Whanake** relates to people having the skills and resources to generate sustainable and intergenerational prosperity and considers the sustainability of these assets.

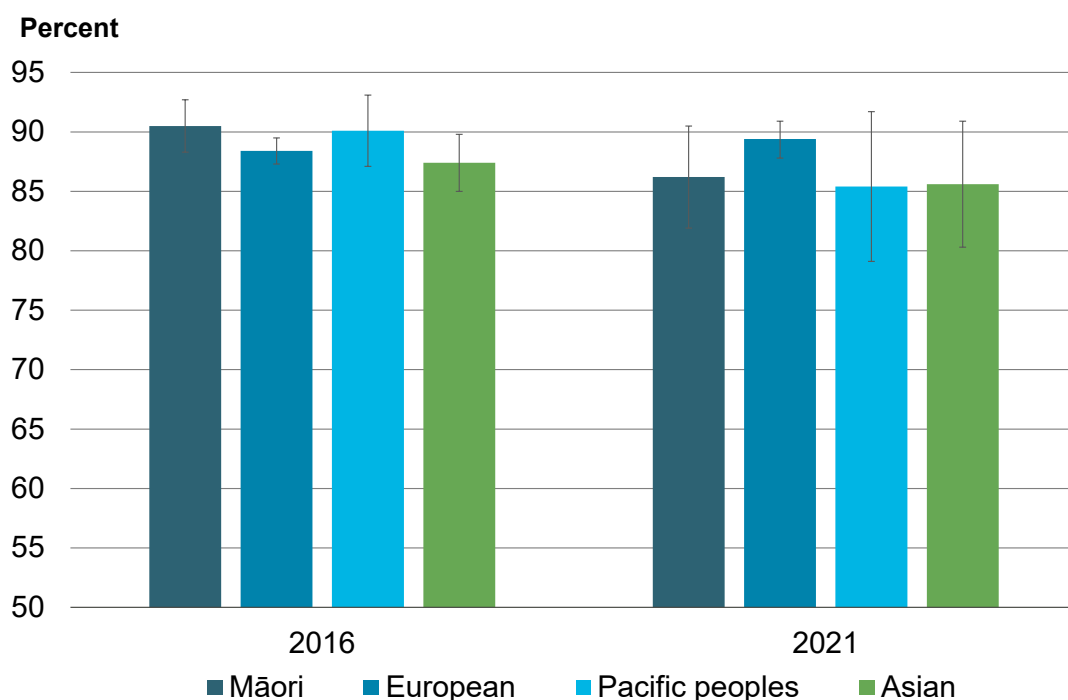
The discussion below is thematic rather than segmented according to each aspect of mana. This is because the above elements are interlinked and one indicator may relate to several at once. The analysis will indicate how these concepts relate to the indicators in each section.

### 3.1 Indigenous identity and belonging

Māori report a higher sense of identity and belonging than most other ethnic groups, though data for 2021 shows a decrease (Figures 13 and 14). Along with participation in cultural activities, discussed below, these are particularly linked with Mana Tuku Iho and Mana Tauutuutu.

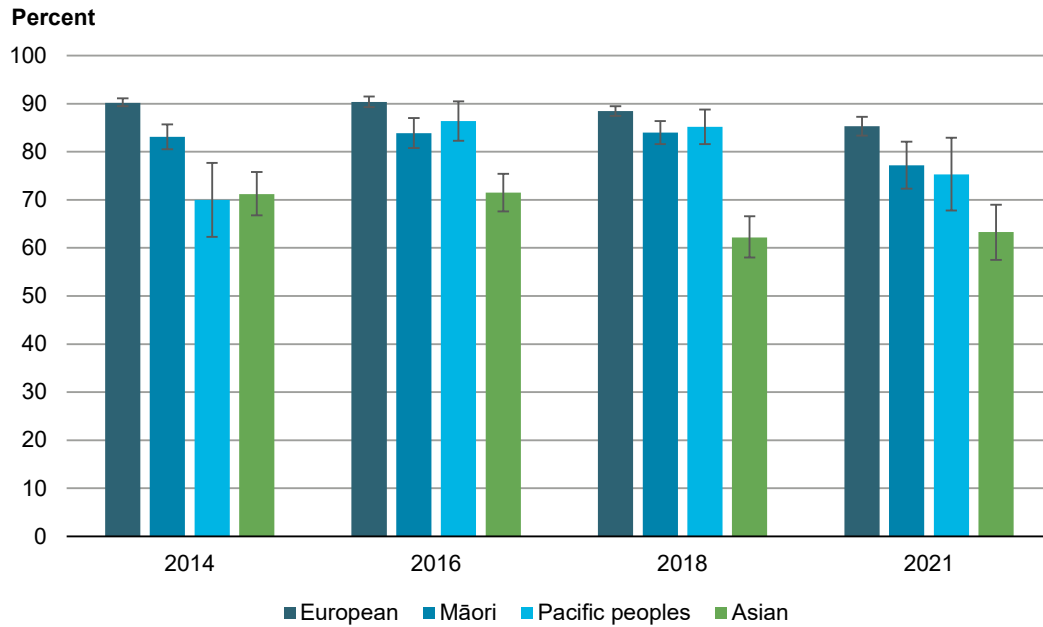
For many Māori, expressing one’s identity stems from indigeneity, usually indicating that there are more or better avenues to connect with one’s culture. Increasingly, Māori culture has been reflected in public spaces, reflecting increasing recognition of Treaty partnerships and the place of indigenous cultures. This also reflects the strength of cultural connections enabled by marae, iwi and other Māori institutions.

**Figure 13: Sense of belonging by ethnic group, 2016 and 2021**



Source: Stats NZ, General Social Survey

**Figure 14: Ability to express identity, by ethnic group, 2014-2021**

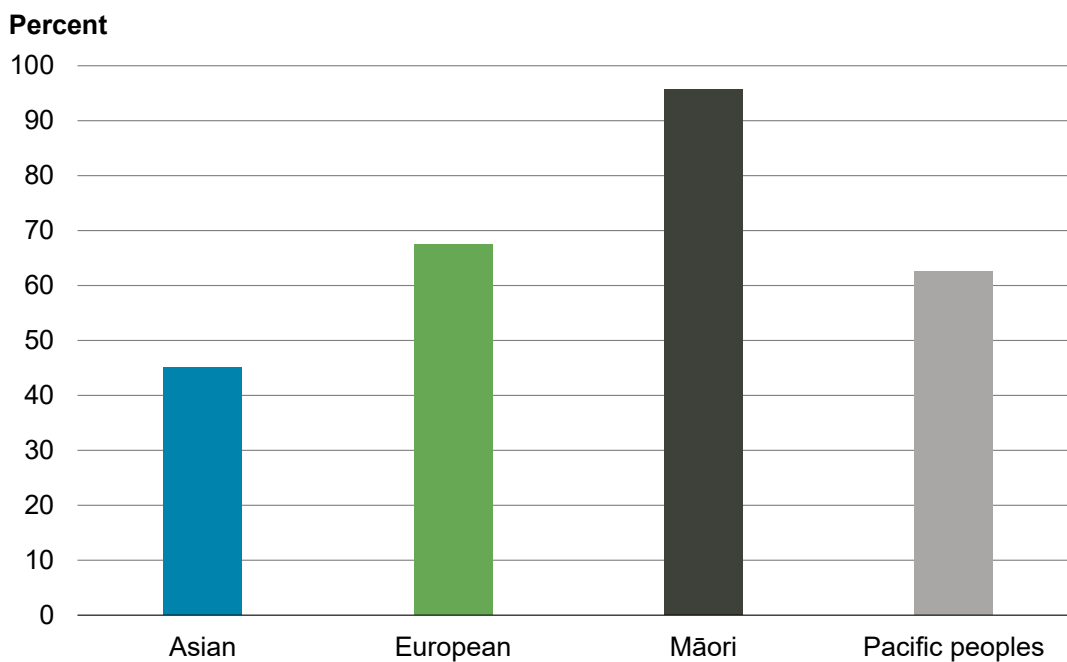


Source: Stats NZ, General Social Survey

**Māori have the highest engagement in cultural activities ...**

In 2016, Māori had the highest level of engagement in cultural activities (Figure 15). Strong cultural ties can translate into experiences of identity linked to cultural values and serve as an essential aspect of intergenerational wellbeing (Dalziel et al., 2019). As well as activities, culture is also expressed through everyday norms and behaviours, which are not so easily captured by the data.

**Figure 15: Participation in cultural activities by ethnic group, 2016**



Source: Stats NZ, General Social Survey

One interview participant emphasised culture and identity as essential for Māori to participate as Māori, which serves as an important way to maintain and improve intergenerational outcomes:

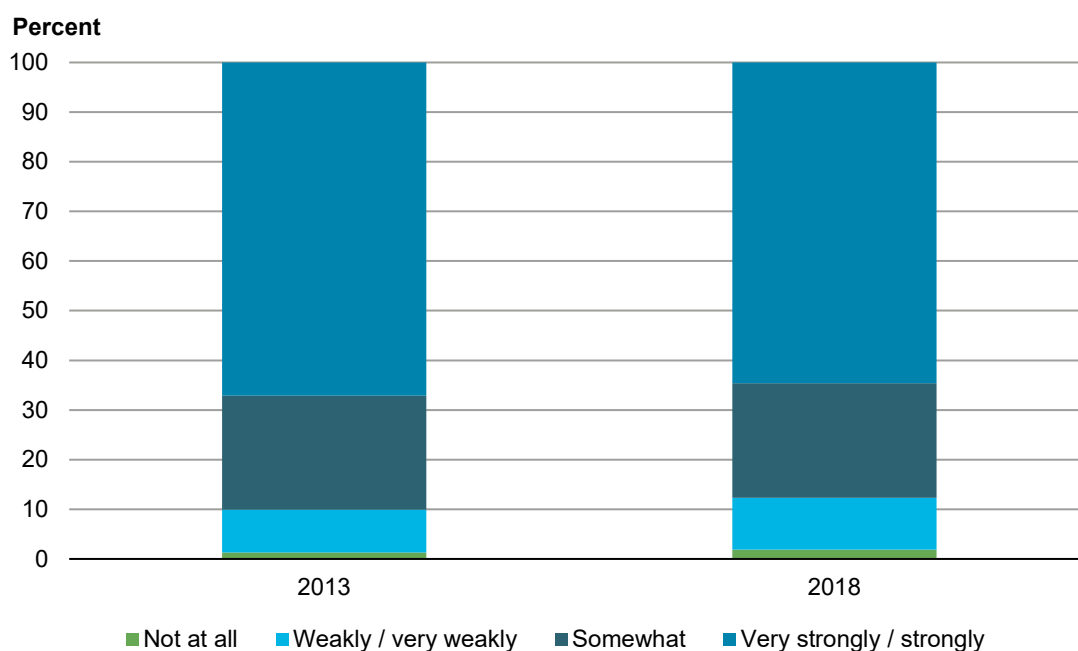
*“We’ve spoken about climate change as one of the big risks, but another risk to wellbeing on the horizon is broadening the scope for Māori to participate as Māori. We’re talking wairuatanga, mātauranga, te reo, whakapapa... And asset growth. We’ve got to get much smarter about supporting Māori to grow their assets.” – Liz Mellish, Palmerston North Māori Reserve Trust*

### ...and a high proportion of Māori feel connected to their marae...

Marae are key cultural institutions that function as bonding points for people and communities. For many Māori, connecting to where they come from via their marae tipuna (ancestral marae) and the surrounding environment is an important contributor to their wellbeing.

In 2018, around 65% of Māori said that they felt strongly or very strongly connected to their ancestral marae, with another 23% of respondents saying that they were at least somewhat connected with their marae (Figure 16). There are indications that marae attendance could be declining (Figure 17), though this conclusion should be cautioned since it may simply be due to inconsistencies in the data.<sup>10</sup>

**Figure 16: Percent of Māori adults by strength of connection to their ancestral marae, 2013 and 2018**

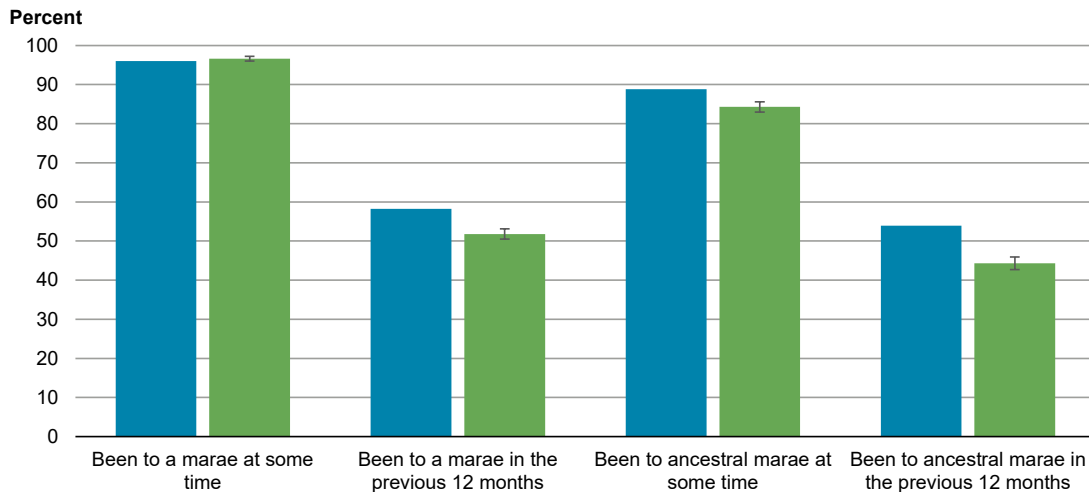


Source: Stats NZ, Te Kupenga Survey

<sup>10</sup> Note that confidence intervals are not publicly accessible for Te Kupenga 2013.



**Figure 17: Marae attendance, 2013 and 2018**

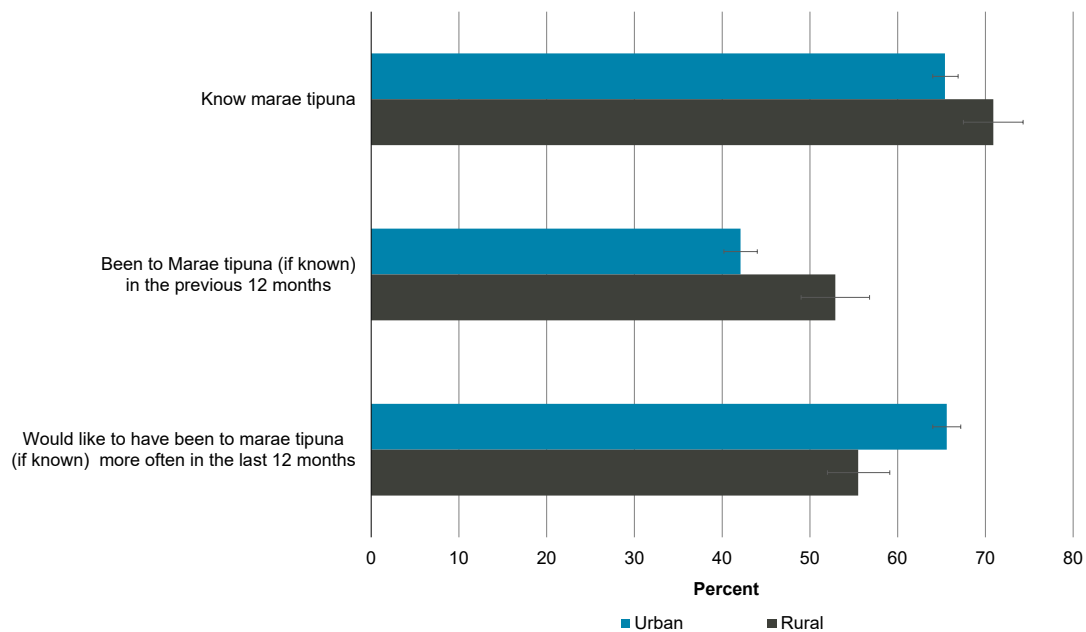


Source: Stats NZ, Te Kupenga Survey

**... and Māori living in rural areas may feel more connected to their ancestral marae than those in urban areas**

Figure 18 indicates that Māori living in rural areas were more likely to have been to their ancestral marae (if known) in the previous 12 months (53%) compared to Māori living in urban areas (42%). A higher proportion (66%) of urban Māori who knew their ancestral marae said they would like to have visited more often compared to those who lived rurally.

**Figure 18: Proportion of Māori by connection to marae tipuna and by urban and rural areas, 2018**



Source: Stats NZ, Te Kupenga Survey

One theme that arose in the interviews was a potential disconnect of some urban Māori with their ancestral marae and the cultural and community activities associated with it. Urban marae and other urban institutions may provide other important points of connection, but digital connectivity for ancestral marae offers one way to bridge the urban-rural disconnect that some interview participants spoke of:

*“There is this physical disconnection of urban Māori from their marae, and to me, that’s the Māori urban and rural divide. I think it’s really about our disenfranchisement from our marae, which enables us to do those things like go to the sea and gather kai as a whānau, for tangi and for manuhiri, and the mahinga kai, the māra kai and all of those things. Because that’s an indicator of our wellbeing. So how do we enable that connection? We could do a few things like put fibre into all marae so that people can use that virtual world.”* – Liz Mellish, Palmerston North Māori Reserve Trust

In addition to serving as bonding points for cultural connection, marae function as institutions that offer support in times of crisis, with interview participants noting that marae often have a better visibility of need and understanding of the types of support necessary than other institutions.

*“In an urban environment, you get left behind if you don’t make yourself visible or present in those institutional environments. With other welfare institutions, you get left behind. You just can’t do that down here. You can still meet your cultural and your spiritual wellbeing needs and you just can’t get left behind.”* – Ngarangi Haerewa, Financial Markets Authority

## **Te reo Māori is a language rich with embedded knowledge**

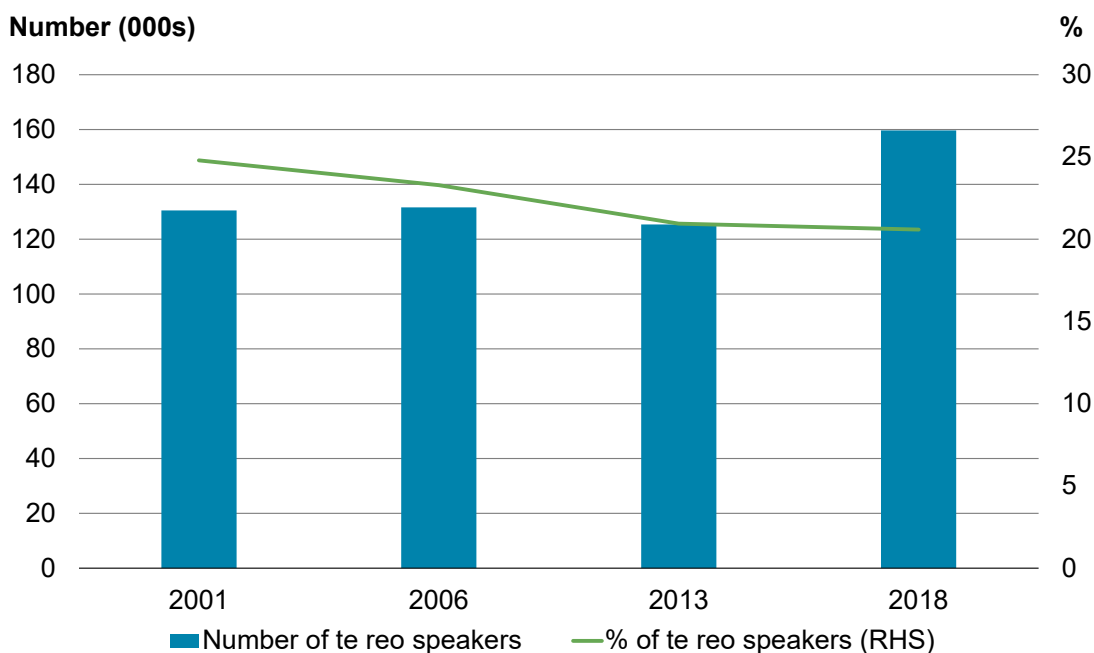
The importance of language as an indicator of identity is encapsulated in the words of Sir James Henare in 1988: “Ko te reo te mauri o te mana Māori” (the language is the life force of Māori mana). Language is an important facet of Mana Tuku Iho and can flow through to other aspects of He Ara Waiora, notably Mana Tauutuutu and Mana Āheinga.

Historically, Māori cultural identity has been disrupted by colonisation, which led to the erosion of te reo Māori through the historical suppression of te reo education in schools (Office of the Auditor-General, 2017). As te reo Māori is a language rich with imagery, metaphors and embedded knowledge, disruptions in its use is not only a loss of communication but a loss of understanding. Some knowledge cannot be passed on in English in a way that encompasses the full complexity of mātauranga Māori. There are also intergenerational implications, particularly where younger generations with English as a dominant language are limited in their ability to communicate with kaumātua and kuia (Māori elders) who use te reo Māori as a first language. In other cases, tamariki in Māori-medium schooling may be more fluent than their parents.

## The number of Māori who speak te reo Māori has grown but has not kept up with the growth in the Māori population ...

Although the overall number of conversational te reo speakers has increased between 2001 and 2018, the percentage of Māori who speak te reo Māori conversationally has declined slightly from 24.8% in 2001 to 20.6% in 2018 (Figure 19).<sup>11</sup> This shows that the rise in the number of speakers has not kept up with the growth in the Māori population (Te Puni Kōkiri, 2022).<sup>12</sup>

**Figure 19: Percentage of Māori who can speak te reo Māori at a conversational level, 2001-2018**



Source: Stats NZ, Census

In 2018, around 73% of Māori adults reported that their use of te reo Māori was of some importance in daily life, and around 32% said it was quite or very important to them (Stats NZ, 2020). In terms of proficiency, around 57% of Māori reported being able to understand te reo Māori, with around 49% of respondents saying they could speak more than a few words or phrases. The percentages were higher for wāhine Māori, with women more likely than men to report that they could speak, understand, read and write te reo Māori at least fairly well (Te Puni Kōkiri, 2022).

<sup>11</sup> 'Conversational' refers to the ability to have a conversation about a lot of everyday things (Stats NZ, 2018).

<sup>12</sup> Caution should be taken when considering this indicator data. The quality of data obtained through the 2018 Census is considered poor due to a lower-than-expected response rate compared to earlier years. This lower response rate was particularly significant for Māori in terms of sample frame and data quality. The Census 2018 External Data Quality Panel rated the quality of the Māori language data as poor in the census due to a high degree of inconsistency between individuals' responses between 2013 and 2018 and the high level of imputation.

## ...but there is growing support and use of te reo in the overall population of Aotearoa New Zealand

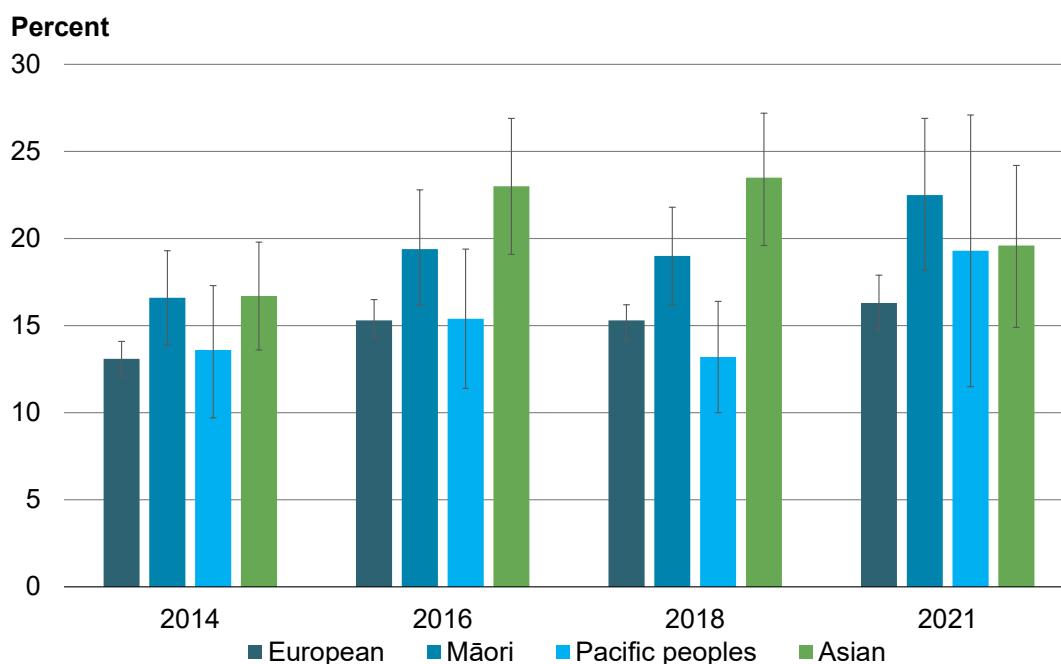
The latest data from the General Social Survey suggests a resurgence of interest and support for te reo Māori and some improvement in the speaking abilities of the combined Māori and non-Māori population. Since 2018, the proportion of people (of any ethnicity) able to speak more than a few words or phrases of te reo Māori increased from around 24% to 30% in 2021 (Stats NZ, 2022e). It is important to note that this is a lower proficiency level than is measured in the census, which measures the ability to have everyday conversations. Māori-led initiatives such as the kōhanga reo movement have given momentum towards the revitalisation of te reo Māori (Stats NZ, 2022e).

## 3.2 Human connections and mental wellbeing

### Māori have the highest rates of loneliness...

In 2021, Māori reported the highest rates of loneliness compared to other ethnic groups (Figure 20). This could be partly due to the younger age structure of Māori, as loneliness was more prevalent among young people over the COVID-19 lockdowns. Analysis by Loneliness NZ on the 2013 Te Kupenga Survey suggests that feelings of loneliness for Māori are primarily correlated with being disconnected from their culture and whānau (Loneliness NZ, n.d.). Loneliness is also linked with feelings of victimisation, bullying and discrimination, which are explored in more detail later in this paper.

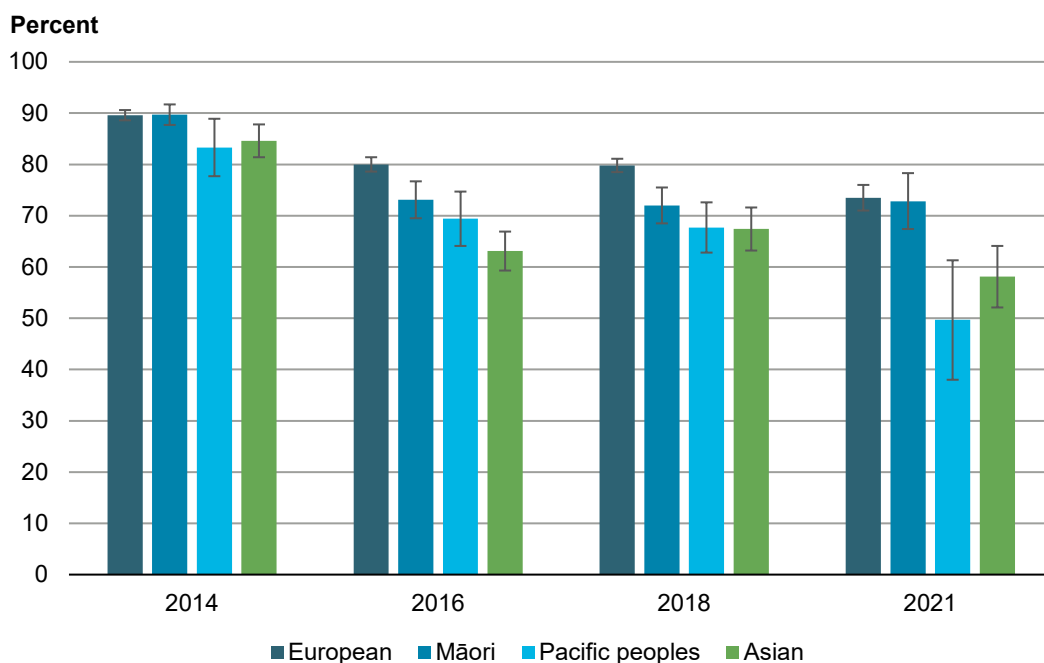
**Figure 20: Percentage of people who felt lonely in the last four weeks by ethnic group, 2014-2021**



Source: Stats NZ, General Social Survey

Māori also report reduced confidence that they have someone who they could ask to stay with, although this decline is reflected in other ethnic groups as well (Figure 21). These measures are based on self-reported contact with people outside of the household.

**Figure 21: Percentage of people who could ask someone they know for a place to stay, by ethnic group, 2014-2021**



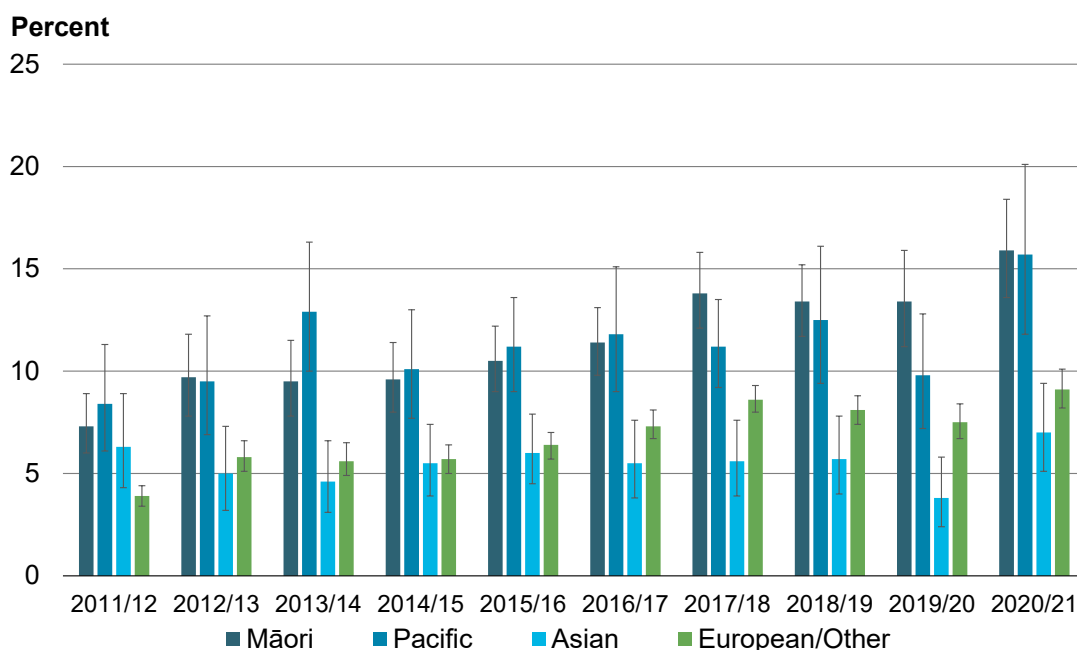
Source: Stats NZ, General Social Survey

### ... as well as high and increasing rates of psychological distress

There is a general trend of increasing psychological distress among all ethnic groups over the last 10 years. However, rates for Māori (and Pacific peoples) are higher than for other ethnic groups (Figure 22). In addition, the ethnic gap is increasing over time from a 3 percentage point difference in 2011 to a 7 percentage point difference in 2021. In 2021, Māori were 1.6 times as likely to experience psychological distress than non-Māori. This ratio was more pronounced for wāhine Māori, who were 1.7 times as likely than non-Māori women to experience psychological distress (Te Puni Kōkiri, 2022). The history surrounding Māori identity could have a role to play, including the legacy of historical dispossession and the systematic breaking down of Māori social structures.<sup>13</sup>

<sup>13</sup> See Thomas and Nikora (1996) for a review.

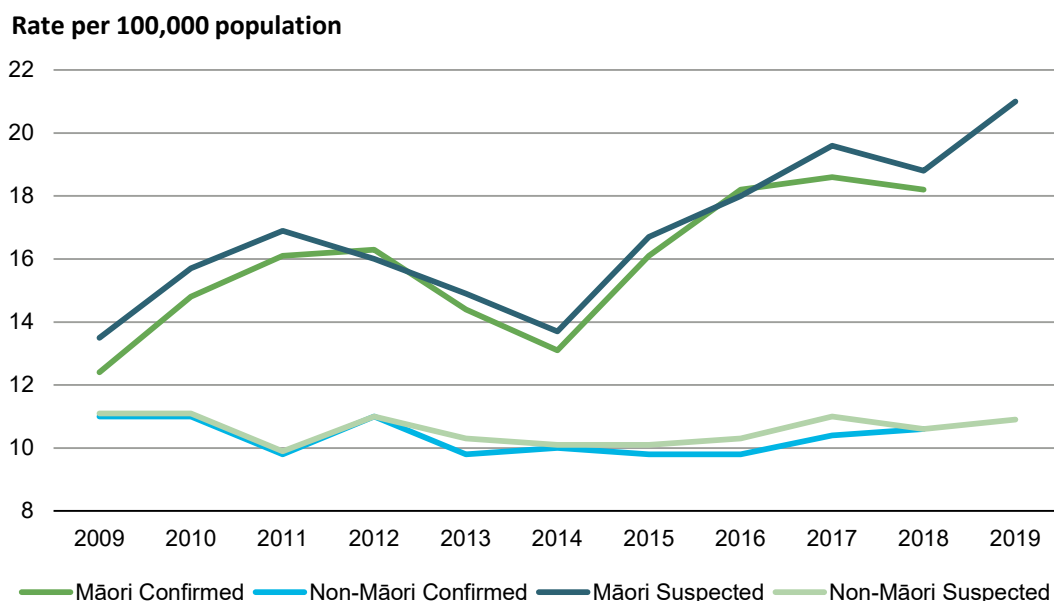
**Figure 22: Psychological distress in the past four weeks, by ethnic group, 2011-2021**



Source: Ministry of Health, New Zealand Health Survey

Suicide rates partly reflect acute psychological distress. More broadly, younger people, particularly those between 15 and 24, experience high levels of psychological distress, and Aotearoa New Zealand’s teen suicide rates are among the worst in the OECD (OECD, 2017). Confirmed and suspected Māori suicides occur at a significantly higher rate compared to non-Māori, even when accounting for age, and are increasing where the rest of the population is holding relatively steady (Figure 23).

**Figure 23: Age-standardised suspected and confirmed suicide rate per 100,000 population, by Māori and non-Māori, 2009-2019**



Source: Ministry of Health, Suicide Web Tool

### 3.3 Subjective wellbeing

Overall satisfaction with life is one way to gauge how outcomes across a range of other wellbeing dimensions are impacting on how Māori feel. It could be considered a proxy measure that is influenced by the four aspects of mana, which flow through from the Wairua domain at the centre of He Ara Waiora.

Sense of purpose is an aspect of life satisfaction and reflects how worthwhile people think the things they do in their life are. Sense of purpose can be fostered through many different avenues, including meaningful employment, spending leisure time outdoors, physical activity, engagement in cultural activities and social activities. This relates to the concept of Mana Āheinga, which speaks to individuals, whānau and communities having self-determined aspirations and the capability to achieve them.

#### **Māori report lower levels of life satisfaction and family wellbeing than the total population ...**

In 2021, Māori on average reported slightly lower average life satisfaction ratings of 7.3 on a 0-10 scale than the 7.7 rating of the total population (Figure 24).

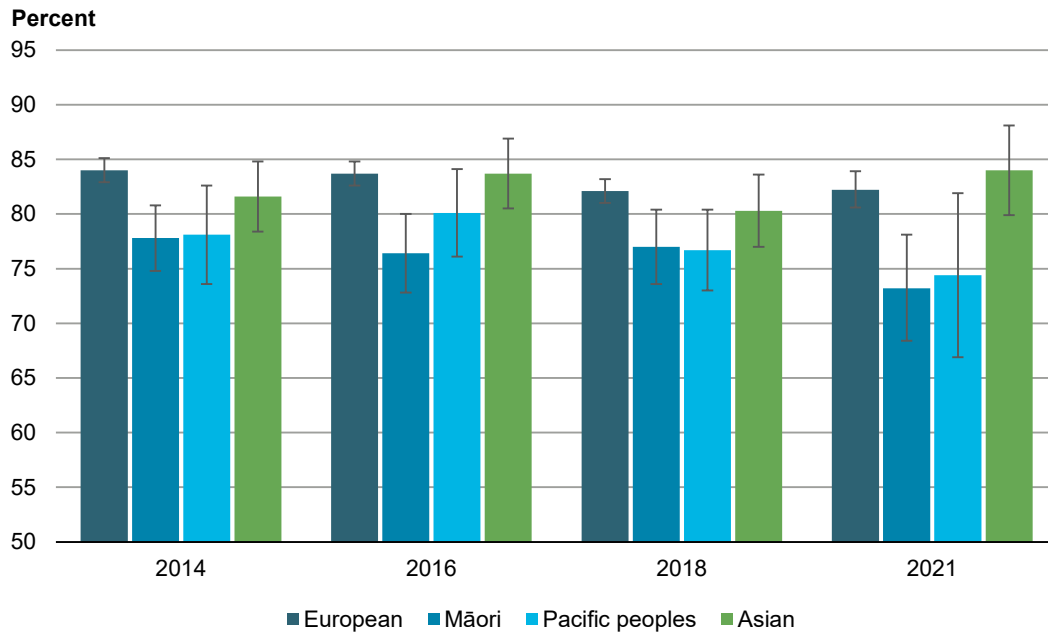
Recent Treasury analysis (based on data from an earlier survey) investigated the relationship between levels of subjective wellbeing and other factors. This analysis found that mental health, income and partnership status are most significant for explaining variations in life satisfaction. The analysis segments the adult population into one of 13 groups from high to lower subjective wellbeing. Māori are represented in all of these segments but were over-represented in segments with lower subjective wellbeing, lower mental health and not/just enough income to meet everyday needs (The Treasury, 2022c).

Māori were also the least likely to rate their family wellbeing as highly as other ethnic groups, and this rating has declined between 2018 and 2021 (Figure 25). The latest data shows that Māori rate their expectation of overall life satisfaction in five years' time slightly higher than the average population (8.4 versus 8.2), suggesting that many Māori are more optimistic about their future circumstances (Stats NZ, 2022c).

#### **... and also report a lower sense of purpose**

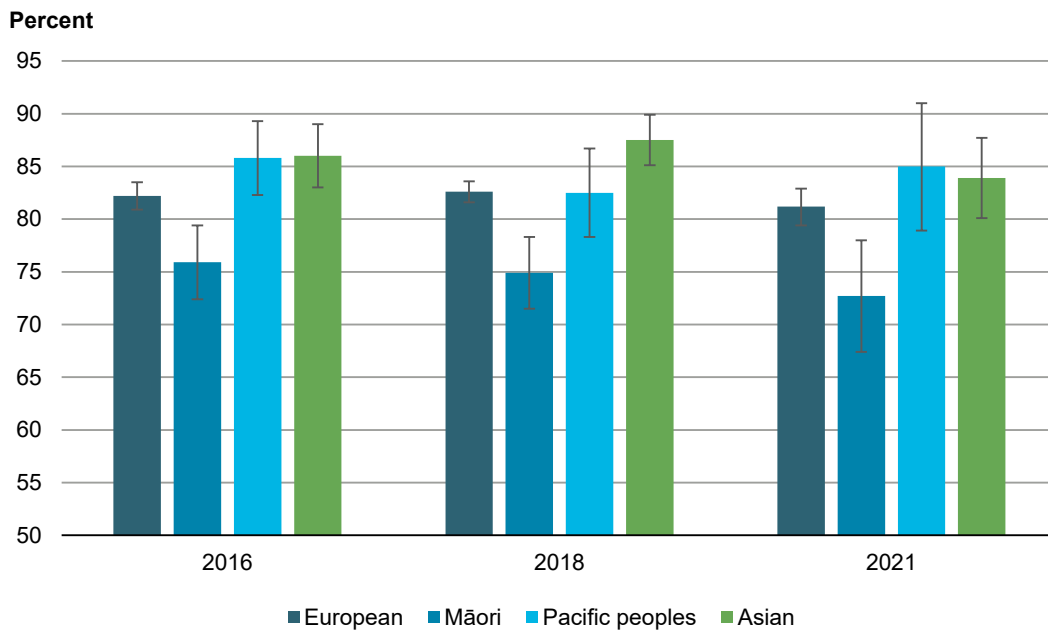
Māori have also consistently reported a lower sense of purpose compared to other people in New Zealand. For example, between 2014 and 2021, the percentage of Māori who reported a high sense of purpose was on average 5 percentage points lower than New Zealand Europeans (Stats NZ, 2021c).

**Figure 24: General life satisfaction, by ethnic group, 2014-2021**



Source: Stats NZ, General Social Survey

**Figure 25: Percentage of people who rated their family wellbeing highly, by ethnic group, 2016-2021**



Source: Stats NZ, General Social Survey



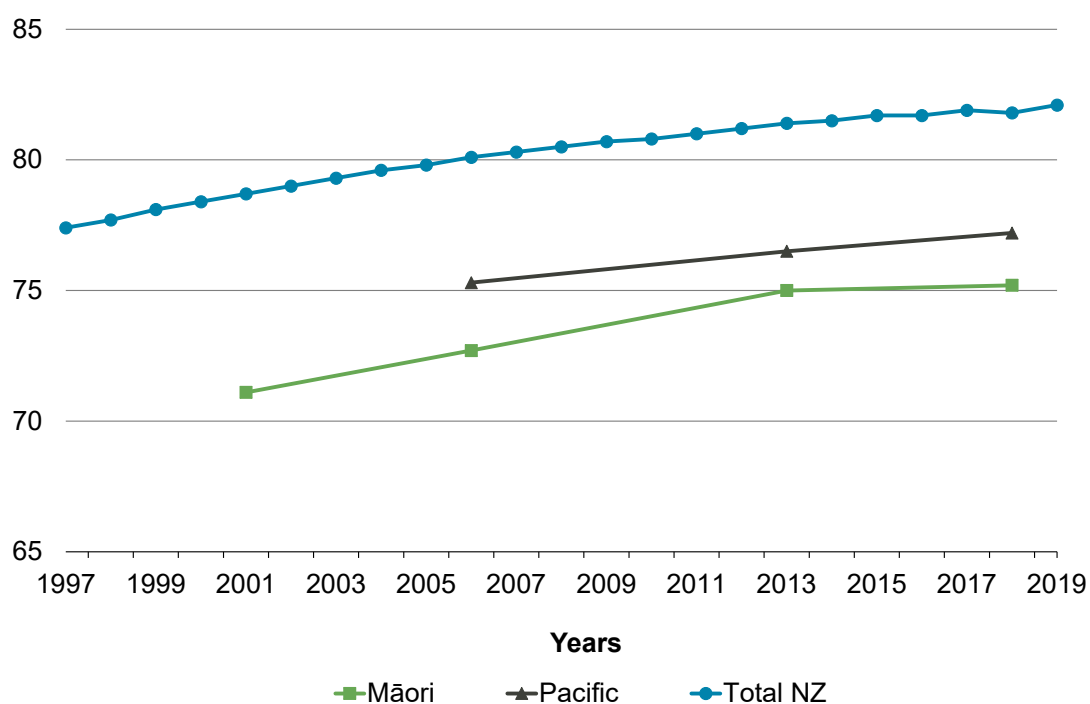
### 3.4 Health

An important aspect of human capability is health. Māori views on health take a holistic approach where physical health represents just one aspect of health and cannot be separated from wairua, whānau and mental health dimensions, all of which are considered in He Ara Waiora (and discussed above).<sup>14</sup> From a standard health perspective, life expectancy at birth is a widely used measure in health analysis that is driven by a number of factors, including living standards, infant mortality and communicable disease, lifestyle and better education, as well as access to quality health services (OECD, 2021).

#### Māori life expectancy is improving but gaps remain ...

Life expectancy has been increasing over time in Aotearoa New Zealand, although Māori have a lower life expectancy than the rest of the population (Figure 26). The latest data shows that Māori males are expected to live for 73.4 years compared to 80.9 years for non-Māori males, and Māori females live 77.1 years compared to 84.4 years for non-Māori females. This gap in life expectancy has decreased slightly over time, but Māori still live six to seven years less on average than the rest of the population.

**Figure 26: Life expectancy at birth, 1997-2019**



Source: OECD Health Statistics

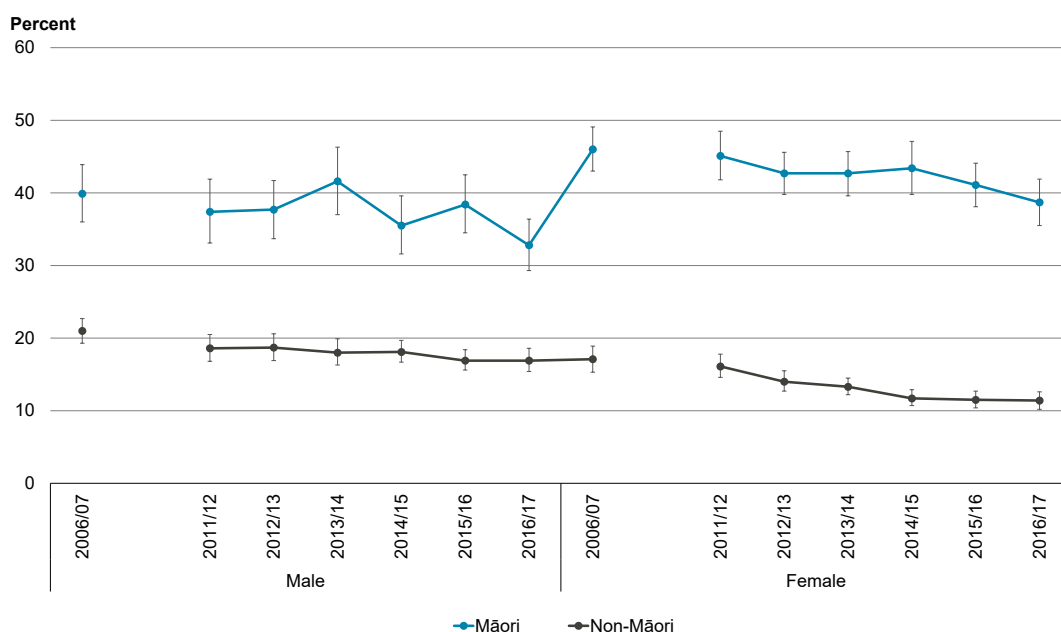
<sup>14</sup> As set out in Sir Mason Durie's 1985 Te Whare Tapa Whā model – see <https://mentalhealth.org.nz/te-whare-tapa-wha>.

## ... and the underlying contributing factors to lower life expectancy and health inequities more broadly are complex

Overall, Māori report greater experiences of unmet need when accessing health services compared to non-Māori (Ministry of Health, 2019b). Many of the drivers of health inequities are related to the unequal distribution and access to resources such as income, education and employment – factors that often compound one another (Walsh & Grey, 2019).

These factors also expose Māori to other risk factors such as tobacco and alcohol use. The prevalence of smoking has decreased slowly over time for both Māori and non-Māori but rates have declined even more slowly for Māori. From 2006 to 2017, rates of smoking for Māori decreased by 17% compared to 25% for non-Māori (Figure 27). Māori were at least 2.5 times as likely as non-Māori to smoke over that time period. This gap is more pronounced for Māori females who were nearly 3.5 times as likely as non-Māori females to smoke (Ministry of Health, 2019b).

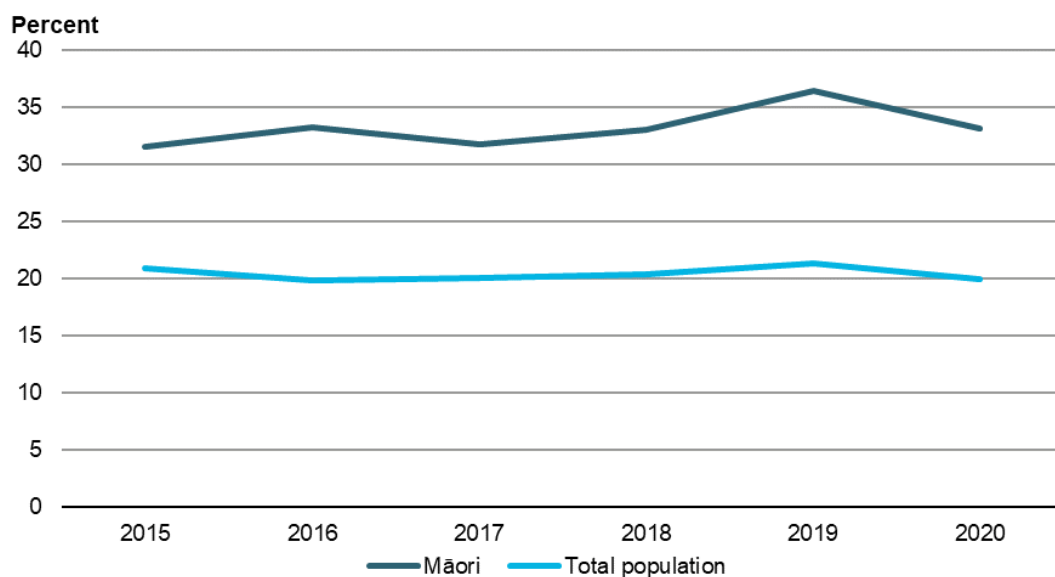
**Figure 27: Current smoking in people aged 15 and over, by gender, Māori and non-Māori, 2006/07-2016/17**



Source: Ministry of Health, [New Zealand Health Survey](#)

Between 2015 and 2020, the rates of hazardous drinking for Māori have also been consistently higher than for non-Māori (Figure 28), with over 30% of Māori drinking hazardously compared to 20% of non-Māori (Te Puni Kōkiri, 2022). Excessive alcohol consumption is linked with higher rates of psychological distress (Brown & Bailey, 2021) and has flow-on impacts in each of the four aspects of mana in He Ara Waiora.

**Figure 28: Percentage of Māori and the total population who drink alcohol to hazardous levels, 2015-2020**

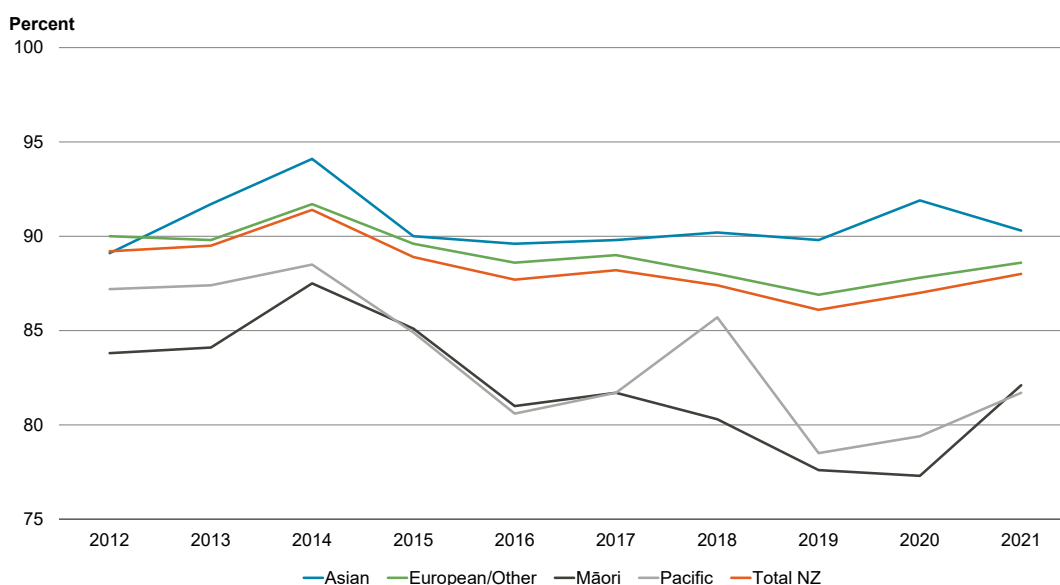


Source: Ministry of Health, New Zealand Health Survey

### Māori are more likely to consider themselves in poorer health ...

Self-reported health for Māori has been declining in recent years, reaching a low point in 2020 where 77% of Māori reported good or very good health compared to over 85% in 2006 (Figure 29).<sup>15</sup> The proportion of Māori who report good or very good health recovered in 2021 but is still 6% lower than the total population. In 2021, after adjusting for age and gender, Māori are 1.7 times as likely than non-Māori to consider themselves in poor health (Te Puni Kōkiri, 2022). This ratio increased for wāhine Māori, who were 1.9 times as likely than non-Māori women to consider themselves in poor health.

**Figure 29: Percentage of adults reporting good, very good or excellent health, 2012-2021**



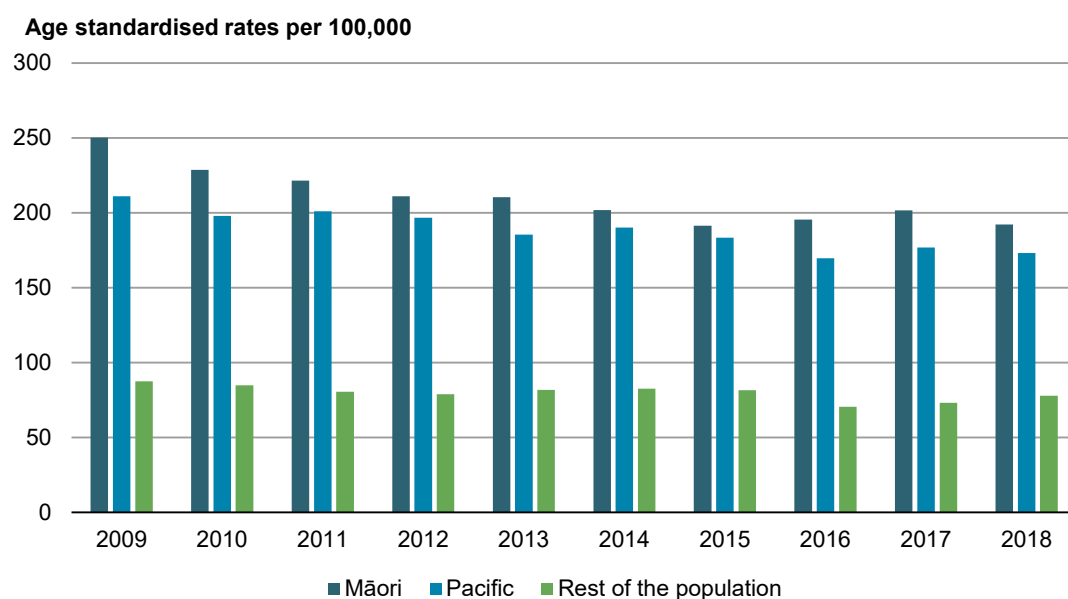
Source: Ministry of Health, New Zealand Health Survey

<sup>15</sup> It is not clear how the dip in self-reported health in 2020 correlates with the emergence of COVID-19.

## ... and over half of all Māori deaths can be attributed to potentially avoidable causes

Māori have the highest rates of amenable mortality, although these rates have been declining slowly since 2009 (Figure 30).<sup>16</sup> In an analysis of life expectancy differentials between 2013 and 2015, Walsh and Grey (2019) noted that over half of all Māori deaths (53.0%) can be attributed to potentially avoidable causes compared to less than one-quarter (23.2%) in the non-Māori population. Within age groups, higher mortality rates in the 50-74 age group contributed the most to life expectancy differentials. For Māori males, suicide and land transport injuries made up a significant contribution of avoidable injuries, with a higher proportion in the 0-29 age group. The life expectancy differential within Māori females were associated more with avoidable health factors than injury.

**Figure 30: Amenable mortality, age standardised rates, 0-74 years, by ethnic group, 2009-2018**



Source: Ministry of Health, Mortality Collection

## 3.5 Education

While learning also happens outside the classroom, the education system has a critical role in imparting the skills for individuals and whānau to achieve their aspirations, as envisaged in Mana Āheinga. The data in this section also provides some evidence of the success of education approaches that build from a place of identity and belonging (Mana Tuku Iho).

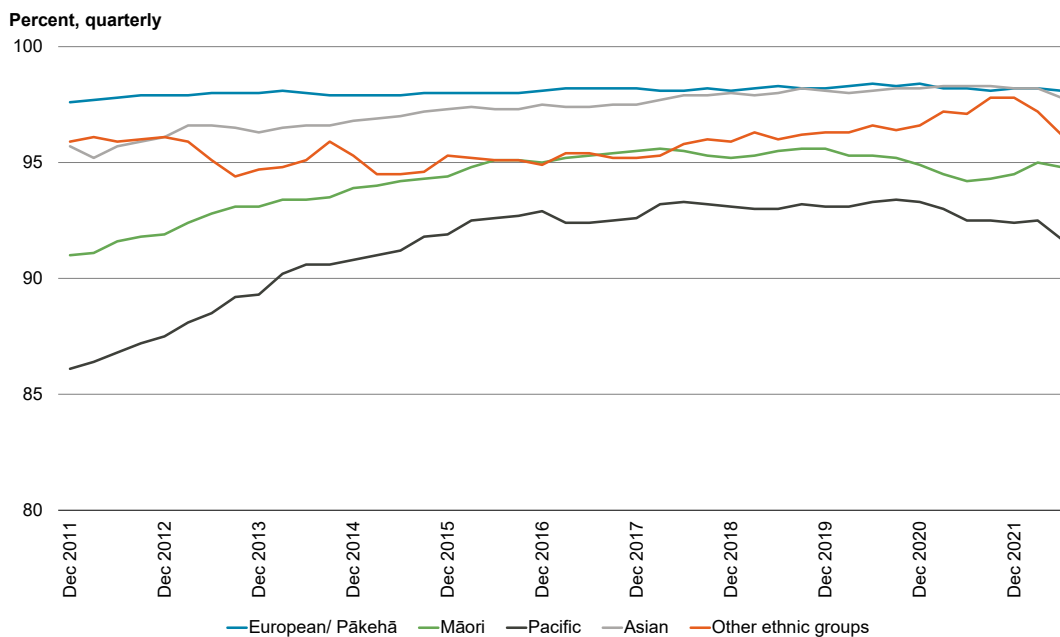
### A high proportion of Māori participate in early childhood education

Studies show that participation in early childhood education (ECE) provides foundations for better functioning across many aspects of life into adolescence and adulthood, including improved educational and vocational performance at school and better development of social and emotional behaviours (Bakken et al., 2017).

<sup>16</sup> Amenable mortality is defined as premature deaths that could have potentially been avoided with healthcare intervention.

ECE attendance for Māori has increased by 4 percentage points between 2011 and mid 2022 (Figure 31). As of June 2022, around 95% of Māori tamariki attended ECE compared to the national rate of 97%. Māori are more likely to attend English-medium ECE services (representing 79% of enrolments). Māori attendance at Māori-medium ECE services, where te reo Māori is spoken for more than 50% of the time, was around 21% in 2020 (Ministry of Education, 2021).

**Figure 31: Percentage of children in their first year of school who attended ECE, by ethnic group, 2009-2022**

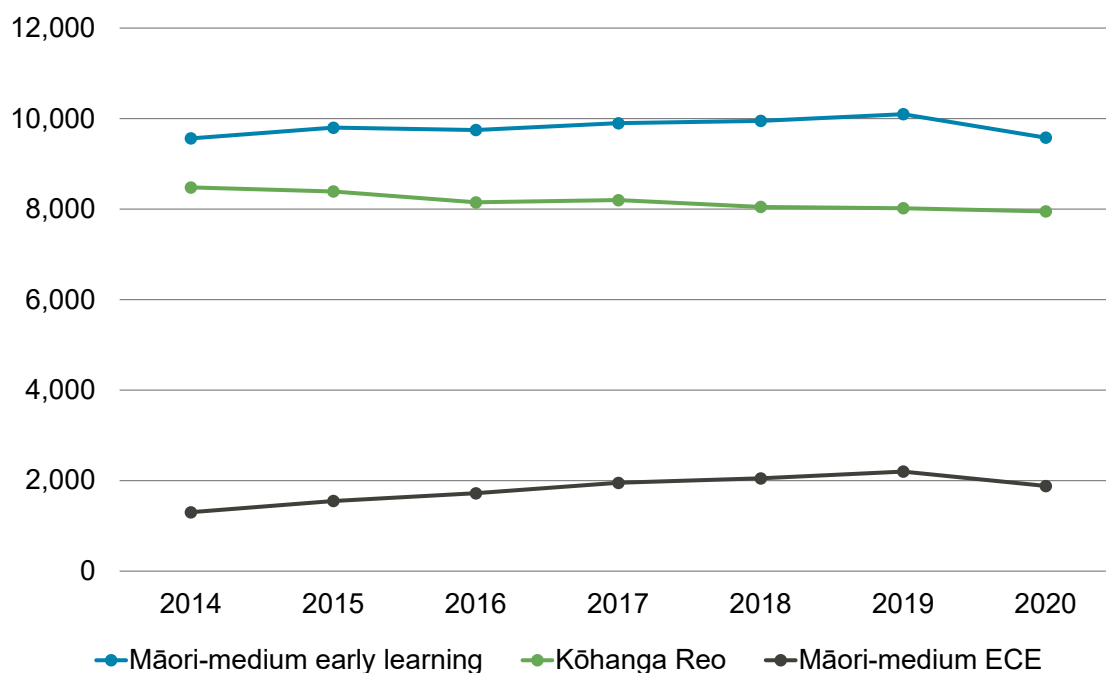


Source: Ministry of Education, ENROL student register

Between 2014 and 2020, attendances at Māori-medium ECE increased by 58 percentage points, while attendances at kōhanga reo<sup>17</sup> decreased by 7 percentage points (Figure 32). The gains in Māori-medium ECE mean that the overall number of tamariki receiving Māori-medium early learning has remained stable over this time period (Ministry of Education, 2021).

<sup>17</sup> Kōhanga reo are Māori-medium immersion education providers where te reo Māori is used for more than 80% of the time. Kōhanga reo are distinct from other Māori-medium services because they have different management and operation methods and they have a broader purpose that works to build Māori language, cultural customs and values (Ministry of Education, 2021).

**Figure 32: Kōhanga reo and Māori-medium ECE attendance**



Source: [Ministry of Education](#)

### **Māori-medium education improves te reo Māori acquisition and supports future educational achievements for Māori learners**

Recent research shows that there may be educational benefits to Māori-medium education. For example, Māori students attending Māori-medium school have higher National Certificate of Educational Achievement (NCEA) attainment rates on average than Māori students in English-medium schools (Ministry of Education, 2022). Māori who attended Māori-medium education are also more likely to participate and attain standards that reflect Māori culture, language and identity by the time they leave school than Māori who attended English-medium education (Ministry of Education, 2022).

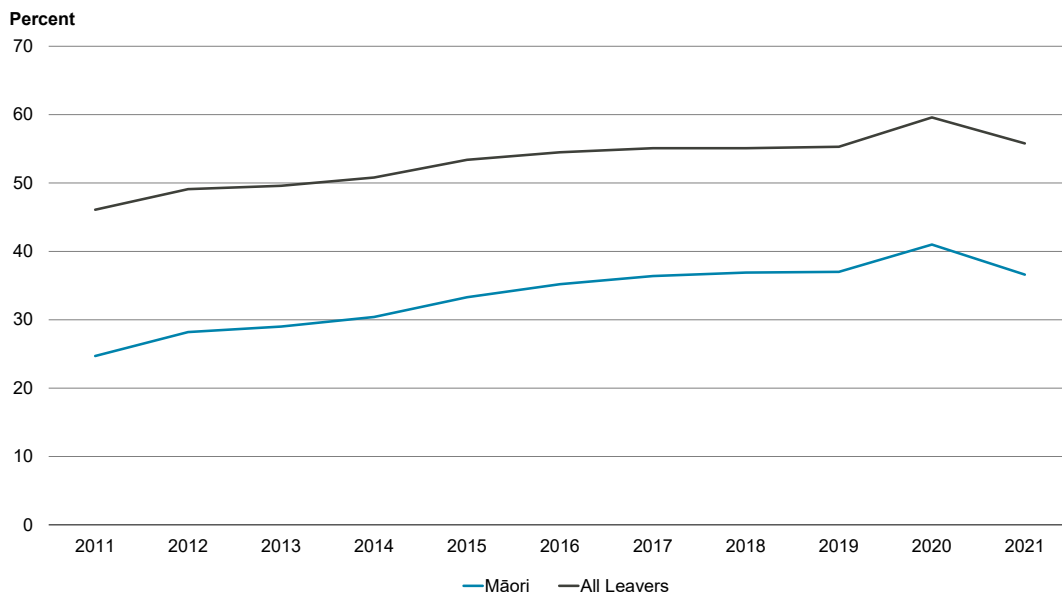
One interview participant highlighted the role that education plays not only for lifting te reo Māori acquisition but in leading the way for a wider understanding of te ao Māori world views:

*“We’ve concentrated a lot in this country on language, which is hugely important. But there are other pillars for us. Wairua is hugely in there. There’s got to be really good education about understanding that, on one hand, there’s a western concept, and on the other hand, there’s a Māori concept, which is based in wairuatanga.”* – Liz Mellish, Palmerston North Māori Reserve Trust

### **Educational attainment and skills training rates have improved but gaps remain**

NCEA level 3 achievement rates have been growing steadily between 2010 and 2020 for both Māori and non-Māori (Figure 33). However, Māori have achieved faster gains, with NCEA level 3 achievement rates increasing by 19% for Māori compared to 12% for non-Māori (Te Puni Kōkiri, 2022). However, there is still a 19 percentage point gap when compared to non-Māori achievement in 2020.

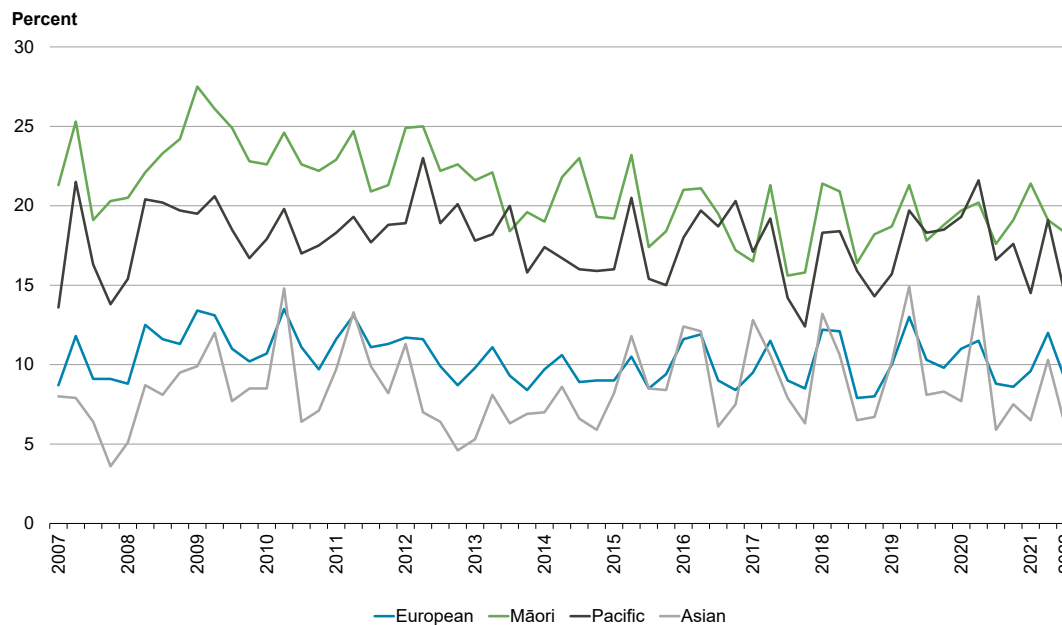
**Figure 33: Percentage of Māori and all school leavers achieving NCEA level 3 or university entrance, 2010-2020**



Source: Ministry of Education, Education Counts

There has been a decrease in young people aged 15-24 who are not in employment, education or training (NEET) since 2007. However, there is still a gap between Māori and non-Māori (Figure 34). Education and skills training for rangatahi youth are critical steps to help set them up for working life and broader engagement in society.

**Figure 34: Percentage of young people aged 15-24 years who are NEET, by ethnic group, 2007-2022**



Source: Stats NZ, Household Labour Force Survey

## 3.6 Discrimination, trust and engagement

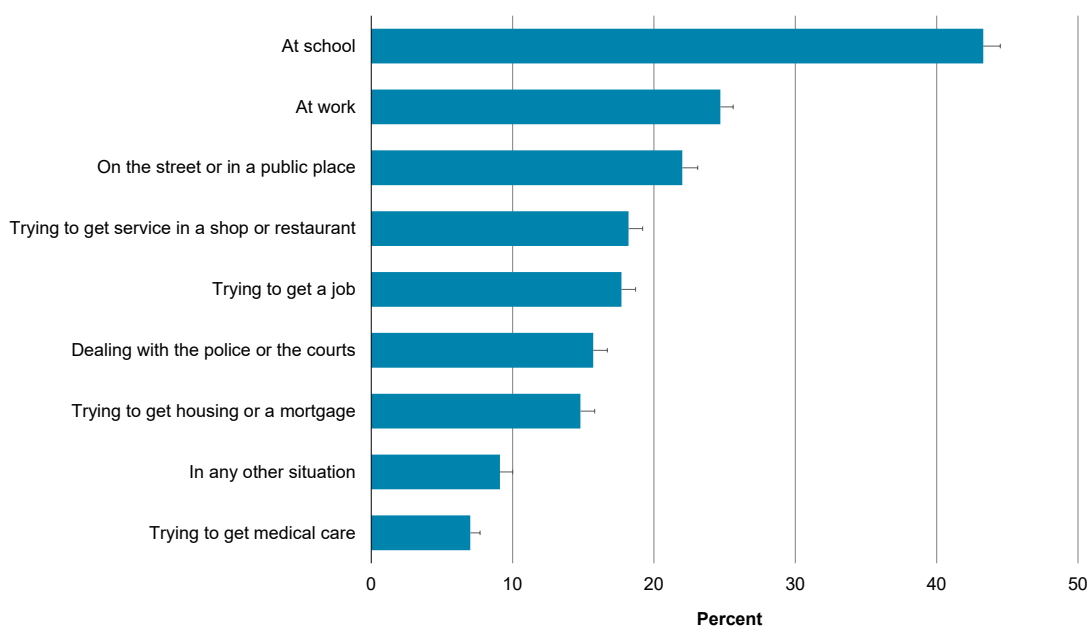
### Māori experience high rates of discrimination ...

Around 66% of Māori respondents said that they had experienced discrimination at some stage of their life (Stats NZ, 2020), with Figure 35 indicating school being the most common setting (43%), followed by the workplace (25%). Māori were also among some ethnic groups who were more likely to report experiences of discrimination during the COVID-19 pandemic (The Treasury, 2022a).

Discrimination can take many forms, including individual or internalised discrimination, interpersonal discrimination, institutional discrimination and systemic discrimination (Cormack et al., 2020). Feelings of discrimination can undermine mana in all four dimensions of He Ara Waiora. For example, these feelings can compromise one's sense of Mana Tauutuutu and with it the connectedness of individuals to wider society and its institutions. One interview participant spoke about an underlying tension between Māori aspirations and the structural impediments they face.

*"I always talked about the systemic frustration of aspirations. You've got a high level of aspirations in place, but from a very young age, people become social realists around what they would like on one hand and what they're likely to get on the other."*  
– Tracey McIntosh, University of Auckland

**Figure 35: Contexts in which Māori experienced discrimination at any stage, 2018**



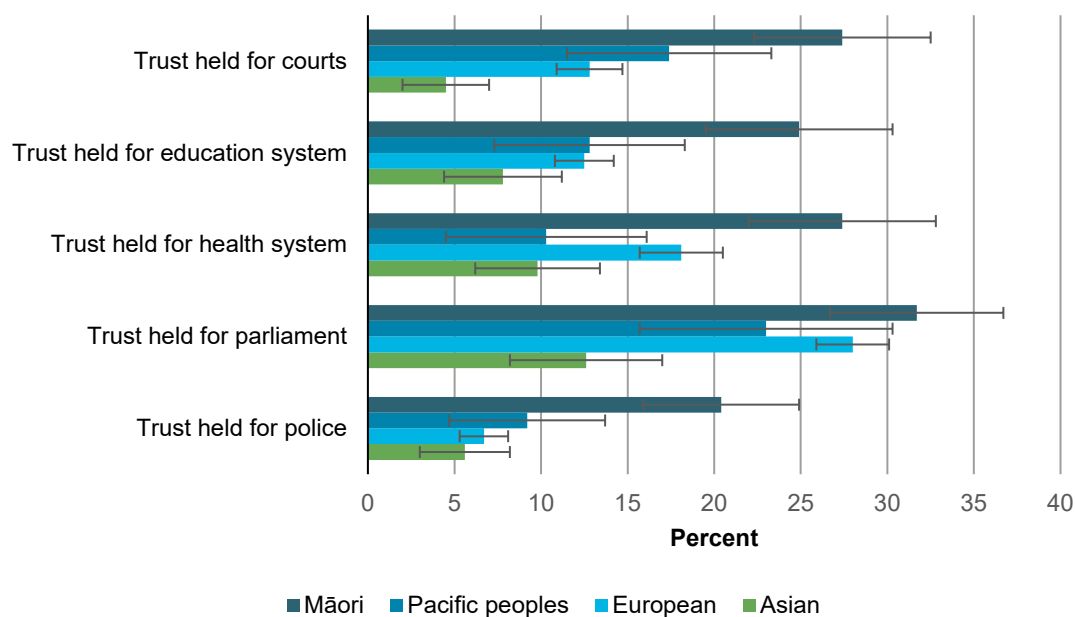
Source: Stats NZ, Te Kupenga Survey

### ... as well as low trust in institutions ...

Māori report having the lowest levels of trust in government, with 51% of Māori rating the public sector highly in 2022 (Stats NZ, 2021c). This trend, while improving somewhat since 2017, is present across multiple government institutions. Figure 36 indicates that Māori report the lowest levels of trust across the police, parliament, the health system, the education system and courts of any other ethnic group, evidenced by the higher proportion of Māori respondents rating these institutions a 0-4 out of 10 for trust compared to other ethnicities.



**Figure 36: Self-reported low levels of trust in the police, parliament, health system, education system, and courts, by ethnicity, 2021**



Source: Stats NZ, General Social Survey

### ...and lower rates of civic engagement

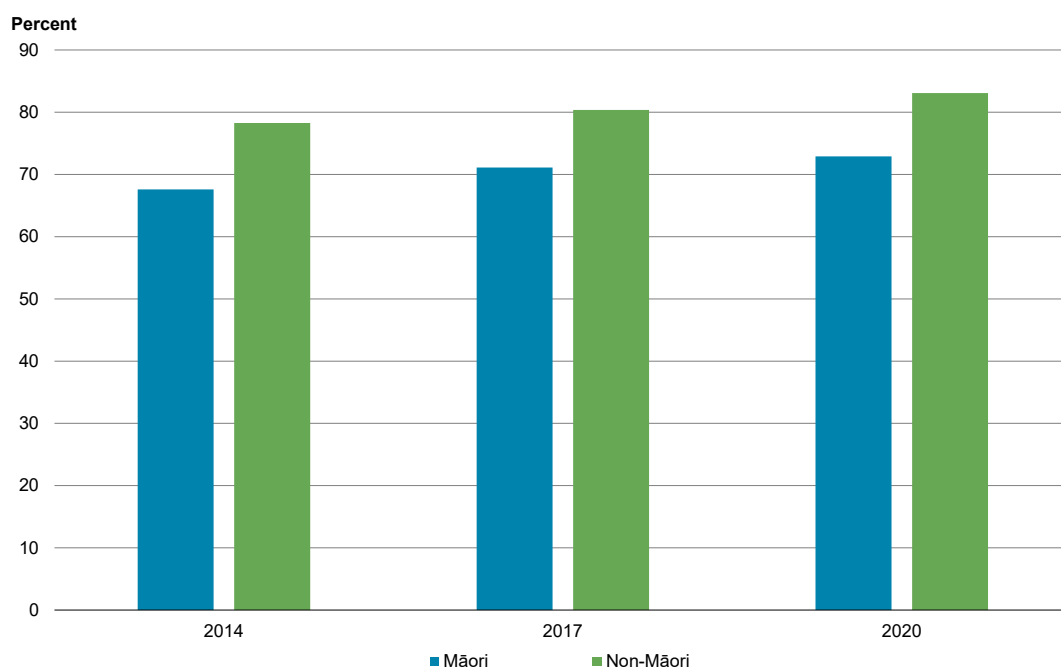
Civic engagement is related to the confidence people have in political institutions, the importance they attach to them and the extent to which they feel their participation can make a difference. It relates to the concept of *Mana Tauutuutu*, which is found in knowing and fulfilling one’s rights and responsibilities to the community.

Voter turnout for both Māori and non-Māori has been increasing with each election, although Māori have had a consistently lower voter turnout (Figure 37). Voter turnout generally improves with age. In the 2020 election, the highest voter turnout for Māori (84.5%) were those over 65 years old. Of those Māori who enrolled to vote, younger Māori aged 18-24 had the highest number of enrolments. However, only 69.7% of those enrolled in this age group voted (Electoral Commission, 2020).

Low voter turnout could relate to many factors, one of which is income. Analysis of the 2014 General Election noted that people were more likely to vote if their income met their everyday needs (Stats NZ, 2018b). Non-voters also tended to feel disengaged. The same report noted that nearly half of the Māori population (47%) felt that the public had low influence on government decision making compared to 37% of the total population.<sup>18</sup>

<sup>18</sup> The report noted several reasons for disengagement, including “My vote wouldn’t have made a difference”, “I didn’t get around to it” and “It makes no difference which government is in parliament” (Stats NZ, 2018b).

**Figure 37: Percentage of enrolled electors who voted in the New Zealand general elections, by Māori and non-Māori, 2014-2020**



Source: Electoral Commission

### 3.7 Safety and security

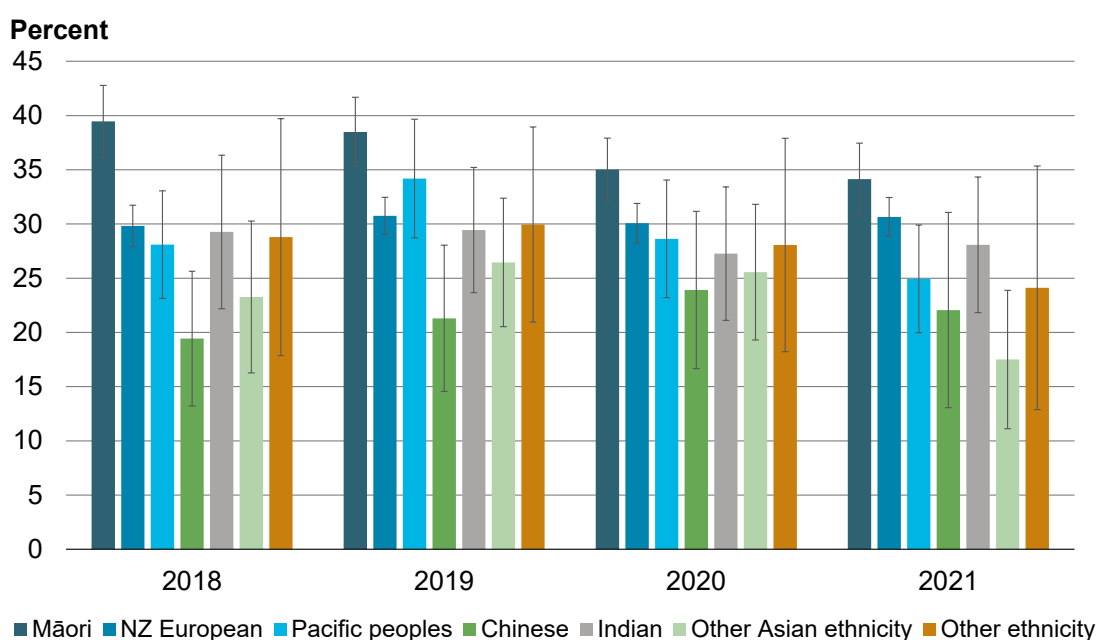
#### Māori have high victimisation rates driven by their younger age structure and deprivation profile ...

Figure 38 shows that Māori report the highest rates of crime victimisation of any ethnic group, with around 34% of Māori saying they had a crime committed against them in 2021 compared to the national average of 29%. However, after considering differences in age and deprivation, the gap in victimisation between Māori and the overall average reduces to 2%, which is not statistically significant. This supports the view that the younger age structure and deprivation profile of Māori are significant factors in their higher victimisation rates (Ministry of Justice, 2022a).

#### ... feel less safe than other people in New Zealand ...

Māori also have lower self-reported safety. In 2021, around 55% of Māori aged 15 years and over felt safe or very safe walking alone in their neighbourhood after dark compared to around 60% of the total population (Stats NZ, 2021).

**Figure 38: Percentage of New Zealanders who said they had been a victim of crime in the last 12 months, by ethnic group, 2018-2021**



Source: Ministry of Justice, New Zealand Crime and Victims Survey

### ... and are over-represented in the prison system (despite declining numbers)

The number of Māori in prison has fallen, along with the general prison population, down to less than 1% of adult Māori in June 2022. However, Māori are still over-represented in the prison system, representing 53% of men in prison and 67% of women in prison in 2022 (Department of Corrections, 2022). This is the case despite changes in the age structure of the general Māori population and falls in the number of younger Māori entering the prison system (Ministry of Justice, 2022a).

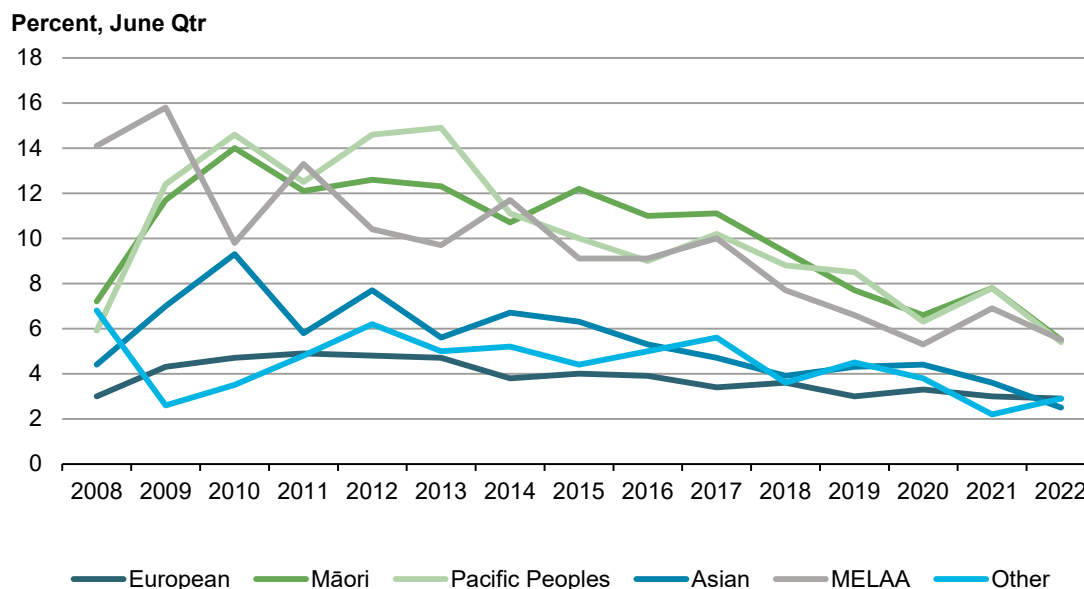
## 3.8 Participation in paid employment

Employment and work are key factors in building a sense of Mana Whanake, which is found in having the skills and resources to generate sustainable and intergenerational prosperity.

### Employment outcomes are improving but gaps remain with the rest of the population ...

Māori employment rates have grown over time, and there has been an increase in the number of Māori participating in the labour force since 2008 (Stats NZ, 2022b). Unemployment rates have declined steadily over time for all ethnic groups, but there continues to be a disparity between Māori and non-Māori, and this gap tends to widen during economic downturns (Figure 39). Over the course of the pandemic, New Zealand's total unemployment rates fell, including for Māori, from 8.4% in 2019 to 6.3% in 2022.

**Figure 39: Unemployment rate over time, by ethnic group, 2008-2022**



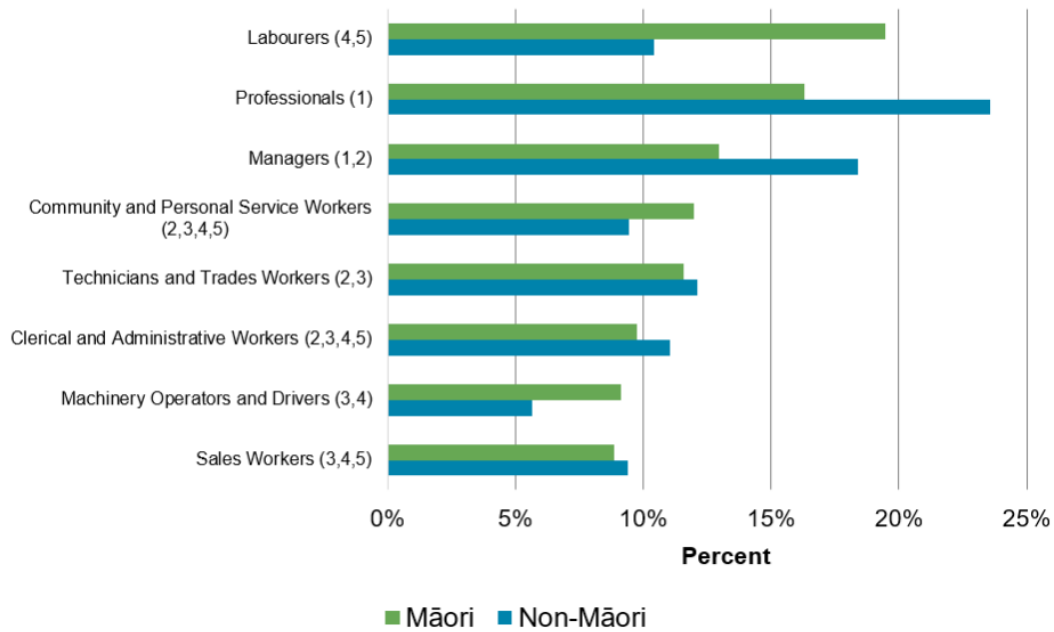
Source: Stats NZ, Household Labour Force Survey

**... more Māori are in higher skilled employment than in the past ...**

There has been rapid growth in the number of Māori in high-skilled employment, which has increased by 83% between 2006 and 2018 (BERL, 2018).<sup>19</sup> Even with this growth, Māori are still more likely to work in lower-skilled employment than non-Māori, with half of Māori in the two lowest skilled levels (4 and 5 – see Figure 40). This could be due in part to the fact that Māori are younger on average and younger employees more commonly occupy lower-skilled positions as they gain experience. Lower-skilled employment makes Māori more susceptible to economic shocks as it tends to offer less employment stability and lower wages compared to higher-skilled employment.

<sup>19</sup> Skill level is determined by the Australia and New Zealand Standard Classification of Occupations (ANZSCO), which calculates skill level based on the relevant qualifications or equivalent experience required to obtain employment in a given occupation. Occupations are given classifications ranging from 1 (highly skilled) to 5 (unskilled).

**Figure 40: Percentage of people aged 15+ by occupation and ANZSCO skill level, by Māori and non-Māori, 2018**

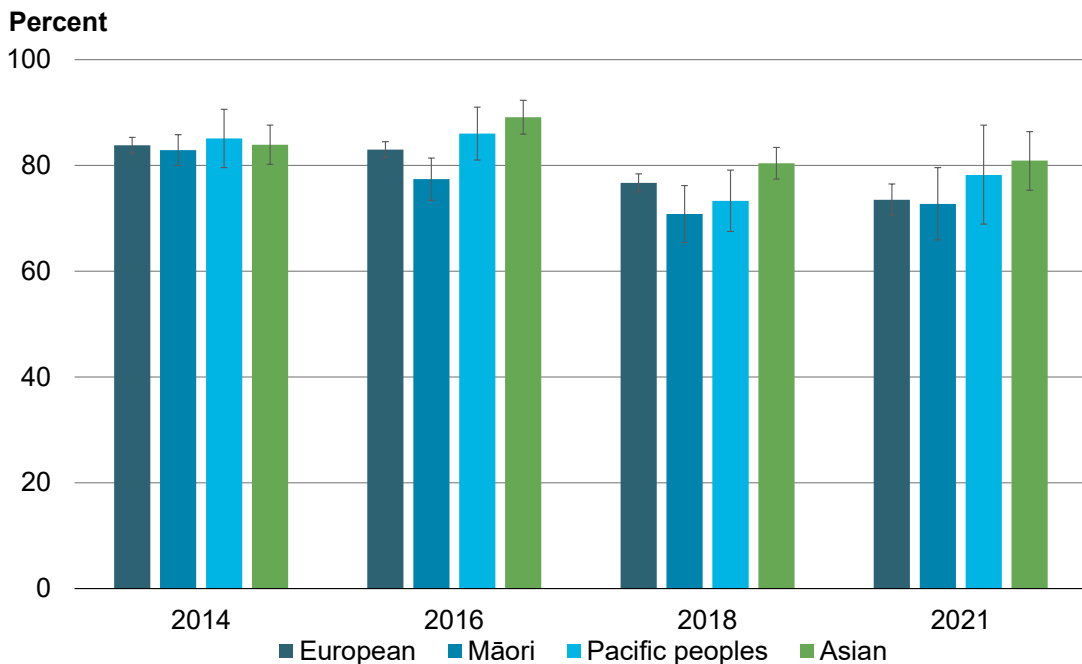


Source: Stats NZ, Census

**... and Māori are less satisfied with their jobs compared to other people in New Zealand**

Job satisfaction has been declining since 2014, with Māori reporting the lowest levels (Figure 41). This could correlate to the fact that a higher proportion of the Māori workforce are in lower-skilled employment.

**Figure 41: Percentage of employed people who felt satisfied or very satisfied with their job, by ethnic group, 2014-2021**



Source: Stats NZ, General Social Survey

## Rangatahi Māori have significant potential in the labour force

Māori are a young and growing population and will make up almost one-fifth of the working-age population by 2043 (Stats NZ, 2021a). The success of rangatahi Māori in the labour force therefore presents a significant opportunity to support sustainable and productive growth (Schulze & Green, 2017), linking with concepts such as Mana Whanake.

As technology advances, the employment landscape will likely change as lower-skilled jobs are often displaced in favour of higher-skilled industries (Schulze & Green, 2017). Evidence from our interviews suggests that adapting to and utilising new technologies cannot be underestimated for rangatahi Māori to unlock opportunities that will move them into higher-skilled career pathways. In addition, it could increase access and the ability to maintain cultural connections to their whakapapa, marae and whenua.

*“... there’s no provision for future generations of Māori to go and be financial traders for one, and then come home and just trade from home all day and then go and do their community stuff in the afternoon.” – Ngarangi Haerewa, Financial Markets Authority*

One interview participant noted that mātauranga Māori in the future workforce will become a valuable skillset but will come with added pressure on rangatahi to uphold cultural knowledge and practice.

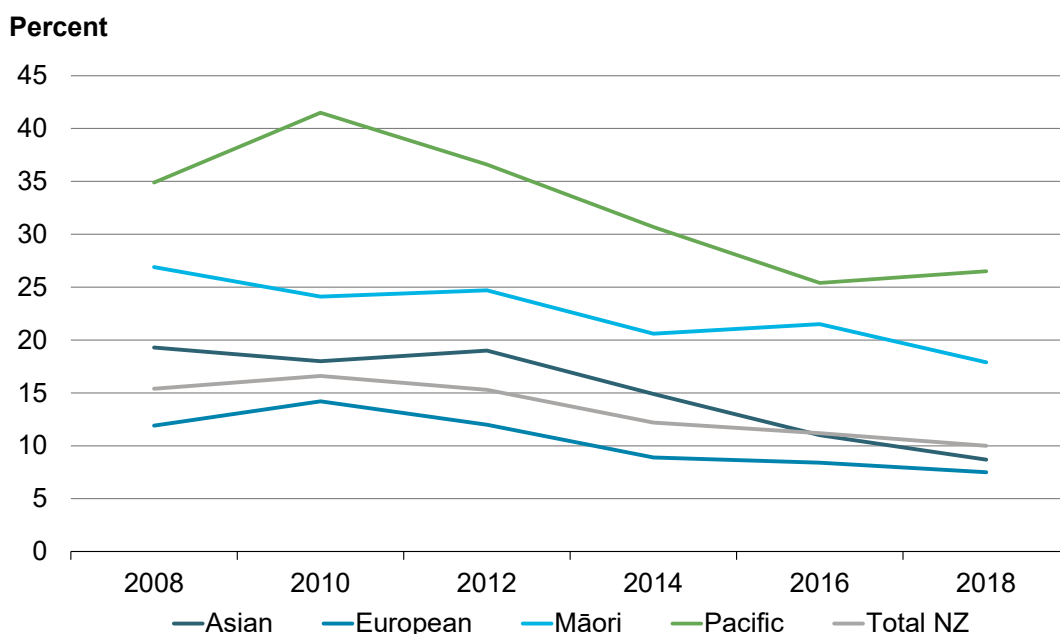
*“There’s a huge group of kids coming through kura kaupapa Māori that are going to be coming into the workforce over the next few years, and they’re going to be tooled up with mātauranga Māori, te reo Māori and tikanga Māori. They’re going to have a huge expectation placed upon their shoulders to be the source of knowledge and best practice in terms of what mātauranga Māori is and can be for us. They’re going to become hugely valuable members of our societies, our families, our workforce, but there’s a risk that we put too much weight on them.” – Jason Mika, University of Waikato*

## 3.9 Financial wellbeing and wealth

### Māori report better financial wellbeing than in the past ...

Adequate income is an important foundation for growing other aspects of wellbeing and links strongly with the concepts of Mana Āheinga and Mana Tauutuutu outlined in He Ara Waiora. New Zealanders on average have enjoyed a steady increase in household disposable incomes since 1994 with fewer individuals reporting that they don’t have enough money to meet daily needs (Figure 42).

**Figure 42: Percentage of adults who report they do not have enough money to meet every-day needs, by ethnicity, 2008-2018**

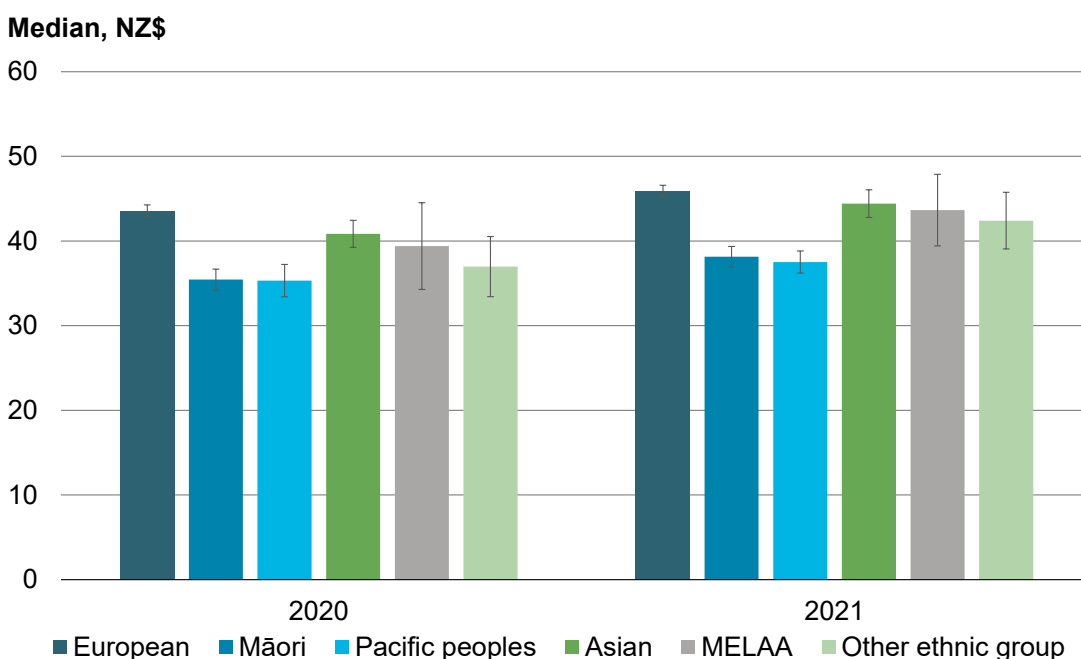


Source: Stats NZ, General Social Survey

**... but still have among the lowest levels of disposable income ...**

When compared to other ethnic groups, however, Māori and Pacific peoples have the lowest levels of disposable income before housing costs. In 2021, the Māori median disposable income was \$38,143 compared to \$43,903 for the total population (Figure 43). A lower disposable income is likely related to a number of different factors, including the wage gap disparity, lower employment outcomes compared to non-Māori or lower earning potential due to occupational skill levels.

**Figure 43: Median household equivalised disposable income, by ethnic group 2020-2021**



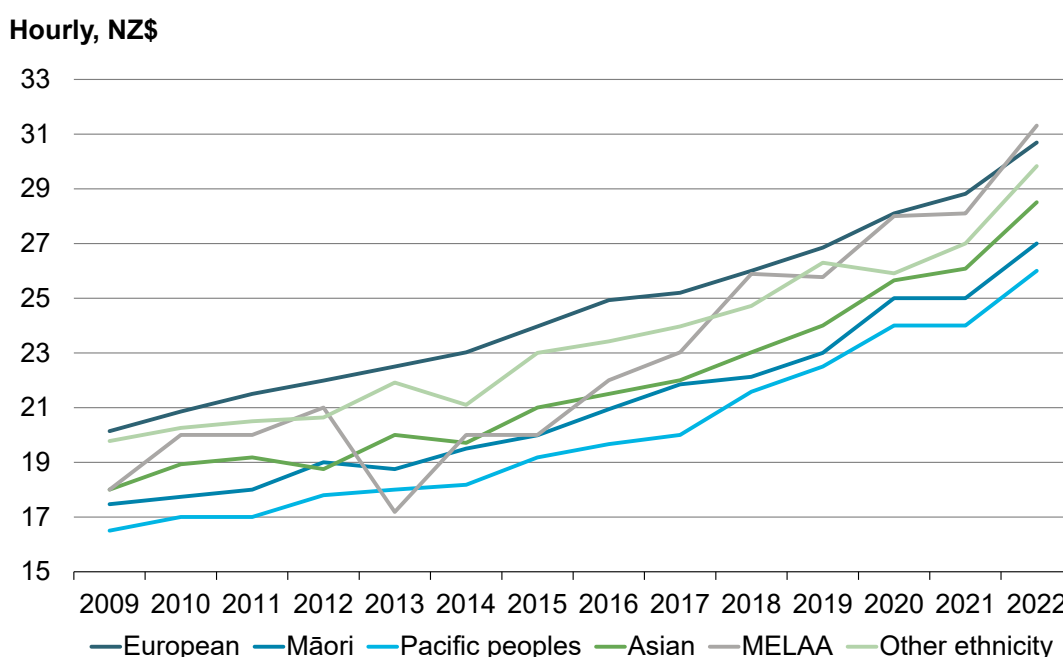
Source: Stats NZ, Household Economic Survey

## ... and there is a persistent wage gap between Māori and other people in New Zealand

Median hourly earnings have grown steadily since 2009 for all ethnicities, including for Māori, who earn an average of \$27.00 per hour in 2022, an 8% increase from the previous year (Figure 44). There is a persistent wage gap between Māori and non-Māori. One interview participant spoke of the impact this has on the waiora of individuals and whānau:

*“You’re working too hard to be able to invest in the next thing, to be able to invest in your children, to be able to ensure your healthcare is really good so that you don’t get sick ... How do we shift that average income?”* – Hinerangi Raumatī Tu’ua, Tainui Group Holdings

**Figure 44: Median hourly earnings, by ethnic group, 2009-2021**



Source: Stats NZ, Labour Market Statistics

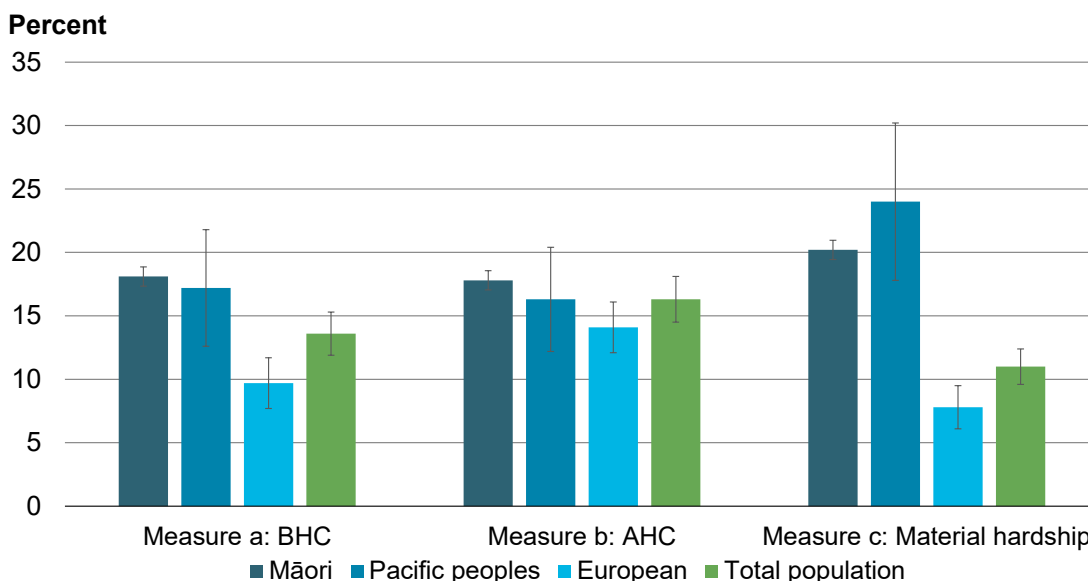
## The number of Māori children in material hardship has decreased but hardship is still prevalent for many whānau ...

The number of children aged 0-14 in material hardship has reduced substantially since 2013, but deprivation is still prevalent in many households. For individual children, poverty is about growing up in a household that experiences financial hardship and the stress that arises from having to make decisions that involve trade-offs between basic needs. The experience of poverty can involve various forms of hardship such as going hungry, living in cold, damp houses and forgoing opportunities like school outings and sports activities (Department of the Prime Minister and Cabinet, 2020).



There are three primary measures to interpret child poverty.<sup>20</sup> In two of these measures, Māori fare the least well (Stats NZ, 2022a). Figure 45 illustrates that, in 2021, approximately 18% of Māori children were living in households considered to be in poverty (and this rate was relatively unchanged regardless of whether the cost of housing was factored in). Māori children in low-income households after housing costs decreased 4.6 percentage points over the past two years. In 2021, around 20% of Māori children lived in households that experienced material hardship (a decrease of 2 percentage points over the past two years) compared to 11% for the total population.

**Figure 45: Percentage of children in poverty by selected measure, by ethnic group, 2021**



Source: Stats NZ, Household Economic Survey

### ... and more Māori children are living in food-insecure households compared to other children in New Zealand

Qualitative research on the experience of food insecurity from a Māori perspective noted that sharing food with others and providing food for special occasions was important for Māori households (Beavis et al., 2018). This suggests that practices such as manaakitanga, through offering food to company, can be compromised. For example, a 2019 report found that 27% of Māori children lived in a household where the primary caregiver felt stressed because they couldn't provide the food they wanted for social occasions. This was compared to 15% for non-Māori children (Ministry of Health, 2019a).

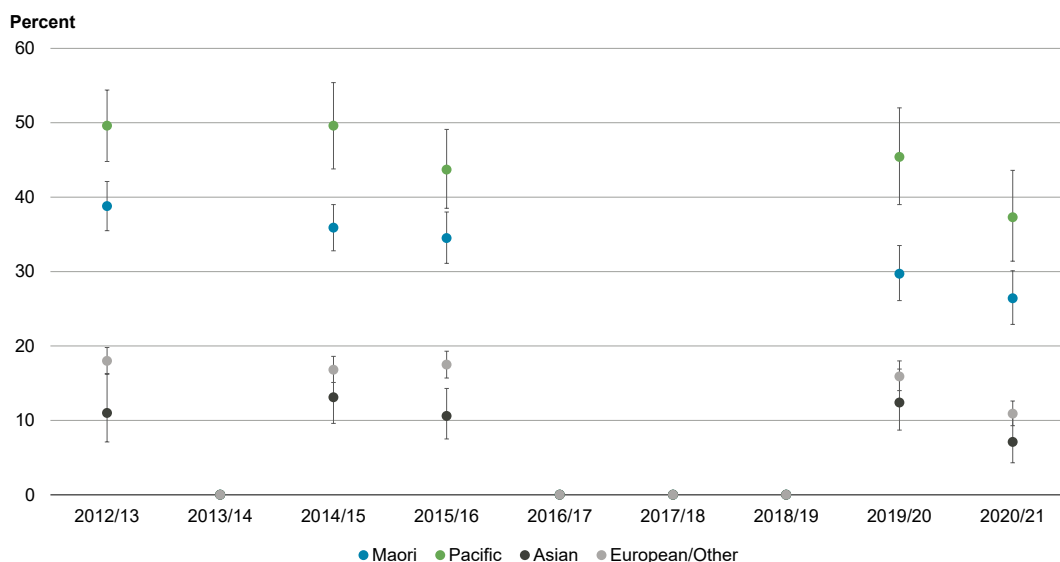
<sup>20</sup> **A – Low-income before housing costs are deducted.** Percentage of children living in households with less than 50% of the median equivalised disposable household income before housing costs are deducted. This measure involves comparing a household's income for the previous 12 months to the current median for all households.

**B – Low-income after housing costs are deducted.** Percentage of children living in households with less than 50% of the median equivalised disposable household income after housing costs are deducted for the 2017/2018 base financial year. This measure indicates whether household incomes were rising or falling over time, regardless of what happened to the incomes of other households.

**C – Material hardship.** Percentage of children living in households that experienced material hardship. This measure determines the proportion of children who live in households that cannot afford specific consumption items that most people regard as essential.

While levels of food insecurity for children have been trending downwards, it is still prevalent for many households. Māori and Pacific children are disproportionately affected, with around 26% of Māori children living in food-insecure households (Figure 46). Analysis from the Ministry of Health suggests that the difference in the rate of household food insecurity between Māori and non-Māori children can largely be explained by the households of Māori children being over-represented in the lower-income group and having on average more children per household (Ministry of Health, 2019a).

**Figure 46: Percentage of children living in households where food runs out often or sometimes**



Source: Ministry of Health, New Zealand Health Survey

### 3.10 Housing

Measures of income adequacy should be considered alongside housing outcomes for a more nuanced picture of Māori wellbeing. Housing is an important component of household wealth, and the housing market has much to do with the difference between people’s income and wealth ranks (The Treasury, 2022d).

#### Housing can be seen as a component of wealth but also as a culturally significant asset

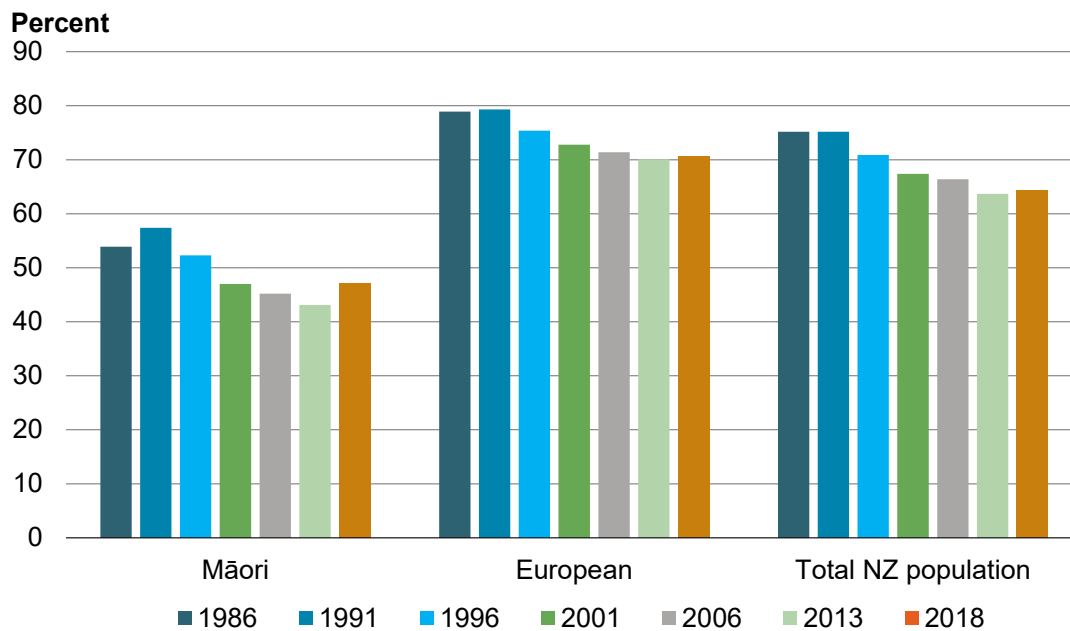
For Māori, housing is not only important for economic outcomes and material security but also as a culturally significant asset and, ideally, a place of nurturing. Māori views of land and housing such as household tenure, crowding, dwelling type and proximity of residence to ancestral marae have been found to be strongly associated with key kaitiakitanga measures (Stats NZ, 2021b). For example, Māori who live in a stand-alone house are more likely to grow their own fruits and vegetables, gather traditional food and take care of cultural sites of importance compared to Māori who live in a joined dwelling (an attached dwelling such as a flat, townhouse or apartment).<sup>21</sup>

<sup>21</sup> Some urban-rural differences impact this as stand-alone houses are more common in rural areas, and among people who own their house or hold it in a family trust. In 2018, a slightly higher proportion of Māori in rural areas lived in a stand-alone house (94%) when compared to those in urban areas (89%) (Stats NZ, 2021b).

## More Māori are likely to rent their home and report unaffordable housing ...

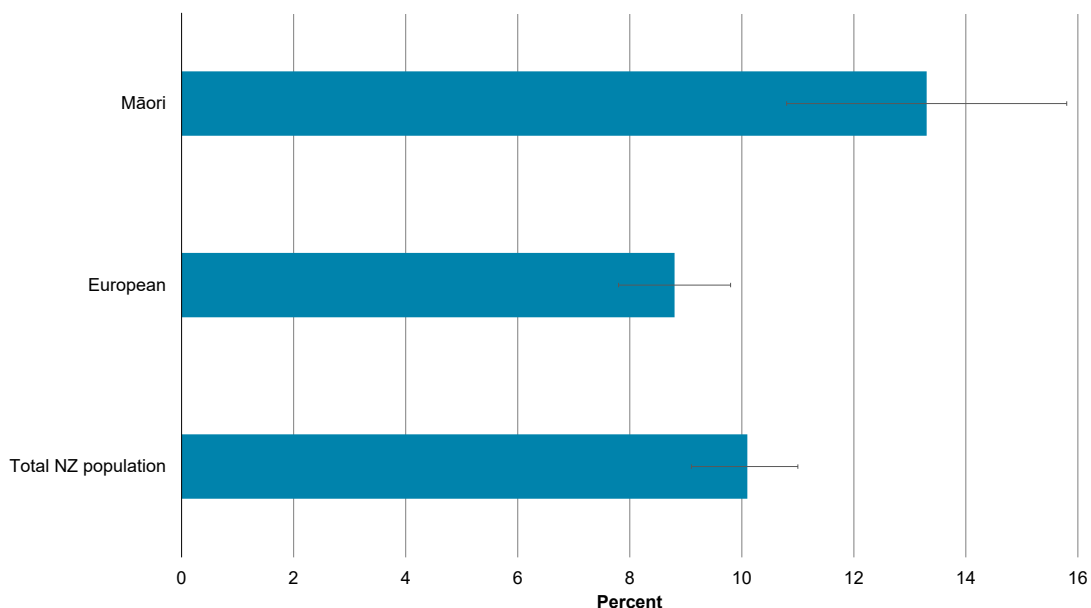
There are significant disparities in homeownership rates for Māori. More Māori live in rented homes compared to those people of European ethnicity, even when accounting for the younger age structure of Māori (Figure 47). Renting households generally spend a higher proportion of their income on housing costs than owner-occupiers. When asked about their own perceptions of housing affordability, Māori were more likely to rate their housing as unaffordable (Figure 48). Among the Māori population, 17% of people living in a rented home found it very unaffordable (rated 0-3 on a scale from 0-10) compared to 9% of people living in a home they owned or partly owned (Stats NZ, 2021b).

**Figure 47: Proportion of people who own their own home, by selected ethnic group, 1986-2018**



Source: Stats NZ, Census

**Figure 48: Proportion of people who rated their housing unaffordable, by selected ethnic group, 2018**



Source: Stats NZ, General Social Survey

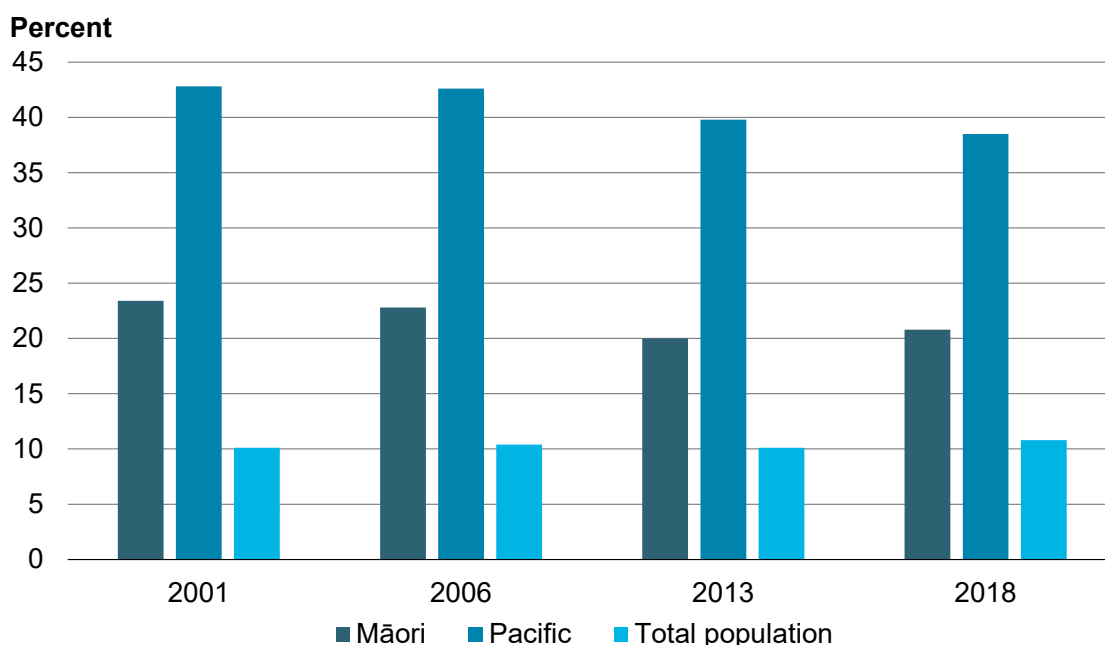
From an intergenerational perspective, home ownership is important for wealth accumulation as houses tend to be appreciating assets that can be passed on. Housing inequality makes it more difficult for groups on low incomes who do not already own homes to move into homeownership. This can create a barrier to intergenerational prosperity.

*“I’m really interested to see what the significant growth in wealth over the last two years means for Māori over the next generation. Does that mean if you’re Māori and a homeowner you’re probably in a much better, healthier financial state? And if you’re Māori and not a homeowner and aspiring to be one, does that mean that you will never be a homeowner because of the growth in prices in property generally? And what are the implications for those whānau members?” – Hinerangi Raumati-Tu’ua, Tainui Group Holdings*

### ... and live in poorer-quality or crowded housing

Rental housing is often of a lower-quality stock than owner-occupied housing, and Māori report among some of the lowest housing quality often due to dampness, mould and cold. In 2018, 30% of Māori lived in a house or flat that was always cold compared to 21% of the total population (Stats NZ, 2021b). Māori and Pacific peoples are also more likely to live in crowded households than the total population, although this trend has declined over time (Figure 49). Poor-quality housing stock and overcrowding can pose health risks such as respiratory illness.<sup>22</sup>

**Figure 49: Percentage of people in crowded households, by selected ethnic group, 2001-2018**



Source: Stats NZ, Census of Population and Dwellings

<sup>22</sup> In measuring household crowding for Māori, it is important to note that the housing needs of Māori can differ due to some specific needs of Māori around housing (see Waldegrave et al., 2006). The measure of crowding used here is only applied to the people who are usually resident in the household and does not include visitors.

## 3.11 Collective approaches to wellbeing

### A reciprocal sharing economy is a prominent feature of te ao Māori ...

A collective approach to wellbeing is a prominent feature of te ao Māori, particularly in terms of increased resilience through the sharing of resources, efforts and burdens. One interview participant spoke about the benefits of community and collaborative consumption, which can compensate for insufficient individual employment opportunities, particularly in rural areas.

*“The difference is that, in a Māori community, a sharing economy and collaborative consumption is more or less how everything stays alive up here. There’s not much by way of shops, material goods or high-earning wage opportunities. But there is a lot of collaborative consumption manaakitanga, and that’s how everyone stays in life.”* – Ngarangi Haerewa, Financial Markets Authority

Māori often look to promote shared outcomes and understand the relationships at play when addressing challenges (Cram, 2021). One interview participant described a community housing solution that supplied homes for Māori through collective financial asset management. Funding was pooled to build houses at scale then allocated to whānau in need, while loan repayments went back into the pool to replenish the funding supply. This was done at zero interest to alleviate the repayment burden while still being able to provide for the next family.

*“... they’re not clipping the ticket, not making any capital gain. They’re just really doing it for the social good, being able to put people into homes and giving their whānau a chance to live a happy life, right?”* – Ngarangi Haerewa, Financial Markets Authority

### ... collective approaches to wellbeing bolster resilience in the face of shocks ...

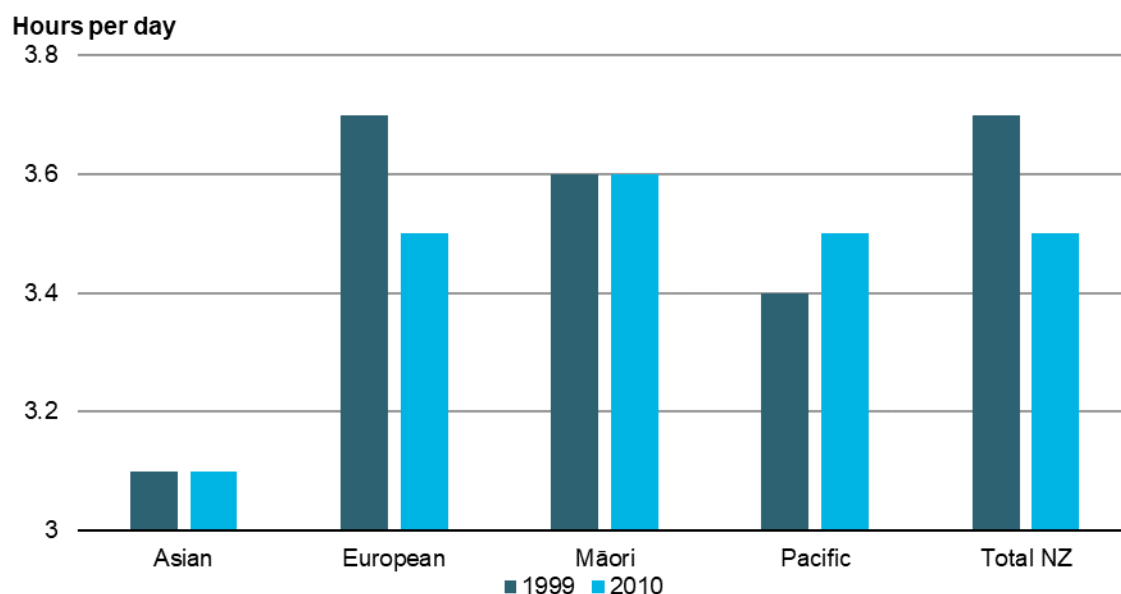
The collective approach to wellbeing by many Māori has helped Aotearoa New Zealand to be resilient to future shocks, be they economic or otherwise. For example, when COVID-19 first emerged in Aotearoa New Zealand in 2020, iwi and Māori organisations were quick to identify the risks to whānau in need in their communities both in terms of personal health and in terms of economic stress. They responded quickly and effectively to mitigate the effects of the crisis by providing goods and social services to their people, creating their own infrastructure and supply chains and largely bearing the additional costs themselves (Cook et al., 2020).

*“Resilience is about the collective. We’re supposed to be part of our whānau, we’re supposed to be part of our hapū, we’re supposed to be part of our iwi and marae.... We share the wealth and the knowledge and the expertise and the networks so that everyone moves in the same direction.”* – Hinerangi Raumati-Tu’ua, Tainui Group Holdings

### ... and manaakitanga is reflected in time spent performing mahi aroha (unpaid work)

Māori also spend a higher proportion of their time performing mahi aroha, which reflects members of households engaged in nurturing and caring for members of their whānau, hapū, iwi and/or community (Figure 50).<sup>23</sup> The importance of manaakitanga, where rights and responsibilities to the wider community is a way of maintaining the social fabric, links strongly with the Mana Tauutuutu element of He Ara Waiora.

**Figure 50: Average hours per day doing unpaid work, 1999 and 2010**



Source: Stats NZ, Time Use Survey

### Māori business models are putting wellbeing values into practice

The Māori economy – made up of individuals, small and medium enterprises, iwi businesses, trusts and post-settlement entities among others – is growing faster than the wider New Zealand economy, representing 6.8% of national GDP in 2018 (BERL, 2018). While the Māori economy lags behind the broader economy, the gains being made in recent years have the potential to support sustainable and productive economic growth (New Zealand Productivity Commission, 2021).

Iwi and Māori institutions often endeavour to incorporate Māori values and principles into their strategic goals and approach to the management of their business (Mill & Millin, 2021). This often means using a multiple bottom line approach, which balances social, cultural, financial, environmental, spiritual and political values and objectives. This approach can leverage strong business relationships and partnerships, which are important for diffusing knowledge and enabling collaboration (Mill & Millin, 2021).

<sup>23</sup> This data is drawn from the Time Use Survey, which was last updated 2009/10.

One interview participant spoke about how Māori businesses handled the COVID-19 response when it became clear that the operating environment meant job losses were inevitable. She emphasised that business owners were primarily concerned with seeking to uphold the mana and wellbeing of their employees by helping to find other income avenues before announcing redundancies.

*We had businesses that had to lay off staff. But even before they did, they were ringing us to say, 'look, we're making our people redundant and they don't know yet. Is there any way you [NZMT] can help ... the people response, having someone to talk through the issues, was as critical as the business response.'* – Pania Tyson-Nathan, New Zealand Māori Tourism

The drive to balance bottom lines can be a strong driver of ambition, which catalyses experimentation and innovation (New Zealand Productivity Commission, 2021). Māori businesses have higher innovation rates and higher rates of research and development compared to New Zealand businesses as a whole (Callaghan Innovation, 2020). At the same time, Māori businesses operating on multiple bottom lines can run into challenges, particularly when competing in a non-Māori business environment where it may be less common in practice.

*"The Māori value proposition is run by a quadruple bottom line, or the 'tangas', but in practice, they don't really appreciate what that looks like or how that feels and how people actually live by that every day."* – Ngarangi Haerewa, Financial Markets Authority

Further work is required to understand Māori businesses and productivity, including how businesses' cultural values and practices relate to performance. What is clear is that the growth and development of the Māori economy has the potential to support wellbeing outcomes in a way that is culturally grounded in te ao Māori.

# Conclusions

He Ara Waiora offers a Māori perspective that emphasises the connections between aspects of wellbeing and considers how wellbeing in the present is connected to future generations.

Through this lens, a high-level review of the evidence has suggested that waiora is improving in many ways. Many Māori experience high levels of cultural belonging, and participation in Māori culture serves as an essential aspect of intergenerational wellbeing.

Māori concepts of human wellbeing view it as inseparable from the natural environment, or Te Taiao, but global environmental issues pose a threat to intergenerational social, cultural and economic outcomes in interconnected ways.

There are also persistent gaps with the broader population. Māori experience lower wellbeing on average than other groups of people across many areas, including income, material hardship, health and housing. Most of these gaps are closing slowly at best. In particular, Māori experience increasing rates of psychological distress, high levels of discrimination and low trust in government institutions.

In compiling this report, we have identified areas that could open more opportunities for future analysis. There are opportunities to explore the ongoing use of He Ara Waiora and its broader applications, including through tailored indicators and a better understanding of the interconnectedness at play between different aspects of wellbeing. For example, He Ara Waiora holds that Mana Tuku Iho, a strong sense of identity and belonging, is a vital foundation for other aspects of wellbeing.

The development of measures to understand the strength and nature of the relationship between Māori and the Crown based on te Tiriti o Waitangi may be another area for future development. Supporting this relationship is one of the functions of the Public Service and is an integral part of working effectively with and for Māori.<sup>24</sup>

The availability of quality data to measure the concepts in He Ara Waiora is a clear area for future development. Work is currently under way with Te Puni Kōkiri to confirm existing and bespoke indicators to support He Ara Waiora, and we expect to be able to use these in future wellbeing reports.

He Ara Waiora is a framework that is used by the Treasury but comes from te ao Māori. The Treasury does not own any aspect of mātauranga Māori but can learn from and apply some of its wisdom with the right guidance and authenticity. Though this report has used familiar measures to highlight familiar problems – many of them intergenerational – it has also highlighted strengths and learnings from indigenous wisdom.

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<sup>24</sup> As set out in section 14(1) of the Public Service Act 2020.



There is much future kōrero to be had, but we hope that this paper will serve to support a dialogue around priorities for the wellbeing of Māori. The responses to the highlighted challenges are longstanding and complex and will require collective effort across governments, communities, businesses, families and whānau and individuals.

Nā reira, ka whakatau i a mātou kōrero ki kōnei.

Piki te kaha

Piki te ora

Piki te waiora

Mauriora-ē!

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# Appendix

## Section A1: Key concepts in He Ara Waiora

<b>ENDS</b>	<b>Wairua</b>	Spirit
	<b>Te Taiao</b>	Natural world, environment
	<b>Te Ira Tangata</b>	Human domain, including activities and relationships between generations
	• <b>Mana Tuku Iho</b>	Mana deriving from a strong sense of identity and belonging
	• <b>Mana Tauutuutu</b>	Mana found in participation in and connectedness to one's community, including knowing and fulfilling one's rights and responsibilities
	• <b>Mana Āheinga</b>	Mana in the individual's and community's capability to decide on aspirations and realise them in the context of their own unique circumstances
	• <b>Mana Whanake</b>	Mana in the power to grow sustainable, intergenerational prosperity
<b>MEANS</b>	<b>Kotahitanga</b>	Working in an aligned, coordinated way
	<b>Tikanga</b>	Making decisions in accordance with the right values and processes, including in partnership with the Treaty partner
	<b>Whanaungatanga</b>	Fostering strong relationships through kinship and/or shared experience that provide a shared sense of belonging
	<b>Manaakitanga</b>	Enhancing the mana of others through a process of showing proper care and respect
	<b>Tiakitanga*</b>	Guardianship, stewardship (for example, of the environment, particular taonga or other important processes and systems)

\* *Under discussion for inclusion in framework.*

Source: McMeeking et al., 2019



## Section A2: He Ara Waiora proxy indicators

Indicators in bold have been selected for commentary in this paper.

Principle	LSF indicators	Indicators Aotearoa
Te Taiao	<ul style="list-style-type: none"> <li>• <b>Natural environment</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Biodiversity/native species</b></li> <li>• Export of waste</li> <li>• Material intensity</li> <li>• Waste flows in waterways and coastal maritime environments</li> <li>• <b>Illness attributable to air quality</b></li> <li>• <b>Costs of extreme weather events</b></li> <li>• Consumption of greenhouse gas emissions</li> </ul>
Mana Tuku Iho	<ul style="list-style-type: none"> <li>• <b>Cultural identity indicators</b></li> <li>• <b>Social connections</b></li> <li>• <b>Perceived social network</b></li> <li>• <b>Social capital</b></li> </ul>	<ul style="list-style-type: none"> <li>• Language retention</li> <li>• <b>Ability to be yourself</b></li> <li>• <b>Engagement with cultural activities</b></li> <li>• Intergenerational knowledge transfer</li> <li>• <b>Te reo Māori speakers</b></li> <li>• Spiritual health</li> <li>• <b>Sense of purpose</b></li> <li>• <b>Sense of belonging</b></li> <li>• <b>Contact with family and friends</b></li> <li>• <b>Loneliness</b></li> <li>• <b>Suicide</b></li> <li>• <b>Social support</b></li> <li>• Access to natural resources</li> <li>• <b>Mental health status</b></li> <li>• Harm against children</li> </ul>
Mana Āheinga	<ul style="list-style-type: none"> <li>• <b>Life satisfaction</b></li> <li>• <b>Self-evaluation of life satisfaction</b></li> <li>• <b>Knowledge and skills</b></li> <li>• Labour force with at least secondary education</li> <li>• <b>Health</b></li> <li>• <b>Life expectancy at birth</b></li> <li>• Age-adjusted mortality rate</li> <li>• <b>Human capability</b></li> <li>• Access to services</li> <li>• Households with broadband access</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Experienced wellbeing</b></li> <li>• <b>Family wellbeing</b></li> <li>• <b>Hope for the future</b></li> <li>• <b>Life satisfaction</b></li> <li>• Leisure and personal time</li> <li>• Satisfaction and leisure time</li> <li>• <b>Job satisfaction</b></li> <li>• <b>Job strain</b></li> <li>• Work-life balance</li> <li>• Underutilisation</li> <li>• Locus of control</li> <li>• <b>Amenable mortality</b></li> <li>• Health equity</li> <li>• <b>Health expectancy</b></li> <li>• <b>Self-reported health status</b></li> <li>• <b>Suicide</b></li> <li>• Core competencies</li> <li>• <b>ECE participation</b></li> <li>• <b>Educational attainment</b></li> <li>• Literacy, numeracy and science skills of 15-year-olds</li> <li>• <b>NEET</b></li> </ul>

Principle	LSF indicators	Indicators Aotearoa
Mana Tauutuutu	<ul style="list-style-type: none"> <li>• <b>Safety and security</b></li> <li>• Homicide rate</li> <li>• <b>Civic engagement and governance</b></li> <li>• <b>Voter turnout</b></li> <li>• <b>Time use</b></li> </ul>	<ul style="list-style-type: none"> <li>• Corruption</li> <li>• <b>Institutional trust in government</b></li> <li>• <b>Institutional trust in police</b></li> <li>• Justice equity</li> <li>• <b>Experience of discrimination</b></li> <li>• <b>Perceptions of safety</b></li> <li>• <b>Victimisation</b></li> <li>• Workplace accidents</li> <li>• Potential to consolidate or repeat various equity measures, including:               <ul style="list-style-type: none"> <li>○ income inequality</li> <li>○ health equity</li> <li>○ education equity</li> </ul> </li> <li>• Value of unpaid work</li> <li>• <b>Democratic participation</b></li> <li>• <b>Sense of purpose</b></li> <li>• Active stewardship of land</li> </ul>
Mana Whanake	<ul style="list-style-type: none"> <li>• <b>Jobs and earnings</b></li> <li>• Employment rate</li> <li>• <b>Unemployment rate</b></li> <li>• <b>Income and consumption</b></li> <li>• <b>Disposable income per capita</b></li> <li>• <b>Housing</b></li> <li>• Rooms per person</li> </ul> <ul style="list-style-type: none"> <li>• <b>Non-LSF indicators</b></li> <li>• Number of Māori businesses</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Child poverty – material hardship</b></li> <li>• <b>Child poverty – low income</b></li> <li>• <b>Income</b></li> <li>• <b>Income adequacy</b></li> <li>• Income inequality</li> <li>• Low income</li> <li>• <b>Material wellbeing</b></li> <li>• Net worth</li> <li>• Official development assistance</li> <li>• Remittances to other countries</li> <li>• Value of unpaid work</li> <li>• <b>Employment rate</b></li> <li>• <b>Hourly earnings</b></li> <li>• Access to safe water for recreation and food gathering</li> <li>• <b>Drinking water quality</b></li> <li>• Resilience of infrastructure</li> <li>• <b>Housing affordability</b></li> <li>• <b>Housing quality</b></li> <li>• Overcrowding</li> <li>• Homelessness</li> </ul>

## Section A3: Interview method and engagement process

A series of interviews were conducted in early 2022 with Māori across academia, government, iwi, and business to gain insight into Māori perspectives of wellbeing. The interview questions were focused around how Māori interests might be reflected in the wellbeing report, participants' views on associated wellbeing concepts (eg, inequality, sustainability, etc.) and any gaps in our approach.

The interviews were transcribed and the following themes were identified as a result of the interview process:

- Identity
- Intergenerational aspects of waiora
- The role of institutions (including Māori institutions)
- Resilience and sustainability
- Social cohesion
- Abundance and scarcity
- Distribution or inequality
- Rangitahi Youth
- Wellbeing measurement
- Collective wellbeing

Some themes were linked closely with others in the discussions. For example, intergenerational aspects of waiora often linked to discussions on resilience, sustainability, or education, depending on the context. The theme of identity was often linked to collective wellbeing and social cohesion. In this way, the discussions reflected the connected nature of He Ara Waiora and influenced the more fluid structure of this paper.

We thank the interview participants for their participation and for their consent to the use of their names and quotes.

**Hinerangi Raumati Tu'ua, Tainui Group Holdings**

**Jason Mika, University of Waikato**

**Liz Mellish, Palmerston North Māori Reserve Trust**

**Ngarangi Haerewa, Financial Markets Authority**

**Pania Tyson-Nathan, New Zealand Māori Tourism**

**Tia Greenaway, Climate Change Commission**

**Tracey McIntosh, University of Auckland**

# Glossary

Hapū	Kinship group or clan
Kai	Food
Kaitiakitanga	Guardianship
Kaumātua	Māori elders
Kōhanga reo	Māori language preschool
Kotahitanga	Joining together for a collective purpose
Kuia	Māori elders
Manaakitanga	Caring, nurturing, hospitality
Manuhiri	Visitors
Marae	Ceremonial courtyard – can include surrounding buildings
Marae tipuna	Ancestral marae
Mātauranga Māori	Māori knowledge/episteme
Noa	Free from restriction or prohibition
Rāhui	Temporary ritual prohibition
Rangatiratanga	Leadership, ownership
Rangatahi	Young people, youth
Tamariki	Children
Taonga	Gift, treasure, precious
Tapu	Restriction, prohibition
Te Tai Ōhanga	The Treasury
Tikanga Māori	Incorporating practices and values from Māori knowledge
Waiora	Wellbeing, health, soundness
Wairua	Spirit, intuition, emotion, expression
Whānau	Close and extended family
Whanaungatanga	Relationship/kinship