

A socio-demographic profile of rangatahi in the Waikato region

Waikato Wellbeing Project

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Table of Contents

1.1	Introduction	8
1.2	Purpose, objectives and scope of this document	8
1.3	Data and Methodology	10
	Current and projected population profile of rangatahi and tamariki in the Waikato region	18
2.1	Current population profile	19
2.1.1	Overall	19
2.1.2	By sex	20
2.1.3	By ethnicity	20
2.1.4	By NZ deprivation index	21
2.1.5	By birthplace (born overseas)	22
3.1	Projected changes	31
3.1.1	Overall projections by geographical region	31
3.1.2	National population projections by ethnic group	33
3.1.3	Waikato region population projections by ethnic group	35
4.1	Population estimates based on 'Creating Futures: WISE' customised projections	37
	Socio-economic profile of rangatahi in Waikato region	40
5.1	School leaver qualifications	41
5.1.1	NCEA Level 1 or above	44
5.1.2	NCEA Level 2 or above	45
5.1.3	NCEA Level 3 or above	46
5.1.4	School leavers with highest attainment	47
6.1	Student retention and engagement	48
6.1.1	Retention: age at leaving school	48
6.1.2	Engagement: stand-downs, suspensions and exclusions	50
7.1	Rangatahi not in education, employment or training (NEET)	52
8.1	Work and labour force status	54
9.1	Industry	58
10.1	Occupation	61
11.1	Sources of personal income	63
12.1	Rangatahi on benefits	65
12.1.1	Rangatahi on benefits - overall	66
12.1.2	Rangatahi on benefits by age group	68

12.1.3	Rangatahi on benefits by ethnic group	69
13.1	Wellbeing indicators from the New Zealand Health Survey	71
13.1.1	Health status.....	71
13.1.2	Substance use	73
13.1.3	Nutrition and physical activity	74
13.1.4	Health service utilisation and patient experience.....	75
14.1	Rangatahi access to secondary mental health and addiction services	78
14.1.1	Overall trend of mental health and AoD service access	79
14.1.2	Mental health and AoD service access, by sex	80
14.1.3	Mental health and AoD service access, by ethnic group	81
15.1	Road accidents.....	82
16.1	Rangatahi offending (proceedings resulting in court action)	84
17.1	Discussion and conclusion.....	87
	References	89
	Appendices	90

List of Tables and Figures

Table 4.1	Estimated and projected population of rangatahi and tamariki resident in Waikato region disaggregated by TA area (customised medium series projections)	37
Figure 2.1	Estimated resident population profile in 2021; Waikato region and New Zealand	23
Figure 2.2	Estimated resident population profile (2021) of TAs within Waikato region boundary.....	24
Figure 2.3	Distribution of total resident rangatahi and tamariki population across the Waikato region.....	29
Figure 2.4	Distribution of rangatahi and tamariki population living in high socio-economic deprivation areas (NZDep 9&10) across the Waikato region	29
Figure 2.5	Proportion of rangatahi in the Waikato region born overseas disaggregated by TA of residence (based on 2018 Census data)	30
Figure 2.6	Distribution of overseas born rangatahi by birthplace (based on 2018 Census data)	30
Figure 3.1	Projected change over 2021-2028 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (2018 census based medium series sub-national projections)	32
Figure 3.2	Projected change over 2021-2038 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (2018 census based medium series sub-national projections)	33
Figure 3.3	Projected change (%) in the population of rangatahi across New Zealand (2018 census based medium series national ethnic projections)	34
Figure 3.4	Projected change (%) in the population of tamariki across New Zealand (2018 census based medium series national ethnic projections)	35

Figure 3.5 Changing ethnic composition of the rangatahi population in Waikato region (2013 census based medium series sub-national ethnic projections)	36
Figure 3.6 Changing ethnic composition of the tamariki population in Waikato region (2013 census based medium series sub-national ethnic projections)	36
Figure 4.1 Projected change over 2021-2028 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (customised medium series projections)	38
Figure 4.2 Projected change over 2021-2038 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (customised medium series projections)	39
Figure 5.1 Proportion of the total school leavers in a given school year with NCEA level 1 or above qualification disaggregated by sex, ethnic group and TA of residence	44
Figure 5.2 Proportion of the total school leavers in a given school year with NCEA level 2 or above qualification disaggregated by sex, ethnic group and TA of residence	45
Figure 5.3 Proportion of the total school leavers in a given school year with NCEA level 3 or above qualification disaggregated by sex, ethnic group and TA of residence	46
Figure 5.4 Distribution of school leavers in 2020 by highest qualification/attainment disaggregated by sex, ethnic group and TA of residence	47
Figure 6.1 Percentage of school leavers staying in school until at least their 17th birthday	49
Figure 6.2 Age-standardised rate of stand-downs, suspensions and exclusions per 1,000 students in the Waikato region disaggregated by sex, ethnic group and TA of residence	51
Figure 7.1 NEET rate over the 2012-2021 period for rangatahi resident in the Waikato region (year ending June, based on the HLFS survey)	53
Figure 7.2 NEET rate for rangatahi in New Zealand disaggregated by sex and ethnic group (year ending June, based on the HLFS survey)	53
Figure 8.1 Work and labour force (LF) status of rangatahi (15-19 and 20-24 years) in New Zealand and associated rates disaggregated by sex for the year ending June 2021 (based on HLFS survey)	55
Figure 8.2 Work and labour force status of rangatahi (15-24 years) in New Zealand and associated rates disaggregated by ethnic group for the year ending June 2021 (based on HLFS survey)	55
Figure 8.3 Work and labour force status of 15-19 year olds as recorded at the 2018 Census for Waikato region and its constituent TAs	56
Figure 8.4 Work and labour force status of 20-24 year olds as recorded at the 2018 Census for Waikato region and its constituent TAs	56
Figure 8.5 Work and labour force status of rangatahi in the Waikato region disaggregated by major ethnic groups (Census 2018)	57
Figure 9.1 Distribution of employed rangatahi aged 15-24 years in the Waikato region by industry (Census 2018)	59
Figure 9.2 Distribution of employed rangatahi aged 15-24 years in the Waikato region by industry disaggregated by sex (Census 2018)	60
Figure 10.1 Distribution of employed rangatahi aged 15-24 years in the Waikato region by occupation (Census 2018)	62
Figure 11.1 Sources of personal income (self-reported) of rangatahi in the Waikato region (Census 2018) ...	64

Figure 12.1 Proportion of resident 16-24 year olds in the Waikato region receiving a benefit payment from MSD, 2019-2021 (year ending September).....	67
Figure 12.2 Distribution of rangatahi aged 16-24 years who received benefit payment(s) in 2021 (year ending September) disaggregated by type of benefit	67
Figure 12.3 Proportion of rangatahi in the Waikato region receiving a benefit payment from MSD disaggregated by age, 2019-2021 (year ending September)	68
Figure 12.4 Distribution of rangatahi who received benefit payment(s) in 2021 (year ending September) disaggregated by type of benefit and age group.....	69
Figure 12.5 Proportion of rangatahi aged 16-24 years in the Waikato region receiving a benefit payment from MSD in 2018 (year ending September), disaggregated by ethnic group	70
Figure 12.6 Proportion of rangatahi aged 16-24 years who received benefit payment(s) in 2018 (year ending September) disaggregated by type of benefit and ethnic group	70
Figure 13.1 Respondents aged 15-24 years having excellent, very good or good self-rated health, NZHS 2017-20	72
Figure 13.2 Respondents aged 15-24 years who are a healthy weight as measured by the BMI Index, NZHS 2017-20	72
Figure 13.3 Respondents aged 15-24 years who reported being current smokers, NZHS 2017-20	73
Figure 13.4 Respondents aged 15-24 years who reported using cannabis for recreational or non-medical purposes, or to get high, in the last 12 months, NZHS 2017-20	74
Figure 13.5 Respondents aged 15-24 years reporting as having adequate vegetable and fruit intake, NZ Health Survey 2017-20	74
Figure 13.6 Respondents aged 15-24 years reporting to be physically active, NZHS 2017-20.....	75
Figure 13.7 Respondents aged 15-24 years who reported as having visited a GP in the past 12 months, NZHS 2017-20	76
Figure 13.8 Respondents aged 15-24 years who reported an unmet need for primary health care, NZHS 2017-20	76
Figure 13.9 Barriers to accessing primary health care, NZHS 2017-20.....	77
Figure 14.1 Proportion of the resident rangatahi population utilising DHB funded secondary mental health/addiction services, 2012-2020 (YE June).....	79
Figure 14.2 Proportion of the resident rangatahi utilising DHB funded secondary mental health/addiction services in each TA in the combined two-year period 2019-2020 (YE June)	80
Figure 14.3 Proportion of the resident male and female rangatahi population utilising DHB funded secondary mental health/addiction services, 2012-2020 (YE June)	80
Figure 14.4 Proportion of the resident Māori and non-Māori rangatahi accessing DHB funded secondary health services in 2013 and 2018 (YE June)	81
Figure 15.1 Incidence rate (per 10,000) for rangatahi involved in road crashes in 2018 and 2019	82
Figure 15.2 Proportion of the total recorded road crashes involving rangatahi which resulted in serious or fatal injuries, 2018 and 2019	83
Figure 15.3 Incidence rate (per 10,000) for rangatahi involved in road crashes resulting in serious or fatal injuries, 2018 and 2019	83

Figure 15.1 Incidence rate (per 100) for rangatahi aged 15-19 years who committed offences that resulted in court action, 2020 and 2021 (YE June)	84
Figure 15.2 Incidence rate (per 100) for rangatahi aged 20-24 years who committed offences that resulted in court action, 2020 and 2021 (YE June)	85
Figure 15.3 Incidence rate (per 100) disaggregated by sex for rangatahi aged 15-24 years who committed offences that resulted in court action, 2021 (YE June)	85
Figure 15.4 Type of offence committed by rangatahi aged 15-19 and 20-24 years across the Waikato region, 2021 (YE June).....	86

List of Appendix Tables

Appendix Table 1 Census variables used in construction of the NZDep18 index.....	90
Appendix Table 2 Estimated resident population of Waikato Region in 2021 disaggregated by SA2 and TA of residence (Total, rangatahi and tamariki)	91
Appendix Table 3 Estimated and projected population of rangatahi and tamariki resident in Waikato region disaggregated by TA area (2018 census-based estimates and medium series projections)	94
Appendix Table 4 Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)	95

List of Appendix Figures

Appendix Figure 1 Statistical and administrative geographies (Source: Stats NZ)	90
Appendix Figure 2 Projected change in estimated population of Waikato region and its constituent TAs over the 2021-2028 and 2021-2038 period (2018 census-based estimates and medium series projections)	94
Appendix Figure 3 Projected change across New Zealand in the total population of major ethnic groups (2018 census-based estimates and medium series projections).....	101
Appendix Figure 4 Projected change in the ethnic profile of the rangatahi and tamariki population in each TA (2013 census based medium series sub-national ethnic projections)	101
Appendix Figure 5 Proportion of the total school leavers across New Zealand in a given school year with NCEA qualifications disaggregated by decile.....	105

1.1 Introduction

In late 2021, the Waikato Wellbeing Project commissioned Te Ngira (formerly known as the National Institute of Demographic and Economic Analysis, NIDEA) to provide a demographic and socio-economic profile of rangatahi¹ living in the Waikato region.

This profile aimed to contribute to a series of research questions posed by the Waikato Wellbeing Project team to support their programme of work for rangatahi. These questions focused on opportunities to understand the aspirations of rangatahi in the Waikato as well as what rangatahi require to thrive. The ultimate aim is to empower the voices and decision making of rangatahi and to improve outcomes for rangatahi and their whānau in our region.

In order to contribute robust evidence to focus interventions to support rangatahi, it is important to understand available evidence of: the rangatahi population in the Waikato region; how this population size and structure may change in the near future; and the current outcomes for rangatahi. This report outlines this quantitative evidence, and is intended to be utilized alongside the other aspects of the Waikato Wellbeing Project rangatahi work, including a literature review on understandings of rangatahi aspirations and influences, and qualitative interviews with rangatahi themselves.

1.2 Purpose, objectives and scope of this document

The purpose of this report is limited to a quantitative and descriptive analysis of the demographic and socio-economic data for the rangatahi population in the Waikato region and its constituent Territorial Authorities (TAs).

This objectives are to:

- describe the demographic characteristics of the current and projected Waikato Region rangatahi population. These population characteristics are useful in order to understand the profile of current rangatahi as well as for consideration of current and future service delivery by the Waikato Wellbeing Project and project partners;
- outline socio-economic characteristics of rangatahi, particularly in areas where wellbeing could be better supported.

¹This report uses the term 'rangatahi' throughout to encompass young people, younger generation, youth.
<https://Māoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=rangatahi>
A particular focus is on supporting wellbeing for Māori and Pacific young people.

This report presents the key current and projected demographic changes and trends in the population of rangatahi and tamariki across the Waikato, putting it in context of the overall population change estimated for the region over the 2020-2038 period with comparisons drawn with the changes expected nationally. The overview of the socio-economic profile of rangatahi in the region focuses on key variables related to education, health, labour force, income and occupation.

Each section identifies and discusses key findings, illustrated by simple tables and graphs. Underlying data are included in the appendices.

The following limitations of this report are important considerations to be taken into account when interpreting the data presented with respect to the overall purpose and objectives:

- the scope of this document excludes qualitative research, evaluations or other measures. The descriptive data presents an demographical snapshot but does not (and cannot) answer questions relating to 'what is missing', 'why does this occur' or 'what is the best way of addressing this pattern'. Therefore, ongoing discussion of the analyses presented here will generate further questions and knowledge gaps that may require additional research and/or analyses;
- the selection of variables included in this report when reporting socio-economic outcomes for rangatahi is dependent on data availability rather than rangatahi aspirations;
- this report presents secondary data analyses, and the quality and consistency of the data sources varies and is determined by the original data collection methodology;
- the socio-economic data available on areas of interest for the Waikato Wellbeing Project typically presents 'negative' or 'deficit' statistics. Future analyses and population profiles must prioritise the collection and presentation of data that highlights the inherent strengths and positive outcomes for rangatahi and their whānau;
- inequities in socio-economic outcomes, particularly for Māori and Pacific rangatahi, are common, stark and enduring. Such inequities are seen in this report when outcome data is presented by ethnic group. There is important literature and evidence that recognises that these inequities are the result of colonisation, systems and structural failures, racism, stigma and breaches of Te Tiriti o Waitangi obligations. The inequities presented in this report must be understood within this context;
- the analyses presented here are provided in order to assist the Waikato Wellbeing Project and the format and content of the report is designed for the project team but may need adapting to make it more digestible for a wider range of users.

1.3 Data and Methodology

The Waikato region spans across 11 TA areas as shown in Figure 1.1:

- Thames-Coromandel District
- Hauraki District
- Waikato District
- Matamata-Piako District
- Hamilton City
- Waipa District
- Otorohanga District
- South Waikato District
- Waitomo District²
- Taupo District³
- Rotorua District⁴

Each TA is made up of Statistical Areas 1 and 2 (SA1 and SA2). Statistical area geographies are non-administrative area aggregations of households optimised to be of similar population sizes to enable the release of low-level data. The SA geographies were created by Stats NZ as a part of the Statistical Standard for Geographic Areas 2018 (SSGA18). SA1s are the smallest geographic area for published output, with an ideal size range of 100–200 residents, and a maximum population of about 500. SA2s are aggregations of SA1 population data which aim to reflect communities that interact together socially and economically. In populated areas, SA2s generally contain similar sized populations.

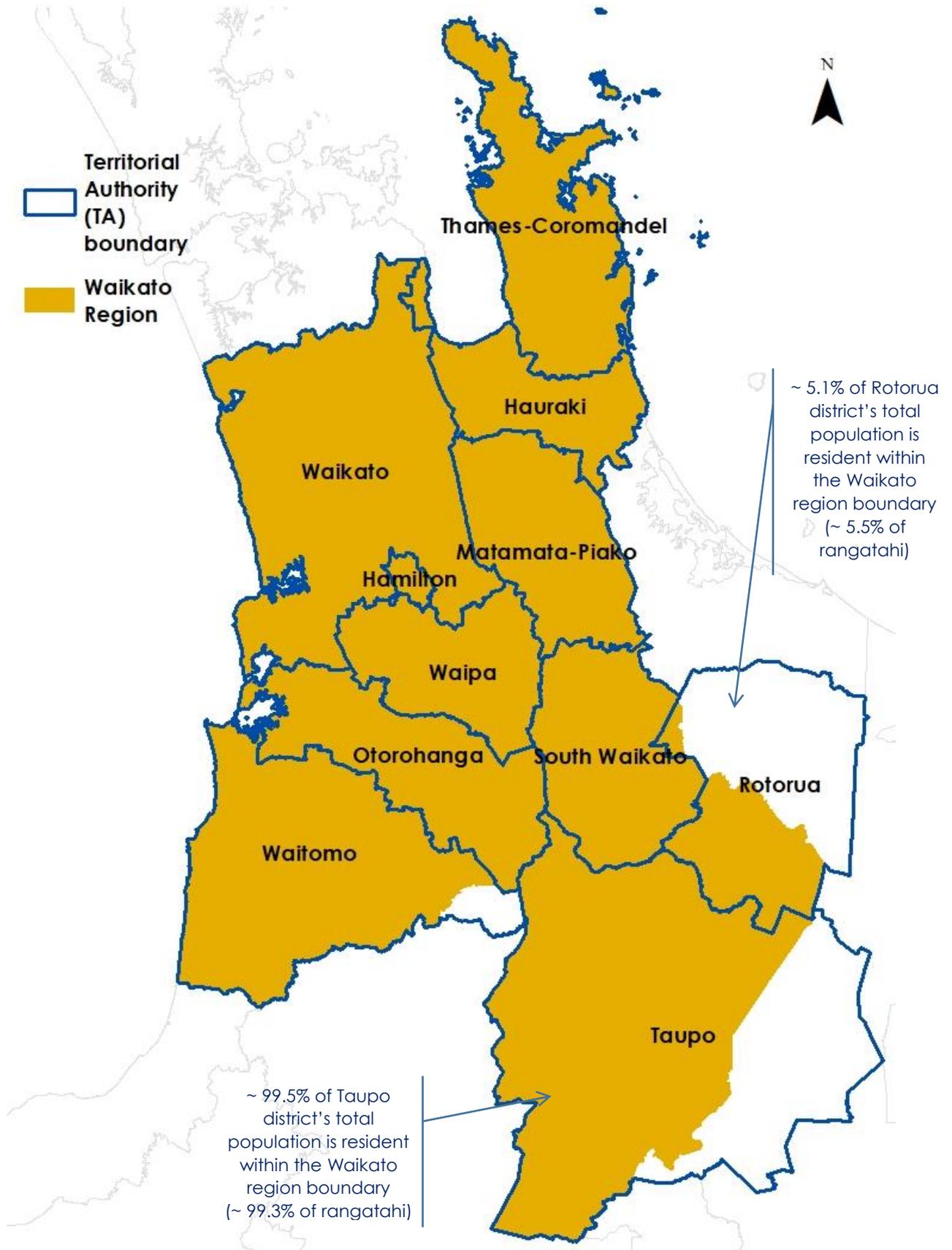
Refer to Appendix table 2 for the estimated resident population of Waikato Region in 2021 disaggregated by SA2 and TA of residence.

² A small part of the Waitomo district falls outside the Waikato region (see Figure 1.1). For the purpose of this report, the whole of Waitomo district has been included.

³ Approximately 0.5 per cent of Taupo district's population is resident outside the Waikato region boundary. On the other hand, only about 5 per cent of Rotorua district's population is resident within the region's boundary and therefore Rotorua district has not been included in the analysis presented in this report.

⁴ Only about 5 per cent of Rotorua district's population is resident within the region's boundary and therefore Rotorua district has not been included in the analysis presented in this report.

Figure 1.1 Waikato region boundary (2018 census-based population estimates for the year 2021)



The analysis and findings presented in this report are based on the analysis of data extracted from various sources:

Part A: Current and projected population profile of rangatahi and tamariki in the Waikato region

Population estimates (Source: Stats NZ)

The estimated resident population (ERP) at 30 June in the census year is based on the census usually resident population count, with updates for:

- net census undercount (as measured by a post-enumeration survey)
- residents temporarily overseas on census night
- births, deaths and net migration between census night and 30 June
- reconciliation with demographic estimates at the youngest ages.

The estimated resident population is not directly comparable with the census usually resident population (URP) count because of these adjustments.

This report uses population estimates from Stats NZ census data. The following data sources are used:

- Subnational population estimates (RC⁵, SA2), by age and sex, at 30 June 1996-2021 (2021 boundaries)
- Subnational population estimates (TA, SA2), by age and sex, at 30 June 1996-2020 (2021 boundaries)
- Estimated resident population (ERP), subnational population by ethnic group, age, and sex, at 30 June 1996, 2001, 2006, 2013, and 2018⁶
- Birthplace (broad geographic areas) by age and sex, for the census usually resident population count aged 15 years and over, 2013 and 2018 Censuses (RC, TA, SA2, DHB) (Stats NZ quality rating for birthplace data: High⁷).

⁵ Regional council

⁶ Sub-national population estimates for ethnic groups are not available for mid-censal years.

⁷ Participation in the 2018 Census was lower than previous censuses and data from alternative sources (such as 2013 census and administrative data) was used to impute missing data. A quality assurance framework was developed by Stats NZ in order to identify and assess associated data quality concerns. Only variables rated as 'very high', 'high', or 'moderate' have been analysed and presented in this report.

Box 1: Ethnicity

There are important features of ethnicity data in Aotearoa New Zealand that are relevant for both the interpretation of, and comparison between, information in this report. The ethnicity data derived from census data is based on self-identification, with multiple response options allowed. Stats NZ defines ethnicity as: *'the ethnic group or groups that people identify with or feel they belong to. Ethnicity is self-perceived and people can belong to more than one ethnic group'* (Stats NZ, 2016). The output from the ethnicity question in the Census is then aggregated into the "Level 1" categories of Māori, Pacific, Asian, European, Middle Eastern Latin American and African (MELAA) and Other. These categories can be then presented as a **'total response'** output - where individuals are counted within every ethnic group with which they identify. This is the primary approach taken with the data in this report, and therefore because some individuals (particularly rangatahi) identify with more than one ethnic group, the proportions in the resulting graphs sum to more than 100 per cent.

Some of the data sources utilised in this report however (particularly those from the Ministry of Health and Ministry of Social Development) involve an alternative **'prioritised'** ethnicity output. Prioritisation assigns a single ethnic group to each individual by sequentially prioritising identification in the following order: Māori, Pacific, Asian, MELAA, Other, then European (Ministry of Health 2004b). This means that if someone identifies as being Chinese and Māori, they are categorised only as Māori for the purpose of analysis. This process ensures that the total number of responses equals the total population. This output also maximises the Māori group size. In doing so however, prioritisation conceals diversity within and overlap between ethnic groups, and leads to under-counting of non-Māori groups. An increasing proportion of rangatahi, particularly Māori and Pacific, identify with multiple ethnicities and therefore interpretation of prioritised ethnicity data utilised in this report must take this limitation into account.

Given that this report utilises ethnicity data from the 2018 Census, readers also need to recognise that the low response rates (particularly for Māori and Pacific populations) to this census resulted in poorer quality ethnicity data. The quality of the census ethnicity data is noted to decrease further with increased specificity of geographical area. This is an important limitation to also consider in the interpretation of this report.

Finally, sector-specific ethnicity data considered in this report (such as that from the Ministry of Education and Ministry of Social Development) also has important limitations. The social and political context, and known discriminatory practices in such sectors, shapes whether and how people identify their ethnicity(ies). This not only influences the ethnicity data presented but also the ability to compare data sources by ethnicity across sectors and with the Census.

Population projections (Source: Stats NZ)

The 2018 census-based population projections have as a base the estimated resident population of each area at 30 June 2018.

- Statistical area 2 population projections, by age and sex, 2018(base)-2048
- Subnational population projections, by age and sex, 2018(base)-2048
- National ethnic population projections, by age and sex, 2018(base)-2043
- Subnational ethnic population projections, by age and sex, 2013(base)-2038 update⁸

When interpreting the population projections contained in this report it is important to understand that population projections are not forecasts or predictions. Rather, they are indications of what the future population numbers will be *if* the underlying assumptions regarding births, deaths, and migration hold true. In all likelihood, these factors will change over time in response to social, economic, and political factors.

Three alternative series (designated low, medium, and high) are produced by Stats NZ for projections of each area unit using different fertility, mortality, and migration assumptions:

- Low series: Assuming low fertility, high mortality and low net migration
- Medium Series: Assuming medium fertility, medium mortality and medium net migration
- High Series: Assuming high fertility, low mortality and high net migration

It is conventional to see the medium series projections as the 'most likely' scenario. The low and high series provide an indication of the likely lower and upper parameters of change, and allow users to assess the impact on population size and structure resulting from more conservative and optimistic demographic scenarios, respectively. Projections resulting from the medium series scenario have been presented in this report.

⁸ Sub-national ethnic projections based on the 2018 census were not available at the time of release of this report and are expected to be released by Stats NZ by March 2022.

Part B: Socio-economic profile of rangatahi in the Waikato region

- Youth not in education employment or training (NEET) by Regional Council by Age (Annual-Mar), Table reference: HLF200AA, last updated: 04 August 2021 (based on survey data).
- Youth Labour Force and Education Status (Annual-Jun). Table reference: HLF150AA, last updated: 04 August 2021 (based on survey data).
- Youth Labour Force and Education Status by Total Response Ethnic Group by Sex (Annual-Jun), Table reference: HLF161AA, last updated: 04 August 2021 (based on survey data).
- Highest qualification and ethnic group (grouped total responses) by age group and sex, for the census usually resident population count aged 15 years and over, 2006, 2013, and 2018 Censuses (RC, TA, SA2, DHB) (based on Census data, Stats NZ quality rating: Moderate – see Box 1)
- Study participation and ethnic group (grouped total responses) by age group and sex, for the census usually resident population count, 2018 Census (RC, TA, SA2, DHB) (Based on Census data, Stats NZ quality rating: Moderate – see Box 1)
- Labour Force Status by Sex by Age Group (Annual-Jun), Table reference: HLF033AA, Last updated: 04 August 2021 (based on survey data).
- Labour Force Status by Total Response Ethnic Group and Age Group (Annual-Jun), Table reference: HLF182AA, Last updated: 04 August 2021 (based on survey data).
- Work and labour force status and ethnic group (grouped total responses) by age group and sex, for the census usually resident population count aged 15 years and over, 2006, 2013, and 2018 Censuses (RC, TA, SA2, DHB) (based on Census data, Stats NZ quality rating: High)
- Sources of personal income and ethnic group (grouped total responses) by age group, for the census usually resident population count aged 15 years and over, 2006, 2013, and 2018 Censuses (RC, TA, SA2, DHB) (based on Census data, Stats NZ quality rating: High)
- Occupation (major group) by age group and sex, for the employed census usually resident population count aged 15 years and over, 2006, 2013 and 2018 Censuses (RC, TA, SA2, DHB) (based on Census data, Stats NZ quality rating: Moderate)
- Industry (division) by age group and sex, for the employed census usually resident population count aged 15 years and over, 2006, 2013 and 2018 Censuses (RC, TA, DHB) (based on Census data, Stats NZ quality rating: High)
- Data Counts, Ministry of Education datasets:
 - https://www.educationcounts.govt.nz/_data/assets/excel_doc/0012/182001/Time-Series-School-leavers-NCEA-Level-1.xlsx

- https://www.educationcounts.govt.nz/__data/assets/excel_doc/0014/182003/Time-Series-School-leavers-NCEA-Level-2.xlsx
 - https://www.educationcounts.govt.nz/__data/assets/excel_doc/0018/182007/Time-Series-School-leavers-NCEA-Level-3.xlsx
 - https://www.educationcounts.govt.nz/__data/assets/excel_doc/0017/182015/Time-Series-Highest-attainment.xlsx
 - <https://www.educationcounts.govt.nz/know-your-region>
- New Zealand Health Survey data from the Regional Data Explorer portal of the Ministry of Health for 2017-2020. This combines three years of data from July 2017 to June 2020⁹. Combining three years of data increases the sample size, enabling results to be provided for all regions and, in some cases, for sub-populations (i.e. age, ethnicity and neighbourhood deprivation) within those regions. However, even with pooled data the results for smaller regions and sub-populations often have wide margins of error.
 - Clients aged 15-24 years seen by DHB mental health and addiction services, 2011-2020 by financial year (July to June), service DHB, territorial authority (TA) of domicile, age in years, gender, and ethnicity data from the Programme for the Integration of Mental Health Data (PRIMHD) sourced from the Ministry of Health via a customised request under the Official Information Act 1982 (the Act).

The PRIMHD database of the Ministry of Health collects and stores all recorded information on the secondary care Mental Health and Drugs and Alcohol services (mental health/AoD) funded by the government (National Collections & Reporting, National Health Board). The primary purpose is to integrate data on mental health service provision and outcomes into a single national collection. The PRIMHD system, which went live on 1 July 2008, combines data from two prior systems: Mental Health Information National Collection (MHINC) and Mental Health – Standard Measures of Assessment and Recovery (MH-SMART). Note that the PRIMHD data includes only publicly funded mental health and addictions services (and not those funded privately/through insurance etc.). The quality of analysis is dependent on the accuracy and consistency of the PRIMHD dataset, including the quality and completeness of data entry across service providers and the accuracy of key variables such as age and ethnicity.

- Youth on benefits dataset sourced from the Ministry of Social Development under the Official Information Act 1982 (the Act):

⁹ Data collection for the 2019/20 New Zealand Health Survey stopped before New Zealand entered Alert Level 4 on 25 March 2020, so there is no data in this Regional Data Explorer about the health of New Zealanders during the COVID-19 pandemic. The 2017-2020 pooled data contains about 37,100 adult respondents and 12,500 children.

- Number of clients aged 16 - 24 years old receiving a main benefit as at the end of September for the calendar years 2011 to 2021, by TLA, type of benefit, and key demographic variables (ethnic group, age group, gender).
- Road accidents dataset sourced from the Waka Kotahi (NZ Transport Agency) under the Official Information Act 1982 (the Act):
 - Number of crashes and number and type of injuries caused by crashes in the Waikato region and its TAs for population aged 16-19 and 20-24 years in the years 2018-2021.
- Dataset sourced from New Zealand Police under the Official Information Act 1982:
 - Number of unique offenders aged 15-19 and 20-24 years old whose proceedings resulted in court actions for each of the 12-month periods ending in 30 June 2018, 30 June 2019, 30 June 2020 and 30 June 2021 disaggregated by TA of residence, ethnicity and gender.

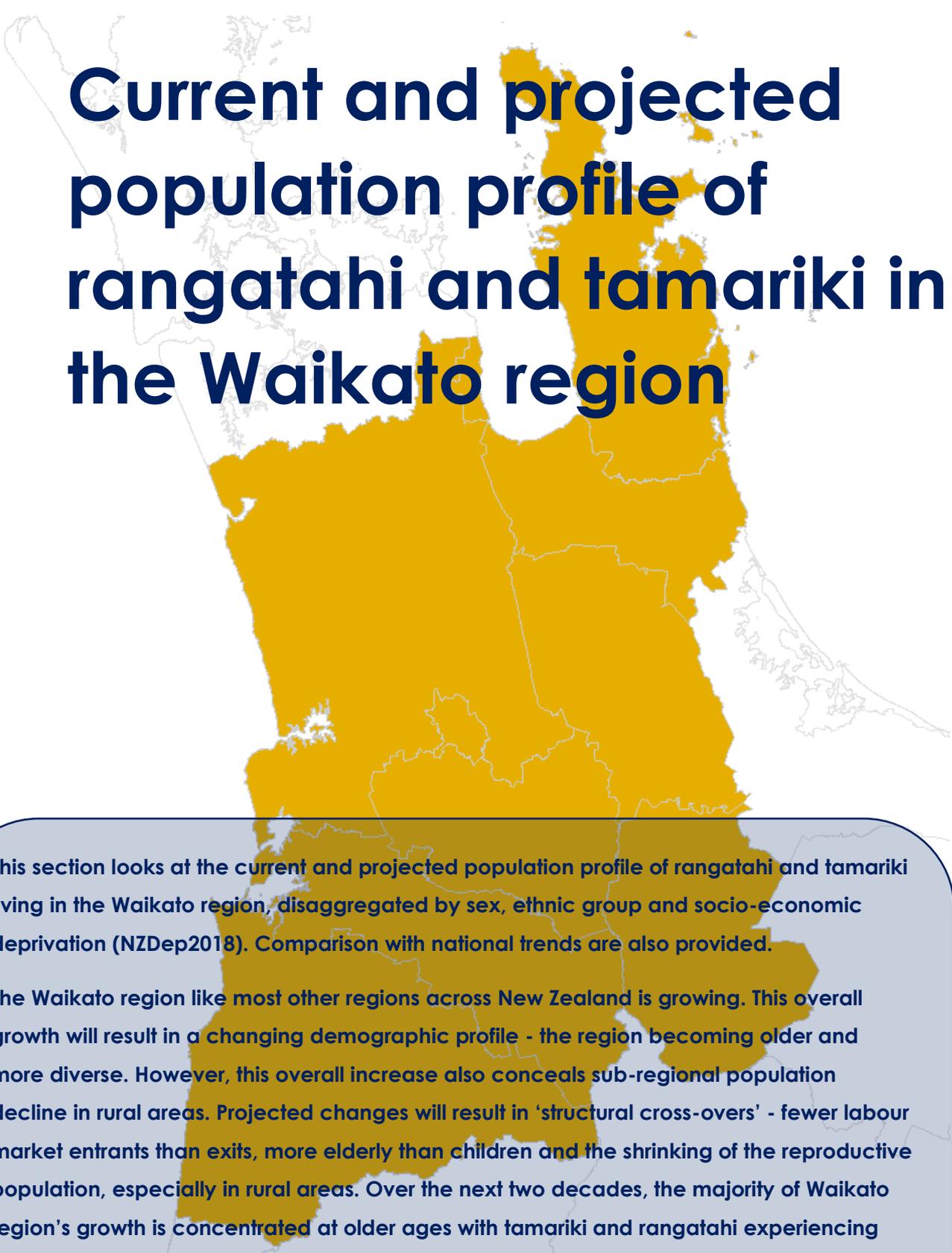
Box 2: Socioeconomic deprivation

The 2018 New Zealand Index of Deprivation (NZDep2018) used in this report is developed by Otago University and combines nine variables from the 2018 census which include:

- no access to the internet at home
- benefit receipt
- household income below a certain threshold
- unemployment
- no qualification
- not living in own home
- single parent family
- overcrowded households
- damp and/or mould in dwelling.

NZDep2018 provides a deprivation score for each Statistical Area 1 and its constituent meshblocks, in New Zealand. The NZDep2018 scale ranges from 1 to 10, where 1 represents the areas with the least deprived scores and 10 the areas with the most deprived scores. For example, a value of NZDep2018 10 indicates the SA1 is in the most deprived 10 percent of small areas in New Zealand.

It is important to note that NZDep2018 deprivation scores apply to areas rather than individual people. For the purpose of this report, NZDep 9 & 10 have been combined to represent areas of highest relative deprivation while NZDep 1 & 2 together represent areas with least socio-economic deprivation.



Current and projected population profile of rangatahi and tamariki in the Waikato region

This section looks at the current and projected population profile of rangatahi and tamariki living in the Waikato region, disaggregated by sex, ethnic group and socio-economic deprivation (NZDep2018). Comparison with national trends are also provided.

The Waikato region like most other regions across New Zealand is growing. This overall growth will result in a changing demographic profile - the region becoming older and more diverse. However, this overall increase also conceals sub-regional population decline in rural areas. Projected changes will result in 'structural cross-overs' - fewer labour market entrants than exits, more elderly than children and the shrinking of the reproductive population, especially in rural areas. Over the next two decades, the majority of Waikato region's growth is concentrated at older ages with tamariki and rangatahi experiencing (relatively) a much smaller overall increase. The numbers of tamariki and rangatahi are likely to decline sub-regionally.

2.1 Current population profile

This section looks at the current population profile of the Waikato region and its constituent TAs disaggregated by: age group (0-14 years and 15-24 years); sex (male and female); ethnic group (Māori, Pacific Peoples, European/Other, Asian and MELAA¹⁰); and socio-economic deprivation (NZDep2018).

Figure 2.1 shows the population (total, rangatahi and tamariki) profile of the Waikato region and New Zealand based on 2018 census-based estimates for the year 2021.^{11,12} This same profile for each of the ten constituent TAs of the Waikato region is presented in Figure 2.2.

Figure 2.3 shows the distribution of rangatahi and tamariki across the constituent TAs, and Figure 2.4 shows the distribution of the rangatahi and tamariki living in the areas of the most socio-economic deprivation.

Figure 2.5 shows the proportion of rangatahi born overseas and Figure 2.6 gives the birthplace of those born overseas.

2.1.1 Overall

- The Waikato region is resident to 506,000 people as per the 2021 population estimates, which is around 10 per cent of the total New Zealand population. The region is geographically diverse with ten TA areas and 240 statistical area units (SA2).
- Rangatahi (15-24 years) living in the Waikato region make up 12.6 per cent of the resident population. The approximately 63,940 rangatahi living in the region make up around 10 per cent of the country's population of the same age.
- Around 43 per cent of the Waikato region's rangatahi live in Hamilton, with 70 per cent living in the Hamilton, Waikato or Waipa TA areas.
- Tamariki (0-14 years) living in the Waikato region make up 20.3 per cent of its resident population. The approximately 102,900 tamariki living in the region make up 10.6 per cent of the country's population of the same age.
- Over a third (36 per cent) of Waikato region's tamariki are resident in Hamilton, with three-quarters (66.4 per cent) living in the Hamilton, Waikato or Waipa TA areas.
- Less than one per cent of Waikato region's rangatahi population is resident in the Rotorua district area.

¹⁰ Middle Eastern, Latin American and African ethnic group

¹¹ The ethnic profile in this section is based on the 2018 census based estimates for the year 2018 as population estimates for ethnic groups for mid-census years are not published by Stats NZ.

¹² Refer to Appendix Table 2 for estimated resident population numbers (total, rangatahi and tamariki) for the Waikato Region in 2021 disaggregated by SA2 and TA of residence.

2.1.2 By sex

- There are 107 males for every 100 female rangatahi across the Waikato region similar to the national average.
- There are higher (above regional average) male to female sex ratios among youth in Thames Coromandel (129 males per 100 females), Hauraki (119:100 females) and Matamata-Piako (115:100).
- There are 105 males for every 100 female tamariki across the Waikato region which is similar to the sex ratio among children seen nationally.
- The tamariki sex ratio is either similar to or below the regional average across all TAs except Waipa and Thames Coromandel where there are 109 boys for every 100 girls, and Waikato district (108:100).

2.1.3 By ethnicity

As described in Box 1, census data provides 'total response' ethnicity data. As a result, the count of responses exceeds the count of people and the sum of percentages in the ethnic profiles shown in Figure 2.1 and Figure 2.2 exceed 100 per cent. The higher the ethnic 'overcount', the greater the number of people identifying with more than one broad ethnic grouping and therefore greater the diversity and/or the overlap between ethnic groups.

Rangatahi (aged 15-24 years)

- Almost one-third (32.3 per cent) of the rangatahi population resident in the Waikato region are Māori. This is much higher than the national average of 22 per cent.
- The TAs with the highest proportion of Māori rangatahi are Waitomo (60.7 per cent), South Waikato (47.7 per cent) and Taupo (43.6 per cent).
- Rangatahi within the broad Pacific ethnic group account for around 7 per cent of the region's 15-24 year old rangatahi. This is lower than the national average of 12.1 per cent.
- The TAs with the highest proportion of Pacific rangatahi are South Waikato (17.9 per cent) and Hamilton (8.2 per cent).
- 11.1 per cent of the Waikato region's population aged 15-24 years identify within the broad Asian ethnic group, which is a lower proportion than the national average of 17.4 per cent.
- The TA with the highest proportion of Asian rangatahi is Hamilton (17.9 per cent).
- Among rangatahi, there is an ethnic overcount of 20.8 per cent in the Waikato region which is higher than that recorded nationally (17.9 per cent). The TAs with the highest ethnic

overcount are South Waikato (33.4 per cent), followed by Thames-Coromandel (27.3 per cent) and Taupo (26.2 per cent).

Tamariki (aged 0-14 years)

- Around 37.2 per cent of the tamariki in the Waikato region identify with the Māori ethnic group. This is much higher than the national average of 27 per cent.
- The TAs with the highest proportion of Māori tamariki are Waitomo (60.0 per cent), South Waikato (52.2 per cent) and Taupo (46.2 per cent).
- Tamariki identifying with the Pacific ethnic group account for 8.4 per cent of the region's 0-14 year population. This is lower than the national average of 14.1 per cent.
- The TAs with the highest proportion of Pacific tamariki are South Waikato (21.0 per cent) and Hamilton (10.8 per cent).
- Asian tamariki make up 10.9 per cent of Waikato region's child population, a lower proportion than the national average of 16.2 per cent.
- The TA with the highest proportion of Asian tamariki is Hamilton (20.2 per cent).
- There is an ethnic 'overcount' of 29.4 per cent in the Waikato region for the tamariki population which is slightly higher than that recorded nationally (26.6 per cent). The TAs with the highest ethnic overcount are South Waikato (45.2 per cent), followed by Hauraki (34.3 per cent) and Thames-Coromandel (33.4 per cent).

2.1.4 By NZ deprivation index

As described in Box 2, it should be noted that relative socioeconomic deprivation scores according to the NZDep index from the 2018 census apply to areas (SA2) and not individual people.

- Around 30.5 per cent of Waikato region's rangatahi live in areas of high socio-economic deprivation (NZDep 9 and 10). This is a higher proportion than the national average of 24.7 per cent.
- The TAs with the proportion of youth living in areas of high deprivation are South Waikato (75.5 per cent), followed by Hauraki (56.8 per cent) and Waitomo (53.4 per cent).
- Of all the rangatahi living in areas of high socio-economic deprivation, almost half live in Hamilton (48.9 per cent).
- Among the tamariki in the region, 29.7 per cent live in areas of high socio-economic deprivation (NZDep 9 & 10). This is a higher proportion than 24.7 per cent nationally.

- The TAs with the highest proportion of tamariki living in areas of high deprivation are South Waikato (73.8 per cent), followed by Hauraki (55.1 per cent) and Waitomo (51.1 per cent).
- Of all the tamariki living in areas of high socio-economic deprivation, two-fifths (40.3 per cent) live in Hamilton.

2.1.5 By birthplace (born overseas)

- Around one out of every five rangatahi living in the Waikato region was born overseas. This is lower than the national average of one out of every four (~25 per cent).
- Among the overseas-born rangatahi living in the Waikato region, approximately 40 per cent were born in Asia, and one in five were born in the Europe. The next largest group of overseas-born rangatahi were those born in the Middle East and Africa (14 per cent), followed by rangatahi born in the Pacific (~10 per cent).

Figure 2.1 Estimated resident population profile in 2021; Waikato region and New Zealand

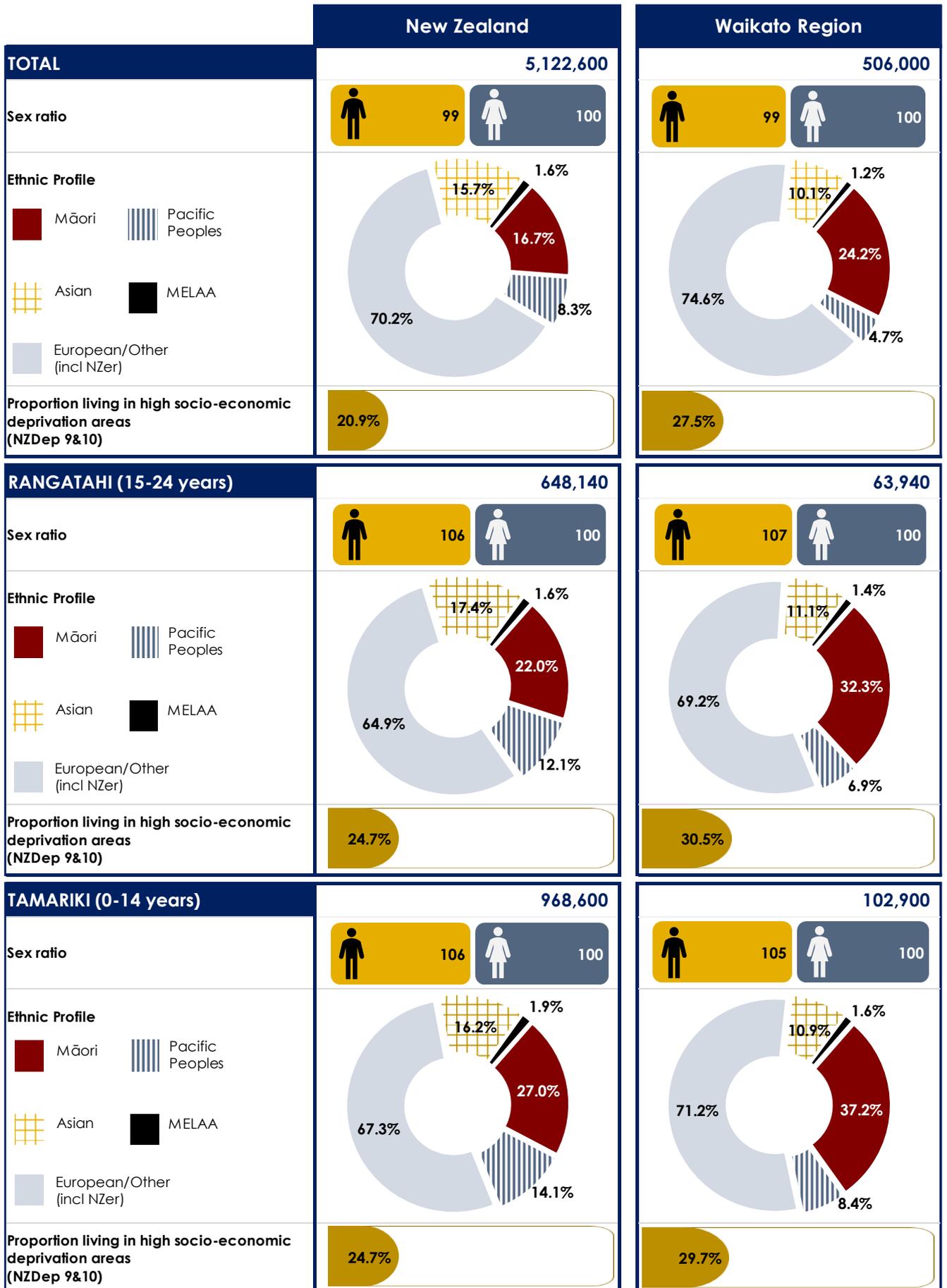


Figure 2.2 Estimated resident population profile (2021) of TAs within Waikato region boundary

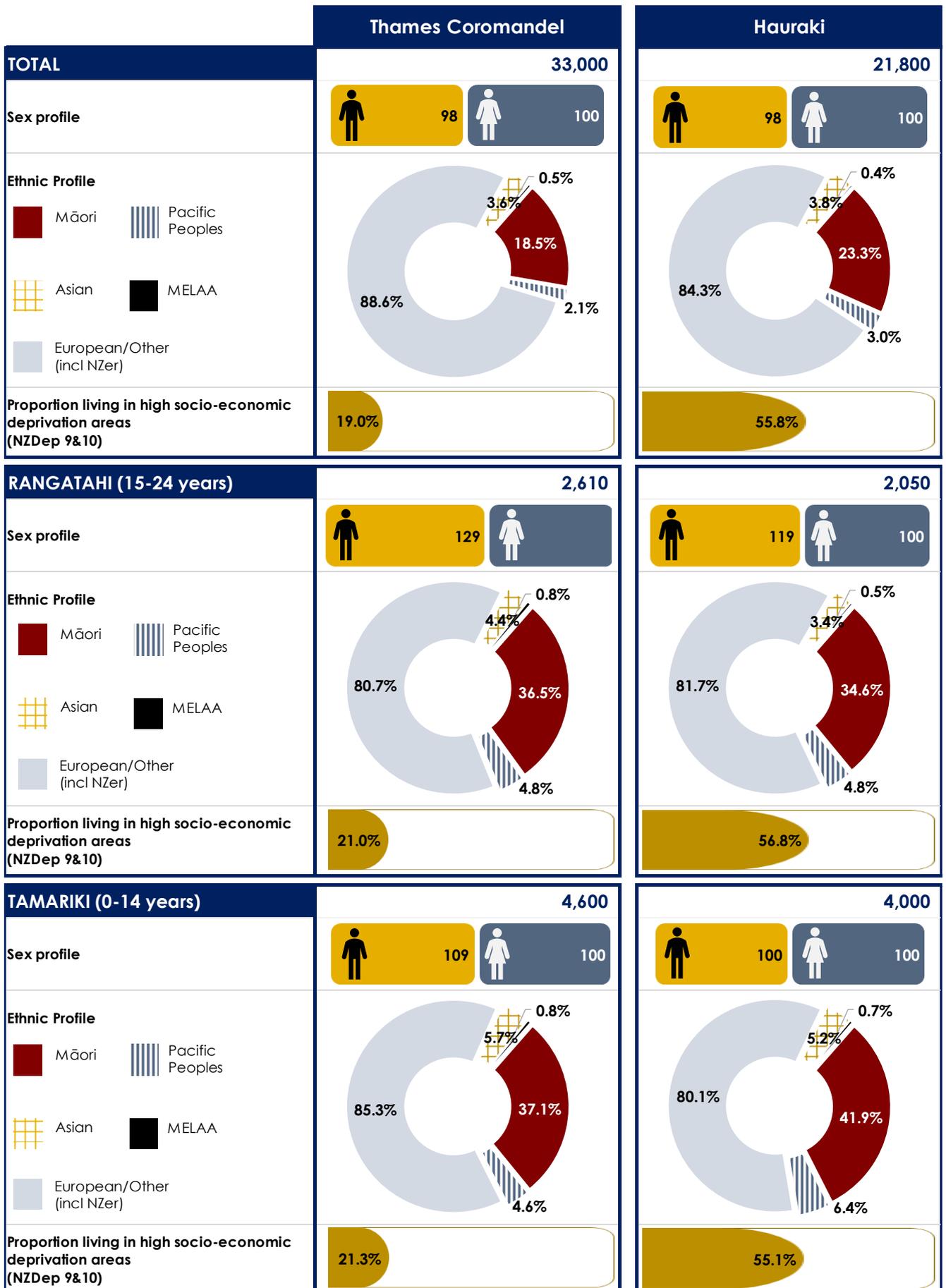


Figure 2.2 (contd.) Estimated resident population profile (2021) of TAs within Waikato region boundary

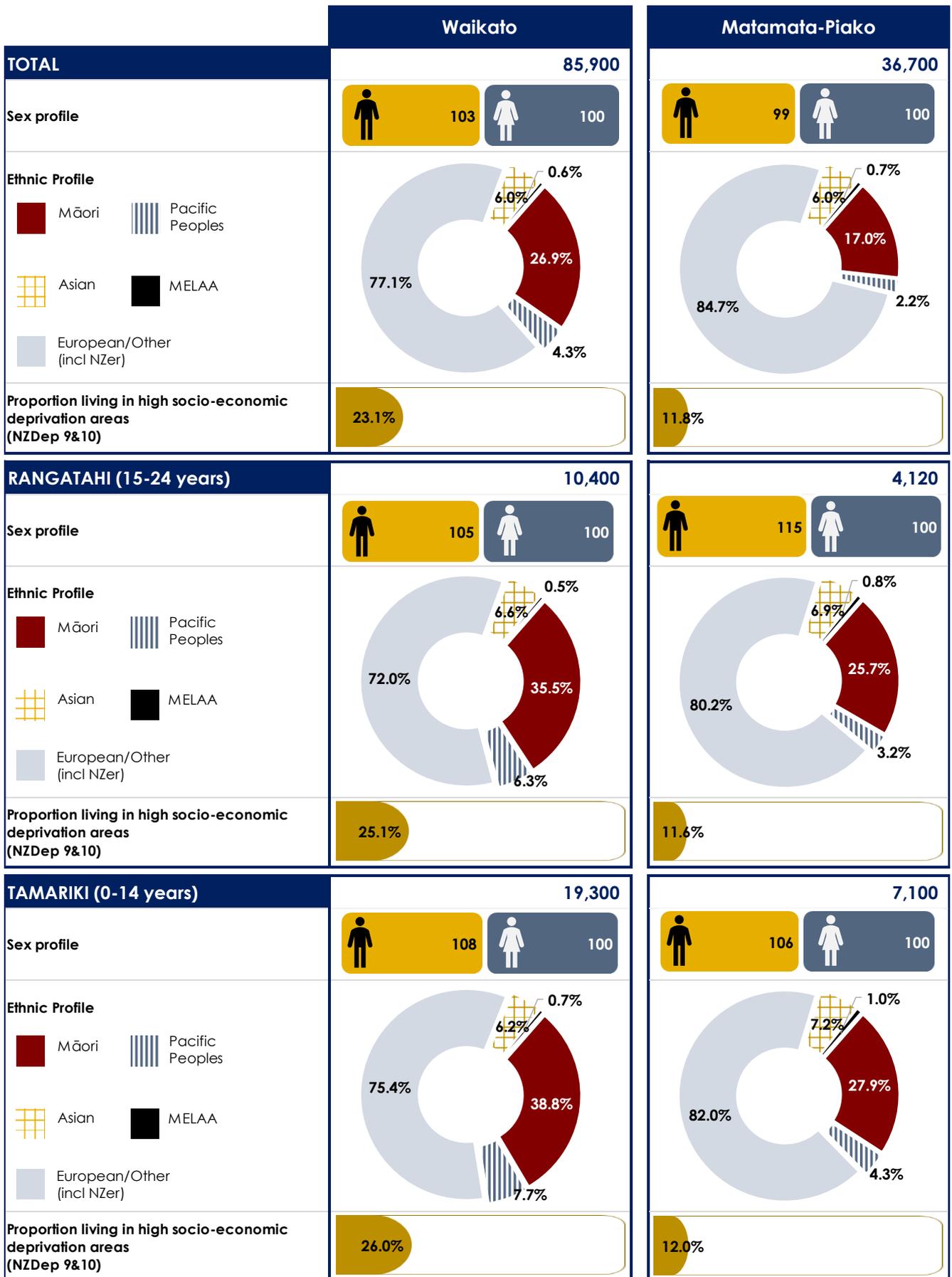


Figure 2.2 (contd.) Estimated resident population profile (2021) of TAs within Waikato region boundary

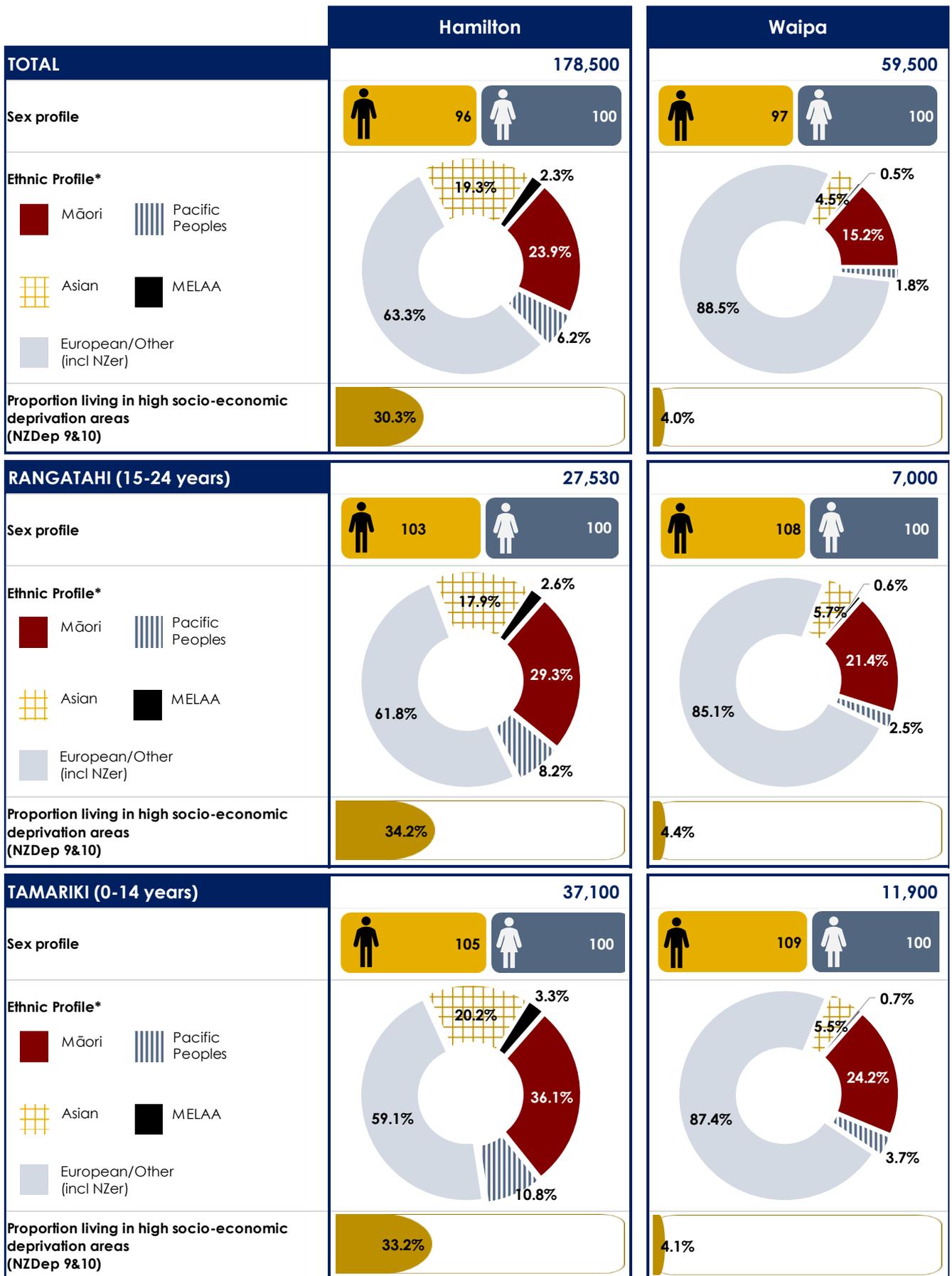


Figure 2.2 (contd.) Estimated resident population profile (2021) of TAs within Waikato region boundary

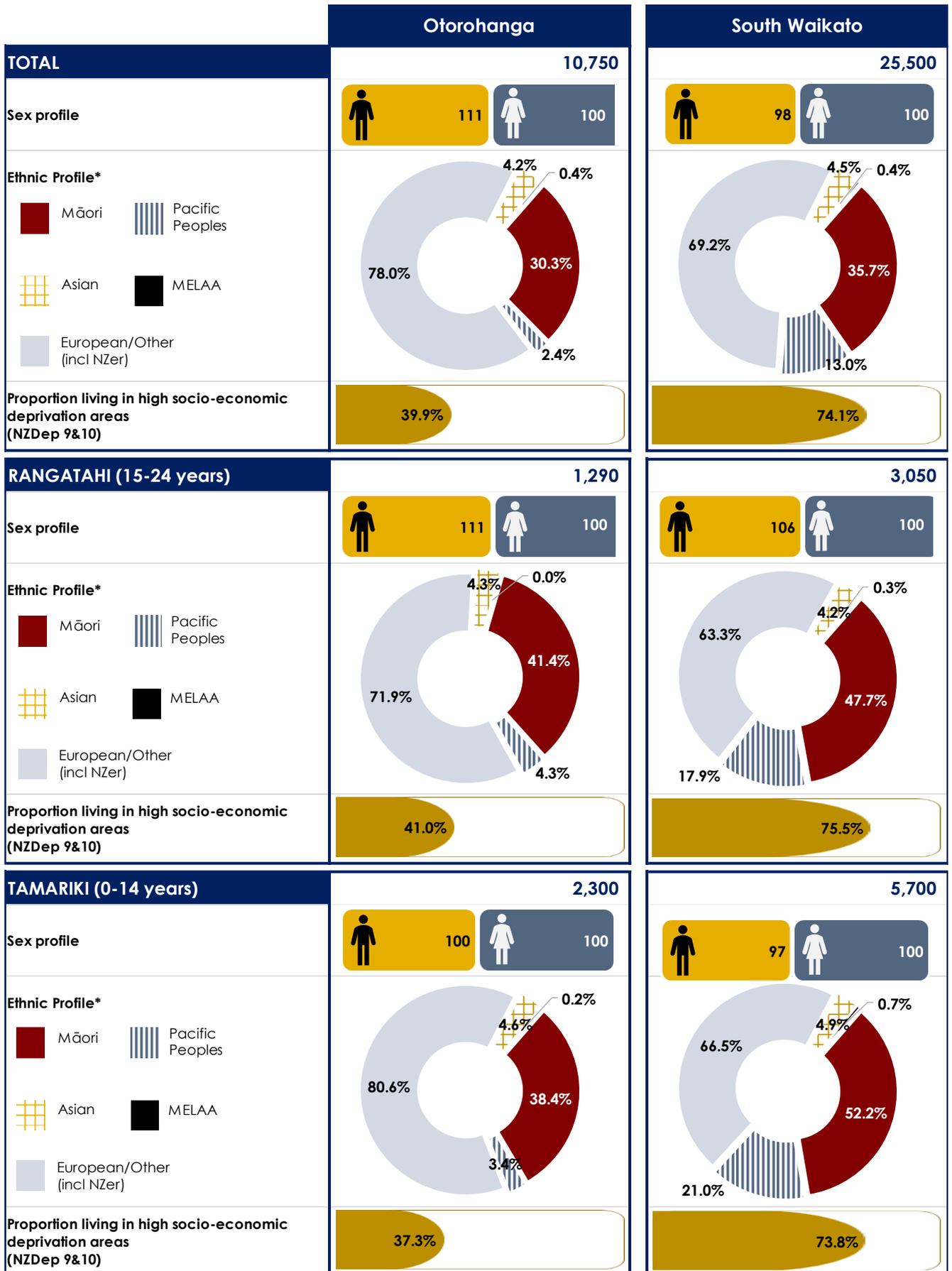


Figure 2.2 (contd.) Estimated resident population profile (2021) of TAs within Waikato region boundary

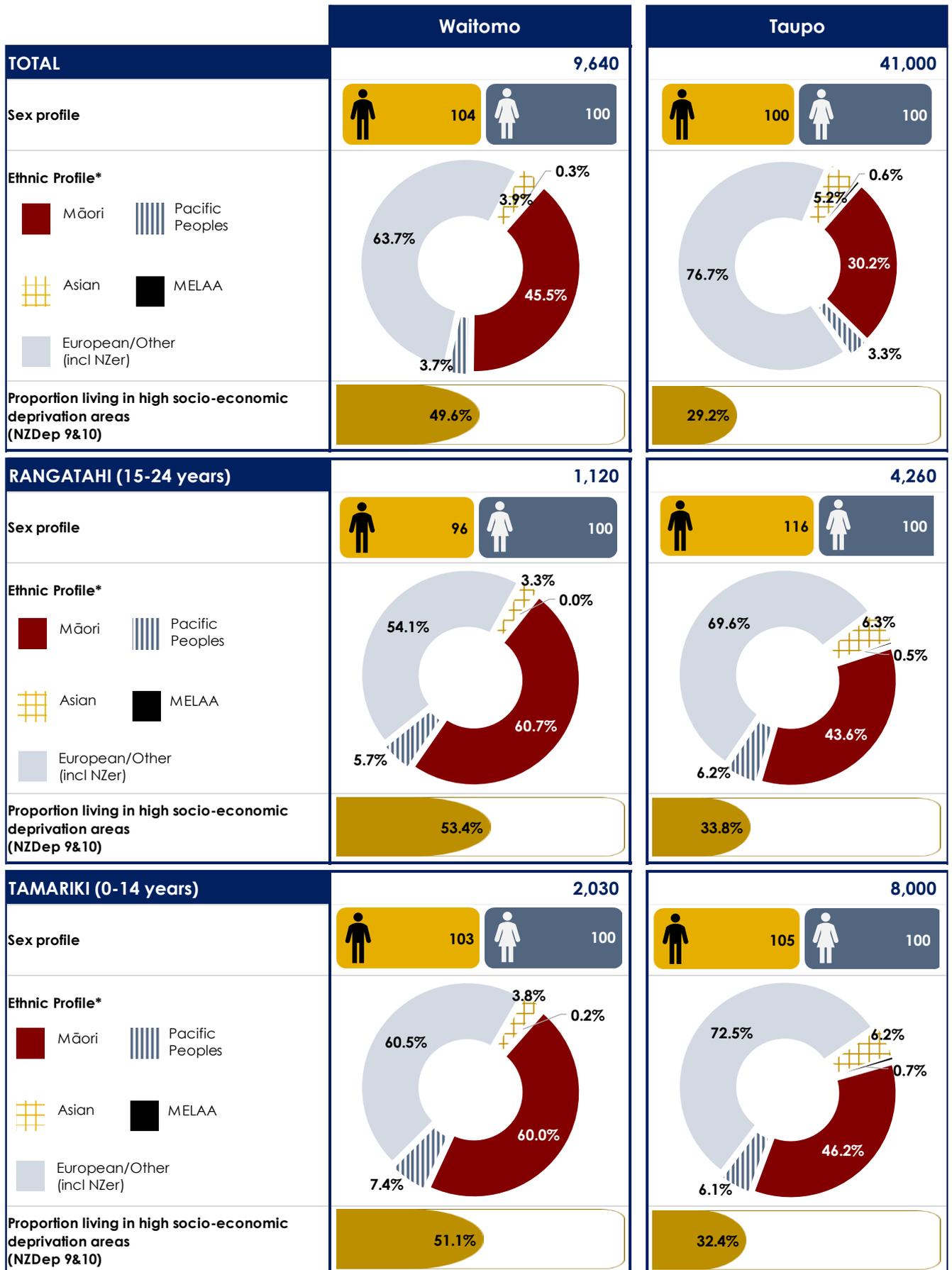


Figure 2.3 Distribution of total resident rangatahi and tamariki population across the Waikato region

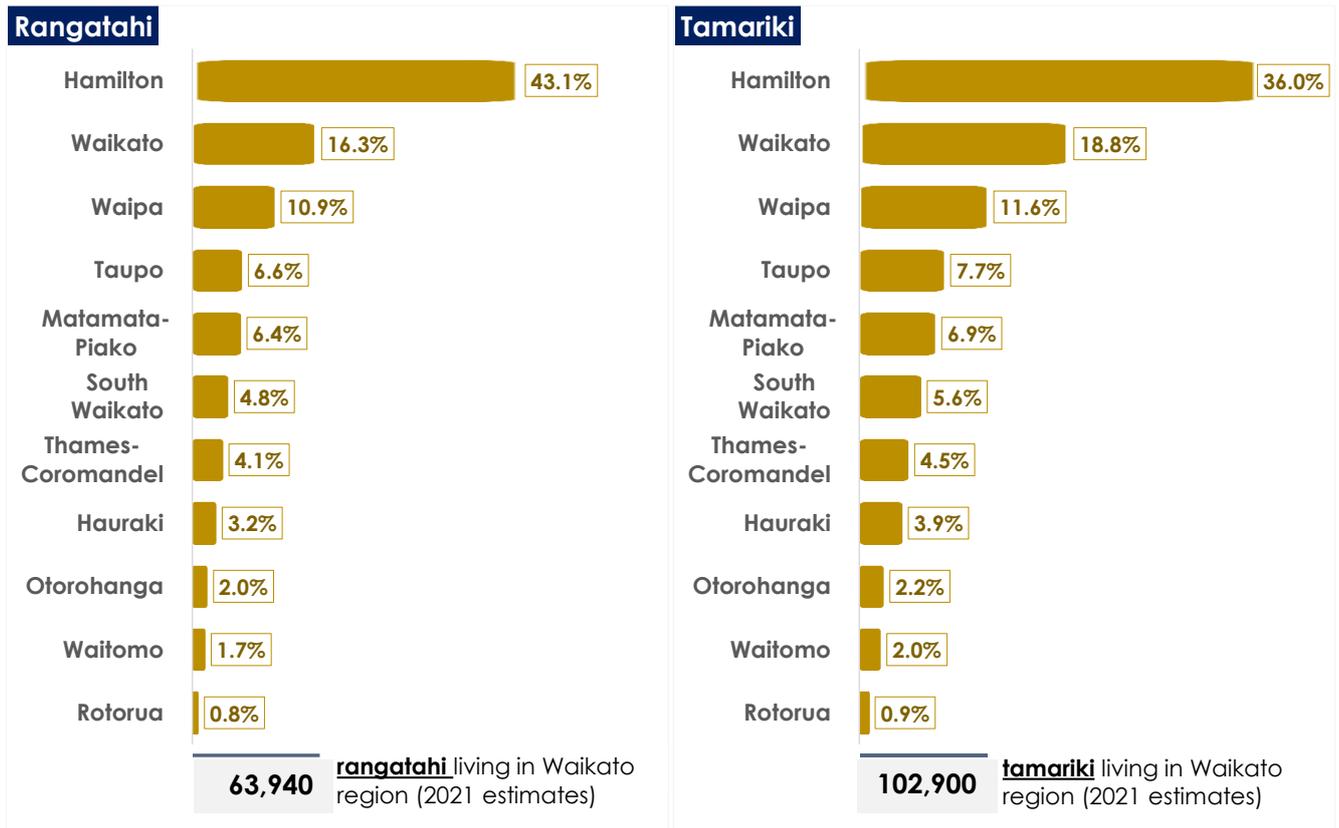


Figure 2.4 Distribution of rangatahi and tamariki population living in high socio-economic deprivation areas (NZDep 9&10) across the Waikato region

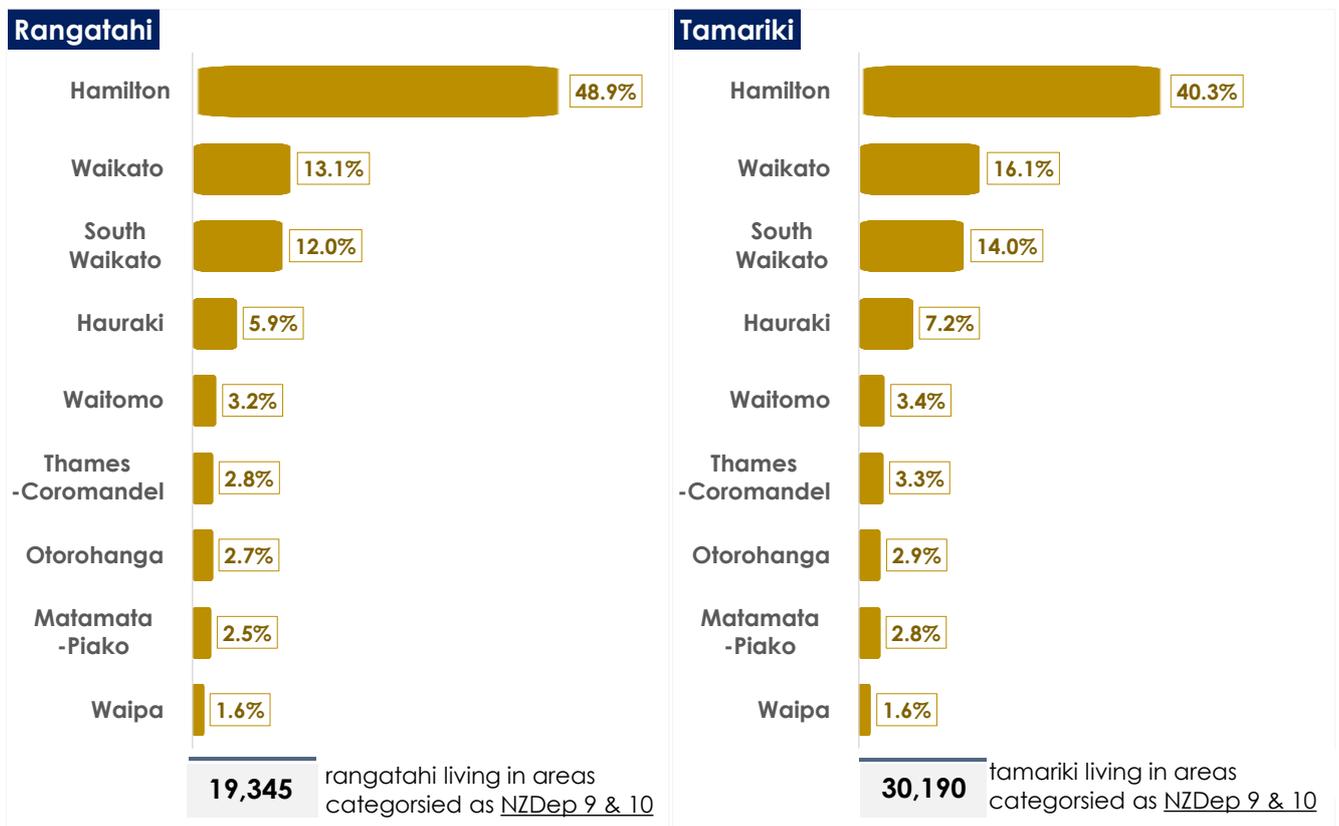


Figure 2.5 Proportion of rangatahi in the Waikato region born overseas disaggregated by TA of residence (based on 2018 Census data)

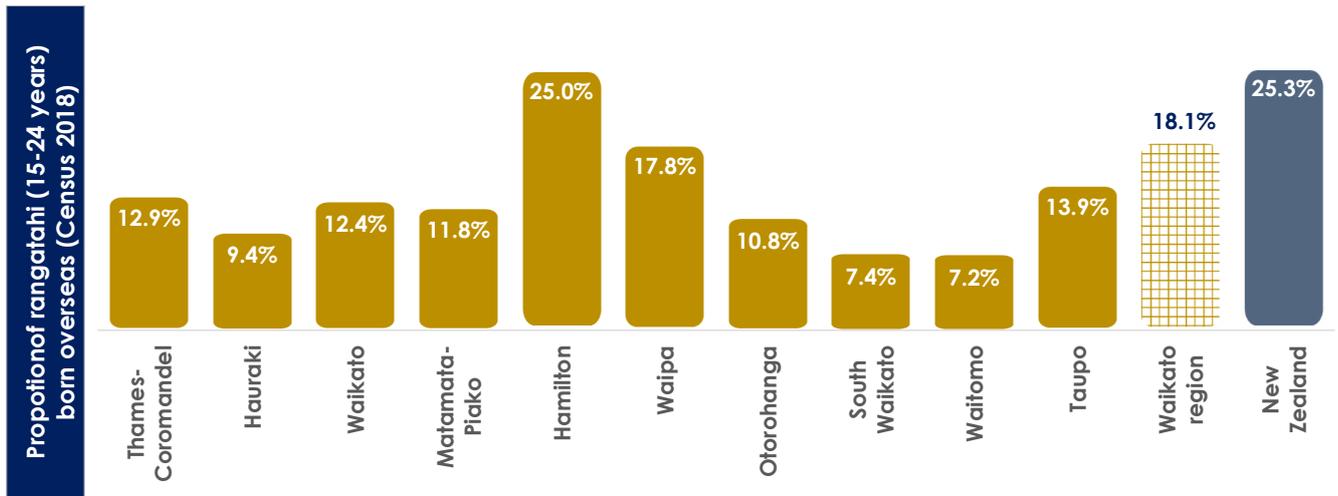
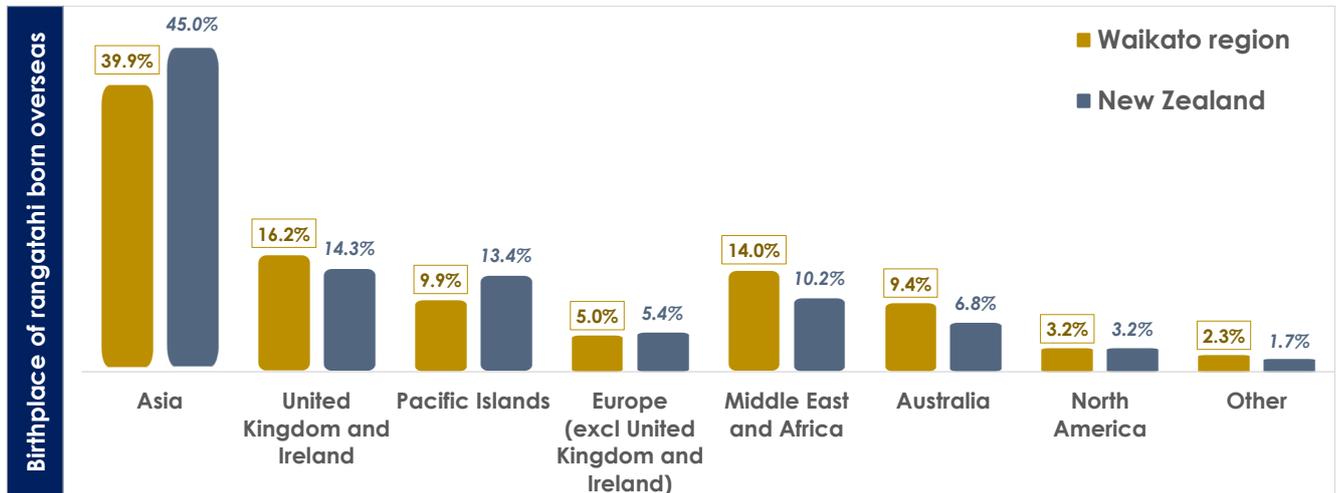


Figure 2.6 Distribution of overseas born rangatahi by birthplace (based on 2018 Census data)



3.1 Projected changes

This section provides detail on the projected rangatahi and tamariki population of the Waikato region in 2028 and 2038. As noted earlier, population projections are not forecasts but are estimations of what the situation will be if the assumptions on which they are based prevail.

3.1.1 Overall projections by geographical region

From the 2018 census base, and under the medium series assumptions, the total population of the Waikato region is likely to increase by 5.9 per cent over the 2021-2028 period (506,000 to 535,900 residents) and by another 8.1 per cent over the subsequent ten-year period, 2028-2038 (to 579,300 residents by 2038). This equates to an overall increase of 16.6 per cent over the 2020 – 2038 period, similar to the 14.5 percent increase expected nationally. Refer to Appendix Table 3 and Appendix Figure 2 for the total projected population of the region and percentage change estimated over the 2021-2028 and 2021-2038 periods. Appendix Table 4 shows the projected population of tamariki and rangatahi in the region disaggregated by SA2 of residence.

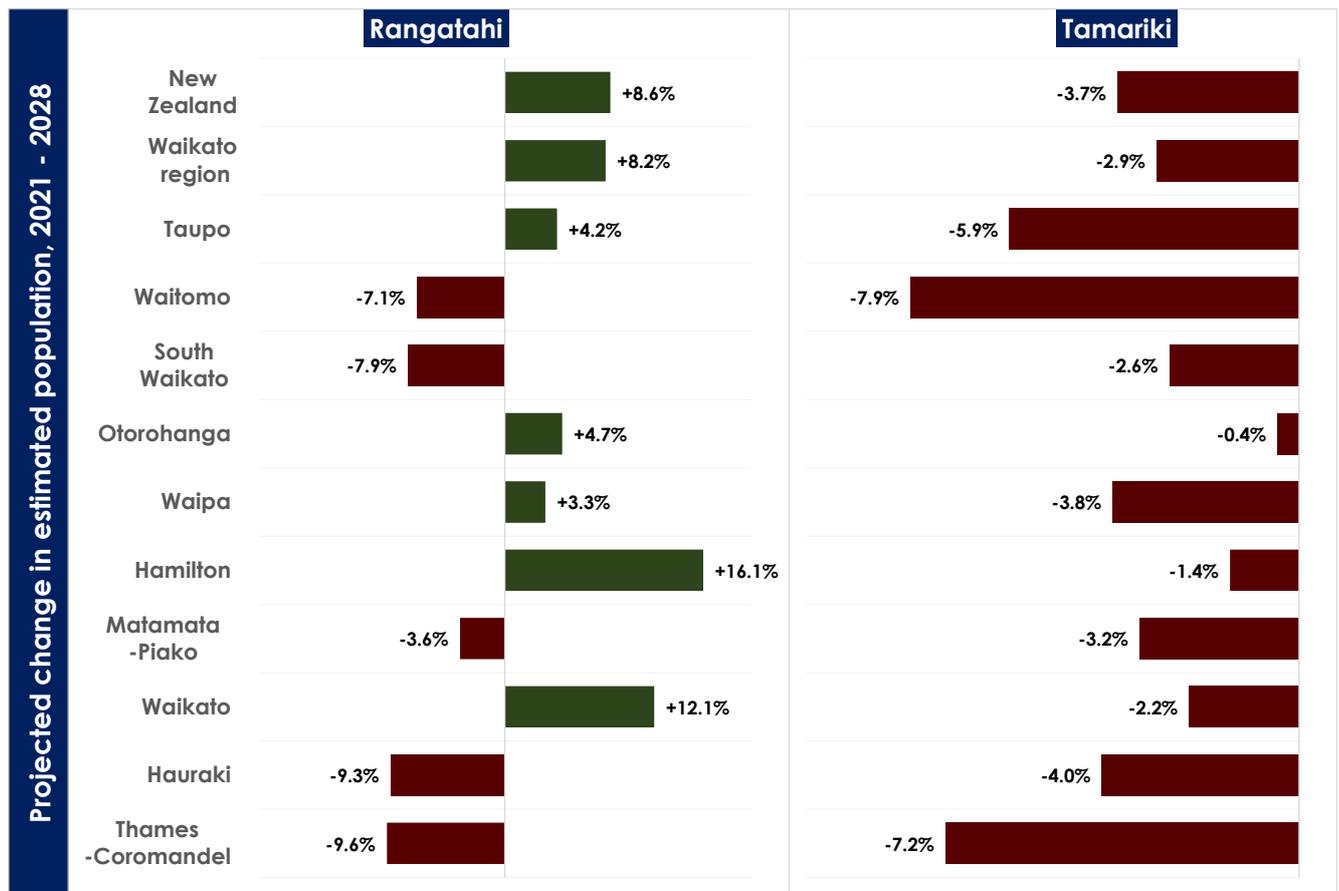
The change in the rangatahi and tamariki population in the region is not uniformly distributed across its constituent TAs and SA2s. Figure 3.1 and Figure 3.2 show the percentage change projected in the population of rangatahi (15-24 years) and tamariki (0-14 years) over the 2021-2028 and 2021-2038 periods respectively, disaggregated by TA of residence (with red bars showing decline and green bars an increase in population numbers).

Rangatahi:

The population of 15-24 year olds in the Waikato region is projected to increase by around 10.0 per cent over the 2021-2038 period (a projected addition of 6,410 rangatahi by 2038), with the majority of this overall increase likely to occur in the earlier 2021-2028 period. However, this increase is unevenly distributed across the region, with proportion of rangatahi likely to decline in five of the ten TAs. Almost all the projected increase in rangatahi is concentrated in Hamilton city (additional 5,630 rangatahi by 2038) and the Waikato district (additional 1830 rangatahi by 2038). The rangatahi population is projected to decline in Waitomo, South Waikato, Thames-Coromandel, Hauraki and Matamata-Piako.

Refer to Appendix Table 3 and Appendix Table 4 for the projected population counts for the total, rangatahi and tamariki populations of Waikato Region and its constituent TAs and SA2s in 2028 and 2038.

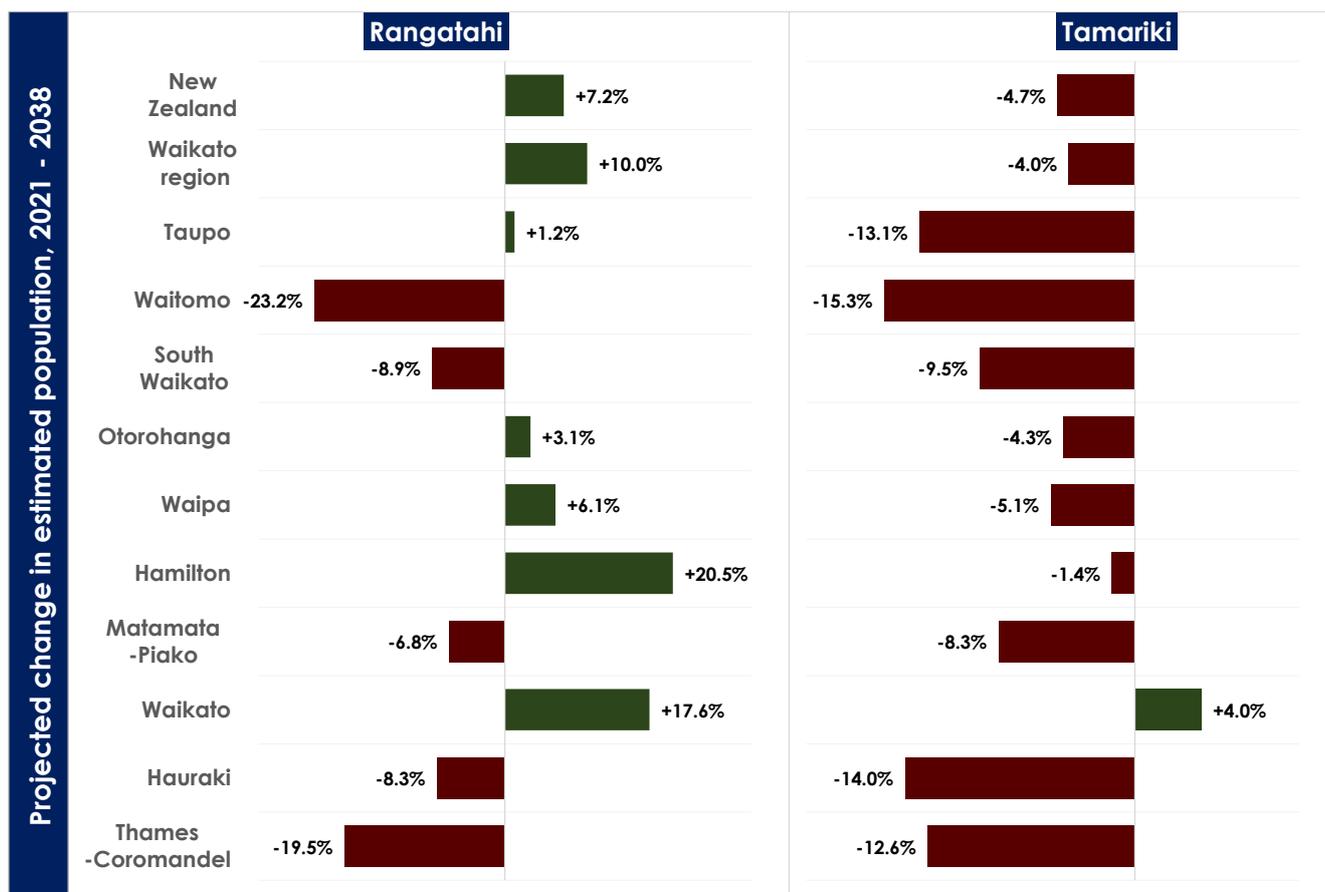
Figure 3.1 Projected change over 2021-2028 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (2018 census based medium series sub-national projections)



Tamariki:

The population of 0-14 year olds in the Waikato region is projected to decline by around 4 per cent over the 2021-2038 period (4,160 fewer tamariki by 2038). All TAs across the region except Waikato district are likely to see a decline in the tamariki population. In the Waikato district there is likely to be an increase of around 4.0 per cent in the population of children aged 0-14 years over the 2021-2038 period.

Figure 3.2 Projected change over 2021-2038 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (2018 census based medium series sub-national projections)



3.1.2 National population projections by ethnic group

In order to accurately understand the ethnic profile of populations, it is important to also understand the complexity of ethnicity data outputs and the context of ethnic identification, particularly in Aotearoa New Zealand, as described in Box 1. Projecting populations based on ethnic identification, and understanding the limitations and interpretation of such projections is also important. For example, many such projections involve a high degree of rounding of numbers, and, for some groups, low reliability of data by age because of small cell sizes. The following projections have many such limitations and therefore should be read as indicative only.

Figure 3.3 shows the projected change in the population of rangatahi of each major ethnic group across New Zealand based on the most up to date 2018 census based national ethnic medium series projections analysis¹³. The corresponding projections for tamariki is shown in Figure 3.4.

¹³ Only the national 2018 census based ethnic population projections by age and sex were available. The 2018 census based sub-national ethnic population projections by age and sex are expected to be released by Stats NZ in March 2022.

Rangatahi:

Māori, Pacific and Asian rangatahi are projected to experience a substantial increase in their population numbers nationally over the 2018-2038 period, while the European/Other rangatahi group is expected to decrease. The biggest projected increase is for the MELAA group¹⁴ followed by Indian, Chinese and Asian. The population of Māori rangatahi is expected to increase by around 23 per cent by 2038 nationally, while rangatahi identifying within the Pacific (and particularly Samoan) groups are likely to increase by around 26.0 per cent over this period as per the national medium series ethnic projections. On the other hand, the population of rangatahi identifying with the European/Other group is likely to experience a small decline nationally over the 2020-2038 period.

Tamariki:

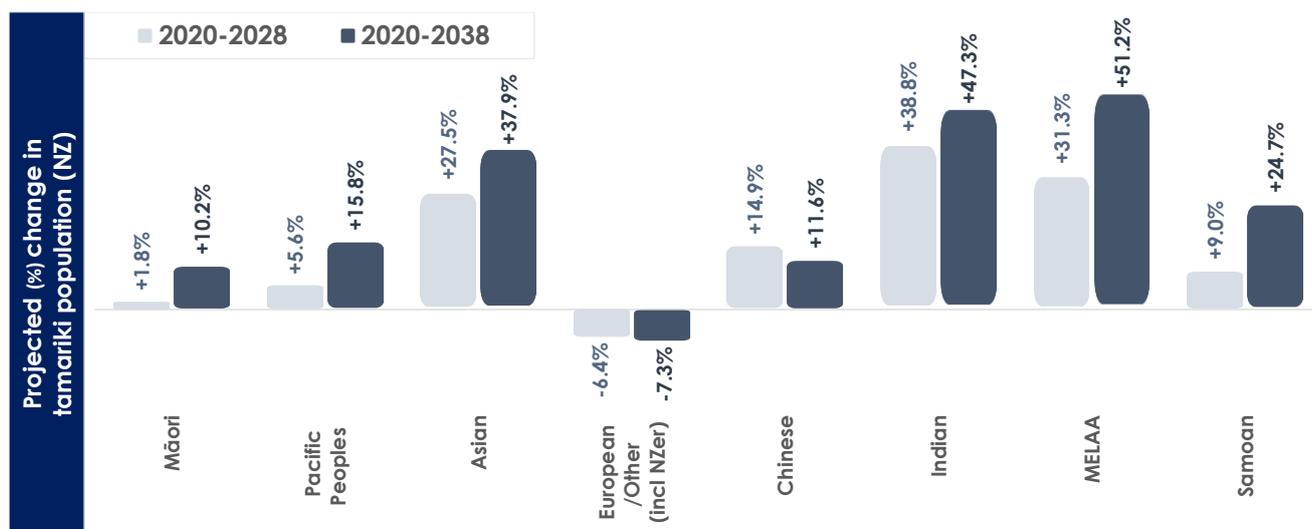
The national projections for tamariki follow a similar pattern to that seen with rangatahi, with increases estimated for the Māori, Pacific, Asian, MELAA¹¹ and Indian groups. The population of Māori and Chinese tamariki is projected to increase by a more modest 10-12 per cent compared to Samoan (+26.0 per cent) and Pacific (+16.0 per cent). The population of children identifying with the European/Other group is likely to decline over the 2020-2038 period.

Figure 3.3 Projected change (%) in the population of rangatahi across New Zealand (2018 census based medium series national ethnic projections)



¹⁴ The population of rangatahi identifying with the MELAA ethnic group is relatively small and therefore projections for this ethnic and age group need to be viewed as indicative only.

Figure 3.4 Projected change (%) in the population of tamariki across New Zealand (2018 census based medium series national ethnic projections)



As the projected population change/growth rates differ substantially among the major ethnic groups as noted above, the ethnic composition of New Zealand will also change over time, with Māori, Pacific and Asian rangatahi and tamariki making up a higher proportion of the population in their respective age groups.

3.1.3 Waikato region population projections by ethnic group

Due to the unavailability of more recently updated 2018 Census based sub-national ethnic projections at the time of writing with report, the projected change in the ethnic profile of rangatahi and tamariki in the Waikato region over the 2018-2038 period is presented in Figure 3.5 and Figure 3.6 using the 2013 Census based sub-national ethnic medium series projections. Although these projections are less timely, they are indicative of the changes likely to occur in the ethnic compositional structure of the population of interest over the coming years and they lack the challenges of the 2018 Census response rate (see Box 1).

Differing growth rates among the ethnic groups result in a noticeable change in the ethnic composition of rangatahi across the Waikato region in these projections, as seen in Figure 3.5. By 2038, 40% of rangatahi in the Waikato region are likely to be Māori. All ethnic groups except the European/Other are set to increase within the region over time. As a result, by 2038, 15-24-year-olds identifying with the European/Other group will likely make up a smaller proportion of the total rangatahi population of the region compared to 2018. The ethnic overcount is also likely to increase from around 17 per cent in 2018 to 37 per cent by 2038 indicating growing diversity and overlap between the ethnic groups.

This ethnic compositional change is even more pronounced for the tamariki population in the region. The proportion of children identifying with the Māori, Pacific and Asian ethnic groups is projected to increase noticeably. The ethnic overcount projected for tamariki increases from 30 per cent in 2018 to 46 per cent by 2038.

These changes in the ethnic composition of the rangatahi and tamariki population groups is mirrored across all constituent TA areas as seen in Appendix Figure 4.

Figure 3.5 Changing ethnic composition of the rangatahi population in Waikato region (2013 census based medium series sub-national ethnic projections)

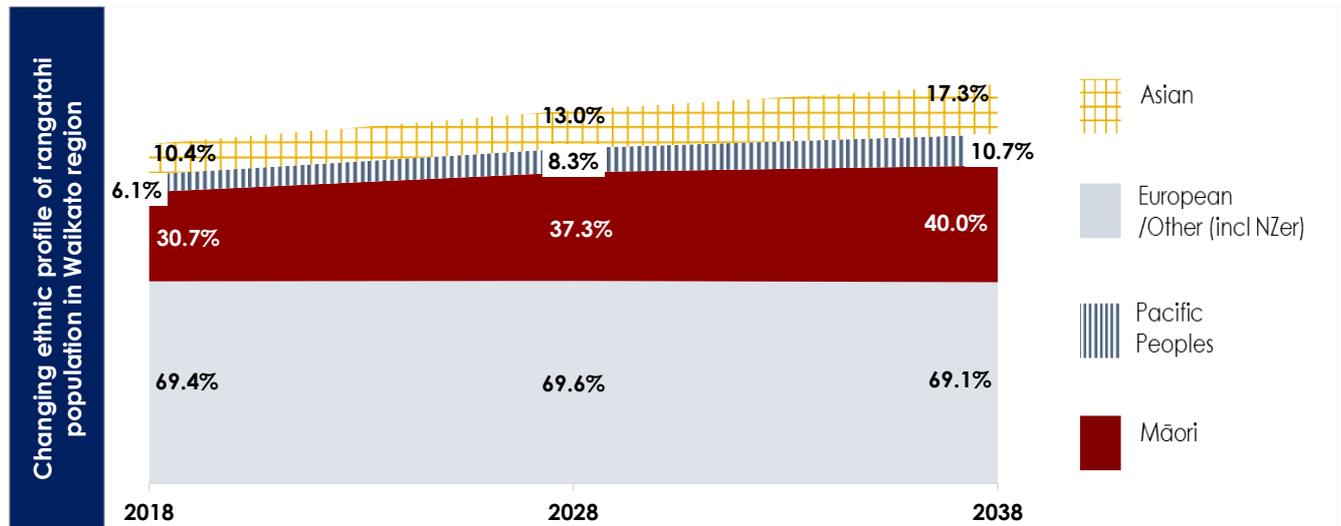
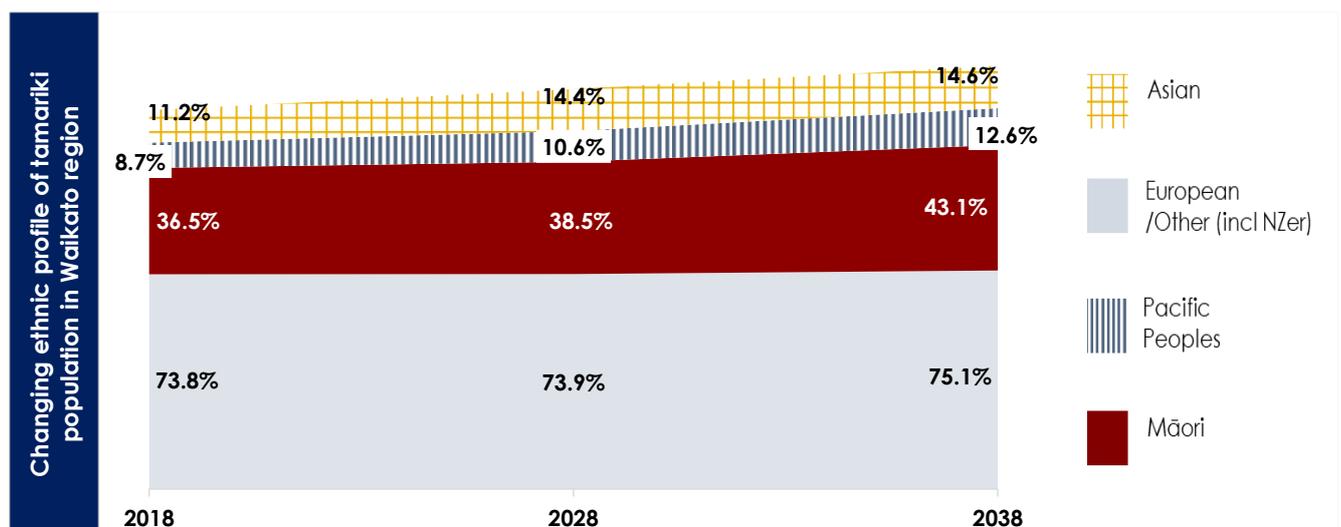


Figure 3.6 Changing ethnic composition of the tamariki population in Waikato region (2013 census based medium series sub-national ethnic projections)



4.1 Population estimates based on customised Waikato projections

This section uses the customised population projections output provided by University of Waikato to the Waikato Regional Council as a part of the Waikato projections project¹⁵ to look at the current and projected population of rangatahi and tamariki in the Waikato region and its constituent TAs.¹⁶ The data output resulting from the medium series projection scenario has been used. The population data disaggregated by age are not available at the SA2 level and therefore this section presents the population projections for rangatahi and tamariki only at the TA level.

Table 4.1 gives the estimated and projected population of Waikato region and its constituent TAs and Figures 4.1 and 4.2 show the estimated percentage change (2021-2028 and 2021-2038) in rangatahi and tamariki population groups based on these customised medium series projections.

Table 4.1 Estimated and projected population of rangatahi and tamariki resident in Waikato region disaggregated by TA area (customised medium series projections)

	Total population			Rangatahi population			Tamariki population		
	2021	2028	2038	2021	2028	2038	2021	2028	2038
Thames-Coromandel	31,326	31,382	31,572	2,231	2,131	1,758	4,476	3,627	2,736
Hauraki	21,178	21,505	22,077	1,886	1,854	1,963	3,939	3,614	3,021
Waikato	83,384	90,638	99,298	9,545	10,921	11,942	19,149	19,319	18,822
Matamata-Piako	36,391	37,569	39,330	4,130	4,078	3,700	6,990	6,504	6,203
Hamilton	179,456	195,445	216,116	28,637	30,649	32,088	36,995	36,634	35,739
Waipa	57,676	61,225	65,610	6,697	6,855	6,874	11,571	11,276	10,957
Otorohanga	10,841	11,211	11,900	1,293	1,546	1,493	2,403	2,173	2,181
South Waikato	25,068	24,772	25,086	3,131	3,357	3,281	5,708	5,296	5,118
Waitomo	9,592	9,386	9,338	1,136	1,146	1,074	2,067	1,880	1,735
Taupo	39,513	40,352	41,543	4,355	4,691	4,145	7,688	6,901	6,520
Waikato region	498,337	527,481	566,034	63,566	67,782	68,826	101,822	98,011	93,833

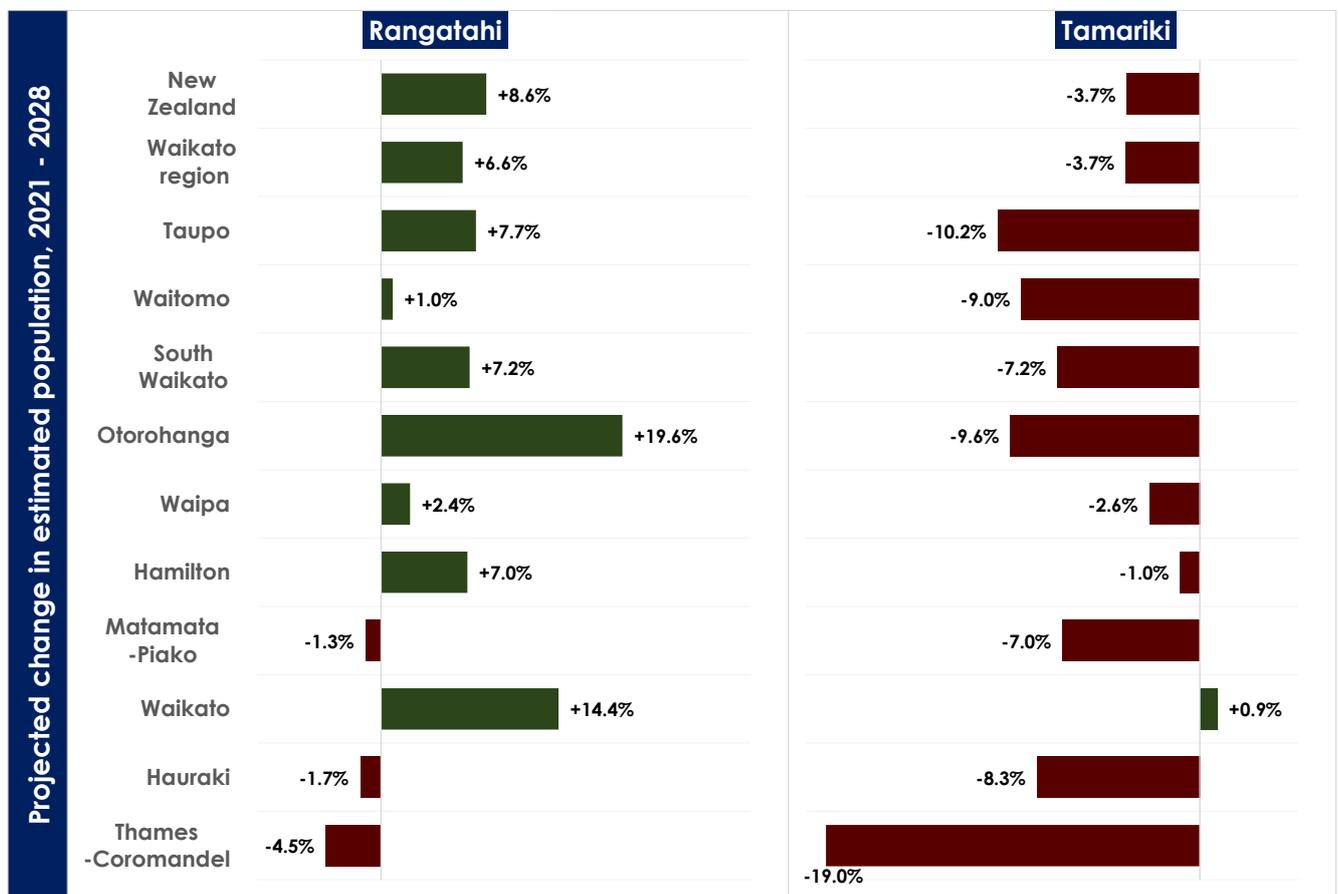
¹⁵ <http://www.creatingfutures.org.nz/waikato-projections-demographic-and-economic/2018-projections-outputs/>

¹⁶ The Waikato demographic, economic and land use projections include three scenarios (low; medium; high) to a projection horizon of 2068. The methodology and assumptions that are employed are substantially different from those adopted for official Statistics New Zealand (SNZ) projections (Cameron and Cochrane 2021, www.waikatoregion.govt.nz/assets/WRC/WRC-2019/TR202122.pdf), using a bottom-up approach and including local knowledge of council planners for small scale projections (SA2 level) based on land use projections developed by the WISE model (Fenton et al, 2021, <https://www.waikatoregion.govt.nz/assets/WRC/TR202131.pdf>).

Rangatahi:

The population of 15-24 year olds in the Waikato region is projected to increase by around 8.0 per cent over the 2021-2038 period (a projected addition of 5,260 rangatahi by 2038), with the majority of this overall increase likely to occur in the earlier 2021-2028 period. However, this increase is unevenly distributed across the region, with proportion of rangatahi likely to decline in four of the ten TAs. Most of the projected increase in rangatahi is concentrated in the Waikato district (additional 2,400 rangatahi by 2038) and Hamilton city (additional 3,450 rangatahi by 2038). By 2038 the rangatahi population is projected to decline in Thames-Coromandel, Matamata-Piako, Waitomo and Taupo.

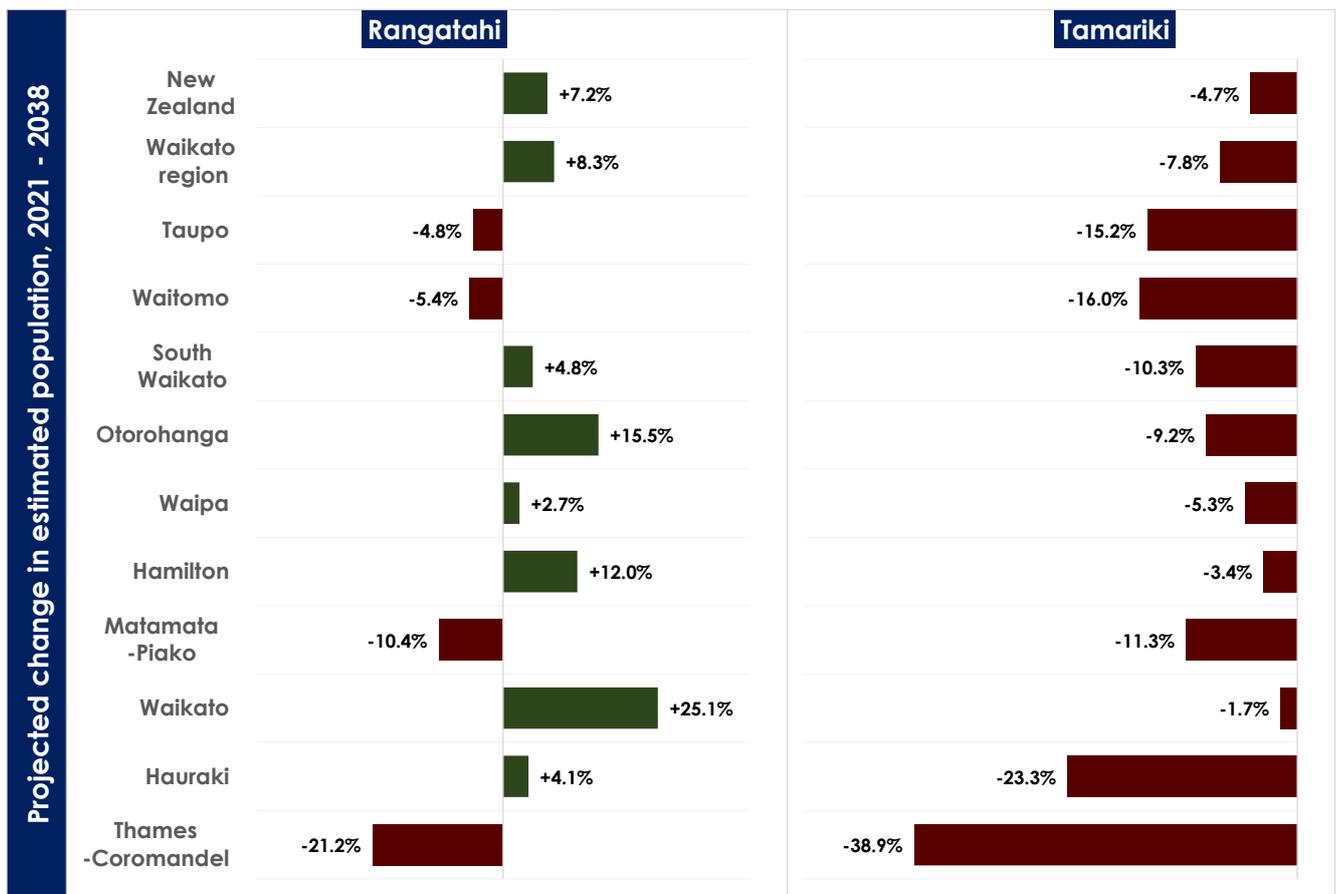
Figure 4.1 Projected change over 2021-2028 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (customised medium series projections)

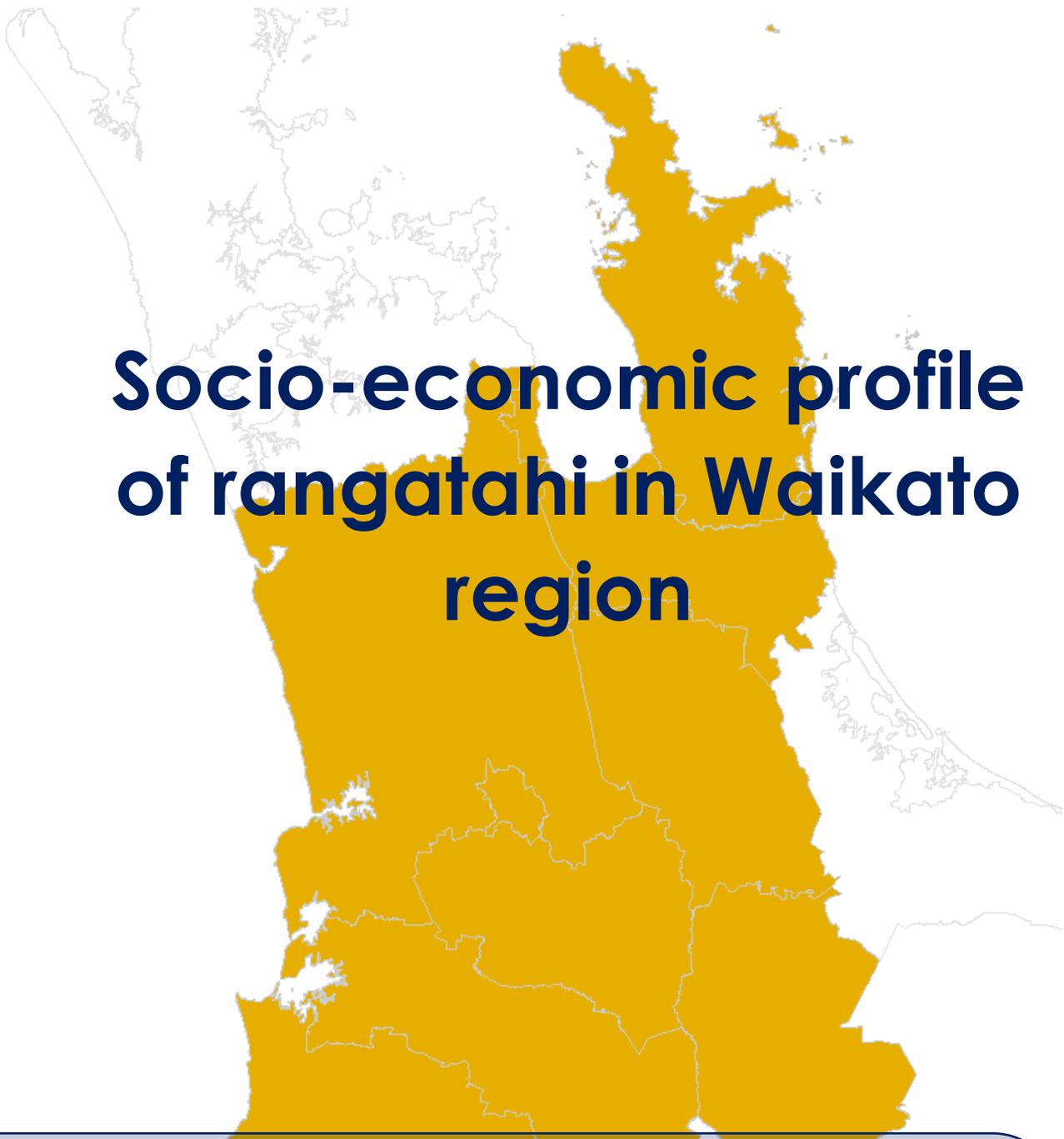


Tamariki:

The population of 0-14 year olds in the Waikato region is projected to decline by around 8 per cent over the 2021-2038 period (about 8,000 fewer tamariki by 2038). All TAs across the region are likely to see a decline in the tamariki population with the most decline in the population of children aged 0-14 years expected in Thames-Coromandel, Hauraki, Waitomo and Taupo.

Figure 4.2 Projected change over 2021 -2038 in the population of rangatahi and tamariki living in the Waikato region and its constituent TAs (customised medium series projections)





Socio-economic profile of rangatahi in Waikato region

Understanding the social and economic determinants of wellbeing for youth is critical for supporting rangatahi outcomes as well as for the provision of a strong foundation for future improvements in outcomes for the entire population. Important inequities in wellbeing are faced by Māori and Pacific children and youth, and by those who experience socio-economic disadvantage. This section provides indicator statistics of some of these socio-economic determinants (selected according to data availability and quality) for rangatahi in the Waikato region, disaggregated where possible by sex, ethnic group and TA of residence, and compared to relevant national data.

5.1 School leaver qualifications

Education is fundamental for promoting wellbeing of tamariki, rangatahi, and adults through pathways such as improved health, access to income and job security, and potential financial stability, housing and community engagement. Prior to the economic restructuring of the late 1980s, it was still possible to hold jobs that paid relatively well, but which did not require formal qualifications for entry (e.g., in the agriculture and forestry industries). Now, it is increasingly difficult to obtain secure, well-paying employment without some sort of formal qualification. With more New Zealanders opting for a tertiary education, either out of high school or as adult students, employers are increasingly looking to hire qualified workers, even in jobs that previously required little training. Looking at the education profile of rangatahi can provide a general sense of how well they are positioned to take advantage of expanding opportunities afforded through structural ageing, or to withstand economic shocks such as recessions.

Upper secondary school qualifications serve as the foundation for higher (post-secondary) learning and training opportunities, as well as the preparation for direct entry into the labour market. This section looks at the NCEA¹⁷ qualifications of rangatahi leaving school in a given year extracted from the Data Counts portal of the Ministry of Education. The data are disaggregated by sex, ethnic group¹⁸ and deprivation decile where possible. School deciles are similar to the NZDep measure described in Box 2, and they indicate the extent to which a school draws their students from lower socio-economic communities, relative to other schools throughout the country¹⁹. Schools that draw their roll from communities that experience greater disadvantage are given greater funding to combat these barriers.

Figure 5.1 to Figure 5.3 show NCEA level qualifications of school leavers in a given school year (2018, 2019 and 2020) disaggregated by sex, ethnic group and TA of residence. Appendix Figure 5 shows these data disaggregated by school decile for New Zealand as a whole (regional data disaggregated by decile are not published). Figure 5.4 shows the distribution of the year 2020 school leavers by highest qualification/attainment disaggregated by sex, ethnic group and TA of residence.

¹⁷ New Zealand's National Certificates of Educational Achievement (NCEA) are national qualifications for senior secondary school students.

¹⁸ Total response ethnicity has been used for school leavers. As described in Box 1, total response ethnicity is when people who have been identified in more than one ethnic group have been counted in each ethnic group. For the New Zealand total, individuals are counted only once.

¹⁹ Decile 1 schools are the 10% of schools with the greatest proportion of students from the most socio-economically deprived areas. Decile 10 schools are the 10% of schools with the greatest proportion of students from the least socio-economically deprived areas.

Overall achievement

- The proportion of school leavers in 2020 with NCEA qualifications was slightly lower in the Waikato region compared to the national average. This difference was more pronounced for school leavers with NCEA Level 3 or University Entrant award (UE) qualifications – just over half (50.1 per cent) of school leavers in the Waikato region had gained NCEA Level 3 or UE qualifications compared to 59 percent nationally. Around 12 per cent of the 2020 school leavers in the region left with no qualifications which is similar to the national average.

Sex

- Male students are more likely than female students to leave school with no or lower qualifications – 13 per cent of males in the Waikato region left school in 2020 with no qualifications compared to 10 per cent of females.
- Only 44 per cent of male school leavers had a NCEA Level 3/UE qualification compared to 59 per cent of females.
- This disparity is less pronounced among students leaving school in 2020 with at least NCEA Level 2 qualifications – 76.0 per cent for males compared to 82 per cent for females.

Ethnic group

- Māori and Pacific students leave school less qualified than non-Māori and non-Pacific students. One in five (22 per cent) Māori and 13 per cent of Pacific students in the Waikato region left school in 2020 with no qualifications compared to 4 per cent of Asian and approximately 10% of European, MELAA and Others.
- Only 37 per cent of Māori and 47 per cent of Pacific students leaving school in 2020 gained a NCEA Level 3/UE qualification compared to 76 per cent of Asian and 54 per cent Europeans/Other students.
- Two out of every three (67 per cent) Māori students and three out of every four (74 per cent) Pacific students who left school in 2020 had at least NCEA Level 2 qualification(s), compared to 95 per cent of Asian and 83 per cent of European students.

School decile (see Appendix Figure 5)

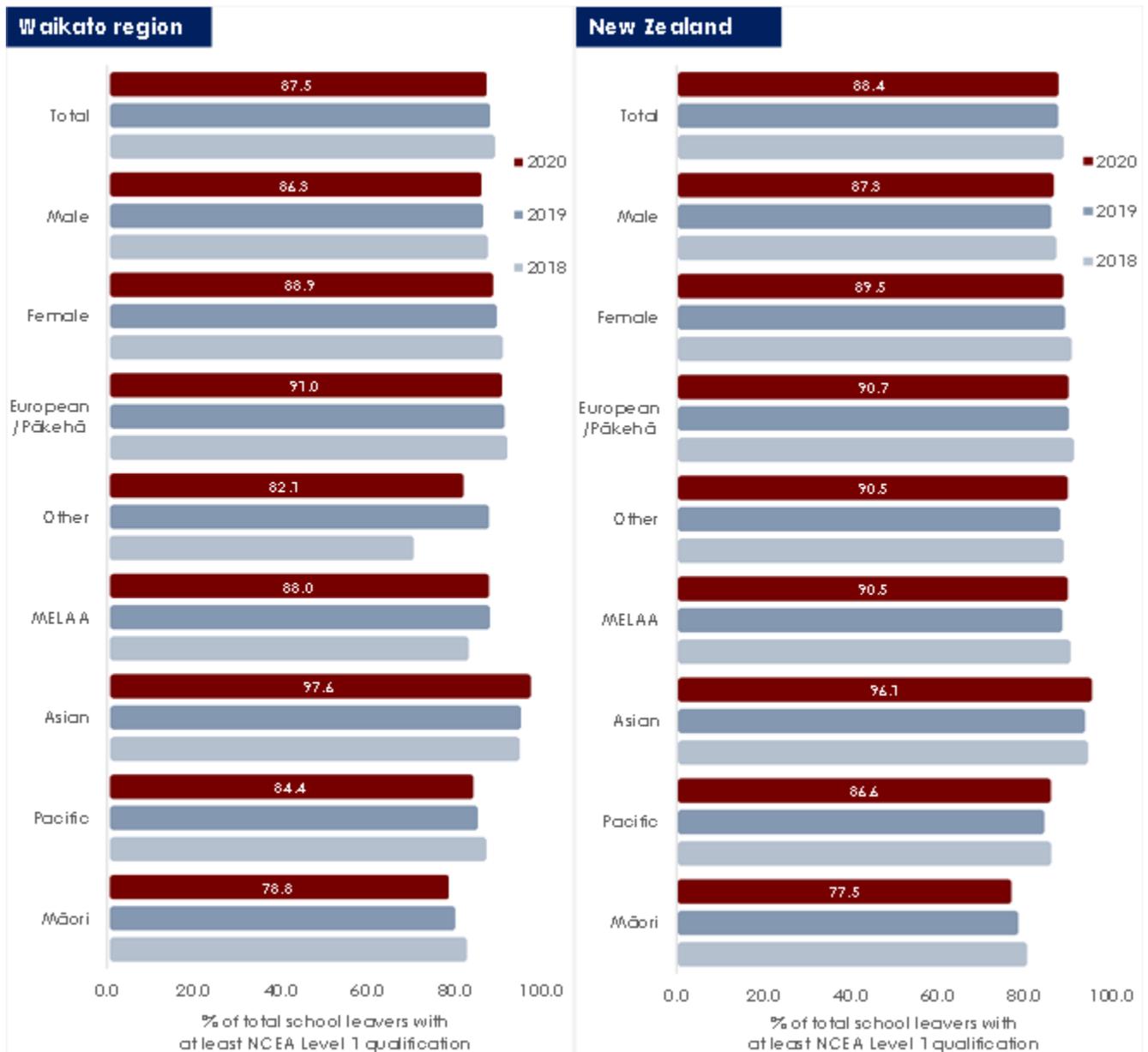
- School leavers from the most socioeconomically disadvantage schools are more likely to leave school with no or lower qualifications.
- Just under half (47 per cent) of the school leavers in 2020 from Decile 1 and Decile 2 schools (20% of the most disadvantaged) gained a NCEA Level 3/UE qualification compared to 81 per cent of leavers from Decile 10 schools (the most advantaged communities) nationally.

TA of residence

- Only 9 per cent of the 2020 school leavers in Hauraki district and 11 per cent in Hamilton left with no qualifications compared to 22 per cent in Waitomo and 18 per cent in Waikato districts.
- Hauraki has the highest proportion (58.3 per cent) of school leavers in 2020 gaining a NCEA Level 3/UE qualification followed by Hamilton (56 per cent) and Waipa (54 per cent). The lowest proportions of school leavers gaining this level of qualification were seen in the Waitomo (28.1 per cent), Waikato (34.7 per cent) and Otorohanga (39.4 per cent) districts.
- A similar trend is seen among school leavers in 2020 leaving gaining at least a Level 2 qualification, with Hamilton and Hauraki recording the highest proportion at around 82 per cent and Waitomo and Waikato the lowest with 67 and 70 per cent respectively.

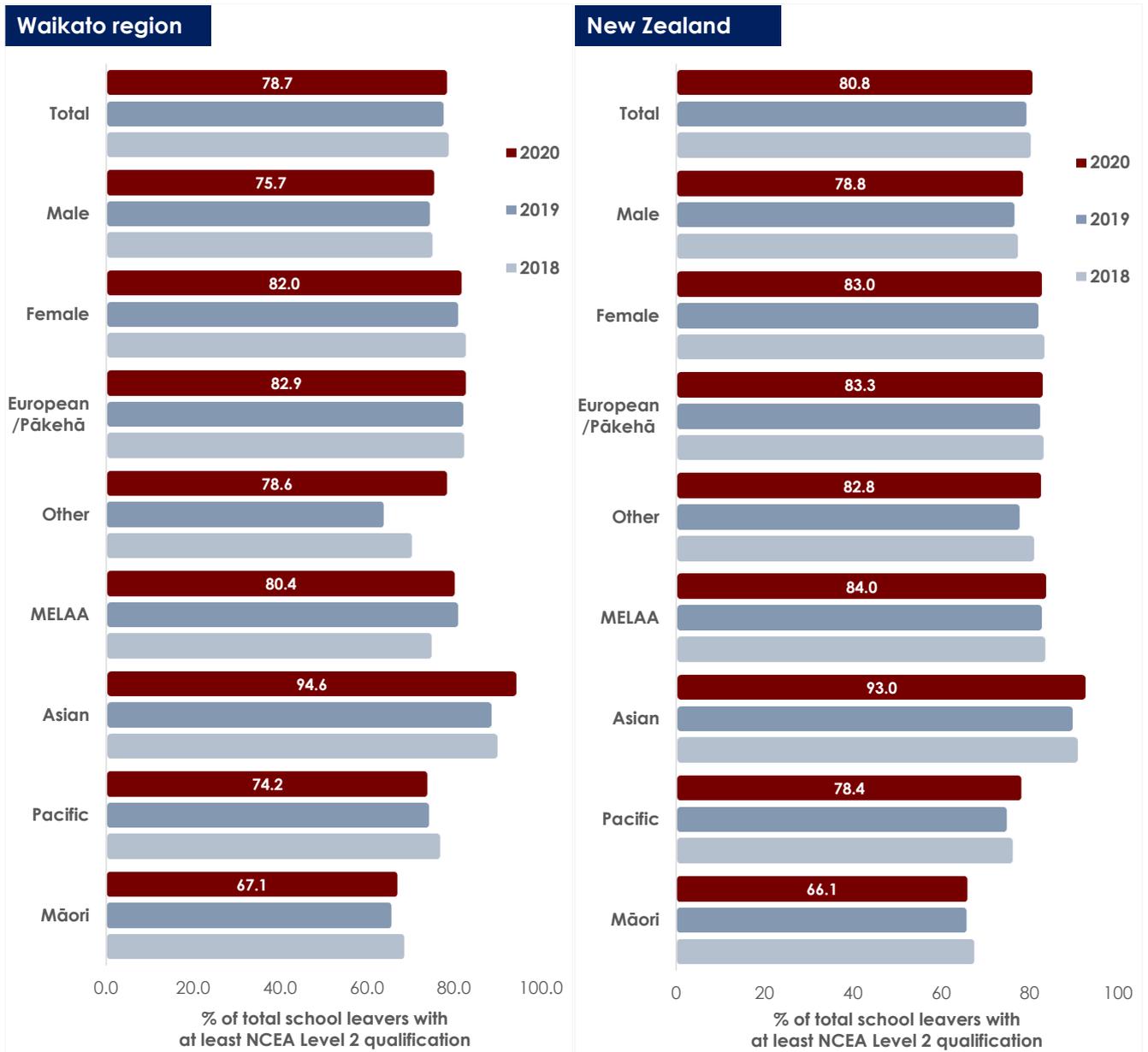
5.1.1 NCEA Level 1 or above

Figure 5.1 Proportion of the total school leavers in a given school year with NCEA level 1 or above qualification disaggregated by sex, ethnic group and TA of residence



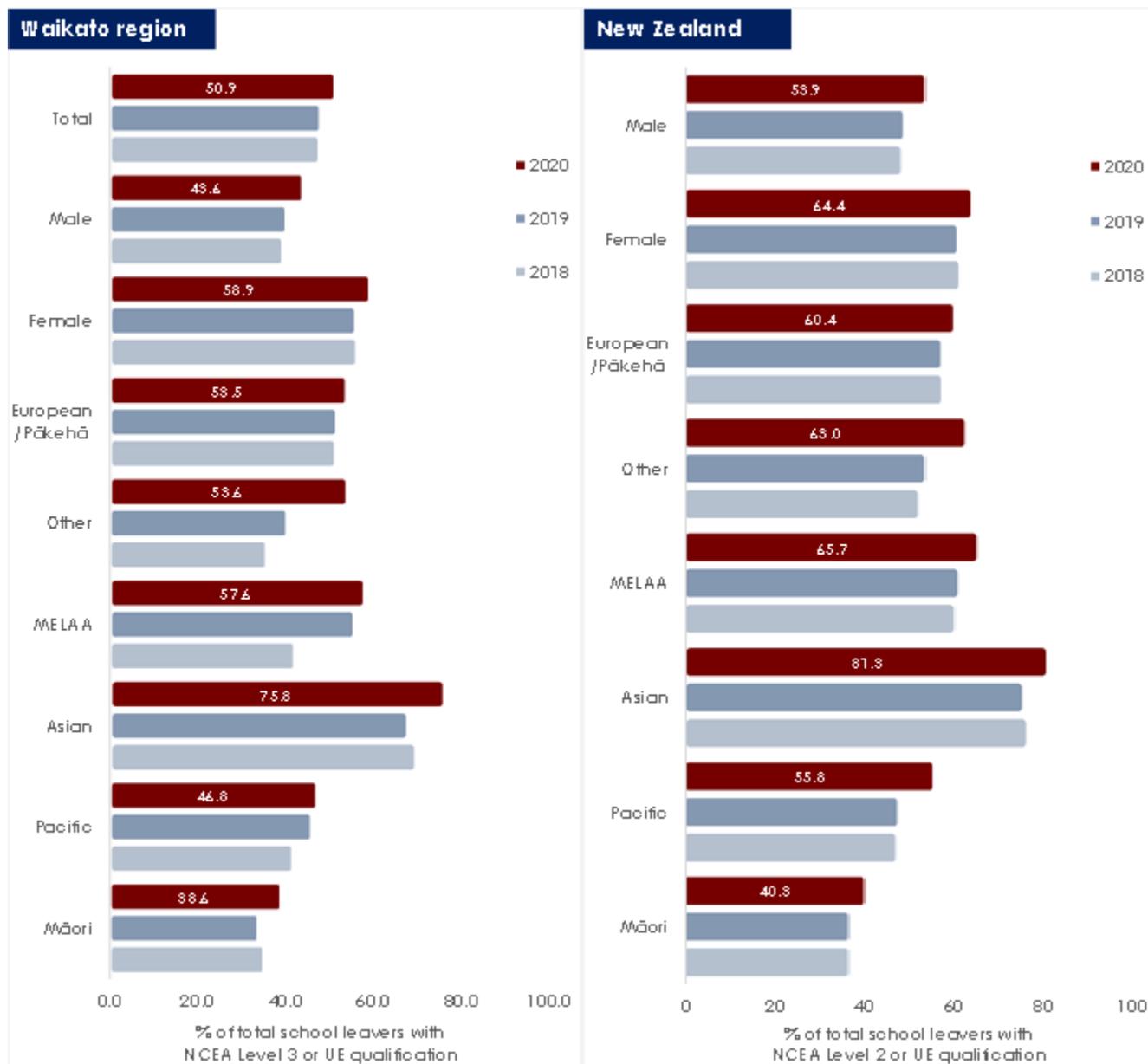
5.1.2 NCEA Level 2 or above

Figure 5.2 Proportion of the total school leavers in a given school year with NCEA level 2 or above qualification disaggregated by sex, ethnic group and TA of residence



5.1.3 NCEA Level 3 or above

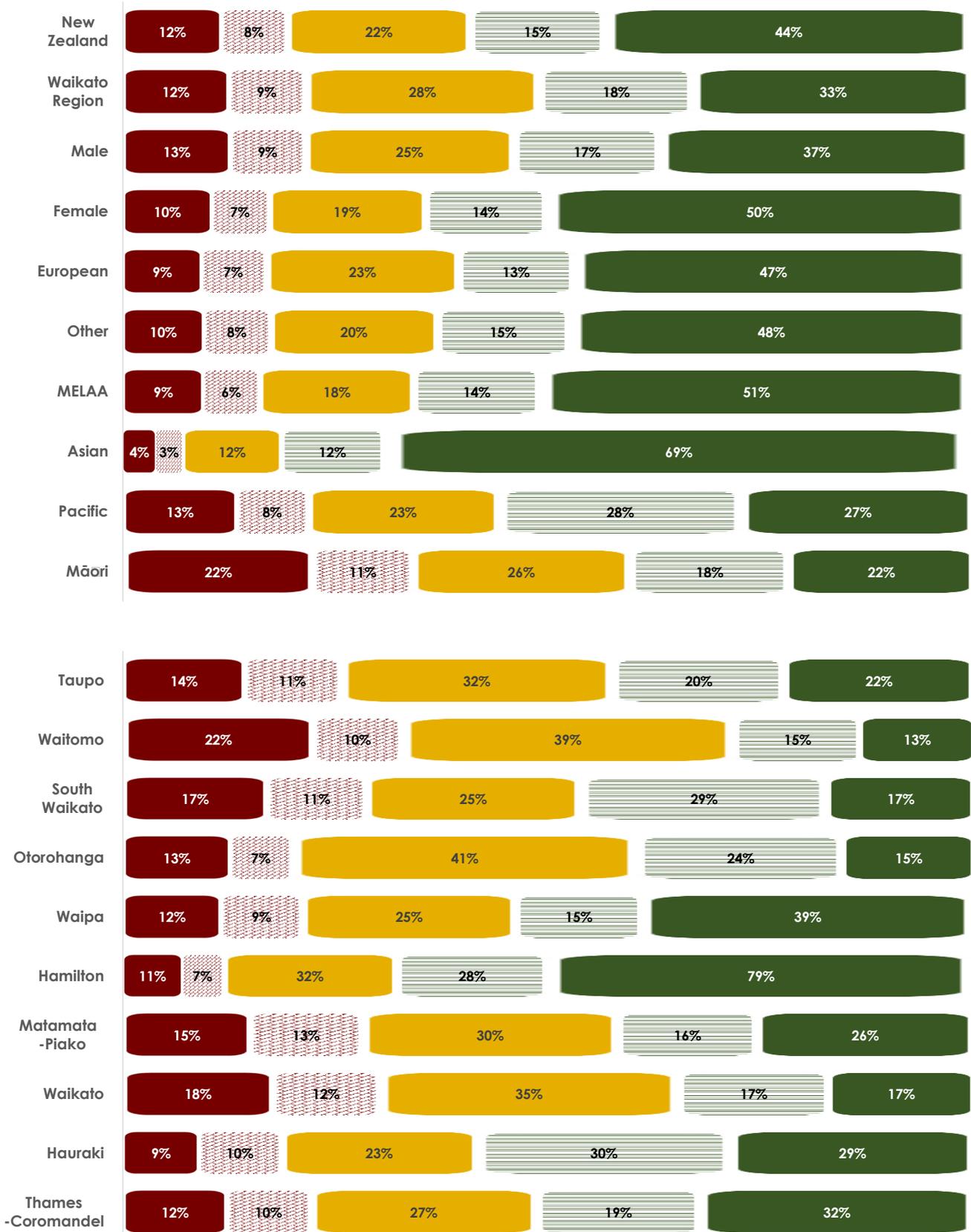
Figure 5.3 Proportion of the total school leavers in a given school year with NCEA level 3 or above qualification disaggregated by sex, ethnic group and TA of residence



5.1.4 School leavers with highest attainment

Figure 5.4 Distribution of school leavers in 2020 by highest qualification/attainment disaggregated by sex, ethnic group and TA of residence

■ Below Level 1 Qualification ■ Level 1 Qualification ■ Level 2 Qualification ■ Level 3 Qualification ■ University Entrance



6.1 Student retention and engagement

6.1.1 Retention: age at leaving school

Completion of upper secondary education is associated with a range of economic and social benefits both in New Zealand and across the OECD. Retention in senior secondary schooling is linked to higher levels of skills and knowledge required for participation in our increasingly knowledge-based society and the wider global community. The conventions for measurement of this indicator in the Ministry of Education database is the proportion of students that remain at school until at least their 17th birthday; one year after compulsory education and the average age for a student completing their upper secondary qualifications (Source: Ministry of Education).

Figure 6.1 shows the proportion of school leavers in a given year (excluding foreign fee-paying students) who were aged 17 years or older disaggregated by sex, ethnic group and TA of residence.

Overall retention

- Students in the Waikato region are leaving school at a younger age than seen nationally. Just under four out of every five (77.4 per cent) school leavers in the Waikato region in 2020 were aged 17 years or older, compared to 83.5 per cent of those across New Zealand.

Sex

- In the Waikato (as seen nationally), males are more likely to leave school before the age of 17 years – around 27 per cent compared to 18 per cent of females in the Waikato region.

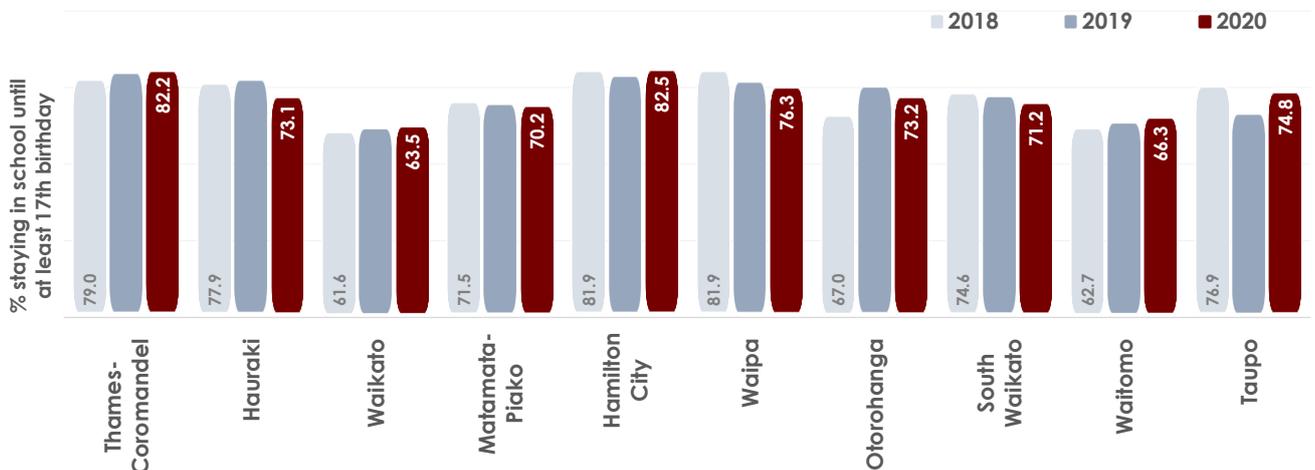
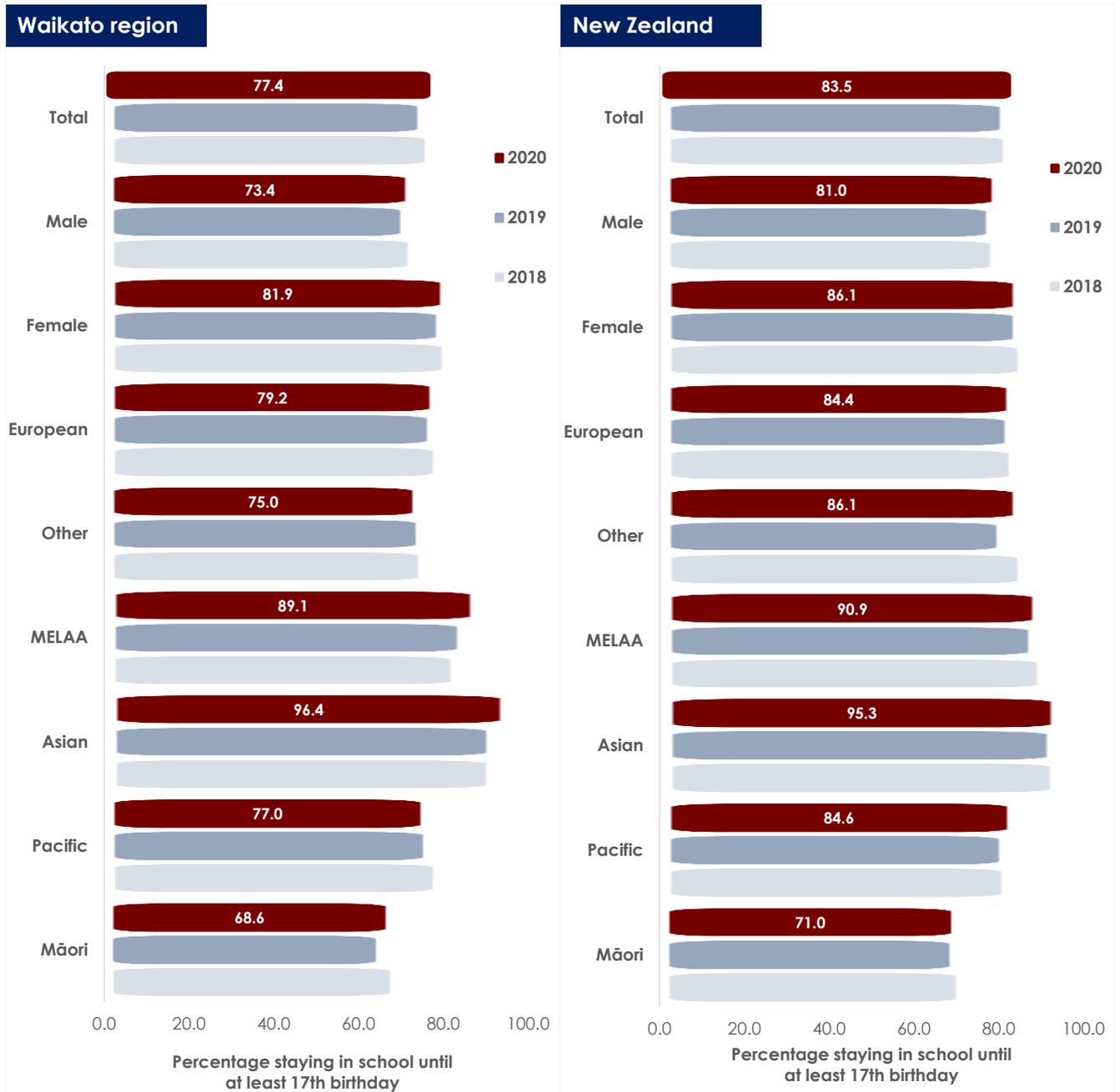
Ethnic group

- Just over two-thirds (68.6 per cent) of Māori students leaving school in 2020 in the Waikato region were aged 17 years or more. This is lower than that seen for the other ethnic groups – Asian (~ 96 per cent), MELAA (89 per cent), Pacific and European (~ 77-79 per cent).

TA of residence

- In 2020, the Waikato district recorded the lowest proportion of school leavers who were aged at least 17 years (64 per cent), followed by Waitomo (66 per cent) and Matamata-Piako (70 per cent). The highest proportions were in Hamilton and Thames-Coromandel (82 per cent) followed by Waipa (76 per cent).

Figure 6.1 Percentage of school leavers staying in school until at least their 17th birthday



6.1.2 Engagement: stand-downs, suspensions and exclusions

Schools must effectively involve students in learning to ensure educational success. Stand-downs²⁰, suspensions²¹, and exclusions²² help provide indications of where in productive learning may be absent and engagement issues may be present. Stand-downs, suspensions and exclusions²³ are not measures of student behaviour but measures of a school's reaction to behaviour and disengagement. What one school may choose to suspend for, another may not (Source: Ministry of Education).

Figure 6.2 shows the age standardised rate per 1,000 students for stand-downs, suspensions and exclusions disaggregated by sex, ethnic group and TA of residence. The red dotted line in each figure shows the national average. Please note that these data are for all students and not just those aged 15-18 years.

Overall disengagement

- For the 2020 school year in the Waikato region, the age standardised rate per 1000 of stand-downs (30 per 1,000 students), suspensions (5 per 1,000) and exclusions (1 per 1,000) is noticeably higher than the national average of each of these indicators.

Sex

- Males are much more likely to get stood-down, suspended and excluded than females.

Ethnic group

- Age standardised rate of stand-downs, suspensions and exclusions is substantially higher for Māori and Pacific students.

TA of residence

- South Waikato had the highest age-standardised rates of stand-downs, suspensions and exclusions

²⁰ A stand-down is when a student is removed from school or kura for a short period – no more than 5 days in a school term or a total of 10 days in a school year.

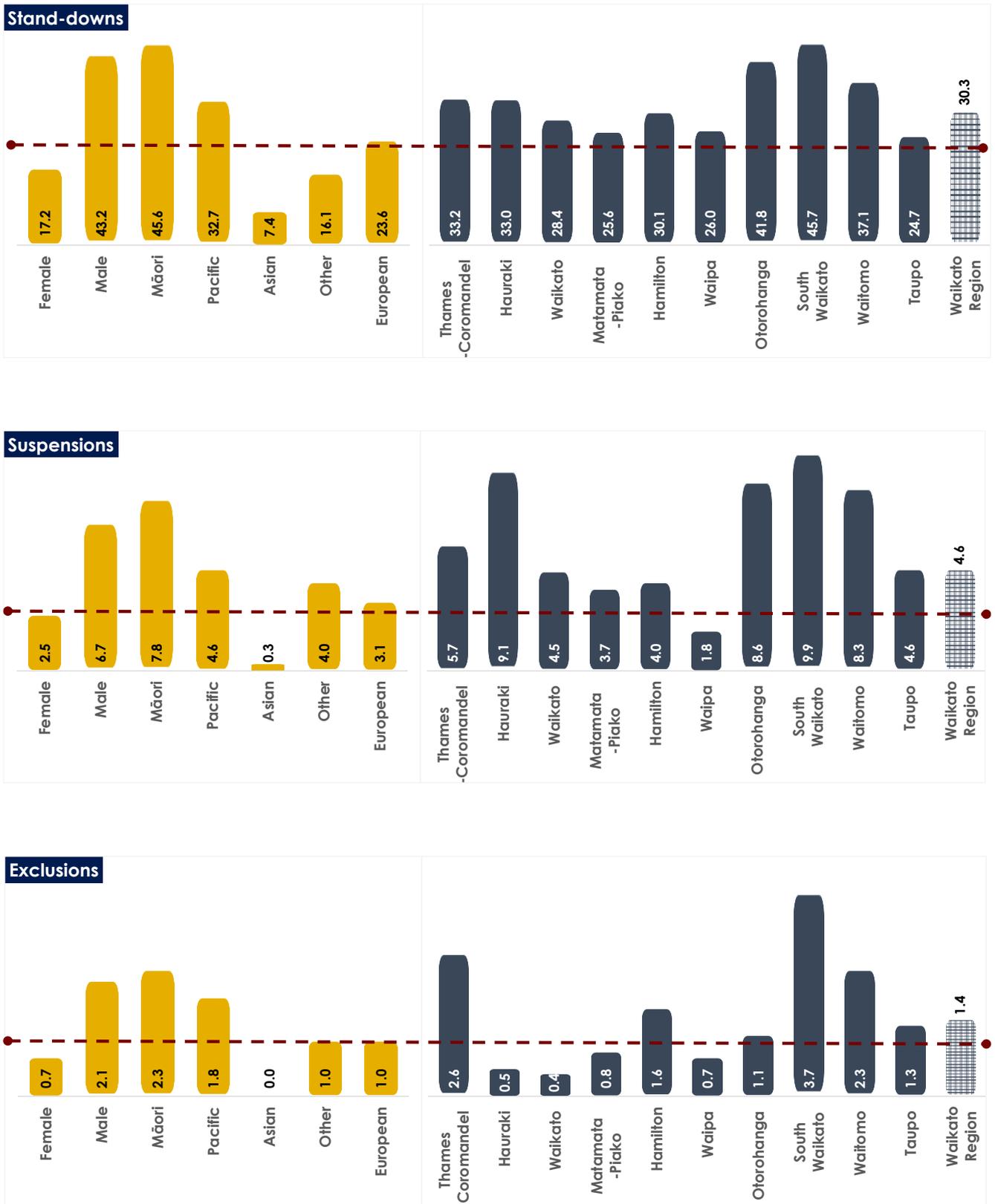
²¹ A suspension is the formal removal of a student from school or kura by the principal, until the board of trustees meets to decide what to do.

²² Exclusion is the formal removal of a student from school or kura if they are under 16 years.

²³ Refer to Ministry of Education's guidelines on stand-downs, suspensions and exclusions:

<https://assets.education.govt.nz/public/Documents/School/Managing-and-supporting-students/Stand-downs-suspensions-exclusions-and-expulsions-guidelines/17-5-18-SuspensionLegalGuideWEB-1.pdf>

Figure 6.2 Age-standardised rate of stand-downs, suspensions and exclusions per 1,000 students in the Waikato region disaggregated by sex, ethnic group and TA of residence



7.1 Rangatahi not in education, employment or training (NEET)

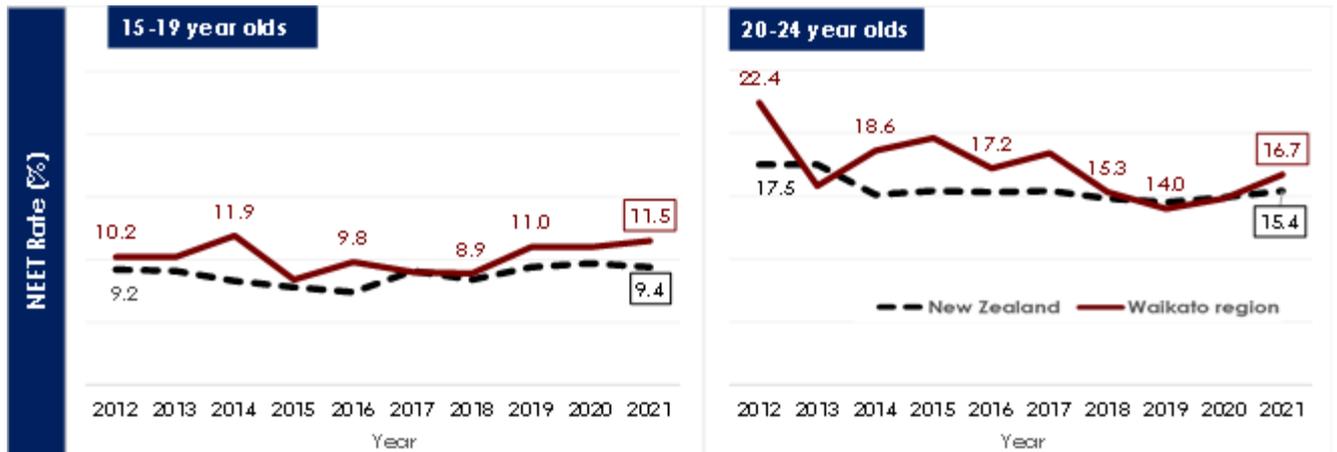
The NEET indicator measures young people "Not in Education, Employment, or Training", referring to a person who is unemployed and not receiving an education or vocational training. Young people who are NEET are neither gaining experience in the labour market, receiving an income from work, nor enhancing their education or skills. While this is a blunt measure, it can indicate those at a higher potential risk of social exclusion, insecurity and poverty. The exclusion, disengagement, and overall under-utilisation of NEET rangatahi has clear impact on the young person themselves as well as short term costs to the economy, and long-term impacts on society.

The NEET rate presents the share of young people not in employment, education or training as a proportion of the total number of young people in the corresponding age group. As per the OECD database, New Zealand had a NEET rate of 7.2 per cent for 15-19 year olds in 2020, which is slightly higher than the OECD average of 6.6 per cent. For the 20-24 year group, the NEET rate in 2020 was 14.7 per cent which is lower than the OECD average of 15.8 per cent (OECD, 2021).

The national NEET rates presented in Figure 6.1 are based on the Household Labour Force Survey (HLFS) data. These data disaggregated by sex and/or ethnic group are not available at the sub-regional level due to the small sample size. The analysis shown in Figure 6.2 on NEET rates among the rangatahi population by sex and ethnic grouping is available and therefore presented only at the national level.

In the year ending June 2021, approximately 11.0 per cent of New Zealand's NEET rangatahi (15-24 years) in the HLFS were resident in the Waikato region (around 10 per cent of the country's rangatahi population lives in the region). The NEET rates in Waikato region have been consistently higher than the national average over the last decade. Although the NEET rate has steadily declined across the region over 2012-2021, the increase seen for the year ending June 2021 especially for the 20-24 year age group (16.7 per cent) is in part likely due to the effect of the COVID-19 pandemic and resulting lockdown.

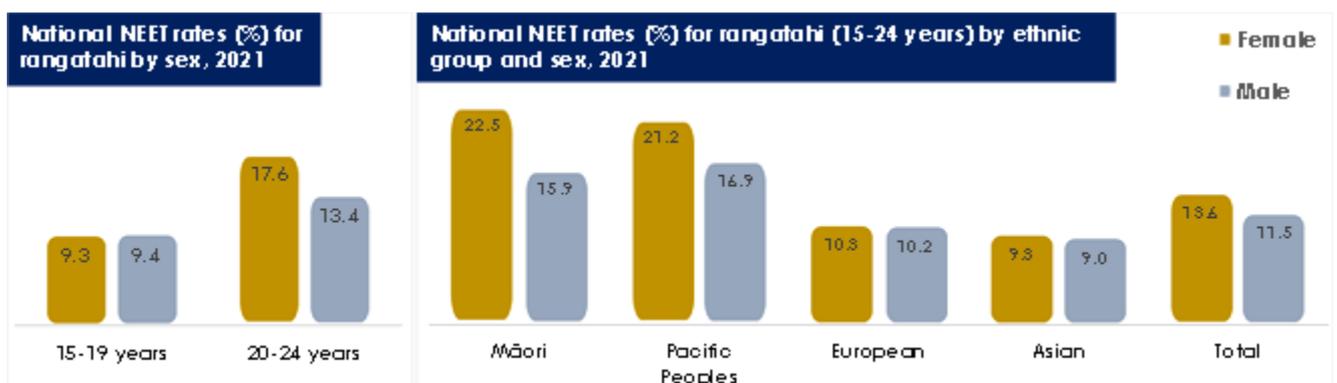
Figure 7.1 NEET rate over the 2012-2021 period for rangatahi resident in the Waikato region (year ending June, based on the HLFS survey)



Rangatahi who are NEET are more likely to be aged 20-24 years as Figure 6.2 shows. As also seen in previous analyses by a Stats NZ report, the NEET rate for females aged 20–24 years has been consistently higher than that for males of the same age. Nationally, this difference has diminished over time, and is now at its lowest point, 3.9 percentage points, compared with a peak of 14.5 percentage points in March 2005. There is little difference in the NEET rates for men and women aged 15–19 years. The prevalence of NEET amongst females aged 20-24 reflects inequities in caregiving duties across age/gender groups, where 80 per cent of all caregiving NEET are females aged 20-24 years (Ministry of Business, Innovation and Employment, 2019).

NEET rates are much higher (more than double) for Māori and Pacific rangatahi – approximately one in five Māori and Pasifika rangatahi are NEET compared to one in ten among Asian and European young people. It is important to untangle and dismantle the drivers behind these inequities for Māori and Pacific rangatahi, since these youth have been found to be at a greater risk of experiencing adverse economic and social outcomes later in adulthood (Ministry of Business, Innovation and Employment, 2019).

Figure 7.2 NEET rate for rangatahi in New Zealand disaggregated by sex and ethnic group (year ending June, based on the HLFS survey)



8.1 Work and labour force status

Transition of rangatahi from education to the labour market, and engagement in employment have long term impacts on the living standards of the individual and their whānau, as well as on the socio-economic development of the country. In this section we look at labour force participation and employment rates for rangatahi (aged 15 years and over is determined as 'working age') from the HLFS. A person who was not employed is classified as either 'unemployed' or 'not in the labour force'. Those not in the labour force are people in the working-age population who are neither employed nor unemployed²⁴ and are not actively seeking work, such as those with personal or family responsibilities (including childcare), those attending educational institutions and those who are permanently unable to work due to physical or mental disabilities.

Due to small sample size considerations, these updated data for the year ending June 2021 from the HLFS survey disaggregated by age are not available for the Waikato region or its constituent TAs. Therefore this report presents labour force status for rangatahi at the national level, disaggregated by sex and ethnic group²⁵ (Figure 8.1 and Figure 8.2).

The rates presented are calculated as follows:

- Employment rate: number of employed rangatahi expressed as a percentage of the total rangatahi population.
- Labour force participation rate: rangatahi in the labour force expressed as a percentage of the total rangatahi population.
- Unemployment rate: number of unemployed rangatahi expressed as a percentage of the rangatahi in the labour force.

As seen globally, the labour force participation rate of rangatahi (15-24 years) in New Zealand has declined over the years. This trend reflects the growing proportion of young people engaged in secondary and tertiary education as well as an under-utilisation of labour with a substantial number of rangatahi not in education, employment or training (as described in the NEET section of this report). Young people are outside the labour market for various reasons, including education, family responsibilities, sickness or disability and discouragement (believing that there are no jobs available) (International Labour Organisation, 2020).

²⁴ Unemployed are all people in the working-age population who, during the reference week, were without a paid job, available for work, and had either actively sought work in the past four weeks ending with the reference week, or had a new job to start within the next four weeks.

²⁵ The ethnic group is calculated as "total response" in the HLFS survey, which means each person was assigned to each ethnic group they have self-identified with.

Females have lower labour force participation rates, with the disparity in the rate of engagement more prominent for the 20-24 year group. This predominantly reflects the caregiving duties for young women aged 20-24 years (see Figure 8.1).

There are differences in the labour force engagement of rangatahi when disaggregated by ethnic group (see Figure 8.2). The underlying factors leading to these ethnic inequities in labour force engagement or employment rates between the ethnic groups are shaped by our complex systems (and their access barriers including racism) and overlapping social, economic, cultural and environmental context.

Figure 8.1 Work and labour force (LF) status of rangatahi (15-19 and 20-24 years) in New Zealand and associated rates disaggregated by sex for the year ending June 2021 (based on HLFS survey)

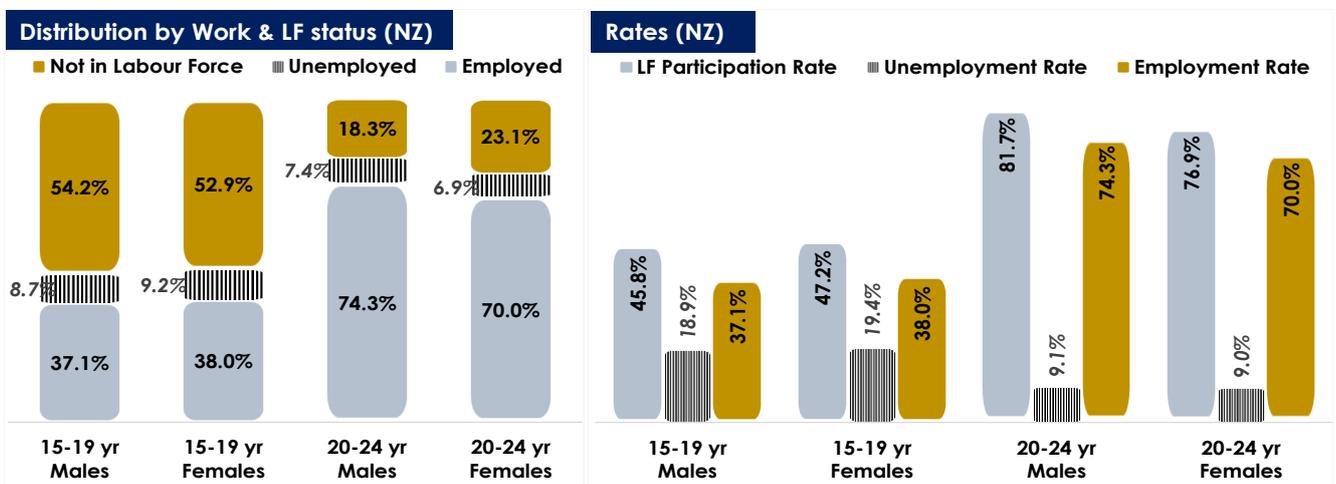
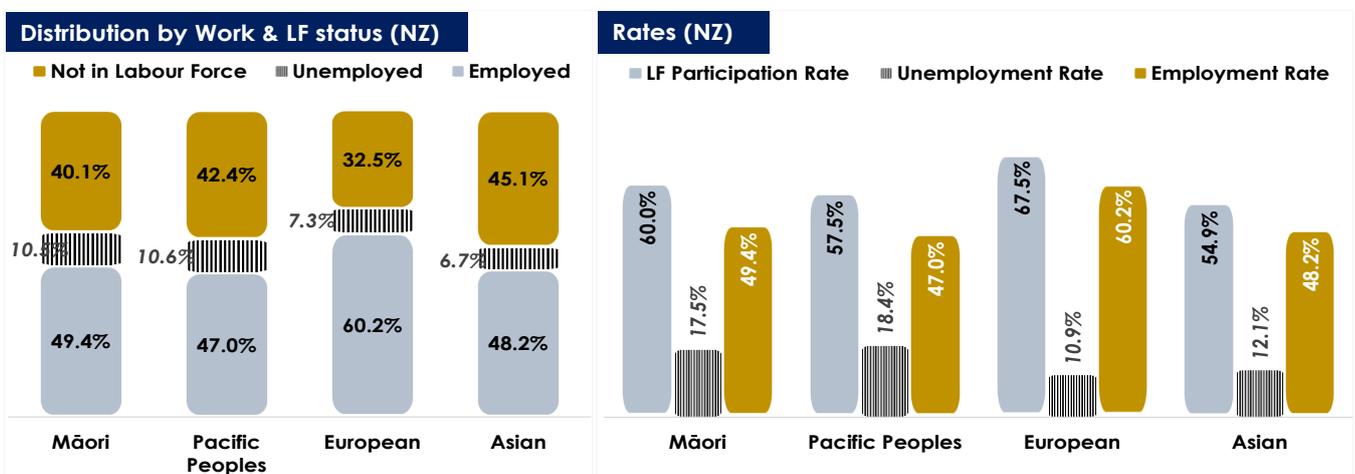


Figure 8.2 Work and labour force status of rangatahi (15-24 years) in New Zealand and associated rates disaggregated by ethnic group for the year ending June 2021 (based on HLFS survey)



The work and labour force data at the TA level can only be extracted from the 2018 Census. In this data, a person is considered to be unemployed if, during the week ended 4 March 2018, they were without a paid job but were available for work, and had actively sought work in the four weeks prior. A person is considered to not be in the labour force if they were not employed and they were not actively seeking work, or not available for work. The work and labour force variable is rated as high quality²⁶.

Figure 8.3 Work and labour force status of 15-19 year olds as recorded at the 2018 Census for Waikato region and its constituent TAs

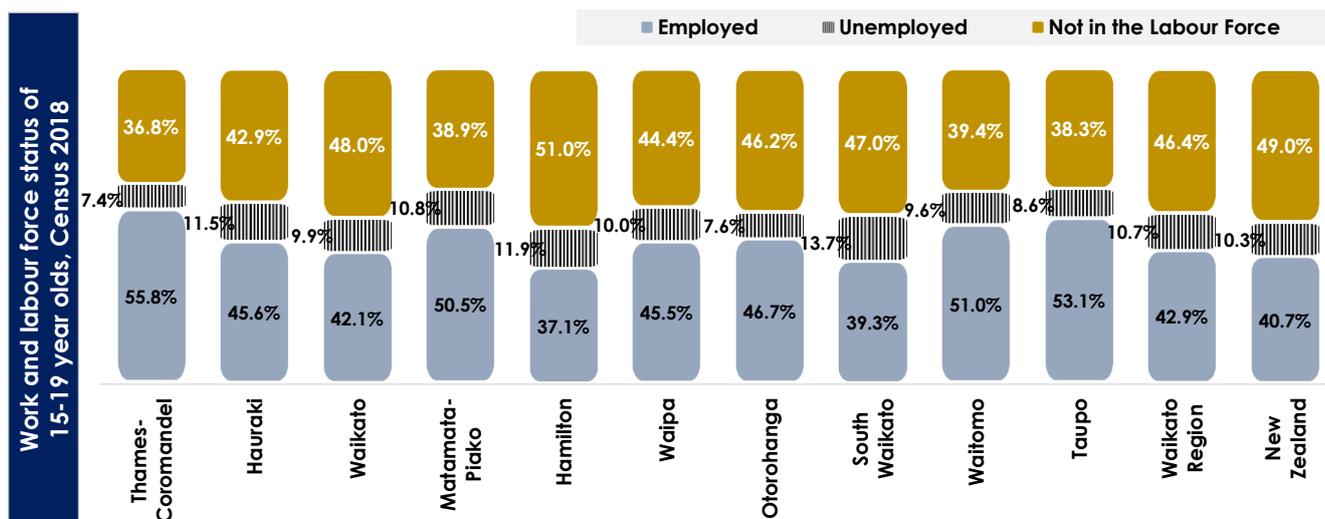
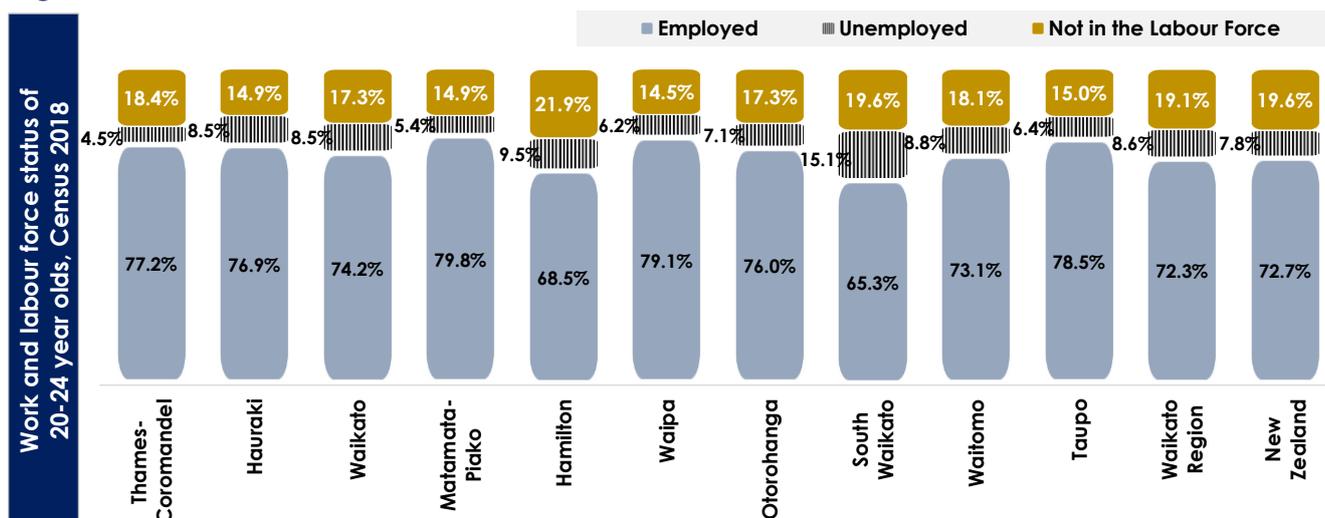
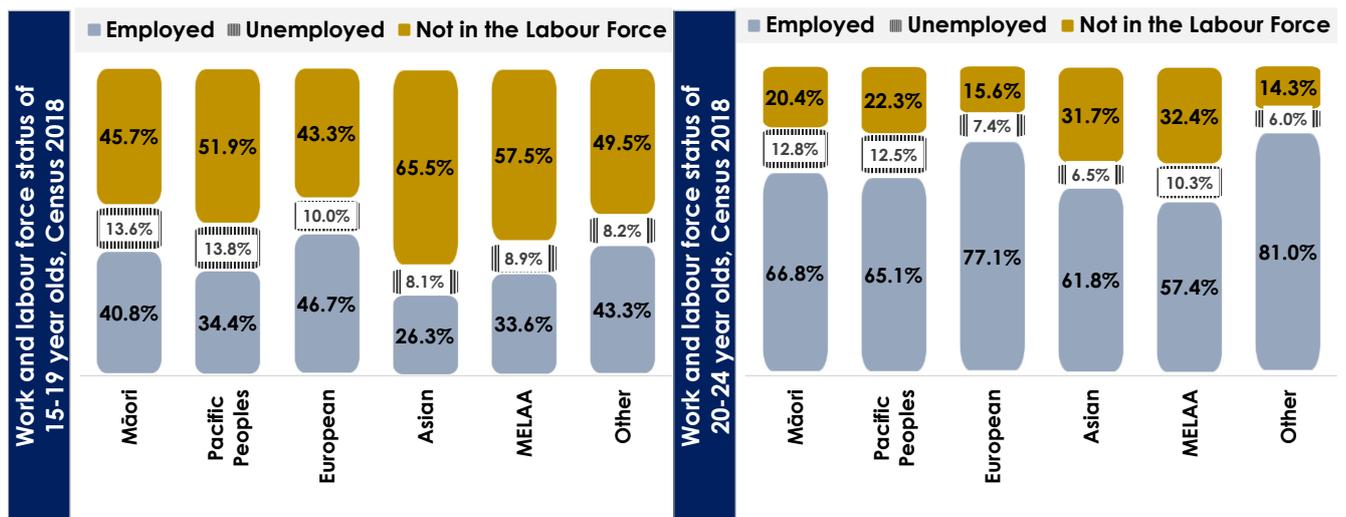


Figure 8.4 Work and labour force status of 20-24 year olds as recorded at the 2018 Census for Waikato region and its constituent TAs



²⁶ The response rate from 2018 Census forms was 84.0%. 16.0% of responses were imputed.

Figure 8.5 Work and labour force status of rangatahi in the Waikato region disaggregated by major ethnic groups (Census 2018)



9.1 Industry

Employed rangatahi gain valuable work experience, income and practical skills. However, the specific occupation type, level of job security and stability, and opportunities for training and career progression are important considerations for the wellbeing of young people.

This section looks at the industry of work for rangatahi aged 15-24 years who were recorded as employed in the 2018 Census. Industries are grouped by the Australian and New Zealand Standard Industrial Classification (ANZSIC). The data presented is based on the 2018 census and is rated to be of high quality by Stats NZ. Figure 8.1 looks at the distribution of employed rangatahi in the Waikato region across industries and Figure 8.2 disaggregates this analysis by sex.

Across the Waikato region, the majority of employed rangatahi aged 15-24 years were working in one of the following five industries:

- Retail Trade (16.2 per cent)
- Accommodation & Food Services (15.4 per cent)
- Construction (11.5 per cent)
- Manufacturing (8.3 per cent)
- Agriculture, Forestry & Fishing (9.3 per cent).

A similar distribution is seen nationally.

When disaggregated by sex, one can see a distinctly different industry of work profile among male and female employed rangatahi. The top five industries of employment for females (accounting for one-third of the employed female rangatahi workforce in the Waikato region) are: Accommodation & Food Services; Retail Trade; Health Care & Social Assistance; Education & Training; and Professional, Scientific & Technical Services. Retail and Accommodation & Food Services are also in the top five industries of employment for males in the Waikato region, with the addition of: Construction; Manufacturing; and Agriculture, Forestry & Fishing.

Figure 9.1 Distribution of employed rangatahi aged 15-24 years in the Waikato region by industry
(Census 2018)

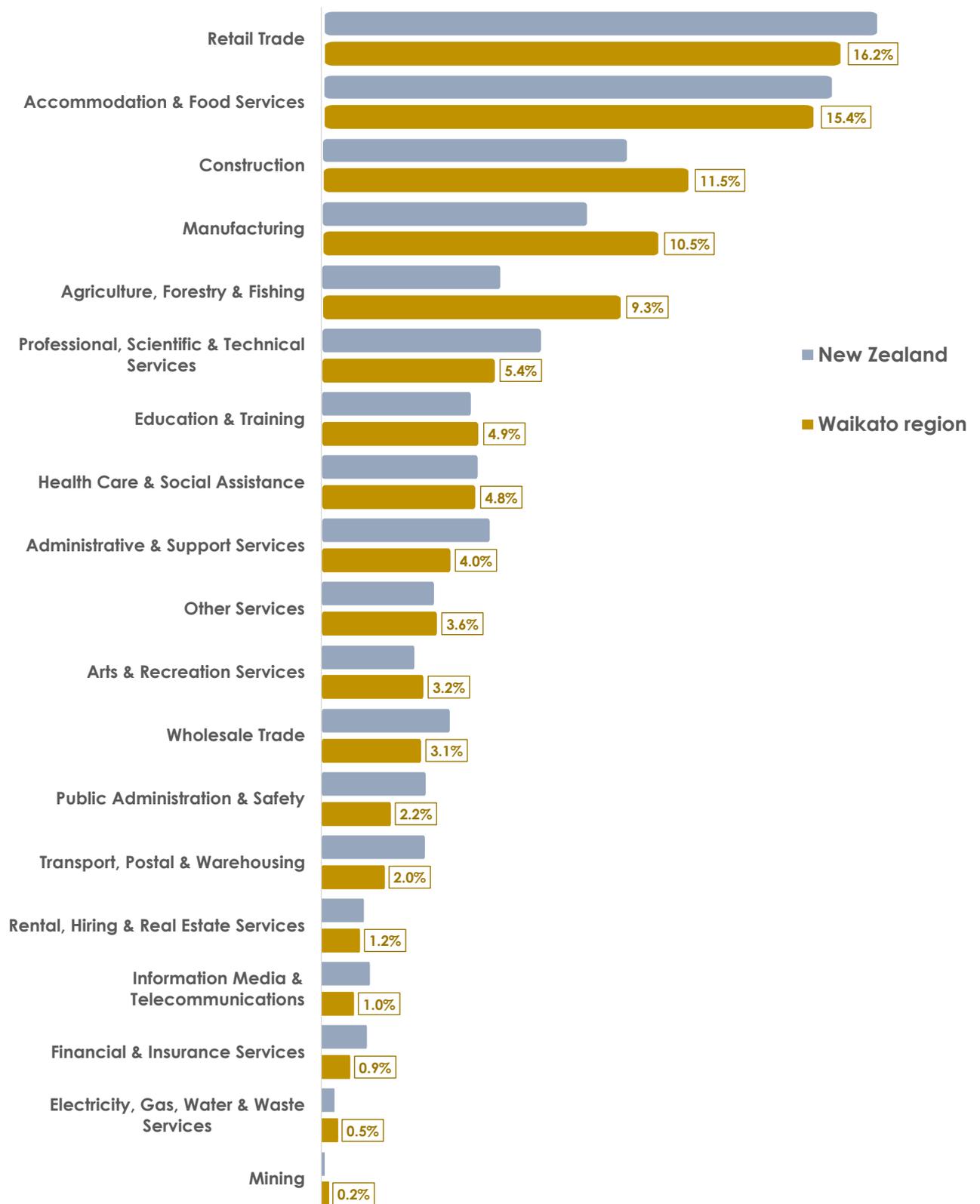
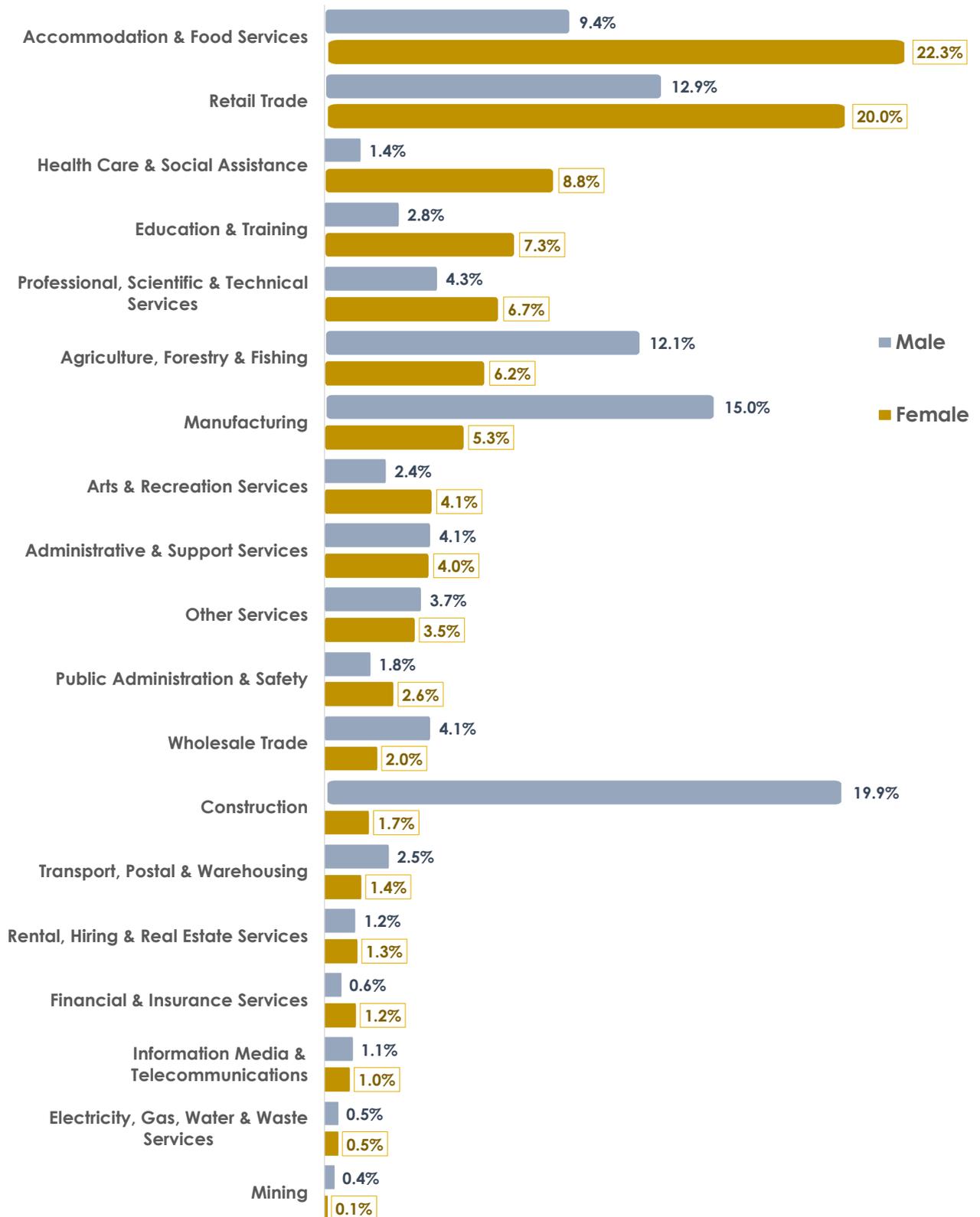


Figure 9.2 Distribution of employed rangatahi aged 15-24 years in the Waikato region by industry disaggregated by sex (Census 2018)



10.1 Occupation

This section looks at the occupational profile of rangatahi in the Waikato region. An occupation is a set of jobs that require the performance of similar or identical sets of tasks. Occupations are organised based on skills, using the ANZSCO classification. Occupation is strongly correlated with income. New Zealanders in professional occupations have the highest median personal income²⁷, while jobs in labouring and manufacturing tend to be more vulnerable to economic downturns and restructuring. Not only in New Zealand, but globally youth face disproportionate disadvantages in the labour market compared to adults. Due to inadequate work experience and/or education and skills, they are mostly employed in entry-level occupations or positions which, apart from being lower-paying, are at a greater risk of being automated and hence redundant (International Labour Organisation, 2020).

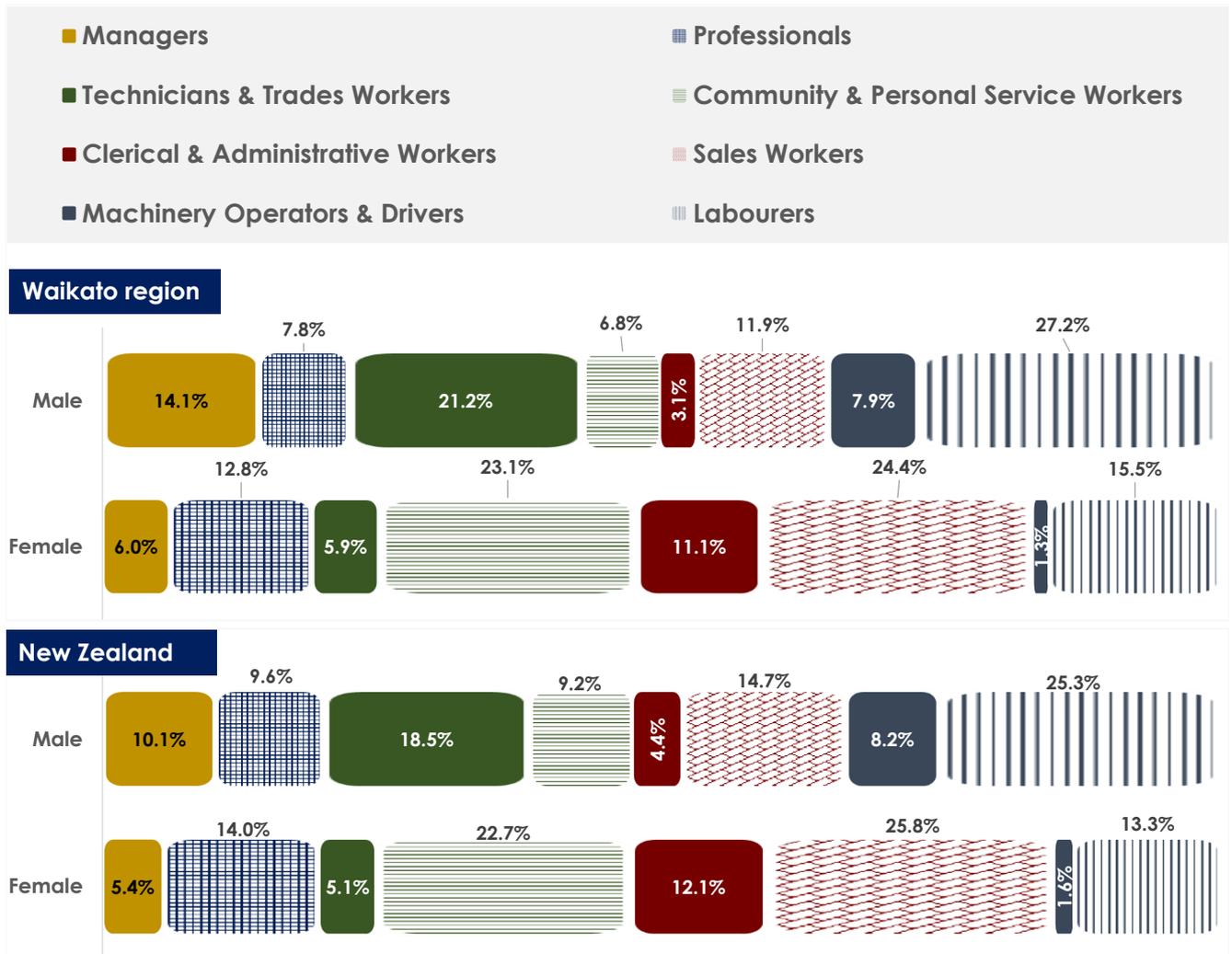
The data presented is based on the 2018 census and is rated to be of moderate quality by Stats NZ. The response rate from 2018 Census forms was 79.7 per cent. The remaining 20.3 per cent of responses were imputed. Due to data quality concerns, these data are not presented at the TA level.

Figure 10.1 shows the distribution of the employed rangatahi aged 15-24 years by occupation. As the industry of work profile of rangatahi differs substantially by among males and females, these data are disaggregated and presented for each sex. Comparative national data are also included.

Female rangatahi are more likely to work as Sales Workers or Community & Personal Service Workers, while their male counterparts are more likely to work as Labourers or Technicians & Trades Workers. Half of all employed female and male rangatahi work in one of these two occupations respectively.

²⁷ <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-income/personal-income-occupation.aspx>

Figure 10.1 Distribution of employed rangatahi aged 15-24 years in the Waikato region by occupation (Census 2018)



11.1 Sources of personal income

Earnings are affected by a range of factors, some of which relate to individual characteristics (e.g., experience, skills, training, caregiving responsibilities); the labour market environment (e.g., job availability; employment conditions; employer discrimination); and more structural influences (e.g., regional economies and policy responses). In Aotearoa there are well-known age, sex, ethnic and regional inequities in labour market outcomes and earnings. For example, in Northland and Gisborne regions, median earnings are much lower than in Wellington and Auckland, and in all regions, earnings are higher for men than for women as well as higher for European and Asian compared to Māori and Pacific workers.

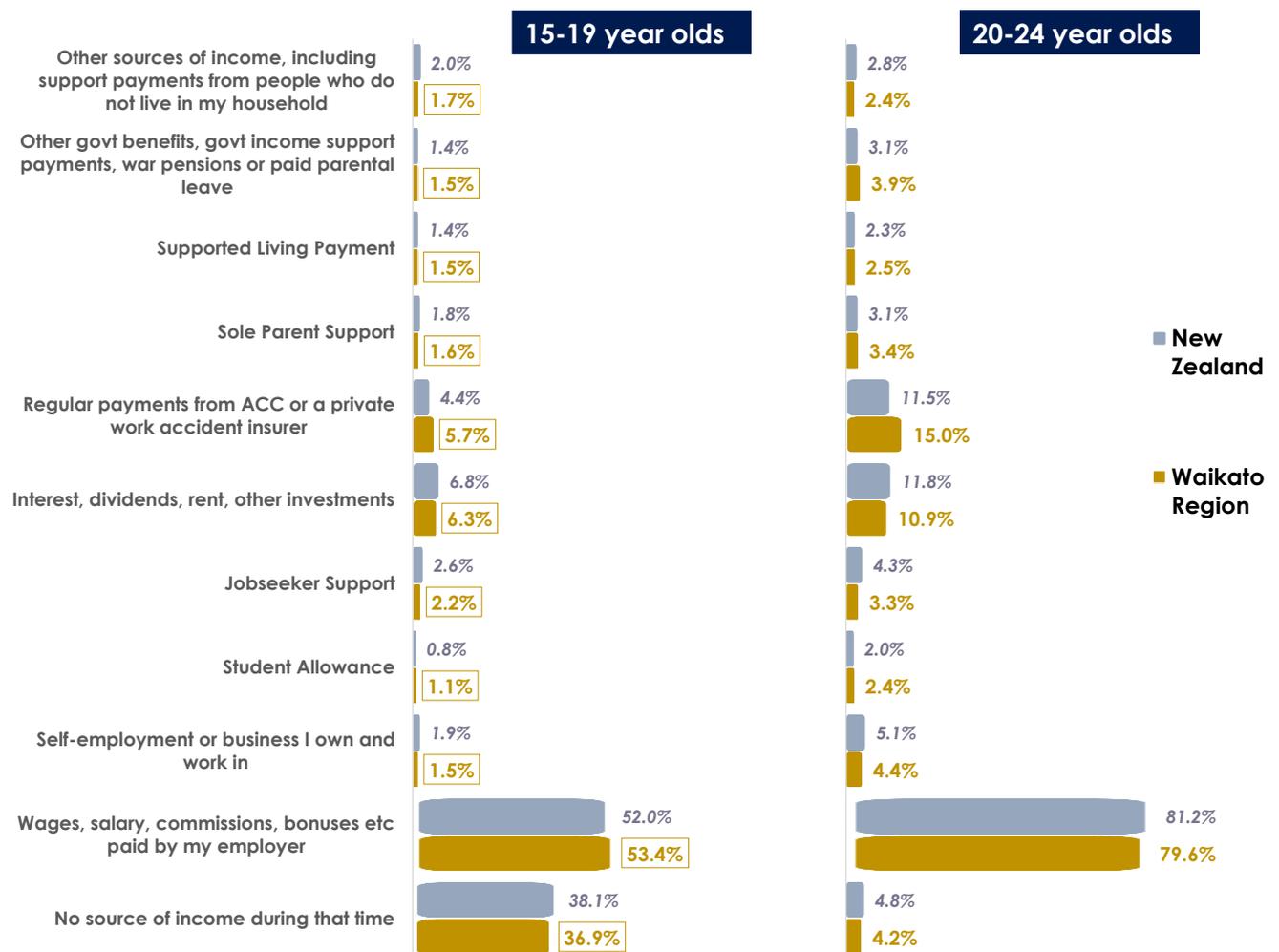
In the Census, sources of personal income from the 12 months ending 6 March 2018 are collected for all those over the age of 15 years. Multiple responses are provided, and therefore percentages will add up to more than 100 percent. The sources of personal income variable is rated as high quality²⁸.

Personal income does not necessarily reflect an individual's circumstances; due to income sharing that may occur within a family or household.

Sources of income patterns for Waikato rangatahi match those seen in the national population of young people (see Figure 11.1). The most common source of income for both 15-19 year olds and 20-24 year olds are wages, salary, etc paid by an employer. Additional common sources of income (which typically increase with age) are: regular payments from ACC or a private work accident insurer; interest, dividends, rent and other investments; and self-employed earnings.

²⁸ The response rate for this data from 2018 Census forms was 83.6 per cent. A further 14.1 per cent were sourced from administrative data supplied by Inland Revenue and 2.1 per cent of responses were imputed. There was no information available for the remaining 0.2% of people.

Figure 11.1 Sources of personal income (self-reported) of rangatahi in the Waikato region (Census 2018)



12.1 Rangatahi on benefits

This section looks at the youth aged 16-24 years living in the Waikato region who were eligible for and received a Ministry of Social Development (MSD) benefit. The types of benefits that rangatahi can apply for are:

- **Jobseeker support** (weekly payment that helps people until they find work)
- **Sole parent support** (weekly payment that helps single parents find part-time work or get ready for future work)
- **Supported living payments** (weekly payment to help people who have, or are caring for someone with a significant health condition, injury or disability meaning that suitable work is unlikely within the next 2 years)
- **Youth payment and Young parent payment** (Young Parent Payment helps young parents aged 16-19 year olds and Youth Payment helps young people aged 16 or 17 who can't live with their parents or guardian and aren't supported by them or anyone else)
- **Other main benefit**

Rangatahi are eligible to receive only one of the above benefits within a given year. The data received from MSD are for the year ending September 2021. The estimated resident population (ERP) data for 16-17, 18-19 and 20-24 year olds (aligning to the age groups in the MSD dataset) was requested from Stats NZ using a customised data request. As sub-national mid-census year ethnic population estimates are not published by Stats NZ, the base data for the ethnicity analysis in this section is based on the 2018 census data. The ethnicity classification used by MSD in the benefits dataset (and the ERP customised dataset) is based on prioritised ethnic groupings – Māori, Pacific and Other (as described in Box 1). It should be noted that ethnicity data recorded in both datasets are not directly comparable. Ethnicity in the MSD dataset is collected as an administrative requirement and may not necessarily be self-identified, compared to the ethnicity recorded in the census. Moreover, the approach of using prioritised ethnicity results in the increasing under-counting of Pacific peoples and other smaller ethnic groups. These limitations should be taken into account when considering the ethnicity-based analysis in this section.

The Waikato region in this section is the sum of counts in both datasets for the ten TAs. National data are also included for comparison.

12.1.1 Rangatahi on benefits - overall

The proportion of rangatahi aged 16-24 years who received a benefit payment in 2021 in each of the TA areas across the region is provided in Figure 12.1. The data for the previous two years are also included. Figure 12.2 disaggregates this information by benefit type to show the distribution of rangatahi who received a particular benefit payment in 2021. Summary of key points:

- In 2021, a slightly higher proportion (12 per cent) of the rangatahi resident across the Waikato region received a benefit payment in 2021 compared to the national average (10 per cent). This proportion has declined compared to the previous year but is still higher than in 2019. The increase in proportion of rangatahi receiving a benefit payment in 2020 and 2021 across the country, and in the Waikato, is likely connected to the Covid-19 pandemic and associated lockdowns.
- South Waikato has the highest proportion of rangatahi on a benefit with one of every five (20 per cent) rangatahi aged 16-24 years old receiving a benefit payment in 2021 followed by Hauraki (15 per cent), Hamilton and Waitomo (both 14 per cent). The location of major tertiary education centres in Hamilton can partly explain the higher proportion of rangatahi beneficiaries in the city. Waipa and Otorohanga have the lowest proportion of rangatahi beneficiaries across the region, at 8 per cent. The proportion of beneficiaries in the Waikato subareas will also be directly related to employment opportunities as well as family support and family socioeconomic circumstances.
- The majority, close to two-thirds (64 per cent), of rangatahi in the region on a benefit received a Jobseeker support payment in 2021. This is similar to the proportion seen nationally.
- Sole parent support payments were the next most common benefit, followed by supported living payments and then youth/young parent payments. Compared to other areas across the region, a relatively higher proportion of rangatahi resident in Taupo (24 per cent) and South Waikato (23 per cent) received a Sole parent support payment. The smallest proportion of rangatahi beneficiaries receiving this payment were rangatahi resident in Hauraki (13 per cent) and Waipa (14 per cent) which were lower than the national average (15 per cent).
- Supported living payments were the next frequent benefit type received by rangatahi in the region. Waipa had the highest proportion (19 per cent) of rangatahi beneficiaries receiving the Supported living payments followed by Hauraki (17 per cent), higher than the national average of 13 per cent.
- Nationally, there are 5 per cent of rangatahi on a benefit who received a Youth payment or Young parent payment. In comparison, Waitomo had 11 per cent of rangatahi beneficiaries on this benefit type. None of the rangatahi beneficiaries in Otorohanga were on this type of benefit payment.

Figure 12.1 Proportion of resident 16-24 year olds in the Waikato region receiving a benefit payment from MSD, 2019-2021 (year ending September)

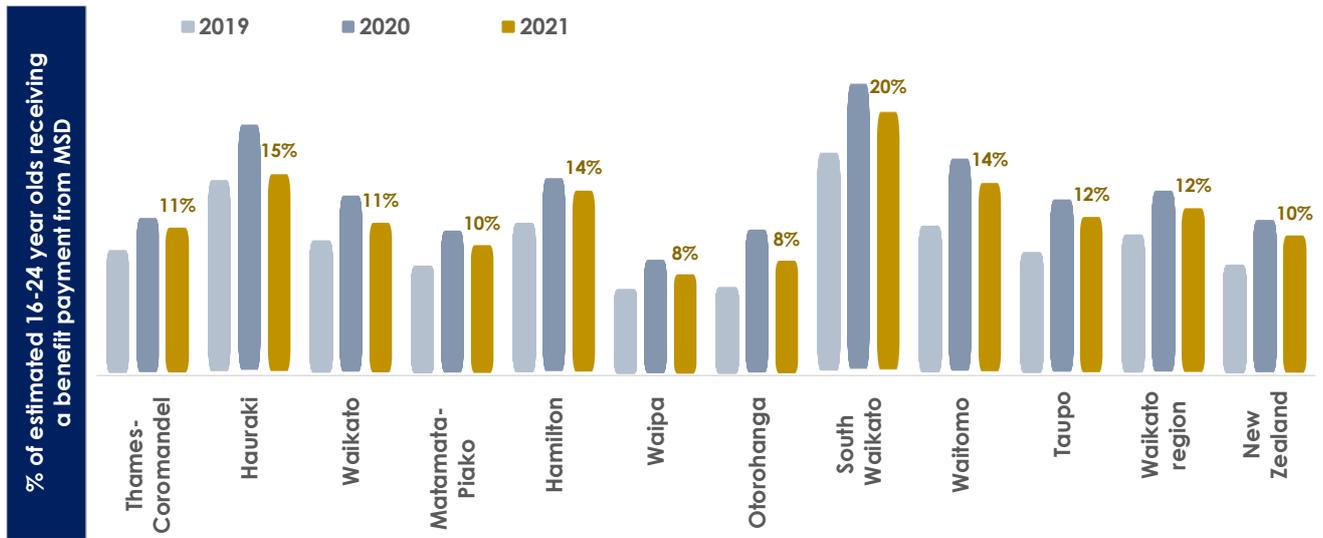
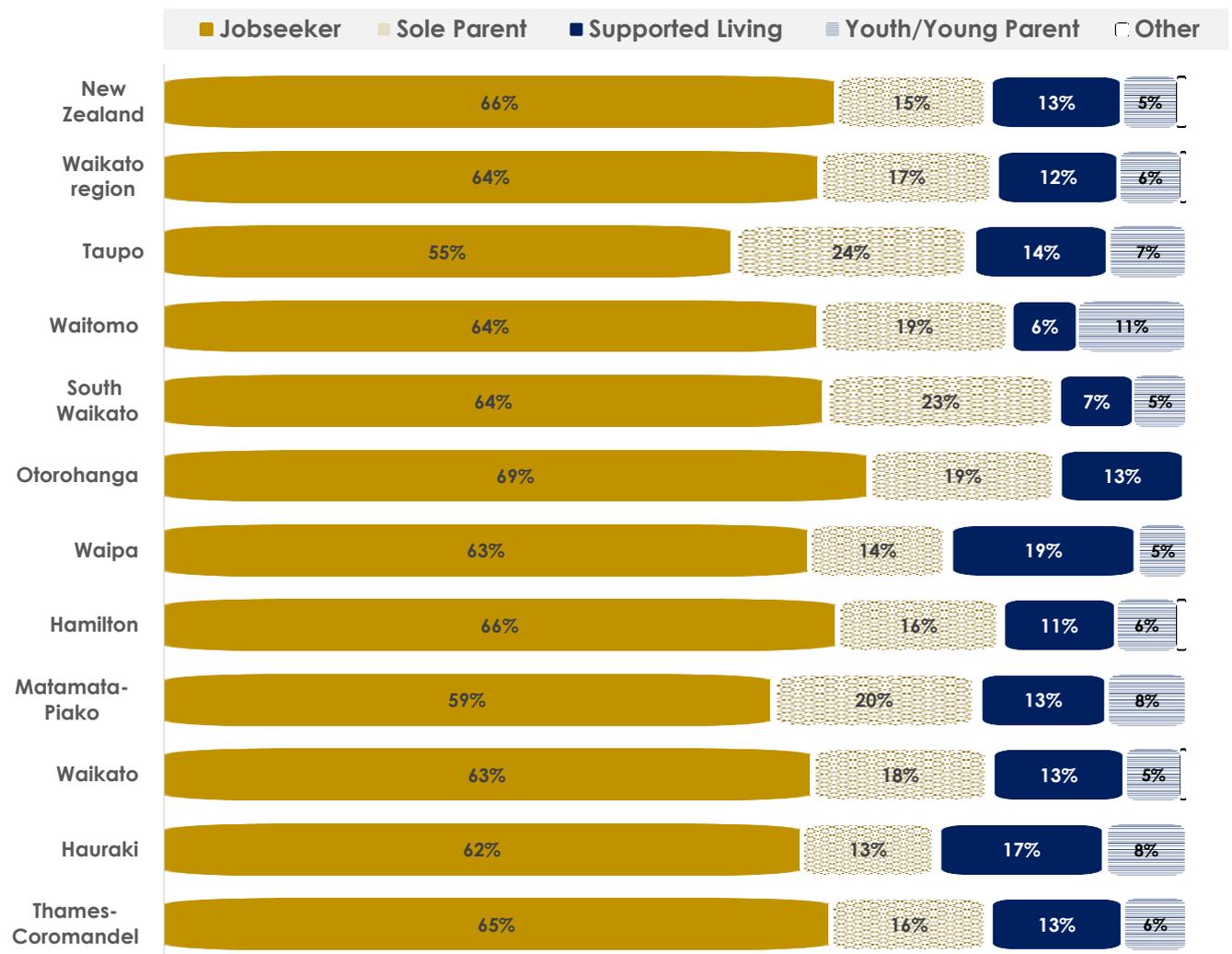


Figure 12.2 Distribution of rangatahi aged 16-24 years who received benefit payment(s) in 2021 (year ending September) disaggregated by type of benefit



12.1.2 Rangatahi on benefits by age group

Figure 12.3 and Figure 12.4 disaggregates the analysis of rangatahi on benefits by age groups: 16-17, 18-19 and 20-24 years for the Waikato region and New Zealand.

Summary of key points:

- Around 2 per cent of Waikato rangatahi aged 16-17 years received a benefit payment, which is similar to the national average. Three-quarters (74 per cent) of these beneficiaries received a Youth or Young parent payment and the remaining one quarter (26 per cent) a Supported living payment.
- 13 per cent of rangatahi aged 18-19 years resident in the Waikato region received a benefit payment in 2021, slightly higher than the national average of 11 per cent. Over three-quarters (76 per cent) of these rangatahi were on a Jobseeker support benefit, 12 per cent received a Supported living payment and the remaining 12 per cent a Youth or Young parent payment or other type of main benefit. This trend is similar to that seen nationally.
- 16 per cent of rangatahi aged 20-24 years resident in the Waikato region received a benefit payment in 2021, higher than the national average of 13 per cent. Close to two-thirds (64 per cent) of these Waikato rangatahi received a Jobseeker support payment, and one quarter (24 per cent) a Sole parent support payment. The proportion of rangatahi beneficiaries aged 20-24 years on a Sole parent benefit in 2021 was slightly higher in the Waikato region (24 per cent) than seen nationally (21 per cent).

Figure 12.3 Proportion of rangatahi in the Waikato region receiving a benefit payment from MSD disaggregated by age, 2019-2021 (year ending September)

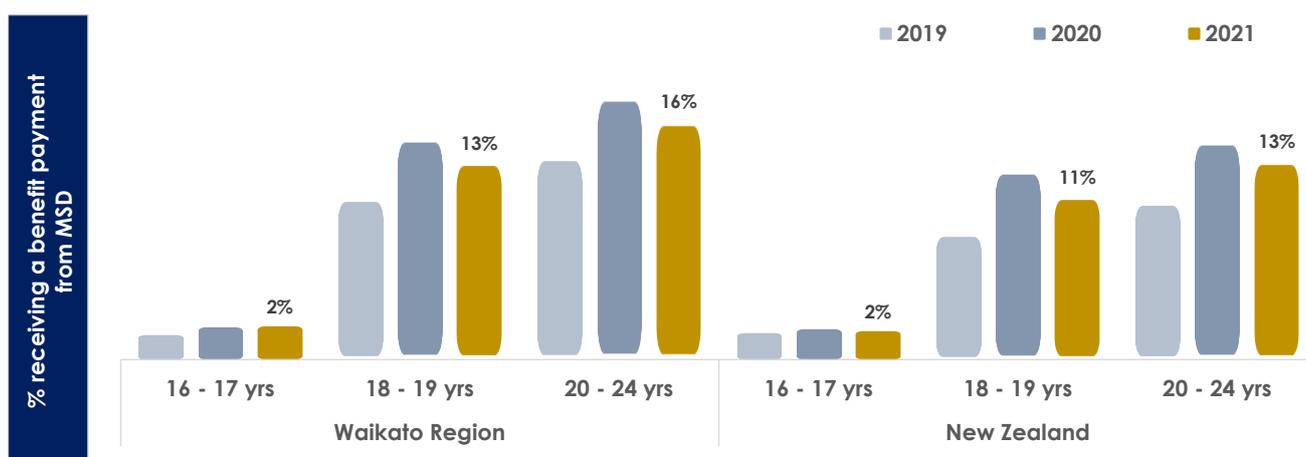
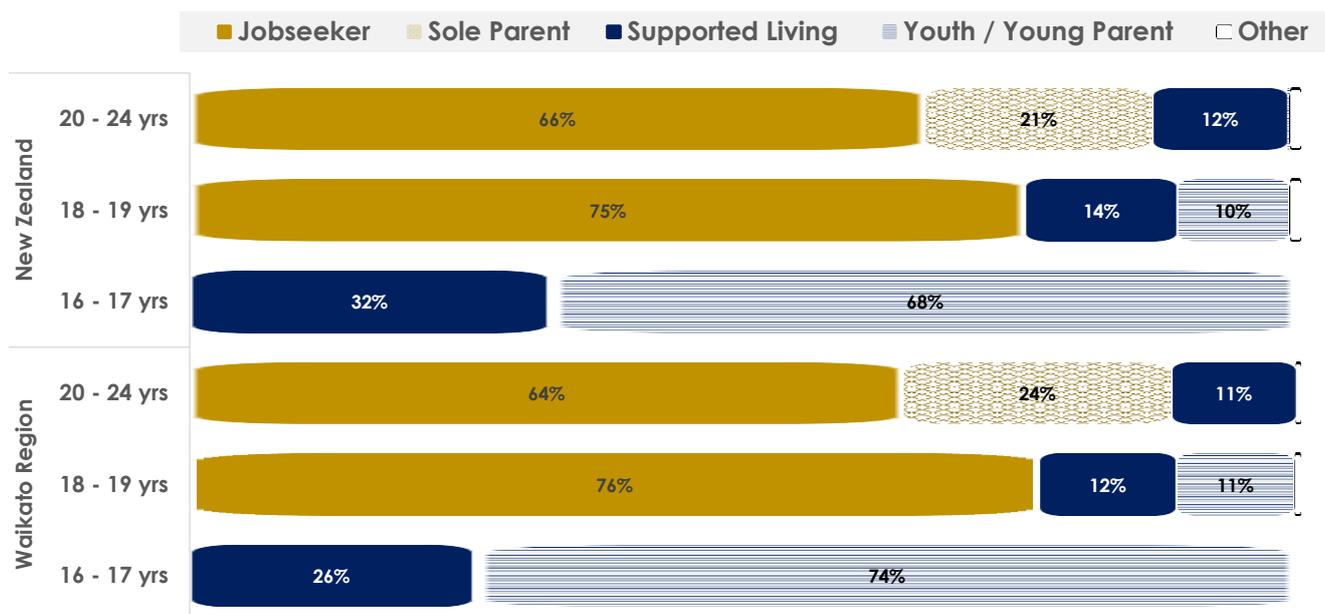


Figure 12.4 Distribution of rangatahi who received benefit payment(s) in 2021 (year ending September) disaggregated by type of benefit and age group



12.1.3 Rangatahi on benefits by ethnic group

Figure 12.5 and Figure 12.6 disaggregate the analysis by broad ethnic groups: Māori, Pacific and Other, for the Waikato region and New Zealand. The 'Other' ethnic group will be predominantly those that identify within the broad European ethnic category (which includes New Zealand European). The previously noted limitations of these analysis should be considered while interpreting the findings. Also, please note that these findings are based on the 2018 year ending September. Summary of key points:

- Māori rangatahi were more likely to receive a benefit payment than non-Māori.
- A much higher proportion of Māori and Pacific rangatahi aged 16-24 years who were beneficiaries received a Sole parent support compared to the residual 'Other' ethnic group.
- Beneficiary rangatahi from the 'Other' ethnic grouping were more likely to receive a Supported living payment, 22 per cent, compared to only 7-8 per cent among Māori and Pacific rangatahi.
- Compared to the other two groups, Pacific rangatahi had a much higher proportion of beneficiaries on a Jobseeker related payment. However, this difference seen in the Waikato region for Pacific rangatahi should be interpreted with caution due to the small number of Pacific rangatahi in the region and issues with the prioritised ethnicity classification approach.

Figure 12.5 Proportion of rangatahi aged 16-24 years in the Waikato region receiving a benefit payment from MSD in 2018 (year ending September), disaggregated by ethnic group

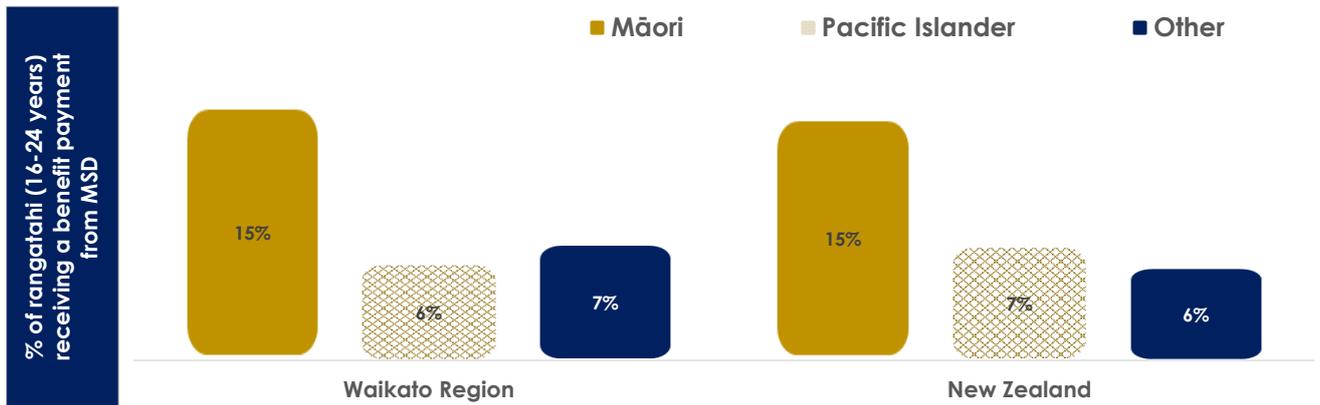
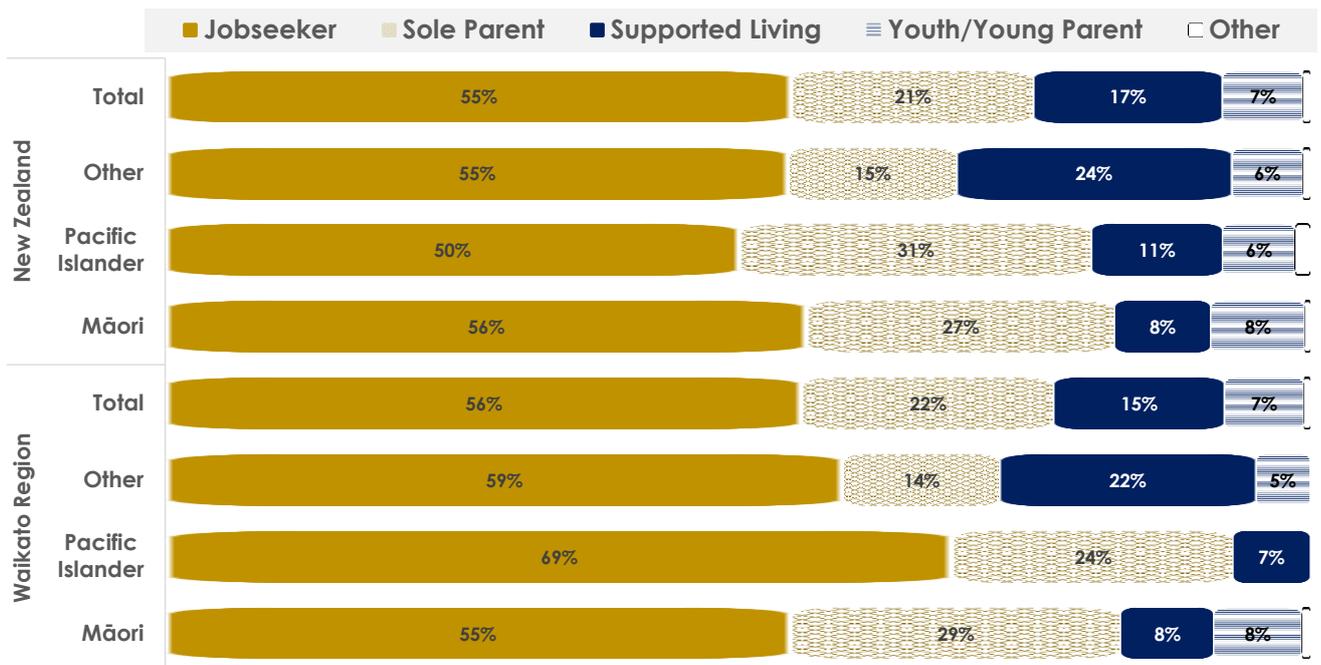


Figure 12.6 Proportion of rangatahi aged 16-24 years who received benefit payment(s) in 2018 (year ending September) disaggregated by type of benefit and ethnic group



13.1 Wellbeing indicators from the New Zealand Health Survey

The New Zealand Health Survey (NZHS) is an ongoing survey²⁹ that monitors population health providing evidence for health policy and strategy development. The analyses presented in this report use the most recent pooled data (from the 2017–20 survey years). Pooling data across years increases the sample size, produces more reliable estimates, and enables disaggregation by region, age, sex or ethnic group. The NZHS comprises a set of core questions which are administered both face to face and computer assisted to the survey population.

Figure 13.1 to Figure 13.8 provide results for some selected measures from this survey for rangatahi aged 15-24 years in the Waikato region with national comparisons included. Also shown are 95 per cent upper and lower confidence intervals³⁰ in order to assess the reliability of these estimates.

The difference in rates between population groups, e.g. males compared to females or the Waikato region compared to New Zealand, for the various survey measures may or may not be statistically significant as measured by the p-value.³¹ Where these differences are significant, it has been noted accordingly in the findings.

13.1.1 Health status

The proportion of 15-24 year olds in New Zealand and the Waikato region who rated their health as “good”, “very good” or “excellent” is presented in Figure 13.1.³² Self-reported health measures are based on an individual's own perception of their health status and functioning. These measures provide an alternative source of data to objective measures of health, such as hospital rates and disease prevalence. The majority of rangatahi in the Waikato regard their overall health as excellent, very good or good.

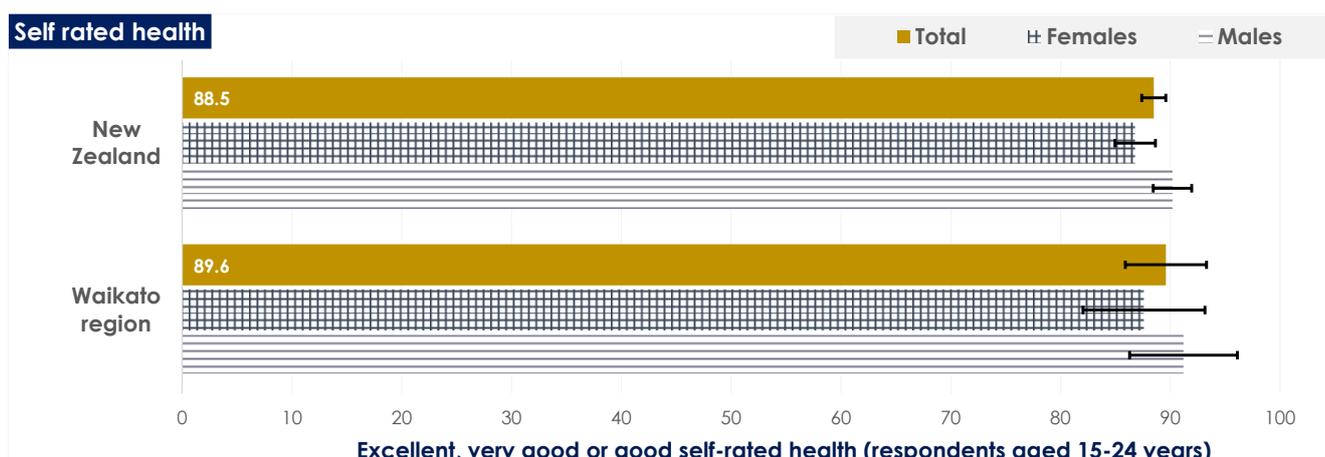
²⁹ The NZHS has a multi-stage, stratified, probability-proportional-to-size (PPS) sampling design. The survey is designed to yield an annual sample size of approximately 14,000 adults and 5,000 children

³⁰ Confidence interval is a way to measure how well the sample represents the population being studied/analysed. The 95 per cent confidence interval is a range of values (upper and lower) that one can be 95 per cent confident contains the true mean of the population. The bigger the confidence interval (upper minus the lower value), lower is the reliability of the calculated statistic.

³¹ A p-value less than 0.05 (typically ≤ 0.05) is statistically significant. It indicates strong evidence against the null hypothesis, as there is less than a 5 per cent probability the null is correct (and the results are random).

³² Various survey instruments have been developed to assess these dimensions. For adults, instruments included in the core NZHS are the SF-12 and the K10.

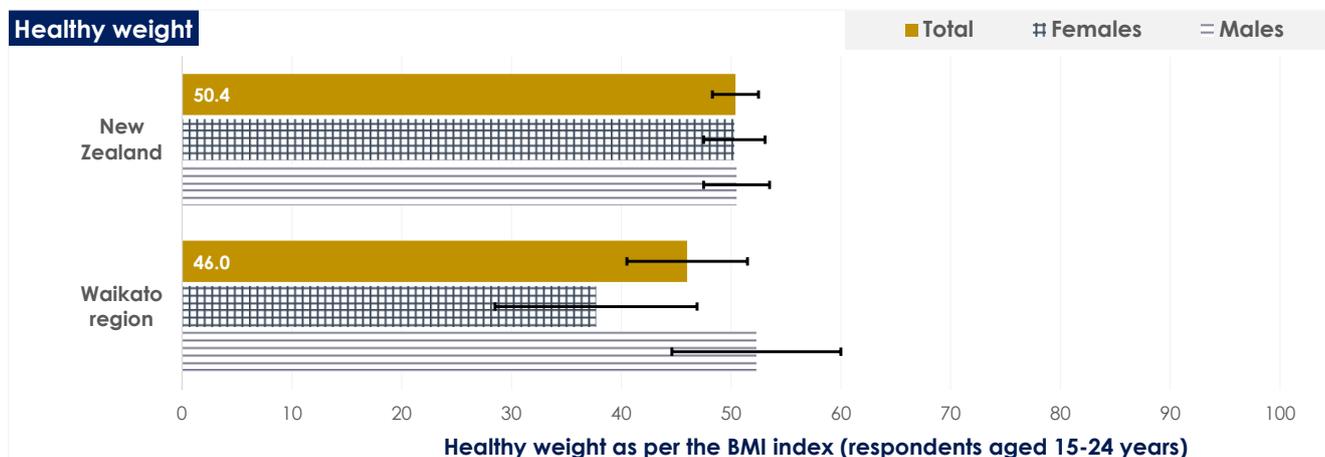
Figure 13.1 Respondents aged 15-24 years having excellent, very good or good self-rated health, NZHS 2017-20



Reaching and maintaining a healthy weight can reduce the risk of heart disease, stroke, diabetes and some forms of cancer. It can help ensure that bones and joints are not under too much stress. Figure 13.2 shows the proportion of survey respondents aged 15-24 years who are a healthy weight. The healthy weight variable within the survey is measured using the BMI index³³. Objective measures like height, weight and waist circumference measurements are taken at least twice for each respondent during the face-to-face interview at the end of the interview component of the survey (Ministry of Health, 2021).

Less than half of the surveyed rangatahi in the Waikato region had a healthy weight as measured by the BMI index. This is lower than the national average however this difference is not statistically significant. A much lower proportion of female rangatahi in the Waikato region had a healthy weight compared to female rangatahi nationally. This difference is statistically significant and should be noted.

Figure 13.2 Respondents aged 15-24 years who are a healthy weight as measured by the BMI Index, NZHS 2017-20



³³ For adults, a healthy weight is a BMI measurement between 18.5 and 24.9 kg/m².

13.1.2 Substance use

Substance use/misuse among rangatahi can lead to problems at school, cause or aggravate physical and mental health-related issues, promote poor peer relationships, cause motor-vehicle accidents, and place stress on the family. They can also develop into lifelong issues such as substance dependence, chronic health problems, and have social and financial consequences.

Figure 13.3 shows the proportion of respondents aged 15-24 years who reported being current smokers. In the survey, current smokers are defined as those who smoke at least monthly, and have smoked more than 100 cigarettes in their whole life. Rangatahi in the Waikato region have a higher prevalence of current smoking compared to rangatahi nationally however this difference is not statistically significant.

Figure 13.3 Respondents aged 15-24 years who reported being current smokers, NZHS 2017-20

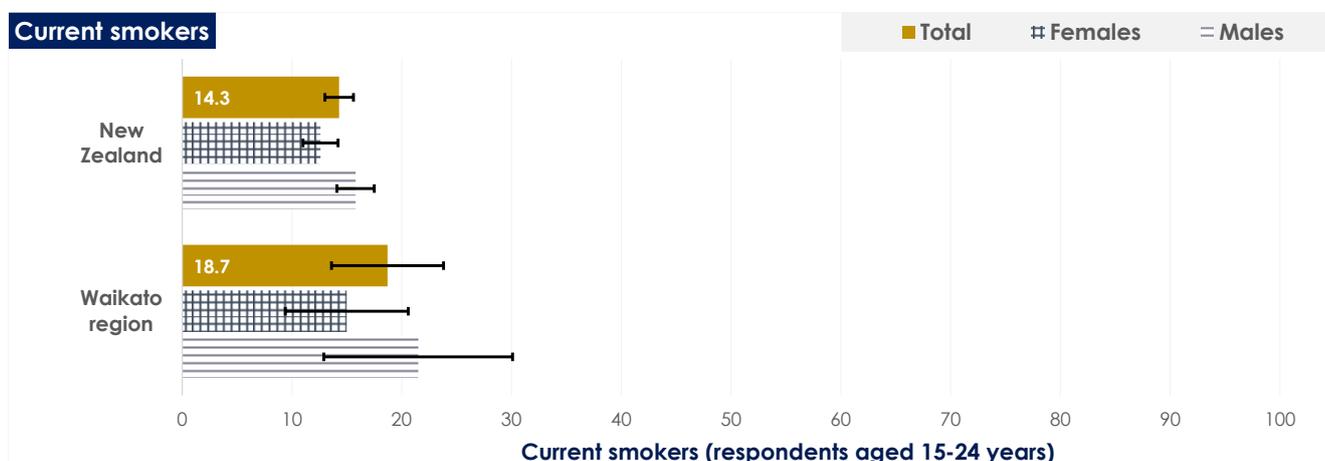
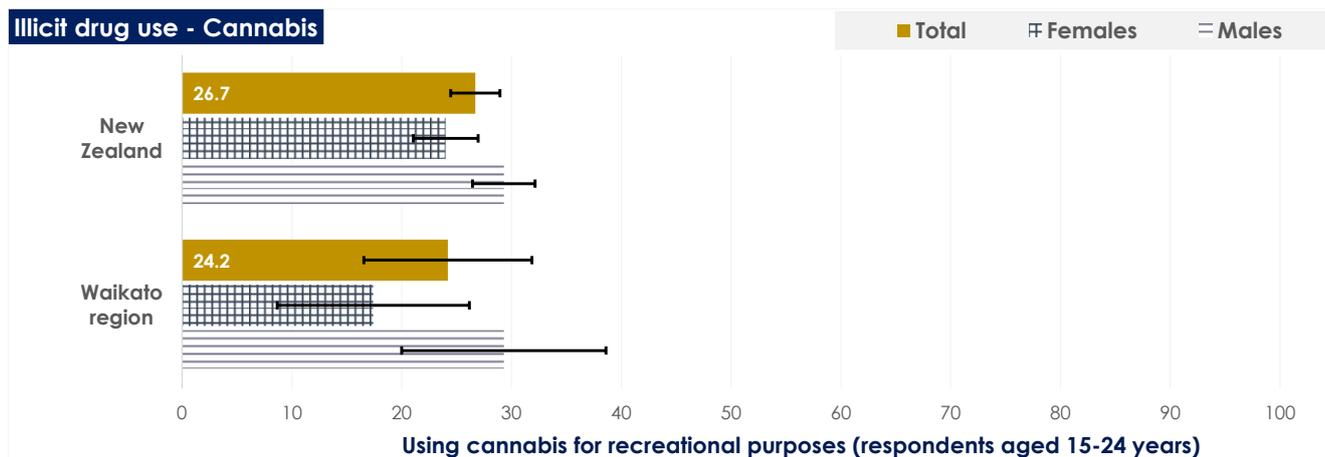


Figure 13.4 shows the proportion of respondents aged 15-24 years who reported using cannabis for recreational or non-medical purposes, or to get high, in the last 12 months. Cannabis is the most commonly used illicit drug used in New Zealand. There is increasing evidence to suggest that the regular or heavy use of cannabis may have a number of adverse consequences including increased risks of: mental health problems; other forms of illicit drug use; school dropout and educational underachievement; motor vehicle collisions and injuries. By the age of 21, 80 per cent of New Zealanders have tried cannabis at least once and 10 per cent have developed a pattern of heavy use (Fergusson & Boden, 2004).

In the Waikato region, one in four rangatahi reported having cannabis for recreational or non-medical purposes, or to get high, in the last 12 months, slightly lower than the rate reported nationally. Again, this difference is not statistically significant.

Figure 13.4 Respondents aged 15-24 years who reported using cannabis for recreational or non-medical purposes, or to get high, in the last 12 months, NZHS 2017-20



13.1.3 Nutrition and physical activity

Poor diet and excess body weight are leading causes of potentially avoidable health loss in New Zealand. Figure 13.5 gives the proportion of who reported having adequate vegetable and fruit intake. Adequate vegetable and fruit intake is measured in the New Zealand Health Survey according to the Ministry of Health guidelines of at least three servings of vegetables each day and at least two servings of fruit each day. These guidelines are met at a rate of 26.6 per cent for Waikato rangatahi, similar to the 28.7 per cent seen nationally. There is therefore significant opportunity to increase fruit and vegetable intake for Waikato rangatahi.

Figure 13.5 Respondents aged 15-24 years reporting as having adequate vegetable and fruit intake, NZ Health Survey 2017-20

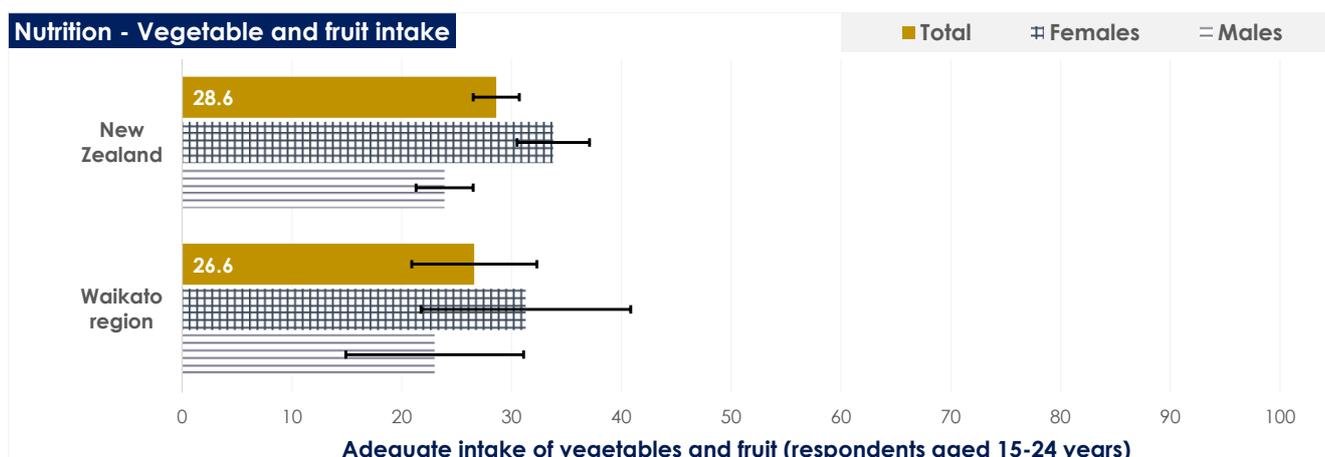
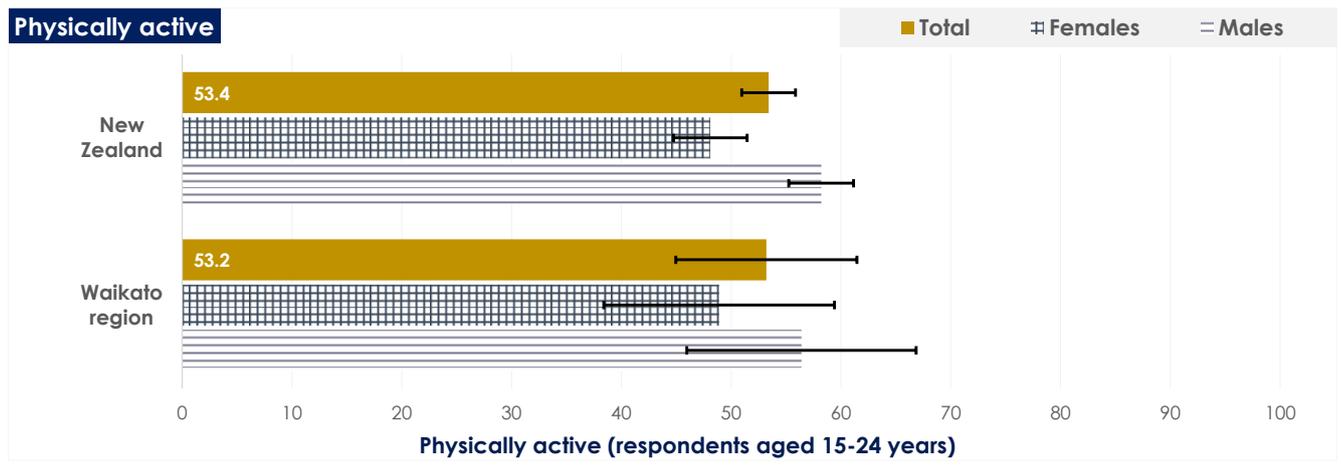


Figure 13.6 shows the proportion of survey respondents aged 15-24 years who reported being physically active. Adequate physical activity in the NZHS is defined as doing at least 30 minutes of brisk walking or moderate-intensity physical activity (or equivalent vigorous activity), for at least 10 minutes at a time, at least five days a week. For children and young people aged 5-18 years, the Ministry of Health recommends at least 60 minutes or more of moderate to vigorous physical activity each day. In the Waikato region, approximately half of rangatahi meet these guideline requirements for physical activity (the same rate as seen nationally for rangatahi).

Figure 13.6 Respondents aged 15-24 years reporting to be physically active, NZHS 2017-20



13.1.4 Health service utilisation and patient experience

The use of appropriate and effective health care services is an important determinant of population health. The NZHS focuses on health service utilisation and patient experience in the primary health care setting, which is often people's first point of contact with the health system. Primary health care use for adults (aged 15+ years) in the NZHS is defined as having visited a GP at their usual medical centre, or somewhere else, in the past 12 months. Figure 13.7 shows the proportion of respondents aged 15-24 years who reported having visited a GP in the past 12 months. A similar proportion of rangatahi in the Waikato region report at least one GP visit annually, when compared to nationally. There are significant differences in GP access by gender both regionally and nationally.

Figure 13.7 Respondents aged 15-24 years who reported as having visited a GP in the past 12 months, NZHS 2017-20

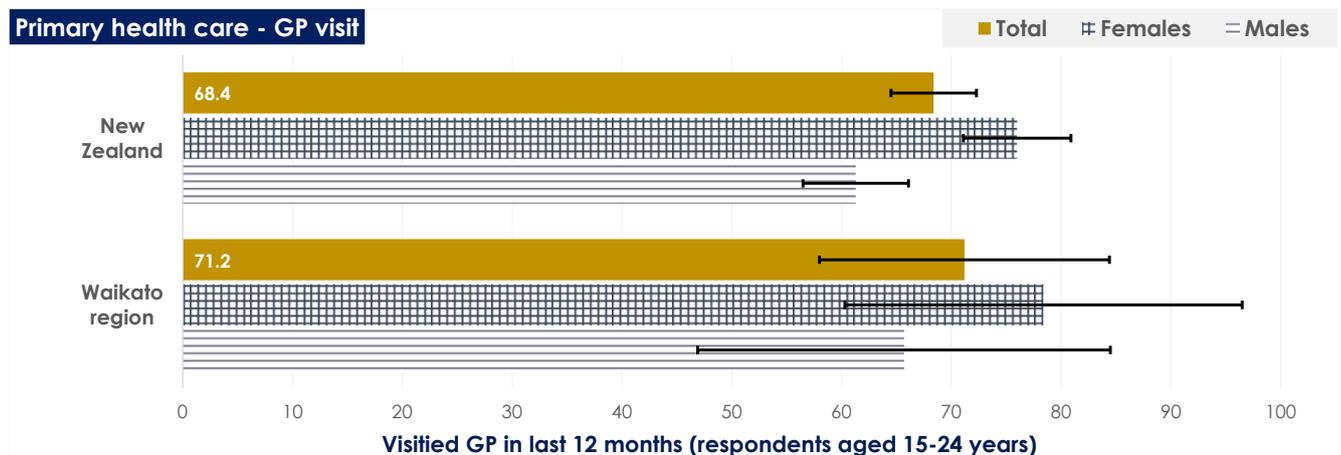


Figure 13.8 show the proportion of rangatahi respondents who reported an unmet need for primary health care. Unmet need for primary health care is defined as having experienced one or more types of unmet need for a GP, nurse or other health care worker in the past 12 months at their usual medical centre because of cost or transport. This unmet need is relatively common for rangatahi, both in the Waikato region and nationally, and particularly for young women.

Figure 13.8 Respondents aged 15-24 years who reported an unmet need for primary health care, NZHS 2017-20

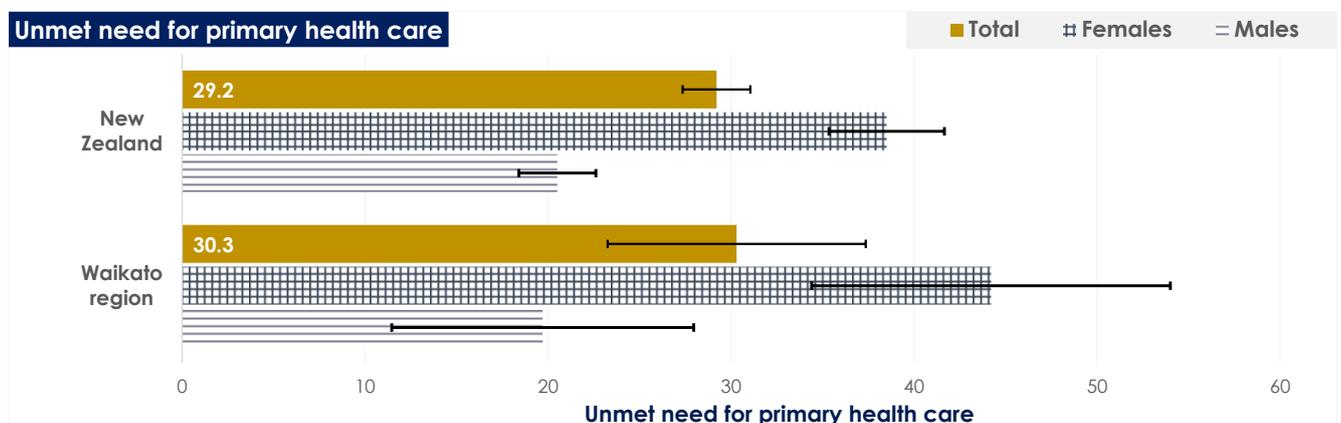
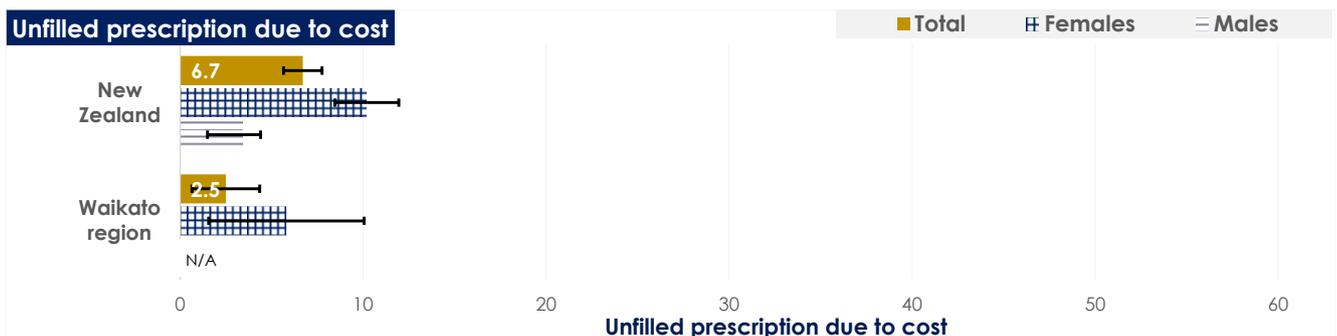
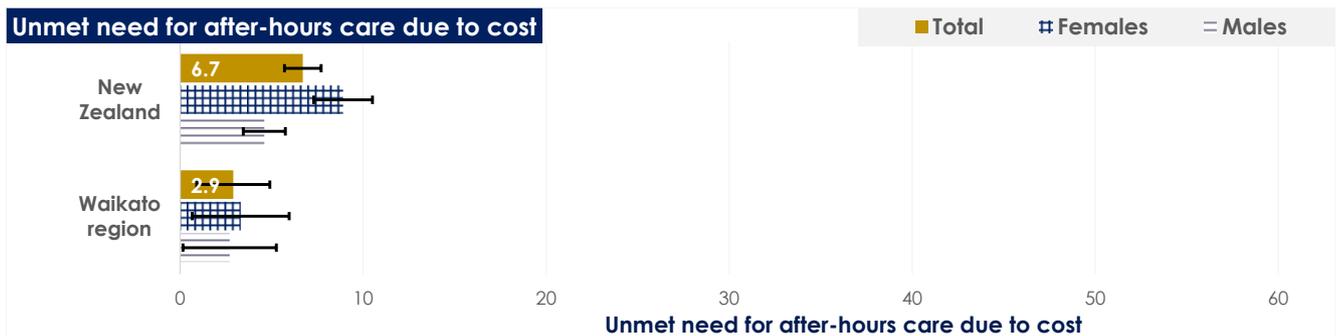
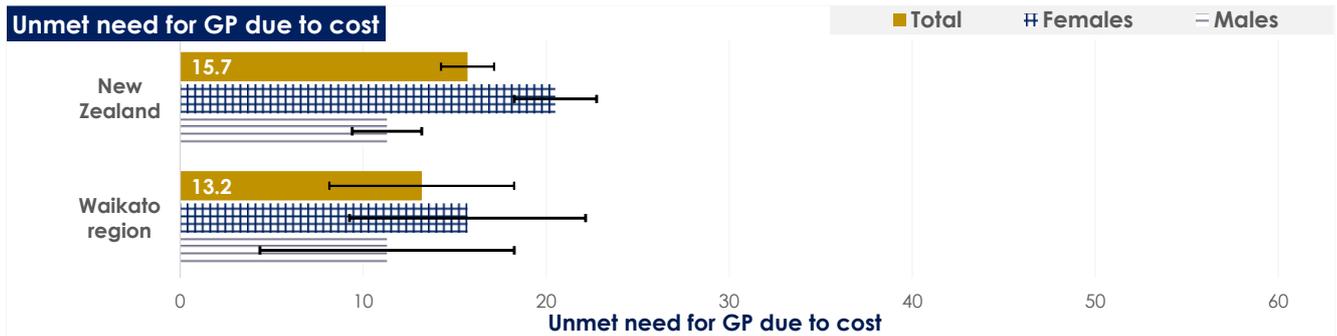
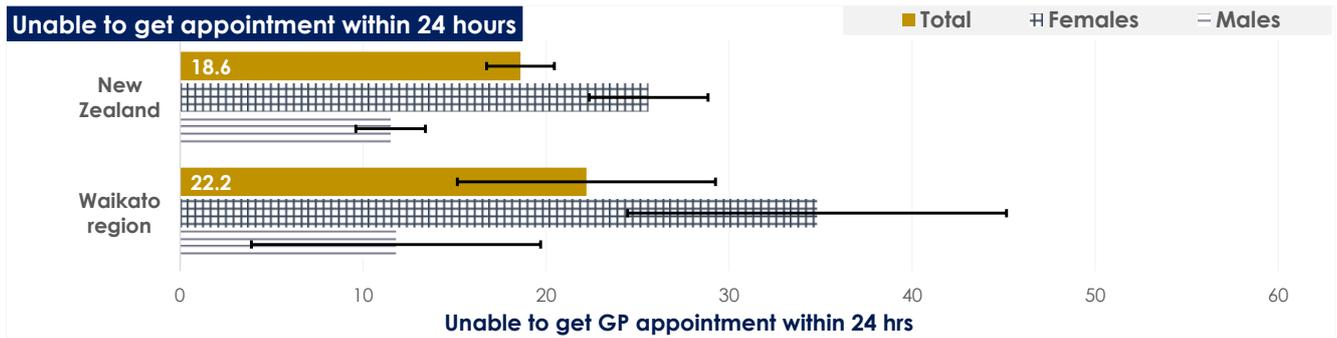


Figure 13.9 looks at the various barriers to accessing primary health care which leads to one or more unmet need. The only statistically significant difference between the rates seen in the Waikato region compared to those seen nationally is for the 'unmet need for after-hours care due to cost' variable where the rate in the Waikato region is much lower.

Figure 13.9 Barriers to accessing primary health care, NZHS 2017-20



14.1 Rangatahi access to secondary mental health and addiction services

This section looks at the data on secondary mental health or alcohol and drug (AoD) services provided through District Health Boards (DHBs) that are utilised by rangatahi³⁴. The key data source is the Ministry of Health's Programme for the Integration of Mental Health Database (PRIMHD) which contains DHB funded secondary care data for clients accessing inpatient, residential and community-based services. Data for services provided by the various Non-Government Organisations (NGOs) have been excluded. The customised PRIMHD dataset provided by the Ministry of Health for this report included the distinct count of those aged 15-24 years³⁵ seen by a DHB funded secondary mental health/AoD service disaggregated by the TA of domicile³⁶, sex and prioritised ethnicity. The data of the ten TAs within the Waikato region have been aggregated to calculate the regional total. The access rate has been calculated using the number of distinct clients aged 15-24 years in a given financial year (year ending June) divided by the estimated number of residents aged 15-24 years for that year (Stats NZ 2018 based estimates).

It should be noted that the analyses presented are based on service access data, rather than the prevalence of mental health or addiction issues, although these overlap. Also, service access rates do not provide information on how many rangatahi in need of mental health/AoD services are unable to access them, or what the barriers to access might be. The access rates presented here therefore cannot be interpreted as descriptions of rangatahi need or unmet need. Possible reasons for sub-optimal rates of access include the threshold for access to secondary mental health services being set too high, a lack of services, workforce shortages and the possibility of rangatahi not attempting to access services.

Finally, PRIMHD access does not necessarily mean ongoing access because clients who received a one-off assessment are included in the same dataset as those clients attending regular treatment sessions or receiving care in a residential setting. Continuity of care or ongoing treatment is considered to be an essential feature for the effective management of long-term disorders like mental health and addiction, especially for clients with serious issues requiring secondary care intervention (Kukutai & Pawar, 2013).

³⁴ Mental health services provided by primary care are not included

³⁵ A person can access/utilise a service more than once in a given year therefore in order to calculate the rate of access, each person is counted only once in a given year.

³⁶ The TA area in which the client resided at the time of time of the contact with the mental health service or health event

14.1.1 Overall trend of mental health and AoD service access

Figure 14.1 shows the estimated proportion of rangatahi aged 15-24 years resident in the Waikato region who utilised the DHB funded secondary mental health and addiction services over the 2012-2020 period (years ending June). Comparative national data are also provided. Until approximately 2017, the usage rates in the Waikato region were lower than that seen nationally. In the last two years, this rate has increased to around 5.7 per cent, marginally higher than the 5.3 per cent noted nationally.

Figure 14.1 Proportion of the resident rangatahi population utilising DHB funded secondary mental health/addiction services, 2012-2020 (YE June)

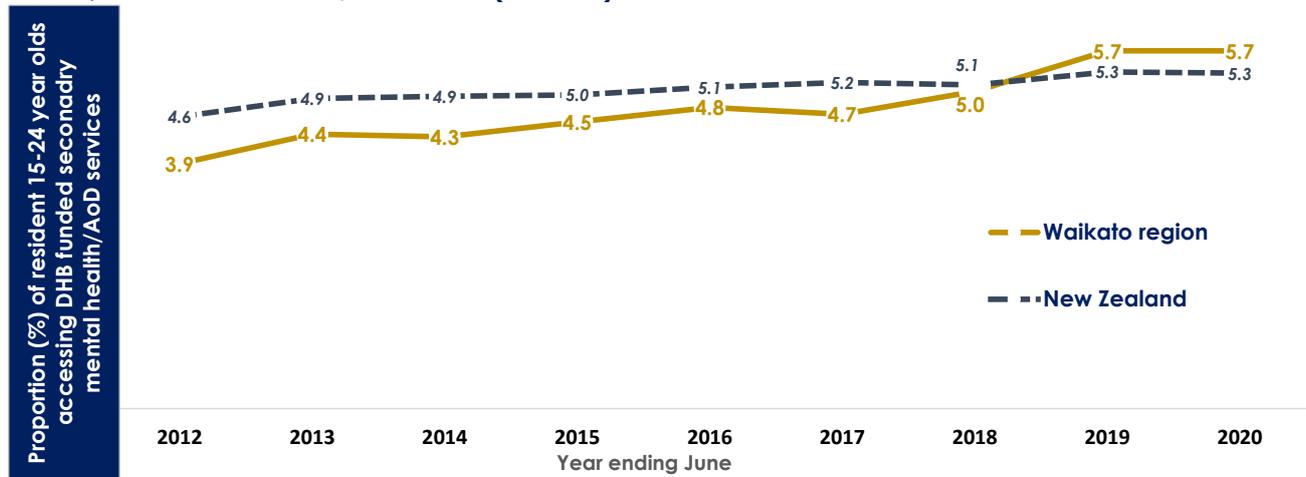
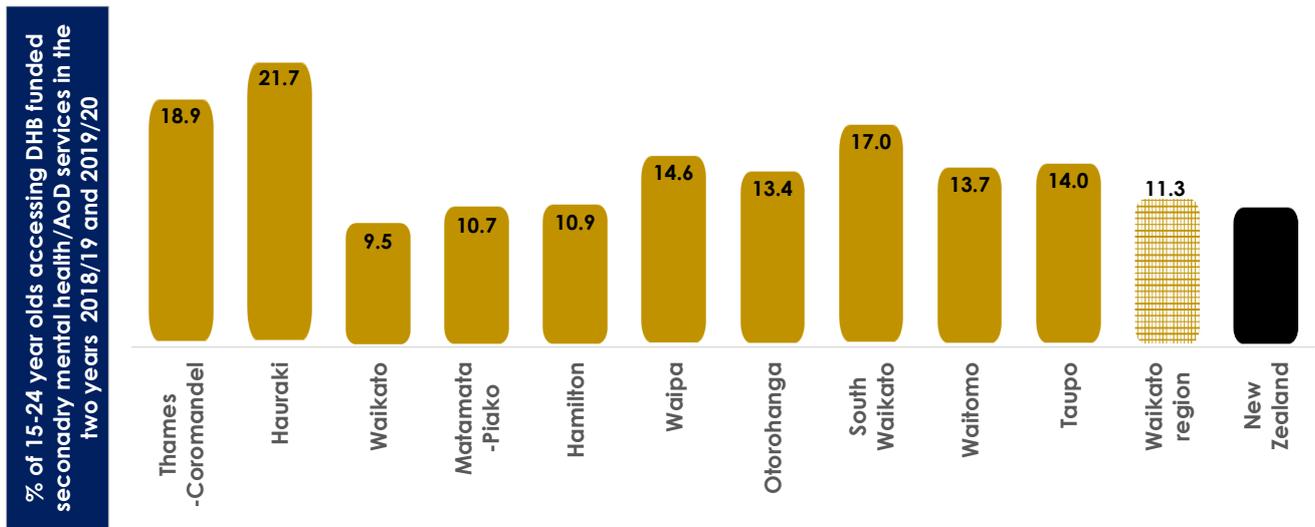


Figure 14.2 disaggregates the utilisation rates by TA of residence. The data for 2018/19 and 2019/20 have been combined to increase the sample size and reduce the associated error, particularly in smaller TAs. Hauraki district recorded the highest usage of DHB funded secondary mental health/addiction services with one in every five (21.78 per cent) rangatahi aged 15-24 years having accessed these services over the two-year period.

The other two TAs with high usage rates over this two-year period are Thames-Coromandel (18.9 per cent) and South Waikato (17.0 per cent). The lowest rates were recorded in Waikato district (9.5 per cent), Matamata-Piako and Hamilton (~11 per cent).

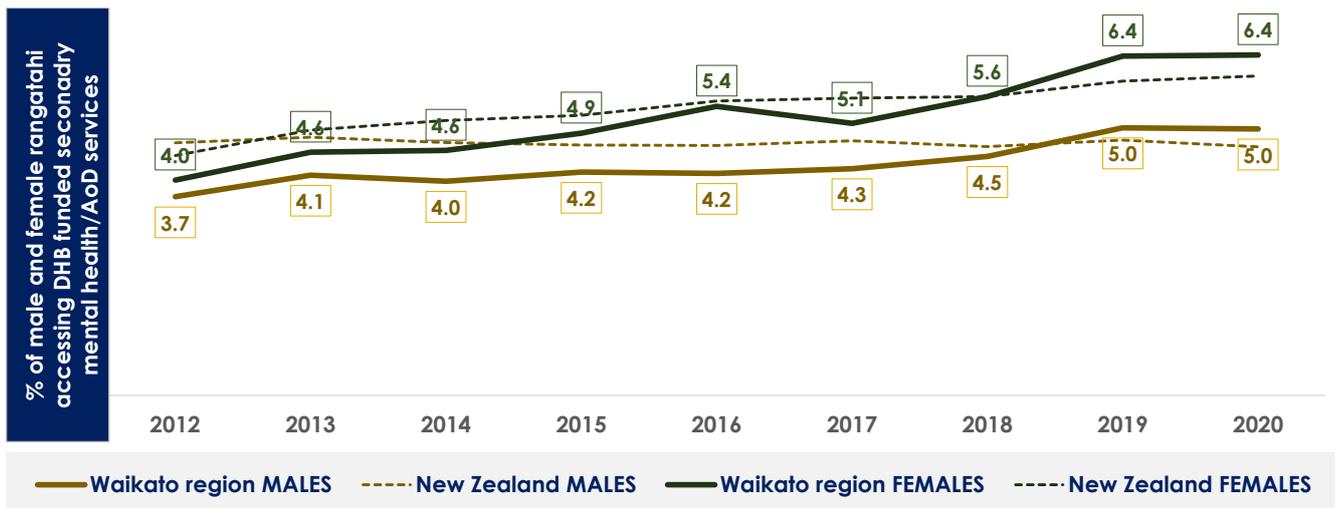
Figure 14.2 Proportion of the resident rangatahi utilising DHB funded secondary mental health/addiction services in each TA in the combined two-year period 2019-2020 (YE June)



14.1.2 Mental health and AoD service access, by sex

Figure 14.3 shows the annual usage rates in the PRIMHD database, disaggregated by sex for the region, with national data also included for comparison. Similar rates are seen for Waikato compared to nationally, with a higher proportion of female compared to male rangatahi utilising DHB funded services.

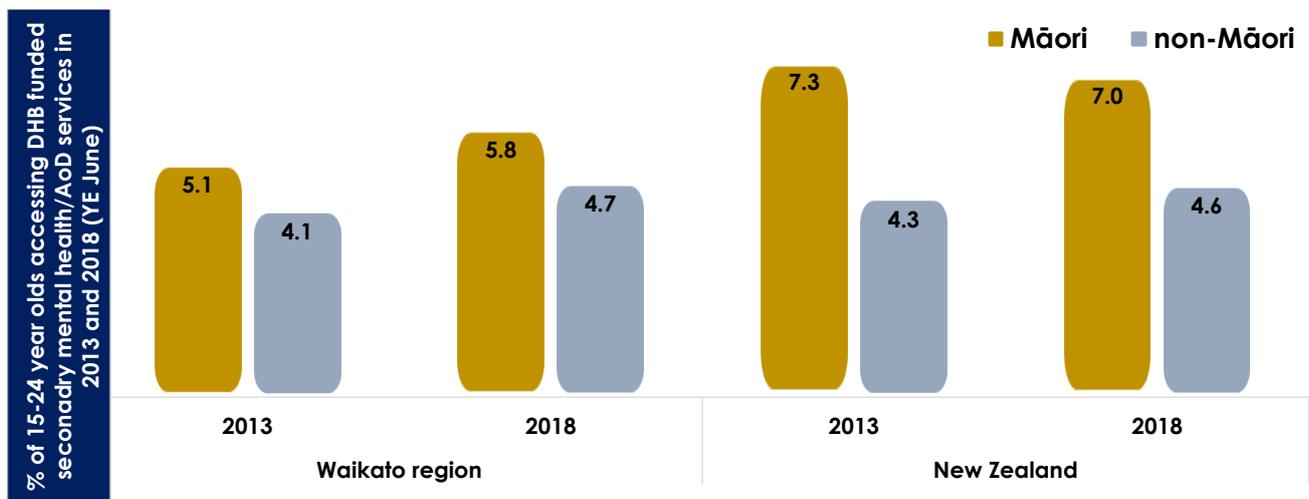
Figure 14.3 Proportion of the resident male and female rangatahi population utilising DHB funded secondary mental health/addiction services, 2012-2020 (YE June)



14.1.3 Mental health and AoD service access, by ethnic group

Figure 14.4 shows the usage rates in the PRIMHD database, disaggregated by ethnic group for the region, with national data also included for comparison. Rates are presented for 2013 and 2018, to allow comparisons utilising Census denominator data. Both nationally and in the Waikato region a similar proportion of non-Māori rangatahi accessed Mental health and AoD services in these years. A lower proportion of Māori rangatahi in the Waikato region accessed Mental health and AoD services compared to Māori rangatahi nationally. This may reflect greater access barriers for Māori in the Waikato region.

Figure 14.4 Proportion of the resident Māori and non-Māori rangatahi accessing DHB funded secondary health services in 2013 and 2018 (YE June)

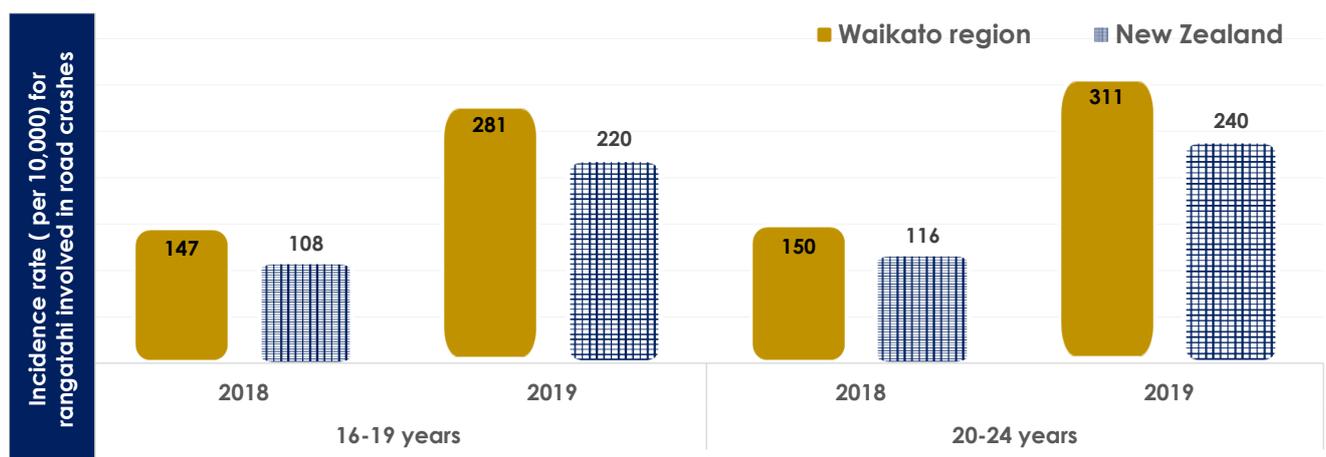


15.1 Road accidents

The analysis in this section is based on road traffic crashes data provided from the Crash Analysis System (CAS) by the Waka Kotahi (NZ Transport Agency). It includes all crashes involving rangatahi aged 16-24 years recorded as at 24 November 2021. The data for the 2021 year is therefore incomplete and not included.³⁷ Due to the Covid-19 pandemic, NZ had a 4-level Alert system in place starting from 21 March 2020 and the country was in Alert levels 3 or 4 until 14 May 2020. The amount of traffic on the roads during level 4 lockdown was greatly reduced, which consequently reduced the number of road crashes. The data for the 2020 year is also therefore not included and the analysis presented is based on the crash data for 2018 and 2019. The rates have been calculated using the customised resident population data for these two years sourced from Stats NZ.

Figure 15.1 shows the incidence rate per 10,000 for resident rangatahi involved in road crashes in 2018 and 2019 across the Waikato region, with comparative national data also included. Compared to the national average, in 2019, the Waikato region had a higher incidence of road crashes involving rangatahi and this rate has doubled compared to the previous year. There are different patterns by crash severity (the severity of the worst injury in the crash) as shown in Figure 14.2. The increased incidence was a result of the number of road crashes involving rangatahi resulting in minor or no injuries³⁸ more than doubling over the 2018-2019 period. The proportion of the total recorded road crashes involving rangatahi resulting in serious or fatal injuries has in fact declined over 2018-2019.

Figure 15.1 Incidence rate (per 10,000) for rangatahi involved in road crashes in 2018 and 2019



³⁷ Due to the police reporting time frame and subsequent data processing there is a lag from the time of a crash to full and correct crash records within CAS.

³⁸ Due to the nature of non-fatal crashes it is believed that these are under-reported, with the level of under-reporting decreasing with the severity of the crash.

Figure 15.2 Proportion of the total recorded road crashes involving rangatahi which resulted in serious or fatal injuries, 2018 and 2019



Figure 15.3 shows the incidence rates (per 10,000) for crashes involving rangatahi which resulted in serious or fatal injuries. The incidence rates in the Waikato region are much higher than the national average for both years studied and for both the 16-19 years and 20-24 years age groups.

Figure 15.3 Incidence rate (per 10,000) for rangatahi involved in road crashes resulting in serious or fatal injuries, 2018 and 2019



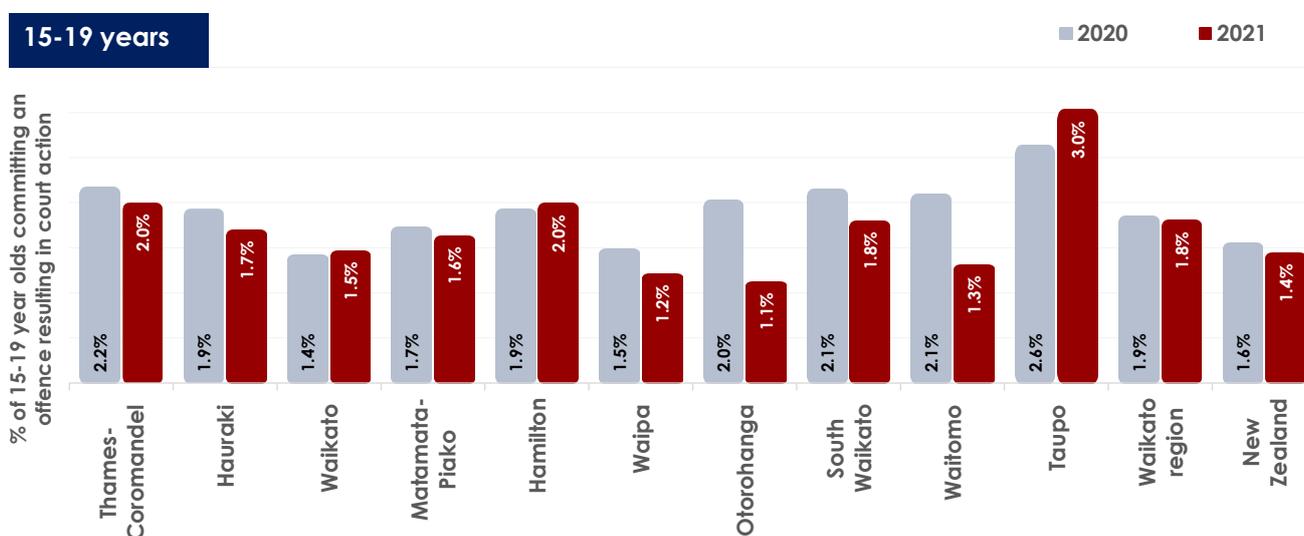
16.1 Rangatahi offending (proceedings resulting in court action)

The analysis in this section is based on data provided by New Zealand Police giving the number of unique offenders aged 15-19 years and 20-24 years old whose proceedings resulted in court actions for each of the 12-month periods ending in 30 June 2020 and 30 June 2021. The 'proceedings against offenders' count each instance of an offender being proceeded against by Police for one or more offences and the 'unique offenders' population counts each offender once in a 12-month period irrespective of how many times they have been proceeded against within that period. The offence attributed to the offender is based on the most serious offence committed within that 12-month period.

Figure 15.1 and Figure 15.2 show the incidence rates (per cent of estimated population) for rangatahi who committed offences which resulted in court action in 2020 and 2021 (year ending June). The incidence rates for the Waikato region are only marginally higher than the national average, with this difference more noticeable for older rangatahi aged 20-24 years. The incidence rate of 20-24 year olds in the region (3.7 per cent) is double that for those aged 15-19 years (1.8 per cent) in 2021.

The highest incidence rates among 15-19 year olds was recorded in the Taupo district (3.0 percent) and the lowest (well below the regional average) in Otorohanga, Waipa and Waitomo. The incidence rates have remained similar or declined over the 2020-2021 period in all TAs except Taupo where the rate has increased. The most noticeable declines are noted for Otorohanga and Waitomo.

Figure 15.1 Incidence rate (per 100) for rangatahi aged 15-19 years who committed offences that resulted in court action, 2020 and 2021 (YE June)



For rangatahi aged 20-24 years, the incidence rates in South Waikato, Waitomo, Taupo and Hauraki are well above the regional average of 3.7 per cent in 2021. The lowest rate is seen in Waipa and Hamilton followed by Otorohanga. Over the 2020-2021 period, the rate has declined in all TA areas except Waikato district.

Figure 15.2 Incidence rate (per 100) for rangatahi aged 20-24 years who committed offences that resulted in court action, 2020 and 2021 (YE June)

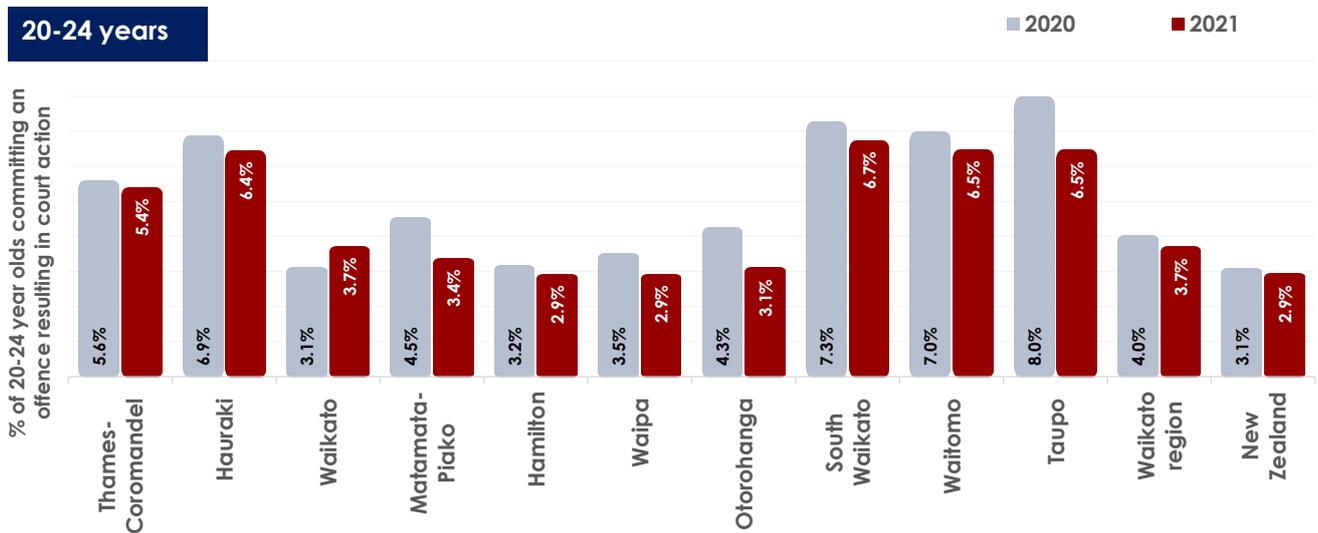


Figure 15.3 shows the incidence rates for all rangatahi disaggregated by sex. As seen nationally, across the region, male rangatahi are approximately three times more likely to commit offences that result in court action, compared to females. This disparity is most pronounced in Waitomo and Taupo followed by Thames-Coromandel.

Figure 15.3 Incidence rate (per 100) disaggregated by sex for rangatahi aged 15-24 years who committed offences that resulted in court action, 2021 (YE June)

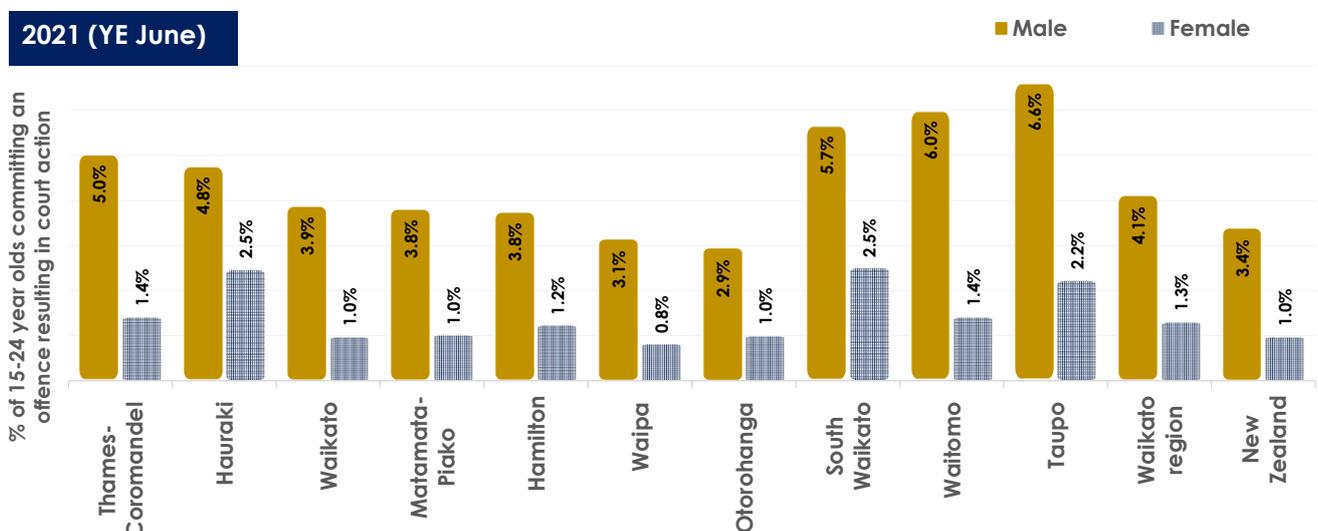
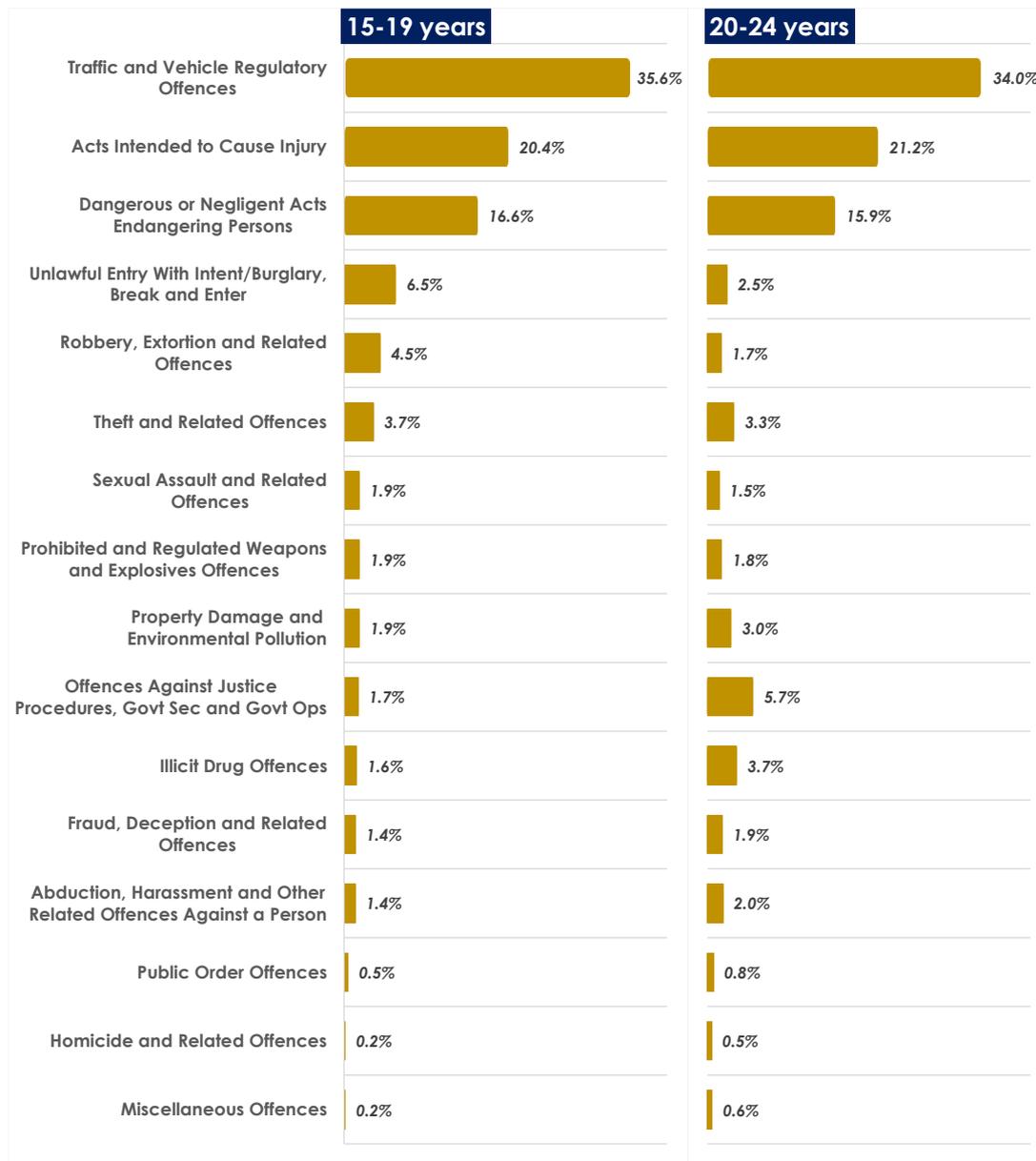


Figure 15.4 shows the type of recorded offences which resulted in a court action. The most common offences for both 15-19 year olds, and 20-24 year olds were: traffic offences; acts intended to cause injury; and dangerous or negligent acts endangering persons. Unlawful entry with intent, burglary and breaking and entering were more common offences for the younger 15-19 year olds compared to 20-24 year olds, whereas offences against justice procedures and government, and illicit drug offences were more common in the older age group compared to the younger.

Figure 15.4 Type of offence committed by rangatahi aged 15-19 and 20-24 years across the Waikato region, 2021 (YE June)



17.1 Discussion and conclusion

The intention of this report is to contribute to the work of the Waikato Wellbeing Project by providing evidence to inform interventions and opportunities to improve outcomes for rangatahi in the Waikato region. This report describes the current and projected population profile of rangatahi across the Waikato region, focusing on the 10 districts of the Waikato region, and presenting a range of available data related to key socio-economic indicators of rangatahi wellbeing.

Rangatahi (15-24 years) in the Waikato region make up 12.6 per cent of the resident population, while tamariki (0-14 years) make up 20.3 per cent of the resident population. Almost one-third of the rangatahi population, and 37.2 per cent of the tamariki population, in the Waikato region are Māori, higher than the national average of 22 and 27 per cent, respectively. Young people in the Waikato region commonly experience area-level socioeconomic deprivation.

The demographic profile of the Waikato region is projected to change with the onset of structural and numerical ageing, predominantly in rural areas. Because of this ageing, the proportion of children across the districts of the Waikato region are estimated to reduce from 2021-2038, while for rangatahi there is a more mixed picture with estimated reductions in the proportion of rangatahi particularly in the more southern districts and in the Thames-Coromandel districts.

Compositional changes are also estimated, with the resident population set to become more ethnically diverse over time, and the population of Māori estimated to increase significantly over time. A smaller, structurally younger population will co-exist alongside a much older and numerically dominant population. The age-sex structures of the major ethnic groups across New Zealand in 2020 (Appendix Figure 6) show very clearly that Māori will remain relatively youthful for the foreseeable future and that ever larger cohorts of Māori will enter the working ages. The relatively youthful age of the Pacific population, closely resembling the Māori population in structure, will also influence population estimates in the future, particularly estimates of the future child and youth communities, and the working ages.

As each successively larger cohort from the Baby Boom generation retires, it will be replaced by a successively smaller cohort at labour market entry age. This situation will usher in a demographically-tight labour market, in which youthful cohorts (such as Māori and Pacific) will be in short supply and great demand. Increasing access to education, employment, training and socio-economic wellbeing for young Māori and Pacific is of critical importance – not just for individual outcomes, but also for social capital, equity, and for the region as a whole.

This report has provided information on the following indicators of rangatahi wellbeing in the Waikato region:

- school leaver qualifications
- student retention and engagement at school, including stand-downs, suspensions and exclusions
- rangatahi not in education, employment or training (NEET)
- work and labour force status and employment type
- sources of income, including benefit receipt
- health, including health status, mental health, accidents and health service utilisation, and
- offending resulting in court action.

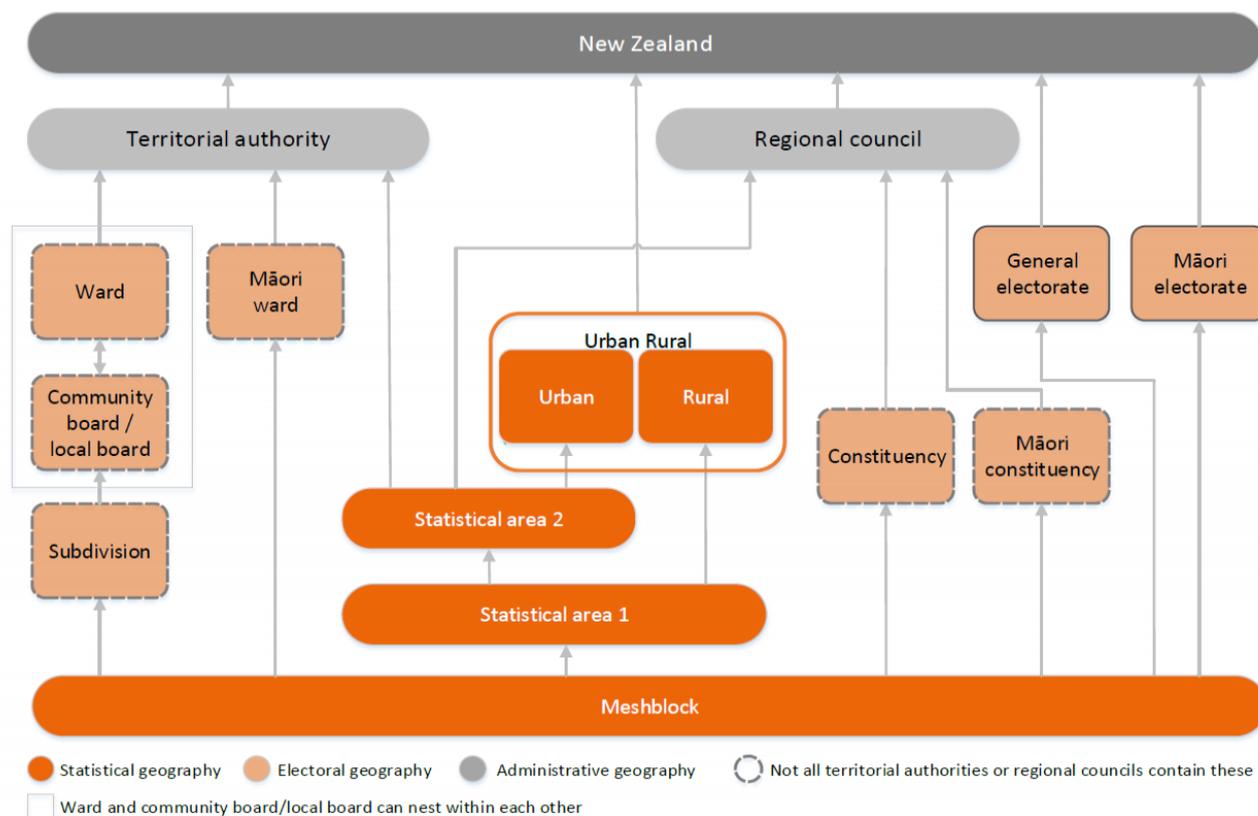
While limitations to this report include that it only analysed data that was available, and therefore some aspects of critical determinants of wellbeing were missing, the findings presented in combination with the literature review included in Part A of this research report provide some valuable insights into the socio-economic profile of rangatahi in the region. These indicators align with understandings of the critical determinants of wellbeing, and provide evidence of the support systems in place for rangatahi and their whānau as well as the inequities experienced by our communities in the Waikato region. Comprehensive understanding of both the experience and narrative of and from rangatahi in our region will support more effective policy, programmes and interventions to achieve wellbeing, resilience and equity.

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Appendices

Appendix Figure 1 Statistical and administrative geographies (Source: Stats NZ)



Appendix Table 1 Census variables used in construction of the NZDep18 index

Dimension of deprivation	Description of variable (in order of decreasing weight in the index)
Communication	People with no access to the Internet at home
Income	People aged 18-64 receiving a means tested benefit Income People living in equivalised* households with income below an income threshold
Employment	People aged 18-64 unemployed
Qualifications	People aged 18-64 without any qualifications
Owned home	People not living in own home
Support	People aged living in a single parent family
Living space	People living in equivalised* households below a bedroom occupancy threshold
Living condition	People living in dwellings that are always damp and/or always have mould greater than A4 size

*Equivalisation: methods used to control for household composition.

Appendix Table 2 Estimated resident population of Waikato Region in 2021 disaggregated by SA2 and TA of residence (Total, rangatahi and tamariki)

	Total	Rangatahi	Tamariki		Total	Rangatahi	Tamariki
Thames-Coromandel district	33,000	2,610	4600	Hauraki district	21,800	2,050	4,000
Colville	1,620	130	250	Hauraki Plains East	1,490	140	330
Cooks Beach-Ferry Landing	550	30	80	Hauraki Plains North	1,250	145	250
Coromandel	1,890	160	260	Hauraki Plains South	1,700	210	440
Hikuai	270	20	40	Miranda-Pukorokoro	920	70	130
Kauaeranga	640	50	110	Ngatea	1,580	150	320
Matatoki-Puriri	1,140	110	190	Paeroa	4,600	430	770
Mercury Bay North	2,060	160	320	Paeroa Rural	2,020	170	380
Mercury Bay South	1,470	140	220	Waihi East	1,500	135	250
Pauanui	1,170	85	100	Waihi North	1,840	160	330
Tairua	1,600	95	220	Waihi Rural	2,450	200	440
Thames Central	1,100	85	120	Waihi South	2,460	230	370
Thames Coast	1,820	115	180	Otorohanga district	10,750	1,290	2,300
Thames North	1,970	145	240	Honikiwi	1,730	165	400
Thames South	3,490	340	590	Maihihi	1,860	225	440
Totorā-Kopu	920	125	130	Otorohanga	3,270	440	670
Whangamata	4,450	280	580	Pirongia Forest	1,070	100	190
Whangamata Rural	480	35	60	Puniu	1,560	195	270
Whitianga North	1,810	110	250	Te Kawa	1,280	170	320
Whitianga South	4,520	400	650	South Waikato district	25,500	3,050	5,700
Matamata-Piako district	36,300	4,175	7090	Kinleith	1,550	175	370
Hinuera	1,220	135	230	Matarawa	2,260	290	540
Mangaiti	1,390	155	310	Moananui	3,240	450	820
Matamata North	3,420	360	530	Paraonui	1,920	200	380
Matamata South	5,140	530	890	Parkdale	880	85	180
Morrinsville East	5,300	600	980	Putaruru	4,580	540	920
Morrinsville West	3,110	400	660	Putaruru Rural	2,550	290	590
Okauia	1,110	150	220	Stanley Park	2,390	300	560
Richmond Downs-wardville	1,330	135	300	Strathmore (South Waikato dist	2,520	340	600
Tahuna-Mangateparu	1,650	180	370	Tirau	2,540	260	580
Tahuroa	1,840	230	370	Tokoroa Central	1,120	135	220
Tatuanui	1,440	165	350	Waitomo district	9,640	1,120	2,030
Te Aroha East	2,640	250	480	Aria	1,290	150	290
Te Aroha West	2,010	180	340	Hangatiki	1,300	160	220
Te Poi	900	105	200	Herangi	1,030	75	210
Waharoa-Peria	1,670	250	360	Te Kuiti East	2,040	240	460
Waihou-Manawaru	1,260	130	250	Te Kuiti West	2,680	330	580
Waitoa-Ngarua	1,210	160	260	Waipa Valley	1,240	145	260

Appendix Table 2 (contd.) Estimated resident population of Waikato Region in 2021 disaggregated by SA2 and TA of residence (Total, rangatahi and tamariki)

	Total	Rangatahi	Tamariki		Total	Rangatahi	Tamariki
Waikato district	85,900	10,400	19,300	Waipa district	59,500	7,000	11,900
Aka Aka	3,380	430	670	Cambridge Central	920	75	110
Eureka-Tauwhare	2,250	300	510	Cambridge East	2,960	360	580
Hamilton Park	1,720	250	380	Cambridge North	2,650	330	550
Horotiu	700	65	180	Cambridge Park-River Garder	1,590	155	310
Horsham Downs	790	125	160	Cambridge West	2,620	310	440
Huntly East	5,360	660	1,280	Fencourt	800	145	140
Huntly Rural	2,320	280	490	Fraser Street	1,480	155	250
Huntly West	3,400	490	1,010	Goodfellow Park	1,870	225	380
Kainui-Gordonton	1,880	220	460	Hautapu	610	90	140
Mangatangi	1,200	130	310	Hautapu Rural	740	75	120
Maramarua	1,990	200	490	Kaipaki	1,750	170	390
Ngaruawahia Central	3,470	440	890	Karapiro	2,630	300	540
Ngaruawahia North	2,340	340	640	Kihikihi Central	2,690	320	600
Ngaruawahia South	2,120	290	610	Lake Cameron	1,650	260	330
Onewhero	1,760	225	360	Lake Ngारoto	1,280	140	280
Pokeno	5,030	430	1,260	Leamington Central	2,610	340	550
Pokeno Rural	1,730	180	370	Leamington East	2,150	260	400
Port Waikato-Waikaretu	870	120	150	Leamington South	1,850	220	350
Pukekawa	1,760	230	350	Leamington West	1,590	145	270
Pukemoremore	2,580	360	530	Maungatautari	910	110	190
Raglan	3,660	330	750	Ngahinapouri	1,800	220	370
Rangiriri	1,420	210	170	Oaklands-St Kilda	1,860	145	400
Rotokauri	1,120	165	220	Pekerau	2,840	370	570
Tamahere North	4,550	620	890	Pirongia	1,300	160	260
Tamahere South	2,140	270	410	Pokuru	1,600	200	370
Taupiri-Lake Kainui	2,110	310	440	Pukerimu	1,060	135	220
Te Akau	2,120	210	430	Rotongata	910	110	240
Te Kauwhata	1,780	150	410	Rotoorang	1,840	185	420
Te Kauwhata West	820	55	190	Sherwin Park	2,160	220	450
Te Kowhai	2,250	230	510	St Leger	510	65	80
Te Uku	1,940	165	380	Te Awamutu Central	420	50	70
Tuakau North	3,520	450	900	Te Awamutu North	1,230	135	250
Tuakau Rural	1,680	240	300	Te Awamutu Stadium	1,890	250	340
Tuakau South	2,120	300	520	Te Awamutu West	1,440	190	290
Waerenga	940	95	180	Te Pahu	1,560	160	320
Whale Bay	1,180	120	220	Te Rahu	1,290	150	250
Whatawhata East	3,110	400	670	Tokanui	470	70	100
Whatawhata West	590	45	160	Rotorua district	3,940	535	930
Whitikahu	2,150	300	490	Arahiwi	150	25	30
				Golden Springs	1,870	245	490
				Ngakuru	1,920	265	410

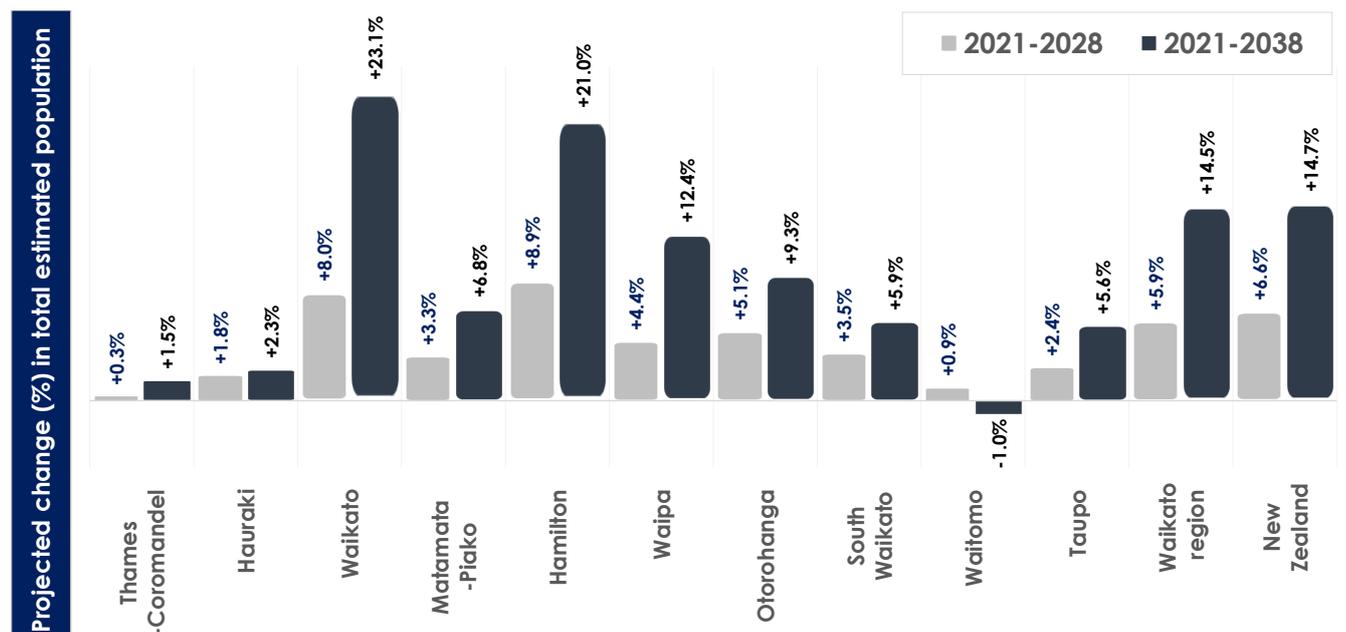
Appendix Table 2 (contd.) Estimated resident population of Waikato Region in 2021 disaggregated by SA2 and TA of residence (Total, rangatahi and tamariki)

	Total	Rangatahi	Tamariki		Total	Rangatahi	Tamariki
Hamilton city	178,500	27,530	37,100	Hamilton city (contd.)			
Bader	2,820	410	760	Pukete East	2,460	310	500
Beerescourt	2,360	290	450	Pukete West	2,390	340	590
Chartwell	2,700	420	630	Queenwood (Hamilton city)	2,510	360	460
Chedworth	1,930	265	380	Resthill	2,680	340	520
Claudelands	3,240	480	510	Riverlea	2,870	460	520
Crawshaw	3,550	560	1,010	Rotokauri-Waiwhakareke	930	90	180
Deanwell	2,260	320	580	Rototuna Central	5,060	720	1,220
Dinsdale North	4,590	630	1,010	Rototuna North	2,290	230	560
Dinsdale South	4,170	550	840	Rototuna South	4,650	630	930
Enderley North	2,760	420	730	Ruakura	2,110	590	320
Enderley South	2,990	450	700	Saint Andrews East	2,540	280	420
Fairfield (Hamilton city)	4,810	800	1,220	Saint Andrews West	3,010	370	720
Fairview Downs	3,450	490	770	Silverdale (Hamilton city)	2,320	550	430
Fitzroy	3,230	400	600	St James	2,080	310	470
Flagstaff East	3,990	450	760	Swarbrick	2,810	370	610
Flagstaff North	4,630	450	1,230	Te Manatu	4,100	510	1,000
Flagstaff South	3,650	420	880	Te Rapa North	180	20	30
Forest Lake (Hamilton city)	2,600	270	550	Te Rapa South	250	30	40
Frankton Junction	780	100	130	Temple View	1,240	200	340
Glenview	2,510	350	600	Western Heights (Hamilton city)	3,200	430	590
Greensboro	4,480	1,990	560	Whitiora	2,910	360	410
Hamilton Central	920	230	60	Taupo district	40,950	4,250	7,940
Hamilton East	4,170	580	810	Acacia Bay	1,830	125	290
Hamilton East Cook	2,190	510	430	Bird Area	2,380	210	450
Hamilton East Village	3,530	710	500	Brentwood (Taupo district)	2,170	170	360
Hamilton Lake	3,740	490	540	Hilltop (Taupo district)	2,820	300	560
Hamilton West	1,860	235	270	Kaimanawa	250	-	-
Hillcrest East (Hamilton city)	3,420	940	580	Lake Taupo Bays	1,720	125	290
Hillcrest West (Hamilton city)	2,900	770	480	Mapara	2,260	190	390
Huntington	2,640	360	470	Marotiri	2,570	280	570
Kahikatea	3,800	470	960	Mountview	2,820	360	610
Kirikiroa	720	80	120	Nukuhau-Rangatira Park	2,780	250	520
Maeroa	4,080	540	900	Ohakuri	2,040	260	390
Melville North	3,180	460	620	Rangataiki	140	10	30
Melville South	2,710	380	690	Richmond Heights	2,510	280	550
Miropiko	3,270	450	590	Tauhara	1,920	275	450
Nawton East	4,440	630	1,090	Taupo Central East	2,620	340	520
Nawton West	3,810	540	880	Taupo Central West	420	45	40
Peachgrove	3,750	710	610	Turangi	3,790	450	830
Peacocks	390	50	70	Waipahihi	2,340	210	420
Porritt	2,870	470	650	Wairakei-Broadlands	1,320	175	300
				Waitahanui	860	110	160
				Wharewaka	1,370	80	210

Appendix Table 3 Estimated and projected population of rangatahi and tamariki resident in Waikato region disaggregated by TA area (2018 census-based estimates and medium series projections)

	Total population			Rangatahi population			Tamariki population		
	2021	2028	2038	2021	2028	2038	2021	2028	2038
Thames-Coromandel	33,000	33,100	33,500	2,610	2,360	2,100	4,600	4,270	4,020
Hauraki	21,800	22,200	22,300	2,050	1,860	1,880	4,000	3,840	3,440
Waikato	85,900	92,800	105,700	10,400	11,660	12,230	19,300	18,870	20,080
Matamata-Piako	36,700	37,900	39,200	4,120	3,970	3,840	7,100	6,870	6,510
Hamilton	178,500	194,400	216,000	27,530	31,960	33,160	37,100	36,580	36,580
Waipa	59,500	62,100	66,900	7,000	7,230	7,430	11,900	11,450	11,290
Otorohanga	10,750	11,300	11,750	1,290	1,350	1,330	2,300	2,290	2,200
South Waikato	25,500	26,400	27,000	3,050	2,810	2,780	5,700	5,550	5,160
Waitomo	9,640	9,730	9,540	1,120	1,040	860	2,030	1,870	1,720
Taupo	41,000	42,000	43,300	4,260	4,440	4,310	8,000	7,530	6,950
Waikato region	506,000	535,900	579,300	63,940	69,160	70,350	102,900	99,930	98,740
New Zealand	5,122,600	5,460,500	5,876,400	648,140	703,600	694,630	968,600	932,920	922,740

Appendix Figure 2 Projected change in estimated population of Waikato region and its constituent TAs over the 2021-2028 and 2021-2038 period (2018 census-based estimates and medium series projections)



Note:

All TAs except the Waitomo district are estimated to have an increase in total population numbers over the 2021-2038 period (see Appendix Figure 2) with the biggest increase expected in the Waikato district (+23.1 per cent) and Hamilton city (+21.0 per cent). There is estimated to be a small decline in the Waitomo district's resident population over this period (-1.0 per cent). The contribution of the broad age groups to the overall increase of 73,300 residents in the

Waikato region over the 2021-2038 period is also not uniform – the majority of this increase will be a result of a substantial increase in the number of 65+ year olds.

Similarly, the overall increase in the region's population is not uniformly distributed across ethnic groups. As per the most up to date 2018 census based medium series ethnic projection estimates for the country (see Appendix Figure 3) all ethnic groups except the 'European/Other (including New Zealander)' are projected to experience substantial growth over the 2020-2038 period. It should be noted that in the context of New Zealand, the dynamics of growth in the Māori and Pacific Peoples population groups are mainly driven by higher fertility rates while for Asians, Indians, Chinese and MELAA groups they are driven by migration.

Appendix Table 4 Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

Increase or decline of more than 10% shown by ▲ or ▼	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)				
	2018	2028	2038	Change		2018	2028	2038	Change	
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs
Thames-Coromandel district										
Colville	120	105	100	▼	▼	240	240	240		
Cooks Beach-Ferry Landing	35	30	35	▼		60	70	90	▲	▲
Coromandel	160	135	120	▼	▼	260	260	260		
Hikuai	30	25	15	▼	▼	40	40	40		
Kauaeranga	60	55	60			110	110	120		
Matatoki-Puriri	105	85	70	▼	▼	200	190	180		
Mercury Bay North	130	115	120	▼		240	240	200		▼
Mercury Bay South	115	85	90	▼	▼	200	200	220		
Pauanui	65	55	50	▼	▼	100	110	120		▲
Tairua	85	125	70	▲	▼	220	150	130	▼	▼
Thames Central	90	65	65	▼	▼	120	120	100		▼
Thames Coast	135	110	85	▼	▼	210	180	190	▼	
Thames North	140	140	80		▼	250	190	170	▼	▼
Thames South	340	300	260	▼	▼	630	560	510	▼	▼
Totorā-Kopu	100	95	85		▼	160	140	130	▼	▼
Whangamata	270	290	290			570	530	450		▼
Whangamata Rural	35	35	40		▲	70	70	90		▲
Whitianga North	100	125	125	▲	▲	240	240	220		
Whitianga South	360	400	360	▲		660	620	550		▼

Important: Please note that the projected population change at the SA2 level should be taken as indicative only – population projections of very small geographical areas are less reliable (as they involve a high degree of rounding, and lower data reliability by age because of small cell sizes) and the direction of change should be examined (increasing or decreasing) rather than the absolute value.

Appendix Table 4 (contd.) Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

Increase or decline of more than 10% shown by ▲ or ▼	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)					
	2018	2028	2038	Change		2018	2028	2038	Change		
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs	
	Hauraki district										
	Hauraki Plains East	140	120	150	▼		300	330	270		
	Hauraki Plains North	150	120	145	▼		240	250	240		
	Hauraki Plains South	200	165	230	▼	▲	410	470	410		
	Miranda-Pukorokoro	75	70	65		▼	120	120	130		
	Ngatea	165	155	140		▼	290	270	250		▼
	Paeroa	430	400	360		▼	740	720	650		▼
	Paeroa Rural	205	180	160	▼	▼	360	340	300		▼
	Waihi East	135	130	105		▼	260	240	220		▼
	Waihi North	165	150	160			300	310	290		
	Waihi Rural	180	200	210	▲	▲	420	430	360		▼
	Waihi South	220	180	160	▼	▼	400	370	320		▼
	Waikato District										
	Aka Aka	420	420	410			650	660	740		▲
	Eureka-Tauwhare	260	350	290	▲	▲	530	460	470	▼	▼
	Hamilton Park	215	300	230	▲		400	310	350	▼	▼
	Horotiu	65	85	125	▲	▲	150	190	200	▲	▲
	Horsham Downs	90	105	70	▲	▼	160	130	150	▼	
	Huntly East	630	730	720	▲	▲	1,150	1,150	1,060		
	Huntly Rural	280	390	630	▲	▲	490	810	1,260	▲	▲
	Huntly West	480	500	480			980	910	890		
	Kainui-Gordonton	220	320	310	▲	▲	440	420	500		▲
	Mangatangi	135	125	135			280	290	260		
	Maramarua	205	240	220	▲		450	440	450		
	Ngaruawahia Central	400	410	480		▲	820	880	780		
	Ngaruawahia North	320	380	360	▲	▲	620	570	540		▼
	Ngaruawahia South	250	300	350	▲	▲	610	640	550		
	Onewhero	190	185	170		▼	360	330	320		▼
	Pokeno	270	490	910	▲	▲	650	1,350	1,270	▲	▲
	Pokeno Rural	165	235	230	▲	▲	330	330	410		▲
	Port Waikato-Waikaretu	85	110	95	▲	▲	150	160	210		▲
	Pukekawa	185	205	220	▲	▲	310	340	380		▲
	Pukemoremore	300	450	390	▲	▲	570	500	560	▼	
	Raglan	320	350	370		▲	690	680	610		▼
	Rangiriri	190	205	230		▲	190	210	230	▲	▲
	Rotokauri	170	165	165			210	220	250		▲
	Tamahere North	510	720	620	▲	▲	910	780	880	▼	
	Tamahere South	250	300	360	▲	▲	400	470	520	▲	▲
	Taupiri-Lake Kainui	285	320	300	▲		410	410	520		▲
	Te Akau	210	240	180	▲	▼	410	350	400	▼	
	Te Kauwhata	145	250	260	▲	▲	360	360	350		
	Te Kauwhata West	45	90	145	▲	▲	100	210	240	▲	▲
	Te Kowhai	220	340	370	▲	▲	500	510	570		▲
	Te Uku	160	200	240	▲	▲	400	430	440		
	Tuakau North	430	530	620	▲	▲	830	930	990	▲	▲
	Tuakau Rural	220	230	180		▼	310	270	350	▼	▲
	Tuakau South	295	340	380	▲	▲	500	560	680	▲	▲

Appendix Table 4 (contd.) Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

Increase or decline of more than 10% shown by ▲ or ▼	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)				
	2018	2028	2038	Change		2018	2028	2038	Change	
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs
Waikato District										
	95	110	95	▲		190	170	160	▼	▼
	100	150	165	▲	▲	230	240	270		▲
	350	410	410	▲	▲	630	610	680		
	45	90	80	▲	▲	140	110	110	▼	▼
	260	270	250			500	480	490		
Matamata-Piako district										
	135	135	115		▼	240	230	240		
	180	145	150	▼	▼	300	310	300		
	370	330	320	▼	▼	540	530	490		
	540	530	480		▼	830	790	720		▼
	590	600	520		▼	920	850	810		▼
	420	370	390	▼		640	670	640		
	150	115	110	▼	▼	230	220	210		
	180	110	185	▼		280	350	310	▲	▲
	180	215	185	▲		390	360	370		
	245	210	240	▼		400	430	460		▲
	170	150	180	▼		340	330	290		▼
	240	280	240	▲		500	440	400	▼	▼
	180	200	170	▲		370	300	270	▼	▼
	85	120	125	▲	▲	220	220	200		
	235	225	160		▼	360	300	320	▼	▼
	130	120	115		▼	270	260	240		▼
	165	110	140	▼	▼	260	280	230		▼
Hamilton city										
	470	450	530		▲	710	760	680		
	280	340	340	▲	▲	440	430	370		▼
	410	450	410			660	580	560	▼	▼
	235	250	250			400	440	450		▲
	490	550	560	▲	▲	540	530	470		▼
	580	610	600			980	960	940		
	310	400	350	▲	▲	620	540	500	▼	▼
	630	710	720	▲	▲	1,020	1,020	930		
	550	550	580			860	880	800		
	430	450	470			700	710	670		
	460	520	540	▲	▲	680	670	570		▼
	780	940	920	▲	▲	1,220	1,180	1,120		
	510	550	470			790	710	640	▼	▼
	370	390	450		▲	520	620	540	▲	
	410	530	480	▲	▲	770	690	670	▼	▼
	360	750	780	▲	▲	890	1,040	860	▲	
	360	650	560	▲	▲	760	760	650		▼
	280	370	420	▲	▲	530	540	500		
	115	135	105	▲		110	100	90		▼
	350	390	400	▲	▲	590	580	540		
	1,980	2,030	2,090			510	620	570	▲	▲

Appendix Table 4 (contd.) Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)				
	2018	2028	2038	Change		2018	2028	2038	Change	
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs
Hamilton city										
Hamilton Central	235	235	250			50	70	60	▲	▲
Hamilton East	610	690	760	▲	▲	850	850	710		▼
Hamilton East Cook	530	550	570			450	460	430		
Hamilton East Village	730	810	840	▲	▲	470	480	410		▼
Hamilton Lake	610	600	610			510	510	430		▼
Hamilton West	265	260	280			220	290	290	▲	▲
Hillcrest East (Hamilton city)	940	980	940			570	510	470	▼	▼
Hillcrest West (Hamilton city)	800	860	810			500	450	430		▼
Huntington	350	450	300	▲	▼	520	360	370	▼	▼
Kahikatea	550	600	630		▲	940	960	870		
Kirikiroa	55	85	110	▲	▲	30	110	120	▲	▲
Maeroa	550	610	650	▲	▲	820	830	730		▼
Melville North	500	440	500	▼		540	630	560	▲	
Melville South	430	450	470			630	640	610		
Miropiko	440	440	450			600	610	600		
Nawton East	680	770	600	▲	▼	1,060	900	920	▼	▼
Nawton West	550	640	570	▲		870	770	760	▼	▼
Peachgrove	720	740	680			640	560	500	▼	▼
Peacocks	35	190	830	▲	▲	60	740	1,950	▲	▲
Porritt	500	550	540			630	620	610		
Pukete East	300	290	260		▼	520	430	390	▼	▼
Pukete West	350	320	290		▼	570	510	490	▼	▼
Queenwood (Hamilton city)	350	360	340			460	440	430		
Resthill	320	350	370		▲	510	550	560		
Riverlea	430	500	490	▲	▲	560	530	510		
Rotokauri-Waiwhakareke	70	220	800	▲	▲	110	740	1,590	▲	▲
Rototuna Central	630	900	650	▲		1,290	920	850	▼	▼
Rototuna North	125	320	470	▲	▲	280	510	460	▲	▲
Rototuna South	600	710	560	▲		960	770	780	▼	▼
Ruakura	625	1,090	1,520	▲	▲	140	660	1,060	▲	▲
Saint Andrews East	270	290	290			440	410	370		▼
Saint Andrews West	390	420	440		▲	720	710	670		
Silverdale (Hamilton city)	560	570	590			410	430	390		
St James	250	390	290	▲	▲	510	370	340	▼	▼
Swarbrick	430	410	500		▲	510	590	490	▲	
Te Manatu	520	680	650	▲	▲	930	850	700		▼
Te Rapa North	15	55	125	▲	▲	40	130	310	▲	▲
Te Rapa South	15	15	25		▲	20	30	30	▲	▲
Temple View	215	200	180		▼	340	310	290		▼
Western Heights (Hamilton city)	420	400	380			550	530	520		
Whitiara	450	480	570		▲	300	440	450	▲	▲

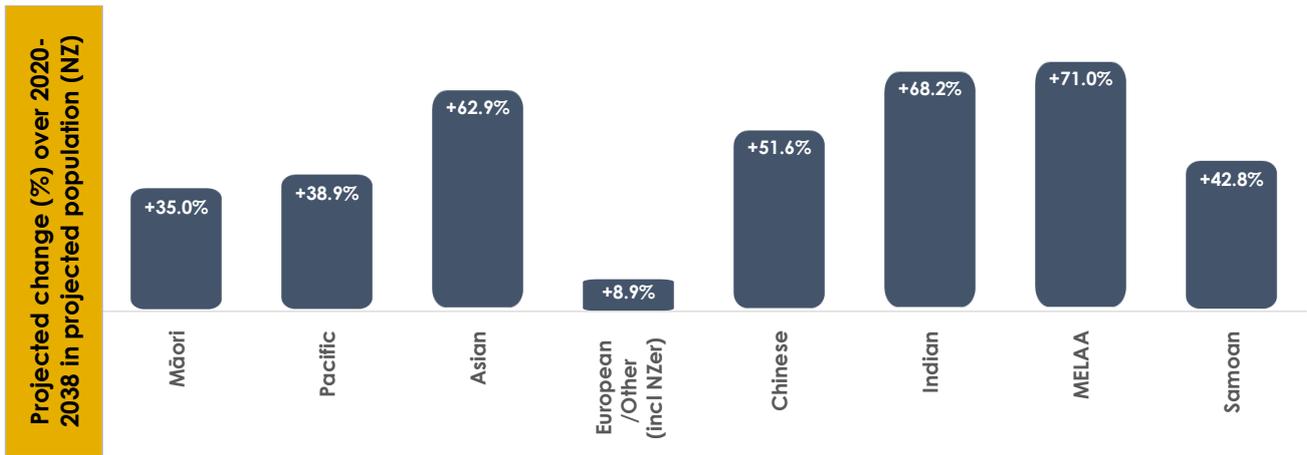
Appendix Table 4 (contd.) Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

Increase or decline of more than 10% shown by ▲ or ▼	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)					
	2018	2028	2038	Change		2018	2028	2038	Change		
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs	
	Waipa District										
	Cambridge Central	75	80	95		▲	90	120	120	▲	▲
	Cambridge East	350	360	340			580	530	500		▼
	Cambridge North	280	480	460	▲	▲	410	550	610	▲	▲
	Cambridge Park-River Garden	140	230	210	▲	▲	310	270	250	▼	▼
	Cambridge West	270	300	240	▲	▼	430	370	370	▼	▼
	Fencourt	105	120	100	▲		160	140	160	▼	
	Fraser Street	165	135	180	▼		240	270	250	▲	
	Goodfellow Park	230	225	260		▲	390	400	340		▼
	Hautapu	90	110	110	▲	▲	100	110	100		
	Hautapu Rural	80	90	95	▲	▲	120	130	140		▲
	Kaipaki	160	190	215	▲	▲	350	360	360		
	Karapiro	280	340	330	▲	▲	540	520	520		
	Kihikihi Central	320	280	340	▼		500	550	490		
	Lake Cameron	245	235	250			300	320	360		▲
	Lake Ngaroto	165	130	165	▼		250	270	260		
	Leamington Central	320	310	310			550	530	500		
	Leamington East	240	220	210		▼	400	360	360		
	Leamington South	215	225	210			350	310	310	▼	▼
	Leamington West	145	135	140			240	240	230		
	Maungatautari	110	100	125		▲	170	190	190	▲	▲
	Ngahinapouri	215	220	225			380	370	370		
	Oaklands-St Kilda	130	245	220	▲	▲	320	320	350		
	Pekerau	320	350	380		▲	510	550	560		
	Pirongia	140	145	135			290	270	280		
	Pokuru	185	190	180			340	340	350		
	Pukerimu	130	180	180	▲	▲	200	230	270	▲	▲
	Rotongata	90	110	105	▲	▲	230	210	190		▼
	Rotoorangi	175	225	250	▲	▲	400	410	380		
	Sherwin Park	210	240	270	▲	▲	420	440	410		
	St Leger	55	90	90	▲	▲	90	100	150	▲	▲
	Te Awamutu Central	50	55	55			70	70	70		
	Te Awamutu North	130	140	185		▲	230	270	250	▲	
	Te Awamutu Stadium	235	230	215			340	320	300		▼
	Te Awamutu West	190	135	165	▼	▼	270	320	330	▲	▲
	Te Pahu	155	155	160			330	320	300		
	Te Rahu	140	140	155		▲	250	250	220		▼
	Tokanui	80	65	65	▼	▼	110	110	110		
	Otorohanga district										
	Honikiwi	170	195	210	▲	▲	390	370	300		▼
	Maihihi	230	230	230			480	470	430		▼
	Otorohanga	420	430	450			660	680	670		
	Pirongia Forest	85	100	65	▲	▼	190	170	190	▼	
	Puniu	210	210	195			310	290	290		
	Te Kawa	160	180	175	▲		340	320	320		

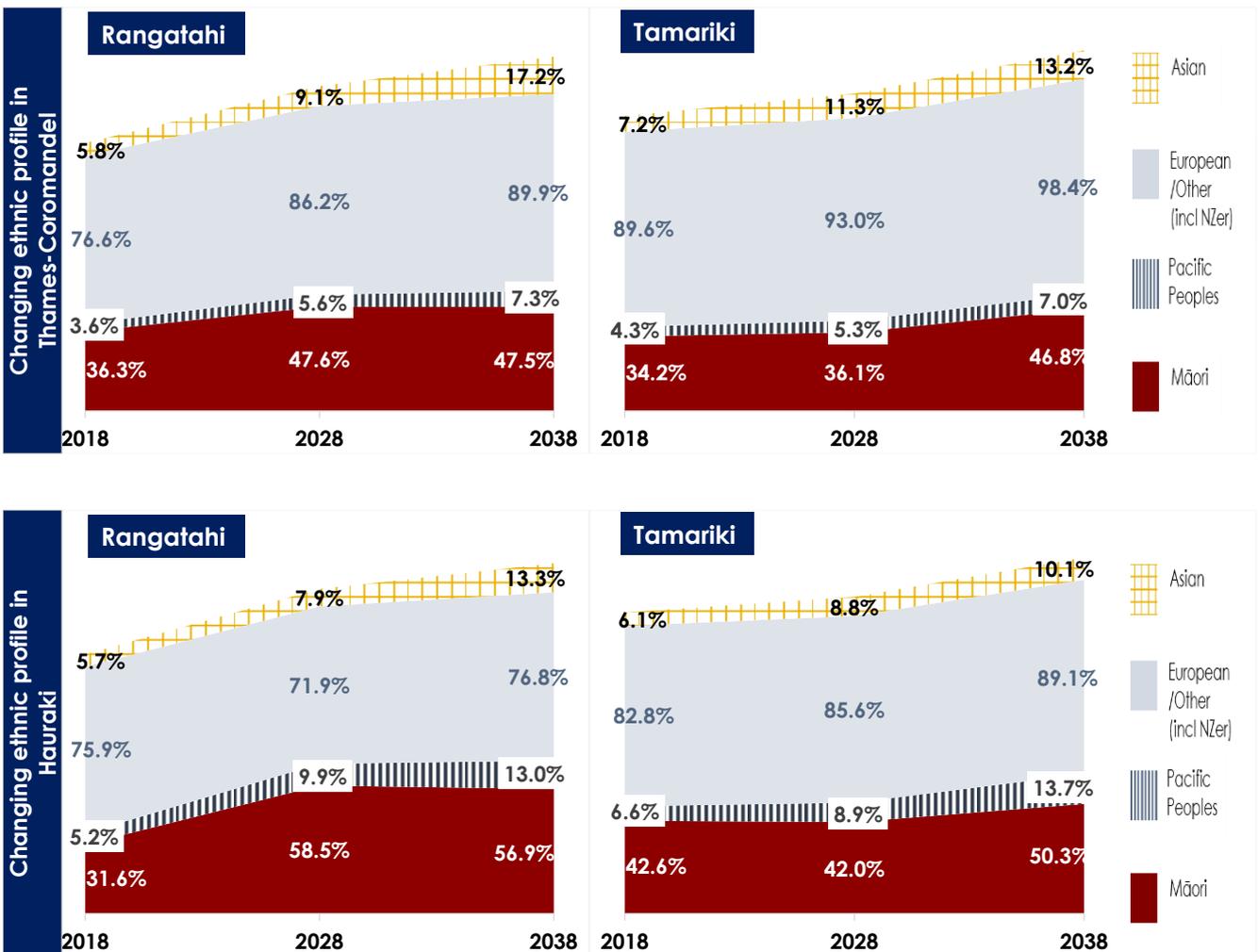
Appendix Table 4 (contd.) Projected population of rangatahi and tamariki disaggregated by SA2 of residence (2018 census based medium series projections)

Increase or decline of more than 10% shown by ▲ or ▼	Rangatahi (15-24 yrs)					Tamariki (0-14 yrs)					
	2018	2028	2038	Change		2018	2028	2038	Change		
				In 10 yrs	In 20 yrs				In 10 yrs	In 20 yrs	
	South Waikato District										
	Kinleith	210	180	210	▼		330	370	380	▲	▲
	Matarawa	290	300	230		▼	540	460	450	▼	▼
	Moananui	440	410	340		▼	810	730	700		▼
	Paraonui	210	190	190			400	390	380		
	Parkdale	120	80	100	▼	▼	160	160	140		▼
	Putaruru	490	490	440		▼	910	850	790		▼
	Putaruru Rural	300	250	330	▼		560	640	590	▲	
	Stanley Park	300	250	270	▼		570	540	460		▼
	Strathmore	340	320	260		▼	610	560	520		▼
	Tirau	240	250	310		▲	560	620	540	▲	
	Tokoroa Central	135	100	90	▼	▼	210	220	210		
	Waitomo district										
	Aria	150	145	120		▼	330	280	240	▼	▼
	Hangatiki	150	115	100	▼	▼	240	230	230		
	Herangi	90	90	75		▼	200	200	200		
	Te Kuiti East	290	260	200	▼	▼	470	400	330	▼	▼
	Te Kuiti West	370	310	270	▼	▼	580	520	470	▼	▼
	Tiroa	15	5	5	▼	▼	10	10	10		
	Waipa Valley	150	125	85	▼	▼	270	240	250	▼	
	Taupo district										
	Acacia Bay	130	135	160		▲	260	270	250		
	Bird Area	230	300	240	▲		450	380	360	▼	▼
	Brentwood (Taupo district)	165	190	210	▲	▲	320	330	300		
	Hilltop (Taupo district)	290	320	230	▲	▼	590	480	440	▼	▼
	Lake Taupo Bays	110	120	145		▲	270	290	260		
	Mapara	160	220	230	▲	▲	370	410	440	▲	▲
	Marotiri	280	300	260			600	550	500		▼
	Mountview	350	340	350			600	600	540		
	Nukuhau-Rangatira Park	230	290	310	▲	▲	490	490	440		▼
	Ohakuri	235	240	190		▼	390	360	370		
	Rangataiki	20	15	20	▼		30	30	20		▼
	Richmond Heights	250	240	240			540	520	450		▼
	Tauhara	290	270	260		▼	450	450	440		
	Taupo Central East	360	340	320		▼	500	470	440		▼
	Taupo Central West	85	85	80			50	50	50		
	Turangi	400	430	390			820	760	680		▼
	Waipahihi	180	190	220		▲	400	410	340		▼
	Wairakei-Broadlands	175	170	180			320	310	290		
	Waitahanui	100	120	95	▲		170	140	120	▼	▼
	Wharewaka	65	110	180	▲	▲	130	210	180	▲	▲

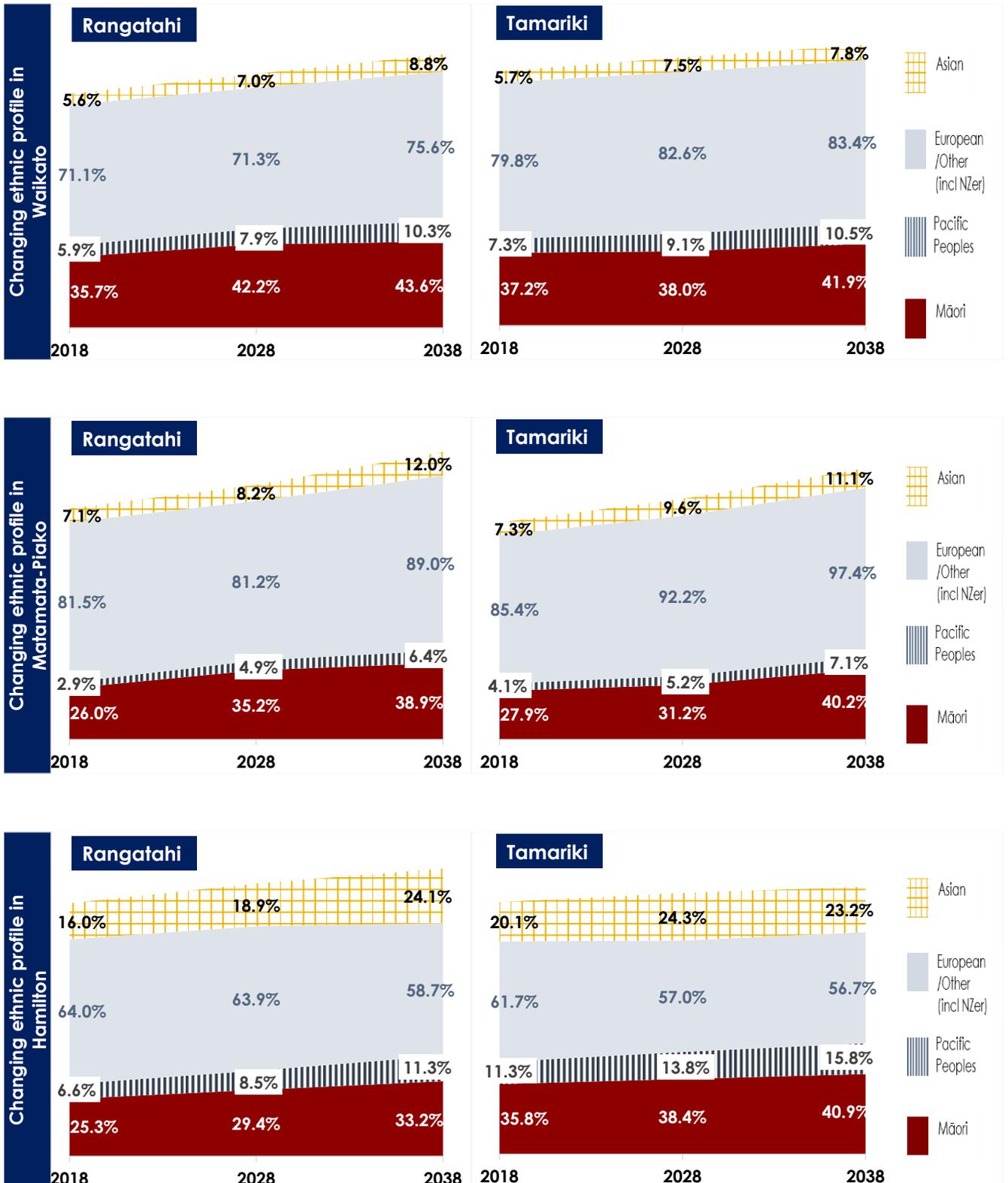
Appendix Figure 3 Projected change across New Zealand in the total population of major ethnic groups (2018 census-based estimates and medium series projections)



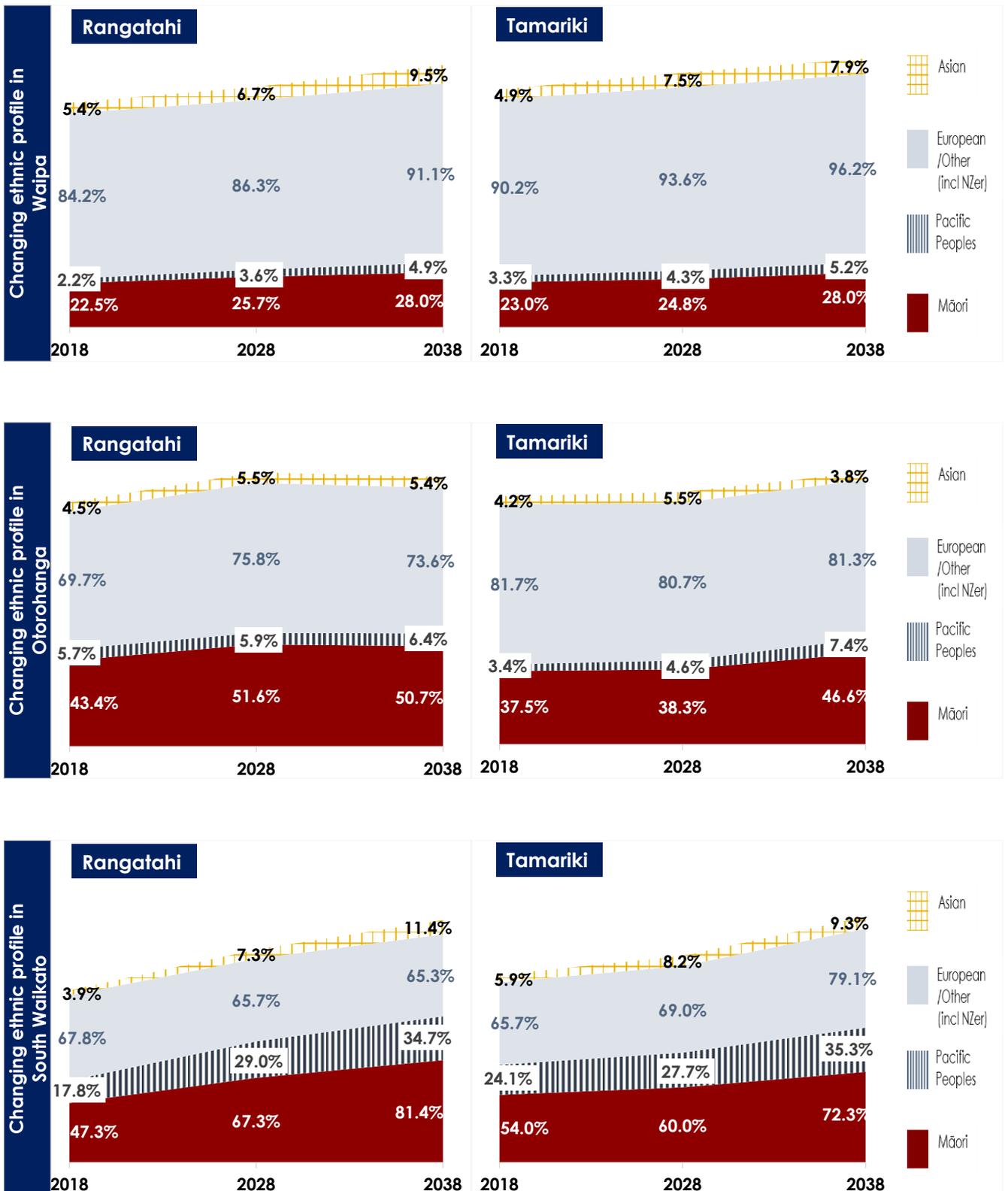
Appendix Figure 4 Projected change in the ethnic profile of the rangatahi and tamariki population in each TA (2013 census based medium series sub-national ethnic projections)



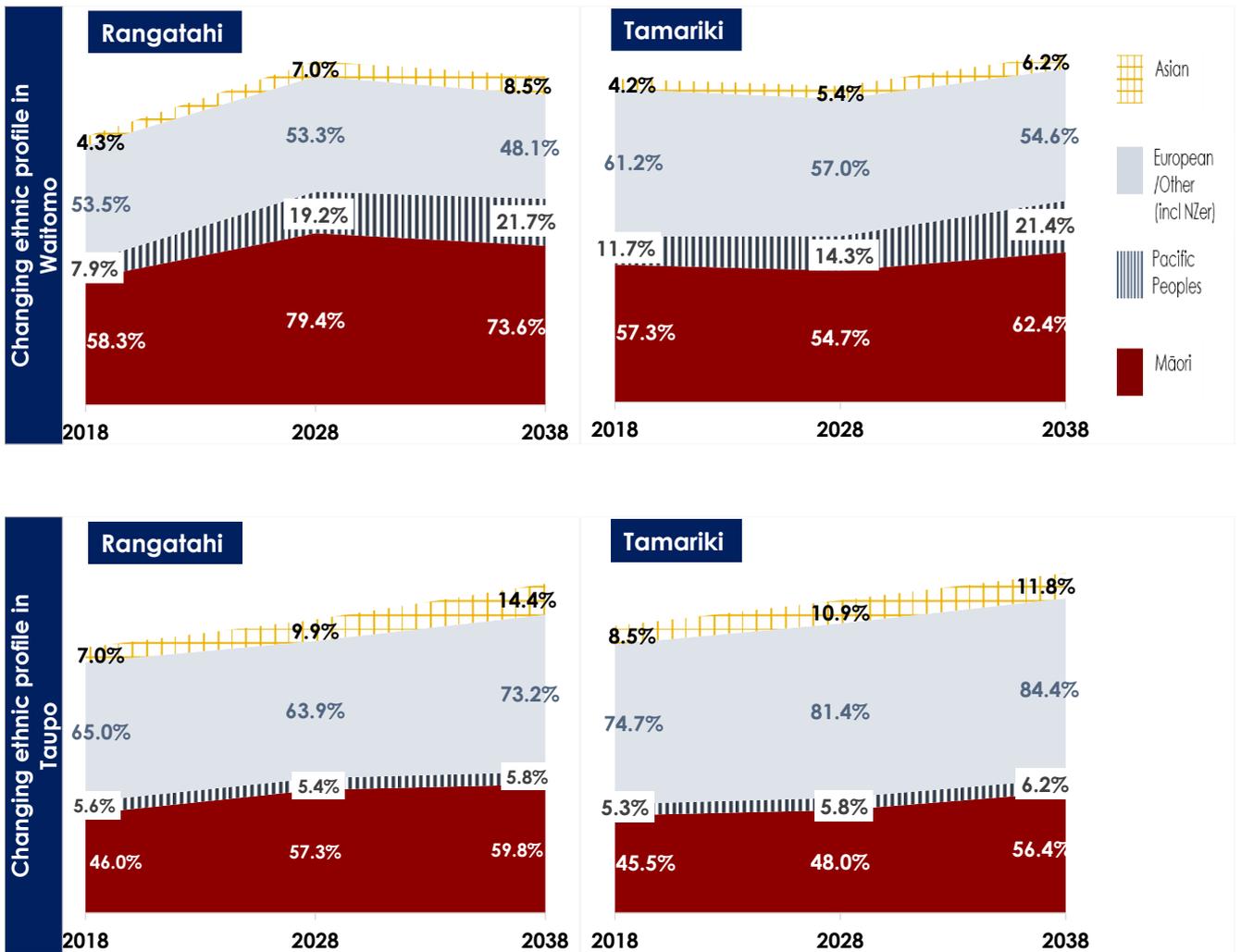
Appendix Figure 4 (contd.) Projected change in the ethnic profile of the rangatahi and tamariki population in each TA (2013 census based medium series sub-national ethnic projections)



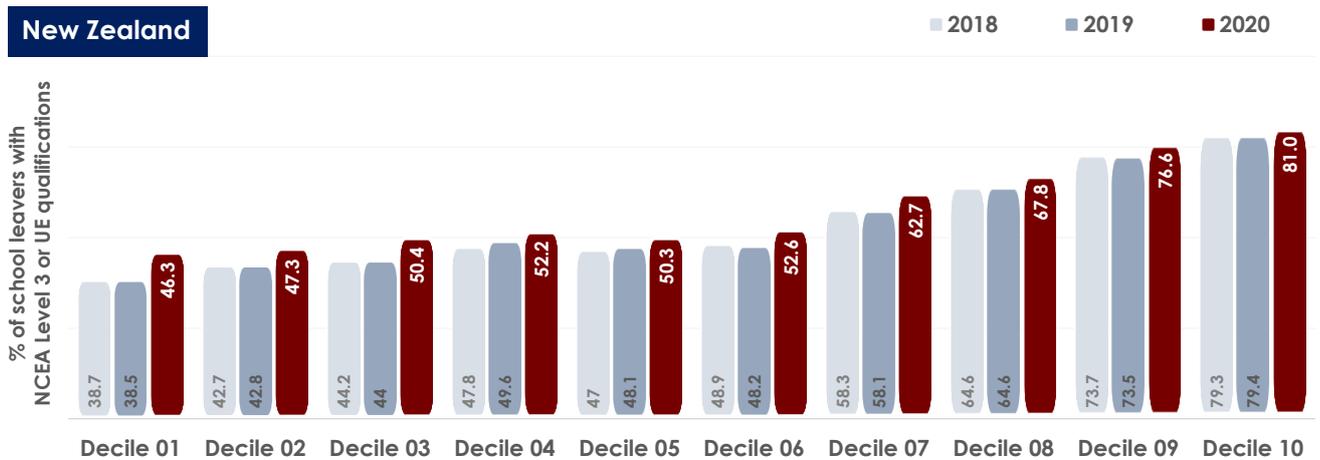
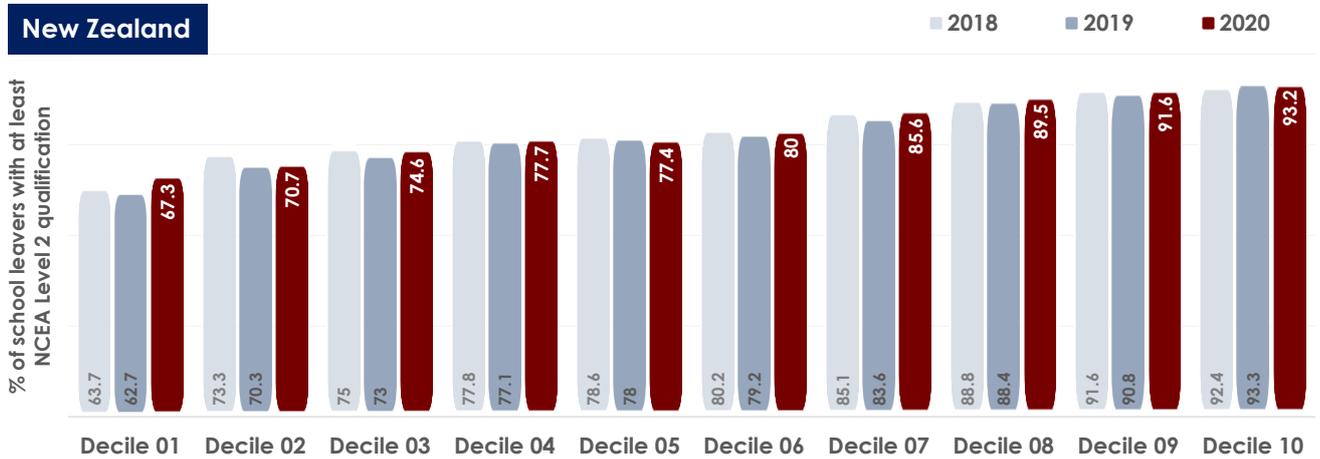
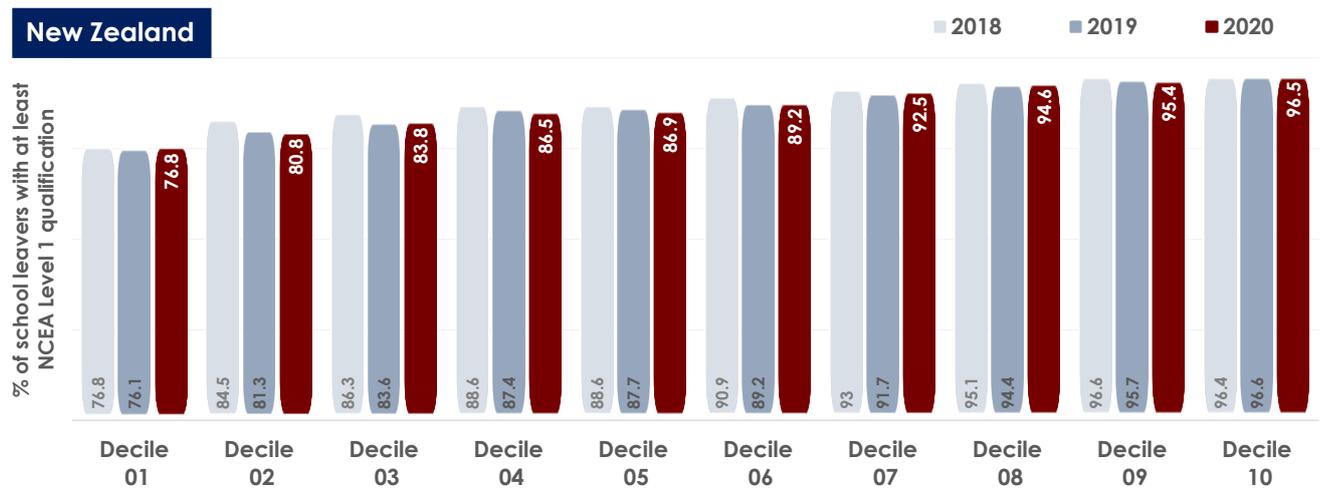
Appendix Figure 4 (contd.) Projected change in the ethnic profile of the rangatahi and tamariki population in each TA (2013 census based medium series sub-national ethnic projections)



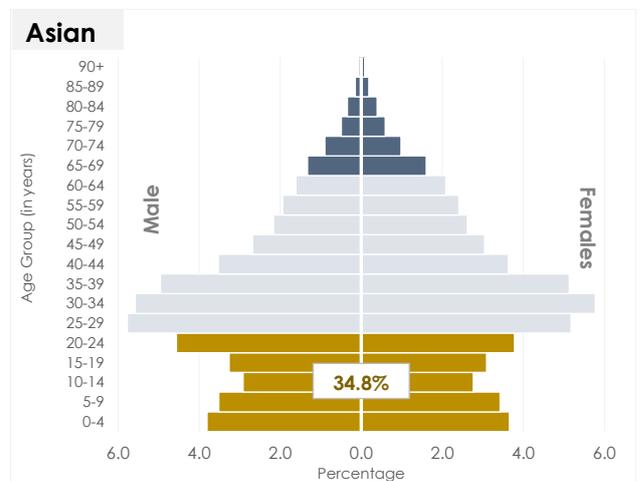
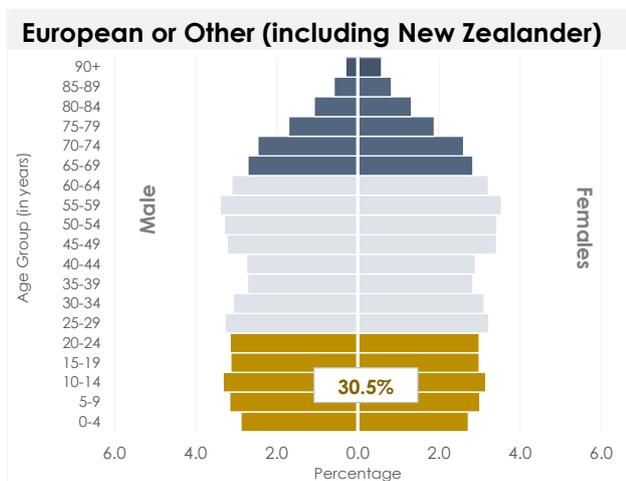
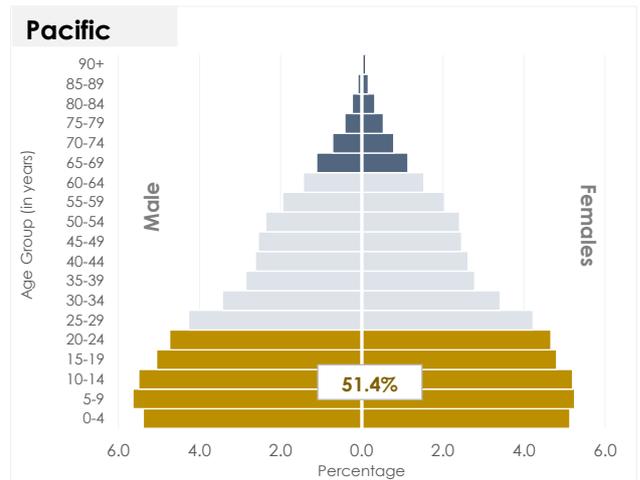
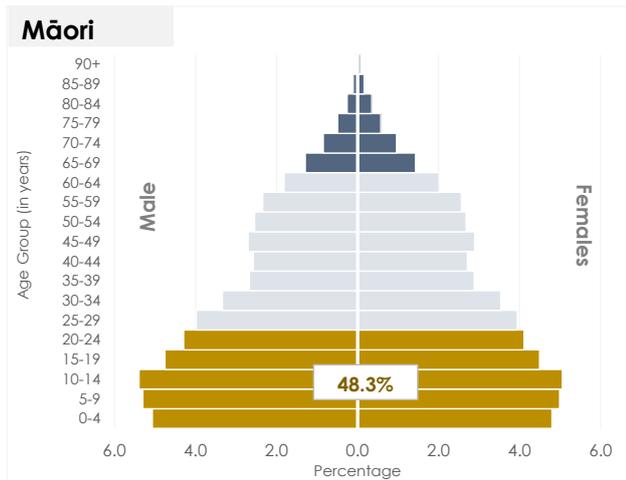
Appendix Figure 4 (contd.) Projected change in the ethnic profile of the rangatahi and tamariki population in each TA (2013 census based medium series sub-national ethnic projections)



Appendix Figure 5 Proportion of the total school leavers across New Zealand in a given school year with NCEA qualifications disaggregated by decile



Appendix Figure 6 Age-sex structures of major ethnic groups in 2020 (2018 census based)





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