

# *Demographic Profile: 2013 Census Population of Counties Manukau*

---

## **Disclaimer**

Information within the report may be freely used provided the source is acknowledged. Every effort has been made to ensure that the information in this report is correct. Counties Manukau Health and the authors will not accept any responsibility for information which is incorrect, or any actions taken as a result of the information in this report.

Published in November 2015

By Counties Manukau Health  
Private Bag 94052  
South Auckland Mail Centre  
Manukau City  
New Zealand

ISBN 978-0-9876500-6-1

Suggested citation:

Winnard D, Lee M, Macleod G (2015) Demographic Profile: 2013 Census, Population of Counties Manukau. Auckland: Counties Manukau Health.

## **Acknowledgements**

The authors would like to acknowledge the helpful peer review and feedback of Dr Wing Cheuk Chan.

## Executive Summary

The population served by Counties Manukau Health (CM Health) has many unique features compared to other District Health Board populations, related to its size, age structure, ethnic mix and socioeconomic profile. This report outlines some of the key features of the CM Health population as evidenced by data from, or projections based on, the 2013 Census. Percentages derived from the 2013 Census data are then applied to the 2014 Estimated Resident population to give estimated numbers for planning purposes.

Information is provided at the whole CM Health district level, for the main ethnic groups, and also for the residential population of the four localities into which the CM Health district is divided for the purposes of service planning and integration – Mangere/Otara, Eastern, Manukau and Franklin.

This summary focuses on whole of population data for the main ethnic groups of the CM Health population.

## Demography

- In 2014 the estimated resident population served by CM Health was 509,060 people, 11% of the population of New Zealand.
- 16% of the CM Health estimated resident population in 2014 were identified as Maaori, 21% as Pacific peoples, 23% as Asian and 40% as NZ European/Other groups.
- The ethnicity mix of the estimated CM population varies by age, with younger groups having higher proportions of Maaori, Pacific and Asian peoples than the population aged 65 years and over (where two thirds of the population are NZ European/Other groups).
- CM has a higher proportion of children than the overall NZ population -24% aged 14 years or under compared with 20% for New Zealand. The percentage of the population aged under 15 years is much higher in Maaori (36%) and Pacific (32%) populations than other ethnic groups.
- Approximately half (51%) of the Pacific population in CM Health identified themselves as Samoan at the time of the 2013 Census, nearly a quarter as Tongan (23%) and just over a fifth (21%) as Cook Island Maaori.
- Nearly half of the Asian population in CM Health identified themselves as Indian in 2013 (46%) and a third as Chinese (34%).

- The Middle Eastern, Latin American, African (MELAA) group represented 1.4% of the CM population in 2013; 64% of the MELAA group identified themselves as Middle Eastern.
- A quarter (26%) of those who identified themselves as of Maaori descent in CM identified with one of the Waikato/Tainui iwi; 51% identified with one of the Te Tai Tokerau/Tāmaki-makaurau iwi.
- 62% of the CM Health population were born in NZ, 14% in a Pacific Island country and 13% in an Asian country (compared with the rest of NZ where 76% were born in New Zealand, 3% in a Pacific Island country and 7% in Asia).
- 57% of those who stated they were born overseas had been living in New Zealand for 10 years or more at the time of the 2013 Census; 18% had been living in New Zealand less than five years.
- 94% of residents aged 15 years and over were able to have a conversation about everyday things in English; this varied by age group particularly across Pacific and Asian groups, being lower in older age groups. The percentage not able to speak English was highest for those identified as Chinese (28%).
- 53% of those who answered the question about religion identified with a Christian or Maaori Christian religion and 31% described themselves as having no religion; Buddhism, Islam, Hindu and other religions were identified by 2.5-6% of the population for each religion. These figures varied considerably across ethnicities.
- 4.5% of Counties Manukau residents were living in a household of one person, 55% in households of 2-4 residents, and 15% in households of seven or more usual residents. This varied considerably by ethnicity - 38% of Pacific people and 21% of Maaori residents were living in a household with seven or more members. A higher proportion of the CM population lived in larger sized households than in the rest of New Zealand.
- 47% of households identified as a couple with a child or children and 14% as a couple only; 20-30% of Maaori, Asian and Pacific people were in households that included other family householders compared with 6% of NZ European/Other groups.
- 49% of those aged 5 years and over were not living at the same address they were at five years previously.

## Socioeconomic Determinants of Health

- 54% of those aged 15 years and over had a personal income of <\$30,000 per year – this figure was 60% for Maaori, 64% for Pacific peoples, 54% for those identified as Indian, 67% for Chinese, 64% for Other Asian groups, and 45% for those NZ European/Other groups.

- 56% of those aged 15 years and over reported wages, salary, commissions and/or bonuses as a source of personal income. 12% reported a business or being self-employed as their income source – this varied from 3% for Pacific to 16% for Chinese and NZ European/Other groups.
- A third of CM residents aged 15 years and over were not in the labour force (this includes those aged 15 years and over and still at school or in training); 6% were unemployed. Unemployment for Maaori and Pacific peoples (12% and 10%) was approximately three times higher than for NZ European/Other groups (3.4%).
- 23% of those aged 15 years and over had no qualification and for 40% a school qualification was the highest they reported (noting this does include students); 16% had a Bachelors/Level 7 qualification or above. Maaori and Pacific peoples were less likely to have a Bachelors/Level 7 qualification or above (6 and 7% compared with 17-30% for Asian and NZ European/Other groups).
- 58% of those aged 15 years and over did not own the residence they were living in - 80% of Maaori and Pacific peoples, 50-70% for those in Asian groups and 40% for NZ European/Other groups.
- 22% of residents were living in a crowded household in 2013, using the Canadian National Occupancy Standard; this figure was much higher for Maaori (32%) and Pacific peoples (48.5%). Children were particularly likely to be living in a crowded household - 31% of CM children aged 0-14 years, but 38% of Maaori children and 53% of Pacific children.
- 5% reported having no vehicle in their home; this varied by ethnicity with 11% of Maaori and 7% of Pacific peoples reporting no motor vehicle.
- 72% of those aged 15 years and over who indicated that they were employed full-time or part-time and stated a means of travel to work drove a vehicle to work; 5% were a passenger in a car/truck/van and 4% used public transport.
- 85% of residents aged 15 years and over reported having access to a mobile phone at home. 80% reported access to the internet at home but this was lower for Maaori and Pacific peoples (65% and 62% respectively) while Asian groups had the highest access at 90%. 2% of people had no access to telecommunications at home.
- 36% of Counties Manuka residents were living in areas defined as the most socioeconomically deprived (NZDep2013 Deciles 9 & 10). All things 'being equal' this figure would be 20%. The percentage living in NZDep2013 Deciles 9 & 10 was much higher for Maaori (58%) and Pacific peoples (76%) than for European (17%), Asian (22%) and MELAA (29%) groups.
- 45% of children aged under 15 years were living in areas defined as NZDep2013 Deciles 9 & 10; this figure was 35% for those aged 15-64 years and 25% for those aged 65 years and over.

## Table of Contents

|   |    |
|---|----|
| Executive Summary .....                     | 3  |
| Demography .....                            | 3  |
| Socioeconomic Determinants of Health.....   | 4  |
| Table of Contents .....                     | 6  |
| List of Figures.....                        | 8  |
| List of Tables.....                         | 10 |
| Abbreviations .....                         | 14 |
| Introduction.....                           | 15 |
| Use and interpretation of data.....         | 17 |
| Census counts and populations.....          | 17 |
| Ethnicity data.....                         | 19 |
| Locality data .....                         | 20 |
| Demography .....                            | 22 |
| Ethnic composition and age structure .....  | 22 |
| Pacific, Asian and MELAA subgroups.....     | 29 |
| Iwi Affiliation .....                       | 31 |
| Birthplace .....                            | 32 |
| Years since arrival in New Zealand.....     | 35 |
| Language .....                              | 38 |
| Religion.....                               | 41 |
| Number of people in the household .....     | 44 |
| Household composition .....                 | 48 |
| Residential Mobility.....                   | 51 |
| Socio-economic Determinants of Health ..... | 52 |
| Personal Income.....                        | 52 |
| Income Source.....                          | 56 |
| Work Status .....                           | 61 |
| Academic Achievement.....                   | 65 |
| Housing.....                                | 69 |
| Housing Tenure .....                        | 69 |
| Household crowding.....                     | 73 |

|  |    |
|--|----|
| Vehicles in the Home.....  | 76 |
| Travel to Work.....  | 79 |
| Telecommunications Access.....   | 83 |
| New Zealand Deprivation Index 2013 .....   | 87 |
| Appendices .....   | 93 |
| Appendix One: Standard ethnicity collection question.....  | 93 |
| Appendix Two: Languages spoken for Pacific and Asian subgroups .....   | 94 |
| Appendix Three: Additional Information relevant to Telecommunications Access for the<br>CM Health population ..... | 98 |

## List of Figures

|   |    |
|---|----|
| Figure 1 CM Health four localities .....  | 15 |
| Figure 2 Ethnicity distribution within age groups of the estimated resident population of CM in 2014.....   | 23 |
| Figure 3 Distribution of each ethnic group across age groups of the estimated resident population of CM in 2014.....  | 24 |
| Figure 4 Age distribution of locality populations, based on the estimated resident population of CM in 2014 .....   | 26 |
| Figure 5 Locality distribution of age groups based on the estimated resident population of CM in 2014 .....   | 27 |
| Figure 6 Birthplace for the UR CM population in Census 2013 for prioritised ethnic groups.  | 33 |
| Figure 7 Birthplace for the UR CM population in Census 2013 by locality .....   | 34 |
| Figure 8 Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by prioritised ethnicity .....                                  | 35 |
| Figure 9 Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by locality .....   | 37 |
| Figure 10 Religion stated for the UR CM population in the 2013 Census for prioritised ethnic groups.....  | 42 |
| Figure 11 Religion stated for the UR CM population in the 2013 Census by locality.....  | 43 |
| Figure 12 Languages spoken for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups .....   | 39 |
| Figure 13 Number of people usually resident in a household for UR CM population in the 2013 Census for prioritised ethnic groups .....  | 45 |
| Figure 14 Number of people usually resident in a household for UR CM population in the 2013 Census by locality .....  | 46 |
| Figure 15 Household composition for the UR CM population in the 2013 Census for prioritised ethnic groups .....   | 49 |
| Figure 16 Household composition for the UR CM population in the 2013 Census by locality   | 50 |
| Figure 17 Personal income for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups .....  | 53 |
| Figure 18 Personal income for UR CM populations aged 15 years and over in the 2013 Census by locality .....   | 55 |
| Figure 19 Sources of income in the 12 months prior to the 2013 Census for UR CM population aged 15 years and over for prioritised ethnic groups.....                                | 57 |
| Figure 20 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for UR CM population aged 15 years and over for prioritised ethnic groups | 58 |
| Figure 21 Sources of income in the 12 months prior to the 2013 Census for the UR CM population aged 15 years and over by locality.....  | 59 |
| Figure 22 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for the UR CM population aged 15 years and over by locality .....         | 60 |
| Figure 23 Workforce status for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups .....   | 62 |
| Figure 24 Workforce status for the UR CM population aged 15 years and over in the 2013 Census by locality .....   | 64 |
| Figure 25 Highest level of academic achievement for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups.....                               | 66 |
| Figure 26 Highest level of academic achievement for UR CM population aged 15 years and over in the 2013 Census by locality .....  | 67 |



|  |     |
|--|-----|
| Figure 27 Housing tenure for CM Health residents aged 15 years and over in the 2013 Census for prioritised ethnic groups.....  | 70  |
| Figure 28 Percentage of CM Health residents age 15 years and over who answered question in 2013 Census by ownership of house and locality .....  | 72  |
| Figure 29 Percentage of people living in a crowded household for CM Health residents in the 2013 Census for total response ethnic groups, all ages combined and children 0-14 yrs..... | 74  |
| Figure 30 Number of vehicles available in the home for CM Health residents in the 2013 Census for prioritised ethnic groups .....  | 77  |
| Figure 31 Number of vehicles available in the home for CM Health residents in the 2013 Census by locality .....  | 78  |
| Figure 32 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time for prioritised ethnic groups.....        | 80  |
| Figure 33 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time by locality.....                          | 81  |
| Figure 34 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by ethnicity .....  | 84  |
| Figure 35 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by locality .....   | 86  |
| Figure 36 Pattern of distribution across NZDep2013 deciles for Maaori, Pacific and European populations.....   | 89  |
| Figure 37 Pattern of distribution across NZDep2013 deciles for Asian and MELAA populations .....   | 89  |
| Figure 38 Percentage of CM Health residents living in NZDep2013 deciles by age group .....   | 90  |
| Figure 39 Devices in households by income, national data, World Internet Project 2013 ...  | 102 |
| Figure 40 Hours spent online per day by location of access, national data, World Internet Project 2013 .....   | 103 |
| Figure 41 Internet usage index by age and ethnicity, national data, World Internet Project 2013.....   | 104 |
| Figure 42 Internet user status by age, national data, World Internet Project 2013 .....  | 105 |
| Figure 43 Internet user status by ethnicity, national data, World Internet Project 2013 ....   | 106 |
| Figure 44 Internet usage index by age and household income, national data, World Internet Project 2013 .....   | 107 |
| Figure 45 Internet user status by income for those aged 65 years and over, national data, World Internet Project 2013 .....  | 107 |
| Figure 46 Online multilingualism by ethnicity, national data, World Internet Project 2013  | 108 |
| Figure 47 Proxy internet use by ethnicity, national data, World Internet Project 2013.....   | 109 |
| Figure 48 Devices used by households to access the internet, national data, Household Use of Information and Communication Technology Survey, 2012 .....                               | 110 |
| Figure 49 Recent internet use by age, Household Use of Information and Communication Technology Survey, 2012.....  | 110 |

## List of Tables

|  |    |
|--|----|
| Table 1 Estimated resident population of CM in 2014 by prioritised ethnicity and age group .....   | 22 |
| Table 2 Ethnicity distribution within age groups of the estimated resident population of CM in 2014.....   | 23 |
| Table 3 Distribution of each ethnic group across age groups of the estimated resident population of CM in 2014.....                                | 24 |
| Table 4 Age distribution of locality populations, based on the estimated resident population of CM in 2014 .....                                   | 25 |
| Table 5 Age distribution of locality populations, based on the estimated resident population of CM in 2014 .....                                   | 25 |
| Table 6 Locality distribution of age groups based on the estimated resident population of CM in 2014.....  | 26 |
| Table 7 Ethnicity distribution within localities based on the UR population counts for CM in 2013.....   | 28 |
| Table 8 Distribution of each ethnic group across localities based on the UR population counts for CM in 2013.....                                  | 28 |
| Table 9 Neighbourhoods in Auckland with high ethnic diversity ranking.....   | 29 |
| Table 10 Five largest Pacific ethnic groups in the UR CM population in Census 2013 .....   | 29 |
| Table 11 Five largest Asian ethnic groups in the UR CM population in Census 2013 .....   | 30 |
| Table 12 Middle Eastern, Latin American, African groups in the UR CM population in Census 2013.....  | 30 |
| Table 13 Iwi affiliation for people identified as of Maaori descent in the UR CM population in Census 2013 (15 numerically largest groups) .....   | 31 |
| Table 14 Birthplace for the UR CM population in Census 2013 for prioritised ethnic groups  | 32 |
| Table 15 Estimated number of CM Health residents in 2014 by place of birth and ethnicity   | 33 |
| Table 16 Birthplace for the UR CM population in Census 2013 by locality.....   | 34 |
| Table 17 Estimated number of CM Health residents in 2014 by place of birth and locality...   | 34 |
| Table 18 Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by prioritised ethnicity ..... | 35 |
| Table 19 Estimated number of overseas born CM Health residents in 2014 by years since arrival in New Zealand and prioritised ethnicity .....       | 36 |
| Table 20 Years since arrival in New Zealand (at the time of Census 2013) for the overseas born UR CM population by locality .....                  | 36 |
| Table 21 Estimated number of overseas born CM Health residents in 2014 by years since arrival in New Zealand and locality .....                    | 37 |
| Table 24 Languages spoken for the UR CM population aged 15 years and over in Census 2013 for prioritised ethnic groups.....                        | 39 |
| Table 25 Estimated number of CM Health residents in 2014 by language competency for official languages in NZ.....                                  | 40 |
| Table 22 Religion stated for the UR CM population in the 2013 Census for prioritised ethnic groups.....  | 41 |
| Table 23 Religion stated for the UR CM population in the 2013 Census by locality.....  | 42 |
| Table 26 Number of people usually resident in a household for UR CM population in the 2013 Census for prioritised ethnic groups .....              | 44 |
| Table 27 Estimated number of CM Health residents in 2014 living in various household sizes by ethnicity.....                                       | 45 |
| Table 28 Number of people usually resident in a household for UR CM population in the 2013 Census by locality .....                                | 46 |

|  |    |
|--|----|
| Table 29 Estimated number of CM Health residents in 2014 living in various household sizes by locality.....  | 47 |
| Table 30 Household composition for the UR CM population in the 2013 Census for prioritised ethnic groups.....  | 48 |
| Table 31 Estimated number of CM Health residents in 2014 by household composition and ethnicity.....   | 49 |
| Table 32 Household composition for the UR CM population in the 2013 Census by locality   | 50 |
| Table 33 Estimated number of CM Health residents in 2014 by household composition and locality .....   | 50 |
| Table 34 Place of residence five years ago for people domiciled in CM Health in 2013 aged 5 years and over by locality.....  | 51 |
| Table 35 Personal income for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups .....  | 53 |
| Table 36 Estimated numbers of CM Health residents in 2014 aged 15 years and over by income band and prioritised ethnicity .....  | 54 |
| Table 37 Personal income for UR CM populations aged 15 years and over in the 2013 Census by locality.....  | 54 |
| Table 38 Estimated numbers of CM Health residents in 2014 aged 15 years and over by income band and locality .....   | 55 |
| Table 39 Sources of income in the 12 months prior to the 2013 Census for UR CM population aged 15 years and over for prioritised ethnic groups .....                               | 56 |
| Table 40 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for UR CM population aged 15 years and over for prioritised ethnic groups | 57 |
| Table 41 Sources of income in the 12 months prior to the 2013 Census for the UR CM population aged 15 years and over by locality.....  | 58 |
| Table 42 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for the UR CM population aged 15 years and over by locality .....         | 59 |
| Table 43 Workforce status for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups .....   | 62 |
| Table 44 Estimated number of CM Health residents aged 15 years and over in 2014 by workforce status and ethnicity.....   | 63 |
| Table 45 Workforce status for the UR CM population aged 15-29 years in the 2013 Census for prioritised ethnic groups.....  | 63 |
| Table 46 Workforce status for the UR CM population aged 15 years and over in the 2013 Census by locality .....   | 64 |
| Table 47 Estimated number of CM Health residents aged 15 years and over in 2014 by workforce status and locality .....   | 64 |
| Table 48 Highest level of academic achievement for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups.....                               | 65 |
| Table 49 Estimated number of CM Health residents aged 15 years and over in 2014 by highest level of academic achievement and ethnicity .....                                       | 66 |
| Table 50 Highest level of academic achievement for UR CM population aged 15 years and over in the 2013 Census by locality .....  | 67 |
| Table 51 Estimated number of CM Health residents aged 15 years and over in 2014 by highest level of academic achievement and locality.....   | 68 |
| Table 52 Housing tenure for CM Health residents aged 15 years and over in the 2013 Census for prioritised ethnic groups.....   | 70 |
| Table 53 Estimated numbers of CM Health residents in 2014 aged 15 years and over by ownership of house and ethnicity.....  | 71 |
| Table 54 Percentage of CM Health residents age 15 years and over who answered question in the 2013 Census by ownership of house and locality .....                                 | 71 |

|   |     |
|---|-----|
| Table 55 Estimated numbers of CM Health residents in 2014 aged 15 years and over by ownership of house and locality .....   | 72  |
| Table 56 Percentage of people living in a crowded household for CM Health residents in the 2013 Census for total response ethnic groups, all ages combined and children 0-14 yrs..... | 74  |
| Table 57 Percentage of people living in a crowded household for CM Health residents in the 2013 Census by locality .....  | 75  |
| Table 58 Estimated number of people living in a crowded household in 2014 for CM Health residents by locality.....  | 75  |
| Table 59 Number of vehicles available in the home for CM Health residents in the 2013 Census for prioritised ethnic groups .....  | 76  |
| Table 60 Estimated number of CM Health residents in 2014 by number of vehicles available in the home and ethnicity .....  | 77  |
| Table 61 Number of vehicles available in the home for CM Health residents in the 2013 Census by locality .....  | 78  |
| Table 62 Estimated number of CM Health residents in 2014 by number of vehicles available in the home and locality.....  | 78  |
| Table 63 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time for prioritised ethnic groups.....        | 79  |
| Table 64 Estimated numbers of CM Health residents in 2014 aged 15 years and over who were employed full-time or part-time by means of travel to work and ethnicity.....               | 80  |
| Table 65 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time by locality.....                          | 81  |
| Table 66 Estimated numbers of CM Health residents in 2014 aged 15 years and over who were employed full-time or part-time by means of travel to work for localities .....             | 82  |
| Table 67 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by ethnicity .....  | 84  |
| Table 68 Estimated number of CM Health residents aged 15 years and over in 2014 by access to telecommunications at home and ethnicity.....  | 85  |
| Table 69 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by locality.....  | 85  |
| Table 70 Estimated number of CM Health residents aged 15 years and over in 2014 by access to telecommunications at home and locality.....   | 86  |
| Table 71 Percentage of CM Health residents living in NZDep2013 deciles by total response ethnicity.....   | 88  |
| Table 72 Percentage of CM Health residents living in NZDep2013 quintiles by total response ethnicity.....   | 88  |
| Table 73 Percentage of CM Health residents living in NZDep2013 deciles by age group.....  | 90  |
| Table 74 Percentage of CM Health residents living in NZDep2013 quintiles by age group....   | 90  |
| Table 75 Estimated number of CM Health residents in 2014 living in NZDep2013 quintiles by age group.....  | 91  |
| Table 76 Percentage of CM Health residents living in NZDep2013 deciles by locality .....  | 91  |
| Table 77 Percentage of CM Health residents living in NZDep2013 quintiles by locality .....  | 91  |
| Table 78 Estimated number of CM Health residents in NZDep2013 quintiles by locality .....   | 92  |
| Table 79 Language indicators for the CM Pacific population from the 2013 Census, by age group and total response ethnicity .....  | 95  |
| Table 80 Language indicators for the CM Asian population from the 2013 Census, by age group and total response ethnicity .....  | 96  |
| Table 81 Access to mobile phone/cellphone at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity .....                | 99  |
| Table 82 Access to telephone at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity .....                             | 100 |

Table 83 Access to internet at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity ..... 100

Table 84 No access to telecommunications at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity ..... 100

## Abbreviations

|           |  |
|-----------|--|
| CAU       | Census Area Unit   |
| CM        | Counties Manukau   |
| CM Health | Counties Manukau Health  |
| ER        | Estimated Resident   |
| MB        | Meshblock  |
| NZ        | New Zealand  |
| NZDep     | New Zealand small-area index of relative socioeconomic deprivation |
| UR        | Usually Resident   |

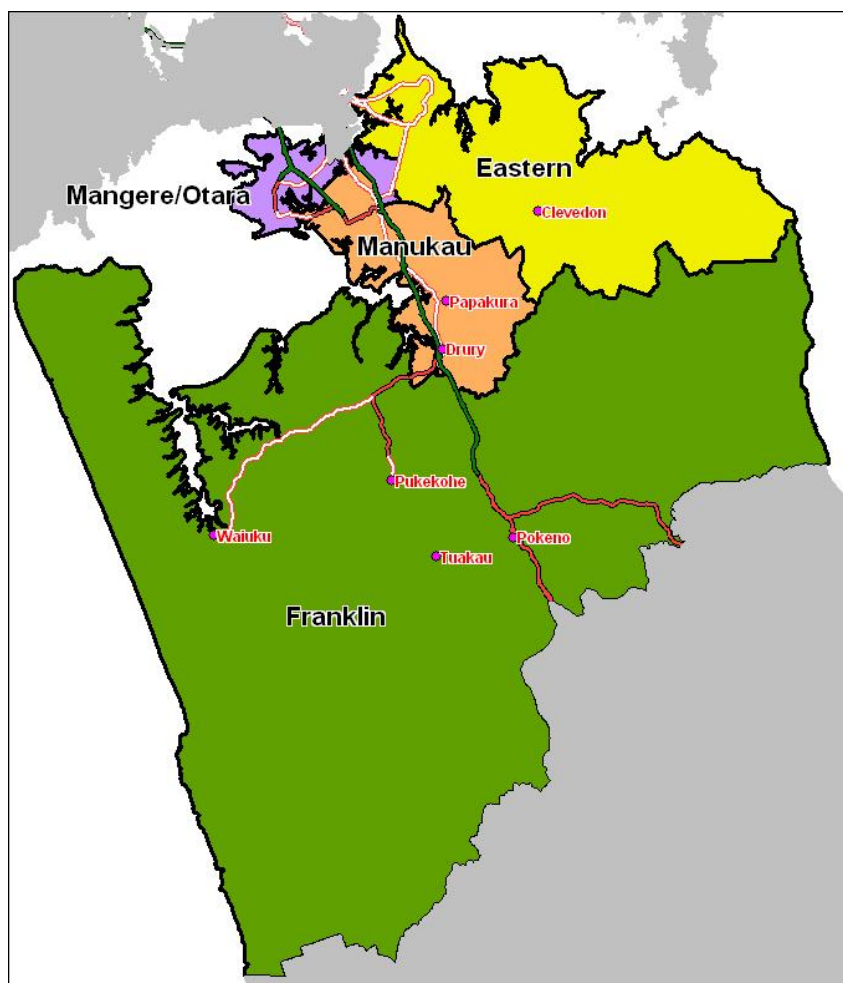
## Introduction

This report summarises information from the New Zealand 2013 Census for the population living in the district served by Counties Manukau Health (Counties Manukau District Health Board, CM Health). Most of the geographic area served by CM Health is part of the territorial authority of Auckland Council. However small areas of the southern extent of the DHB are part of Waikato District and Hauraki District territorial authorities.

For the purposes of service planning and integration, the area served by CM Health is divided into four localities – Mangere/Otara, Eastern, Manukau and Franklin (Figure 1). Within each locality, there are two populations of note in relation to planning – the people who live in the locality and the people who are enrolled in primary care practices in the locality. These two populations overlap but are not the same and the variance differs across the localities.

This report provides information about parameters captured in the 2013 Census at the level of the whole CM Health district population, for the main ethnic groups, and also for the residential population of the four localities.

Figure 1 CM Health four localities



CM Health has the second largest estimated resident population of the 20 District Health Boards in New Zealand. A range of documents provide information on the demography and health needs of the people of Counties Manukau, available on the [Health Status Documents](#) page of the CM Health website. Information is also available in various CM Health [Planning Documents](#), also available on the website.

The population served by CM Health is multi-ethnic with high numbers and proportions of Maaori<sup>1</sup>, Pacific and Asian peoples. This report provides some detail about the ethnicity mix of the population at a district level. In addition, information about parameters captured in the 2013 Census is provided specific to ethnic groups.

Comparisons are also made between the Counties Manukau population and the rest of New Zealand in the narrative (rest of New Zealand data is not shown in the tables). While Counties Manukau is part of Auckland and Auckland's population as a whole is distinct from many other areas of the country, Auckland region analyses mask the differences across Auckland. Hence this report complements other publically available Auckland region reports.

---

<sup>1</sup> Double vowels are used rather than macrons where appropriate in Te Reo words in CM Health in keeping with the Tainui convention, as Mana Whenua for the Counties Manukau district



## Use and interpretation of data

In reading and using the information presented in this report, it is important to understand some key issues about the populations described in relation to the census, the way ethnicity is recorded and used, and how the CM Health localities are defined.

### Census counts and populations

The '**census Usually Resident (UR) population**' is a count of all people who usually live in a given area, and who are present in New Zealand and filled in a form on census night. This population number excludes visitors from overseas and does not include New Zealand residents who are temporarily overseas. Residents away from home on census night, but elsewhere in New Zealand, are counted as resident in their home area. The Usually Resident census population is mainly useful as a denominator for the information outputs from census. For example, to calculate the percentage of people living in a household of eight or more people or having access to the internet at home, the UR population is used as the denominator.

Unless otherwise stated, all percentages in this report derived from census UR population counts exclude responses that cannot be classified (e.g., 'not stated', 'response unidentifiable', 'response out of scope'). This is in line with Statistics New Zealand conventions.

However, despite the name, census Usually Resident population counts provide an underestimate of the actual population living in a district. Some residents are temporarily overseas on census night, and some people in New Zealand on census night are missed by the census – termed the 'net census undercount'. Statistics New Zealand undertakes a 'Post-enumeration Survey' after each census to help understand the degree of census undercount. This demonstrates that there are significant differential undercounts by ethnicity, and also variance by age group. For example, there were proportionately more Maaori, Pacific and Asian people who did not fill in census forms in 2013 compared to those of the European ethnic group and more young people aged 15-29 years compared to other age groups<sup>2</sup>.

Statistics NZ makes adjustments to the census Usually Resident population counts to include the addition of residents temporarily overseas at the time of census, adjustments for births, deaths and international migration since the census night, and for people who did not answer or provide a valid response to the ethnicity question to produce '**Estimated Resident (ER) population by ethnicity**'. Statistics New Zealand has clearly stated the adjusted Estimated Resident population (rather than the census Usually Resident population) should be used for planning and decision-making purposes<sup>3</sup>.

---

<sup>2</sup> Statistics New Zealand (2014) Coverage in the 2013 Census based on the New Zealand 2013 Post-enumeration Survey. Wellington: Statistics New Zealand

<sup>3</sup> Statistics New Zealand (2007) A Report on the 2006 Post-enumeration Survey. Wellington: Statistics New Zealand

The resulting ER population at a national level for 2013 was 4.7% higher than the UR Census figure from the 2013 Census. However because of the differential undercount by ethnicity, the difference between UR and ER is differential across ethnicities and this is very important for ethnically diverse districts like CM. The CM Health ER population for 2013 was 5.8% higher than the UR count overall, but the Maori population for CM Health was 17% more in ER than UR, Pacific 15.8% more, and Asian 13.2% more. This means the structure of the population by ethnicity differs to some extent between the UR and ER populations – in our case is more diverse in the ER population.

After calculating the ER population, Statistics NZ then use the ER population for the year of the census as a base/starting point for population projections for future years. These projections allow for births, death and migration, making assumptions about future fertility, life expectancy and net migration. The ER population and population projections are used to inform the Population Based Funding Formula (PBFF) for DHB funding. This report begins with a description of the CM population based on the ER population projections produced by Statistics NZ for the Ministry of Health in November 2014 and provided to DHBs, as context for the subsequent 2013 Census descriptions.

In this report percentages for the 2013 Census variables described are calculated from UR counts, as obtained in a customised census extract from Statistics NZ for use by the four Northern Region District Health Boards and their support organisations<sup>4</sup>. These percentages are then applied to ethnic and locality estimated resident populations for 2014 as described below, to provide an estimate of the quantum of people in each category for planning.

I.e. percentages provided for census variables relate to Usually Resident population counts, subsequent population numbers relate to Estimated Resident populations.

This report applies the situation as documented in the 2013 Census, the percentages derived from the UR responses, to the 2014 Estimated Resident population to give estimates for the variables in question for planning purposes. This does assume the situation in 2013 is still relevant in 2014; this was considered reasonable at a high level, given the time difference was only one year. The further the time difference between the census and the planning year in question the less safe that assumption would be. This approach also assumes that the people who responded to the Census questions were representative of the total population.

Numbers in this report have been rounded to protect confidentiality and also, for the population numbers, to reinforce the estimated nature of the figures presented. Age group populations are rounded to multiples of five if the total population is less than 2000, otherwise to multiples of 10s. Individual figures may not add up to totals, and values for the same data may vary in different tables because of this rounding.

---

<sup>4</sup> Supplied to CM Health, Auckland District Health Board, Waitemata District Health Board, Northland District Health Board, Auckland Regional Public Health Service and Northern Regional Alliance

## Ethnicity data

Ethnicity is 'a social construct of group affiliation and identity'<sup>5</sup> and is distinct from ancestry and nationality. In New Zealand ethnic identity is recognised as an important dimension of economic, social and cultural experience, and health and well-being. In addition there are significant health inequalities, particularly for Maaori and Pacific peoples<sup>6</sup>. Quality ethnicity information is therefore important to support decision making.

In the New Zealand census people are asked to self-identify the ethnic group or groups which they belong to, with ability to mark more than one. The standard ethnicity collection question (see appendix one) has been consistently used since the 2001 Census and is also the sector standard for the health and disability sector. There are two main ways ethnicity information can be described – total response and prioritised. In total response, each respondent is counted in each of the ethnic groups they reported; this gives a more comprehensive picture for each ethnic group but does mean the sum of the groups adds up to more than the total number of people. In prioritised outputs, each respondent is allocated to a single ethnic group based on a prioritising system (for health this is: Maaori, Pacific peoples, Asian, other groups except NZ European, and NZ European).

Prioritised ethnicity is the output most commonly used in the health sector for planning and funding purposes (in most other settings total response ethnicity is used). Statistics NZ produces an annual specific Estimated Resident population profile for the Ministry of Health using ethnicity prioritised into four groups – Maaori, Pacific, Asian and Other for the purpose of health sector funding and planning. These annual population profiles are provided at the level of the DHB by age and gender but not at smaller area levels.

The growing ethnic diversity of the New Zealand population does mean that larger numbers of people are identifying with two or more ethnicities, especially those in young age groups. In the 2013 Census, 11.2% of people identified with more than one ethnicity; this figure was 22.8% for children aged 0-14 years<sup>7</sup>. However, in keeping with other health system analyses, this report uses predominantly prioritised ethnicity.

It is well recognised that Pacific peoples and the Asian population group are very heterogeneous and ideally data would be routinely broken down to results for the Pacific and Asian subgroups. However at present much data is still aggregated for these groups.

---

<sup>5</sup> Ministry of Health (2004) Ethnicity data protocols for the Health and Disability Sector. Wellington: Ministry of Health.

<sup>6</sup> Pacific peoples is the term preferred by the Ministry of Pacific Island affairs as it more accurately encompasses those born in New Zealand and elsewhere as well as those born in the different Pacific island nations, rather than 'Pacific Island(er)' (Ministry of Health (2004) Ethnicity data protocols for the Health and Disability Sector. Wellington: Ministry of Health)

<sup>7</sup> Statistics NZ (2014) 2013 Census QuickStats about culture and identity, accessed from <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity/ethnic-groups-NZ.aspx>

Historical analyses suggest that many health-related parameters for Pacific peoples are quite similar across Pacific subgroups<sup>8</sup> while there are some substantial differences between those parameters across Asian subgroups<sup>9</sup>. In particular, Indian communities (by far the largest South Asian subgroup in the Auckland population) have different health and illness profiles to Chinese and other Asian groups. For the Northern Region Health census data extract, prioritised ethnicity counts were obtained for Maaori, Pacific peoples, Indian, Chinese, Other Asian and NZ European/Other groups, and are described in this report.

To estimate numbers for planning for the Asian subgroups, the prioritised Asian subgroup percentages from the UR census data have been applied to the prioritised 2014 ER population Asian population in the population tables supplied to DHBs by the Ministry of Health in November 2014, to produce subgroup Asian population numbers (all ages and aged 15 and over).

The New Zealand statistical standard for ethnicity data collection, storage and reporting has a hierarchical classification system of four levels and in the most aggregated level, Level 1, the other group who are described separately are the Middle Eastern, Latin American and African (MELAA) group. Again, this is a very heterogeneous group (although much smaller than the Pacific and Asian groups) and population counts for this group along with the 10 most common Pacific and Asian subgroups by total response ethnicity were also included in the Northern Region Health census data extract and selected aspects of this data are also described.

## Locality data

The four CM Health localities are defined by aggregations of Census Area Units (CAUs). New Zealand is divided into 2,020 area units. Area units within urban areas normally contain a population of 3,000 to 5,000 but this can vary due to such things as industrial areas, port areas, rural areas and so on.

The Northern Region Health custom extract of 2013 Census data from Statistics NZ included UR data by CAU. This was then able to be aggregated to locality areas to give data to derive percentages for census variables of interest for the four CM Health localities.

Statistics NZ had released Estimated Resident population figures at CAU level by age and gender, but not by prioritised ethnicity, for 2014. The ER population for 2014 at CAU level was used to produce aggregated locality populations (all ages and aged 15 and over). Derived percentages for the 2013 Census variables for the localities were then applied to

---

<sup>8</sup> Novak B (2007) Ethnic-Specific Health Needs Assessment for Pacific People in Counties Manukau. Manukau City: Counties Manukau District Health Board.

<sup>9</sup> Mehta S (2012) Health needs assessment of Asian people living in the Auckland region. Auckland: Northern DHB Support Agency

these 2014 ER locality populations to give estimated population numbers for the variables in question for locality planning.

In terms of how the CM Health population is distributed across the localities by ethnicity for the contextual description of the population, there are two sources of information drawn on in this report:

- The Northern Region Health extract of 2013 Census UR data has population numbers at CAU level by prioritised ethnicity that can be aggregated to give an ethnic distribution picture for the district. However this UR data does not take into account census undercount and population growth in subsequent years.
- Consistent with historical patterns, the census net undercount is proportionally greater in the Maaori, Pacific and Asian populations than the New Zealand European group.<sup>10</sup>
- The 2013 post-numeration survey does provide net undercount estimates for the Pacific and Asian subgroups. Hence, the UR data can give a picture of the distribution of ethnic subgroups but the actual distribution might be different if there were ER data available at this level.
- The Northern Region DHBs also commissioned from Statistics NZ a 'one-off' ER population by age, ethnicity (at the level of Maaori/Pacific/Asian/Other, prioritised) and gender at CAU level for 2013, to support service planning. That data doesn't have the detail of ethnic subgroups provided by the UR data but does give what is considered to be a more accurate picture of population size for planning at a higher level, and is able to be aggregated to locality areas.

---

<sup>10</sup> Statistics New Zealand. Post-enumeration Survey: 2013. Wellington: Statistics New Zealand, 2014.

## Demography

### Ethnic composition and age structure

This report begins with a description of the CM population based on the ER population<sup>11</sup> projections (prioritised ethnicity) produced by Statistics NZ for the Ministry of Health in November 2014. This description is provided as context for the subsequent 2013 Census information.

In the 2014 the estimated resident population served by CM Health was 509,060 people. 16% of the CM Health ER population were identified as Maaori, 21% as Pacific peoples, 23% as Asian and 40% as NZ European/Other groups (Table 1 & 2)<sup>12</sup>.

In 2014 it was estimated that 12% of New Zealand Maaori were living in Counties Manukau, the second largest DHB Maaori population, after Waikato DHB. 38% of New Zealand's Pacific population were living in Counties Manukau, the largest DHB Pacific population and 21% of Asian people living in New Zealand were living in Counties Manukau, the second largest DHB Asian population after Auckland DHB. The NZ European/Other population living in Counties Manukau constituted only 7% of the corresponding population of New Zealand compared with the CM Health population overall representing 11% of the New Zealand population.

The ethnicity mix of the CM population varies by age, with younger groups having higher proportions of Maaori, Pacific and Asian peoples than the population aged 65 years and over (where two thirds of the population are NZ European/Other groups) (Table 2, Figure 2).

**Table 1 Estimated resident population of CM in 2014 by prioritised ethnicity and age group**

| Est Resident Pop 2014 by age group (yrs) | Maaori        | Pacific        | Asian          | NZ European/ Other | Total          |
|--|---------------|----------------|----------------|--------------------|----------------|
| 0-14                                     | 29,040        | 35,010         | 23,620         | 32,680             | 120,350        |
| 15-24                                    | 15,050        | 20,850         | 18,440         | 24,310             | 78,650         |
| 25-44                                    | 19,170        | 27,990         | 39,060         | 48,560             | 134,780        |
| 45-64                                    | 13,850        | 19,110         | 27,320         | 60,100             | 120,380        |
| 65-74                                    | 2,640         | 4,190          | 5,710          | 21,200             | 33,740         |
| 75 & over                                | 1,010         | 1,900          | 2,530          | 15,720             | 21,160         |
| <b>Total</b>                             | <b>80,760</b> | <b>109,050</b> | <b>116,680</b> | <b>202,570</b>     | <b>509,060</b> |

Source: Estimated resident population projections, Nov 2014 version, Stats NZ via Ministry of Health

<sup>11</sup> As per the Introduction section, in describing the ethnicity and age structure of the Counties Manukau population for service planning, it is important to use the Estimated Resident population (ER) rather than the Usually Resident (UR) population.

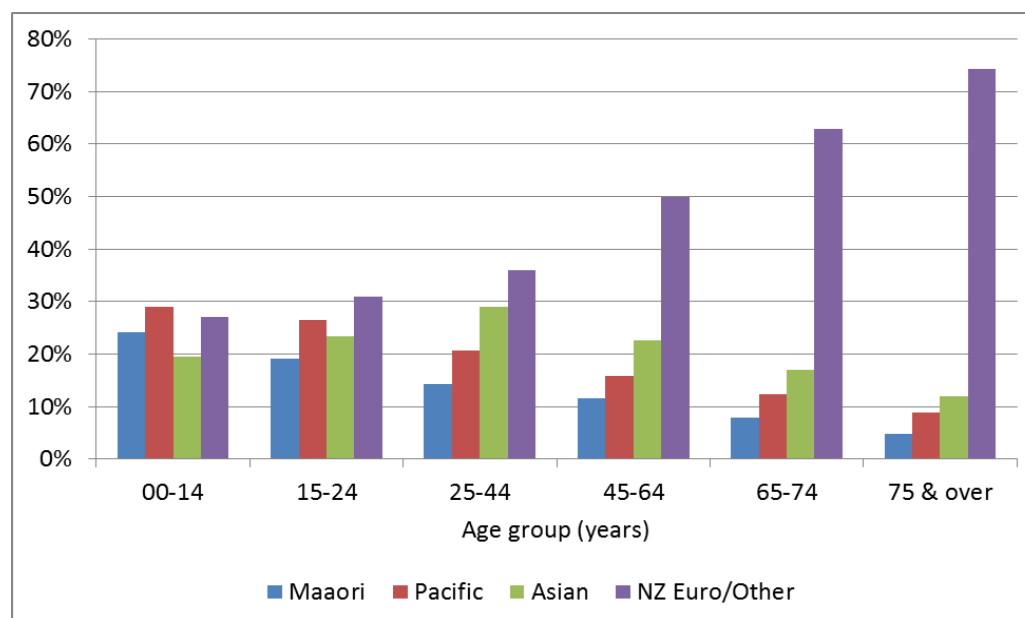
<sup>12</sup> In this instance, the percentages are derived from the population estimates produced by Statistics NZ; in most of the rest of this report the percentages are derived from the Census UR counts and applied to the ER population to produce the estimated population numbers at the CM Health level

**Table 2 Ethnicity distribution within age groups of the estimated resident population of CM in 2014**

| <b>Ethnicity distribution within age groups (yrs; row %)</b> | <b>Maaori</b> | <b>Pacific</b> | <b>Asian</b> | <b>NZ European /Other</b> | <b>Total</b> |
|--|---------------|----------------|--------------|---------------------------|--------------|
| 0-14   | 24.1%         | 29.1%          | 19.6%        | 27.2%                     | 100%         |
| 15-24  | 19.1%         | 26.5%          | 23.4%        | 30.9%                     | 100%         |
| 25-44  | 14.2%         | 20.8%          | 29.0%        | 36.0%                     | 100%         |
| 45-64  | 11.5%         | 15.9%          | 22.7%        | 49.9%                     | 100%         |
| 65-74  | 7.8%          | 12.4%          | 16.9%        | 62.8%                     | 100%         |
| 75 & over  | 4.8%          | 9.0%           | 12.0%        | 74.3%                     | 100%         |
| <b>Total</b>   | <b>15.9%</b>  | <b>21.4%</b>   | <b>22.9%</b> | <b>39.8%</b>              | <b>100%</b>  |

Source: Estimated resident population projections, Nov 2014 version, Stats NZ via Ministry of Health

**Figure 2 Ethnicity distribution within age groups of the estimated resident population of CM in 2014**



Source: Estimated resident population projections, Nov 2014 version, Stats NZ via Ministry of Health

While the CM population is aging, Counties Manukau still has a higher proportion of children than the overall NZ population. Twenty-four percent of the CM Health ER population in 2014 was aged 14 years or under (Table 3) compared with 20% for New Zealand; 13% of New Zealand children aged 14 or under were living in Counties Manukau. The percentage of the population aged under 15 years is much higher in Maaori and Pacific populations than other ethnic groups (Table 3, Figure 3). The Asian population group has a higher percentage of its population aged under 25 years than the NZ European/Other group, and the highest percentage of the ethnic groups in the age group 25-44 years.

Fertility rates in New Zealand have been reducing in the last decade and particularly in the last two to three years. Counties Manukau has a high birth rate compared with many other areas. However, consistent with national trends, birth rates in Counties Manukau have also

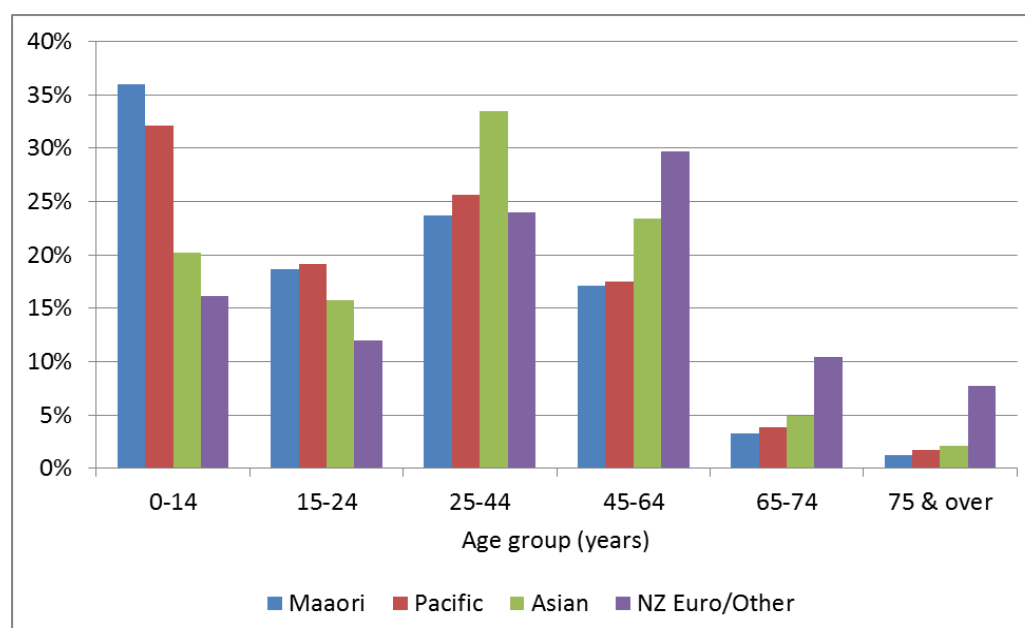
decreased in recent years, particularly among young, Maaori and Pacific women<sup>13</sup>.

**Table 3 Distribution of each ethnic group across age groups of the estimated resident population of CM in 2014**

| Distribution of each ethnic group across age groups (yrs; column %) | Maaori | Pacific | Asian | NZ European /Other | Total        |
|---|--------|---------|-------|--------------------|--------------|
| 0-14  | 36.0%  | 32.1%   | 20.2% | 16.1%              | <b>23.6%</b> |
| 15-24   | 18.6%  | 19.1%   | 15.8% | 12.0%              | <b>15.5%</b> |
| 25-44   | 23.7%  | 25.7%   | 33.5% | 24.0%              | <b>26.5%</b> |
| 45-64   | 17.1%  | 17.5%   | 23.4% | 29.7%              | <b>23.6%</b> |
| 65-74   | 3.3%   | 3.8%    | 4.9%  | 10.5%              | <b>6.6%</b>  |
| 75 & over   | 1.3%   | 1.7%    | 2.2%  | 7.8%               | <b>4.2%</b>  |
| Total   | 100%   | 100%    | 100%  | 100%               | <b>100%</b>  |

Source: Estimated resident population projections, Nov 2014 version, Stats NZ via Ministry of Health, percentages derived by CM Health

**Figure 3 Distribution of each ethnic group across age groups of the estimated resident population of CM in 2014**



Source: Estimated resident population projections, Nov 2014 version, Stats NZ via Ministry of Health

<sup>13</sup> Birth data from National Minimum Data Set, analysed by CM Health



## Ethnic composition and age structure of the CM Health Localities

Within the area served by CM Health, the four localities have quite distinct mixes of these different population groups, both age group and ethnicity.

The Eastern and Franklin localities have a higher percentage of their populations aged 65 years and over (12.7% and 13.9% respectively) than Mangere/Otara (7.9%) and Manukau (9.6%) (Tables 4, 5 & 6, Figures 4 & 5). Mangere/Otara and Manukau populations have higher proportions of children and young people.

**Table 4 Age distribution of locality populations, based on the estimated resident population of CM in 2014**

| <b>2014 ER population (yrs)</b> | <b>Eastern</b> | <b>Franklin</b> | <b>Mangere/Otara</b> | <b>Manukau</b> | <b>Total</b>   |
|---------------------------------|----------------|-----------------|----------------------|----------------|----------------|
| 0-14                            | 29,325         | 15,550          | 29,975               | 45,855         | <b>120,705</b> |
| 15-24                           | 21,580         | 8,785           | 19,000               | 28,995         | <b>78,360</b>  |
| 25-44                           | 40,680         | 15,785          | 27,595               | 51,000         | <b>135,060</b> |
| 45-64                           | 40,155         | 19,300          | 20,040               | 40,775         | <b>120,270</b> |
| 65-74                           | 11,600         | 5,915           | 5,440                | 10,665         | <b>33,620</b>  |
| 75 & over                       | 7,610          | 3,690           | 2,830                | 7,090          | <b>21,220</b>  |
| <b>Total</b>                    | <b>150,950</b> | <b>69,025</b>   | <b>104,880</b>       | <b>184,380</b> | <b>509,235</b> |

\*Totals don't add up and are slightly different from total DHB level data because of rounding

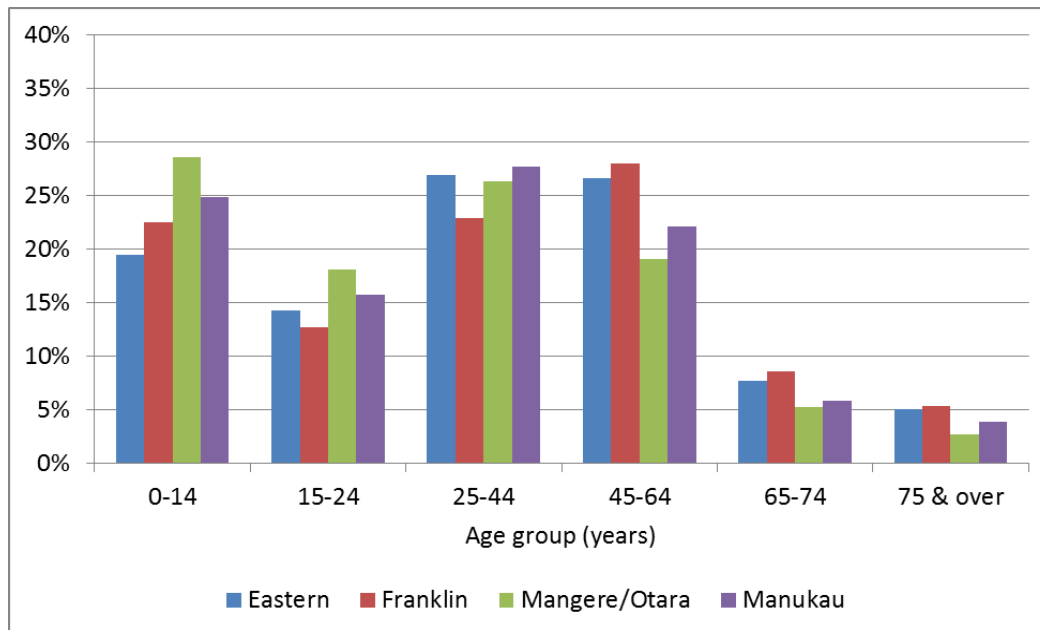
Source: Estimated resident population by CAU for 2014, Stats NZ, aggregated to localities by CM Health

**Table 5 Age distribution of locality populations, based on the estimated resident population of CM in 2014**

| <b>Distribution of each locality across age groups (yrs; column %)</b> | <b>Eastern</b> | <b>Franklin</b> | <b>Mangere/Otara</b> | <b>Manukau</b> | <b>Total</b> |
|--|----------------|-----------------|----------------------|----------------|--------------|
| 0-14   | 19.4%          | 22.5%           | 28.6%                | 24.9%          | <b>23.7%</b> |
| 15-24  | 14.3%          | 12.7%           | 18.1%                | 15.7%          | <b>15.4%</b> |
| 25-44  | 26.9%          | 22.9%           | 26.3%                | 27.7%          | <b>26.5%</b> |
| 45-64  | 26.6%          | 28.0%           | 19.1%                | 22.1%          | <b>23.6%</b> |
| 65-74  | 7.7%           | 8.6%            | 5.2%                 | 5.8%           | <b>6.6%</b>  |
| 75 & over  | 5.0%           | 5.3%            | 2.7%                 | 3.8%           | <b>4.2%</b>  |
| <b>Total</b>   | <b>100%</b>    | <b>100%</b>     | <b>100%</b>          | <b>100%</b>    | <b>100%</b>  |

Source: Estimated resident population by CAU for 2014, Stats NZ, percentages derived from aggregation to localities by CM Health

**Figure 4 Age distribution of locality populations, based on the estimated resident population of CM in 2014**



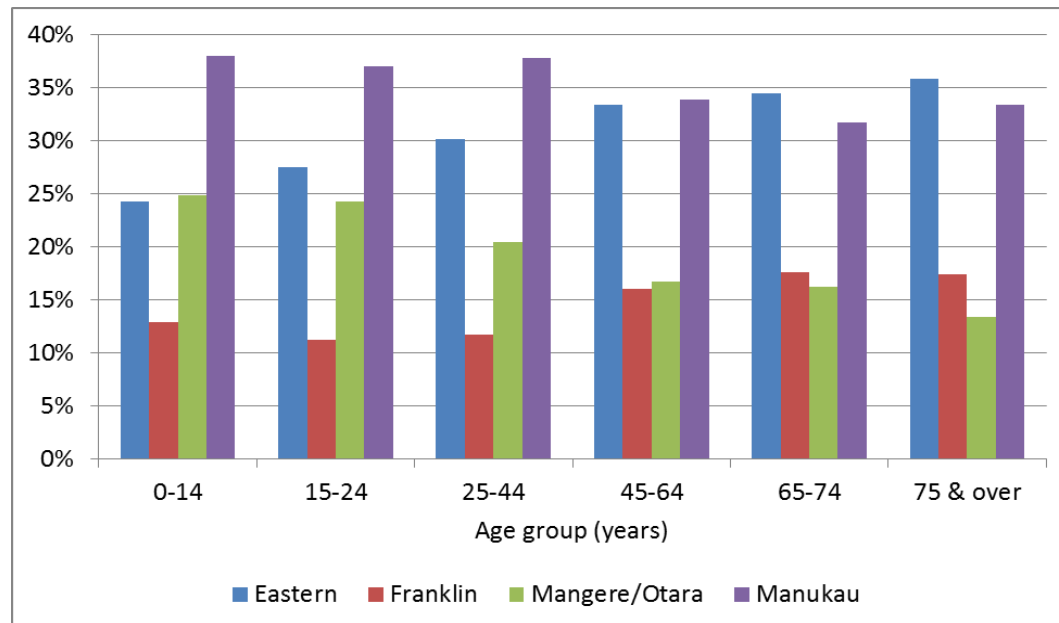
Source: Estimated resident population by CAU for 2014, Stats NZ, percentages derived from aggregation to localities by CM Health

**Table 6 Locality distribution of age groups based on the estimated resident population of CM in 2014**

| Locality distribution within age groups (yrs; row %) | Eastern      | Franklin     | Mangere/Otara | Manukau      | Total       |
|--|--------------|--------------|---------------|--------------|-------------|
| 0-14   | 24.3%        | 12.9%        | 24.8%         | 38.0%        | 100%        |
| 15-24  | 27.5%        | 11.2%        | 24.2%         | 37.0%        | 100%        |
| 25-44  | 30.1%        | 11.7%        | 20.4%         | 37.8%        | 100%        |
| 45-64  | 33.4%        | 16.0%        | 16.7%         | 33.9%        | 100%        |
| 65-74  | 34.5%        | 17.6%        | 16.2%         | 31.7%        | 100%        |
| 75 & over  | 35.9%        | 17.4%        | 13.3%         | 33.4%        | 100%        |
| <b>Total</b>   | <b>29.6%</b> | <b>13.6%</b> | <b>20.6%</b>  | <b>36.2%</b> | <b>100%</b> |

Source: Estimated resident population by CAU for 2014, Stats NZ, percentages derived from aggregation to localities by CM Health

**Figure 5 Locality distribution of age groups based on the estimated resident population of CM in 2014**



Source: Estimated resident population by CAU for 2014, Stats NZ, percentages derived from aggregation to localities by CM Health

As noted in the introductory section, two ‘pictures’ of the distribution of the ethnic populations of CM across localities are available for 2013. The UR provides more detail ethnicity breakdown within the Asian subgroups. However, these estimates are likely to undercount Maori, Pacific and Asian subgroups compared to New Zealand European and others because net undercount could be not adjusted for. Based on the 2013 Census UR population, while all areas have people from most ethnic groups, a high proportion of Pacific peoples live in Mangere/Otara, Maaori in Manukau (particularly Manurewa and Papakura), the Indian population in Manukau, Chinese and Other Asian groups in Eastern and NZ European/Other groups in the Eastern locality (Table 8)<sup>14</sup>.

<sup>14</sup> Note these percentages are of the total population UR count, not excluding the ‘Not Elsewhere Included’ (NEI) category from the denominator. Excluding the NEI group from the denominator is the usual practice when estimating a percentage for Census variables, but in this case the NEI group is included in the denominator and identified separately in the numerator columns of Table 7.

**Table 7 Ethnicity distribution within localities based on the UR population counts for CM in 2013**

| Locality (row %) | Maaori       | Pacific      | Indian      | Chinese     | Other Asian | (Total Asian) | NZ European /Other | Not Else-where incl |
|------------------|--------------|--------------|-------------|-------------|-------------|---------------|--------------------|---------------------|
| Eastern          | 5.2%         | 3.4%         | 8.5%        | 18.4%       | 6.9%        | 33.8%         | 54.0%              | 3.6%                |
| Franklin         | 15.2%        | 3.2%         | 2.7%        | 1.2%        | 1.3%        | 5.2%          | 71.0%              | 5.4%                |
| Mangere/Otara    | 15.4%        | 54.3%        | 7.7%        | 1.5%        | 2.7%        | 11.9%         | 9.4%               | 9.0%                |
| Manukau          | 21.2%        | 19.9%        | 14.5%       | 2.6%        | 3.8%        | 20.9%         | 30.6%              | 7.4%                |
| <b>[Total*</b>   | <b>14.5%</b> | <b>19.6%</b> | <b>9.7%</b> | <b>6.9%</b> | <b>4.2%</b> | <b>20.7%</b>  | <b>38.8%</b>       | <b>6.4%]</b>        |

\*NOTE: This distribution is slightly different from the ethnic composition of the CM Health population based on the ER population because of the differential undercounts across ethnic groups and adjustments made in deriving ER populations.

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 8 Distribution of each ethnic group across localities based on the UR population counts for CM in 2013**

| Locality (column %) | Maaori | Pacific | Indian | Chinese | Other Asian | (Total Asian) | NZ European /Other | Total        |
|---------------------|--------|---------|--------|---------|-------------|---------------|--------------------|--------------|
| Eastern             | 10.6%  | 5.1%    | 25.7%  | 79.3%   | 48.9%       | 48.1%         | 41.1%              | <b>29.5%</b> |
| Franklin            | 14.5%  | 2.3%    | 3.8%   | 2.4%    | 4.3%        | 3.4%          | 25.3%              | <b>13.8%</b> |
| Mangere/Otara       | 21.5%  | 55.7%   | 16.1%  | 4.3%    | 13.2%       | 11.6%         | 4.9%               | <b>20.2%</b> |
| Manukau             | 53.4%  | 36.9%   | 54.4%  | 13.9%   | 33.6%       | 36.9%         | 28.8%              | <b>36.5%</b> |
| Total               | 100%   | 100%    | 100%   | 100%    | 100%        | 100%          | 100%               | <b>100%</b>  |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Ethnic diversity at a neighbourhood level has been described in the Auckland Regional Public Health Service 2013 Census Demographic Profile for the Auckland region<sup>15</sup>. The measure describes how uniformly the usually resident ethnic groups Maaori, Pacific, Asian, MELAA and European/Other groups contribute to the total population of a neighbourhood (defined as a Census Area Unit). They identified that all of the top ten ranked ethnically diverse suburbs in New Zealand were located in the Auckland region. In fact, seven of those ten neighbourhoods were in the CM Health district, six of them in Manurewa (Table 9).

<sup>15</sup> Gomez D, King R, Jackson C (2014) Demographic Profile Report 1: Census 2013 Auckland Usual Residents Snapshot. Auckland: Auckland Regional Public Health Service.

**Table 9 Neighbourhoods in Auckland with high ethnic diversity ranking**

| Neighbourhood    | Auckland Council Local Board | NZ Ethnic Diversity Rank | Diversity Score* |
|------------------|------------------------------|--------------------------|------------------|
| Beaumont         | Manurewa                     | 1                        | 69.5             |
| Manurewa East    | Manurewa                     | 2                        | 69.3             |
| Manurewa Central | Manurewa                     | 3                        | 68.7             |
| Kelston Central  | Whau                         | 4                        | 68.2             |
| Avondale West    | Whau                         | 5                        | 67.9             |
| Leabank          | Manurewa                     | 6                        | 67.8             |
| Weymouth East    | Manurewa                     | 7                        | 67.4             |
| Randwick Park    | Manurewa                     | 8                        | 66.7             |
| Parrs Park       | Waitakere Ranges             | 9                        | 65.9             |
| Takanini North   | Papakura                     | 10                       | 65.5             |

\*A score of 100 would indicate identically sized populations from each of the five groups (Maori, Pacific, Asian, MELAA and European/Other)

Source: Gomez D, King R, Jackson C (2014)<sup>16</sup>

### Pacific, Asian and MELAA subgroups

As noted in the introductory section, the Pacific, Asian and MELAA groups are very heterogeneous. The tables below give an indication of relative size of the populations within these groupings. Ethnicity for these tables is total response, therefore subgroups add up to more than 100%. The percentage these groups represent of the total Usually Resident population for CM Health in the 2013 Census is given as an indication of relative size, but it needs to be remembered that Pacific peoples overall, and to a lesser extent Asian groups, tend to be undercounted to some extent in the UR population, so the real percentage is likely to be slightly higher.

Approximately half (51%) of the Pacific population in CM Health identified as Samoan at the time of the 2013 Census, nearly a quarter as Tongan (23%) and just over a fifth (21%) as Cook Island Maaori (Table 10). People identifying as Tokelauan, Kiribati, Tuvaluan and Other Pacific groups represented 1% or less each of the total Pacific group.

**Table 10 Five largest Pacific ethnic groups in the UR CM population in Census 2013**

|                        | Samoan | Tongan | Cook Island Maaori | Niuean | Fijian |
|------------------------|--------|--------|--------------------|--------|--------|
| % of Pacific responses | 50.8%  | 23.4%  | 21.4%              | 8.6%   | 3.2%   |
| % of CM (UR)           | 11.3%  | 5.2%   | 4.8%               | 1.9%   | 0.7%   |

\*people can appear in more than one group, so percentages can add up to more than 100%

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>16</sup> Gomez D, King R, Jackson C (2014) Demographic Profile Report 1: Census 2013 Auckland Usual Residents Snapshot. Auckland: Auckland Regional Public Health Service

Nearly half of the Asian population in CM Health identified as Indian at the time of the 2013 Census, with a third identifying as Chinese (Table 11). Compared with the 2006 Census population, a higher percentage of the CM Health Asian population identified as Indian in 2013 (46% compared to 41% in 2006) and a lower percentage as Chinese (34% compared to 38% in 2006). In addition the position in ranking of population size of Filipino and Korean groups were reversed in 2013 compared with 2006.

The Asian population mix varies across Auckland and so is different for each of the three metro Auckland DHBs; for example in Waitemata DHB in 2013, 40% identified as Chinese, 23% Indian, 14% Korean and 10% Filipino.

**Table 11 Five largest Asian ethnic groups in the UR CM population in Census 2013**

|                      | <b>Indian</b> | <b>Chinese</b> | <b>Filipino</b> | <b>Korean</b> | <b>Cambodian</b> |
|----------------------|---------------|----------------|-----------------|---------------|------------------|
| % of Asian responses | 46.5%         | 34.0%          | 5.5%            | 3.4%          | 2.5%             |
| % of CM UR           | 10.1%         | 7.4%           | 1.2%            | 0.7%          | 0.5%             |

\*people can appear in more than one group, so percentages can add up to more than 100%

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

The MELAA (Middle Eastern, Latin American, African) group represented 1.4% of the CM usually resident population for Census 2013, just under 6,500 people (the UR number is given here as an indication of the MELAA population size). The degree of undercount for the MELAA population is not described in the Statistics NZ report on the Post Census Enumeration survey as the number of people identified with the MELAA group was too small in the sample to make any robust estimates<sup>17</sup>, so it is unclear how far this would be different from the likely real count. The Middle Eastern group were just under two thirds of the total MELAA group, just under 1% of the CM usually resident population (Table 12).

**Table 12 Middle Eastern, Latin American, African groups in the UR CM population in Census 2013**

|                      | <b>Middle Eastern</b> | <b>Latin American</b> | <b>African</b> | <b>Total MELAA*</b> |
|----------------------|-----------------------|-----------------------|----------------|---------------------|
| UR count             | 4,130                 | 890                   | 1,420          | 6,430               |
| % of MELAA responses | 64%                   | 14%                   | 22%            | 100%                |
| % of CM UR           | 0.9%                  | 0.2%                  | 0.3%           | 1.4%                |

\*people can appear in more than one group, so percentages can add up to more than 100%

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>17</sup> Statistics New Zealand (2014). Coverage in the 2013 Census based on the New Zealand 2013 Post-enumeration Survey. Available from [www.stats.govt.nz](http://www.stats.govt.nz)

## Iwi Affiliation

Iwi affiliation is recorded for people identified as of Maaori descent in the Census UR population (this group is larger than those people who identify as Maaori ethnicity). 83% of those of Maaori descent in Counties Manukau who answered the question about iwi affiliation<sup>18</sup> identified with one or more iwi (or waka/iwi confederation). Approximately 26% of Maaori in CM identified with one of the Waikato/Tainui iwi, while 51% identified with one of the Te Tai Tokerau/Tāmaki-makaurau iwi (Table 13).

**Table 13 Iwi affiliation for people identified as of Maaori descent in the UR CM population in Census 2013 (15 numerically largest groups)**

| <b>Iwi or waka/iwi confederation</b> | <b>Number</b> |
|--------------------------------------|---------------|
| Ngāpuhi                              | 24,030        |
| Waikato                              | 9,350         |
| Ngāti Porou                          | 5,760         |
| Ngāti Maniapoto                      | 4,550         |
| Tūhoe                                | 3,260         |
| Ngāti Kahungunu (various)            | 3,050         |
| Te Rarawa                            | 2,920         |
| Tainui                               | 2,890         |
| Ngāti Tūwharetoa                     | 2,740         |
| Ngāti Whātua                         | 2,520         |
| Te Arawa                             | 2,150         |
| Ngāi Tahu / Kāi Tahu                 | 1,900         |
| Ngāti Kahu                           | 1,800         |
| Ngāti Awa                            | 1,730         |
| Te Aupōuri                           | 1,640         |

Source: 2013 Census UR population, Northern Region Health extract, Statistics NZ

---

<sup>18</sup> 97% of those identified as of Maaori descent gave an answer to the question about iwi affiliation

## Birthplace

New Zealand was the country of birth stated by 62% of the CM Health population who responded to the relevant question<sup>19</sup> in the 2013 Census. A Pacific Island country (14%) and an Asian country (13%) were the other main birthplaces for CM Health residents.

For people identified as Indian ethnicity, the most likely place of birth reported was a Pacific Island country (41%), followed by an Asian country (34%) and NZ (21%). This suggests a substantial proportion of the Indian population living in CM would identify as Fijian Indian.

About 80% of people who identified with Chinese or Other Asian groups reported an Asian country as their place of birth and about 20% of people of these ethnicities reported New Zealand as their place of birth (Table 14, Figure 6).

These figures compare with the rest of New Zealand where 76% were born in New Zealand, 3% in a Pacific Island country and 7% in Asia. For the Indian population in the rest of New Zealand, 52% reported Asia as their birthplace, 22% a Pacific country and 21% New Zealand.

**Table 14 Birthplace for the UR CM population in Census 2013 for prioritised ethnic groups**

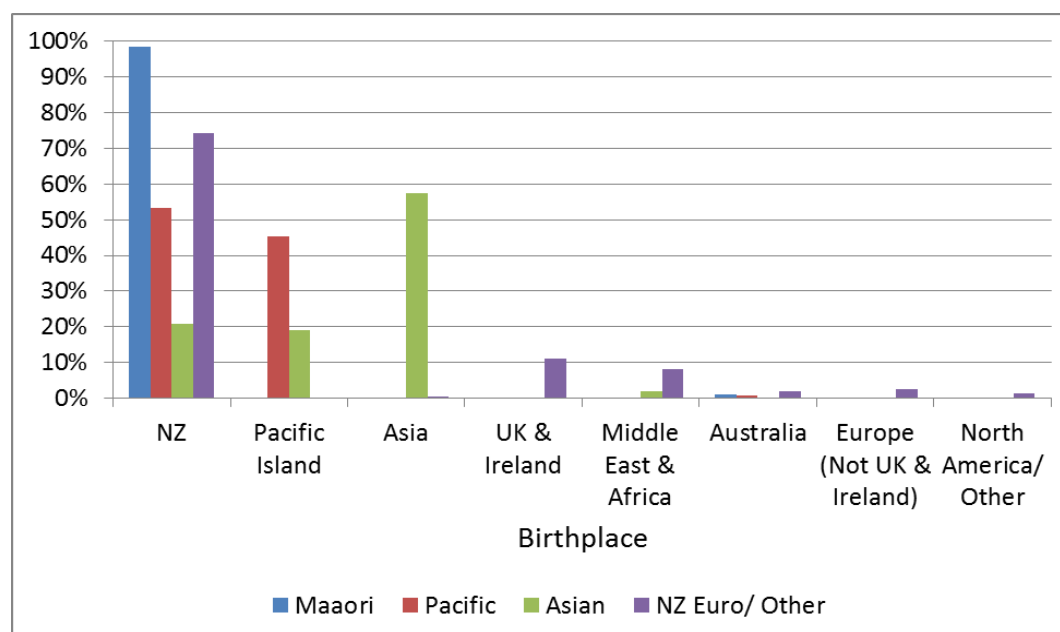
|                      | NZ           | Pacific Island | Asia         | UK & Ireland | Middle East & Africa | Australia   | Europe (Not UK & Ireland) | North America /Other |
|----------------------|--------------|----------------|--------------|--------------|----------------------|-------------|---------------------------|----------------------|
| Maaori               | 98.3%        | 0.3%           | 0.1%         | 0.2%         | 0.0%                 | 1.0%        | 0.0%                      | 0.1%                 |
| Pacific              | 53.4%        | 45.4%          | 0.1%         | 0.1%         | 0.0%                 | 0.8%        | 0.0%                      | 0.3%                 |
| Indian               | 20.6%        | 40.8%          | 34.0%        | 0.3%         | 3.9%                 | 0.3%        | 0.0%                      | 0.2%                 |
| Chinese              | 22.6%        | 0.3%           | 76.2%        | 0.1%         | 0.2%                 | 0.2%        | 0.0%                      | 0.2%                 |
| Other Asian          | 18.0%        | 0.2%           | 80.4%        | 0.0%         | 0.5%                 | 0.2%        | 0.1%                      | 0.3%                 |
| <i>(Total Asian)</i> | <i>20.8%</i> | <i>19.2%</i>   | <i>57.3%</i> | <i>0.2%</i>  | <i>2.0%</i>          | <i>0.2%</i> | <i>0.1%</i>               | <i>0.2%</i>          |
| NZ European /Other   | 74.4%        | 0.2%           | 0.4%         | 11.3%        | 8.2%                 | 1.9%        | 2.5%                      | 1.2%                 |
| <b>Total</b>         | <b>61.8%</b> | <b>13.9%</b>   | <b>12.9%</b> | <b>4.8%</b>  | <b>3.9%</b>          | <b>1.2%</b> | <b>1.1%</b>               | <b>0.6%</b>          |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>19</sup> 93% of the Usually Resident CM population gave an identifiable response to the birthplace question



Figure 6 Birthplace for the UR CM population in Census 2013 for prioritised ethnic groups



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Table 15 Estimated number of CM Health residents in 2014 by place of birth and ethnicity

|                      | NZ             | Pacific Island | Asia          | UK & Ireland  | Middle East & Africa | Australia    | Europe (Not UK & Ireland) | North America /Other |
|----------------------|----------------|----------------|---------------|---------------|----------------------|--------------|---------------------------|----------------------|
| Maaori               | 79,410         | 210            | 80            | 140           | 0                    | 830          | 30                        | 50                   |
| Pacific              | 58,250         | 49,520         | 60            | 60            | 50                   | 850          | 20                        | 280                  |
| Indian               | 11,270         | 22,300         | 18,570        | 180           | 2,140                | 150          | 30                        | 80                   |
| Chinese              | 8,740          | 100            | 29,410        | 40            | 70                   | 80           | 20                        | 80                   |
| Other Asian          | 4,220          | 40             | 18,820        | 0             | 120                  | 40           | 30                        | 70                   |
| <i>(Total Asian)</i> | <i>24,230</i>  | <i>22,380</i>  | <i>66,850</i> | <i>230</i>    | <i>2,320</i>         | <i>270</i>   | <i>70</i>                 | <i>230</i>           |
| NZ European /Other   | 150,650        | 430            | 780           | 22,800        | 16,550               | 3,760        | 5,090                     | 2,500                |
| <b>Total</b>         | <b>314,470</b> | <b>70,600</b>  | <b>65,490</b> | <b>24,310</b> | <b>19,680</b>        | <b>5,860</b> | <b>5,440</b>              | <b>3,120</b>         |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

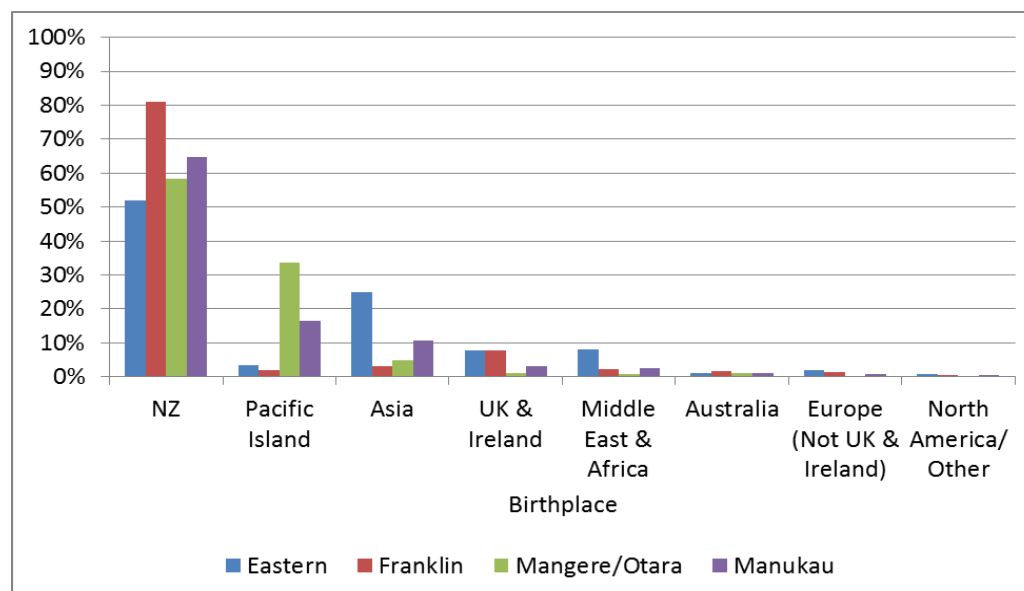
In all localities New Zealand was the most common birthplace, but the proportion of people who reported being born in NZ varied considerably across localities, from 52% in Eastern to 81% in Franklin. The next most common birthplace also varied across the localities – 34% of those living in Mangere/Otara and 17% of those living in Manukau being born in the Pacific and 25% of Eastern locality residents being born in Asia. In Franklin UK & Ireland (8%) was the second most common birthplace (Table 16, Figure 7).

Table 16 Birthplace for the UR CM population in Census 2013 by locality

|               | NZ           | Pacific Island | Asia         | UK & Ireland | Middle East & Africa | Australia   | Europe (Not UK & Ireland) | North America/ Other |
|---------------|--------------|----------------|--------------|--------------|----------------------|-------------|---------------------------|----------------------|
| Eastern       | 51.8%        | 3.5%           | 24.8%        | 7.7%         | 8.2%                 | 1.2%        | 1.8%                      | 0.9%                 |
| Franklin      | 81.0%        | 2.0%           | 3.2%         | 7.9%         | 2.3%                 | 1.6%        | 1.4%                      | 0.6%                 |
| Mangere/Otara | 58.3%        | 33.5%          | 4.8%         | 1.0%         | 0.7%                 | 0.9%        | 0.3%                      | 0.4%                 |
| Manukau       | 64.6%        | 16.6%          | 10.8%        | 3.2%         | 2.5%                 | 1.0%        | 0.7%                      | 0.5%                 |
| <b>Total</b>  | <b>61.8%</b> | <b>13.9%</b>   | <b>12.9%</b> | <b>4.8%</b>  | <b>3.9%</b>          | <b>1.2%</b> | <b>1.1%</b>               | <b>0.6%</b>          |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Figure 7 Birthplace for the UR CM population in Census 2013 by locality



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Table 17 Estimated number of CM Health residents in 2014 by place of birth and locality

|               | NZ             | Pacific Island | Asia          | UK & Ireland  | Middle East & Africa | Australia    | Europe (Not UK & Ireland) | North America/ Other |
|---------------|----------------|----------------|---------------|---------------|----------------------|--------------|---------------------------|----------------------|
| Eastern       | 78,220         | 5,240          | 37,510        | 11,590        | 12,370               | 1,850        | 2,740                     | 1,420                |
| Franklin      | 55,910         | 1,350          | 2,230         | 5,430         | 1,570                | 1,080        | 990                       | 440                  |
| Mangere/Otara | 61,130         | 35,170         | 5,090         | 1,070         | 730                  | 990          | 310                       | 370                  |
| Manukau       | 119,180        | 30,600         | 19,940        | 5,840         | 4,690                | 1,920        | 1,320                     | 870                  |
| <b>Total</b>  | <b>314,580</b> | <b>70,630</b>  | <b>65,510</b> | <b>24,320</b> | <b>19,680</b>        | <b>5,860</b> | <b>5,440</b>              | <b>3,120</b>         |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Years since arrival in New Zealand

For the CM residents who answered the question on birthplace and were not born in New Zealand, 95% of them gave information about how many years it was since they had arrived in New Zealand.

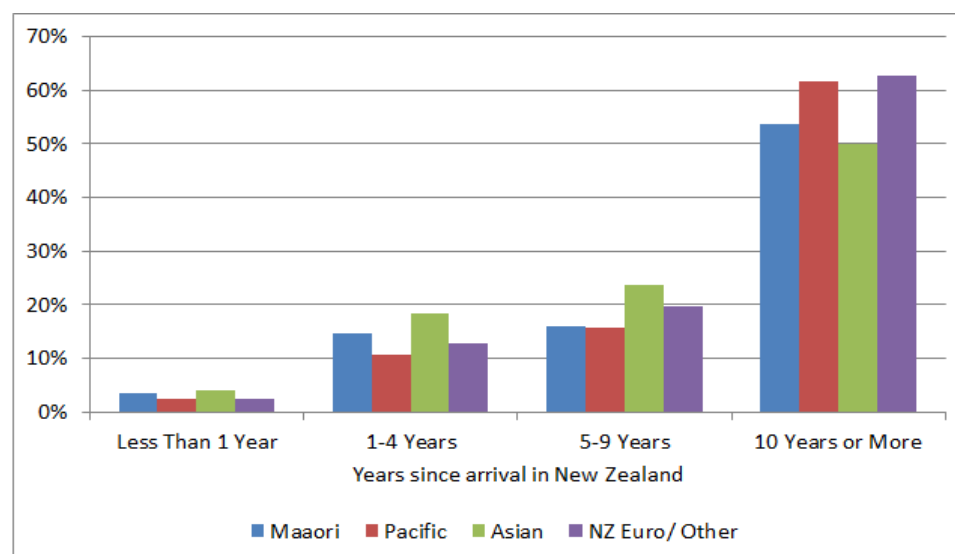
57% of those born overseas had been living in New Zealand for 10 years or more at the time of the 2013 Census (Table 18, Figure 8). Just under 20% had been living in New Zealand less than five years. This equates to an estimated 35,300 people living in Counties Manukau in 2014 who were born overseas and had been living in New Zealand for less than five years (Table 19). Within the Asian population, a higher percentage of those identifying as Chinese (63%) had been living in NZ for 10 years or more, than those identifying as Indian (42%) and Other Asian groups (47%).

**Table 18 Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by prioritised ethnicity**

|                      | Less Than 1 Year | 1-4 Years    | 5-9 Years    | 10 Years or More |
|----------------------|------------------|--------------|--------------|------------------|
| Maaori               | 3.5%             | 14.7%        | 16.0%        | 53.7%            |
| Pacific              | 2.5%             | 10.8%        | 15.8%        | 61.5%            |
| Indian               | 4.1%             | 21.3%        | 28.1%        | 42.4%            |
| Chinese              | 3.9%             | 12.9%        | 16.6%        | 62.9%            |
| Other Asian          | 4.6%             | 20.6%        | 24.2%        | 47.2%            |
| <i>(Total Asian)</i> | <i>4.1%</i>      | <i>18.4%</i> | <i>23.6%</i> | <i>50.1%</i>     |
| NZ European / Other  | 2.4%             | 12.7%        | 19.7%        | 62.8%            |
| <b>Total</b>         | <b>3.2%</b>      | <b>14.9%</b> | <b>20.4%</b> | <b>56.6%</b>     |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 8 Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by prioritised ethnicity**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 19 Estimated number of overseas born CM Health residents in 2014 by years since arrival in New Zealand and prioritised ethnicity**

|                      | <b>Less Than 1 Year</b> | <b>1-4 Years</b> | <b>5-9 Years</b> | <b>10 Years or More</b> |
|----------------------|-------------------------|------------------|------------------|-------------------------|
| Maaori               | 50                      | 200              | 220              | 730                     |
| Pacific              | 1,290                   | 5,470            | 8,010            | 31,260                  |
| Indian               | 1,780                   | 9,230            | 12,220           | 18,420                  |
| Chinese              | 1,150                   | 3,850            | 4,950            | 18,780                  |
| Other Asian          | 890                     | 3,950            | 4,640            | 9,060                   |
| <i>(Total Asian)</i> | <i>3,820</i>            | <i>17,020</i>    | <i>21,800</i>    | <i>46,280</i>           |
| NZ European / Other  | 1,260                   | 6,610            | 10,210           | 32,600                  |
| <b>Total</b>         | <b>6,320</b>            | <b>29,010</b>    | <b>39,750</b>    | <b>110,050</b>          |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

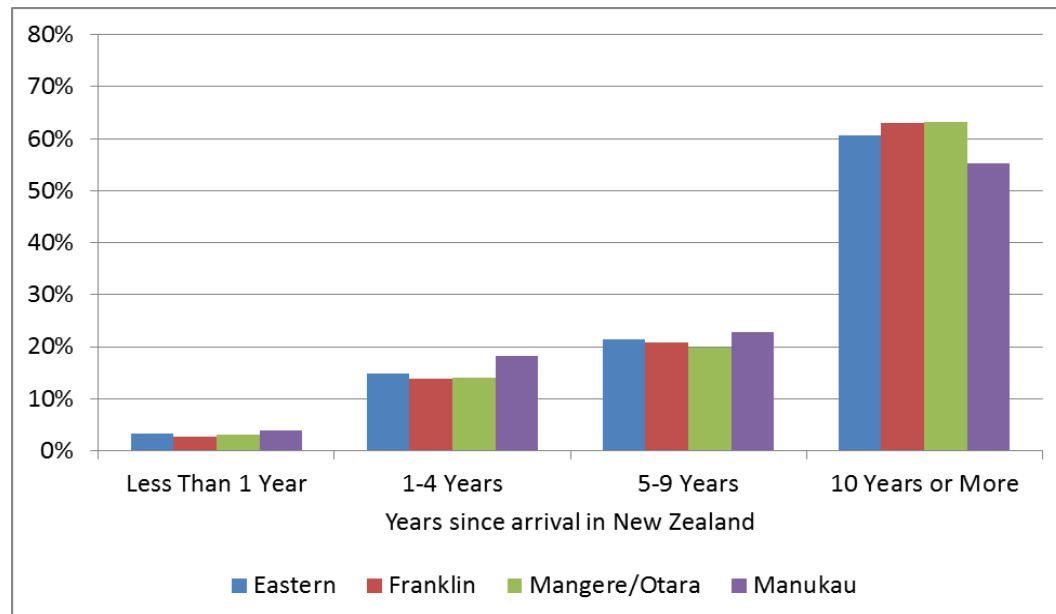
The Manukau locality had the highest percentage of overseas-born residents who had been in New Zealand less than five years - 22%; the figure for other localities was 17-18% (Table 20, Figure 9).

**Table 20 Years since arrival in New Zealand (at the time of Census 2013) for the overseas born UR CM population by locality**

|                | <b>Less Than 1 Year</b> | <b>1-4 Years</b> | <b>5-9 Years</b> | <b>10 Years or More</b> |
|----------------|-------------------------|------------------|------------------|-------------------------|
| Eastern        | 3.3%                    | 14.8%            | 21.4%            | 60.6%                   |
| Franklin       | 2.6%                    | 13.9%            | 20.8%            | 62.9%                   |
| Mangere/ Otara | 3.1%                    | 14.0%            | 19.8%            | 63.2%                   |
| Manukau        | 3.9%                    | 18.1%            | 22.8%            | 55.2%                   |
| <b>Total</b>   | <b>3.4%</b>             | <b>15.7%</b>     | <b>21.5%</b>     | <b>59.5%</b>            |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 9: Years since arrival in New Zealand (at the time of the 2013 Census) for the overseas born UR CM population by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 21 Estimated number of overseas born CM Health residents in 2014 by years since arrival in New Zealand and locality**

|                | <b>Less Than 1 Year</b> | <b>1-4 Years</b> | <b>5-9 Years</b> | <b>10 Years or More</b> |
|----------------|-------------------------|------------------|------------------|-------------------------|
| Eastern        | 2,330                   | 10,440           | 15,100           | 42,770                  |
| Franklin       | 330                     | 1,770            | 2,640            | 7,980                   |
| Mangere/ Otara | 1,240                   | 5,620            | 7,960            | 25,360                  |
| Manukau        | 2,410                   | 11,190           | 14,040           | 34,020                  |
| <b>Total</b>   | <b>6,320</b>            | <b>29,020</b>    | <b>39,760</b>    | <b>110,090</b>          |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Language

The NZ Census contains a question on language(s) spoken which asks: *In which language(s) could you have a conversation about a lot of everyday things? Remember to mark English if you can have a conversation in English.* The categories given (with instructions to mark as many spaces as apply) are:

- English
- Māori
- Samoan
- New Zealand Sign Language
- other language(s), for example GUJARATI, CANTONESE, GREEK. Print the language(s):
- or none (for example too young to talk).

Note, this question (and therefore the information below) is about ability to have a conversation about everyday things; that is potentially quite different from the ability to have a conversation about health issues which may be relatively complex. Being able to speak a language does not necessarily equate to literacy in that language, and confidence to engage and ask questions will vary across different contexts.

The information below is for the high level ethnic groups and all of those aged 15 years and over combined. Appendix Two has further detail for Pacific and Asian subgroups<sup>20</sup>, broken down by age groups within the group aged 15 years and over.

At the time of the 2013 Census, 94% of CM Health residents aged 15 years and over were able to have a conversation about everyday things in English; 6% did not have adequate English for this task (Table 24, Figure 12). The percentage of people not able to speak English varied by ethnicity and age. 28% for those identified as Chinese and 17% of the total Asian group aged 15 years and over were not able to speak English.

23% of those identified as Māori aged 15 years and over living in CM were able to have a conversation about everyday things in Te Reo Māori (not shown in Table 24).

As described further in Appendix Two, the ability to have a conversation in English does vary by age group for Pacific and Asian populations. A substantial proportion (31%) of those who identify with one or more of the Pacific populations aged 65 years and over do not have conversational English, and that figure is 51% for those identifying with one or more of the Asian populations. However, high proportions of people are able to speak their ethnic language, at least for every day matters - over 80% for those who are Samoan or Tongan aged 45 years and over, and over 80% for those who are Chinese, Filipino or Korean aged 45 years and over.

---

<sup>20</sup> Note the Pacific and Asian subgroup information is Total Response Ethnicity rather than prioritised ethnicity so the overall percentages are slightly different

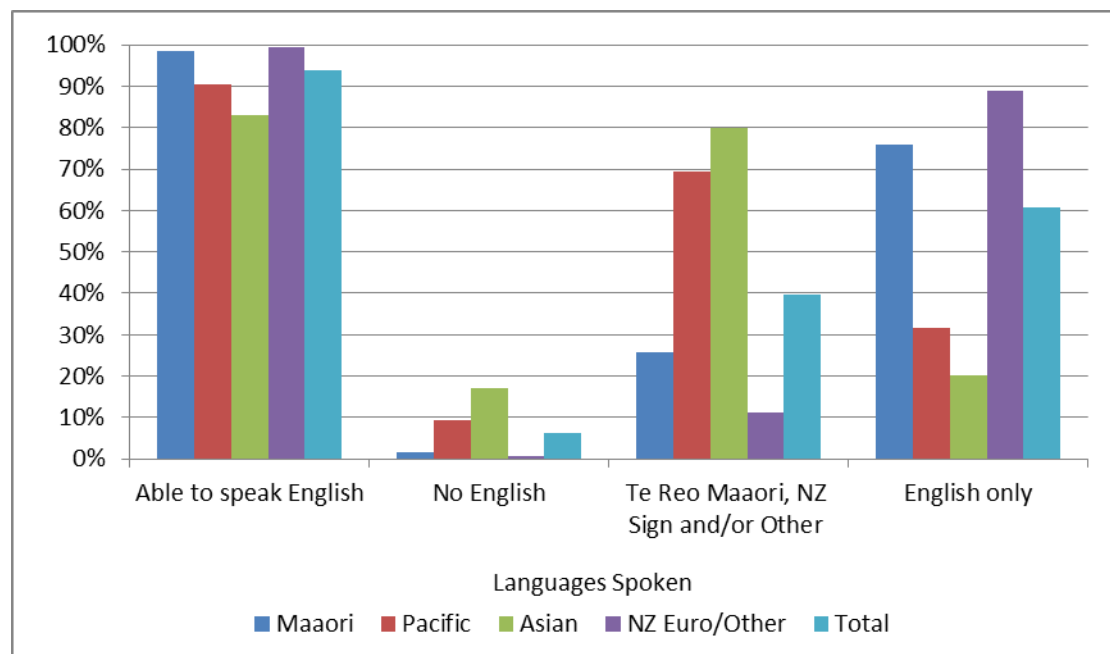
For the rest of New Zealand aged 15 years and over, only 2% were not able to have a conversation in English and 20% were able to have a conversation in Te Reo Maaori, NZ Sign Language and/or another language. 24% of those identified as Maaori aged 15 years and over living in in the rest of New Zealand were able to have a conversation about everyday things in Te Reo Maaori.

**Table 22 Languages spoken for the UR CM population aged 15 years and over in Census 2013 for prioritised ethnic groups**

|                      | <b>Able to have conversation in English</b> | <b>Not able to have conversation in English</b> | <b>Able to have conversation in Te Reo Maaori, NZ Sign and/or another language</b> | <b>Able to have conversation in English only</b> |
|----------------------|---|---|--|--|
| Maaori               | 98.5%                                       | 1.5%  | 25.8%  | 75.8%  |
| Pacific              | 90.6%                                       | 9.4%  | 69.3%  | 31.7%  |
| Indian               | 91.0%                                       | 9.1%  | 73.7%  | 26.5%  |
| Chinese              | 71.9%                                       | 28.0%   | 86.1%  | 14.0%  |
| Other Asian          | 83.0%                                       | 17.1%   | 83.5%  | 16.5%  |
| <i>(Total Asian)</i> | <i>83.0%</i>                                | <i>17.0%</i>                                    | <i>79.8%</i>   | <i>20.3%</i>                                     |
| NZ European / Other  | 99.3%                                       | 0.7%  | 11.3%  | 88.8%  |
| <b>Total</b>         | <b>93.8%</b>                                | <b>6.2%</b>                                     | <b>39.6%</b>   | <b>60.8%</b>                                     |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 10 Languages spoken for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Applying the figures from the 2013 Census to the estimated resident population of Counties Manukau in 2014, there would be just over 24,000 people aged 15 years and over who were not able to have a conversation about everyday things. Two thirds of this group would identify as Asian ethnicities, and over half of these as Chinese (Table 25).

**Table 23 Estimated number of CM Health residents in 2014 by language competency for official languages in NZ**

|                      | <b>Able to have conversation in English</b> | <b>Not able to have conversation in English</b> | <b>Able to have conversation in Te Reo Maaori, NZ Sign and/or another language</b> | <b>Able to have conversation in English only</b> |
|----------------------|---|---|--|--|
| Maaori               | 50,940                                      | 780   | 13,340   | 39,200   |
| Pacific              | 67,080                                      | 6,960   | 51,310   | 23,470   |
| Indian               | 39,450                                      | 3,940   | 31,950   | 11,490   |
| Chinese              | 22,650                                      | 8,820   | 27,120   | 4,410  |
| Other Asian          | 15,110                                      | 3,110   | 15,200   | 3,000  |
| <i>(Total Asian)</i> | <i>77,240</i>                               | <i>15,820</i>                                   | <i>74,260</i>  | <i>18,890</i>                                    |
| NZ European / Other  | 168,700                                     | 1,190   | 19,200   | 150,860  |
| <b>Total</b>         | <b>364,610</b>                              | <b>24,100</b>                                   | <b>153,930</b>   | <b>236,340</b>                                   |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

Languages spoken data was not available in a form able to be aggregated for localities, but given the ethnic distribution of the Pacific and Asian populations at the time of the 2013 Census, those not able to speak English but able to speak their ethnic language are likely to be spread across the Eastern (particularly Chinese), Mangere/Otara (Pacific) and Manukau (Pacific and Indian) localities.



## Religion

Spirituality is an important aspect of health and well-being<sup>21</sup> and faith-based settings are a common place of engagement with communities for health promotion and for consultation regarding health service planning.

Census data on religion uses a denominator which includes all people who stated their religion along with those who stated they did not have a religion and those who responded that they object to answering this question. The denominator does not include those who did not tick any box at all for this question or whose answer was not able to be accurately identified (approximately 9% of the CM population for this question). As people can state more than one religion, including more than one denomination, it is not possible to state how many unique people identify with each religion from the data CM Health has available.

Just over half of those who answered the religion question (as described) identified with a Christian or Maaori Christian religion and just under a third described themselves as having no religion (Table 22, Figure 10). These figures varied considerably across ethnicities, with nearly 90% of Pacific peoples identifying with a Christian religion; for those identified as Indian, over half of described themselves as Hindu, 20% identified with other religions and 15% as Muslim. Chinese groups had the highest percentage describing themselves as having no religion (61%). Just over half of those identified as NZ European/Other groups identified with a Christian religion.

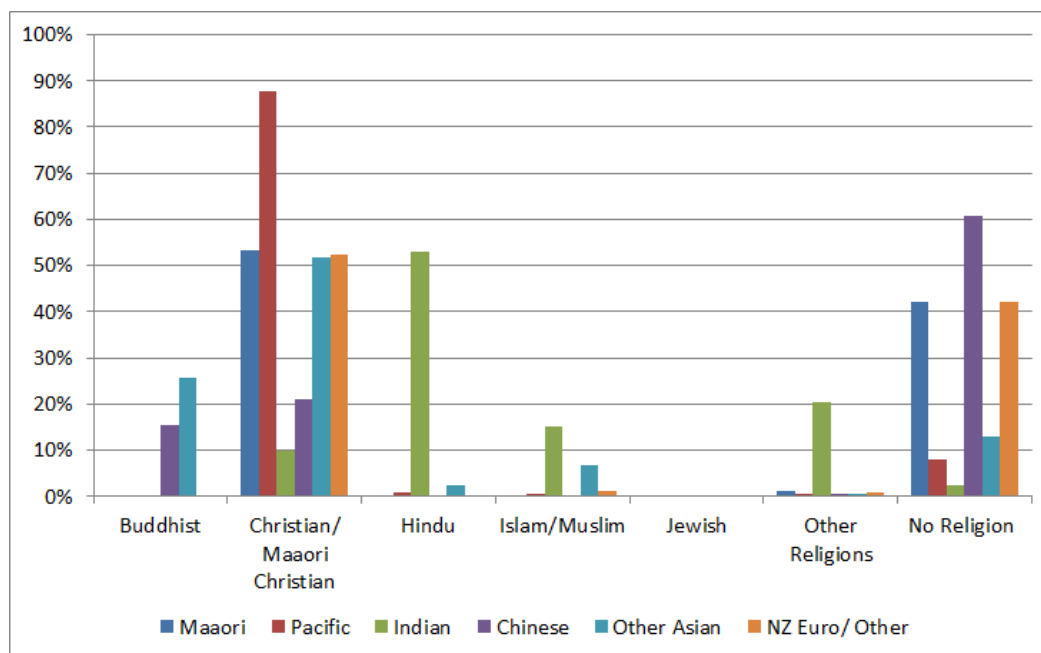
**Table 24 Religion stated for the UR CM population in the 2013 Census for prioritised ethnic groups**

|                          | <b>Buddhist</b> | <b>Christian/<br/>Maaori<br/>Christian</b> | <b>Hindu</b> | <b>Muslim</b> | <b>Jewish</b> | <b>Other<br/>Religions</b> | <b>No<br/>religion</b> |
|--------------------------|-----------------|--|--------------|---------------|---------------|----------------------------|------------------------|
| Maaori                   | 0.2%            | 53.2%                                      | 0.2%         | 0.3%          | 0.1%          | 1.3%                       | 42.2%                  |
| Pacific                  | 0.1%            | 87.8%                                      | 0.8%         | 0.6%          | 0.1%          | 0.6%                       | 8.1%                   |
| Indian                   | 0.2%            | 10.0%                                      | 52.9%        | 15.0%         | 0.0%          | 20.3%                      | 2.5%                   |
| Chinese                  | 15.4%           | 20.9%                                      | 0.1%         | 0.3%          | 0.0%          | 0.6%                       | 60.8%                  |
| Other<br>Asian           | 25.7%           | 51.7%                                      | 2.5%         | 6.7%          | 0.0%          | 0.5%                       | 12.8%                  |
| <i>(Total<br/>Asian)</i> | <i>10.4%</i>    | <i>21.9%</i>                               | <i>25.4%</i> | <i>8.5%</i>   | <i>0.0%</i>   | <i>9.8%</i>                | <i>23.8%</i>           |
| NZ<br>European<br>/Other | 0.3%            | 52.2%                                      | 0.2%         | 1.3%          | 0.2%          | 0.8%                       | 42.2%                  |
| <b>Total</b>             | <b>2.5%</b>     | <b>52.9%</b>                               | <b>5.9%</b>  | <b>2.6%</b>   | <b>0.1%</b>   | <b>2.9%</b>                | <b>31.1%</b>           |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>21</sup> Durie M (1998) Whaiora: Māori Health Development (2nd Edition ed). Auckland: Oxford University Press; WHOQOL-SRPB Group (2006) A cross-cultural study of spirituality, religion, and personal beliefs as components of quality of life. *Social Science & Medicine* 62(6):1486-1497.

Figure 11 Religion stated for the UR CM population in the 2013 Census for prioritised ethnic groups



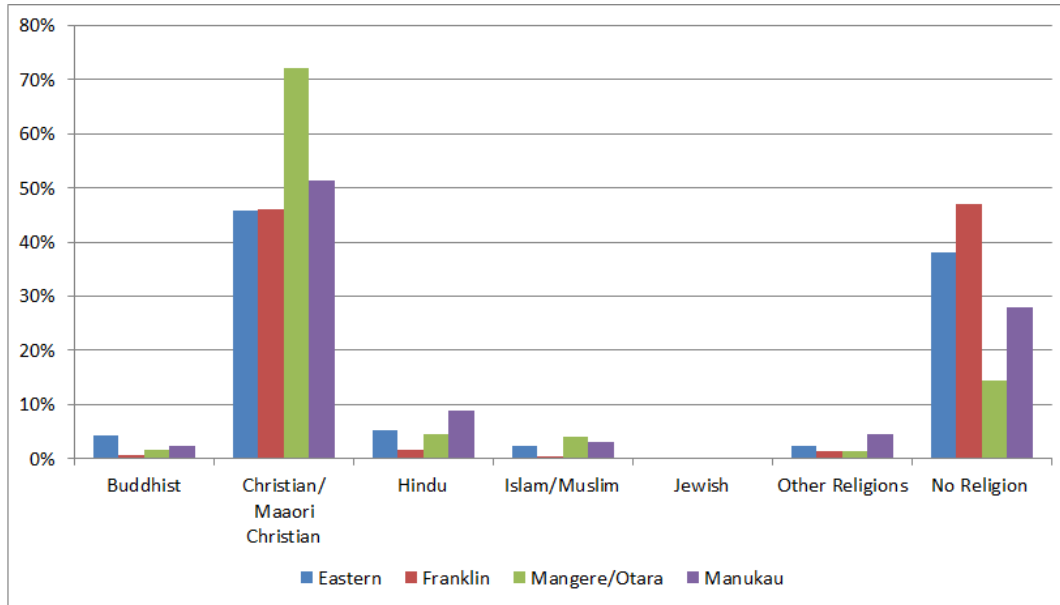
Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Table 25 Religion stated for the UR CM population in the 2013 Census by locality

|               | Buddhist    | Christian/Maaori Christian | Hindu       | Islam/Muslim | Jewish      | Other Religions | No religion  |
|---------------|-------------|----------------------------|-------------|--------------|-------------|-----------------|--------------|
| Eastern       | 4.2%        | 45.7%                      | 5.4%        | 2.3%         | 0.2%        | 2.3%            | 38.1%        |
| Franklin      | 0.6%        | 46.0%                      | 1.6%        | 0.4%         | 0.1%        | 1.4%            | 47.0%        |
| Mangere/Otara | 1.6%        | 72.2%                      | 4.6%        | 4.0%         | 0.1%        | 1.4%            | 14.3%        |
| Manukau       | 2.3%        | 51.4%                      | 8.8%        | 3.0%         | 0.1%        | 4.6%            | 27.8%        |
| <b>Total</b>  | <b>2.5%</b> | <b>52.9%</b>               | <b>5.9%</b> | <b>2.6%</b>  | <b>0.1%</b> | <b>2.9%</b>     | <b>31.1%</b> |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Figure 12 Religion stated for the UR CM population in the 2013 Census by locality



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

## Number of people in the household

A household is defined as 'one or more people usually resident in the same dwelling, who share living facilities'<sup>22</sup>.

Just under 5% of Counties Manukau residents were living in a household of one person at the time of Census 2013. 55% were living in households of 2-4 usual residents, and 15% lived in households of seven or more usual residents. However this varied considerably by ethnicity with nearly 40% of Pacific people and just over 20% of Maaori residents living in a household with seven or more members compared with only 3% for those in NZ European/Other groups and 11-14% for Asian groups (Table 26, Figure 13).

These figures compare with the rest of New Zealand, where 9% were living in a household of one person, 68% were living in households of 2-4 usual residents, and 4% lived in households of seven or more usual residents. Even for Maaori and Pacific peoples, the proportion living in larger households was considerably lower in the rest of New Zealand than in Counties Manukau – 10% and 24% respectively lived in households of seven or more usual residents. Similarly only 6-8% of those identifying with Asian ethnicities in the rest of New Zealand were living in households with seven or more residents.

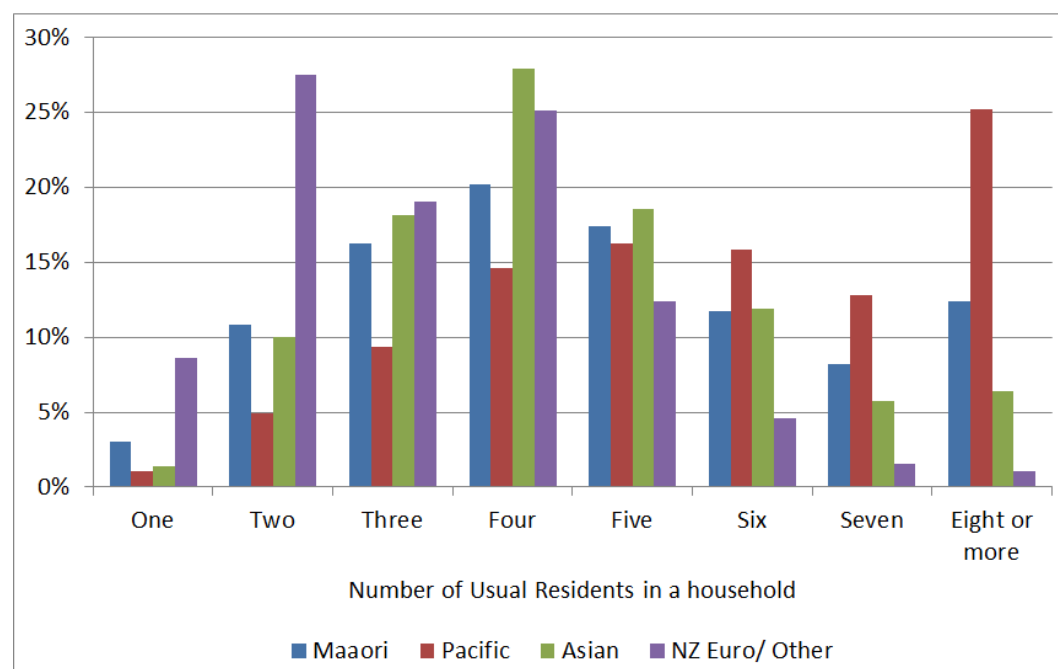
**Table 26 Number of people usually resident in a household for UR CM population in the 2013 Census for prioritised ethnic groups**

|                      | Number of Usual Residents |              |              |              |              |              |             |               |
|----------------------|---------------------------|--------------|--------------|--------------|--------------|--------------|-------------|---------------|
|                      | One                       | Two          | Three        | Four         | Five         | Six          | Seven       | Eight or more |
| Maaori               | 3.0%                      | 10.8%        | 16.2%        | 20.2%        | 17.4%        | 11.8%        | 8.2%        | 12.4%         |
| Pacific              | 1.1%                      | 4.9%         | 9.3%         | 14.6%        | 16.2%        | 15.9%        | 12.8%       | 25.2%         |
| Indian               | 1.1%                      | 8.6%         | 17.1%        | 29.9%        | 18.9%        | 12.1%        | 5.7%        | 6.6%          |
| Chinese              | 1.8%                      | 12.4%        | 20.2%        | 25.1%        | 17.6%        | 11.9%        | 5.6%        | 5.2%          |
| Other Asian          | 1.1%                      | 9.4%         | 17.0%        | 27.9%        | 19.1%        | 11.4%        | 6.2%        | 7.8%          |
| <i>(Total Asian)</i> | <i>1.4%</i>               | <i>10.0%</i> | <i>18.1%</i> | <i>27.9%</i> | <i>18.5%</i> | <i>11.9%</i> | <i>5.7%</i> | <i>6.4%</i>   |
| NZ European /Other   | 8.6%                      | 27.5%        | 19.1%        | 25.1%        | 12.4%        | 4.6%         | 1.5%        | 1.1%          |
| <b>Total</b>         | <b>4.5%</b>               | <b>16.1%</b> | <b>16.4%</b> | <b>22.7%</b> | <b>15.6%</b> | <b>10.0%</b> | <b>5.7%</b> | <b>8.9%</b>   |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>22</sup> <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/family-type/definition.aspx>

**Figure 13 Number of people usually resident in a household for UR CM population in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 27 Estimated number of CM Health residents in 2014 living in various household sizes by ethnicity**

| Ethnicity            | Estimated number of Usual Residents |               |               |                |               |               |               |               |
|----------------------|-------------------------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|
|                      | One                                 | Two           | Three         | Four           | Five          | Six           | Seven         | Eight or more |
| Maaori               | 2,420                               | 8,720         | 13,100        | 16,340         | 14,080        | 9,510         | 6,630         | 10,030        |
| Pacific              | 1,180                               | 5,330         | 10,170        | 15,930         | 17,710        | 17,290        | 13,960        | 27,450        |
| Indian               | 610                                 | 4,700         | 9,340         | 16,360         | 10,350        | 6,600         | 3,100         | 3,600         |
| Chinese              | 710                                 | 4,800         | 7,810         | 9,680          | 6,800         | 4,590         | 2,160         | 2,010         |
| Other Asian          | 260                                 | 2,200         | 3,980         | 6,530          | 4,480         | 2,660         | 1,450         | 1,830         |
| <i>(Total Asian)</i> | <i>1,590</i>                        | <i>11,700</i> | <i>21,140</i> | <i>32,570</i>  | <i>21,630</i> | <i>13,850</i> | <i>6,700</i>  | <i>7,430</i>  |
| NZ European /Other   | 17,470                              | 55,750        | 38,670        | 50,880         | 25,160        | 9,340         | 3,130         | 2,180         |
| <b>Total</b>         | <b>23,020</b>                       | <b>82,070</b> | <b>83,630</b> | <b>115,620</b> | <b>79,260</b> | <b>50,980</b> | <b>28,960</b> | <b>45,480</b> |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

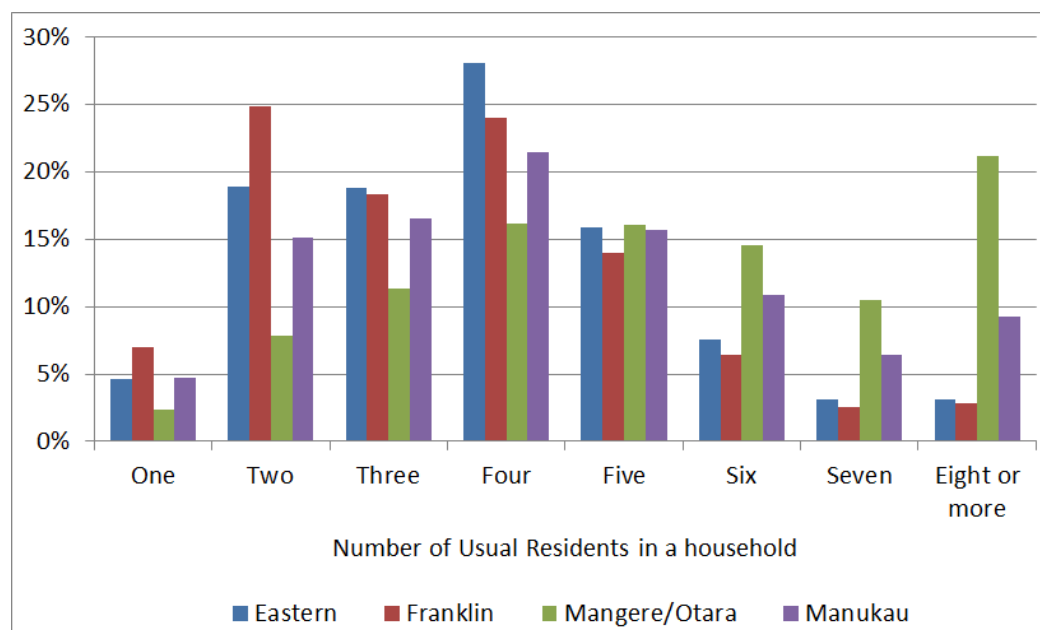
Household number also varied considerably by locality, largely reflecting the distribution of the ethnic populations, with much higher percentages of households in Mangere/Otara and to a less extent Manukau having seven, or eight or more residents than households in Eastern and Franklin (Table 28, Figure 14).

**Table 28 Number of people usually resident in a household for UR CM population in the 2013 Census by locality**

|                | Number of Usual Residents |              |              |              |              |              |             |               |
|----------------|---------------------------|--------------|--------------|--------------|--------------|--------------|-------------|---------------|
|                | One                       | Two          | Three        | Four         | Five         | Six          | Seven       | Eight or more |
| Eastern        | 4.6%                      | 18.9%        | 18.8%        | 28.1%        | 15.8%        | 7.5%         | 3.1%        | 3.1%          |
| Franklin       | 7.0%                      | 24.8%        | 18.4%        | 24.0%        | 14.0%        | 6.5%         | 2.5%        | 2.9%          |
| Mangere /Otara | 2.4%                      | 7.8%         | 11.4%        | 16.1%        | 16.0%        | 14.6%        | 10.5%       | 21.2%         |
| Manukau        | 4.7%                      | 15.1%        | 16.5%        | 21.5%        | 15.7%        | 10.9%        | 6.4%        | 9.2%          |
| <b>Total</b>   | <b>4.5%</b>               | <b>16.1%</b> | <b>16.4%</b> | <b>22.7%</b> | <b>15.6%</b> | <b>10.0%</b> | <b>5.7%</b> | <b>8.9%</b>   |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 14 Number of people usually resident in a household for UR CM population in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 29 Estimated number of CM Health residents in 2014 living in various household sizes by locality**

|                | Number of Usual Residents |               |               |                |               |               |               |               |
|----------------|---------------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|
|                | One                       | Two           | Three         | Four           | Five          | Six           | Seven         | Eight or more |
| Eastern        | 6,960                     | 28,590        | 28,410        | 42,430         | 23,910        | 11,340        | 4,650         | 4,650         |
| Franklin       | 4,800                     | 17,150        | 12,680        | 16,560         | 9,650         | 4,460         | 1,740         | 1,980         |
| Mangere /Otara | 2,510                     | 8,190         | 11,920        | 16,930         | 16,820        | 15,310        | 10,960        | 22,230        |
| Manukau        | 8,680                     | 27,860        | 30,500        | 39,570         | 28,950        | 20,030        | 11,770        | 17,020        |
| <b>Total</b>   | <b>23,030</b>             | <b>82,090</b> | <b>83,660</b> | <b>115,660</b> | <b>79,290</b> | <b>51,000</b> | <b>28,970</b> | <b>45,500</b> |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Household composition

A household can 'contain one or more families or can contain no families at all'<sup>23</sup>. Household composition is a 'derived variable that classifies all households according to the relationships between the people in them, whether there is a family nucleus present or not'<sup>24</sup>.

For the CM usually resident population in 2013 just under half of households (47%) identified as a couple with a child or children and 14% as a couple only (Table 30, Figure 15). Again however, this varied considerably by ethnicity with only 4% of Pacific peoples and 7% of Maaori living in a household described as couple only compared with a quarter of those identified as NZ European/Other, while 20-30% of Maaori, Asian and Pacific households were described as including other family householders compared with 6% of NZ European/Other groups.

These figures compare with the rest of New Zealand, where 42% identified as a couple with a child or children and 23% as a couple only. In the rest of New Zealand 10-20% of Maaori, Asian and Pacific households were described as including other family householders and only 3% of NZ European/Other groups.

**Table 30 Household composition for the UR CM population in the 2013 Census for prioritised ethnic groups**

|                      | <b>One-person household</b> | <b>Couple only</b> | <b>Couple with child(ren)</b> | <b>One parent with child(ren)</b> | <b>Other family householders</b> | <b>Other non-family householders</b> |
|----------------------|-----------------------------|--------------------|-------------------------------|-----------------------------------|----------------------------------|--------------------------------------|
| Maaori               | 3.0%                        | 7.2%               | 36.3%                         | 28.7%                             | 21.9%                            | 2.9%                                 |
| Pacific              | 1.1%                        | 3.8%               | 46.5%                         | 15.9%                             | 31.5%                            | 1.3%                                 |
| Indian               | 1.2%                        | 9.4%               | 55.5%                         | 5.7%                              | 25.3%                            | 3.0%                                 |
| Chinese              | 1.8%                        | 12.5%              | 49.4%                         | 8.9%                              | 25.3%                            | 2.1%                                 |
| Other Asian          | 1.2%                        | 9.0%               | 58.1%                         | 10.4%                             | 19.2%                            | 2.4%                                 |
| <i>(Total Asian)</i> | <i>1.4%</i>                 | <i>10.3%</i>       | <i>54.0%</i>                  | <i>7.7%</i>                       | <i>24.1%</i>                     | <i>2.6%</i>                          |
| NZ European /Other   | 8.6%                        | 24.6%              | 48.6%                         | 9.8%                              | 5.6%                             | 2.7%                                 |
| <b>Total</b>         | <b>4.7%</b>                 | <b>14.2%</b>       | <b>47.2%</b>                  | <b>13.6%</b>                      | <b>17.9%</b>                     | <b>2.5%</b>                          |

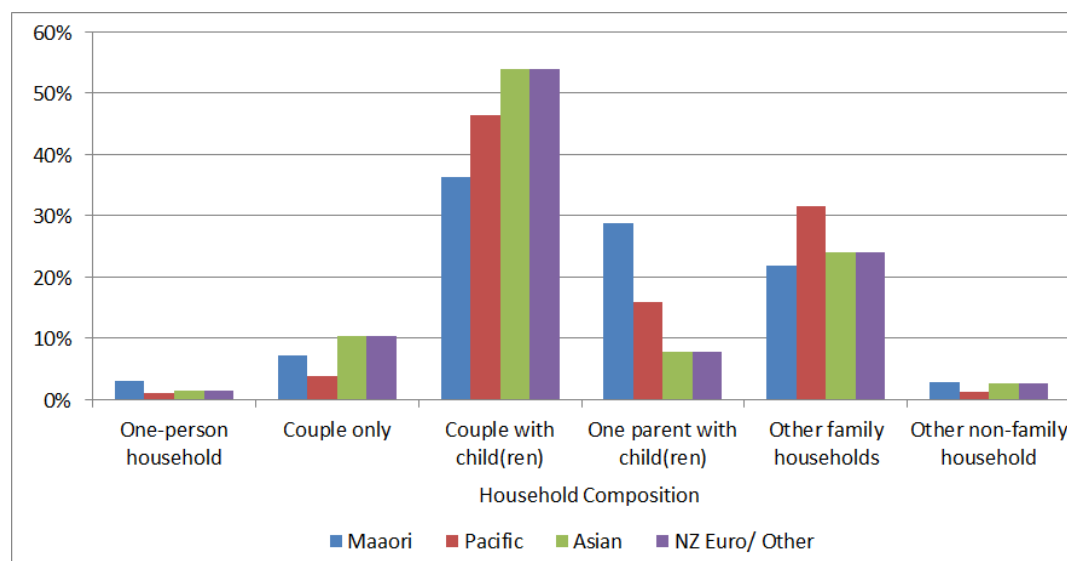
Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>23</sup> <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/family-type/definition.aspx>

<sup>24</sup> <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/family-type/definition.aspx>



**Figure 15 Household composition for the UR CM population in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 31 Estimated number of CM Health residents in 2014 by household composition and ethnicity**

|                      | One-person household | Couple only   | Couple with child(ren) | One parent with child(ren) | Other family householders | Other non-family householders | Total          |
|----------------------|----------------------|---------------|------------------------|----------------------------|---------------------------|-------------------------------|----------------|
| Maaori               | 2,460                | 5,790         | 29,300                 | 23,200                     | 17,710                    | 2,380                         | 80,870         |
| Pacific              | 1,190                | 4,140         | 50,680                 | 17,290                     | 34,400                    | 1,410                         | 109,110        |
| Indian               | 640                  | 5,120         | 30,340                 | 3,130                      | 13,830                    | 1,630                         | 54,690         |
| Chinese              | 710                  | 4,820         | 19,050                 | 3,450                      | 9,760                     | 820                           | 38,610         |
| Other Asian          | 270                  | 2,100         | 13,600                 | 2,430                      | 4,500                     | 560                           | 23,470         |
| <i>(Total Asian)</i> | <i>1,620</i>         | <i>12,040</i> | <i>62,990</i>          | <i>9,000</i>               | <i>28,080</i>             | <i>3,010</i>                  | <i>116,760</i> |
| NZ European /Other   | 17,460               | 49,830        | 98,360                 | 19,920                     | 11,430                    | 5,550                         | 202,570        |
| <b>Total</b>         | <b>23,940</b>        | <b>72,250</b> | <b>240,070</b>         | <b>69,260</b>              | <b>90,910</b>             | <b>12,660</b>                 | <b>509,080</b> |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

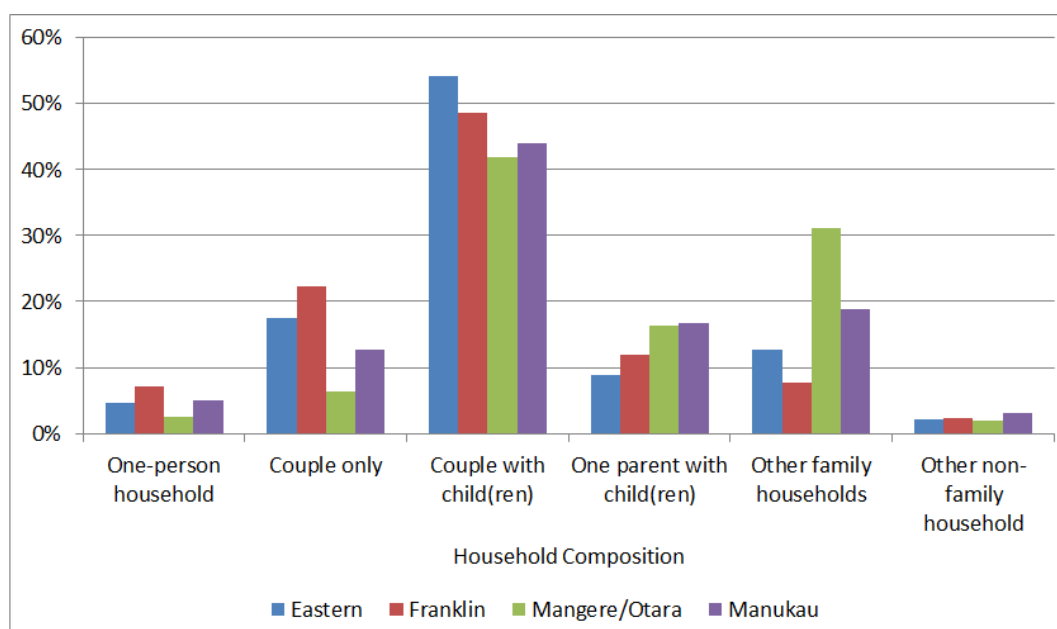
Probably reflecting the ethnic mix of their populations, household composition varied across localities, with only 3% of households described as one person and 6% as couple only in Mangere/Otara compared with 7% and 22% respectively in Franklin. 31% of households in Mangere/Otara included other family householders compared with 8% in Franklin (Table 32, Figure 16).

**Table 32 Household composition for the UR CM population in the 2013 Census by locality**

|               | One-person household | Couple only  | Couple with child(ren) | One parent with child(ren) | Other family householders | Other non-family householders |
|---------------|----------------------|--------------|------------------------|----------------------------|---------------------------|-------------------------------|
| Eastern       | 4.7%                 | 17.6%        | 54.0%                  | 8.9%                       | 12.7%                     | 2.1%                          |
| Franklin      | 7.2%                 | 22.2%        | 48.6%                  | 12.0%                      | 7.7%                      | 2.3%                          |
| Mangere/Otara | 2.5%                 | 6.3%         | 41.8%                  | 16.3%                      | 31.1%                     | 2.0%                          |
| Manukau       | 4.9%                 | 12.6%        | 43.8%                  | 16.6%                      | 18.8%                     | 3.1%                          |
| <b>Total</b>  | <b>4.7%</b>          | <b>14.2%</b> | <b>47.2%</b>           | <b>13.6%</b>               | <b>17.9%</b>              | <b>2.5%</b>                   |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 16 Household composition for the UR CM population in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 33 Estimated number of CM Health residents in 2014 by household composition and locality**

|               | One-person household | Couple only   | Couple with child(ren) | One parent with child(ren) | Other family householders | Other non-family householders |
|---------------|----------------------|---------------|------------------------|----------------------------|---------------------------|-------------------------------|
| Eastern       | 7,080                | 26,500        | 81,490                 | 13,490                     | 19,150                    | 3,240                         |
| Franklin      | 4,970                | 15,330        | 33,540                 | 8,300                      | 5,310                     | 1,560                         |
| Mangere/Otara | 2,660                | 6,610         | 43,800                 | 17,130                     | 32,590                    | 2,100                         |
| Manukau       | 9,120                | 23,270        | 80,840                 | 30,670                     | 34,750                    | 5,760                         |
| <b>Total</b>  | <b>23,950</b>        | <b>72,270</b> | <b>240,150</b>         | <b>69,280</b>              | <b>90,940</b>             | <b>12,660</b>                 |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Residential Mobility

The New Zealand census asks people how long they have lived at their current address and where they were living five years ago (normally this would be at the time of the previous census but the planned NZ 2011 Census was delayed until 2013 by earthquakes in Christchurch). Categories of response include: not born five years ago, at the same address, at another address in NZ or overseas.

For CM residents, 49% of those aged 5 years and over were not living at the same address they were at five years previously (Table 34). The Eastern and Manukau localities had the highest proportion of people not living at the same residence as they were five years previously, at 52% and 51% respectively. The comparative figures for the Auckland region and NZ respectively were 54% and 51%<sup>25</sup>.

**Table 34 Place of residence five years ago for people domiciled in CM Health in 2013 aged 5 years and over by locality**

|               | At same residence 5 yrs prior | Elsewhere in NZ | Overseas    |
|---------------|-------------------------------|-----------------|-------------|
| Eastern       | 48.2%                         | 41.0%           | 10.8%       |
| Franklin      | 52.6%                         | 42.8%           | 4.6%        |
| Mangere/Otara | 56.7%                         | 35.6%           | 7.7%        |
| Manukau       | 48.8%                         | 42.3%           | 8.9%        |
| <b>Total</b>  | <b>50.6%</b>                  | <b>40.7%</b>    | <b>8.7%</b> |

Source: Census 2013 UR population, Statistics NZ Meshblock data set available from Statistics NZ website, CAUs aggregated to localities by CM Health

Of those people for whom data was available on their place of residence five years previously, the percentage of people living in the same CM Health locality as they were five years previously was 57% for the Mangere/Otara and Manukau localities and 63% for the Eastern and Franklin localities (data not shown) – i.e. they may not be living in the same house or even the same suburb but were living in the same residential locality area as defined for CM Health service planning and development.

<sup>25</sup> Gomez D, King R, Jackson C (2014) Demographic Profile Report 1: Census 2013 Auckland Usual Residents Snapshot. Auckland Regional Public Health Service.

## Socio-economic Determinants of Health

The factors that promote and protect good health are known as the determinants of health. In 1998 the National Health Committee of New Zealand stated that the social and economic factors that have been shown in a variety of settings to have the greatest influence on health are income and poverty, employment and occupation, education, housing, and culture and ethnicity<sup>26</sup>.

More recently the World Health Organization's Commission on the social determinants of health has described these factors as the 'conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life'<sup>27</sup>. The social determinants of health are described as the key drivers for health inequities – unfair and avoidable differences in health.

The following sections describe the distribution of some of the key social determinants of health for the CM Health population as identified in the 2013 Census.

### Personal Income

Income has been described as 'the single most important modifiable determinant of health and is strongly related to health and well-being'<sup>28</sup>. A lower level of income is associated with poorer health outcomes.

Personal income recorded in the census is the income from all sources; it does not take into account employment status or the source of income (see next section). Total personal income data was identified for 88% of CM residents aged 15 years and older (note this does include young people still at school). Just over half (54%) of the CM Health population aged 15 years and over had a personal income of <\$30,000 per year (Table 35, Figure 17). This equates to an estimate of just under 210,000 adults in the CM Health population in 2014 (Table 36).

As shown in the tables below, there were ethnic and locality differences in personal income. 60% or more of Maaori, Pacific peoples and those who identified as Chinese or Other Asian groups had an income of <\$30,000 per year. For those identified as Indian, 54% reported an income of <\$30,000 per year whereas for those identified as NZ European/Other groups, 45% reported an income of <\$30,000 per year (Table 35). In contrast 8% of NZ European/Other groups reported an income of >\$100,000, whereas that was the case for 2% or less for all other ethnic groups (4.6% of the total population aged 15 years and over).

---

<sup>26</sup> National Health Committee (1998) The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health. Wellington: National Health Committee

<sup>27</sup> World Health Organization. Social determinants of health.

[http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/)

<sup>28</sup> P 8, National Health Committee (1998)

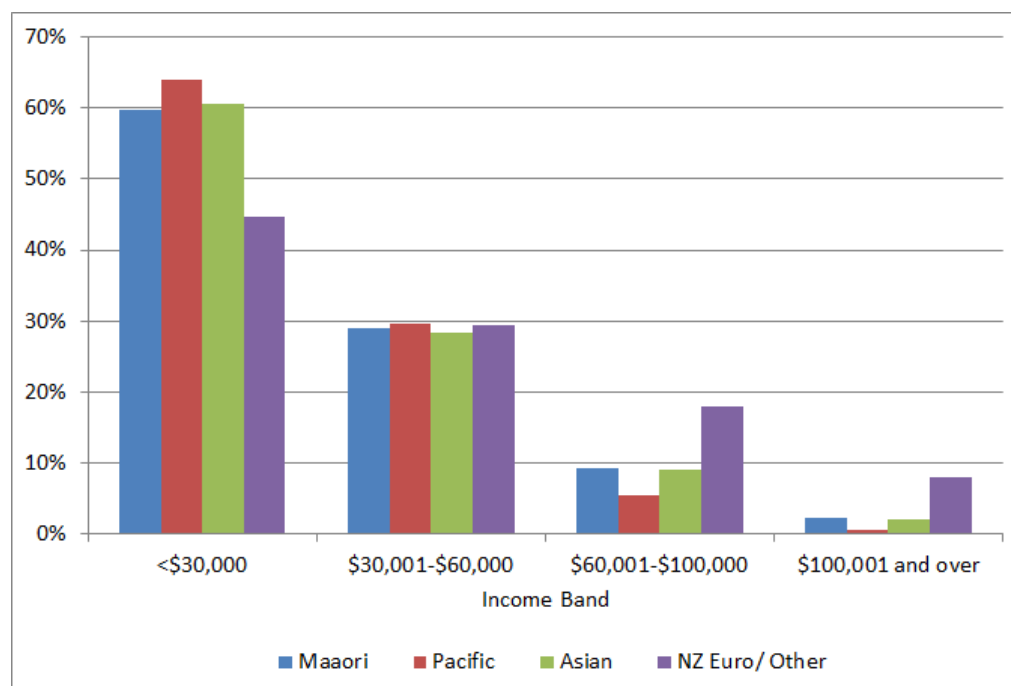
These figures compare with the rest of New Zealand where 52% of the population aged 15 years and over had a personal income of <\$30,000 per year and 6% reported an income of >\$100,000.

**Table 35 Personal income for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**

|                     | Income Band  |                   |                    |                    |
|---------------------|--------------|-------------------|--------------------|--------------------|
|                     | <\$30,000    | \$30,001-\$60,000 | \$60,001-\$100,000 | \$100,001 and over |
| Maaori              | 59.6%        | 28.9%             | 9.3%               | 2.2%               |
| Pacific             | 64.0%        | 29.7%             | 5.5%               | 0.7%               |
| Indian              | 54.0%        | 33.5%             | 10.2%              | 2.3%               |
| Chinese             | 67.4%        | 22.4%             | 7.9%               | 2.2%               |
| Other Asian         | 63.7%        | 26.7%             | 8.5%               | 1.5%               |
| <i>Total Asian</i>  | <i>60.5%</i> | <i>28.4%</i>      | <i>9.1%</i>        | <i>2.1%</i>        |
| NZ European / Other | 44.6%        | 29.4%             | 17.9%              | 8.1%               |
| <b>Total</b>        | <b>53.6%</b> | <b>29.1%</b>      | <b>12.6%</b>       | <b>4.6%</b>        |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 17 Personal income for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 36 Estimated numbers of CM Health residents in 2014 aged 15 years and over by income band and prioritised ethnicity**

|                     | Income Band    |                   |                    |                    |
|---------------------|----------------|-------------------|--------------------|--------------------|
|                     | <\$30,000      | \$30,001-\$60,000 | \$60,001-\$100,000 | \$100,001 and over |
| Maaori              | 30,850         | 14,940            | 4,810              | 1,130              |
| Pacific             | 47,390         | 22,000            | 4,110              | 510                |
| Indian              | 23,410         | 14,510            | 4,420              | 1,020              |
| Chinese             | 21,250         | 7,050             | 2,500              | 710                |
| Other Asian         | 11,600         | 4,860             | 1,560              | 270                |
| <i>Total Asian</i>  | <i>56,290</i>  | <i>26,380</i>     | <i>8,450</i>       | <i>1,980</i>       |
| NZ European / Other | 75,800         | 49,870            | 30,450             | 13,690             |
| <b>Total</b>        | <b>208,470</b> | <b>113,090</b>    | <b>49,050</b>      | <b>18,060</b>      |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

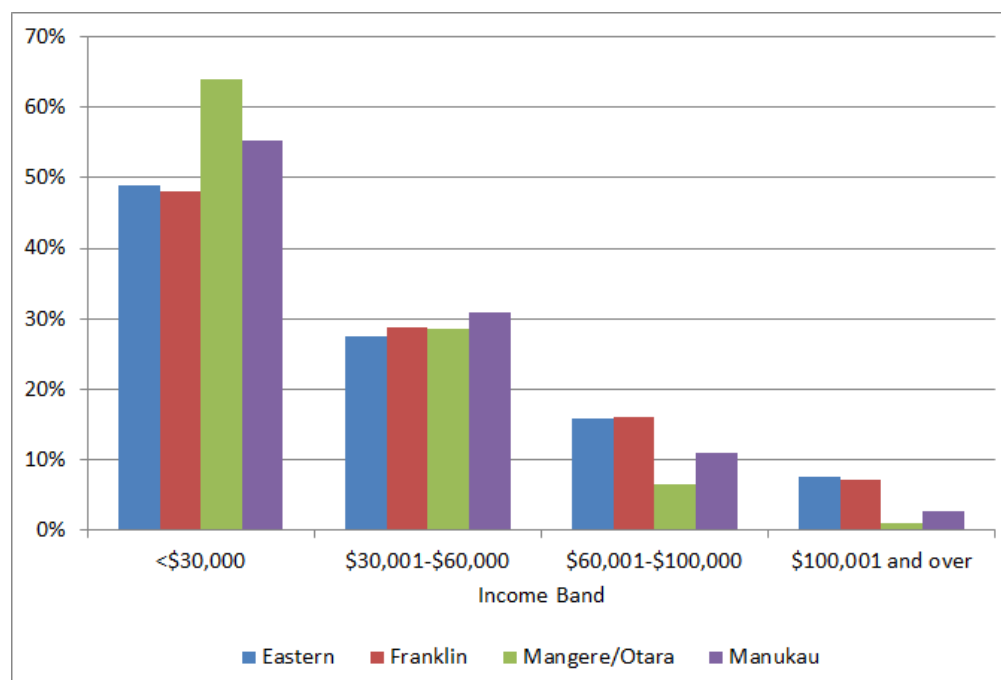
The Mangere/Otara locality had a substantially higher proportion of people aged 15 years and over with a personal income of <\$30,000 (64%) than other localities, whereas the percentage with an income of >\$100,000 was substantially higher (>7%) for the Eastern and Franklin localities (Table 37, Figure 18). This is consistent with the income patterns by ethnicity and the ethnic composition of the localities.

**Table 37 Personal income for UR CM populations aged 15 years and over in the 2013 Census by locality**

|               | Income Band  |                   |                    |                    |
|---------------|--------------|-------------------|--------------------|--------------------|
|               | <\$30,000    | \$30,001-\$60,000 | \$60,001-\$100,000 | \$100,001 and over |
| Eastern       | 49.0%        | 27.5%             | 15.9%              | 7.5%               |
| Franklin      | 48.0%        | 28.8%             | 16.1%              | 7.2%               |
| Mangere/Otara | 63.8%        | 28.6%             | 6.5%               | 1.0%               |
| Manukau       | 55.3%        | 31.0%             | 11.0%              | 2.7%               |
| <b>Total</b>  | <b>53.6%</b> | <b>29.1%</b>      | <b>12.6%</b>       | <b>4.6%</b>        |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 18 Personal income for UR CM populations aged 15 years and over in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 38 Estimated numbers of CM Health residents in 2014 aged 15 years and over by income band and locality**

|               | Income Band    |                   |                    |                    |
|---------------|----------------|-------------------|--------------------|--------------------|
|               | <\$30,000      | \$30,001-\$60,000 | \$60,001-\$100,000 | \$100,001 and over |
| Eastern       | 59,610         | 33,500            | 19,380             | 9,140              |
| Franklin      | 25,700         | 15,390            | 8,590              | 3,840              |
| Mangere/Otara | 47,830         | 21,390            | 4,900              | 780                |
| Manukau       | 76,620         | 42,880            | 15,300             | 3,680              |
| <b>Total</b>  | <b>208,380</b> | <b>113,050</b>    | <b>49,030</b>      | <b>18,050</b>      |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Income Source

In the census people can state multiple sources of income. Hence the percentages in each row in the tables below add up to more than 100% and we have not tried to give a count of individuals in each category for the CM Health population. The benefit categories are as categorised prior to the Benefit Reform that has taken place since the 2013 Census, which has re-categorised benefits. Note that as for amount of income, data about income source is for those 15 years and older, so includes young people still at school.

Patterns of income source vary by ethnicity, with lower percentages of Asian groups in receipt of pensions or benefits and lower percentages of Maaori and Pacific peoples having self-employment or a business as an income source. Higher percentages of Chinese and NZ European/Other groups report Interest/Dividends/Rent/Other investments as a source of income than other groups (Table 39, Figure 19).

**Table 39 Sources of income in the 12 months prior to the 2013 Census for UR CM population aged 15 years and over for prioritised ethnic groups**

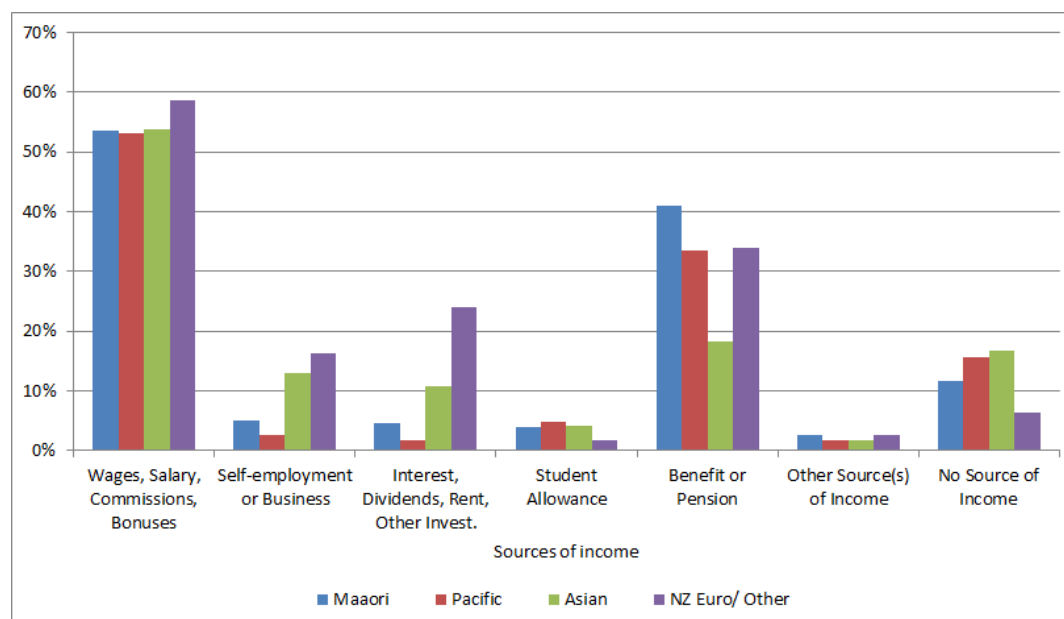
|                    | Wages, Salary, Commissions, Bonuses | Self-employed or Business | Interest Dividends, Rent, Other Investments | Student Allowance | Benefit or Pension (Detail see table below) | Other source (s) of income | No Income Source |
|--------------------|-------------------------------------|---------------------------|---|-------------------|---|----------------------------|------------------|
| Maaori             | 53.6%                               | 5.0%                      | 4.5%  | 3.9%              | 40.9%                                       | 2.6%                       | 11.6%            |
| Pacific            | 53.2%                               | 2.6%                      | 1.6%  | 4.9%              | 33.5%                                       | 1.6%                       | 15.6%            |
| Indian             | 61.7%                               | 11.2%                     | 6.6%  | 2.7%              | 17.2%                                       | 1.0%                       | 14.6%            |
| Chinese            | 43.9%                               | 15.6%                     | 18.7%                                       | 4.9%              | 19.4%                                       | 2.4%                       | 18.8%            |
| Other Asian        | 52.7%                               | 12.3%                     | 6.7%  | 5.6%              | 18.9%                                       | 1.6%                       | 18.1%            |
| <i>Total Asian</i> | <i>53.9%</i>                        | <i>12.9%</i>              | <i>10.7%</i>                                | <i>4.0%</i>       | <i>18.3%</i>                                | <i>1.6%</i>                | <i>16.7%</i>     |
| NZ European /Other | 58.6%                               | 16.3%                     | 24.1%                                       | 1.6%              | 33.8%                                       | 2.6%                       | 6.2%             |
| <b>Total</b>       | <b>55.9%</b>                        | <b>11.6%</b>              | <b>14.5%</b>                                | <b>3.0%</b>       | <b>31.1%</b>                                | <b>2.2%</b>                | <b>11.0%</b>     |

Note: People can report more than one income source

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ



**Figure 19 Sources of income in the 12 months prior to the 2013 Census for UR CM population aged 15 years and over for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

A substantially higher percentage of the NZ European/Other population reported NZ Superannuation or a Veteran Pension as an income source than other groups, consistent with the age structure of the NZ European/Other population, while a higher percentage of Maaori and Pacific peoples reported being in receipt of the Domestic Purposes Benefit and the unemployment benefit than those of other ethnicities (Table 40, Figure 20).

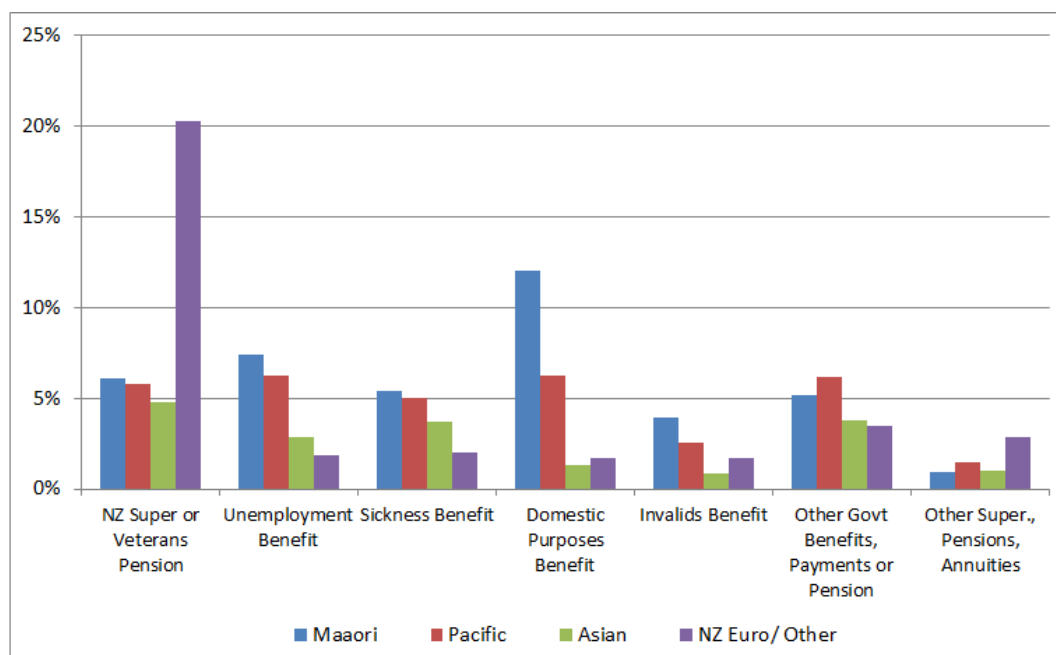
**Table 40 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for UR CM population aged 15 years and over for prioritised ethnic groups**

|                    | NZ Super or Veteran Pension | Unemployment Benefit | Sickness Benefit | Domestic Purposes Benefit | Invalids Benefit | Other Government Benefits, Payments or Pension | Other Super, Pension, Annuities |
|--------------------|-----------------------------|----------------------|------------------|---------------------------|------------------|--|---------------------------------|
| Maaori             | 6.1%                        | 7.4%                 | 5.4%             | 12.0%                     | 3.9%             | 5.2%   | 0.9%                            |
| Pacific            | 5.8%                        | 6.2%                 | 5.0%             | 6.2%                      | 2.6%             | 6.2%   | 1.5%                            |
| Indian             | 3.3%                        | 2.6%                 | 4.6%             | 1.5%                      | 1.1%             | 3.3%   | 0.9%                            |
| Chinese            | 7.6%                        | 2.2%                 | 2.8%             | 0.8%                      | 0.5%             | 4.1%   | 1.4%                            |
| Other Asian        | 3.3%                        | 4.5%                 | 3.4%             | 1.8%                      | 0.7%             | 4.4%   | 0.7%                            |
| <i>Total Asian</i> | <i>4.8%</i>                 | <i>2.8%</i>          | <i>3.7%</i>      | <i>1.3%</i>               | <i>0.8%</i>      | <i>3.8%</i>                                    | <i>1.0%</i>                     |
| NZ European /Other | 20.2%                       | 1.8%                 | 2.0%             | 1.7%                      | 1.7%             | 3.4%   | 2.9%                            |
| <b>Total</b>       | <b>12.3%</b>                | <b>3.6%</b>          | <b>3.4%</b>      | <b>3.8%</b>               | <b>2.0%</b>      | <b>4.2%</b>                                    | <b>1.9%</b>                     |

Note: People can report more than one income source

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 20 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for UR CM population aged 15 years and over for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Consistent with the ethnic mix of their populations, a higher percentage of the Eastern and Franklin populations reported having self-employment or a business and Interest/Dividends/Rent/Other investments as income sources, and lower percentages in receipt of various benefits than the populations of Mangere/Otara and Manukau (Table 41, Figure 21).

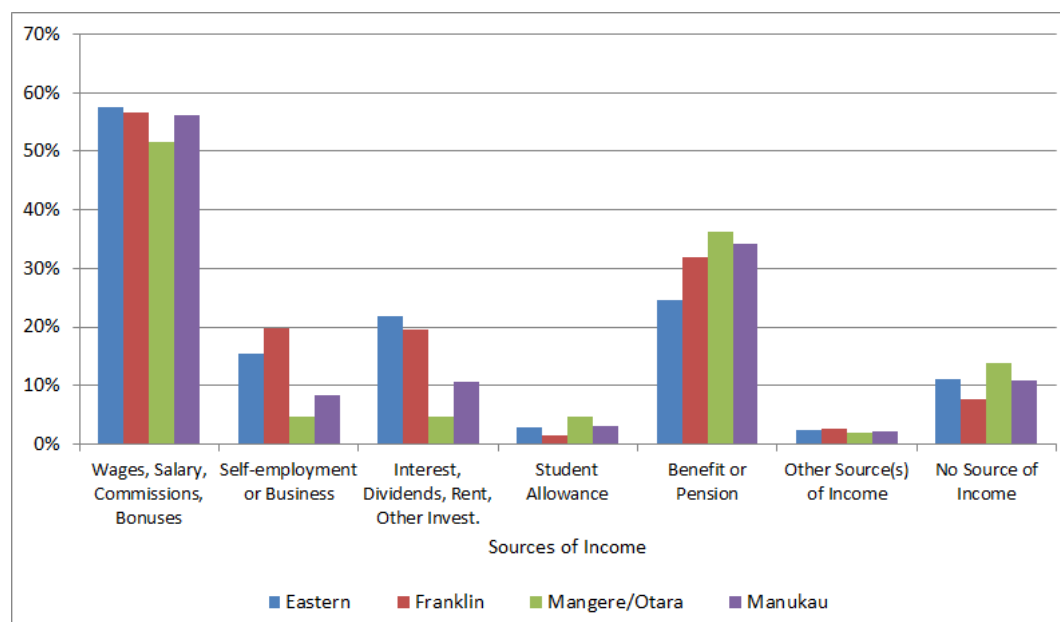
**Table 41 Sources of income in the 12 months prior to the 2013 Census for the UR CM population aged 15 years and over by locality**

|               | Wages, Salary, Com-missions, Bonuses | Self-employed or Business | Interest Dividends, Rent, Other Investments | Student Allowance | Benefit or Pension (Detail see table below) | Other source (s) of income | No Income Source |
|---------------|--------------------------------------|---------------------------|---|-------------------|---|----------------------------|------------------|
| Eastern       | 57.6%                                | 15.4%                     | 21.8%                                       | 2.9%              | 24.6%                                       | 2.3%                       | 11.1%            |
| Franklin      | 56.5%                                | 19.7%                     | 19.6%                                       | 1.4%              | 31.8%                                       | 2.6%                       | 7.6%             |
| Mangere/Otara | 51.5%                                | 4.6%                      | 4.6%  | 4.6%              | 36.3%                                       | 1.8%                       | 13.9%            |
| Manukau       | 56.2%                                | 8.3%                      | 10.5%                                       | 3.0%              | 34.3%                                       | 2.1%                       | 10.9%            |
| <b>Total</b>  | <b>55.9%</b>                         | <b>11.6%</b>              | <b>14.5%</b>                                | <b>3.0%</b>       | <b>31.1%</b>                                | <b>2.2%</b>                | <b>11.0%</b>     |

Note: People can report more than one income source

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 21 Sources of income in the 12 months prior to the 2013 Census for the UR CM population aged 15 years and over by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

A higher percentage of the those living in the Franklin and Eastern localities reported NZ Superannuation or a Veteran Pension as an income source than Manukau and Mangere/Otara locality, consistent with the age and ethnicity structure of the localities (Table 42, Figure 22). A higher percentage of people living in the Mangere/Otara and Manukau localities reported being in receipt of the Unemployment, Sickness, Domestic Purposes and Invalids Benefits than those living in Franklin and Eastern localities, again consistent with the age and ethnicity structure of the localities.

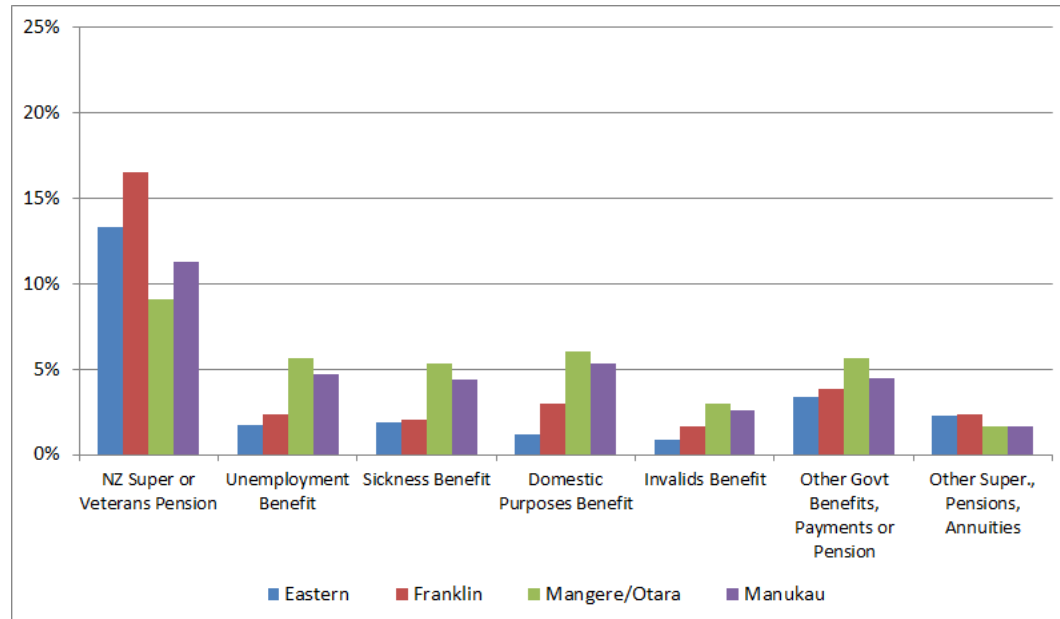
**Table 42 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for the UR CM population aged 15 years and over by locality**

|               | NZ Super or Veteran Pension | Unemployment Benefit | Sickness Benefit | Domestic Purposes Benefit | Invalids Benefit | Other Government Benefits, Payments or Pension | Other Super, Pension, Annuities |
|---------------|-----------------------------|----------------------|------------------|---------------------------|------------------|--|---------------------------------|
| Eastern       | 13.3%                       | 1.7%                 | 1.9%             | 1.2%                      | 0.9%             | 3.4%   | 2.2%                            |
| Franklin      | 16.5%                       | 2.4%                 | 2.1%             | 3.0%                      | 1.7%             | 3.9%   | 2.4%                            |
| Mangere/Otara | 9.1%                        | 5.6%                 | 5.3%             | 6.0%                      | 3.0%             | 5.6%   | 1.7%                            |
| Manukau       | 11.3%                       | 4.7%                 | 4.4%             | 5.3%                      | 2.6%             | 4.4%   | 1.6%                            |
| <b>Total</b>  | <b>12.3%</b>                | <b>3.6%</b>          | <b>3.4%</b>      | <b>3.8%</b>               | <b>2.0%</b>      | <b>4.2%</b>                                    | <b>1.9%</b>                     |

Note: People can report more than one income source

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 22 Benefit and Pension sources of income in the 12 months prior to the 2013 Census, disaggregated, for the UR CM population aged 15 years and over by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

## Work Status

Paid employment is one of the contributors to adequate income, and employment is also related to self-esteem and provides social contact and opportunities to participate in community life, which contribute to health and well-being<sup>29</sup>.

In the New Zealand census work status for a person aged 15 years and over refers to whether he/she is in the labour force. The 'employed' status includes self-employment. There are a number of reasons why a person may not be in the labour force, the categories include:

- retired people
- people with personal or family responsibilities, such as unpaid housework and childcare
- people attending educational institutions
- people permanently unable to work due to physical or mental disabilities
- people who were temporarily unavailable for work in the survey reference week
- people who are not actively seeking work.

A third of CM residents aged 15 years and over were not in the labour force at the time of the 2013 Census (this includes those aged 15 years and over and still at school or in training)<sup>30</sup>. 6% were unemployed. The figure for unemployment for Maaori and Pacific peoples (12% and 10%) was approximately three times higher than that for NZ European/Other groups (3.4%) (Table 43, Figure 23).

Unemployment figures for the rest of New Zealand were slightly lower than for Counties Manukau – 4% overall, 10% for Maaori and 9% for Pacific. 44% of Maaori and Pacific peoples aged 15 years and over in the rest of New Zealand were employed full-time.

---

<sup>29</sup> National Health Committee (1998) The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health. Wellington: National Health Committee

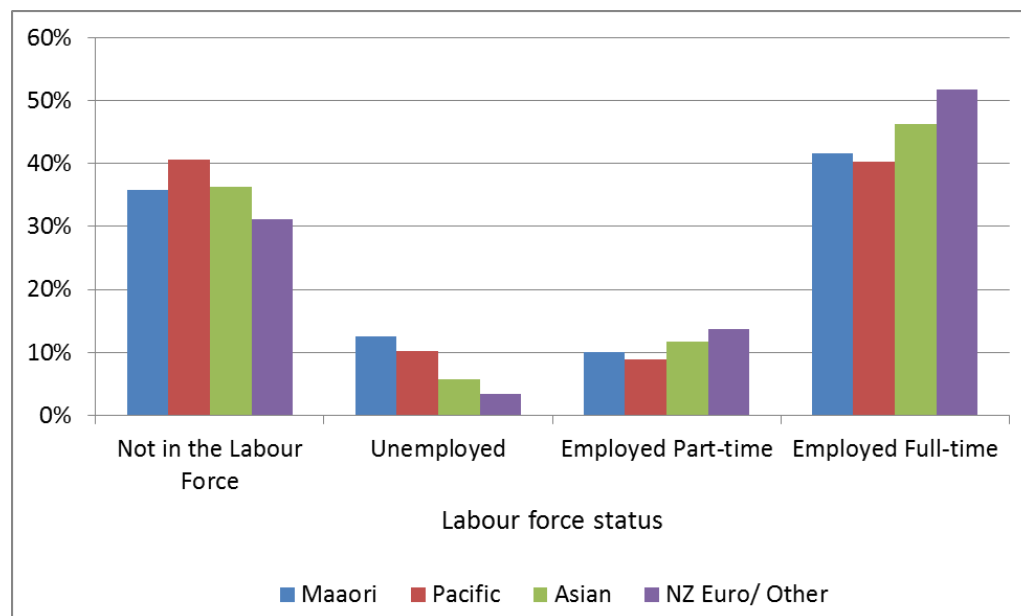
<sup>30</sup> Note; ethnicity is not available for the 6% of CM residents aged 15 years and over who did not have an identifiable response to the work status questions in the Census for technical reasons (<http://www.stats.govt.nz/Census/2013-census/info-about-2013-census-data/information-by-variable/work-and-labour-force-status.aspx>). This means that, unlike the other work presented in this report, the percentages presented here do not exclude those people from the denominator. The figures given would change a little if this data were available (e.g. the percentage unemployed of those people who had an identifiable answer would be 6.4% rather than 6.0% at total population level); however the overall picture is likely to be very similar.

**Table 43 Workforce status for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**

|                    | <b>Not in the labour force</b> | <b>Unemployed</b> | <b>Employed part time</b> | <b>Employed full-time</b> |
|--------------------|--------------------------------|-------------------|---------------------------|---------------------------|
| Maaori             | 35.8%                          | 12.5%             | 10.1%                     | 41.6%                     |
| Pacific            | 40.7%                          | 10.2%             | 8.8%                      | 40.3%                     |
| Indian             | 30.9%                          | 6.1%              | 11.2%                     | 51.7%                     |
| Chinese            | 44.3%                          | 4.5%              | 11.4%                     | 39.8%                     |
| Other Asian        | 35.7%                          | 6.7%              | 13.2%                     | 44.5%                     |
| <i>Total Asian</i> | <i>36.4%</i>                   | <i>5.7%</i>       | <i>11.7%</i>              | <i>46.3%</i>              |
| NZ European /Other | 31.2%                          | 3.4%              | 13.6%                     | 51.8%                     |
| <b>Total</b>       | <b>32.8%</b>                   | <b>6.0%</b>       | <b>11.1%</b>              | <b>44.3%</b>              |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 23 Workforce status for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 44 Estimated number of CM Health residents aged 15 years and over in 2014 by workforce status and ethnicity**

|                    | <b>Not in the labour force</b> | <b>Unemployed</b> | <b>Employed part time</b> | <b>Employed full-time</b> |
|--------------------|--------------------------------|-------------------|---------------------------|---------------------------|
| Maaori             | 18,530                         | 6,460             | 5,210                     | 21,500                    |
| Pacific            | 30,130                         | 7,520             | 6,550                     | 29,840                    |
| Indian             | 13,420                         | 2,670             | 4,840                     | 22,410                    |
| Chinese            | 13,940                         | 1,430             | 3,600                     | 12,540                    |
| Other Asian        | 6,510                          | 1,220             | 2,410                     | 8,100                     |
| <i>Total Asian</i> | <i>33,870</i>                  | <i>5,310</i>      | <i>10,860</i>             | <i>43,050</i>             |
| NZ European /Other | 52,950                         | 5,790             | 23,140                    | 88,070                    |
| <b>Total</b>       | <b>135,290</b>                 | <b>24,830</b>     | <b>45,920</b>             | <b>182,680</b>            |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

Employment in young people is of particular concern. Table 45 shows the labour force data for those aged 15-29 years in Counties Manukau at the time of the 2013 Census. Unemployment in this age group was nearly twice that of the total population aged 15 years and over, at 11%, with Maaori and Pacific rates 18% and 15% respectively.

**Table 45 Workforce status for the UR CM population aged 15-29 years in the 2013 Census for prioritised ethnic groups**

|                    | <b>Not in the labour force</b> | <b>Unemployed</b> | <b>Employed part time</b> | <b>Employed full-time</b> |
|--------------------|--------------------------------|-------------------|---------------------------|---------------------------|
| Maaori             | 42.6%                          | 18.1%             | 10.7%                     | 28.3%                     |
| Pacific            | 45.5%                          | 14.8%             | 9.6%                      | 30.2%                     |
| Indian             | 32.1%                          | 9.7%              | 16.3%                     | 42.0%                     |
| Chinese            | 45.2%                          | 8.0%              | 13.6%                     | 32.5%                     |
| Other Asian        | 44.2%                          | 9.7%              | 16.2%                     | 30.3%                     |
| <i>Total Asian</i> | <i>38.4%</i>                   | <i>9.2%</i>       | <i>15.5%</i>              | <i>36.9%</i>              |
| NZ European /Other | 29.3%                          | 8.2%              | 17.7%                     | 44.9%                     |
| <b>Total</b>       | <b>35.6%</b>                   | <b>11.1%</b>      | <b>12.9%</b>              | <b>33.6%</b>              |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

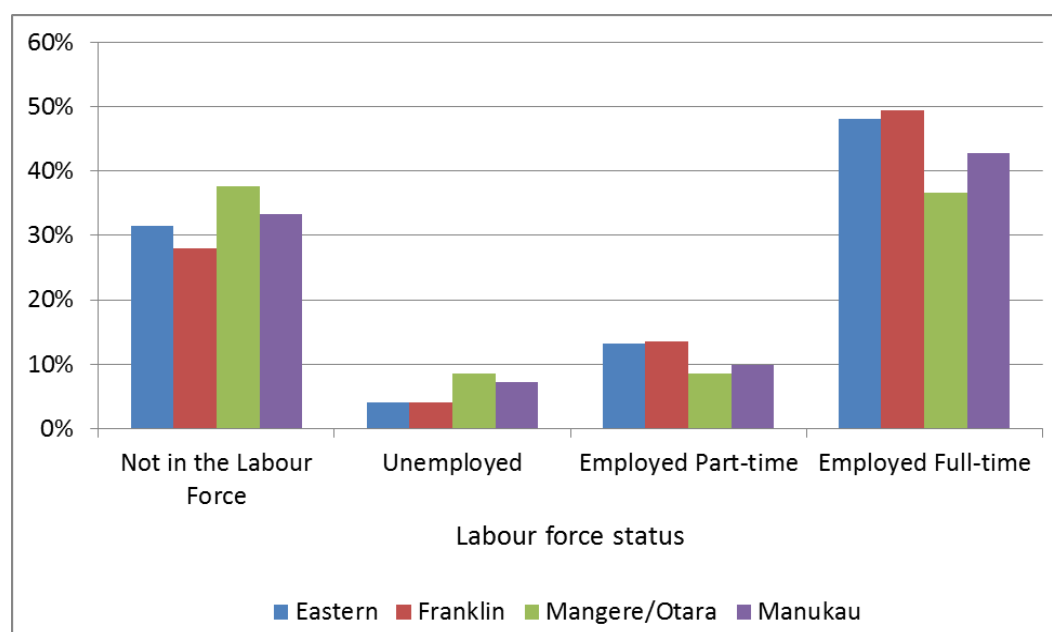
Reflecting the ethnicity mix of the localities, unemployment was higher in Mangere/Otara and Manukau and full time employment lower in these localities than in the Eastern and Franklin localities (Table 46, Figure 24).

**Table 46 Workforce status for the UR CM population aged 15 years and over in the 2013 Census by locality**

|               | <b>Not in the labour force</b> | <b>Unemployed</b> | <b>Employed part time</b> | <b>Employed full-time</b> |
|---------------|--------------------------------|-------------------|---------------------------|---------------------------|
| Eastern       | 31.4%                          | 4.0%              | 13.1%                     | 48.2%                     |
| Franklin      | 28.1%                          | 4.1%              | 13.5%                     | 49.5%                     |
| Mangere/Otara | 37.6%                          | 8.6%              | 8.6%                      | 36.6%                     |
| Manukau       | 33.3%                          | 7.2%              | 9.8%                      | 42.9%                     |
| <b>Total</b>  | <b>32.8%</b>                   | <b>6.0%</b>       | <b>11.1%</b>              | <b>44.3%</b>              |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 24 Workforce status for the UR CM population aged 15 years and over in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 47 Estimated number of CM Health residents aged 15 years and over in 2014 by workforce status and locality**

|               | <b>Not in the labour force</b> | <b>Unemployed</b> | <b>Employed part time</b> | <b>Employed full-time</b> |
|---------------|--------------------------------|-------------------|---------------------------|---------------------------|
| Eastern       | 38,200                         | 4,890             | 15,940                    | 58,580                    |
| Franklin      | 15,010                         | 2,170             | 7,230                     | 26,450                    |
| Mangere/Otara | 28,200                         | 6,430             | 6,410                     | 27,450                    |
| Manukau       | 46,070                         | 9,920             | 13,600                    | 59,360                    |
| <b>Total</b>  | <b>127,360</b>                 | <b>23,370</b>     | <b>43,230</b>             | <b>171,970</b>            |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health



## Academic Achievement

Education has been described as ‘critical in determining people’s social and economic position and thus their health’<sup>31</sup>. Lower levels of education are associated with poorer health outcomes.

Census data on academic achievement usually describes the proportion of the population aged 15 years and over who report attaining a particular level of education. That means the figures do include young people still at school or in training.

23% of the CM population aged 15 years and over who answered the question<sup>32</sup> on academic achievement reported having no qualification. For 39% of the population, a school qualification was the highest they reported (noting this does include students); 16% had a Bachelors/Level 7 qualification or above (Table 48, Figure 25). Maaori and Pacific people were considerably more likely to have no qualification (38% and 32% respectively) than Asian and NZ European/Other groups (12-20%) and less likely to have a Bachelors/Level 7 qualification or above (7 and 6% compared with 17-30%) (Table 48).

These figures compare with the rest of New Zealand, where 21% reported no qualification, 36% a school qualification and 21% a Bachelor’s degree or equivalent as their highest qualification. The figures for Maaori and Pacific people having no qualification for the rest of NZ were 33% and 29% respectively.

**Table 48 Highest level of academic achievement for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**

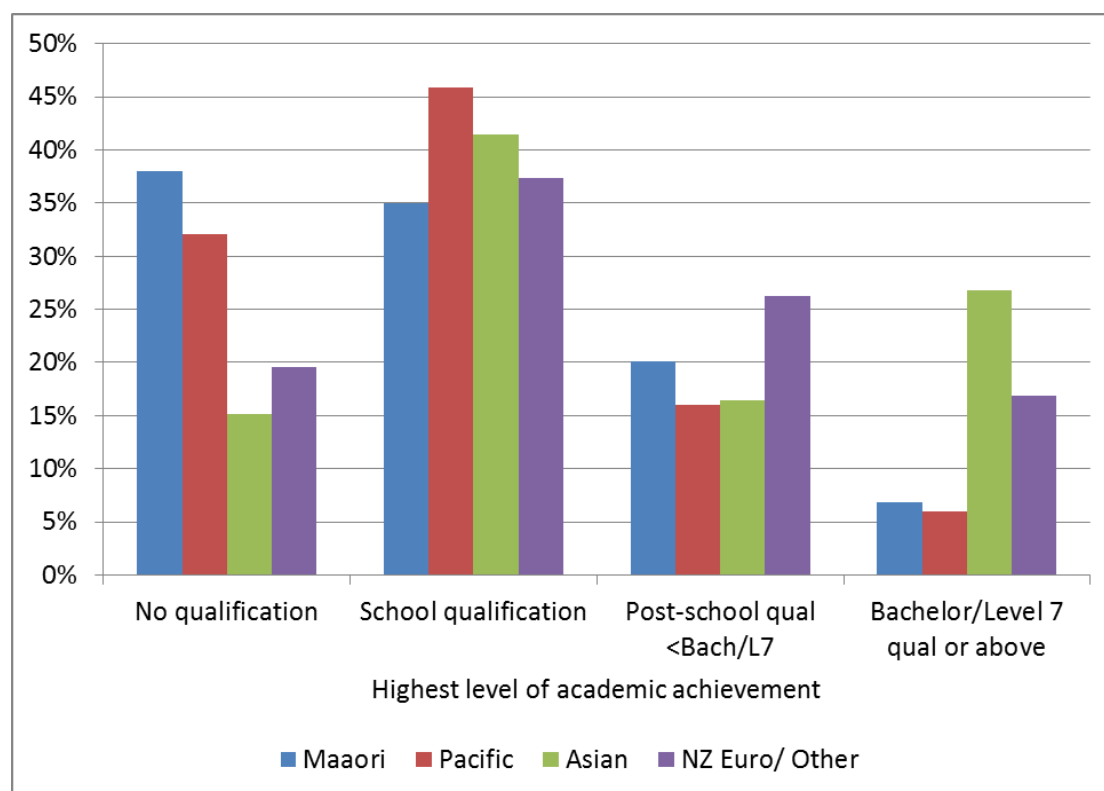
|                     | No qualification | School qualification | Post School qualification/ Below Bachelor /L7 | Bachelor /L7 qualification or above |
|---------------------|------------------|----------------------|---|-------------------------------------|
| Maaori              | 38.0%            | 34.9%                | 20.1%   | 6.9%                                |
| Pacific             | 32.1%            | 45.9%                | 16.1%   | 5.9%                                |
| Indian              | 12.3%            | 40.8%                | 22.3%   | 24.5%                               |
| Chinese             | 16.8%            | 42.0%                | 11.4%   | 29.7%                               |
| Other Asian         | 19.1%            | 41.9%                | 11.7%   | 27.1%                               |
| <i>Total Asian</i>  | <i>15.2%</i>     | <i>41.4%</i>         | <i>16.5%</i>                                  | <i>26.8%</i>                        |
| NZ European / Other | 19.6%            | 37.3%                | 26.2%   | 16.8%                               |
| <b>Total</b>        | <b>23.1%</b>     | <b>39.5%</b>         | <b>21.4%</b>                                  | <b>16.0%</b>                        |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>31</sup>National Health Committee (1998) The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health. Wellington: National Health Committee

<sup>32</sup> 87% of the population aged 15 years and over had an identifiable response to this question

**Figure 25 Highest level of academic achievement for the UR CM population aged 15 years and over in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 49 Estimated number of CM Health residents aged 15 years and over in 2014 by highest level of academic achievement and ethnicity**

|                      | No qualification | School qualification | Post School qualification/ Below Bachelor /L7 | Bachelor /L7 qualification or above |
|----------------------|------------------|----------------------|---|-------------------------------------|
| Maaori               | 19,670           | 18,070               | 10,380  | 3,550                               |
| Pacific              | 23,750           | 33,980               | 11,890  | 4,400                               |
| Indian               | 5,320            | 17,670               | 9,690   | 10,640                              |
| Chinese              | 5,280            | 13,240               | 3,580   | 9,350                               |
| Other Asian          | 3,480            | 7,640                | 2,140   | 4,940                               |
| <i>(Total Asian)</i> | <i>14,100</i>    | <i>38,560</i>        | <i>15,340</i>                                 | <i>24,960</i>                       |
| NZ European / Other  | 33,300           | 63,410               | 44,530  | 28,610                              |
| <b>Total</b>         | <b>89,860</b>    | <b>153,510</b>       | <b>83,180</b>                                 | <b>62,130</b>                       |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

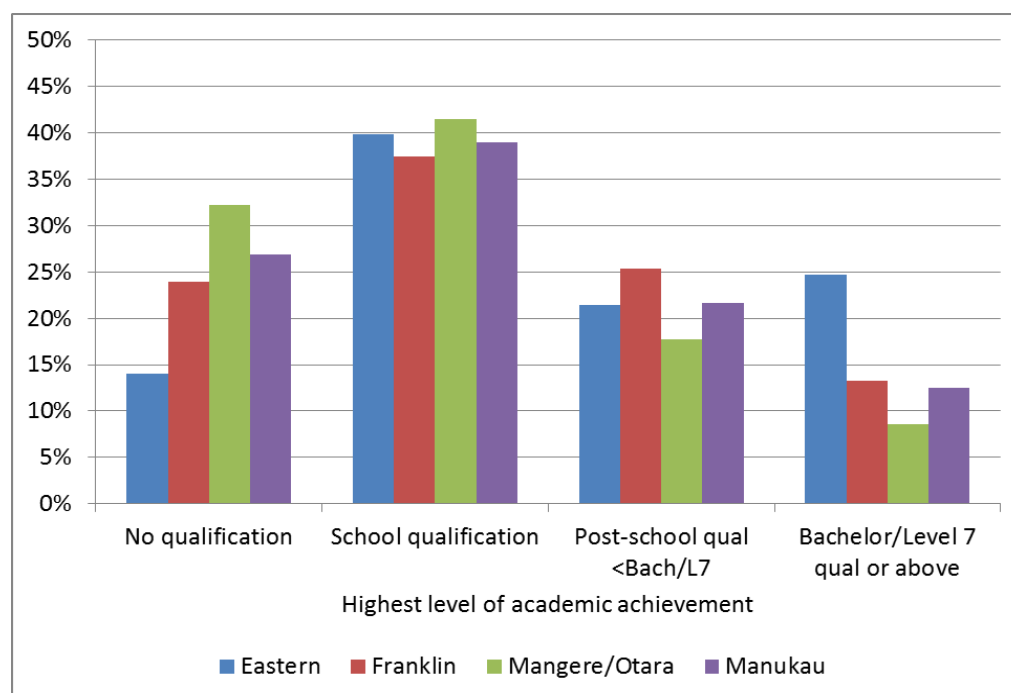
Consistent with the ethnicity mix of the population, the Eastern locality had a lower percentage than other localities of people with no qualifications (14%) and a higher percentage (25%) with a Bachelors/Level 7 qualification or above (Table 50, Figure 26). The pattern is the opposite for the Mangere/Otara locality.

**Table 50 Highest level of academic achievement for UR CM population aged 15 years and over in the 2013 Census by locality**

|               | No qualification | School qualification | Post School qualification/ Below Bachelor /L7 | Bachelor /L7 qualification or above |
|---------------|------------------|----------------------|---|-------------------------------------|
| Eastern       | 14.0%            | 39.9%                | 21.4%   | 24.7%                               |
| Franklin      | 23.9%            | 37.4%                | 25.3%   | 13.3%                               |
| Mangere/Otara | 32.2%            | 41.5%                | 17.7%   | 8.6%                                |
| Manukau       | 26.9%            | 39.0%                | 21.6%   | 12.5%                               |
| <b>Total</b>  | <b>23.1%</b>     | <b>39.5%</b>         | <b>21.4%</b>                                  | <b>16.0%</b>                        |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 26 Highest level of academic achievement for UR CM population aged 15 years and over in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 51 Estimated number of CM Health residents aged 15 years and over in 2014 by highest level of academic achievement and locality**

|                | <b>No qualification</b> | <b>School qualification</b> | <b>Post School qualification/ Below Bachelor /L7</b> | <b>Bachelor /L7 qualification or above</b> |
|----------------|-------------------------|-----------------------------|--|--|
| Eastern        | 17,050                  | 48,490                      | 26,020   | 30,040                                     |
| Franklin       | 12,780                  | 20,020                      | 13,550   | 7,110                                      |
| Mangere/ Otara | 24,100                  | 31,090                      | 13,270   | 6,460                                      |
| Manukau        | 37,250                  | 54,000                      | 29,920   | 17,350                                     |
| <b>Total</b>   | <b>89,820</b>           | <b>153,440</b>              | <b>83,140</b>  | <b>62,110</b>                              |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Housing

Housing is described as a key determinant of health and ‘an important mediating factor in health inequalities and poverty’<sup>33</sup>. Overcrowding and cold damp housing can have direct detrimental effects on physical and mental health<sup>34</sup>. High housing costs leave less money for other expenses such as heating, nutritious food, education, and access to health services<sup>35</sup>. Rental housing is recognised as generally being in poorer condition than owner occupied housing<sup>36</sup> and lack of stable tenure can impact on education and employment.

The NZ census provides information about housing tenure and household crowding as described in the following sections.

### Housing Tenure

93% of Counties Manukau residents aged 15 years and over (so this does include young people still at school) had an identifiable response for the Census question about home ownership<sup>37</sup>.

Just under 60% of the CM population aged 15 years and over did not own the residence they were living in, with this figure being approximately 80% for Maaori and Pacific peoples, 50-70% for those in Asian groups and just over 40% for NZ European/Other groups (Table 52, Figure 27). If only those aged 30 and over are included, 45% do not own their residence, with the difference from the 15 & over age groups across ethnicities being 9-14% (data not shown).

The comparative figures for the rest of New Zealand are 49% of those aged 15 years and over did not own their residence, that figure being 71% for Maaori, 80% for Pacific, 60-73% for Asian groups and 41% for NZ European/Other groups.

---

<sup>33</sup> New Zealand College of Public Health Medicine (2013) Housing. Position statement. Wellington: New Zealand College of Public Health Medicine

<sup>34</sup> New Zealand College of Public Health Medicine (2013) as above

<sup>35</sup> National Health Committee (1998) The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health. Wellington: National Health Committee

<sup>36</sup> Buckett N, Jones M, Marston NJ (2012) BRANZ 2010 House Condition Survey – Condition Comparison by Tenure. Wellington: BRANZ Study Report SR264

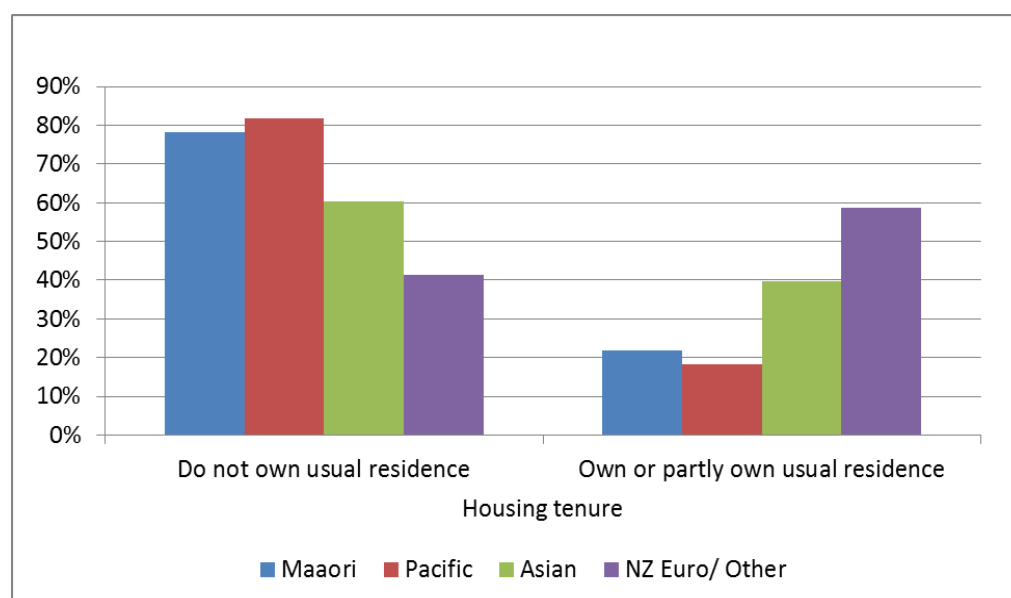
<sup>37</sup> Note the answer should reflect individual’s ownership, e.g. a 15 year old living with parents should report they don’t own their residence

**Table 52 Housing tenure for CM Health residents aged 15 years and over in the 2013 Census for prioritised ethnic groups**

|                    | <b>Do not own residence</b> | <b>Own or partly own usual residence</b> |
|--------------------|-----------------------------|--|
| Maaori             | 78.1%                       | 21.9%                                    |
| Pacific            | 81.9%                       | 18.2%                                    |
| Indian             | 62.2%                       | 37.8%                                    |
| Chinese            | 53.5%                       | 46.4%                                    |
| Other Asian        | 67.8%                       | 32.3%                                    |
| <i>Total Asian</i> | <i>60.4%</i>                | <i>39.7%</i>                             |
| NZ European /Other | 41.4%                       | 58.6%                                    |
| <b>Total</b>       | <b>58.4%</b>                | <b>41.6%</b>                             |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 27 Housing tenure for CM Health residents aged 15 years and over in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

Applied to the ER population for 2014, these percentages equate to just over 227,000 people aged 15 years and over not owning their residence in 2014 (Table 53)

**Table 53 Estimated numbers of CM Health residents in 2014 aged 15 years and over by ownership of house and ethnicity**

|                    | <b>Do not own residence</b> | <b>Own or partly own usual residence</b> |
|--------------------|-----------------------------|--|
| Maaori             | 40,410                      | 11,320                                   |
| Pacific            | 60,610                      | 13,440                                   |
| Indian             | 26,970                      | 16,400                                   |
| Chinese            | 16,860                      | 14,610                                   |
| Other Asian        | 12,340                      | 5,890                                    |
| <i>Total Asian</i> | <i>56,160</i>               | <i>36,900</i>                            |
| NZ European /Other | 70,270                      | 99,590                                   |
| <b>Total</b>       | <b>227,030</b>              | <b>161,670</b>                           |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

Three quarters of those aged 15 years and over living in Mangere/Otara at the time of Census 2013 did not own the residence they were living in; this figure was only 44% for Franklin (Table 54, Figure 28).

**Table 54 Percentage of CM Health residents age 15 years and over who answered question in the 2013 Census by ownership of house and locality**

|                   | <b>Do not own residence</b> | <b>Own or partly own usual residence</b> |
|-------------------|-----------------------------|--|
| Eastern           | 49.7%                       | 50.3%                                    |
| Franklin          | 43.9%                       | 56.1%                                    |
| Mangere/<br>Otara | 75.7%                       | 24.2%                                    |
| Manukau           | 63.1%                       | 36.9%                                    |
| <b>Total</b>      | <b>58.4%</b>                | <b>41.6%</b>                             |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 28 Percentage of CM Health residents age 15 years and over who answered question in 2013 Census by ownership of house and locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 55 Estimated numbers of CM Health residents in 2014 aged 15 years and over by ownership of house and locality**

|                   | Do not own residence | Own or partly own usual residence |
|-------------------|----------------------|-----------------------------------|
| Eastern           | 60,440               | 61,190                            |
| Franklin          | 23,460               | 30,000                            |
| Mangere/<br>Otara | 56,720               | 18,160                            |
| Manukau           | 87,460               | 51,090                            |
| <b>Total</b>      | <b>226,920</b>       | <b>161,600</b>                    |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health



## Household crowding

Household crowding is associated with increased risk of serious communicable diseases such as meningococcal disease, acute rheumatic fever and tuberculosis<sup>38</sup>.

Crowding analysis of Census data by Statistics NZ is done using the Canadian National Occupancy Standard (CNOS). In this standard, children aged under 5 years of either gender may share a bedroom but children between 5 and 18 are allocated separate bedrooms if they are not the same gender. Couples and people 18 and over are also allocated a bedroom. The household is defined as crowded (needing one or more extra bedrooms) if these conditions are not met<sup>39</sup>. In reporting on the housing situation in Auckland, Goodyear and Fabian (2014) cite work suggesting that even though cultural norms about how crowding is perceived may vary, people of different ethnic groups have the same levels of physiological stress as a result of crowding, whether or not they perceive themselves to be living in a crowded situation or not<sup>40</sup>.

Household crowding can be reported in two ways – the percentage of people living in a crowded household and the percentage of households that are crowded. Analysis by people rather than households allows reporting by ethnicity and this is described below. The customised data extract obtained for household crowding reported total response rather than prioritised ethnicity and with Asian groups combined as below.

22% of Counties Manukau residents were living in a crowded household in 2013, using the Canadian National Occupancy Standard. This figure was much higher for Maaori (32%) and Pacific peoples (48.5%) than for those in Asian groups (20.6%), MELAA (18.8%) and NZ European/Other groups (6.8%) (Table 56, Figure 29). Children were particularly likely to be living in a crowded household; 31% of CM children aged 0-14 years were identified as living in a crowded household at the time of the 2013 Census, again the figures much higher for Maaori and Pacific children (38% and 53% respectively).

The comparative figures for the rest of New Zealand are 9% of residents living in a crowded household, that figure being 18% for Maaori and 35% for Pacific; for children the comparative figures are 14% for all children, 23% for Maaori and 38% for Pacific. This highlights the very high degree of crowding for people living in Counties Manukau.

---

<sup>38</sup> New Zealand College of Public Health Medicine (2013) Housing. Position statement. Wellington: New Zealand College of Public Health Medicine

<sup>39</sup> Goodyear R & Fabian A (2014) Housing in Auckland: Trends in housing from the Census of Population and Dwellings 1991 to 2013. Available from [www.stats.govt.nz](http://www.stats.govt.nz)

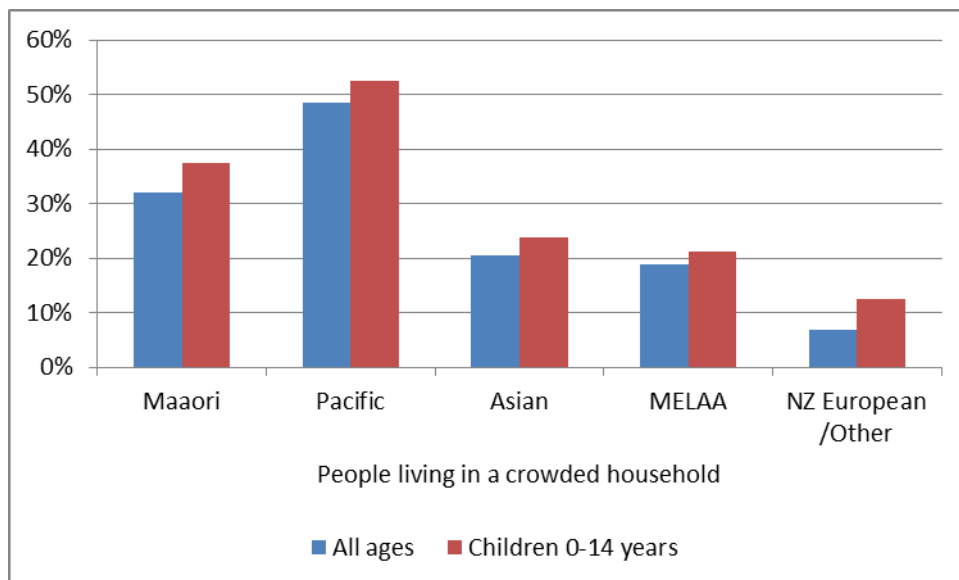
<sup>40</sup> Goodyear & Fabian (2014)

**Table 56 Percentage of people living in a crowded household for CM Health residents in the 2013 Census for total response ethnic groups, all ages combined and children 0-14 yrs**

|                    | <b>All ages</b> | <b>Children 0-14 years</b> |
|--------------------|-----------------|----------------------------|
| Maaori             | 32.0%           | 37.5%                      |
| Pacific            | 48.5%           | 52.5%                      |
| Asian              | 20.6%           | 23.7%                      |
| MELAA              | 18.8%           | 21.3%                      |
| NZ European /Other | 6.8%            | 12.5%                      |
| <b>Total</b>       | <b>21.8%</b>    | <b>30.6%</b>               |

Source: Custom extract of household crowding data for the 2013 Census for Auckland Regional Public Health Service from Statistics NZ, CM Health analysis

**Figure 29 Percentage of people living in a crowded household for CM Health residents in the 2013 Census for total response ethnic groups, all ages combined and children 0-14 yrs**



Source: Custom extract of household crowding data for the 2013 Census for Auckland Regional Public Health Service from Statistics NZ, CM Health analysis

Mangere/Otara locality had by far the highest percentage of residents living in a crowded household at the time of Census 2013, 45% (Table 57).

**Table 57 Percentage of people living in a crowded household for CM Health residents in the 2013 Census by locality**

|                   | <b>Living in a crowded household (%)</b> |
|-------------------|--|
| Eastern           | 8.2%                                     |
| Franklin          | 7.4%                                     |
| Mangere/<br>Otarā | 44.9%                                    |
| Manukau           | 26.6%                                    |
| <b>Total</b>      | <b>21.8%</b>                             |

Source: Custom extract of household crowding data for the 2013 Census for Auckland Regional Public Health Service from Statistics NZ, CAU aggregation to localities, CM Health analysis

If the situation documented in the 2013 Census is unchanged these percentages applied to the ER population for 2014 would equate to just over 111,000 people in CM living in a crowded household in 2014 (Table 58).

**Table 58 Estimated number of people living in a crowded household in 2014 for CM Health residents by locality**

|                   | <b>Living in a crowded household</b> |
|-------------------|--------------------------------------|
| Eastern           | 12,340                               |
| Franklin          | 5,077                                |
| Mangere/<br>Otarā | 47,086                               |
| Manukau           | 49,122                               |
| <b>Total</b>      | <b>111,109</b>                       |

Source: Custom extract of household crowding data for the 2013 Census for Auckland Regional Public Health Service from Statistics NZ, CM Health analysis; applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health.

## Vehicles in the Home

94% of people resident in Counties Manukau responded to the question about vehicles in the home in the 2013 Census. Of those, just under 5% reported having no vehicle whereas 71% reported two or more vehicles. This varied with ethnicity with 11% of Maaori and 7% of Pacific peoples reporting no motor vehicle and 30-31% one vehicle, compared to 2-3% with no vehicle and 17-22% with one vehicle for Asian and NZ European/Other groups. About 60% of Maaori and Pacific people reported two or more vehicles, compared to about 80% for Asian and NZ European/Other groups (Table 59, Figure 30)). This is particularly pertinent when seen alongside the data about number of people in the household, where Maaori and Pacific peoples were more likely to live in households with seven or more residents (P 44).

When applied to the estimated population for 2014, there would be nearly 24,000 residents in Counties Manukau without access to a vehicle in their household, with 40% of these people being Maaori and nearly half living in the Manukau locality (Table 60 & 62).

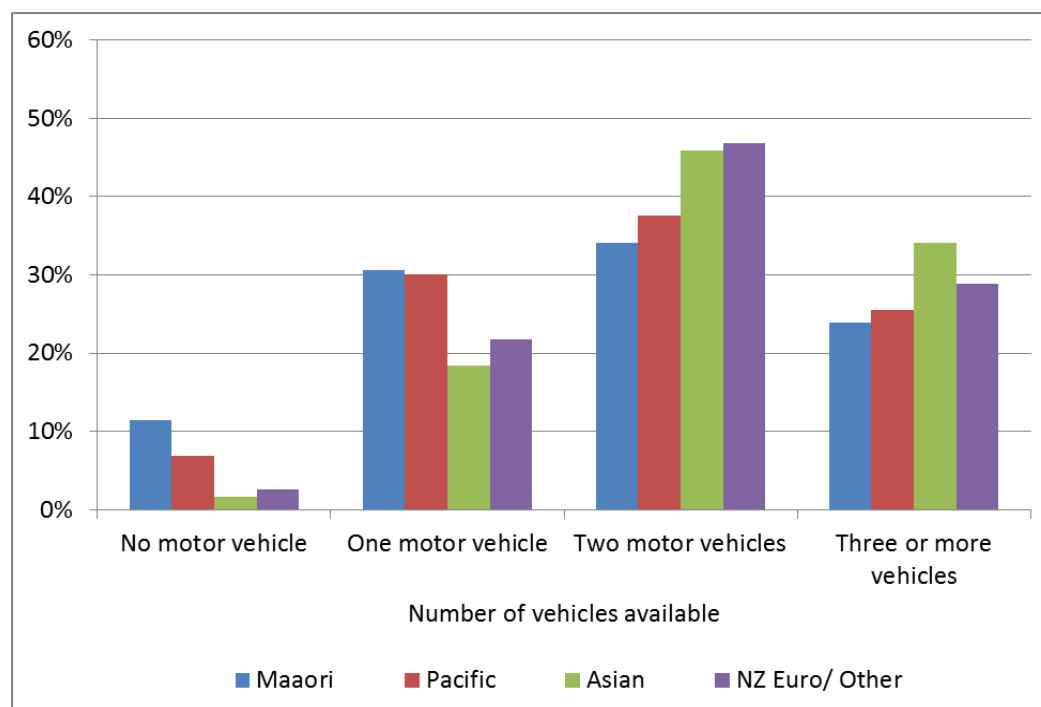
For the rest of New Zealand, 5% of people reported no vehicle (10% for Maori and 9% for Pacific) but only 64% reported two or more vehicles.

**Table 59 Number of vehicles available in the home for CM Health residents in the 2013 Census for prioritised ethnic groups**

|                    | <b>No motor vehicles</b> | <b>One motor vehicle</b> | <b>Two motor vehicles</b> | <b>Three or more vehicles</b> |
|--------------------|--------------------------|--------------------------|---------------------------|-------------------------------|
| Maaori             | 11.4%                    | 30.6%                    | 34.1%                     | 23.9%                         |
| Pacific            | 6.8%                     | 30.0%                    | 37.6%                     | 25.6%                         |
| Indian             | 1.6%                     | 18.2%                    | 44.5%                     | 35.7%                         |
| Chinese            | 1.8%                     | 17.3%                    | 47.5%                     | 33.4%                         |
| Other Asian        | 1.9%                     | 20.4%                    | 46.5%                     | 31.3%                         |
| <i>Total Asian</i> | <i>1.7%</i>              | <i>18.4%</i>             | <i>45.9%</i>              | <i>34.1%</i>                  |
| NZ European /Other | 2.6%                     | 21.7%                    | 46.8%                     | 28.9%                         |
| <b>Total</b>       | <b>4.6%</b>              | <b>24.0%</b>             | <b>42.7%</b>              | <b>28.7%</b>                  |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 30 Number of vehicles available in the home for CM Health residents in the 2013 Census for prioritised ethnic groups**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 60 Estimated number of CM Health residents in 2014 by number of vehicles available in the home and ethnicity**

|                    | No motor vehicles | One motor vehicle | Two motor vehicles | Three or more vehicles |
|--------------------|-------------------|-------------------|--------------------|------------------------|
| Maaori             | 9,180             | 24,690            | 27,510             | 19,340                 |
| Pacific            | 7,440             | 32,720            | 41,010             | 27,890                 |
| Indian             | 850               | 9,970             | 24,350             | 19,500                 |
| Chinese            | 700               | 6,690             | 18,330             | 12,900                 |
| Other Asian        | 430               | 4,760             | 10,880             | 7,330                  |
| <i>Total Asian</i> | <i>1,990</i>      | <i>21,420</i>     | <i>53,570</i>      | <i>39,730</i>          |
| NZ European /Other | 5,260             | 43,960            | 94,870             | 58,500                 |
| <b>Total</b>       | <b>23,650</b>     | <b>122,100</b>    | <b>217,220</b>     | <b>146,050</b>         |

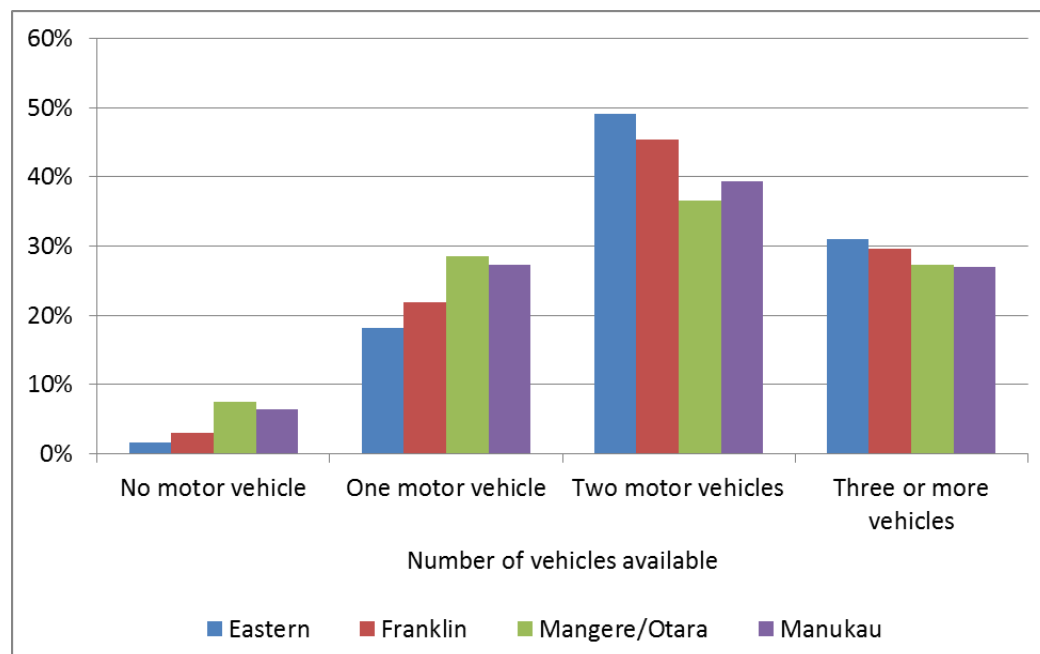
Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

**Table 61 Number of vehicles available in the home for CM Health residents in the 2013 Census by locality**

|               | No motor vehicles | One motor vehicle | Two motor vehicles | Three or more vehicles |
|---------------|-------------------|-------------------|--------------------|------------------------|
| Eastern       | 1.6%              | 18.2%             | 49.1%              | 31.1%                  |
| Franklin      | 3.0%              | 22.0%             | 45.4%              | 29.6%                  |
| Mangere/Otara | 7.5%              | 28.6%             | 36.6%              | 27.3%                  |
| Manukau       | 6.4%              | 27.3%             | 39.4%              | 27.0%                  |
| <b>Total</b>  | <b>4.6%</b>       | <b>24.0%</b>      | <b>42.7%</b>       | <b>28.7%</b>           |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 31 Number of vehicles available in the home for CM Health residents in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 62 Estimated number of CM Health residents in 2014 by number of vehicles available in the home and locality**

|               | No motor vehicles | One motor vehicle | Two motor vehicles | Three or more vehicles |
|---------------|-------------------|-------------------|--------------------|------------------------|
| Eastern       | 2,400             | 27,440            | 74,190             | 46,920                 |
| Franklin      | 2,080             | 15,160            | 31,330             | 20,450                 |
| Mangere/Otara | 7,870             | 30,010            | 38,350             | 28,670                 |
| Manukau       | 11,720            | 50,250            | 72,570             | 49,800                 |
| <b>Total</b>  | <b>23,660</b>     | <b>122,150</b>    | <b>217,290</b>     | <b>146,100</b>         |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Travel to Work

Using public and active transport can help reduce traffic congestion and greenhouse gas emission as well as have co-benefits for health in increasing physical activity<sup>41</sup>.

At the time of the 2013 Census, the majority (72%) of CM usual residents aged 15 years and over who indicated that they were employed full-time or part-time and stated a means of travel to work<sup>42</sup> drove a vehicle to work (Table 63, Figure 32). 5% were a passenger in a private vehicle, although more Pacific peoples were a passenger in a private vehicle, at 11%. Four percent of adults went to work by train or public bus and 16% either worked at home or did not go to work on census day.

**Table 63 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time for prioritised ethnic groups**

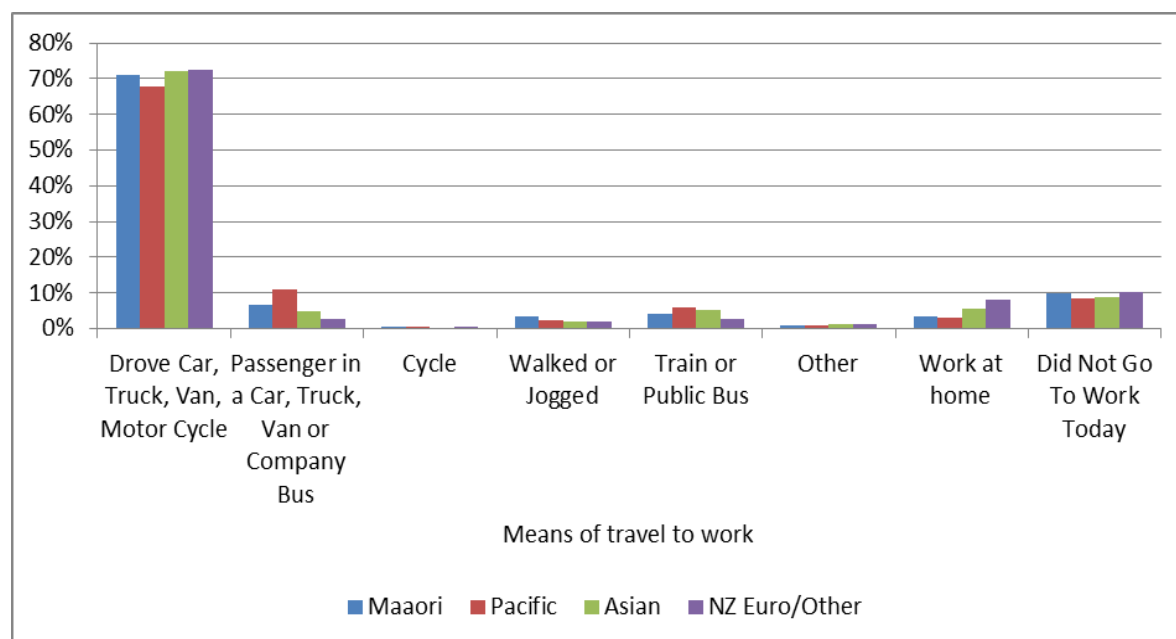
|                    | Drove Car, Truck, Van, Motor Cycle | Passenger in Car, truck or Van | Cycle       | Walked or Jogged | Train or Public Bus | Other       | Work at home | Did not get to work on census day |
|--------------------|------------------------------------|--------------------------------|-------------|------------------|---------------------|-------------|--------------|-----------------------------------|
| Maaori             | 70.9%                              | 6.8%                           | 0.7%        | 3.3%             | 4.2%                | 0.8%        | 3.3%         | 9.8%                              |
| Pacific            | 68.0%                              | 10.9%                          | 0.5%        | 2.4%             | 5.9%                | 1.0%        | 2.9%         | 8.3%                              |
| Indian             | 72.3%                              | 5.5%                           | 0.1%        | 2.2%             | 5.6%                | 1.4%        | 3.9%         | 9.0%                              |
| Chinese            | 73.0%                              | 3.9%                           | 0.3%        | 1.7%             | 4.0%                | 0.7%        | 7.6%         | 8.9%                              |
| Other Asian        | 70.0%                              | 5.3%                           | 0.3%        | 2.5%             | 5.7%                | 1.0%        | 6.4%         | 8.9%                              |
| <i>Total Asian</i> | <i>72.1%</i>                       | <i>5.0%</i>                    | <i>0.2%</i> | <i>2.1%</i>      | <i>5.1%</i>         | <i>1.1%</i> | <i>5.5%</i>  | <i>9.0%</i>                       |
| NZ European /Other | 72.6%                              | 2.6%                           | 0.7%        | 1.9%             | 2.6%                | 1.1%        | 8.2%         | 10.4%                             |
| <b>Total</b>       | <b>71.6%</b>                       | <b>4.8%</b>                    | <b>0.5%</b> | <b>2.2%</b>      | <b>3.8%</b>         | <b>1.0%</b> | <b>6.3%</b>  | <b>9.7%</b>                       |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

<sup>41</sup>New Zealand College of Public Health Medicine. Policy statement on Climate Change. Wellington: New Zealand College of Public Health Medicine, 2013. Available at <http://www.nzcpm.org.nz/policy-publications>

<sup>42</sup> 95% of the CM UR population who answered that they were employed full-time or part-time had an identifiable response for the question about means of travel to work in the 2013 Census

**Figure 32 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time for prioritised ethnic groups**



**Table 64 Estimated numbers of CM Health residents in 2014 aged 15 years and over who were employed full-time or part-time by means of travel to work and ethnicity**

|                    | Drove Car, Truck, Van, Motor Cycle | Passenger in Car, truck or Van | Cycle        | Walked or Jogged | Train or Public Bus | Other        | Work at home  | Did not got to work on census day | Total*         |
|--------------------|------------------------------------|--------------------------------|--------------|------------------|---------------------|--------------|---------------|-----------------------------------|----------------|
| Maaori             | 17,620                             | 1,680                          | 170          | 820              | 1,050               | 190          | 810           | 2,440                             | 24,840         |
| Pacific            | 22,090                             | 3,540                          | 160          | 780              | 1,910               | 330          | 950           | 2,690                             | 32,490         |
| Indian             | 18,640                             | 1,430                          | 30           | 580              | 1,430               | 370          | 1,000         | 2,330                             | 25,790         |
| Chinese            | 11,330                             | 600                            | 40           | 260              | 620                 | 100          | 1,190         | 1,380                             | 15,530         |
| Other Asian        | 6,970                              | 520                            | 30           | 250              | 560                 | 100          | 640           | 890                               | 9,950          |
| <i>Total Asian</i> | <i>36,940</i>                      | <i>2,560</i>                   | <i>110</i>   | <i>1,100</i>     | <i>2,610</i>        | <i>570</i>   | <i>2,830</i>  | <i>4,590</i>                      | <i>51,260</i>  |
| NZ European /Other | 78,910                             | 2,850                          | 730          | 2,050            | 2,820               | 1,180        | 8,940         | 11,250                            | 108,700        |
| <b>Total</b>       | <b>146,790</b>                     | <b>9,860</b>                   | <b>1,100</b> | <b>4,430</b>     | <b>7,900</b>        | <b>2,120</b> | <b>12,860</b> | <b>19,810</b>                     | <b>204,960</b> |

\*This total relates to the 95% of people employed full-time or part-time who stated a means of travel to work

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ



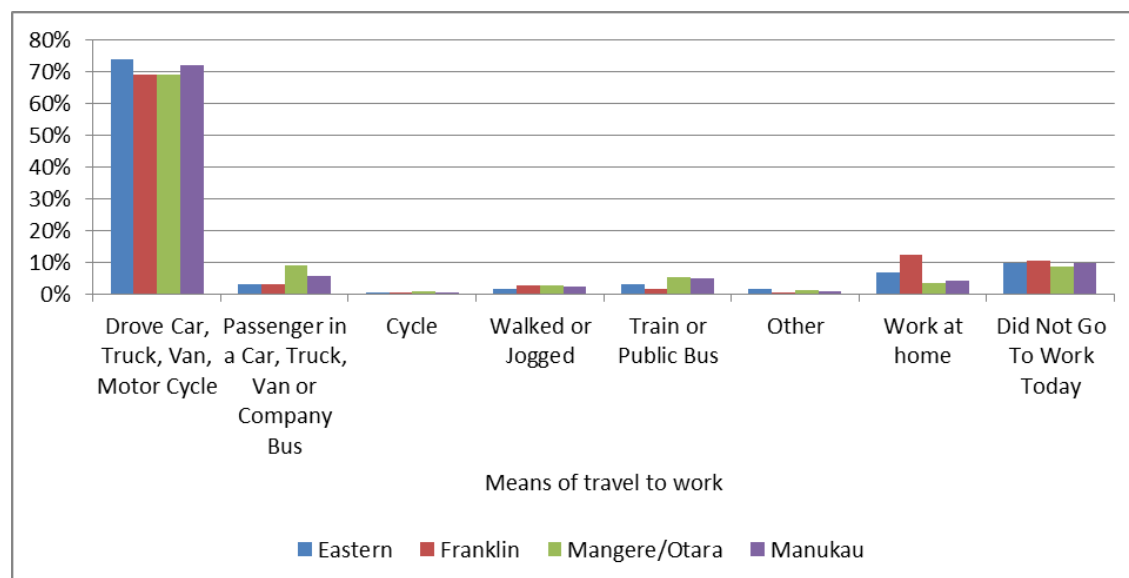
Consistent with the high proportion of the Mangere/Otara population who identify as Pacific, the percentage of people who were a passenger in a private vehicle was higher for Mangere/Otara at 9%. Of note 12% of Franklin residents reported working at home compared with 4-7% for the other localities (Table 65, Figure 33). This could reflect farming and horticulture businesses in the area and possibly more people working offsite from their usual workplace to reduce travel, given the distances to urban areas for some Franklin residents.

**Table 65 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time by locality**

|               | Drove Car, Truck, Van, Motor Cycle | Passenger in Car, truck or Van | Cycle       | Walked or Jogged | Train or Public Bus | Other       | Work at home | Did not get to work on census day |
|---------------|------------------------------------|--------------------------------|-------------|------------------|---------------------|-------------|--------------|-----------------------------------|
| Eastern       | 73.6%                              | 3.2%                           | 0.5%        | 1.6%             | 3.1%                | 1.5%        | 6.6%         | 9.8%                              |
| Franklin      | 69.0%                              | 3.2%                           | 0.4%        | 2.7%             | 1.4%                | 0.5%        | 12.2%        | 10.6%                             |
| Mangere/Otara | 69.0%                              | 9.0%                           | 0.7%        | 2.7%             | 5.5%                | 1.0%        | 3.6%         | 8.6%                              |
| Manukau       | 71.9%                              | 5.5%                           | 0.5%        | 2.3%             | 5.1%                | 0.8%        | 4.2%         | 9.6%                              |
| <b>Total</b>  | <b>71.6%</b>                       | <b>4.8%</b>                    | <b>0.5%</b> | <b>2.2%</b>      | <b>3.9%</b>         | <b>1.0%</b> | <b>6.3%</b>  | <b>9.7%</b>                       |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 33 Means of travel to work for CM Health residents aged 15 years and over in the 2013 Census who were employed full-time or part-time by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 66 Estimated numbers of CM Health residents in 2014 aged 15 years and over who were employed full-time or part-time by means of travel to work for localities**

|               | <b>Drove Car, Truck, Van, Motor Cycle</b> | <b>Passenger in Car, truck or Van</b> | <b>Cycle</b> | <b>Walked or Jogged</b> | <b>Train or Public Bus</b> | <b>Other</b> | <b>Work at home</b> | <b>Did not get to work on census day</b> | <b>Total*</b>  |
|---------------|---|---------------------------------------|--------------|-------------------------|----------------------------|--------------|---------------------|--|----------------|
| Eastern       | 53,470                                    | 2,320                                 | 380          | 1,140                   | 2,270                      | 1,100        | 4,810               | 7,090                                    | 72,630         |
| Franklin      | 22,500                                    | 1,040                                 | 130          | 870                     | 470                        | 170          | 3,980               | 3,450                                    | 32,600         |
| Mangere/Otara | 21,110                                    | 2,750                                 | 220          | 820                     | 1,670                      | 320          | 1,100               | 2,620                                    | 30,590         |
| Manukau       | 49,510                                    | 3,760                                 | 380          | 1,590                   | 3,490                      | 540          | 2,910               | 6,610                                    | 68,850         |
| <b>Total</b>  | <b>146,720</b>                            | <b>9,860</b>                          | <b>1,100</b> | <b>4,430</b>            | <b>7,890</b>               | <b>2,120</b> | <b>12,860</b>       | <b>19,800</b>                            | <b>204,870</b> |

\*\*This total relates to the 95% of people employed full-time or part-time who stated a means of travel to work

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Telecommunications Access

There was a question on the 2013 Census dwelling form about access to telecommunications for the household, as below:

**17** Mark as many spaces as you need to show which of these are available here in this dwelling.

**DON'T count**

- anything that is disconnected or broken
- anything that can be used **ONLY** for work

a cellphone / mobile phone (that is here all or most of the time)

a telephone

fax access

Internet access

or  none of these

Note that the interpretation of and relationships between these response options are not necessarily clear. For example, does the “telephone” option include cellphones / mobile phones? Does “internet access” include access via a mobile phone? Individuals may have interpreted these, and responded to them, in different ways which cannot be determined from their census response.

Information for the CM population aged 15 years and over is presented below. In Appendix Three this is disaggregated further into those aged 15-64 years and those aged 65 years and over. Overall, 85% of Counties Manukau residents reported having access to a mobile phone, and this was fairly consistent across ethnicities for the total group aged 15 years and over. 88% reported access to a telephone, although access was lower for Maaori and Pacific peoples (72% and 80%) than Asian and NZ European/Other groups (93-94%) (Table 67, Figure 34). 80% reported access to the internet at home but for Maaori and Pacific peoples the figures were 65% and 62% respectively while Asian groups had the highest access at 90%. As described in Appendix Three, access levels for mobile and internet were lower in those aged 65 years and over.

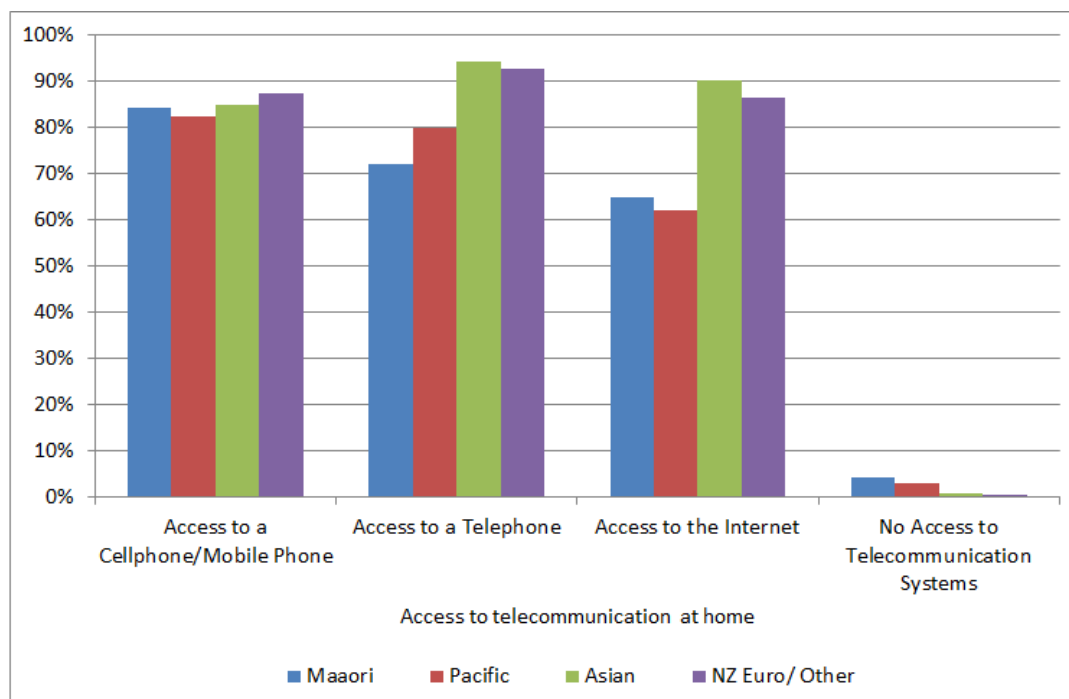
2% of people aged 15 years and over had no access to telecommunications at home, with the proportions higher among Maaori (4%) and Pacific peoples (3%) than other population groups (1%). Applying this to the estimated resident population for 2014, there would be over 6,000 Counties Manukau residents with no access (at home) to any of the telecommunications technologies asked about (Table 68).

**Table 67 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by ethnicity**

|                    | <b>Access to mobile phone/cellphone at home</b> | <b>Access to telephone at home</b> | <b>Access to internet at home</b> | <b>No access to telecommunications at home</b> |
|--------------------|---|------------------------------------|-----------------------------------|--|
| Maaori             | 84.3%   | 72.1%                              | 64.8%                             | 4.2%   |
| Pacific            | 82.4%   | 79.7%                              | 62.2%                             | 2.9%   |
| Indian             | 85.1%   | 94.1%                              | 89.0%                             | 1.3%   |
| Chinese            | 83.4%   | 94.8%                              | 91.3%                             | 0.5%   |
| Other Asian        | 86.0%   | 94.0%                              | 91.1%                             | 0.9%   |
| <i>Total Asian</i> | <i>84.7%</i>                                    | <i>94.3%</i>                       | <i>90.2%</i>                      | <i>0.9%</i>                                    |
| NZ European /Other | 87.4%   | 92.7%                              | 86.3%                             | 0.6%   |
| <b>Total</b>       | <b>85.4%</b>                                    | <b>87.9%</b>                       | <b>80.0%</b>                      | <b>1.6%</b>                                    |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 34 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by ethnicity**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 68 Estimated number of CM Health residents aged 15 years and over in 2014 by access to telecommunications at home and ethnicity**

|                    | <b>Access to mobile phone/cellphone at home</b> | <b>Access to telephone at home</b> | <b>Access to internet at home</b> | <b>No access to telecommunications at home</b> |
|--------------------|---|------------------------------------|-----------------------------------|--|
| Maaori             | 43,580  | 37,300                             | 33,520                            | 2,170  |
| Pacific            | 60,970  | 59,020                             | 46,030                            | 2,150  |
| Indian             | 36,910  | 40,770                             | 38,580                            | 540  |
| Chinese            | 26,270  | 29,860                             | 28,750                            | 170  |
| Other Asian        | 15,660  | 17,110                             | 16,590                            | 170  |
| <i>Total Asian</i> | 78,830  | 87,750                             | 83,920                            | 880  |
| NZ European /Other | 148,490   | 157,560                            | 146,670                           | 1,070  |
| <b>Total</b>       | <b>331,870</b>                                  | <b>341,730</b>                     | <b>310,900</b>                    | <b>6,330</b>                                   |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

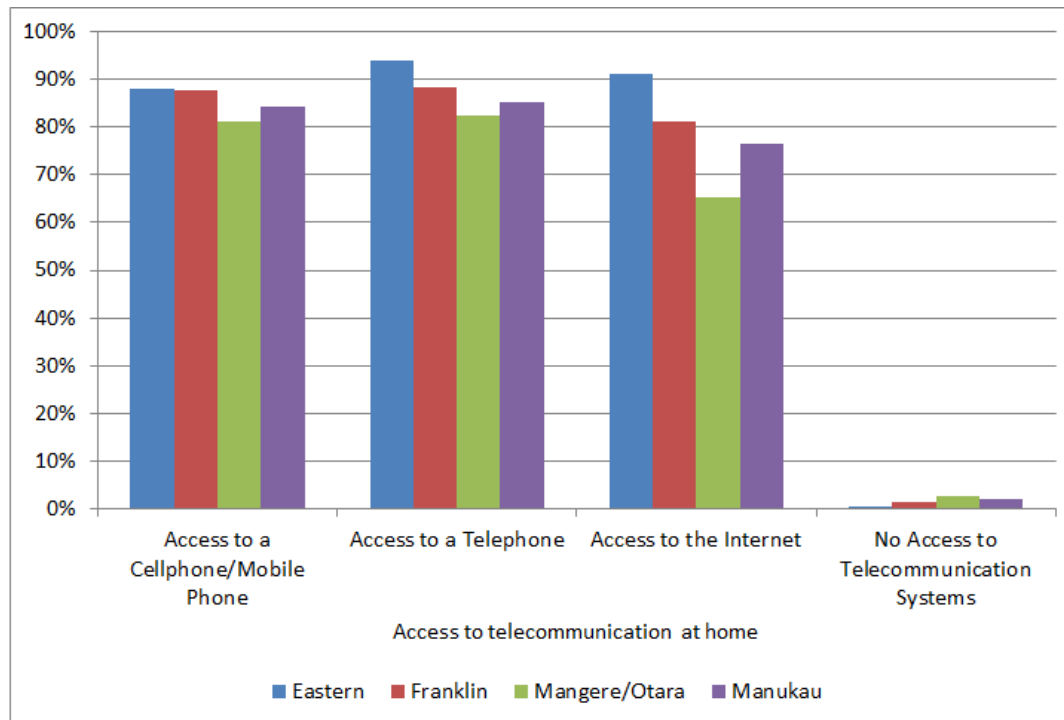
Substantially less people living in Mangere/Otara locality had access to the internet at home (65%) compared with other localities; people living in the Eastern locality had the highest internet connectivity at home (91%) (Table 69, Figure 35).

**Table 69 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by locality**

|               | <b>Access to mobile phone/cellphone at home</b> | <b>Access to telephone at home</b> | <b>Access to internet at home</b> | <b>No access to telecommunications at home</b> |
|---------------|---|------------------------------------|-----------------------------------|--|
| Eastern       | 88.0%   | 93.9%                              | 91.2%                             | 0.5%   |
| Franklin      | 87.7%   | 88.3%                              | 81.2%                             | 1.3%   |
| Mangere/Otara | 81.1%   | 82.3%                              | 65.4%                             | 2.8%   |
| Manukau       | 84.2%   | 85.0%                              | 76.5%                             | 2.2%   |
| <b>Total</b>  | <b>85.4%</b>                                    | <b>87.9%</b>                       | <b>80.0%</b>                      | <b>1.6%</b>                                    |

Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Figure 35 Access to telecommunications at home for CM Health residents aged 15 years and over in the 2013 Census by locality**



Source: Census 2013 UR population, Northern Region Health extract, Statistics NZ

**Table 70 Estimated number of CM Health residents aged 15 years and over in 2014 by access to telecommunications at home and locality**

|               | Access to mobile phone/cellphone at home | Access to telephone at home | Access to internet at home | No access to telecommunications at home |
|---------------|--|-----------------------------|----------------------------|---|
| Eastern       | 107,050                                  | 114,250                     | 110,970                    | 570                                     |
| Franklin      | 46,890                                   | 47,240                      | 43,410                     | 700                                     |
| Mangere/Otara | 60,720                                   | 61,670                      | 48,970                     | 2,090                                   |
| Manukau       | 116,650                                  | 117,810                     | 106,040                    | 3,090                                   |
| <b>Total</b>  | <b>331,720</b>                           | <b>341,580</b>              | <b>310,760</b>             | <b>6,330</b>                            |

Source: Distribution derived from Census UR population, Northern Region Health extract, applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## New Zealand Deprivation Index 2013

NZDep2013 is a relative index of the socioeconomic deprivation of an area, based on census data relating to income, home ownership, employment, qualifications, family structure, housing, access to transport and internet at home<sup>43</sup>. NZDep2013 provides a deprivation score for each meshblock in New Zealand. Meshblocks are the smallest geographical area defined by Statistics New Zealand, with a population of around 60–110 people.

Meshblock scores are grouped into deciles, with 1 representing the 10% of areas with the least deprived scores and 10 the 10% of areas with the most deprived scores<sup>44</sup>; it is common to see data presented and cited with the deciles combined into quintiles with quintile 1 representing the 20% of areas with least deprived scores and quintile 5 the 20% of most deprived scores. It is important to remember that NZDep scores refer to areas, not individuals and are relative - 10% of areas will always be the most deprived, relative to other areas in New Zealand.

The information CM Health has on NZDep2013 does not come from the Northern Regional health extract of Census data but from nationally released information<sup>45</sup> and is based on total response ethnicity.

At the time of the 2013 Census, 36% of Counties Manuka residents were living in areas defined as the most socioeconomically deprived (Deciles 9 & 10). All things 'being equal' this figure would be 20%. The percentage living in NZDep2013 Deciles 9 & 10 was much higher for Maaori (58%) and Pacific peoples (76%) than for European (17%), Asian (22%) and MELAA (29%) groups (Tables 71 & 72, total response ethnicity).

---

<sup>43</sup> Atkinson J, Salmond C, Crampton P (2014) NZDep2013 Index of deprivation. Wellington: University of Otago.

<sup>44</sup> Note the NZDep scores are the opposite of the decile system used in the education sector, where decile one represents the highest socioeconomic deprivation

<sup>45</sup> University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File. Accessed from

<http://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html>

**Table 71 Percentage of CM Health residents living in NZDep2013 deciles by total response ethnicity**

| Total Response Ethnicity | NZDep2013 Decile |            |           |           |           |           |           |           |            |            |
|--------------------------|------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
|                          | 1                | 2          | 3         | 4         | 5         | 6         | 7         | 8         | 9          | 10         |
| Maaori                   | 3%               | 4%         | 4%        | 4%        | 5%        | 5%        | 6%        | 10%       | 20%        | 38%        |
| Pacific                  | 1%               | 1%         | 1%        | 2%        | 2%        | 3%        | 5%        | 9%        | 23%        | 52%        |
| Asian                    | 6%               | 11%        | 12%       | 10%       | 9%        | 9%        | 10%       | 12%       | 14%        | 9%         |
| MELAA                    | 5%               | 9%         | 12%       | 9%        | 8%        | 9%        | 8%        | 10%       | 15%        | 13%        |
| European                 | 13%              | 16%        | 12%       | 10%       | 10%       | 8%        | 6%        | 7%        | 9%         | 9%         |
| <b>Total</b>             | <b>8%</b>        | <b>10%</b> | <b>9%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>9%</b> | <b>14%</b> | <b>22%</b> |

Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Table 72 Percentage of CM Health residents living in NZDep2013 quintiles by total response ethnicity**

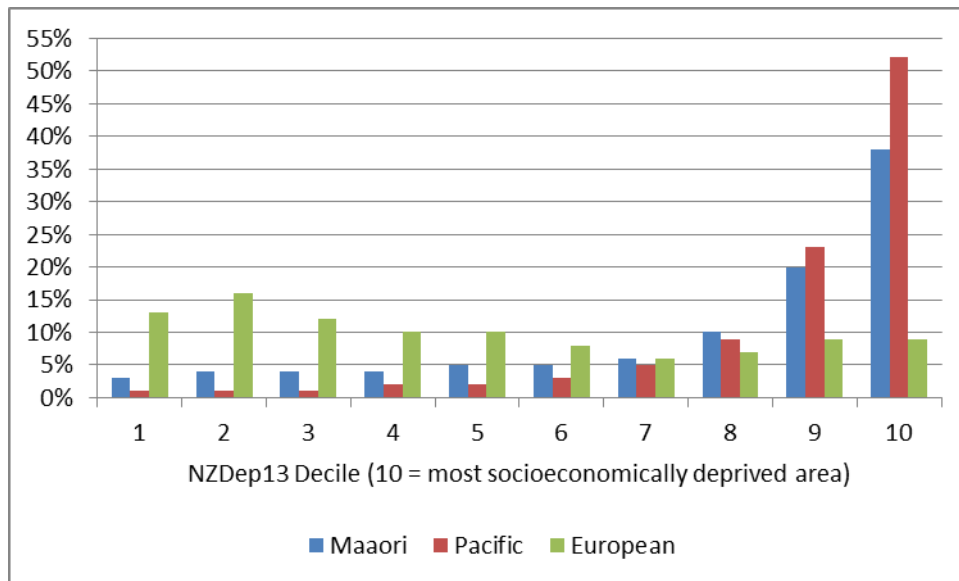
| Total response ethnicity | NZDep2013 Quintile |            |            |            |            |
|--------------------------|--------------------|------------|------------|------------|------------|
|                          | 1                  | 2          | 3          | 4          | 5          |
| Maaori                   | 7%                 | 8%         | 10%        | 16%        | 58%        |
| Pacific                  | 2%                 | 3%         | 5%         | 14%        | 76%        |
| Asian                    | 16%                | 22%        | 18%        | 21%        | 22%        |
| MELAA                    | 15%                | 21%        | 17%        | 18%        | 29%        |
| European                 | 29%                | 22%        | 18%        | 13%        | 17%        |
| <b>Total</b>             | <b>18%</b>         | <b>17%</b> | <b>14%</b> | <b>15%</b> | <b>36%</b> |

Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

The pattern across NZDep2013 deciles does vary between ethnicities, with the Maaori and Pacific population patterns being very skewed towards the deciles of higher socioeconomic deprivation, the European group relatively skewed towards lower socioeconomic deprivation and the Asian and MELAA groups having a 'bimodal pattern', with a relative peak in decile 3 and another peak in decile 9 (Figures 36 & 37, note different Y-axis scale).

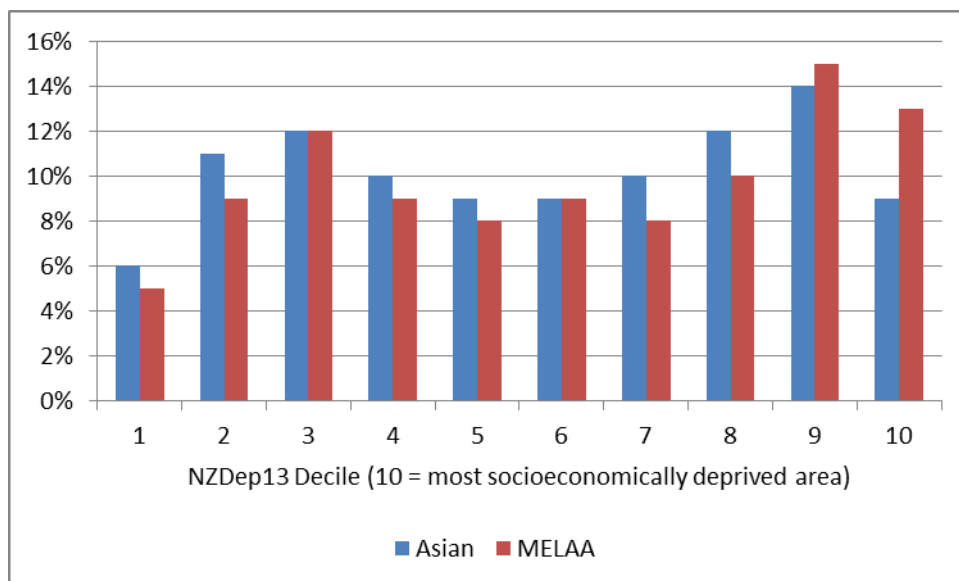


**Figure 36 Pattern of distribution across NZDep2013 deciles for Maaori, Pacific and European populations**



Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Figure 37 Pattern of distribution across NZDep2013 deciles for Asian and MELAA populations**



Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

The percentage of people living in NZDep2013 Decile 9 & 10 areas at the time of the 2013 Census also varied by age, being 45% for children aged under 15 years, 35% for those aged 15-64 years and 25% for those aged 65 years and over (Tables 73 & 74, Figure 38). If these circumstances continue to apply for the CM population, these figures equate to approximately 183,000 people in Counties Manukau living in NZDep2013 Decile 9 & 10 areas in 2014 (Table 75), approximately 54,000 of these being children.

**Table 73 Percentage of CM Health residents living in NZDep2013 deciles by age group**

| Age group (yrs) | NZDep2013 Decile |            |           |           |           |           |           |           |            |            |
|-----------------|------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
|                 | 1                | 2          | 3         | 4         | 5         | 6         | 7         | 8         | 9          | 10         |
| <15             | 6%               | 8%         | 8%        | 6%        | 6%        | 6%        | 6%        | 8%        | 16%        | 29%        |
| 15-64           | 8%               | 11%        | 9%        | 8%        | 7%        | 7%        | 7%        | 9%        | 14%        | 21%        |
| 65 & over       | 9%               | 13%        | 10%       | 8%        | 8%        | 8%        | 7%        | 8%        | 11%        | 14%        |
| <b>Total</b>    | <b>8%</b>        | <b>10%</b> | <b>9%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>9%</b> | <b>14%</b> | <b>22%</b> |

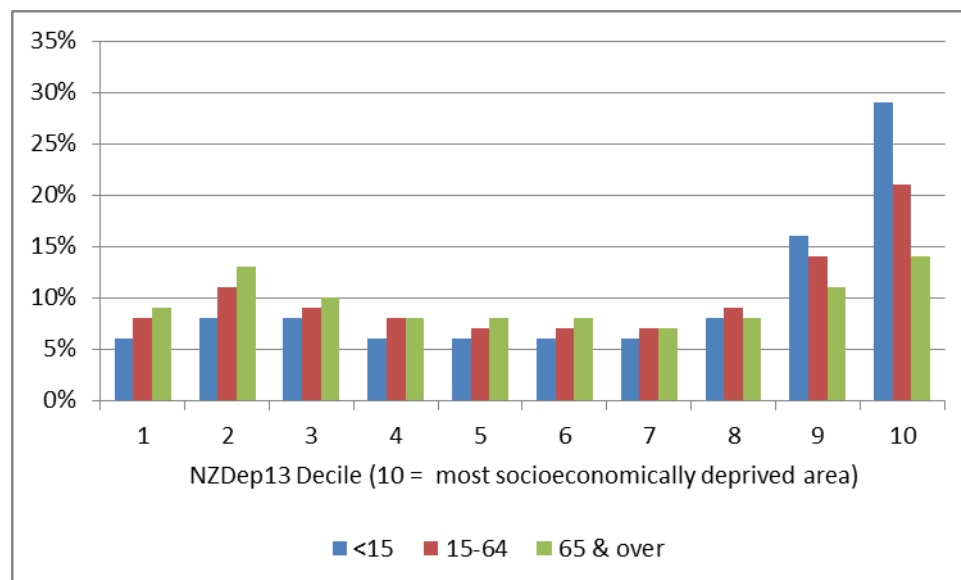
Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Table 74 Percentage of CM Health residents living in NZDep2013 quintiles by age group**

| Age group (yrs) | NZDep13 Quintile |            |            |            |            |
|-----------------|------------------|------------|------------|------------|------------|
|                 | 1                | 2          | 3          | 4          | 5          |
| <15             | 14%              | 14%        | 12%        | 15%        | 45%        |
| 15-64           | 18%              | 17%        | 14%        | 16%        | 35%        |
| 65 & over       | 25%              | 19%        | 17%        | 15%        | 25%        |
| <b>Total</b>    | <b>18%</b>       | <b>17%</b> | <b>14%</b> | <b>15%</b> | <b>36%</b> |

Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Figure 38 Percentage of CM Health residents living in NZDep2013 deciles by age group**



Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Table 75 Estimated number of CM Health residents in 2014 living in NZDep2013 quintiles by age group**

| Age group (yrs) | NZDep2013 Quintile |               |               |               |                |
|-----------------|--------------------|---------------|---------------|---------------|----------------|
|                 | 1                  | 2             | 3             | 4             | 5              |
| <15             | 17,390             | 17,030        | 14,440        | 17,650        | 53,850         |
| 15-64           | 60,990             | 57,490        | 47,480        | 52,630        | 115,230        |
| 65 & over       | 13,700             | 10,170        | 9,100         | 8,100         | 13,830         |
| <b>Total</b>    | <b>92,070</b>      | <b>84,690</b> | <b>71,020</b> | <b>78,390</b> | <b>182,910</b> |

Source: Distribution derived from University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013, NZDep2013 Area Concordance File; applied to Estimated Resident Population Projection for 2014, Ministry of Health Nov 2014 version from Statistics NZ

Consistent with the figures by ethnicity, the percentage of people living in NZDep 9 & 10 was concentrated in Mangere/Otara (77%) in particular and in Manukau (50%), compared with Eastern and Franklin localities (Table 76 & 77).

**Table 76 Percentage of CM Health residents living in NZDep2013 deciles by locality**

| Locality      | NZDep2013 Decile |            |           |           |           |           |           |           |            |            |
|---------------|------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
|               | 1                | 2          | 3         | 4         | 5         | 6         | 7         | 8         | 9          | 10         |
| Eastern       | 15%              | 21%        | 20%       | 13%       | 11%       | 10%       | 5%        | 2%        | 1%         | 0%         |
| Franklin      | 9%               | 16%        | 13%       | 11%       | 13%       | 10%       | 7%        | 8%        | 6%         | 7%         |
| Mangere/Otara | 0%               | 1%         | 1%        | 2%        | 2%        | 2%        | 5%        | 10%       | 24%        | 53%        |
| Manukau       | 5%               | 5%         | 3%        | 5%        | 4%        | 5%        | 8%        | 14%       | 22%        | 28%        |
| <b>Total</b>  | <b>8%</b>        | <b>10%</b> | <b>9%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>7%</b> | <b>9%</b> | <b>14%</b> | <b>22%</b> |

Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Table 77 Percentage of CM Health residents living in NZDep2013 quintiles by locality**

| Locality      | NZDep2013 Quintile |            |            |            |            |
|---------------|--------------------|------------|------------|------------|------------|
|               | 1                  | 2          | 3          | 4          | 5          |
| Eastern       | 36%                | 33%        | 21%        | 8%         | 1%         |
| Franklin      | 25%                | 24%        | 23%        | 15%        | 13%        |
| Mangere/Otara | 1%                 | 2%         | 5%         | 15%        | 77%        |
| Manukau       | 10%                | 8%         | 10%        | 22%        | 50%        |
| <b>Total</b>  | <b>18%</b>         | <b>17%</b> | <b>14%</b> | <b>15%</b> | <b>36%</b> |

Source: University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013; NZDep2013 Area Concordance File; analysed by CM Health

**Table 78 Estimated number of CM Health residents in NZDep2013 quintiles by locality**

| Locality      | NZDep2013 Quintile |        |        |        |        |
|---------------|--------------------|--------|--------|--------|--------|
|               | 1                  | 2      | 3      | 4      | 5      |
| Eastern       | 54,340             | 49,810 | 31,700 | 12,080 | 1,510  |
| Franklin      | 17,260             | 16,570 | 15,880 | 10,350 | 8,970  |
| Mangere/Otara | 1,050              | 2,100  | 5,240  | 15,730 | 80,760 |
| Manukau       | 18,440             | 14,750 | 18,440 | 40,560 | 92,190 |

Note: totals are slightly different to totals for each quintile calculated by age because of rounding at various levels in the analysis process

Source: Distribution derived from University of Otago, Wellington (2014) New Zealand Indexes of Deprivation, 2013, NZDep2013 Area Concordance File; applied to Estimated Resident Population Projection by CAU for 2014, Statistics NZ, CAUs aggregated to localities by CM Health

## Appendices

### Appendix One: Standard ethnicity collection question

Which ethnic group do you belong to?  
Mark the space or spaces that apply to you.

New Zealand European

Māori

Samoan

Cook Island Māori

Tongan

Niuean

Chinese

Indian

other (such as DUTCH, JAPANESE, TOKELAUAN). Please state:

|  |
|--|
|  |
|  |

Source: SNZ, 2001 Census

## Appendix Two: Languages spoken for Pacific and Asian subgroups

### Summary

The ability to have an everyday conversation in English varies considerably across Pacific and Asian population subgroups and by age group for the population living in the CM Health area, based on the 2013 Census data. A substantial proportion of those who identify with one or more of the Pacific and Asian populations aged 65 years and over do not have conversational English – 31% of the total Pacific population and 51% of the total Asian population of that age in the CM Health area. Even for those aged 45-64 years, 13% of the Pacific population and 24% of the Asian population living in Counties Manukau do not have conversational English. However, high proportions of people are able to speak their ethnic language, an important part of the preservation of cultural values and identity. These findings have important implications for health services provision and community engagement.

### Context

As noted on P 38 the NZ Census question about language(s) spoken is about the ability to have a conversation about everyday things, which is potentially quite different from the ability to have a conversation about health issues which may be relatively complex. Being able to speak a language does not necessarily equate to literacy in that language and not specifically health literacy, and confidence to engage and ask questions will vary across different contexts.

The need to address language barriers and/or provision for translation services (in person or of resources) will depend on the volume and age of people engaging with the relevant services; for example in most instances older people are more likely to be attending health services although they may not represent a large percentage of the population of that ethnicity. There are also many situations where grandparents are integrally involved in the care of children and language competencies across the family will be important to consider. The implications extend across many services as well as wider community engagement.

### Method

CM Health has two sets of tables derived from answers to the 2013 Census question on language(s) spoken

- (a) official language spoken (or not) by ethnicity. NZ has three official languages – English, Te Reo Maaori and NZ Sign Language.
- (b) language spoken – 17 languages – so not all languages (our tables include Samoan and Tongan; Hindi, Yue – includes Cantonese, and Northern Chinese – includes Mandarin).

In addition information was sought from Statistics New Zealand for four languages not included in the CM Health language spoken tables, relevant to populations of significant size in the CM Health population (Niuean and Cook Island Maori; Tagalog, the language of the Filipino group, and Korean). The information below combines data from these three sources

for Pacific and Asian peoples living in Counties Manukau in 2013 aged 15 years and over<sup>46</sup>. The information derived from the CM Health tables was verified by Statistics NZ in addition to obtaining the extra information on other languages spoken, as no other official source could be found to ‘sense check’ the CM Health results<sup>47</sup>.

The language competency information below is based on the total CM Health population who Identified as Pacific and Asian, aged 15 years & over, in the 2013 Census based on total response (TR) ethnicity – i.e. if people identify in more than one ethnic group, they are counted in each of those groups. This means summed groups will add up to more than the total number of people. Also these results are for those who answered the question about languages spoken in a way that was able to be categorised (total stated, which is less than the total number of people in each identified ethnic group). Where ‘Other’ language is referred to, it means languages other than the three official New Zealand languages – English, Te Reo Maaori and NZ Sign language.

## Results

### Pacific Groups

The ability to speak English is less in those in older age groups and a substantial proportion of those who identify with one or more of the Pacific populations aged 65 years and over do not have conversational English – 31% of the total Pacific population in the CM Health area. Even for those aged 45-64 years, 13% do not report having conversational English (Table 1). High proportions of people are able to speak their ethnic language, at least for every day matters (over 80% for those who are Samoan or Tongan aged 45 years and over).

**Table 79 Language indicators for the CM Pacific population from the 2013 Census, by age group and total response ethnicity**

| Language indicators for CM Pacific population | 15-29 yrs        | 30-44 yrs        | 45-64 yrs        | 65 yrs & over            | Total 15 yrs & over            |
|---|------------------|------------------|------------------|--------------------------|--------------------------------|
| <b>Total Pacific (TR)</b>                     |                  |                  |                  |                          |                                |
| Total having English                          | 97%              | 93%              | 87%              | 69%                      | <b>91%</b>                     |
| Total having no English                       | 3%               | 7%               | 13%              | 31%                      | <b>9%</b>                      |
| Total having other language(s)                | 51%              | 64%              | 76%              | 87%                      | <b>63%</b>                     |
| English only                                  | 47%              | 34%              | 23%              | 12%                      | <b>35%</b>                     |
| Total able to speak Samoan                    | 33%              | 39%              | 46%              | 47%                      | <b>39%</b>                     |
| Total able to speak Tongan                    | 13%              | 16%              | 16%              | 18%                      | <b>15%</b>                     |
|   |                  |                  |                  |                          |                                |
| <b>Samoan (TR)</b>                            | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                          | 95%              | 90%              | 83%              | 65%                      | <b>89%</b>                     |
| Total having no English                       | 5%               | 10%              | 17%              | 35%                      | <b>11%</b>                     |
| Total having other language(s)                | 64%              | 77%              | 87%              | 95%                      | <b>76%</b>                     |
| English only                                  | 35%              | 22%              | 12%              | 4%                       | <b>24%</b>                     |

<sup>46</sup> Data for those aged under 15 years is more complex as there is a category ‘none (e.g. too young to talk)’ which can be excluded for younger children but there is no specified age at which parents would use this category and comparisons assume the same level of use of the category across populations.

<sup>47</sup> Email dialogue with Robert Didham, Statistics NZ in early 2015

|  |                  |                  |                  |                          |                                |
|--|------------------|------------------|------------------|--------------------------|--------------------------------|
| Total able to speak Samoan             | 64%              | 76%              | 87%              | 97%                      | <b>75%</b>                     |
|  |                  |                  |                  |                          |                                |
| <b>Tongan (TR)</b>                     | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                   | 97%              | 92%              | 83%              | 56%                      | <b>90%</b>                     |
| Total having no English                | 3%               | 8%               | 17%              | 44%                      | <b>10%</b>                     |
| Total having other language(s)         | 59%              | 74%              | 84%              | 91%                      | <b>71%</b>                     |
| English only                           | 40%              | 26%              | 15%              | 8%                       | <b>28%</b>                     |
| Total able to speak Tongan             | 57%              | 72%              | 85%              | 92%                      | <b>70%</b>                     |
|  |                  |                  |                  |                          |                                |
| <b>Cook Is Maori (TR)</b>              | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                   | 99%              | 98%              | 98%              | 87%                      | <b>98%</b>                     |
| Total having no English                | 1%               | 2%               | 2%               | 13%                      | <b>2%</b>                      |
| Total having other language(s)         | 13%              | 24%              | 43%              | 66%                      | <b>27%</b>                     |
| English only                           | 83%              | 71%              | 53%              | 28%                      | <b>69%</b>                     |
| Total able to speak Cook Island Maori* | 10%              | 22%              | 41%              | 66%                      | 24%                            |
| Total able to speak Te Reo Maaori      | 5%               | 5%               | 7%               | 9%                       | <b>6%</b>                      |
|  |                  |                  |                  |                          |                                |
| <b>Niuean (TR)</b>                     | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                   | 99%              | 99%              | 96%              | 82%                      | <b>97%</b>                     |
| Total having no English                | 1%               | 1%               | 4%               | 20%                      | <b>3%</b>                      |
| Total having other language(s)         | 18%              | 38%              | 58%              | 82%                      | <b>37%</b>                     |
| English only                           | 80%              | 60%              | 40%              | 16%                      | <b>61%</b>                     |
| Total able to speak Niuean*            | 12%              | 32%              | 54%              | 79%                      | 32%                            |

Totals may not add up exactly because of rounding. 'Other' language means languages other than the three official New Zealand languages – English, Te Reo Maaori and NZ Sign language. \*Sourced separately from StatsNZ

### Asian Groups

The ability to speak English is less in those in older age groups and a substantial proportion of those who identify with one or more of the Asian populations aged 65 years and over do not have conversational English – 51% of the total Asian population of that age in the CM Health area. Even for those aged 45-64 years, 24% do not have conversational English (Table 3). High proportions of people are able to speak their ethnic language, at least for every day matters (over 80% for those who are Chinese, Filipino or Korean aged 45 years and over).

**Table 80 Language indicators for the CM Asian population from the 2013 Census, by age group and total response ethnicity**

| Language indicators for CM Asian population | 15-29 yrs | 30-44 yrs | 45-64 yrs | 65 yrs & over | Total 15 yrs & over |
|---|-----------|-----------|-----------|---------------|---------------------|
| <b>Total Asian (TR)</b>                     |           |           |           |               |                     |
| Total having English                        | 94%       | 89%       | 76%       | 49%           | 83%                 |
| Total having no English                     | 6%        | 11%       | 24%       | 51%           | 17%                 |
| Total having other language(s)              | 70%       | 79%       | 84%       | 89%           | 78%                 |
| English only                                | 29%       | 21%       | 16%       | 11%           | 21%                 |



| <b>Indian (TR)</b>  | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
|---|------------------|------------------|------------------|--------------------------|--------------------------------|
| Total having English                                      | 96%              | 95%              | 87%              | 63%                      | 91%                            |
| Total having no English                                   | 4%               | 5%               | 13%              | 37%                      | 9%                             |
| Total having other language(s)                            | 66%              | 74%              | 77%              | 85%                      | 73%                            |
| English only  | 34%              | 26%              | 23%              | 15%                      | 27%                            |
| Able to speak Hindi*                                      | 49%              | 56%              | 56%              | 56%                      | 54%                            |
|   |                  |                  |                  |                          |                                |
| <b>Chinese (TR)</b>                                       | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                                      | 92%              | 81%              | 63%              | 36%                      | 73%                            |
| Total having no English                                   | 8%               | 19%              | 37%              | 64%                      | 27%                            |
| Total having other language(s)                            | 73%              | 83%              | 89%              | 92%                      | 83%                            |
| English only  | 26%              | 17%              | 11%              | 7%                       | 16%                            |
| Able to speak Yue (includes Cantonese)*                   | 29%              | 31%              | 40%              | 44%                      | 35%                            |
| Able to speak Northern Chinese (includes Mandarin)*       | 31%              | 37%              | 38%              | 30%                      | 35%                            |
| Able to speak other Sinitic language not further defined* | 23%              | 29%              | 30%              | 29%                      | 28%                            |
| Total able to speak a Sinitic language*                   | 70%              | 79%              | 86%              | 90%                      | 80%                            |
|   |                  |                  |                  |                          |                                |
| <b>Filipino (TR)</b>                                      | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                                      | 100%             | 98%              | 98%              | 89%                      | 98%                            |
| Total having no English                                   | 1%               | 2%               | 2%               | 9%                       | 2%                             |
| Total having other language(s)                            | 71%              | 83%              | 85%              | 89%                      | 80%                            |
| English only  | 29%              | 17%              | 15%              | 13%                      | 20%                            |
| Tagalog speaker*  | 68%              | 82%              | 83%              | 87%                      | 78%                            |
|   |                  |                  |                  |                          |                                |
| <b>Korean (TR)</b>  | <b>15-29 yrs</b> | <b>30-44 yrs</b> | <b>45-64 yrs</b> | <b>65 yrs &amp; over</b> | <b>Total 15 yrs &amp; over</b> |
| Total having English                                      | 90%              | 74%              | 60%              | 40%                      | 72%                            |
| Total having no English                                   | 10%              | 25%              | 40%              | 58%                      | 28%                            |
| Total having other language(s)                            | 90%              | 90%              | 93%              | 94%                      | 91%                            |
| English only  | 9%               | 9%               | 7%               | 8%                       | 8%                             |
| Total able to speak Korean*                               | 90%              | 90%              | 93%              | 96%                      | 91%                            |

Totals may not add up exactly because of rounding. Other' language means languages other than the three official New Zealand languages – English, Te Reo Maaori and NZ Sign language

\*Sourced separately from StatsNZ

## Appendix Three: Additional Information relevant to Telecommunications Access for the CM Health population<sup>48</sup>

### Summary

As telecommunications technologies advance and access and usage become more widespread, they provide increasing opportunities to improve communication and care coordination with our patients and communities. A high proportion (over 80%) of Counties Manukau residents who responded to the 2013 Census reported having access to mobile phone, internet and/or telephone at home. However, the subgroups of populations with the greatest health needs and/or health service utilisation – notably Maaori and Pacific people, and those aged over 65 years – have significantly reduced access to these technologies. Among Maaori and Pacific people over the age of 65 years, only 70% had access to a mobile phone and just over 50% had access to the internet at home; and even among younger Maaori and Pacific people (15-64 years), only about two-thirds had internet access at home. At least 6,000 Counties Manukau residents are estimated to have no access at home to any of the telecommunications technologies asked about in the Census.

While not specific to Counties Manukau, New Zealand information from the World Internet Survey 2013 suggests there is a key difference between internet “access” (presence of technology in a dwelling) and usage. Young people in low income households do not appear to be digitally disadvantaged, having one of the highest usage indices of all subgroups (this includes internet access at school, work or elsewhere in addition to home), but income has a marked effect on levels of internet use for those aged 40 years and over. Pacific people have notably lower usage indices and are more likely to be low-level users if they are online than people of other ethnic groups. On the other hand, Asian internet users stand out as being the most engaged, particularly those aged under 40 years.

It also cannot be assumed that communication and interactions will be facilitated via younger members of the family in Maaori and Pacific communities – 34% of NZ European internet non-users had asked someone to do something for them online several times in the preceding year compared with only 10% of Maaori or Pacific non-users.

Of note, mobile phone access does not equal smartphone access: in the World Internet Survey less than three quarters of the households that had access to a mobile phone (or any sort) also had access to a smartphone. In any case it appears that smartphones are not a primary way that people connect to the internet (although they may be used more often to access internet connections established through other means). The New Zealand Household Use of Information and Communication Technology 2012 showed that while a quarter of all recent internet users reporting having used a mobile phone to access the internet, only 4% reported having used a mobile device to connect to the internet. This seems to indicate that

---

<sup>48</sup> Thanks to Siniva Sinclair for the additional information in this Appendix, drawn together for a briefing for CM Health planning and clinical staff in July 2014

people are using their mobile phones to access the internet via a wireless connection which is connected separately from the cellular network (e.g. via telephone line).

The 2013 Census data suggest that older age groups in Counties Manukau have greater access to older “landline” telephone technology, so it will be important to ensure that these are used to best advantage, alongside newer more capable and versatile technologies; while not forgetting those residents (6,000+) who have no access at home to any of the technologies asked about in Census.

### Information and data sources

This appendix draws together data and information from three sources:

- Counties Manukau data from the 2013 New Zealand Census
- New Zealand information from the World Internet Project, 2013<sup>49</sup>
- New Zealand data and information from the Household Use of Information and Communication Technology Survey, 2012<sup>50</sup> (undertaken by Statistics New Zealand as part of the Household Labour Force Survey for the September 2012 quarter)

### Counties Manukau data from the 2013 Census

The Census question about telecommunications access is described on P 83 and information is provided there for the whole population group aged 15 years and over. The Census information below disaggregates that group into those aged 15-64 years and those aged 65 years and over to highlight the issues for those who are older.

**Table 81 Access to mobile phone/cellphone at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity**

| Ethnicity                             | ACCESS TO MOBILE PHONE / CELLPHONE at home |            |                     |
|---------------------------------------|--|------------|---------------------|
|                                       | 15-64 yrs                                  | 65+ yrs    | Total 15 yrs & over |
| Maaori                                | 85%  | 70%        | 84%                 |
| Pacific Peoples                       | 84%  | 70%        | 83%                 |
| Asian                                 | 86%  | 77%        | 85%                 |
| European                              | 90%  | 76%        | 88%                 |
| Middle Eastern/Latin American/African | 85%  | 79%        | 84%                 |
| Other Ethnicity                       | 89%  | 82%        | 88%                 |
| Not Elsewhere Included (4)            | 84%  | 74%        | 83%                 |
| <b>All ethnic groups</b>              | <b>87%</b>                                 | <b>75%</b> | <b>85%</b>          |

<sup>49</sup> Gibson A, Miller M, Smith P, Bell A, Crothers C, The Internet in New Zealand 2013. Auckland, New Zealand: Institute of Culture, Discourse & Communication, AUT University

<sup>50</sup> Statistics New Zealand, Household Use of Information and Communication Technology: 2012 [http://www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/information\\_technology\\_and\\_communications/HouseholdUseofICT\\_HOTP2012.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/information_technology_and_communications/HouseholdUseofICT_HOTP2012.aspx)

**Table 82 Access to telephone at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity**

| Ethnicity                             | ACCESS TO TELEPHONE at home |            |                     |
|---------------------------------------|-----------------------------|------------|---------------------|
|                                       | 15-64 yrs                   | 65+ yrs    | Total 15 yrs & over |
| Maaori                                | 71%                         | 88%        | 72%                 |
| Pacific Peoples                       | 78%                         | 91%        | 79%                 |
| Asian                                 | 94%                         | 97%        | 94%                 |
| European                              | 90%                         | 98%        | 91%                 |
| Middle Eastern/Latin American/African | 93%                         | 100%       | 94%                 |
| Other Ethnicity                       | 91%                         | 97%        | 92%                 |
| Not Elsewhere Included (4)            | 78%                         | 94%        | 80%                 |
| <b>All ethnic groups</b>              | <b>87%</b>                  | <b>96%</b> | <b>88%</b>          |

**Table 83 Access to internet at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity**

| Ethnicity                             | ACCESS TO INTERNET at home |            |                     |
|---------------------------------------|----------------------------|------------|---------------------|
|                                       | 15-64 yrs                  | 65+ yrs    | Total 15 yrs & over |
| Maaori                                | 66%                        | 52%        | 65%                 |
| Pacific Peoples                       | 63%                        | 53%        | 62%                 |
| Asian                                 | 91%                        | 79%        | 90%                 |
| European                              | 89%                        | 69%        | 85%                 |
| Middle Eastern/Latin American/African | 90%                        | 81%        | 89%                 |
| Other Ethnicity                       | 91%                        | 79%        | 89%                 |
| Not Elsewhere Included (4)            | 73%                        | 67%        | 73%                 |
| <b>All ethnic groups</b>              | <b>82%</b>                 | <b>68%</b> | <b>80%</b>          |

**Table 84 No access to telecommunications at home for CM Health residents aged 15 years and over from the 2013 Census, by age group and total response ethnicity**

| Ethnicity                             | NO ACCESS TO TELECOMMUNICATIONS at home |           |                     |
|---------------------------------------|---|-----------|---------------------|
|                                       | 15-64 yrs                               | 65+ yrs   | Total 15 yrs & over |
| Maaori                                | 4%                                      | 3%        | 4%                  |
| Pacific Peoples                       | 3%                                      | 2%        | 3%                  |
| Asian                                 | 1%                                      | 1%        | 1%                  |
| European                              | 1%                                      | 0%        | 1%                  |
| Middle Eastern/Latin American/African | 1%                                      | 0%        | 1%                  |
| Other Ethnicity                       | 1%                                      | 1%        | 1%                  |
| Not Elsewhere Included (4)            | 3%                                      | 1%        | 3%                  |
| <b>All ethnic groups</b>              | <b>2%</b>                               | <b>1%</b> | <b>2%</b>           |

Overall, 85% of Counties Manukau residents report having access to a mobile phone, with 88% reporting access to a telephone and 80% reporting access to the internet at home. However, among Maaori and Pacific people over the age of 65 years, only 70% had access to a mobile phone, and just over 50% had access to the internet at home; and even among younger Maaori and Pacific people, only about two-thirds had internet access at home.

Older people – including those who are Maaori or Pacific – do seem to have higher rates of “telephone” access (around 90% for Maaori and Pacific people over 65 years).

### **New Zealand information from the World Internet Project, 2013**

The World Internet Project surveyed 2,006 New Zealanders aged 16 and above<sup>51</sup> using internet and telephone (including a sub-sample of individuals without access to a landline). Results are reported using either the full sample (n= 2,006) or internet users (n=1,847) as denominators. This survey goes into much more detail about *how* people use the internet (as compared with data on how many people use the internet available from other sources). Of the wide range of results available, the following are selected for their potential relevance to Counties Manukau Health communications strategies.

92% of respondents were current internet users, while 3% had previously used the internet (but were not current users) and 5% had never used the internet. The 92% of current users were classified by usage patterns into

- next-generation users (38% of respondents) - these people access the internet through multiple devices, including mobile devices, and have high online engagement by a range of indicators,
- first generation users (40%) - access the internet through fewer or more traditional devices; considered as “average” users, and
- low-level users (14%) – use internet infrequently and for fewer purposes.

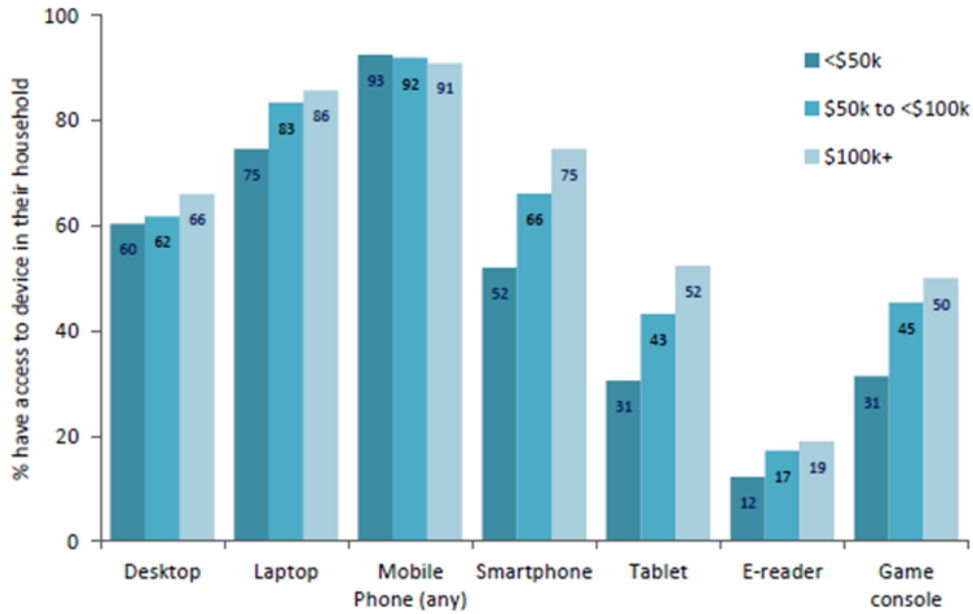
Of the internet users, 92% had access in their household to a mobile phone (any type), while 67% had access to a smartphone. When access to devices was examined by income bracket (<\$50k, \$50k to <\$100k, \$100k+), the only device for which access was not related to income was the mobile phone, with 91-93% of all households having access to a mobile phone (any type). Smartphones and tablets were highly stratified by income, with differences of around 20% between low income and high income households.

---

<sup>51</sup> Data included a simple random sample of New Zealand adults with targeted random samples of the Maaori, Pacific and Asian populations, and was weighted to account for the sampling design and characteristics of the population.

Figure 39 Devices in households by income, national data, World Internet Project 2013

### Devices in household by income

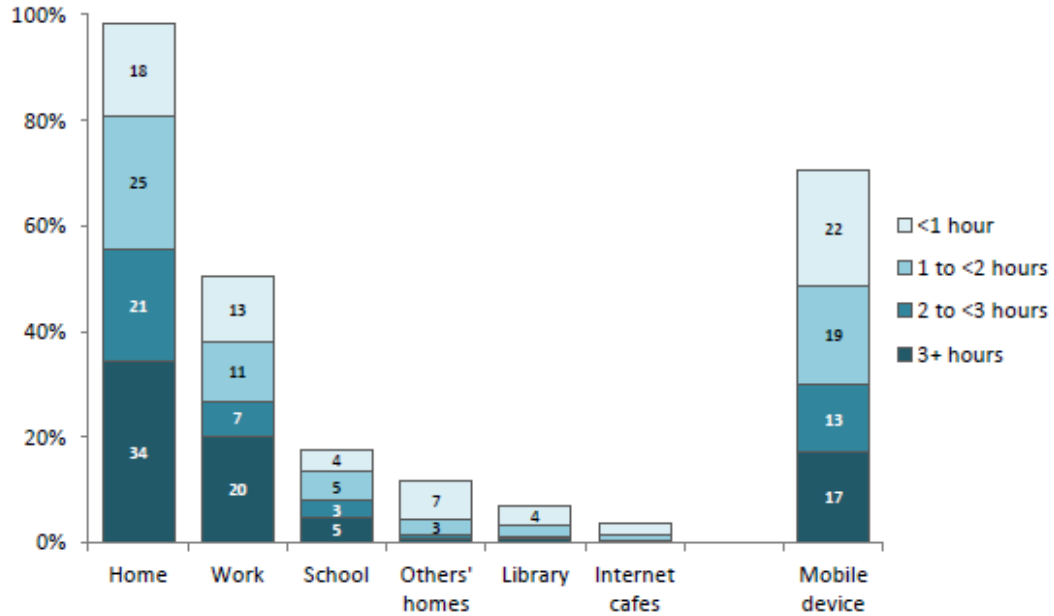


Base: Internet users.

Of people who use the internet, 98% do so at home, although they may also do so from work, school, others' homes, libraries or internet cafes (and/or mobile devices – which may either connect directly to the internet via the cellular network, or use connections established through other means at any of the above locations).

Figure 40 Hours spent online per day by location of access, national data, World Internet Project 2013

### Hours spent online per day

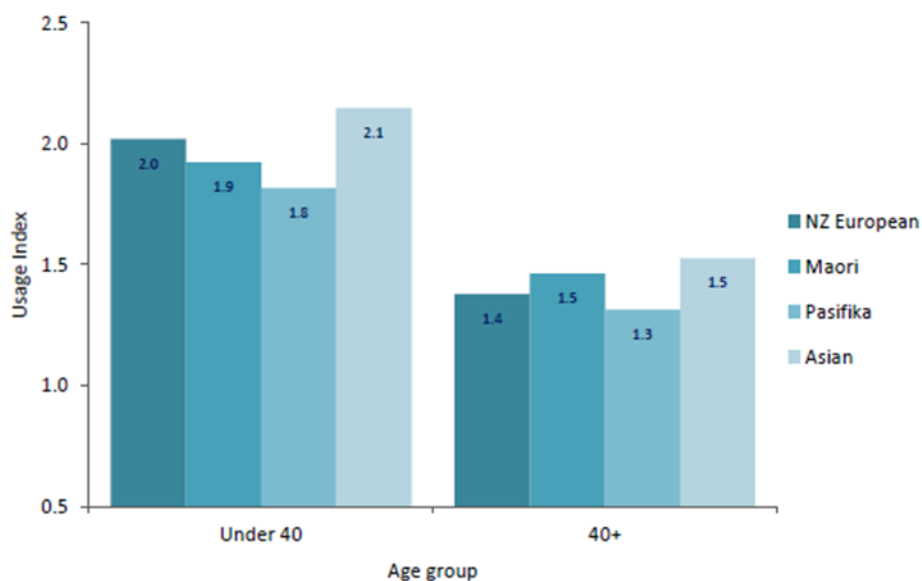


Base: Internet users | The blank space above each bar represents the percentage of people who do not access the internet from this location, or at least did not give an amount of time spent using the internet there 'on an average day'. | NB. Previous WIPNZ surveys have asked about time spent online in 'a typical week' – we have updated this to 'an average day'. While this is a useful change for home and mobile use, it may cause some challenges for respondents when deciding how to respond about internet cafes and libraries if they only go online from these locations occasionally.

Internet users were divided by ethnicity (NZ European / Maaori / Pacific / Asian) and age group (under 40 / 40+ years) with a “usage index” calculated for each sub-group. Asian internet users stand out as being the most engaged users in both age groups, with those under 40 years being particularly high-end users. Both younger and older Pacific users have a lower average usage index than the other ethnic groups.

Figure 41 Internet usage index by age and ethnicity, national data, World Internet Project 2013

### Usage Index by age and ethnicity

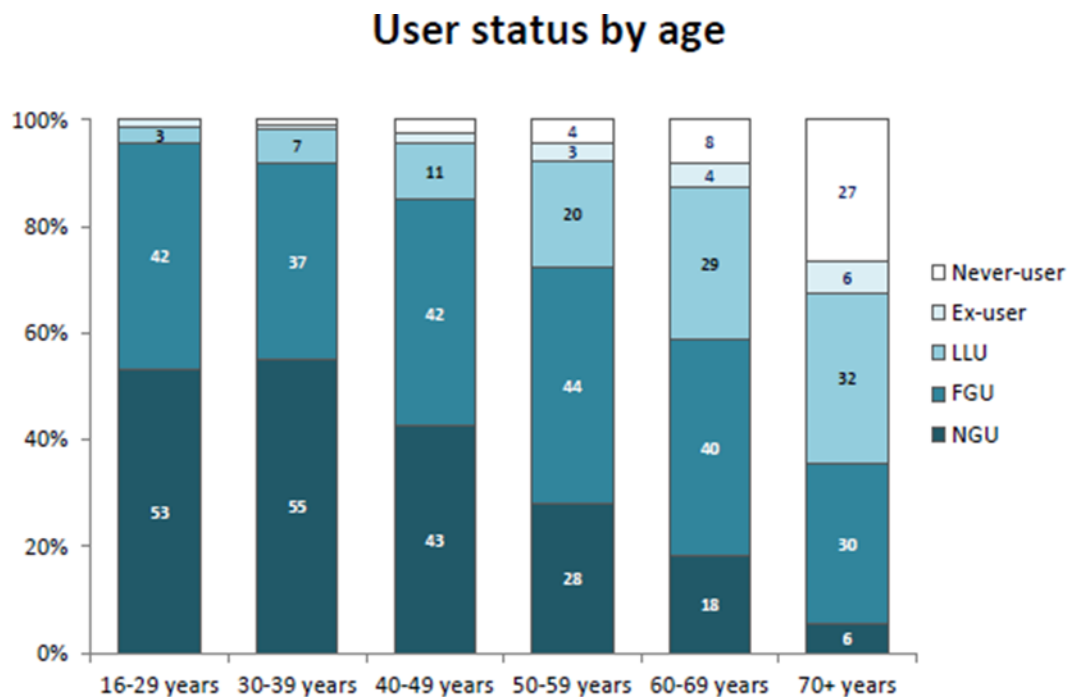


Base: Internet users in the four main ethnicity groups – other ethnicities not shown here (NZ European n=1242, Māori n=143, Pasifika n=95, Asian n=219) | Note: Māori and Pasifika respondents are younger, on average, than New Zealand European respondents – reflecting the NZ population.



Another way of looking at this is to consider the classifications of user status by age and ethnicity. Almost everyone under 40 years is online, and very few (<5%) of these are low-level users; the majority of young people are next-generation users. By contrast, one in three respondents over the age of 70 years were internet non-users, with almost another third again being low-level users.

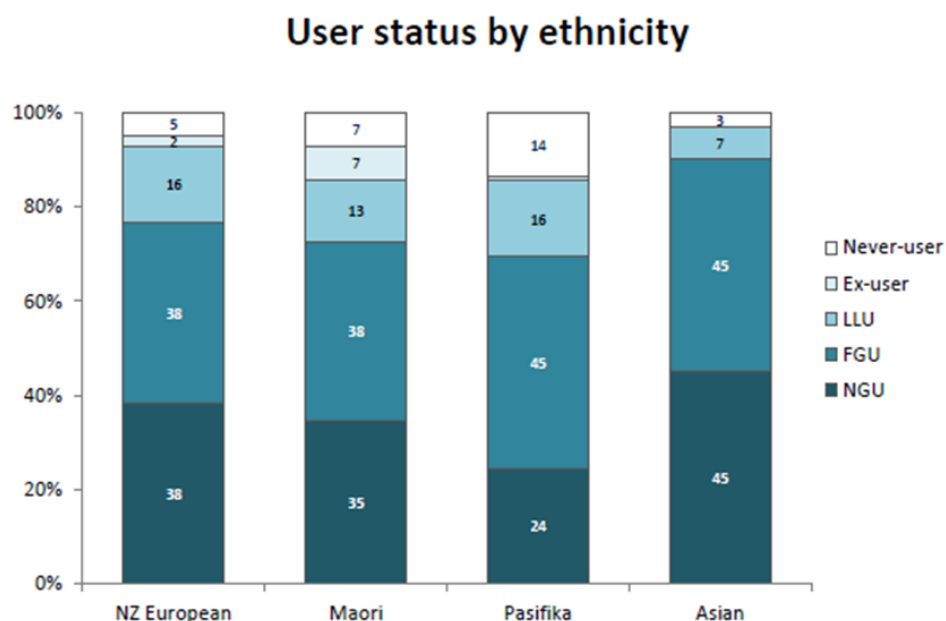
Figure 42 Internet user status by age, national data, World Internet Project 2013



Base: All respondents.

Looking by ethnicity, Maaori and Pacific New Zealanders have higher levels of internet non-use (both at 14%) than NZ Europeans (7%) and Asians (3%). Of those who are online, a much higher proportion of Asians (45%) than of other ethnic groups are next-generation users – particularly when comparing to Pacific people, less than a quarter of whom are next-generation users.

Figure 43 Internet user status by ethnicity, national data, World Internet Project 2013

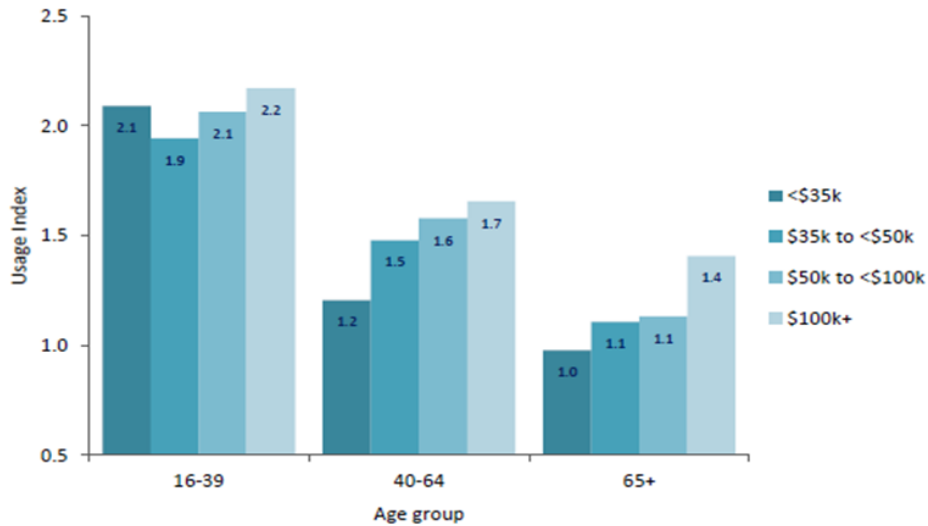


Base: All respondents.

The usage index was also calculated for sub-groups divided by age group (16-39, 40-64 and 65+) and income (<\$35k, \$35k to <\$50k, \$50k to <\$100k, and \$100k+). In general internet usage increases with household income; however the effect of household income is much greater for those aged 40 years and over. Interestingly, young people in the lowest income households do not show any signs of being digitally disadvantaged, with one of the highest usage indices of all.

Figure 44 Internet usage index by age and household income, national data, World Internet Project 2013

### Usage Index by age and household income

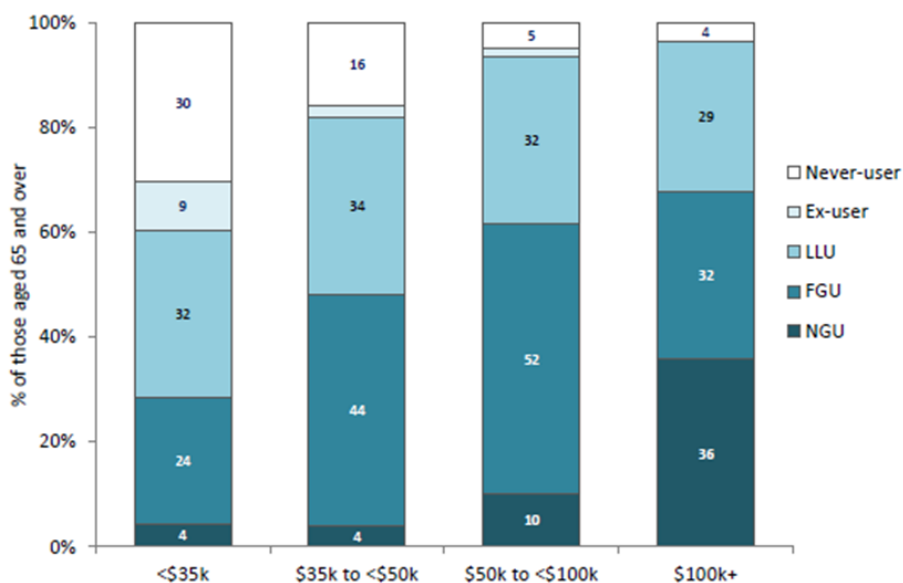


Base: Internet users.

Looking at the actual levels of internet usage by income bracket, the proportion of “low-level users” decreases with increasing income, particularly among those aged over 65 years. Among people aged 65 or over with a household income of less than \$35,000 per year, four in ten do not use the internet; and of those who do, more than half are low-level users.

Figure 45 Internet user status by income for those aged 65 years and over, national data, World Internet Project 2013

### User status by income: 65 years and over

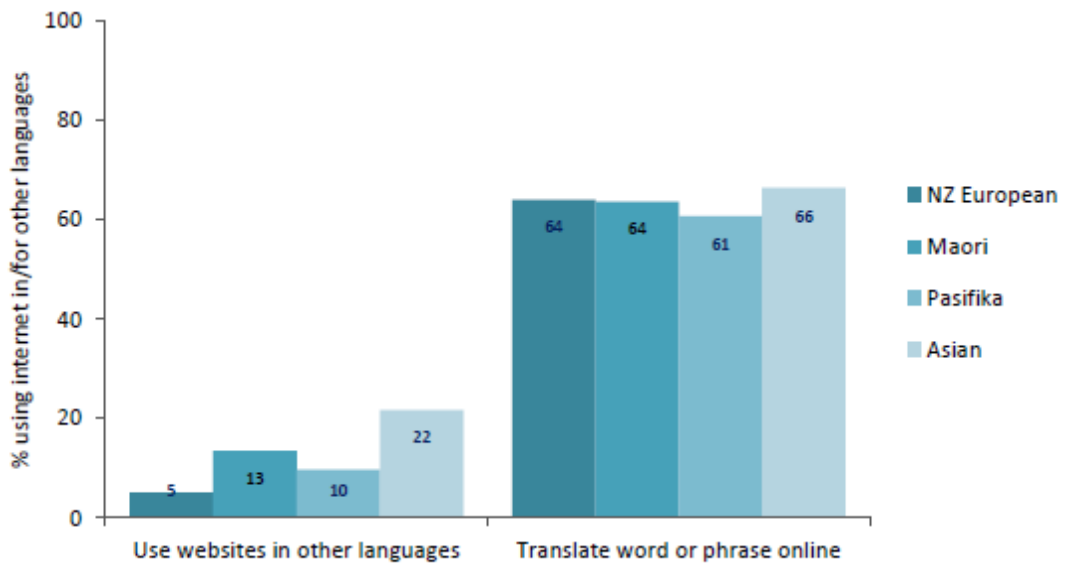


Base: All respondents

Internet users were asked about their use of websites that are mainly in a language other than English. 22% of Asian, 13% of Maori, and 10% of Pacific users responded in the affirmative to this question (as compared to 5% of NZ European users).

Figure 46 Online multilingualism by ethnicity, national data, World Internet Project 2013

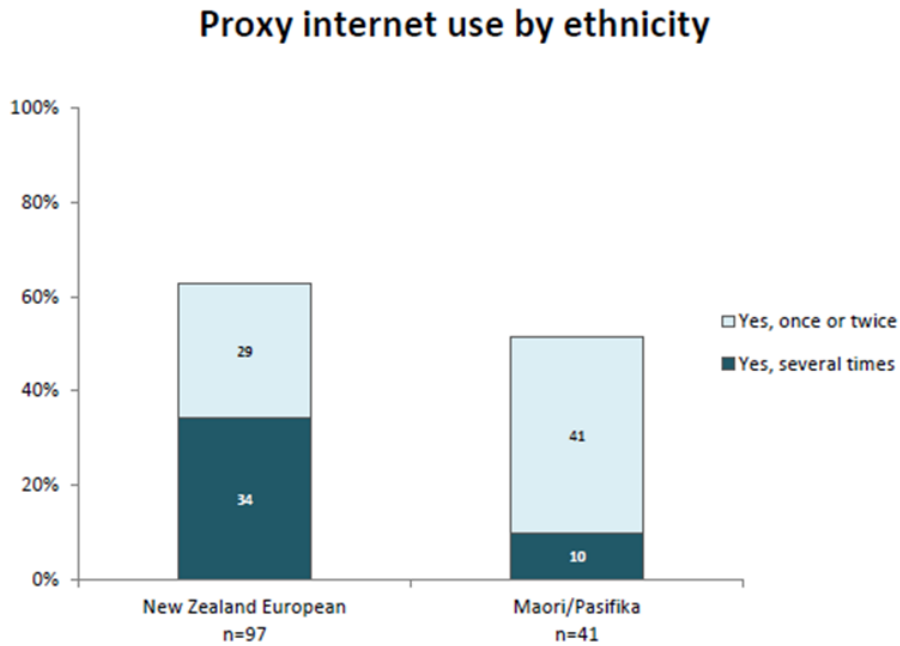
### Online multilingualism by ethnicity



Base: Internet users in the four main ethnic groups.

Looking at “proxy” internet use, six out of ten non-users had asked someone else to do something online for them in the preceding year. This was significantly different by ethnicity, with more than a third of NZ Europeans having asked someone to do something for them online several times, compared with just one in ten Maori or Pacific non-users.

Figure 47 Proxy internet use by ethnicity, national data, World Internet Project 2013



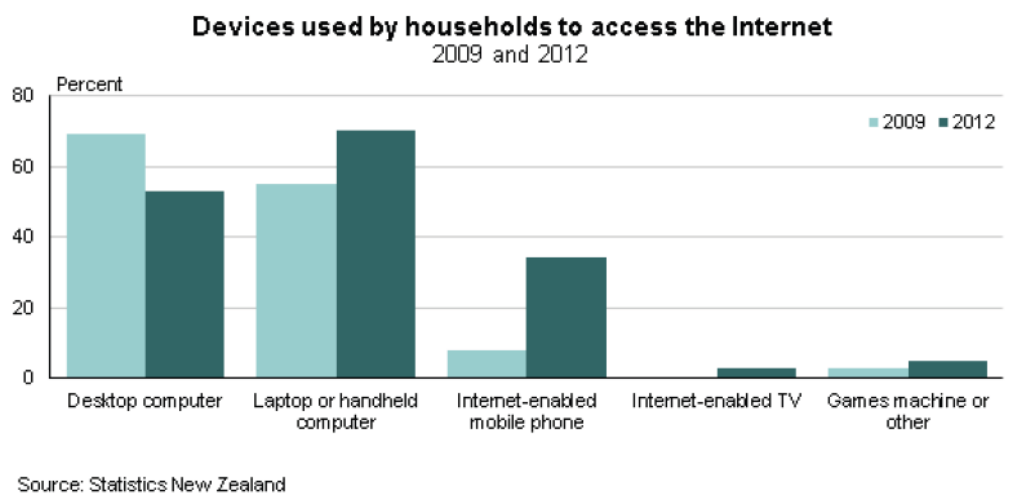
Base: Non-users | Note: Blank space represents the percentage of non-users who have not asked somebody to do something for them online.

### New Zealand data and information from the Household Use of Information and Communication Technology Survey, 2012

This survey was undertaken by Statistics New Zealand as part of the Household Labour Force Survey for the September 2012 quarter, reaching 13,046 households which represented achievement of a 76% response rate (target response rate 75%) with both household and individual surveys.

Overall, four in five New Zealand homes were connected to the internet, with a third of households (41% in Auckland) and a quarter of all recent internet users reporting having used a mobile phone to access the internet.

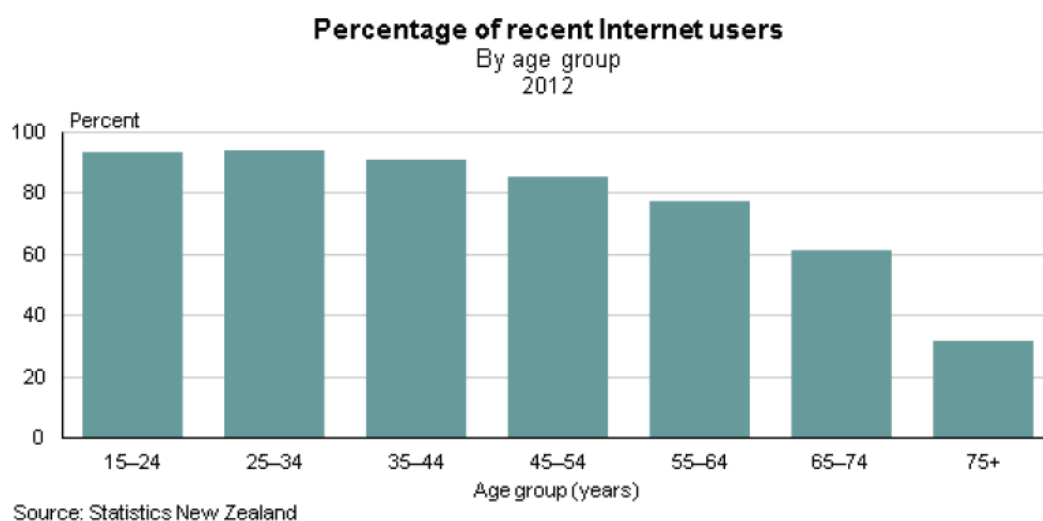
**Figure 48 Devices used by households to access the internet, national data, Household Use of Information and Communication Technology Survey, 2012**



However, looking at the actual connection type used<sup>52</sup>, only 4% of households and the same proportion of recent internet users reported having used a mobile device to connect to the internet. This apparent discrepancy seems to indicate that people are using their mobile phones to access the internet via a wireless connection which itself is connected separately from the cellular network (e.g. via telephone line).

Recent internet use varied markedly by age group, with 90% or more of individuals in younger age groups, but only 60% of those aged 65-74 years and less than a third of those aged 75 and over having accessed the internet in the preceding 12 months.

**Figure 49 Recent internet use by age, Household Use of Information and Communication Technology Survey, 2012**



<sup>52</sup><http://www.stats.govt.nz/~media/Statistics/Browse%20for%20stats/HouseholdUseofICT/HOTP2012/huict-2012-tables.xls>

## **Discussion**

The Census question relates to telecommunications technologies present in the dwelling, so does not include access that people may have elsewhere e.g. at work or in public places such as libraries (or fast food restaurants!) Levels of internet access may therefore be underestimated for some groups (e.g. technologically savvy young people who have smart phones without data plans, but are able to access internet through WiFi in public places). On the other hand, effective access may be overestimated for other groups (e.g. older people whose family members may have and use technology in the home, but who don't themselves access it at all – whether due to lack of knowledge or other reasons).

Access to mobile phones does not necessarily mean access to smart phones that are capable of running mobile applications. While the level of smart phone access is likely to increase in the future, the current level of smart phone access (or the ability to competently use a smart phone) is likely to be considerably less than the overall mobile phone access indicated by the 2013 Census – as seen in the difference between smartphone and any mobile phone access (less than three quarters of those who had access to a mobile phone having access to a smartphone), and the marked stratification of smartphone access by income, in the World Internet Survey.

Additionally, there is a key difference between technology “access” (presence in a dwelling) and usage, as outlined in the results from the World Internet Survey. Income has a marked effect on levels of use (beyond that on access), and Pacific people have notably lower usage indices and are more likely to be low-level users if they are online than people of other ethnic groups.

With significant proportions of Maaori and Pacific people (especially those the older age group) reporting no access at home to mobile phone and internet technologies – and many of those who have access being low-level users - it cannot be assumed that communications using these means will reliably reach their intended audiences among these populations with the greatest health needs and/or health service utilisation – the very ones with existing health disparities.

Of note is that Maaori and Pacific non-internet users are also much less likely to have asked someone else to do something for them online than NZ European non-users – so it also cannot be assumed that communication and interactions will be facilitated via younger members of the family.

Given the apparently greater accessibility of older “landline” telephone technologies for the older age groups in Counties Manukau, it will be important to ensure that these are used to best advantage, alongside newer technologies (despite the greater capabilities and versatility of the newer technologies). The 6,000+ Counties Manukau residents who are estimated to have no access to any telecommunications technology at home are likely to have significant health needs; ways must be found to ensure that they are catered for in any communication strategies that are developed.