Trends in Wellbeing for Māori Households/Families, 1981–2006

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TRENDS IN WELLBEING FOR MĀORI HOUSEHOLDS/ FAMILIES, 1981–2006

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Family Whānau and Wellbeing Project

FWWP was a 5-year research programme supported by the Social Science funding pool of the Foundation for Research, Science and Technology (FRST). The principal goal of this programme was to develop ways to examine and monitor the social and economic determinants of family and whānau wellbeing and how these changed over the 1981–2006 period. These results presented in this research report, funded by Ngā Pae o te Māramatanga, draw on the work of FWWP and use the same wellbeing indicators to analyse different aspects of Māori family wellbeing.

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EXECUTIVE SUMMARY

Significant changes occurred in New Zealand during the period 1981 to 2006 and unsurprisingly, these had a profound effect on Māori whānau/families and households. Changes during this period have been documented by the Family Whānau and Wellbeing Project (FWWP). Many of the trends observed for the general population also apply to Māori whānau and households. However there are significant differences and any generic application would hide the impact of changes during this period on Māori whānau/ households. This report focuses on Māori whānau/households and examines in greater depth the relationship between factors associated with wellbeing and the experience of these whānau/households during this period. The implications for policymaking practice and further research makes the availability of this information invaluable.

This report publishes findings derived from New Zealand Census data 1981–2006, and contextualises the information to illuminate relevant areas for current policy consideration. It is a timely contribution to a key policy area, namely whānau ora/family wellbeing. The report does not attempt to identify all of the policy implications from the findings but instead is a basis for informing policy.

Indicators of family wellbeing have been developed from data relating to six censuses to identify trends across 25 years. Reports and publications to date include: *Family wellbeing indicators from the 1981–2001 New Zealand Censuses* (Milligan et al., 2006); *Measuring changes in family and whānau wellbeing using census data, 1981–2006: A preliminary analysis* (Cotterell et al., 2008a); *An examination of linkages between parental educational qualifications, family structure and family wellbeing* (Cotterell et al., 2008b), and *A guide to using data from the New Zealand census: 1981–2006* (Errington et al., 2008).

Information on housing, income, occupation and ethnicity, as well as specific areas such as smoking, are also included. Unfortunately, census data are very limited and sporadic with regards to health, although there are other important sources of health information that will be briefly considered in this report to contextualise other findings relevant to hauora (health and wellbeing). These include the New Zealand Health Survey, the Child and Youth Epidemiology Service, the Youth Health Survey, and the Ministry of Social Development's Social Reports for the period 1981–2006. Other sources of information will be briefly examined from the following datasets: Survey of Family, Income and Employment (SoFIE); the Household Economic Survey (HES); the New Zealand Health Survey (NZHS); and the Household Labour Force Survey (HLFS). A thorough examination of the implications of these information sources for health and/or other wellbeing indicators for Māori remains to be done.

Trends for Māori whānau/households include both positive and negative cycles, some of which are driven by external impacts such as international economic cycles, and some of which are internal cycles such as long-term demographic shifts and changes in social behaviours (Pool & Johnstone, 1999).The data

considered here finish in 2006, but where possible the latest data available from national surveys have been used to augment these trends. For example, New Zealand entered a recession at the end of June 2008 and technically left the recession at the end of June 2009, although Statistics New Zealand commented that no significant conclusions could be drawn regarding this being a turning point in economic activity given that the June 2009 quarter growth was 0.1 percent (Statistics New Zealand, 2009b). The duration and extent of the recession will have a material effect on Māori whānau/households. Research on a recent recession has shown that recessions negatively impact Māori populations disproportionately, and that these impacts persist for longer (Blakely & McLeod, 2009).

Wellbeing trends during this 25-year period reflect periods of low and high employment, increasing housing costs, and significant changes in Government policy that impact families, including the introduction of Working for Families (WFF) in 2004. External sources confirm that there was an increase in relative poverty for single-parent families, families with three or more dependent children and Māori and Pacific families (Perry, 2009a). This is due in part to interlocking factors of high income inequality and high rates of unemployment followed by periods of high employment, decreased crowding in housing, and increases in those with secondary qualifications. These findings are consistent with other findings around income, employment and home ownership.

Income inequality and unemployment were especially noted among Māori in the early 1990s. These are associated with family structure – Māori had higher proportions of single-parent families who lost income during the period 1981–1991. Māori are more likely to be in certain occupational groups that are less secure and more buffeted during times of economic stress. Unemployment peaked in 1991 for all family types except for single-parent families, for whom unemployment peaked in 1986. Single-parent families with dependent children were also more likely to have a family member unemployed with 16 percent at each census point after 1981 (Cotterell et al., 2007). All family types experienced an increase in the proportion of families where at least one member worked more than 48 hours per week, with the largest increase in couples with independent children (ibid.).

WFF was introduced by the fifth Labour Government between 2004 and 2008, and impacted the latter period of our consideration for trends, but also has significance beyond this period. The proportion of whānau/households reliant on government assistance increased during this 25-year period. Unusually, two-parent working families became increasingly impoverished during the late 1980s and early 1990s, which prompted the major redistribution policy implemented as WFF. Cabinet papers confirm that the intention of WFF was to "assist working people, especially low and middle income families" (Cabinet Office, 2004).

Cotterell et al. (2007) also showed that housing tenure changed 1981–2001, with four of the five family types examined increasingly not living in their own dwellings. The largest increase was for single-parent families. However, crowding decreased over the same period, except in the case of single-parent families with only independent children, for whom the proportion of crowded dwellings increased slightly 1981–2006 (Cotterell et al., 2008a). Single-parent families with dependent children experienced by far the highest level of crowding during the period. Rents increased substantially during the period, as did the proportion of families paying more than 25 percent of their equivalised income in rent. Couples with dependent children saw the largest increase here, followed closely by single-parent families with dependent children, which were the most likely families to be paying more than 25 percent of their equivalised income in rent throughout the period (Cotterell et al., 2007).

Improvements in wellbeing were also experienced by Māori, such as a decline in households where no parent had any secondary school qualifications, with the biggest decrease seen for couples with dependent children (Cotterell et al., 2008a).

An increasing proportion of children are likely to be of Māori descent given the census trends of increasing identification of Māori identity and the slightly higher fertility rates among Māori relative to the general population. The effects of changes to whānau/families will therefore be of national significance for New Zealand society and not just for Māori communities and iwi. This is of particular value given the Government's recently announced Whānau Ora strategy which is intended to provide improved support to Māori whānau in need (Whānau Ora Taskforce, 2009). Identifying these long-term trends for Māori is a valuable basis for informing policy and services planning in the future.

1 INTRODUCTION

1.1 Background

Māori life expectancy has increased significantly over the past 25 years. Māori men were expected to live for 68 years and Māori women for 72 years in 1985 (Pool, 1990), increasing to 70.4 years for males and 75.1 years for females for 2005–2007 (Statistics New Zealand, 2009a). By 2008 a newborn girl could expect to live to the age of 82.2 years and a boy to 78.2 years (Durie, 2009). Survivability and longevity have policy implications for Māori whānau, including new challenges such as: how to care for chronically ill elderly; retirement; new family formation; and other phenomena associated with an ageing population. Māori remain a relatively youthful population though, with 35 percent under 15 years of age.

Understanding long-term trends and their impact on Māori whānau/families and households is an important basis for any informed policy development. Māori are a diverse population with as much intra-ethnic variation as inter-ethnic variation (Cunningham, 2008). The danger therefore of any Māori analysis is the tendency to focus on the mean rather than acknowledge the range of Māori outcomes present. However, Māori are more likely to share experiences and patterns as a population, which makes these analyses valuable. Given changing definitions of ethnicity and self-identification of Māori, it may be more accurate to assess Māori ancestry over time in order to better understand long-term trends. We have not been able to undertake this analysis in this report, but it would be useful for future analysis. Despite these limitations there is important information on trends that helps us to better understand the experiences of Māori families and households.

Quality long-term information is needed to guide policy development, determine resource allocation, shape interventions and monitor outcomes. The increasing involvement of Māori community providers in the delivery of services to Māori has expanded the need for high quality research-based information beyond academia and the policy world, and out into the community. Te Hoe Nuku Roa, the Māori longitudinal study, will aid our understanding of Māori whānau, but few publications are available to date.

The New Zealand Census offers a wealth of information for understanding and informing Māori health knowledge, policy and services planning (Cotterell, Wheldon, & Milligan, 2007). Limited use has been made of this information to date with no study of Māori household and family level variables and their application to health, for example, being undertaken. This study contributes to correcting this oversight on the assumption that household/family level variables have a great deal to offer especially in identifying modifiable variables consistent with a lifecourse and kaupapa Māori approach to health.

Household/family level indicators are relevant to increase the protectiveness and resilience of Māori whānau/households (Connolly & Doolan, 2007; Perry, 1997; Shonkoff & Phillips, 2000). Variables to be considered include family structure, geographical location, breastfeeding, housing type including crowding, income

amount and source, educational status of parents and cultural connectedness. While there has been some analysis of Māori data with the Survey of Family, Income and Employment (SoFIE), the Household Economic Survey (HES), the New Zealand Health Survey (NZHS), the Household Labour Force Survey (HLFS) and the Family Whānau and Wellbeing Project (FWWP) census datasets, it has usually been with outcomes at the individual, rather than whānau or household level. FWWP results pioneered the aggregation of census data at the household and family levels. This project extends the descriptive work of FWWP to analyse these levels, as well as individual associations with positive outcomes, for all Māori households and families in Aotearoa/New Zealand.

1.2 Overview

1.2.1 Report overview

This report describes changes in wellbeing for Māori families over the 1981–2006 period based on data from the New Zealand Census of Population and Dwellings. Changes in household composition for Māori households are also described. Māori families/households are defined by the presence of parents of Māori ethnicity – those with one Māori parent and those with two Māori parents are analysed separately.

Changes in wellbeing over the period 1981–2006 are described using a set of indicators. Families are further divided into four categories based on their usual household composition: *couples without children*, *single-parent families*, *other one-family households* and *multi-family households*. Data for the non-Māori population are included in Appendix C, to allow comparison of differences in wellbeing between the Māori population and the non-Māori population. This comparison is not conducted in the main body of the report because the primary purpose of the report is to examine the wellbeing of the Māori population in detail and not to compare it with the rest of the population.

1.2.2 Family Whānau and Wellbeing Project (FWWP)

FWWP was a 5-year research programme supported by the Social Science funding pool of the Foundation for Research, Science and Technology (FRST). The principal goal of this programme was to develop ways to examine and monitor the social and economic determinants of family and whānau wellbeing and how these changed over the 1981–2006 period. This research report draws on the work of FWWP in that it utilises the same wellbeing indicators to analyse some aspects of Māori family wellbeing.

This report owes much to the enormous effort over many years of the Centre of Methods and Policy Application in the Social Sciences (COMPASS) and its earlier designation as the Social Statistics Research Group (SSRG), The University of Auckland. They undertook the development of the indicators and datasets that have enabled this report.

1.3 Report structure

This report is structured as follows: the remainder of Section 1 details the use of census data, the family and household classifications, and the wellbeing indicators analysed in the report. Section 2 examines changes in Māori household composition 1981–2006, and Section 3 examines changes in the wellbeing of Māori families by the household types described, for the same period. Section 4 draws together the results of the previous sections and discusses trends and outcomes for different household types for each indicator. It also includes data from other analyses conducted in New Zealand, where these are relevant and available for the particular indicator under discussion. A series of appendices are included to explain aspects of the methodology used to construct the indicators and family/household classifications.

1.4 Data source and data access

All data used in this report were derived from the 5-yearly New Zealand Censuses of Population and Dwellings conducted between 1981 and 2006 by Statistics New Zealand. The research team obtained access to confidentialised unit record data through Statistics New Zealand's secure Data Laboratory facility in Auckland. None of the personal identification information supplied on the original census forms, such as name and address, is carried over to the computer records held by Statistics New Zealand, so these details are not available to users of these data. Further details on data access are given in Appendix A.

1.4.1 Information from other official sample survey datasets

The authors sought household and family level information from official statistics sample surveys including the HES, HLFS, SoFIE, NZHS and the General Social Survey (GSS). All of these studies involve household-based samples and include large Māori sub-samples that would be amenable to distinct analysis for Māori households. Unfortunately, none of them have published information on Māori families or households, with the exception of the family contact information from the GSS.

For consideration for future research, some of these surveys have data available to researchers in the form of Confidentialised Unit Record Files (CURFs). These are data sets that have potentially identifying data removed and various other modifications made to protect confidentiality; they are also often offered as subsets, e.g. 10 percent of the sample. CURFs are becoming more commonly developed, especially by Statistics New Zealand and other government agencies for the purposes of encouraging secondary data analysis. However, accessing these is beyond the scope of the current project.

1.4.2 Information from public good funded research projects

Several large scale research projects contain information on Māori families and some of these are already being used as sources of detailed information about family-level determinants and outcomes for Māori (see Marie, Fergusson, & Boden, 2008a, 2008b, 2008c, 2008d, 2009). These projects include the Christchurch Health and Development Study (CHDS), the Dunedin Multidisciplinary Health and Development Study, Te Hoe Nuku Roa, Youth Health 2000 and 2007, and the new Growing Up in New Zealand project. Some of these projects have established protocols for external researchers to analyse their data while others prefer research projects to be led by an existing co-investigator. All of these studies could provide useful insights into the determinants and outcomes of family- and household-level wellbeing for Māori. Again, accessing this information is beyond the scope of this project.

Access to data from other sources was limited to already published information or use of the Table Builder facility on the Statistics New Zealand website.

1.5 Classifying families and households

Statistics New Zealand notes that:

> A 'family nucleus' is a couple, with or without children, or one parent and their child(ren) usually resident in the same dwelling. The children do not have partners or children of their own living in the same household. People who usually live in a particular dwelling, and are members of a family nucleus in that dwelling, but who are absent on census night, are included, as long as they are reported as being absent by the reference person on the dwelling form.*

* http://www.stats.govt.nz/Census/about-2006-census/information-by-variable/family-type.aspx, accessed 9 April, 2010.

In contrast, a household is defined as any group of families or individuals living in the same dwelling, regardless of their relationships to one another. Therefore, census families are wholly contained within households. However, it is important to note that not all households contain families and also that some households are made up of a family or families cohabiting with non-family members.

In this report the primary focus is the census family unit. Indicators are presented for these units in four categories: *couples without children*, *single-parent families*, *other one-family households*, *multi-family households*. The full classification scheme and the definitions used for this report are detailed in Table 1.1. The second and third categories have at least one child by definition and, as we did not break things down any further, there is no restriction in those categories on age of children – the only requirement is to be living with parent(s) and thus identified as dependent/independent children by the census. In previous FWWP reports the categories were broken down to, for instance, *couples with dependent children* and *couples with only independent children* – defined based on considerations of age and employment status. However, the distinction is not material for the work-related indicators presented as the outcomes of children are not taken into account, e.g. in the *median equivalised income* and *low income* indicators, or those that specifically refer to parents, as for *lack of paid work*. Terminology used in this report is consistent with FWWP's recent report on the wellbeing of Pacific families (Cotterell et al., 2009).

There are many definitions of whānau/family with most describing it as based upon whakapapa. Early definitions referred to three or four generations living in the same household or compound (Walker, 2006). Whānau is more than simply an extended family network (Durie, 1998b). They share a common whakapapa (descent from a shared ancestor), although contemporary definitions include not just whānau whakapapa but also whānau kaupapa (interests in common which perform the core functions of whānau).

'Whānau' has great policy currency, an example of which is the Whānau Ora Taskforce (2009–2010). This central government initiative seeks reorientation of health and welfare policies/programmes towards whānau rather than individuals. There are shortcomings in data on Māori whānau that need to be borne in mind when developing policy for Māori based on existing data. For example, recent work on Māori family wellbeing from the CHDS highlighted issues of limited precision and generalisability of research based on the small number of Māori whānau at a single point in time (Marie et al., 2009). In the same study, they also found that examining family-level outcomes for Māori highlighted different determinants than for non-Māori families (Marie et al., 2008a, 2008b, 2008c, 2008d, 2009).

As with other New Zealand families, Māori whānau continue to change with shifting demographic, social and economic patterns. Family composition has been changing, although only marginally, with increases in the numbers of people who live together and do not marry, single-parent families and people living alone (Families Commission, 2008). Despite this, in 2006 76 percent of partnered people were married, the divorce rate was still low at 11.9 percent. The marriage rate was 13.9 percent and 34 percent of marriages were remarriages. Single-parent families comprised 10 percent of all households and 21 percent of households with dependent children, and these proportions were expected to remain relatively stable until 2021 (ibid.). Increased life expectancy is changing social patterns for families and households with an increased number of people living longer, responsible for aged parents, and spending longer in marriages or remarrying. Interactions between social patterns such as demography and economic cycles impact on families and households by shaping the decisions that individuals, families and

communities make, and thereby changing them. During times of economic recession, for example, it is more likely that families will group together in multi-family or multi-generational households.

Family function is more important for wellbeing than family form, as the latter is affected by factors such as:

- the structure of the labour market (where work is available),
- demographic shifts such as delayed fertility resulting in fewer and later births,
- mobility and more women working,
- costs of housing,
- technology (the ability to 'stay in touch' even when living long distances apart),
- changed social roles such as greater participation of men in raising their children.

However, function changes little over time, as the basis for reproducing and raising the next generation, providing social identity, values, cohesion and support remains the basis of any family unit.

Families live in households. The question as to whether a household is a family has also become more complex as unrelated individuals in a household may perform the function of a family, while related individuals in multiple households may also be a family. Households are the basis of census information.

1.6 Determining the ethnicity of households

One of the primary aims of this report is to investigate changes in wellbeing for what we have defined as 'Māori' households – such a definition is not clear cut. Is it a household where one of the adults present identifies as Māori, or only where at least two adults do, or do the majority of household members have to? Given that ethnicity is identified as an individual personal trait in the census (Statistics New Zealand, 2004), can we even meaningfully identify the 'ethnicity' of a household or family?

The issue of how to identify family and by association household ethnicity has provoked considerable discussion among academics and analysts who seek to understand the impact of ethnicity in social policy (for example see Callister, 2006; Callister, Didham, Newell, & Potter, 2007; Rochford, 1996).

Ethnicity in itself is an area of considerable complexity and debate in social research. Increasing levels of inter-ethnic marriage and increasing numbers of people with multiple ethnic identities make it difficult for researchers to use and analyse ethnicity data. Statistics New Zealand recently published on its website a series of informative papers that discuss these issues and provide examples for

TABLE 1.1: Census usual household composition categories and report household type

Usual household composition	Household type
Couple only	Couple-only households
One-parent family	Single-parent family households
One-parent family plus others	
Couple with children	Other one-family households
Couple only plus others	
Couple with children plus others	
Two two-parent families with or without children	Multi-family households
Two-parent plus one-parent family	
Two one-parent families	
Three or more families	

researchers on how to gather, use and interpret ethnicity data.†

The method we employ for this report is to define a household as Māori where at least one of the adults identifies as Māori, which is the same definition as used in the longitudinal study of Māori households running since 1994 (Te Hoe Nuku Roa). This approach looks at households in which there is a member of Māori ethnicity, rather than at 'Māori' households, i.e. ethnic identification remains at the individual level and we look at the family and household environment of the individual. Non-family entities and people not related to the family unit are therefore excluded.

The statuses of the adults in the household (in terms of employment, income level, educational attainment and similar) play the major role in determining the level of wellbeing in most households. There are some situations where parents present are unemployed or have no educational qualifications, and so adult children who have acquired educational qualifications and/or are in full-time employment may play a more substantive role in determining the level of wellbeing, but these are not captured separately in our analysis.

1.7 Measuring the wellbeing of 'Māori' households

Our use of census data allows for an assessment of continuity and change in societal patterns over a long segment of time. Information obtained from the census covers (almost) all members of the population, allowing us to examine the wellbeing of all New Zealanders, as well as providing specific information on different population groupings, as in this case with Māori households.‡

The census collects information on all individuals living in common dwelling units (households). The data also associate individuals within households into family groups. We can conduct household- and family-level analyses, acknowledging the fundamental interdependence between family members and showing how the impact of wider change has varied for different types of families.

The disadvantages associated with using census data to measure changes in family wellbeing are linked to the limited range and depth of information collected, the frequency of collection for some data, and the way in which family types are defined and measured. For the purposes of creating indicators to measure changes in wellbeing, we are constrained by the information available through census data. Family and household wellbeing may be influenced by other factors (e.g. the perceived quality of family/household relationships) for which no census information is available.

The lack of suitable information also means that some indicators end up being indirect proxy measures for particular attributes of interest. For example, we include a health indicator examining changes in the proportion of families with an adult receiving health-related benefits, rather than any actual measure of the state of physical health of a family. There are also some limitations in interpreting change using some indicators. For example, income data are defined in banded categories rather than discrete amounts; our 'median equivalised income' indicator is based on these data, and uses medians of the band categories, which reduces its accuracy.

The lack of data availability can also constrain time series analysis. Some census questions that may be relevant to family/household wellbeing are no longer asked (e.g. housing insulation), while others (e.g. on smoking) are included on an irregular basis (1981, 1996, 2006 in our study period). This means that the monitoring of changes in some domains is less frequent and less continuous than ideal.

† http://www.stats.govt.nz/reports/analytical-reports/review-measurement-of-ethnicity.aspx, accessed 9 April 2010.

‡ For information on census coverage, see Statistics New Zealand, 2001.

Finally, the census definition of 'family' only incorporates those members who live within the same household. Census wellbeing measures may thus be poor indicators for families whose members do not all reside within the one household. In particular, this relates to separated/divorced parents who usually share custody of their children, and children who live across two households. The ability to monitor the wellbeing of those in extended family situations is also constrained by this household-based definition of family.

1.7.1 Wellbeing indicators

The original set of indicators used for this study was obtained from the work of Milligan, Fabian, Coope, and Errington (2006). The main FWWP report based on these indicators (Cotterell, von Randow, & Wheldon, 2008a) describes various changes to and exclusions from the original set.

This report presents overall results for Māori families using that same resulting set, described in Table 1.2 below. The indicators used are for outcomes that are readily modifiable by policy or other interventions. The health domain includes an indicator for smoking that was not presented in earlier FWWP results reports; this and the additional information on face-to-face contact report on important areas relating to Māori wellbeing. Unfortunately, we were not able to extract any cultural expression indicators from this dataset, but acknowledge their value for Māori identity.

TABLE 1.2: Wellbeing indicators presented

Wellbeing domain	Indicator name	Definition
Income	Median equivalised income	Median real, gross equivalised household income. Equivalised income is gross income adjusted for household composition using the Revised Jensen Scale (Jensen, 1988) and expressed in 1999 dollars using the March quarter consumers price index (CPI) (base 1999) for the relevant year (Statistics New Zealand, 2005)
	Low income	The proportion of households whose median real, gross equivalised income is less than 60 percent of the median equivalised gross household income
Education	Any educational attainment	The proportion of households where no adult has any formal educational qualification
	Post-secondary educational attainment	The proportion of households where no adult has any post-secondary qualification
Work	Families without paid work	The proportion of households with no adult engaged in formal paid employment
	Long working hours	The proportion of households where at least one adult works more than 48 hours per week
Housing	Home ownership	The proportion of families that do not live in owner-occupied dwellings
	Rental affordability	The proportion of households in rented dwellings, whose weekly rent is greater than 25 percent of the gross equivalised household income
	Crowding	The proportion of households living in dwellings that require at least one additional bedroom to meet the sleeping needs of the household
Health	Health-related benefits	The proportion of households with at least one adult receiving either a sickness or invalid's benefit
	Smoking	The proportion of all households with one or two Māori parents present and with at least one parent who smokes cigarettes

1.8 Household types and the presentation of results

In the case of the household crowding indicator, no results are presented for couple-only households; they are excluded from consideration because of the limited applicability of the crowding concept to their housing circumstances. Household types that do not identify families are excluded from our analyses. These differ across census years, and include:

- Non-Family Households
- One-Person Households
- Not Elsewhere Classified, i.e. visitors only
- Household of Unrelated People
- Other Multi-Person Household Not Further Classifiable

Due to missing data in census variables, both raw collected and derived, there are also family type classifications that are incomplete and thus excluded from our analyses, e.g. Household Not Classifiable, Household Composition Unidentifiable.

All of the indicators with percentage-based outputs (i.e. all except median income) are defined so that *high* values have *negative* connotations, for consistency across indicators and the other reports from FWWP.

Further to the discussion of median income earlier, the issue of having banded income data is greater when combined with the equivalising of income and measuring medians for single-parent families. The ubiquitous presence of only one income in these families, and the resulting clumping of values at the band medians, mean that to see a visible difference would generally require a whole band shift. This effect can be seen in tables presented in this report, where the analysis of all Māori families and also those of most of the sub-groups report median equivalised income for single-parent families to be: $16,708 in 1986; $14,565 in 1991; and $14,311 in 1996.

2 CHANGES IN MĀORI HOUSEHOLD COMPOSITION OVER TIME

As described earlier, 'Māori households' have been defined by the presence of at least one adult of Māori ethnicity. This section reports on the changing distributions of Māori households over the 1981–2006 period, looking at census 'usual household composition' categories and the number of children present, within each of the four household types used for the project, as described in Section 1.5.

2.9 Usual household composition

Numbers of certain family types increased, sometimes significantly, as shown in Table 2.1. However, what is important is to look across time at the proportions of families as this gives us a clearer picture about trends relating to family composition.

TABLE 2.1: Distribution of composition of Māori households as at census years 1981–2006

Household composition	1981	1986	1991	1996	2001	2006
Couples without children	**14.1%**	**15.0%**	**15.8%**	**18.9%**	**20.2%**	**21.6%**
Couples only	13,095	14,778	17,808	28,404	28,032	33,744
Single-parent families	**13.0%**	**17.5%**	**25.9%**	**24.4%**	**26.4%**	**24.4%**
One-parent family	8,886	12,387	21,408	25,590	25,578	27,393
One-parent family plus others	3,168	4,932	7,665	11,133	11,022	10,764
Other one-family households	**68.3%**	**59.9%**	**51.7%**	**48.2%**	**46.9%**	**45.7%**
Couples only plus others	1,701	1,866	2,301	5,409	4,626	5,349
Couples with children	53,994	50,496	50,046	59,502	53,151	59,145
Couples with children plus others	7,728	6,786	5,751	7,560	7,365	7,062
Multi-family households	**4.7%**	**7.6%**	**6.6%**	**8.5%**	**6.5%**	**8.3%**
Two two-parent families with or without children	1,890	1,776	1,713	3,591	2,919	903
Two-parent plus one-parent family	1,635	3,342	3,345	5,160	2,187	2,640
Two one-parent families	513	1,584	1,857	3,102	15	2,619
Other two-family household	–	–	–	18	3,042	5,892
Three or more families	288	774	549	975	891	927

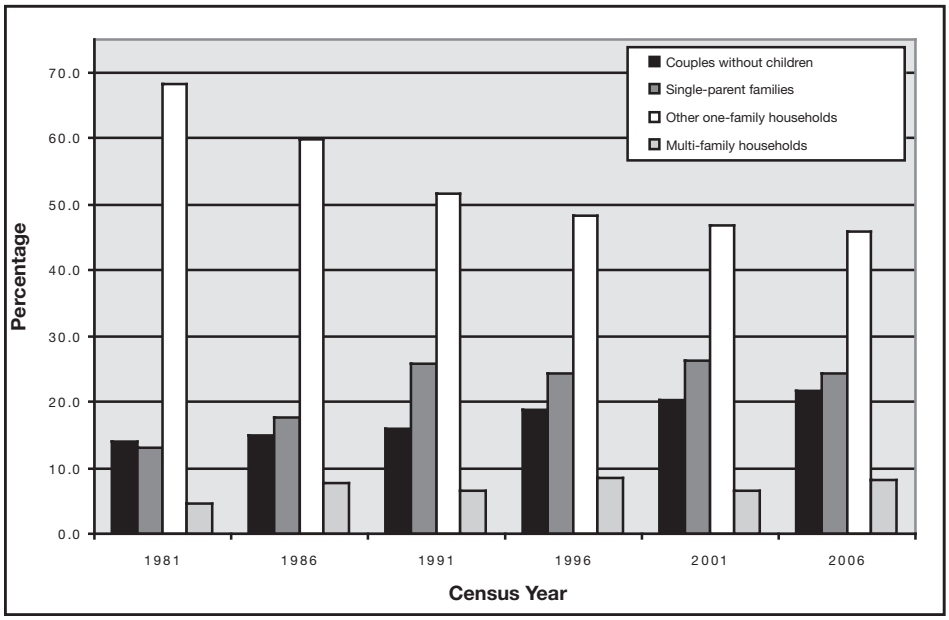

FIGURE 2.1: Distribution of composition for households with at least one Māori adult at census years 1981–2006

Summary

Māori couples with children, e.g. other one-family households, became less common over the period, accounting for 23 percent fewer Māori households in 2006 than in 1981 – the most significant change appears to have occurred from 1981 to 1991. In contrast there was a steady increase in couples without children. Similarly there was an increase in the proportion of single-parent families between 1981 and 1991, but this then stabilised. Their numbers increased, but they accounted for a lower proportion of total families in 2006 than in 1991. Multi-family households varied across the period, but they always made up a much smaller proportion than any other household type. Multi-family households increased between 1981 and 1991 and then remained relatively stable (much like single-parent families).

3 CHANGES IN FAMILY WELLBEING FOR MĀORI FAMILIES, 1981–2006

3.1 Income

3.1.1 Equivalised income

Indicator definition: Median equivalised real household income for households where one or two Māori adults are present.

For the purposes of the analyses in this report, median equivalised real income is median gross income adjusted for household composition using the Revised Jensen Scale (Jensen, 1988) and expressed in 1999 dollars using the March quarter CPI (base 1999) for the relevant year (Statistics New Zealand, 2005).

Summary points for median equivalised income

Households with one Māori adult

There were enormous income differences between single-parent families and multi-family households on the one hand, and other household types on the other. All household types experienced increases in median equivalised incomes over the whole period. However, declines were seen for couples without children and other one-family households between 1981 and 1991; the growth in real income for these household types occurred between 1991 and 2006.

Households with two Māori adults

Median equivalised income increased over the period as a whole, for all household types with two Māori adults. However, couples without children and other one-family households initially saw decreases between 1981 and 1991. For all family types the largest increases occurred between 2001 and 2006. Two-Māori-adult households had lower median incomes than one-Māori-adult households, except in the case

TABLE 3.1: Median equivalised household income, by household category, 1981–2006, for households with one Māori adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	$50,000	$45,388	$39,945	$46,415	$48,163	$52,041
Single-parent families	$13,203	$16,708	$14,565	$14,311	$13,309	$16,715
Other one-family households	$32,619	$31,366	$31,741	$34,276	$37,665	$43,006
Multi-family households	$14,370	$16,708	$14,565	$15,758	$18,282	$23,992

TABLE 3.2: Median equivalised household income, by household category, 1981–2006, for households with two Māori adults

Household category	1981	1986	1991	1996	2001	2006
Couples without children	$40,000	$39,016	$30,008	$35,927	$38,679	$46,062
Other one-family households	$26,777	$27,197	$24,964	$26,551	$29,297	$35,745
Multi-family households	$22,087	$25,993	$23,735	$26,249	$28,748	$34,690

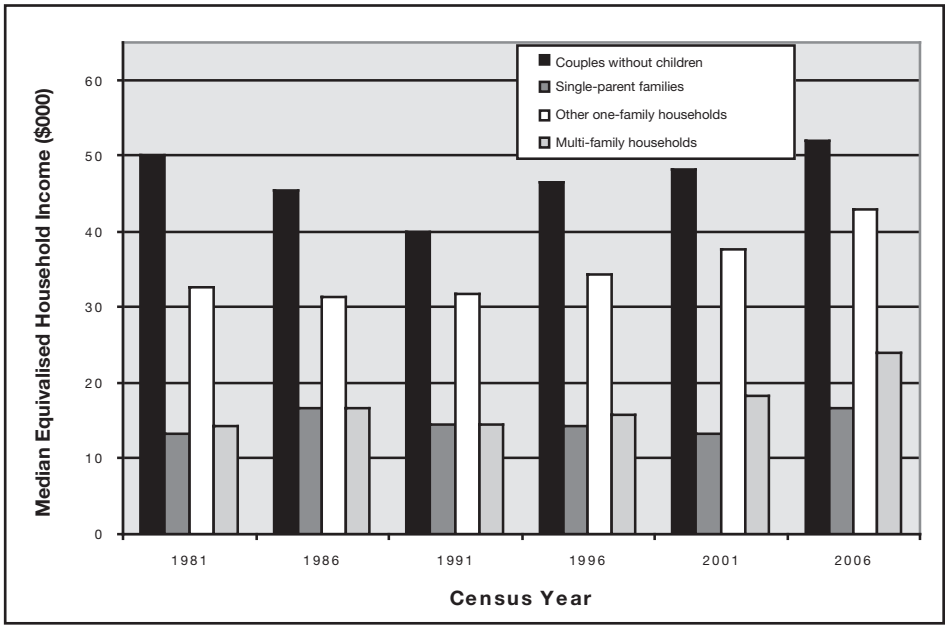

FIGURE 3.1: Median equivalised income, by household category, 1981–2006, for households with one Māori adult

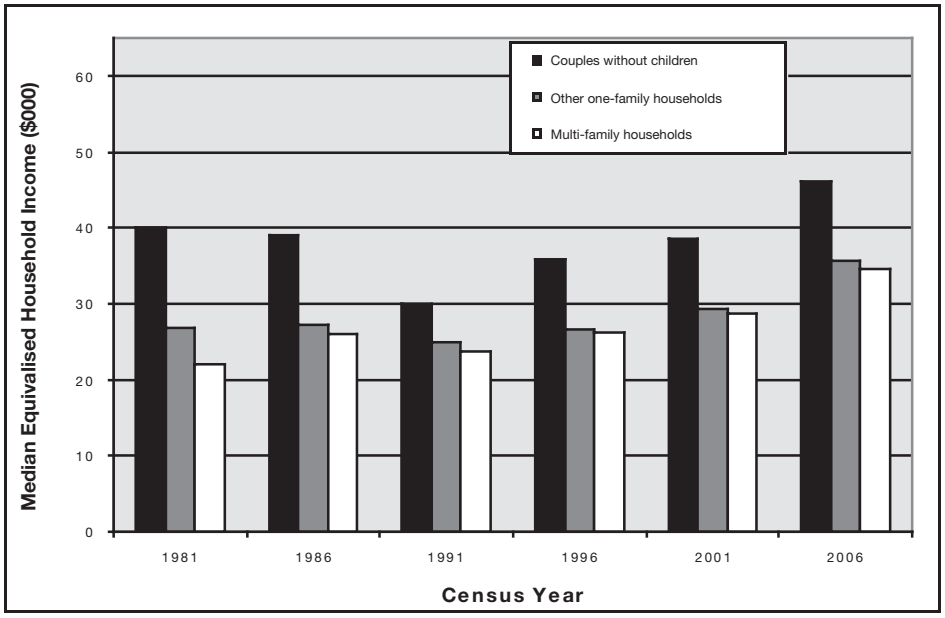

FIGURE 3.2: Median equivalised income, by household category, 1981–2006, for households with two Māori adults

of multi-family households, who had the lowest median incomes in general along with single-parent families in the one-adult case.

3.1.2 Low income

Indicator definition: The proportion of all households with one/two Māori adults present, whose equivalised gross income is less than 60 percent of the overall median equivalised gross household income.

TABLE 3.3: Low income, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	18.8	9.5	10.4	15.2	15.7	15.2
Single-parent families	72.2	66.9	75.0	71.6	73.5	69.3
Other one-family households	24.3	20.4	17.4	16.7	16.5	15.3
Multi-family households	63.7	60.1	58.6	55.0	57.2	50.0

TABLE 3.4: Low income, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	27.9	15.3	20.7	25.3	23.0	20.4
Other one-family households	36.1	31.1	30.3	29.9	28.5	25.0
Multi-family households	49.4	34.2	32.8	32.3	32.8	28.1

Summary points for low income

Households with one Māori adult

The proportions of families with low incomes declined over the period for all family types. Almost 70 percent of single-parent families and 50 percent of multi-family households were in the low income category in 2006 compared with 15 percent for other one-family households and couples without children. The largest decrease in proportion over the period was for multi-family households, at 13.7 percent.

Households with two Māori adults

As with the previous summary, proportions of families with low incomes declined over the period for all family types. Multi-family households again saw the greatest decline, from 49.4 percent to 28.1 percent, but they saw the highest proportion on low incomes of all household types at every census point.

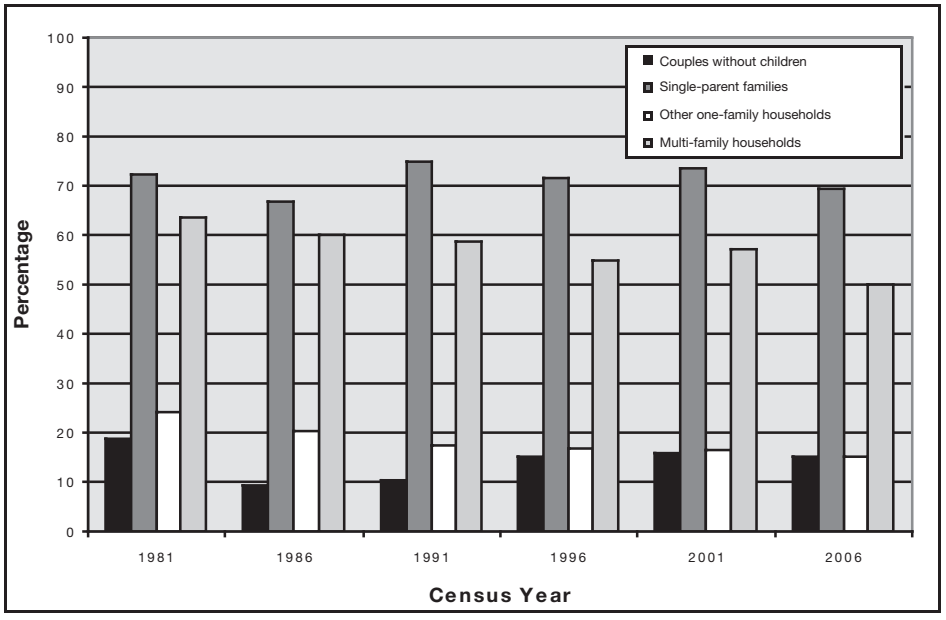

FIGURE 3.3: Low income, by household category, 1981–2006, for households with one Māori adult

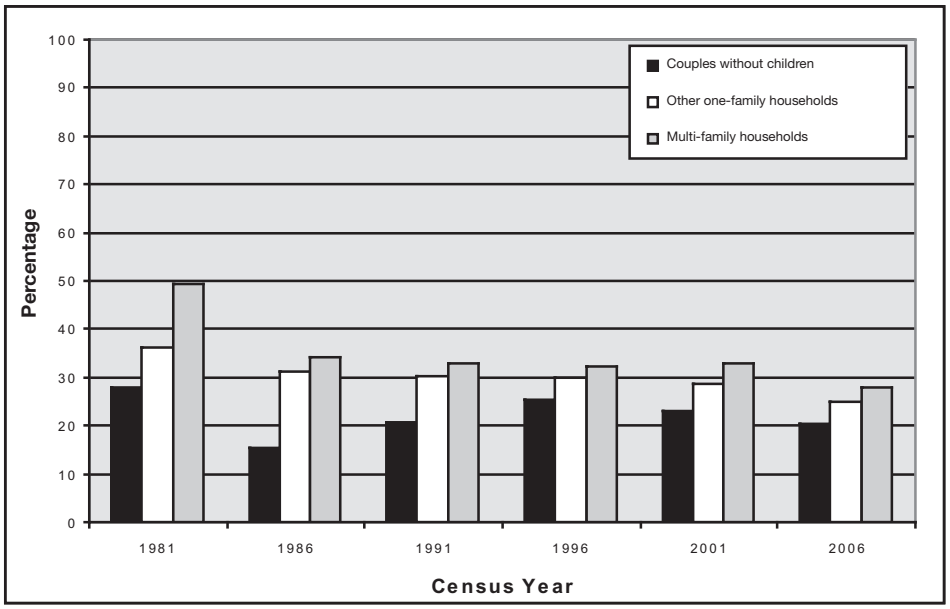

FIGURE 3.4: Low income, by household category, 1981–2006, for households with two Māori adults

3.2 Education

3.2.1 Educational attainment

Indicator definition: The proportion of all households with one/two Māori adults present where no adult has any educational qualifications.

Summary points for educational attainment

Households with one Māori adult

There was a decline in the proportion with no adults with educational attainment across the period for all family types (that is, everyone is doing better). Single-parent fared the worst at every time point, but they also saw the biggest improvement of almost 40 percent between 1981 and 2006.

Households with two Māori adults

There were decreases over the time period for all household types with two Māori adults (that is, they improved in adult educational attainment). However, all but multi-family households fared worse than their counterparts with one Māori adult at every time point; they are doing worse, and multi-family households were still in a worse position than the other household types. In both cases the ordering changed with couples without children faring better than other one-family households in 1981 but worse than them in 2006.

Although there was an overall increase in educational attainment, in 2006 there were still high proportions of households with adults with no educational qualifications, e.g. 43 percent for single-parent families and 12.2 and 22.4 percent of other one-family households with one and two Māori adults, respectively.

TABLE 3.5: Lack of any educational attainment, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	39.4	27.3	27.7	31.4	21.0	17.9
Single-parent families	82.7	73.0	69.6	69.6	50.1	43.3
Other one-family households	46.5	35.1	29.6	29.4	16.3	12.2
Multi-family households	76.8	69.7	61.6	61.1	42.4	36.0

TABLE 3.6: Lack of any educational attainment, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	61.7	48.9	46.0	50.4	31.4	27.4
Other one-family households	68.7	53.4	46.6	48.6	28.8	22.4
Multi-family households	76.0	61.6	52.3	55.0	35.3	30.4

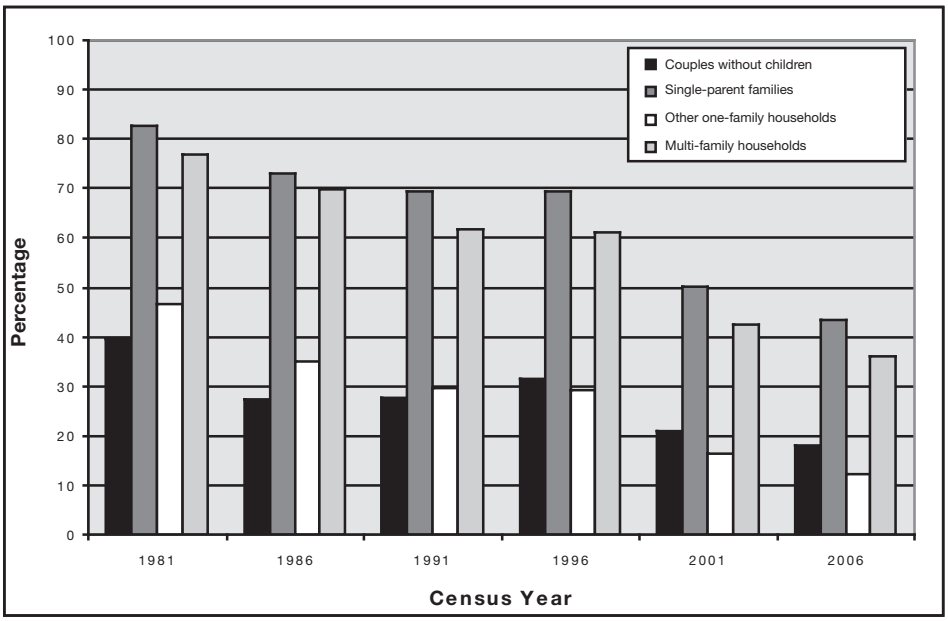

FIGURE 3.5: Lack of any educational attainment, by household category, 1981–2006, for households with one Māori adult

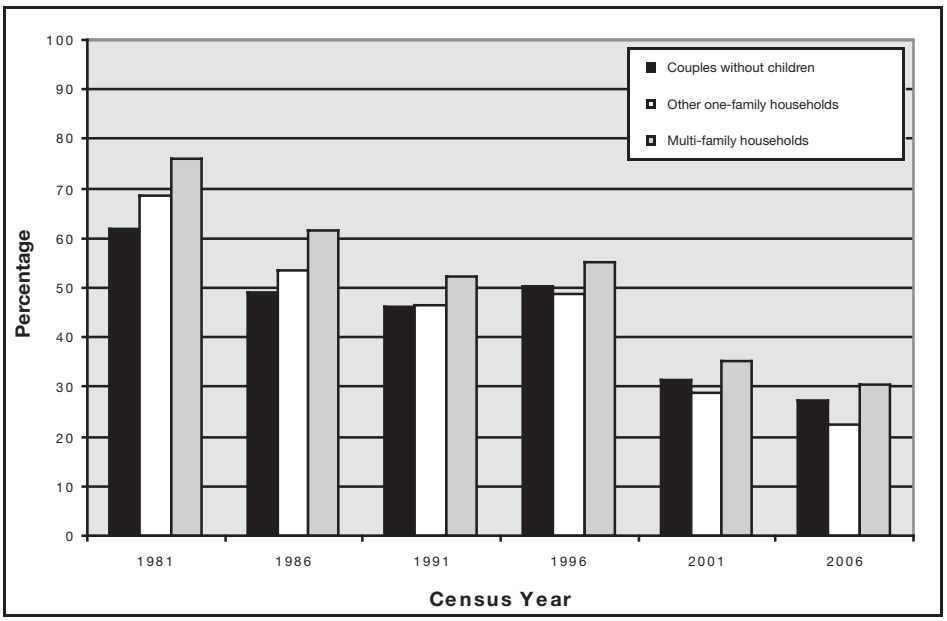

FIGURE 3.6: Lack of any educational attainment, by household category, 1981–2006, for households with two Māori adults

3.2.2 Post-secondary educational attainment

Indicator definition: The proportion of all households with one/two Māori adults present where no adult has any post-secondary qualification.

Summary points for post-secondary educational attainment

Households with one Māori adult

This indicator saw an improvement for all household types with one Māori adult. However, in 2006 there were still rather high proportions, around 70 percent, of single-parent families and multi-family households in this category where adults lacked post-secondary qualifications. The largest decline, or 'improvement' over the period, of over 30 percent, was recorded by other one-family households.

Households with two Māori adults

There were consistent declines over the period in this indicator, for all household types, with

TABLE 3.7: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	65.6	49.9	44.1	48.3	43.2	39.9
Single-parent families	94.9	88.8	81.4	83.9	74.6	75.0
Other one-family households	69.6	53.8	45.1	49.3	42.4	38.5
Multi-family households	91.5	85.6	75.6	77.2	68.3	69.1

TABLE 3.8: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	84.4	69.5	60.5	66.6	55.0	54.3
Other one-family households	86.8	71.8	61.2	66.4	56.0	53.0
Multi-family households	93.3	79.2	66.3	71.7	61.0	62.1

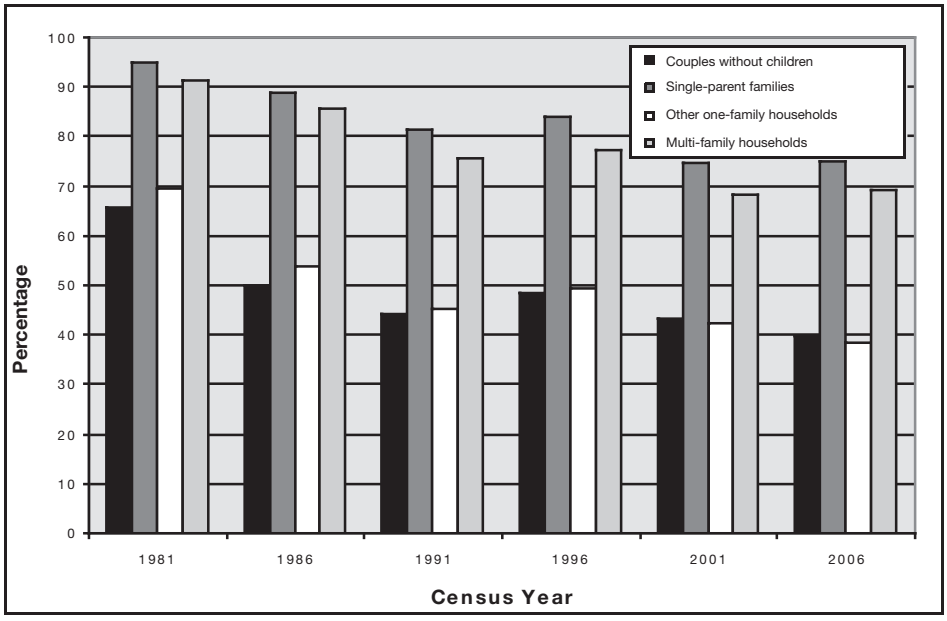

FIGURE 3.7: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with one Māori adult

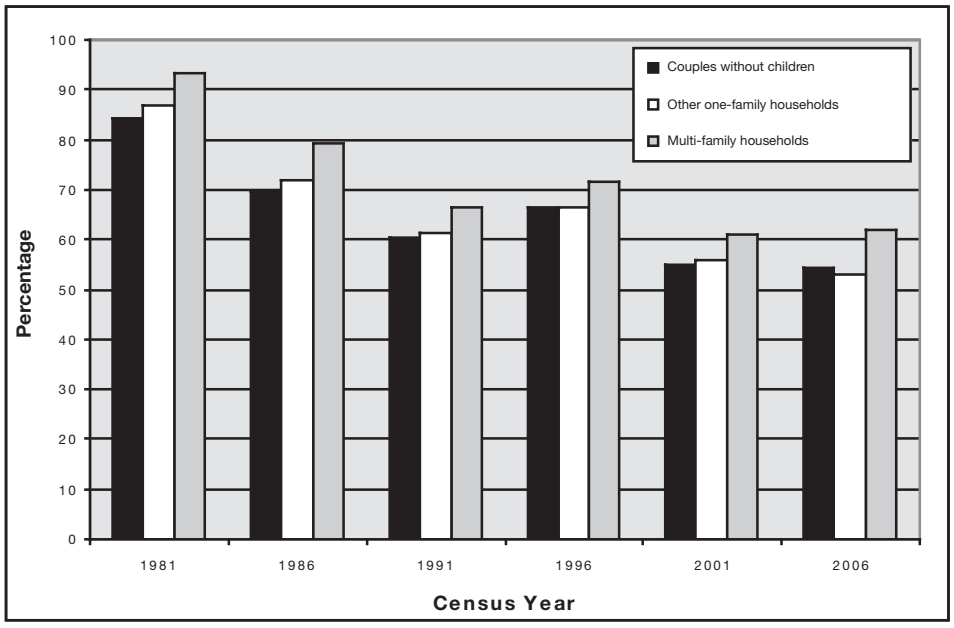

FIGURE 3.8: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with two Māori adults

over 30 percent improvements for each. The proportion lacking post-secondary qualifications was higher than for one-Māori-adult households, for all household types.

3.3 Work

3.3.1 Parental employment

Indicator definition: The proportion of all households with one/two Māori adults present where there is no adult in formal paid employment.

Summary points for parental employment

Households with one Māori adult

All household types saw improvements on this indicator 1981–2006, i.e. lower occurrences of no adult being in paid employment. However, there were smaller periods of sizeable increases, especially 1986 to 1991, most likely related to unemployment which increased during this period. Unemployment for Māori peaked at 25 percent in 1991. Single-parent families and multi-family households fared worst on this indicator.

Households with two Māori adults

Only multi-family households saw a decrease over the period in the proportion lacking paid employment, i.e. their situations improved 1981–2006. As for households with one Māori adult, things got worse for all household types between 1986 and 1991, and then recovered somewhat through the rest of the period. Interestingly, the situation for multi-family households was quite a bit better than for their one-Māori-adult counterparts.

TABLE 3.9: Lack of paid employment, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.9	16.1	22.4	19.6	16.8	13.6
Single-parent families	71.6	74.1	80.4	70.1	61.1	55.0
Other one-family households	6.6	5.7	15.6	10.1	8.7	5.6
Multi-family households	52.8	62.6	67.2	55.4	48.5	39.8

TABLE 3.10: Lack of paid employment, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	18.2	21.0	34.4	28.3	23.6	18.2
Other one-family households	10.1	11.0	29.1	22.5	17.6	11.5
Multi-family households	22.0	20.6	39.6	29.8	25.0	16.7

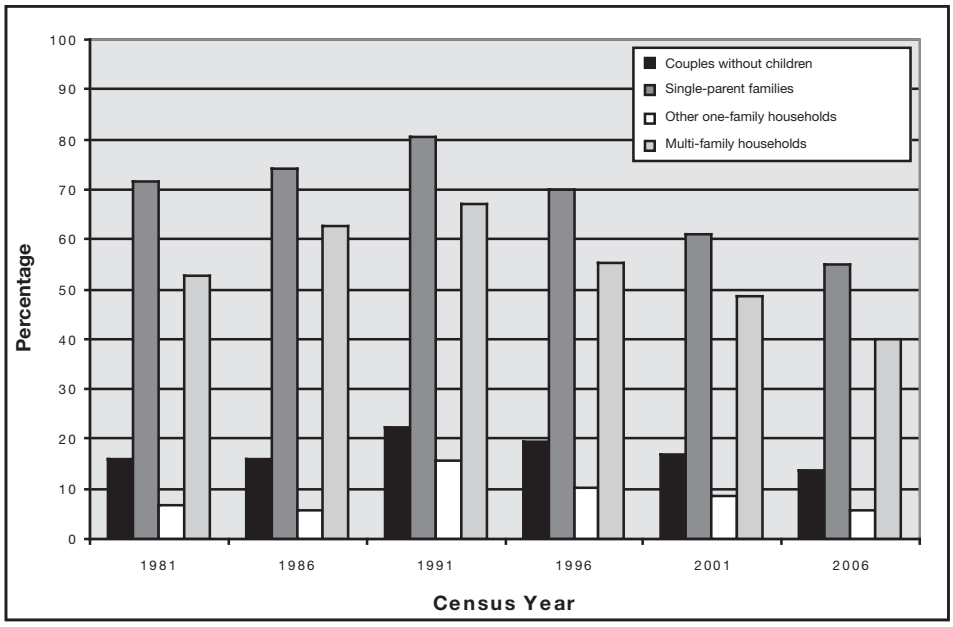

FIGURE 3.9: Lack of paid employment, by household category, 1981–2006, for households with one Māori adult

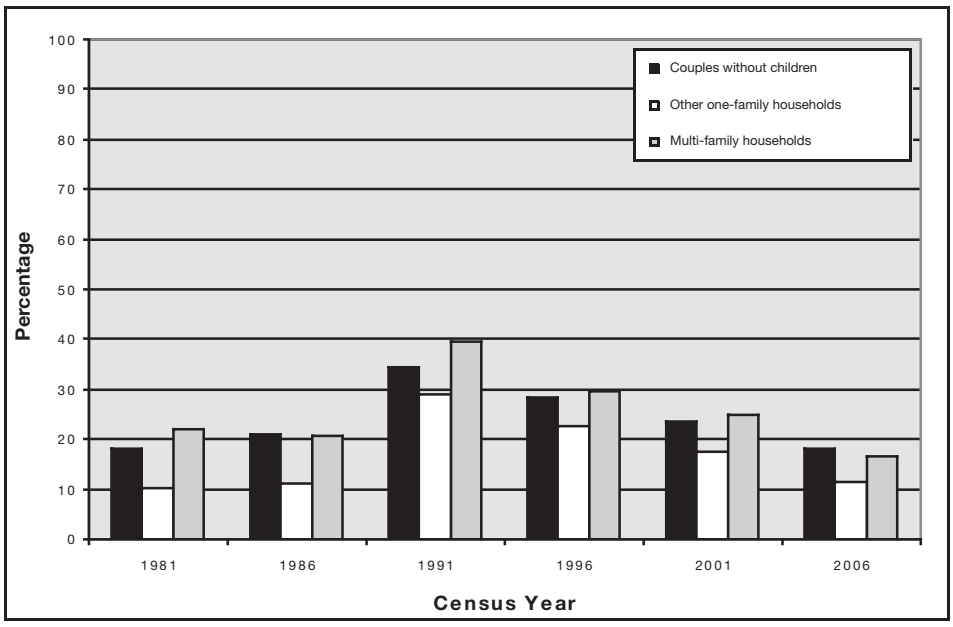

FIGURE 3.10: Lack of paid employment, by household category, 1981–2006, for households with two Māori adults

3.3.2 Long working hours

Indicator definition: The proportion of all households with one/two Māori adults present and at least one adult who works more than 48 hours per week.

Summary points for long working hours

Households with one Māori adult

All household types saw increases in the proportions with an adult working more than 48 hours per week. The largest absolute increases were for couples without children and other one-family households, at more than 10 percent. The very low rates observed for single-parent families may partly be due to their reliance on government income assistance through benefits.

Households with two Māori adults

There was a generally increasing long-term trend for long hours worked for two-Māori-adult households. The drop off observed between 1986 and 1991 likely relates back to the similar increase in the lack of paid work indicator and generally higher unemployment. Multi-family households saw proportions much closer to those of the other household types than in the one-Māori-adult case, possibly tied to what was observed for lack of paid employment.

3.4 Housing

3.4.1 Home ownership

Indicator definition: The proportion of all households with one/two Māori adults present, not living in owner-occupied dwellings.

Summary points for home ownership

Households with one Māori adult

All household types except single-parent families saw a decrease on this indicator, i.e. an increase in home ownership 1981–1991, and all types saw a steady decrease in home ownership 1996–2006. There was no consistent pattern across the whole period. At the ends of the spectrum, couples without children were the only ones more likely to own their own home in 2006 than in 1981; single-parent families were 20 percent less likely.

Households with two Māori adults

The same two-stage pattern was visible as for households with one Māori adult, a decrease in the indicator 1981–1991 and an increase 1991–2006, that is, housing became more affordable and then less affordable. Again, couples without children were the only families to see an improvement in their situation over the period as a whole.

TABLE 3.11: Long working hours, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.8	29.6	26.8	34.5	34.8	35.1
Single-parent families	2.8	3.5	2.9	4.2	5.1	6.2
Other one-family households	29.2	35.9	32.9	41.0	40.8	41.3
Multi-family households	8.8	8.0	7.8	12.1	12.7	15.8

TABLE 3.12: Long working hours, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	14.9	22.1	17.2	24.0	26.8	29.2
Other one-family households	18.7	24.6	20.1	26.9	29.5	32.9
Multi-family households	12.9	17.8	14.0	20.7	22.9	27.4

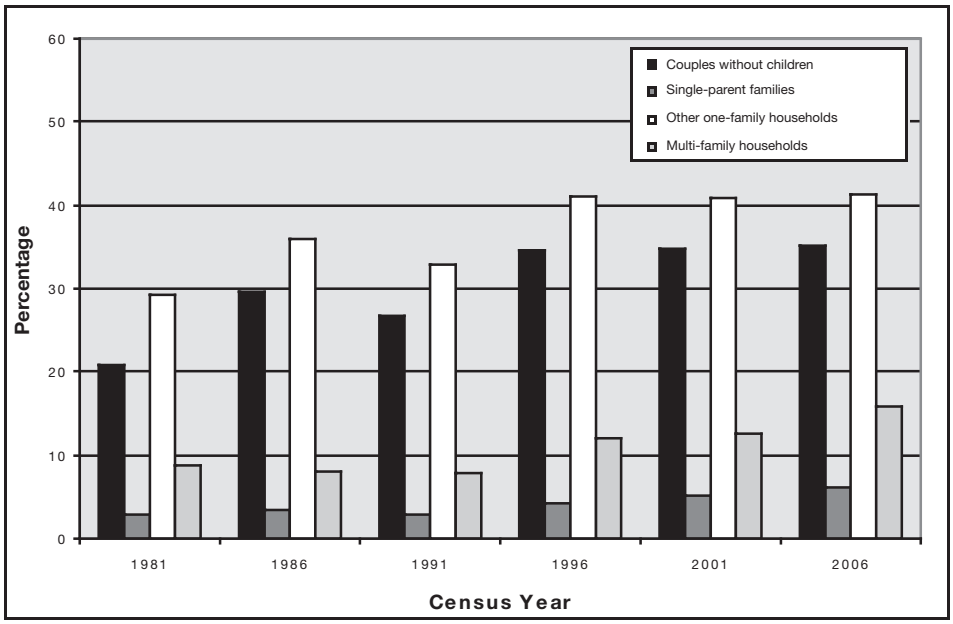

FIGURE 3.11: Long working hours, by household category, 1981–2006, for households with one Māori adult

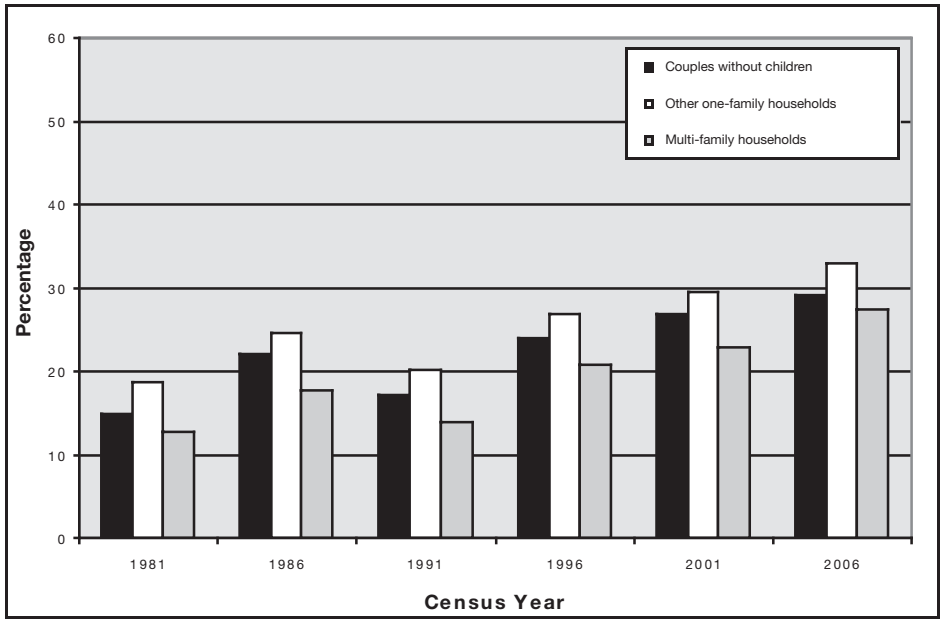

FIGURE 3.12: Long working hours, by household category, 1981–2006, for households with two Māori adults

TABLE 3.13: Lack of home ownership, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	46.8	43.8	36.6	33.0	33.2	37.6
Single-parent families	58.5	62.5	59.8	67.3	71.5	77.0
Other one-family households	40.4	34.8	28.3	31.4	34.8	40.7
Multi-family households	42.8	40.3	36.2	43.8	48.4	53.3

TABLE 3.14: Lack of home ownership, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	59.0	52.5	45.4	45.7	44.3	51.0
Other one-family households	50.7	47.6	37.9	45.2	50.9	56.2
Multi-family households	40.1	34.0	29.9	36.9	41.8	49.2

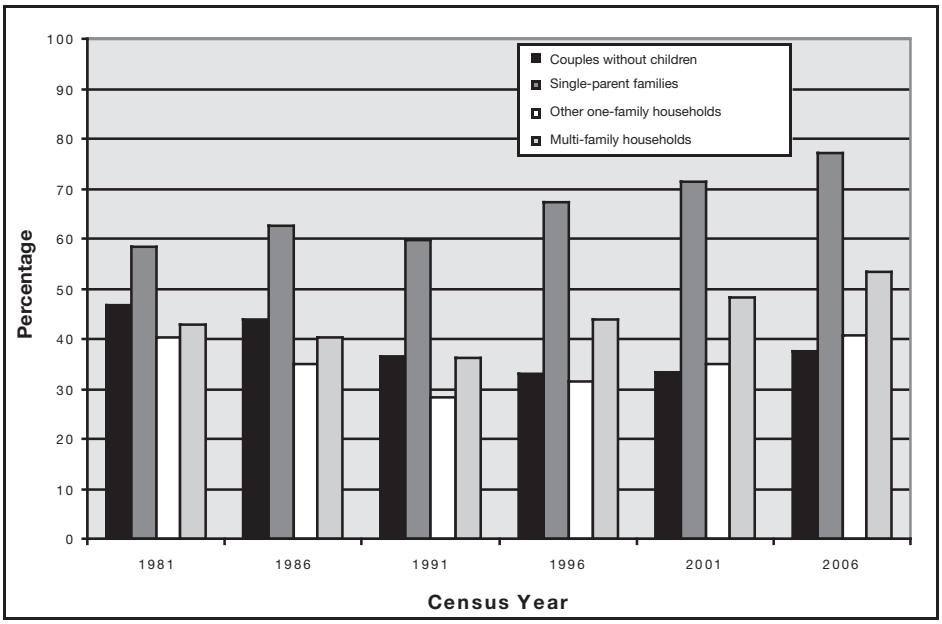

FIGURE 3.13: Lack of home ownership, by household category, 1981–2006, for households with one Māori adult

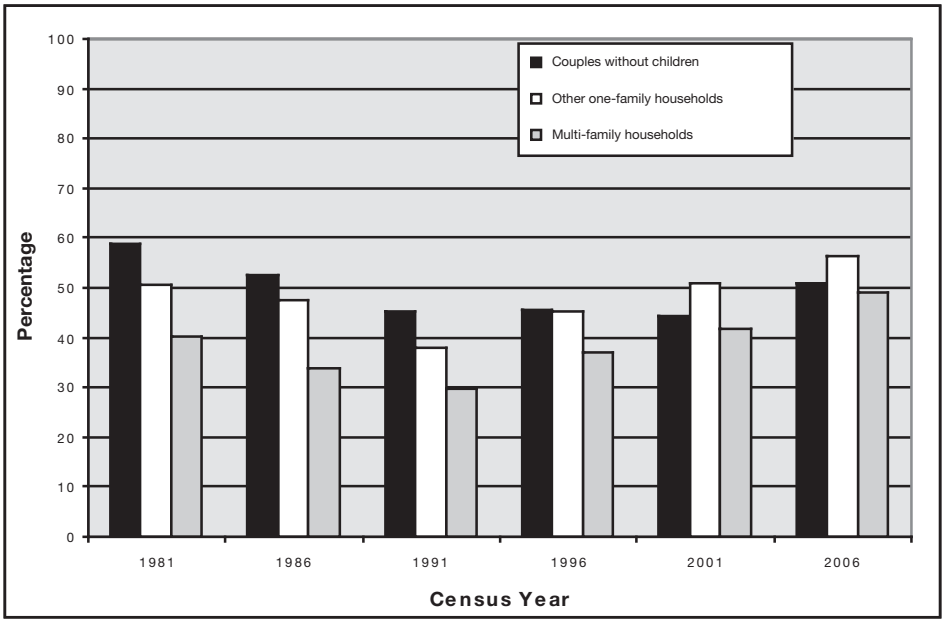

FIGURE 3.14: Lack of home ownership, by household category, 1981–2006, for households with two Māori adults

3.4.2 Rental affordability

Indicator definition: The proportion of all households with one or two Māori adults present, living in rented dwellings, whose weekly rent is greater than 25 percent of their weekly gross equivalised household income.

Summary points for rental affordability

Households with one Māori adult

There were large relative increases in low rental affordability for all family types between 1986 and 1996, with slight decreases from then until 2006. The period saw large differences among family types, with single-parent families and other one-family households faring worst in 2006, the latter having switched places with multi-family households back in 1986.

Households with two Māori adults

In 2006, two-Māori-adult households had lower rates of low rental affordability than their

TABLE 3.15: Low rental affordability, by household category, 1981–2006, for households with one Māori adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	16.0	15.1	25.6	28.5	28.6	26.2
Single-parent families	53.1	53.1	75.7	86.9	78.9	75.9
Other one-family households	29.0	28.3	46.6	56.6	55.1	52.2
Multi-family households	36.5	27.8	42.9	70.9	58.9	50.0

TABLE 3.16: Low rental affordability, by household category, 1981–2006, for households with two Māori adults, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.9	18.4	30.2	34.9	31.5	24.8
Other one-family households	30.6	28.4	49.5	62.5	57.6	50.8
Multi-family households	26.6	20.7	33.0	54.1	47.9	39.6

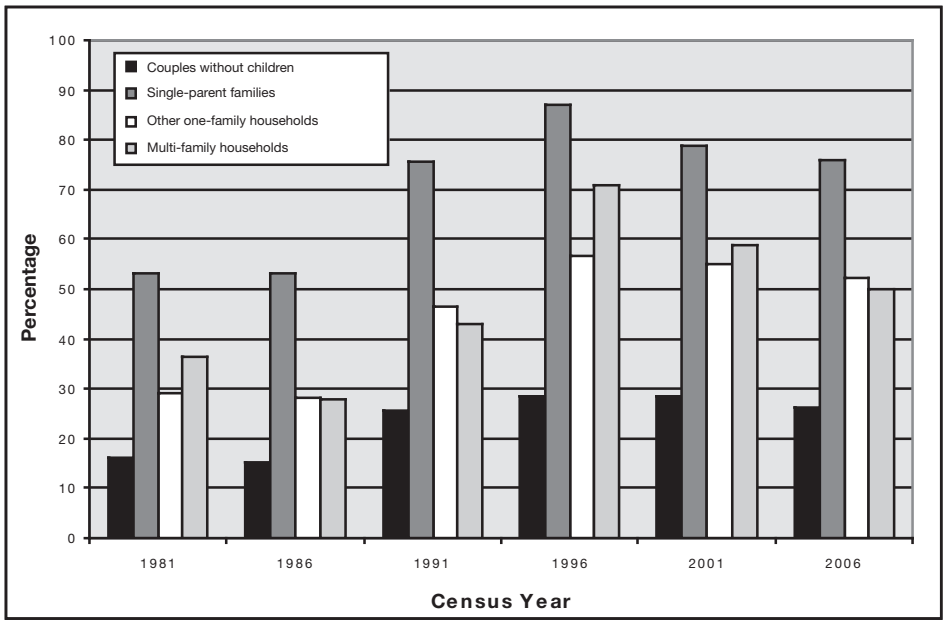

FIGURE 3.15: Low rental affordability, by household category, 1981–2006, for households with one Māori adult, living in rented dwellings

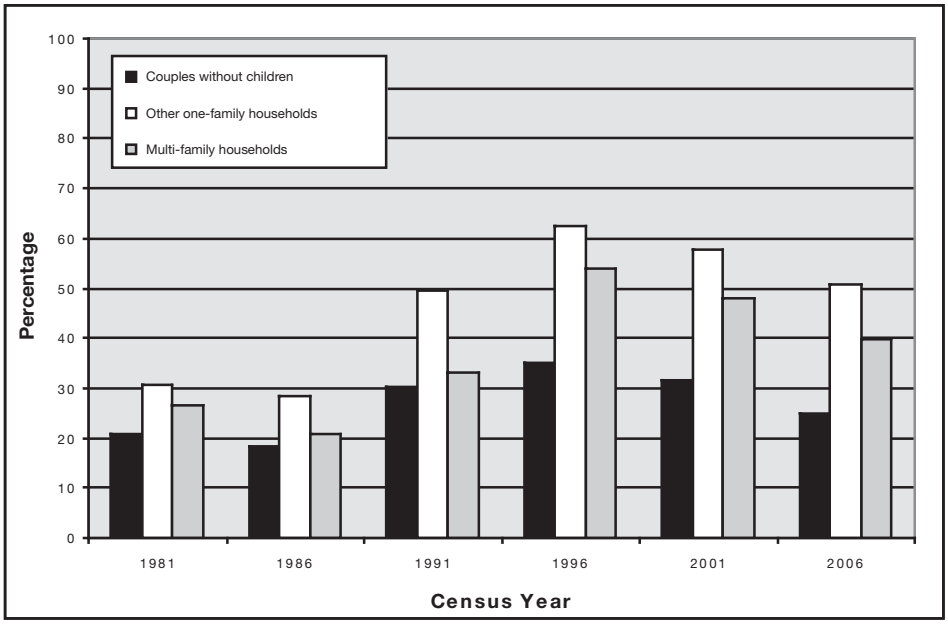

FIGURE 3.16: Low rental affordability, by household category, 1981–2006, for households with two Māori adults, living in rented dwellings

one-Māori-adult counterparts (that is, they were doing better); for the rest of the period this was only the case for multi-family households. Again, the biggest decreases in affordability occurred between 1986 and 1996.

3.4.3 Crowding

Indicator definition: The proportion of all households with one or two Māori adults present, living in dwellings that require at least one additional bedroom to meet the sleeping needs of the household.

Summary points for crowding

Households with one Māori adult

There was an overall decline in household crowding between 1981 and 2006. It peaked in 1986, 10 years before a peak in low rental affordability and 5 years before an increase in families lacking paid employment. There were noticeably high rates of crowding for multi-family households, likely related to the very definition, of more than one family living in a single dwelling. There was relatively little change in crowding rates after 1996.

TABLE 3.17: Crowding, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	41.7	38.7	33.5	29.9	29.4	30.2
Other one-family households	23.2	23.6	20.1	14.4	13.2	12.0
Multi-family households	77.6	79.7	74.6	64.7	60.1	58.0

TABLE 3.18: Crowding, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Other one-family households	40.3	37.8	32.5	27.2	26.0	25.0
Multi-family households	78.2	77.0	67.9	59.2	53.7	55.9

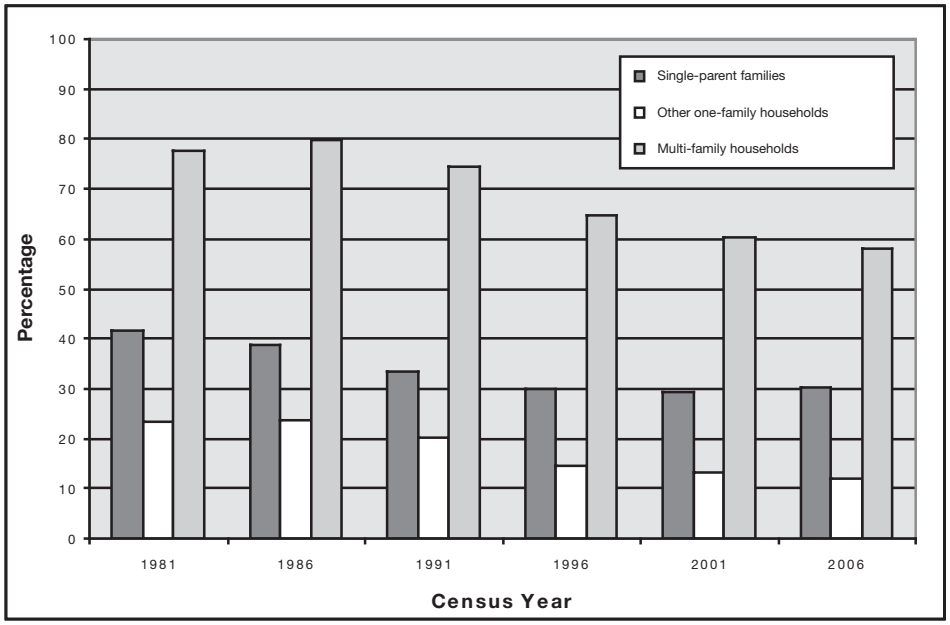

FIGURE 3.17: Crowding, by household category, 1981–2006, for households with one Māori adult

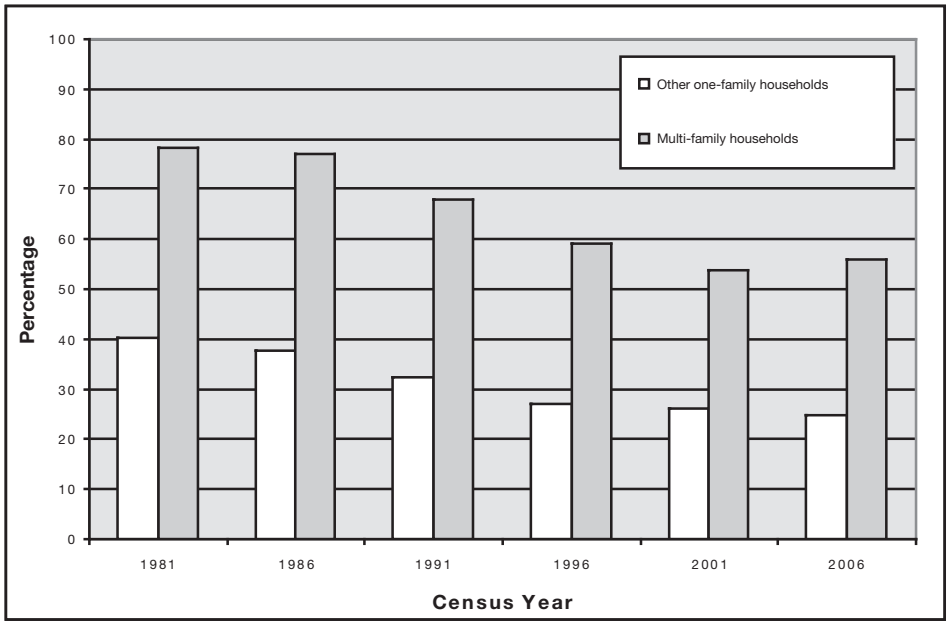

FIGURE 3.18: Crowding, by household category, 1981–2006, for households with two Māori adults

Households with two Māori adults

There was an overall decline in crowding for households with two Māori adults between 1981 and 2006. It increased slightly for multi-family households between 2001 and 2006. Multi-family households were more than twice as likely to be crowded as were one-family households. The high point for crowding in this series was right at the start in 1981, 15 years before the peak in low rental affordability as mentioned for one-Māori-adult households.

3.4 Health

3.4.4 Health-related benefits

Indicator definition: The proportion of all households with one/two Māori adults present

and with at least one adult receiving either a sickness or invalid's benefit.

Summary points for health-related benefits

Households with one Māori adult

There was at least a doubling in the receipt of health-related benefits between 1981 and 2006. The largest increases were for single-parent families between 1991 and 1996 / 2001 and 2006, and multi-family households between 1991 and 1996. There was some volatility between 1986 and 1991 and a generally steady increase from 1991.

Households with two Māori adults

There was an increase in receipt of health-related benefits for all household types with two Māori adults. The rates were much higher for multi-family households than for the other

TABLE 3.19: Health-related benefits, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	2.4	3.8	4.5	5.5	6.2	6.0
Single-parent families	2.0	3.3	2.8	5.8	6.4	8.7
Other one-family households	1.9	3.3	3.7	5.7	5.5	5.6
Multi-family households	3.6	7.1	5.6	9.2	8.3	9.0

TABLE 3.20: Health-related benefits, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	3.5	4.3	6.5	9.0	10.1	9.7
Other one-family households	3.1	4.9	6.0	8.9	8.6	8.7
Multi-family households	5.0	7.8	9.4	12.9	12.5	11.8

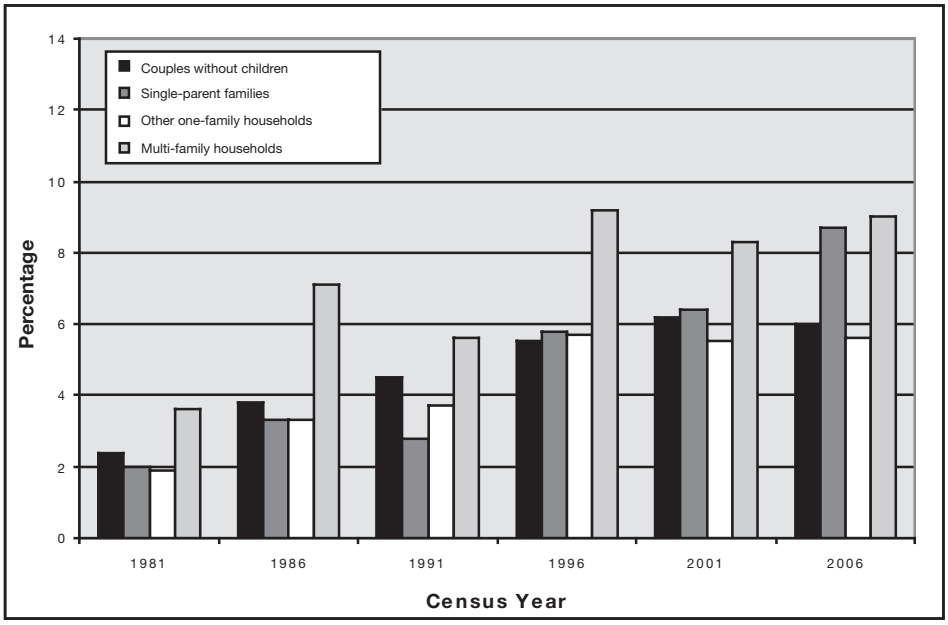

FIGURE 3.19: Health-related benefits, by household category, 1981–2006, for households with one Māori adult

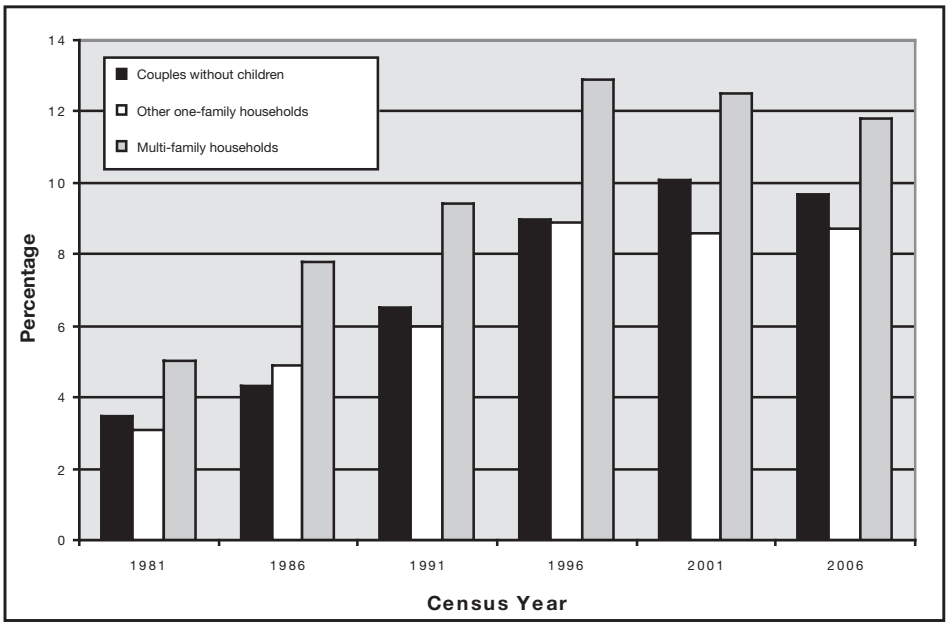

FIGURE 3.20: Health-related benefits, by household category, 1981–2006, for households with two Māori adults

household types, at all time points. Households with two Māori parents were generally more likely to be in receipt of health-related benefits than those with only one Māori adult.

3.4.5 Smoking

Indicator definition: The proportion of all households with one or two Māori adults present and with at least one adult who regularly smokes cigarettes.

Questions on cigarette smoking behaviour were included in the 1981, 1996 and 2006 Censuses. Respondents were asked about current smoking and previous smoking. The questions were based on self-reported cigarette smoking and were only for respondents aged 15 or older. Consequently census data is likely to underreport smoking prevalence. However, the use of similar questions in the various census forms does enable a useful examination of changes in smoking prevalence across time.

TABLE 3.21: Parental smoking, by household category, 1981–2006, for households with one Māori adult

Household category	1981 (%)	1996 (%)	2006 (%)
Couples without children	61.2	45.4	40.7
Single-parent families	70.2	65.4	64.7
Other one-family households	70.4	57.3	51.7
Multi-family households	77.7	67.6	65.2

TABLE 3.22: Parental smoking, by household category, 1981–2006, for households with two Māori adults

Household category	1981 (%)	1996 (%)	2006 (%)
Couples without children	70.3	56.1	55.3
Other one-family households	79.4	70.9	67.4
Multi-family households	86.0	72.7	71.1

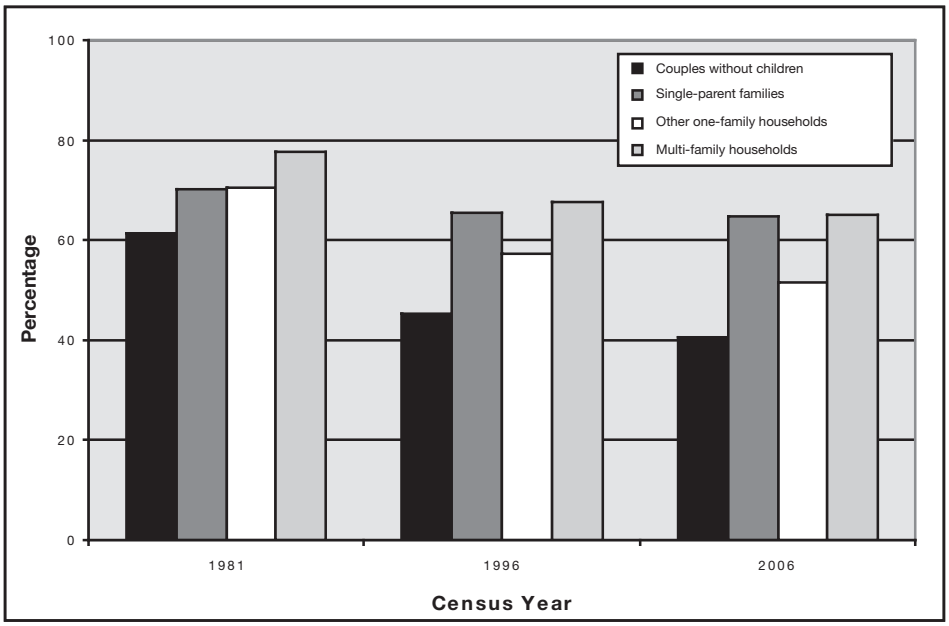

FIGURE 3.21: Parental smoking, by household category, 1981–2006, for households with one Māori adult

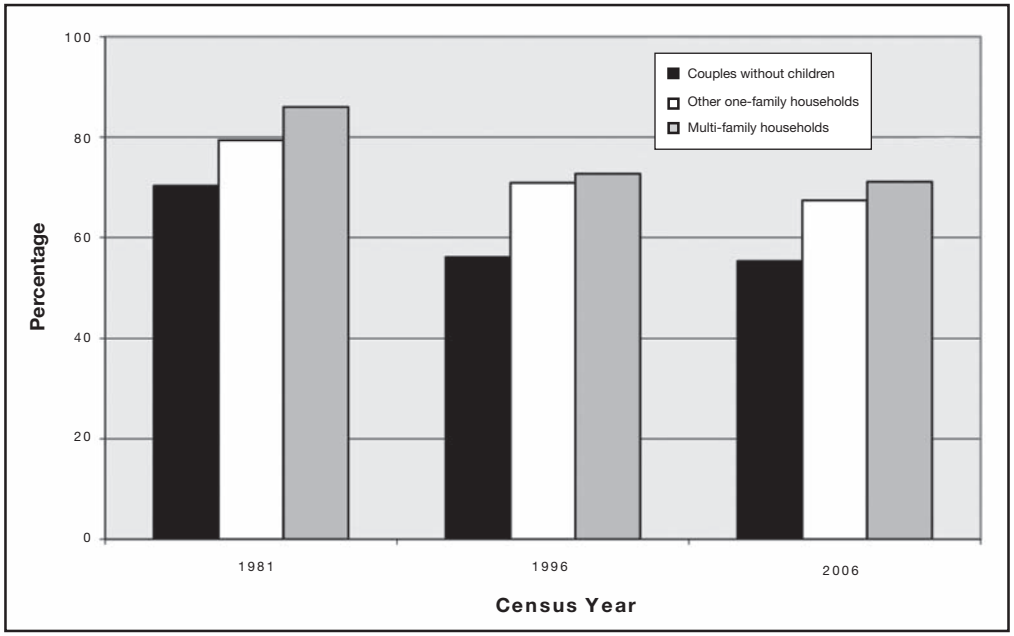

FIGURE 3.22: Parental smoking, by household category, 1981–2006, for households with two Māori adults

Tobacco use has a major negative effect on Māori health outcomes – smoking is a significant contributing factor to Māori/non-Māori health inequalities (Ministerial Committee on Drug Policy, 2007). About one-third of Māori deaths are attributable to smoking (Laugesen & Clements, 1998). The deaths of 33 Māori children per year from sudden infant death syndrome are attributable to passive smoking (Ministry of Health, 1999). Tobacco use is associated with higher rates of various chronic diseases in Māori adults and second-hand smoke is associated with higher rates of asthma and infectious diseases in Māori children (Ministry of Health, 2004).

Parental smoking is a valuable measure as familial smoking is associated with both smoking initiation and environmental exposure to second-hand smoke.

Summary points for smoking

Households with one Māori adult

There was an overall marked decrease 1981–2006 in the proportion of one-Māori-adult households with a parent smoking, with most of this decrease occurring between 1981 and 1996, partly due to this being a longer interval than 1996–2006. The decrease in proportion was markedly slower for single-parent families and multi-family households, leading to an increased disparity between these household types and couples without children/other one-family households. Large changes in prevalence suggest that it is possible to change household exposure to smoking.

Households with two Māori adults

There was an overall marked decrease since 1981 in the proportion of all types of two-Māori-adult households with a parent smoking. Again the bulk of the change occurred 1981–1996 and the change was slower for single-parent families and multi-family households. The prevalence of parental smoking was higher at all time points for two-Māori-adult than for one-Māori-adult households. This difference is likely in part due to the higher prevalence of smoking among Māori adults compared with non-Māori adults. The persistence of high household smoking prevalences indicates that Māori children continue to be highly exposed to smoking environments at home.

4 DISCUSSION

4.1 Changes in household composition

There were significant changes in household composition among Māori families/households over the period (Table 2.1), such as a steady increase in the proportion that were couples without children. There was a similar increase in single-parent families but this appeared to stabilise from 1991 on. Associated with these was a steady decrease in the proportion of households that were couples with children. Multi-family households made up a relatively low proportion throughout; they increased slightly between certain time points, and the spikes seemed to correlate to changes in housing costs, e.g. the elimination of market rentals. This is more likely than changes in cultural phenomena such as moving in with older relatives, and if that were the case we would see a steady increase in these family types rather than the peaks and troughs pattern evident.

The increase in couples without children could have been caused by a demographic transition with baby boomers' children becoming adults and leaving home. Single-parent family numbers continued to increase, but they made up a lower proportion of total families in 2006 than in 1991. Numbers of couples only plus others also increased, possibly due to couples taking in boarders or other family members to contribute to household finances or because of pressure in the rental and home ownership markets. The elimination of market rentals could have played a part as mentioned above. Analysis of these changes in household composition are subject to consistent categorisation/definition on the part of Statistics New Zealand, the effect of which can be seen for instance in Table 2.1 where 'two one-parent families' dropped off in 2001 and appeared to be replaced by 'other two-family households'. All of these explanations are speculation on the authors' part, as we did not undertake a separate analysis of the housing literature to attempt to verify them.

In respect of adult educational attainment, there was an overall decline (i.e. improvement) in the indicator driven by a cohort effect of increasing educational attainment 1981–2006. This cohort effect means that more people have educational qualifications in the general population, and thus in the Māori population as well, and the increases for Māori are part of this general population trend towards higher qualifications.

Decreases in lack of post-secondary educational attainment represent major improvements for Māori education during this period, but Māori participation in post-secondary education remains low. This may be linked to a flow-on from the earlier lack of educational attainment (although this improved as well, as above).

Relative changes in rates of long working hours over the period were lower for couples without children and other one-family households and higher for single-parent families and multi-family households. As these two latter household types were observed as the most likely to be on low incomes, one possible explanation is that they could have been moving towards working more than one job and/or

additional casual work to get more income into the household.

Rates of home ownership increased 1981–1991 for all household types except for single-parent families, and decreased for all 1996–2006. The shift away from owner-occupied dwelling for Māori overall may reflect how home ownership is subject to changes in government policy and market shifts brought about by lower interest rates, investment patterns of ageing New Zealanders and the real estate investment priorities of New Zealand. There are push-pull patterns evident in any market but with housing becoming more expensive during this period, households and families changed their living circumstances. A 2006 report on Māori housing experiences found that home ownership rates for Māori were lower than for the general population and had been falling since the 1950s (Centre for Housing Research & Te Puni Kōkiri, 2006). The main reasons for this were:

> High and rising housing costs and difficulty obtaining finance; lack of knowledge about home ownership; difficulty of accessing services and information; low motivation; discrimination; high bureaucratic costs in both urban and rural environments; and high development costs especially in rural areas. (ibid., p. 11)

There were large relative increases across all family types for low rental affordability between 1986 and 1996, with slight decreases between then and 2006. There were large differences by family type with single-parent families and other one-family households faring worst. The largest increase was between 1986 and 1991, most likely due to the introduction of a government market rental policy which had a flow-on effect for some household types.

There was at least a doubling in the receipt of health-related benefits for all household types between 1981 and 2006. There were large increases for single-parent families between 1991 and 1996 and again 10 years later between 2001 and 2006. This shift could have been in part due to changes in government policy in relation to moving people off the Domestic Purposes Benefit.

Two-Māori-adult households were consistently more likely to have at least one adult in receipt of health-related benefits than one-Māori-adult families. This may reflect a sicker population with more injuries, including work-related injuries for Māori workers living in households with Māori partners. It may be related to their jobs, where injury or environmental exposures are more likely. This would need to be the subject of further investigation.

Culture-related indicators were unfortunately difficult to get access to. One possible indicator could be that identified from Te Hoe Nuku Roa, in which they described the extent to which whānau are involved with whānau and marae as a possible health indicator (Stevenson et al., no date). This literature refers to the positive and beneficial link between whānau involvement and marae participation and health, which was demonstrated by Te Hoe Nuku Roa (ibid.). Whānau that are blood related and not residing in the same household, but do play an important part in each other's lives, report higher self-rated health status.

To this extent, census data on face-to-face contact including for those living in another household may be an important cultural indicator. We must treat this with caution, however, as we cannot assume that all whānau interactions are beneficial. For example in the cases of family violence, child abuse and neglect, family members are most often the perpetrators (Connolly & Doolan, 2007).

Te Hoe Nuku Roa concluded that high levels of involvement with whānau reflect:

> the quantity and quality of the participants' social relationships in general. The support and sense of social inclusion concomitant with good social relationships are most likely the primary factors behind the health benefits of whānau involvement found in this report. (Stevenson et al., no date, p. 17)

The same study also found a weaker and not necessarily causal relationship between whānau involvement and smoking. A number of reasons for this are posited, but not proven. For example, smoking may be indicative of poor family functioning such as onset of adolescent smoking, or the nature of the household where those sharing a house/flat are more likely to smoke – 67.8 percent compared with 47.9 percent of households headed by couples with children (ibid., p. 18). Interestingly our indicator of at least one adult who smokes in the household suggested a pattern of declining smoking among Māori households, but rates were still high relative to non-Māori households.

The interactions of the two cultural variables of whānau involvement and marae participation are influenced by other variables including socio-economic status and location such as distance from papa kāinga or whānau base. While this report does not analyse distance from papa kāinga or strength of iwi identity, it does identify variables relating to socio-economic status.

The following discussion section broadens the findings from the census to include material from Bryan Perry, Ministry of Social Development, around income inequality, because of the link between this and good health and other social outcomes (Tobias, Blakely, Matheson, Rasanathan, & Atkinson, 2009; World Health Organization, 2008). Furthermore, we know that the impacts of changes to the New Zealand economy have effects on Māori health both in the immediate and sometimes longer term, with Māori requiring longer periods to recover from economic dislocation (Blakely & McLeod, 2009).

4.2 Summary of changes in wellbeing for each domain

4.2.1 Income

Low income among Māori has long been identified as a problem, with poor Māori outcomes such as unemployment, poor health, less adequate housing, higher crime rates, higher accident fatality and lower educational attainment all being linked to Māori deprivation – "an impoverished racial minority" (Cross et al., 1990, p. 3). Good outcomes for Māori children are less likely when socio-economic deprivation is present both relative and real. Māori children feature disproportionately in this low-income population (Craig, 2009; Fletcher & Dwyer, 2008). The solution according to Cross et al. (1990) is the Government's and its agencies' promotion of Māori economic development. Child Poverty Action Group (CPAG), United Nations International Children's Fund (UNICEF) and the Organisation for Economic Co-operation and Development (OECD) concluded that income support for the most deprived families was essential to break the cycle of poverty (Blaiklock et al., 2002; OECD, 2009; Turner & Asher, 2008). Most importantly, UNICEF's report concluded that what governments did in respect of their family and child policies had a material impact on the wellbeing of children growing up in these societies. It was not simply a matter of wealthy countries doing better for their children, but of the types and levels of support provided by these countries, irrespective of their gross domestic product.

The view that Māori have within their grasp the ability to shape a positive future for themselves irrespective of their difficult circumstances (Durie, 1998a, 2009) has gained more currency over the past two decades. This is in keeping with a view that Māori autonomy is both distinctive and essential to Māori thriving economically, socially and politically. In a speech in November 2003, Hon. Tariana Turia said:

> There is no doubt that whānau development is a major challenge. The issues we confront are gnawing at the very heart of our culture and identity as tāngata whenua and our future as whānau, hapū and iwi. We need to stick with our own pathways – and the challenge for government is that the public service must

> see where it can work alongside us – not determining the pathway forward. And in turn, we have to stop thinking that we need to change to fit the proposals dished out to us. Is the provision of government services what Tuini Ngawai was referring to when she said, "Kia tupato ki te mātauranga a te Pākehā. He patu tikanga – he patu mahara – he patu mauri", a reference to the imposition of the Western benefit system which she said would undermine our tikanga, our thinking and endanger our life force? (Walker, 2006, p. 17)

This view underpins the Whānau Ora Strategy (Whānau Ora Taskforce, 2009). The congruence between the desire for rangatiratanga by Māori, especially through the medium of iwi and whānau development resonates with neo-liberal commitments to autonomous and responsible action without recourse to the state (Kiro, 2001). Again, Cross et al. (1990) distinguish between economic principles and economic strategies and differences between Māori and Pākehā. They say:

> Although the economic strategies of Māori and Pākehā have converged, at times through choice and at times through compulsion, the underlying economic principles of the two groups remain fundamentally different. That difference is rooted in concepts of ownership and associated systems for valuing resources and in the organisational structures and associated decision-making processes of the two groups. (ibid.)

This may not be as accurate today as it was in 1990, with an increasing trend towards the 'corporatisation' of iwi and their emergence through Treaty settlements and Māori cultural renaissance, to being economic powers within their own right. The consequential organisation of their business along similar lines to other corporations blurs significant differences such as adherence to principles of wairua (spirituality) and oranga (the continuity of existence) over economic resources such as land. Iwi and Māori organisations could be argued to maintain the collective interests of their descendant beneficiaries in comparison to the individual (and collective) interests of shareholders.

These aspirations for Māori are, however, influenced by the reality of Māori inequality and lower incomes. Work done by Bryan Perry on household income before housing costs (BHC) indicates that since 1988, Māori household income has been markedly less than European/Pākehā income. Māori income increased the least in real terms between 1988 and 2007 and declined by over 25 percent in the 4 years to 1992 (see Table 4.1). The persistent inequality in household income (BHC) is apparent when comparing median income of European/Pākehā households with that of households of other ethnicities (Perry, 2008).

The 2009 Household Incomes Report provides information on the material wellbeing of New Zealanders as indicated by their household incomes 1982–2008. Household after-tax income is affected by a range of factors: wage rates, hours worked by the adults in the

TABLE 4.1: Real equivalised median household income (BHC) by ethnicity, 1988–2007 ($2007)

	1988	1990	1992	1994	1996	1998	2001	2004	2007
NZ Māori	$20,200	$18,200	$14,800	$15,000	$17,800	$18,800	$20,100	$20,800	$20,400
European/ Pākehā	$24,300	$24,200	$21,800	$21,500	$22,300	$24,300	$24,800	$27,900	$28,600
Pacific	$19,800	$17,300	$15,700	$14,100	$15,500	$17,100	$16,600	$19,000	$22,300
Other	$21,900	$21,100	$20,700	$15,600	$17,900	$15,400	$24,100	$20,300	$25,500
All	$23,200	$22,700	$20,500	$19,800	$21,000	$22,800	$23,400	$25,200	$26,500

Source (Perry, 2008, p. 48)

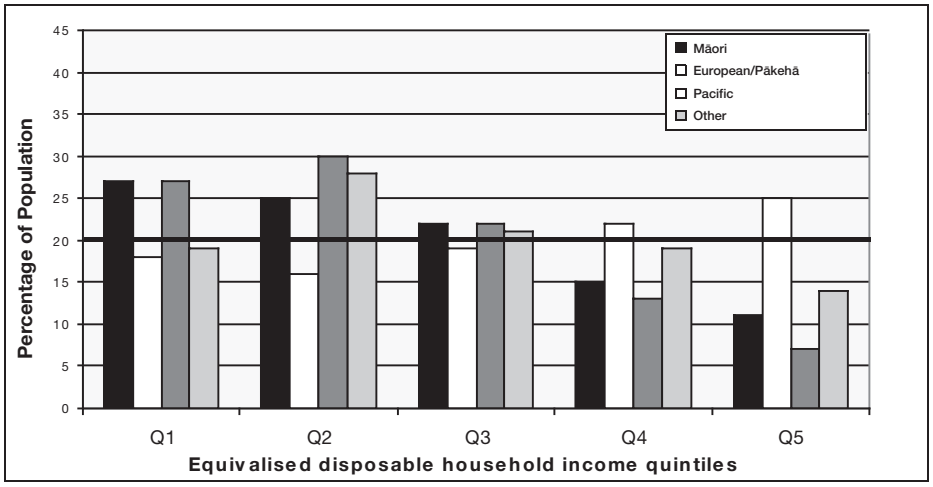

FIGURE 4.1: Distribution of individuals across household income before housing costs (BHC) quintiles from the Household Economic Survey 2008
Source: Perry, 2009b, Table B.5.

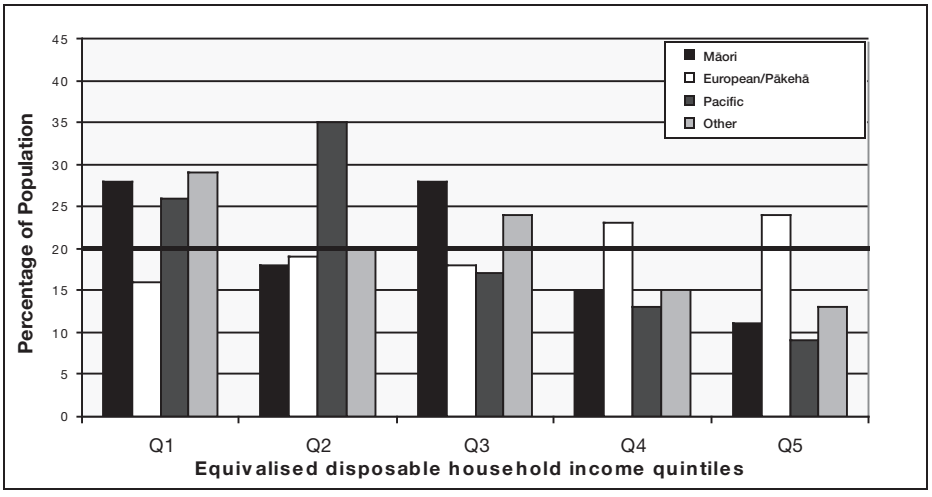

FIGURE 4.2: Distribution of individuals across household income after housing costs (AHC) quintiles from the Household Economic Survey 2008
Source: Perry, 2009b, Table B.7.

household, rates of social assistance, returns on investment, personal income tax rates and tax credits for families with children (Working for Families) (Perry, 2009b). This includes an analysis by different measures such as before and after housing costs.

The unequal exposure to low income was also apparent in that report, which showed that in 2008, 52 percent of Māori lived in households in the lowest two quintiles of household income, and only 27 percent in the top two income quintiles, close to the inverse of the case for European/Pākehā (ibid.). Possible reasons for this could be the high number of children in these households relative to other household types, and the occupational groupings of Māori.

Similar patterns existed for household income after housing costs (AHC) with 46 percent of Māori living in households in the bottom two quintiles and 28 percent in the third quintile (ibid.). Again, the higher numbers of children relative to other household types and occupational groupings may partly explain this.

Although Māori incomes increased marginally 1988–2008, the relative inequality between Māori and European/Pākehā increased in the same period, as shown in Figure 4.3. Inequalities would likely be exacerbated if housing costs were also included, though they could be reduced with the removal of market rentals for lowest income families.

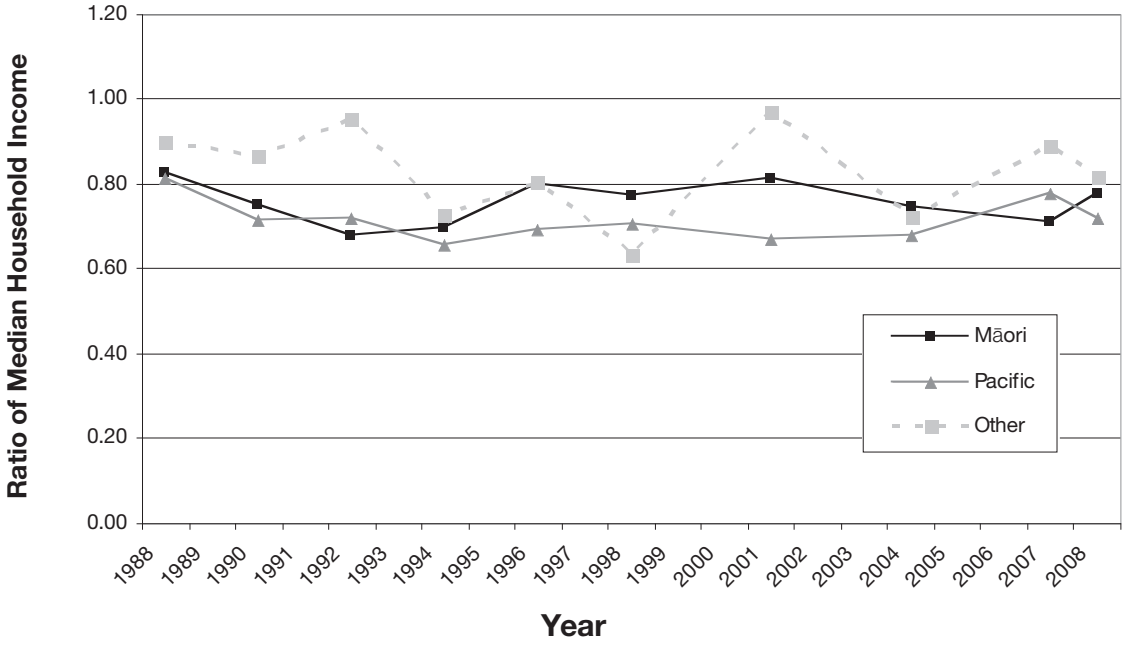

FIGURE 4.3: Ethnic inequality in median household income, ratio of ethnic groups' median income to European/Pākehā median income, 1988–2008
Source: Perry, 2008.

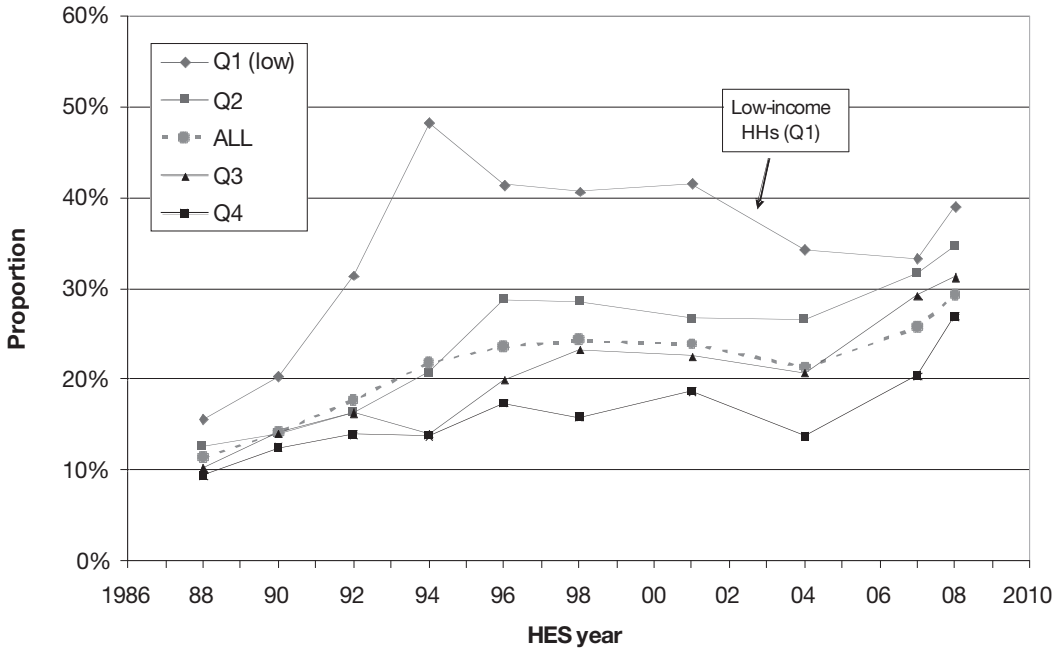

FIGURE 4.4: Proportion of households with housing costs > 30 percent of after-tax income, by income quintile, from the Household Economic Survey
Source: Perry, 2009b.

TABLE 4.2: Child poverty by household type (60 percent fixed line measure, AHC): proportions of children below the threshold

Household type	1994 (%)	2001 (%)	2008 (%)
Single-parent	76	74	52
Two-parent	29	21	13

Source: Perry, 2009b.

Census data over 25 years confirm many of these trends with significant differences for one-Māori-adult and two-Māori-adult households, where the latter tend to fare worse. Income was lower for single-parent families than for all others but multi-family households. The most likely explanation for this is that both of these family types are among the poorest. Single-parent families only have access to one income, and many are dependent upon government assistance. Multi-family households include those who live together to get the benefits of shared household resources and who may be unable to afford to live on their own.

All household categories experienced an increase in income 1981–2006, but they also all saw decreases in income during the 1981–1991 period, except for single-parent families, who were already on a relatively low threshold of income. The same was true for all types of two-Māori-adult households, which had lower median household incomes than their one-Māori-adult counterparts, with the exception of multi-family households. This was probably due to an increased likelihood of income sharing such as workers pooling their incomes together, rather than a reflection of those who are outside of the labour market.

In 2003–2004, part of the fifth Labour Government's response to falling household incomes for families was the introduction of Working for Families (WFF). The entitlement for WFF was to give an estimated 290,000 families with dependent children additional average income of $66 a week, with an additional 28,000 gaining from Childcare Assistance an average of $23 a week, around 99,500 gaining on Accommodation Supplement with an increase in assistance of $19 a week, and an anticipated consequential decrease of child poverty, using a 60 percent median household income measure, by 30 percent (Cabinet Office, 2004). The entitlement depended on the number of dependent children, with those in work gaining an additional in-work tax credit to augment work-related costs. The marginal additional benefit for those families whose income source was government assistance came under intense criticism because of its effect of perpetuating child poverty for the poorest and most vulnerable children (Fletcher & Dwyer, 2008; Turner & Asher, 2008).

4.2.2 Education

The Ministry of Education's annual report on Māori education does not include census data as they are concerned with the characteristics of those passing through the system rather than the country as a whole. Their Ngā Haeata Mātauranga Annual Report on Māori Education for 2007/08 includes key measures such as participation and quality of early childhood education (ECE). It reports that 91 percent of Māori year 1 (new entrant) learners at school in 2007 participated in ECE compared with 86 percent in 2002 (Ministry of Education, 2009a).

Evidence from the Competent Children study suggests that children who are supported and nurtured by the adults in their lives to learn, grow and develop from the start, are more likely to become confident and competent learners, develop constructive behaviours and enjoy improved social outcomes (ibid.). Early experience of these factors is therefore important for developing effective learning for Māori students in ways that engage them in the

education sector. This is especially true for early engagement with quality ECE.

The lifelong flow-on effects of quality ECE suggest that better supported early engagement would be beneficial for Māori outcomes. Literature is equivocal on the extent or nature of this benefit, but there is the suggestion of children under 2 years of age benefiting from strong attachment to their parent or primary caregiver before entering into ECE (Shonkoff & Phillips, 2000; Bennett, 2008).

Over the past 15 years the number of children attending ECE services has increased. Despite this improvement, Māori have been less likely to attend ECE services for sustained periods of time compared with non-Māori (ibid.). There is likely to be a cohort effect for those children who are socialised early into quality ECE that flows on to more positive experiences in primary and secondary school education, including a greater likelihood that they will stay in school.

The low level of post-secondary educational attainment among Māori is likely to be the end result of much earlier patterns of educational attainment. Māori children are tuning out at a very early age, maybe as young as 11 or 12. The difference between Māori and non-Māori children's education is apparent by this early age with fewer expectations of going on to tertiary study or further training among Māori than non-Māori. Fewer positive early experiences of school increase the chance of leaving school at an early age, and consequently fewer entering into post-secondary education. However, the long-term trend in census data shows that Māori are staying at school longer. In part this is due to the raising of the school-leaving age during the period, but it is also likely due to other factors such as more of their peers staying at school, both non-Māori and Māori, fewer job opportunities and a greater range of choices of schools such as Kura Tuarua, specialist schools such as those with religious instruction, and alternative education providers. Importantly rates of high achievement among Māori are increasing, but still around 30 percent of Māori are leaving secondary education with no qualification. There are significant gender differences with Māori boys doing poorly in relation to everyone else.

Inequities for Māori learners persist (Ministry of Education, 2009a), with the 1997 Chapple Report concluding that there was nothing significant about being Māori that affected education success. Rather, differences were due to socio-economic status, not ethnicity (Ministry of Education, 2009b). However, Harker (2007), in a re-analysis of the data, concluded that ethnicity was a significant factor in educational achievement over and above socio-economic status. This latter report suggested that the relationships between schools, teachers and students were crucial to Māori educational success.

4.2.3 Work

All one-Māori-adult household categories saw increasing rates of paid employment (a decline in the indicator) 1981–2006. However, the opposite was true for 1981–1991, and overall unemployment for Māori reached 25 percent by 1991. Unemployment increased for all ethnicities between 1986–1991, and it took 10 years for the recovery, i.e. not until 2001–2006 did figures get back to their 1981 levels, from our data. The impact of Māori unemployment during the international economic recession of 2008/09 is still being worked through, although last quarter 2009 statistics put Māori unemployment at 15.4 percent (Statistics New Zealand, 2010).

The Household Labour Force Survey (HLFS), conducted by Statistics New Zealand, is the official measure of unemployment in New Zealand. Overall unemployment rose from 4 percent in December 1986 to a peak of 10.7 percent in December 1991, before declining to 5.7 percent in December 2001 and then to 3.6 percent in June 2006. For Māori it rose from 10.7 percent in 1986 to a peak of 26.1

percent in 1992, remained above 15 percent throughout the 1990s and fell back to 10.2 percent in 2003. It fell to a record low of 7.9 percent in 2007 (Ministry of Social Development, 2004, 2009).

Our lack of paid work indicator showed that the highest levels were among single-parent families and multi-family households, the two types that consistently appear as among the most socio-economically disadvantaged households across time. For two-Māori-adult households, all household categories saw significant decreases in rates of paid employment 1981–1991 and then improvements through 2006, but only multi-family households ended the period with higher rates of paid employment than they started it. This is likely due to their having a greater number of people, among whom one or more will be working. This trend has since reversed again with the economic crisis of 2008. For couples without children there was no change overall, while for other one-family households there was a decline in the rate of paid employment over the 25 years. Again as discussed above, recovery from 1991 figures took about 10 years, and even then, labour force participation has not yet returned to pre-1986 levels.

There was a significant increase in proportions with at least one adult working 48 hours per week for all household types, in keeping with all other ethnicities during this 25-year period. This is despite incomes not increasing much and the cost of housing increasing. Couples without children and other one-family households saw the highest absolute increases in rates of long working hours. The low rates observed for single parent families may be due to their reliance on government income assistance through benefits over this period, though it should be noted that most single parents remain dependent on benefit assistance for only a few years before re-entering the labour market.

The trends for two-Māori-adult households were more consistent, with an overall increase in households working longer, with 2006 figures around double what they were in 1981. Multi-family households had the lowest rates of long working hours.

Casualisation of work means that low-income families are likely to have less control over their working environment, with consequently less flexibility for negotiating working conditions suitable for children with families than other household types.

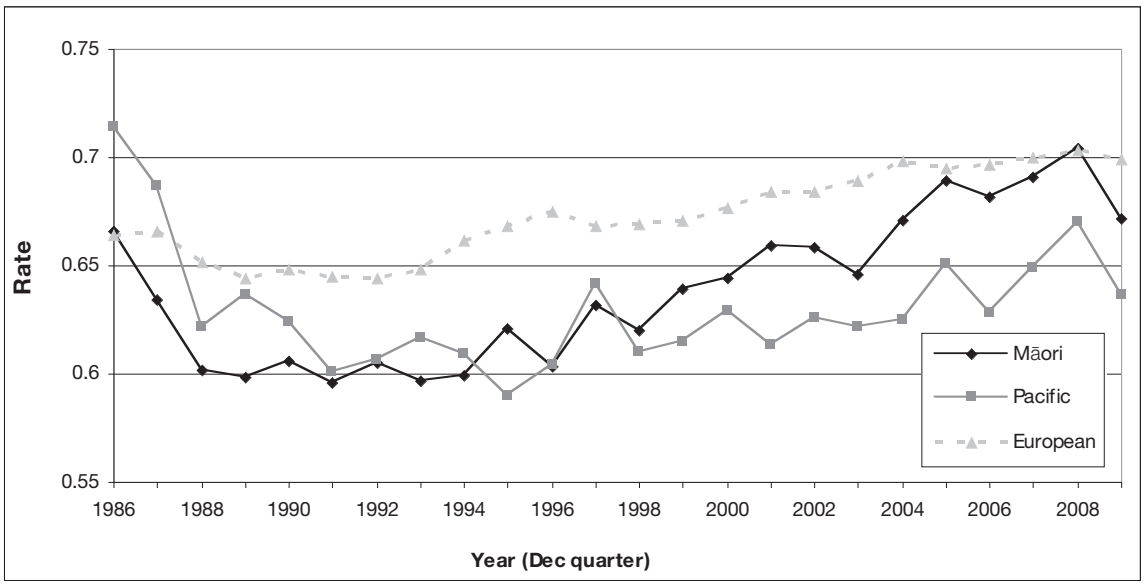

FIGURE 4.5: Labour force participation rate by ethnicity 1986–2009
Source: HLFS – Statistics New Zealand.

4.2.4 Housing

Home ownership decreased for all household types 1996–2006, due mainly to the higher cost of housing. Not living in an owner occupied dwelling showed no consistent pattern across this 25-year period (it goes up and down). This is likely to have resulted from the increased and high cost of housing relative to income (around seven times the average New Zealand yearly income compared with similar countries such as Australia where it is around three times the average yearly income). This has decreased housing affordability.

The effects of government policy and market volatility including interest rates, investment patterns and immigration also influence home ownership. The only exception to this trend of decreased affordability in our findings for one-Māori-adult households was for couples without children, which were much more likely to be living in their own home in 2006 than in 1981. The pattern for all household types was an increase in home ownership until 1991 followed by a decrease through 2006.

All types of two-Māori-adult households experienced similar decreases in home ownership rates from 1996 on (that is, housing became less affordable). There were noticeable decreases in home ownership rates for other one-family households and multi-family households, while again the reverse was true for couples without children. This last is likely to reflect the contribution of two incomes and fewer expenses relating to the costs of raising children, placing them in a stronger position to afford to buy a house.

Not owning your own home has a number of effects other than immediate shelter. It increases the likelihood that you will be mobile, have to share with other households if you have dependents, and have less security over your tenure, all of which impact on health and other social outcomes such as educational attainment. Higher levels of mobility are correlated with higher rates of school truancy and absences.

Rental affordability declined for all types of one-Māori-adult households over the period. There were large differences by family type with single-parent families and other one-family households faring worst. The largest decrease in affordability was between 1986 and 1991, for all household types. The most likely cause of this was the impact of the market rental policy by government.

Two-Māori-adult households had surprisingly lower rates of low rental affordability than their one-Māori-adult counterparts. A possible explanation for this is the clustering of these families in poorer geographical areas, including on turangawaewae and rural communities. As with one-Māori-adult households, 1986–1991 saw big increases in low rental affordability.

There was an overall decline over the period, for all household categories, which is a good sign. Crowding peaked in 1986 for one-Māori-adult households, 10 years before a peak in low rental affordability and 5 years prior to an increase in unemployment. This is interesting given the increased cost of housing and is therefore more likely to reflect an increase in state housing stock between 1996–2006.

There were high rates of crowding for multi-family households with over 50 percent living in crowded dwellings even in 2006. This is not such a surprise given the nature of multi-family households with more than one family living together by definition. There was little change in crowding rates for single parent families after 1996.

For two-Māori-adult households there was an overall decline in crowding from 1981 on. However, there was an increase for multi-family households between 2001 and 2006. For two-Māori-adult households crowding was at its highest right at the start of the period, 15 years before a peak in low rental affordability. Again, there were very high rates of crowding for multi-family households, remaining at over 50 percent in 2006, double the figure for one-family households.

There are correlations between crowding and health and educational outcomes. Given

this, the reduction in crowding should have had a positive effect on these, mitigating to some extent other negative trends such as low housing affordability.

4.3 Health

The census contains very little information about health status and behaviours. What is available is information on health-related income support in the form of the sickness and invalids' benefits, and information on smokers aged 15 years and over in the 1981, 1996 and 2006 censuses. A wealth of information exists on health from other sources, such as the New Zealand Health Survey, the Adolescent and Youth Health Survey, and the Child and Youth Epidemiology Centre. Other sources of information exist on Māori health such as the regular publication of Hauora: Māori Standards of Health produced by the University of Otago, which provides health summary information on Māori.

For this study we were unable to locate other published, national-level data on Māori cultural connectedness such as participation in kapa haka, marae and other whānau events, or the use of te reo. However, Te Hoe Nuku Roa has early publications suggesting strong links between cultural connectedness and good health outcomes (Stevenson et al., no date).

The General Social Survey does have published data on ethnic differences in face-to-face contact with members of the family living in other households, see Figure 4.6.

There is a likely causal association between changing economic inequalities and changing health inequalities between ethnic groups, with a suggested lag time of less than 5 years. Understanding and addressing the distribution of determinants of health and appropriate health services are supported by findings from abridged life tables for Māori from 1951 to 2006 in work by Tobias et al. (2009).

4.3.1 Frequency of face-to-face contact with family members living in other households

Households of all ethnic groups showed evidence of regular contact with family members

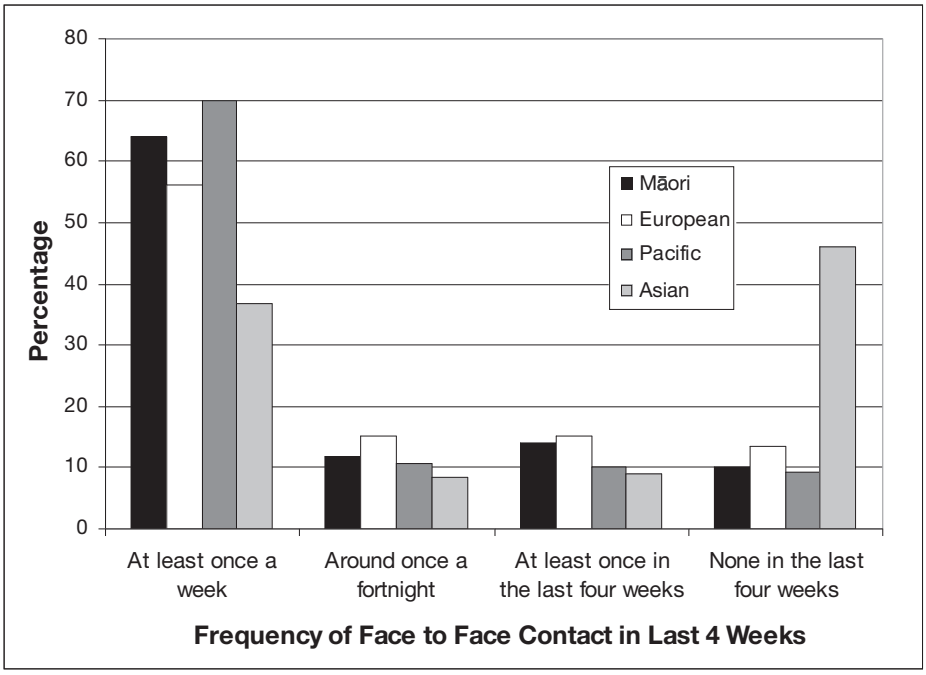

FIGURE 4.6: Face-to-face contact with family members living in other households, by ethnic group
Source: General Social Survey, Statistics New Zealand.

in other households, with Māori and Pacific showing higher proportions in the categories indicating more frequent contact. They were followed closely by European and Asian households in the "at least once a week" category.

4.4 Māori in Australia

Excluded from this census analysis are those 16 percent and rising of the Māori population who have moved overseas, particularly to Australia. Termed 'mozzies', these Māori Aussies were recorded at 92,912 with Māori ancestry based on the 2006 Australian census. This is considered an underestimation, with other figures between 115,000 and 125,000 Māori living in Australia (Te Puni Kōkiri, 2007). Unfortunately we do not know much more about the profile of these Māori, for instance whether or not they would have higher levels of education and different flow-on effects into income, occupation, housing and health indicators.

Most of the Māori living in Australia reported moving for work or a better job. A combination of pull factors were also included, such as better weather, higher wages, joining whānau there; push factors included negatives in social dysfunction and perceived prejudice. Many Māori in Australia mentioned that they missed their extended whānau, and some had taken on new notions of whānau to replace them (ibid.). They were quite likely to say that they would return to New Zealand someday (36 percent, definitely; 26.2 percent, probably).

These Māori work and live in a trans-Tasman labour market. As Hamer points out:

> In this era of globalisation, and especially given the ongoing levels of connectedness within whānau, hapū and iwi, it seems logical to measure Māori progress and achievement beyond the confines of the New Zealand state. What impact, for example, has out-migration had on the sum health of te reo Māori, or on Māori participation in tertiary education, or on overall Māori life expectancy or rates of imprisonment? (Hamer, 2009, p. 80)

Māori in Australia enjoy higher wages and a better standard of living than those in New Zealand, undoubtedly driving further migration over the past few decades. However, Māori economic viability in the Australian labour market may be more vulnerable when there is an economic downturn as recently experienced in both New Zealand and Australia. This could have a major influence on their decision to return to New Zealand (Hamer, 2009).

4.5 Strengths and limitations of the study

The main strength of this study is the availability of data from the census, which, in principle, provides coverage of the whole population. This facilitates the analysis of changes in Māori household composition and wellbeing for a range of household types. This type of analysis cannot be conducted with sample surveys such as the HES and HLFS because of sample size limitations.

The limitations of the study are linked to the range of information collected in the census. First, information that could be useful for constructing indicators of Māori households is not available through the census. Second, although this research uses repeated cross-sectional information to create time series data on different groups of people, it must be recognised that this does not create a true longitudinal study. For example, families and households may enter and exit the census by migration, and the composition of existing units will change (with altered domestic arrangements). Thus it must be borne in mind that the families and households featuring in the analysis are not necessarily the same units, or composed of the same individuals, from one census to the next.

For further information on the strengths and limitations of using census data to measure

household composition and wellbeing, see Milligan et al. (2006).

4.6 Conclusion

There were significant changes in Māori households over the past 25 years. These were similar in most instances to changes experienced in households of other ethnicities over the same period, but the extent of the changes and sometimes the direction varied for Māori households.

There were important gains for Māori households, such as a reduction in crowding, improvements in secondary educational attainment and improvements for some categories of Māori households in respect of income. However, significant inequalities remain among Māori households and between Māori and non-Māori households (see Cotterell et al. 2008a). In many indicators inequalities increased during the period 1986–2006, though evidence of improvements in income for families with dependent children is likely as a result of some flow through of Working for Families based on HES and HLFS data.

There are a number of indicators that could have been included in this report but were unavailable at the time of writing. These would augment the included indicators; examples include paternal education and identity by iwi. The measures that are included in this report are a little confusing as they are often stated in the negative such as lack of employment rather than employment. For proportion-based indicators used in this report, large values are bad, i.e. a large figure means more low income, a greater lack of paid work and so forth.

Lastly, and importantly, many of the measures are threshold measures, and while providing us with valuable information, these do not facilitate a more trend-based analysis that would improve our understanding of changes that occurred for Māori households over the period. It would be extremely valuable to augment these with other data, including additional research and data from other sources to better explain and predict outcomes for Māori households/families. This would allow more specific understanding of policy impacts and services planning.

This report does not attempt to identify or explain other policy implications arising from the data, but rather to provide basic information so that others can do this. We note, however, that there is any number of policies and recommendations in all of the areas considered in the report. The Ministry of Social Development's Social Report provides an excellent basis for comparison and unpacking some the trends for Māori households/families in conjunction with this report. One other specific example of currently available information that would expand our understanding of the findings of this report is that on home ownership. The Family Centre Social Policy Research Unit for Māori Health and Development at Massey University in their report for the Centre for Housing Research Aotearoa New Zealand and Te Puni Kōkiri, recommend building on policies like Low Deposit Rural Lending, Welcome Home Loans, Kiwisaver and Home Ownership Education, along with new initiatives to further develop realistic savings incentives, schemes for households on low to middle incomes, and creative partnerships between public and private organisations, and to encourage private lending institutions to enable affordable mortgages and rent-to-buy schemes, suspensory loans or low interest subsidised loans and finally, further education targeting Māori so they better understand home ownership (Centre for Housing Research & Te Puni Kōkiri, 2006).

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APPENDIX A. WORKING WITH DATA FROM THE CENSUS

Access to the data used in this study was provided by Statistics New Zealand in a secure environment, the Data Laboratory, designed to give effect to the confidentiality provisions of the Statistics Act 1975. Personal identification information supplied on the original census forms, such as name and address, is not carried over to the computer records held by Statistics New Zealand, and these details are therefore not available to Data Laboratory users. Further omissions eliminate the linking of individual-level records in the Data Laboratory data sets back to respondents.

In addition, all Data Laboratory output is subject to confidentiality rules set by Statistics New Zealand to further protect respondent confidentiality. The current rules are given in Statistics New Zealand (2006). In particular, all frequencies in this report are randomly rounded to one of the nearest multiples of 3 (e.g. a count of 5 could become 3 or 6) to further guard confidentiality (Statistics New Zealand, 2001). All percentages are calculated based on rounded counts. Derived statistics such as medians and quantiles are not rounded. Given that the numbers presented are typically very large, rounding is expected to have no effect on the conclusions drawn.

APPENDIX B. USING CENSUS DATA TO MEASURE WELLBEING

The census contains a wealth of information on a wide range of demographic, social and economic issues covering the entire population – or at least those who completed the population census forms. The primary advantages of using census data to assess wellbeing are as follows:

- It allows for an assessment of continuity and change in societal patterns over a long period of time.
- Information obtained from the census covers (almost) all members of the population. It therefore allows us to examine the wellbeing of all New Zealanders, and can provide information on small population groupings in a way that sample surveys rarely can.
- The census collects information on all family members in the household, enabling us to conduct family-level analysis. Such an analysis acknowledges the fundamental interdependence between family members and enables us to see how the impact of the changes since the mid-1980s has varied according to family type.
- Although the census collects no information on the subjective elements of wellbeing, many of the core outcomes (good jobs, adequate income, education and health) identified by New Zealanders as promoting wellbeing are based on objective living conditions, which are captured (with the limitations outlined below) in the census.

The limitations associated with using census data to measure changes in family wellbeing are as follows:

- The range and depth of information collected, the frequency of collection of some data, and the way in which family types are defined and measured is limited.
- The selection of indicators is constrained by the information available through census data. Family and household wellbeing may be influenced by other factors (e.g. the perceived quality of family/household relationships) for which no census information is available. This lack of suitable information also necessitates some indicators being indirect proxy measures of a particular attribute. For example, the health indicator describes changes in the number of people receiving health-related benefits, rather than being an actual measure of the physical health of a family.
- A lack of data availability may constrain time-series analysis. Some census questions that may be relevant to family/household wellbeing are no longer asked (e.g. on housing insulation), while other census questions (e.g. on smoking) are included only on an irregular basis. This means the monitoring of changes in some domains is less frequent than ideal.
- A lack of in-depth information may place limits on interpreting change in some indicators. For example, because income data are collected in bands rather than in discrete amounts, indicator construction requires some estimation.
- The census definition of 'family' only incorporates those family members who live within the same household. Census wellbeing measures

may thus be poor indicators for families whose members do not all reside within the one household. In particular, this relates to parents who usually share custody of their children, and children who live across two households. The ability to monitor the wellbeing of those in extended family situations is also constrained by this household-based definition of family.

With the above issues kept in mind, an extensive process of data investigation preceded the construction of wellbeing indicators. Data collected in each census between 1981 and 2006 were checked for consistency and comparability over time. Once this process was complete, a range of indicators whose purpose was to capture aspects of family and household wellbeing were constructed.

B.1 Median equivalised income – Revised Jensen Scale

Median gross household income is not a suitable indicator of the relative standard of living of a household compared with other households because it does not take into account household composition. For example, a one-adult household with a median annual household income of $45,000 is likely to have access to a higher standard of living than a two-adult, three-child household with the same income. In order to compare household income across a range of household types, an equivalence scale is used to equivalise gross household income.

The equivalence scale used for this study is the Revised Jensen Scale (RJS), which is a New Zealand scale derived by John Jensen of the Ministry of Social Development. Its reference point is a two-adult couple-only household, which is given a value of 1. All other household types are expressed in terms of the equivalent income for the reference two-adult household, with adjustments made for the age and number of children. The scale contains adjustments which take into account that children typically need less income than adults in order to maintain a comparable standard of living. Gross equivalised household income is calculated by dividing annual gross household income by the appropriate value for the household on the Revised Jensen Scale.

For example, a two-adult household with an annual income of $40,000 would have an annual income equivalised with the Revised Jensen Scale of $40,000 since its rating on the Jensen scale is 1. However, if an 8-year-old child was added to the household, its Jensen Scale Rating would change to 1.19 and therefore its equivalised income would be $40,000/1.19 = $33,613.

B.2 Household crowding index

The crowding index is calculated using the equivalised crowding index (ECI), which is used by Statistics New Zealand and takes into account the number of bedrooms in a dwelling and the household composition. The formula weights each individual in a couple relationship as one-half, as in a shared bedroom. Children aged less than 10 years are treated in the same manner, and then all other members of the household are given a weight of one. The result is an equivalised number of people per bedroom. The formula is:

$$\text{ECI} = \frac{[(1/2 \text{ number of children under 10 years}) + (\text{number of couples}) + (\text{all other people aged 10+})]}{\text{number of bedrooms}}$$

Any value in excess of 1.0 represents a crowded dwelling (Statistics New Zealand, 2007).

APPENDIX C. WELLBEING INDICATORS FOR THE REMAINDER OF THE POPULATION

The following tables present the indicators examined in this report for the non-Māori population, e.g. using our definitions, households with no Māori adult present. This allows interested readers to compare levels of wellbeing for each household type for each indicator.

APPENDIX TABLE C.1: Median equivalised household income, by household category, 1981–2006, for households with no Māori adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	$42,308	$39,561	$38,936	$41,193	$43,205	$50,401
Single-parent families	$22,910	$22,664	$20,071	$19,740	$19,827	$25,003
Other one-family households	$40,847	$38,017	$38,407	$39,182	$43,205	$48,623
Multi-family households	$26,154	$25,054	$23,338	$26,046	$24,424	$29,988

APPENDIX TABLE C.2: Low income, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	24.7	6.9	7.9	17.8	15.8	19.6
Single-parent families	48.2	39.8	47.8	48.0	52.3	48.9
Other one-family households	13.2	13.0	10.5	12.6	12.7	13.6
Multi-family households	42.6	36.8	34.9	36.7	42.4	39.9

APPENDIX TABLE C.3: Lack of any educational attainment, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	43.8	27.3	24.4	31.6	19.4	15.3
Single-parent families	64.5	53.1	48.7	51.1	33.5	29.3
Other one-family households	32.5	21.6	17.5	19.3	9.3	7.0
Multi-family households	53.1	46.5	40.3	45.7	30.2	24.8

APPENDIX TABLE C.4: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	62.4	46.0	40.2	44.8	39.9	34.8
Single-parent families	83.3	73.7	66.7	71.1	64.6	62.6
Other one-family households	53.3	39.0	32.6	37.0	32.3	28.1
Multi-family households	74.3	66.6	57.8	61.3	56.9	53.7

APPENDIX TABLE C.5: Lack of paid employment, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	36.5	38.7	40.4	35.0	31.2	27.2
Single-parent families	57.2	57.3	61.3	54.7	46.1	41.7
Other one-family households	5.0	5.7	10.2	9.4	8.1	6.6
Multi-family households	32.7	38.0	43.2	37.8	36.8	30.9

APPENDIX TABLE C.6: Long working hours, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.7	20.0	21.4	27.1	28.8	28.2
Single-parent families	5.2	6.6	7.1	8.1	9.1	9.4
Other one-family households	35.7	40.1	39.8	45.3	44.3	41.1
Multi-family households	15.9	16.4	16.3	20.5	19.0	20.1

APPENDIX TABLE C.7: Lack of home ownership, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.5	17.3	15.4	16.9	18.8	22.8
Single-parent families	35.7	33.8	35.7	41.5	45.4	51.9
Other one-family households	17.8	15.4	15.2	19.0	22.0	27.6
Multi-family households	30.0	28.3	25.2	31.4	36.0	38.8

APPENDIX TABLE C.8: Low rental affordability, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.2	14.0	23.8	29.9	29.3	30.6
Single-parent families	44.4	47.5	69.7	83.5	77.7	76.9
Other one-family households	25.7	32.5	48.3	59.3	57.9	59.3
Multi-family households	37.5	36.6	46.6	68.4	60.8	57.6

APPENDIX TABLE C.9: Crowding, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	21.2	19.3	17.7	14.3	13.9	14.0
Other one-family households	15.6	13.5	11.3	9.4	8.6	8.5
Multi-family households	53.4	56.3	48.8	43.9	41.1	38.6

APPENDIX TABLE C.10: Health-related benefits, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	1.0	1.4	1.6	2.4	2.8	2.9
Single-parent families	1.2	2.4	2.5	4.4	4.9	6.5
Other one-family households	1.0	1.5	1.9	2.8	2.9	2.9
Multi-family households	2.1	5.4	4.6	6.5	6.6	6.9

APPENDIX TABLE C.11: Parental smoking, by household category, 1981–2006, for households with no Māori adult

Household category	1981 (%)	1996 (%)	2006 (%)
Couples without children	41.1	25.9	20.5
Single-parent families	51.2	45.0	40.0
Other one-family households	49.8	36.1	29.5
Multi-family households	54.0	43.5	37.1

APPENDIX D. INCOME AND INEQUALITY 2008 SUMMARY FINDINGS

Based on Perry (2008)

1. These measures do not capture the full impact of the 2008 international financial crisis.
2. The 2007–2008 HES captures the full impact of the WFF package implemented between 2004 and 2007. This resulted in the transfer of a considerable amount of money to low and middle income households with children.
3. The impact of material wellbeing from high housing costs relative to income is greatest for low-income households.
4. From 2007 to 2008 median household incomes (BHC) rose 3.4 percent in real terms, following a rise of 14 percent from 2001 to 2007 (2.3 percent on average).
5. The impact of WFF from 2004 to 2008 is the only period in the last 25 years when low to middle household incomes have risen more quickly than incomes above the middle.
6. Median incomes fell in real terms from the late 1980s to a low point in 1994 and rose steadily from then to 2008 at an average of 2.5 percent returning to its 1988 level by 2001.
7. In the two decades from 1988 to 2008 all income groups gained in real terms with the increases being proportionally greater for the higher income group. For example, in 1988 the household income (BHC) for those in the highest 20 percent income was 2.24 but by 1992 this had risen to 2.53, rising to 2.74 by 2004. It appears to have been steady at 2.59 in 2008.
8. The Gini coefficient rose from 31.7 in 2007 to 33.0 in 2008 (BHC) and 36.8 to 39.1 (AHC) between 2007 to 2008.
9. Large increases in inequality from the late 1980s to mid-1990s steadily continued to rise to 2004, with a decline following WFF to 2007.
10. From 2001 to 2008 median incomes rose strongly because of economic factors and increasing employment among two-parent families. From 2004 to 2008 the WFF package raised real incomes in households with below the median income. Housing costs were reduced for many low-income households from 2001 because of the income-related rents policy. From 2007 to 2008 housing costs rose for all income groups, especially low income groups.
11. The poverty rate using a 60 percent moving line measure (BHC) fell from 21 percent to 18 percent and remained at 18 percent in 2008. The WFF package redistribution of income was sufficient size to counter the upward impact on measured poverty rates for the rising median.
12. Using the more restrictive 50 percent moving line measure (BHC) shows a different trend

with a high proportion of households whose main source of income is from income-tested benefit or New Zealand Superannuation at the lower end of the income distribution. These incomes did not change greatly in real terms from 2004 to 2008 compared with an improvement in real terms for incomes of households with adults in paid employment.

13. With the 60 percent fixed line measure (AHC) the population poverty rate peaked at 23 percent in 1994, fell to 17 percent in 2004 and 13 percent in 2007.
14. Since the early 1990s there has been a clear gradient across age groups with poverty rates decreasing significantly as age increases. That is more marked for children and those younger.
15. A 60 percent fixed line measure (AHC) shows that the poverty rate for children in families with at least one adult in full-time paid work was 10 percent in 2008, down from 14 percent in 2004 and 20 percent in 1994.
16. For children in families with no paid employment the rate was 67 percent in 2008, down from 77 percent in 1994 and up from 60 percent in 2004 and 2007.
17. Children in sole parent households (52 percent in 2008) are always much higher than for those in two-parent households (13 percent), compared with 2001 where sole parents were 74 percent and two-parent households 21 percent. The peak was in 1994 with 76 percent for sole parent households and 29 percent for two-parent households.
18. Around one in three sole parent families live in wider households with other adults, and for these children there is a lower risk of being in poverty because of the wider resources available to them.
19. Children in households with three or more children are at higher risk of being in poverty, although the gap had narrowed in 2008 compared with 2001 and earlier.

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