



families commission
kōmihana ā **whānau** / pasifika

pacific families now and in the future: changing pacific households

The Families Commission was established under the Families Commission Act 2003 and commenced operations on 1 July 2004. Under the Crown Entities Act 2004, the Commission is designated as an autonomous Crown entity.

A key role of the Commission is to promote research on issues that will give the Commission and the public a better understanding of family life. In 2006 the Families Commission consulted with Pacific families. Following those meetings, research was commissioned on Pacific Families Now and in the Future. The research was designed to provide information about the characteristics of New Zealand Pacific families and the challenges they face.

For more information visit www.nzfamilies.org.nz

This report is copyright to the Families Commission. The copyright-protected material may be reproduced free of charge for non-commercial personal use without requiring specific permission. This is subject to the material being reproduced and attributed accurately and not being used in a misleading context. Requests and enquiries concerning the reproduction of information for any purpose other than personal use, requires the permission of the Families Commission.

Families Commission
Public Trust Building
Level 6, 117-125 Lambton Quay
PO Box 2839
Wellington 6140

Telephone: 04 917 7040
Email: enquiries@nzfamilies.org.nz
www.nzfamilies.org.nz

ISBN 978-0-478-34910-8 (Print)
ISBN 978-0-478-34911-5 (Online)

REPORT ONE (pp. 2-56)

**pacific families now and in the future:
changing pacific household composition and
wellbeing 1981–2006**

GERARD COTTERELL¹, MARTIN VON RANDOW¹, STEPHEN MCTAGGART¹,
TAMASAILAU SUA'ALI'I-SAUNI², DANIEL PATRICK¹, PETER DAVIS¹

AUCKLAND UNISERVICES LTD, THE UNIVERSITY OF AUCKLAND

REPORT TWO (pp. 57-114)

**pacific families now and in the future:
a qualitative snapshot of household composition,
wellbeing, parenting and economic decision-making
among Pacific families in Auckland, 2008**

TAMASAILAU SUA'ALI'I-SAUNI, STEPHEN MCTAGGART, MARTIN VON RANDOW

AUCKLAND UNISERVICES LTD, THE UNIVERSITY OF AUCKLAND

¹ Centre of Methods and Policy Application in the Social Sciences (COMPASS), The University of Auckland.

² Centre for Pacific Studies, The University of Auckland.

DISCLAIMER

The views expressed in this report are the personal views of the authors and should not be taken to represent the views or policy of the Families Commission. Although all reasonable steps have been taken to ensure the accuracy of the information, no responsibility is accepted for the reliance by any person on any information contained in this report, nor for any error in or omission from the report.

ACKNOWLEDGEMENTS

Pacific Families Now and in the Future is a research project funded by the Families Commission. We are grateful to the research team members who assisted

Access to the data used in this study was provided by Statistics New Zealand in a secure environment designed to give effect to the confidentiality provisions of the Statistics Act 1975.

Technical information

All tables presented in this report are rounded to base three to conform to Statistics New Zealand's confidentiality requirements. Figures, percentages and derived data and statistics were produced from rounded data.

with preparing the report. We would also like to thank Statistics New Zealand for their assistance. Finally, we would like to acknowledge the advice and input of our reviewers and the project's advisory panel.

TABLE OF CONTENTS – REPORT ONE

Disclaimer	2	3.5 Health	26
Acknowledgements	2	3.5.1 Health-related benefits	26
Executive summary	9	4. Examining changes in wellbeing for Samoan, Cook Island, Tongan and Niuean households	27
1. Introduction	10	4.1 Median equivalised income	27
1.1 Background	10	4.1.1 Samoan median equivalised income	27
1.2 Overview	10	4.1.2 Cook Island median equivalised income	27
1.2.1 Report overview	10	4.1.3 Tongan median equivalised income	27
1.2.2 Family Whānau and Wellbeing Project (FWWP) overview	10	4.1.4 Niuean median equivalised income	28
1.3 Data source and data access	11	4.1.5 Discussion	28
1.4 Classifying families and households	11	4.2 Low income	28
1.5 Determining the ethnicity of ‘Pacific’ households	11	4.2.1 Samoan low income	28
1.6 Measuring the wellbeing of ‘Pacific’ households	12	4.2.2 Cook Island low income	29
1.6.1 Wellbeing indicators	13	4.2.3 Tongan low income	29
1.7 Household types and the presentation of results	14	4.2.4 Niuean low income	29
		4.2.5 Discussion	29
2. Changes in Pacific household composition over time	15	4.3 Home ownership	30
2.1 Usual household composition	15	4.3.1 Samoan home ownership	30
2.2 Number of children	20	4.3.2 Cook Island home ownership	30
2.3 Multiple ethnicity	21	4.3.3 Tongan home ownership	30
		4.3.4 Niuean home ownership	31
3. Changes in family wellbeing for Pacific families (1981–2006)	22	4.3.5 Discussion	31
3.1 Income	22	4.4 Rental affordability	31
3.1.1 Median equivalised income	22	4.4.1 Samoan rental affordability	31
3.1.2 Low income	22	4.4.2 Cook Island rental affordability	32
3.2 Education	23	4.4.3 Tongan rental affordability	32
3.2.1 Educational attainment	23	4.4.4 Niuean rental affordability	32
3.2.2 Post-secondary educational attainment	23	4.4.5 Discussion	33
3.3 Work	24	4.5 Crowding	33
3.3.1 Parental employment	24	4.5.1 Samoan crowding	33
3.3.2 Long working hours	24	4.5.2 Cook Island crowding	33
3.4 Housing	25	4.5.3 Tongan crowding	33
3.4.1 Home ownership	25	4.5.4 Niuean crowding	34
3.4.2 Rental affordability	25	4.5.5 Discussion	34
3.4.3 Crowding	26	5. Pacific-born and New Zealand-born Pacific households	35
		5.1 Median equivalised income	35
		5.1.1 Pacific-born median equivalised income	35

5.1.2 New Zealand-born median equivalised income	35	7 Discussion	45
5.2 Low income	36	7.1 Changes in household composition	45
5.2.1 Pacific-born low income	36	7.2 Summary of changes in wellbeing for each indicator	45
5.2.2 New Zealand-born low income	36	7.2.1 Income	45
5.3 Home ownership	36	7.2.2 Education	46
5.3.1 Pacific-born home ownership	36	7.2.3 Work	47
5.3.2 New Zealand-born home ownership	37	7.2.4 Housing	47
5.4 Rental affordability	37	7.2.5 Health	48
5.4.1 Pacific-born rental affordability	37	7.3 A Pacific qualitative perspective	48
5.4.2 New Zealand-born rental affordability	37	7.4 Strengths and limitations of the study	48
5.5 Crowding	38	7.5 Conclusion	49
5.5.1 Pacific-born crowding	38	References	51
5.5.2 New Zealand-born crowding	38	Appendix A. Working with data from the census	52
6. Regional analysis	39	Appendix B. Using census data to measure wellbeing	53
6.1 Regional median equivalised income	39	B.1 Median equivalised income – Revised Jensen Scale	54
6.1.1 Auckland median equivalised income	39	B.2 Household crowding index	54
6.1.2 Wellington median equivalised income	39	Appendix C. Wellbeing indicators for the remainder of the population	55
6.1.3 Rest of North Island median equivalised income	39	Appendix Table C.1	
6.1.4 South Island median equivalised income	39	Median equivalised household income, by household category, 1981–2006, for households with no Pacific adult	55
6.2 Regional low income	40	Appendix Table C.2	
6.2.1 Auckland low income	40	Low income, by household category, 1981–2006, for households with no Pacific adult	55
6.2.2 Wellington low income	40	Appendix Table C.3	
6.2.3 Rest of North Island low income	40	Lack of any educational attainment, by household category, 1981–2006, for households with no Pacific adult	55
6.2.4 South Island low income	41	Appendix Table C.4	
6.3 Regional home ownership	41	Lack of post-secondary educational attainment, by household category, 1981–2006, for households with no Pacific adult	55
6.3.1 Auckland home ownership	41	Appendix Table C.5	
6.3.2 Wellington home ownership	41	Lack of paid employment, by household category, 1981–2006, for households with no Pacific adult	56
6.3.3 Rest of North Island home ownership	41	Appendix Table C.6	
6.3.4 South Island home ownership	42	Long working hours, by household category, 1981–2006, for households with no Pacific adult	56
6.4 Regional rental affordability	42		
6.4.1 Auckland rental affordability	42		
6.4.2 Wellington rental affordability	42		
6.4.3 Rest of North Island rental affordability	42		
6.4.4 South Island rental affordability	43		
6.5 Regional crowding	43		
6.5.1 Auckland crowding	43		
6.5.2 Wellington crowding	43		
6.5.3 Rest of North Island crowding	43		
6.5.4 South Island crowding	44		

Appendix Table C.7 Lack of home ownership, by household category, 1981–2006, for households with no Pacific adult	56	Table 3.2 Low income, by household category, 1981–2006, for households with at least one Pacific adult	22
Appendix Table C.8 Low rental affordability, by household category, 1981–2006, for households with no Pacific adult	56	Table 3.3 Lack of any educational attainment, by household category, 1981–2006, for households with at least one Pacific adult	23
Appendix Table C.9 Crowding, by household category, 1981–2006, for households with no Pacific adult	56	Table 3.4 Lack of post-secondary educational attainment, by household category, 1981–2006, for households with at least one Pacific adult	23
Tables			
Table 1.1 Census usual household composition categories and report household type categories	11	Table 3.5 Lack of paid employment, by household category, 1981–2006, for households with at least one Pacific adult	24
Table 1.2 Wellbeing indicators presented	13	Table 3.6 Long working hours, by household category, 1981–2006, for households with at least one Pacific adult	24
Table 2.1 Distribution of household composition for Pacific households	15	Table 3.7 Lack of home ownership, by household category, 1981–2006, for households with at least one Pacific adult	25
Table 2.2 Distribution of household categories for Samoan households	16	Table 3.8 Low rental affordability, by household category, 1981–2006, for households with at least one Pacific adult, living in rented dwellings	25
Table 2.3 Distribution of household categories for Cook Island households	16	Table 3.9 Crowding, by household category, 1981–2006, for households with at least one Pacific adult	26
Table 2.4 Distribution of household categories for Tongan households	16	Table 3.10 Health-related benefits, by household category, 1981–2006, for households with at least one Pacific adult	26
Table 2.5 Distribution of household categories for Niuean households	17	Table 4.1 Median equivalised household income, by household category, 1981–2006, for households with at least one Samoan adult	27
Table 2.6 Distribution of household categories for Pacific-born Pacific households	17	Table 4.2 Median equivalised household income, by household category, 1981–2006, for households with at least one Cook Island adult	27
Table 2.7 Distribution of household categories for New Zealand-born Pacific households	17	Table 4.3 Median equivalised household income, by household category, 1981–2006, for households with at least one Tongan adult	28
Table 2.8 Distribution of household categories for Pacific households in Auckland	18	Table 4.4 Median equivalised household income, by household category, 1981–2006, for households with at least one Niuean adult	28
Table 2.9 Distribution of household categories for Pacific households in Wellington	18	Table 4.5 Low income, by household category, 1981–2006, for households with at least one Samoan adult	28
Table 2.10 Distribution of household categories for Pacific households in the rest of the North Island	19		
Table 2.11 Distribution of household categories for Pacific households in the South Island	19		
Table 2.12 Distribution of number of children for Pacific households, by category, 1981–2006	20		
Table 2.13 Numbers of mixed Pacific households for major ethnic groups, 1981–2006	21		

Table 4.6	Low income, by household category, 1981–2006, for households with at least one Cook Island adult	29	Table 4.20	Crowding, by household category, 1981–2006, for households with at least one Niuean adult	34
Table 4.7	Low income, by household category, 1981–2006, for households with at least one Tongan adult	29	Table 5.1	Median equivalised household income, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult	35
Table 4.8	Low income, by household category, 1981–2006, for households with at least one Niuean adult	29	Table 5.2	Median equivalised household income, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult	35
Table 4.9	Lack of home ownership, by household category, 1981–2006, for households with at least one Samoan adult	30	Table 5.3	Low income, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult	36
Table 4.10	Lack of home ownership, by household category, 1981–2006, for households with at least one Cook Island adult	30	Table 5.4	Low income, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult	36
Table 4.11	Lack of home ownership, by household category, 1981–2006, for households with at least one Tongan adult	30	Table 5.5	Lack of home ownership, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult	36
Table 4.12	Lack of home ownership, by household category, 1981–2006, for households with at least one Niuean adult	31	Table 5.6	Lack of home ownership, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult	37
Table 4.13	Low rental affordability, by household category, 1981–2006, for households with at least one Samoan adult, living in rented dwellings	31	Table 5.7	Low rental affordability, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult, living in rented dwellings	37
Table 4.14	Low rental affordability, by household category, 1981–2006, for households with at least one Cook Island adult, living in rented dwellings	32	Table 5.8	Low rental affordability, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult, living in rented dwellings	37
Table 4.15	Low rental affordability, by household category, 1981–2006, for households with at least one Tongan adult, living in rented dwellings	32	Table 5.9	Crowding, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult	38
Table 4.16	Low rental affordability, by household category, 1981–2006, for households with at least one Niuean adult, living in rented dwellings	32	Table 5.10	Crowding, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult	38
Table 4.17	Crowding, by household category, 1981–2006, for households with at least one Samoan adult	33	Table 6.1	Median equivalised household income, by household category, 1981–2006, for households in Auckland with at least one Pacific adult	39
Table 4.18	Crowding, by household category, 1981–2006, for households with at least one Cook Island adult	33	Table 6.2	Median equivalised household income, by household category, 1981–2006, for households in Wellington with at least one Pacific adult	39
Table 4.19	Crowding, by household category, 1981–2006, for households with at least one Tongan adult	33			

Table 6.3	Median equivalised household income, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult	39	Table 6.13	Low rental affordability, by household category, 1981–2006, for households in Auckland with at least one Pacific adult, living in rented dwellings	42
Table 6.4	Median equivalised household income, by household category, 1981–2006, for households in the South Island with at least one Pacific adult	39	Table 6.14	Low rental affordability, by household category, 1981–2006, for households in Wellington with at least one Pacific adult, living in rented dwellings	42
Table 6.5	Low income, by household category, 1981–2006, for households in Auckland with at least one Pacific adult	40	Table 6.15	Low rental affordability, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult, living in rented dwellings	42
Table 6.6	Low income, by household category, 1981–2006, for households in Wellington with at least one Pacific adult	40	Table 6.16	Low rental affordability, by household category, 1981–2006, for households in the South Island with at least one Pacific adult, living in rented dwellings	43
Table 6.7	Low income, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult	40	Table 6.17	Crowding, by household category, 1981–2006, for households in Auckland with at least one Pacific adult	43
Table 6.8	Low income, by household category, 1981–2006, for households in the South Island with at least one Pacific adult	41	Table 6.18	Crowding, by household category, 1981–2006, for households in Wellington with at least one Pacific adult	43
Table 6.9	Lack of home ownership, by household category, 1981–2006, for households in Auckland with at least one Pacific adult	41	Table 6.19	Crowding, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult	43
Table 6.10	Lack of home ownership, by household category, 1981–2006, for households in Wellington with at least one Pacific adult	41	Table 6.20	Crowding, by household category, 1981–2006, for households in the South Island with at least one Pacific adult	44
Table 6.11	Lack of home ownership, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult	41	Table 7.1	Real equivalised median household income (BHC) by ethnicity, 1988–2007 (\$2007)	46
Table 6.12	Lack of home ownership, by household category, 1981–2006, for households in the South Island with at least one Pacific adult	42			

EXECUTIVE SUMMARY

Pacific people make up a significant and growing proportion of New Zealand's population. This study aims to contribute to the growing body of knowledge regarding the changing composition of Pacific households and wellbeing among the overall Pacific population as well as specific Pacific ethnic groups.

The study first examines changes in household composition and the number of children living in Pacific households over the period from 1981 to 2006. The report then examines changes in wellbeing for the overall Pacific population using a series of wellbeing indicators derived from New Zealand Census of Population and Dwellings (census) data.

A subset of wellbeing indicators is then used to examine changes and differences in wellbeing for Samoan, Cook Island, Tongan and Niuean households; for New Zealand and Pacific-born households; and for Pacific households living in Auckland, Wellington, the rest of the North Island and the South Island.

The use of census data allows these changes and differences to be examined over a period of 25 years between 1981 and 2006, during which significant economic and social reform occurred in New Zealand.

The distribution of different household composition categories in the Pacific population changed over the 25 years of study. Four categories were defined for the report: couples without children; single-parent families; other one-family households; and multi-family households. The proportions of single-parent families and multi-family households doubled between 1981

and 2006; this was offset by the shrinking proportion of other one-family households.

Our analyses showed that there were differences in wellbeing among households in the four Pacific ethnic groups, the two birth groups and the four different regions of New Zealand. For this reason, it is not realistic to treat the Pacific population as one homogeneous group – a point with implications for policies affecting the Pacific population.

This report's comparative analyses of population subgroups provide insights into the factors affecting families' wellbeing. The report also provides:

- > a comprehensive set of empirical data that can be used to underpin future research on Pacific peoples, especially family and household-related research
- > a detailed and comprehensive empirical understanding of how household composition changed over 25 years for Pacific families and whether this varies depending on the parents' country of birth and for different Pacific groupings
- > an analysis of Pacific families' wellbeing by region.

It is hoped that this report will provide a baseline of information from which researchers can draw, and that it will provoke further research in the area.

The companion report, *Pacific Families: A qualitative snapshot of household composition, wellbeing, parenting and economic decision-making among Pacific families in Auckland, 2008*. (Sua'ali'i-Sauni et al) provides greater insight into the experiences of some Pacific families in Auckland. This report can be found from page 57.

1. INTRODUCTION

1.1 Background

Nearly seven percent of the total New Zealand population was of Pacific ethnicity according to the 2006 Census. From a figure of approximately 2,000 in 1945, it increased to 202,233 in 1996 and 265,974 in 2006 (Callister & Didham, 2007), and it is projected to rise to 480,000 by 2026 (Statistics New Zealand, 2008b). In comparison with the overall population of New Zealand, the Pacific population is relatively young.

In order to broaden the knowledge-base about the Pacific population and particularly Pacific families, the Families Commission has established a research fund as part of its Pacific Families Now and in the Future project. The fund is aimed at sponsoring investigations into the characteristics of Pacific families in New Zealand, and the challenges they face, together with the implications of these characteristics and challenges for future policies and services. This report has been funded by the Families Commission as part of the project.

The companion report from pg 57, *Pacific Families: A qualitative snapshot of household composition, wellbeing, parenting and economic decision-making among Pacific families in Auckland, 2008*, supplements the quantitative material in this report and gives a human face to the quantitative data with a detailed collection of narratives from the main Pacific household types outlined in this report.

1.2 Overview

1.2.1 Report overview

This report describes changes in household composition and wellbeing for Pacific people between 1981 and 2006, using data from the New Zealand Census of Population and Dwellings. Changes in household composition for Pacific households, which are defined by the presence of at least one adult of Pacific Island ethnicity, are described in detail along with changes in the number of children present in different household types.

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 Pacific household composition between 1981 and 2006, and Section 3 uses indicators to show changes in the wellbeing of the household types described above for the same period. Section 4 provides an analysis of changes in wellbeing for Samoan, Cook Island, Tongan and Niuean households, defined by the presence of at least one adult of the ethnicity in question, for a selected subgroup of the wellbeing indicators – specifically those related to income and housing.

Section 5 then examines differences in wellbeing for Pacific households on the basis of where the adults were born, using a subset of the wellbeing indicators. Section 6 analyses regional differences in wellbeing for Pacific households, examining differences among those in Auckland, Wellington, the rest of the North Island and the South Island.

Section 7 draws together the results of the preceding four sections and discusses trends and outcomes for different household types and Pacific ethnicities for each indicator. It also includes data from other analyses conducted in New Zealand, where they are relevant and available for the particular indicator under discussion. A series of appendices is included to explain aspects of the methodology used to construct the indicators and family and household classifications.

Data for the non-Pacific population are included in Appendix C, to allow comparison with the wellbeing of the overall population. This comparison is not conducted in the main body of the report because its primary purpose is to examine the wellbeing of the Pacific population in detail rather than compare it with the rest of the population.

1.2.2 Family Whānau and Wellbeing Project (FWWP) overview

FWWP was a five-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 things changed between 1981 and 2006.

This research report draws on the work of FWWP in that it utilises the same wellbeing indicators to analyse some aspects of Pacific family and household wellbeing.

1.3 Data source and data access

All data used in this report were derived from the five-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 the data. Further details on data access are given in Appendix A.

1.4 Classifying families and households

According to Statistics New Zealand:

A 'family nucleus' is a couple, with or without child(ren), 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.³

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 household unit. Indicators are presented for these units in four categories: couples without children; single-parent families; other one-family households; and multi-family households. Using the household, rather than the family, as the unit allowed us to retain at least some representation of the extended family aspect of Pacific culture. The full classification scheme and the definitions used for this report are detailed in Table 1.1.

The more detailed categories were aggregated so as to separate the most interesting homogeneous groups; as a result, however, the other one-family household group includes a somewhat wider range of composition categories.

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

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

1.5 Determining the ethnicity of 'Pacific' households

One of the primary aims of this report is to investigate changes in wellbeing for what we have labelled 'Pacific' households. However, the issue of what constitutes a Pacific household is not clear-cut. Is it a household where one of the adults present identifies as Pacific?, or one where at least two adults identify as Pacific?, or one where the majority of household members identify as Pacific? Given that ethnicity is a personal trait (Statistics New Zealand, 2004), can we even meaningfully determine the 'ethnicity' of a household?

Ethnicity in itself is an area of considerable complexity and debate in social research, and the issue of how to identify family and household ethnicity has provoked much discussion among academics and analysts who seek to understand the impact of ethnicity in social policy (for example, see Callister, 2006; Callister,

³ <http://www.stats.govt.nz/Census/2006-census-data/information-by-variable.aspx>, accessed 6 August 2009.

Didham, Newell, & Potter, 2007; Rochford, 1996). The increase in ethnic inter-marriage and 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 researchers on how to gather, use and interpret ethnicity data.⁴

The method we employ for this report is to define a household as Pacific where at least one of the adults identifies as Pacific. This approach looks at households in which there is a member of Pacific ethnicity, rather than at 'Pacific' households; in other words, ethnic identification remains at the individual level and we look at the family and household environment of that individual.

Our justification for this is that the status of the adults in the household (in terms of employment, income level and educational attainment, for example) plays the major role in determining the level of wellbeing in most households. There are some situations where parents are unemployed, or have no educational qualifications, and so adult children who have acquired educational qualifications or are in full-time employment may play a more substantive role in determining the level of wellbeing, but they are not captured in our analysis.

1.6 Measuring the wellbeing of 'Pacific' 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 Pacific households.⁵

The census collects information on all individuals living in common dwelling units, or households. The data also distinguish individuals in family groups within households. 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. This method constrains the information available for the purposes of creating indicators to measure changes in wellbeing. Family and household wellbeing may be influenced by other factors (such as the perceived quality of family or household relationships) for which no census information is available. Some indication of this might be gleaned from the qualitative research conducted in tandem with this quantitative work.

This lack of suitable information also necessitates some indicators being used as indirect proxy measures for a particular attribute. For example, the health indicator examines changes in the proportion of families with an adult receiving health-related benefits, rather than being an actual measure of a family's physical health. 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 or household wellbeing are no longer asked (for instance, questions on housing insulation), while others (such as questions on smoking) are included irregularly (1981, 1996 and 2006 in our study period). This means that the monitoring of changes in some domains is less frequent and less continuous than is ideal.

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 and 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.

⁴ See <http://www.stats.govt.nz/reports/analytical-reports/review-measurement-of-ethnicity.aspx>, accessed 6 August 2009.

⁵ For information on census coverage, see Statistics New Zealand (2001b).

1.6.1 Wellbeing indicators

The original set of indicators used for this study was obtained from the work of Milligan, Fabian, Coope & Errington, (2006). The main FWWP report based on these indicators (Cotterell, von Randow, & Wheldon, 2008) describes various changes to and exclusions from the original set. This report presents overall results for Pacific families using that same resulting

set, described in Table 1.2, with only the income and housing domains covered for subgroup analyses. The analysis was conducted on a subgroup of the indicators for two reasons. Firstly, the income and housing indicators were felt to be the most useful indicators in terms of readers' interest and, secondly, presentation of the results for a full set of indicators would have made the report unwieldy.

TABLE 1.2: Wellbeing indicators presented

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 Consumer 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	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	Parental paid employment	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 households 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

1.7 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. Further household types not identifying families were excluded from our analyses. These differ across census years, and include non-family households; one-person households; not elsewhere classified (visitors only); households of unrelated people; and other multi-person household (not further classifiable).

Some family-type classifications are incomplete because of missing data in census variables, both raw collected and derived; these classifications (such as 'household not classifiable' and 'household composition unidentifiable') are excluded from our analyses.

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

Further to the discussion of median income earlier, the issue of having income data only in bands (eg, \$10,001–\$20,000), is more serious when combined with the equalising of income and measuring medians for single-parent families. The almost 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 analysing all Pacific families and also most of the subgroups on median equalised income – figures for single-parent families are usually reported as \$16,708 in 1986; \$14,565 in 1991; and \$14,311 in 1996.

2. CHANGES IN PACIFIC HOUSEHOLD COMPOSITION OVER TIME

As described in Section 1, 'Pacific households' have been defined by the presence of at least one adult of Pacific ethnicity. This section reports on the changing distributions of Pacific households between 1981 and

2006, looking at census 'usual household composition' categories and the number of children present within each of the four household-type categories used for the project, as described in Section 1.5. Also reported here are numbers of 'mixed Pacific households' for the major groups, based on our definitions, such as one Samoan adult and one Tongan adult. This is to give an indication of the amount of overlap that constrains our subgroup analyses.

2.1 Usual household composition

TABLE 2.1: Distribution of household composition for Pacific households

Household composition	1981	1986	1991	1996	2001	2006
Couples without children	10.3%	10.0%	9.9%	10.9%	12.0%	12.5%
Couples only	2,310	2,775	3,594	5,217	5,955	7,146
Single-parent families	7.2%	8.8%	14.0%	12.7%	13.2%	13.5%
One-parent family	1,620	2,439	5,076	6,078	6,555	7,713
Other one-family households	75.4%	70.7%	65.6%	60.9%	60.8%	58.1%
Couples with children	12,342	13,974	16,911	19,587	20,301	23,793
Couples only plus others	468	612	819	1,494	1,497	1,635
Couples with children plus others	3,357	3,975	4,032	4,803	5,046	4,460
One-parent family plus others	765	1,128	2,064	3,171	3,237	3,384
Multi-family households	7.0%	10.6%	10.6%	15.5%	13.9%	16.0%
Two two-parent families with or without children	783	1,062	1,311	2,528	1,806	1,185
Two-parent plus one-parent family	573	1,197	1,614	2,943	1,848	2,340
Two one-parent families	105	342	558	1,083	12	1,170
Other two-family household	-	-	-	3	2,523	3,432
Three or more families	120	360	360	828	699	1,014

As shown in Table 2.1, other one-family households accounted for the greatest proportion of Pacific households at each census point in our study. However, this proportion steadily declined over the period, from 75.4 percent in 1981 to 58.1 percent in 2006. Single-parent families accounted for 7.2 percent

in 1981 and increased to 13.5 percent in 2006, with a blip in 1991 where they accounted for 14 percent. The proportion of couples without children increased slowly from 10.3 percent in 1981 to 12.5 percent in 2006, while multi-family households increased from seven percent in 1981 to 16 percent in 2006.

TABLE 2.2: Distribution of household categories for Samoan households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	732 (7.5)	1,140 (8.3)	1,563 (8.5)	2,271 (12.3)	2,784 (16.4)	2,205 (9.6)
Single-parent families	624 (6.4)	1,077 (7.8)	2,298 (12.5)	2,388 (12.9)	2,973 (17.5)	2,721 (11.8)
Other one-family households	7,809 (80.0)	10,290 (74.6)	12,660 (69.0)	10,983 (59.4)	7,782 (45.7)	14,235 (61.8)
Multi-family households	600 (6.1)	1,281 (9.3)	1,821 (9.9)	2,853 (15.4)	3,492 (20.5)	3,867 (16.8)

TABLE 2.3: Distribution of household categories for Cook Island households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	579 (9.5)	870 (11.2)	978 (10.8)	1,395 (14.1)	1,551 (12.8)	1,236 (12.9)
Single-parent families	534 (8.8)	834 (10.7)	1,584 (17.5)	1,629 (16.4)	1,902 (15.7)	1,479 (15.4)
Other one-family households	4,482 (73.6)	5,127 (65.9)	5,523 (61.0)	5,409 (54.6)	7,020 (58.0)	5,262 (54.8)
Multi-family households	498 (8.2)	945 (12.2)	975 (10.8)	1,482 (15.0)	1,635 (13.5)	1,622 (16.9)

TABLE 2.4: Distribution of household categories for Tongan households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	261 (13.1)	315 (10.7)	465 (9.7)	681 (12.6)	873 (10.7)	681 (8.0)
Single-parent families	90 (4.5)	183 (6.2)	468 (9.8)	618 (11.4)	822 (10.1)	867 (10.2)
Other one-family households	1,464 (73.4)	2,124 (72.3)	3,270 (68.5)	3,240 (59.8)	5,190 (63.8)	5,457 (64.3)
Multi-family households	180 (9.0)	315 (10.7)	573 (12.0)	876 (16.2)	1,251 (15.4)	1,485 (17.5)

TABLE 2.5: Distribution of household categories for Niuean households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	225 (10.3)	300 (10.7)	348 (10.2)	471 (12.7)	603 (12.8)	405 (11.0)
Single-parent families	168 (7.7)	258 (9.2)	546 (16.1)	552 (14.9)	654 (13.9)	555 (15.1)
Other one-family households	1,566 (71.8)	1,854 (66.0)	2,088 (61.4)	2,045 (55.1)	2,752 (58.5)	2,037 (55.3)
Multi-family households	222 (10.2)	396 (14.1)	420 (12.4)	645 (17.4)	696 (14.8)	687 (18.7)

As shown in Tables 2.2 through 2.5, the proportion of households consisting of couples without children grew slightly between 1981 and 2006 for three of the four Pacific ethnic groups, the exception being Tongan households. For each of the four Pacific ethnicities, the proportions of single-parent families more than doubled between 1981 and 2006, with the largest

increase experienced by Tongan households, and with Cook Island households having the highest rate. The proportions of other one-family households declined for each Pacific ethnicity over the 25 years under examination. Multi-family households increased as a proportion of household types for Samoan, Cook Island, Tongan and Niuean ethnicities between 1981 and 2006.

TABLE 2.6: Distribution of household categories for Pacific-born Pacific households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	1,560 (8.5)	1,926 (8.4)	2,535 (8.6)	2,844 (8.6)	3,480 (10.2)	3,936 (10.4)
Single-parent families	1,317 (7.1)	1,962 (8.5)	3,981 (13.4)	3,954 (12.0)	4,233 (12.4)	4,629 (12.2)
Other one-family households	14,190 (77.0)	16,479 (71.6)	19,704 (66.4)	20,529 (62.1)	20,871 (61.1)	22,440 (59.0)
Multi-family households	1,368 (7.4)	2,634 (11.5)	3,435 (11.6)	5,721 (17.3)	5,580 (16.3)	7,035 (18.5)

TABLE 2.7: Distribution of household categories for New Zealand-born Pacific households

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	756 (16.8)	876 (15.0)	1,122 (13.4)	2,388 (12.7)	2,568 (13.4)	3,306 (13.1)
Single-parent families	264 (5.9)	453 (7.7)	1,023 (12.2)	2,139 (11.3)	2,247 (11.7)	2,916 (11.6)
Other one-family households	3,060 (68.0)	3,576 (61.1)	4,821 (57.7)	10,473 (55.5)	10,686 (55.7)	13,551 (53.8)
Multi-family households	420 (9.3)	951 (16.2)	1,386 (16.6)	3,861 (20.5)	3,690 (19.2)	5,400 (21.5)

The increase over time in the proportion of single-parent families seen for Pacific households in general was spread fairly equally between the birth subgroups (that is, between those households with at least one Pacific-born Pacific adult and those with at least one New Zealand-born Pacific adult, as summarised in Tables 2.6 and 2.7). Couples without children were the only household type to show different trends between these two groups, with the proportion for the Pacific-

born increasing by 1.9 percentage points across 1981–2006, and that for the New Zealand-born decreasing by 3.7 percentage points. The largest percentage point changes for both groups were decreases in the proportions of other one-family households (18 percent for Pacific-born; 14.2 percent for New Zealand-born) and increases in the proportions of multi-family households (11.1 percent for Pacific-born and 12.2 percent for New Zealand-born).

TABLE 2.8: Distribution of household categories for Pacific households in Auckland

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	1,311 (9.5)	1,572 (9.1)	2,034 (8.6)	2,637 (8.9)	3,060 (9.7)	3,564 (9.6)
Single-parent families	1,116 (8.1)	1,563 (9.0)	3,444 (14.6)	3,708 (12.6)	4,185 (13.3)	5,079 (13.7)
Other one-family households	10,287 (74.4)	11,895 (68.9)	15,234 (64.5)	17,808 (60.3)	19,020 (60.5)	21,705 (58.4)
Multi-family households	1,116 (8.1)	2,241 (13.0)	2,907 (12.3)	5,376 (18.2)	5,184 (16.5)	6,789 (18.3)

TABLE 2.9: Distribution of household categories for Pacific households in Wellington

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	387 (9.9)	456 (9.8)	594 (10.3)	852 (12.1)	1,008 (13.8)	1,221 (15.0)
Single-parent families	267 (6.8)	423 (9.1)	774 (13.4)	960 (13.6)	1,011 (13.8)	1,086 (13.3)
Other one-family households	3,063 (78.2)	3,408 (73.5)	3,930 (68.1)	4,410 (62.4)	4,497 (61.5)	4,848 (59.5)
Multi-family households	201 (5.1)	351 (7.6)	477 (8.3)	843 (11.9)	801 (10.9)	999 (12.3)

TABLE 2.10: Distribution of household categories for Pacific households in the rest of the North Island

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	405 (12.8)	474 (12.1)	636 (13.9)	1,134 (14.8)	1,233 (17.0)	1,521 (17.5)
Single-parent families	162 (5.1)	303 (7.7)	591 (12.9)	1,008 (13.1)	948 (13.0)	1,092 (12.6)
Other one-family households	2,385 (75.2)	2,835 (72.5)	3,033 (66.3)	4,665 (60.8)	4,401 (60.5)	5,115 (59.0)
Multi-family households	219 (6.9)	300 (7.7)	317 (6.9)	864 (11.3)	687 (9.5)	939 (10.8)

TABLE 2.11: Distribution of household categories for Pacific households in the South Island

Household composition	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	210 (13.8)	273 (13.4)	333 (14.3)	594 (17.2)	651 (19.6)	837 (19.6)
Single-parent families	75 (4.9)	147 (7.2)	267 (11.4)	402 (11.6)	411 (12.4)	456 (10.7)
Other one-family households	1,197 (78.5)	1,548 (76.0)	1,605 (68.8)	2,166 (62.7)	2,046 (61.7)	2,583 (60.5)
Multi-family households	42 (2.8)	69 (3.4)	129 (5.5)	291 (8.4)	207 (6.2)	396 (9.3)

Tables 2.8 through 2.11 show another cut of the distribution of Pacific households among our four categories: by the four regions we have defined for analysis. The proportions of couples without children increased by about five percent over the 25 years in every region except for Auckland, where the proportion showed very little change. The other trends that we observed in the previous subgroup distributions – increases in the proportions of single-parent families

and multi-family households, and associated decreases in other one-family households – do not appear to have been location-specific. The size of these changes was also very similar across the four regions, with increases of five to seven percentage points for single-parent families, increases of four to 10 percentage points for multi-family households and decreases of 16 to 20 percentage points for other one-family households.

2.2 Number of children

TABLE 2.12: Distribution of number of children for Pacific households, by category, 1981–2006

Number of children by household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families						
1	33.7	36.5	35.1	35.1	36.1	36.8
2	26.9	29.5	30.4	30.4	29.2	28.8
3	17.7	17.8	18.1	18.4	17.8	17.6
4	10.9	9.6	9.7	9.3	10.0	9.5
5	5.5	4.1	4.3	4.5	4.0	4.3
6	3.0	1.7	1.5	1.6	1.9	1.9
7	1.4	0.6	0.7	0.3	0.6	0.6
8 or more	0.8	0.2	0.2	0.3	0.4	0.5
Other one-family households						
0	2.9	3.3	3.7	3.1	5.6	5.3
1	20.9	20.9	22.5	23.9	24.2	23.7
2	26.4	27.0	27.4	29.3	27.8	27.9
3	21.0	23.0	21.4	21.5	20.5	20.5
4	14.3	14.8	14.1	12.3	12.0	12.1
5	8.0	6.9	6.5	5.9	5.6	5.9
6	3.7	2.7	2.9	2.5	2.6	2.8
7	1.8	0.9	1.0	0.9	0.9	1.2
8 or more	1.0	0.5	0.5	0.5	0.6	0.5
Multi-family households						
0	13.6	12.7	14.6	20.4	23.1	29.6
1	24.4	26.2	28.1	30.9	34.2	35.7
2	19.3	23	21.2	22.8	22.3	18.5
3	17.0	16.3	16.5	14.1	10.8	9.1
4	11.3	11.5	10.0	7.1	5.5	4.0
5	6.6	5.9	5.5	2.7	2.4	1.9
6	4.2	2.7	2.3	1.4	1.1	0.8
7	1.9	1.2	1.1	0.5	0.3	0.3
8 or more	1.7	0.4	0.8	0.2	0.2	0.2

The proportion of Pacific households with more than two children fell across the board between 1981 and 2006. The biggest changes were seen for multi-family households, for whom the proportion with three children fell by almost eight percent over the 25 years; the proportion with no children increased by 16 percentage points, and the changes for every other number of children were also quite large. By contrast, the proportions with three children fell by

0.1 percentage points for single-parent families and 0.5 percentage points for other one-family households. Other one-family households were the most likely to have three or four children at each census point, possibly indicative of the stability and circumstances connoted by a single two-parent family household relative to the other types. Couples without children are not included in this analysis, by definition.

2.3 Multiple ethnicity

For the ethnic subgroup analyses we defined (for instance) a Samoan household as one with at least one Samoan adult. This definition meant that the categories were not entirely mutually exclusive. Table 2.13 reports the total numbers in each ethnic group and then numbers of 'mixed Pacific households' among these

groups across the 25-year period. The categories in the table are based on our definitions – for example, households with one Samoan adult and one Tongan adult. These figures give some idea of the extent of mixing – percentages of the associated ethnic groups for the mixed categories ranged from 1.1 percent (1981: Cook Island Māori and Tongan) to 22.6 percent (1996: Samoan and Niuean).

TABLE 2.13: Numbers of mixed Pacific households for major ethnic groups, 1981–2006

Ethnic mixture	1981	1986	1991	1996	2001	2006
Samoan	9,765	13,788	18,342	18,495	17,031	23,028
Cook Island Māori	6,093	7,776	9,060	9,915	12,108	9,599
Tongan	1,995	2,937	4,776	5,415	8,136	8,490
Niuean	2,181	2,808	3,402	3,713	4,705	3,684
Samoan & Cook Island Māori	153	309	420	849	1,086	669
Samoan & Tongan	132	300	357	834	993	771
Samoan & Niuean	195	300	381	840	936	687
Cook Island Māori & Tongan	69	111	129	285	441	276
Cook Island Māori & Niuean	108	204	225	435	576	423
Tongan & Niuean	117	144	171	426	477	345

3. CHANGES IN FAMILY WELLBEING FOR PACIFIC FAMILIES (1981–2006)

3.1 Income

3.1.1 Median equivalised income

Indicator definition: Median equivalised real household income for households where at least one Pacific adult is present.

For the purposes of 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 Consumer Price Index (CPI) (base 1999) for the relevant year (Statistics New Zealand, 2005).

Each of the four household types experienced an increase in median equivalised income over the period between 1981 and 2006. The largest increases, of 48.3 percent and 46.6 percent, were experienced by multi-family households and single-parent families respectively, but their overall level of income was much lower than those of the other two household types. Couples without children had the highest overall income at all census points over the 25 years.

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

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$46,154	\$45,388	\$39,945	\$46,415	\$48,163	\$52,041
Single-parent families	\$13,203	\$16,708	\$14,565	\$14,311	\$14,594	\$19,354
Other one-family households	\$27,972	\$27,700	\$25,683	\$29,518	\$33,358	\$38,068
Multi-family households	\$19,568	\$20,706	\$19,973	\$20,691	\$23,731	\$29,019

3.1.2 Low income

Indicator definition: The proportion of all households with at least one Pacific adult whose equivalised gross income is less than 60 percent of the median equivalised gross household income.

There was a minor overall financial improvement for all household categories between 1981 and 2006.

Single-parent families fared worst at all census points, and even at their most favourable point (in 2006), 63.2 percent of this category were living with less than 60 percent of the median equivalised gross household income. Not surprisingly, couples without children were least likely at all time points to have income below the 60 percent median level.

TABLE 3.2: Low income, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.6	10.9	12.9	16.0	17.1	16.9
Single-parent families	71.6	64.6	70.0	66.6	67.6	63.2
Other one-family households	34.6	31.7	30.9	26.3	25.7	24.2
Multi-family households	53.7	49.5	47.4	44.8	45.2	41.6

3.2 Education

3.2.1 Educational attainment

Indicator definition: The proportion of all households with at least one Pacific adult present where no adult has any educational qualifications.

On the whole, Pacific households became more educated over the study period. The level of educational qualification achievement, however, differed between household category types. The proportion of Pacific

single-parent families where no adult had an educational qualification fell steadily, from 81.9 percent in 1981 to 44.1 percent in 2006. However, if we consider that other one-family households accounted for at least 58.8 percent of the Pacific population during our study period, we can see a general improvement in educational achievement, most markedly between 1996 and 2006. Over the whole period, the proportion with at least one adult with an educational qualification rose by 40 percentage points.

TABLE 3.3: Lack of any educational attainment, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	45.8	30.1	27.2	36.3	20.5	18.9
Single-parent families	81.9	66.3	62.3	73.0	49.0	44.1
Other one-family households	60.8	41.2	36.8	48.2	24.4	20.8
Multi-family households	73.1	59.5	51.9	62.9	39.7	34.9

3.2.2 Post-secondary educational attainment

Indicator definition: The proportion of all households with at least one Pacific adult present where no adult has any post-secondary qualification.

Generally, the proportion of Pacific households with no adult holding a post-secondary educational qualification was relatively large over our study period, but it has been falling. Couples without children fared the best and single-parent families the worst over the study period. For the other one-family households there was a significant

improvement over the 25 years. In 1981, 80.8 percent of them had no adult with a post-secondary educational qualification; this had fallen to 55.1 percent by 2006. Single-parent families and multi-family households had the smallest absolute decreases over time, of 13.3 percentage points and 18 percentage points respectively. The most favourable point for single-parent families was in 2001, but even then 79.4 percent had no adult with a post-secondary qualification; for multi-family households the equivalent point was in 1991 with 71.1 percent.

TABLE 3.4: Lack of post-secondary educational attainment, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	73.0	56.0	47.6	53.2	46.8	44.5
Single-parent families	93.9	85.5	79.9	85.9	79.4	80.6
Other one-family households	80.8	64.2	56.6	65.3	56.7	55.1
Multi-family households	91.1	79.6	71.1	79.5	72.0	73.1

3.3 Work

3.3.1 Parental employment

Indicator definition: The proportion of all households with at least one Pacific adult present, where there is no adult in formal paid employment.

The overall trend for all categories was an increase in the proportion of Pacific households with no adult in formal paid employment between 1981 and 1991,

before a slow decline through to 2006. The rather large proportions of single-parent families in this category are likely in large part due to contextual issues such as childcare duties, low educational outcomes and corresponding limited employment opportunities. Interestingly, the rate for multi-family households climbed significantly to a peak of 53.1 percent in 1991 and remained relatively high at 33.6 percent at the end of the study period.

TABLE 3.5: Lack of paid employment, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	9.9	11.6	21.9	19.4	17.1	14.9
Single-parent families	64.0	11.6	78.4	69.5	59.3	55.0
Other one-family households	6.8	7.4	25.1	19.1	15.8	11.8
Multi-family households	28.7	36.1	53.1	44.3	39.2	33.6

3.3.2 Long working hours

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

The data here show an increasing proportion of all Pacific household categories working more than 48 hours per week within the study period. A dip in the numbers working longer hours occurred in 1991, reflecting the economic downturn in New Zealand at that time. The relatively large differences between couples without children and single-parent families

can be explained by the fact that those in the former category are more likely to be employed in the first place, having no childcare responsibilities or constraints. More than 24 percent of other one-family households consistently had at least one adult working more than 48 hours per week between 1996 and 2006. This category makes up a large part of the Pacific population under study, so this could be indicative of a significant proportion of other one-family Pacific households needing to have someone working long hours for the maintenance and improvement of their financial status.

TABLE 3.6: Long working hours, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.9	25.5	19.1	29.5	27.8	28.9
Single-parent families	2.6	3.8	2.1	3.3	4.3	5.1
Other one-family households	16.5	23.3	16.8	24.7	25.2	26.7
Multi-family households	7.2	9.8	7.1	11.7	11.9	14.2

3.4 Housing

3.4.1 Home ownership

Indicator definition: The proportion of all households with at least one Pacific adult present, not living in owner-occupied dwellings.

The proportions not living in owner-occupied dwellings increased for three of the four Pacific household types over the 25 years under examination. Only couples without children households saw decreases in this indicator over the period. As might be expected, single-parent families saw the highest proportions of any household type at every time point in the analysis.

TABLE 3.7: Lack of home ownership, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	61.5	56.6	51.0	48.0	49.7	52.5
Single-parent families	68.7	69.0	71.4	74.3	77.4	81.5
Other one-family households	50.4	45.3	44.5	48.8	54.7	60.9
Multi-family households	53.3	46.9	42.1	48.6	52.7	57.1

3.4.2 Rental affordability

Indicator definition: The proportion of all households with at least one Pacific adult present, living in rented dwellings, whose weekly rent is greater than 25 percent of their weekly gross equivalised household income.

There was an overall rise in the proportion of all household categories paying more than 25 percent of their weekly equivalised income in rent between 1981 and 2006. Rates peaked in 1996 for most household types and have declined since, although, with the exception of multi-family households, the 2006 levels were higher than those in 1981.

The largest household group in our study population, other one-family households, fared quite badly on this indicator, starting in 1981 where 42.1 percent spent more than 25 percent of their weekly gross equivalised household income on rent, and increasing to more than 70 percent in 1996, before falling again to just over 60 percent in 2006. The proportion of single-parent families (who have limited income and employment opportunities) with unaffordable rents was also extremely high across the study period, peaking from 1991 to 1996 at 89.4 percent, and remaining over 70 percent from 2001 to 2006.

TABLE 3.8: Low rental affordability, by household category, 1981–2006, for households with at least one Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	21.7	24.1	38.1	34.4	31.9	28.7
Single-parent families	55.2	56.6	78.0	89.4	75.7	71.3
Other one-family households	42.1	44.4	67.0	73.3	62.9	60.9
Multi-family households	43.1	39.6	52.6	72.9	50.5	42.4

3.4.3 Crowding

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

The overall trend for all household categories was a decrease in crowding between 1981 and 2006;

however, 68.9 percent of multi-family households were considered crowded in 2006, and other one-family households never experienced less than 30 percent requiring at least one extra bedroom over the study period. In addition, a significant proportion of single-parent families (never less than 39 percent for the study period) also needed another room at each census point.

TABLE 3.9: Crowding, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	48.0	45.3	43.3	39.7	40.0	39.4
Other one-family households	39.9	41.9	39.9	35.2	32.4	33.1
Multi-family households	82.2	82.9	79.7	73.7	70.0	68.9

3.5 Health

3.5.1 Health-related benefits

Indicator definition: The proportion of all households with at least one Pacific adult present and with at least one adult receiving either a Sickness or Invalid's Benefit.

An increasing number of Pacific adults (in all household categories) over the study period were receiving either a Sickness or Invalid's Benefit, with rates increasing steadily over the 25 years of the study.

TABLE 3.10: Health-related benefits, by household category, 1981–2006, for households with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	2.2	3.4	4.5	6.2	6.9	5.8
Single-parent families	1.5	2.8	3.3	5.8	6.9	7.3
Other one-family households	1.8	3.1	4.2	7.7	7.7	7.2
Multi-family households	3.1	5.0	6.2	10.0	9.9	9.7

4. EXAMINING CHANGES IN WELLBEING FOR SAMOAN, COOK ISLAND, TONGAN AND NIUEAN HOUSEHOLDS

This section of the report examines differences in the income and housing wellbeing indicators among the four largest Pacific ethnic groups, and changes in wellbeing between 1981 and 2006. The analysis is conducted for households where at least one of the adults is of Samoan, Cook Island, Tongan or Niuean ethnicity. These are not mutually exclusive categories – for instance, a household could have one Samoan adult and one Tongan adult – and the prevalence of

such inter-ethnic households over time is described in Table 2.13.

4.1 Median equivalised income

Indicator definition: Median equivalised household income for households with at least one Samoan, Cook Island, Tongan or Niuean adult present.

4.1.1 Samoan median equivalised income

All categories of Samoan households experienced increases in median equivalised household income over the study period. Couples without children were best off, followed by other one-family households. Single-parent families experienced the largest percentage increase in median equivalised income over the period (nearly 77 percent) but still had the lowest overall household incomes.

TABLE 4.1: Median equivalised household income, by household category, 1981–2006, for households with at least one Samoan adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$45,385	\$44,053	\$39,945	\$36,459	\$50,100	\$50,401
Single-parent families	\$11,471	\$16,708	\$14,565	\$14,311	\$14,594	\$20,274
Other one-family households	\$25,641	\$25,861	\$25,282	\$29,679	\$33,707	\$36,484
Multi-family households	\$18,561	\$20,150	\$20,071	\$21,974	\$24,813	\$30,389

4.1.2 Cook Island median equivalised income

The median equivalised income of all Cook Island households rose over the 25 years, with couples without children having the highest income at every point of

analysis. Multi-family households experienced the largest percentage increase in income, of 38 percent, while couples without children recorded the lowest increase at 1.7 percent.

TABLE 4.2: Median equivalised household income, by household category, 1981–2006, for households with at least one Cook Island adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$45,385	\$47,938	\$39,945	\$41,193	\$45,574	\$46,151
Single-parent families	\$13,203	\$16,708	\$14,165	\$14,311	\$14,112	\$16,546
Other one-family households	\$28,790	\$29,188	\$27,614	\$30,192	\$34,528	\$36,908
Multi-family households	\$20,059	\$21,737	\$20,071	\$20,107	\$23,731	\$27,673

4.1.3 Tongan median equivalised income

Following their Samoan and Cook Island counterparts, all Tongan households had higher median equivalised incomes in 2006 than they did in 1981. However, in almost all time periods, Tongan families appear to have

been worse off economically than the overall Pacific population, for whom this indicator is described in Table 3.1. Tongan multi-family households experienced the largest percentage increase (of 34 percent), as did their Cook Island equivalents.

TABLE 4.3: Median equivalised household income, by household category, 1981–2006, for households with at least one Tongan adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$40,000	\$40,730	\$31,782	\$41,193	\$43,191	\$46,224
Single-parent families	\$15,520	\$14,949	\$14,151	\$13,745	\$13,309	\$15,950
Other one-family households	\$25,641	\$24,985	\$20,755	\$25,331	\$27,345	\$31,013
Multi-family households	\$18,987	\$20,060	\$17,520	\$19,050	\$20,018	\$25,398

4.1.4 Niuean median equivalised income

Niuean households experienced increases in median equivalised income between 1981 and 2006, as did

the other ethnic groups examined. Other one-family Niuean households saw a considerable increase of 46.3 percent over the time period.

TABLE 4.4: Median equivalised household income, by household category, 1981–2006, for households with at least one Niuean adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$43,462	\$44,053	\$39,945	\$46,459	\$50,100	\$54,401
Single-parent families	\$14,622	\$16,708	\$14,565	\$14,311	\$14,550	\$20,274
Other one-family households	\$27,424	\$28,225	\$27,614	\$31,641	\$35,532	\$40,114
Multi-family households	\$22,308	\$21,566	\$20,300	\$24,830	\$27,336	\$29,988

4.1.5 Discussion

For each of the four Pacific ethnicities analysed above, couples without children had the highest median equivalised gross income at every census point over the 25 years between 1981 and 2006. Single-parent families consistently had the lowest income for each Pacific ethnic group. Both extreme household types

were subject to the inaccuracies in the equivalised income calculations as described in Section 1.8, hence the many identical figures. Niuean households generally had higher incomes than their counterparts in the other ethnic groups, but were at times followed closely by Samoan households.

4.2 Low income

Indicator definition: The proportion of all households with at least one Samoan, Cook Island, Tongan or Niuean adult whose equivalised gross income is less than 60 percent of the median equivalised gross household income.

4.2.1 Samoan low income

In the 25 years under examination, the prevalence of low income decreased among all Samoan households. Single-parent families and multi-family households were the most likely to experience low income at each time point. However, these groups also recorded the biggest decreases in the prevalence of low income, of 15.6 and 17.4 percent respectively.

TABLE 4.5: Low income, by household category, 1981–2006, for households with at least one Samoan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	21.7	10.8	12.5	15.0	15.7	17.6
Single-parent families	75.0	64.4	68.3	64.4	75.4	59.4
Other one-family households	39.0	35.3	32.3	26.1	25.5	26.6
Multi-family households	55.2	51.2	45.9	41.7	41.0	37.8

4.2.2 Cook Island low income

Three of the four Cook Island household categories experienced decreases in the prevalence of low income between 1981 and 2006. Couples without children did quite well from 1981 to 1991, with the rate dropping from 20.2 percent to 11.1 percent. However, the rate had increased to 24.4 percent by 2006. The situation

improved only marginally for Cook Island single-parent families during the study period. Their most favourable point was in 1986, when 65.1 percent were living on less than 60 percent of the median equivalised gross household income. Both other one-family households and multi-family households saw decreases in the prevalence of low income by about nine percent.

TABLE 4.6: Low income, by household category, 1981–2006, for households with at least one Cook Island adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.2	9.9	11.1	17.7	17.8	24.4
Single-parent families	71.2	65.1	75.0	71.1	71.0	69.9
Other one-family households	32.1	25.8	25.4	23.3	21.3	23.9
Multi-family households	52.0	45.5	47.5	45.4	45.7	43.2

4.2.3 Tongan low income

All Tongan households experienced decreases over time in the prevalence of low income from 1981 to 2006. However, for single-parent families and other one-family households, the improvements were slight.

On the whole, single-parent families fared worst; even at their most favourable point (in 2006), 68.5 percent of this category were surviving on less than 60 percent of the median equivalised gross household income.

TABLE 4.7: Low income, by household category, 1981–2006, for households with at least one Tongan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	27.3	14.6	18.8	18.7	19.4	21.9
Single-parent families	69.4	67.1	70.4	70.7	72.4	68.5
Other one-family households	38.0	36.9	42.7	37.8	36.5	36.0
Multi-family households	57.0	51.5	51.4	50.6	51.5	46.8

4.2.4 Niuean low income

Niuean households saw decreases across the board in the prevalence of low income from 1981 to 2006, with other one-family households and multi-family

households showing the most improvement over time. As with each of the other Pacific ethnic groups, Niuean single-parent families were the most likely to be experiencing low income at all census points.

TABLE 4.8: Low income, by household category, 1981–2006, for households with at least one Niuean adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	22.7	12.2	13.1	12.9	14.2	18.9
Single-parent families	67.9	63.5	67.2	65.2	68.1	59.1
Other one-family households	34.8	27.0	25.2	21.3	19.1	18.2
Multi-family households	49.0	48.5	44.2	39.7	39.6	37.6

4.2.5 Discussion

For each of the four Pacific ethnicities examined, couples without children were the least likely to have income below 60 percent of the overall median,

followed by other one-family households. For each ethnic group single-parent families were the most likely to earn this type of low income at all time points.

4.3 Home ownership

Indicator definition: The proportion of all households with at least one Samoan, Cook Island, Tongan or Niuean adult present, not living in owner-occupied dwellings.

4.3.1 Samoan home ownership

For three of the four Samoan household types, the proportions not living in owner-occupied dwellings increased between 1981 and 2006. Samoan single-parent families fared worst, with proportions on this

indicator increasing from 66.2 percent in 1981 to 81.7 percent in 2006.

Samoan couples without children fared only slightly better than single-parent families between 1981 and 1986, but from then on the former experienced decreasing proportions on this indicator while those for single-parent families increased. Samoan multi-family households saw the lowest proportions – or had the highest rates of home ownership – at all census points except for 2001.

TABLE 4.9: Lack of home ownership, by household category, 1981–2006, for households with at least one Samoan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	66.1	59.4	52.4	48.9	49.8	55.8
Single-parent families	66.2	64.7	69.0	72.6	75.9	81.7
Other one-family households	48.5	43.1	44.1	49.1	54.8	65.0
Multi-family households	47.2	39.1	37.1	45.8	50.5	55.1

4.3.2 Cook Island home ownership

Three of the four Cook Island household types, like their Samoan counterparts, saw decreases in rates of home ownership over the study period. Single-parent families typically have low levels of home ownership, and the proportion of Cook Island single-parent families owning their own home was never more than 25.2 percent

(in 1986) in the study period; it dropped from there to a low of 14.2 percent in 2006. Cook Island couples without children were the group most likely to be living in their own home in 2001 and 2006, but before this, other one-family households were most likely to do so, and multi-family households also fared better than couples without children.

TABLE 4.10: Lack of home ownership, by household category, 1981–2006, for households with at least one Cook Island adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	68.2	58.2	46.4	48.1	49.3	50.9
Single-parent families	75.5	74.8	74.7	76.9	79.3	85.8
Other one-family households	57.4	49.8	42.4	46.2	52.3	63.2
Multi-family households	59.9	55.5	45.9	52.2	55.1	62.2

4.3.3 Tongan home ownership

Tongan couples without children saw a slight overall improvement in rates of home ownership between 1981 and 2006, although they peaked in 1996 at 47.8 percent. For the other three household types

the likelihood of living in a dwelling that they owned decreased over the period, with the largest absolute decrease of 16.1 percent experienced by single-parent families. Indeed, the same family type was the least likely to own their own home at each census point after 1981.

TABLE 4.11: Lack of home ownership, by household category, 1981–2006, for households with at least one Tongan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	67.4	52.4	63.0	52.2	58.2	65.7
Single-parent families	66.7	66.7	71.2	74.5	77.1	82.8
Other one-family households	57.5	49.1	53.6	56.6	61.9	72.4
Multi-family households	55.2	48.5	48.1	51.5	57.3	64.2

4.3.4 Niuean home ownership

The overall proportion of Niuean couples without children owning their own home increased between 1981 and 2006, with just a slight reversal of this trend between 2001 and 2006 – something that was in fact observed for all household types. The proportion of Niuean single-parent families and other one-family households owning their own homes

declined, significantly for the former and slightly for the latter, over the 25 years, although other one-family households were better off than in 1981 up until the aforementioned turnaround between 2001 and 2006. Multi-family households experienced an increase of 13 percent in the proportion owning their own homes between 1981 and 1991, but then saw a decrease, also of 13 percent, between 1991 and 2006.

TABLE 4.12: Lack of home ownership, by household category, 1981–2006, for households with at least one Niuean adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	62.2	61.2	54.8	49.7	49.5	53.7
Single-parent families	72.0	73.4	73.4	77.7	81.3	82.5
Other one-family households	57.1	49.8	44.9	48.3	51.5	58.8
Multi-family households	59.3	54.4	46.3	48.5	50.8	59.3

4.3.5 Discussion

For most Pacific households, regardless of household composition or the ethnicity of the adults, overall levels of home ownership declined between 1981 and 2006. The exceptions were couples without children for each of the four ethnicities, for whom rates of

home ownership increased, and Niuean multi-family households, whose rates increased between 1981 and 1991 and then returned to about their 1981 level by 2006. As would be expected, single-parent families had the lowest levels of home ownership for all ethnic groups at all points in time.

4.4 Rental affordability

Indicator definition: The proportion of all households with at least one Samoan, Cook Island, Tongan or Niuean adult present, living in rented dwellings, whose weekly rent is greater than 25 percent of their weekly gross equivalised household income.

4.4.1 Samoan rental affordability

With the exception of multi-family households, a higher proportion of Samoan households were paying more than 25 percent of their weekly gross equivalised

income in rent in 2006 than in 1981. Samoan couples without children were the least likely, and single-parent households the most likely to be paying more than 25 percent of their income in rent, at all census points. Samoan single-parent families peaked in 1996, when 88.5 percent had low rental affordability, before an improvement to 67.6 percent in 2006, at which point they were still worse off on this indicator than in 1981. Rental affordability improved for all Samoan household types between 1996 and 2006.

TABLE 4.13: Low rental affordability, by household category, 1981–2006, for households with at least one Samoan adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	25.7	28.1	37.5	33.0	29.2	27.3
Single-parent families	58.9	59.0	76.3	88.5	75.1	67.6
Other one-family households	45.8	48.8	66.9	74.0	62.8	63.0
Multi-family households	46.3	42.9	52.7	70.6	49.1	41.6

4.4.2 Cook Island rental affordability

The proportion of Cook Island single-parent families spending more than 25 percent of their income on rent rose from 49.7 percent in 1981 to a peak of 89.9 percent in 1996, before declining to 68.3 percent by 2006. The proportion for Cook Island other one-family households rose from 37.1 percent in 1981 to a peak

of 68.3 percent in 1996, before decreasing to 55.7 percent by 2006. Cook Island couples without children fared the best, but still almost one in five (19.7 percent) were spending more than 25 percent of their income on rent in 1981, increasing to a peak of 34.6 percent in 1996, before slipping down to 27.6 percent by 2006.

TABLE 4.14: Low rental affordability, by household category, 1981–2006, for households with at least one Cook Island adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	19.7	17.6	32.3	34.6	30.7	27.6
Single-parent families	49.7	52.4	78.9	89.9	75.9	68.3
Other one-family households	37.1	33.8	61.2	68.3	59.6	55.7
Multi-family households	35.5	30.9	47.9	73.0	47.7	33.0

4.4.3 Tongan rental affordability

Multi-family households were the only Tongan household type to have better rental affordability in 2006 than in 1981. For the remaining three types, the proportions

that were paying more than 25 percent of their weekly income in rent increased. The largest increases were experienced by other one-family households (20.2 percent) and couples without children (15.7 percent).

TABLE 4.15: Low rental affordability, by household category, 1981–2006, for households with at least one Tongan adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	24.1	34.0	50.0	41.9	37.6	39.8
Single-parent families	62.1	67.3	81.5	92.7	76.8	69.3
Other one-family households	46.7	55.9	76.8	81.0	68.0	66.9
Multi-family households	56.9	52.4	59.4	80.0	54.5	46.5

4.4.4 Niuean rental affordability

The pattern for rental affordability in households with at least one Niuean adult followed that of their Samoan, Cook Island and Tongan counterparts, with only multi-family households experiencing a decrease in the proportion paying more than 25 percent of weekly income in rent over the study period. The proportion for

Niuean other one-family households improved after the peak in the mid 1990s, but still remained substantial, at 61.8 percent, in 2006. Niuean couples without children fared best on this indicator, but still almost 30 percent of them were suffering from low rental affordability in 2006. Niuean single-parent families fared worst, as was the case for the other ethnic groups.

TABLE 4.16: Low rental affordability, by household category, 1981–2006, for households with at least one Niuean adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	22.7	21.8	39.2	29.8	31.9	28.8
Single-parent families	52.7	57.1	79.4	88.0	74.1	70.4
Other one-family households	45.1	42.2	66.7	71.2	60.1	61.8
Multi-family households	45.6	43.9	50.0	70.9	53.7	44.2

4.4.5 Discussion

Whatever the Pacific ethnicity of at least one of the adults, couples without children were the least likely household type to be paying more than 25 percent of

their weekly income in rent at every time point in the analysis. Single-parent families, again regardless of their ethnicity, were the most likely to be paying more than 25 percent of their weekly income in rent.

4.5 Crowding

Indicator definition: The proportion of all households with at least one Samoan, Cook Island, Tongan or Niuean adult present living in dwellings that require at least one additional bedroom to meet the sleeping needs of the household.

Samoan household types in this analysis. Of particular interest is that while the prevalence of crowding declined between 1981 and 2001, it increased between 2001 and 2006. Samoan multi-family households were the most crowded, with never less than 70.1 percent (2001), and a peak of 84.2 percent in 1986 needing at least one additional bedroom.

4.5.1 Samoan crowding

The prevalence of crowding declined for each of the

TABLE 4.17: Crowding, by household category, 1981–2006, for households with at least one Samoan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	49.5	47.3	44.9	40.0	40.3	42.6
Other one-family households	42.0	45.0	42.9	37.7	33.1	38.0
Multi-family households	83.3	84.2	81.3	73.9	70.1	70.2

4.5.2 Cook Island crowding

The pattern seen in the Samoan analysis is repeated for Cook Island households. The prevalence of crowding declined for all household types between 1981 and

2001, and then increased between 2001 and 2006. As might be expected, multi-family households experienced the most crowding, regardless of the time point.

TABLE 4.18: Crowding, by household category, 1981–2006, for households with at least one Cook Island adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	47.3	42.2	39.7	37.8	37.4	41.7
Other one-family households	42.2	37.9	32.4	29.6	26.7	32.2
Multi-family households	85.8	82.3	77.1	72.9	69.8	71.6

4.5.3 Tongan crowding

The prevalence of crowding increased for two of the three Tongan household types, and decreased only slightly for the third, single-parent families, between 1981 and 2006. For Tongan other one-family households (the largest proportion of households), the

extent of crowding grew nearly 10 percent over the period. Tongan multi-family households had the largest proportion needing an extra bedroom at each census point, reaching a peak of 81.6 percent in 1986 before decreasing to 71 percent in 2001 and rising back up to 76.2 percent in 2006.

TABLE 4.19: Crowding, by household category, 1981–2006, for households with at least one Tongan adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	51.0	46.6	48.5	41.7	45.4	49.3
Other one-family households	38.7	42.6	45.7	41.3	39.8	48.4
Multi-family households	71.7	81.6	78.9	75.4	71.0	76.2

4.5.4 Niuean crowding

There was a trend towards less overcrowding for all Niuean household categories over the study period. Niuean multi-family households suffered from the most crowding, with a minimum of 65.5 percent (in 2001)

needing an extra bedroom. For Niuean single-parent families, the rate of crowding decreased over the study period, but was still substantial, with a minimum of 42 percent (in 2001) needing at least one extra bedroom.

TABLE 4.20: Crowding, by household category, 1981–2006, for households with at least one Niuean adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	53.0	46.9	44.8	43.6	42.0	42.7
Other one-family households	44.7	40.6	36.0	31.7	30.0	31.3
Multi-family households	85.1	81.9	79.5	71.0	65.5	69.3

4.5.5 Discussion

With the exception of Tongan single-parent families and multi-family households, the prevalence of crowding declined for all household types regardless of the ethnicity of the adults over the period from 1981 to 2006. However, this overall decrease contained an

interesting internal shift in the form of an increase between 2001 and 2006. In most cases, the effect of this reversal was to bring crowding in 2006 back to its 1996 levels; for Tongan multi-family households and other one-family households, the 1996 levels were also higher than the 1981 levels.

5. PACIFIC-BORN AND NEW ZEALAND-BORN PACIFIC HOUSEHOLDS

This section describes the income and housing indicators for two further subgroups of the Pacific population: those containing at least one New Zealand-born Pacific adult, and those containing at least one

Pacific-born Pacific adult. Again, it should be realised that these groups are not mutually exclusive for the purposes of comparison.

5.1 Median equivalised income

Indicator definition: Median equivalised household income for households where at least one Pacific-born or New Zealand-born Pacific adult is present.

5.1.1 Pacific-born median equivalised income

TABLE 5.1: Median equivalised household income, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$44,615	\$43,524	\$33,227	\$37,348	\$38,679	\$46,062
Single-parent families	\$13,203	\$16,708	\$14,565	\$14,311	\$14,594	\$20,274
Other one-family households	\$27,211	\$26,768	\$24,626	\$27,146	\$30,363	\$34,594
Multi-family households	\$19,442	\$20,706	\$19,973	\$20,812	\$23,731	\$29,030

5.1.2 New Zealand-born median equivalised income

Median equivalised real gross income increased for all household types, and for both birthplace subgroups, over the 25 years between 1981 and 2006.

With the exception of single-parent families, households with at least one New Zealand-born Pacific adult had higher median equivalised incomes than their counterparts with at least one Pacific-born Pacific adult, at every time point. The single-parent families were subject to the inaccuracies of the equivalised income

calculations described in Section 1.7. For couples without children and other one-family households, the gap between the two birth groups increased over time. In 1981 for couples without children, the New Zealand-born group had a median equivalised income almost \$8,000 higher than their Pacific-born equivalents; by 2006 the difference had risen to more than \$14,000. For the two groups of other one-family households, the gap was almost \$3,000 in 1981 and grew to over \$7,000 in 2006. Only for multi-family households did the gap decrease between 1981 and 2006, from almost \$3,000 to only \$743.

TABLE 5.2: Median equivalised household income, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$52,308	\$52,678	\$51,363	\$51,681	\$55,059	\$60,638
Single-parent families	\$11,471	\$16,708	\$14,565	\$14,311	\$14,594	\$17,501
Other one-family households	\$29,879	\$30,569	\$30,983	\$34,044	\$37,455	\$41,728
Multi-family households	\$22,308	\$21,737	\$20,391	\$22,199	\$24,676	\$29,773

5.2 Low income

Indicator definition: The proportion of all households with at least one Pacific-born or New Zealand-born

Pacific adult whose equivalised gross income is less than 60 percent of the median equivalised gross household income.

5.2.1 Pacific-born low income

TABLE 5.3: Low income, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	23.5	12.7	15.8	20.7	23.1	24.3
Single-parent families	70.4	63.9	68.0	64.0	65.7	59.6
Other one-family households	35.8	33.9	33.8	30.5	30.8	29.2
Multi-family households	54.0	49.3	47.4	45.3	45.2	41.1

5.2.2 New Zealand-born low income

The likelihood of having income below 60 percent of the overall median was lower for households with at least one New Zealand-born Pacific adult than for those with at least one Pacific-born Pacific adult for couples

without children, other one-family households and multi-family households at every point in time between 1981 and 2006. In contrast, rates of low income were higher for single-parent families with a New Zealand-born Pacific adult at each time point.

TABLE 5.4: Low income, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	14.7	6.6	6.0	10.3	9.0	7.7
Single-parent families	77.9	68.8	76.6	71.4	70.5	67.8
Other one-family households	29.1	20.7	19.8	18.1	17.7	17.0
Multi-family households	47.7	46.3	43.6	40.5	41.9	38.9

5.3 Home ownership

Indicator definition: The proportion of all households with at least one Pacific-born or New Zealand-born Pacific adult present, not living in owner-occupied dwellings.

5.3.1 Pacific-born home ownership

TABLE 5.5: Lack of home ownership, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	61.8	56.0	49.6	47.0	47.2	49.9
Single-parent families	68.8	67.8	71.7	74.2	77.1	80.9
Other one-family households	50.7	46.1	46.5	52.3	58.8	65.7
Multi-family households	54.3	48.2	44.8	51.8	55.7	60.6

5.3.2 New Zealand-born home ownership

Rates of home ownership declined over the study period for both birthplace groups, and for all household types except couples without children. The gap between the Pacific-born and New Zealand-born groups grew over time for all household types, the largest changes being experienced by couples without children and other one-family households. In 1981, the Pacific-born group had home ownership rates 1.4 percent and 0.9 percent respectively higher than the

corresponding family types in the New Zealand-born group; in 2006, the situation was different for the two household categories: Pacific-born couples without children had a home ownership rate 7.1 percent higher than their New Zealand-born counterparts, while other one-family households with at least one New Zealand-born adult had a rate 10.7 percent higher than the Pacific-born. This gap was smallest for single-parent families, at 1.3 percent in 1981 and 1.4 percent in 2006, but it also changed direction during the period.

TABLE 5.6: Lack of home ownership, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	63.2	59.7	55.1	51.2	55.1	57.0
Single-parent families	67.5	74.8	71.0	74.6	77.9	82.3
Other one-family households	51.6	43.4	37.4	41.5	49.0	55.0
Multi-family households	47.1	38.7	28.0	40.4	45.2	50.1

5.4 Rental affordability

Indicator definition: The proportion of all households with at least one Pacific-born or New Zealand-born

Pacific adult present, living in rented dwellings, whose weekly rent is greater than 25 percent of their weekly gross equivalised household income.

5.4.1 Pacific-born rental affordability

TABLE 5.7: Low rental affordability, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	24.7	27.0	43.1	44.0	37.5	34.8
Single-parent families	53.9	56.6	76.3	89.0	72.7	66.1
Other one-family households	43.3	45.9	69.6	78.2	65.3	63.2
Multi-family households	44.8	41.7	53.9	75.1	50.9	42.4

5.4.2 New Zealand-born rental affordability

With the exception of multi-family households with at least one Pacific-born Pacific adult present, all of the household types in both of these subgroups were more likely to be paying more than 25 percent of their weekly income in rent in 2006 than they were in 1981.

Whether Pacific-born or New Zealand-born, other one-family households experienced the largest decreases in rental affordability, at around 20 percent. The prevalence of low rental affordability peaked in 1996 for most Pacific-born and New Zealand-born Pacific households, and improved between then and 2006.

TABLE 5.8: Low rental affordability, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	16.4	18.8	27.8	24.4	26.5	22.2
Single-parent families	62.7	56.1	83.7	89.7	75.9	76.8
Other one-family households	36.3	35.3	53.0	62.3	58.7	57.5
Multi-family households	30.6	24.1	43.6	65.6	47.7	39.7

5.5 Crowding

Indicator definition: The proportion of all households with at least one Pacific-born or New Zealand-born

Pacific adult present, living in dwellings that require at least one additional bedroom to meet the sleeping needs of the household.

5.5.1 Pacific-born crowding

TABLE 5.9: Crowding, by household category, 1981–2006, for households with at least one Pacific-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	50.5	47.8	45.5	43.3	44.9	43.5
Other one-family households	43.6	46.0	43.4	41.4	38.9	41.0
Multi-family households	83.5	84.1	81.7	77.7	73.5	73.5

5.5.2 New Zealand-born crowding

TABLE 5.10: Crowding, by household category, 1981–2006, for households with at least one New Zealand-born Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	34.7	34.2	34.9	32.4	31.5	33.3
Other one-family households	23.5	22.2	23.9	21.6	20.3	21.2
Multi-family households	73.4	76.6	71.9	64.5	61.9	61.0

The prevalence of crowding decreased for all household types for both groups in the analysis. The largest absolute reductions in the extent of crowding were recorded for, in both groups, with 10 percent for Pacific-born and 12.4 percent for New Zealand-born. The gap between the Pacific-born and New Zealand-

born groups stayed around 20 percent for other one-family households and around 10 percent for multi-family households, but shrank from 15.8 percent in 1981 to 10.2 percent in 2006 for single-parent families; in each case, those in the New Zealand-born group had less crowding.

6. REGIONAL ANALYSIS

This section reports the wellbeing indicators for all Pacific households, broken down by region of dwelling. The regions compared are Auckland, Wellington, the rest of the North Island and the South Island.

6.1 Regional median equivalised income

Indicator definition: Median equivalised household income for households in Auckland, Wellington, the rest of the North Island and the South Island, where at least one Pacific adult is present.

6.1.1 Auckland median equivalised income

TABLE 6.1: Median equivalised household income, by household category, 1981–2006, for households in Auckland with at least one Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$46,154	\$47,255	\$39,945	\$46,459	\$50,100	\$55,526
Single-parent families	\$13,203	\$16,708	\$14,565	\$14,311	\$14,594	\$18,973
Other one-family households	\$27,692	\$27,601	\$25,282	\$29,692	\$34,091	\$38,708
Multi-family households	\$19,640	\$20,706	\$20,071	\$21,525	\$23,732	\$29,030

6.1.2 Wellington median equivalised income

TABLE 6.2: Median equivalised household income, by household category, 1981–2006, for households in Wellington with at least one Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$51,585	\$48,186	\$49,606	\$46,459	\$50,100	\$54,649
Single-parent families	\$11,471	\$16,708	\$14,565	\$14,311	\$15,573	\$20,728
Other one-family households	\$27,125	\$27,197	\$27,614	\$31,659	\$35,182	\$39,444
Multi-family households	\$15,575	\$19,974	\$20,365	\$20,530	\$24,424	\$29,769

6.1.3 Rest of North Island median equivalised income

TABLE 6.3: Median equivalised household income, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$46,154	\$43,610	\$38,936	\$37,348	\$38,233	\$46,062
Single-parent families	\$15,520	\$16,708	\$13,022	\$13,950	\$13,309	\$16,546
Other one-family households	\$29,011	\$28,406	\$25,955	\$26,566	\$28,845	\$34,332
Multi-family households	\$21,978	\$21,737	\$16,851	\$18,151	\$19,898	\$25,398

6.1.4 South Island median equivalised income

TABLE 6.4: Median equivalised household income, by household category, 1981–2006, for households in the South Island with at least one Pacific adult

Household category	1981	1986	1991	1996	2001	2006
Couples without children	\$40,577	\$43,610	\$38,936	\$41,193	\$43,205	\$50,228
Single-parent families	\$9,563	\$16,708	\$14,565	\$14,311	\$14,112	\$18,862
Other one-family households	\$28,438	\$26,718	\$25,709	\$29,405	\$31,966	\$35,751
Multi-family households	\$16,923	\$17,358	\$18,853	\$19,740	\$21,245	\$28,118

All Pacific households, regardless of where they lived, experienced an increase in their median real equivalised gross income over the period from 1981 to 2006, except for couples without children in the rest of the North Island, who only just fell short of their 1981 level in 2006. The increases ranged from just six percent for couples without children living in Wellington, through to more than 97 percent for single-parent families living in the South Island.

The highest overall level of Pacific household income in 2006 was recorded by those living in Wellington, with single-parent families, other one-family households and multi-family households all recording higher median equivalised incomes than their counterparts in the other three regions, and couples without children trailing just behind their counterparts in Auckland.

6.2 Regional low income

Indicator definition: The proportion of all households in Auckland, Wellington, the rest of the North Island and

the South Island, with at least one Pacific adult, whose equivalised gross income is less than 60 percent of the median equivalised gross household income.

6.2.1 Auckland low income

TABLE 6.5: Low income, by household category, 1981–2006, for households in Auckland with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.5	10.3	13.5	16.3	16.3	16.4
Single-parent families	72.4	65.1	69.4	64.8	66.1	62.6
Other one-family households	35.1	32.6	32.7	26.7	25.7	24.4
Multi-family households	53.3	49.6	46.7	44.0	44.7	41.4

6.2.2 Wellington low income

TABLE 6.6: Low income, by household category, 1981–2006, for households in Wellington with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.3	12.2	8.9	10.9	13.2	13.0
Single-parent families	71.3	63.2	67.4	65.5	64.1	57.0
Other one-family households	38.0	33.4	27.5	23.0	21.3	20.7
Multi-family households	57.5	51.9	45.2	44.6	42.0	38.8

6.2.3 Rest of North Island low income

TABLE 6.7: Low income, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	19.3	11.7	15.9	18.9	22.6	21.2
Single-parent families	65.3	62.4	74.3	73.4	77.2	70.6
Other one-family households	28.4	26.4	28.3	29.6	30.6	27.0
Multi-family households	49.1	43.7	56.9	51.1	52.6	46.7

6.2.4 South Island low income

TABLE 6.8: Low income, by household category, 1981–2006, for households in the South Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	25.7	11.1	8.9	16.9	17.3	17.1
Single-parent families	68.6	69.7	75.0	70.2	69.1	66.5
Other one-family households	34.4	30.5	28.4	23.5	24.5	23.4
Multi-family households	60.7	55.3	49.3	46.5	50.0	41.5

Couples without children and single-parent families with a Pacific adult living in the rest of the North Island were the only household types for whom the proportion recorded as having income below 60 percent of the median increased between 1981 and 2006. The largest decrease (or improvement), of just over 19 percent,

was recorded by multi-family households living in the South Island, closely followed by those living in Wellington, with just under 19 percent. Overall, in 2006, Pacific households living in Wellington were the least likely to have household incomes below 60 percent of the median.

6.3 Regional home ownership

Indicator definition: The proportion of all households in Auckland, Wellington, the rest of the North Island

and the South Island, with at least one Pacific adult present, not living in owner-occupied dwellings.

6.3.1 Auckland home ownership

TABLE 6.9: Lack of home ownership, by household category, 1981–2006, for households in Auckland with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	60.8	57.4	52.1	50.2	52.2	56.3
Single-parent families	67.5	68.6	72.8	74.8	78.3	83.2
Other one-family households	45.9	44.0	45.7	50.1	56.1	62.8
Multi-family households	51.7	46.2	41.9	48.7	53.5	58.2

6.3.2 Wellington home ownership

TABLE 6.10: Lack of home ownership, by household category, 1981–2006, for households in Wellington with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	67.5	61.6	56.6	50.5	53.5	53.0
Single-parent families	81.0	76.5	77.1	80.3	77.6	78.2
Other one-family households	63.0	52.5	50.1	51.7	54.9	59.0
Multi-family households	62.4	57.7	48.3	51.5	49.6	51.6

6.3.3 Rest of North Island home ownership

TABLE 6.11: Lack of home ownership, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	57.9	49.7	42.4	42.1	41.4	45.6
Single-parent families	61.4	58.6	57.7	68.1	73.3	77.4
Other one-family households	54.4	44.3	33.8	43.1	51.1	57.6
Multi-family households	53.3	40.1	32.5	43.7	49.4	52.2

6.3.4 South Island home ownership

TABLE 6.12: Lack of home ownership, by household category, 1981–2006, for households in the South Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	60.0	58.2	50.9	45.5	47.9	48.4
Single-parent families	57.1	71.6	66.4	70.2	75.5	79.5
Other one-family households	48.7	41.2	40.8	43.4	49.0	56.6
Multi-family households	53.6	43.6	43.2	50.0	53.6	60.0

All types of Pacific households living in Wellington experienced increases in their rates of home ownership between 1981 and 2006. For the other three areas, more household types faced a decreased likelihood of living in their own home. The biggest

increase in home ownership rate, of 14.5 percent, was recorded by couples without children in Wellington, while the biggest decreases were experienced by single-parent families, regardless of where they lived.

6.4 Regional rental affordability

Indicator definition: The proportion of all households in Auckland, Wellington, the rest of the North Island and

the South Island, with at least one Pacific adult present, living in rented dwellings, whose weekly rent is greater than 25 percent of their weekly gross equivalised household income.

6.4.1 Auckland rental affordability

TABLE 6.13: Low rental affordability, by household category, 1981–2006, for households in Auckland with at least one Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	23.8	29.8	45.4	40.5	35.3	32.8
Single-parent families	56.0	61.1	79.7	91.4	76.4	71.8
Other one-family households	47.2	53.9	72.5	79.6	67.2	65.6
Multi-family households	43.9	42.8	55.0	74.4	51.3	43.8

6.4.2 Wellington rental affordability

TABLE 6.14: Low rental affordability, by household category, 1981–2006, for households in Wellington with at least one Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	20.0	17.1	30.4	27.0	23.1	22.2
Single-parent families	56.0	45.3	72.3	87.2	71.2	65.0
Other one-family households	41.3	32.8	61.0	64.1	55.4	52.1
Multi-family households	48.4	28.6	41.3	67.3	46.0	33.3

6.4.3 Rest of North Island rental affordability

TABLE 6.15: Low rental affordability, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	14.9	12.9	26.1	27.4	33.9	24.7
Single-parent families	50.0	50.0	75.2	86.4	79.8	75.0
Other one-family households	24.2	27.6	52.8	63.2	56.3	53.8
Multi-family households	26.7	24.0	50.0	69.4	54.5	39.5

6.4.4 South Island rental affordability

TABLE 6.16: Low rental affordability, by household category, 1981–2006, for households in the South Island with at least one Pacific adult, living in rented dwellings

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	23.1	19.6	28.9	27.9	26.8	25.5
Single-parent families	55.6	54.5	81.4	84.7	71.6	71.6
Other one-family households	42.2	30.6	54.1	63.8	56.9	55.4
Multi-family households	50.0	35.7	50.0	71.4	41.2	43.9

In three of the four regions, with the rest of the North Island being the exception, multi-family households saw increases in rental affordability over the study period. Of the 16 household types (four in

each of the four regions), 13, an overwhelming majority, were more likely to be paying more than 25 percent of their weekly income in rent in 2006 than in 1981.

6.5 Regional crowding

Indicator definition: The proportion of all households in Auckland, Wellington, the rest of the North Island and the South Island, with at least one Pacific-born

or New Zealand-born Pacific adult present, living in dwellings that require at least one additional bedroom to meet the sleeping needs of the household.

6.5.1 Auckland crowding

TABLE 6.17: Crowding, by household category, 1981–2006, for households in Auckland with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	50.8	49.3	46.7	43.2	44.0	43.0
Other one-family households	43.3	46.2	43.0	39.1	36.4	37.4
Multi-family households	81.9	83.9	81.0	76.1	71.5	71.1

6.5.2 Wellington crowding

TABLE 6.18: Crowding, by household category, 1981–2006, for households in Wellington with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	44.5	41.0	37.4	36.9	36.3	33.1
Other one-family households	39.6	40.9	38.3	33.7	29.3	28.7
Multi-family households	83.9	79.1	75.8	67.1	66.4	64.0

6.5.3 Rest of North Island crowding

TABLE 6.19: Crowding, by household category, 1981–2006, for households in the rest of the North Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	34.9	30.2	34.0	31.6	28.8	31.3
Other one-family households	31.8	30.5	31.7	25.6	23.7	25.1
Multi-family households	82.2	82.2	74.5	65.9	63.1	58.5

6.5.4 South Island crowding

TABLE 6.20: Crowding, by household category, 1981–2006, for households in the South Island with at least one Pacific adult

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	37.1	37.7	33.6	31.0	31.4	30.5
Other one-family households	28.7	32.4	30.9	25.8	22.4	23.0
Multi-family households	78.6	74.4	74.4	63.1	61.8	62.0

The prevalence of crowding declined for Pacific households of all types, regardless of where they lived, between 1981 and 2006. For all regions, the largest decreases in crowding over the 25 years

were experienced by multi-family households – ranging in size from 10.8 percent in Auckland to 23.7 percent in the rest of the North Island.

7. DISCUSSION

The following subsections discuss trends in household composition and the results for each wellbeing indicator for each of the different ethnic groups detailed above. Where appropriate, the results are located in the context of known societal events that are likely to have relevance to the particular indicator. In addition, the discussion is supplemented with data from other sources, where possible and relevant.

7.1 Changes in household composition

With the exception of Tongan couples without children, the trends in changes in the overall Pacific household composition are seen in the analysis for each of the four Pacific ethnicities. The proportion of households that were single-parent families, multi-family households or couples without children increased between 1981 and 2006, while the proportion of one-family households decreased. Similarly, the analysis of Pacific-born and New Zealand-born households followed the same trend, again with the exception of couples without children, matching that of the overall Pacific population, as did the four regions analysed.

The household type which demonstrated the largest overall increase was, for every type of analysis, multi-family households, followed by single-parent families. In every type of analysis the proportion of other one-family households declined between 1981 and 2006. However, despite this decrease, other one-family households were the largest household type in each analysis, accounting for over 50 percent of households in each case in 2006.

7.2 Summary of changes in wellbeing for each indicator

7.2.1 Income

Pacific household and family income has been significantly affected by events and policy decisions in recent decades. These events and policies include the economic changes of the 1980s and 1990s, and the labour-market and welfare reforms of the 1990s. The economic restructuring of the 1980s and 1990s resulted in the disappearance of many well-paid manufacturing jobs and their replacement with work

or employment in lower-paying service-sector work or unemployment (Dalziel & Lattimore, 2004).

The tax cuts of the mid-1980s redistributed income upwards (Dalziel, 2002; Stephens, 1993), and wage inequality increased (Dixon, 1996). In addition, the late 1980s and early 1990s were marked by high and rising unemployment, which peaked for most groups in 1991. The overall unemployment rate then was over 11 percent, and for Pacific people it reached 30.6 percent in the June quarter. Unemployment declined through the mid to late 1990s, and by 2001 the unemployment rate was 5.7 percent, although for Pacific people it was still 11.1 percent in the March quarter. Between 2001 and 2006, unemployment rates declined markedly for all ethnic groups. The overall unemployment rate was 4.3 percent in March 2006, with 7.6 percent for Pacific people (Statistics New Zealand, 2008a).

Welfare benefits were reduced early in 1991, by up to 25 percent in some cases, reducing the income of many beneficiaries. Furthermore, from the late 1980s the value of benefit payments in relation to wages declined, because benefit rates were only indexed to increases in the rate of inflation. In addition, rates of inflation were high for the middle part of the 25 years under examination, and this tended to reduce the real value of wages and other forms of income.

The outcome of these events has been a reduction in the living standards of the Pacific population. Pacific people, on average, have the lowest living standards of all New Zealanders, with 58 percent experiencing some degree of hardship and 17 percent experiencing severe hardship. A greater proportion of those who were born overseas have some level of hardship (Ministry of Social Development, 2006a). The Ministry of Social Development's Social Report shows that while outcomes for Pacific people are improving, they are still relatively poor. In 2003 and 2004, the proportion of Pacific families with low incomes was 40 percent – double the proportion in the total population (Ministry of Social Development, 2006b).

Recent data suggested some reversal in these trends, at least up to 2008, with the Ministry of Social Development's 2008 Social Report noting that real equivalised median household income for Pacific households rose between 2004 and 2007 (Ministry of Social Development, 2008).

7.2.1.1 Median equivalised income

The median equivalised income data used in this study were constructed using figures for gross income reported by census respondents, so disposable income cannot be calculated.

For all the Pacific household categories used in this analysis, whether examined by ethnic group, birthplace or regional location, overall median equivalised income rose between 1981 and 2006. The only exception to this pattern of increase was for couples without children living in the rest of the North Island, whose median real equivalised income declined very slightly over this period.

Couples without children typically had the highest median equivalised incomes, while Samoan households had generally higher incomes than did Tongan, Cook Island and Niuean households. Pacific households living in Wellington had generally higher incomes than their counterparts in other regions, while Pacific households with at least one New Zealand-born adult had higher incomes than their Pacific-born counterparts.

In a recently released report, the Ministry of Social Development examined changes in household income over the period 1982 to 2007 using data from Statistics New Zealand's Household Expenditure Survey (HES). A summary of the before-housing-costs (BHC) real equivalised median income data is presented in Table 7.1 and shows changes for each of the major ethnic groups. Real equivalised median income (before housing costs were removed) rose by 26 percent between 1988 and 2007.

7.2.1.2 Low income

The prevalence of low-income households declined for the overall Pacific population between 1981 and 2006. However, in tandem with this overall decline there were variations, with a small number of household types experiencing an increase in the likelihood that they would have median equivalised income below 60 percent of the overall median. The household types that experienced an increase in the proportion with low income were couples without children and single-parent family households living in the rest of the North Island, Pacific-born couples without children and Cook Island couples without children.

The household type least likely to have low income was couples without children for all forms of analysis, while the type having the highest overall likelihood of income below 60 percent of the overall median was single-parent families.

7.2.2 Education

The Pacific population is increasingly gaining higher educational qualifications. In 1981, 0.6 percent of those with Pacific ethnicity held a degree qualification; this rose to 2.7 percent in 1996 and then to 3.9 percent in 2001. Similarly, 5.5 percent of those identifying as Pacific held a non-degree post-school qualification in 1981, and this increased to 10 percent in 1986 and 12.9 percent in 2001 (Newell & Perry, 2006, p. 39).

While age-standardised participation rates for Pacific students in tertiary education are below that for Pākehā and Māori, since 2001, participation rates for Pacific people have increased at a rate much greater than the

Table 7.1 Real equivalised median household income (BHC) by ethnicity, 1988–2007 (\$2007)

	1988	1990	1992	1994	1996	1998	2001	2004	2007
European/Pākehā	24,300	24,200	21,800	21,500	22,300	24,300	24,800	27,900	28,600
NZ Māori	20,200	18,200	14,800	15,000	17,800	18,800	20,100	20,800	20,400
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)

Pacific real median equivalised household income shows a similar trend of decreases and increases to the information contained earlier in this report.

national average. The participation rates for Pacific people have increased by 23 percent since 2001; for Māori the increase was around seven percent, and for the overall population there was a decrease of 2.5 percent (Ministry of Education, 2007, p. 44).

In addition, Pacific participation in industry training is also increasing, with approximately 12 percent of the Pacific workforce undertaking training in 2006 – a rate lower than Māori but much higher than the non-Māori population. In addition, Pacific take-up of the Modern Apprenticeships scheme has increased at a faster rate than for other ethnic groups between 2001 and 2006 (Ministry of Education, 2007).

7.2.2.1 Educational attainment

All Pacific households experienced a significant increase in the proportion of at least one adult holding an educational qualification, with the largest improvements being for other one-family households, followed by couples without children.

7.2.2.2 Post-secondary educational attainment

Between 1981 and 2006 the proportion of Pacific households where at least one adult holds a post-secondary qualification increased for all household types, with the largest improvement experienced by couples without children.

7.2.3 Work

The Household Labour Force Survey (HLFS), conducted by Statistics New Zealand, is the official measure of unemployment in New Zealand. Overall

unemployment, as measured in the HLFS, rose from four 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 the Pacific population as a whole, unemployment rose from seven percent in March 1986 to a peak of 30.6 percent in September 1991 before slowly decreasing to 9.9 percent in December 2001 and further to 5.1 percent in September 2006.

7.2.3.1 Parental paid employment

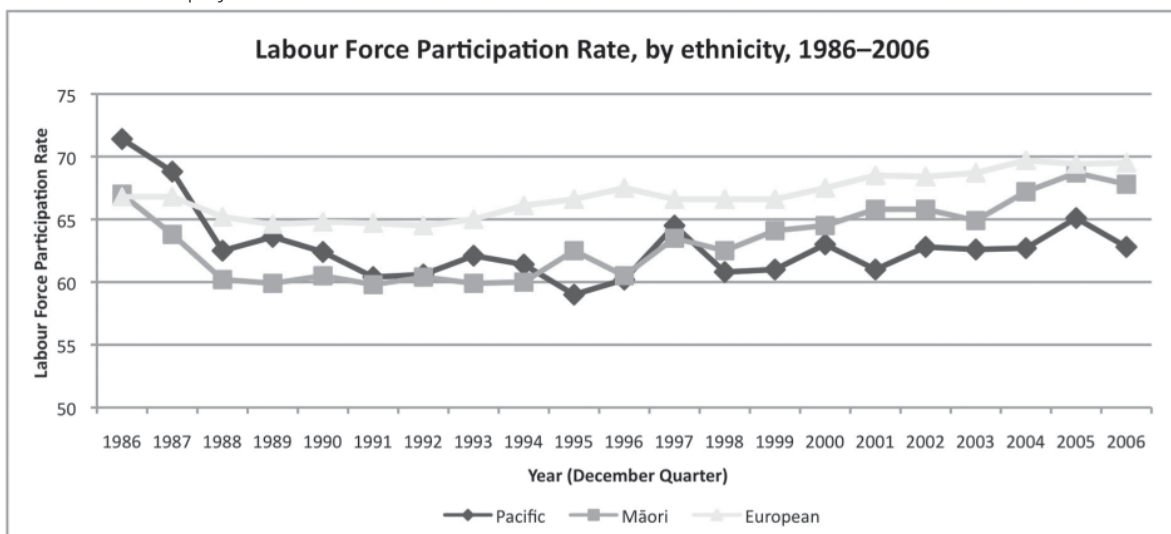
Of the four household types in the analysis, only single-parent family households experienced a decline in the proportion with no adult in formal paid employment. For other one-family households the proportion nearly doubled over the 25 years between 1981 and 2006, while for multi-family households and couples without children the rates increased by around five percent.

7.2.3.2 Long working hours

The proportion of Pacific households with at least one adult who worked more than 48 hours per week increased for all four household types. Couples without children were most likely to be working long hours, while, as might be expected, single-parent families were least likely to work long hours in paid employment.

7.2.4 Housing

A particular set of circumstances – such as typically larger family sizes, the importance of extended family networks, low median ages and low incomes – combine to produce a number of specific problems for Pacific



Source: HLFS

families with respect to housing (Koloto & Associates Ltd, New Zealand Institute of Economic Research, & Gray Matter Research Ltd, 2007). Among the results are lower rates of home ownership for Pacific households than for the rest of the population (Koloto & Associates Ltd et al, 2007, p. 25).

7.2.4.1 Home ownership

In line with trends in the rest of the population, rates of home ownership have declined for most categories of Pacific household, the exception in the overall Pacific analysis being couples without children, who improved their rate of home ownership between 1981 and 2006. This pattern was observable in the analysis of the four Pacific ethnic groups, where again couples without children were the only category that increased its likelihood of living in its own home.

In the comparison between New Zealand-born and Pacific-born, Pacific-born couples without children had a higher likelihood of living in their own home than their New Zealand-born counterparts.

The pattern was somewhat different in the regional analysis, where for all Pacific household types the rates of home ownership increased. Of those Pacific households living in the rest of the North Island, both couples without children and multi-family households increased their rates of home ownership between 1981 and 2006. In the South Island and Auckland regions, only couples without children increased their likelihood of living in their own homes over this period.

7.2.4.2 Rental affordability

Table 3.8 shows that the proportion of households in the overall Pacific population paying more than 25 percent of their income in rent has increased for three out of the four household types, with the only decrease being for multi-family households. A similar pattern of increases and decreases is observed when the four Pacific ethnic groups are separately examined.

The pattern for the New Zealand- and Pacific-born comparison is different, with only Pacific-born multi-family households experiencing an improvement in rental affordability between 1981 and 2006. In the regional comparison multi-family households in Auckland, Wellington and the South Island experienced increases in rental affordability, while all other

household types, regardless of location, saw rental affordability decrease.

7.2.4.3 Crowding

In the overall Pacific population, rates of crowding declined over the 25 years between 1981 and 2006. Among the four Pacific ethnic groups analysed, all experienced improvements – that is, a decline in the crowding rate – with the exception of Tongan single-parent families and multi-family households.

7.2.5 Health

Each household type in the overall Pacific analysis experienced an increase in the proportion of at least one adult receiving a Sickness or Invalid's Benefit between 1981 and 2006. This trend matches that in the overall population and is confirmed by data from the Ministry of Social Development's Statistical Report. The report shows that the number of people receiving Sickness Benefits grew steadily from about 7,000 in 1981 to just over 47,500 in 2006, while the number receiving an Invalid's Benefit rose from under 17,000 in 1981 to just over 77,000 in June 2006 (Ministry of Social Development, 2007).

7.3 A Pacific qualitative perspective

This report is accompanied by a companion report, (p. 57) *Pacific Families: A qualitative snapshot of household composition, wellbeing, parenting and economic decision-making among Pacific families in Auckland, 2008*, which is intended to supplement the quantitative material in this report. The qualitative study provides a human face to the quantitative data with a detailed collection of 'stories' – that is, a collection of narratives about the experiences and perspectives of key members within a certain household type. The main Pacific household types distinguished in this quantitative data analysis are examined, and the stories are intended to provide insight into the context within which the changes in household composition and wellbeing, and their impact on Pacific families, are located.

7.4 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 Pacific household composition and wellbeing for various household types, and locations, for different ethnic groups and for adults born in different places. 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 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 truly 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).

7.5 Conclusion

This report has provided empirical evidence of changes in the composition of Pacific households and changes in selected aspects of wellbeing for different sub-categories of this population.

Differences in wellbeing exist across the four Pacific ethnicities examined, and also between Pacific-born and New Zealand-born Pacific households, and between Pacific households living in different regions in New Zealand.

These differences illustrate that it is not realistic to treat the Pacific population as a homogeneous group. This has implications for policymakers; they may well need to take these differences into account when designing policy measures that affect the Pacific population.

It is hoped that this report will provide a baseline of information from which researchers can draw as they conduct more detailed research. It is also hoped that the information in the report will provoke further examination by subject-matter experts on particular pieces of the information supplied.

REFERENCES

- Callister, P. (2006). 'Ethnic measurement as a policy-making tool'. In R. Openshaw & E. Rata (Eds.), *Politics of ethnic boundary-making* (pages). Palgrave, Basingstoke.
- Callister, P., & Didham, R. (2007). *Some emerging demographic and socio-economic features of the Pacific population in New Zealand*. Paper presented at the Thought Leaders Dialogue - With the Pacific.....About the Pacific, Auckland 30 & 31 August.
- Callister, P., Didham, R., Newell, J., & Potter, D. (2007). "'Family Ethnicity": Knitting a jumper using two woolly concepts'. *Social Policy Journal of New Zealand*, (32).
- Cotterell, G., von Randow, M., & Wheldon, M. (2008). *Measuring changes in family and whānau wellbeing using census data, 1981–2006: A preliminary analysis*, Statistics New Zealand, Wellington.
- Dalziel, P. (2002). 'New Zealand's economic reforms: An assessment'. *Review of Political Economy*, 14(1): 31-46.
- Dalziel, P., & Lattimore, R. (2004). *The New Zealand Macroeconomy: Striving for sustainable growth with equity*. Oxford University Press, Melbourne.
- Dixon, S. (1996). *The distribution of earnings in New Zealand* (No. 1996:1). Department of Labour, Wellington.
- Jensen, J. (1988). *Income equivalences and the estimation of family expenditure on children* (Note). Department of Social Welfare, Wellington. (unpublished).
- Koloto & Associates Ltd, New Zealand Institute of Economic Research, & Gray Matter Research Ltd. (2007). *Pacific housing experiences: Developing trends and issues*. Centre for Housing Research Aotearoa New Zealand and the Ministry of Pacific Island Affairs, Wellington.
- Milligan, S., Fabian, A., Coope, P., & Errington, C. (2006). *Family wellbeing indicators from the 1981–2001 New Zealand censuses*. Statistics New Zealand, Wellington.
- Ministry of Education. (2007). *Pasifika education plan monitoring report 2007*. Ministry of Education, Wellington.
- Ministry of Social Development. (2006a). *New Zealand living standards 2004*. Ministry of Social Development, Wellington.
- Ministry of Social Development. (2006b). *The social report 2006*. Ministry of Social Development, Wellington.
- Ministry of Social Development. (2007). *Statistical report for the year ending June 2006*. Ministry of Social Development, Wellington.
- Ministry of Social Development. (2008). *The social report 2008*. Ministry of Social Development, Wellington.
- Newell, J., & Perry, M. (2006). *Trends in the contribution of tertiary education to the accumulation of educational capital in New Zealand*. Ministry of Education, Wellington.
- Perry, B. (2008). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2007*. Accessed 22 September 2009, at <http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/household-income-1982-2007/household-incomes-in-nz-82-07.doc>.
- Rochford, M. (1996). 'Comment: Methodological issues relating to families and households'. *Social Policy Journal of New Zealand*, (6).
- Statistics New Zealand. (2001a). *Introduction to the census (2001) – Reference report*. Statistics New Zealand, Wellington.
- Statistics New Zealand. (2001b). *New Zealand census of population and dwellings 2001: Definitions and questionnaires*. Statistics New Zealand, Wellington.
- Statistics New Zealand. (2004). *Report of the Review of the measurement of ethnicity*. Statistics New Zealand, Wellington.
- Statistics New Zealand. (2005). *Consumers Price Index – information releases. Consumers Price Index, 2005*. Accessed 22 September 2009, at http://www.stats.govt.nz/methods_and_services/information-releases/consumers-price-index.aspx
- Statistics New Zealand. (2007). *A report on the 2006 Post-enumeration Survey*. Statistics New Zealand, Wellington.
- Statistics New Zealand. (2008a). *Labour market statistics 2007*. Statistics New Zealand, Wellington.
- Statistics New Zealand. (2008b). *National ethnic population projections: 2006 (base) – 2026*. Statistics New Zealand, Wellington.
- Stephens, R. (1993). 'Radical tax reform in New Zealand'. *Fiscal Studies*, 14(3): 45–63.
- Sua'ali'i-Sauni, T., McTaggart, S., & von Randow, M. (forthcoming). *Pacific families: A qualitative snapshot of household composition, wellbeing, parenting and economic decision-making among Pacific families in Auckland, 2008*. Families Commission, Wellington.

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 respondents' confidentiality. The current rules are given in Statistics New Zealand (2001a). In particular, all frequencies in this report are randomly rounded to one of the nearest multiples of 3 (so, a count of 5 could become 3 or 6) to further guard confidentiality (Statistics New Zealand, 2001a). All percentages are calculated on the basis of 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 linked with the limited range and depth of information collected, the frequency of collection of some data, and the way in which family types are defined and measured.

- > The selection of indicators is constrained by the information available through census data. Family and household wellbeing may be influenced by other factors (such as the perceived quality of family or 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 may constrain time-series analysis. Some census questions that may be relevant to family and household wellbeing are no longer asked (such as questions on housing insulation), while other census questions (for example, those on smoking) are included only irregularly. This means the monitoring of changes in some domains is less frequent than is 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, construction of indicators 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, several indicators were constructed for the purpose of capturing aspects of family and household wellbeing.

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 household composition into account. 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.

A two-adult household with an annual income of \$40,000, for example, 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 eight-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 wellbeing indicators examined in this report for the non-Pacific population – using our definitions, households with no Pacific adult present. This allows those readers who are interested to compare the 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 Pacific 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	\$21,277	\$21,737	\$17,520	\$17,794	\$18,632	\$22,863
Other one-family households	\$39,435	\$36,925	\$37,464	\$38,700	\$42,434	\$47,916
Multi-family households	\$23,462	\$23,391	\$21,948	\$24,957	\$24,222	\$29,351

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	24.5	7.1	8.2	17.8	16.0	19.4
Single-parent families	51.1	43.7	52.7	52.6	56.2	52.7
Other one-family households	14.6	13.8	11.1	13.3	13.2	13.7
Multi-family households	47.2	41.6	39.3	40.0	44.8	40.9

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	43.8	27.7	24.9	31.8	19.7	15.7
Single-parent families	66.7	56.1	52.9	54.6	36.8	31.9
Other one-family households	34.7	23.6	19.2	20.5	10.3	7.7
Multi-family households	60.5	54.4	45.9	47.8	32.3	26.2

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	62.8	46.5	40.6	45.4	40.3	35.4
Single-parent families	84.7	75.9	69.4	73.4	66.1	64.3
Other one-family households	55.6	41.1	34.1	38.5	33.3	28.8
Multi-family households	79.7	72.6	61.3	63.2	56.6	53.5

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	35.5	37.8	39.7	34.0	30.3	26.3
Single-parent families	59.2	60.0	64.8	57.7	49.0	44.1
Other one-family households	5.3	5.9	11.0	9.7	8.2	6.4
Multi-family households	35.9	43.8	48.0	41.0	38.2	31.1

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.9	20.3	21.6	27.5	29.1	28.7
Single-parent families	4.9	6.1	6.4	7.4	8.4	8.9
Other one-family households	34.9	39.6	39.2	44.9	44.3	41.6
Multi-family households	15.0	15.1	15.5	19.9	19.5	21.2

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	21.9	18.6	16.5	18.1	19.7	24.0
Single-parent families	38.2	38.6	39.3	46.1	49.7	56.2
Other one-family households	20.5	17.6	16.0	20.1	22.9	28.4
Multi-family households	31.4	29.6	25.3	31.6	35.3	38.9

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Couples without children	15.3	13.9	23.7	29.8	29.1	29.8
Single-parent families	45.7	48.5	70.9	84.2	78.2	77.1
Other one-family households	25.1	29.5	45.3	57.5	56.7	56.8
Multi-family households	32.7	28.4	41.4	66.6	61.9	57.6

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

Household category	1981 (%)	1986 (%)	1991 (%)	1996 (%)	2001 (%)	2006 (%)
Single-parent families	23.5	21.8	19.9	16.7	16.0	16.2
Other one-family households	17.0	14.6	11.7	9.5	8.5	8.0
Multi-family households	59.8	62.4	52.0	44.8	39.5	37.3