

Patterns of Wellbeing ROTORUA

Rotorua District
Indicators of Socio-Economic Status
2008



DESTINATION
ROTORUA
ROTORUA DISTRICT
COUNCIL

FOREWORD

More than six centuries ago, Te Arawa people moved inland from their landing at Maketu, on the Bay of Plenty coast to Rotorua, an area discovered by their ancestors.

The district is centred around a thriving urban area on the southern shore of Lake Rotorua, and extends to include a substantial rural area as well as lakeside communities.

Rotorua is a bicultural district with an increasingly multicultural population. Rotorua is the heart of Te Arawa people and Maori culture in New Zealand, and has a population of 65,901 (2006 Census).

European settlers arrived in New Zealand throughout the 18th Century. The development of the district was driven by tourism generated through the unique geothermal and cultural attractions of the area.

Today, the Rotorua District Council has responsibility, under the Local Government Act, for the provision of a wide range of services to the community and for coordination and planning of Rotorua's future social, cultural, economic and environmental development.

Part of the district council's work is to achieve the Community Outcomes identified by the people of the district. These outcomes contribute to the social, cultural, environmental and economic wellbeing of the community.

This report is part of an expanding series of publications produced by Council's Community Policy and Resources department to track the social trends, and to assist with community planning.

Incorporating 2006 Census data are publications on:

- Changing Communities Rotorua – Rotorua District Demographic Profile 2007.
- Young People Rotorua – Rotorua District Youth Demographic Profile 2007.
- Aging Population Rotorua – Rotorua District Older Persons Profile 2007.
- Social Monitor Rotorua – Rotorua District Indicators of Social Wellbeing 2007.
- Patterns of Wellbeing – Indicators of Socio-Economic Status 2008.

Other publications based on the census will follow and will sit alongside 'Good Health, Rotorua District Health and Wellbeing Services,' to provide up-to-date information for businesses, students, not-for-profit organisations as well as local and central government agencies.

Naku noa na

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This document is available on the Rotorua District Council website:
www.rdc.govt.nz (keyword: “demographic”)

Disclaimer: Care has been taken in the production of this publication to ensure its contents are as accurate as possible. However, the authors take no responsibility for any incorrect information contained within, or any actions that may result from the use of information in this publication.



EXECUTIVE SUMMARY

- This report is based around the NZDep Index of Deprivation. The NZDep and related Census indicators provide valuable information for resource allocation and advocacy in local communities. The report was developed as a reference for Council, local service providers, Central Government agencies, and voluntary organisations in the Rotorua District.
- The NZDep index is a weighted average of nine Census indicators of socio-economic status. The index divides New Zealand into equal tenths. A score of 10 indicates a geographic area is in the *most deprived* 10 percent of all areas in New Zealand.
- The Rotorua District scored 7 on the NZDep index in 1991, 1996, 2001 and 2006. This means that a 'typical' area within the District is in the 30% most deprived areas in New Zealand. The 2006 NZDep results show that 45.7% of the Rotorua District population live in areas that are considered the 30% most deprived in the country. In 2006 there were more residents living in very deprived areas (NZDep of 10), and fewer residents living in high socio-economic areas (NZDep of 1).
- The NZDep allows comparisons at a point in time, but does not measure absolute trends in socio-economic status. Census information shows that overall socio-economic status improved over the period 1991-2006.
- Positive socio-economic trends in the Rotorua District over the period 1991 to 2006 include increased median household income, fewer people receiving income support payments, more households with access to a car and telephone, lower unemployment, and more people with a formal academic qualification.
- A significant negative socio-economic trend over this period was a substantial decrease in home ownership levels.
- The most deprived parts of the District relative to New Zealand as a whole include Fordlands, Koutu, Selwyn Heights, Western Heights, Pukehangi North, residential areas close to the CBD, Whaka in the south, Ngapuna in the east and the rural settlement of Kaingaroa Forest. Variations between Census results for different suburbs and neighbourhoods are highlighted in the Data Appendix.

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INTRODUCTION

In recent years, Rotorua District Council has played an increasing role in social and economic development. Part of this role includes monitoring differences in socio-economic status throughout the District.

This report presents information on key indicators of socio-economic status for the period 1991 to 2006, sourced directly from Statistics New Zealand and the Ministry of Health. The report is based around the NZDep Index of Deprivation, developed by the Health Services Research Centre. The NZDep is made up of nine Census measures of deprivation. It was developed in consultation with key social service sectors, and has become a standard measure of relative socio-economic status in New Zealand.



The report begins with location maps of statistical Area Units (suburbs and rural communities) in the Rotorua District. Rotorua has 39 Area Units excluding Lake Rotorua/Mokoia Island. These range in population from Arahiwi (150 residents) to Springfield (4,275). Population density is highest in the urban areas around the southern shore of Lake Rotorua, and lowest in large rural meshblocks.

Part One presents the NZDep index scores for the Rotorua District and its Area Units over the period 1991 to 2006, as well as colour maps of NZDep scores at the meshblock (neighbourhood) level.

Part Two presents trend information for the Rotorua District and New Zealand in terms of the individual Census items that make up the NZDep index.

The Data Appendix presents NZDep and Census information comparing different Area Units as at Census night 2006. Additional Census statistics are contained in the Rotorua District Demographic Profile, which can be accessed from www.rdc.govt.nz (keyword: “demographic”). Additional information on the NZDep index can be found on the Ministry of Health website at www.moh.govt.nz/phi.

Cautionary note

This report follows the approach of Statistics New Zealand when calculating percentages, of first excluding invalid responses such as “Not stated”, “Refused to answer” or “Not elsewhere included”. These categories exist because some Census responses are illegible or their meaning is unclear, some are unanticipated and can’t adequately be coded, and in some cases respondents have left questions blank. By excluding these categories the valid responses sum to 100.0%, but this assumes there are no underlying features separating the group of people who gave valid responses and the group of people who gave invalid responses.

DEPRIVATION

Uses for NZDep2006

NZDep91, NZDep96, NZDep2001, and NZDep2006 have been developed with three principal purposes in mind: resource allocation, research, and advocacy.

1. Indexes of deprivation have application in funding formulas. For example, indexes of deprivation are used in capitation funding formulas for primary health care services, the population-based funding formula for District Health Boards, and in funding formulas for social services in other sectors.
2. Indexes of deprivation have application in research in a variety of settings such as health and other social services. For example, in the health sector, many researchers use small area indexes to describe the relationship between socioeconomic deprivation and health outcomes; increasing levels of deprivation are associated with higher mortality rates, and higher rates of many diseases.
3. Indexes of deprivation are used by community groups and community-based service providers to describe the population they serve, and to advocate for extra resources for community based services.¹

Health Outcomes

New Zealand research evidence demonstrates a strong association between NZDep and other health outcomes. Increasing NZDep scores are associated with increased total mortality, injury-related mortality, asthma prevalence in adults, sudden infant death syndrome, domestic fire deaths, and mortality due to causes which respond to medical treatment — including lung cancer, diabetes, rheumatic fever, ischaemic heart disease, pneumonia, chronic obstructive respiratory disease, asthma, peptic ulcer, alcoholic liver damage, complications of pregnancy and perinatal causes.

In New Zealand, environmental factors like the quality of water supply, aspects of lifestyle and disease risk factors are also patterned according to the level of NZDep. People living in areas with high NZDep scores are more likely to have their house close to a contaminated waste site, and are more likely to have a risky drinking water supply.

There is strong New Zealand evidence related to the association between measures of area deprivation and the use of hospital services. Increasing NZDep scores are associated with increasing total hospitalisations, hospitalisations due to heart failure, and hospitalisations avoidable through good primary care or outpatient care, including hospitalisations for pneumonia, asthma, cellulitis, kidney infections, ruptured appendix, congestive heart failure, immunisable infections and diabetes. There is less published research related to area deprivation and use of primary care services. While there is evidence that preventive services such as immunisation are taken up less by people in areas with high-ranking NZDep scores, frequent use of general practitioner services is higher in such areas.

Source: The deprivation atlas (reference: Crampton, P., C. Salmond, et al. (2004). Degrees of Deprivation in New Zealand: An atlas of socioeconomic difference. 2nd Edition. Auckland, David Bateman Ltd.).

¹ Source: NZDep2006 Index of Deprivation User's Manual (August 2007).

LOCATION MAPS

Figure 1: Rural Area Units in the Rotorua District

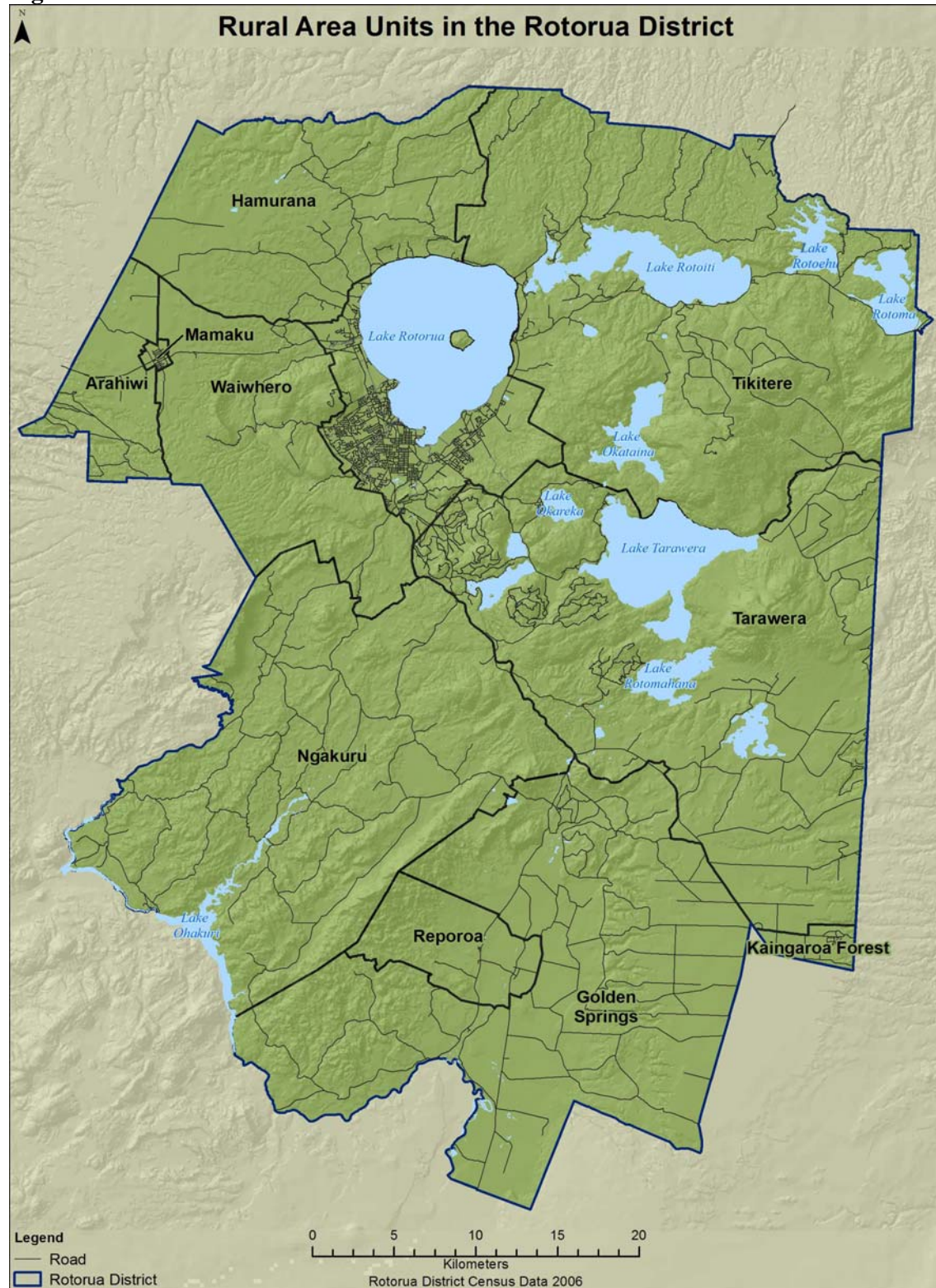


Figure 2: Urban Area Units in the Rotorua District



PART ONE:

NZDEP INDEX OF DEPRIVATION

NZDep INDEX OF DEPRIVATION

Socio-economic status refers to a community's ability to access resources and opportunities. Deprivation, or low socio-economic status, can cause social and economic exclusion and related social costs. Geographic differences in deprivation can be measured in terms of income levels and income sources, access to private motor vehicles, access to telecommunications, home ownership, living space, employment status, educational attainment, and family type.

KEY POINTS:

- 45.7% of the Rotorua District population lives in areas that are considered the 30% most deprived in the country.
- The overall District scored 7 on the NZDep index in 1991, 1996, 2001 and 2006. In 2006 there were more residents living in very deprived areas (NZDep of 9 and 10), and fewer residents living in high socio-economic areas (NZDep of 1 and 2).
- The most deprived parts of the District include residential areas close to the CBD, western suburbs including Fordlands, Koutu, Western Heights and Selwyn Heights, Whaka in the South, Ngapuna in the east and the rural settlement of Kaingaroa Forest.²

The NZDep index is a weighted average of nine Census indicators of socio-economic status for a specific area (refer Table 1).³ The NZDep divides New Zealand into equal tenths. A score of 10 indicates a geographic area is in the *most deprived* 10 percent of all areas in New Zealand. The scoring system is interpreted in the opposite way to the Ministry of Education's decile rating system. Note that the NZDep index relates to geographic areas rather than individual people. Note also that the difference between scores of (say) 1 and 2 is not necessarily of the same magnitude as the difference between scores of 4 and 5.

Table 1: Components of the NZDep index

Dimension of deprivation	Variable description (in order of decreasing weight)
Income	People aged 18-64 receiving a means tested benefit
Income	People living in equivalised* households with income below an income threshold
Owned home	People not living in own house
Support	People aged <65 living in a single parent family
Employment	People aged 18-64 unemployed
Qualifications	People aged 18-64 without any qualifications
Living space	People living in equivalised* households below a bedroom occupancy threshold
Communication	People with no access to a telephone (cellphone/landline)
Transport	People with no access to a car

* Methods are used to control for household composition, including the number and ages of children.

² Kaingaroa Forest is a large tract of land. Kaingaroa township (a settlement within the forest) is a little more than 40kms from Rotorua.

³ NZDep2006 is an updated version of the NZDep91, NZDep96, and NZDep2001 indexes of socioeconomic deprivation. NZDep2006 combines nine variables from the 2006 census which reflect eight dimensions of deprivation. NZDep2006 provides a deprivation score for each meshblock in New Zealand. Meshblocks are geographical units defined by Statistics New Zealand, containing a median of approximately 87 people in 2006.

[NZDep2006 Index of Deprivation User's Manual (August 2007)]

Figure 3 shows the changing pattern of socio-economic status in the Rotorua District over the period 1991 to 2006, relative to New Zealand as a whole. The top graph shows that in 1991 there was a slightly above-average number of Rotorua residents with very high socio-economic status (NZDep score of 1), lower proportions of people with 'average' levels of socio-economic status (NZDep score of 2 to 7), and a high number of people with low socio-economic status (NZDep scores of 8 to 10). In 1991, 46.4% of the Rotorua population lived in areas considered the 30% most deprived in the country (i.e. NZDep scores of 8, 9 and 10).

The second graph in Figure 3 shows that over the period 1991 to 1996 there was an increase in the proportion of Rotorua people with very high socio-economic status, but no significant reduction in the percentage of people with very low socio-economic status. Over this period there was a reduction in the percentage of Rotorua people living in areas scoring 3-6 on the NZDep, which created a 'missing middle class'.

The third graph in Figure 3 shows that socio-economic status in Rotorua became relatively more equitable over the period 1996 to 2001. There were fewer residents living in very deprived areas (NZDep scores of 9 and 10) compared to 1996, as well as fewer residents living in very high socio-economic areas (NZDep score of 1). As at Census night 2001, 45.6% of the District population lived in areas considered the 30% most deprived in the country.

The lower graph in Figure 3 shows that between 2001 and 2006 a number of suburbs and rural communities in the Rotorua District were downgraded on the NZDep index while others were upgraded. Over this period there was a significant reduction in the percentage of people living in areas scoring 1 on the NZDep and significantly more in areas with an NZDep score of 2. There were significantly fewer residents living in areas scoring 5 on the NZDep and significantly more residents living in areas with NZDep scores of 7 than in previous years.

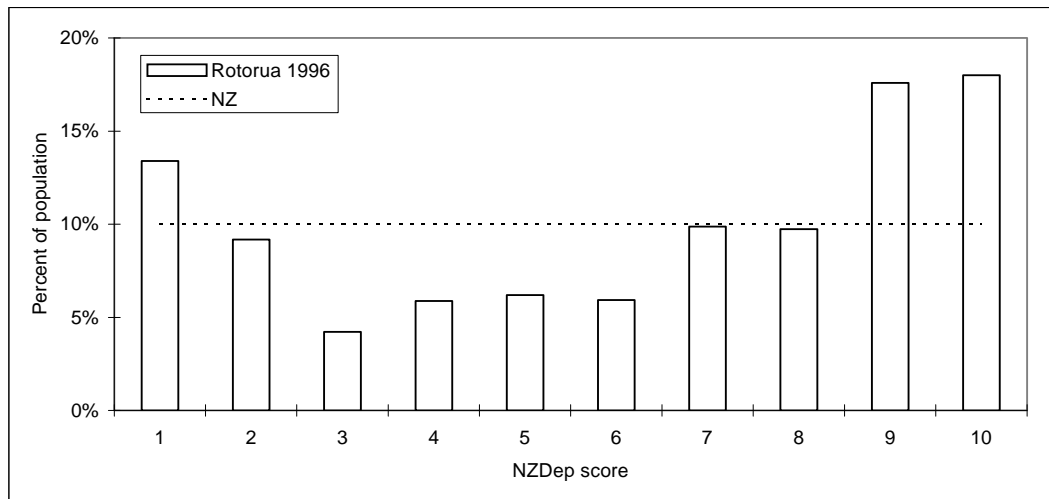
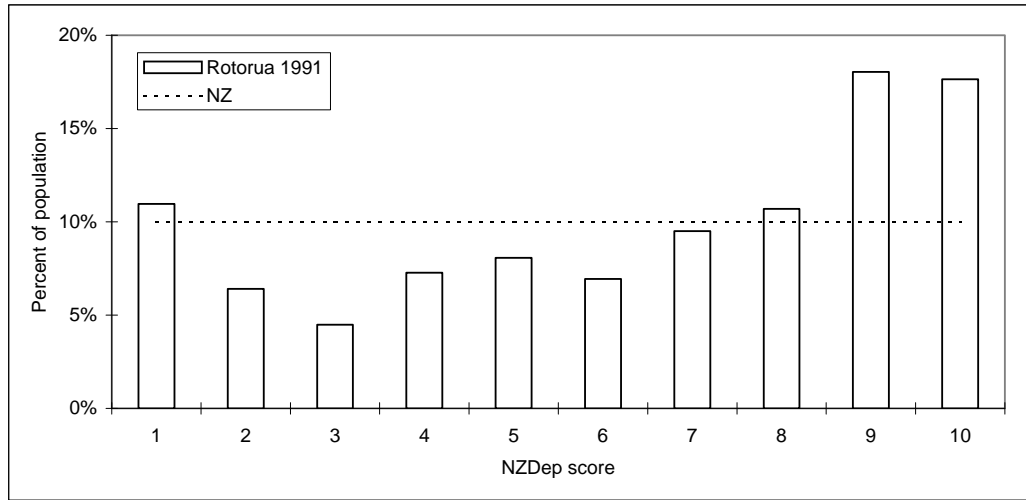
Significantly more areas scored a 10 on the index in 2006 than in previous years. These areas include central city areas (Kuirau, Victoria and Glenholme West), several of the western suburbs (Fordlands, Pukehangi North, Western Heights, Koutu and Selwyn Heights), Whaka in the south, Ngapuna in the east and the rural settlement of Kaingaroa Forest.

Overall the Rotorua District scored a 7 on the 2006 NZDep index, which is the same as in previous Census years (refer Table 2). In 2006 there were more Rotorua residents living in very deprived areas (with NZDep score of 10) compared to 2001, and also fewer residents living in high socio-economic areas with NZDep score of 1.

In total, 45.7% of the district population live in areas that are considered the 30% most deprived in the country. However, in comparison with neighbouring areas the Rotorua District is relatively advantaged (e.g. Eastern Bay of Plenty areas).

The colour maps following Table 2 reveal neighbourhood-level differences within each suburb and rural community. For instance, areas around Lakes Rotoiti and Rotoma score higher on the deprivation scale than other parts of the Tikitere area. In interpreting these maps note that rural meshblocks (communities) tend to be geographically larger, but contain fewer residents.

Figure 3: NZDep index, Rotorua District and New Zealand, 1991-2006



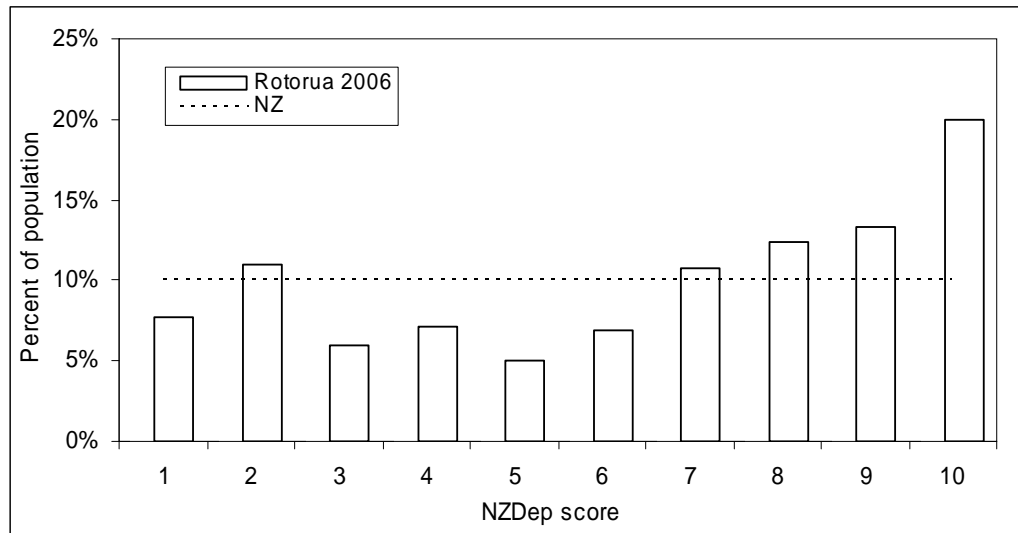
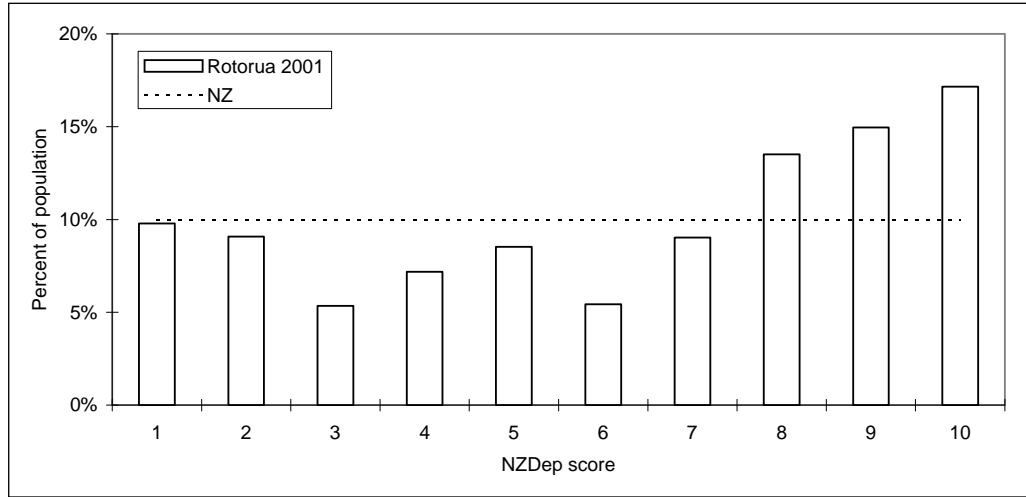
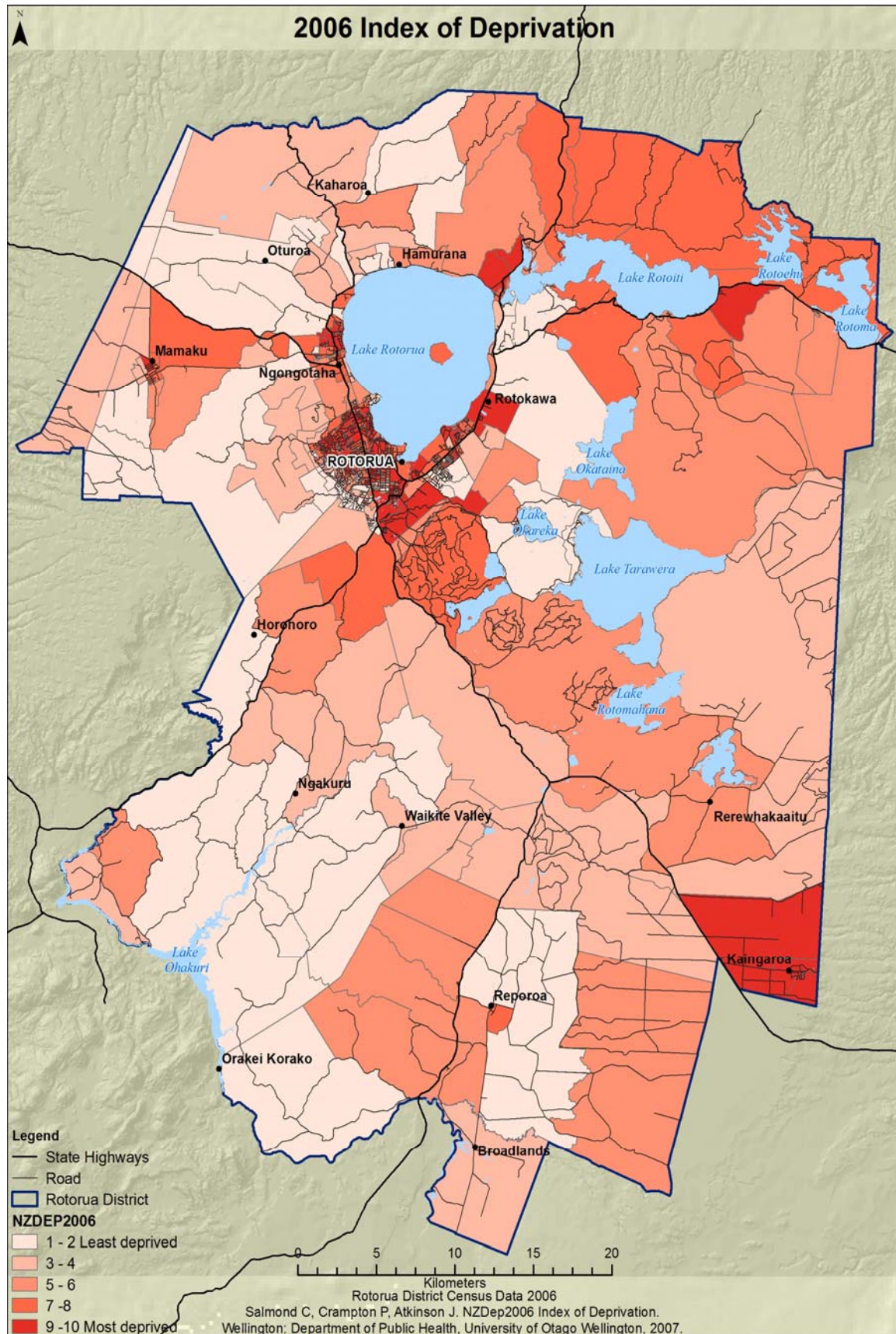
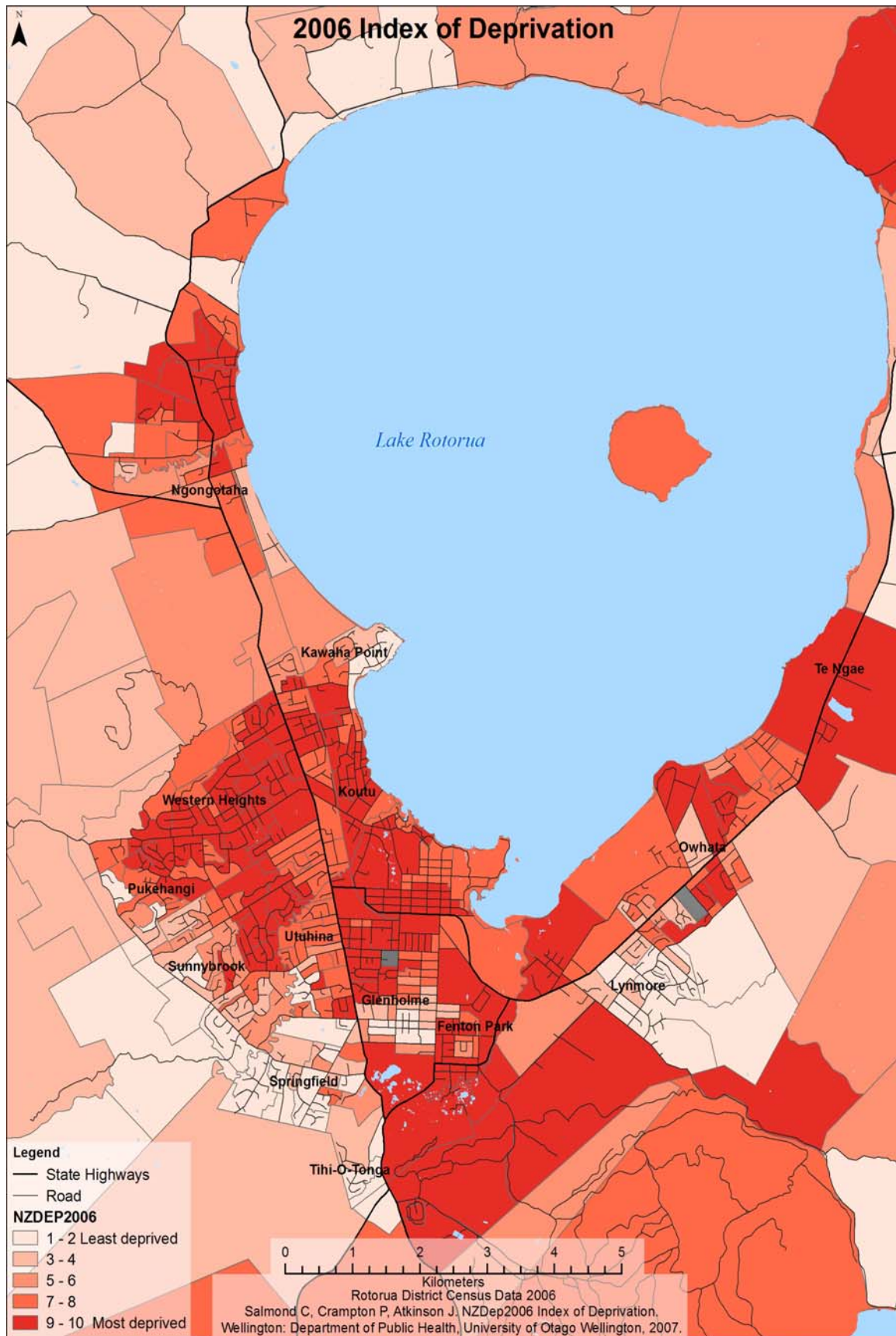


Table 2: NZDep index, Rotorua District Area Units, 1991-2006

Area Unit	2006 Population	NZDep91 Score	NZDep96 Score	NZDep2001 Score	NZDep2006 Score	Trend (1991-2006)
Ngongotaha North	2,874	9	8	8	9	☹
Ngongotaha South	1,101	8	7	8	7	☺
Poets Corner	267	-	4	5	6	☹
Ngapuna	513	9	10	9	10	☹
Owhata South	588	-	5	5	6	☹
Lynmore	3,132	1	1	1	1	☺
Owhata West	3,576	9	8	9	9	☺
Owhata East	2,133	7	7	8	8	☹
Hamurana	2,388	3	3	3	2	☺
Tikitere	2,829	7	7	7	6	☺
Kaingaroa Forest	486	10	10	10	10	☺
Tarawera	1,395	3	2	2	2	☺
Golden Springs	1,287	5	4	3	3	☺
Reporoa	474	6	5	6	7	☹
Ngakuru	1,701	3	3	2	3	☺
Arahiwi	147	5	5	3	3	☺
Waiwhero	699	6	3	4	5	☹
Mamaku	726	8	8	8	8	☺
Selwyn Heights	1,128	9	8	10	10	☹
Western Heights	3,822	9	9	9	10	☹
Fairy Springs	2,013	9	9	9	9	☺
Pukehangi North	2,190	9	9	9	10	☹
Pukehangi South	2,790	6	5	5	6	☹
Mangakakahi	2,448	8	9	9	9	☺
Sunnybrook	1,941	4	4	5	6	☹
Fordlands	1,905	10	10	10	10	☺
Utuhina	1,407	6	6	7	8	☹
Pomare	1,494	3	3	3	4	☹
Hillcrest	1,602	8	8	8	8	☺
Springfield	4,275	2	2	1	2	☺
Kawaha Point	1,641	6	5	6	6	☺
Koutu	1,896	9	9	10	10	☹
Ohinemutu	282	9	9	9	9	☺
Kuirau	1,110	9	10	10	10	☺
Victoria	1,650	9	10	10	10	☺
Glenholme East	1,986	4	5	6	6	☹
Glenholme West	2,277	9	9	10	10	☹
Fenton	1,395	9	9	9	9	☺
Whakarewarewa	333	10	10	9	10	☹
ROTORUA DISTRICT	65,901	7	7	7	7	☺

KEY: ☺ Improved
☺ No significant change
☹ Worsened





PART TWO:

**KEY INDICATORS OF
SOCIO-ECONOMIC STATUS**

1. HOUSEHOLD INCOME

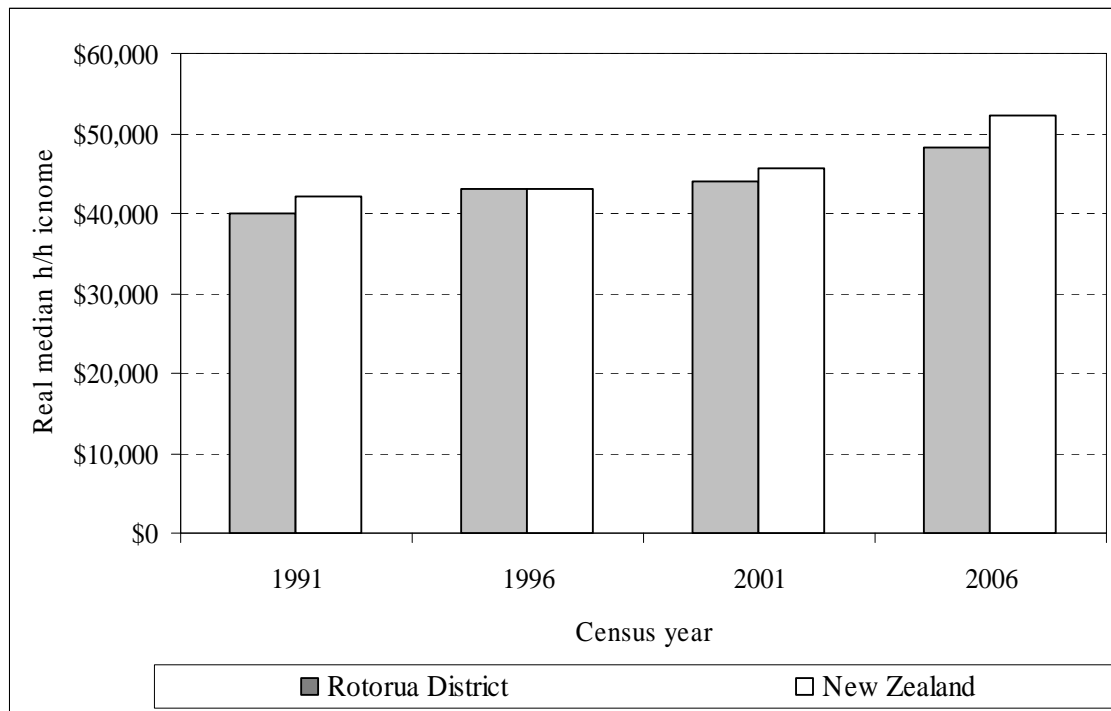
Income is a key contributor to overall quality of life. Household income levels determine how much can be spent on food, housing, clothing, health care, and other goods and services. Median or average household income is a key indicator of socio-economic status.

KEY POINT:

- In real terms (adjusted to June 2006 dollars), median household income in the Rotorua District increased from \$43,081 in 1996 to \$48,325 in 2006. The 2006 figure is approximately \$3,800 per annum below the national median household income of \$52,183.

Statistics New Zealand derives figures for total household income by adding up the total personal income of all members of the household. Figure 4 illustrates that the median household income in real terms (i.e. inflation-adjusted) increased from \$43,081 in 1996 to \$48,325 in 2006. National real median income in 2006 is around \$3,800 higher at \$52,183. Household income growth in the Rotorua District averaged 1.2% per annum in the period 1996 to 2006, compared with 2.1% for New Zealand as a whole.

Figure 4: Real median household income (2006 dollars), Rotorua District and New Zealand, 1991-2006



Note: Figures are inflation-adjusted to June 2006 dollars.

2. INCOME SUPPORT

Information on sources of personal income, particularly benefit-related income, is important for monitoring social change. Reliance on welfare benefits can limit the earning potential of individuals and families.

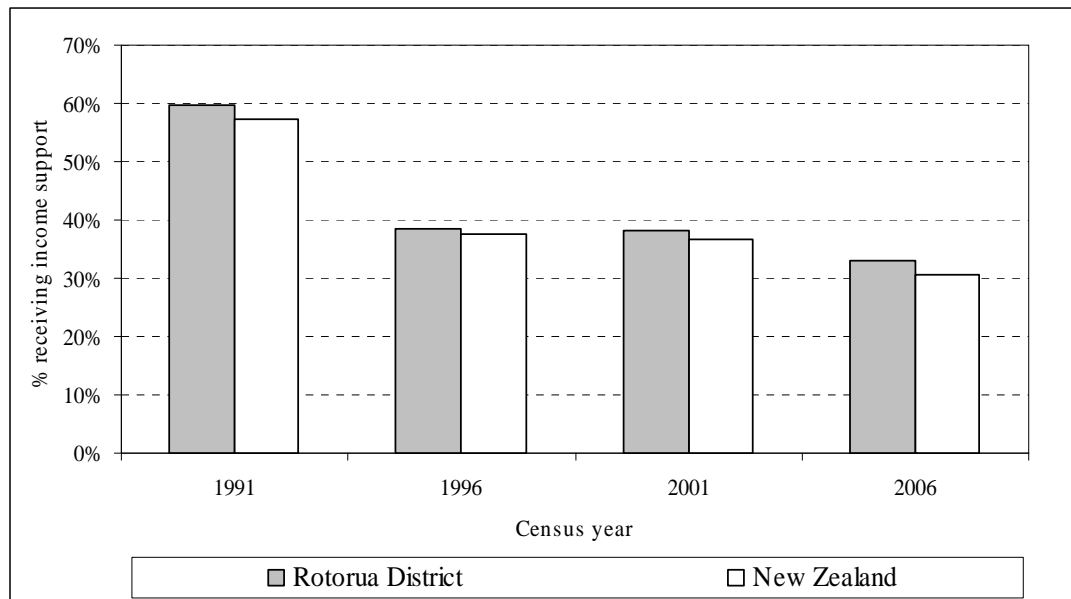
KEY POINT:

- Between 1996 and 2001 the percentage of Rotorua people receiving some form of income support fell slightly from 38.4% to 37.1%.

The five-yearly census asks respondents to mark as many spaces as they need to show the ways they got income in the previous 12-month period. In 2006, based on the total population aged 15 years and over, 60.8% of Rotorua residents received income from wages, salary, commissions, bonuses etc; 20.5% received income from interest, dividends, rent and other investments; 15.7% received income from self-employment or business; and 14.3% received income from NZ Superannuation or Veterans Pension. Note these figures add up to more than 100% because this is a multiple response item.

Figure 5 shows that at both the local and national level, the proportion of people receiving income support decreased over the period 1991-2006. This corresponds with a period of substantial welfare reforms, including the removal of Family Benefit payments between 1991 and 1996. Between 1996 and 2006 the percentage of Rotorua people receiving some form of income support fell to 33.1% from 38.4%, and the percentage nationally fell to 30.6% from 37.5%.

Figure 5: Percentage of people aged 15 and over receiving income support, 1991-2006



Notes:

- Based on the number of people with one or more income sources from work accident insurance, superannuation, pensions, annuities, welfare benefits, and student allowance. The "Not Stated" category was omitted prior to calculation.
- The 1991 figures include Family Benefit payments.

3. TRANSPORT

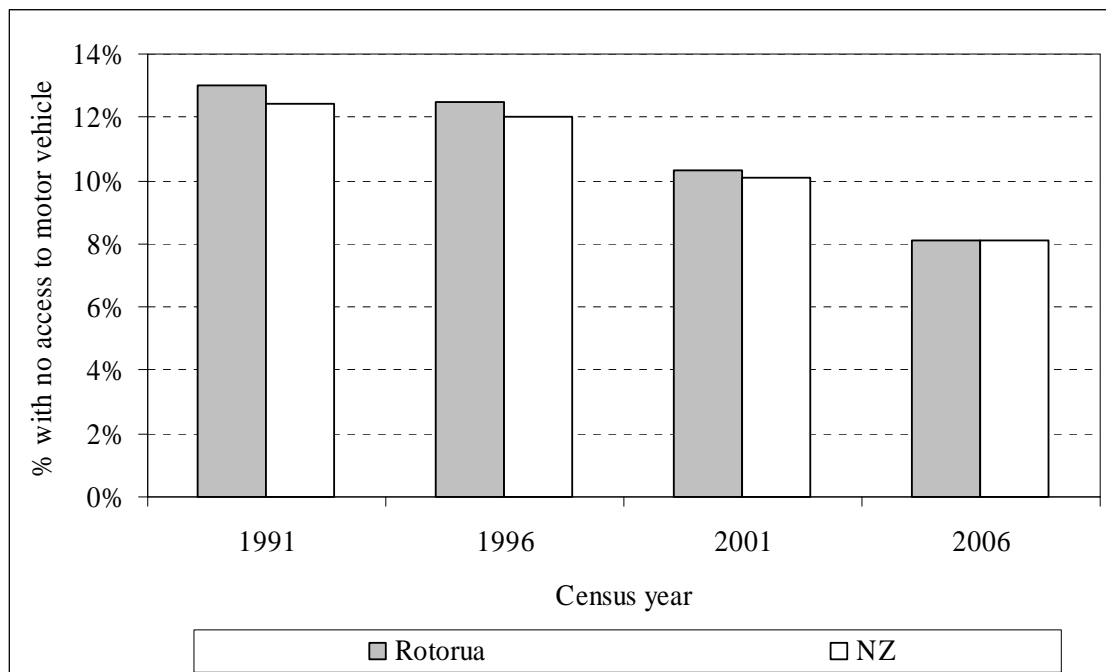
The percentage of households without access to a motor vehicle is a key indicator of material deprivation and dependence on other modes of transport. Lack of access to a private motor vehicle may be a sign of potential social and economic isolation.

KEY POINT:

- 8.1% of Rotorua dwellings in 2006 had no motor vehicle compared with 13.0% in 1991. The proportion of Rotorua dwellings with no vehicle is comparable with the national average in the 2006 Census.

Figure 6 shows that the proportion of dwellings in the Rotorua District with no motor vehicle fell over the period 1991 to 2006. 13.0% of Rotorua dwellings in 1991 had no motor vehicle compared with just 8.1% in 2006. Moreover, the gap between local and national figures for this item has reduced between 2001 and 2006. The comparable national figure for 2006 is 8.1%.

Figure 6: Percentage of households with no access to a private motor vehicle, Rotorua District and New Zealand, 1991-2006



Note: The "Not Stated" category was omitted prior to calculation.

4. LIVING SPACE

Community wellbeing is enhanced if residents have access to affordable, warm, clean, safe and uncrowded dwellings. Overcrowding is often associated with an inability to pay housing costs. There is evidence that occupants of overcrowded houses have a greater likelihood of catching infectious diseases and of having mental health problems. Research has also indicated a link between overcrowding and poor educational attainment.

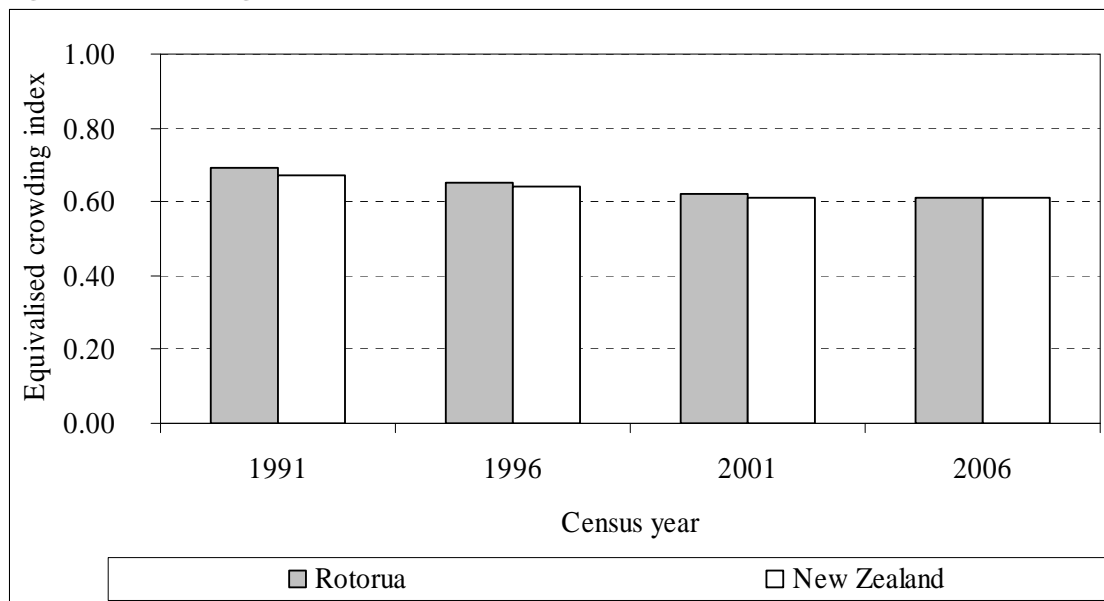
KEY POINT:

- The Rotorua Equivalised Crowding Index (ECI) is 0.61, the same as for New Zealand as a whole.

The most commonly reported measure of crowding in New Zealand is the ECI. This is calculated from Census information and reflects the number of occupants relative to the number of bedrooms. The ECI formula is adjusted to “adult equivalents”, with married and de facto couples counted as a single adult and children less than 10 years counted as half an adult.

The latest ECI results show that crowding has fallen over the past decade at both the national and local level. As at 2006, the Rotorua ECI was 0.61, the same as the national level.

Figure 7: Crowding, Rotorua District and New Zealand, 1991 – 2006



Notes:

- ECI figures are based on households (excludes any visitor-only dwellings) that specified their number of bedrooms (not specified/not stated/unidentifiable categories have been excluded). The people are the number of people usually resident in those households.
- Equivalised Crowding Index = $[(1/2 \text{ number of children under 10 years}) + (\text{number of couples}) + (\text{all other people aged 10 years and over})] / \text{number of bedrooms}$.

5. HOME OWNERSHIP

Home ownership represents the single largest investment decision made by most New Zealanders. A high level of home ownership is indicative of community stability and social cohesion. Home ownership is a relatively good indicator of wealth and socio-economic status, although preferences for home ownership may be changing.

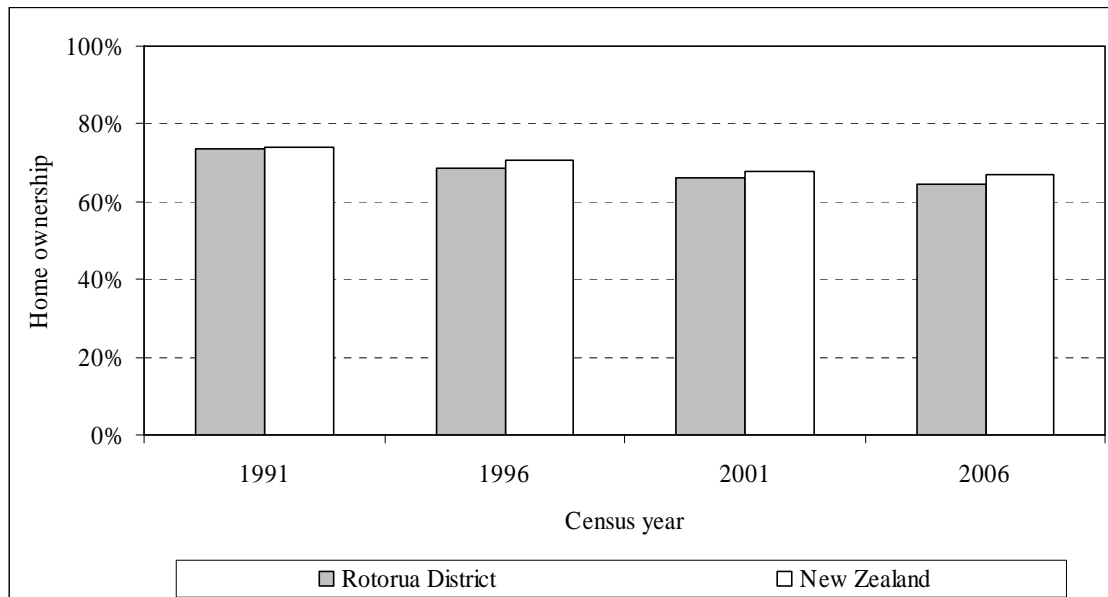
KEY POINT:

- In 1991, 73.6% of Rotorua District households owned their own home compared with 73.8% for New Zealand overall. In 2006, 64.5% of Rotorua District households owned their own home compared with 66.9% for New Zealand as a whole.

Over the past decade, home ownership has been falling at both the national and local level. In addition, home ownership in the Rotorua District has been falling slightly more quickly than the national average. In 2006, 64.5% (13,917) of Rotorua District households owned their own home compared with a figure of 66.9% for New Zealand overall⁴. The 1991 figures were 73.6% (14,799) for Rotorua and 73.8% for New Zealand overall (refer Figure 8).

There is considerable variation in home ownership rates in the district, ranging from more than 80% in suburbs with a high average income to less than 40% in less well-off suburbs.

Figure 8: Home ownership, Rotorua District and New Zealand, 1991 – 2006



Note: The “Not Stated” category was omitted prior to calculation.

⁴ 2006 data includes information on dwelling held in a family trust by usual occupants. This data was first collected in 2006.

6. UNEMPLOYMENT

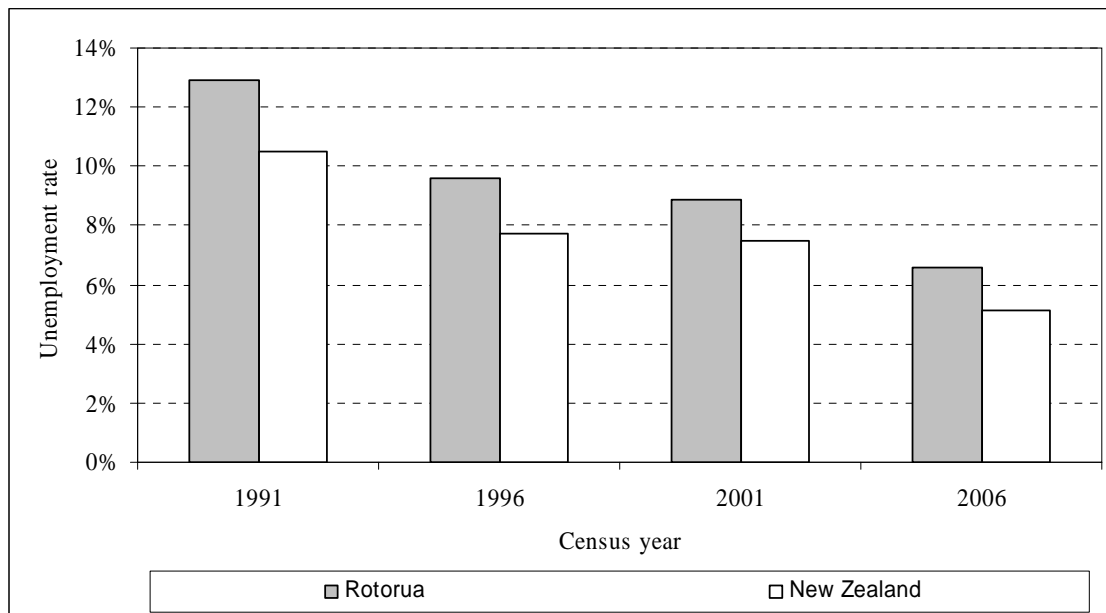
Over the past two decades, unemployment has become a persistent feature of New Zealand society. Employment provides not only income but also self-esteem and a sense of community connection. A lack of opportunities for employment restricts the community's earning potential.

KEY POINT:

- The Census night unemployment rate for the Rotorua District fell from 12.9% in 1991 to 6.6% in 2006, but remains higher than the national average rate of 5.1%.

The unemployment rate is the number of unemployed as a percentage of the labour force (i.e. not including people who are "Not in the Labour Force"). Figure 9 shows that since 1991 the Rotorua District unemployment rate has been above the national rate. The 2006 Census night unemployment rate for the Rotorua District was 6.6% compared with 5.1% for New Zealand as a whole.

Figure 9: Unemployment rate, Rotorua District and New Zealand, 1991-2006



Note: The "Unidentifiable" category was omitted prior to calculation.

7. QUALIFICATIONS

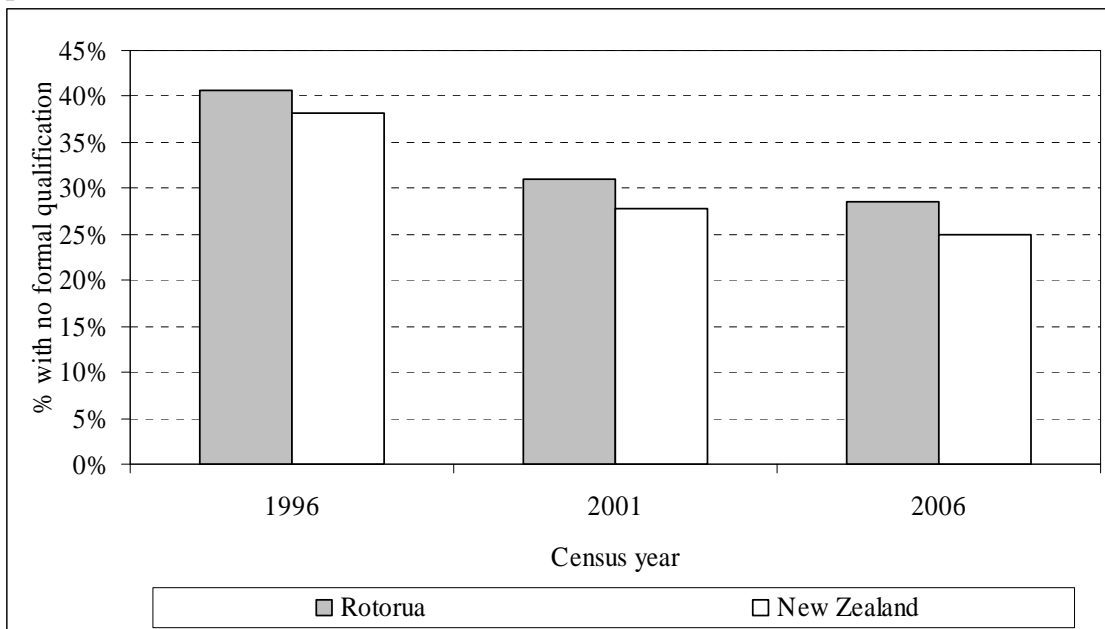
Education is a key factor in breaking the poverty cycle and fostering economic independence. The proportion of the population in an area with no formal qualification is a key indicator of low socio-economic status.

KEY POINT:

- The percentage of people aged 15 and over in the Rotorua District with no formal qualification fell substantially from 40.7% in 1996 to 28.5% in 2006⁵ (See Appendix 2 for a definition of qualification). However, this percentage is still higher than the figure of 25% for New Zealand as a whole.

There has been a substantial reduction in the percentage of Rotorua residents aged 15 years and over with no formal qualification, from 40.7% in 1996 to 28.5% in 2006 (refer Figure 10). This is still higher than the overall New Zealand figure of 25%. As at March 2006, 9.3% of Rotorua's population aged 15 and over had some form of vocational qualification compared with 9.5% nationally.

Figure 10: Percent of working age population (15 years and over) with no formal qualification, Rotorua District and New Zealand, 1996-2006



Note: These figures should be interpreted with care due to changes in the Census item relating to educational qualifications, and differences in the number of people in the “not elsewhere included” category. Also, comparable 1991 figures are not available.

⁵ The NZDep index qualification dimension includes data for 18-64 year olds. These people are likely to have left school and be in the labour force. This data was not available to RDC at the time of compiling this document.

8. FAMILY TYPE

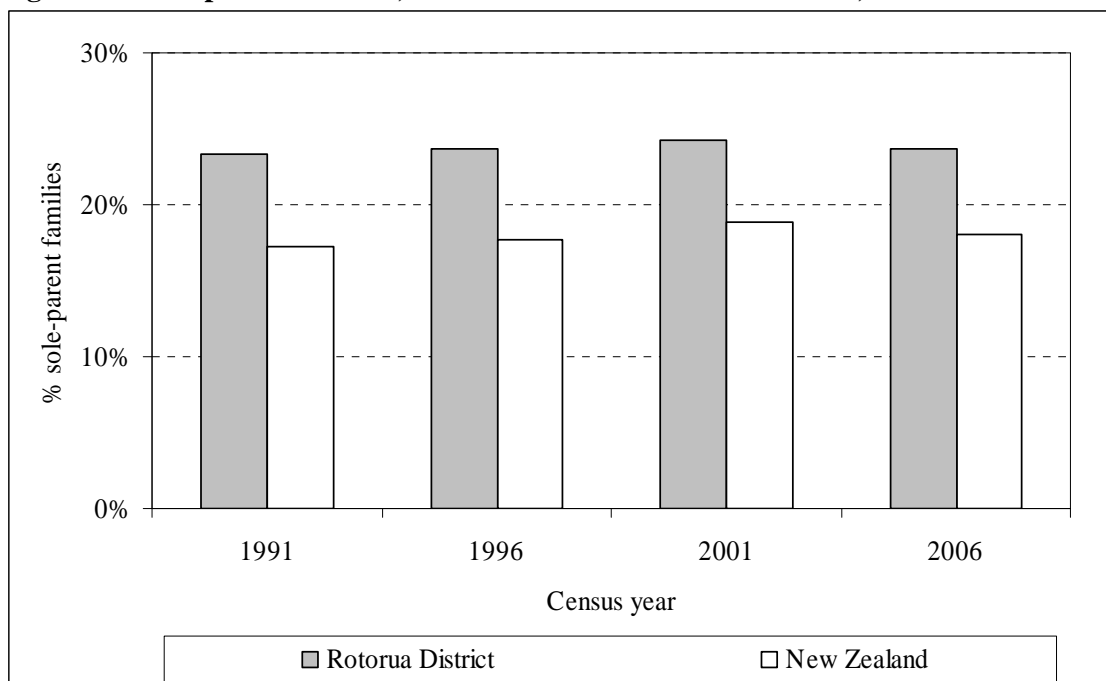
Changes in household composition and family type are a key indicator of social trends. Of particular interest to this report is the proportion of one-parent families compared with other types of families.

KEY POINT:

- The proportion of sole-parent families in the Rotorua District decreased slightly from 24.2% in 2001 to 23.7% in 2006. The figure for New Zealand as a whole in 2006 was 18.1%.

The Rotorua District has a relatively high proportion of sole-parent families. The proportion of sole-parent families in the Rotorua District decreased slightly to 23.7% (4,116) in 2006 from 24.2% (3,981) in 2001 (refer Figure 11). Sole-parent families are particularly prevalent in the western suburbs of the Rotorua urban area.

Figure 11: Sole-parent families, Rotorua District and New Zealand, 1991-2006



Note: The “Family Not Classifiable” category was omitted prior to calculation.

9. TELECOMMUNICATIONS

Access to telecommunications is likely to become increasingly important in the future due to greater provision of services, information and communication through the Internet and telephone call centres. Lack of access to a telephone is a potential indicator of income inadequacy. Access to telecommunications also indicates the ability of a household to receive assistance in an emergency.

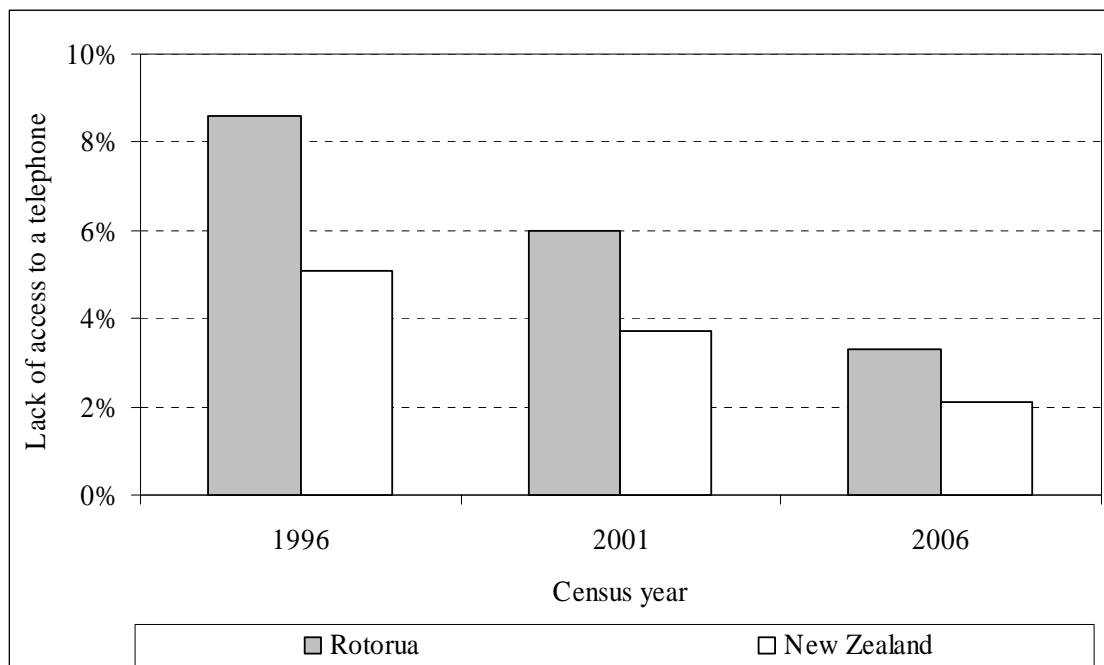
KEY POINTS:

- 3.3% of households in the Rotorua District are without access to a private telephone, compared with 2.0% for New Zealand as a whole.⁶

The proportion of households with no access to a private telephone fell from 8.6% in 1996 to 3.3% in 2006, but remains well above the national average of 2.0%. Therefore, some 732 Rotorua households have no access to telecommunications systems of any kind, compared with 28,407 households for New Zealand as a whole.

In the Rotorua District 74.5% of households have access to a cellphone, compared with 74.2% of households for New Zealand as a whole.⁷

Figure 12: Lack of access to a private telephone, Rotorua District and New Zealand, 1996-2006



Note: The “Not Stated”/ “Not Specified” category was omitted prior to calculation. Also, 1991 data is not available.

⁶ “Private telephone” includes cellphones that are in the home all or most of the time.

⁷ The distinction between landline and cellphone was made for the first time in the 2006 Census.

APPENDIX 1: DATA

	(1) Median household income	(2) % ppl receiving one or more forms of income support	(3) % dwellings with no motor vehicle
Ngongotaha North	\$40,900	35.1%	6.9%
Ngongotaha South	\$39,700	34.5%	6.0%
Poets Corner	\$60,000	19.0%	3.7%
Ngapuna	\$45,000	31.6%	12.5%
Owhata South	\$62,100	29.2%	4.9%
Lynmore	\$71,200	22.4%	1.4%
Owhata West	\$44,000	34.7%	5.9%
Owhata East	\$44,100	39.7%	6.5%
Hamurana	\$65,400	20.2%	1.4%
Tikitere	\$56,300	28.1%	2.6%
Kaingaroa Forest	\$31,500	43.8%	11.4%
Tarawera	\$65,300	17.3%	1.2%
Golden Springs	\$62,300	16.6%	1.5%
Reporoa	\$62,600	18.4%	3.8%
Ngakuru	\$62,500	15.9%	1.6%
Arahiwi	\$71,900	11.1%	0.0%
Waiwhero	\$60,700	19.7%	2.5%
Mamaku	\$39,600	29.5%	5.1%
Selwyn Heights	\$41,700	37.1%	5.5%
Western Heights	\$36,700	41.1%	10.9%
Fairy Springs	\$40,400	36.0%	8.2%
Pukehangi North	\$43,500	40.0%	6.5%
Pukehangi South	\$53,500	27.7%	4.5%
Mangakakahi	\$40,500	34.9%	8.4%
Sunnybrook	\$55,000	27.9%	2.9%
Fordlands	\$33,700	53.3%	22.4%
Utuhina	\$43,400	36.3%	7.5%
Pomare	\$64,200	25.3%	2.9%
Hillcrest	\$50,100	33.8%	8.3%
Springfield	\$65,400	29.9%	3.9%
Kawaha Point	\$54,600	30.4%	5.0%
Koutu	\$35,500	42.3%	11.7%
Ohinemutu	\$39,600	43.5%	15.2%
Kuirau	\$32,800	40.0%	25.6%
Victoria	\$25,200	43.2%	27.0%
Glenholme East	\$39,200	42.8%	10.2%
Glenholme West	\$34,500	44.9%	21.7%
Fenton	\$30,200	48.9%	23.0%
Whakarewarewa	\$40,700	38.3%	24.0%
Rotorua District	\$47,600	33.1%	8.1%
New Zealand	\$51,400	30.6%	8.1%

- (1) 2006 Census, Households in Private Occupied Dwellings, Median Household Income (\$). The "Not stated" category was omitted prior to calculation. Figures are in March 2006 dollars.
- (2) 2006 Census, Census Usually Resident Population Count Aged 15 Years and Over, Sources of Personal Income. Income support sources include NZ Superannuation or Veterans Pension, Other Super., pensions and annuities, Unemployment Benefit, Sickness Benefit, Domestic Purposes Benefit, Invalids Benefit, and Student Allowance, Other Govt Benefits, Payments or Pension. The "Not stated" category was omitted prior to calculation.
- (3) 2006 Census, Households in Private Occupied Dwellings, Number of Motor Vehicles for Private Dwellings: None. The "Not stated" category was omitted prior to calculation.

	(4) Crowding Equivalised Crowding Index	(5) % households not owned by occupants	(6) Unemployment rate
Ngongotaha North	0.62	31.1%	7.9%
Ngongotaha South	0.57	31.0%	5.9%
Poets Corner	0.58	29.6%	6.1%
Ngapuna	0.71	37.0%	7.6%
Owhata South	0.62	30.0%	3.8%
Lynmore	0.52	17.0%	3.1%
Owhata West	0.65	40.6%	9.0%
Owhata East	0.63	30.7%	7.3%
Hamurana	0.51	20.0%	2.8%
Tikitere	0.6	25.3%	5.9%
Kaingaroa Forest	0.77	36.6%	13.3%
Tarawera	0.5	28.7%	2.2%
Golden Springs	0.55	50.4%	2.8%
Reporoa	0.62	45.3%	3.3%
Ngakuru	0.53	36.1%	2.5%
Arahiwi	0.62	36.4%	4.0%
Waiwhero	0.53	27.8%	2.9%
Mamaku	0.66	25.6%	7.5%
Selwyn Heights	0.71	40.2%	10.2%
Western Heights	0.72	47.4%	10.7%
Fairy Springs	0.66	39.1%	8.2%
Pukehangi North	0.74	48.8%	8.7%
Pukehangi South	0.59	28.1%	4.6%
Mangakakahi	0.67	43.2%	9.0%
Sunnybrook	0.59	25.4%	3.8%
Fordlands	0.91	63.8%	22.5%
Utuhina	0.62	36.1%	6.3%
Pomare	0.53	18.7%	3.7%
Hillcrest	0.65	34.1%	7.2%
Springfield	0.53	18.2%	3.1%
Kawaha Point	0.53	30.1%	3.7%
Koutu	0.71	47.1%	12.1%
Ohinemutu	0.62	40.6%	13.0%
Kuirau	0.63	64.3%	9.4%
Victoria	0.63	62.7%	7.8%
Glenholme East	0.51	30.4%	3.5%
Glenholme West	0.7	51.3%	10.6%
Fenton	0.64	47.8%	7.9%
Whakarewarewa	0.79	47.8%	13.0%
Rotorua District	0.61	35.5%	6.6%
New Zealand	0.61	33.1%	5.1%

- (4) 2006 Census, Number of people usually residing in the dwelling divided by the number of bedrooms. Formula – [(1/2 number of children aged under 10 years) + (number of couples) + (all other people aged 10 years and over)] / number of bedrooms.
- (5) 2006 Census, Households in Private Occupied Dwellings, Tenure of Households: Dwelling Not Owned by Usual Resident(s). The "Not elsewhere included" category was omitted prior to calculation.
- (6) 2006 Census, Unemployment Rate. The "Not elsewhere included" and "Not in the labour force" categories were omitted prior to calculation.

	(7) % people with no formal qualification	(8) % families with sole parent	(9) % households with no telephone (landline/cellphone)
Ngongotaha North	32.3%	25.0%	3.9%
Ngongotaha South	29.8%	24.0%	3.4%
Poets Corner	25.9%	22.2%	0.0%
Ngapuna	38.3%	34.8%	7.3%
Owhata South	25.4%	19.6%	0.0%
Lynmore	15.6%	9.2%	0.3%
Owhata West	31.3%	28.4%	4.4%
Owhata East	30.9%	24.3%	3.0%
Hamurana	20.3%	9.8%	1.4%
Tikitere	26.3%	16.5%	3.0%
Kaingaroa Forest	50.6%	42.1%	16.7%
Tarawera	16.5%	10.2%	0.6%
Golden Springs	28.1%	9.8%	2.2%
Reporoa	35.5%	21.4%	1.9%
Ngakuru	23.0%	7.2%	1.1%
Arahiwi	32.0%	9.1%	0.0%
Waiwhero	28.7%	8.8%	1.3%
Mamaku	37.2%	25.8%	6.4%
Selwyn Heights	43.1%	39.8%	4.5%
Western Heights	37.4%	37.2%	5.1%
Fairy Springs	31.2%	32.4%	3.5%
Pukehangi North	38.3%	41.3%	5.1%
Pukehangi South	26.6%	19.2%	1.3%
Mangakakahi	33.9%	34.9%	4.6%
Sunnybrook	27.0%	20.8%	0.5%
Fordlands	53.6%	50.8%	12.6%
Utuhina	26.9%	26.7%	2.5%
Pomare	23.2%	15.5%	1.2%
Hillcrest	25.9%	28.6%	3.0%
Springfield	19.0%	11.5%	0.6%
Kawaha Point	21.1%	17.5%	1.0%
Koutu	34.8%	38.1%	5.6%
Ohinemutu	29.7%	34.8%	3.0%
Kuirau	27.3%	36.7%	9.4%
Victoria	30.7%	29.2%	6.5%
Glenholme East	23.5%	15.9%	1.3%
Glenholme West	32.0%	33.7%	6.3%
Fenton	33.5%	26.5%	5.1%
Whakarewarewa	32.1%	36.8%	0.0%
Rotorua District	28.5%	23.7%	3.3%
New Zealand	25.0%	18.1%	2.1%

(7) 2006 Census, Census Usually Resident Population Count Aged 15 Years and Over, Highest Qualification Gained: No Qualification. The "Not elsewhere included" category was omitted prior to calculation.

(8) 2006 Census, Families in Households, Family Type: One Parent with Child(ren)

(9) 2006 Census, Households in Private Occupied Dwellings, Access to Telecommunications Systems for Private Dwellings: No Access to a Telephone. The "Not stated" category was omitted prior to calculation.

APPENDIX 2: DEFINITION OF QUALIFICATION

A qualification is a formally recognised award for attainment resulting from a full-time (20 hours per week) learning course of at least three months, or from part-time study that, when completed, is equivalent to three months full time, or from on-the-job training.

Formal recognition means that the qualification is:

- awarded by a New Zealand secondary school or institution as defined by the Education Act, or
- awarded under the auspices of the New Zealand Qualifications Authority (NZQA), that is, by a registered qualifications provider, or
- awarded by a publicly recognised New Zealand authority of a profession, academic discipline or trade, or
- awarded by a New Zealand recognised overseas authority of a profession, academic discipline or trade.

Category of attainment is an indication of the amount and type of learning required to gain a qualification.

The amount of learning is the total learning time usually necessary to obtain a qualification. Included are any previous learning or educational attainment required for admission to the educational course leading to the qualification and the amount of learning time necessary to complete the qualification.

The type of learning is the blend of theoretical knowledge and understanding and the attainment of practical skills. For example, academic qualifications have greater theoretical content than vocational qualifications; vocational qualifications have greater applied skills content than academic qualifications.

Source: Statistics New Zealand/Census