

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.

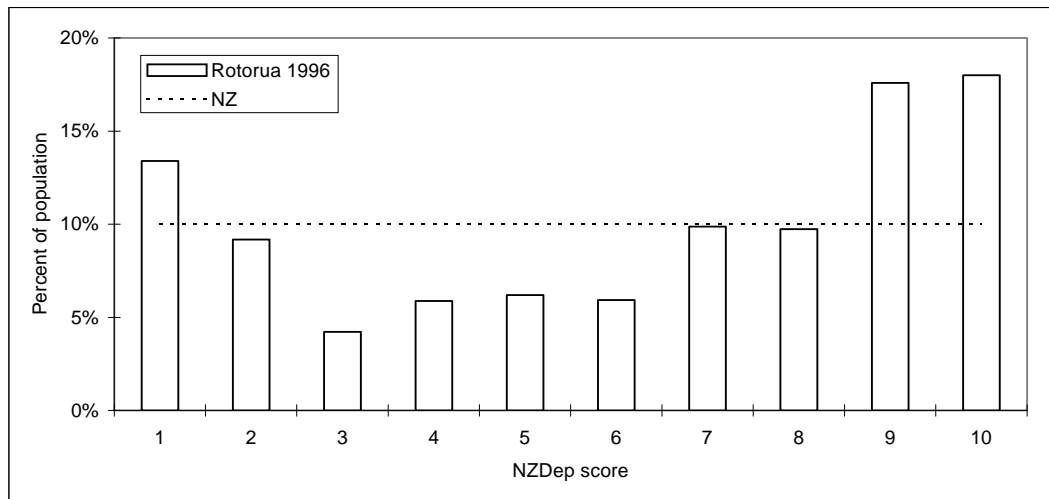
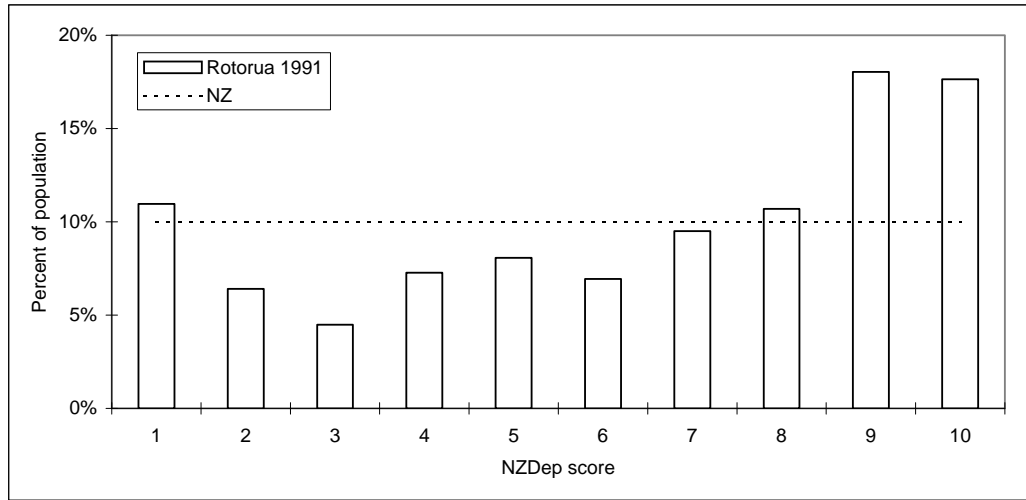
Significantly more areas scored a 10 on the index in 2006 than in previous years. These areas include central city areas (Kuirau, Victoria and Glenholme West), several of the western suburbs (Fordlands, Pukehangi North, Western Heights, Koutu and Selwyn Heights), Whaka in the south, Ngapuna in the east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



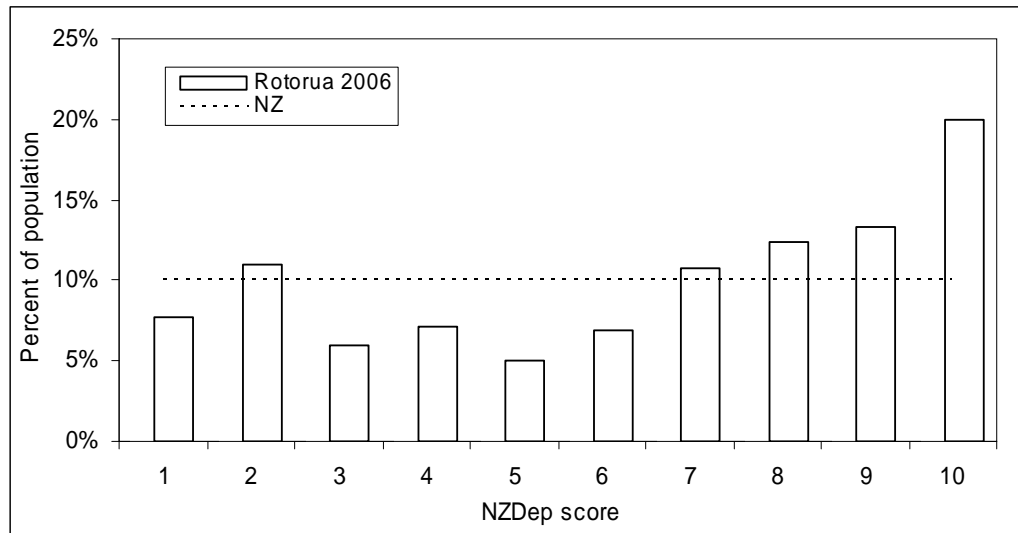
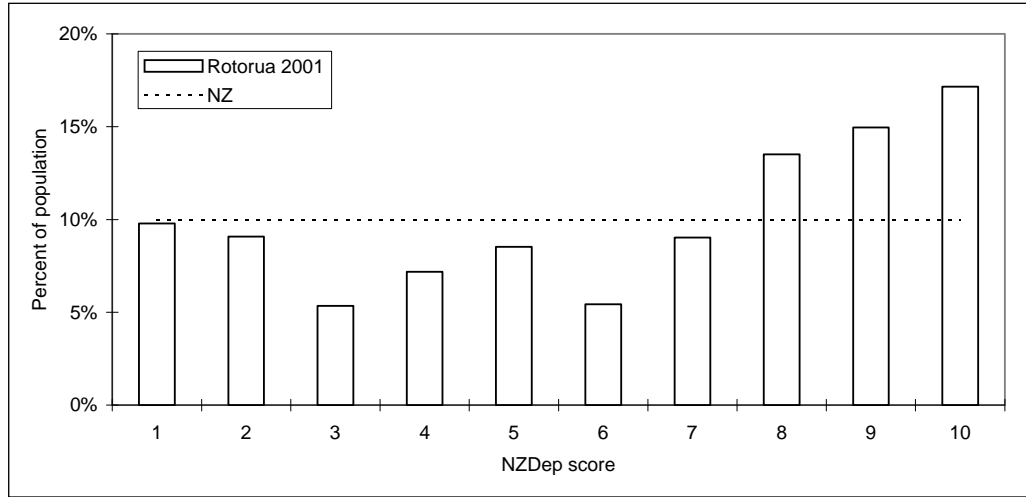


Table 2: NZDep index, Rotorua District Area Units, 1991-2006

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

