

**Table 1:** NZDep variables, and weights given to each variable in calculating overall NZDep score, for the 1996–2013 New Zealand censuses.

Dimension of deprivation	Variable	1996	2001	2006	2013
Income	People aged 18–64* receiving a means tested benefit		0.361	0.371	0.364
	People living in equivalised households with income below a threshold	0.351	0.350	0.356	0.356
Employment	People aged 18–64* unemployed	0.358	0.353	0.332	0.338
Education	People aged 18–64* without any qualifications	0.327	0.319	0.326	0.332
Home ownership	Not living in own home	0.295	0.312	0.334	0.322
Social support	People aged <65 living in single parent family**	0.345	0.325	0.333	0.317
Living space	Living in household below equivalised bedroom occupancy threshold	0.228	0.309	0.318	0.303
Transport	People with no access to a car	0.348	0.332	0.311	0.286
Communication***	People aged <65 with no access to a telephone**	0.363	0.336	0.314	
	People aged <65 with no access to the internet at home**				0.372
Total % of variance explained****		57.4%	57.7%	55.4%	60.7%

Source: Tobias et al,<sup>5</sup> Atkinson et al<sup>17</sup> and Crampton et al.<sup>21</sup>

Notes: \*Prior to 2006, the age range for these variables was 18–59 years to reflect the eligibility threshold for old age pensions at the time.

\*\*Prior to 2006, these variables were calculated for people <60 years.

\*\*\*In 2013, access to a telephone was replaced with internet access for the communication dimension. Variable weights for NZDep1991 are available on request from the authors of NZDep1991, and are broadly similar to the years 1996–2013.<sup>22</sup>

\*\*\*\*This refers to the degree to which each set of chosen NZDep variables accounted for the overall variation in the data, using a principal components analysis.

**Figure 1:** Māori (left) and NZ European (right) population distributions by NZDep decile, 1991–2013.



**Table 2:** Percentage of Māori and NZ European population in each NZDep decile, 1991–2013.

NZDep decile	% of Māori						% of NZ European				
	1991	1996	2001	2006	2013		1991	1996	2001	2006	2013
1	1.6%	2.8%	2.3%	2.8%	3.2%		12.5%	12.7%	12.7%	13.1%	13.3%
2	2.5%	3.6%	3.4%	3.8%	4.3%		11.9%	12.2%	12.3%	12.5%	12.9%
3	3.5%	4.6%	4.3%	4.7%	4.8%		11.4%	11.6%	12.1%	12.0%	12.1%
4	4.9%	5.7%	5.4%	5.5%	5.8%		11.2%	11.4%	11.4%	11.4%	11.3%
5	5.9%	6.8%	6.8%	6.8%	7.2%		10.6%	10.9%	11.0%	10.9%	10.9%
6	8.0%	8.4%	8.5%	8.8%	8.7%		10.2%	10.4%	10.4%	10.3%	10.3%
7	10.8%	10.6%	10.6%	10.5%	10.5%		9.6%	9.7%	9.6%	9.7%	9.6%
8	13.6%	13.1%	13.4%	13.4%	13.1%		8.9%	8.9%	8.7%	8.5%	8.6%
9	20.2%	17.9%	18.5%	18.2%	17.6%		8.0%	7.6%	7.3%	7.1%	7.0%
10	29.2%	26.6%	26.8%	25.4%	24.8%		5.7%	4.7%	4.4%	4.4%	4.0%
	100%	100%	100%	100%	100%		100%	100%	100%	100%	100%

**Table 3:** Odds ratios for Māori being in each NZDep decile, compared to NZ Europeans, 1991–2013.

Decile	1991		1996		2001		2006		2013	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
1	0.11	0.11–0.11	0.20	0.19–0.20	0.16	0.16–0.16	0.19	0.19–0.19	0.21	0.21–0.22
2	0.19	0.19–0.20	0.27	0.26–0.27	0.25	0.24–0.25	0.28	0.27–0.28	0.30	0.30–0.31
3	0.28	0.27–0.28	0.37	0.36–0.37	0.33	0.32–0.33	0.36	0.35–0.36	0.37	0.36–0.37
4	0.41	0.40–0.41	0.47	0.47–0.48	0.45	0.44–0.45	0.45	0.45–0.46	0.48	0.48–0.49
5	0.53	0.52–0.53	0.60	0.59–0.61	0.59	0.58–0.60	0.60	0.59–0.61	0.63	0.63–0.64
6	0.76	0.76–0.77	0.79	0.78–0.80	0.80	0.79–0.80	0.84	0.83–0.85	0.84	0.83–0.84
7	1.14	1.13–1.15	1.10	1.09–1.11	1.11	1.10–1.13	1.10	1.09–1.12	1.10	1.09–1.11
8	1.60	1.58–1.61	1.54	1.53–1.56	1.62	1.60–1.63	1.67	1.66–1.69	1.61	1.60–1.63
9	2.91	2.89–2.94	2.66	2.64–2.68	2.87	2.85–2.90	2.90	2.87–2.92	2.81	2.79–2.84
10	6.76	6.71–6.82	7.34	7.28–7.40	8.00	7.93–8.07	7.47	7.41–7.54	7.97	7.90–8.04

All P-values &lt;0.05

**Figure 2:** Distribution of NZDep scores for Māori and NZ European populations, 1991–2013.

