

# Summary

This report has described a range of desirable social outcomes and proposed a range of indicators to measure these outcomes. The indicators provide a snapshot of the current social health of the nation, and for some an indication of whether this has improved or deteriorated; an indication of how New Zealand compares internationally; and an indication of how different groups in the population fare.

These findings are summarised below.

## **THE SOCIAL WELL-BEING OF NEW ZEALANDERS**

The health indicators included in this report show some improvement in the health aspects of well-being of New Zealanders. Life expectancy is increasing steadily for all groups. With more people living well into old age, rates of disability are significant, although most New Zealanders can expect to live the great majority of their lives independently. Among younger people the birth rate has declined, and the youth suicide rate, which climbed steadily to the mid-90s, has been stable over the last three years. Fewer people smoke now than in the past, although smoking among Maori or Pacific peoples has remained relatively unchanged. These health indicators give cause for concern for the health status of Maori, and to a lesser extent for that of Pacific peoples. A comparison of this country's performance with that of other OECD countries suggests that while the health status of New Zealanders has been improving, comparable countries have made greater gains.

Educationally New Zealanders make a good start in life with high levels of participation in early childhood education. Participation rates have been steadily improving particularly for Maori and Pacific children. The proportion of school leavers with higher school qualifications improved in the late 1980s, but has since been stable. The level of educational attainment of adults in the population improved throughout the 1990s. However, in 1997 almost half the adult population had literacy levels below those required to meet the demands of everyday life (as measured by the International Adult Literacy Survey). Participation rates in early childhood education appear to compare favourably with other OECD countries. The proportion of the population with an upper secondary school or a tertiary qualification is about average for OECD countries, and what evidence there is suggests that the rates of adult literacy in this country are also about average. New Zealand has high rates of participation in tertiary education internationally with nearly a quarter of 16-24 year-olds enrolled in a tertiary institution.

New Zealand is not always a safe place for its people, especially if they are young. About 10 children each year die from intentional injury, and the rate of substantiated reports of abuse and neglect of children has been fairly constant for a number of years. It is, however, difficult to interpret these figures as they reflect only the abuse that is reported. It is unclear how the rate of abuse compares with that of other countries, or whether New Zealanders are prepared to report child abuse more or less readily than do people in other countries. Many New Zealanders have been the victims of violent offending or property offending, and a small proportion of people have been repeatedly victimised. The rate of people killed or injured in motor vehicle crashes has been falling steadily since 1986, but is still higher than that in many comparable OECD countries.

Rates of employment and unemployment have fluctuated with the state of the economy. In the mid to late 1980s unemployment was low, but climbed rapidly to a peak in 1991 and has since fallen somewhat, although it has not returned to the 1986 level. Younger people, Maori and Pacific peoples are all amongst those more likely to be out of work. New Zealand's position relative to other OECD countries has also fluctuated from having one of the lowest unemployment rates 15 years ago, to having a rate well above average by 1992, and around or just below average over the past four years. Safety in the workplace is one measure of the quality of work. Certain groups are more likely to have accidents at work than others, notably men and Maori.

Included in this report as a measure of civic participation, voter turnout has gradually declined since 1986, although New Zealand's voter turnout is high when compared with many other western democracies. Complaints to the Human Rights Commission have increased steadily since 1986, and complaints to the Race Relations Conciliator have risen very sharply, particularly in recent years. Complaints relate mostly to discrimination in employment on the grounds of disability and race, access to goods and services and sexual harassment. These trends can be difficult to interpret given legislative changes, expanding the grounds for complaints, and issues of under-reporting.

New Zealanders report a high level of participation in broadly defined arts and cultural activities. Local content on New Zealand television has increased since 1988 until in 1999 when it made up over a third of prime time programming. News and current affairs, information programmes and sports coverage account for nearly two-thirds of local content. Local content on New Zealand television accounts for a much smaller proportion of total transmission time than in Australia, Canada, Ireland or Norway. A quarter of Maori have conversational fluency in te reo Maori, although the proportion of fluent Maori speakers is much smaller, and many are older people. Participation in Maori medium education, however, is particularly strong at the early childhood level and substantial at the primary school level.

After a brief downturn in the economy in the early 1990s, market income per person has grown since 1992. However, per capita growth since then has been slower than in many comparable countries. Despite this growth, income inequality is higher now than it was in the 1980s due largely to the rise in the incomes of higher earners, and an increase in the proportion of the population with low after-housing cost incomes. The economic indicators suggest that Maori and Pacific families, sole parent families and families with several children are more likely to be on a low income and to experience hardship, such as crowding or food insecurity, than other families.

In terms of social connection with others, almost all of the adult population has access to a telephone, and almost half has access to the Internet in their own home. Over half the population over 12 years of age are involved in unpaid work outside the home, and high proportions of the population report that they participate in family activities and share meals with family or friends. The indicators suggest that social connectedness is less strong for older people than for others, but stronger for Maori and Pacific peoples than others.

The quality of the physical environment influences quality of life in a number of ways. The air quality in New Zealand's urban areas is generally good and is comparable with or better than a number of OECD countries. High levels of air pollution do sometimes occur, particularly in congested traffic corridors. A high proportion of the population has access to good quality drinking water, and that proportion is gradually increasing.

Indicators	Current overall level of indicator (most recent year)	Variation within the population	Is this aspect of the quality of life improving overall?	How does this aspect of the quality of life compare with OECD countries?
<b>Health</b>				
Life expectancy at birth	75.2 years for males and 80.4 years for females (1997-99)	Lower for males, Maori and Pacific peoples. Variation between regions	Steadily improving	Average
Dependent disability	11% of the population with a disability requiring assistance (1996-97)	Higher rates amongst people aged 65 years and above and Maori	No trend available	No reliable comparison available
Independent life expectancy	64.6 years for males and 67.9 years for females (1996)	Lower for males and Maori	No trend available	No comparison available
Youth suicide	26.1 suicides per 100,000 young people aged 15-24 (1998)	Much higher rates for young men and for Maori but more attempted suicides by young women	Worsening to 1996 then stable	Very poor
Births to young adolescents	8.8 births per 1,000 young women aged 13-17 (2000)	Rates higher for Maori but declining faster. Variation between regions	Improving since mid-90s	Poor
Prevalence of cigarette smoking	25% of population aged 15 and over smoke cigarettes (2000)	Higher rates among young people, Maori, Pacific peoples and those living in deprived areas	Improving to 1991, steady since	Good for males, average for females
<b>Knowledge and skills</b>				
Participation in early childhood education	"Apparent" participation rate of 92% for 3 year olds and 100% for 4 year olds (2000)	Maori rates lower than non-Maori	Improving	Good
School leavers with higher school qualifications	66% of school leavers with at least Sixth Form Certificate (1999)	Proportions lower for males, Maori and Pacific young people	Improving to 1991, steady since	No comparison available
Educational attainment of the adult population	71.1% of the population aged 25-64 years with at least an upper secondary qualification (2000)	Proportions lower for older people, women as well as Maori and Pacific peoples	Improving	Average
Adult literacy skills in English	54% of population aged 16-65 have a level of literacy in English needed to meet the complex demands of everyday life and work. 51% meet the same standard for document literacy and 50% for quantitative (1996)	Literacy levels lower amongst older people, Maori and Pacific peoples and Other ethnic groups	No trend available	Average on document and quantitative. Good on prose
Participation in tertiary education	9% of population aged 16 and over enrolled in tertiary education institutions (2000)	Lower rates for males, students from poorer socio-economic communities, and those aged above 25	Improving slowly	Good
<b>Safety and security</b>				
Child abuse and neglect	7 substantiated notifications per 1,000 children aged 0-16 (2000)	Female and Maori children more likely to be assessed as abused or neglected	Trend cannot be reliably interpreted	No reliable comparison available
Criminal victimisation	8.2% of population aged over 15 years were a victim of violent criminal offending (1995)	Younger people, Maori, Pacific peoples and people of other ethnic groups more likely to have been a victim of violent offending	No trend available	No reliable comparison available
Road casualties	13.4 deaths per 100,000 of population (1999)	High rates amongst men, young people and those aged 65 and over. Also higher for Maori and Pacific per kilometres driven	Improving since 1986	Poor
<b>Paid work</b>				
Unemployment	6% of the labour force (2000)	Higher rates amongst young people, Maori, Pacific and Other ethnic groups. Variation between regions	Worsening to 1991 then improving but not to mid-80s levels	Average
Employment	70.7% of the population aged 15-64 years (2000)	Lower rates for young people, women, Maori, Pacific peoples and Other ethnic groups. Variation between regions	Worsening to 1992 then improving	Above average
Workplace injury claims	140 claims per 1,000 full time equivalent employees (2000)	Higher rates for men and Maori	No trend available	No comparison available
<b>Human rights</b>				
Voter turnout	77.2% of the population eligible to vote (1999)	Non-voters more likely to be on lower incomes, younger people and Maori or Pacific people	Worsening	Good
Complaints to the Human Rights Commission and Race Relations Office	337 complaints to Human Rights Commission and 1,031 to Race Relations Office (2000)	Most complaints for sexual harassment, racial harassment, racial disharmony and discrimination in employment because of disability	Cannot be reliably interpreted	No comparison available
<b>Culture and identity</b>				
Participation in cultural and arts activities	93% of adult population took part in arts and cultural activities (1998)	Higher participation rates amongst young people and women	No trend available	No comparison available

Indicators	Current overall level of indicator (most recent year)	Variation within the population	Is this aspect of the quality of life improving overall?	How does this aspect of the quality of life compare with OECD countries?
Maori language speakers	25% of Maori report conversational fluency in Maori (1996)	Fluent speakers more likely to be older	No trend available	Not relevant
Maori and Pacific children receiving Maori medium and Pacific medium education	35% of Maori children in early childhood education are in kōhanga reo (2000) 41% of Pacific children in early childhood education are in Pacific Islands language nests (2000) 18% of Maori school students involved in Maori medium education (2000)	Particularly high at pre-school level. Increasing proportion of Maori children have at least some pre-school and school Maori medium education	Improved to early 90s then recent worsening for kōhanga reo. Improvement for school students until mid 90s then steady	Not relevant
Local content programming on New Zealand television	37% of the prime time schedule (2000)	Not relevant	Improved to mid-90s then variable	Below average
<b>Economic standard of living</b>				
Market income per person	RGNDI of \$23,086 per capita (in constant 91/92 dollars) (2000)	Not measured	Improving	Below average and falling behind on GDP per capita
Income inequality	The household in the 80 <sup>th</sup> percentile has an income 3.2 times the household in the bottom 20 <sup>th</sup> percentile (1998)	Not relevant	Worsening	No comparison available
Population with low incomes	23% of population lives in economic family units with incomes below 60% of median (1998)	Higher rates among large families, sole parents, Maori or Pacific families, families from Other ethnic groups, families reliant on income-tested benefits and families in rented dwellings	Worsening to 1994 then improving slowly	Average
Housing affordability	25% of households spend more than 30% of income on housing	More likely amongst Maori, Pacific peoples or Other ethnic groups	Worsening	No comparison available
Household crowding	3.4% of individuals living in households requiring two or more additional bedrooms (1996)	More common amongst families with young children, for people in rental housing and in South Auckland and Maori and Pacific peoples	No trend available	No comparison available
Food insecurity	13% of people reported that their household could afford to eat properly only sometimes (1997)	Higher rates for Maori and Pacific peoples	No trend available	No comparison available
Self-reported standard of living	8% of the population rate their own standard of living as low or fairly low (2000)	More likely to be reported among sole parent families and families with Maori, Pacific or non-European adults	No trend available	No comparison available
<b>Social connectedness</b>				
Unpaid work outside the home	59% of the population aged 12 and over spent some time during the last four weeks doing unpaid work outside the home (1999)	Women and Maori are more likely to undertake unpaid work outside the home	No trend available	No comparison available
Telephone and Internet access in the home	97% of adult population have access to telephone and 41% to Internet in their homes (2000)	Access less likely amongst Maori and Pacific families, families with unemployed adults and sole parent families	No trend available	Above average for Internet
Participation in family/whānau activities and regular contact with family/friends	71% of adults had family or friends over for dinner at least once a month in the previous year and 87% engage in family/whānau activities (2000)	Older people and Europeans/Pakeha less likely to be involved in family activities	No trend available	No comparison available
Membership of and involvement in groups	70% of adults belonged to community organisations or groups (1999)	Non-Maori less likely to belong to sports clubs and cultural organisations. Women more likely to belong to church groups, hobby groups and community service organisations. Men more likely to belong to sports clubs and unions.	No trend available	No comparison available
<b>The environment</b>				
Air quality	Carbon monoxide levels exceeded "action" threshold 1% of the time in Auckland and Christchurch (1999) and not at all in Waikato (1998)	Poorer in some urban areas, particularly in congested traffic corridors	Steady	Good
Drinking water quality	In 1999, 75% of the population had a water supply that conforms with the 1995 Drinking Water Standards	Not reported	Improving	Good

# Where next?

**Although there have been other social reporting initiatives of this kind undertaken in New Zealand, none has been based on the idea of getting broad support for the outcomes to be measured or sustained over a long period. It is our intention to use this report as the first step in an ongoing indicators programme where reports are published at regular intervals.**

The frequency with which these reports should be published is a matter for consideration. Much of New Zealand's most important data comes from surveys that are only carried out every three or five years, limiting the usefulness of an annual report. Many social changes also happen relatively slowly and trends may not be apparent in annual reports. On the other hand, reports should also contain data about the contemporary situation rather than be too historic. One option may be to publish a regular annual report containing a set of core indicators for which data is collected more frequently with modules attached each year containing information about different aspects of well-being.

This report is a prototype. Ideally it will be read widely and vigorously discussed. The goals must be debated and some assessment made about whether the indicators selected are the right ones and whether reporting against them is useful.

The Ministry of Social Policy will be conducting a review of this report in the coming months. In the meantime, comments on this report from groups and individuals are welcomed. Comments can be made to:

The Social Report 2001 Project Manager  
Ministry of Social Policy  
Private Bag 39993  
Wellington  
e-mail: [socialreport@mosp.govt.nz](mailto:socialreport@mosp.govt.nz)

# Endnotes

## Introduction

- 1 Durie (2001)
- 2 Royal Commission on Social Policy, Vol II, p.472
- 3 See Sen in Noll and Berger-Schmitt (2000)
- 4 Cited in Zubrick et al. (2000)
- 5 See Zubrick et al. (2000) for further discussion about causal pathways frameworks
- 6 Noll (1996)
- 7 see Noll (1996) for discussion of subjective vs. objective indicators

## Health

- 1 Howden-Chapman and Tobias (eds) (2000)
- 2 Jaffee et al. (forthcoming)
- 3 Statistics New Zealand (1998a) Fig. 2.6
- 4 Ministry of Health (1999a), p.112
- 5 Ministry of Health (1999a), p.117
- 6 Ministry of Health (1999a), p.117
- 7 OECD (2000c)
- 8 Kokaua et al (1998), cited in Ministry of Health (1999a), p173
- 9 OECD Health Data, 2000c
- 10 Jaffee et al. (forthcoming)
- 11 Ministry of Health (1999a), p.344
- 12 Ministry of Health (2000b), p.54

## Knowledge and Skills

- 1 See for example, OECD (2000b)
- 2 See for example, Wylie (1999)
- 3 Ministry of Education (1996). Strands in the curriculum include Well-being, Belonging, Contribution, Communication and Exploration
- 4 Wylie (1999), Boocock (1995)
- 5 Newell (forthcoming)
- 6 Rates for Pacific children are limited to census years because there are no base population estimates available annually with which to determine this rate
- 7 OECD (2000b), Table C1.2
- 8 OECD (2000b), p. 294
- 9 Statistics New Zealand (1998c)
- 10 OECD (2000b) Tables A2.2a, A2.2b.
- 11 Walker et al. (1997)
- 12 Walker et al. (1997)
- 13 Ministry of Education (2000b)
- 14 OECD (1997a)

## Safety and Security

- 1 Report of Ministerial Committee of Inquiry into Violence (1987)
- 2 National Research Council (1993)
- 3 NZ Health Information Service
- 4 Land Transport Safety Authority (1997)
- 5 National Road Safety Committee (2000), p.3
- 6 Between June 1994 and June 1995 years, there was a change in the notification categories used and notifications not directly related to care and protection (which came under the heading of "general welfare inquiries") were subsequently excluded from the statistics. This contributed to the sharp drop in the number of notifications between 1994 and 1995
- 7 Ministry of Health (1996), p.24
- 8 Young et al. (1997), p.41
- 9 Victimization Survey Committee/ACNielsen-McNair (1997), p.33. Figures not reported
- 10 LTSA (2000b), p88

## Paid Work

- 1 This includes wage and other payments to employees and entrepreneurial income, 1998 Statistics New Zealand data, cited in Department of Labour, 1999. Human Capability: A Framework for Analysis.
- 2 New Zealand Employment Service, 1996
- 3 See Wilson, N. (1999), Statistics New Zealand and Ministry of Health (1993) and Prime Ministerial Taskforce on Employment (1994). Note that the causality between unemployment and health can work in both directions – poor health can lead to unemployment as well as vice versa. However, Wilson cites the UK Acheson Report conclusion that selection effects were not the dominant effect in the link between unemployment and increased risk of ill health
- 4 See Winkelmann and Winkelmann (1998)

## Human Rights

- 1 Ministry of Foreign Affairs and Trade (1998)
- 2 Miller and Sarat (1980-81)
- 3 UMR Insight poll. Reported in Human Rights Commission (2001)
- 4 Vowles and Aimer (1993), p.53
- 5 Vowles and Aimer (1993)
- 6 Report of the Race Relations Conciliator (1999), p.17

## Culture and Identity

- 1 Durie (2000)
- 2 The Maori ethnic group population is used in this indicator. All those who identified as Maori in the census are counted as part of the Maori ethnic group
- 3 Te Puni Kōkiri (1998), pp34-37
- 4 Ministry of Education (2000a)
- 5 ACNielsen [www.acnielsen.co.nz](http://www.acnielsen.co.nz)

## Economic Standard of Living

- 1 Stephens, Frater and Waldegrave (1995)
- 2 Salmond, Crampton and Sutton (1998)
- 3 Robust data is not available for low-income households by household characteristics (such as ethnicity)
- 4 Baker et al. (2000) cited in Gray (2001)

## Social Connectedness

- 1 Spellerberg (2001)
- 2 Statistics New Zealand (2001a)
- 3 OECD (2001)

## The Environment

- 1 Farrell (1998)
- 2 OECD (1997b)
- 3 Ministry for the Environment and Ministry of Transport (1998), p.25
- 4 Ministry for the Environment and Ministry of Transport (1998), pp.23-24. Vehicle emissions are estimated to account for 83 per cent of CO emissions in the Auckland region in winter and 9 per cent in summer. In the Canterbury region, vehicle emissions are estimated to account for almost 70 per cent of total CO emissions in winter, while domestic fires account for about 30 per cent of CO emissions.
- 5 Ministry for the Environment and Ministry of Transport (1998), p.24
- 6 <http://indicators.niwa.cri.nz>
- 7 [www.stats.govt.nz](http://www.stats.govt.nz)
- 8 Statistics New Zealand (1993), p.83
- 9 Statistics New Zealand (1993)

# Bibliography

- Baker, M., McNicholas, A., Garrett, N., Jones, N., Stewart, J., Koberstein, V. and Lennon, D. (2000) "Household Crowding: A Major Risk Factor for Epidemic Meningococcal Disease in Auckland Children" *Pediatric Infectious Disease Journal* 19(10), 983-990.
- Barwick, H., Gray, A., Martin, P. and Asiasiga, L. (forthcoming) *Good Outcomes for Young People – A Report for the Ministry of Social Policy*. Ministry of Social Policy: Wellington.
- Beautrais, A. (1998) *A Review of Evidence: In Our Hands – The New Zealand Youth Suicide Prevention Strategy*. Ministry of Health: Wellington.
- Boocock, S. (1995) "Early Childhood Programs in Other Nations: Goals and Outcomes", in *The Future of Children*, v5, no3, Winter.
- Canada, Human Resources Development Corporation (2000) *Supporting Families and Children: Government of Canada Initiatives*.
- Creative New Zealand/ Arts Council of New Zealand/ Toi Aotearoa (1999) *Arts Every Day, Mahi toi ia ra: A Survey of Arts Participation by New Zealand Adults, Tirohanga ki te whakauru o nga pakeke o Aotearoa ki nga mahi toi*. Wellington.
- Crothers, C. (2000) "Monitoring the Changing Social Conditions of New Zealanders" *Social Policy Journal of New Zealand*, 15, 102-120.
- Davey, J. (1998) *Tracking Social Change in New Zealand: From Birth to Death IV*. Institute of Policy Studies: Wellington.
- Davey, J. (1993) *Tracking Social Change in New Zealand: From Birth to Death III*. Institute of Policy Studies: Wellington.
- Department of Labour (2000) *Workplace Accident Insurance Statistics*. Department of Labour: Wellington.
- Department of Labour (1999) *Human Capability: A Framework for Analysis*. Department of Labour: Wellington.
- Department of Social Welfare/Ministry of Social Policy, *Statistical Information Reports* (various years from 1993 to 1999). Wellington.
- Durie, M. (2001) *A Framework for Considering Maori Educational Advancement Hui Taumata Matauranga, Turangi/Taupo*, 24 February 2001.
- Durie, M. (2000) "Citizenship, Indigeneity, and the Treaty of Waitangi: Challenges for the State" in *The 2000 Papers. Public Service Senior Management Conference*: Wellington.
- Dwyer, M., Gray, A. and Renwick, M. (1999) *Factors Affecting the Ability of Older People to Live Independently: A Report for the International Year of Older Persons*. Ministry of Social Policy: Wellington.
- Electoral Commission (2000) *The New Zealand Electoral Compendium*, 2<sup>nd</sup> edition.
- Farrell, A. (1998) "What Does Sustainability Really Mean? The search for useful indicators", *Environment*, November.
- Gold, H. and Webster, A. (1990) *New Zealand Values Today*. Alpha Publications: Palmerston North.
- Gray, A. (2001) *Definitions of Crowding and the Effects of Crowding on Health: A Literature Review, Research Series Report 1*, Ministry of Social Policy: Wellington.
- Harland, A. (1995) *Victimisation in New Zealand: as measured by the 1992 International Crime Survey*. Department of Justice: Wellington.

Howden-Chapman, P. and Tobias, M. (eds) (2000) *Social Inequalities in Health: New Zealand 1999*. Ministry of Health: Wellington.

Human Rights Commission (2001) *Tirohia April 2001*. Human Rights Commission: Auckland.

Jaffee, S. , Caspi, A., Moffitt, T., Belsky, J. and Silva, P. (forthcoming) “Why Are Children Born to Teen Mothers at Risk for Adverse Outcomes in Young Adulthood?: Results from a 20 year Longitudinal Study”. *Development and Psychopathology*.

Kokaua J, Tobias M., Katzenellenbogen, J, et al (1998) *1996/7 Disability Surveys: Multiple Regression Model*. Unpublished Report to Health Funding Authority and Ministry of Health, cited in Ministry of Health (1999a) p173.

Land Transport Safety Authority (2000a) *Motor Vehicle Accidents in New Zealand, 1999*. Land Transport Safety Authority: Wellington.

Land Transport Safety Authority (2000b) *Travel Survey Report: Increasing our Understanding of New Zealanders’ Travel Behaviour, 1997/98*. Land Transport Safety Authority: Wellington.

Land Transport Safety Authority (1997) *Motor Vehicle Accidents in New Zealand*. Land Transport Safety Authority: Wellington.

Lawson-Te Aho, K. (1998) *A Review of Evidence: A Background Document to Support Kia Piki Te Ora o Te Tamariki*. Ministry of Maori Development: Wellington.

Miller, R.E. and Sarat, A. (1980-81) “Grievances, Claims and Disputes: Assessing the Adversary Culture” *Law Society Review*, 15(3-4), 525-562.

Ministry for the Environment (2000) *Population Statistics*. Ministry for the Environment: Wellington.

Ministry for the Environment and the Ministry of Transport (1998) *Ambient Air Quality and Pollution Levels in New Zealand: Targets for Vehicle Emissions Control. Air Quality Technical Report, No.9*. Ministry for the Environment: Wellington.

Ministry of Education (various) *Education Statistics of New Zealand*. Ministry of Education: Wellington.

Ministry of Education (2001) *Education Statistics News Sheet*. V10, no.1, March.

Ministry of Education (2000a) *Nga Haeta Mātauranga: Annual Report on Maori education 1999/2000*. Ministry of Education: Wellington.

Ministry of Education (2000b) *New Zealand’s Tertiary Education Sector: Profile and Trends 1999*. Ministry of Education: Wellington.

Ministry of Education (1996) *Te Whariki: He Whāriki Mātauranga mō ngā Mokopuna o Aotearoa: Early Childhood Curriculum*. Learning Media: Wellington.

Ministry of Foreign Affairs and Trade (1998) *The New Zealand Handbook on International Human Rights*. Ministry of Foreign Affairs and Trade: Wellington.

Ministry of Health (2001a) *Suicide Facts: Provisional 1998 Statistics (all ages)*. Ministry of Health: Wellington.

Ministry of Health (2001b) *Tobacco Facts* May. Ministry of Health: Wellington.

Ministry of Health (2000a) *Progress on Health Outcome Targets, 1999*. Ministry of Health: Wellington.

Ministry of Health (2000b) *Social Inequalities in Health: New Zealand 1999*. Ministry of Health: Wellington.

Ministry of Health (1999a) *Our Health, Our Future: Hauora Pakari, Koiora Roa. The Health of New Zealanders 1999*. Ministry of Health: Wellington.

Ministry of Health (1999b) *Progress on Health Outcome Targets, 1998*. Ministry of Health: Wellington.

- Ministry of Health (1999c) *Suicide and the Media: The Reporting and Portrayal of Suicide in the Media*. Ministry of Health: Wellington.
- Ministry of Health (1999d) *NZ Food, NZ People: Key Results of the 1997 National Nutrition Survey*. Ministry of Health: Wellington.
- Ministry of Health (1998) *Our Children's Health: Key Findings on the Health of New Zealand children*. Ministry of Health: Wellington.
- Ministry of Health (1996) *Child Abuse Prevention: The Health Sector's Contribution to the "Strengthening Families" Initiative*. Ministry of Health: Wellington.
- Ministry of Maori Development (2000) *Progress Towards Closing Social and Economic Gaps Between Maori and Non-Maori*. Ministry of Maori Development: Wellington.
- Mitchell, E., Tuohy, R., Brunt, J. et al (1997). "Risk Factors for Sudden Infant Death Syndrome Following the Prevention Campaign in New Zealand: A Prospective Study" *Pediatrics* 100: 835-40, cited in Ministry of Health (1999a), p.344.
- National Research Council (1993) *Understanding Child Abuse and Neglect – Panel on Research on Child Abuse and Neglect*. Department of Health and Human Services: Washington D.C.
- National Road Safety Committee (2000) *Road Safety Strategy 2010: A Consultation Document*. National Road Safety Committee: Wellington.
- New Zealand Employment Service, 1996 *The Barriers to Employment Faced by Long Term Job seekers*, New Zealand Employment Service: Wellington.
- New Zealand Planning Council (1985) *From Birth to Death: The First Report of the Social Monitoring Group*. New Zealand Planning Council: Wellington.
- New Zealand Planning Council (1989) *From Birth to Death: The Second Report of the Social Monitoring Group*. New Zealand Planning Council: Wellington.
- Newell, J. (forthcoming) "Disparities between Maori and non-Maori participation in early childhood services in New Zealand" Te Puni Kokiri: Wellington.
- Noll, H. (1996) *Social Indicators Reporting: The International Experience*. Presentation to Symposium on Measuring Well-being and Social Indicators, Canadian Council on Social Development [www.ccsd.ca/noll1.html](http://www.ccsd.ca/noll1.html)
- Noll, H. and Berger-Schmitt, R. (2000) *Conceptual Framework and Structure of a European System of Social Indicators*. EuReporting Working Paper No 9, Centre for Survey Research and Methodology (ZUMA), Social Indicators Department: Mannheim.
- OECD (2001) *OECD Communications Outlook*. OECD: Paris.
- OECD (2000a) *Human and Social Capital and Sustained Growth and Development – Reconciling New Economies and Societies: the Role of Human and Social Capital* DEELSA/ELSA/ED/CERI/CD(2000)3/REV1.
- OECD (2000b) *Education at a Glance. OECD Indicators, Education and Skills, 2000 Edition*. OECD: Paris.
- OECD (2000c) <http://www.oecd.org/els/health/software/fad04.htm>, <http://www.oecd.org/els/health/software/fad07.htm>
- OECD Working Party on Social Policy (1999) *Trends in Income Distribution and Poverty in the OECD Area: Background tables and figures*. DEELSA/ELSA/WP1(99)15/ANN.
- OECD (1997a) *Education at a Glance: OECD Indicators, Education and Skills, 1997 Edition*. OECD: Paris.
- OECD (1997b) *Sustainable Consumption and Production – Clarifying the Concepts*. OECD Proceedings, OECD: Paris.
- OECD (1995) *Environmental Data, Compendium 1995*. OECD: Paris.
- Perry, P. and Webster, A. (1999) *New Zealand Politics at the Turn of the Millennium: Attitudes and Values about Politics and Government*. Alpha Publications: Auckland.

- Prime Ministerial Taskforce on Employment (1994) *Employment: the Issues*. Prime Ministerial Taskforce on Employment: Wellington.
- Report of Ministerial Committee of Inquiry into Violence (1987) Presented to the Minister of Justice, March 1987, Wellington.
- Report of the Race Relations Conciliator (1999). Auckland.
- Royal Commission on Social Policy (1988) *The April Report*. Royal Commission on Social Policy: Wellington.
- Salmond, C., Crampton, P. and Sutton F. (1998) *NZDep 96 Index of Deprivation*. Research Report No. 8. Health Services Research Centre: Wellington.
- Spellerberg, A. (2001) *Framework for the Measurement of Social Capital in New Zealand*. Research and Analytical Report 2001 no.14. Statistics New Zealand: Wellington.
- Statistics New Zealand (2001a) *Around the Clock: Findings from the New Zealand Time Use Survey 1998-1999*. Statistics New Zealand: Wellington.
- Statistics New Zealand (2001b) *Demographic Trends 2000*. Statistics New Zealand: Wellington.
- Statistics New Zealand (1998a) *New Zealand Life Tables 1995-97*. Statistics New Zealand: Wellington.
- Statistics New Zealand (1998b) *Demographic Trends 1997*. Statistics New Zealand: Wellington.
- Statistics New Zealand (1998c) *New Zealand Now: Young New Zealanders*. Statistics New Zealand: Wellington.
- Statistics New Zealand (1998d) *New Zealand Now: Maori*. Statistics New Zealand: Wellington.
- Statistics New Zealand and Ministry of Health (1993) *A Picture of Health*. Statistics New Zealand: Wellington.
- Statistics New Zealand (1993) *Measuring Up: New Zealanders and the Environment*. Statistics New Zealand: Wellington.
- Stephens, R., Frater, P. and Waldegrave, C. (1995) "Measuring Poverty in New Zealand" *Social Policy Journal of New Zealand*, Issue 5, December.
- Te Puni Kokiri (1998) *The National Maori Language Survey: Te Mahi Rangahau Reo Maori*. Te Puni Kokiri: Wellington.
- Vowles, J. and Aimer, P. (1993) *Voters' Vengeance: The 1990 Election in New Zealand and the Fate of the Fourth Labour Government*. Auckland University Press: Auckland.
- Walker, M., Udy, K. and Pole, N. (1997) *Adult Literacy in New Zealand: Results from the International Adult Literacy Survey*. Ministry of Education: Wellington.
- Wilson, N. (1999) "Occupational Class and Health" in *Social Inequalities in Health: New Zealand 1999*. Ministry of Health: Wellington.
- Winkelmann, L. and Winkelmann, R. (1998) "Immigrants in the New Zealand Labour Market; A Cohort Analysis using 1986, 1991 and 1996 Census data". *Labour Market Bulletin*, 1998: 1&2, New Zealand Department of Labour, Wellington, pp 34 - 70.
- World Health Organisation,  
[http://www.who.int/mental\\_health/Topic\\_Suicide/suiciderates.html](http://www.who.int/mental_health/Topic_Suicide/suiciderates.html)
- Wylie, C. (1999) *Eight Years Old and Competent, The Third Stage of the Competent Children Project: A Summary of the Main Findings*. New Zealand Council for Educational Research: Wellington.
- Young, W., Morris, A., Cameron, N., Haslett, S. (1997) *New Zealand National Survey of Crime Victims 1996*. Victoria University: Wellington.
- Zubrick, S., Williams, S. and Vimpani, G. (2000) *Indicators of Social and Family Functioning*. Department of Family and Community Services: Canberra.

**APPENDIX 1:**

# Selected International Social Indicator Reports

<b>Country/International Agency</b>	<b>Year begun</b>	<b>Periodicity</b>	<b>Name of Report</b>
Australia	1994	annual	Social Trends
Austria	1977	4-5 yrs	Sozialstatische Daten
Canada	1996	quarterly	Canadian Social Trends
Denmark	1976	4 yrs	Leveevilkår i Danmark
Eurostat	1977	3 yrs	Social Indicators for the European Community
Germany	1983	2 yrs	Datenreport
France	1973	3 yrs	Donnees Sociales
Great Britain	1970	annual	Social Trends
Latin America (UNECLA)	1992	annual	Social Panorama
Netherlands	1974	2 years	Social & Cultural Report
Norway	1974	3-4 yrs	Sosialt Utsyn
OECD	1986	one-off	Living Conditions in OECD countries
Portugal	1992	5 years	Portugal Social
UNDevProgram	1990	annual	Human Development Report
World Bank	1978	annual	World Development Report
World Bank	1987	annual	Social Indicators of Development

## APPENDIX 2:

# Technical Details

## HEALTH

## Life expectancy at birth

**Definition/formulae:** The expected number of years a hypothetical newborn male or female would live if they were subject throughout their lives to the age-specific mortality patterns prevailing over a three-year period centred on their birth year.

The analysis associating life expectancy with levels of deprivation is based on NZDep96, a small area index of deprivation based on a principal component analysis of nine socioeconomic variables from the 1996 Census. The index has been converted to a scale ranging from 1 to 10, where 1 represents the least deprived 10 per cent of small areas, and 10 represents the most deprived 10 per cent. The small areas are about the size of a census meshblock and have median populations of 90 people.

**Limitations of data:** Available annually from abridged life tables for the total population only. Maori/non-Maori data only available five-yearly from complete life tables based on three-year period around census years. From 1995-97, comparability with earlier years is affected by a change in the population concept (from de facto to resident), and a substantial change in the ethnicity classification.

**Data sources:** Statistics New Zealand (1998) *New Zealand Life Tables 1995-97*; Abridged Life Tables 1997-99; *Demographic Trends 2000*, Tables 4.12, 4.13; Ministry of Health (1999) *Our Health, Our Future: Hauora Pakari, Koiora Roa, The Health of New Zealanders 1999* (Chapter 2).

## Dependent disability

**Definition/formulae:** The proportion (per 1,000) of the population who have one or more disabilities and require assistance, as measured in the New Zealand Disability Surveys of 1996 and 1997. Dependent disability includes those with a functional and/or role limitation who require assistance from another person or from a complex assistive device over a period of at least six months. Adults were classified as disabled based on their response to a series of questions that assessed difficulties undertaking daily activities. A slightly different definition based on specific chronic conditions and education or other support needs was employed to determine disability among children.

Age-standardised disability rates (based on Segi's world population) are used to compare Maori and non-Maori disability prevalence.

**Limitations of data:** Results for adults and children are not strictly comparable due to differences in the definition of disability, and the prevalence of disability in children may be overstated relative to that of adults.

**Data sources:** New Zealand Disability Surveys, 1996, 1997, as cited in Ministry of Health (1999) *Our Health, Our Future: Hauora Pakari, Koiora Roa, The Health of New Zealanders 1999* (Chapter 5).

## Independent life expectancy

**Definition/formulae:** The total number of years a person can expect to live without any self-reported functional limitation requiring the assistance of another person or a complex assistive device.

**Limitations of data:** This measure is currently available for one year only. The ability to monitor ILE on a regular basis depends on the availability of information about disability and levels of disability.

Independent life expectancy has inherent limitations as a population health indicator. An indicator that included all levels of disability – not just a single dependency threshold – would provide a more precise measure of health (that is, a disability adjusted life expectancy). The social preferences (disability weights) needed to construct such an indicator are still under development in New Zealand.

**Data sources:** Ministry of Health/Statistics New Zealand, The 1996-97 New Zealand Disability Surveys; Statistics New Zealand, *New Zealand Life Tables 1995-97*; Ministry of Health (1999) *Our Health, Our Future: Hauora Pakari, Koiora Roa; The Health of New Zealanders 1999*; "The Health of New Zealanders in Brief", and Chapter 7.

## Youth suicide

---

**Definition/formulae:** The number of suicide deaths of persons aged 15-24 per 100,000 population aged 15-24, for calendar years.

---

**Limitations of data:** Because suicide is a relatively rare event in statistical terms, rates of suicide can vary markedly from year to year. Any interpretation of trends requires an examination of rates over several years. Data on the rates of suicide for geographical regions and cities may be of little value for reporting comparisons because of the low numbers, and hence highly variable suicide rates. For example, where populations are small, the rate of suicide can be greatly inflated by one or two deaths. Deaths by suicide are subject to a coroner's inquiry and can only be officially deemed suicide once an inquest is complete. This means that there can be a considerable delay in publication of the statistics.

Data on attempted suicide is only available for those admitted to hospital as inpatients or day patients for self-inflicted injury. Those cared for in hospital but not admitted and those cared for by primary or community care services are not reported. Therefore, the actual rate of attempted suicide is likely to be much higher than reported in official statistics.

Comparability over time is affected by a change in population concept in 1991 (from de facto to resident), and the change in the ethnicity classification in 1995. Ethnic-specific mortality data is also subject to some uncertainty due to differences in collection across different providers.

A comparison of international trends in youth suicide is problematic due to differences in the methods used to classify suicide.

---

**Data sources:** Ministry of Health, New Zealand Health Information Service (customised tables); World Health Organisation: [http://www.who.int/mental\\_health/Topic\\_Suicide/suicide\\_rates.html](http://www.who.int/mental_health/Topic_Suicide/suicide_rates.html)

---

## Births to young adolescents

---

**Definition/formulae:** Births to females under 18 years of age per 1,000 estimated mean female population aged 13-17 years. For the international comparison, the teenage birth rate is the number of births to women under 20 per 1,000 females aged 15-19, except for the United States rate which excludes births to females under 15 years.

---

**Limitations of data:** Figures for 1998 were lower than expected because of a small change in the rate at which births were registered during 1998. Comparability over time is affected by a change in population concept in 1991 (from de facto to resident), and the change in the ethnicity classification in 1995.

**Data sources:** Statistics New Zealand, Age-specific fertility rates by single year of age; *Demographic Trends 1997*, Table 2.10; *Demographic Trends 2000*, Tables 2.10, 2.15.

---

## Prevalence of cigarette smoking

---

**Definition/formulae:** The proportion of the population aged 15 and over who ever smoke any ready-made cigarettes or roll-your-own tobacco cigarettes. Information on smoking prevalence is collected from quarterly surveys conducted by ACNielsen Ltd. Results up to 1999 have been calculated from the average of the quarterly results. The 2000 results are based on the year's pooled data's average prevalence.

---

**Limitations of data:** Information on smoking prevalence across regions is based on pooled data from 1998-2000 (which has been indirectly standardised by District Health Board regions). The international comparison is affected by differences in the collection and classification of the data.

---

**Data sources:** Ministry of Health *Tobacco Facts* May 2001. World Health Organisation *Tobacco Control Country Profiles*. Retrieved 17 May, 2001 from the World Wide Web: <http://tobacco.who.int/en/statistics/TCCP.html>

---

## KNOWLEDGE AND SKILLS

### Participation in early childhood education

**Definition:** The number of children aged three and four years enrolled in early childhood education programmes as a proportion of the estimated population aged three and four years. Early Childhood Education (ECE) programmes include: licensed ECE services (kindergartens, playcentres, education and care services, homebased services, casual education and care (no regular roll), Correspondence School and Te Kōhanga Reo); and licence-exempt ECE services (Early Childhood Development funded playgroups, Pacific Islands early childhood groups, and playcentres); and licence-exempt kōhanga reo.

**Limitations of data:** Rates of participation are only “apparent” because children may be enrolled in more than one ECE centre. The rates may therefore be inflated. The measure does not provide information on the length of participation or the quality of the programmes, both of which are relevant to positive educational outcomes.

**Data sources:** Ministry of Education (various years) *Education Statistics of New Zealand; Education Statistics News Sheet, V10, no1, March 2001*; customised tables; OECD (2000) *Education at a Glance: OECD Indicators*, 2000 Edition, Table C1.2.

### School leavers with higher qualifications

**Definition:** The number of students leaving school with Sixth Form Certificate in at least one subject or a higher qualification, as a proportion of the total number of school leavers during the year. Higher qualifications include: Sixth Form Certificate in at least one subject (irrespective of grade awarded); National Certificate Level 2 (or 12 or more credits at Level 2 or above); Higher School Certificate (or 12-39 credits at Level 3 or above); Entrance Qualification (or 40 or more credits at Level 3 or above); University Bursary, A or B grade (or National Certificate Level 3); University Scholarship (up to 1989).

**Limitations of data:** The available data on school leavers’ highest qualifications does not allow a breakdown by the number of subjects passed or the grades achieved.

**Data source:** Ministry of Education (various years) *Education Statistics of New Zealand*.

### Educational attainment of the adult population

**Definition:** The proportion of adults aged 25-64 years with educational attainment of at least upper secondary school level, defined in the International Standard Classification of Education (ISCED 97) as Level 3 and above.

ISCED 3 includes local Polytech certificate or diploma, trade certificate or advanced trade certificate, University Bursary, Scholarship, Higher School Certificate, Higher Leaving Certificate, Sixth Form Certificate, University Entrance in one or more subjects, School Certificate in one or more subjects, other school qualification. ISCED 4 includes technician’s certificate, New Zealand Certificate or diploma. ISCED 5B includes university certificate or diploma, teacher’s certificate or diploma, nursing certificate or diploma, other tertiary qualification. ISCED 5A/6 includes post-graduate degree, certificate or diploma, Bachelor’s degree.

**Limitations of data:** There are substantial differences in the typical duration of ISCED 3 programmes between countries, which range from two to five years of secondary schooling.

**Data sources:** Statistics New Zealand, Household Labour Force Survey; OECD (2000) *Education at a Glance: OECD Indicators*, 2000 Edition, Tables A2.2a, A2.2b.

## Adult literacy skills in English

---

**Definition:** Respondents in the International Adult Literacy Survey were asked to carry out various everyday tasks. "Prose literacy" refers to the knowledge and skills required to use information from texts, such as editorials, news stories, poems and fiction; "document literacy" refers to the knowledge and skills required to locate and use information contained in various formats such as job applications, payroll forms, transportation timetables, maps, tables and graphics; and "quantitative literacy" refers to the knowledge and skills required to apply arithmetic operations such as balancing a cheque book, completing an order form or determining the amount of interest on a loan. The achievement attained on each of the literacy domains is grouped into one of five "skill levels". Level 1 represented the lowest ability range and level 5 the highest. Literacy level 3 is regarded by experts as being the minimum required for individuals to meet the "complex demands of everyday life and work" in the emerging "knowledge society".

**Limitations of data:** The first international adult literacy survey was conducted in 1994-95; the New Zealand survey took place in 1996.

**Data sources:** Ministry of Education (1997) *Adult Literacy in New Zealand: Results from the International Adult Literacy Survey*; OECD (1998) *Education at a Glance: OECD Indicators 1998*, Table A3.3, p54.

---

## Participation in tertiary education

---

**Definition:** Participation in tertiary education is calculated by: the number of students who are enrolled in tertiary education and studying for a New Zealand registered qualification as at 31 July each year; divided by the estimated population aged 16 and over.

**Limitations of data:** Further work is required to determine the best population estimates for the Maori population before Maori participation rates can be considered robust. They have therefore been omitted for this report.

**Data sources:** Ministry of Education, 2001; *Education at a Glance: OECD Indicators*, OECD, December 1997.

---

## SAFETY AND SECURITY

### Child abuse and neglect

---

**Definition/formulae:** The number of children who were assessed as abused (physically, emotionally, sexually) or neglected, following a notification to the Department of Child, Youth and Family Services as a proportion (per 1,000) of all children under 17 years of age.

**Limitations of data:** There is currently no single measure that can adequately establish the prevalence of child abuse in the community, or establish trends in child abuse over time. Mortality rates capture only the most extreme form of abuse; hospitalisation data on injuries sustained as a result of child abuse are subject to misclassification and reflect changes in hospital admission procedures. Notifications of child abuse and neglect, and hence the number of children assessed as abused, can be affected by the level of resources made available, by administrative changes, and by changes in the likelihood of people reporting suspected abuse. For Pacific children, rates of substantiated child abuse or neglect can only be produced for census years.

**Data sources:** Ministry of Health, New Zealand Health Information Service; Ministry of Social Policy (SWIS data); Statistics New Zealand, estimated resident population, mean for the year ended 30 June.

---

## Criminal victimisation

**Definition/formulae:** The number of individuals who have been the victims of one or more incidents of criminal offending over the 1995 year as a proportion of the population aged 15 and over, as measured by the 1996 National Survey of Crime Victims. The survey includes all behaviour reported by the respondents which falls within the legal definition of criminal offending. This is a broader measure than that collected from police records.

**Limitations of data:** The survey includes a wide range of behaviour with varying degrees of seriousness but excludes offences such as shoplifting and tax evasion as well as victimless crimes such as drug abuse. Many of the reported behaviours may not be regarded as a "crime" by the victims and they may not regard the incident as requiring police intervention.

The 1996 survey had a response rate of 57 per cent and the number of statistically insignificant findings was quite high. Previous studies suggest that sexual offending and domestic abuse are substantially under-reported in criminal victimisation surveys. The results, therefore, should be treated with some caution.

The ethnicity definition in the survey is based on descent and differs from the definition used in the census. Multiple ethnic categories are classified as "Other".

Statistics on the fear of crime are subject to a number of conceptual and methodological issues.

An international comparison of criminal victimisation rates is affected by inter-country variations in the willingness to disclose information about criminal offending as well as differences in survey response rates.

**Data sources:** Young et al. (1997) New Zealand National Survey of Crime Victims 1996; Victimisation in New Zealand: As Measured by Harland, A. *The 1992 International Crime Survey*, December 1995.

## Road casualties

**Definition/formulae:** The number of deaths caused by motor vehicles per 100,000 population. The number of injured persons resulting from motor vehicle crashes as reported to the police, per 100,000 population. Pedestrians or cyclists killed or injured by motor vehicles are included.

**Limitations of data:** The collection of ethnicity data changed during 1995 for both mortality and hospitalisation data. For mortality data, the basis of ethnicity has changed from a biological concept to a concept of self-identification; in mid-1995 hospitalisation data recorded multiple ethnic groups, whereas previously only one ethnic group could be recorded. Consequently, comparison of 1996 ethnic-specific data with previous years is misleading: 1996 is the start of a new time series for ethnic-specific data.

**Data sources:** Land Transport Safety Authority; New Zealand Health Information Service; New Zealand Travel Surveys.

The Land Transport Safety Authority derives its data from two main sources: injury data from the Traffic Crash Reports completed by Police officers who attend the fatal and injury crashes; and mortality and hospitalisation data from the New Zealand Health Information Service. The LTSA does not report on ethnic-specific rates of death or hospitalisation; these data come directly from NZHIS. The New Zealand Travel Survey 1997/98 was based on a sample of approximately 14,000 people and the survey report compared results from a similar survey conducted in 1989/90.

## PAID WORK

### Unemployment

---

**Definition:** The proportion of labour force (aged 15 and over) that is unemployed. The labour force is the sum of those defined as employed and those defined as unemployed. Hence the unemployment rate is defined as Unemployed/(Employed and Unemployed). The unemployed are defined in the Household Labour Force Survey as those who are without a paid job (or unpaid work in a relative's business) and who have actively sought work in the four weeks prior to the survey and are available to take work. "Actively seeking" includes any actions such as contacting an employer, asking friends and relatives, contacting an employment agency or the Department of Work and Income but excludes those who have only checked newspaper advertisements. The employed are those who worked for pay or profit for one hour or more in the week prior to the survey or who worked unpaid in a relative's business or who have a job but did not work that week because of leave, sickness or industrial disputes.

**Limitations of data:** Data is based on a sample survey and is therefore subject to sampling error. The definition of the unemployed excludes some people who regard themselves as unemployed, including the "discouraged unemployed" – those not meeting the "actively seeking work" criterion. This group is classified in the "Not in the Labour Force" category. The unemployment rate also excludes those who have part-time employment but are seeking to work more hours.

**Data sources:** Statistics New Zealand, Household Labour Force Survey, 1986-2000; OECD Standardised Unemployment Rates, Retrieved 10 May 2001 from the World Wide Web: <http://www.oecd.org/media/new-numbers/sur/sur01-05a.pdf>

---

### Employment

---

**Definition:** The proportion of the population aged 15-64 that is employed for at least one hour per week. See above for definition of the employed. The definition used here relates to the population aged 15-64, rather than to those aged 15 and over, because otherwise results are skewed by differences in the proportions of the sub-populations over 65, particularly when comparing males with females and comparing different ethnic groups.

**Limitations of data:** As above, data is subject to sampling error. The definition of employment includes those working one hour or more per week, so will include some people who are likely to regard their status as closer to unemployment than to being employed. For example, people on the unemployment benefit and searching for work but working a few hours per week will be counted as employed.

**Data sources:** Statistics New Zealand Household Labour Force Survey, 1986-2000.

---

### Workplace injury claims

---

**Definition:** The number of work-related accident claims reported to the Accident Insurance Regulator per 1,000 full-time equivalent employees (one part-time employee = 0.5 full-time employee).

**Limitations of data:** The data does not include workplace accidents where no claim was made with an insurer. In some cases there are also delays between the occurrence of the accident, the claim being reported to the insurer and the insurer reporting the claim to the Regulator.

**Data sources:** *Workplace Accident Insurance Statistics Report 1999/2000*, Accident Insurance Regulator, Department of Labour. Full-time equivalent employee data is as estimated by the Statistics New Zealand 1986-2000 Household Labour Force Survey.

---

## HUMAN RIGHTS

### Voter turnout

---

**Definition/formulae:** The total number of votes cast is divided by the estimated number of people who would have been eligible to vote (voting age population) on Election Day, and expressed as a percentage. In order to be eligible to vote, a person must be at least 18 years old and meet residential and certain other criteria.

---

**Limitations of data:** The voting age population is based on population estimates that are subject to revision. The 1984 figure is based on the estimated de facto population aged 18 and over, as at 30 June 1984.

---

**Data source:** Electoral Commission (2000) *The New Zealand Electoral Compendium*; Statistics New Zealand, estimated de facto population by ages.

---

### Complaints to the Human Rights Commission and Race Relations Office

---

**Definition/formulae:** The total number of complaints made to the Human Rights Commission and the Office of the Race Relations Conciliator.

---

**Limitations of data:** The increase in the total number of discrimination complaints to the HRC may be partly attributable to changes in legislation and reporting requirements that have broadened the grounds on which a complaint can be laid.

---

**Data sources:** *Report of the Office of the Race Relations Conciliator (1984-2000)*. *Report of the Human Rights Commission (Annual Report) (1984-2000)*.

---

## CULTURE AND IDENTITY

### Participation in cultural and arts activities

---

**Definition/formulae:** The proportion of adults aged 18 and over who took part in an arts activity during the past year and the average number of different arts activities in which they took part, as measured in the 1997-98 Arts Every Day Survey. A total of 5,846 adults aged 18 and over were interviewed: 806 people identified as Maori and 175 as Pacific.

---

**Limitations of data:** Ad hoc survey.

---

**Data source:** Creative New Zealand/Hillary Commission *Arts Every Day Survey, 1997-98*.

---

### Maori language speakers

---

**Definition/formulae:** Maori language speakers as a proportion of the Maori ethnic group. Maori language speakers are defined as those able to hold a conversation about a lot of everyday things in Maori.

---

**Limitations of data:** The data is reliant on self-reporting and does not measure the level of fluency in the population. More detailed information on the level of fluency among Maori language speakers is available from a nationwide survey undertaken in 1995. This data is not directly comparable with the census data because different definitions were used.

---

**Data sources:** Statistics New Zealand, 1996 Census of Population and Dwellings: Maori; Te Puni Kōkiri [1998] *The National Maori Language Survey: Te Mahi Rangahau Reo Maori*.

---

## Maori and Pacific children receiving Maori medium and Pacific medium education

---

**Definition/formulae:** (1) The number of Maori children who were enrolled in kōhanga reo as a proportion of all Maori children enrolled in early childhood education (ECE); (2) the number of children enrolled in Pacific early childhood language groups as a proportion of all Pacific children enrolled in ECE; and (3) the number of Maori and Pacific students who receive language immersion education in primary and secondary schools.

**Limitations of data:** The only readily available information on Maori immersion education in early childhood education relates to kōhanga reo and Pacific early childhood language groups. There is no published information over time on Maori children who were receiving immersion education in mainstream early childhood centres.

Prior to 1990, the number of children enrolled in kōhanga reo includes all enrolments, Maori and non-Maori. Changes in counting methods affect the comparability of kōhanga reo data before and after 1998, and Maori medium data before and after 1999.

Enrolments in Pacific early childhood education includes all enrolments in both licensed and unlicensed centres.

**Data sources:** Ministry of Education (various years) *Education Statistics of New Zealand*; Statistics New Zealand, Estimated Resident Maori Population as at 30 June 1991-00.

---

## Local content programming on New Zealand television

---

**Definition/formulae:** The hours of local content broadcast on TV One, TV2, and TV3 in prime time are expressed as a percentage of the total prime time schedule. TV3 commenced in November 1989. New Zealand programming includes first runs and repeats across all three channels.

**Limitations of data:** The number of local content hours broadcast on other free-to-air or pay channels is not included in the data presented here.

**Data source:** New Zealand on Air, Retrieved 10 May 2001 from the World Wide Web: <http://www.nzonair.govt.nz/pubs/25.html>

---

## ECONOMIC STANDARD OF LIVING

### Market income per person

---

**Definition/formulae:** Real GNDI measures the real purchasing power of the net income of New Zealand residents from both domestic and overseas sources after taking account of income redistribution resulting from international transfers. GNDI is GNI (previously called GNP) plus net international transfers. Real GDP per person (as used in the OECD comparisons) is Gross National Expenditure plus exports minus imports.

Derivation of RGNDI: In the published tables, RGNDI is calculated as follows: Constant price gross domestic product (production-based measure) plus constant price trading gain/loss plus constant price total net income and transfers. Constant price trading gain/loss is defined as current price exports divided by the imports implicit price index less constant price exports. Constant price total net income and transfers equals investment income credits less investment income debits plus transfers credits less transfers debits, all divided by the imports implicit price index.

**Limitations of data:** Major limitations to the use of RGNDI as an indicator of well-being include its failure to include non-marketed (and, therefore, non-priced) activities (barring the exception of imputed rentals). RGNDI provides no information on income distribution considerations. Evidence suggests monetary measures have a very weak cross-sectional and limited time series correlation with self-assessed measures of well-being. Use of real GDP for OECD comparisons is likely to over-state New Zealand's relative position because of New Zealand's relatively high per capita net external debt.

**Data sources:** Statistics New Zealand, Real GNDI per capita, INFOS series SNBA.SRNDIPCO. OECD real GDP data is from OECD, *Annual National Accounts – Volume 1, Comparative Tables*.

---

## Income inequality

---

**Definition/formulae:** The ratio of the 80<sup>th</sup> percentile of disposable household income to the 20<sup>th</sup> percentile of disposable household income. This indicator is based on “actual” household income so does not take into account household size and composition.

---

**Data source:** Household Economic Survey. Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the Ministry of Social Policy.

---

## Population with low incomes

---

**Definition/formulae:** The measures have been constructed using economic family units as the base unit of analysis. An economic family is operationally defined as:

1. Financially independent single adult (not in a *de jure* or “social” marriage, not caring for dependent children).
2. Sole parent family – i.e. financially independent single adult (not in a *de jure* or “social” marriage) caring for one or more dependent children.
3. Couple (in a *de jure* or “social” marriage, not caring for dependent children).
4. Two parent family – i.e. couple (in a *de jure* or “social” marriage) caring for one or more dependent children.
5. All young adults are considered financially independent at 18 years of age; 16 and 17 year olds are also considered financially independent if receiving a benefit in their own right or employed for 30 hours or more per week.
6. Conceptually, an economic family is a group of co-resident people whose financial affairs are common or have been merged to the extent that the people are substantially interdependent (with an individual not part of such a group being considered to constitute an economic family in its minimal form).

Housing costs have been apportioned to economic family units. Account was taken of the housing costs of the economic family unit by subtracting its housing cost from its after-tax income. The resulting amounts were inflation adjusted using the CPI for all groups excluding housing.

Adjustment for family size was made by means of a per capita equivalisation process based on the 1988 Revised Jensen Equivalence Scale. The resulting amount – Housing-adjusted Equivalised Disposable Income (HEDY) – can be regarded as an income-based proxy measure of standard of living. The HEDY is the metric on which the low thresholds are specified.

Changes over the decade 1988 to 1998 have been tracked in terms of the proportion of economic families with HEDY values below 40 per cent, 50 per cent and 60 per cent of the median HEDY in 1998. This definition means that the measures are based on constant-value benchmarks. The three measures are referred to as the 40 per cent line, the 50 per cent line and the 60 per cent line. For the purpose of this analysis the self-employed have been included.

NB: While technical analysis done to date indicates that the measurement approach is well-grounded and robust, future work may point to the use of other thresholds as more informative for social monitoring.

---

**Limitations of data:** The HEDY metric is an imperfect indicator of living standards, which is influenced by factors other than income and housing cost. People with the same income level can have greatly different standards of living as a result of their lifecycle stage (youth, middle age, elderly), ownership of assets, the extent to which they receive assistance from others, and the extent to which they have atypical expenditure commitments (e.g. unusually high medical costs, debt repayments, transport costs, electricity costs, etc). People who experience a lengthy period of substantial restriction are likely to have different life outcomes to those who experience only a transient episode.

Family ethnicity is defined in this indicator by the presence of an adult of a particular ethnic group. The figures for families defined in this way are not mutually exclusive.

Housing costs is the sum of annualised accommodation expenditure codes (includes mortgage payments (principal and interest), payments to local authorities, property rent, rent of private dwelling, boarding house, student accommodation not paid with formal fees). In this indicator the accommodation supplement is counted as income.

---

**Data sources:** Derived from the Household Economic Survey by the Ministry of Social Policy. OECD (1999) *Trends in Income Distribution and Poverty in the OECD Area, Background Tables and Figures*, DEELSA/ELSA/WPI(99)15/ANN, p21.

---

---

## Housing affordability

---

**Definition/formulae:** Proportion of all households with housing cost outgoings-to-income ratio greater than 30 per cent.

Household incomes have been equivalised using the 1988 Revised Jensen Equivalence Scale.

Housing costs is the sum of annualised accommodation expenditure codes (includes mortgage payments (principal and interest), payments to local authorities, property rent, rent of private dwelling, boarding house, student accommodation not paid with formal fees). In this indicator the accommodation supplement is counted as income.

**Limitations of data:** Measures of housing affordability do not shed light on issues of housing quality, suitability or sustainability, nor do they explain why affordability problems may exist, or the extent to which inadequate housing is occupied in order to avoid affordability problems. Furthermore, marginally-housed families are often hidden from official statistics and therefore not counted among those with an affordability problem.

Household ethnicity is defined in this indicator by the presence of an adult of a particular ethnic group. The figures for households defined in this way are not mutually exclusive.

**Data source:** Derived from the Household Economic Survey by Ministry of Social Policy.

---

## Household crowding

---

**Definition/formulae:** The Canadian National Occupancy standard sets the bedroom requirements of a household according to the following compositional criteria:

- There should be no more than two people per bedroom;
- Parents or couples share a bedroom;
- Children under five years, either of same or opposite sex, may reasonably share a bedroom;
- Children under 18 years of the same sex may reasonably share a bedroom;
- A child aged five to 17 years should not share a bedroom with one under five of the opposite sex;
- Single adults 18 years and over and any unpaired children require a separate bedroom.

**Limitations of data:** There is no contemporary official statistic or index of household crowding in New Zealand. There are many frameworks or models used in many countries for analysing the incidence of crowding. It is unlikely that any single measure of crowding could adequately summarise such a complex and multi-faceted issue as crowding.

There is no definitive evidence that crowding leads to negative social outcomes. There are just associations between living in crowded circumstances and negative outcomes. The mechanisms by which these outcomes result are not clear.

The Canadian crowding index is not an objective index of crowding. The extent to which household members will perceive themselves as living in crowded circumstances is dependent on many factors including social and cultural expectations. Furthermore, it cannot be assumed that households requiring two or more additional bedrooms (based on the Canadian index) will suffer negative social outcomes.

The Canadian crowding index is used here as it is sensitive to both household size and composition.

The measure sets a bedroom requirement for households based on precise criteria. It is useful not only for ascertaining crowding levels but also to identify the extent of bedroom under-utilisation.

**Data sources:** Statistics New Zealand, 1998, *New Zealand Now – Young New Zealanders*, pp56-63.

---

## Food insecurity

---

**Definition/formulae:** This information comes from the 1997 New Zealand Nutrition Survey (NNS97).

This survey provides information on food and nutrient intakes, dietary habits and nutrition-related clinical measures of New Zealanders. NNS97 was based on a nationally representative sample of 4,636 New Zealanders living in selected households and aged 15 years and above. The survey information was collected in the homes of respondents and included: a 24 hour diet recall; a self-administered qualitative food frequency questionnaire which estimated the frequency of intake of foods over the preceding 12 months and included questions on food preparation habits; questions on dietary supplements; barriers to dietary change and self assessment of household food security.

**Data source:** Ministry of Health (1999) *NZ Food, NZ People, Key results of the 1997 National Nutrition Survey*, pp100-102.

---

## Self-reported standard of living

---

**Definition/formulae:** Proportion of the population rating their standard of living as “low” or “fairly low” in the 2000 Living Standards Surveys. (The other response categories were “medium”, “fairly high” or “high”.)

The data is derived from responses to two Ministry of Social Policy surveys of living standards conducted in 2000, one of 3,060 older people (65+) and the other of 3,682 working-age adults (18-64). Both surveys involved face-to-face interviews with nationwide representative samples.

Statistical collection unit: The data was collected in relation to the “economic family” (an adult with or without a partner and dependent children). Some results are reported for persons (e.g. results for total population, dependent children). These counts are obtained by aggregating the persons in the economic families with the attributes indicated. For example, if an economic family with a low respondent-assessed rating contains five children, it contributes five to the count of children in the “low standard of living” rating category.

For total population estimates, results were estimated by taking a weighted average of results from the two surveys.

For age differences, the unit of analysis is the economic family. Although only one adult responded for the economic family, results (such as that adult’s self-ratings) have been applied to the whole economic family (including children).

For ethnic differences, economic families with one or more Maori members have been classified as Maori. Economic families with one or more Pacific members have been classified as Pacific. “Other” economic families include those with one or more members of other ethnic groups. European/Pakeha economic families are the remaining families not included in the above categories. The Maori, Pacific and Other ethnic categories are not mutually exclusive.

Data for families with dependent children comes from the working-age survey only.

For family economic status, the first two rows are based on the working-age survey (including children) and the third and fourth rows on the survey of older people. Economic families in the working-age survey were divided into those where the main income earner was in full-time paid employment and those where the main income earner was not in full-time paid employment (25 per cent of the surveyed population). Older people were divided into those with employment income, private superannuation income, or some other non-government income of more than \$2,500 per annum (50 per cent of older people), and those without such non-government income (partner’s income included).

**Limitations of data:** These results are based on provisional survey datasets.

Results from the working-age survey were weighted to be representative of economic families containing a working-age adult (18-64). A few of these families contained a partner aged over 65. The survey of older people was weighted to be representative of individuals (not economic families) aged 65 and over. Therefore, the small sub-population of people over 65 with partners aged under 65 may be double counted by the weightings. Also, dependent children of those over 65 have not been accounted for by the weightings. These limitations are not expected to substantially affect the above results.

**Data source:** Living Standards Surveys 2000, Ministry of Social Policy.

---

## SOCIAL CONNECTEDNESS

### Unpaid work outside the home

---

**Definition/formulae:** The proportion of the population aged 12 and over who did unpaid work for people or organisations outside their own household, and the average time spent on unpaid work outside the home, as measured by the 1999 Time Use Survey.

**Limitations of data:** Sample survey, subject to sampling error.

**Data source:** Statistics New Zealand (2001) *Around the Clock: Findings from the New Zealand Time Use Survey 1998-99*, Chapter 3, Social Participation; 1999 Time Use Survey, unpublished tables.

---

---

## Telephone and Internet access in the home

---

**Definition/formulae:** The proportion of the population with telephone and Internet access in the home, as measured by the 2000 Living Standards Surveys.

The data is derived from responses to two Ministry of Social Policy surveys of living standards conducted in 2000, one of 3,060 older people (65+) and the other of 3,682 working age adults (18-64). Both surveys involved face-to-face interviews with nationwide representative samples.

For further details, see notes for "Self-reported Standard of Living".

---

**Data source:** Living Standards Surveys 2000, Ministry of Social Policy.

---

---

## Participation in family/whānau activities and regular contact with family/friends

---

**Definition/formulae:** The proportion of the population who had had family or friends over for a meal at least once a month, and the proportion who had participated in family/whānau activities, as measured by the 2000 Living Standards Surveys. Family or whānau activities were not specified in the surveys; respondents interpreted them in their own ways.

The data is derived from responses to two Ministry of Social Policy surveys of living standards conducted in 2000, one of 3,060 older people (65+) and the other of 3,682 working-age adults (18-64). Both surveys involved face-to-face interviews with nationwide representative samples.

For further details, see notes for "Self-reported Standard of Living".

---

**Data source:** Living Standards Surveys 2000, Ministry of Social Policy.

---

---

## Membership of and involvement in groups

---

**Definition/formulae:** The proportion of the population aged 18 and over who responded to a question in the New Zealand Election Study 1999 that they belonged to an organisation or group. "Active" membership is defined here as having attended at least one meeting in the previous year; "passive" membership as having attended no meetings.

**Limitations of data:** The data comes from self-completed postal surveys. As the sample contains panel components subject to attrition, participation may be overestimated. The main dataset is made up of three components: a sample drawn from the 1999 rolls (N=940, rr=58 per cent); a sample containing people sampled from the rolls at any or all of the 1990, 1993, and 1996 elections (N=2231), and a sample taken originally by phone during the 1999 election campaign subsequently completing a postal survey (N=2060, rr about 35 per cent on a base of the original numbers). A separate Maori sample was drawn (response rate 54 per cent) and the Maori dataset is somewhat biased towards areas of the country where Maori tend to be more concentrated.

---

**Data source:** New Zealand Election Study 1999; unpublished data and supporting technical information obtained from Jack Vowles, Principal Researcher, [j.vowles@waikato.ac.nz](mailto:j.vowles@waikato.ac.nz).

---

## PHYSICAL ENVIRONMENT

### Air quality

---

**Definition/formulae:** The level of ambient concentrations of CO averaged over an 8-hour period are categorised with respect to the acceptable air quality guideline of 10 milligrams per cubic metre (10 mg/m<sup>3</sup>), as excellent, good, acceptable, alert or action.

---

**Limitations of data:** Ambient air quality sites where data on CO levels is publicly available, are few in number and tend to represent urban areas where “worst case” CO concentration levels are to be found.

---

**Data source:** National Institute of Water and Atmospheric Research, <http://indicators.niwa.cri.nz>

---

### Drinking water quality

---

**Definition/formulae:** Full microbiological compliance with the Drinking-Water Standards for New Zealand (DWSNZ) 1995 requires that all water leaving the treatment plant must be free of three micro-organisms: faecal coliforms, *Giardia*, and *Cryptosporidium*. Additionally, adequate monitoring and the use of a registered laboratory are required to demonstrate full compliance with this standard. Figures are shown on the sub-population that is served by community supplies, showing the percentage of this population that receives drinking water that fully complies with the DWSNZ 1995.

---

**Limitations of data:** Drinking water rated not fully compliant may be the result of failing one of three of the microbiological criteria, the use of a non-registered laboratory, or inadequate monitoring, rather than being actually contaminated.

---

**Data source:** Annual Review of the Microbiological Quality of Drinking-Water in New Zealand (1994 to 1999), Ministry of Health, Wellington.

---