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### **New Zealand Regions, 1986-2001: Population Geography**

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University of Waikato  
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# NEW ZEALAND REGIONS, 1986-2001: POPULATION GEOGRAPHY

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## **Abstract**

This paper is primarily concerned with the spatial aspects of population, namely with: (i) patterns of settlement (urban, rural) and attendant population size variations by region, (ii) changes over time between rural and urban areas at a Regional Council level, (iii) and between regions in New Zealand. It is important to look at this because many trends in human capital, social equity, families and health that are seen at a regional level may be gaps between more urbanised and more isolated areas. There are, in fact, significant differences in levels of urbanisation between regions and these have major implications for policy.

**Keywords:** Urban, Rural, Regions, New Zealand

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This is part of the FRST-funded New Demographic Directions Programme. The paper will be included in a monograph entitled *Developing Underdevelopment and Geographical Disparities: A Social Demography of New Zealand Regions*. (Hamilton: Population Studies Centre) that will synthesise the results presented in topic-specific discussion papers.

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## **1. Introduction**

This working paper is part of a large project, funded by the Foundation for Research, Science and Technology (FoRST), being undertaken by the Population Studies Centre. This project explores the links between different sorts of population transitions, social transformations of various kinds and changes in the political economy of New Zealand's regions between the 1980s and the dawn of the 21st century. It relates to a period of rapid change at the end of which the regional architecture of the country was very different from the way it had been in 1985. The trends also represented a radical departure from what preceded these last two decades.

This particular discussion paper, using data from the five yearly Census of Population and Dwellings collected by Statistics New Zealand, examines the spatial aspects of population with population size and with changes over time between rural and urban areas at a Regional Council level and between regions in New Zealand<sup>1</sup>.

## **2. Population Geography of Regions**

The level of urbanisation and the distribution of a population nationally and within regions can be an indication of access to major social and commercial institutions in New Zealand (Haggett 1983; Jackson and McDermott 1986). Above all, these factors are linked to industrial labour force transformation (Baxendine et al. 2004; Pool and Bedford 1996). Moreover, the economic institutions of production and distribution, health and other social sector institutions and services in both the public and private sectors are likely to be concentrated in the urban areas. Indeed, many of the trends that are seen at a regional level are really differences between more urbanised and more rural areas<sup>2</sup>.

This paper is primarily concerned with the spatial aspects of population, with population size and with changes over time between rural and urban areas at a Regional Council level and between regions. In related Discussion Papers the demographic dimension of human capital, social equity, families and health will be looked at in further detail.

The population geography of today must be seen in historical context. New Zealand's normally resident population has been highly urbanised at least since the late 19<sup>th</sup> Century (Pool and Bedford 1997), although the balance between southern (Dunedin and Christchurch, and even Nelson at one period) and northern cities (Auckland and Wellington) was very different from today (e.g. at the 1881 census). By the First World War the geographical focus had shifted north (if Maori are counted the South Island had never been the dominant region), this pattern that was to be reinforced throughout the 20<sup>th</sup> century, and in a particularly accelerated way after the late 1960s.

From World War One until the entry of the United Kingdom into the European Common Market, the level of urbanisation, the distribution of overseas-born and other population characteristics, the level of inter-provincial mobility and related factors remained in a state of

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<sup>1</sup> Other topics covered in this series of discussion papers are listed in the end piece to this paper. The culmination of this project will be the publishing of a monograph synthesizing the various themes explored in this series of working papers (Pool et al. forthcoming-a).

<sup>2</sup> This manifests itself strongly in industrial and occupational structures by region (Pool et al. forthcoming-b). That study is being extended by ongoing research led by Jacques Poot (Baxendine et al. 2004).

relative equilibrium (Pool 2002). In that period urban growth occurred as much in secondary urban centres that processed rural products and often were export ports, as in the big cities. Thus metropolitan dominance was not as marked as it was to become later.

In the late 1960s another major set of changes occurred, not least of all Britain's entry into the common market (Hawke 1985). With this came the trend to globalisation in many economic spheres, not just for productive industries but also in the service sector. A corollary to this was greater and greater concentration of many functions in a few very large urban centres, the metropolis, especially Auckland and Wellington. Metropolitan dominance had come of age in New Zealand with it no longer being an urban-rural divide but a dichotomy between metropolitan (Auckland and Wellington, and marginally Christchurch) and the remainder of New Zealand (Johnstone 1973; Pool 2002; Pool forthcoming).

One of the more interesting features of New Zealand's development, as was noted above, is that it was a country that urbanised very early despite its reliance on primary production (Johnstone 1973; Pool 2002). The proportion in rural areas was already only 32 per cent in 1951. Between then and 1976 the final major changes in rural production technologies, both for farming and processing industries, occurred and as a result there were rural-urban movements particularly of Māori. Thus by 1976 the proportion in rural areas had dropped to 17 per cent (Watson 1985), and declined further to 14 per cent in 2001.

More recently, however, counter-changes have occurred, so that the "rural" population of 2001 is very different from that of 1976. There has been overspill from metropolitan and large urban areas, manifesting itself in so-called "4 ha life-style blocks", and also movement into "dormitory" towns outside the metropolitan and large urban areas but relatively close (e.g. Morrinsville). Secondly, there has been sunbelt migration often to rural areas such as the Coromandel Peninsula and around Kerikeri, as well as urban areas such as Tauranga, and the north of the South Island and the South Island lake region. Another manifestation of this has been the growth of retirement populations in extra-urban locations, especially on the northern flanks of both Auckland and Wellington. A third aspect of "ruralisation" has been the movement of discouraged workers, mainly Māori to rural communities (Scott and Kearns 2000). This last trend is one that is elaborated further elsewhere (Pool et al. 2005b).

The population geography also has another facet. At a regional level there is a high degree of diversity in levels of urbanisation and the forms it takes (Statistics New Zealand 1994; Statistics New Zealand 1997a; Statistics New Zealand 1997b). At one end of the spectrum are the West Coast and Marlborough with very small populations and no large or metropolitan urban areas; while at the other end is Auckland that is almost exclusively urban.

For much, but not all of this paper, the classification of urban areas is based on concentrations of populations and commuter-zones rather than the administrative entities often referred to in discussions of urban and rural land uses and populations; the exception will be when analysis is made of what might be called the "regional political demography". Dunedin city (the legal entity), for example, exceeds the population which is considered by Statistics New Zealand to be metropolitan. Timaru is an even more dramatic example of this pattern with the population of the statistically defined "urban area" only about 71 per cent of the Territorial Authority. This factor combined with the great variety in size of the regional populations produces a complex diversity in the population geography of New Zealand.

In this paper, Napier and Hastings are combined into one metropolitan area as this reflects the reality of “the Bay”.<sup>3</sup> This has now been operationalised functionally in services (e.g. one hospital), even though politically the two jurisdictions prefer separation.

In passing it should be noted that the term urban is used rather liberally in New Zealand to denote settlement-types that in population terms would be seen as villages elsewhere. But the New Zealand usage does reflect function as much as demographic size. Even in minor urban areas, most workers are in Secondary and Tertiary industries. With mergers in the primary processing field and the building of mega-plants, even the traditional hamlet surrounding a dairy factory has disappeared.

### 3. *Sources of Data*

The New Zealand Census of Population and Dwellings identifies six types of 'urban' and 'rural' areas. These are: 'Main Urban Areas' (MUA, populations 30,000 and over), 'Secondary Urban Areas' (SUA, populations between 10,000 and 29,999), 'Minor Urban Areas' (MinUA, populations between 1,000 and 9,999), 'Rural Centres' (RC, settlements with populations below 1,000), 'Rural Areas' (RA, dispersed rural populations) and 'Other Areas' (oceanic islets and inlets). This paper recognises the Statistics New Zealand definitions, but has divided the MUA category into two sub-groups, metropolitan and large urban areas as this is more meaningful for purposes of social analysis.

In this study, each Regional Council area has been divided into urban and rural areas. Some areas changed in classification over the time period, but for the purpose of this paper how they were classified in 1996 was the guideline chosen. The classification used here is outlined below but more extensive explanations are given in Appendix 1.

Regional Council areas have been divided into:

Metropolitan areas:

These are main urban areas considered to be the chief cities in New Zealand. They include the Auckland urban sub-regions; the Hamilton urban sub-regions; Napier and Hastings urban areas combined; the Wellington urban sub-regions; the Christchurch main urban area; and the Dunedin main urban area (see Appendix 1).

Large Urban Areas:

These are all other main urban areas that are not defined as metropolitan, for example, Gisborne, Whangarei and Invercargill.

Secondary Urban Areas:

These are the same as those defined by Statistics New Zealand and have a minimum population of 10,000 and a maximum population of 29,999 in 1996. Statistics New Zealand identifies 15 SUAs, including Pukekohe, Whakatane, Blenheim, Timaru and Oamaru.

Minor Urban Areas:

As above, this category is the same as that defined by Statistics New Zealand with a population between 1,000 and 9,999 in 1996. Included in this group are such places as Queenstown and Bluff in the South Island, and Featherstone and Te Aroha in the North Island.

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<sup>3</sup> The fragmentation of some regions into numerous functional authorities is a theme that will be returned to in a later paper in this series. Suffice to say that local political fragmentation may weaken the perception of the rest of New Zealand about the political economy of some regions.



Rural:

These are all areas that are not urban areas. This is the residual “left-over” from the aggregation of the other urban types. In this paper Statistics New Zealand's Rural Centre/Area and 'Other Areas' are combined and considered as one category.

Data on the level of urbanisation for the start and the end of the period (1986 and 2001) of this study were looked at, as the results in the intermediate years are fairly consistent in one direction or the other. The focus is on patterns in 2001 and the changes since 1986.

In this paper and a series of studies to come (Pool et al. 2005b) we divide the population into two ethnic groups: Māori and Pakeha. The reason for this is purely practical. The term Pakeha is used instead of Non-Māori, although the later is employed in some analyses in later discussion papers since it covers all the ethnic groups which are not Māori, including Pacific Island and Asian which have very different population structures from Pakeha as has been noted elsewhere (Pool et al. 2005b). But as was also shown most regions are overwhelmingly Māori plus Pakeha, with only small minorities from the other groupings. Of the 15 regions<sup>4</sup>, 13 have more than 90 per cent who are Māori plus Pakeha.

#### ***4. Level of Urbanisation for New Zealand as a Whole, 1986-2001***

Despite New Zealanders' perceptions of themselves as a farming nation, since the turn of the 20<sup>th</sup> century, and certainly since World War II, New Zealand has been a highly urbanised society (Pool 2002; Statistics New Zealand 1994; Statistics New Zealand 1997a; Statistics New Zealand 1997b). In 1996, when the populations resident in the Metropolitan, Large, Secondary and Minor Urban areas were combined "the share of the country's population living in towns and cities reached 85 per cent - one of the highest rates of urbanisation in the world" (Bedford et al. 1999: 29). Thus, only 14 per cent of the population lived in rural areas at the beginning of the twenty-first century.

Not only is the New Zealand population urban, but it is now metropolitan to a considerable degree. The proportion of the total New Zealand population living in metropolitan centres increased by over two percentage points from 1986 to 2001, when it reached 57 per cent, as is shown in Table 1. As this table shows, this increase was at the expense of all other elements of the settlement hierarchy.

This rank order was similar for both Pakeha and Māori, but the proportions of the population in each settlement type differs. The proportion of Māori living in metropolitan areas (46 per cent) was less than half of that population, while for Pakeha the figure was just over half in 2001, while the proportion in metropolitan areas remained relatively unchanged from 1986 to 2001 for both Māori and Pakeha. In 2001, more Māori lived in large urban than rural areas. Minor urban areas contained a higher proportion of the Māori population than of the Pakeha. For Asians and Pacific Islanders metropolitan residence was the overwhelmingly dominant form as is true in other Neo-European countries (North America and Australia): non-European migrants tend to cluster in Metropolis, rather than spread out across the country.

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<sup>4</sup> There are 15 regions instead of the usual 16 as Nelson and Tasman are combined into one region yet they operate essentially as one region other than administratively. As the division was made on the basis of river catchments, not communities or social and economic interest, anomalies occur. For example, Nelson urban area has some of its population in the Tasman region.

**Table 1: Percentage of the New Zealand Population Living in Metropolitan, Urban and Rural Areas, by Ethnic Group, New Zealand, 1986 and 2001**

Urban Area	Total		Pakeha		Māori		Pacific Island		Asian	
	1986	2001	1986	2001	1986	2001	1986	2001	1986	2001
Metropolitan	54.1	57.1	54.1	53.9	45.1	46.0	88.1	89.9	78.1	88.7
Large Urban	13.1	13.0	13.1	13.7	15.1	17.1	4.0	3.8	8.1	5.3
Secondary Urban	7.1	7.2	8.1	8.1	7.1	7.5	3.1	2.9	4.1	2.0
Minor Urban	9.1	8.3	8.1	8.4	13.1	13.3	1.1	1.7	3.1	2.1
Rural	14.1	14.3	15.1	15.9	17.1	16.0	1.1	1.8	4.1	1.9
TOTAL	100.1	100.0	100.1	100.0	100.1	100.0	100.1	100.0	100.1	100.0

*Source:* In this table and except where otherwise noted data used in this paper comes from published census data, or from Supermap3, or from special tabulations from the Censuses of Population and Dwellings from Statistics New Zealand.

The proportion of Pakeha in metropolitan areas were very similar to those for the population as a whole in 1986. But by 2001 there was a noticeable difference with metropolitan areas being three per cent lower for Pakeha than overall, while Pakeha in rural areas were over one percentage points higher than were true for the Total population, and large and secondary urban areas slightly higher. These results reflect the lower percentages of older people that are predominately Pakeha living in metropolitan areas (see Table 2; see also Appendix Table 1). The percentage of the total population living in New Zealand’s rural, and large, secondary and minor urban areas was lower than for both the Māori and Pakeha populations. This is because, as has been noted, the total New Zealand population includes recent migrant groups, such as those of Asian and Pacific Island ethnic groups, that are almost entirely metropolitan (see Table 1).

There is some difference in the distribution of people living in different types of settlements by age, although the metropolises dominate in every age category as shown in Table 2. The proportion of children under 15 years in rural areas was higher than for any other age group in 1986 with a reduction of two percentage points in 2001, but by then the percentage in the youngest age group had been overtaken by those in the 45-64 years age group. The large secondary and minor urban areas disproportionately house the elderly (65 years and over) indicating a preference to move to these smaller urban areas for retirement and “ageing in place” as metropolis gain through the inflows of the younger population. On retirement many rural people move into urban areas where there is easier access to services, and thus the lowest percentages in rural areas are for those aged 75 years and over for both 1986 and 2001.

Young people aged 15-24 years were concentrated in metropolitan areas in both 1986 and 2001 as this age group moves to the larger cities for employment and education opportunities. Along with this was an increasing concentration at 25-44 years in metropolises, a key factor for the growth of human capital.

The settlement types with the largest shift-shares by age between 1986 and 2001 were at each end of the spectrum: the metropolitan areas and rural areas. For metropolitan areas the age groups 45 years and under showed sizable proportional increases in national share, whereas the share for older age groups declined, especially at 65 years and over. The opposite trend was seen for rural areas with age groups 45 years and under having a sizable decrease and the remaining age groups increasing.

Much of the national growth by age occurred at 25-64 years so the metropolis took a disproportionate share of those cohort flows, a factor that also has human capital implications (Pool et al. 2005b). In contrast, the rural industries have an ageing work force and this is reflected in their increasing share of the total at those ages.

**Table 2: Percentage of Each Age Group of New Zealand Population Living in Metropolitan, Urban and Rural Areas, New Zealand, 1986 and 2001**

Age Group (years)	Metropolitan	Urban Areas			Rural	Total
		Large	Secondary	Minor		
<b>1986</b>						
Under 15	51.7	13.3	7.8	9.7	17.6	100.0
15-24	57.6	13.7	7.2	8.2	13.4	100.0
25-44	55.9	12.8	7.2	8.3	15.7	100.0
45-64	54.9	13.4	8.1	9.2	14.4	100.0
65-74	54.1	15.0	9.6	10.9	10.4	100.0
75+	56.6	15.5	10.0	10.4	7.6	100.0
<b>Total</b>	<b>54.9</b>	<b>13.5</b>	<b>7.8</b>	<b>9.0</b>	<b>14.8</b>	<b>100.0</b>
<b>2001</b>						
Under 15	55.4	13.0	7.1	8.5	15.9	100.0
15-24	63.3	12.9	5.9	6.9	11.0	100.0
25-44	60.0	12.1	6.4	7.3	14.1	100.0
45-64	54.4	12.7	7.4	8.6	16.9	100.0
65-74	50.0	15.0	9.8	11.7	13.5	100.0
75+	53.1	16.5	10.8	11.5	8.1	100.0
<b>Total</b>	<b>57.1</b>	<b>13.0</b>	<b>7.2</b>	<b>8.3</b>	<b>14.3</b>	<b>100.0</b>

## 5. The Level of Urbanisation in 2001: a Regional Analysis

### 5.1 The Distribution of Regional Populations, by Place and Type of Residence, 2001

There are significant regional differences in the proportions of populations living in the various types of settlement. As is clear in Table 3, those regional council areas which include a metropolitan area do not have large urban areas, simply because much of the population lives in the metropolis. Table 3 shows the regions that have high proportions of their population living in metropolitan areas: Auckland; Wellington; and Hawke's Bay (Napier-Hastings). Canterbury and Otago, which contain the main cities of Christchurch and Dunedin, have lower proportions of their populations in metropolitan areas than do Auckland or Wellington. Of the regions with a metropolitan area, the Waikato region has the lowest proportion of its population living in this urban area, only 46 per cent<sup>5</sup>. It is the only region with a metropolitan area that is also significantly rural. Some non-metropolitan regions such as Gisborne, Nelson-Tasman and the Bay of Plenty also have relatively high proportions of their populations living in large urban areas but not, of course, in metropoli. But in Northland only 33 per cent of the population lives in a large urban area (Whangarei). The West Coast

<sup>5</sup> Historically, the delineation of this metropolitan area has been parsimonious by comparison with others. Thus significant commuter zones are excluded (e.g. Huntly, Morrinsville and Raglan).

and Marlborough are the only regions with neither a metropolitan nor a large urban population.

**Table 3: Percentage of the Regional Population Living in Metropolitan, Urban and Rural Areas, by Region, 2001**

Region	Metropolitan	Urban			Rural	Total
		Large	Secondary	Minor		
Northland	-	32.9	-	18.4	48.7	100.0
Auckland	92.7	-	1.2	1.9	4.1	100.0
Waikato	46.4	-	11.0	18.7	23.8	100.0
Bay of Plenty	-	61.9	7.4	10.9	19.7	100.0
Gisborne	-	72.1	-	-	27.9	100.0
Hawke's Bay	79.5	-	-	7.1	13.3	100.0
Taranaki	-	46.4	10.6	21.0	22.0	100.0
Manawatu-Wanganui	-	50.9	14.9	14.4	19.8	100.0
Wellington	80.2	-	12.5	3.6	3.6	100.0
West Coast	-	-	31.4	27.2	41.3	100.0
Canterbury	69.4	-	8.8	6.9	14.9	100.0
Otago	59.0	-	7.0	14.7	19.3	100.0
Southland	-	50.9	10.9	8.3	29.9	100.0
Nelson-Tasman	-	64.7	-	13.3	22.0	100.0
Marlborough	-	-	67.1	10.1	22.8	100.0
<b>New Zealand</b>	<b>57.1</b>	<b>13.0</b>	<b>7.2</b>	<b>8.3</b>	<b>14.3</b>	<b>100.0</b>

For New Zealand as a whole 14 per cent of the population live in rural areas (Table 3). At a Regional Council level the proportion of the population in rural areas ranges from 4 per cent (Wellington and Auckland) to 49 per cent (Northland). Other areas with proportionally large rural populations include four of the six South Island regions (West Coast, Southland, Marlborough and Nelson-Tasman) and the North Island's East Coast regions of the Bay of Plenty and Gisborne. In addition, the farming regions of Waikato, Taranaki and Manawatu-Wanganui also have 20 to 24 per cent of their population living in rural areas. Waikato, which contains the fourth largest total population, is also noteworthy for the relatively high proportion of its population living in rural and minor urban areas (43 per cent). This region and Manawatu-Wanganui have the most even distribution of population across the different settlement types.

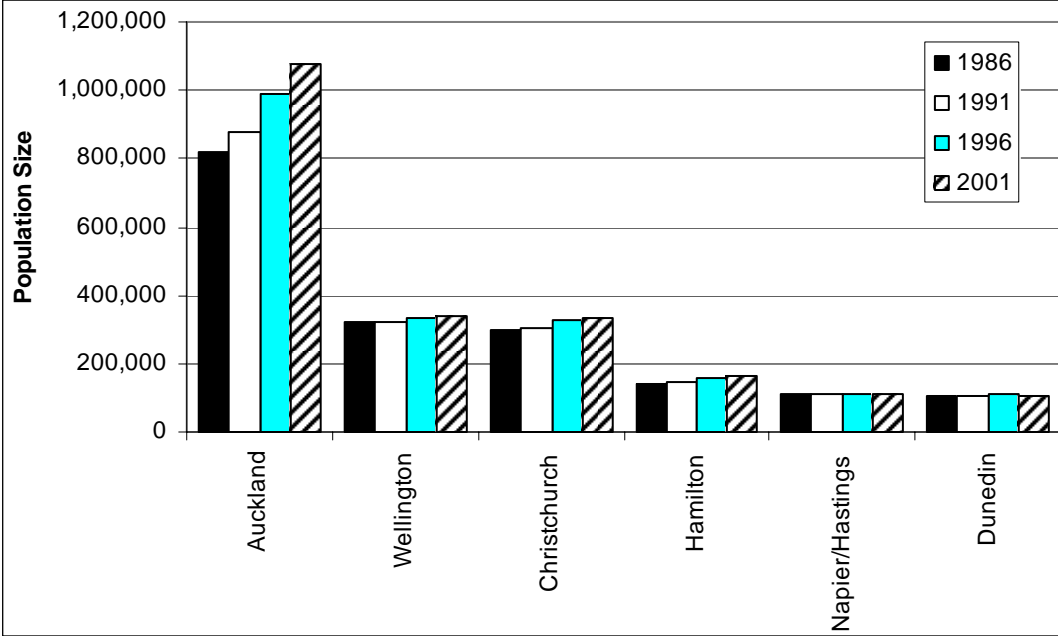
As noted earlier in New Zealand there is confusion at a popular level between administrative jurisdictions and what can be seen as functioning metropolitan communities. The size and rank order of the functional units are shown in Figure 1. Three of the six metropolitan areas are in the northern third of the country as is Tauranga, the probable next candidate for the metropolitan ranks as defined here<sup>6</sup>. Rank order remains the same over the period.

This figure also points to another important point. Auckland metropolitan area is growing far more rapidly than others. This trend has profound population, economic and political

<sup>6</sup> In Local Government New Zealand it is included in the Metropolitan interest group.

implications, some of which will be discussed in the next section of this paper, but the key point is that the growing metropolitan dominance alluded to, is already increasing the dominance, demographically, of one central place.

**Figure 1: Size and Rank Order of New Zealand’s Metropolitan Areas, 1986-2001**



*5.2 Metropolitan Dominance and the Demography of Power*

Metropolitan dominance has implications for economic and political power; the demographic concentration did not come about in the absence of economic growth, but such population dominance in turn brings about political and economic strengths at the national level. This holds especially true for metropolis that are big cities, particularly if the metropolis is not divided into too many major cities with competing interests. But if in a “metropolitan” region the division is into city and non-city territorial authorities, then the metropolis may well find that in metropolitan-level politics a new and different set of political and economic interests enter the equation. The concerns of city politics and policies may not fit with those of more rural communities.

Tables 4 and 5 show that large city populations are found in only a minority of the regions. But more importantly most of the metropolitan regions are overwhelming composed of populations that live in cities, not in other forms of Territorial Authority, and the metropolis itself is also predominantly composed of city dwellers. The major exception is the Waikato and its one city, Hamilton. Even in the Hamilton urban area two-thirds of the residents live in that city.

**Table 4: Percentage of the Population in any Region Living in a Territorial Authority Designated Legally as a City (2001) or Cities, 2001**

Region	2001
Northland	0
Auckland <sup>1</sup>	87
Waikato	32
Bay Of Plenty	0
Gisborne	0
Hawke's Bay <sup>2</sup>	38
Taranaki	0
Manawatu-Wanganui	31
Wellington	81
West Coast	0
Canterbury	66
Otago	63
Southland	51
Nelson-Tasman	53
Marlborough	0

(1) Does not include Papakura District.

(2) Does not include Hastings District.

**Table 5: Percentage of Metropolitan Populations<sup>1</sup> in Territorial Authorities which are Cities, 2001**

Metropolitan Areas	2001
Auckland	92
Hamilton	69
Napier/Hastings <sup>2</sup>	99
Wellington	100
Christchurch	95
Dunedin	100

(1) Urban areas.

(2) (Hasting Urban area + Napier City)/(Hastings Urban area + Napier Urban area)

### *5.3 The Intra-Regional Distribution of the Population, by Ethnicity, Place and Type of Residence, 2001*

Patterns of urbanisation for each ethnic group within regions are not greatly different as shown in Tables 6. There are lower proportions of the Māori population than of the Pakeha population living in metropolitan and large urban areas in every North Island region except Auckland and Wellington, where Māori had higher percentages than Pakeha. In contrast in Auckland (where percentages are low), the Bay of Plenty, Gisborne and Hawke's Bay, Māori are more likely to be rural than are Pakeha, but the opposite is true in other regions.

**Table 6: Percentage of the Specified Population Living in Metropolitan, Urban and Rural Areas, by Ethnicity and Region, 2001**

Region	Metropolitan	Urban			Rural	Total
		Large	Secondary	Minor		
<b>Pakeha</b>						
Northland	-	35.3	-	15.6	49.1	100.0
Auckland	90.4	-	1.3	2.5	5.8	100.0
Waikato	46.6	-	9.4	18.2	25.8	100.0
Bay of Plenty	-	65.4	7.0	8.6	19.0	100.0
Gisborne	-	77.7	-	-	22.3	100.0
Hawke's Bay	80.6	-	-	5.9	13.5	100.0
Taranaki	-	47.5	10.3	18.5	23.7	100.0
Manawatu-Wanganui	-	51.1	15.3	12.6	21.0	100.0
Wellington	77.2	-	14.6	3.8	4.4	100.0
West Coast	-	-	32.3	26.8	40.9	100.0
Canterbury	67.4	-	9.4	7.2	15.9	100.0
Otago	58.0	-	7.4	14.5	20.0	100.0
Southland	-	50.0	11.1	7.4	31.5	100.0
Nelson-Tasman	-	65.0	-	13.0	22.0	100.0
Marlborough	-	-	67.7	9.0	23.3	100.0
<b>New Zealand</b>	<b>53.9</b>	<b>13.7</b>	<b>8.1</b>	<b>8.4</b>	<b>15.9</b>	<b>100.0</b>
<b>Māori</b>						
Northland	-	29.6	-	24.0	46.5	100.0
Auckland	92.1	-	2.2	2.4	3.3	100.0
Waikato	42.6	-	14.4	23.3	19.7	100.0
Bay of Plenty	-	52.5	9.0	16.8	21.7	100.0
Gisborne	-	65.0	-	-	35.0	100.0
Hawke's Bay	73.0	-	-	12.0	15.0	100.0
Taranaki	-	36.8	12.5	35.7	14.9	100.0
Manawatu-Wanganui	-	44.4	14.0	23.9	17.7	100.0
Wellington	79.5	-	12.3	6.0	2.2	100.0
West Coast	-	-	27.2	32.7	40.0	100.0
Canterbury	74.0	-	7.2	6.6	12.2	100.0
Otago	57.9	-	5.3	17.2	19.7	100.0
Southland	-	54.5	11.0	13.7	20.8	100.0
Nelson-Tasman	-	63.4	-	18.6	18.0	100.0
Marlborough	-	-	65.2	17.7	17.1	100.0
<b>New Zealand</b>	<b>46.0</b>	<b>17.1</b>	<b>7.5</b>	<b>13.3</b>	<b>16.0</b>	<b>100.0</b>

The reverse is the case in the minor urban areas where there are higher proportions of Māori than Pakeha. In five regions more than 20 per cent of the Māori population live in minor urban areas: Taranaki, the West Coast, Northland, Manawatu-Wanganui and Waikato, in that order. In contrast only one region for Pakeha was greater than 20 per cent for minor urban areas, the West Coast. It is often forgotten that the great Māori rural exodus after World War II was typically step-wise through local urban areas such as Gisborne or Rotorua (Pool 1991).

#### 5.4 *The Distribution of the National Population, by Place and Type of Residence, 2001*

New Zealand is overwhelmingly an urban society with 57 per cent of the population living in the metropolitan areas alone as can be seen in Table 7. Moreover, half of the people living in metropoli live in Auckland alone (29 per cent of the national population). Other metropolitan areas that have high proportions of the national population are Wellington and Canterbury (Christchurch). It is interesting to note that the metropolitan area of Hawke's Bay contains the similar proportion of the total New Zealand population as does Otago's metropolitan area but that the metropolitan area of the Waikato contains a greater proportion of the total population than either of them. At the next level of settlement it is the Bay of Plenty with two large urban areas, and Manawatu-Wanganui also with two such clusters, whose urban centres contribute disproportionately to the total of the national population. The South Island regions other than Otago and Canterbury made very limited contributions even though more than 50 per cent of people in Southland and Nelson-Tasman live in their main centres.

**Table 7: The Percentage of the National Population by Settlement Type and Region, 2001**

Region	Metropolitan	Urban			Rural	Total
		Large	Secondary	Minor		
Northland	-	1.2	-	0.7	1.8	3.7
Auckland	28.8	-	0.4	0.6	1.3	31.0
Waikato	4.4	-	1.0	1.8	2.3	9.6
Bay of Plenty	-	4.0	0.5	0.7	1.3	6.4
Gisborne	-	0.8	-	-	0.3	1.2
Hawke's Bay	3.0	-	-	0.3	0.5	3.8
Taranaki	-	1.3	0.3	0.6	0.6	2.8
Manawatu-Wanganui	-	3.0	0.9	0.8	1.2	5.9
Wellington	9.1	-	1.4	0.4	0.4	11.3
West Coast	-	-	0.3	0.2	0.3	0.8
Canterbury	8.9	-	1.1	0.9	1.9	12.9
Otago	2.9	-	0.3	0.7	0.9	4.9
Southland	-	1.2	0.3	0.2	0.7	2.4
Nelson-Tasman	-	1.4	-	0.3	0.5	2.2
Marlborough	-	-	0.7	0.1	0.2	1.1
<b>New Zealand</b>	<b>57.1</b>	<b>13.0</b>	<b>7.2</b>	<b>8.3</b>	<b>14.3</b>	<b>100.0</b>

Secondary urban areas do not contain high proportions of the national population; only Waikato, Wellington and Canterbury have more than one per cent of the national population in their secondary urban areas. Minor urban areas also do not have large proportions of the national population although this type of settlement occurs in all regions except Gisborne. In this context, Gisborne has the narrowest range of settlement types, with neither minor urban settlements nor secondary urban areas but just one large urban area (Table 7).

A minor but significant proportion of the national population is classed as rural, a population that includes both farming and non-farming components. The actual farming population is rather small despite New Zealand's traditional reliance on the export of primary commodities.



However, at a regional level the proportion of the population that is rural is spread more evenly across the regions than is the case for other settlement-types, with the Marlborough region having the smallest recorded per cent of the national population in its rural sector (0.2 per cent). The region with the highest proportion of its population in its rural areas is Waikato (2.3 per cent), a point that adds to the strength of comment earlier about the dynamics of local government. The only other regions with more than 1.5 per cent of the national total in rural areas were Northland and Canterbury.

#### 5.5 *Distribution of the National Population, by Place, Type of Residence and Ethnicity, 2001*

When the distribution of the national population is disaggregated by Māori and Pakeha we can see that the Auckland region contains around 23 per cent each of the Māori and Pakeha populations as is shown in Tables 8. This is significantly lower than the overall national proportion of 29 per cent. This difference is not due to a higher concentration there of Māori, but rather results from the disproportionate clustering of other ethnic groups, such as Pacific Islanders and Asians. The Māori population is more concentrated in rural areas, especially in Northland and Gisborne, than is the New Zealand population as a whole. Minor urban areas, as discussed previously, are also places of Māori population concentration particularly in the case of Northland, Waikato, the Bay of Plenty, Taranaki and Manawatu-Wanganui.

Of the national Pakeha population a higher per cent is in the South Island metropolitan, large and secondary urban areas than is true for the Māori population (Tables 8). This result is merely a reflection of the concentration of the Māori population in the northern and eastern areas of the North Island. The Māori population is less concentrated in metropolitan areas than is seen for the national population (Tables 7 and 8).

**Table 8: The Percentage of the National Pakeha and Māori Populations by Settlement Type and Region, 2001**

Region	Metropolitan	Urban			Rural	Total
		Large	Secondary	Minor		
<b>Pakeha</b>						
Northland	-	1.1	-	0.5	1.6	3.2
Auckland	23.4	-	0.3	0.7	1.5	25.9
Waikato	4.5	-	0.9	1.8	2.5	9.6
Bay of Plenty	-	3.9	0.4	0.5	1.1	6.0
Gisborne	-	0.6	-	-	0.2	0.8
Hawke's Bay	3.1	-	-	0.2	0.5	3.8
Taranaki	-	1.5	0.3	0.6	0.8	3.2
Manawatu-Wanganui	-	3.2	1.0	0.8	1.3	6.2
Wellington	8.9	-	1.7	0.4	0.5	11.5
West Coast	-	-	0.3	0.3	0.4	1.0
Canterbury	10.5	-	1.5	1.1	2.5	15.6
Otago	3.5	-	0.4	0.9	1.2	6.0
Southland	-	1.5	0.3	0.2	0.9	3.0
Nelson-Tasman	-	1.8	-	0.4	0.6	2.8
Marlborough	-	-	0.9	0.1	0.3	1.3
<b>New Zealand</b>	<b>53.9</b>	<b>13.7</b>	<b>8.1</b>	<b>8.4</b>	<b>15.9</b>	<b>100.0</b>
<b>Māori</b>						
Northland	-	2.3	-	1.9	3.6	7.7
Auckland	22.3	-	0.5	0.6	0.8	24.3
Waikato	5.9	-	2.0	3.2	2.7	13.8
Bay of Plenty	-	6.3	1.1	2.0	2.6	12.1
Gisborne	-	2.4	-	-	1.3	3.7
Hawke's Bay	4.5	-	-	0.7	0.9	6.1
Taranaki	-	1.0	0.3	1.0	0.4	2.8
Manawatu-Wanganui	-	3.3	1.0	1.8	1.3	7.5
Wellington	7.7	-	1.2	0.6	0.2	9.7
West Coast	-	-	0.1	0.2	0.2	0.5
Canterbury	4.4	-	0.4	0.4	0.7	6.0
Otago	1.2	-	0.1	0.3	0.4	2.0
Southland	-	1.0	0.2	0.3	0.4	1.9
Nelson-Tasman	-	0.7	-	0.2	0.2	1.1
Marlborough	-	-	0.5	0.1	0.1	0.7
<b>New Zealand</b>	<b>46.0</b>	<b>17.1</b>	<b>7.5</b>	<b>13.3</b>	<b>16.0</b>	<b>100.0</b>

## 6. *Regional Changes in the Level of Urbanisation from 1986 to 2001*

Over the period 1986 to 2001 the population of New Zealand increased by 14 per cent. This increase was not, however, spread evenly throughout New Zealand. It was focused more in metropolitan than other types of urban areas. The increase of population in secondary and minor urban areas was less than half that experienced by the population as a whole.

At a regional level, however, the situation is much more diverse (Bedford et al. forthcoming; Pool et al. 2005a; Pool et al. 2005b). The percentage change from 1986 to 2001, for each urban type and regional council area for the whole population, is shown in Table 9. As is discussed elsewhere (Pool et al. 2005a), Auckland is both the fastest growing and numerically the largest region in New Zealand. Within the Auckland region, between 1986 and 2001 all of its settlement types experienced growth of over 30 per cent, with the largest being in the rural area with 54 per cent, a function of urban overspill not real rural growth. This was the most rapid for any settlement type in any region. In contrast, the rural settlements in the Southland region lost 15 per cent of their populations, which was the largest loss for any settlement type and for any region over the fifteen years 1986 to 2001.

**Table 9: Percentage Change for the New Zealand Population as a Whole, by Settlement Type and Region, 1986-2001**

Region	Metropolitan	Urban			Rural	Total
		Large	Secondary	Minor		
Northland	-	4.2	-	11.7	23.0	14.1
Auckland	31.5	-	32.6	47.3	53.9	32.6
Waikato	19.8	-	2.5	5.6	6.6	11.6
Bay of Plenty	-	33.3	11.5	-0.3	29.0	26.0
Gisborne	-	-0.9	-	-	-10.8	-3.9
Hawke's Bay	4.1	-	-	-9.5	0.7	2.5
Taranaki	-	0.8	-6.0	-10.6	-10.8	-5.2
Manawatu-Wanganui	-	4.3	2.5	-14.3	-5.1	-1.0
Wellington	5.1	-	25.4	6.4	27.5	8.0
West Coast	-	-	-11.5	-13.5	-1.6	-8.2
Canterbury	13.0	-	-3.8	14.5	17.1	11.9
Otago	-0.3	-	-9.1	27.7	-3.4	1.7
Southland		-12.3	-12.6	-7.5	-14.8	-12.7
Nelson-Tasman	-	22.8	-	21.5	23.2	22.7
Marlborough	-	-	15.5	17.8	28.4	18.4
<b>New Zealand</b>	<b>19.2</b>	<b>10.7</b>	<b>6.0</b>	<b>5.4</b>	<b>10.9</b>	<b>14.6</b>

Three major settlement trends in New Zealand are also illustrated by the data in Table 9. The first is the relationship between core and periphery regions (Haggett 1983; Jackson and McDermott 1986). Auckland is clearly a core region in New Zealand; Southland, Taranaki, the West Coast and Gisborne can be seen as peripheries, and all lost population over the fifteen year period.

Most metropolitan and large urban areas had higher growth rates than the totality of the regions in which they are located. The exceptions were Northland, Auckland, Wellington and Otago, where urban overspill produced growth in adjacent commuter zones. In contrast, most secondary and minor urban areas had lower growth than the average growth overall of settlement types for their particular region. The notable exceptions are Wellington's secondary urban areas (the growth of Kapiti<sup>7</sup> and Masterton as satellites) and Manawatu-Wanganui's large and secondary urban areas which slightly compensate for the region's

<sup>7</sup> In the 2001 census Kapiti is classified as a large urban area, but treated here as a secondary urban area for consistency of analysis.

overall trend of loss of population. In Auckland, Canterbury and Otago's the growth of minor urban areas exceeded that of the region as a whole. In the last case the driver was the mushrooming of towns like Queenstown, Wanaka and Arrowtown associated with the tourism industry.

The second major trend, the urban over-spill effect, to which reference was made earlier, can best be seen within the Auckland region. While the metropolitan area of Auckland has shown a high rate of change over the last fifteen years, it is the minor urban areas and rural areas of Auckland that have had the highest rates of change (Table 10). The rural areas in Northland, Wellington, Canterbury and Nelson-Tasman have also increased at a higher rate than the metropolitan or large urban areas of their regions. In Northland's case some of the growth was a flow-on effect from the overspill from Auckland discussed above.

The last trend, the movement of people to the "sun-belts", is discussed in other papers (Bedford et al. forthcoming; Bedford et al. in press; Pool et al. 2005a). The rural and minor urban areas of the Bay of Plenty, Northland and the northerly regions of the South Island, Nelson-Tasman and Marlborough all exhibit this tendency.

### ***7. The Effects of a High Level of Concentration: Travel to Nearest Urban Area***

A final question of population geography is to look at one of the side-effects of high levels of urban concentration, an associated clustering of services, especially those that are more specialised, into the urban, and particularly the metropolitan areas. This effect may have implications for all of the market, voluntary and public sectors. To attempt to document this effect the present paper looks at the effects of distance and geographical access to urban areas and thus to services. Another paper (Pool et al. forthcoming-c) will look more specifically at times taken to access health facilities.

Access is defined here by distance from the larger settlements: secondary urban areas and above. Though there is a difference in the services and business available between the various levels of urban area, secondary urban areas generally have a comprehensive range of general services, so that people do not need to travel to another place to seek them. Of course, the bigger the urban areas the greater the variety of services available. For instance, Auckland hosts many of the major entertainments outlets that are normally not available in other centres in New Zealand. Major sports events are normally held only in the metropolitan centres and tertiary educational institutions are generally only found in metropolitan and large urban centres. Where a secondary or even a larger urban area is near a metropolis (e.g. Masterton in relation to Wellington; Pukekohe in relation to Auckland) then clearly there will be competition, with the larger centre likely to have more services or facilities that are varied or specialised. Although Hamilton is seen as a metropolis here, it is close enough to Auckland to feel its pull, while Palmerston North has similar links with Wellington.

When people do not have ready access to the facilities of bigger larger areas there are many issues to face. For instance, where secondary schooling is often very limited with only one small school available locally, the option that some families will take is to send their children to boarding school. Also, young adults leave these minor urban and rural areas to attend specialised tertiary institutions. General access to medical services is often limited, with very restricted after-hours services and a long way to the nearest doctor or pharmacist (the problem of hospital access is covered in Pool et al. forthcoming-c). Some rural and minor urban areas

do not have banking services, forcing people to travel long distances and the same is typically true for welfare services. The environmental infrastructure is not as developed in smaller areas with some households having to provide their own water and sewage. Telephone reception is often not good enough for easy internet access, and some areas do not have cell-phone coverage. Thus people in rural and minor urban areas do without things that those in urban areas take for granted, such as being able to attend a local accident and medical centre outside normal business hours, and being able to choose where and when to buy goods or where and when to bank. In larger urban and metropolitan areas some consumer outlets and service facilities (e.g. supermarkets and ATMs; accident and emergency services) may be available 24 hours, seven days a week.

Another issue is the time taken to travel longer distances. Where roads are good and straight this time is less than when the roads are narrow and winding. This is an important factor in some more mountainous coastal areas such as Northland, the Coromandel Peninsula (Waikato), Marlborough Sounds, the western Nelson-Tasman region, around the East Cape (the Bay of Plenty and Gisborne Regions) and the West Coast. It is also true for extensive areas for inland parts of most North Island and South Island region. Unsealed roads and sheer distance also increase travel times, so that some isolated sub-regions, such as the south western Waikato, western Taranaki, northern Hawkes Bay, inland Wanganui and Rangitikei, much of the entire inland South Island (most of the Western half, Northern Canterbury and South Marlborough) face similar issues of isolation.

Different scales of access are identified cartographically in Figure 2 and in Table 10<sup>8</sup>. The map (Figure 2) shows that large parts of the South Island are more than 100km from an urban area. However, most of these areas have reasonably small populations and are mountainous. An exception is the West Coast regions where almost a third of the population lives more than 100km from a secondary urban area and above. In the North Island there are fewer areas more than 100km from an urban area, but again these are generally mountainous and sparsely populated, except for areas in the Far North.

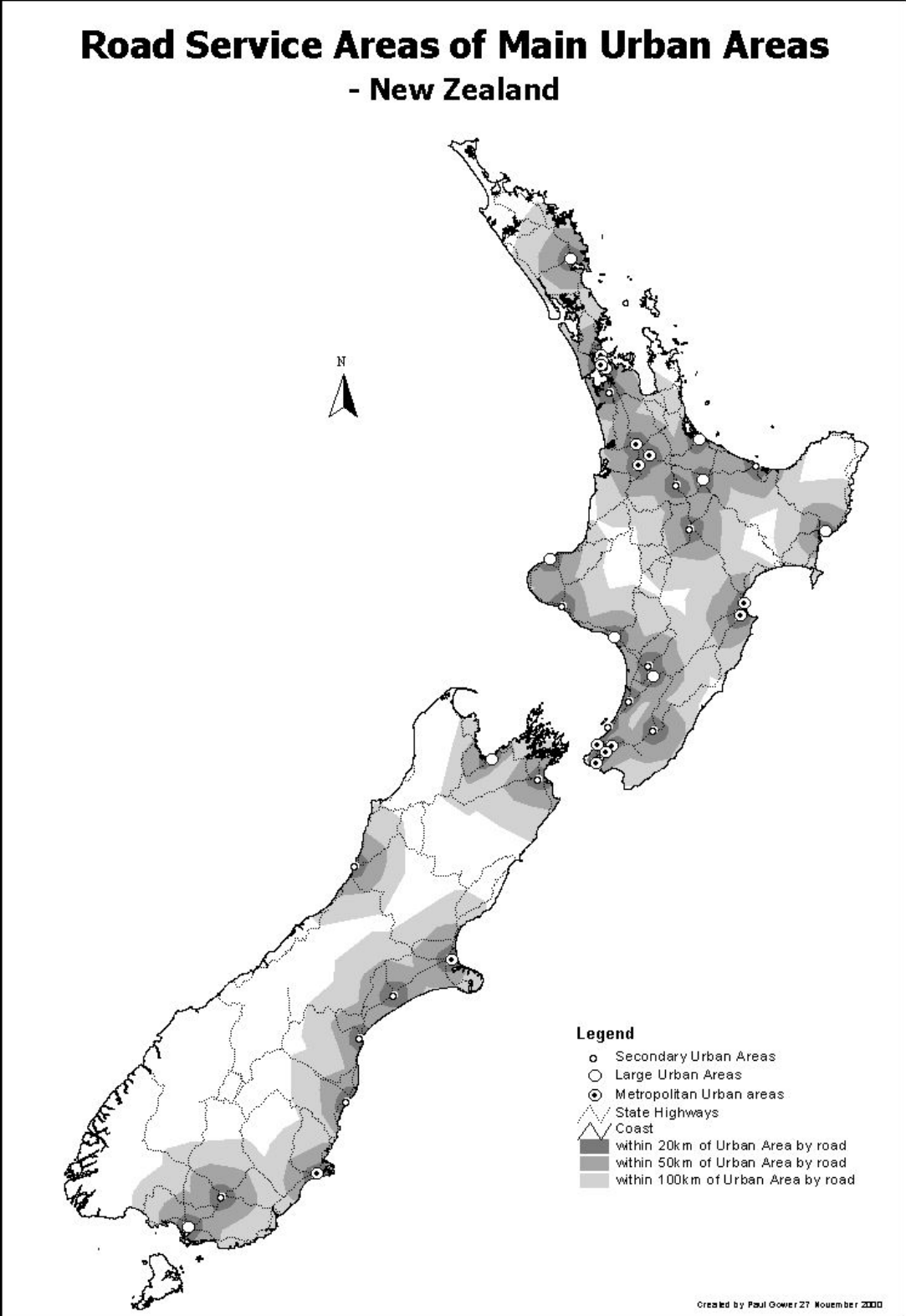
In New Zealand as a whole minor but still significant population numbers are located more than 20km from a main urban area. In these areas it still takes an effort to go shopping, particularly at short notice, and to access services especially for those living further away at more than 50km from an urban area, which is the case for half of the population in Northland and more than 40 per cent of those living in the West Coast.

For the country overall, 79 per cent of the population lives within 20km of a secondary, large or urban area, or metropolitan area (Table 10). Another 12 per cent lives between 20km and 50km from a secondary urban area and above. Another seven per cent lives between 50km and 100km with three per cent living more than 100km from a secondary urban area. People who live more than 50km from a secondary urban area have the greatest difficulties with access, a problem that affects nine per cent of the total population.

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<sup>8</sup> 1996 was taken as the reference year in this exercise.

Figure 2:



Source: This was generated in a sub-contract carried out by Lars Brabyn and funded by NDDP (FoRST), Department of Geography, University of Waikato.

As noted, the two regions which have the highest proportions of their populations outside all three distances are Northland and West Coast. For the West Coast there is only one secondary urban area which itself is small and does not have the range of services and facilities of a larger urban area. Other regions with greater than 10 per cent of the population outside 50km of a secondary urban area or above are Waikato, Gisborne, Hawke's Bay, Manawatu-Wanganui, Otago, Southland and Nelson-Tasman.

**Table 10: Percentage of Population within Selected Distances of Main Urban Areas<sup>1</sup>, by Region, 1996**

Region <sup>2</sup>	% Living less than Specified Distances from Urban Areas <sup>1</sup>		
	20km	50km	100km
Northland	38.6	49.9	81.2
Auckland	90.5	97.6	99.9
Waikato	61.0	83.9	96.8
Bay of Plenty	73.2	95.9	99.1
Gisborne	77.8	84.9	91.8
Hawke's Bay	80.7	87.0	99.3
Taranaki	74.6	98.3	99.8
Manawatu-Wanganui	73.4	86.2	95.0
Wellington	95.5	99.6	100.0
West Coast	35.0	56.6	68.3
Canterbury	81.3	95.1	98.1
Otago	67.8	74.4	85.2
Southland	68.8	88.1	96.0
Nelson-Tasman	67.5	87.7	95.0
Marlborough	73.0	94.4	98.6
<b>New Zealand</b>	<b>79.1</b>	<b>91.0</b>	<b>96.9</b>

(1) Urban areas are 'Metropolitan', 'Large' and 'Secondary' urban areas.

(2) Areas are made up of Territorial Authorities grouped up to Regional Councils. All of Franklin District is in Auckland region.

*Source:* This was generated in a sub-contract carried out by Lars Brabyn and funded by NDDP (FoRST), Department of Geography, University of Waikato.

In contrast, areas with over 90 per cent of the population within 20km of a secondary urban area or more are Auckland and Wellington, both of which contain metropolitan areas. Hawkes Bay, Canterbury and Otago, with Christchurch and Dunedin, have greater distances than Auckland, but metropolitan concentrations there are such that the vast majority of their population have easy access to services.

## 8. Conclusion

This paper has mapped a society which is highly urbanised. Moreover, there is increasing metropolitanisation, it is argued that there are negative consequences associated with one central place gaining at the expense of others. At the same time, however, the political demography of the metropolis varies and their dynamics also probably differ.

The reasons for changes in the distribution of a population over time are very complex (Pool 2002). The purpose of this paper has simply been to map these changes in terms of rural and urban categories at a Regional Council level between the years 1986 and 2001. To this end three sets of trends have been reported. The first is the "over-spill" effect most clearly seen in the Auckland Region. This effect is generally confined to areas around large urban or metropolitan places where there is a movement from the urban areas to either smaller townships or rural areas that are within commuting distance of the urban area. "Life-style" blocks, and other small land holdings, are part of this "over-spill". This is not true "ruralisation".

The second trend is true ruralisation commented on in Pool et al. (2005a). This is the movement to the "sun-belts" such as Northland, the Bay of Plenty and the northerly regions of the South Island (Nelson-Tasman and Marlborough) and the return of discouraged urban workers back to rural areas, by Māori in particular.

The third trend is counter to these, and is the most important. While rural populations increased by 11 per cent, the much larger metropolitan areas increased by 19 per cent. If extra-suburban "overspill" into adjacent so-called rural areas were added this would be even more impressive.

The net result is rapid metropolitan growth overall, growth mainly concentrated in Auckland. Other settlement types are not growing – in some regions they are declining – except where they are on the edges of metropolis. This population geography and its shifts raise major questions which will be studied in research following on from this present paper. These revolve around two themes:

- 1 This paper and others in this series have raised Core-Periphery themes – effects in terms both of peripheral geographic marginality, as in the case of East Coast, and the political-economic marginalisation seen in most regions. The concentration of population and services, businesses and industries in the more highly urbanised places in New Zealand is itself a driver of further population change.<sup>9</sup> This increases the pull effects of migration, and the movement of younger populations to main urban areas. As the migrants "pulled" into metropolis are likely to be of prime reproductive ages, this also has momentum effects in terms of replacement (Pool et al. 2005b). In turn, this raises questions to be asked in later research whether or not the trend is related to an increasing core-periphery differentiation of human capital, and growing gaps for social equity, exclusion and cohesion.
- 2 The level of urbanisation can also be seen as a proxy for detailing different levels of access to major social and economic institutions. An assumption that underpins this is that geographic space can be a barrier against accessing social institutions, goods and services. In sum, then, the population geography may play a major role in determining social capital, the subject later discussed in this set of work (Pool et al. forthcoming-a).

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<sup>9</sup> Although faster and cheaper transport has played an important role in closing the distance between rural and urban areas, it has also contributed to the changing nature of minor urban areas and rural places. Some examples of the changing nature of rural communities can be found in (Bedford et al. 1999; Joseph 1999; Joseph et al. 2004; Joseph et al. 2001). They contend that a distinction can be made between "leading" and "lagging" communities and between communities where ties are strengthening between the centres and their surrounding rural areas and areas where the settlements are becoming "decoupled" from the rural areas surrounding them.



## Appendix 1: The Groupings of Regions in Terms of Urban Areas

For the purposes of this study the population of each of the 15 regional council areas are grouped into the following five urban areas: Metropolitan, Large, Secondary and Minor Urban Areas, and Rural Centres.

The definition of each urban area is as follows:

**Metropolitan** - the main urban area areas of:

*Auckland*

North Auckland zone	Western Auckland zone
Central Auckland zone	Southern Auckland zone

*Hamilton*

Hamilton zone	Cambridge zone
Te Awamutu zone	

*Napier-Hasting*

Napier zone	Hastings zone
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*Wellington*

Upper Hutt zone	Lower Hutt zone
Porirua zone	Wellington zone

*Christchurch*

Christchurch

*Dunedin*

Dunedin

**Large Urban Areas** - all other main urban areas.

A “main urban area” is defined by Statistics New Zealand as:

“... very large non-administrative centres which are urban in character and consist of part of a city or parts of cities and/or part of a district or parts of a district. The minimum population of a main urban area is 30,000 people” (Statistics New Zealand 1997a).

**Secondary Urban Areas** - are defined by Statistics New Zealand as

“... large non-administrative centres which comprise parts of a district or districts regarded as urban in character and have a population ranging between 10,000 and 29,999” (Statistics New Zealand 1997a).

**Minor Urban Areas** - are defined by Statistics New Zealand as

“...small to medium sized non-administrative centres which comprise part of a district, are regarded as urban in character and have populations ranging between 1,000 and 9,999” (Statistics New Zealand 1997a).

**Rural Areas** - are not specifically designated as “urban”. This is a residual category. The “rural areas” definition includes rural centres. Rural centres are not examined in this study and have no legal status. They are places

“... with a population of 300 to 999 in a reasonably compact area which service their surrounding rural areas (district territory). Examples are Ruatoria and Waitoa” (Statistics New Zealand 1997a).

Note: Regions which change their administrative status inter-censally do not get corrected straight away by Statistics New Zealand. In this paper we used the area that Statistics New Zealand assigned to such units.

The application of these definitions in terms of Regional Council areas are as follows:

**Northland Regional Council:**

<i>Metropolitan</i>	0		
<i>Large</i>	1	Whangarei	
<i>Secondary</i>	0		
<i>Minor</i>	9		
	Dargaville	Kawakawa	Paihia
	Kaikohe	Kerikeri	Russell
	Kaitaia	Moerewa	Taipa Bay-Mangonui

**Auckland Regional Council**

<i>Metropolitan</i>	4		
	Northern Auckland Zone		Western Auckland Zone
	Central Auckland Zone		Southern Auckland Zone
<i>Large</i>	0		
<i>Secondary</i> -	1	Pukekohe (part)	
<i>Minor</i>	6		
	Helensville	Waiheke Island	Warkworth
	Snells Beach	Waiuku (part)	Wellsford

**Waikato Regional Council**

<i>Metropolitan</i>	3		
	Cambridge Zone	Hamilton Zone	Te Awamutu Zone
<i>Large</i>	0		
<i>Secondary</i>	3		
	Pukekohe (only small part)	Taupo	Tokoroa
<i>Minor</i>	19		
	Coromandel	Pauanui Beach	Turangi
	Huntly	Putaruru	Waihi
	Mangakino	Raglan	Waiuku (part)
	Matamata	Tairua	Whangamata
	Morrinsville	Te Aroha	Whitianga
	Otorohanga	Te Kuiti	
	Paeroa	Thames	

**Bay of Plenty Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	2	Tauranga	Rotorua
<i>Secondary</i>	1	Whakatane	
<i>Minor</i>	7		
	Edgecumbe Community	Murupara	Waihi Beach
	Kawerau	Opotiki	
	Katikati Community	Te Puke Community	

**Gisborne Regional Council**

<i>Metropolitan</i>	0	
<i>Large</i>	1	Gisborne
<i>Secondary</i>	0	
<i>Minor</i>	0	

**Hawke's Bay Regional Council**

<i>Metropolitan</i>	2	Napier Zone	Hastings Zone
<i>Large</i>	0		
<i>Secondary</i>	0		
<i>Minor</i>	3		
Waipawa		Waipukurau	Wairoa

**Taranaki Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	1	New Plymouth	
<i>Secondary</i>	1	Hawera	
<i>Minor</i>	7		
Eltham		Opunake	Waitara
Inglewood		Patea	
Manaia		Stratford	

**Manawatu-Wanganui Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	2	Wanganui	Palmerston North
<i>Secondary</i>	2	Feilding	Levin
<i>Minor</i>	12		
Bulls		Ohakune	Taihape
Dannevirke		Pahiatua	Taumarunui
Foxton Community		Raetihi	Waiouru
Marton		Shannon	Woodville

**Wellington Regional Council**

<i>Metropolitan</i>	4		
Porirua Zone		Upper Hutt Zone	Wellington Zone
Lower Hutt Zone			
<i>Large</i>	0		
<i>Secondary</i>	2	Kapiti <sup>10</sup>	Masterton
<i>Minor</i>	5		
Carterton		Greytown	Otaki
Featherstone		Martinborough	

**West Coast Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	0		
<i>Secondary</i>	1	Greymouth	
<i>Minor</i>	3		
Hokitika		Reefton	Westport

<sup>10</sup> Kapiti's classification changed to large urban area in 2001, though included in secondary urban area for this analysis.

**Canterbury Regional Council**

<i>Metropolitan</i>	1	Christchurch	
<i>Large</i>	0		
<i>Secondary</i>	2	Ashburton	Timaru
<i>Minor<sup>11</sup></i>	13		
		Darfield	Lincoln
		Geraldine	Oxford
		Hamner Springs	Pleasant Point
		Kaikoura	Rangiora
		Leeston	Temuka
			Twizel Community
			Waimate
			Woodend

**Otago Regional Council**

<i>Metropolitan</i>	1	Dunedin	
<i>Large</i>	0		
<i>Secondary</i>	1	Oamaru	
<i>Minor</i>	7		
		Alexandra	Cromwell
		Arrowtown	Milton
		Balclutha	Queenstown
			Wanaka

**Southland Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	1	Invercargill	
<i>Secondary</i>	1	Gore	
<i>Minor</i>	4		
		Bluff	Te Anau
		Riverton	Winton

**Nelson-Tasman Regional Councils**

<i>Metropolitan</i>	0		
<i>Large</i>	1	Nelson	
<i>Secondary</i>	0		
<i>Minor</i>	4		
		Brightwater	Takaka
		Motueka	Wakefield

**Marlborough Regional Council**

<i>Metropolitan</i>	0		
<i>Large</i>	0		
<i>Secondary</i>	1	Blenheim	
<i>Minor</i>	1	Picton	

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<sup>11</sup> Rolleston became a minor urban area in 2001, though included in rural for this analysis.

**Appendix Table 1: Percentage Distribution of the Age Group within Metropolitan, Urban and Rural Areas, New Zealand, 1986 and 2001**

Age Group (years)	Metropolitan	Urban Areas			Rural	Total
		Large	Secondary	Minor		
<b>1986</b>						
Under 15	22.9	24.0	24.5	26.0	28.9	<b>24.4</b>
15-24	18.7	18.2	16.4	16.1	16.1	<b>17.9</b>
25-44	29.5	27.6	26.9	26.7	30.6	<b>28.9</b>
45-64	18.3	18.3	19.0	18.7	17.8	<b>18.3</b>
65-74	6.3	7.2	8.0	7.8	4.5	<b>6.4</b>
75+	4.2	4.7	5.2	4.7	2.1	<b>4.0</b>
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	<b>100.0</b>
<b>2001</b>						
Under 15	22.0	22.7	22.5	23.2	25.2	<b>22.7</b>
15-24	15.0	13.4	11.1	11.2	10.4	<b>13.5</b>
25-44	31.2	27.7	26.5	26.2	29.2	<b>29.7</b>
45-64	21.0	21.6	22.7	22.7	25.9	<b>22.1</b>
65-74	5.8	7.6	9.0	9.3	6.2	<b>6.6</b>
75+	5.1	7.0	8.2	7.5	3.1	<b>5.5</b>
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	<b>100.0</b>

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