

Mapping Trends in the Auckland Region

Ethnicity

Commentary

Overview

Auckland is home to people who identify with many ethnic groups. Those identifying with a Pacific ethnicity have the highest tendency to live near people of the same ethnic group. In 1991, 76 percent of the Auckland region's population identified with the 'European or other' ethnic group (which includes New Zealand European and 'New Zealander'), but by 2006 this had decreased to 64 percent.

Mapping ethnicity

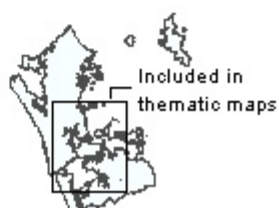
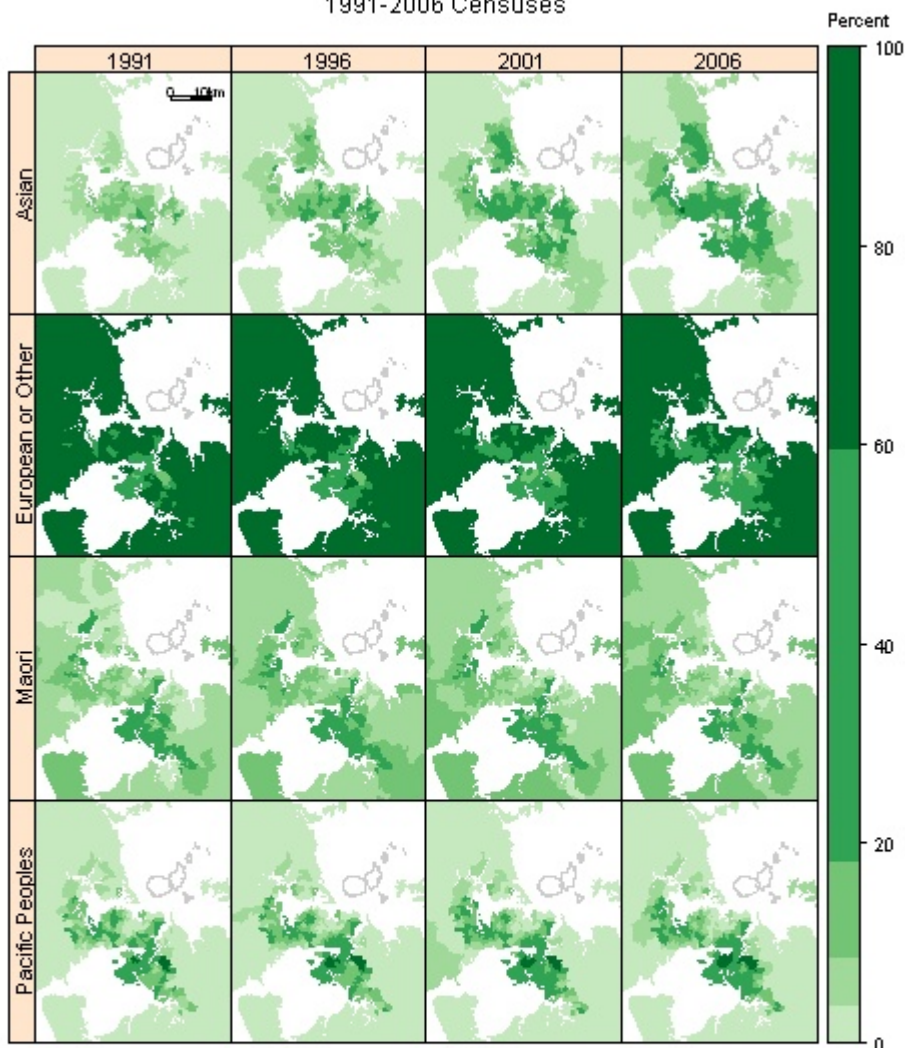
Figure 5.1 shows the percentage of the population identifying with the four broad ethnic groups, from the 1991 to 2006 Censuses. Ethnicity is defined as the ethnic group or groups that people identify with or feel they belong to. It is self-perceived, and people can belong to more than one ethnic group. Ethnicity is primarily a measure of cultural affiliation, although it is influenced by other factors such as language, ancestry, and national identity.

Ethnic group are listed on the left-hand side of the maps. Each panel of maps uses the same scale (right-hand side). The dark green colour on the maps shows where a higher percentage of people identify with the ethnic group.

The 'European or other' ethnic group includes people identifying as New Zealand European (which is included in European) and/or 'New Zealander' (which is included in 'other'). The remainder of this chapter will refer to the 'European or other' ethnic group as 'European'. More information about this group is in the [Notes and sources](#) section.

Figure 5.1

Percentage of Population in Each Ethnic Group
Auckland region
1991-2006 Censuses



Note: More information about interpreting the maps is in the [Interpreting the maps](#) chapter.



Downloadable version of figure 5.1 (PDF, 10.4MB)

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Distribution of ethnic groups in Auckland region

People stating a European ethnicity were the largest ethnic group in most areas over the 1991–2006 period. The maps show that Rodney and Franklin districts both had higher proportions of Europeans than did other territorial authority areas (93 percent and 85 percent, respectively) in 2006.

The highest proportions of people identifying with the Māori ethnic group were in Papakura district (27 percent of the total population in 2006) and Manukau city (15 percent). See figure 5.1 for the area units where higher proportions of Māori live.

Manukau city, and southern parts of Auckland city, had higher proportions of Pacific people than other parts of the Auckland region, and these patterns have been consistent over the whole time period.

The Asian ethnic group has been growing as a percentage of the total population. For the Auckland region as a whole, the percentage of people identifying with an Asian ethnicity increased from 6 percent to 19 percent between 1991 and 2006. Growth in this ethnic group over the 1991–2006 period has mostly been in the Auckland region's four cities (North Shore, Waitakere, Auckland, and Manukau).

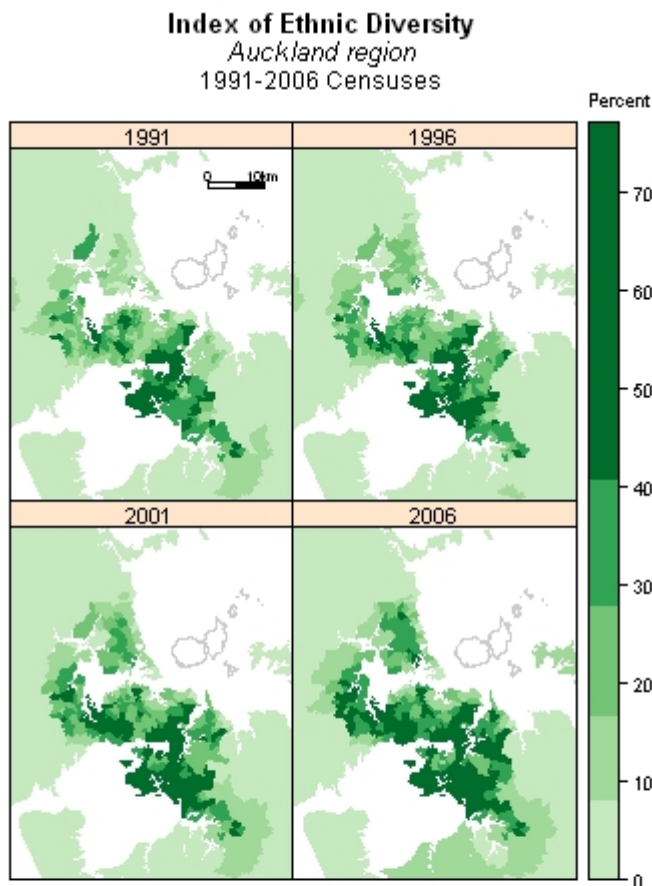
Living near people of the same ethnicity

The geographical distribution of ethnic groups can be further analysed by looking at the extent to which different ethnic groups live near people of the same ethnicity. This can be quantified for each ethnic group (see [Notes and sources](#) section for more detail). Results show that Pacific people have the greatest tendency to live near people of the same ethnicity. The European ethnic group had the second-highest level, ahead of both Māori and Asian. Over time, the Asian ethnic group has displayed an increasing trend towards living near people of the same ethnicity.

Mapping ethnic diversity

One way of measuring an area's ethnic diversity is if no single ethnic group accounts for a large proportion of the population. Figure 5.2 shows an index of ethnic diversity based on this criterion. Darker shades indicate greater diversity. The derivation of the index is described in the [Notes and sources](#) section.

Figure 5.2



The index of ethnic diversity shown in Figure 5.2 is calculated as follows. For each area unit,

- (1) calculate the percent of people identifying with the broad Asian, European or other, Māori, and Pacific peoples ethnicities
- (2) choose the highest percent
- (3) set the index equal to 100 minus this number. More information about the index can be found in the [Notes and sources](#) section.

More information about interpreting the maps can be found in the [Interpreting the maps](#) chapter.



[Downloadable version of figure 5.2 \(PDF, 3.9MB\)](#)

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Changes in diversity

European is the largest ethnic group in New Zealand society, but over time it has become less dominant. The increasing number of people identifying with ethnic groups other than European – particularly the Asian, Pacific, and Māori ethnic groups – as well as the increasing number of people who identify with more than one ethnicity, is an indication that the Auckland region is becoming more ethnically diverse. This is shown in figure 5.2, as the maps generally become darker from 1991 to 2006.

In 1991, Rodney district and North Shore city were the least diverse areas. These areas were more than 90 percent European. By 2006 both areas had become more diverse but the European ethnic group still dominated. However, migration of Asian people into parts of North Shore city has meant that in these parts the European ethnic group is now below 60 percent.

In 1991, Otahuhu and Mangere were the most diverse areas in the Auckland region. European and Pacific people were the dominant ethnicities, but there were also significant numbers of Māori and Asian people. By 2006, large parts of Auckland and Manukau cities had become very diverse, mainly due to an influx of Asian people and to a lesser extent Pacific people. The most diverse areas in 2006 have the European ethnic group making up 35 percent of the total population.

Papatoetoe has seen the biggest change in ethnic makeup between 1991 and 2006. In 1991, Papatoetoe was just under 80 percent European, but by 2006 this proportion was just over 40 percent. In 2006, Asian and Pacific people together made up just over 50 percent of Papatoetoe's population.

The European ethnic group is the largest percentage of the population in Rodney district, North Shore city, Waitakere city (except for Lynn mall which has a high proportion of Asian people), Papakura district, and Franklin district. Auckland and Manukau cities have areas where the European, Pacific, or Asian ethnic groups have the largest population. There are no areas within the Auckland region where Māori has the largest ethnic population.

The Auckland region has high concentrations of ethnic populations, but it should also be noted that there are interactions between these ethnic groups. There are areas within Auckland and Manukau cities which are highly diverse, due to having different ethnic groups living near one another. The dynamics of interactions between the ethnic groups, for example multiple ethnicity and ethnic intermarriage, will continue to contribute to the growing diversity of the Auckland region.

Diversity and language skills

The language skills of different ethnic groups are an indicator of diversity, and a benefit of immigration. In the 2006 Census, 14 percent of Asians reported they could speak three or more languages. These multilingual abilities were approximately five times greater than for the New Zealand population as a whole (Friesen, 2008). Given that two-thirds of New Zealand's Asian people live in the Auckland region, the benefits of multilingual abilities may be greater there than elsewhere.

Implications

There are a number of implications about the Auckland region's ethnic makeup:

- It will be necessary to ensure different groups have access to adequate services, and where there are specific needs, that these are catered for. For example, people of Pacific ethnicities tend to live in larger families, which has implications for housing needs and accommodation in Manukau city.
- Ethnic diversity brings benefits, such as multilingual abilities. Diversity has had other influences too, for example the growth of ethnic festivals, retail and food enterprises, and various religious institutions (Auckland Regional Council, 2007). As the region's ethnic diversity continues to increase, so will the benefits that diversity brings.
- Some areas of the Auckland region have had substantial change in their ethnic composition and therefore their age-sex structure. Ethnic groups have different age-sex structures; for example Māori and Pacific populations tend to be younger in comparison with European and Asian populations. These differences are likely to affect the composition of the future labour force.
- When Asian and Pacific people migrate to New Zealand they generally settle in the cities. This would imply that the Auckland region's four cities are likely to become even more diverse in the future. However, if migrants move to areas where there are already significant numbers of people of similar ethnicity, there is the possibility that areas may become less diverse, with one ethnic group dominating.

Related chapters

- [Population change](#)
- [Population density](#)
- [Population mobility](#)

Further information

This page is part of [Mapping Trends in the Auckland Region](#), available on www.stats.govt.nz.

Notes and sources

Definitions

The 'European or other' ethnic group includes people who belong to the 'European' or 'other ethnicity' groups defined in level 1 of the Standard Classification of Ethnicity 2005. If a person belongs to both the European and the 'other ethnicity' groups they have only been counted once in that grouping. Almost all people in the 'other ethnicity' group belong to the 'New Zealander' subgroup.

Data sources

The historical data are based on the census usually resident population count from the 1991, 1996, 2001, and 2006 Censuses.

The maps display data at area unit level. Area units are non-administrative areas that are in between meshblocks and territorial authorities. They generally coincide with suburbs (in urban areas) and rural neighbourhoods. The Auckland region is made up of 399 area units, while there are 1,927 area units throughout New Zealand. Digital boundary files, used for constructing the maps, can be downloaded from Digital Boundaries, available on www.stats.govt.nz.

The Auckland region is one of 16 regions, which are aggregations of area units governed by regional councils. More information about the geographical hierarchy and the maps is in the Interpreting the maps chapter.

An index of ethnic diversity

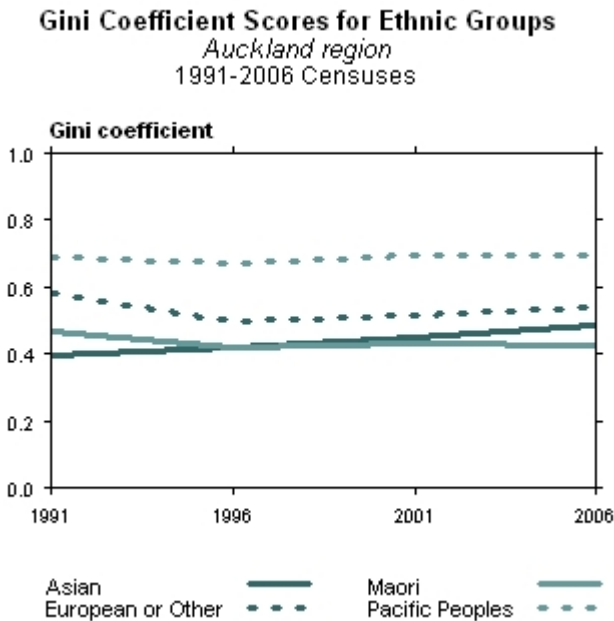
The index of ethnic diversity shown in figure 5.2 is calculated as follows. For each area unit: calculate the percentage of people identifying with the broad Asian, European or other, Māori, and Pacific ethnicities; choose the highest percentage; and set the index equal to 100 minus this percentage. The highest percentage measures the extent to which a single ethnic group dominates within the area unit, or whether instead there is a mix of ethnic groups. Subtracting from 100 is necessary so that area units with more ethnic diversity score higher on the index.

Quantifying ethnic distribution

While the maps show the overall pattern of ethnic distribution over time, quantifying the pattern is useful in order to compare the ethnic groups more directly. The Gini coefficient is one way of doing this. It measures distribution across space and shows to what extent people in each ethnic group live near people of the same ethnic group. It ranges between 0 and 1. A score of 0 indicates perfect equality (all area units have the same proportion of people), while 1 indicates perfect inequality.

Figure 5.3 shows the Gini coefficient scores for the four broad ethnic groups.

Figure 5.3



Across the Auckland region, the Pacific ethnic group had the highest coefficient scores between 1991 and 2006 (0.7 for each year), indicating that Pacific people have the greatest tendency to live near people of the same ethnic group. The European ethnic group had the second-highest score, with a coefficient of between 0.5 and 0.6 over the same period. Over time, people in the Asian ethnic group have displayed an increasing trend towards living near other Asian people.

A statistical analysis of local spatial clustering (the local index of spatial autocorrelation) reveals that the European ethnic group has significant geographic clusters in the outer territorial authorities (Rodney and Franklin districts). Area units in these territorial authorities with high percentages of European people tend to be clustered near other, similar area units. These two territorial authorities have low numbers of people with Pacific and Asian ethnicities.

References and further reading

References

Auckland Regional Council (2007), Immigration and Ethnicity in the Auckland Region Auckland Regional Council, 2006 Census series.

Friesen, W (2008). Diverse Auckland: The face of New Zealand in the 21st century? Asia:NZ Foundation Outlook Series, edition 6.

Further reading

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Moran, P A P (1950). Notes on continuous stochastic phenomena. *Biometrika*, 37, 17–23.

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