

AUCKLAND'S POPULATION

BRIEFING PAPER PREPARED FOR

THE ROYAL COMMISSION ON AUCKLAND GOVERNANCE

CITYSCOPE CONSULTANTS

AUCKLAND

APRIL 2008

AUCKLAND'S POPULATION

BRIEFING PAPER PREPARED FOR THE ROYAL COMMISSION ON AUCKLAND GOVERNANCE

PHILIP McDERMOTT

CITYSCOPE CONSULTANTS, AUCKLAND, MARCH 2008

THE INFORMATION IN THIS REPORT IS PRESENTED IN GOOD FAITH USING THE BEST INFORMATION AVAILABLE TO US AT THE TIME OF PREPARATION. IT IS PROVIDED ON THE BASIS THAT CITYSCOPE CONSULTANTS LTD AND ITS ASSOCIATES ARE NOT LIABLE TO ANY PERSON OR ORGANISATION FOR ANY DAMAGE OR LOSS WHICH MAY OCCUR IN RELATION TO THAT PERSON OR ORGANISATION TAKING OR NOT TAKING ACTION (AS THE CASE MAY BE) IN RESPECT OF ANY STATEMENT, INFORMATION, OR ADVICE CONVEYED WITHIN THIS REPORT.

CONTENTS

Summary	i
1 Introduction	1
2 Growth Expectations	1
3 The Recent Record	2
4 The Latest Projections	3
5 Forecasting Contingencies	4
6 Internal Migration	5
7 International Migration	6
8 Immigration and Ethnic Diversity	10
9 The Implications of Diversity	11
10 The Implications of Ageing	13
11 Slower Labour Force Growth	15
12 Changing Population Distribution	17
13 Housing Need	19
14 From Need to Demand	21
15 Housing Affordability	22
16 Conclusion	24
Acknowledgements	24
References	24

TABLES

Table 1:	50 Year Demographic Projections for Auckland	2
Table 2:	Population Growth, 2001-2007	3
Table 3:	Residents Born Overseas, 2001 and 2006	11
Table 4:	Ethnic Composition of Auckland Population, 2006	12
Table 5:	Council Population Projections 2006-2031	17
Table 6:	Projected Additional Households, 2006-2031	20

FIGURES

Figure 1:	Net Five Yearly Population Movements, Auckland Region and the Rest of New Zealand, 1981-2006	6
Figure 2:	Net International Migration, New Zealand 1981-2006	7
Figure 3:	Immigration to Australia, Canada & New Zealand 1981-2006	8
Figure 4:	Regional Growth by Age Group, 1991-2006	14
Figure 5:	Projected Growth by Age Group, High Projection 2006-2031	15
Figure 6:	Labour Force Growth and Dependency, 2006-2031	16
Figure 7:	Components of Population Change; Auckland Local Councils 2001-2006	18

Summary

This paper has been prepared to background population issues for the Royal Commission on Auckland Governance. The Commission's Terms of Reference require it to consider "the current and future well-being of the region and its communities" as it reviews local government arrangements to help the region deal with "global challenges and local trends", the latter including "high population growth".

The paper draws on 2006 Census data from Statistics New Zealand (SNZ). It also makes use of SNZ's recent subnational population projections, and various reports on Auckland's demography. It sets out some basic population parameters, both at regional level and for the region's individual territorial local authorities (TLAs, or local councils).

The paper documents the high rate of recent population growth, the substantial contribution of international immigration to this growth, particularly over the past five years, and changes in the internal distribution of population. It demonstrates growing diversity through reference to the expanding size and significance of different ethnic groups. It also highlights the likely impact of population ageing, especially on the labour and housing markets.

Among the conclusions, the following stand out:

- Auckland grew by 12.7% in the five years to June 2006, an additional 156,300 people taking the population to 1,387,800. The rest of New Zealand grew by 147,700 or 5.6%. Auckland accounts for one third of the national population.
- Auckland will continue to dominate national growth, with the prospect of 2 million residents before 2040. The SNZ *high* projection is for growth of 726,500 from 2006 to 2031 (53% growth), to 2,097,000 people in 2031. This compares with a gain of 550,000 (67%) over the 25 years to 2006.
- The medium projection suggests growth of 561,000 to 1,932,000 people in 2031 (41% growth). The low projection would see a gain of nearly 400,000 people in the 25 years to 2031, for a population of 1,770,800 (22% growth).
- Growth will be driven disproportionately by minority ethnic groups, especially Asian and Pacific Island peoples. This will result from future migration gains and the younger age structure of currently resident populations. This will increase Auckland's already distinctive ethnic, cultural, socio-economic and geographic diversity. By way of illustration, the medium population projections for different

ethnic groups suggest that by 2016 Asian peoples could account for as many as 25% of Auckland residents, compared with 55% of European ethnicity.

- Between 2001 and 2006 gains from international migration accounted for two thirds of Auckland's growth. Historically, this was exceptional. Nevertheless, future migration gains assumed by SNZ account for 44% of its high projection, 37% of the medium projection, and 22% of the low projection.
- Planning for growth heavily dependent on migration carries risk. Increasing international competition is a threat, especially for skilled and semi-skilled people. This may be driven by a growing gap between New Zealand wages and conditions compared with alternative destinations. Any reduction in Auckland's attractiveness would slow gains or reduce retention rates (as overseas migrants move on or return home). It would also increase the loss of young Aucklanders.
- The possibility of a population slow-down raises risks that need to be factored into decisions about the land, infrastructure, and services required to cater for growth. They include the risk that failure to provide services and facilities of appropriate standards will discourage immigration and investment. The consequences might be slower income growth, a relative reduction in living standards, poorly performing infrastructure, and a failure to meet expectations for Auckland to perform as the engine of national growth.
- Population growth is also difficult to predict among councils, as it varies significantly. It is likely to continue to do so as residential preferences become more differentiated with ageing and ethnic diversity. This is evident in a combination of household downsizing and relatively slower growth in and around Auckland City compared with relatively high growth in the north and south of the urban area.
- Under all assumptions, the number of residents in the region will expand more rapidly than the labour force. On the basis of estimates using the SNZ high projection, for example, the labour force could grow by 44% over the 25 years to 2031 while population grows by 53%. This will increase "dependency": for every 100 people in the labour force 1996, there were 95 outside it – too young, too old, or not working. In 25 year's time, the ratio will have reversed. For every 100 people in the labour force then, there could be 108 who do not work under the high projection assumptions. Dependency will be greater under the assumptions

of the medium and low projections: with perhaps 114 and 120 respectively outside the labour force for every 100 within it in 2031.

- The growth of the labour force is the supply side of the labour market equation, with demand the other. Already strong, sustained economic performance has boosted the demand for labour almost to the limits of supply. With unemployment at a long-time low, labour and skill shortages are placing pressure on employers. Consequently, boosting skilled migrants into the region (including Aucklanders returning from overseas) is an economic priority.
- Even as it slows down labour force growth, ageing will see demand for new dwellings grow more rapidly than population numbers as average household size contracts. Under the high population projection, there would be a need for an additional 324,500 additional houses by 2031, a 73% addition to the current occupied housing stock, compared with the projected population growth of 53%. The medium projection would see a need for another 271,000 dwellings to accommodate the region's additional households over the 25 years, a 61% increase compared with projected population growth of 41%. Under the low projection assumptions, there would still be need demand for an additional 219,800 dwellings, 49% more than the 2006 stock.
- Housing is a key issue, both in terms of accommodating growth and in terms of maintaining an attractive environment to potential migrants – both overseas arrivals (immigrants) and possible departures (emigrants). Housing is proving something of a bottleneck for the region at present, and looks set to continue this way in the future in terms of availability, affordability and choice.

It is possible to project the sorts of demographic outcomes outlined in this paper on the basis of reasonable assumptions. Nevertheless, modest variations among even reasonable assumptions can lead to quite different outcomes, as illustrated. Changes in conditions within and outside the region mean that the reality is highly likely to depart from that predicted by any particular set of assumptions. Finding ways to deal with the resulting uncertainty over the rate, composition and distribution of growth and the not-always-predictable needs of diverse communities adds complexity to the challenge of managing a large and expanding city Auckland region.

The implication is that the agencies responsible for planning for Auckland's population cannot do so without due regard for the inter-related nature of demographic growth, economic expansion, land use, and infrastructure.

1 Introduction

1. Two themes traditionally dominate thinking about Auckland Region's population – coping with long term growth and increasing diversity. A third, emerging theme revolves around the consequences of changing geographic distribution. This involves two divergent movements: one towards a greater concentration in established centres and corridors and the other towards decentralisation.
2. Jointly, these themes inform planning for infrastructure and land use, particularly as they drive and shape demand for housing, employment and related services.
3. This paper introduces a further theme, that of uncertainty and risk. This is based in part on Auckland's dependence on overseas arrivals as a source of population growth (international migration accounted for around two thirds of the gain between 2001 and 2006, although this was unprecedented in recent history) and the difficulty of predicting those trends. Uncertainty is also influenced by changes that take place in residential needs and preferences within an increasingly diverse population.
4. Whatever the level, composition, and distribution of growth, Auckland along with the rest of New Zealand faces the consequences of population ageing. These include changes in the nature of demand for new dwellings, the slowing growth of the labour force, and increasing dependency (more people outside the labour force).
5. These population changes present challenges to the Auckland economy over and above those associated with simply accommodating growth. Sustaining competitive development will mean creating and maintaining conditions that attract and retain a skilled and motivated labour force, and support productivity growth. At the same time, growth will pose environmental management and community development challenges which, if not addressed successfully, could themselves frustrate Auckland's progress.

2 Growth Expectations

6. The Regional Growth Forum predicted that Auckland's population would reach 2 million by 2050 (ARC, 1999). This growth expectation underlies the planning and infrastructure issues that face Auckland and was the starting point for the

growth management policies development by the Forum. Subsequently, as part of the Auckland Sustainability Framework project, population prospects were revisited (ARC, 2006). It was concluded that an additional 736,000 residents was the “most likely” outcome for the region by 2050 (Table 1).

Table 1: 50 Year Demographic Projections for Auckland

Population	2005	2050	Growth	
			Number	%
Auckland	1,337,000	2,073,448	736,448	55%
New Zealand	4,098,300	5,050,000	951,700	23%
Auckland Share	33%	41%	77%	

Source: *Forces Shaping the 21st Century: Demographics*, ARC 2006

7. If this projection becomes a reality, Auckland would account for 41% of New Zealand’s population by mid-century and 77% of its growth between 2005 and 2050 (Table 1). This compares with around 33% of New Zealand’s population today and 51% of growth between 2001 and 2006. The expectation, then, is for Auckland to become even more dominant within New Zealand.

3 The Recent Record

8. According to Statistics New Zealand’s (SNZ) most recent subnational population estimates (June 2007) Auckland Region’s population was estimated 1,387,800 people in June 2006, having grown by 156,300 or 12.7% over the preceding five years.¹ The rest of New Zealand grew by less, 147,800 or 5.6%, although there were areas that grew faster than Auckland. These included places with lifestyle appeal, such as Queenstown-Lakes, Selwyn, Waimakariri and Central Otago in the South Island and Tauranga in the North.
9. Growth eased in the year to June 2007, back seven points from an annual rate of 2.4% for the region for the five years to 2006, to 1.7%; and back four points for the rest of New Zealand, from 1.1% per year to 0.7%.

¹ The June figures used by Statistics New Zealand to track and project sub-national population are adjusted to take account of under-enumeration in the Census counts.

10. Growth rates were uneven within Auckland (Table 2).² The growing importance of residential choice based on lifestyles was reflected in Rodney, with its coastal and country living, growing at 3.3% per year from 2001 to 2006, and 2.4% in 2007. Manukau also grew rapidly (3.1% per year from 2001 to 2006, and 2.2% in 2007). Auckland City was the slowest growing council (2.0% and 1.2%).

Table 2: Population Growth, 2001-2007

	Population at June			Annual Change 2001-06		Change 2006-07	
	2001	2006 ^R	2007 ^P	Number	%	Number	%
Rodney	78,500	92,400	94,700	2,780	3.3	2,220	2.4
North Shore	194,200	216,900	220,300	4,540	2.2	3,380	1.6
Waitakere	176,200	195,300	198,400	3,820	2.1	3,090	1.6
Auckland	388,800	428,300	433,200	7,910	2.0	4,930	1.2
Manukau	298,200	347,100	354,700	9,780	3.1	7,610	2.2
Papakura	42,300	46,900	47,700	920	2.1	810	1.7
Franklin	53,300	60,900	62,200	1,520	2.7	1,320	2.2
Region ¹	1,231,500	1,387,800	1,411,200	31,270	2.4	23,360	1.7
Rest NZ	2,649,000	2,796,800	2,816,800	29,560	1.1	20,040	0.7

Notes: % Annual Change 2001-06 is compound growth rate

R: Revised; P Provisional

1: Total includes that part of Franklin in Waikato region

Source: Statistics New Zealand

11. Auckland City still accounted for a quarter of regional growth between 2001 and 2006, although Manukau City accounted for more, at 31%. This differential increased in 2007, with Manukau City accounting for close to one third of the region's population gain, Auckland for 21%, the outer councils, Rodney (9.5%), Papakura (3.5%) and Franklin (5.7%) jointly accounted for 18.7% of the region's growth in 2007, up from 16.7% between 2001 and 2006. The implication is that differential population growth rates within the region are contributing to a degree of residential decentralisation.

4 The Latest Projections

12. In December 2007 SNZ issued its latest sub-regional population projections, out to 2031. They reflect specific assumptions about birth and death rates and net levels of migration, updated using 2006 Census results.

² Part of Franklin falls into Environment Waikato for resource management purposes. However, its total population is included here, which means that the sum of the local councils in 2006 was 16,800 (1%) more than the Auckland Region population.

13. The high projection suggests that Auckland's population could grow by 53% from 2006 to 2031, to reach 2,097,500 people. Some 56% of growth would come from natural increase (expected births less deaths) and a lesser, but still substantial share (44%) from net migration. This is a gain from an excess of long-term arrivals (immigrants) over long term departures (emigrants) of 320,300 people, an average of 12,800 per year.
14. The resulting growth compares with just 18% projected growth across the rest of New Zealand. If they prove accurate, these projections mean that in 25 years Auckland would account for 39% of the country's population.
15. The medium projection suggests that Auckland Region could growth by 41% from 2006 to 2031, to 1,932,300 people. This would be 38% of the national population. Natural increase would account for 63% of Auckland's growth and net migration for 37% of growth (204,900 people, or 8,200 a year).
16. The low projection assumes much lower migration. As a result, some 78% of projected growth is attributable to natural increase, leaving just 22% from migration (89,500 or around 3,600 a year). Under these circumstances, there would be a 22% population gain by 2031, for a total regional population of 1,770,800. The region would account for 37% of the national population.
17. On the basis of recent evidence and in light of initiatives to promote Auckland on the global stage, the medium if not the high projection may be considered the most likely and the low projection the least likely. A failure to plan adequately for growth could see a shift towards the low projection, however.
18. While no specific outcome can be assured, the revised medium growth projection seems to support those used for the Growth Strategy in 1998, the Auckland Sustainability Project (ARC 2006), and the recent evaluation of the Growth Strategy (ARC, 2007a). If anything, they suggest the Forum's projections are conservative, with the 2 million mark a strong possibility before 2041.

5 Forecasting Contingencies

19. Moving from mechanical population projections to forecast the most likely outcome is a major challenge for councils and other investors concerned with infrastructure, services and land use. The tendency is to adopt one or other of

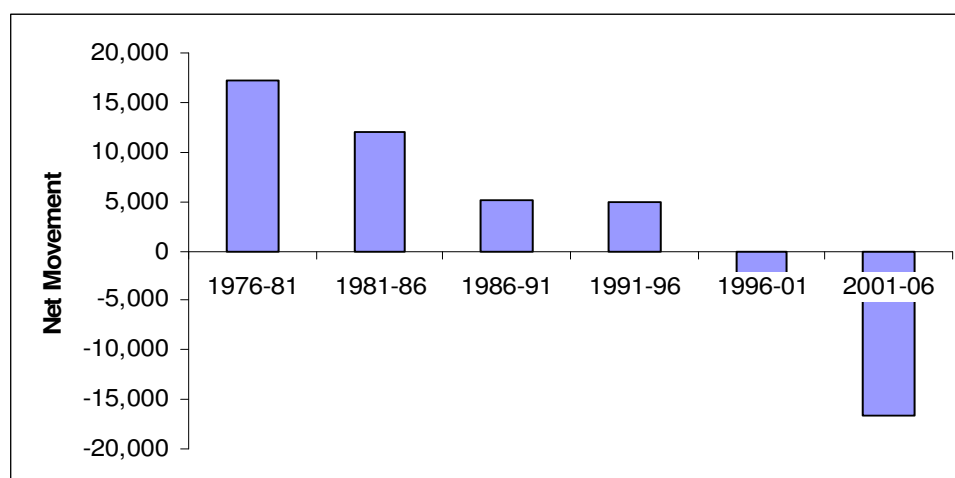
the SNZ projections as the basis for planning (usually the medium projection), perhaps modified to take account of short-term deviations. Planning in this manner does not necessarily factor in risk – specifically, the consequences of changes from predicted outcomes on infrastructure and land use. Under- or over-provision of infrastructure as a result of strict adherence to what turn out to be inaccurate forecasts imposes costs on the community. Under-provision may lead to capacity bottlenecks and congestion; over-provision to wasted resources.

20. Differences among the views of councils and others involved in the supply of land use and infrastructure about long term population trends contribute to differing views of planning needs. For example, population pressures experienced by Manukau City influence that council's views of the Regional Growth Strategy and the impact of constraints imposed by the Metropolitan Urban Limits. This is evident in appeals by Manukau City (and others) against the decisions of the Panel which in 2007 heard submissions on the reviewed Regional Policy Statement (Policy Change 6).

6 Internal Migration

21. Migration will play a large part in shaping Auckland's future population. For example, the difference between the SNZ medium and high 2031 projections is 165,200 people. Variations in the migration assumptions account for 70% of this difference, indicating the uncertainty introduced to projections and plans by what might happen to inward and outward migration movements.
22. The reversal of internal migration between 1996 and 2001, with Auckland losing more people than it gained from the rest of New Zealand (around 2,240), may have been a significant turning point in internal migration (Figure 1), even though the numbers were small. Figures from 1919 to 2003 published in ARC (2006) indicate minor net losses for three years during the depression, during and immediately after World War II, 1979, 1980 and 1982. A five year net loss was virtually unprecedented over the 80 years depicted.
23. This turn-around was reinforced by a greater regional loss between 2001 and 2006 (16,660). Coupled with growing gains within adjoining Northland and Waikato, increasing employment growth outside Auckland, and the emergence of residential lifestyle destinations in the South Island, this may be evidence of a new, long-term trend.

Figure 1: Net Five Yearly Population Movements, Auckland Region and the Rest of New Zealand, 1981-2006



Source: Pool I, Baxendine S, Cochrane B (2005) and calculated, 2006 Census, Statistics New Zealand

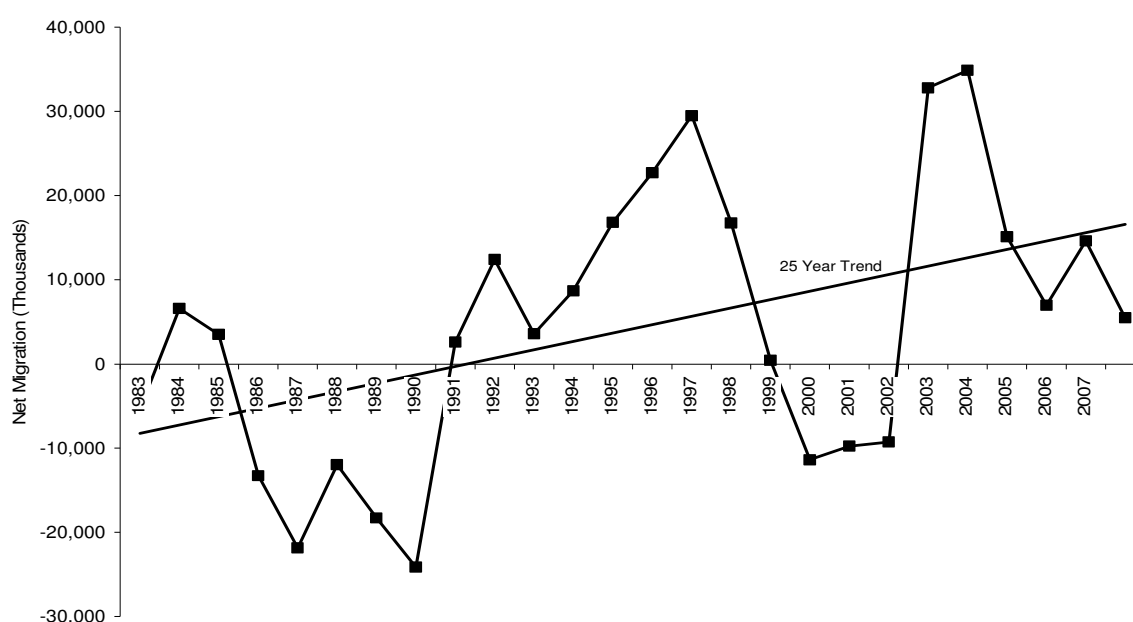
7 International Migration

24. Long-term international arrivals have not suffered the same reversal: they continue to outstrip departures from Auckland region. The 2006 Census recorded 169,500 people in Auckland who lived overseas five years earlier. This immigration was partially offset by an estimated loss overseas of perhaps 67,000 (plus around 7,000 children born between censuses).³ The result was a net migration gain of around 95,500 people, or 19,000 a year (ARC 2007b, 2). This accounted for two thirds of the growth over the five years.
25. Predicting the future of the international immigration that is critical to Auckland's growth is challenging. There are two sources of uncertainty. First, international labour market conditions influence where migrants go (together with perceptions of social stability, quality of lifestyles and ease of integration). Second, a reduction in the share of immigrants who head into Auckland could lower growth.
26. New Zealand migration has been trending slowly upwards over the past 25 years (Figure 2). However, the cyclical nature of migration means that the net

³ Losses overseas are estimated by deducting (1) the sum of known gains (or losses) from natural increase + international arrivals + net movement to and from the rest of New Zealand from (2) the change in the number of residents between censuses (for more details on this method of calculation, see Discussion Paper 44, *Components of Regional Population Growth, 1986-2001*, Centre for Population Studies, Waikato University, 2005).

cumulative gains between 1981 and 2006 from permanent, long-term arrivals less permanent and long-term departures appear to have been just 113,700 nationally (based on declarations on arrival and departure cards). The long-term contribution of migration to population dynamics (including the international movement of New Zealanders themselves) goes well beyond the count of arrivals and departures, however, as it impacts in an ongoing way on the size of birth cohorts and population ageing in the localities from which emigrants are drawn or where immigrants settle.

Figure 2: Net International Migration, New Zealand 1981-2006



Source: Statistics New Zealand

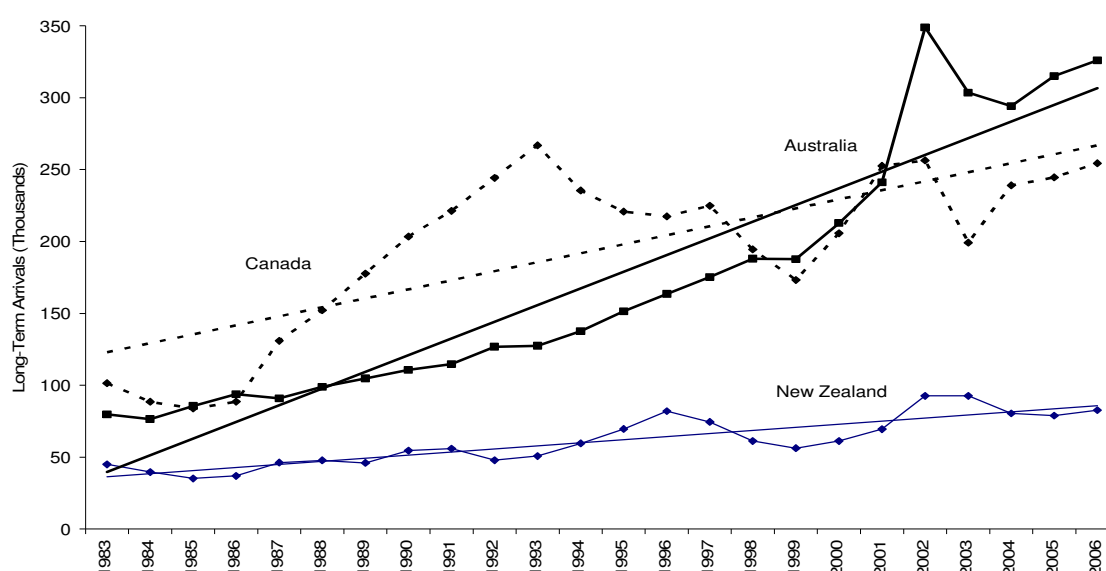
27. A net migration gain of 320,300 assumed for Auckland Region in SNZ's high projection to 2031 (12,800 a year) appears high relative to an estimated net gain over the 25 years to 2006 of around 240,000 (9,600 a year), including internal movements.⁴ An assumed gain of around 205,000 (8,200 a year) for the medium projection appears more reasonable, but it could also be on the high side should the loss of population to internal migration continue and New Zealand lose its competitive position in an increasingly international labour market.
28. Uncertainty over migration is compounded by the growing competitiveness of other destinations for skilled migrants. International differences in income may

⁴ <http://www.stats.govt.nz/products-and-services/Articles/local-population-trends.htm>

undermine New Zealand's (and Auckland's) attractiveness to potential immigrants, reduce retention rates (as some overseas arrivals move on), and encourage New Zealanders to head overseas.

29. Without analysing this more closely, it is interesting to see the significant migrant gains and steeper growth trajectories (denoted by trend lines) in Canada and, especially, Australia compared with Auckland over the past 25 years (Figure 3). The gap opening between them and New Zealand raises questions about our future capacity to compete for skilled and semi-skilled migrants.

Figure 3: Immigration to Australia, Canada & New Zealand 1981-2006



Source: Australian Bureau of Statistics, Statistics Canada, Statistics New Zealand,

30. Any slow-down in migration will have a disproportionate downward impact on Auckland's growth (Sinclair, 2006), as strong national gains between 2001 and 2006 explain much of the region's recent performance. A cyclical slowdown is already underway. The net national inflow in calendar 2007 year was down to 5,500 from 14,600 the previous year, a fall heavily influenced by the departure of New Zealanders overseas the previous year (Department of Labour, 2008).
31. In considering potential changes in migration, increased departures by New Zealand residents in response to international opportunities for skilled people need to be taken into account. In addition, the impact of growth in international student numbers as temporary visitors in the early part of the decade may have given a one-off boost which has subsequently been offset by the outflow of

departing students at the end of their studies. The growth in visitors on temporary working visas over the past several years may also increase apparent long term migration figures, but have a lesser impact on permanent resident numbers. In this case, also, the demand for labour in the primary, manufacturing and tourism sectors means that more of the people involved are as likely to end up working outside Auckland as within the region.

32. Highly skilled people or people with a job offer in New Zealand were given renewed priority by the Department of Labour in 2005, through greater focus on the Skilled Migrant Category for long-term settlement approvals. In the year to June 2006, 55% of approvals for permanent residence were for skilled and 7% for business migrants (Department of Labour 2006a, 41-44).
33. Interestingly, follow up surveys suggest that a majority of such arrivals live outside Auckland, although this result may reflect survey bias (if fewer of the people settling in Auckland were inclined to answer). Wallis (2006) found that 36% of respondents in the Skilled Migrant Category lived in Auckland, compared with 63% in the business migrant category. Badkar's (2006) analysis of short term outcomes from the skilled migrant programme (under one year from arrival) suggested that 57% of those employed and 50% not yet employed were based outside Auckland. It also showed difference in regional preferences, with 60% of Asian immigrants in Auckland, compared with fewer than 39% from Great Britain.
34. Aiming to create a quality, globally competitive city-region is one response to the threat of a long-term slowdown in migration. This might mean not simply having work opportunities available, but ensuring that programmes are in place to enable international arrivals to transition effectively into them.
35. Different programmes will be required for different segments of the labour market (Bedford, 2003). The contrasts between the small group of highly mobile business, specialised professional and skilled migrants and the large numbers of semi-skilled people for whom English may be a second language and who bring with them different lifestyle and work expectations need to be recognised. During a period of slow labour force growth and low unemployment, the semi-skilled migrant may be as important to Auckland's progress as the highly skilled.
36. For the latter, access to quality housing, a quality environment, and quality living may be the critical factors, once income expectations are met. For the former,

the semi-skilled, there may be more basic requirements, including cultural familiarisation, support and mentoring in the areas of housing, health and education, integration into community networks, and further training. Such matters were canvassed through a 2005 investigation by the Auckland Mayoral Forum into migration settlement strategies and by the Providence Reports (2003).

37. While immigration is a key to Auckland's growth, then, and a key to the expansion of the regional workforce and skill base, there are no guarantees that the gains of the past few years will be sustained into the future. Active policy to create and maintain an attractive environment for migrants may be needed, and one that is supportive for several years they after arrive to facilitate an enduring adjustment.

8 Immigration and Ethnic Diversity

38. Migration is important in other ways. In particular, it contributes to growing diversity. Between 2001 and 2006 the share of Auckland's residents born overseas grew by 29% (101,900 people), to 35% of the population.⁵ This compares with just 16% in the rest of New Zealand (Table 3). While some overseas-born people will have moved to Auckland from elsewhere in New Zealand, this surge suggests that recent migration gains are dominated by people born overseas and not simply by New Zealanders returning home.⁶
39. As with other demographic indicators, the share of people born overseas varies within the region. At one extreme, Franklin in 2006 matched the 16% recorded by the rest of New Zealand. At the other extreme, 40% of North Shore residents had been born overseas and 38% each of Auckland and Manukau residents. Migrants do not simply add to the region's diversity as a result of the varied ethnic and cultural heritages they bring, but also through distinctive geographic preferences when they are here.

⁵ This figure will include temporary as well as permanent migrants.

⁶ It may also be that significant numbers of returning New Zealanders are offset by others leaving.

Table 3: Residents Born Overseas, 2001 and 2006

	2001			2006		
	Number	Growth 1996-01	Area Share	Number	Growth 2001-06	Area Share
Rodney	14,643	18%	16%	20,274	38%	23%
North Shore	61,974	26%	30%	81,390	31%	40%
Waitakere	46,413	21%	25%	58,887	27%	32%
Auckland	123,627	20%	31%	153,039	24%	38%
Manukau	95,283	29%	29%	126,399	33%	38%
Papakura	6,720	9%	15%	8,622	28%	19%
Franklin	7,203	12%	12%	9,600	33%	16%
Region	354,126	23%	27%	456,027	29%	35%
Rest of NZ	344,502	9%	13%	423,516	23%	16%

Source: Census 2006, Statistics New Zealand

9 The Implications of Diversity

40. Auckland is already the most ethnically diverse region in New Zealand, and distinctive internationally for its mix of peoples. In 2006, 56% of the regional population identified with European ethnic groups, 19% with Asian, 14% with Pacific peoples, and 11% with Māori.
41. In 2006, 67% of New Zealand's Pacific Peoples dwelt in Auckland, together with 66% of the nation's people of Asian ethnicity. However, Auckland has relatively fewer people identifying as Māori than the rest of New Zealand.
42. Differences within Auckland are even more marked than differences between Auckland and the rest of New Zealand, with geographic concentration leading to a distinctive "ethnic mosaic" within an already diverse region (Table 4). European identification is highest in Rodney and Franklin, and Maori identification in Papakura. Asian ethnicities are highly significant in Auckland City.
43. This diversity is even more pronounced at suburban level. According to the 2006 Census, more than a quarter of residents identified with Maori ethnicity in places like Pukekohe North, Takanini South, Tamaki, Point England, Wiri and Manurewa South. Maori are also a significant minority (more than 20%) in Otara, Mangere, Glen Innes and Papakura, Ranui, Wellsford, and Helensville. The figures indicate a tendency (with some historic exceptions) towards Maori residency towards localities on the edge of, or beyond, the most urbanised parts of the region.

Table 4: Ethnic Composition of Auckland Population, 2006

	European	Māori	Pacific Peoples	Asian	MELAA	Other	Total People
Rodney	82%	9%	2%	3%	0%	13%	109%
North Shore	67%	6%	3%	19%	2%	10%	107%
Waitakere	59%	13%	15%	16%	2%	8%	113%
Auckland	54%	8%	13%	24%	2%	8%	109%
Manukau	41%	15%	28%	21%	1%	6%	112%
Papakura	61%	27%	10%	8%	1%	9%	116%
Franklin	75%	15%	4%	5%	0%	11%	110%
Region	56%	11%	14%	19%	1%	8%	110%
Rest of NZ	73%	16%	3%	5%	1%	13%	110%

Notes Individuals may nominate up to six ethnic groups. Therefore the totals add up to more than 100% of respondents; MELAA – Middle Eastern, Latin American and African

Source: Census 2006, Statistics New Zealand

44. According to an ARC report, European-born residents are spread more or less throughout the region (ARC, 2007c), the one migrant group present in the rural or peri-urban parts of the region. There is some concentration on the North Shore, in southern Waitakere (around the Manukau Harbour) and Howick. Pacific peoples concentrate around Manukau and in the southern suburbs of Auckland City. According to the ARC, these are “suburbs with significant public sector housing as well as facilities servicing Pacific populations such as churches and markets.” Further Pacific Island concentrations are found in the southern Isthmus suburbs and eastern parts of Waitakere City.
45. There are also distinctive Asian settlement patterns. Many Koreans settled on the North Shore in the 1990s. A mix of Chinese and Koreans dwell in and around the CBD, many being students. Chinese and Indian people are concentrated in the south of the Isthmus, from Epsom through to Sandringham, Mt Albert and Mt Roskill. Large numbers of Taiwanese, Hong Kong and Mainland Chinese are settled in the east of the region, from Pakuranga, through Howick to East Tamaki.
46. Apart from varied cultural interests and affiliations, differences in demography (age structure, fertility, and life expectancy) and socio-economic status among these ethnic groups (including generations of New Zealanders of different ethnicity and not simply recent migrants) are reflected in particular needs for public goods and services. The Pacific Island and Maori groups have a significantly younger age structure than the balance. This will contribute to more

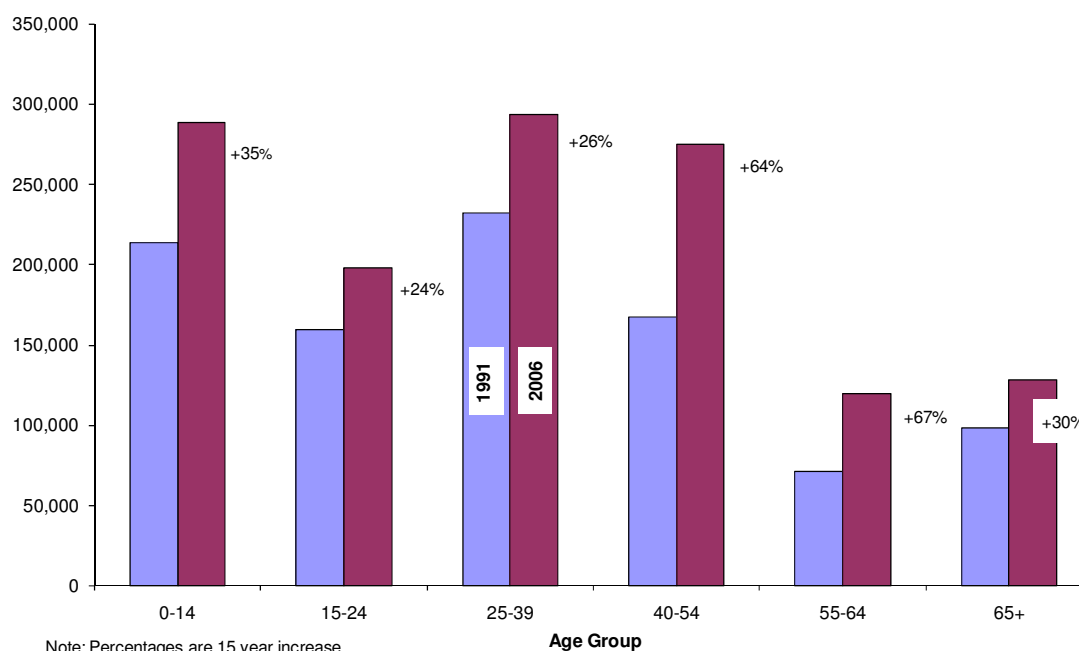
rapid population growth where they are concentrated, among other things. Older working age people (35 to 49 years of age) and students (20 to 24) are characteristic of the Asian population. Consequently, they are younger than the European majority but older than Maori and Pacific Island groups.

47. Different ethnic groups also occupy different positions in the labour market. While there is not a lot of detailed data immediately available, labour force participation is revealing. Pacific Peoples and Asians have significantly lower participation rates than European and Maori, both nationally and even more so regionally (Department of Labour, 2007, 21-22). These contrasts are greater among local councils. For example, Asian participation is under 60% in North Shore City, where the Maori rate is closer to 77% and the European rate 73%.
48. SNZ has published subnational growth projections by ethnicity through to 2016 based on the 2001 Census. Under the medium growth assumptions European New Zealanders would account for 8% of growth, Maori 11%, Pacific Peoples 23%, and Asians 58%. Under the high projection, people of European extraction would account for a bigger share of growth (22%). Either way, their share of regional population could be down to 50% by 2016, and the Asian share up to 25%. While the precise figures will vary, these projections paint a compelling picture of even greater diversity than the region currently enjoys.
49. Diversity of this magnitude poses its own sets of challenges, as needs and expectations diverge according to ethnic composition. How local government engages with local communities and addresses their particular needs will vary with ethnic composition, the strength of community networks in general, and the networks of migrant and minority groups in particular.

10 The Implications of Ageing

50. Along with the rest of New Zealand, Auckland faces a future in which ageing will slow labour force growth, reshape residential preferences and change the demand on public services. Between 1991 and 2006 the most rapid growth by broad age group was in the mature family cohort, comprising people aged between 40 and 54 years. This group grew by 64% over the 15 years, and accounted for 30% of all growth (Figure 4).

Figure 4: Regional Growth by Age Group, 1991-2006

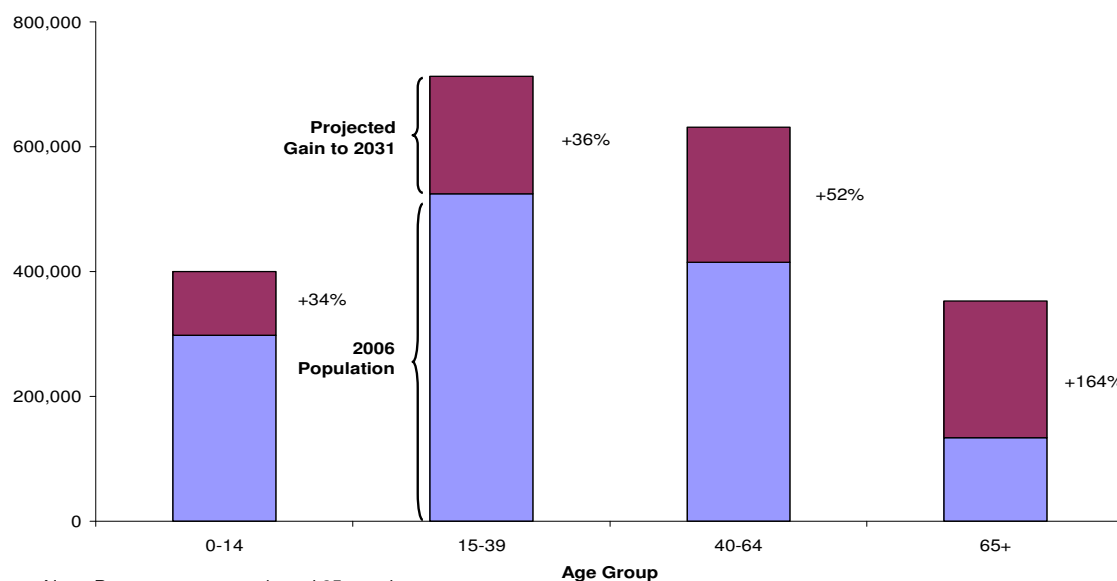


Note: Percentages are 15 year increase

Source: Statistics New Zealand, Census of Population and Dwellings

51. The pre-retirement and empty nester cohort, covering ages 55 to 64, grew faster (67%), but was much smaller, and contributed only 13% to total growth. In contrast, the child cohort, under 14 years, did not grow as rapidly (a 35% gain over 15 years) but was still a major contributor, accounting for 21% of growth.
52. The population will continue to age. Under SNZ's high projection, for example, the most rapid growth will be in the retirement cohort, which will increase by 164% and account for 30% of growth (Figure 5). The 40 to 64 age group will grow by more than 50%, also accounting for 30% of all growth. The two younger cohorts would grow by around 35%.
53. Under the medium projection, slower population growth means that ageing will be more rapid. Some 35% of population growth would occur in the 65+ cohort and 31% in the 40-64 year group. Children (under 15 years) would account for just 10%. Under the low projection under-15 year group would grow just 3%. By contrast, there would be a 78% increase in the numbers aged over 40 years (and 44% in the over 65 age group).

Figure 5: Projected Growth by Age Group, High Projection 2006-2031



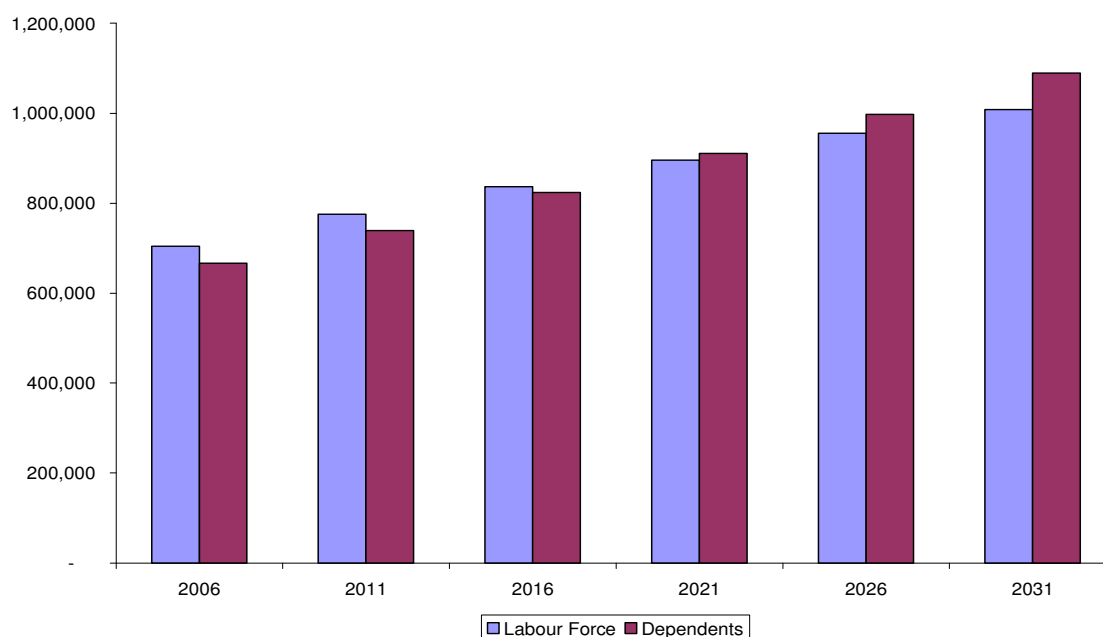
Note: Percentages are projected 25 year increase

Source: Statistics New Zealand, High Population Projection, December 2007

11 Slower Labour Force Growth

54. Ageing will occur regardless of the growth achieved and the impact of migration. This will have important implications for the labour force, housing, transport, leisure needs and community services. This is illustrated here by considering the impact on the labour force. Participation rates used for recently published national population projections have been applied to the age-specific projections for Auckland. While rates will vary between Auckland and the rest of the New Zealand, without SNZ sub-regional labour force projections this approach enables us to for examine the implications of growth and ageing contained in the latest national projections on the regional workforce.
55. Under the high projection, the working age group (15 to 64 years) would fall as a share of population from around 69% in 2006 to around 65% by 2031. Even if a high participation rate is achieved (in part through people working longer), labour force growth will lag population growth. Under the high projection, the labour force should grow by around 43% by 2031. However, total population would grow by 53%, with the non-working group (including children and people over 64), expanding 63%, and exceeding the labour force within 15 or so years (Figure 6).

Figure 6: Labour Force Growth and Dependency, 2006-2031



Source: Based on Statistics New Zealand, High Population Projection, December 2007

56. This exercise has been repeated for the medium and low population projections. Under the medium projection the working age group could expand by 33% and the labour force by 28%, or almost 200,000 people. This compares with total population growth of 41%. Under these circumstances, the labour force would become less than half the total population in around ten years, with perhaps 136 people outside the labour force for every 100 in it by 2031.
57. Under the low projection the labour force would expand by around 14% (96,000 people) by 2031. This compares with 29% projected population growth, and would lead to a higher level of dependency, with perhaps 120 people outside the labour force for every 100 within it by 2031.
58. This demographic shift will have a potentially significant impact on community needs and economic progress. The growth of dependency implied by a shrinking labour force relative to the population will be accelerated if gains from migration slow down (especially through increased out-migration by New Zealanders) as migration favours people in younger and working age groups. It may also require older age groups remaining economically active for longer than has been the case in the past (and longer than assumed in the projected national labour force participation rates).

12 Changing Population Distribution

59. The changing distribution of population creates uncertainties in terms of where best to cater for growth within the region, while managing the infrastructural consequences and environmental effects of that growth. Projections for individual councils. As suggest increasingly disparate growth, projected to be faster in outer areas (Rodney and Franklin) and Manukau than in North Shore, Waitakere and Auckland cities (Table 5). These differences reflect differences in assumed fertility, life expectancy, and especially migration movements.
60. Under the high projection, Rodney's population would increase by 67% or 62,000 people over 25 years. Manukau would increase by 63%, or 218,000. Auckland City would increase by 47%, or 199,300 people. The implication is that there will be significantly different growth impacts in different parts of the region.

Table 5: Council Population Projections 2006-2031

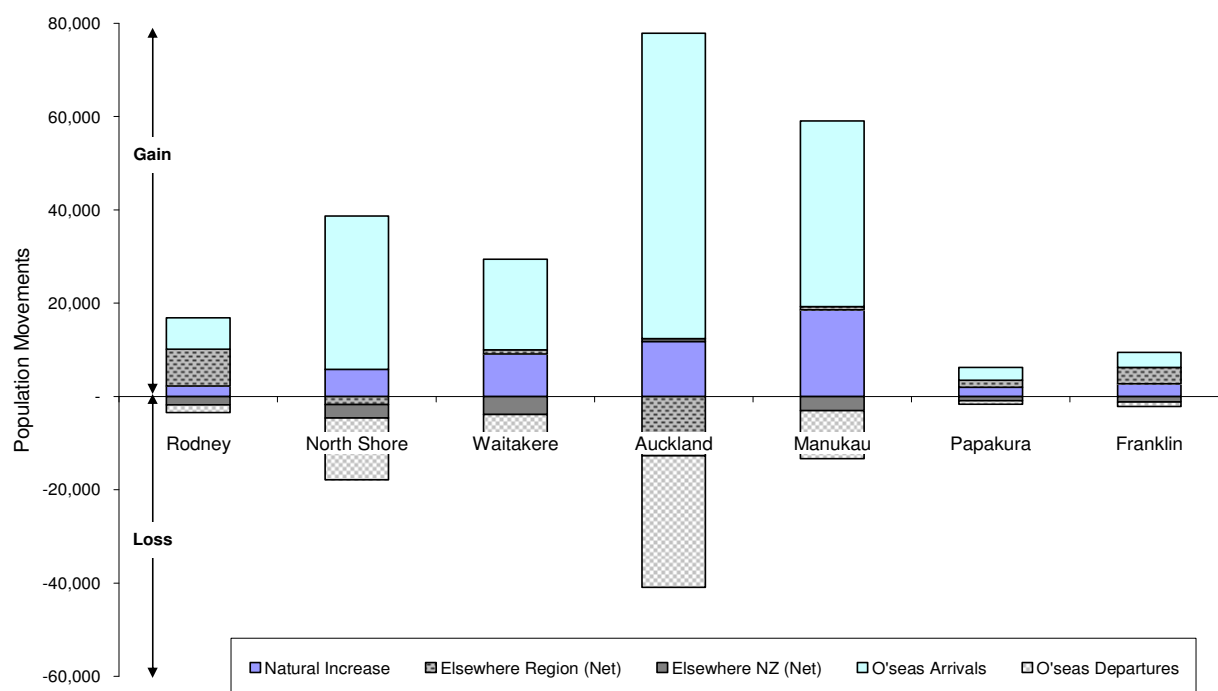
	Medium			High		
	Total 2031	Annual Growth	Share of Growth	Total 2031	Annual Growth	Share of Growth
Rodney	136,200	1.6%	7.7%	154,400	2.1%	8.4%
North Shore	288,500	1.1%	12.6%	315,400	1.5%	13.4%
Waitakere	271,900	1.3%	13.5%	294,100	1.7%	13.4%
Auckland	582,600	1.2%	27.2%	627,600	1.5%	27.1%
Manukau	526,400	1.7%	31.6%	565,100	2.0%	29.7%
Papakura	63,100	1.2%	2.9%	70,100	1.6%	3.2%
Franklin	86,200	1.4%	4.5%	95,900	1.8%	4.8%
TOTAL	1,954,900	1.4%	100.0%	2,122,600	1.7%	100.0%

Source: Statistics New Zealand

61. The evidence for 2001 to 2006 casts more light on the mechanics of population redistribution. The individual components of population change in each council area have been estimated. This is based on Census tables that show where people lived five years earlier (including people who lived elsewhere in New Zealand or overseas five years earlier, and children born in the interim) and separate records of registered deaths at individual council level. These estimates show that overseas arrivals contributed more than natural increase (excess of births over deaths) in each area, with Auckland City by far the most heavily dependent on immigration for growth (Figure 7).
62. With the exception of Auckland City, all councils lost more people to other parts of New Zealand than they gained; 3,900 for Waitakere, 3,000 for Manukau, and

2,900 for North Shore. Auckland City appears to have gained around 600 people from outside the region. Although all districts lost people overseas, arrivals exceeded departures by a significant margin in all cases.⁷

Figure 7: Components of Population Change; Auckland Local Councils 2001-2006



Source: Calculated from 2006 Census, Statistics New Zealand

63. Equally interesting was movement within Auckland. Rodney made a net gain of around 7,900 people from elsewhere in the region; Franklin and Papakura also came out ahead, with gains of 3,500 and 1,500 respectively. Auckland City lost around 12,700 people to other parts of the region and North Shore lost 1,700.
64. Changing population distribution has consequences for regional land use and infrastructure. It also raises the prospect that decisions about how to manage growth might themselves modify population outcomes. Differences in local economic opportunities, the quality of services and amenities, and the living

⁷ Losses overseas are estimated as for the region (footnote 2). The estimates are less accurate because more respondents inaccurately identify their former place of residence at local council level.

environment generally will influence the residential desirability of different parts of the region as well as the region, as a whole.

13 Housing Need

65. The nature and distribution of housing becomes increasingly important against the demographic backdrop painted in this paper. How much housing is required, where, and in what form will determine land use demands and help shape infrastructure investment. At the same time, the quality of housing, associated public services and amenities, and residential proximity to opportunities for work and leisure will influence the appeal of the region and areas within it to potential international migrants, both arrivals and departures.
66. Getting the housing equation right is a challenge for central and local government. The sheer rate of growth in demand poses challenges. These include ensuring an adequate supply of dwellings to meet the social needs of Auckland's diverse communities. Affordability has become a significant factor in this equation. Location is another important element, with separation of residential from employment centres a major contributor to road, vehicle and fuel demands, as well as a source of congestion and associated air and water pollution. The scale and distribution of housing growth impacts on the provision of network services generally, including water supply and waste disposal, power and telecommunications. It also affects soil, water and air quality issues.
67. In areas of high natural amenity, usually outer parts of the region and especially beach settlements, holiday home construction also contributes to demand. This suggests that projections of new residences based on household numbers will underestimate demand for dwellings in places like Rodney and Franklin. Leigh, Cape Rodney, Snells Beach (in the north) and Awhitu (in the south). Equally, the high urban amenity, downtown apartment precincts have a disproportionate share of second homes, or homes that are occupied only part-time. The 2006 Census indicates that 23% of dwellings in Harbourside and Auckland Central West and East meshblocks were unoccupied on Census night. (The Harbourside figure alone was even higher, 32%).
68. The only available SNZ household projections are now dated (based on 2005 calculations from a 2001 base). Alternative projections have been made here,

based on assumed average household occupancy for each of the three adult age groups projected by SNZ using the 2006 census base.

69. The resulting estimates have been checked for credibility against the more detailed earlier household projections made by SNZ. The method used here generates an estimate within 0.04% of actual occupied dwellings in the region in 2006, and includes a maximum deviation among local councils of 0.8% overestimation for Auckland City.
70. Compared with the SNZ high projections made using the 2001 Census base, the new high projections to 2021 (the target year of the SNZ projections) are about 6% lower. Within the region there are more significant deviations. Our high projections are 10% lower than the high SNZ projection for Auckland City and 4% higher than the SNZ projections for Papakura and Franklin. This implies that the earlier SNZ projections do not fully reflect the redistribution of growth that occurred between 2001 and 2006. However, the differences are modest and provide some confidence on the projections prepared for this analysis (Table 6).

Table 6: Projected Additional Households, 2006-2031

	Occupied 2006	High		Medium		Low	
		Number	%	Number	%	Number	%
Rodney	33,400	29,410	88%	22,510	67%	15,910	48%
North Shore	72,800	47,480	65%	38,380	53%	29,580	41%
Waitakere	62,400	44,730	71%	37,830	60%	31,130	50%
Auckland City	145,600	94,050	64%	79,450	54%	65,450	45%
Manukau	95,100	81,550	86%	71,250	75%	61,350	65%
Papakura	14,900	9,970	67%	7,770	52%	5,670	38%
Franklin	20,400	17,300	85%	13,900	68%	10,700	52%
Region	444,600	324,490	73%	271,090	61%	219,790	49%

Source: 2006 Census (Occupied Dwellings) and based on SNZ High Population Projection, December 2007

71. The analysis suggests demand for an additional 324,000 dwellings over the 25 years to 2031 under the high projection assumptions. This gives a compound annual growth rate of 2.2% for the region as a whole, compared with 2.1% in occupied dwellings recorded from 1996 to 2006, and 2.3% in total dwellings.
72. Whereas the population is expected to grow by 53% under the high projection, housing demand will increase by 73%. This is because as the population grows older, the average size of household declines. There will be relatively more

people living in one and two person households, and relatively fewer in households of two, three or more people.

73. Under the high projection, growth in demand for dwellings based on household numbers appears highest in Rodney, where it could be as much as 88%, 86% in Manukau, and 85% in Franklin.⁸ In Auckland City, projected growth is just 64% by comparison. Nevertheless, Auckland City would remain dominant according to these projections, with 29% of projected regional demand (less if migration to other parts of the region increases), followed by 25% for Manukau City.
74. The medium projections derived in the same way suggest that an additional 271,000 new dwellings would be required by 2031 (10,750 a year), a 61% increase compared with a 41% population increase. The low projections indicate a need for another 212,000 dwellings (8,490 a year), a 49% increase compared with a 27% population increase.

14 From Need to Demand

75. The figures in Table 6 illustrate broad trends in need, but do not provide details about the nature of housing demand. The physical capacity for housing development, its character and distribution will influence movement among council areas within the region and between Auckland and other regions. Different cultural norms, changing household and family structures and differences in socio-economic status lead to different housing requirements among groups and between localities.
76. More one-adult households, for example, will increase demand ahead of population growth. On the other hand, a greater tendency towards extended families among first generation migrants may reduce relative demand among new arrivals.
77. In addition, more prosperous households traditionally exercise greater choice over housing location, style and size. Hence, between 2001 and 2006, stand-alone houses continued to dominate new homes, and were clearly favoured for home ownership, accounting for 62% of private dwellings in 2006, up 11% compared with 2001 (ARC, 2007d). However, with declining affordability and

⁸ This does not allow for replacements of houses that are demolished or demand for second homes.

falling rates of home ownership there has also been substantial growth in the number of non-detached dwellings. Apartments, flats and townhouses increased 29% between 2001 and 2006.

78. Deciding a likely balance between these sorts of tendencies and other possible new behaviours over the next 25 years and their influence on the form and distribution of housing demand calls for adaptability in planning. This, however, may conflict with any desire for a more predictable investment environment and with attempts to contain adverse effects by strictly controlling the release of land.

15 Housing Affordability

79. How demand for housing is translated into supply on the ground adds challenges not readily recognised simply through projecting population numbers. One of the issues caught up in the gap between projections of need and the nature of housing demand is the issue of affordability. This is both a consequence of demographic factors, and a potential driver of them. High cost housing diminishes the attractiveness of a locality to potential migrants, both arrivals from overseas and residents, and thereby may reduce population growth.
80. Equally, strong growth in house demand, especially when coupled with constraints on land supply, is associated with high house prices. This is evident in growing problems of affordability in Auckland:

“Our data indicate that Auckland house prices as a whole have risen substantially relative to other urban (Hamilton and Wellington) prices in the North Island. This rise in relative values is likely to reflect, at least in part, the increasingly binding impact of the MUL [Metropolitan Urban Limit] over time” (Grimes and Liang, 2007, 32)

81. Despite this econometric evidence and the substantial impact of escalating land prices on house prices, the role of land availability on affordability remains contested. The ARC, for example, argues that *“soaring house prices have been driven by demand, not supply”*. The ARC reported that research conducted at the beginning of 2007:

“suggests that the region’s district plans are able to provide capacity to accommodate a further 195,000 dwellings within the metropolitan area, which would be sufficient for between 16 and 22 years of metropolitan growth. Furthermore, capacity for an additional 110,000 dwellings within the region could be expected from plan changes related to sector agreements of the region” (ARC, 2007a, 34)

Some 43% of this estimated capacity was projected as apartment development on commercial land (perhaps raising questions about the availability and price of land for business and employment purposes), however, 25% by way of infill development, and only 2% on ‘vacant’ land. This compares with an estimated 27% of residential development on business land between 2001 and 2006, 33% by way of infill and 40% on vacant land.

82. It was subsequently reported that some 16 years of residential land supply theoretically available and ten more years potential capacity identified for zoning is deemed adequate by the ARC for the market to operate effectively (reported by G Cumming, *New Zealand Herald*, 27 October 2007).

83. In addition, the ARC remains concerned about the trade-off between increasing supply and possible increases in infrastructure costs and environmental impacts (reported by A Gibson, *New Zealand Herald*, 23 January 2008).

84. The government’s House Prices Unit’s interpretation of evidence about the impacts of demand and supply on housing affordability was cautious. However, it did conclude that:

“Lower costs of sections and construction are the most likely way of achieving a long-term reduction in housing costs. A focus on streamlining regulatory systems, especially around the Resource Management Act and building consents processes may help. Increasing the amount of land available for housing would also help, either in the form of intensive housing developments or new settlements built using sustainable methods and located outside cities” (Department of the Prime Minister and Cabinet, 2008, 5).

85. In any case, housing demand is not homogenous. It will be manifest in different forms in different areas: one size will not fit all. The consequences for services and amenities, including parks, reserves and community centres, will vary from place to place, as will demand for investment in infrastructure and services, including roads and in public transport. Research into the implications of housing intensification reflected some of this ambiguity, noting, among other things:

“Following a period of literature promoting intensification and highlighting the costs of urban sprawl there is now a growing body of research questioning the claimed benefits of intensification.

On community cohesion and identity:

“[o]verall the research is inconclusive. In some cases intensification appears to result in increased contact with neighbours, but this does not

necessarily translate into a strong sense of community” (Syme, McGregor and Mead, 2005, 1-3).

86. Planning at the regional and local levels may have a central role to in ensuring availability of sufficient housing of a type and mix necessary to sustain Auckland’s attraction and its growth.

16 Conclusion

87. Auckland will remain the dominant centre of population growth in New Zealand. The issues facing local and regional government in Auckland will be dominated by strong population growth. Yet, the form growth takes and the appropriate responses remain uncertain and, in some cases, such as housing supply, contested. Uncertainty is increased given that growth could be moderated by fluctuations in migration, which will itself respond to the effectiveness or otherwise of planning for the region’s development.
88. Variations in migration will in turn impact on ethnic mix and the diversity of communities and community needs. Together, the ageing of Auckland’s population, the increasingly diverse nature of its communities, less predictable migration trends, and changes in participation will influence the size of the labour force relative to population, the nature of housing demand, where it occurs, and the consequences for infrastructure and amenities. Finding ways to deal with both variety and uncertainty adds complexity to the challenges of managing a period of growth in which housing demand will continue to outstrip population expansion, at the same time as population growth outstrips labour force growth.

Acknowledgements

Thanks to Kim Dunstan, Senior Demographer, Statistics New Zealand, Rob Hodgson, Senior Research Analyst in Workforce Research and Evaluation, Department of Labour, and Stephen Dunstan, Immigration Policy Manager, Department of Labour, for their comments. The author remains responsible for the content and views expressed in this paper.

References

- ARC (1999) *A Vision for Managing Growth in the Auckland Region: Auckland Regional Growth Strategy 2050*, Regional Growth Forum
- ARC (2006) *Forces Shaping the 21st Century: Demographics* Internal Discussion Paper, START Project

- ARC (2007) *Auckland Sustainability Project: An agenda for the future*, Prepared for the Auckland Regional Growth Forum
- ARC (2007a) *Growing Smarter: The Auckland Region in the 21st Century, an evaluation of the Auckland Regional Growth Strategy 1999* Technical Report for the Auckland Regional Growth Forum
- ARC (2007b) *Growth of Auckland region: Dynamics of population Change 2001 to 2006*, Social and Economic Research Monitoring team ARC in conjunction with Dr Ward Friesen, University of Auckland
- ARC (2007c) *Immigration and Ethnicity in the Auckland Region* Social and Economic Research Monitoring team ARC in conjunction with Dr Ward Friesen, University of Auckland
- ARC (2007d) *Housing and Households in the Auckland Region* Social and Economic Research Monitoring team, ARC
- Badkar, J (2006) *Life in New Zealand: Settlement Experiences of Skilled Migrants*, Department of Labour
- Bedford C (2003) "Skill Shortages in New Zealand: Public and Private Sector Responses" *New Zealand Population Review* (29) 2, 63-88
- Department of Labour (2007) *Annual in-depth regional report: Auckland region*
- Department of the Prime Minister and Cabinet (2008) *Final Report of the House Prices Unit: Home Prices Increases and Housing in New Zealand*
- DTZ New Zealand, Merwood, P (2006) *Migration Trends 2005/06*, Department of Labour
- Grimes, A, Liang, Y (2007) *Spatial Determinants of Land Prices in Auckland: Does the Metropolitan Urban Limit Have an Effect?* Motu working Paper 07-09, Motu Economic Policy and research
- New Zealand Herald* (27 October 2007) "The vanishing dream of home ownership" Reporter - Cumming, G
- New Zealand Herald* (23 January 2008) "Paradise or purgatory: Urban sprawl in spotlight" Reporter - Gibson, A
- Pool I, Baxendine S and Cochrane B (2005) *Components of Regional Population Growth, 1986-2001*
- Sinclair, R (2006) *Immigration Policy Analysis*, Draft Report, Auckland Regional Council

Syme, C, McGregor, V, Mead, D (2005) *Social Implications of housing Intensification in the Auckland region: Analysis and review of media Reports, Surveys and Literature*, Report to Auckland Sustainable Cities Programme, Auckland City, Waitakere City, New Zealand Housing Corporation, and Auckland Regional Council

The Providence Reports (2003) *Kiwi Asia and New New Zealanders*, Syndicated reports, The Providence Report Ltd

Wallis, R (2006) *Skilled Migrants in New Zealand: A Study of Settlement Outcomes*, Department of Labour