Matamata Piako District

Socio-Demographic Profile 1986-2031

Report prepared for the Matamata-Piako District Council

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National Institute of Demographic and Economic Analysis
Te Rūnanga Tātari Tatauranga

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Matamata-Piako District: Socio-Demographic Profile 1986-2031

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Executive Summary

Population Trends

1. The population of Matamata-Piako District has grown only slightly over the past three decades, from just below 30,000 in 1986 to 32,000 in 2012 (8.8 per cent). The population is projected to grow very slightly over the 2011 – 2031 period, to around 32,740 persons by 2031. The trends are somewhat different for Waikato, where the population is projected to increase by around 13.8 per cent.
2. Matamata-Piako District has a larger proportion of those of European/New Zealand/Other ethnicity than either the Waikato Region or Total New Zealand, and a smaller proportion of both Māori and Pacific Island than the Waikato. Matamata-Piako also has substantially fewer people of Asian origin. In all cases, the number in each ethnic group has grown except for European/NZ/Other. This group saw a small decline in its numbers in the 1996-2006 period, while Maori grew by 8 per cent, accounting for approximately 34 per cent of Matamata-Piako District's growth, compared with 16 per cent of the Waikato's.

Components of Change

3. Overwhelmingly the main component of growth has been natural increase (the difference between births and deaths). Net migration loss across much of the 1990s, early 2000s and again in 2005-2007 partially, and in a few years fully, offset that growth.
4. Components of change by age (which are free of cohort size effects) show that most of Matamata-Piako's net migration loss between 1996 and 2006 was concentrated at 15-24 years of age. However between 2001 and 2006, Matamata-Piako saw notable net migration gain at 30-39 years and also at 55-79 years. The trends were slightly different in the Waikato, with notable net migration gains at 0-4, 5-9 and 30-49 years during the 2001-2006 period.

Age Structure & Population Ageing

5. From a cross-sectional perspective (that is, change by age group rather than cohort), numbers for Matamata-Piako have declined over the past 15 years at most younger ages—and exception being at 15-19 years, and increased at all older ages, most particularly across the Baby Boomer age groups. The trends are markedly similar for Waikato, while for Total New Zealand, net decline occurred at ages 5-9 and 30-34 years only. As noted these changes are partly due to cohort size effects, where larger cohorts replace smaller ones, and vice-versa.
6. As elsewhere, the population of Matamata-Piako is ageing. However, like many 'rural' areas, its ageing is being accelerated by sustained net migration loss at young adult ages which has caused a deep bite to develop in the age structure, across age 20-39 years. The minor gains at older ages also add to structural population ageing. The trends have been similar for the Waikato region.

Age Structure and Population Ageing

7. The changes by age have important implications for the labour market. Matamata-Piako's Labour Market 'entry/exit ratio' (population aged 15-24 / 55-64 years) has fallen since 1996, from 15 people at labour market entry age for every 10 in the retirement zone, to just 10.5 per 10 in 2012. By comparison, the Waikato Region and Total New Zealand still have 13.0 and 13.2 people respectively at entry age per 10 in the retirement zone. Of note is that if older age groupings are used, for example 20-29 and 60-69 years, Matamata-Piako in 2012 had 14 entrants per 10 exits, compared with 14.8 for Total New Zealand and 10.3 for Waikato. Again this is a reflection of Matamata-Piako and Waikato's older age structure and greater bite at ages 20-34.
8. As elsewhere in New Zealand, the age structures of Matamata-Piako's major ethnic groups differ markedly, with the European/New Zealander/Other population relatively older and the Māori and Pacific Island populations relatively young. The Asian population falls somewhere between, closer to the older age structure of European. There is a very strong correspondence between the overall bite in the age structure, and the age structure of the European population.
9. The very youthful age structure of Matamata-Piako's Māori population saw over one-third aged 0-14 years across the period 1996-2006. These proportions are in stark contrast to the Māori population's 12-13 per cent total population share, and are clearly where the Māori population's contribution to Matamata-Piako's growth is concentrated. The data also indicate that Matamata-Piako's Māori population is slightly older than its counterparts in the Waikato Region and Total New Zealand. Young Māori (0-14 years) comprise a slightly smaller share of Matamata-Piako's youthful population than they do of the Waikato Region's and Total New Zealand's youth, although their contribution to overall growth has been greater. The situation at 15-24 years is similar to that for the Waikato Region.

Population projections

10. As noted at point 1, the population of Matamata-Piako District is set to grow only fractionally over the 2011 – 2031 period (medium assumptions). However, significant growth in numbers is projected for all age groups above 65 years, while the numbers at younger ages, 0-39 years, and 40-54 years, are expected to decline. The 65+ population is anticipated to grow both numerically and structurally. Slightly different trends are projected across Waikato, with decline in numbers at 0-14 and 40-54 years, against similarly significant increases at all older age groups (55 years or more). No losses at the younger ages are projected for Total New Zealand, although the gains are likely to be minimal, while the increases at older ages are somewhat greater than for both Matamata-Piako and the Waikato Region.

Population Projections

11. Projections by major ethnic group show the district's Māori population increasing between 2011 and 2021 by approximately 11.1 per cent and the European/Other population declining by 1.1 per cent. There are, however, marked differences by age, with the 65+ year Māori population projected to double and the 65+ European/Other population increasing by just 24.5 per cent. The Maori population is also projected to increase by about 13 per cent in the youngest age group, 0-14 years, while decline is projected for European.
12. Data for the Waikato Region suggest there will be relatively little change in the overall ethnic composition over time, but greater change by age. Young Māori, Pacific Island and Asian (0-14 years) are projected to slightly increase their share of the region's youthful population, while greater shift-share changes are projected for each successively older age group. In each case these result in a slightly diminished proportion of European.
13. The projections show Matamata-Piako's labour market entry / exit ratio falling below one (entrant per exit) between 2016 and 2021, depending on which age groupings are used. The trends are similar for Waikato and Total New Zealand, although for total New Zealand the ratio does not fall below one during the projection period.
14. The projections also show a rapid decline in Matamata-Piako's natural increase that has significant implications for future growth. The trend is driven by a crossover to more elderly than children around 2016 (compared with 2026 for Waikato and Total New Zealand), and a relatively small proportion projected to be at the key reproductive ages (20-23 per cent for Matamata-Piako) compared with 24-25 per cent for Waikato and 25-27 per cent for Total New Zealand.

Industrial Change

15. A special topic section provides an overview of the Waikato region's changing industrial age structure across the 1996-2006 period, focussing on its four largest industries, and concluding with an overview of all industries employing more than 1,000 people (57 of 158 at 3-digit level). Despite the region's relative youth, three of its four largest industries have somewhat older age structures than the total workforce, uppermost among them Sheep, Beef and Cattle farmers, pointing to an urgent need to engage in succession planning.

What you need to know about these data

Data sources: All data used in this report have been sourced from Statistics New Zealand. Most have been accessed via Infoshare or Table Builder, while some have come from purchased, customised databases specially prepared for NIDEA by Statistics New Zealand. Because the data come from different collections and/or are aggregated in different ways, for example by ethnicity or labour force status, and small cell sizes have been rounded by Statistics New Zealand to protect individuals, they often generate different totals. While considerable care has been taken to ensure that such inter- and intra-collection discontinuities are acknowledged and accounted for, for example via footnotes to tables or in the text, the disparities are not usually large, and typically do not affect the story being told. The matter is drawn to the attention of readers who are often concerned when numbers which 'should' be the same, are not. The time-series data in Figures 1.1 and 1.2 are a particular case in point.

Ethnicity: The 'multiple count' method of enumerating the population by ethnic group is another case worthy of special note. The ethnic concept underlying data used in in this report is:

> *'the ethnic group or groups that people identify with or feel they belong to. Ethnicity is self-perceived and people can belong to more than one ethnic group. For example, people can identify with Māori ethnicity even though they may not be descended from a Māori ancestor. Conversely, people may choose to not identify with Māori ethnicity even though they are descended from a Māori ancestor'* (Statistics New Zealand 2011).

Counting people more than once makes analysis of the data and its interpretation particularly difficult. Some analysts prefer to calculate proportions based on the summed numbers in each ethnic group, which is the approach taken here, while others prefer to use the total population count as the denominator (eg., for a region). The problem with the latter method is that proportions sum to well over 100 per cent, making it difficult to interpret the resulting graphs. The approach in this paper has been to identify the extent of the 'over count'.

Residual method for estimating total net migration: This paper uses a residual method for estimating net migration. First, deaths for a given observation (e.g. one single year) are subtracted from births to give an estimate of natural increase. Second, the population at one observation is subtracted from the population at the previous observation, to give an estimate of net change between the two observations. Third, natural increase for that observation is subtracted from net change, to give the component due to net migration.

Residual method for estimating inter-censal migration by age and sex: A similar method is used for estimating net migration by age between two observations for which there are existing data (eg., 5 year census periods). First, numbers by age and sex for one observation are 'survived' based on the probability of surviving to the next age group. Second, known births are apportioned male/female according to the sex ratio (105 males / 100 females), and (using 5 year age group data) entered at age 0-4. Third, the survived numbers for each age/sex group are 'aged' by 5 years, to become the expected population for the next observation. Fourth, expected numbers for each age/sex group are subtracted from actual numbers at the next census, to derive an estimate of net migration for each age/sex.

Projections: The population projections used in this paper are in most cases based on Statistics New Zealand's medium set of assumptions, but comparison with the high and low variants have been included where useful. At national level, the medium assumptions are that the total fertility rate (TFR) will decline from its present 2.1 births per woman to 1.9 births per woman by 2026; that life expectancy will continue to increase, but at a decelerating rate, and that annual net international migration will be 10,000 per year. International and internal migration at the subnational level is also accounted for, the assumptions reflecting observed net migration during each five-year period 1981-2006. The assumptions for Matamata-Piako are included at Appendix 3. When interpreting these data it is important to remind readers that demographic projections of future demand are not forecasts in the sense that they incorporate interventions that may change the demographic future. Rather, they simply indicate what future demand will be if the underlying assumptions regarding births, deaths, migration prevail.

Industry: The industry data used in the Special Topic (Section 6) are drawn from a time-series database developed by Statistics New Zealand to NIDEA specifications. They pertain to the employed population only. Data are given for three Census observations (1996, 2001 and 2006) and have been customised so that the industrial classification and geographic region is internally consistent across the period. The industrial classification is based on ANZSIC96 V4.1 at the three digit level. Aggregation by employment status (employer, self-employed, paid employee etc.,) is another case where the totals in this report may differ from those in other collections.

Feature article – Population ageing in a nutshell

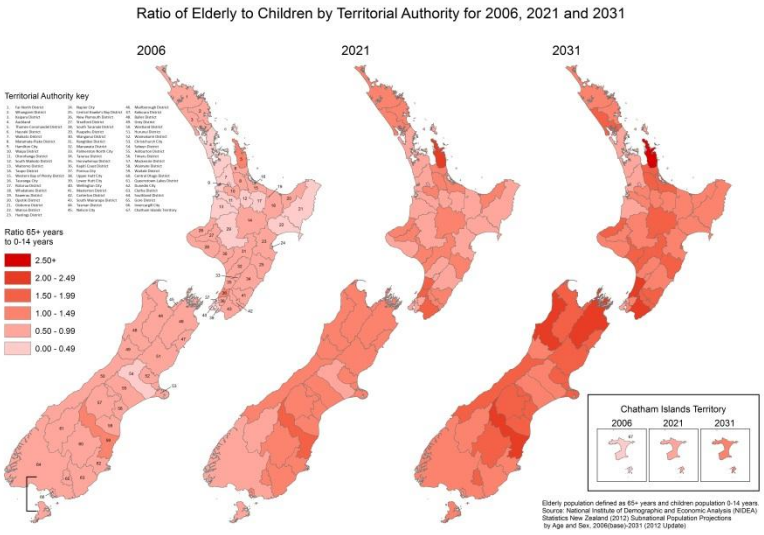
As elsewhere, population ageing is unfolding at markedly different rates across New Zealand. This diversity is caused by different mixes in the drivers of population ageing: birth rates, longevity (survivorship) and migration:

- Declining birth rates decrease the proportion of the population that is young and concomitantly increase the proportion at older ages.
- More people living longer adds to the numbers at older ages, and in the process further swells the proportion at those ages.
- When an area experiences net migration loss, which occurs mainly at 20-39 years, it removes both the young people themselves and their reproductive potential, further pushing up the median age.
- Where an area experiences net migration gains at retiree ages, both the numbers and proportions at those ages are further augmented, further accelerating structural ageing.

The overall outcome of these processes is an incremental—and in some cases rapid—shift to more elderly than children, more deaths than births, and to the end of growth and onset of what is expected to be permanent population decline, something not seen in modern populations until its recent onset in Japan and much of Europe.

Figure 1 provides an overview of the first of these trends (more elderly than children) at Territorial Authority level (TA). In 1996, no TA had more elderly than children. By 2003 that had become 3 TAs (4.5 per cent); by 2021 it is projected to be the case for 41 TAs (61.2 per cent); and by 2031, for 61 TAs (91.0) per cent.

Figure 1: Ratio of elderly (65+ years) to children (0-14 years), 2006, 2021 and 2031



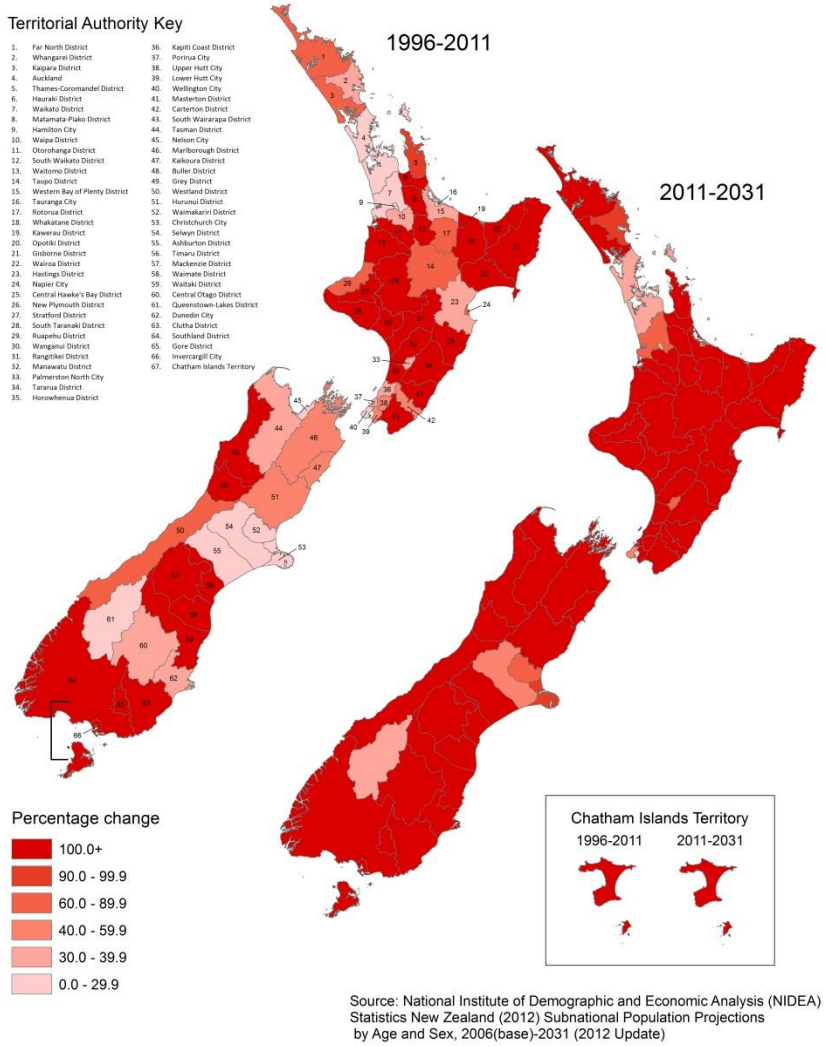
As indicated, the process of population ageing generates two even more profound shifts: from natural increase, where births exceed deaths – as they have for all of New Zealand's modern history – to natural decline where deaths exceed births; and from absolute growth to absolute decline, once there are insufficient migrants to offset the 'lost' births and increased deaths. In New Zealand, the shift to natural decline is not expected to occur nationally until the second half of the Century. However, the crossover is already occurring in three TAs (Waitaki, Thames Coromandel, and Horowhenua) and is projected to be the case in 22 TAs (30 per cent) by 2031.

The final piece of jigsaw is a slow but equally inexorable shift from the 'old' form of population decline, which was caused by net migration loss that was greater than natural increase, to the 'new' form, where net migration loss is both accompanied by – and further contributes to – natural decline. Currently 24 (36 per cent) of New Zealand's TAs are declining in absolute terms, but only the three TAs noted above are yet experiencing the new (dual) form of decline. By 2031, the dual form is projected to be the case for seven TAs (10 per cent), alongside a further 15 TAs (22 per cent) experiencing decline from net migration loss only, and one experiencing decline from natural decline only. While it is still some way off for most TAs, the new form of population decline will be especially challenging because it will be self-reinforcing: ever-fewer young adults to bear the children, and ever-more elderly who have completed their childbearing years.

In the interim, it is critical to understand that for 56 TAs (84 per cent), all future 'growth' to 2031 will be at 65+ years (Figure 2)—and that in 23 of these TAs, that growth will be insufficient to offset overall decline at other ages. While the number declining will actually be one fewer than between 1996 and 2011 (due to a higher net migration assumption going forward), there will also be some shift share effects, with six TAs coming marginally out of decline, and five entering it—meaning that in reality 29 TAs (43 per cent) are at the end of their growth stage.

Between 2011 and 2031, only eleven TAs are projected to see less than 100 per cent of their growth at 65+ years: Christchurch and Whangarei (each 95+ per cent at 65+ years), Waikato, Palmerston North City, and Waimakiriri (60-63 per cent), Wellington City, Selwyn and Tauranga City (44-46 per cent), and Auckland City, Hamilton City, and Queenstown (36-37 per cent). The trends are thus both pervasive and inexorable. At national level, they mean that two-thirds of growth will be at 65+ years, the underlying trends at subnational level concealed largely by Auckland.

Figure 2: Contribution to change by the 65+ year old population by Territorial Authority, 1996-2011 and 2011-2031



Source: National Institute of Demographic and Economic Analysis (NIDEA)
Statistics New Zealand (2012) Subnational Population Projections
by Age and Sex, 2006(base)-2031 (2012 Update)

To place New Zealand's situation in a global context, we can look at trends across the 58 More Developed Countries (MDCs) – of which New Zealand is one of the most youthful. Over the next 20 years, the population of the MDCs aged 65+ years will grow by around 98 million, while *all other age groups combined* will decline by 41 million. In anyone's language, those numbers will cause the scales to tip. Currently across the MDCs there is exactly one person aged 65+ years per child aged 0-14; by 2031 there will be 1.5. The shift is also unavoidable, because the 65+ population of 2031 is already 45+ years old. We know how many there are, and the rate at which they will die (and international migration at older ages is minimal). At the younger ages, only those aged less than 20 years are not yet born – but again we know approximately how many there will be in 2031 because we know how many people there will be at the key parenting ages (they are already teenagers) and we can be fairly certain that they are not going to return to having three or four children per woman as was the case during the baby boom (when their grandparents were born).

The global trends provide New Zealand with a salutary warning. The diminishing pool of youth in the other 57 OECD countries is the pool within which New Zealand competes for many of its skilled migrants. Increasing competition for these migrants will increasingly make it difficult for New Zealand to achieve the migration assumptions in the population projections drawn on above. Attention is increasingly being turned to the developing countries where there is still a significant excess supply of young people. However, attracting them to, and retaining them in New Zealand will require more attention to settlement issues and equity than is presently the case. As one of the youngest of the developed countries, those migrant whom New Zealand attracts *and trains* will be of ever-greater interest to our structurally older counterparts.

The following demographic profile for Matamata-Piako should be read with this broad context in mind. The shift to the end of growth is a sequentially-unfolding phenomenon, with plenty of early warning signals. We can plot its course and plan ahead. However the clock is ticking and has been doing so for many years, as the retrospective elements of this profile will clearly identify. The crossing of any one of a handful of thresholds (see Box 1) by a TA means that it has entered the end of its growth phase. As indicated above, some regions may temporarily revert, but it is unlikely that they will resume significant or sustained growth. These issues are being investigated more deeply by researchers at the National Institute of Demographic and Economic Analysis (NIDEA) and their colleagues at Massey University:

Nga Tangata Oho Mairangi*: Regional Impacts of Demographic and Economic Change* – 2013-2014: MBIE-funded project led by Professor Paul Spoonley (Massey University) and Professor Jacques Poot (NIDEA). Key Researchers: Associate Professor Robin Pearce and Dr Trudi Cain (Massey University), Professor Natalie Jackson, Dr Dave Mare and Dr Michael Cameron (NIDEA).

Box 1: Key thresholds indicating end of growth phase

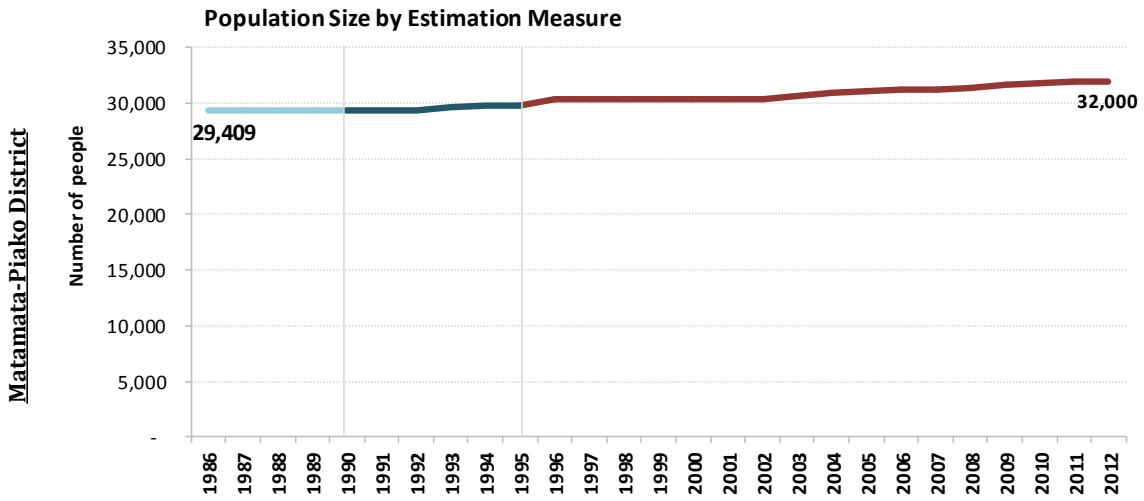
- Onset of youth deficit (proportion of population aged 15-24 years declines below 15 per cent)
- Fewer people at labour market 'entry' than 'exit' age (15-24: 55-64 years; 20-29: 60-69 years)
- More elderly than children (65+ : 0-14 years)
- Key reproductive age population declines below 15 per cent of the population
- More deaths than births (natural decline)
- Absolute decline

1. Population Trends

1.1 Population Size and Growth

The population of Matamata-Piako District has grown only slightly over the past three decades, from just below 30,000 in 1981 to 32,000 in 2012 (Figure 1.1.1). Differences in the timing and methods of estimating population size across the period mean that the trends cannot be presented as continuous; however there is sufficient correspondence to indicate that small but steady growth has occurred since the 1990s (see Appendix 1.0 for underlying data).

Figure 1.1.1: Population of Matamata-Piako District, 1986-2012



Source: Statistics New Zealand, Infoshare, Tables DPE052AA and DPE051AA

1986-1990: Census Night Resident Population (Census-Adjusted) Intercensal Estimates (March Years)

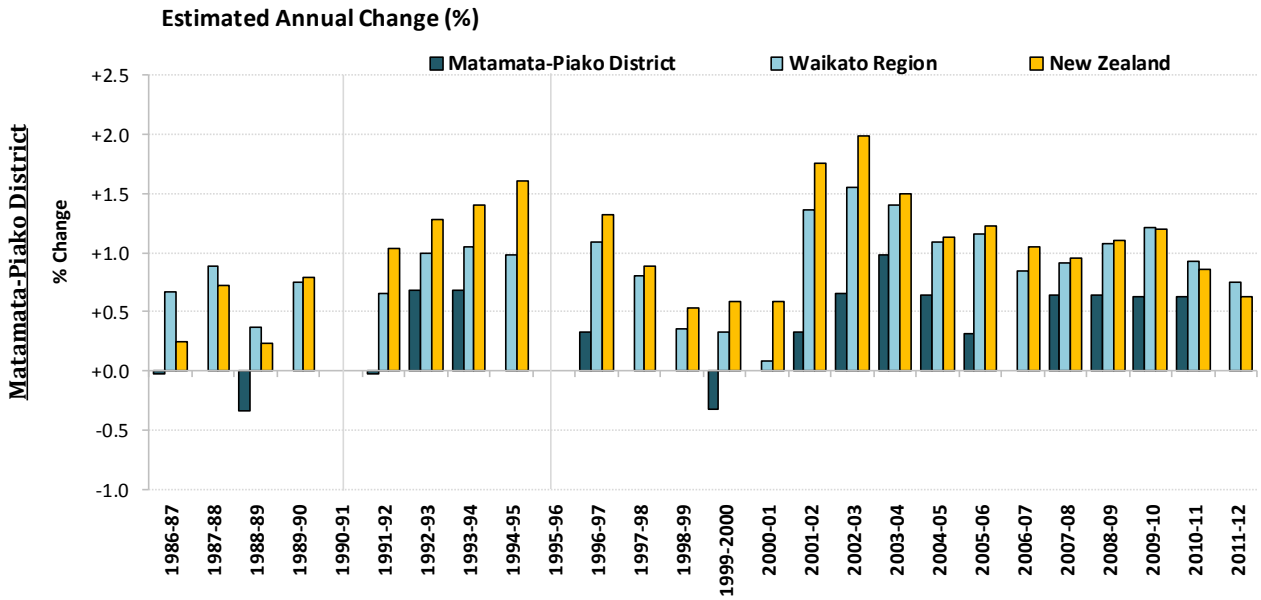
1991-1995: Census Night Resident Population (unadjusted for Census 1996) (March Years)

1996 onwards: Estimated Resident Population for Territorial Authority and Regional Council Areas, at 30 June (1996+) (Annual-Jun)

*Notes: *Changes in the timing and method of estimating Resident Population between 1991-1992 and 1995-1996 mean that the three sets of trends should be understood as discontinuous*

Figure 1.1.2 shows the trends in terms of annual growth rates, with the data collection discontinuities identified by vertical lines. Data are also compared with Waikato Region and Total New Zealand. For Matamata-Piako District, the trends are very different from those for Total New Zealand with some positive growth seen between 1991 and 1995 and again in the early and late 2000s. In the past decade, there has been only a small increase in this rate, especially in the Matamata-Piako District (see Appendix 1.0 for data).

Figure 1.1.2: Annual Population Growth Rate: Matamata-Piako District, Waikato Region and Total New Zealand, 1986-2012



Source: Statistics New Zealand, Infoshare, Tables DPE052AA and DPE051AA

1986-1990: Census Night Resident Population (Census-Adjusted) Intercensal Estimates (March Years)

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1996 onwards: Estimated Resident Population for Territorial Authority and Regional Council Areas, at 30 June (1996+) (Annual-Jun)

*Notes: *Changes in the timing and method of estimating Resident Population between 1991-1992 and 1995-1996 mean that the three sets of trends should be understood as discontinuous*

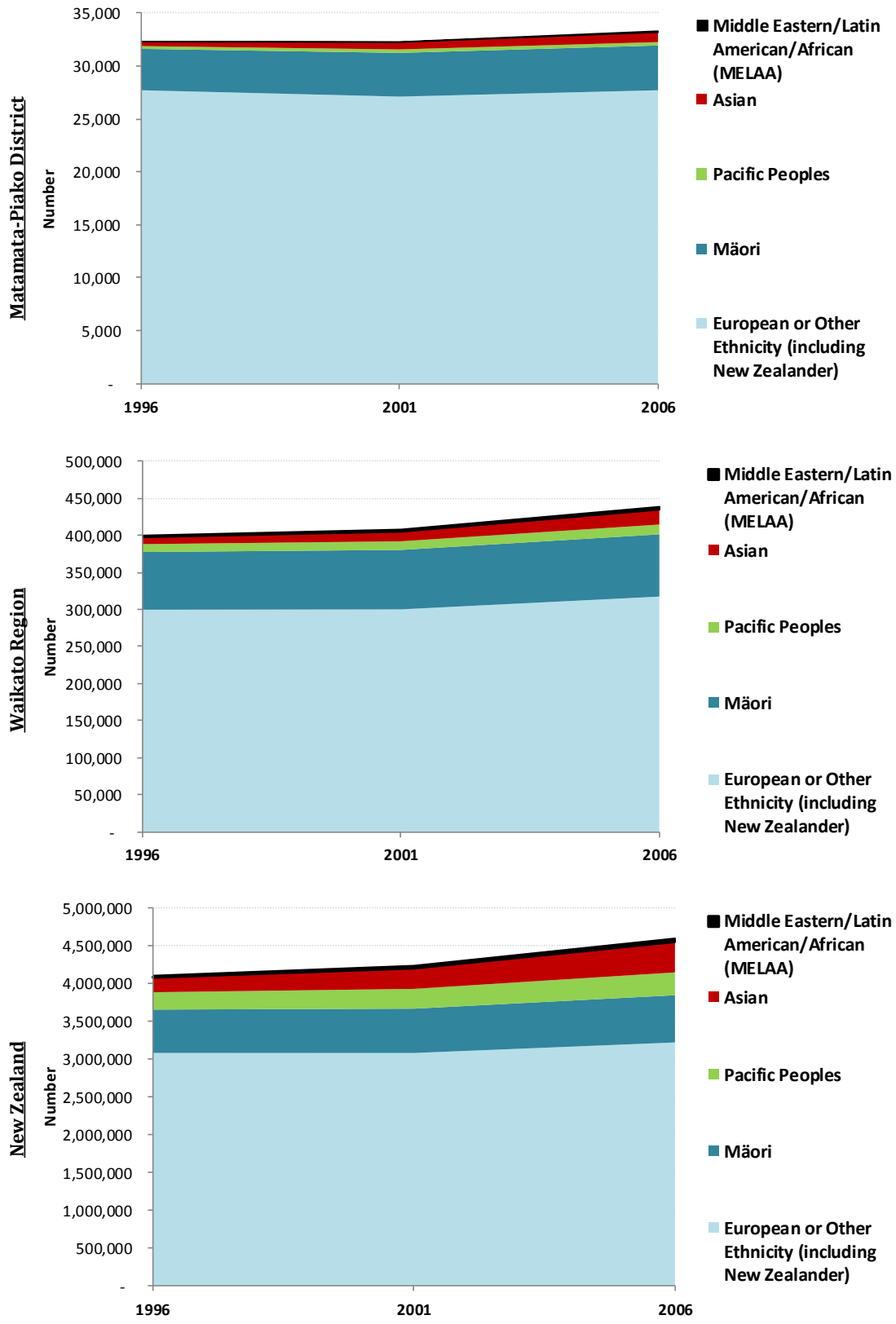
1.2 Ethnic Composition and Growth

Figure 1.2.1 provides an indication of the extent to which the major ethnic groups have contributed to the region's growth (see also Table 1.2.1). Very clear from these 'multiple ethnic group' data[1] is that Matamata-Piako District has a larger proportion of those of European/New Zealand/Other ethnicity than either the Waikato Region or Total New Zealand, and a smaller proportion of both Māori and Pacific Island. Matamata-Piako also has substantially fewer people of Asian origin.

In all cases, the number in each ethnic group has grown, except for European/NZ/Other. This group saw a small decline in its numbers in the 1996-2006 period, while Maori grew by 8 per cent, accounting for approximately 34 per cent of Matamata-Piako District's growth and 16 per cent of the Waikato's (Table 1.2.1). Pacific Peoples also experienced significant growth, about 20 per cent in Matamata-Piako, but, like the Asian-origin and Middle Eastern/Latin American/African (MELAA) population, the higher growth rate reflects a relatively small base.

[1] The multiple ethnic group method of enumeration means that a proportion of people are counted more than once. Table 1.2.1 gives an approximation of the extent to which the method results in an over-count.

Figure 1.2.1: Population by Major Ethnic Group* (Multiple Count), Matamata-Piako District, Waikato Region, and Total New Zealand 1996-2006



Statistics New Zealand, Estimated Subnational Ethnic Population (RC,TA) by Age and Sex at 30 June 1996, 2001 and 2006
*Notes: *People may be counted in more than one ethnic group*

Table 1.2.1: Population by Major Ethnic Group* (Multiple Count), Matamata-Piako District, Waikato Region, and Total New Zealand, 1996-2006

		Population			Change: 1996-2006			Distribution (%)*		
		1996	2001	2006	Number	% Change	Contribution to Change (%)	1996	2001	2006
Matamata-Piako District	European or Other Ethnicity (including New Zealander)	27,700	27,100	27,700	+00	+0.0	0.0	85.8	84.0	83.2
	Mäori	3,910	4,130	4,230	+320	+8.2	32.3	12.1	12.8	12.7
	Pacific Peoples	260	330	320	+60	+23.1	6.1	0.8	1.0	1.0
	Asian	410	680	920	+510	+124.4	51.5	1.3	2.1	2.8
	Middle Eastern/Latin American/African (MELAA)	20	30	120	+100	+500.0	10.1	0.1	0.1	0.4
	Total	32,300	32,270	33,290	+990	+3.1	100.0	100.0	100.0	100.0
	Total People, Ethnicity Stated (without multiple count)	30,300	30,300	31,200		+3.0		...	...	...
	Ethnic 'overcount' (%)	6.6	6.5	6.7		...		...	...	...
Waikato Region	European or Other Ethnicity (including New Zealander)	299,600	300,100	317,300	+17,700	+5.9	45.7	75.1	73.7	72.5
	Mäori	77,900	80,200	84,000	+6,100	+7.8	15.7	19.5	19.7	19.2
	Pacific Peoples	10,600	11,650	13,250	+2,650	+25.0	6.8	2.7	2.9	3.0
	Asian	9,830	13,400	20,600	+10,770	+109.6	27.8	2.5	3.3	4.7
	Middle Eastern/Latin American/African (MELAA)	1,170	1,870	2,720	+1,550	+132.5	4.0	0.3	0.5	0.6
	Total	399,100	407,220	437,870	+38,770	+9.7	100.0	100.0	100.0	100.0
	Total People, Ethnicity Stated (without multiple count)	359,900	369,800	395,100		+9.8		...	...	...
	Ethnic 'overcount' (%)	10.9	10.1	10.8		...		...	...	...
New Zealand	European or Other Ethnicity (including New Zealander)	3,074,600	3,074,000	3,213,300	+138,700	+4.5	28.2	75.2	72.8	70.1
	Mäori	573,200	585,900	624,300	+51,100	+8.9	10.4	14.0	13.9	13.6
	Pacific Peoples	229,300	261,800	301,600	+72,300	+31.5	14.7	5.6	6.2	6.6
	Asian	194,800	272,500	404,400	+209,600	+107.6	42.6	4.8	6.5	8.8
	Middle Eastern/Latin American/African (MELAA)	18,450	27,600	38,600	+20,150	+109.2	4.1	0.5	0.7	0.8
	Total	4,090,350	4,221,800	4,582,200	+491,850	+12.0	100.0	100.0	100.0	100.0
	Total People, Ethnicity Stated (without multiple count)	3,732,000	3,880,500	4,184,600		+12.1		...	...	...
	Ethnic 'overcount' (%)	9.6	8.8	9.5		...		...	...	...

Source: Statistics New Zealand, Estimated Subnational Ethnic Population (RC,TA) by Age and Sex at 30 June 1996, 2001 and 2006

*Notes: *Multiple Count means that people may be counted in more than one ethnic group - see Ethnic 'overcount' rows*

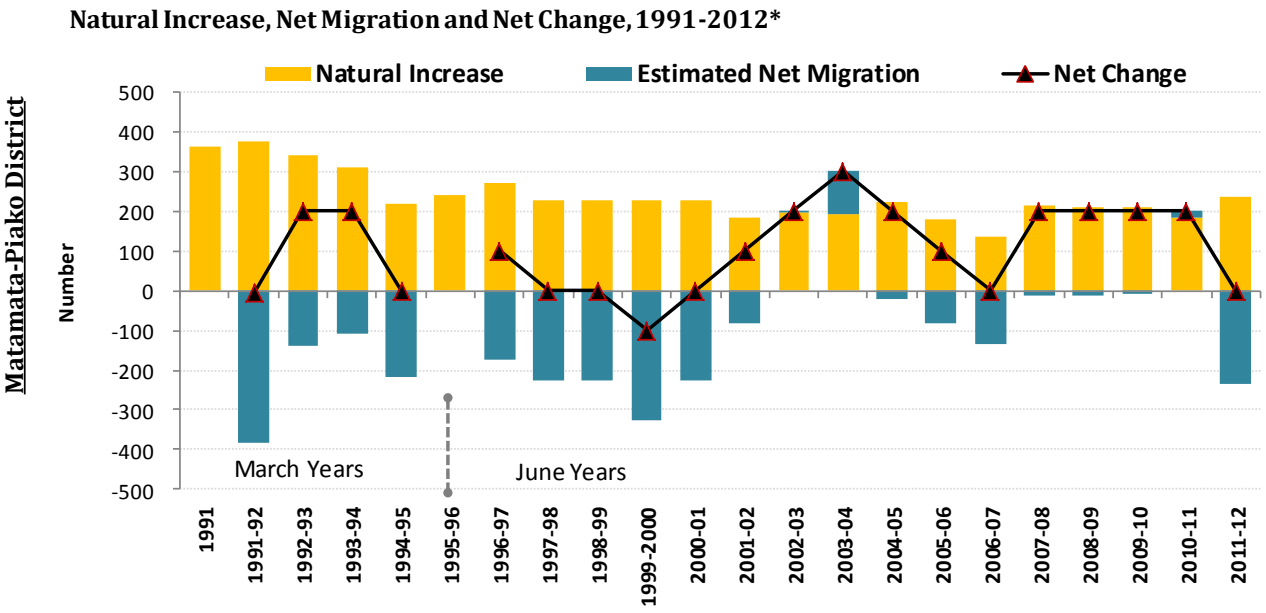
2. Components of Change

2.1 Natural Increase and Net Migration

Figure 2.1.1 shows the components of change contributing to growth for the Matamata-Piako District across the period 1991-2012 (see Table 2.1.1 for underlying data). Overwhelmingly the main component of growth has been natural increase (the difference between births and deaths). Reflecting the population trends above, net migration loss across much of the 1990s, early 2000s and again in 2006-2007 partially, and in a few years fully, offset that growth.

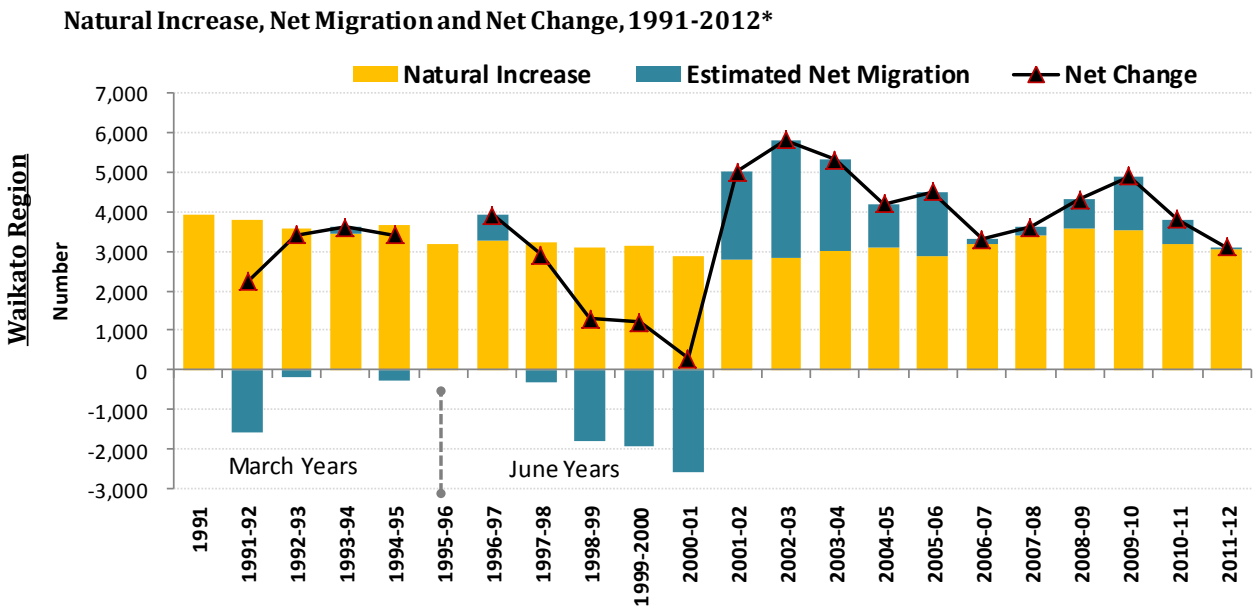
Data for Waikato and Total New Zealand (Figures 2.1.2 and 2.1.3) place these trends in context, with the important - but often poorly acknowledged - role of natural increase relatively similar in both cases, and net migration loss also the driver of low overall growth across the 1998-2001 period, and of slow growth more recently.

Figure 2.1.1: Natural Increase, Net Migration and Net Change 1991-2012, Matamata-Piako District



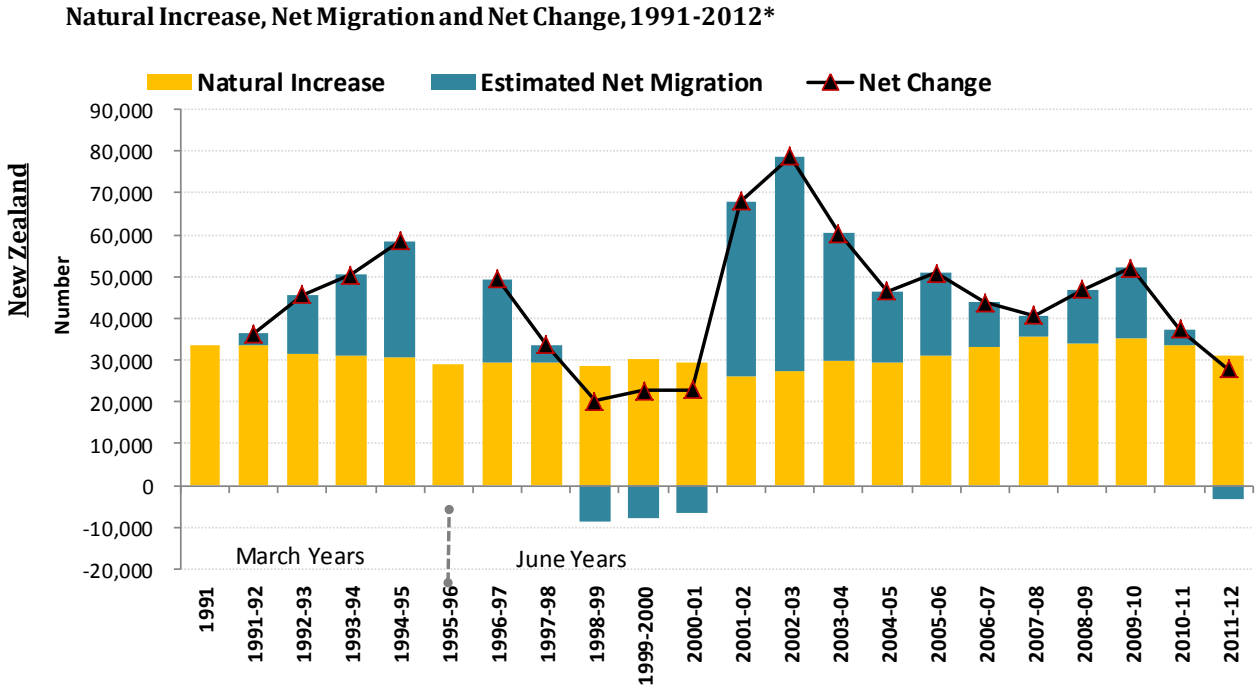
**Changes in timing and method of estimating Resident Population between 1995 and 1996 mean that only natural increase can be shown for that year*

Figure 2.1.2: Natural Increase, Net Migration and Net Change 1991-2012, Waikato Region



**Changes in timing and method of estimating Resident Population between 1995 and 1996 mean that only natural increase can be shown for that year*

Figure 2.1.3: Natural Increase, Net Migration and Net Change 1991-2012, Total New Zealand



**Changes in timing and method of estimating Resident Population between 1995 and 1996 mean that only natural increase can be shown for that year*

Table 2.1.1: Components of Change, 1991-2012, Matamata-Piako District and Total New Zealand

		Matamata-Piako District									New Zealand		
		Components of Change						Contribution to Net Change			Contribution to Net Change		
		Births	Deaths	Natural Increase	Estimated Resident Population (a)	Net Change	Estimated Migration	Estimated Natural Increase~ (%)	Estimated Migration~ (%)	Net Change~ (%)	Estimated Natural Increase~ (%)	Estimated Migration~ (%)	Net Change~ (%)
March Year	**1991**	572	209	363	29,408	...	...	...	...	...	...	...	...
	1992	607	230	377	29,400	-8	-385	1.28	-1.31	-0.03	0.95	0.08	1.03
	1993	557	217	340	29,600	200	-140	1.16	-0.48	0.68	0.89	0.40	1.28
	1994	535	227	308	29,800	200	-108	1.04	-0.36	0.68	0.87	0.53	1.40
	1995	468	249	219	29,800	0	-219	0.73	-0.73	0.00	0.84	0.76	1.60
June Year	**1996**	442	200	242	30,300	...	...	...	...	...	...	...	...
	1997	487	215	272	30,400	100	-172	0.90	-0.57	0.33	0.79	0.53	1.32
	1998	451	224	227	30,400	0	-227	0.75	-0.75	0.00	0.78	0.11	0.89
	1999	470	244	226	30,400	0	-226	0.74	-0.74	0.00	0.75	-0.22	0.53
	2000	485	257	228	30,300	-100	-328	0.75	-1.08	-0.33	0.79	-0.20	0.59
	2001	427	199	228	30,300	0	-228	0.75	-0.75	0.00	0.76	-0.17	0.59
	2002	411	227	184	30,400	100	-84	0.61	-0.28	0.33	0.67	1.08	1.75
	2003	421	223	198	30,600	200	2	0.65	0.01	0.66	0.69	1.30	1.99
	2004	425	231	194	30,900	300	106	0.63	0.35	0.98	0.74	0.76	1.50
	2005	447	225	222	31,100	200	-22	0.72	-0.07	0.65	0.72	0.41	1.14
	2006	417	236	181	31,200	100	-81	0.58	-0.26	0.32	0.75	0.48	1.23
	2007	403	267	136	31,200	0	-136	0.44	-0.44	0.00	0.79	0.25	1.04
	2008	476	264	212	31,400	200	-12	0.68	-0.04	0.64	0.84	0.12	0.96
	2009	460	249	211	31,600	200	-11	0.67	-0.04	0.64	0.80	0.30	1.10
	2010	449	239	210	31,800	200	-10	0.66	-0.03	0.63	0.82	0.39	1.20
	2011	452	269	183	32,000	200	17	0.58	0.05	0.63	0.76	0.09	0.86
	2012	483	249	234	32,000	0	-234	0.73	-0.73	0.00	0.71	-0.08	0.63

Source: Compiled from Statistics New Zealand Infoshare: Estimated Resident Population, Table DPE051AA; Births, Table VSB016AA; Deaths, Table VSD018AA

(a) 1991-1995 Estimated Defacto; 1996-2011 Estimated Usually Resident Population (URP)

~ Births minus Deaths ** Residual (Net Change minus Natural Increase)*

^ Natural Increase, Net Migration and Net Change as a percentage of previous year's URP

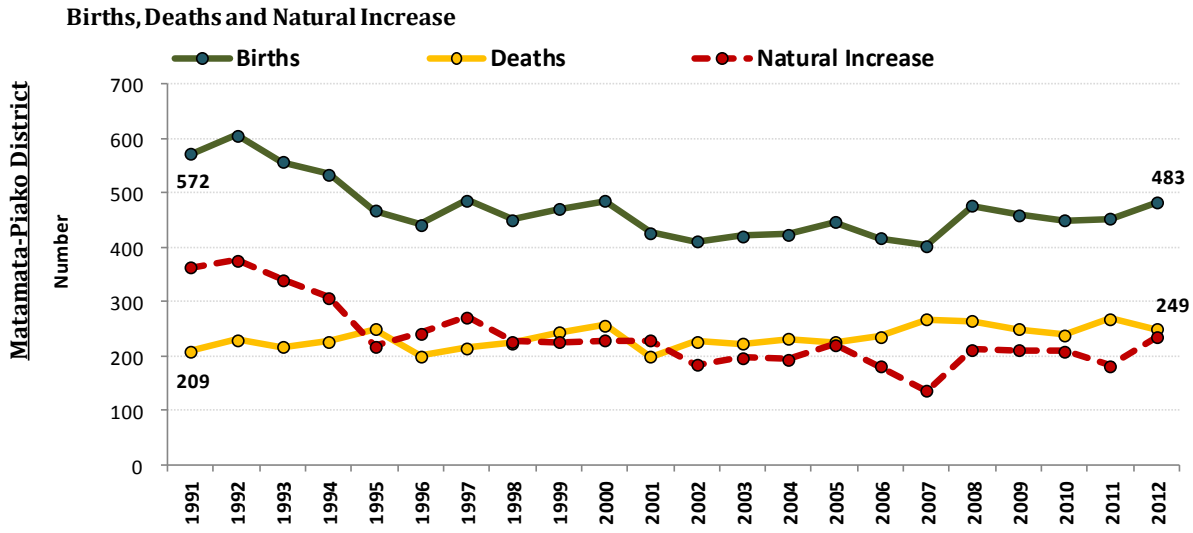
2.2 Births, Deaths and Natural Increase

Underlying the trends in natural increase shown above are those for births and deaths, depicted in Figure 2.2.1. Here we see that an important driver of the slow growth is a steady decline in the number of births. For a number of reasons outlined below (most significantly the reducing size of the reproductive age cohort indicated in the section on age structures), birth numbers are not likely to see major increase in the future.

A small but steady increase in the number of deaths is also seen from 200 in 1991 to just under 250 in 2012. The overall trend of slow increase will soon accelerate as the Baby Boomer wave moves through the older age groups.

As the projections further below show, the overall outcome of these opposing trends will be a steady reduction in natural increase.

Figure 2.2.1: Births, Deaths and Natural Increase, Matamata-Piako District 1991-2012



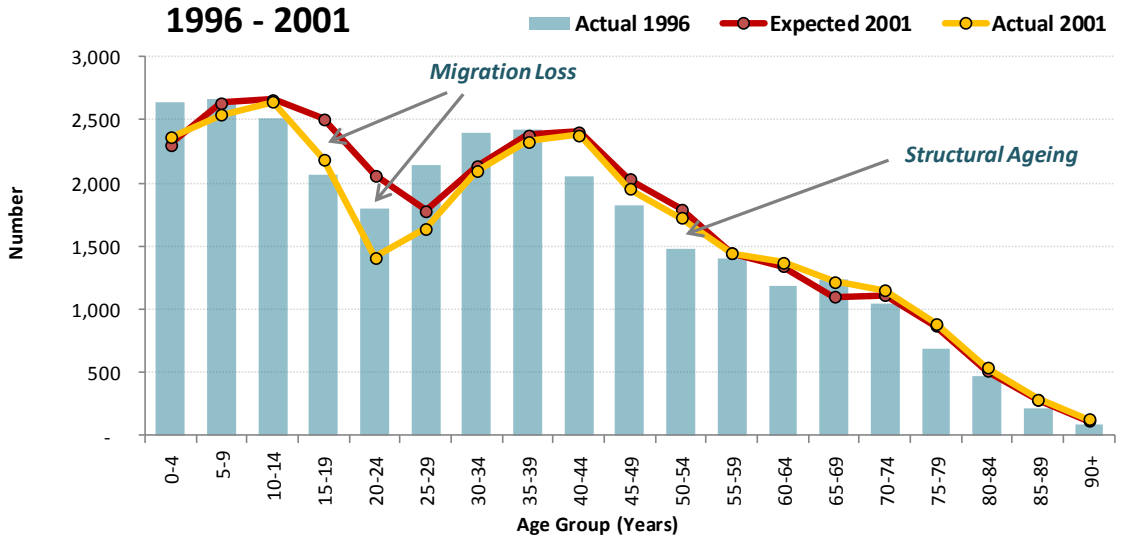
Compiled from Statistics New Zealand Infoshare: Births, Table VSB016AA; Deaths, Table VSD018AA

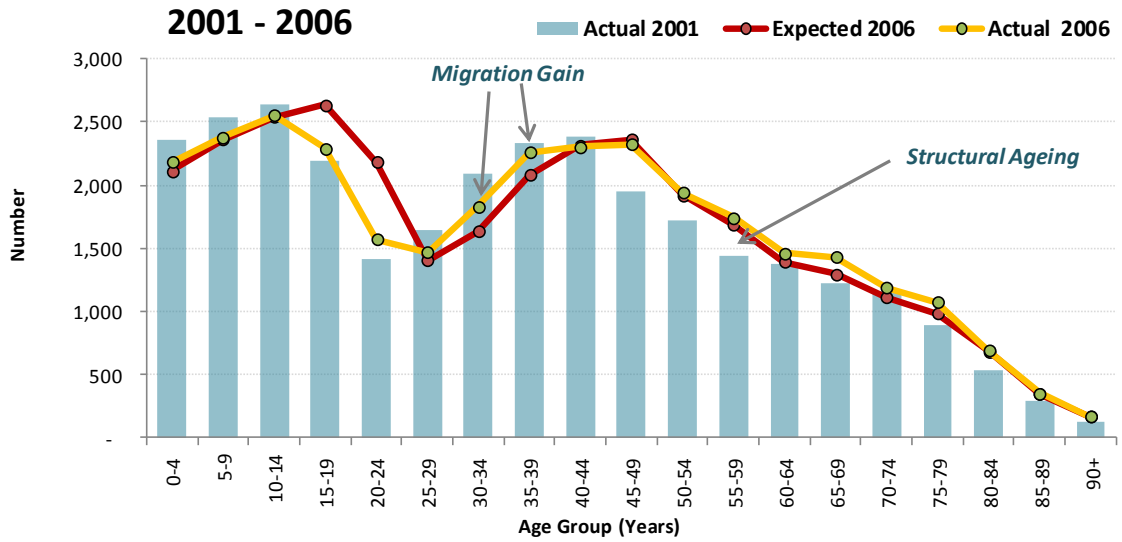
3. Components of Change by Age

3.1 Expected versus Actual Population

Using the residual method for estimating net migration described earlier, the components of change can be plotted by age. Figure 3.1.1 shows that the net migration losses have occurred primarily at age 15-24, while between 2001 and 2006, notable gains were experienced at 30-39 and 55-79 years.

Figure 3.1.1: Expected and actual population by age, 1996-2001 and 2001-2006, Matamata-Piako District



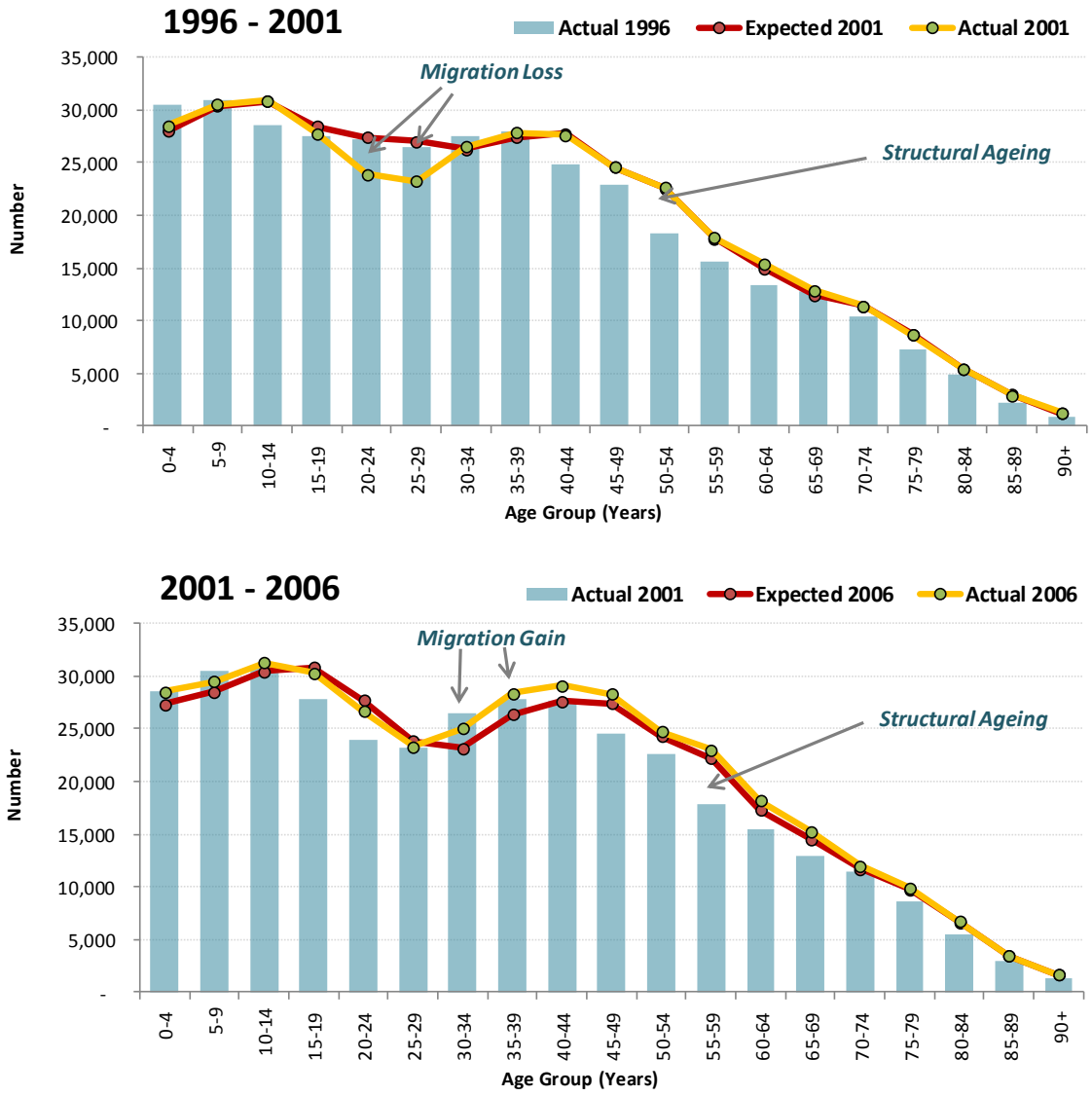


Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

Data for the Waikato Region are similar (Figure 3.1.2). The only real differences are small net migration gains at 0-4, 5-9, and 30-49 years during the 2001-2006 period (see Appendix 2).

Of note for both regions is the impact of structural ageing which shows at 50-54 years across the 1996-2001 period, and 55-59 years for 2001-2006. That is, the gap between numbers at the previous Census (columns) and Expected/Actual numbers at the subsequent Census, reflects the movement of the Baby Boomer wave through the age structure.

Figure 3.1.2: Expected and actual population by age, 1996-2001 and 2001-2006, Waikato Region

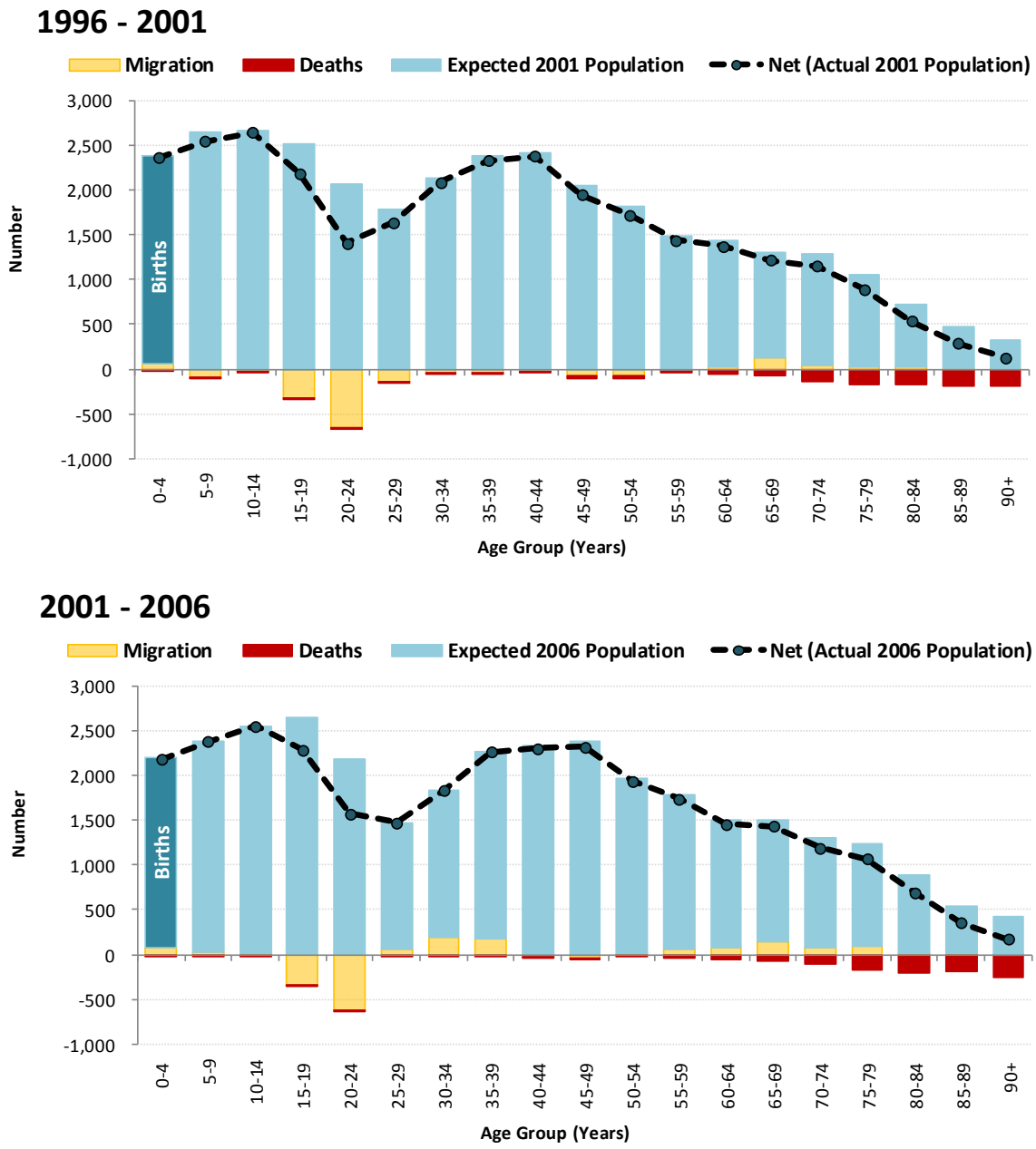


Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

3.2 Expected versus Actual Change by Component

Similar data are plotted in Figure 3.2.1 for Matamata-Piako District only, this time to highlight the role of each component. As indicated above, the primary driver reducing the expected numbers at younger ages is migration, while at older ages it is deaths. By contrast, minor net migration gain is detectable at 25-39 years and 55-79 years between 2001 and 2006. The information is important because it is free of cohort size effects, which have already been accounted for in the methodology.

Figure 3.2.1: Population change by age and component, 1996-2001 and 2001-2006, Matamata-Piako District



Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

4. Age Structure and Population Ageing

4.1 Numerical and Structural Ageing

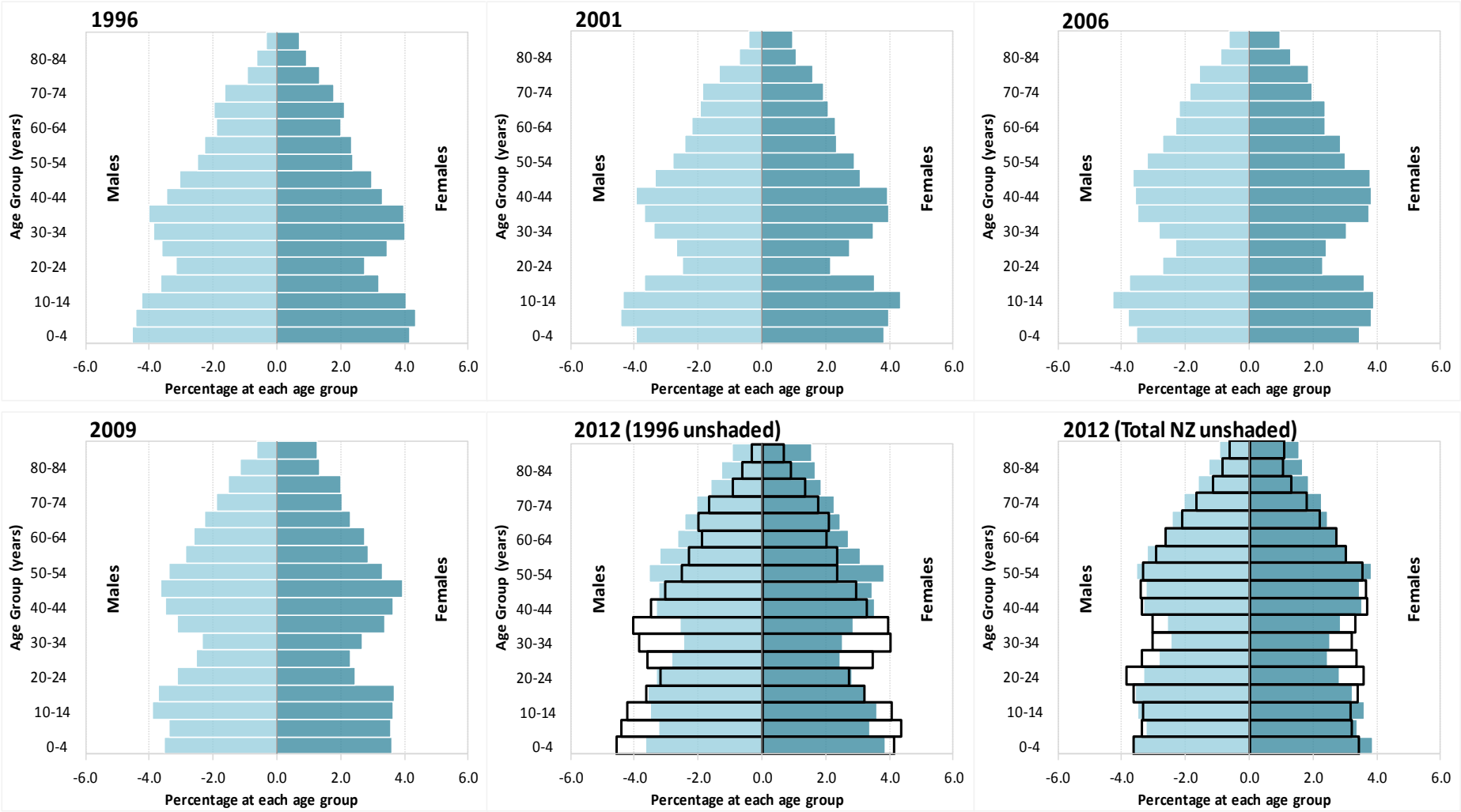
As elsewhere, the population of Matamata-Piako District is ageing. It is ageing numerically, as more people survive to older ages, and structurally, as falling birth rates and reducing numbers at the key reproductive ages deliver fewer babies into the base of the age structure, causing the proportions at younger ages to decrease and the increased numbers at older ages to also become increased proportions.

Migration is also playing a role. As indicated above, Matamata-Piako's structural ageing is accelerated in the first instance because of net migration loss at the young adult ages, particularly 15-24 years. The loss of people at these youthful ages accelerates the structural ageing process in two ways, firstly as a direct result of the reduction in their own numbers; secondly because it removes their reproductive potential, along with any children they may have. It is accelerated in the second instance by modest net gains at older ages, which add to both numerical and structural ageing.

Figure 4.1.1 illustrates the outcome of these trends over the period 1996-2012 (see Table 4.1.1 for summary data). Most obvious from Figure 4.1.1 is the shift from a relatively youthful age structure in 1996 to a deeply waisted ('hour glass') structure by 2001, indicating significant net migration loss at 20-34 years. The bite deepens at each observation until 2009, while in 2012 there is evidence of a minor increase at 20-24 and 25-29 years (reflected also in a small numerical increase). Importantly, Matamata-Piako is not alone in experiencing this youthful deficit, which is evident across most of New Zealand's non-urban regions, and which is also partly a reflection of declining birth rates at the time the current population aged 20-34 years was born. The bite is, however, significantly deeper for Matamata-Piako District than for Total New Zealand, as can be seen in the lower right-hand panel.

Compression at the youngest ages due to declining birth rates over the period 1996-2006 is clear, followed by a small resurgence in births since 2009. The proportion at the youngest ages (0-4 years) in 2012 is marginally higher for Matamata-Piako than Total New Zealand. As Table 4.1.1 shows, Matamata-Piako's population aged 65+ years has increased from 12.4 per cent in 1996 to almost 18 per cent in 2012, making it somewhat older than both Total New Zealand (13.8 per cent), and the Waikato Region (14.3 per cent).

Figure 4.1.1: Age-sex structure of Matamata-Piako District 1996-2012, and compared with New Zealand 2012



Source: Jackson, N.O (2012) Subnational Age Structure Resource 1996-2011, NIDEA, University of Waikato. Source data from Stats NZ Infoshare Estimated Subnational Population and TableBuilder: (RC, TA,AU) by Age and Sex at 30 June 1996, 2001, 2006-2011 (2006 Boundaries)

Table 4.1.1: Summary indicators of change by age, 1996-2012, Matamata-Piako District and key comparisons

Distribution of population over broad age groups									
Broad Age Group (Yrs)	**Population**					**Average Annual Change (%)**			**Annual Change (%) 2011-12**
	1996	**2001**	**2006**	**2011**	**2012**	**1996-2001**	**2001-2006**	**2006-2011**	
0-14	7,810	7,540	7,110	6,850	6,790	-0.7	-1.1	-0.7	-0.9
15-24	3,860	3,600	3,860	4,080	4,130	-1.3	+1.4	+1.1	+1.2
25-54	12,300	12,110	12,120	11,850	11,730	-0.3	+0.0	-0.4	-1.0
55-64	2,580	2,810	3,200	3,660	3,730	+1.8	+2.8	+2.9	+1.9
65+	3,750	4,220	4,880	5,630	5,770	+2.5	+3.1	+3.1	+2.5
Matamata-Piako	30,300	30,280	31,170	32,070	32,150	-0.0	+0.6	+0.6	+0.2
New Zealand	3,732,000	3,880,500	4,184,500	4,405,200	4,433,100	+0.8	+1.6	+1.1	+0.6
Broad Age Group (Yrs)	**Percentage Distribution**					**Average Annual Change (%)**			**Annual Change (%) 2011-12**
	1996	**2001**	**2006**	**2011**	**2012**	**1996-2001**	**2001-2006**	**2006-2011**	
0-14	25.8	24.9	22.8	21.4	21.1	-0.7	-1.7	-1.3	-1.1
15-24	12.7	11.9	12.4	12.7	12.8	-1.3	+0.8	+0.5	+1.0
25-54	40.6	40.0	38.9	37.0	36.5	-0.3	-0.6	-1.0	-1.3
55-64	8.5	9.3	10.3	11.4	11.6	+1.8	+2.1	+2.2	+1.7
65+	12.4	13.9	15.7	17.6	17.9	+2.5	+2.5	+2.4	+2.2
Matamata-Piako	100.0	100.0	100.0	100.0	100.0	...	...	...	+0.0
Total NZ 65+ yea	11.5	11.9	12.2	13.3	13.8	+0.6	+0.6	+1.8	+3.5
Ratio Labour Market Entrants to Exits (Number aged 15-24 per 10 persons aged 55-64)									
	Ratio					**Average Annual Change (%)**			**Annual Change (%) 2011-12**
	1996	**2001**	**2006**	**2011**	**2012**	**1996-2001**	**2001-2006**	**2006-2011**	
Matamata-Piako	15.0	12.8	12.1	11.1	11.1	-2.9	-1.2	-1.5	-0.7
New Zealand	18.3	15.2	14.1	13.0	12.8	-3.3	-1.5	-1.5	-1.5
Ratio Elderly to Children (Number 65+ per Child 0-14)									
	Ratio					**Average Annual Change (%)**			**Annual Change (%) 2011-12**
	1996	**2001**	**2006**	**2011**	**2012**	**1996-2001**	**2001-2006**	**2006-2011**	
Matamata-Piako	0.5	0.6	0.7	0.8	0.8	+3.3	+4.5	+3.9	+3.4
New Zealand	0.5	0.5	0.6	0.7	0.7	+1.0	+1.9	+2.8	+4.4

Source: Jackson, N.O (2012) Subnational Age Structure Resource 1996-2011, National Institute of Demographic and Economic Analysis (NIDEA), University of Waikato

Notes: Source data from Stats NZ Infoshare Estimated Subnational Population (RC, TA,AU) by Age and Sex at 30 June 1996, 2001 and 2006-2011 (2006 Boundaries)

Overall trends by five-year age group are summarised in Figure 4.1.2 (see Table 4.1.2 for comparison with Total New Zealand and Waikato Region). Between 1996 and 2012, numbers for Matamata-Piako District declined at most younger ages (the exception being at 15-19 and 20-24 years) and increased at all older ages, particularly across the Baby Boomer age groups. Importantly, as indicated in Section 3 (above), some of these changes reflect cohort size effects, with smaller cohorts replacing larger cohorts at the younger ages, and vice-versa at older ages; however the data provide important information for planning and resource allocation. Trends

are similar for Waikato, while for Total New Zealand, net decline has occurred at ages 5-9 and 30-39 years only.

Figure 4.1.2: Change by age (number), Matamata-Piako District 1996-2012

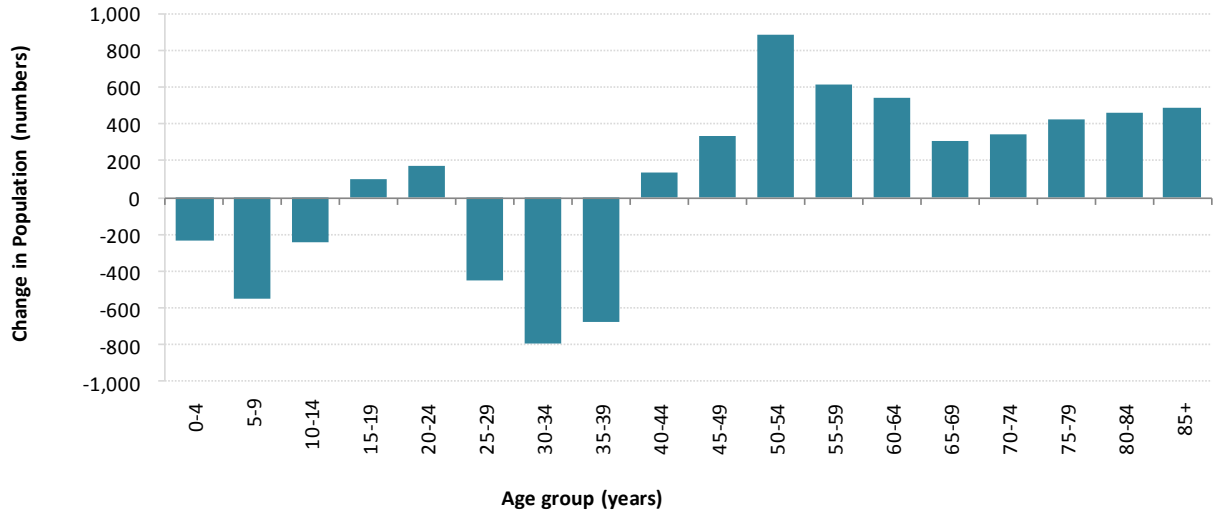


Table 4.1.2: Change by age (%), Matamata-Piako District, Waikato, and Total New Zealand, 1996-2012

		Matamata-Piako District		New Zealand	
		Change in Population	% Change	Change in Population	% Change
1996 - 2012	0-4	(230)	-8.7	17,140	+5.8
	5-9	(550)	-20.7	(4,300)	-1.5
	10-14	(240)	-9.6	19,890	+7.4
	15-19	100	+4.8	40,480	+14.9
	20-24	170	+9.5	49,850	+17.8
	25-29	(450)	-21.0	13,040	+4.6
	30-34	(790)	-33.1	(24,670)	-8.2
	35-39	(680)	-28.1	(15,520)	-5.2
	40-44	140	+6.8	48,550	+18.4
	45-49	330	+18.1	63,720	+25.5
	50-54	880	+59.5	112,470	+58.3
	55-59	610	+43.6	99,240	+60.3
	60-64	540	+45.8	99,850	+72.6
	65-69	310	+25.0	55,920	+41.4
	70-74	340	+32.7	36,910	+31.9
	75-79	420	+60.9	24,530	+29.3
	80-84	460	+97.9	27,230	+48.3
	85+	490	+158.1	36,810	+93.9
	Total	1,700	+5.6	701,100	+18.8

Source: Jackson, N.O (2013) Subnational Age Structure Resource 1996-2012, NIDEA, University of Waikato

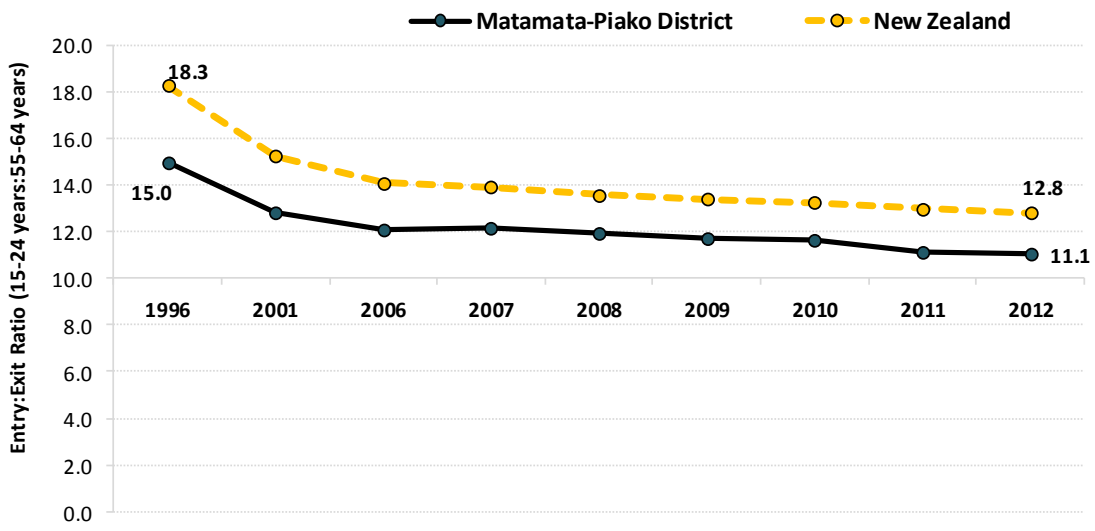
Source data from Stats NZ TableBuilder Estimated Subnational Population by Age and Sex at 30 June (2006 Boundaries)

4.2 Labour Market Implications

Table 4.1.1 (above) also showed that Matamata-Piako District's Labour Market 'entry/exit ratio' has fallen since 1996, from 15 people at labour market entry age for every 10 in the retirement age zone, to just 11 per 10 in 2012 (see Figure 4.2.1). By comparison, the Waikato Region and Total New Zealand still have around 13 people respectively at entry age per 10 at exit age.

Of note is that if older age groupings are used, for example 20-29 and 60-69 years, Matamata-Piako in 2012 had only 11 entrants per 10 exits, compared with 14.7 for Total New Zealand and 13.4 for Waikato. Again this is a reflection of Matamata-Piako's older age structure and greater bite at ages 20-34. This issue is returned to further below.

Figure 4.2.1: Labour market entry/exit ratio, Matamata-Piako District and Total New Zealand, 1996-2012



Source: Jackson, N.O (2012) Subnational Age Structure Resource 1996-2011, NIDEA, University of Waikato. Source data from Stats NZ Infoshare Estimated Subnational Population (RC, TA,AU) by Age and Sex at 30 June 1996, 2001, 2006-2011 (2006 Boundaries)

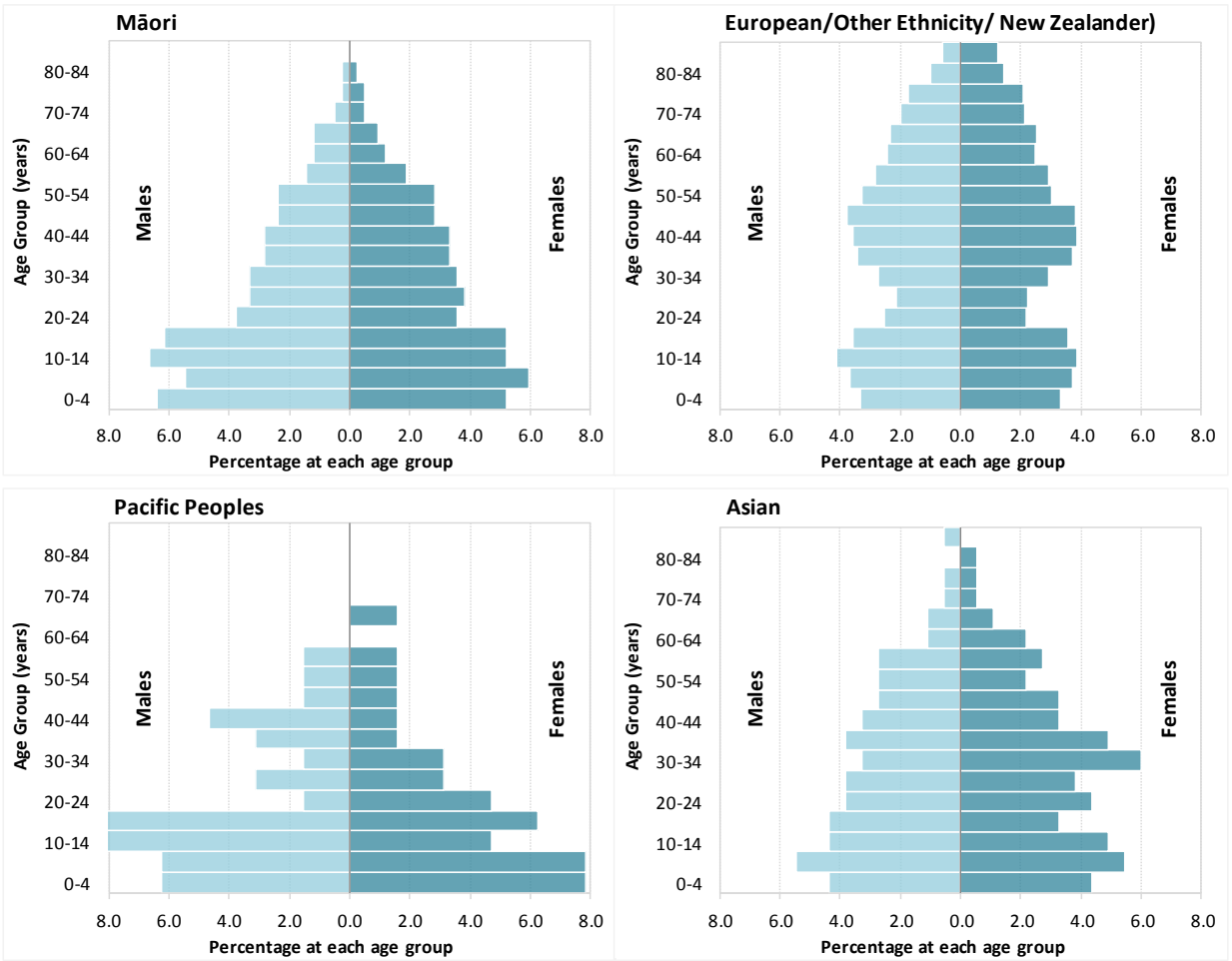
4.3 Ethnic Age Composition and Ageing

Figure 4.3.1 provides a comparison of Matamata-Piako District's major ethnic groups in 2006, according to the multiple count enumeration method discussed above. As was indicated in Table 1.2.1 above, this method of enumeration means that a portion of the population is counted in more than one ethnic group. In Matamata-Piako District's case, the over-count for 2006 (when the totals by ethnic group are summed) was approximately 6.5 per cent. However as can be seen

by the markedly different age structures of each group in Figure 4.3.1, this methodological complexity would have very little impact on the story by age composition.

The data suggest that the bite in the age structure is very much connected with the European/New Zealander/Other population (hereafter European-origin). While it also appears to some extent for the Asian population, it is difficult to say that its cause is the same. For example, for the European-origin population, the bite would appear to be related to net migration loss at those ages, while for the Asian population it may reflect an influx of children and young adults (numbers for the Middle Eastern/Latin American/African - hereafter MELAA population - are too small to give a reliable picture by age).

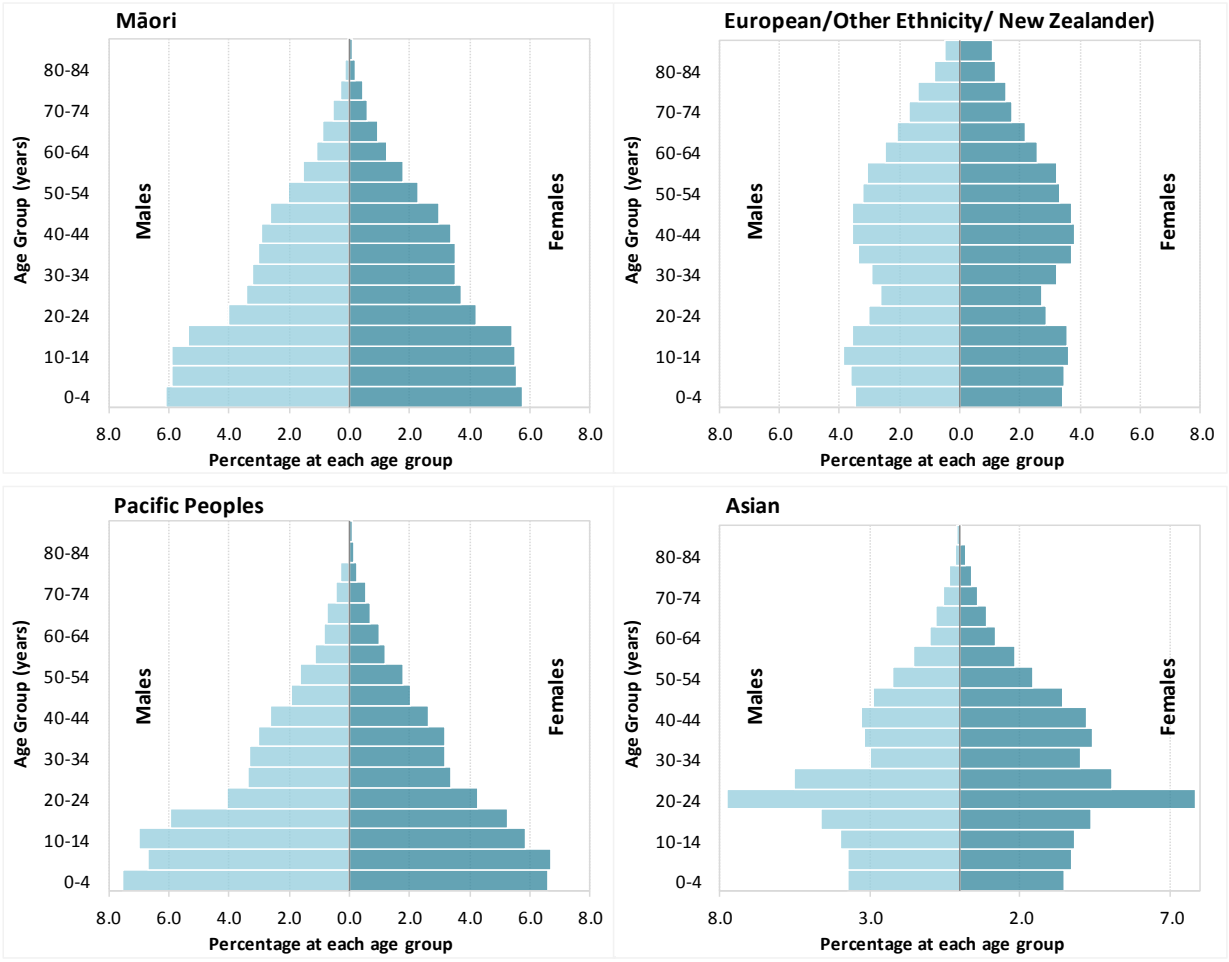
Figure 4.3.1: Age-sex Structure by major ethnic group*, Matamata-Piako District 2006



Source: Statistics New Zealand, Estimated Subnational Ethnic Population (RC,TA) by Age and Sex at 30 June 2006
*Notes: *Multiple count ethnicity means that people may be counted in more than one ethnic group*

Similar comments apply to the situation for the Waikato Region (Figure 4.3.2). The differences by ethnic group are equally marked, although there is significant disparity between the Asian-origin population of Matamata-Piako and the total Waikato Region, particularly at 20-29 years. This primarily reflects the presence of many young Asian students at university in Hamilton.

Figure 4.3.2: Age-sex structure by major ethnic group*, Waikato Region 2006



Source: Statistics New Zealand, Estimated Subnational Ethnic Population (RC,TA) by Age and Sex at 30 June 2006
*Notes: *Multiple count ethnicity means that people may be counted in more than one ethnic group*

Tables 4.3.1- 4.3.4 provide summary data for the Māori, Pacific Island, Asian, and European/New Zealander/Other populations. As above, data for the Middle Eastern/Latin American/African population are not presented because of very small numbers by age.

Table 4.3.1 shows that the very youthful age structure of Matamata-Piako District's Māori population results in over one-third aged 0-14 years across all three observations, falling from 38.8 per cent in 1996 to 34.8 per cent in 2006. These proportions are in stark contrast to their 12.1 to 12.7 per cent total share shown earlier in Table 1.2.1, and are clearly where the Māori population's contribution to Matamata-Piako District's growth is concentrated.

At 65+ years, numbers and proportions have grown significantly, increasing to 4.3 per cent in 2006. The data indicate that Matamata-Piako's Māori population is slightly older than its counterparts in Waikato and Total New Zealand, where the proportions aged 65+ are a little lower, and labour market entry/exit ratios are a little higher (see Section 6 on this topic).

Table 4.3.1: Summary indicators, Matamata-Piako District Māori Population, 1996, 2001, 2006

Distribution of population over broad age groups						Māori
Broad Age Group (Yrs)	Population			Change (%) over 5 years		Change (%) over 10 years 1996 - 2006
	1996	2001	2006	1996-2001	2001-2006	
0-14	1,520	1,630	1,470	+7.2	-9.8	-3.3
15-24	710	730	790	+2.8	+8.2	+11.3
25-54	1,430	1,450	1,550	+1.4	+6.9	+8.4
55-64	170	190	240	+11.8	+26.3	+41.2
65+	90	100	180	+11.1	+80.0	+100.0
Matamata-Piako District Māori	3,920	4,100	4,230	+4.6	+3.2	+7.9
Waikato Region Māori	77,900	80,200	84,000	+3.0	+4.7	+7.8
New Zealand Māori	573,200	586,000	624,300	+2.2	+6.5	+8.9
Broad Age Group (Yrs)	Percentage Distribution			Change (%) over 5 years		Change (%) over 10 years 1996 - 2006
	1996	2001	2006	1996-2001	2001-2006	
0-14	38.8	39.8	34.8	+2.5	-12.6	-10.4
15-24	18.1	17.8	18.7	-1.7	+4.9	+3.1
25-54	36.5	35.4	36.6	-3.1	+3.6	+0.4
55-64	4.3	4.6	5.7	+6.9	+22.4	+30.8
65+	2.3	2.4	4.3	+6.2	+74.5	+85.3
Matamata-Piako District Māori	100.0	100.0	100.0	...	...	...
Waikato Region Māori, % 65+ yrs	3.0	3.4	4.2	+13.1	+22.5	+38.5
New Zealand Māori, % 65+ yrs	3.0	3.4	4.1	+11.8	+22.0	+36.4
Ratio Labour Market Entrants to Exits (Number aged 15-24 per 10 persons aged 55-64)						
	Ratio			Change (%) over 5 years		Change (%) over 10 years 1996 - 2006
	1996	2001	2006	1996-2001	2001-2006	
Matamata-Piako District Māori	41.8	38.4	32.9	-8.0	-14.3	-21.2
Waikato Region Māori	42.0	38.4	33.8	-8.7	-11.9	-19.5
New Zealand Māori	42.0	36.9	33.1	-12.1	-10.2	-21.1
Ratio Elderly to Children (Number 65+ per Child 0-14)						
	Ratio			Change (%) over 5 years		Change (%) over 10 years 1996 - 2006
	1996	2001	2006	1996-2001	2001-2006	
Matamata-Piako District Māori	0.06	0.06	0.12	+3.6	+99.6	+106.8
Waikato Region Māori	0.08	0.09	0.12	+14.4	+31.5	+50.4
New Zealand Māori	0.08	0.09	0.12	+11.8	+30.5	+45.9

Source: Jackson, N.O. (2011) Subnational Age Structure Resource 1996, 2001, 2006, NIDEA, University of Waikato.
Source data from Stats NZ TableBuilder Estimated Subnational Population (RC,TA,AU) by Age and Sex at 30 June 96,01,06.
Notes: Multiple count ethnicity means that people may be counted in more than one ethnic group

The Pacific Island population of Matamata-Piako is even more youthful than that of Māori, with about 44 per cent or more aged 0-14 years at each observation (Table 4.3.2). Reflecting this concentration at younger ages, only 1.6 per cent of the Pacific Island population in 2006 was aged 65+ years, a much lower proportion than for both the Waikato Region (3.3 per cent) and Total New Zealand (3.8 per cent). As was the case for Māori, the Pacific Island population's contribution to the growth of the region is clearly also concentrated at the youngest ages.

Table 4.3.2: Summary indicators, Matamata-Piako Pacific Island Population, 1996, 2001, 2006

Distribution of population over broad age groups						**Pacific Peoples**
Broad Age Group (Yrs)	**Population**			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
0-14	115	165	135	+43.5	-18.2	+17.4
15-24	55	45	70	-18.2	+55.6	+27.3
25-54	70	85	90	+21.4	+5.9	+28.6
55-64	15	15	10	+0.0	-33.3	-33.3
65+	5	5	5	+0.0	+0.0	+0.0
Matamata-Piako District Pacific Pe	260	315	310	+21.2	-1.6	+19.2
Waikato Region Pacific Peoples	10,600	11,650	13,300	+9.9	+14.2	+25.5
New Zealand Pacific Peoples	229,300	261,800	301,600	+14.2	+15.2	+31.5
Broad Age Group (Yrs)	**Percentage Distribution**			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
0-14	44.2	52.4	43.5	+18.4	-16.9	-1.5
15-24	21.2	14.3	22.6	-32.5	+58.1	+6.7
25-54	26.9	27.0	29.0	+0.2	+7.6	+7.8
55-64	5.8	4.8	3.2	-17.5	-32.3	-44.1
65+	1.9	1.6	1.6	-17.5	+1.6	-16.1
Matamata-Piako District Pacific Pe	100.0	100.0	100.0	...	...	...
Waikato Region Pacific Peoples, %	2.7	2.7	3.2	+0.4	+17.7	+18.2
New Zealand Pacific Peoples, % 65	3.1	3.4	3.8	+11.8	+11.8	+25.0
Ratio Labour Market Entrants to Exits (Number aged 15-24 per 10 persons aged 55-64)						
	Ratio			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
Matamata-Piako District Pacific Pe	36.7	30.0	70.0	-18.2	+133.3	+90.9
Waikato Region Pacific Peoples	52.1	49.8	47.3	-4.5	-5.0	-9.3
New Zealand Pacific Peoples	47.1	40.0	37.2	-14.9	-7.0	-20.9
Ratio Elderly to Children (Number 65+ per Child 0-14)						
	Ratio			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
Matamata-Piako District Pacific Pe	0.04	0.03	0.04	-30.3	+22.2	-14.8
Waikato Region Pacific Peoples	0.07	0.07	0.08	-1.8	+23.1	+20.9
New Zealand Pacific Peoples	0.08	0.09	0.10	+12.0	+16.8	+30.8

Source: Jackson, N.O. (2011) Subnational Age Structure Resource 1996, 2001, 2006, NIDEA, University of Waikato.
Source data from Stats NZ TableBuilder Estimated Subnational Population (RC,TA,AU) by Age and Sex at 30 June 96,01,06.
Notes: Multiple count ethnicity means that people may be counted in more than one ethnic group

The data for the region's Asian population identify quite different proportions by age (Table 4.3.3). With 28.3 per cent of the Matamata-Piako District's Asian population aged 0-14 years in 2006, the proportion is aged 65+ years is just 5.3 per cent. Comparison with the Waikato Region and total New Zealand Asian populations points to somewhat younger Asian populations outside Matamata-Piako District, with only 4.7 per cent aged 65+ years nationally, and 4.0 per cent in the Waikato.

Table 4.3.3: Summary indicators, Matamata-Piako District Asian Population, 1996, 2001, 2006

Distribution of population over broad age groups						**Asian**
Broad Age Group (Yrs)	**Population**			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
0-14	130	195	265	+50.0	+35.9	+103.8
15-24	75	135	145	+80.0	+7.4	+93.3
25-54	170	275	395	+61.8	+43.6	+132.4
55-64	20	35	80	+75.0	+128.6	+300.0
65+	-	15	50	#DIV/0!	+233.3	#DIV/0!
Matamata-Piako District Asian	395	655	935	+65.8	+42.7	+136.7
Waikato Region Asian	9,830	13,400	20,600	+36.3	+53.7	+109.6
New Zealand Asian	194,800	272,400	404,300	+39.8	+48.4	+107.5
Broad Age Group (Yrs)	**Percentage Distribution**			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
0-14	32.9	29.8	28.3	-9.5	-4.8	-13.9
15-24	19.0	20.6	15.5	+8.5	-24.8	-18.3
25-54	43.0	42.0	42.2	-2.4	+0.6	-1.8
55-64	5.1	5.3	8.6	+5.5	+60.1	+69.0
65+	-	2.3	5.3	#DIV/0!	+133.5	#DIV/0!
Matamata-Piako District Asian	100.0	100.0	100.0	...	...	...
Waikato Region Asian, % 65+ yrs	2.8	3.6	4.0	+25.8	+11.1	+39.7
New Zealand Asian, % 65+ yrs	3.0	4.2	4.7	+37.9	+11.4	+53.7
Ratio Labour Market Entrants to Exits (Number aged 15-24 per 10 persons aged 55-64)						
	Ratio			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
Matamata-Piako District Asian	37.5	38.6	18.1	+2.9	-53.0	-51.7
Waikato Region Asian	54.1	43.0	44.3	-20.6	+3.1	-18.1
New Zealand Asian	51.0	37.5	36.3	-26.3	-3.3	-28.7
Ratio Elderly to Children (Number 65+ per Child 0-14)						
	Ratio			**Change (%) over 5 years**		**Change (%) over 10 years 1996 - 2006**
	1996	**2001**	**2006**	**1996-2001**	**2001-2006**	
Matamata-Piako District Asian	-	0.08	0.19	#DIV/0!	+145.3	#DIV/0!
Waikato Region Asian	0.10	0.14	0.18	+46.1	+25.1	+82.8
New Zealand Asian	0.12	0.19	0.23	+58.7	+21.6	+93.0

Source: Jackson, N.O. (2011) Subnational Age Structure Resource 1996, 2001, 2006, NIDEA, University of Waikato.
Source data from Stats NZ TableBuilder Estimated Subnational Population (RC,TA,AU) by Age and Sex at 30 June 96,01,06.
Notes: Multiple count ethnicity means that people may be counted in more than one ethnic group

The data for the region's European-origin population (Table 4.3.4) also stand in contrast to that for the other ethnic groups. For Matamata-Piako, overall numbers in fact declined between 1996 and 2001 (by 2.6 per cent). They grew slightly between 2001 and 2006, but the loss in the former period was instrumental in the overall decline of 0.3 per cent. As Table 4.2.4 shows, the loss was primarily experienced at the younger ages, but it also extended up to 54 years, with gains above those ages partially offsetting the losses. With 17.1 per cent aged 65+ years in 2006, the European-origin population of Matamata-Piako is among the nation's oldest, compared to Waikato Region which has 14.2 per cent. The district's 65+ year European-origin population is growing at a much faster rate (28.6 per cent), which is also the case with the Waikato Region (16.7 per cent), than Total New Zealand (8.8 per cent).

Table 4.3.4: Summary indicators, Matamata-Piako District European/NZ/Other Population, 1996, 2001, 2006

Distribution of population over broad age groups						European /Other/NZ
Broad Age Group (Yrs)	Population			Change (%) over 5 years		Change (%) over 10 years
	1996	2001	2006	1996-2001	2001-2006	1996 - 2006
0-14	6,970	6,500	6,090	-6.7	-6.3	-12.6
15-24	3,410	3,020	3,260	-11.4	+7.9	-4.4
25-54	11,230	10,790	10,640	-3.9	-1.4	-5.3
55-64	2,440	2,610	2,950	+7.0	+13.0	+20.9
65+	3,680	4,100	4,720	+11.4	+15.1	+28.3
Matamata-Piako District European	27,730	27,020	27,660	-2.6	+2.4	-0.3
Waikato Region European /Other/N	299,600	300,100	317,300	+0.2	+5.7	+5.9
New Zealand European /Other/NZ	3,074,600	3,074,000	3,213,400	-0.0	+4.5	+4.5
Broad Age Group (Yrs)	Percentage Distribution			Change (%) over 5 years		Change (%) over 10 years
	1996	2001	2006	1996-2001	2001-2006	1996 - 2006
0-14	25.1	24.1	22.0	-4.3	-8.5	-12.4
15-24	12.3	11.2	11.8	-9.1	+5.4	-4.2
25-54	40.5	39.9	38.5	-1.4	-3.7	-5.0
55-64	8.8	9.7	10.7	+9.8	+10.4	+21.2
65+	13.3	15.2	17.1	+14.3	+12.5	+28.6
Matamata-Piako District European	100.0	100.0	100.0	...	...	...
Waikato Region European /Other/N	12.2	13.2	14.2	+8.4	+7.6	+16.7
New Zealand European /Other/NZ,	13.2	13.8	14.4	+4.6	+4.1	+8.8
Ratio Labour Market Entrants to Exits (Number aged 15-24 per 10 persons aged 55-64)						
	Ratio			Change (%) over 5 years		Change (%) over 10 years
	1996	2001	2006	1996-2001	2001-2006	1996 - 2006
Matamata-Piako District European	14.0	11.6	11.1	-17.2	-4.5	-20.9
Waikato Region European /Other/N	16.9	13.3	11.5	-21.3	-13.6	-32.0
New Zealand European /Other/NZ	15.9	12.7	11.3	-20.1	-11.0	-28.9
Ratio Elderly to Children (Number 65+ per Child 0-14)						
	Ratio			Change (%) over 5 years		Change (%) over 10 years
	1996	2001	2006	1996-2001	2001-2006	1996 - 2006
Matamata-Piako District European	0.53	0.63	0.78	+19.5	+22.9	+46.8
Waikato Region European /Other/N	0.52	0.58	0.66	+11.3	+14.9	+27.9
New Zealand European /Other/NZ	0.61	0.65	0.72	+6.1	+10.0	+16.7

Source: Jackson, N.O. (2011) Subnational Age Structure Resource 1996, 2001, 2006, NIDEA, University of Waikato.
Source data from Stats NZ TableBuilder Estimated Subnational Population (RC,TA,AU) by Age and Sex at 30 June 96,01,06.
Notes: Multiple count ethnicity means that people may be counted in more than one ethnic group

Table 4.3.5 provides an overview of each ethnic group's population share by age. As indicated above, the general picture is that the Māori and Pacific Island populations increase their share as age decreases, while the European-origin population increases its share as age increases. The picture is significantly less linear for the Asian population, where the population is evenly spread out between the three youngest age groups.

Within that picture, young Māori comprise a much smaller share of Matamata-Piako District's youthful population than they do of the Waikato Region's youth (18.4 per cent compared with 26.9 per cent), and a slightly smaller share than for Total New Zealand (20.2 per cent), although as noted above, they contributed to a greater proportion of overall growth. The situation at 15-24 years is similar to that for the Waikato Region. The distribution by age of the Asian population across Matamata-Piako and the Waikato is very different, with the former having much smaller proportions of this ethnic group across all ages.

Table 4.3.5: Ethnic group* percentage share by age group and region, 2006

		Mäori	Pacific Peoples	Asian	MELAA	European/ Other/NZ	Total*	Total People with Ethnicity Stated*	Ethnicity Overcount
Matamata-Piako District	0-14	1,470	135	265	45	6,090	8,005	7,110	12.6
		18.4	*1.7*	*3.3*	*0.6*	*76.1*	*100.0*		
	15-24	790	70	145	-	3,260	4,265	3,860	10.5
		18.5	*1.6*	*3.4*	*-*	*76.4*	*100.0*		
	25-54	1,550	90	395	50	10,640	12,725	12,120	5.0
		12.2	*0.7*	*3.1*	*0.4*	*83.6*	*100.0*		
	55-64	240	10	80	-	2,950	3,280	3,200	2.5
		7.3	*0.3*	*2.4*	*-*	*89.9*	*100.0*		
	65+	180	5	50	-	4,720	4,955	4,900	1.1
		3.6	*0.1*	*1.0*	*-*	*95.3*	*100.0*		
	Total	4,230	310	935	95	27,660	33,230	31,190	6.5
		12.7	*0.9*	*2.8*	*0.3*	*83.2*	*100.0*		
Waikato Region	0-14	29,130	5,370	4,630	960	68,110	108,200	89,220	21.3
		26.9	*5.0*	*4.3*	*0.9*	*62.9*	*100.0*		
	15-24	15,920	2,600	5,050	530	41,440	65,540	56,930	15.1
		24.3	*4.0*	*7.7*	*0.8*	*63.2*	*100.0*		
	25-54	30,730	4,270	8,960	1,090	126,490	171,540	158,760	8.0
		17.9	*2.5*	*5.2*	*0.6*	*73.7*	*100.0*		
	55-64	4,710	550	1,140	90	36,090	42,580	41,190	3.4
		11.1	*1.3*	*2.7*	*0.2*	*84.8*	*100.0*		
	65+	3,540	430	820	50	45,160	50,000	49,030	2.0
		7.1	*0.9*	*1.6*	*0.1*	*90.3*	*100.0*		
	Total	84,030	13,220	20,600	2,720	317,290	437,860	395,130	10.8
		19.2	*3.0*	*4.7*	*0.6*	*72.5*	*100.0*		
New Zealand	0-14	215,290	110,280	83,590	10,330	645,240	1,064,730	888,320	19.9
		20.2	*10.4*	*7.9*	*1.0*	*60.6*	*100.0*		
	15-24	116,090	56,770	89,570	7,620	414,280	684,330	604,740	13.2
		17.0	*8.3*	*13.1*	*1.1*	*60.5*	*100.0*		
	25-54	232,190	107,800	187,640	17,800	1,325,060	1,870,490	1,750,250	6.9
		12.4	*5.8*	*10.0*	*1.0*	*70.8*	*100.0*		
	55-64	35,060	15,250	24,670	1,710	365,590	442,280	429,670	2.9
		7.9	*3.4*	*5.6*	*0.4*	*82.7*	*100.0*		
	65+	25,680	11,540	18,850	1,090	463,160	520,320	511,620	1.7
		4.9	*2.2*	*3.6*	*0.2*	*89.0*	*100.0*		
	Total	624,310	301,640	404,320	38,550	3,213,330	4,582,150	4,184,600	9.5
		13.6	*6.6*	*8.8*	*0.8*	*70.1*	*100.0*		

Source: Jackson, N.O (2011) Subnational Ethnic Age Structure Resource 1996, 2001, 2006, NIDEA. Source data: Statistics New Zealand, Estimated Subnational Ethnic Population (RC,TA) by Age and Sex at 30 June

*Notes: *Multiple count ethnicity means that people may be counted in more than one ethnic group*

5. Population Projections

5.1 Size, Growth and Population Ageing

Under the medium series assumptions, the population of Matamata-Piako District is projected to increase very slightly over the 2011 – 2031 period, to around 32,740 persons by 2031 (Table 5.1.1). Significant growth in numbers is projected for all 65+ age groups while the numbers at younger ages, 0-39 years, and even those at 40-54 years are projected to decline. The 65+ population is anticipated to grow both numerically (by 57.2 per cent between 2011 and 2031) and structurally (from 17.2 per cent in 2011 to 27.5 per cent by 2031). Figure 5.1.1 compares these changes under the low and high variant assumptions (see Appendices 3.1—3.4 for projection assumptions).

Table 5.1.1: Projected population, Matamata-Piako District, 2006-2031 (Medium Series)

	Numbers by age						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	7,110	**6,840**	6,500	6,460	6,240	6,060	-11.4
15-24 years	3,860	**4,090**	3,820	3,350	3,210	3,190	-22.0
25-39 years	5,560	**5,130**	5,420	5,900	5,950	5,380	+4.9
40-54 years	6,560	**6,730**	6,100	5,330	4,890	5,190	-22.9
55-64 years	3,200	**3,650**	4,160	4,410	4,230	3,740	+2.5
65-74 years	2,620	**2,880**	3,270	3,750	4,270	4,540	+57.6
75-84 years	1,760	**1,940**	2,170	2,450	2,810	3,260	+68.0
85+ years	520	**670**	870	980	1,180	1,380	+106.0
Total	31,190	**31,930**	32,310	32,630	32,780	32,740	+2.5
65+ years	4,900	**5,490**	6,310	7,180	8,260	9,180	+67.2

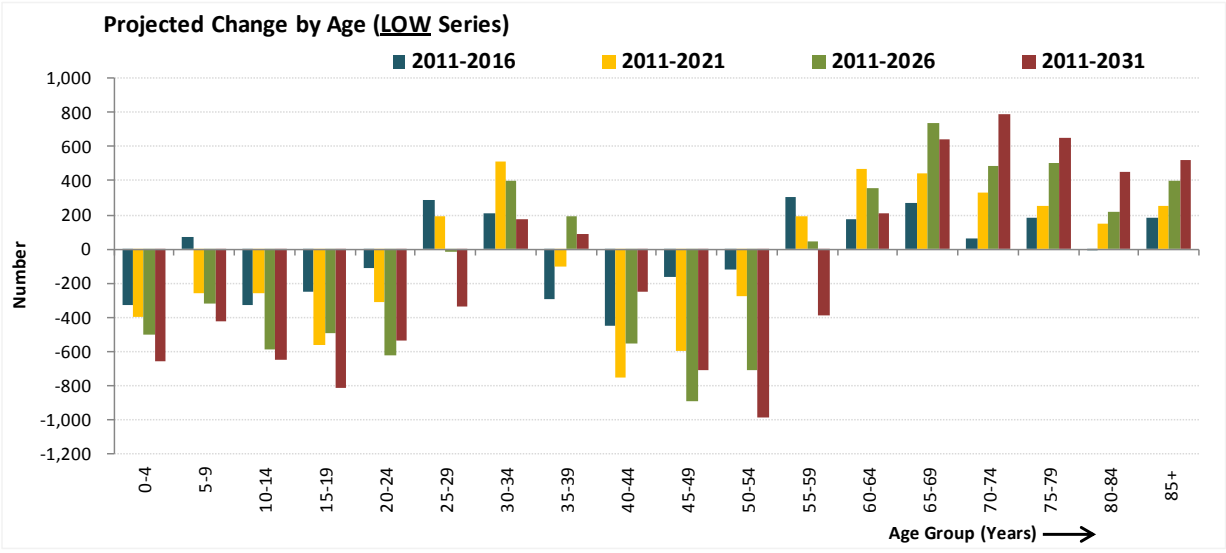
	Intercensal Change by Age (Numbers)						Change (N)) 2011-2031
		2006-2011	2011-2016	2016-2021	2021-2026	2026-2031	
0-14 years	...	**(270)**	(340)	(40)	(220)	(180)	(780)
15-24 years	...	**230**	(270)	(470)	(140)	(20)	(900)
25-39 years	...	**(430)**	290	480	50	(570)	250
40-54 years	...	**170**	(630)	(770)	(440)	300	(1,540)
55-64 years	...	**450**	510	250	(180)	(490)	90
65-74 years	...	**260**	390	480	520	270	1,660
75-84 years	...	**180**	230	280	360	450	1,320
85+ years	...	**150**	200	110	200	200	710
Total	...	**740**	380	320	150	(40)	810
65+ years	...	**590**	820	870	1,080	920	3,690

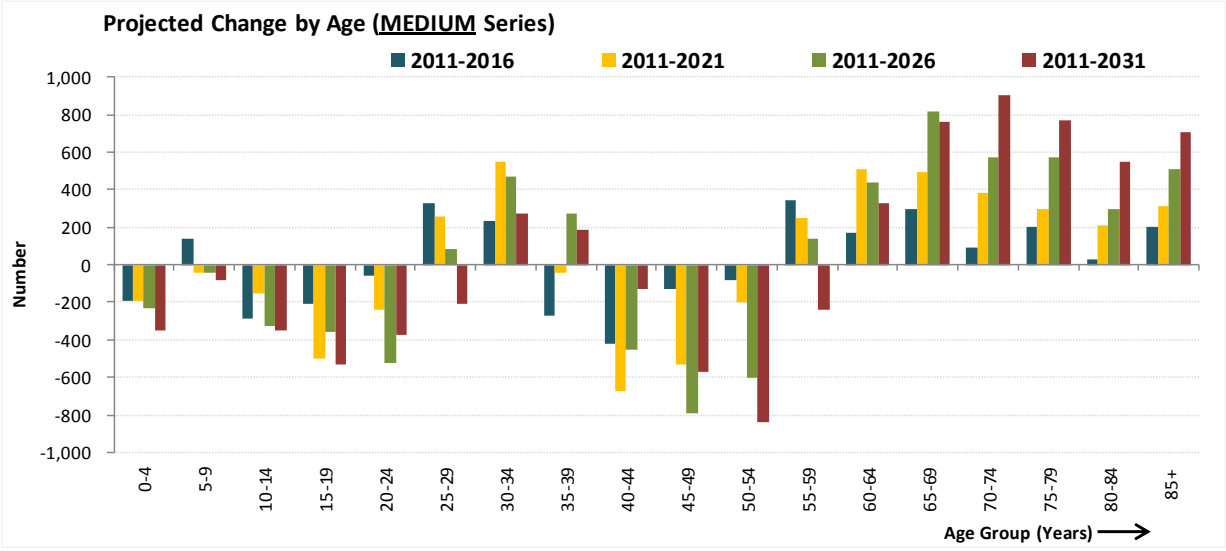
	Age Distribution (% at each age group)						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	22.8	**21.4**	20.1	19.8	19.0	18.5	-13.6
15-24 years	12.4	**12.8**	11.8	10.3	9.8	9.7	-23.9
25-39 years	17.8	**16.1**	16.8	18.1	18.2	16.4	+2.3
40-54 years	21.0	**21.1**	18.9	16.3	14.9	15.9	-24.8
55-64 years	10.3	**11.4**	12.9	13.5	12.9	11.4	-0.1
65-74 years	8.4	**9.0**	10.1	11.5	13.0	13.9	+53.7
75-84 years	5.6	**6.1**	6.7	7.5	8.6	10.0	+63.9
85+ years	1.7	**2.1**	2.7	3.0	3.6	4.2	+100.9
Total	100.0	**100.0**	100.0	100.0	100.0	100.0	+0.0
65+ years	15.7	**17.2**	19.5	22.0	25.2	28.0	+63.1

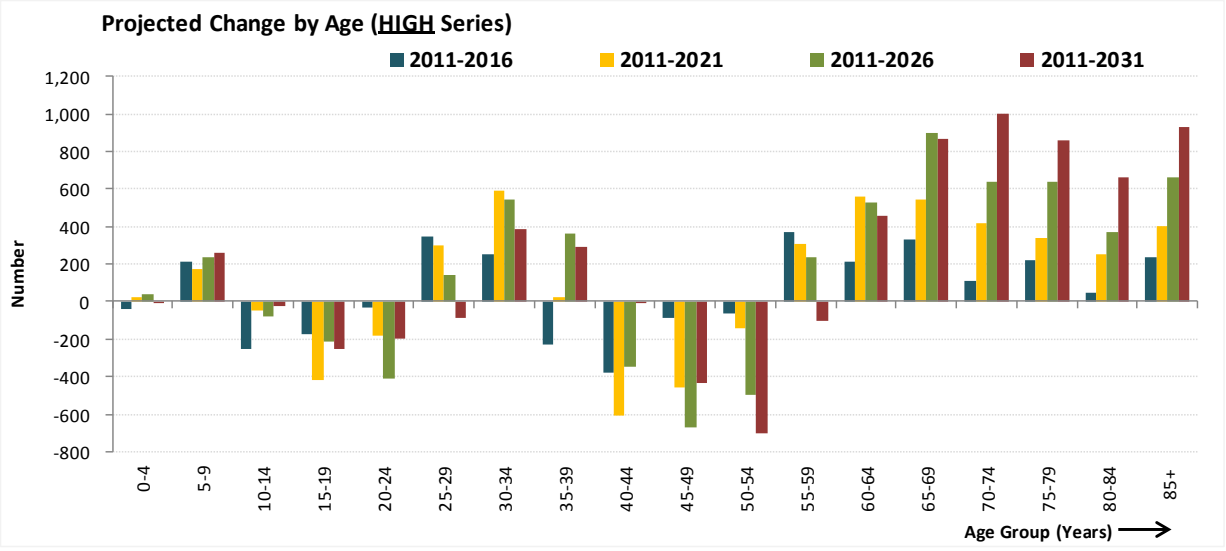
	Summary Measures						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
LM Entrants/Exits							
(15-24/55-64 years)	1.2	**1.1**	0.9	0.8	0.8	0.9	-23.9
(20-29/60-69 years)	1.1	**1.1**	1.0	0.8	0.7	0.7	-37.4
Elderly/Children	0.7	**0.8**	1.0	1.1	1.3	1.5	+88.7
Reproductive (20-39 yrs)	22.9	**21.9**	22.3	23.0	22.2	21.0	-4.1
Proportion 65+ years	15.7	**17.2**	19.5	22.0	25.2	28.0	+63.1
Proportion 75+ years	7.3	**8.2**	9.4	10.5	12.2	14.2	+73.4
Growth (%) in 5 years	...	**+2.4**	+1.2	+1.0	+0.5	-0.1	+2.5
Annual average growth (%)	...	**+0.5**	+0.2	+0.2	+0.1	-0.0	+0.1

Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

Figure 5.1.1: Projected population change by age and projection series, Matamata-Piako District





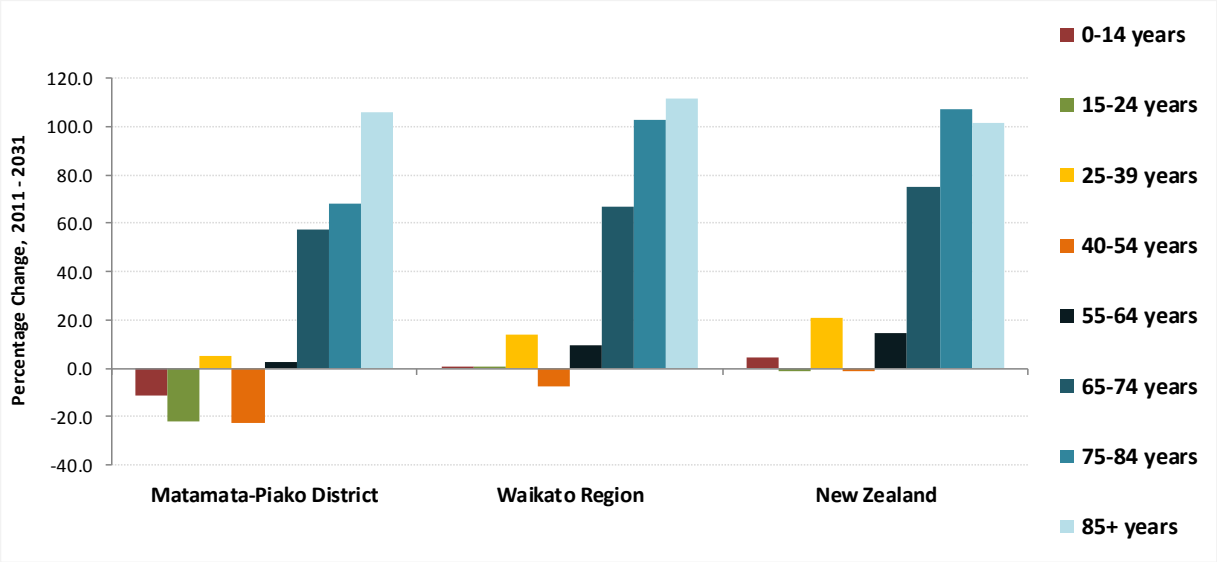


Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

As would be expected, Figure 5.1.1 shows that the losses by age are greater under the low variant assumptions, and lower under the high variant assumptions. However, even under the high series assumptions, loss is projected for several age groups.

Similar losses and gains across the same age groups are also projected for the Waikato region (Figure 5.1.2 and Table 5.1.2). No losses at the younger ages are projected for Total New Zealand, although the gains are likely to be minimal; while those at older ages are somewhat similar to both Matamata-Piako District and the Waikato Region.

Figure 5.1.2: Projected change 2011-2031 by broad age group (%), Matamata-Piako District, Waikato Region and Total New Zealand, Medium Series



Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

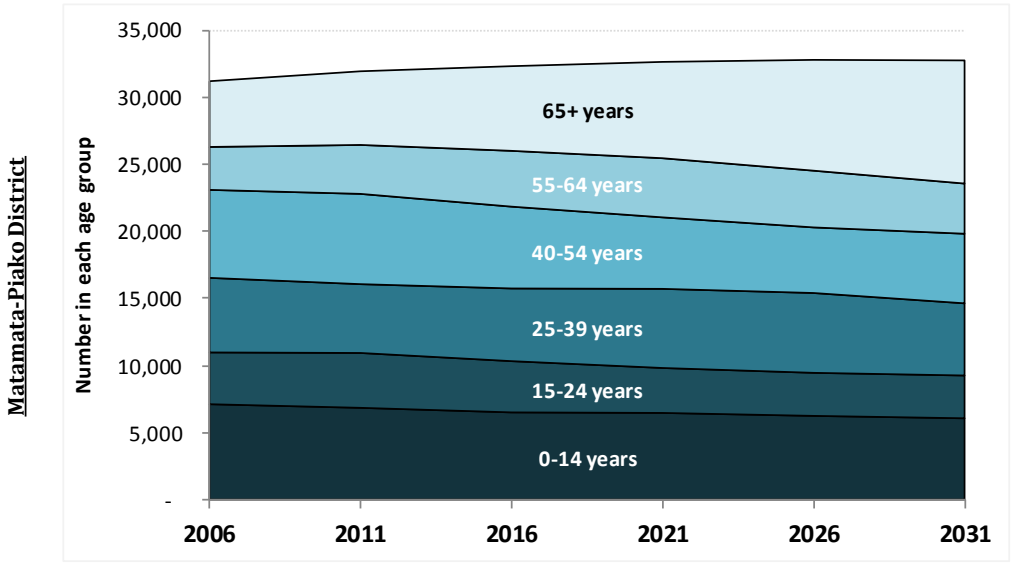
Table 5.1.2: Projected change 2011-2031 by broad age group (%), Matamata-Piako District, Waikato Region and Total New Zealand

	Matamata-Piako District	Waikato Region	New Zealand
0-14 years	-11.4	+0.8	+4.5
15-24 years	-22.0	+0.6	-1.1
25-39 years	+4.9	+13.6	+20.7
40-54 years	-22.9	-7.5	-1.2
55-64 years	+2.5	+9.6	+14.2
65-74 years	+57.6	+66.9	+74.8
75-84 years	+68.0	+102.7	+107.2
85+ years	+106.0	+111.6	+101.5
Total	+2.5	+13.8	+17.9
65+ years	+67.2	+83.6	+88.5

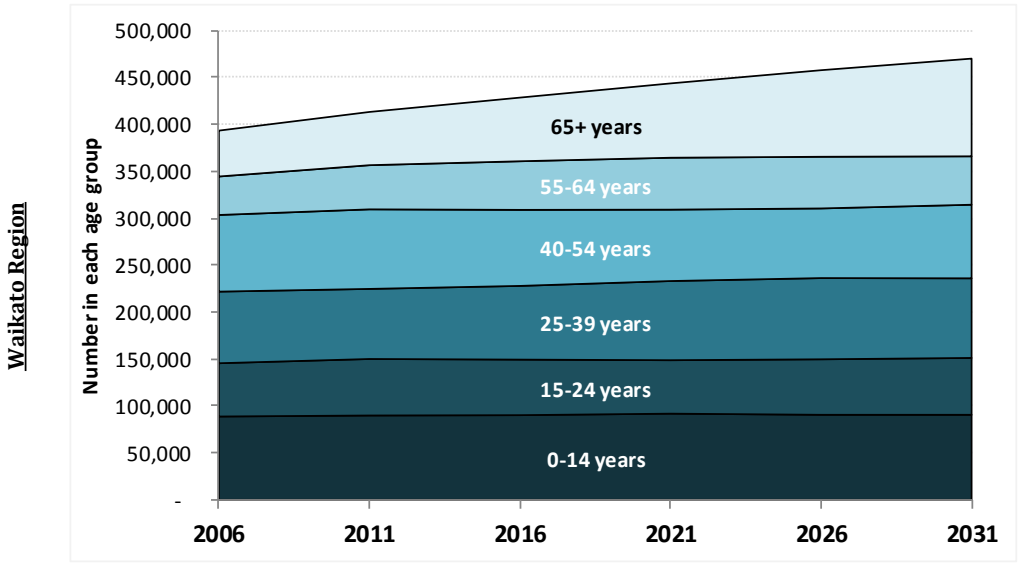
Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

Figure 5.1.3 provides a summary overview of the changes by broad age group. The population of Matamata-Piako shows only a marginal increase in the 2006 – 2013 period with all the growth concentrated at 65+ years, and numbers at the younger ages either remaining constant or declining.

Figure 5.1.3: Projected change in numbers by broad age group, Matamata-Piako District and Waikato Region, 2006-2031, Medium Series



Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)



Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

5.2 Projections by Ethnicity

While counting population by ethnicity is difficult, projecting populations based on ethnic affiliation is even more difficult. The following projections have many caveats attached to them and should be read as indicative only.

The first caveat is that projected data for Matamata-Piako District are available for two ethnic groups only: European-origin and Māori (Table 5.2.1). They show the Māori population increasing between 2011 and 2021 by approximately 11.1 per cent, and the European-origin population declining marginally, by 1.1 per cent. There are, however, marked differences by age. The 65+ year Māori population is projected to double (from 200 to 400), and the European-origin population of the same age, increasing by 24.5 per cent. The Māori population is also projected to increase across all age groups under 65 years, while the European/Other population is projected to decline at these ages.

Table 5.2.1: Population projections for Matamata-Piako District by ethnic group and broad age group

Matamata-Piako district	Population[2, 3] by age group (years) at 30 June					Projected components of population change, five years ended 30 June					Median age[5] (years) at 30 June
	0–14	15–39	40–64	65+	All ages	Births	Deaths	Natural increase	Net migration	Inter-ethnic mobility[4]	
European/Other											
1996	7,000	9,700	7,400	3,700	27,700	...	...	...	...	...	33.6
2001	6,500	8,400	8,100	4,100	27,100	...	...	...	...	...	36.7
2006 (base)	6,100	8,000	8,800	4,700	27,700	...	...	...	...	...	39.3
2011	5,900	7,700	9,400	5,300	28,400	1,900	1,200	800	-100	0	41.5
2016	5,700	7,400	9,200	6,000	28,300	1,800	1,300	500	-600	0	43.3
2021	5,700	7,200	8,700	6,600	28,100	1,700	1,400	400	-600	0	44.7
Change 2011-2021 (%)	*-3.4*	*-6.5*	*-7.4*	*+24.5*	*-1.1*	...	...	...	...	...	...
Māori											
1996	1,500	1,600	700	100	3,900	...	...	...	...	...	20.5
2001	1,600	1,600	800	100	4,100	...	...	...	...	...	20.3
2006 (base)	1,500	1,600	900	200	4,200	...	...	...	...	...	22.7
2011	1,600	1,700	1,000	200	4,500	700	100	500	-200	-100	22.8
2016	1,700	1,700	1,100	300	4,800	600	100	500	-200	-100	23.5
2021	1,800	1,800	1,100	400	5,000	600	200	500	-200	-100	24.2
Change 2011-2021 (%)	*+12.5*	*+5.9*	*+10.0*	*+100.0*	*+11.1*	...	...	...	...	...	...

Source: Statistics New Zealand, Subnational Ethnic Population Projections (2006 Base - 2009 Update) Tables 4e, 4m, 4p, 4a

(1) Boundaries at 30 June 2009.

(2) These projections have as a base the estimated resident population of each ethnicity, of each area, at 30 June 2006 and incorporate medium fertility, medium migration, medium mortality, and medium inter-ethnic mobility assumptions for each area. Population estimates for 1996–2006 are derived from the respective 1996–2006 census usually resident population counts.

(3) Numbers reflect the multiple count enumeration methodology and their sum is somewhat greater than the total projection for the TA. Projections are not available for all ethnic groups for all TA's.

(4) The net effect of people changing their ethnic identity.

(5) Half the population is younger, and half older, than this age.

Because the data in Figure 5.2.1 do not account for all ethnic groups, they are not graphed. Instead, Figure 5.2.1 gives an overview for the Waikato region (see Appendix 3.5 for the underlying assumptions and other information). It should, however, be noted that the data pertain to four ethnic groups only. The fifth group (MELAA) is not projected because of the small cell sizes obtaining when this relatively small population is disaggregated by age.

Based on these four main ethnic groupings, the data suggest that there will be relatively little change in the overall ethnic composition of the region over time. However young Māori (0-14 years) are projected to increase their share of the region's youthful population from 27.8 to 29.0 per cent, Pacific Island from 5.7 to 7.0 per cent, and Asian from 5.0 to 7.1 per cent (Table 5.2.2). The trends result in a diminishing share for the youthful European/Other population, from 61.5 to 57.0 per cent.

Changes are equally evident for each successively older age group. At 40-64 years, for example, Māori increase their share from 14.8 to 16.3 per cent (10 per cent increase), and at 65+ years, from 7.5 to 8.7 per cent (16 per cent). The percentage magnitude of the changes are even greater for the Pacific Island and Asian populations; however, as Figure 5.2.1 shows, they have somewhat less impact on the overall ethnic distribution, because they are coming off such small bases. Concomitantly, the European-origin share of all age groups declines.

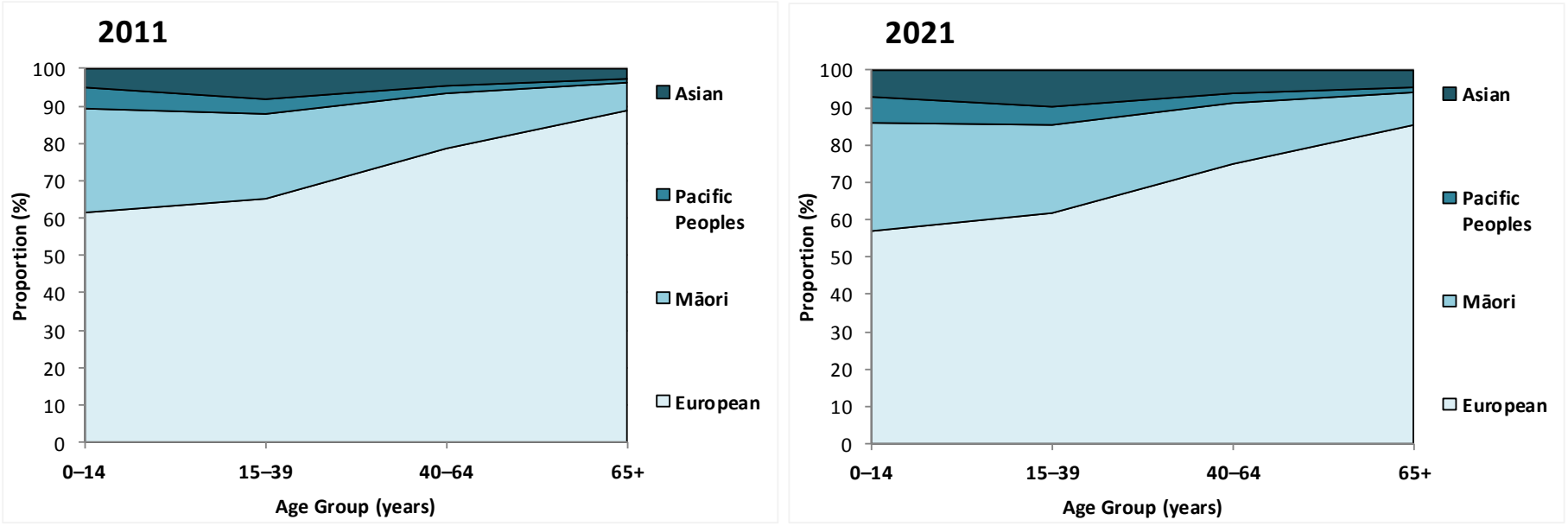
Table 5.2.2: Projected distribution by age and ethnic group*, Waikato Region

	0–14	15–39	40–64	65+	All ages
2011					
European	61.5	65.2	78.6	88.8	71.4
Māori	27.8	22.7	14.8	7.5	19.6
Pacific Peoples	5.7	3.9	2.0	1.0	3.4
Asian	5.0	8.2	4.6	2.7	5.6
Total	100.0	100.0	100.0	100.0	100.0
Number [(1)]	111,400	151,900	139,500	58,900	461,700
2016					
European	59.3	63.1	77.0	87.3	69.8
Māori	28.5	23.2	15.6	8.0	20.0
Pacific Peoples	6.3	4.4	2.2	1.1	3.8
Asian	6.0	9.2	5.1	3.6	6.4
Total	100.0	100.0	100.0	100.0	100.0
Number [(1)]	115,600	154,600	142,400	69,900	482,800
2021					
European	57.0	61.8	74.9	85.3	68.2
Māori	29.0	23.6	16.3	8.7	20.4
Pacific Peoples	7.0	4.9	2.6	1.4	4.1
Asian	7.1	9.7	6.2	4.6	7.3
Total	100.0	100.0	100.0	100.0	100.0
Number [(1)]	119,400	158,000	142,700	81,200	501,400

Source and Notes same as Table 5.2.1

(1) Underlying numbers reflect the multiple count enumeration methodology and their sum is somewhat greater than the total projection for the region. Projections not available for all ethnic groups for all regions.

Figure 5.2.1: Projected population of the Waikato Region by major ethnic group* and broad age group, 2011 and 2021



Source: Statistics New Zealand, Subnational Ethnic Population Projections (2006 Base - 2009 Update) Tables 4e, 4m, 4p, 4a

(1) Boundaries at 30 June 2009.

(2) These projections have as a base the estimated resident population of each ethnicity, of each area, at 30 June 2006 and incorporate medium fertility, medium migration, medium mortality, and medium inter-ethnic mobility assumptions for each area. Population estimates for 1996–2006 are derived from the respective 1996–2006 census usually resident population counts.

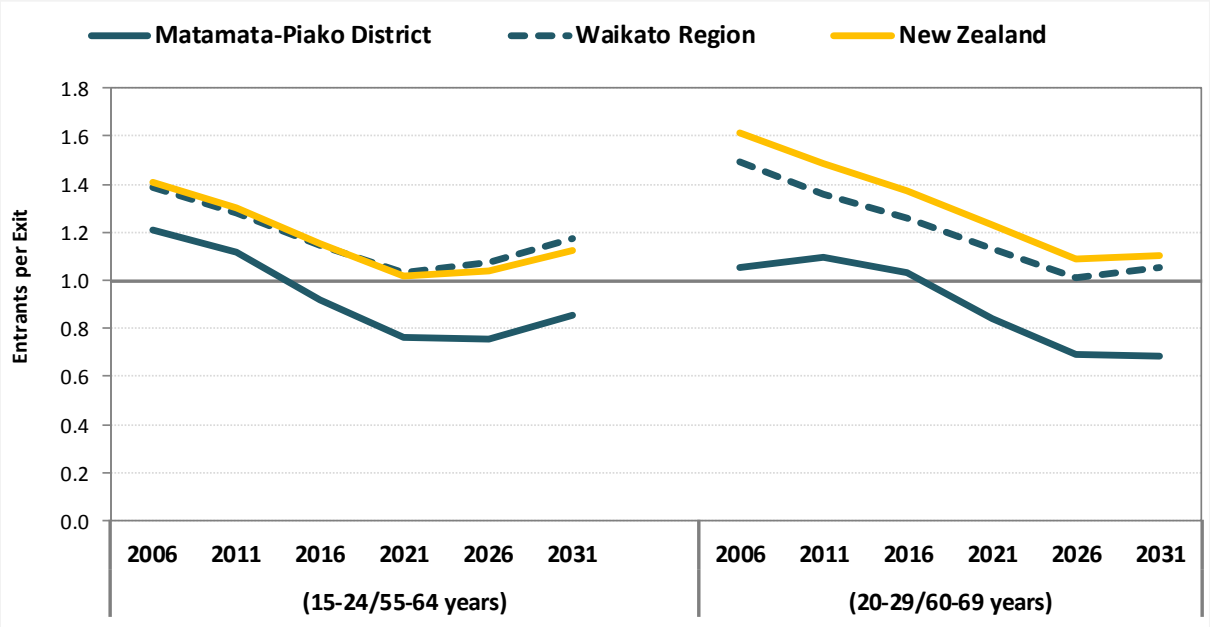
(3) The underlying numbers reflect the multiple count enumeration methodology and their sum is somewhat greater than the total projection for the region.

5.3 Labour Market Implications of Changing Age Structure

As noted earlier, population ageing drives other very important changes. One of the most important is change in the ratio of people at labour market entry age to those at 'exit' age. As noted, various age groupings can be employed to calculate this ratio; here we use two: people aged 15-24 to those aged 55-64 years, and people aged 20-29 to those aged 60-69 years (Figure 5.3.1). Based on the first of these indices, Matamata-Piako District can expect to have fewer 'entrants' than 'exits' from around 2011, reaching a low point of 0.8 (eight entrants per ten exits) over the 2016-2031 period (see also Table 5.1.1 above). When the ratio is based on those aged 20-29 and 60-69 years, it falls below one by 2021 and as low as 0.7 in 2026.

Trends for the Waikato Region are more similar to those at national level (see also Appendix 3.3). For Total New Zealand the ratios similarly decline, but do not fall below 1.0 during the projection period (Appendix 3.4). All are of course linked, however, in a national (and international) labour market that will see increased competition for the participation of the young and greater need to encourage retention of older workers. This demographically tight labour market will have significant implications for labour costs as it unfolds. This will be particularly so for industries which have older age structures and are ageing faster than average, as outlined below in the special topic (Section 6.0).

Figure 5.3.1: Projected ratio of people at labour market entry age to those approaching exit age, Matamata-Piako District, Waikato Region and Total New Zealand, 2006-2031

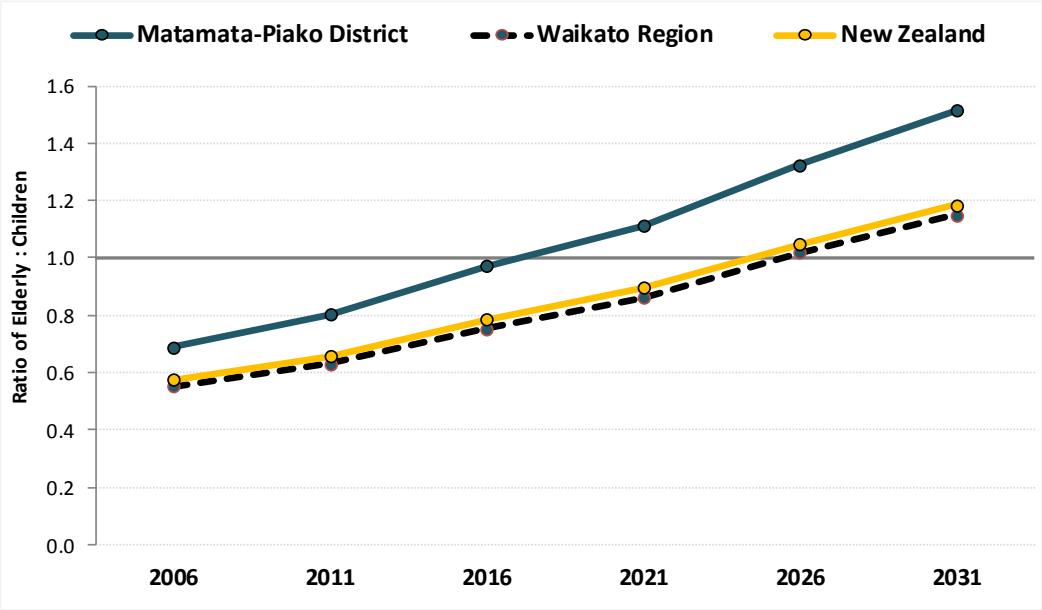


Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

5.4 Natural Increase Implications of Changing Age Structure

For Matamata-Piako District, the projected ratio of elderly (65+ years) to children (0-14 years) increases rapidly from its present 0.69 (seven elderly for every ten children), to 1.5 by 2031 (Figure 5.4.1). This profound shift to more elderly than children (cross over for Matamata-Piako District around 2021) will by then be contributing to rapidly diminishing levels of natural increase (Figure 5.4.2), as will the relatively small proportion projected to be at the key reproductive ages (20-23 per cent) compared with Total New Zealand (25-27 per cent) (Figure 5.4.3). For Waikato Region and Total New Zealand, the cross over to more elderly than children, will occur around 2026 (see also Appendices 3.3 and 3.4).

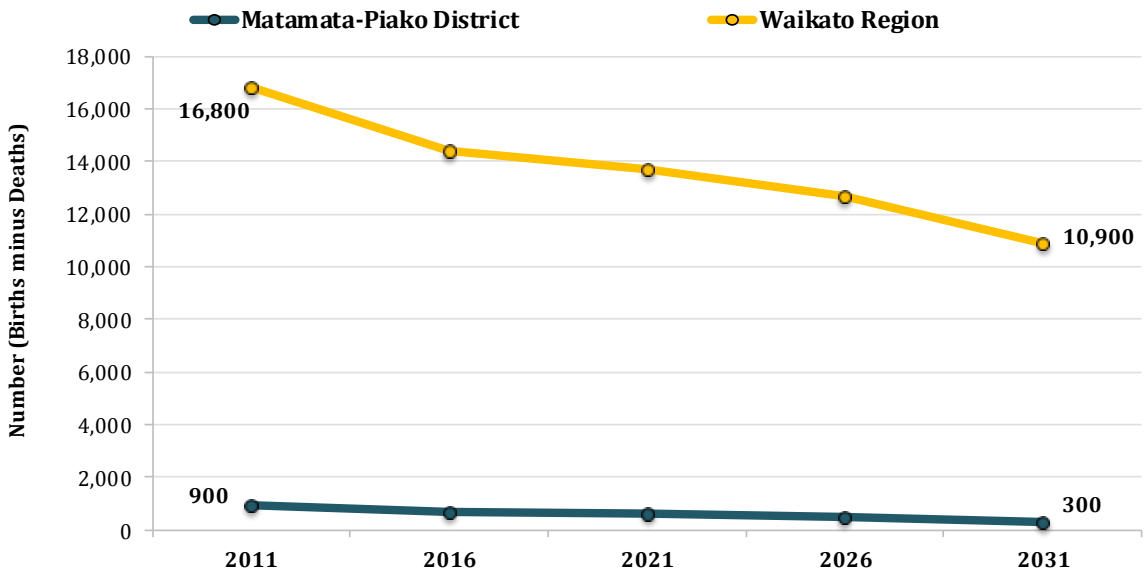
Figure 5.4.1: Projected ratio of elderly (65+ years) to children (0-14 years), Matamata-Piako District, Waikato Region and Total New Zealand, 2006-2031



Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

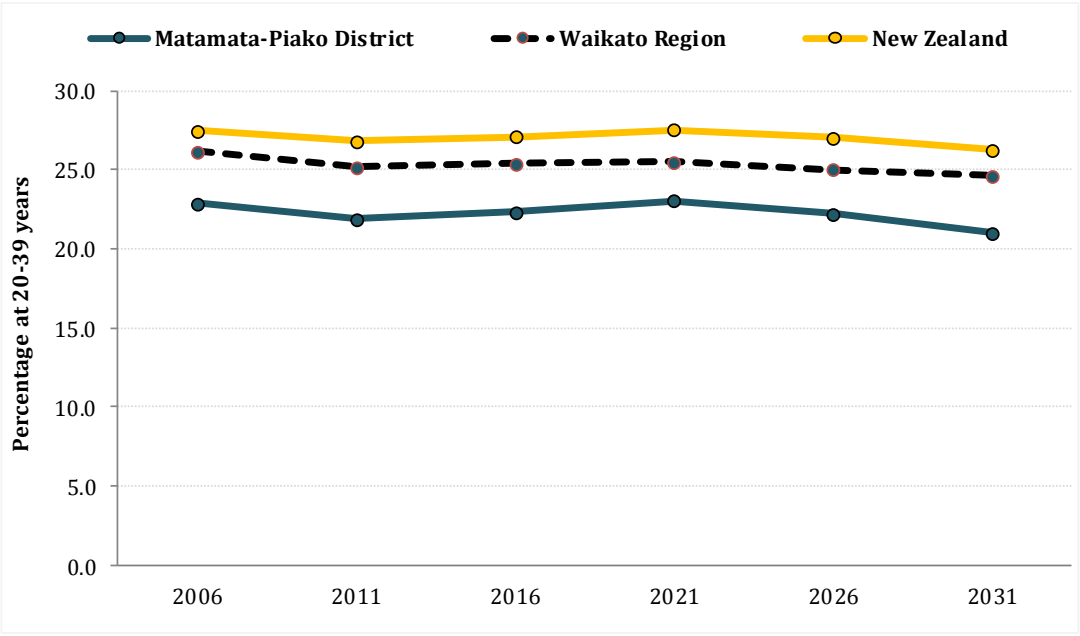
The proportion at key reproductive ages (Figure 5.4.3) appears to be a particularly critical indicator of future growth. In 2010, 15 of New Zealand's 67 Territorial Authorities (22 per cent) had either stopped growing or declined in size (Jackson 2011: 20). All had proportions aged 20-39 years lower than the national average (then 26.9 per cent), and thereby severe 'hour-glass' shaped age structures which are no longer conducive to sustained natural growth. Referring back to Section 2, natural increase is currently the major component of Matamata-Piako's growth. As that component declines, growth – or maintenance of population size - will become ever more dependent on migration.

Figure 5.4.2: Projected natural increase, Matamata-Piako District and Waikato Region, 2011-2031



Source: Subnational Projected Population Characteristics, 2006(base)-2031 (October 2012 update)

Figure 5.4.3: Projected proportion at key reproductive ages (20-39 years), Matamata-Piako District, Waikato Region and Total New Zealand, 2006-2031



Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

6. Industrial Change – Special Topic 1

6.1 Industrial Age-Sex Structures (1996, 2001, 2006)

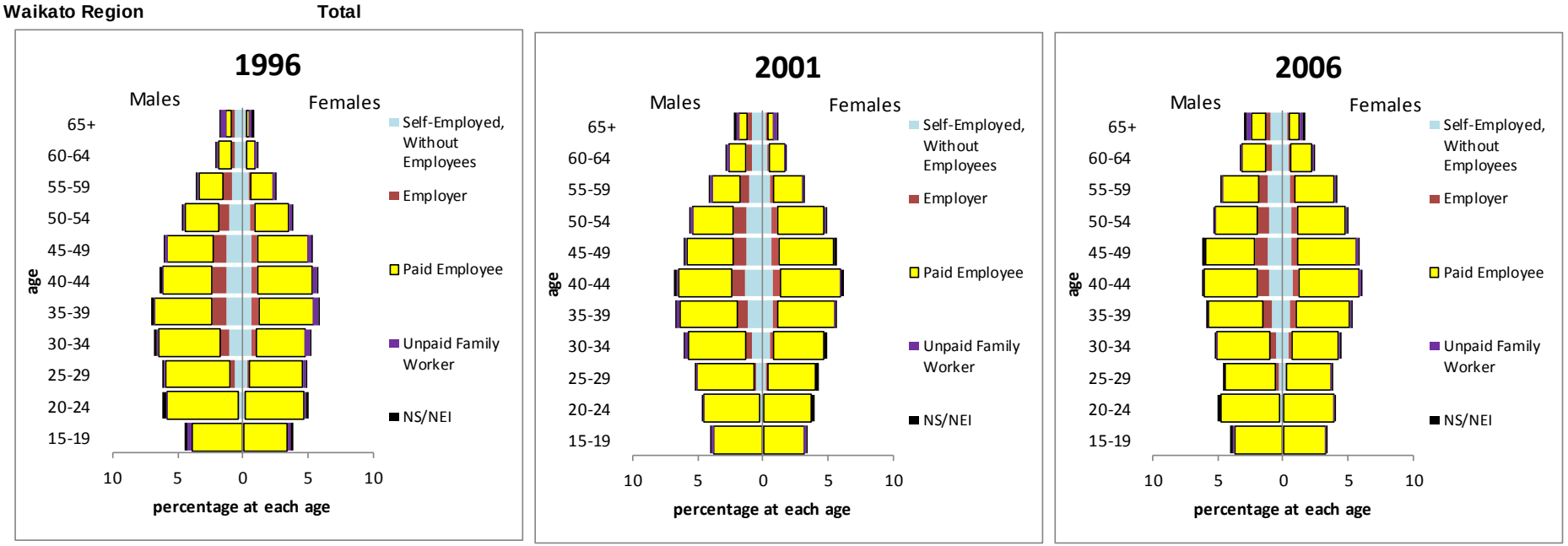
The extent (and speed) of population ageing and its impact on Labour Market entry/exit ratios also differs by industry. Industries which employ large proportions of younger people, such as supermarkets and grocery stores, by definition have youthful age structures; those employing large proportions of older people (especially in senior management positions) have older age structures. However industrial employment patterns by age are not of interest simply because they differ, but rather, in the context of population ageing, they provide important information for issues such as future labour supply and succession planning.

This section provides an overview of the changing age-sex structure of the Waikato Region's employed labour force by employment status (self-employed, employer, paid employee etc.,), first for the total labour force, then for the region's four largest industries (in 2006) at the three digit level: Dairy Cattle Farming; School Education; Building and Construction; and Grain, Sheep and Beef Farming; (see also Appendix 4). The data have been customised by Statistics New Zealand to be consistent in terms of industry and employment status across time. The section concludes with a brief overview of change in all Waikato RC industries employing more than 1,000 people in 2006, followed by data for the Matamata-Piako District at one-digit level.

Figure 6.1.1 provides data for the Waikato Region's total employed labour force (see also Appendix 4.1). Reflecting the trends outlined above, the average age of employed persons at each census was respectively 38.3, 40.3 and 41.4 years, an overall increase of 3.1 years (8.1 per cent). This is almost identical to the average age for the Total New Zealand employed labour force at each observation: 38.3, 40.1 and 41.2 years (an increase of 2.9 years, 7.6 per cent). However the Waikato Region's labour force (employed) is ageing at a slightly faster rate. The speed of this change is similarly evidenced in the increasing proportion aged 55+ years, from just 12.1 per cent in 1996 to 19.5 per cent in 2006 (61.0 per cent), and the ratio of those at labour market entry to exit age falling from 16 per 10 in 1996, to just eight per 10 in 2006.

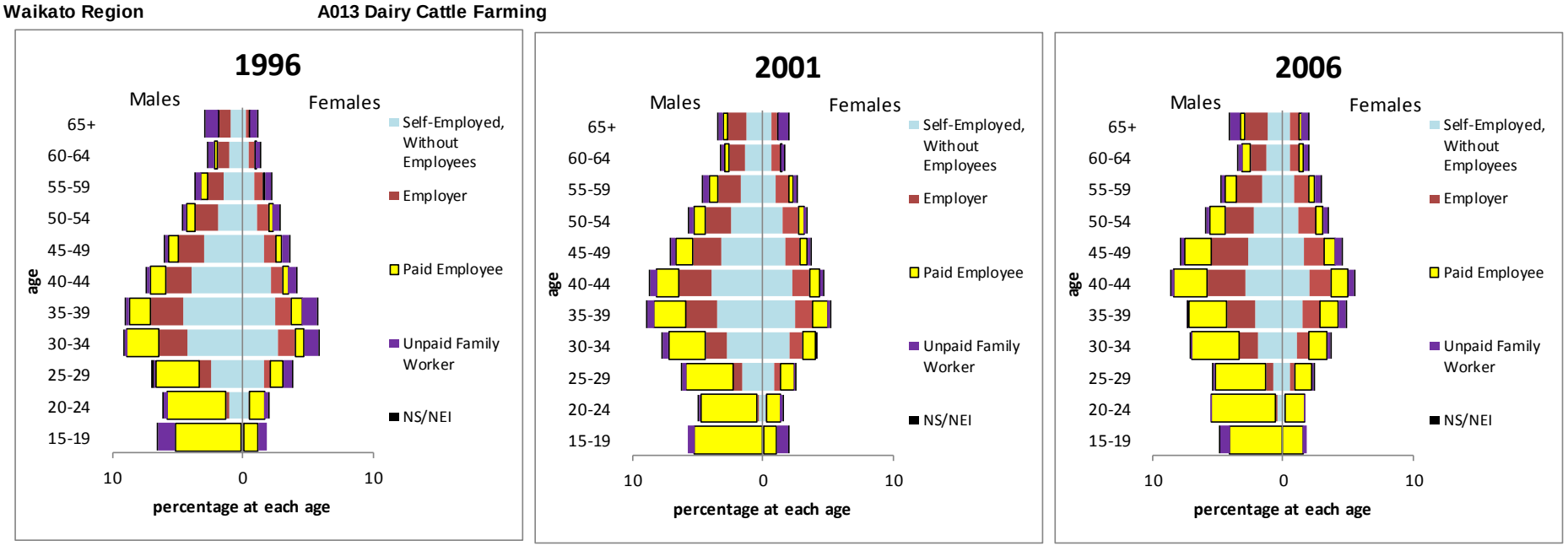
Differing somewhat from the total employed labour force is the region's single largest industrial grouping, Dairy Cattle Farming (ANZSIC96 V4.1 code AO13), which is heavily masculinised (Figure 6.1.2)—albeit the sex ratio (males per female) has reduced slightly over time, from 1.8 in 1996 to 1.7 in 2006 (Appendix 4.2). The average age of Waikato persons employed in this industry (41.9 years in 2006) is only slightly greater than the region's total labour force, and has shifted upwards since 1996 by 3.0 years (7.8 per cent). This is a slightly greater rate of structural ageing than for the Total New Zealand Dairy Farming labour force.

Figure 6.1.1: Age-Sex Structure and Employment Status of Employed Labour Force 1996, 2001, 2006, Waikato Region



Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

Figure 6.1.2: Age-Sex Structure and Employment Status of the Dairy Cattle Farming Industry [AO13] 1996, 2001, 2006, Waikato Region



Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

Contrasting completely with the region's male dominated dairy farming industry is the region's second largest industry, School Education, disproportionately employing females (Figure 6.1.3, Appendix 4.3). Although not unfolding quite as rapidly, structural ageing in this industry is also more advanced than in the dairy industry, with an average age in 2006 of 45.0 years (having increased by 2.6 years since 1996, 6.1 per cent). In 1996, just 12.2 per cent of those employed in this industry were aged 55+ years, while by 2006 that had increased to 21.5 per cent (a 76.0 per cent increase). The trends resulted in the labour market entry: exit ratio falling from 6 entrants per 10 in the retirement zone in 1996, to just two per ten in 2006.

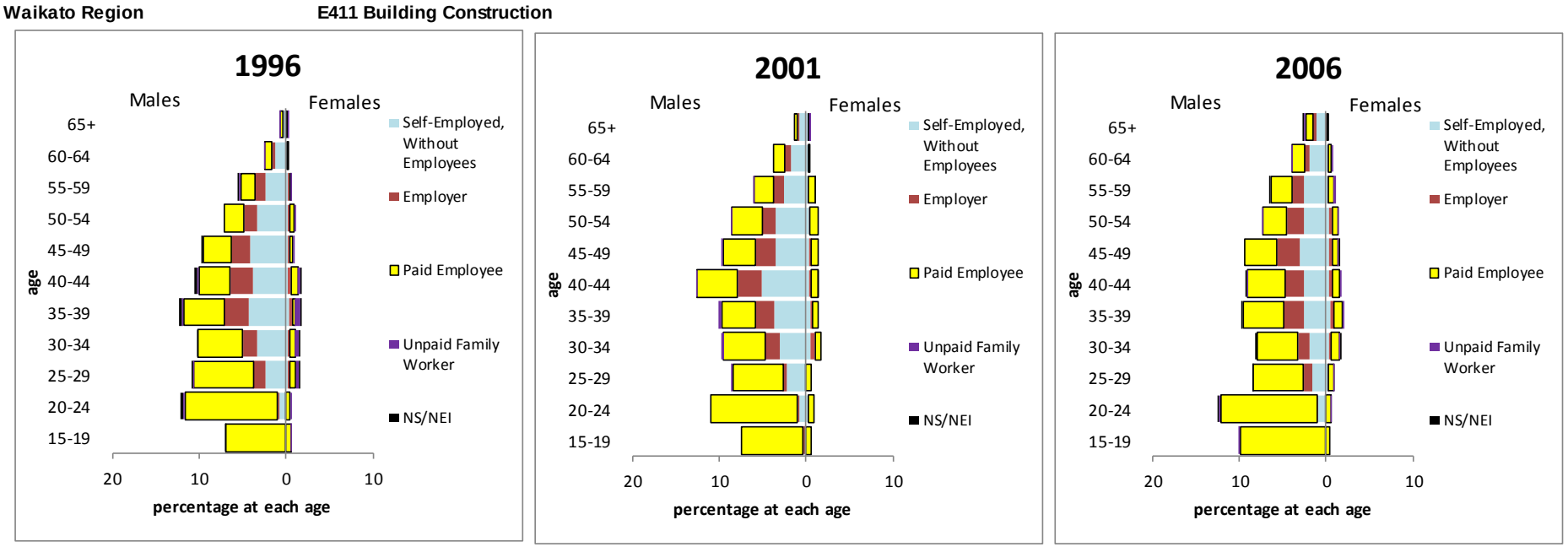
Significantly younger and substantially more masculinised, the region's third largest industry (in 2006 employing 4,680) is Building and Construction (Figure 6.1.3, Appendix 4.4). The average age of employees in this industry increased from 37.4 years in 1996 to 38.5 years in 2006 (1.1 years, 3.0 per cent), although it declined fractionally between 2001 and 2006. This relatively slow ageing reflects the enormous increase in this industry, which in 1996 employed just 2,682 persons, a 75 per cent increase, taking it from eleventh largest in 1996 to third in 2006. Nevertheless it should be noted that the industry's entry: exit ratio fell from 21 per 10 (entrants per those in the retirement zone) in 1996, to 16 per ten in 2006.

The region's fourth largest industry is Grain, Sheep and Beef Cattle Farming, in 2006 employing 4,593 people (Figure 6.1.4, Appendix 4.5), only fractionally more than in 1996 (4,410) and explaining its fall from third to fourth position. Its age-sex structure contrasts substantially with those for the three largest industries, albeit like dairy farming it is also heavily masculinised (sex ratio in 2006, 1.9 males per female, down from 2.0 in 1996). Widely understood as one of the oldest industries in terms of age structure, the average age of the Waikato Region's Grain, Sheep and Beef Farmers increased from 44.6 years in 1996 to 49.3 years in 2006 (4.8 years, 10.7 per cent), making it the region's third oldest industry of the 158 measured at 3-digit level. Relatedly the proportion aged 55+ years increased from 26.5 to 41.6 per cent. The data show that the industry's labour market entry: exit ratio has fallen from an already low five people at labour market entry age in 1996 per ten in the 'retirement zone', to just two per ten in 2006. Notably also, the region's farmers are a little older on average than their New Zealand counterparts. The relatively small proportion at the younger ages *vis-à-vis* the bulk of self-employed and employers at older ages has significant implications for the succession of these farms.

Figure 6.1.3: Age-Sex Structure and Employment Status, School Education Industry [N842] 1996, 2001, 2006, Waikato Region

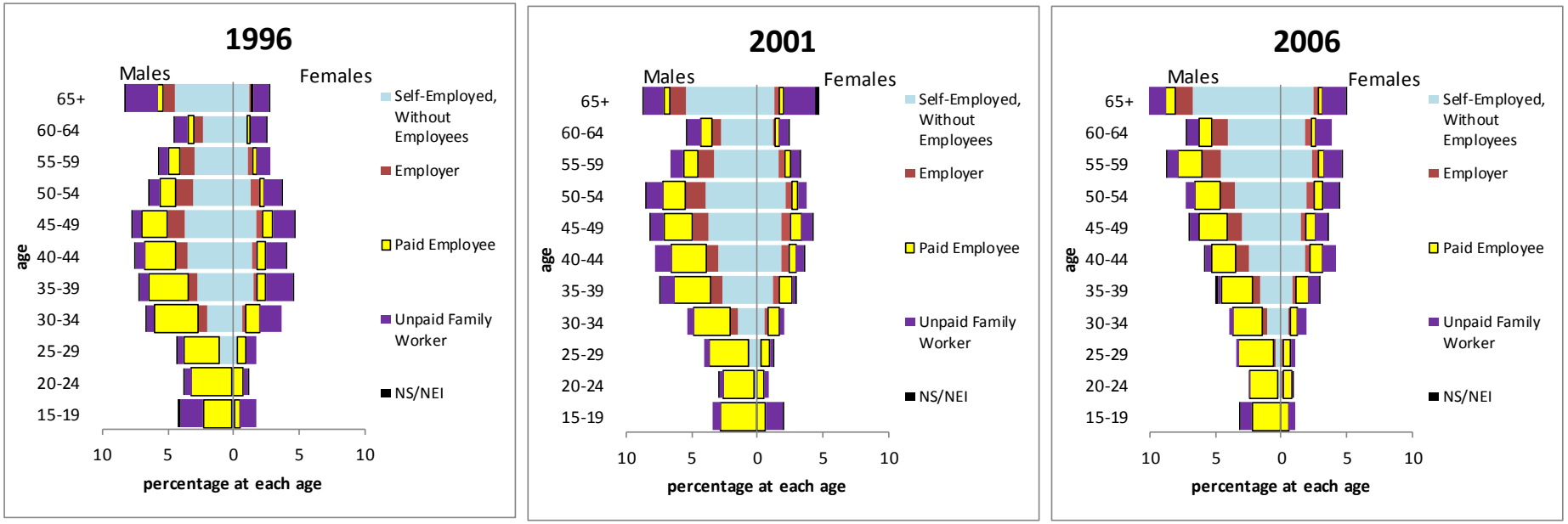
Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

Figure 6.1.4: Age-Sex Structure and Employment Status, Building and Construction Industry [E411] 1996, 2001, 2006, Waikato Region



Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

Figure 6.1.5: Age-Sex Structure and Employment Status, Grain, Sheep and Beef Cattle Farming Industry [A012] 1996, 2001, 2006, Waikato Region



Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

Table 6.1.1 gives data for all Waikato industries employing over 1,000 people in 2006 (accounting for 79 per cent of the region's employed workforce). As indicated above, the region's largest, second-largest and fourth-largest industries all have average ages above that of the total employed workforce, with the latter (Grain, Sheep and Beef Farming) having the third-oldest average age of all 158 industries at 3-digit level. Offsetting this workforce ageing to some extent are the below-average ages of the three next-largest industries: Building and Construction (3rd largest), Supermarket and Grocery Stores (5th largest), and Cafes and Restaurants (6th largest). However, it goes without saying that people and skills are not exact replacements for each other. While the region's overall population remains relatively young, it is critical that the rapid ageing of its workforce is urgently engaged with.

Table 6.1.1: Waikato Industries Employing over 1,000 persons in 2006, Number, Average Age, and Change (%) 1996, 2001 and 2006 (Ranked largest to smallest)

	Number Employed				Average Age (Years)			
Waikato Region	1996	2001	2006	Change 1996-2006 (%)	1996	2001	2006	Change 1996-2006 (%)
A013 Dairy Cattle Farming	12879	11991	10953	-15.0	38.8	41.0	41.9	7.9
N842 School Education	6582	7914	8139	23.7	42.5	43.9	45.0	6.0
E411 Building Construction	2670	2790	4680	75.3	37.3	39.0	38.5	3.0
A012 Grain, Sheep and Beef Cattle Farming	4410	3840	4593	4.1	44.6	46.6	49.3	10.6
G511 Supermarket and Grocery Stores	3726	4059	4467	19.9	29.7	31.6	33.8	13.9
H573 Cafes and Restaurants	3141	3663	4383	39.5	30.4	31.2	30.9	1.4
M811 Government Administration	4374	4083	4371	-0.1	39.7	42.0	42.9	8.0
L786 Other Business Services	2694	3174	4329	60.7	38.9	40.6	41.2	5.9
O863 Other Health Services	1497	4005	4305	187.6	40.6	43.0	44.2	9.0
G532 Motor Vehicle Services	3609	3798	4023	11.5	34.3	36.1	37.7	9.8
O861 Hospitals and Nursing Homes	4191	3414	3813	-9.0	40.2	42.7	44.5	10.5
O872 Community Care Services	2385	3096	3732	56.5	40.9	44.4	46.7	14.3
I611 Road Freight Transport	2505	2811	3288	31.3	38.5	40.2	42.9	11.6
H571 Accommodation	2298	2727	3246	41.3	40.2	41.5	42.1	4.7
G525 Other Personal and Household Good Retailing	2493	2625	3177	27.4	39.4	40.9	41.6	5.7
G512 Specialised Food Retailing	2772	2685	3093	11.6	33.4	33.9	33.9	1.4
E423 Installation Trade Services	1851	2262	3048	64.7	37.1	39.3	39.4	6.4
L785 Marketing and Business Management Services	1275	2001	2913	128.5	38.8	40.0	41.7	7.4
L784 Legal and Accounting Services	2295	2454	2880	25.5	37.7	40.2	41.5	10.2
Q952 Other Personal Services	2439	2268	2790	14.4	35.9	38.9	40.7	13.4
A021 Services to Agriculture	1608	2121	2454	52.6	35.6	39.2	40.8	14.7
E424 Building Completion Services	1584	1794	2400	51.5	37.4	39.3	39.1	4.6
C211 Meat and Meat Product Manufacturing	2046	2373	2364	15.5	34.8	36.8	37.4	7.6
L782 Technical Services	1221	1473	2304	88.7	39.4	41.4	42.1	6.8
C286 Industrial Machinery and Equipment Manufactu	2094	1989	2280	8.9	37.2	39.4	40.6	9.1
F461 Machinery and Equipment Wholesaling	1620	1878	2193	35.4	36.6	39.2	41.5	13.5
P931 Sport	1368	1518	2106	53.9	37.1	38.4	39.1	5.4
N843 Post School Education	1926	2343	2097	8.9	40.3	42.7	43.5	7.9
Q963 Public Order and Safety Services	1503	1851	2019	34.3	38.8	40.4	42.8	10.3
L771 Property Operators and Developers	1599	1641	2001	25.1	41.0	43.7	44.5	8.5
E412 Non-Building Construction	1470	1623	1986	35.1	39.9	41.8	42.8	7.3
G523 Furniture, Houseware and Appliance Retailing	1524	1542	1917	25.8	38.9	39.6	39.4	1.3
L772 Real Estate Agents	1392	1314	1842	32.3	44.7	46.9	47.3	5.8
N844 Other Education	1215	1383	1806	48.6	40.3	41.3	44.1	9.6
O862 Medical and Dental Services	1218	1401	1695	39.2	40.8	43.3	44.7	9.3
C212 Dairy Product Manufacturing	1596	1296	1680	5.3	36.8	40.0	40.3	9.5
K732 Deposit Taking Financiers	2010	1461	1665	-17.2	35.5	39.4	40.5	14.1
G531 Motor Vehicle Retailing	1599	1518	1569	-1.9	36.5	38.4	39.5	8.2
A015 Other Livestock Farming	1722	2271	1563	-9.2	43.1	45.1	45.9	6.5
A011 Horticulture and Fruit Growing	2127	1872	1542	-27.5	38.8	41.1	43.9	13.2
G522 Clothing and Soft Good Retailing	1347	1227	1533	13.8	39.3	40.5	38.5	-2.0
C231 Log Sawmilling and Timber Dressing	1536	1716	1521	-1.0	36.5	38.2	39.6	8.7
F453 Builders Supplies Wholesaling	1038	1080	1476	42.2	36.8	39.3	39.1	6.2
C232 Other Wood Product Manufacturing	1314	1155	1365	3.9	35.8	38.2	40.2	12.3
J711 Postal and Courier Services	1089	1215	1320	21.2	37.1	39.4	42.3	14.1
N841 Preschool Education	579	807	1203	107.8	37.0	39.5	39.8	7.6
E422 Building Structure Services	603	717	1182	96.0	36.2	36.2	35.7	-1.4
G524 Recreational Good Retailing	909	1098	1176	29.4	35.1	37.0	38.1	8.4
A030 Forestry and Logging	1761	1674	1167	-33.7	34.4	36.2	38.7	12.4
F471 Food, Drink and Tobacco Wholesaling	1065	1107	1152	8.2	36.6	37.9	39.1	6.8
L783 Computer Services	288	639	1107	284.4	37.3	37.0	38.4	2.8
G521 Department Stores	918	1161	1086	18.3	28.8	29.8	31.9	10.9
Q962 Interest Groups	744	1038	1074	44.4	40.2	42.7	44.3	10.3
O871 Child Care Services	459	648	1029	124.2	34.3	36.3	36.9	7.5
E421 Site Preparation Services	501	699	1026	104.8	38.3	41.9	41.7	8.8
L781 Scientific Research	831	891	1026	23.5	37.5	39.3	40.7	8.6
C276 Fabricated Metal Product Manufacturing	936	930	1005	7.4	37.0	39.3	40.5	9.6
All employing over 1,000 persons	118446	128124	146154	23.4				
Total Waikato employed Labour Force	155457	162963	185691	19.4	38.3	40.3	41.4	8.0

Source: Jackson/Statistics NZ Customised Database, Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006

6.2 Industrial Change for Matamata-Piako (1996, 2001, 2006)

Finally, Table 6.2.1 gives an overview of industrial change for the Matamata-Piako District at the one-digit level. As would be expected, Agriculture, Forestry and Fishing are (similarly to the Waikato) the single-largest industry for the district. However, for Matamata-Piako, Manufacturing is second largest, followed by Retail Trade and then Construction. Of some importance is the 12.2 per cent decline in the dominant Agriculture, Forestry and Fishing industry over the decade 1996-2006, against a significant increase in the now fourth-largest Construction industry (62.2 per cent). Property and Business Services (5th largest) also saw a sizeable increase (45.3 per cent), as did the slightly smaller Health and Community Services (51.9 per cent) and Transport and Storage (82.4 per cent). Notably the main declines were confined to the smaller industries: Finance and Insurance; Communication Services; Mining; and Electricity, Gas and Water Supply—a similar trend to districts elsewhere.

Table 6.2.1: Number, and Change (%) 1996, 2001 and 2006, Matamata-Piako District

	1996	2001	2006	Change 1996-2006	% Change
Agriculture, Forestry and Fishing	4263	3915	3744	-519	-12.2
Manufacturing	2079	1926	2034	-45	-2.2
Retail Trade	1638	1617	1731	93	5.7
Construction	699	777	1134	435	62.2
Property and Business Services	735	831	1068	333	45.3
Not Elsewhere Included	1017	900	945	-72	-7.1
Health and Community Services	567	750	861	294	51.9
Education	666	765	765	99	14.9
Transport and Storage	324	489	591	267	82.4
Wholesale Trade	453	489	576	123	27.2
Personal and Other Services	357	363	402	45	12.6
Accommodation, Cafes and Restaurants	291	303	387	96	33.0
Cultural and Recreational Services	246	267	318	72	29.3
Government Administration and Defence	234	243	261	27	11.5
Finance and Insurance	252	186	201	-51	-20.2
Communication Services	96	72	63	-33	-34.4
Mining	72	21	27	-45	-62.5
Electricity, Gas and Water Supply	99	36	24	-75	-75.8
Total Industry	14088	13959	15132	1044	7.4

Source: Industry (ANZSIC96 V4.1 Division) by Age Group and Sex, for the Employed Census Usually Resident Population Count Aged 15 Years and Over, 1996, 2001 and 2006

Appendices

Appendix 1.0: Population Size and Growth, Matamata-Piako District, Waikato Region and Total New Zealand, 1986-2012

		Matamata-Piako District		Waikato Region		New Zealand	
		Population Number	% Change from previous year	Population Number	% Change from previous year	Population Number	% Change from previous year
Census Night Resident Population (Census-Adjusted) Intercensal Estimates (March Years) [1]	1986	29,409	...	325,220	...	3,307,084	...
	1987	29,400	-0.0	327,400	+0.7	3,315,410	+0.3
	1988	29,400	+0.0	330,300	+0.9	3,339,160	+0.7
	1989	29,300	-0.3	331,500	+0.4	3,347,140	+0.2
	1990	29,300	+0.0	334,000	+0.8	3,373,400	+0.8
Census Night Resident Population (unadjusted for Census 1996) (March Years) [1]	1991	29,408	...	338,959	...	3,515,980	...
	1992	29,400	-0.0	341,200	+0.7	3,552,240	+1.0
	1993	29,600	+0.7	344,600	+1.0	3,597,850	+1.3
	1994	29,800	+0.7	348,200	+1.0	3,648,260	+1.4
	1995	29,800	+0.0	351,600	+1.0	3,706,710	+1.6
Estimated Usual Resident Population (June Years) [2]	1996	30,300	....	358,800	....	3,732,000	....
	1997	30,400	+0.3	362,700	+1.1	3,781,300	+1.3
	1998	30,400	+0.0	365,600	+0.8	3,815,000	+0.9
	1999	30,400	+0.0	366,900	+0.4	3,835,100	+0.5
	2000	30,300	-0.3	368,100	+0.3	3,857,700	+0.6
	2001	30,300	+0.0	368,400	+0.1	3,880,500	+0.6
	2002	30,400	+0.3	373,400	+1.4	3,948,500	+1.8
	2003	30,600	+0.7	379,200	+1.6	4,027,200	+2.0
	2004	30,900	+1.0	384,500	+1.4	4,087,500	+1.5
	2005	31,100	+0.6	388,700	+1.1	4,133,900	+1.1
	2006	31,200	+0.3	393,200	+1.2	4,184,600	+1.2
	2007	31,200	+0.0	396,500	+0.8	4,228,300	+1.0
	2008	31,400	+0.6	400,100	+0.9	4,268,900	+1.0
	2009	31,600	+0.6	404,400	+1.1	4,315,800	+1.1
	2010	31,800	+0.6	409,300	+1.2	4,367,800	+1.2
	2011	32,000	+0.6	413,100	+0.9	4,405,200	+0.9
	2012	32,000	+0.0	416,200	+0.8	4,433,000	+0.6
	1986-2012*		+5.6		+16.0		+18.8

Source: (1) Statistics New Zealand, Infoshare, Tables DPE052AA and DPE051AA

(2) Statistics NZ, Infoshare, Estimated Resident Population for Territorial Authority and Regional Council Areas, at 30 June (1996+) (Annual-Jun)

*Notes: *Changes in the timing and method of estimating Resident Population between 1991-1992 and 1995-1996 mean that the three sets of trends should be understood as discontinuous*

Appendix 2.1: Components of Change by age (Matamata-Piako District 1996-2001)

Matamata-Piako District	Actual (Observed) 1996	Expected 2001	Actual (Observed) 2001	Actual (Observed) Change 1996-2001	Change due to Migration	Change due to Deaths	Change to cohort size	Actual (Observed) change 1996-2001	Change due to Migration ~	Change due to Deaths~	Change to cohort size~
	Number							Percentage (%)			
0-4 Years	2,640	2,304	2,360	-280	56	-16	-320	*-10.6*	*2.1*	*-0.6*	*-12.1*
5-9 Years	2,660	2,636	2,540	-120	-96	-4	-20	*-4.5*	*-3.6*	*-0.1*	*-0.8*
10-14 Years	2,510	2,658	2,640	130	-18	-2	150	*5.2*	*-0.7*	*-0.1*	*6.0*
15-19 Years	2,070	2,504	2,190	120	-314	-6	440	*5.8*	*-15.2*	*-0.3*	*21.3*
20-24 Years	1,790	2,061	1,410	-380	-651	-9	280	*-21.2*	*-36.4*	*-0.5*	*15.6*
25-29 Years	2,140	1,782	1,640	-500	-142	-8	-350	*-23.4*	*-6.6*	*-0.4*	*-16.4*
30-34 Years	2,390	2,130	2,090	-300	-40	-10	-250	*-12.6*	*-1.7*	*-0.4*	*-10.5*
35-39 Years	2,420	2,378	2,330	-90	-48	-12	-30	*-3.7*	*-2.0*	*-0.5*	*-1.2*
40-44 Years	2,050	2,404	2,380	330	-24	-16	370	*16.1*	*-1.2*	*-0.8*	*18.0*
45-49 Years	1,820	2,030	1,950	130	-80	-20	230	*7.1*	*-4.4*	*-1.1*	*12.6*
50-54 Years	1,480	1,791	1,720	240	-71	-29	340	*16.2*	*-4.8*	*-1.9*	*23.0*
55-59 Years	1,400	1,441	1,440	40	-1	-39	80	*2.9*	*-0.1*	*-2.8*	*5.7*
60-64 Years	1,180	1,341	1,370	190	29	-59	220	*16.1*	*2.4*	*-5.0*	*18.6*
65-69 Years	1,240	1,101	1,220	-20	119	-79	-60	*-1.6*	*9.6*	*-6.4*	*-4.8*
70-74 Years	1,040	1,109	1,150	110	41	-131	200	*10.6*	*4.0*	*-12.6*	*19.2*
75-79 Years	690	867	890	200	23	-173	350	*29.0*	*3.3*	*-25.1*	*50.7*
80-84 Years	470	515	540	70	25	-175	220	*14.9*	*5.3*	*-37.2*	*46.8*
85-89 Years	218	284	291	73	7	-186	252	*33.3*	*3.2*	*-85.0*	*115.1*
90+ Years	92	119	129	37	10	-191	218	*40.7*	*10.9*	*-208.9*	*238.7*
Total	**30,300**	**31,457**	**30,280**	**-**	**20**	**-1,177**	**-1,163**	**2,320**	***-0.1***	***-3.9***	***-3.8***	***7.7***

Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

Notes: ~ As a percentage of Previous Observed Population

Appendix 2.2: Components of Change by age (Matamata-Piako District 2001-2006)

Matamata-Piako District	Actual (Observed) 2001	Expected 2001	Actual (Observed) 2006	Actual (Observed) Change 2001-2006	Change due to Migration	Change due to Deaths	Change to cohort size	Actual (Observed) change 2001-2006	Change due to Migration ~	Change due to Deaths~	Change to cohort size~
	Number							Percentage (%)			
0-4 Years	2,360	2,109	2,180	-180	71	-12	-239	*-7.6*	*3.0*	*-0.5*	*-10.1*
5-9 Years	2,540	2,357	2,380	-160	23	-3	-180	*-6.3*	*0.9*	*-0.1*	*-7.1*
10-14 Years	2,640	2,538	2,550	-90	12	-2	-100	*-3.4*	*0.4*	*-0.1*	*-3.8*
15-19 Years	2,190	2,635	2,290	100	-345	-5	450	*4.6*	*-15.8*	*-0.2*	*20.5*
20-24 Years	1,410	2,182	1,570	160	-612	-8	780	*11.3*	*-43.4*	*-0.5*	*55.3*
25-29 Years	1,640	1,405	1,470	-170	65	-5	-230	*-10.4*	*4.0*	*-0.3*	*-14.0*
30-34 Years	2,090	1,634	1,830	-260	196	-6	-450	*-12.4*	*9.4*	*-0.3*	*-21.5*
35-39 Years	2,330	2,080	2,260	-70	180	-10	-240	*-3.0*	*7.7*	*-0.4*	*-10.3*
40-44 Years	2,380	2,316	2,300	-80	-16	-14	-50	*-3.4*	*-0.7*	*-0.6*	*-2.1*
45-49 Years	1,950	2,359	2,320	370	-39	-21	430	*19.0*	*-2.0*	*-1.1*	*22.1*
50-54 Years	1,720	1,923	1,940	220	17	-27	230	*12.8*	*1.0*	*-1.6*	*13.4*
55-59 Years	1,440	1,683	1,740	300	57	-37	280	*20.8*	*4.0*	*-2.6*	*19.4*
60-64 Years	1,370	1,390	1,460	90	70	-50	70	*6.6*	*5.1*	*-3.7*	*5.1*
65-69 Years	1,220	1,293	1,430	210	137	-77	150	*17.2*	*11.2*	*-6.3*	*12.3*
70-74 Years	1,150	1,111	1,190	40	79	-109	70	*3.5*	*6.9*	*-9.5*	*6.1*
75-79 Years	890	984	1,070	180	86	-166	260	*20.2*	*9.7*	*-18.7*	*29.2*
80-84 Years	540	685	690	150	5	-205	350	*27.8*	*0.9*	*-38.0*	*64.8*
85-89 Years	291	344	350	59	7	-196	249	*20.4*	*2.3*	*-67.3*	*85.4*
90+ Years	129	169	170	41	1	-251	291	*31.6*	*0.6*	*-195.0*	*226.1*
Total	**30,280**	**31,195**	**31,190**	**910**	**-5**	**-1,206**	**2,121**	***3.0***	***-0.0***	***-4.0***	***7.0***

Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

Notes: ~ As a percentage of Previous Observed Population

Appendix 2.3: Components of Change by age (Waikato Region 1996-2001)

Waikato Region	Actual (Observed) 1996	Expected 2001	Actual (Observed) 2001	Actual (Observed) Change 1996-2001	Change due to Migration	Change due to Deaths	Change to cohort size	Actual (Observed) change 1996-2001	Change due to Migration ~	Change due to Deaths~	Change to cohort size~
	Number							Percentage (%)			
0-4 Years	30,410	28,009	28,530	-1,880	521	-189	-2,212	*-6.2*	*1.7*	*-0.6*	*-7.3*
5-9 Years	30,860	30,365	30,480	-380	115	-45	-450	*-1.2*	*0.4*	*-0.1*	*-1.5*
10-14 Years	28,470	30,835	30,860	2,390	25	-25	2,390	*8.4*	*0.1*	*-0.1*	*8.4*
15-19 Years	27,540	28,405	27,760	220	-645	-65	930	*0.8*	*-2.3*	*-0.2*	*3.4*
20-24 Years	27,130	27,419	23,900	-3,230	-3,519	-121	410	*-11.9*	*-13.0*	*-0.4*	*1.5*
25-29 Years	26,390	27,006	23,250	-3,140	-3,756	-124	740	*-11.9*	*-14.2*	*-0.5*	*2.8*
30-34 Years	27,520	26,272	26,460	-1,060	188	-118	-1,130	*-3.9*	*0.7*	*-0.4*	*-4.1*
35-39 Years	27,970	27,383	27,800	-170	417	-137	-450	*-0.6*	*1.5*	*-0.5*	*-1.6*
40-44 Years	24,770	27,792	27,630	2,860	-162	-178	3,200	*11.5*	*-0.7*	*-0.7*	*12.9*
45-49 Years	22,930	24,530	24,590	1,660	60	-240	1,840	*7.2*	*0.3*	*-1.0*	*8.0*
50-54 Years	18,250	22,568	22,660	4,410	92	-362	4,680	*24.2*	*0.5*	*-2.0*	*25.6*
55-59 Years	15,610	17,776	17,870	2,260	94	-474	2,640	*14.5*	*0.6*	*-3.0*	*16.9*
60-64 Years	13,350	14,953	15,390	2,040	437	-657	2,260	*15.3*	*3.3*	*-4.9*	*16.9*
65-69 Years	12,790	12,448	12,880	90	432	-902	560	*0.7*	*3.4*	*-7.1*	*4.4*
70-74 Years	10,440	11,423	11,440	1,000	17	-1,367	2,350	*9.6*	*0.2*	*-13.1*	*22.5*
75-79 Years	7,350	8,713	8,640	1,290	-73	-1,727	3,090	*17.6*	*-1.0*	*-23.5*	*42.0*
80-84 Years	4,920	5,476	5,460	540	-16	-1,874	2,430	*11.0*	*-0.3*	*-38.1*	*49.4*
85-89 Years	2,240	2,977	2,928	688	-50	-1,943	2,680	*30.7*	*-2.2*	*-86.7*	*119.6*
90+ Years	940	1,220	1,292	352	72	-1,960	2,240	*37.5*	*7.6*	*-208.5*	*238.4*
Total	**359,880**	**375,570**	**369,820**	**9,940**	**-5,750**	**-12,508**	**28,198**	***2.8***	***-1.6***	***-3.5***	***7.8***

Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

Notes: ~ As a percentage of Previous Observed Population

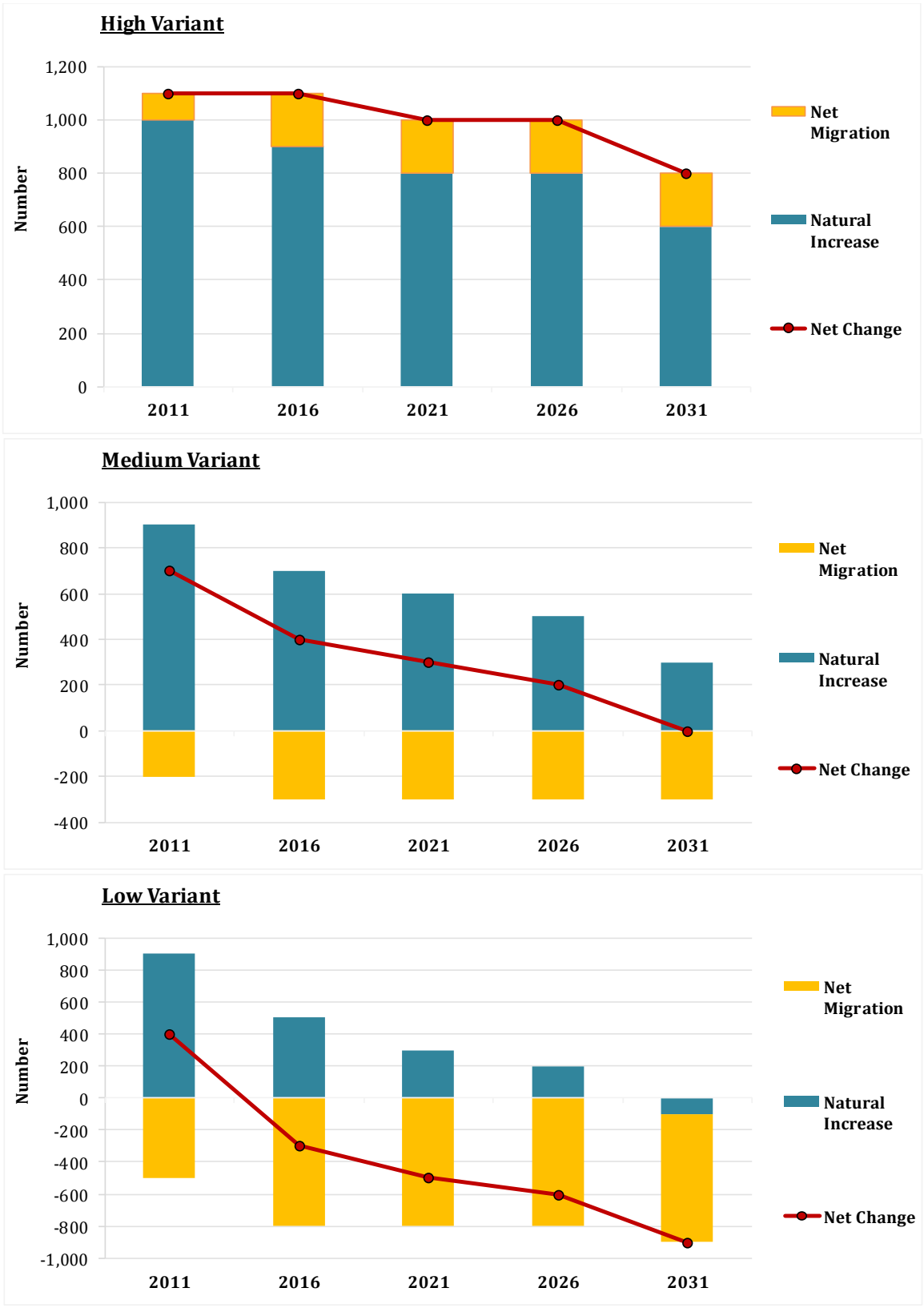
Appendix 2.4: Components of Change by age (Waikato Region 2001-2006)

Waikato Region	Actual (Observed) 2001	Expected 2001	Actual (Observed) 2006	Actual (Observed) Change 2001-2006	Change due to Migration	Change due to Deaths	Change to cohort size	Actual (Observed) change 2001-2006	Change due to Migration ~	Change due to Deaths~	Change to cohort size~
	Number							Percentage (%)			
0-4 Years	28,530	27,318	28,500	-30	1,182	-160	-1,052	*-0.1*	*4.1*	*-0.6*	*-3.7*
5-9 Years	30,480	28,494	29,480	-1,000	986	-36	-1,950	*-3.3*	*3.2*	*-0.1*	*-6.4*
10-14 Years	30,860	30,459	31,240	380	781	-21	-380	*1.2*	*2.5*	*-0.1*	*-1.2*
15-19 Years	27,760	30,802	30,260	2,500	-542	-58	3,100	*9.0*	*-2.0*	*-0.2*	*11.2*
20-24 Years	23,900	27,662	26,670	2,770	-992	-98	3,860	*11.6*	*-4.2*	*-0.4*	*16.2*
25-29 Years	23,250	23,810	23,300	50	-510	-90	650	*0.2*	*-2.2*	*-0.4*	*2.8*
30-34 Years	26,460	23,161	25,000	-1,460	1,839	-89	-3,210	*-5.5*	*7.0*	*-0.3*	*-12.1*
35-39 Years	27,800	26,340	28,370	570	2,030	-120	-1,340	*2.1*	*7.3*	*-0.4*	*-4.8*
40-44 Years	27,630	27,630	29,090	1,460	1,460	-170	170	*5.3*	*5.3*	*-0.6*	*0.6*
45-49 Years	24,590	27,382	28,270	3,680	888	-248	3,040	*15.0*	*3.6*	*-1.0*	*12.4*
50-54 Years	22,660	24,253	24,730	2,070	477	-337	1,930	*9.1*	*2.1*	*-1.5*	*8.5*
55-59 Years	17,870	22,169	23,000	5,130	831	-491	4,790	*28.7*	*4.6*	*-2.7*	*26.8*
60-64 Years	15,390	17,246	18,190	2,800	944	-624	2,480	*18.2*	*6.1*	*-4.1*	*16.1*
65-69 Years	12,880	14,526	15,290	2,410	764	-864	2,510	*18.7*	*5.9*	*-6.7*	*19.5*
70-74 Years	11,440	11,720	12,010	570	290	-1,160	1,440	*5.0*	*2.5*	*-10.1*	*12.6*
75-79 Years	8,640	9,785	9,900	1,260	115	-1,655	2,800	*14.6*	*1.3*	*-19.2*	*32.4*
80-84 Years	5,460	6,658	6,710	1,250	52	-1,982	3,180	*22.9*	*1.0*	*-36.3*	*58.2*
85-89 Years	2,928	3,482	3,450	522	-32	-1,978	2,532	*17.8*	*-1.1*	*-67.6*	*86.5*
90+ Years	1,292	1,694	1,670	378	-24	-2,526	2,928	*29.3*	*-1.9*	*-195.5*	*226.6*
Total	**369,820**	**384,591**	**395,130**	**25,310**	**10,539**	**-12,707**	**27,478**	***6.8***	***2.8***	***-3.4***	***7.4***

Source: Jackson/from Statistics New Zealand ERP and New Zealand Survivorshp 1995-2007

Notes: ~ As a percentage of Previous Observed Population

Appendix 3.1: Projected Assumptions by Projection Variant, Matamata-Piako District



Source: Subnational Projected Population Characteristics, 2006(base)-2031 (October 2012 update)

Appendix 3.2: Projection Assumptions by Variant and Region, Matamata-Piako District and Waikato RC

Matamata-Piako District	2011	2016	2021	2026	2031	Change 2011-2031 (%)
			HIGH			
Births (Live) - 5 years ended 30 June	2300	2200	2300	2300	2300	**0.0**
Deaths - 5 years ended 30 June	1300	1400	1500	1500	1600	**23.1**
Natural Increase - 5 years ended 30 June	1000	900	800	800	600	**-40.0**
Net Migration - 5 years ended 30 June	100	200	200	200	200	**100.0**
Population at 30 June	32200	33300	34300	35300	36100	**12.1**
Median Age (Years) at 30 June	39.7	40.9	41.4	42.1	43.3	**9.1**
			MEDIUM			
Births (Live) - 5 years ended 30 June	2200	2100	2100	2000	1900	**-13.6**
Deaths - 5 years ended 30 June	1300	1400	1500	1600	1700	**30.8**
Natural Increase - 5 years ended 30 June	900	700	600	500	300	**-66.7**
Net Migration - 5 years ended 30 June	-200	-300	-300	-300	-300	**50.0**
Population at 30 June	31900	32300	32600	32800	32700	**2.5**
Median Age (Years) at 30 June	39.7	41.1	42	42.8	44.2	**11.3**
			LOW			
Births (Live) - 5 years ended 30 June	2200	1900	1900	1800	1600	**-27.3**
Deaths - 5 years ended 30 June	1300	1400	1500	1600	1700	**30.8**
Natural Increase - 5 years ended 30 June	900	500	300	200	-100	**-111.1**
Net Migration - 5 years ended 30 June	-500	-800	-800	-800	-800	**60.0**
Population at 30 June	31600	31300	30900	30300	29400	**-7.0**
Median Age (Years) at 30 June	39.8	41.4	42.5	43.6	45.1	**13.3**

Source: Subnational Projected Population Characteristics, 2006(base)-2031 (October 2012 update)

Waikato Region	2011	2016	2021	2026	2031	Change 2011-2031 (%)
			HIGH			
Births (Live) - 5 years ended 30 June	31300	31500	32800	33900	34600	**10.5**
Deaths - 5 years ended 30 June	14000	14600	15800	16800	18300	**30.7**
Natural Increase - 5 years ended 30 June	17300	16900	17000	17100	16300	**-5.8**
Net Migration - 5 years ended 30 June	6800	8300	8800	8800	8800	**29.4**
Population at 30 June	417300	442400	468100	494000	519100	**24.4**
Median Age (Years) at 30 June	36.4	37	37.5	38.3	39.1	**7.4**
			MEDIUM			
Births (Live) - 5 years ended 30 June	30900	29400	29700	29700	29400	**-4.9**
Deaths - 5 years ended 30 June	14100	15000	15900	17000	18500	**31.2**
Natural Increase - 5 years ended 30 June	16800	14400	13700	12700	10900	**-35.1**
Net Migration - 5 years ended 30 June	3100	900	1400	1400	1400	**-54.8**
Population at 30 June	413100	428400	443500	457600	469900	**13.7**
Median Age (Years) at 30 June	36.4	37.2	37.9	38.7	39.8	**9.3**
			LOW			
Births (Live) - 5 years ended 30 June	30500	27200	26700	25900	24700	**-19.0**
Deaths - 5 years ended 30 June	14200	15400	16300	17200	18500	**30.3**
Natural Increase - 5 years ended 30 June	16300	11900	10400	8700	6200	**-62.0**
Net Migration - 5 years ended 30 June	-600	-6500	-6000	-6000	-6000	**900.0**
Population at 30 June	408900	414400	418800	421500	421800	**3.2**
Median Age (Years) at 30 June	36.5	37.4	38.2	39.2	40.6	**11.2**

Source: Subnational Projected Population Characteristics, 2006(base)-2031 (October 2012 update)

Appendix 3.3: Projected Population, Waikato RC, 2006-2031 (Medium Series)

	Numbers by age						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	88,740	**89,830**	90,180	91,790	90,570	90,570	+0.8
15-24 years	56,740	**60,180**	59,180	56,910	59,100	60,550	+0.6
25-39 years	76,280	**74,630**	78,470	84,340	86,500	84,790	+13.6
40-54 years	81,630	**84,720**	80,990	76,020	74,170	78,390	-7.5
55-64 years	40,980	**47,040**	51,770	55,310	55,050	51,550	+9.6
65-74 years	27,180	**31,940**	38,860	44,810	49,610	53,320	+66.9
75-84 years	16,560	**18,310**	21,170	25,440	31,640	37,110	+102.7
85+ years	5,110	**6,440**	7,770	8,890	10,920	13,630	+111.6
Total	393,220	**413,090**	428,390	443,510	457,560	469,910	+13.8
65+ years	48,850	**56,690**	67,800	79,140	92,170	104,060	+83.6

	Intercensal Change by Age (Numbers)						Change (N)) 2011-2031
		2006-2011	2011-2016	2016-2021	2021-2026	2026-2031	
0-14 years	...	**1,090**	350	1,610	(1,220)	00	740
15-24 years	...	**3,440**	(1,000)	(2,270)	2,190	1,450	370
25-39 years	...	**(1,650)**	3,840	5,870	2,160	(1,710)	10,160
40-54 years	...	**3,090**	(3,730)	(4,970)	(1,850)	4,220	(6,330)
55-64 years	...	**6,060**	4,730	3,540	(260)	(3,500)	4,510
65-74 years	...	**4,760**	6,920	5,950	4,800	3,710	21,380
75-84 years	...	**1,750**	2,860	4,270	6,200	5,470	18,800
85+ years	...	**1,330**	1,330	1,120	2,030	2,710	7,190
Total	...	**19,870**	15,300	15,120	14,050	12,350	56,820
65+ years	...	**7,840**	11,110	11,340	13,030	11,890	47,370

	Age Distribution (% at each age group)						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	22.6	**21.7**	21.1	20.7	19.8	19.3	-11.4
15-24 years	14.4	**14.6**	13.8	12.8	12.9	12.9	-11.6
25-39 years	19.4	**18.1**	18.3	19.0	18.9	18.0	-0.1
40-54 years	20.8	**20.5**	18.9	17.1	16.2	16.7	-18.7
55-64 years	10.4	**11.4**	12.1	12.5	12.0	11.0	-3.7
65-74 years	6.9	**7.7**	9.1	10.1	10.8	11.3	+46.8
75-84 years	4.2	**4.4**	4.9	5.7	6.9	7.9	+78.2
85+ years	1.3	**1.6**	1.8	2.0	2.4	2.9	+86.1
Total	100.0	**100.0**	100.0	100.0	100.0	100.0	+0.0
65+ years	12.4	**13.7**	15.8	17.8	20.1	22.1	+61.4

	Summary Measures						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
LM Entrants/Exits							
(15-24/55-64 years)	1.4	**1.3**	1.1	1.0	1.1	1.2	-8.2
(20-29/60-69 years)	1.5	**1.4**	1.3	1.1	1.0	1.1	-22.5
Elderly/Children	0.6	**0.6**	0.8	0.9	1.0	1.1	+82.1
Reproductive (20-39 yrs)	26.2	**25.2**	25.4	25.5	25.0	24.6	-2.2
Proportion 65+ years	12.4	**13.7**	15.8	17.8	20.1	22.1	+61.4
Proportion 75+ years	5.5	**6.0**	6.8	7.7	9.3	10.8	+80.2
Growth (%) in 5 years	...	**+5.1**	+3.7	+3.5	+3.2	+2.7	+13.8
Annual average growth (%)	...	**+1.0**	+0.7	+0.7	+0.6	+0.5	+0.7

Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

Appendix 3.4: Projected Population, Total New Zealand, 2006-2031 (Medium Series)

	Numbers by age						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	888,320	**894,460**	895,880	918,410	922,190	934,760	+4.5
15-24 years	604,740	**642,420**	627,810	604,110	620,770	635,360	-1.1
25-39 years	858,960	**856,580**	912,400	1,004,920	1,045,250	1,033,890	+20.7
40-54 years	891,290	**930,220**	903,540	854,150	852,610	919,050	-1.2
55-64 years	429,670	**494,440**	544,290	592,840	596,600	564,790	+14.2
65-74 years	275,700	**325,440**	400,300	465,990	518,940	568,860	+74.8
75-84 years	177,780	**188,510**	215,810	261,810	330,290	390,510	+107.2
85+ years	58,140	**73,110**	86,190	95,790	117,780	147,350	+101.5
Total	4,184,600	**4,405,180**	4,586,220	4,798,020	5,004,430	5,194,570	+17.9
65+ years	511,620	**587,060**	702,300	823,590	967,010	1,106,720	+88.5

	Intercensal Change by Age (Numbers)						Change (N)) 2011-2031
		2006-2011	2011-2016	2016-2021	2021-2026	2026-2031	
0-14 years	...	**6,140**	1,420	22,530	3,780	12,570	40,300
15-24 years	...	**37,680**	(14,610)	(23,700)	16,660	14,590	(7,060)
25-39 years	...	**(2,380)**	55,820	92,520	40,330	(11,360)	177,310
40-54 years	...	**38,930**	(26,680)	(49,390)	(1,540)	66,440	(11,170)
55-64 years	...	**64,770**	49,850	48,550	3,760	(31,810)	70,350
65-74 years	...	**49,740**	74,860	65,690	52,950	49,920	243,420
75-84 years	...	**10,730**	27,300	46,000	68,480	60,220	202,000
85+ years	...	**14,970**	13,080	9,600	21,990	29,570	74,240
Total	...	**220,580**	181,040	211,800	206,410	190,140	789,390
65+ years	...	**75,440**	115,240	121,290	143,420	139,710	519,660

	Age Distribution (% at each age group)						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
0-14 years	21.2	**20.3**	19.5	19.1	18.4	18.0	-11.4
15-24 years	14.5	**14.6**	13.7	12.6	12.4	12.2	-16.1
25-39 years	20.5	**19.4**	19.9	20.9	20.9	19.9	+2.4
40-54 years	21.3	**21.1**	19.7	17.8	17.0	17.7	-16.2
55-64 years	10.3	**11.2**	11.9	12.4	11.9	10.9	-3.1
65-74 years	6.6	**7.4**	8.7	9.7	10.4	11.0	+48.2
75-84 years	4.2	**4.3**	4.7	5.5	6.6	7.5	+75.7
85+ years	1.4	**1.7**	1.9	2.0	2.4	2.8	+70.9
Total	100.0	**100.0**	100.0	100.0	100.0	100.0	+0.0
65+ years	12.2	**13.3**	15.3	17.2	19.3	21.3	+59.9

	Summary Measures						Change (%) 2011-2031
	2006	2011	2016	2021	2026	2031	
LM Entrants/Exits							
(15-24/55-64 years)	1.4	**1.3**	1.2	1.0	1.0	1.1	-13.4
(20-29/60-69 years)	1.6	**1.5**	1.4	1.2	1.1	1.1	-25.4
Elderly/Children	0.6	**0.7**	0.8	0.9	1.0	1.2	+80.4
Reproductive (20-39 yrs)	27.5	**26.8**	27.1	27.5	27.0	26.3	-2.0
Proportion 65+ years	12.2	**13.3**	15.3	17.2	19.3	21.3	+59.9
Proportion 75+ years	5.6	**5.9**	6.6	7.5	9.0	10.4	+74.3
Growth (%) in 5 years	...	**+5.3**	+4.1	+4.6	+4.3	+3.8	+17.9
Annual average growth (%	...	**+1.1**	+0.8	+0.9	+0.9	+0.8	+0.9

Source: Statistics New Zealand, Subnational Population Projections by Age and Sex, 2006(base)-2031 (October 2012 update)

Appendix 3.5: Projected Population by Ethnic Group* and Broad Age Group, Waikato Region

Waikato region	Population[2, 3] by age group (years) at 30 June					Projected components of population change, five years ended 30 June					Median age[5] (years) at 30 June
	0–14	15–39	40–64	65+	All ages	Births	Deaths	Natural increase	Net migration	Inter-ethnic mobility[4]	
European/Other											
1996	70,500	109,900	82,700	36,600	299,600	0	0	0	0	0	33.3
2001	68,800	99,800	91,800	39,700	300,100	0	0	0	0	0	35.8
2006 (base)	68,100	100,600	103,400	45,200	317,300	0	0	0	0	0	37.8
2011	68,500	99,000	109,700	52,300	329,500	23,100	12,100	11,000	1,300	0	39.3
2016	68,500	97,600	109,700	61,000	336,800	21,700	13,100	8,600	-1,300	0	40.6
2021	68,000	97,600	106,900	69,300	341,900	21,000	14,000	7,000	-1,800	0	41.5
Change 2011-2021 (%)	*-0.7*	*-1.4*	*-2.6*	*+32.5*	*+3.8*	...	...	...	...	...	...
Māori											
1996	29,300	32,800	13,300	2,400	77,900	0	0	0	0	0	21.2
2001	29,900	32,000	15,600	2,800	80,200	0	0	0	0	0	21.8
2006 (base)	29,100	33,100	18,300	3,500	84,000	0	0	0	0	0	22.8
2011	31,000	34,500	20,600	4,400	90,500	12,300	2,100	10,100	-2,400	-1,300	23.1
2016	32,900	35,900	22,200	5,600	96,700	12,000	2,300	9,700	-2,100	-1,300	23.9
2021	34,600	37,300	23,300	7,100	102,300	11,800	2,600	9,200	-2,100	-1,400	24.8
Change 2011-2021 (%)	*+11.6*	*+8.1*	*+13.1*	*+61.4*	*+13.0*	...	...	...	...	...	...
Pacific Peoples											
1996	4,400	4,400	1,600	300	10,600	0	0	0	0	0	19.0
2001	4,900	4,600	1,800	300	11,600	0	0	0	0	0	18.8
2006 (base)	5,400	5,200	2,300	400	13,300	0	0	0	0	0	19.2
2011	6,300	6,000	2,800	600	15,700	2,500	200	2,300	300	-100	19.7
2016	7,300	6,800	3,200	800	18,200	2,700	300	2,400	300	-200	20.2
2021	8,300	7,700	3,700	1,100	20,800	2,900	300	2,600	300	-200	20.6
Change 2011-2021 (%)	*+31.7*	*+28.3*	*+32.1*	*+83.3*	*+32.5*	...	...	...	...	...	...
Asian											
1996	2,900	4,700	2,000	300	9,800	0	0	0	0	0	24.7
2001	3,400	6,300	3,200	500	13,400	0	0	0	0	0	25.6
2006 (base)	4,600	10,200	4,900	800	20,600	0	0	0	0	0	26.4
2011	5,600	12,400	6,400	1,600	26,000	2,100	200	1,900	3,700	-200	28.4
2016	6,900	14,300	7,300	2,500	31,100	2,600	300	2,300	3,100	-300	30.3
2021	8,500	15,400	8,800	3,700	36,400	2,900	400	2,500	3,100	-300	31.7
Change 2011-2021 (%)	*+51.8*	*+24.2*	*+37.5*	*+131.3*	*+40.0*	...	...	...	...	...	...

Source: Statistics New Zealand, Subnational Ethnic Population Projections (2006 Base - 2009 Update) Tables 4e, 4m, 4p, 4a

(1) Boundaries at 30 June 2009.

(2) These projections have as a base the estimated resident population of each ethnicity, of each area, at 30 June 2006 and incorporate medium fertility, medium migration, medium mortality, and medium inter-ethnic mobility assumptions for each area. Population estimates for 1996–2006 are derived from the respective 1996–2006 census usually resident population counts.

(3) Numbers reflect the multiple count enumeration methodology and their sum is somewhat greater than the total projection for the TA. Projections are not available for all ethnic groups for all TA's.

(4) The net effect of people changing their ethnic identity.

(5) Half the population is younger, and half older, than this age.

Appendix 4.1: Key Statistics for the Employed Labour Force, Waikato Region, 1996, 2001, 2006.

Employment Status by Sex

Total Waikato Region	Males	Females	Total	Sex Ratio Males/Females	Average Age (Total)*
1996					
Self Employed, no employee	14,181	7,023	21,204	2.0	44.5
Employer	9,825	4,473	14,298	2.2	44.8
Paid Employee	56,388	51,375	107,763	1.1	36.0
Unpaid Family Worker	2,775	4,086	6,861	0.7	42.3
NS/NEI	2,916	2,424	5,340	1.2	38.3
Total	**86,085**	**69,381**	**155,466**	**1.24**	**38.3**
2001					
Self Employed, no employee	15,009	8,028	23,037	1.9	46.9
Employer	10,092	5,058	15,150	2.0	46.8
Paid Employee	58,578	56,586	115,164	1.0	37.9
Unpaid Family Worker	1,959	2,931	4,890	0.7	45.0
NS/NEI	2,556	2,166	4,722	1.2	40.3
Total	**88,194**	**74,769**	**162,963**	**1.18**	**40.3**
2006					
Self Employed, no employee	15,177	8,709	23,886	1.7	48.6
Employer	10,791	5,529	16,320	2.0	47.7
Paid Employee	68,460	67,134	135,594	1.0	39.0
Unpaid Family Worker	1,953	2,808	4,761	0.7	47.2
NS/NEI	2,751	2,364	5,115	1.2	41.4
Total	**99,132**	**86,544**	**185,676**	**1.15**	**41.4**

Change 1996-2006	Males	Females	Total
Number	13,047	17,163	30,210
(%)	15.2	24.7	19.4

Employment Entry/Exit Ratio	1996	2001	2006	Change 1996-2006 (%)
15-24: 55+ years	1.6	1.0	0.8	-47.7

Percentage aged 55+ Years	12.1	15.5	19.5	61.1

Sex Ratio by age (males/females)	1996	2001	2006	Change 1996-2006 (%)
15-19	1.2	1.1	1.2	-1.7
20-24	1.2	1.2	1.2	1.7
25-29	1.3	1.2	1.2	-3.8
30-34	1.3	1.2	1.2	-8.8
35-39	1.2	1.2	1.1	-7.9
40-44	1.1	1.1	1.0	-7.5
45-49	1.1	1.1	1.0	-8.1
50-54	1.2	1.1	1.1	-12.6
55-59	1.4	1.3	1.1	-19.4
60-64	1.8	1.6	1.3	-27.3
65+	2.1	1.8	1.7	-21.4
TOTAL*	**1.2**	**1.2**	**1.1**	**-7.7**

Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006
** Age not available for small cell sizes, thus summed totals by employment status are lower than summed totals*

Appendix 4.2: Key Statistics for the Employed Labour Force, Waikato Region, 1996, 2001, 2006, Dairy Cattle Farming (A013)

Employment Status by Sex

A013 Dairy Cattle Farming Waikato Region	Males	Females	Total	Sex Ratio Males/Females	Average Age (Total)*
1996					
Self Employed, no employee	3,168	1,779	4,947	1.8	41.2
Employer	1,881	924	2,805	2.0	44.5
Paid Employee	2,658	795	3,453	3.3	29.8
Unpaid Family Worker	588	888	1,476	0.7	40.7
NS/NEI	138	66	204	2.1	38.8
Total	**8,433**	**4,452**	**12,885**	**1.89**	**38.8**
2001					
Self Employed, no employee	2,658	1,608	4,266	1.7	44.4
Employer	1,911	1,053	2,964	1.8	46.8
Paid Employee	2,823	912	3,735	3.1	31.8
Unpaid Family Worker	378	513	891	0.7	43.2
NS/NEI	72	63	135	1.1	41.0
Total	**7,842**	**4,149**	**11,991**	**1.89**	**41.0**
2006					
Self Employed, no employee	1,860	1,116	2,976	1.7	46.0
Employer	1,896	1,086	2,982	1.7	47.6
Paid Employee	2,958	1,170	4,128	2.5	33.8
Unpaid Family Worker	342	456	798	0.8	46.3
NS/NEI	39	42	81	0.9	41.9
Total	**7,095**	**3,870**	**10,965**	**1.83**	**41.9**

Change 1996-2006	Males	Females	Total
Number	-1,338	-582	-1,920
(%)	-15.9	-13.1	-14.9

Employment Entry/Exit Ratio	1996	2001	2006	Change 1996-2006 (%)
15-24: 55+ years	1.2	0.8	0.7	-39.4

Percentage aged 55+ Years	13.9	17.7	19.4	39.6

Sex Ratio by age (males/females)	1996	2001	2006	Change 1996-2006 (%)
15-19	3.5	2.9	2.6	-26.5
20-24	3.1	3.2	3.2	1.9
25-29	1.9	2.4	2.2	18.3
30-34	1.6	1.9	1.9	19.4
35-39	1.6	1.7	1.5	-3.9
40-44	1.8	1.9	1.5	-14.1
45-49	1.7	1.9	1.7	2.5
50-54	1.6	1.7	1.7	3.6
55-59	1.7	1.8	1.6	-4.1
60-64	2.0	1.9	1.7	-15.3
65+	2.6	1.7	2.1	-21.1
TOTAL*	**1.9**	**1.9**	**1.8**	**-3.5**

Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006
** Age not available for small cell sizes, thus summed totals by employment status are lower than summed totals*

Appendix 4.3: Key Statistics for Employed Labour Force, Waikato Region, 1996, 2001, 2006, School Education (N842)

N842 School Education Waikato Region	Males	Females	Total	Sex Ratio Males/Females	Average Age (Total)*
1996					
Self Employed, no employee	6	3	9	2.0	64.2
Employer	-	-	-		
Paid Employee	1,794	4,773	6,567	0.4	42.4
Unpaid Family Worker	-	-	-		
NS/NEI	-	3	3	0.0	42.5
Total	**1,800**	**4,779**	**6,579**	**0.38**	**42.5**
2001					
Self Employed, no employee	78	120	198	0.7	47.4
Employer	9	36	45	0.3	43.8
Paid Employee	1,887	5,700	7,587	0.3	43.8
Unpaid Family Worker	3	24	27	0.1	41.9
NS/NEI	21	51	72	0.4	43.9
Total	**1,998**	**5,931**	**7,929**	**0.34**	**43.9**
2006					
Self Employed, no employee	48	81	129	0.6	50.9
Employer	6	24	30	0.3	44.0
Paid Employee	1,815	6,138	7,953	0.3	45.0
Unpaid Family Worker	6	6	12	1.0	27.5
NS/NEI	6	15	21	0.4	45.0
Total	**1,881**	**6,264**	**8,145**	**0.30**	**45.0**

Change 1996-2006	Males	Females	Total
Number	81	1,485	1,566
(%)	4.5	31.1	23.8

Employment Entry/Exit Ratio	1996	2001	2006	Change 1996-2006 (%)
15-24: 55+ years	0.6	0.4	0.2	-61.4

Percentage aged 55+ Years	12.2	15.9	21.5	76.0

Sex Ratio by age (males/females)	1996	2001	2006	Change 1996-2006 (%)
15-19	0.8	0.9	0.6	-23.1
20-24	0.2	0.3	0.3	20.1
25-29	0.3	0.3	0.3	1.2
30-34	0.3	0.4	0.3	-4.8
35-39	0.3	0.3	0.3	-10.2
40-44	0.3	0.2	0.2	-44.0
45-49	0.4	0.3	0.2	-44.2
50-54	0.5	0.4	0.3	-32.8
55-59	0.5	0.5	0.4	-27.8
60-64	0.7	0.6	0.5	-26.4
65+	0.9	1.0	0.7	-16.7
TOTAL*	**0.4**	**0.3**	**0.3**	**-20.3**

Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006
** Age not available for small cell sizes, thus summed totals by employment status are lower than summed totals*

Appendix 4.4: Key Statistics for Employed Labour Force, Waikato Region, 1996, 2001, 2006, Building and Construction (E411)

E411 Building Construction Waikato Region	Males	Females	Total	Sex Ratio Males/Females	Average Age (Total)*
1996					
Self Employed, no employee	705	45	750	15.7	43.2
Employer	375	45	420	8.3	42.1
Paid Employee	1,239	123	1,362	10.1	32.6
Unpaid Family Worker	30	66	96	0.5	39.7
NS/NEI	42	12	54	3.5	37.4
Total	**2,391**	**291**	**2,682**	**8.22**	**37.4**
2001					
Self Employed, no employee	750	69	819	10.9	44.3
Employer	378	54	432	7.0	43.6
Paid Employee	1,311	171	1,482	7.7	34.5
Unpaid Family Worker	3	36	39	0.1	42.9
NS/NEI	6	-	6		38.9
Total	**2,448**	**330**	**2,778**	**7.42**	**38.9**
2006					
Self Employed, no employee	984	105	1,089	9.4	45.7
Employer	645	117	762	5.5	44.7
Paid Employee	2,418	294	2,712	8.2	33.7
Unpaid Family Worker	27	63	90	0.4	42.7
NS/NEI	21	6	27	3.5	38.5
Total	**4,095**	**585**	**4,680**	**7.00**	**38.5**

Change 1996-2006	Males	Females	Total
Number	1,704	294	1,998
(%)	71.3	101.0	74.5

Employment Entry/Exit Ratio	1996	2001	2006	Change 1996-2006 (%)
15-24: 55+ years	2.1	1.5	1.6	-24.1

Percentage aged 55+ Years	10.0	13.0	15.0	50.7

Sex Ratio by age (males/females)	1996	2001	2006	Change 1996-2006 (%)
15-19	10.5	13.8	22.3	112.2
20-24	21.8	12.8	21.4	-1.6
25-29	6.9	15.8	8.3	19.1
30-34	6.6	6.0	4.8	-26.3
35-39	6.9	7.2	4.6	-33.4
40-44	5.9	9.0	5.3	-9.9
45-49	11.0	7.0	6.1	-44.3
50-54	7.1	6.7	5.2	-27.1
55-59	10.0	5.6	5.6	-43.9
60-64	11.5	11.7	6.2	-46.1
65+	3.5	3.0	13.3	281.0
TOTAL*	**8.5**	**7.4**	**7.1**	**-16.4**

Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006
** Age not available for small cell sizes, thus summed totals by employment status are lower than summed totals*

Appendix 4.5: Key Statistics for Employed Labour Force, Waikato Region, 1996, 2001, 2006, Grain, Sheep and Beef Cattle Farming (A012)

A012 Grain, Sheep and Beef Cattle Waikato Region	Males	Females	Total	Sex Ratio Males/Females	Average Age (Total)*
1996					
Self Employed, no employee	1,146	450	1,596	2.5	49.8
Employer	348	123	471	2.8	49.7
Paid Employee	951	261	1,212	3.6	36.1
Unpaid Family Worker	444	621	1,065	0.7	44.1
NS/NEI	45	21	66	2.1	44.6
Total	**2,934**	**1,476**	**4,410**	**1.99**	**44.6**
2001					
Self Employed, no employee	1,038	468	1,506	2.2	51.6
Employer	333	132	465	2.5	50.5
Paid Employee	861	252	1,113	3.4	37.1
Unpaid Family Worker	324	384	708	0.8	47.9
NS/NEI	33	24	57		46.6
Total	**2,589**	**1,260**	**3,849**	**2.05**	**46.6**
2006					
Self Employed, no employee	1,269	624	1,893	2.0	54.3
Employer	390	150	540	2.6	52.5
Paid Employee	957	300	1,257	3.2	39.1
Unpaid Family Worker	390	465	855	0.8	51.3
NS/NEI	27	21	48	1.3	49.3
Total	**3,033**	**1,560**	**4,593**	**1.94**	**49.3**

Change 1996-2006	Males	Females	Total
Number	99	84	183
(%)	3.4	5.7	4.1

Employment Entry/Exit Ratio	1996	2001	2006	Change 1996-2006 (%)
15-24: 55+ years	0.4	0.3	0.2	-55.1

Percentage aged 55+ Years	26.5	31.1	41.6	56.8

Sex Ratio by age (males/females)	1996	2001	2006	Change 1996-2006 (%)
15-19	2.4	1.7	2.8	18.4
20-24	3.3	3.5	2.5	-23.1
25-29	2.4	3.1	3.3	34.1
30-34	1.8	2.7	2.0	12.0
35-39	1.6	2.4	1.7	7.3
40-44	1.9	2.1	1.4	-25.4
45-49	1.7	1.9	1.9	15.6
50-54	1.7	2.2	1.6	-7.8
55-59	2.0	2.0	1.8	-9.8
60-64	1.8	2.2	1.9	5.5
65+	3.1	1.9	2.4	-21.2
TOTAL*	**2.0**	**2.1**	**1.9**	**-2.2**

Source: Jackson/Statistics NZ Customised Database,
Area of Usual Residence, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex for the Employed Census Usually Resident Population Count Aged 15+ Years, 1996, 2001, 2006
** Age not available for small cell sizes, thus summed totals by employment status are lower than summed totals*

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