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Population Projections until 2061 for *FutureProof* – the Hamilton Sub-Regional Growth Strategy

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Abstract
This report provides a set of projections of the population of Hamilton City, Waipa District and Waikato District. The projections feed into *FutureProof*, the development of a joint sub-regional growth strategy by Hamilton City, Waipa District, Waikato District and Environment Waikato. The projections have been calculated by means of the cohort component model. The projections can be considered alongside official Statistics New Zealand projections, but differ from the latter in terms of several assumptions, particularly about net migration. The assumptions used have been informed by a local consultations process, specifically with respect to the demographic impact of a range of economic development activities. The report also contains projections of the number of households and the labour force. In addition, a dwellings-based methodology is used to produce small area (Census Area Unit) projections. The population, household, and labour force projections for Hamilton City suggest significant growth over the entire period to 2061. The City population is expected to reach 200,000 by the 2030s. Growth is a little less in Waikato District.. Waipa District is projected to have more modest demographic growth, particularly after 2041.

Keywords: cohort component model, population, household, labour force, scenario, small area projections

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Executive Summary

This report provides a set of projections of the population of the Hamilton Sub-region, comprising the territorial local authorities of Hamilton City Council, Waikato District Council, and Waipa District Council. Projections prepared for each territorial local authority area include population, family and household, and labour force projections to a projection horizon of 2061; and dwelling (occupied/unoccupied) and population (dwelling-based) projections at the Census Area Unit level to a projection horizon of 2041.

The projections of total and age- and gender-specific populations were prepared using the standard cohort component model and using data from Statistics New Zealand. However, projections of net migration were derived using age- and gender-specific net migration *rates*, a significant departure from the method employed by Statistics New Zealand. In addition, in some scenarios additional net migration has been assumed to have resulted from the specific development activities of Hamilton City Council, Waipa District Council, Waikato District Council, and other local organisations. Family and household, and labour force, projections were then derived from the total population projections, by applying assumptions about living arrangement type rates and labour force participation rates respectively to the projected total populations. Census Area Unit dwellings and population were projected using a modified constrained variant of the common housing unit methodology.

In the 'medium' population projection scenario including the population effects of additional development activities (the preferred scenario of the clients), the population of Hamilton City is projected to increase significantly to about 198,237 in 2031 and 277,557 in 2061; the population of Waikato District is projected to increase steadily to about 67,382 in 2031 and 86,633 in 2061; and the population of Waipa District is projected to increase to about 62,414 in 2031 and then experience slower growth up to 73,457 in 2061.

In that scenario, the number of private households in Hamilton City is projected to increase to about 72,085 in 2031 and 103,634 in 2061; the number of private households in Waikato District is projected to increase to about 24,035 in 2031 and 31,673 in 2061; and the number of private households in Waipa District is projected to increase to about 24,285 in 2031 and 29,073 in 2061.

Under the highest labour force projection scenario including the additional economic development, the labour force in Hamilton City is projected to increase to 109,801 in 2031 and 149,208 in 2061; the labour force in Waikato District is projected to increase to 31,980 in 2031 and 36,012 in 2061; and the labour force in Waipa District is projected to increase to 31,890 in 2031 and 36,012 in 2061.

The Census Area Unit projections show significant differences to the projections developed by Statistics New Zealand, mainly reflecting recent changes to scheduling of subdivision in Hamilton City.

1 Introduction

The Hamilton City Council (HCC) approached the Population Studies Centre (PSC) of the University of Waikato in late 2007 with a request to prepare population projections for that could be used for *FutureProof*, the Sub-Regional Growth Strategy. This is a joint project between Hamilton City Council, Waikato District Council, Waipa District Council, and Environment Waikato. The projections would incorporate local information by experts and end-users with respect to the assumptions that drive the projections. After discussion between the partner organisations in the Joint Hamilton Sub-Regional Growth Strategy Committee (JHSRGSC) and PSC it was also decided that there was a need to vary assumptions to conduct scenario-based calculations that provide a sensitivity analysis and assessment of robustness of the projected trends. The assumptions used are therefore different from those adopted for official Statistics New Zealand (SNZ) projections.

Subsequent to further consultation between JHSRGSC and PSC it was resolved to calculate projections for a number of key variables of interest to JHSRGSC:

1. To meet the immediate needs of JHSRGSC for information to feed into their strategic planning process, population (cohort component model) and household projections for the three component territorial local authorities (TLAs) of the JHSRGSC area would be prepared to a projection horizon of 2061;
2. Labour force projections for the three component TLAs of the JHSRGSC area to a projection horizon of 2061 would be prepared on the basis of the TLA level population projections and a series of participation rate scenarios; and
3. Incorporating feedback from JHSRGSC on the projections developed in phase one of the project, dwelling (occupied/unoccupied) and population (dwelling based) projections at the Census Area Unit (CAU) level would be completed to a projection horizon of 2041.

The report is structured as follows:

- Section 2 briefly discusses the data used in preparing the projections, and the role of JHSRGSC in this;
- Section 3 outlines the methodology used in the population projections and in particular discusses at some length the method used to calculate net migration, a distinguishing feature of these projections;
- Section 4 covers the TLA level projections themselves and their corresponding scenarios and assumptions;
- Section 5 contains the TLA level family and household projections and discusses the standard SNZ methodology for deriving household projections;
- Section 6 contains the TLA level labour force projections and discusses the methods employed to project the labour force;
- Section 7 presents the population projections disaggregated at the CAU level for total population and total dwellings only; and
- Section 8 concludes.

2 Data

The data used in the formulation of these projections came from two sources, SNZ and the JHSRGSC. The former data came predominantly from the five-yearly Census of Population and Dwellings (1991, 1996, 2001 and 2006), the SNZ subnational population projections series and the reported assumptions underlying those projections. The latter consisted of JHSRGSC building consent data and estimates of the employment effects of various economic development initiatives being undertaken in and around Hamilton City, Waipa District, and Waikato District.

3 Methodology

3.1 Cohort component model

The most common methodology for population projections is the cohort component model. This is the methodology used by SNZ, who is the major supplier of data on current and projected population size, growth and structure for New Zealand regions and districts. In recent years new methodologies have been developed for population projections, such as stochastic and microsimulation approaches (see e.g. Dharmalingam and Pool 2006). However, these methodologies are highly data and computing intensive. We adopt here the conventional cohort-component model instead, because this approach allows readily a comparison between our alternate projections and the official projection series. This methodology is also appropriate given our limited available data.

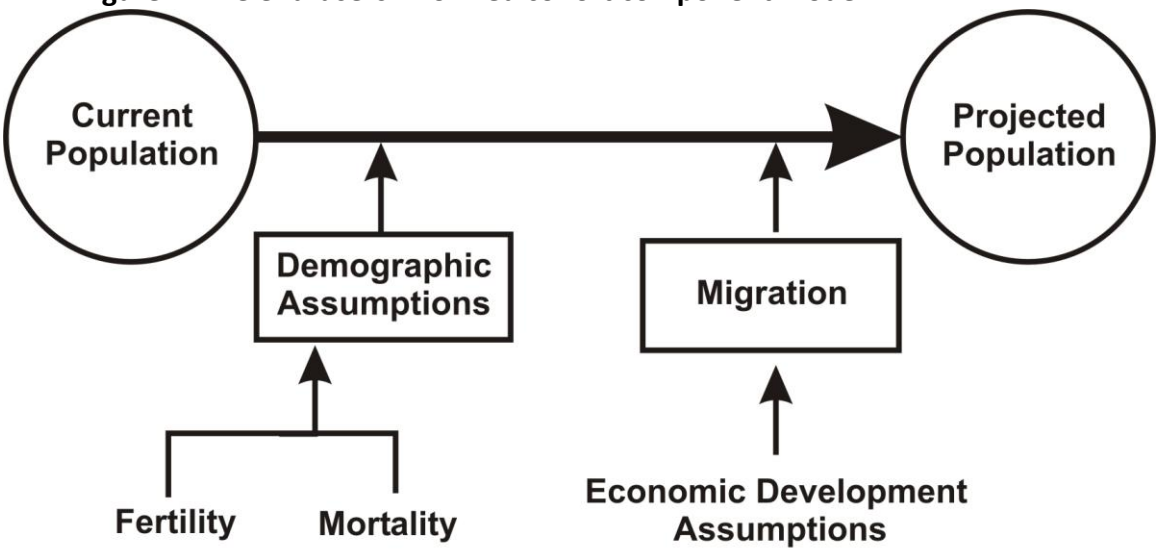
Figure 1 describes the general approach used in population projections. The current population (base population) is first defined, and then assumptions are made about demographic changes to this population, using the cohort component model. This is a stock-flow model that is based on the following fundamental "accounting identity" of population growth:

usually resident population in area *i* at the *end* of year *t*
= usually resident population in area *i* at the *beginning* of year *t*
+ births to mothers residing in area *i during* year *t*
– deaths of residents of area *i* during year *t*
+ inward migration from other regions and from overseas into region *i* during year *t*
– outward migration of residents from area *i* to other regions or to overseas during year *t*

Starting with a given base year population, the population 12 months later is then calculated with the equation above. This defines the base population of the following year. This procedure is repeated for each year through to the end of the projection period. This is done for both genders. Separate assumptions are used for each of the demographic "drivers". Births are derived by

multiplying age specific fertility rates by the numbers of women of childbearing age (13-49). Deaths are derived by multiplying age- and gender-specific mortality rates by the numbers of people of each age and gender.[1] Age- and gender-specific net migration is derived by multiplying age- and gender-specific net migration rates by the numbers of people of each age and gender. The procedure for deriving estimates of net migration is a key departure from the method employed by SNZ and is described in detail below.

Figure 1: The end-users informed cohort component model



Demographic change assumptions, when applied to the current population, allow the calculation of possible future populations. Such calculations are referred to as population *projections* rather than population *forecasts*, because they depend on sets of assumptions and no explicit assessment is made of the relatively likelihood of the assumptions being correct in the future. Varying the assumptions across projections simply permits a sensitivity analysis that provides a relatively broad range of possible outcomes.

3.2 Base Population

The base populations used for all projections were the estimated usually-resident populations at 30 June 2006, obtained from SNZ. This estimated population is only reported by SNZ in 5-year age groups, so the single-year age groups necessary for these projections were derived from the reported estimated population by interpolation using the proportions from the 2006 Census usually-resident population counts by single year of age.

[1] However, instead of mortality rates the current methodology employs gender- and age-specific survivorship rates, which are simply the complement of mortality rates.

3.3 Fertility and Mortality

In all projections, the 'medium' mortality assumptions provided by SNZ were used, and either the 'high', 'medium' or 'low' fertility assumptions provided by SNZ were used as noted in Section 4. We believe that the assumptions used by SNZ with respect to fertility and mortality in their subnational population projections are adequate for our purposes. The alternative would have been to develop our own age-specific fertility and age- and gender-specific mortality (survivorship) assumptions for the three component TLAs of the JHSRGSC area. As past fertility and mortality (survivorship) rates for these TLAs are based on the official deaths and births statistics, the SNZ assumptions are an appropriate starting point. Future mortality (survivorship) and fertility rates can be varied using local assumptions on the composition of the population, for example by ethnicity. In principle, future mortality (survivorship) and fertility assumptions could also take into account economic and social trends. Recently, fertility has increased nationally to above the replacement level (which requires a sustained total fertility rate of about 2.1). The last time fertility was at the current level was during a short period of relatively high fertility referred to as the 1990 'baby blip'. However, it is uncertain how long fertility will remain high, as the level is sensitive to many economic and social trends, and government policies.[2] While migration trends can already have a big impact on population projections in the short run, fertility trends take longer to 'work through' the projected population. For very long projections, such as up to 2061 in this report, it is therefore essential to also consider some variation in fertility assumptions.

3.4 Net Migration

For subnational projections, the projection methodology employed by SNZ involves the estimation of net migration for each territorial authority in each year. SNZ prepare three projections, based on 'low', 'medium', and 'high' levels of net migration. The total net migration assumed by SNZ for the three component TLAs of the JHSRGSC area under each of these scenarios is presented in Table 1.

The SNZ methodology also requires the specification of a total net migration profile by age and sex. This profile specifies the proportion of net migration that is assumed to occur among people of each age and sex, although the profile is allowed to change and therefore is also projected forward. In developing their net migration profile, SNZ uses census-based estimates of net migration as well as information provided by local authorities on proposed developments in their districts/cities that are likely to have an impact on population movement and change, and data from arrival and departure cards on people leaving or entering the country for twelve months or more. The net

[2] See, for example, Poot and Siegers (2001).

migration profile is then used along with the projected total net migration of each TLA in deriving the projections.

Table 1: SNZ net migration estimates for the three component TLAs of the JHSRGSC area

Five-year period ending 30 June	Net migration		
	'Low' series	'Medium' series	'High' series
Hamilton City			
2006 (actual)	+7570	+7570	+7570
2011	0	+2500	+5000
2016	0	+2500	+5000
2021	0	+2500	+5000
2026	0	+2500	+5000
Waikato District			
2006 (actual)	+2200	+2200	+2200
2011	-500	+500	+1500
2016	-500	+500	+1500
2021	-500	+500	+1500
2026	-500	+500	+1500
Waipa District			
2006 (actual)	+2320	+2320	+2320
2011	0	+700	+1400
2016	0	+700	+1400
2021	0	+700	+1400
2026	0	+700	+1400

We adopt a significantly different methodology to that employed by SNZ. The key difference is that rather than estimating a single net migration figure and applying that figure to a net migration profile, we estimate gender- and age-specific net migration rates which are then applied to the actual profile of population in the TLA. The basic estimation of the net migration rates is as follows.

First, we used SNZ data for the period 1991-2006 on Census night usually-resident population counts, reported gender-specific births, and gender- and age-specific reported deaths, to estimate net inter-censal population residuals. These residuals represent the inter-censal population change that is not accounted for by natural increase of the base population, and can therefore be interpreted as the inter-censal population change resulting from net migration.

The net inter-censal population residuals were calculated for each gender- and age-specific population group as follows: [3]

$$M_{ij}^{t+5} = P_{ij}^{t+5} - \sum_{y=t+1}^{y=t+5} B_{ij}^{y} + \sum_{y=t+1}^{y=t+5} D_{ij}^{y} - P_{ij}^{t}$$

where *M* represents net migration between June of year *t*+5 and year *t* estimated as a residual, *P* represents the Census night usually-resident population, *B* the number of reported births, *D* the number of reported deaths, and the subscripts *i* and *j* denote gender and age-specific population group respectively. Note that any net inter-censal population residual could be negative (representing an unaccounted-for decrease in the gender- and age-specific population group, which is interpreted as net out-migration), or positive (representing an unaccounted-for increase in the gender- and age-specific population group, which is interpreted as net in-migration).

The gender- and age-specific inter-censal net migration estimates were converted to estimated inter-censal net migration *rates* by dividing each estimate by the gender- and age-specific usually-resident population count at the *beginning* of each inter-censal period. This resulted in a series of three inter-censal net migration rates for each gender- and age-specific population group, which were projected forward to 2061, using a three period moving average. The resulting projected inter-censal net migration rates were then converted to series of annual net migration rates. As an example of the resulting projected net migration rates, selected resulting series for Hamilton City to 2061 are included in Appendix Figure A1.

Future migration rates are unlikely to be outside the range of two standard deviations either side of the projected net migration rates for the medium scenario. As such, the high migration scenario uses a rate approximately two standard deviations above, and the low migration scenario uses a rate approximately two standard deviations below, the net migration rates for the medium scenario.

Under this method, the projected net migration reflects a combination of the projected net migration rates which vary over time, and the structure of the TLA-level populations which also vary over time. Table 2 illustrates the effect of this methodology by comparison with the projected migration employed by Statistics New Zealand in their population projections for the three component TLAs of the JHSRGSC area for the medium projections.

[3] The gender- and age-specific population groups used were gender-specific age cohorts in five-year bands from 0-14 years, in three-year bands from 15-29 years, in five-year bands from 30-69 years, then two gender-specific population groups including all those aged 70 or more.

Table 2: Comparison of projected net migration between SNZ methodology and the methodology employed in this report, medium projections

Area	Average 2001-06	2007 SNZ	2007 PSC	2016 SNZ	2016 PSC	2031 SNZ	2031 PSC
Hamilton City	+1514	+500	+599	+500	+975	+500	+1038
Waikato District	+440	+100	+103	+100	+104	+100	+190
Waipa District	+464	+140	+164	+140	+340	+140	+471

3.5 Additional net migration resulting from development activities

In addition to the 'standard' net migration assumptions, in some scenarios additional net migration will be assumed to have resulted from the specific development activities of Hamilton City Council, Waipa District Council, Waikato District Council, and other local organisations. Following discussions with strategy groups of the three local councils, development activities that were expected to have significant full-time employment (FTE) effects were identified, as shown in Table 3. Where appropriate, an assumed FTE density of 20 FTEs per hectare was used, with additional assumptions noted in the footnotes to Table 3. [4]

For each new job created as a result of these development activities, no multiplier effect was assumed (i.e. the total employment effect was assumed to be only the direct employment created by the development activities). For each job, 0.5 workers were assumed to migrate into the Hamilton Sub-Region from elsewhere.[5] The total population effect (which would include all family members of migrants) was assumed to be 2.8 times the number of migrant workers (or 1.4 times the number of jobs created by the development activities). The total population effect was assumed to occur two-thirds in the TLA in which the economic development activity occurred, and one-sixth each in the other two TLAs. [6] Over the period 2007-2023, this represents an aggregate additional population of 4,844 persons to the Hamilton Sub-Region.

One future development that has not been taken into account in this exercise is the completion of the Hamilton-Auckland expressway. This is in line with earlier population projections for Hamilton City.[7]

[4] As per the minimum of the range identified for industrial land use in Phil McDermott Consultants (2006).

[5] Other jobs created are assumed to either be taken by locals previously unemployed or not in the labour force, or by commuters from outside the Hamilton Sub-Region boundary.

[6] This accounts for commuting between the three component TLAs of the Hamilton Sub-Region to the newly-created jobs.

[7] Cameron et al (2007) reviews some of the important issues and recent literature.

Table 3. FTE growth effects of selected development activities

	Year					
	2007	**2008**	**2009**	**2010**	**2011**	**2012-2023**
HAMILTON CITY[8]						
Light aviation cluster	+100	+100	+100	+100	+100	-
AgResearch	+20	+20	+20	+20	+20	-
Innovation Park						
- Stage III	+100	+100	+100	-	-	-
- Adjoining development	+33	+33	+34	-	-	-
- Further stages	-	-	+200	+200	+200	+200
Direct Employment (DEF)	**+253**	**+253**	**+454**	**+320**	**+320**	**+200**
Population Effect (PEF = DEF * 1.4)	**+354.2**	**+354.2**	**+635.6**	**+448**	**+448**	**+280**
Local Population Effect	**+236.1**	**+243.1**	**+430.7**	**+380.3**	**+380.3**	**+268.3**
WAIKATO DISTRICT[9]						
Horotiu industrial park[10]	-	-	-	+140	+140	+140
Hampton Downs expansion	-	+30	+30	+30	+30	+30 (to 2018)
Tamahere Mall development[11]	-	-	-	-	-	-
Direct Employment (DEF)	**+0**	**+30**	**+30**	**+170**	**+170**	**+170**
Population Effect (PEF = DEF * 1.4)	**+0**	**+42**	**+42**	**+238**	**+238**	**+238**
Local Population Effect	**+59.0**	**+87.0**	**+133.9**	**+275.3**	**+275.3**	**+247.3**
WAIPA DISTRICT[12]						
Airport/Titanium Park[13]	-	-	-	+130	+130	+130
Hautapu industrial cell[14]	-	-	-	+50	+50	+50
Bond Road industrial cell[15]	-	-	-	-	-	+30
Direct Employment (DEF)	**+0**	**+0**	**+0**	**+180**	**+180**	**+210**
Population Effect (PEF = DEF * 1.4)	**+0**	**+0**	**+0**	**+252**	**+252**	**+294**
Local Population Effect	**+59.0**	**+66.0**	**+112.9**	**+282.3**	**+282.3**	**+254.3**

[8] These assumptions for Hamilton City are the same as used in the projections prepared by Population Studies Centre in 2006.

[9] Other developments considered to have minimal net FTE impact include west coast wind farms.

[10] Assuming development begins in 2009, with an infill rate of 7 ha. per year.

[11] Assumed zero FTE impact at this stage, as it is not certain that this project will proceed.

[12] Other developments considered to have minimal net FTE impact include high performance centre at Karapiro, equine cluster, Mitre 10 Mega in Cambridge, Pak n Save in Te Awamutu, museum and library development in Te Awamutu.

[13] Assuming development begins in 2009, with an infill rate of 8 lots per year and a density of 2.5 lots per hectare in Titanium Park, with additional development of commercial and hotel and other facilities of equal FTE to Titanium Park.

[14] Assuming development begins in 2009, with an infill rate of 6 lots per year and a density of 2.5 lots per ha.

[15] Assuming development begins in 2011, with an infill rate of 4 lots per year and a density of 2.5 lots per ha.

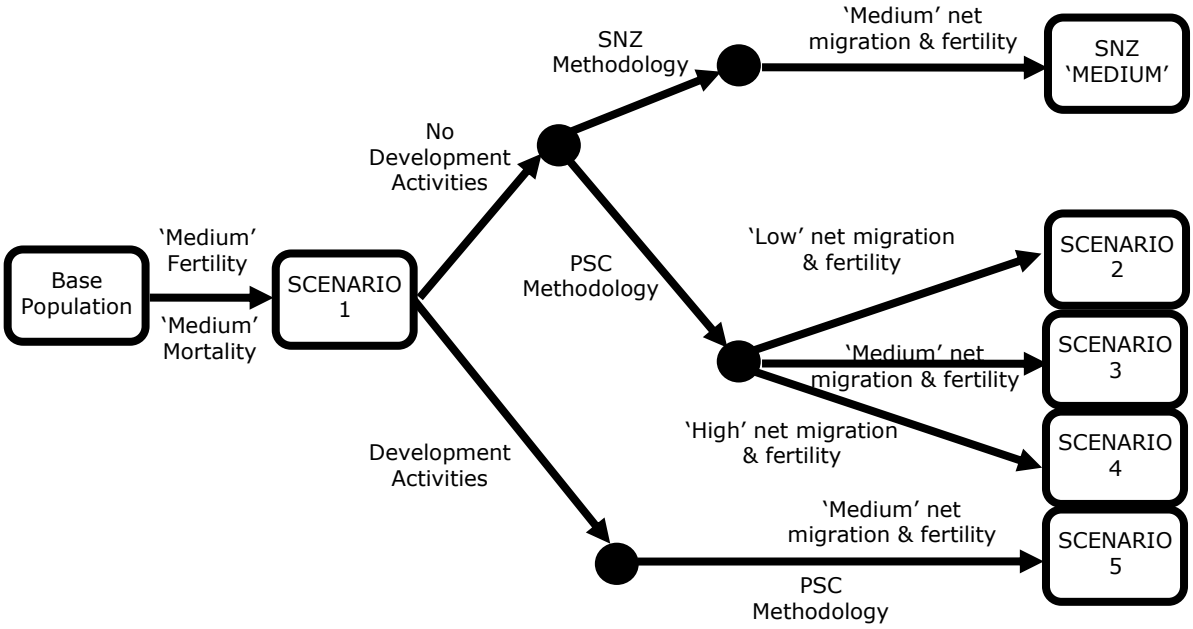
4 Population Projections for the Hamilton Sub-Region 2006-2061

In total, population projections for Hamilton City, Waikato District, and Waipa District have been calculated for five scenarios. All scenarios use the same 'medium' mortality (survivorship) assumptions. The five scenarios are:

1. A 'zero' net migration and 'medium' fertility scenario;
2. A 'low' net migration and fertility scenario;
3. A 'medium' net migration and fertility scenario;
4. A 'high' net migration and fertility scenario; and
5. A 'medium' net migration and fertility scenario, including the population effect of the development activities.

The relationship between these scenarios and SNZ's scenarios, and the assumptions and methodology used to derive them are presented in Figure 2. Scenario 1 ("zero net migration") provides a hypothetical base case scenario where the only population effects are caused by fertility and mortality. Scenarios 2, 3, and 4 apply low, medium and high projections of net migration using the method described above. Scenario 5 also uses the method described above, but also adds the effects of development activities to Scenario 3. This last scenario is of greatest interest to this project.

Figure 2. Relationship between population projection scenarios



The population projections for each TLA to 2061 derived under each scenario by gender and broad age category are summarised at five yearly intervals in the Appendix Tables A1A, A1B, and A1C, and the annual total population projections for each TLA to 2061 are presented in the Appendix Tables A2A, A2B, and A2C. These may be compared with the existing 'medium' population projection scenarios developed by SNZ.

Scenario 1 shows an increasing population for Waikato and Waipa Districts for the entire period to 2061, while Hamilton City's population peaks in 2047 then declines slightly, in the absence of net inward migration. This reflects the relatively lower fertility in Hamilton City than in the more rural areas, such that after 2047 the number of deaths exceeds the number of births in Hamilton City.

Scenarios 2, 3, and 4 provide for somewhat higher projected populations in all three TLAs when compared to SNZ's population projections. This is illustrated in Appendix Figures A2A, A2B, and A2C. These figures clearly show that the further out is the projection horizon, the greater is the range of projected population, indicating considerable uncertainty in projected populations further in the future.

The SNZ 'medium' population projection for Hamilton City is similar to, or a little less than, the PSC 'low' projection for virtually the entire projection period. The scenarios suggest that the population of Hamilton City will grow to between 180,211 and 201,952 by 2031, and to between 228,106 and 304,361 by 2061, with the medium projection being 190,841 in 2031 and 263,940 in 2061. Scenario 5 suggests that when the population effects of the development activities are added to the medium scenario (Scenario 3), the total projected population of Hamilton City increases to about 198,237 in 2031 and 277,557 in 2061.

The SNZ 'medium' population projection for Waikato District is similar to the PSC 'medium' population projection until 2016, after which the SNZ 'medium' projection falls away relative to the PSC 'medium' projection and more closely follows the PSC 'low' projection. The Scenarios suggest that the population of Waikato District will grow to between 56,653 and 67,136 by 2031, and to between 63,534 and 95,467 by 2061, with the medium projection being 61,679 in 2031 and 77,944 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario (Scenario 3) increases the total projected population of Waikato District to about 67,382 in 2031 and 86,633 in 2061.

The SNZ 'medium' population projection for Waipa District is initially similar to the PSC 'medium' population projection but falls away quickly after 2011, ending up significantly below the PSC 'low' projection by 2031. The scenarios suggest that the population of Waipa District will grow to between 53,613 and 60,709 by 2031, and to between 56,801 and 76,112 by 2061, with the medium projection being 57,066 in 2031 and 65,822 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario (Scenario 3) increases the total projected population of Waipa District to about 62,414 in 2031 and 73,457 in 2061.

Appendix Tables A3A, A3B, and A3C show the projected intercensal growth in the population by broad age groups for each TLA to 2061. The tables clearly

show that in all TLAs the biggest population gains are in the population aged over 65 years. For several scenarios and intercensal periods, a five-year growth rate in excess of 15 percent is expected in this age group.

The profiles of the population projections for Scenario 5 for each TLA, represented by population pyramids, are presented in Appendix Figures A3A, A3B, and A3C, along with the 2006 base populations. As can be seen, the population of all three TLAs increases significantly over the period to 2061, and in particular in the ages 55 and over consistent with most population projections for New Zealand. The population pyramids for 2061 show some surprises, including some unexpectedly large cohorts reflecting that, even with reasonable demographic assumptions, long-term projections can give unusual results.[16]

5 Family and Household Projections

Projections of the future number of families and households have been obtained by applying age and gender specific assumptions about future trends in living arrangement type rates and average household sizes to the projected population. The base population for these projections of families and households 2006-2061 are Scenarios 3 and 5 above, i.e. the 'medium' net migration and fertility scenario (Scenario 3), and the 'medium' net migration and fertility scenario including the population effect of the development activities (Scenario 5).

The numbers of families and households are derived from the number of people in each living arrangement type.[17] The number of families is the sum of couple without children families, two-parent families and one-parent families. The number of couple without children families is calculated by dividing the total number of partners (male and female combined) in couple without children families by two. Similarly, two-parent families are calculated by dividing the total number of partners/parents (male and female combined) in two-parent families by two. For one-parent families, the number of families is the same as the number of parents (male and female combined) in one-parent families.

[16] It should be noted that the unusually large projected cohorts in 2061 aged 70-74 in Waipa and Waikato Districts, and aged 75-79 in Hamilton City, result mainly from the non-smoothness (non-differentiability) of projected trends in net migration rates.

[17] For more detail on this methodology, see Statistics New Zealand (2004).

$$\text{Number of families} = \frac{\text{number of partners in couple without children}}{2} + \frac{\text{number of partners / parents in two – parent\_families}}{2} + \text{number of parents in one parent families}$$

The number of families is then used to derive the number of households. The number of family households will necessarily be less than the total number of families, because some households contain more than one family. Multi-person households (containing no families) are also projected, along with single-person households. Adjustment factors for households containing more than one family and for the average number of people living in 'other multi-person' households are separately calculated from an analysis of available historical data. The number of one-person households is the same as the number of people in one-person households.

$$\text{Number of households} = \frac{\text{number of families}}{\text{average number of families per family household}} + \frac{\text{number of people in other multi person households}}{\text{average household size of other multiperson households}} + \text{number of\_one person households}$$

5.1 Derivation of number of persons per living arrangement type

The number of persons living in a particular living arrangement type is derived by multiplying the age- and gender-specific living arrangement type rate (LATR) by the number of persons at that age and gender and summating. LATRs can be thought of as the probability of an individual being in a particular living arrangement. SNZ derive three different series of LATRs:

1. Variant A, assuming that LATRs remain constant at the 2001 levels;
2. Variant B, assuming that LATRs change linearly between 2001 and 2021 based on an assessment of observed trends between 1986 and 2001 and likely future trends; and
3. Variant C assuming that LATRs change linearly between 2001 and 2021 according to the linear trend observed between 1986 and 2001.

Variant B is held by SNZ to provide the best basis for assessing future family and household changes and is used in these projections. However, there are

two important problems with the use of LATRs in household projections: (i) SNZ projected LATRs are only available up to 2021, and (ii) SNZ projected LATRs are only available at the national level. The second problem is most serious, because in TLAs where average household size is larger than the national average the number of households projected using national-level LATRs is likely to be significantly overestimated.

To deal with the first problem, we have held LATRs constant at the 2021 levels for the balance of the projection period, i.e. until 2061. To deal with the second problem requires a two-step approach. First, we compute a household projection using the national-level LATRs for each TLA. Then, for each living arrangement type, we calculate the ratio of the number of actual living arrangements (using 2006 Census data scaled up to account for the population growth between the Census date and the 30 June projection date) to the number of households projected using national-level LATRs. We then create projected TLA-level LATRs by multiplying the projected national-level LATRs by the ratio. Note that the implicit assumption in this procedure is that the *relative change* in propensities for each living arrangement is the same in each TLA as in New Zealand as a whole.

5.2 Average number of families per family household

In calculating the number of family households from the number of families an adjustment must be made for the existence of multi-family households. SNZ Variant B used in these projections assumes linear growth (on the basis of historical trends) in the average number of families per household until 2021. We have held the average number of families per family household constant at the 2021 levels for the balance of the projection period, i.e. until 2061.

As for LATRs, we allow the average number of families per family household to vary by TLA rather than using the national average. The procedure is similar to the above. First, we compute a household projection using the TLA-level LATRs for each TLA. Then, we calculate the ratio of the actual number of family households (using 2006 Census data scaled up to account for the population growth between the Census date and the 30 June projection date) to the number of family households projected using national-level LATRs. We then create projected TLA-level average number of families per family household by multiplying the projected national-level average number of families per family household by the ratio. Note that the implicit assumption in this procedure is that the TLA-level averages of the number of families per family household are perfectly correlated, i.e. that for all TLAs these averages change by the same rate and that there are no changing in ranking between the TLAs.

5.3 Average number of people per other multi-person household

To convert the number of persons in multi-person non-family households to household numbers, the number of persons in multi-person non-family

households is divided by an estimate of the average number of persons in such households. On the basis of historical trends SNZ Variant B assumes linear growth in the average number of persons in multi-person non-family households until 2021. We have held the average number of persons in multi-person non-family households constant at the 2021 levels for the balance of the projection period i.e. until 2061.

5.4 Family and household projections for the Hamilton subregion 2006-2061

The projected number of families and households for each TLA to 2061 under Scenario 3 are presented in Appendix Tables A4A, A4B, and A4C, and the projections under Scenario 5 are presented in Appendix Tables A5A, A5B, and A5C. The projected numbers of households are also shown graphically in Appendix Figures A4A, A4B, and A4C. These projections show a similar pattern to the population projections, with significant growth in the number of families and households in all three TLAs. The biggest growth in family types is among couples without children and single-parent families, and the biggest growth in household types is among single-person households, in line with expectations about family and household change at the national level.

In Hamilton City under the medium net migration and fertility scenario without economic development activities (Scenario 3), the number of families is projected to grow to 49,003 in 2031 and to 67,533 in 2061, and the number of private households to grow to 69,850 in 2031 and to 98,717 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the total projected number of families in Hamilton City to 50,720 in 2031 and 71,120 in 2061, and the number of private households to 72,085 in 2031 and 103,634 in 2061. As can be seen from the figure, Hamilton City experiences significant and sustained growth in the number of households throughout the projection period to 2061.

In Waikato District under the medium scenario without economic development activities (Scenario 3), the number of families is projected to grow to 16,650 in 2031 and to 20,889 in 2061, and the number of private households to grow to 22,233 in 2031 and to 28,552 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the total projected number of families in Waikato District to 18,105 in 2031 and 23,300 in 2061, and the number of private households to 24,035 in 2031 and 31,763 in 2061. Growth in the number of households in Waikato District slows slightly over the period to 2061.

In Waipa District under the medium scenario without economic development activities (Scenario 3), the number of families is projected to grow to 16,297 in 2031 and to 18,209 in 2061, and the number of private households to grow to 22,473 in 2031 and to 26,066 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the total projected number of families in Waipa District to 17,672 in

2031 and 20,438 in 2061, and the number of private households to 24,285 in 2031 and 29,073 in 2061. Growth in the number of households in Waipa District appears to slow significantly after 2041, much in line with the total population projections presented earlier.

6 Labour Force Projections

Projections of the future labour force have been obtained by applying age- and gender-specific assumptions about future trends in labour force participation rates to the projected population. The labour force participation rate (LFPR) being defined as follows:

$$LFPR = \frac{Labour\,Force}{Working\,Age\,Population} = \frac{(Unemployed + Employed + Unpaid\,in\,Family\,\text{Business})}{Working\,Age\,Population}$$

It should be noted that the official labour market statistics used in New Zealand are those derived from the household labour force survey (HLFS) which uses a definition of the working age population as the population aged 15 years and over. This is in contrast to the common international practice, and past practice in New Zealand, of defining the working age population as those aged 15-64 years of age. The justification for the current HLFS practice is that New Zealand lacks an official retirement age and the more limited 15-64 age range no longer reflects current labour market trends. Whatever the merits of this view, the difference between labour force participation rates calculated on the 15-64 population and the more expansive 15+ population are non-trivial. Hence care must be taken when comparing labour force participation rates between countries and studies to ensure that consistent denominators are used. Both the 15-64 and the 15+ based LFPR are reported here.

Here labour force projections for the three TLAs in the Hamilton Sub-Region for the period 2006 to 2061 have been prepared using the 'medium' net migration and fertility scenario (Scenario 3), and the 'medium' net migration and fertility scenario including the population effect of the development activities (Scenario 5), and under three different sets of assumptions about the trend in labour force participation rates.[18]

As the trends are based on national-level labour force participation data, they encounter similar problems to those identified for the household projections above. To overcome this, we allow the labour force participation rates to vary by TLA rather than using the national average. The procedure is similar to that described for LATRs above. First, we compute a labour force projection using the TLA-level LFPRs for each TLA. Then, we calculate the ratio of the actual size

[18] In the scenarios including economic development activities, it is plausible that labour force participation rates would be higher than in the scenarios without economic development activities. However, for simplicity and to avoid additional assumptions, we have assumed the same labour force participation rates for both sets of scenarios.

of the labour force (using 2006 Census data scaled up to account for the population growth between the Census date and the 30 June projection date) to the projected labour force using national-level LFPRs. We then create projected TLA-level labour force participation rates by multiplying the projected national-level labour force participation rates by the ratio. Note that the implicit assumption in this procedure is that the *relative change* in participation rates is the same in each TLA as in New Zealand as a whole.

6.1 Labour force projections scenario A (LFPS3-A and LFPS5-A)

Under this scenario it is assumed that age and gender specific participation rates remain at the level of the average for 2000-2005. These rates are shown in Table 4 and have been derived from the HLFS.

Table 4: National-level labour force participation rates, scenario LFPS3-A and LFPS5-A

Age	Male	Female	Total
15-19	53.9	52.9	53.4
20-24	79.7	67.3	73.5
25-29	89.9	70.2	79.7
30-34	91.5	67.0	78.7
35-39	92.0	72.8	82.0
40-44	92.1	79.6	85.7
45-49	92.1	82.1	87.0
50-54	90.1	76.5	83.3
55-59	83.8	64.2	73.9
60-64	64.7	41.0	52.6
65+	13.7	5.6	9.2

Source Statistics New Zealand. (2006). *Labour Market Statistics 2005*. Wellington: Statistics New Zealand.

It should be noted that the 2000-2005 period was one in which the labour market was particularly buoyant with overall participation rates three to four percentage points higher than at the beginning of the 1990s.

Labour force projections under this scenario are presented in detail by gender and overall in Appendix Tables A6A, A6B, and A6C, for both the medium scenario without economic development activities (Scenario 3), and the medium scenario including economic development activities (Scenario 5). The projections are also depicted in Appendix Figures A5A, A5B, and A5C for Scenario 3 and Appendix Figures A6A, A6B, and A6C for Scenario 5.

In Hamilton City under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 97,470 in 2031 and to 130,184 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Hamilton City to 101,310 in 2031 and 137,131 in 2061.

In Waikato District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 29,337 in 2031 and to 36,143 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waikato District to 32,352 in 2031 and 40,170 in 2061.

In Waipa District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 26,314 in 2031 and to 28,961 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waikato District to 28,994 in 2031 and 32,495 in 2061.

6.2 Labour force projections scenario B (LFPS3-B and LFPS5-B)

Bryant et al. (2004) observe that, while overall levels of labour market participation in New Zealand are not dissimilar to the OECD median, the participation rate of women aged 25-34 is relatively low by OECD standards. In this scenario it is assumed that changes in government policy result in substantial increases in the participation rates of 25-34 year old women. This is not implausible given the recent attention that this matter has received in policy circles (such as at a 2005 Treasury workshop on labour force participation and economic growth, and a 2004 workshop on productivity and the responsiveness of female participation rates to changes in policy settings (Jaumotte, 2003). The following assumptions underpin this scenario:

1. As it is deemed unlikely that there will be a reversal in the pattern of high levels of participation in post secondary education, participation rates in the 15-24 age group are static at the average for the 2000-2005 period for males. Female rates for the 15-19 age group are similarly held static.
2. Age-specific participation rates for males are held at the average for the 2000-2005 period for the 2006-2061 period.
3. Female participation rates for 2021 in the 20 to 44 age group are set to levels based on Bryant et al. (2004, p.5), modified to reflect the average age specific rates for the 2000-2005 period. Other female age groups are at the average for the 2000-2005 period.
4. Female participation rates in the 20 to 44 age group rise in a linear fashion between 2006 and 2021.
5. Post 2021 female participation rates are static at 2021 levels.

The participation rates for males and females used in this scenario are shown in Table 5 for 2006, 2011, 2016 and 2021. LFPR are assumed constant after 2021, as discussed above.

Table 5: National-level labour force participation rates, scenario LFPS3-B and LFPS5-B

		Age Group										
Year	**Gender**	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
2006	**Male**	53.9	79.7	89.9	91.5	92.0	92.1	92.1	90.1	83.8	64.7	13.7
	Female	52.9	67.3	70.2	67.0	72.8	79.6	82.1	76.5	64.2	41.0	5.6
2011	**Male**	53.9	79.7	89.9	91.5	92.0	92.1	92.1	90.1	83.8	64.7	13.7
	Female	52.9	69.3	71.1	69.8	75.2	80.1	82.1	76.5	64.2	41.0	5.6
2016	**Male**	53.9	79.7	89.9	91.5	92.0	92.1	92.1	90.1	83.8	64.7	13.7
	Female	52.9	71.2	72.1	72.7	77.6	80.6	82.1	76.5	64.2	41.0	5.6
2021	**Male**	53.9	79.7	89.9	91.5	92.0	92.1	92.1	90.1	83.8	64.7	13.7
	Female	52.9	73.2	73.0	75.6	80.0	81.1	82.1	76.5	64.2	41.0	5.6

Labour force projections under this scenario are presented in detail by gender and overall in Appendix Tables A6A, A6B, and A6C, for the medium scenario without economic development activities (Scenario LFPS3-B). The results for the medium scenario including economic development activities (Scenario LFPS5-B) can be found for Hamilton City, Waikato District and Waipa District in Appendix Tables A7A, A7B and A7C respectively. The projections are also depicted in Appendix Figures A5A, A5B, and A5C for Scenario 3 and Appendix Figures A6A, A6B, and A6C for Scenario 5.

In Hamilton City under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 99,258 in 2031 and to 132,579 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Hamilton City to 103,228 in 2031 and 139,680 in 2061.

In Waikato District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 29,832 in 2031 and to 36,748 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waikato District to 32,911 in 2031 and 40,851 in 2061.

In Waipa District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 26,744 in 2031 and to 29,437 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waikato District to 29,488 in 2031 and 33,037 in 2061.

6.3 Labour force projections scenario C (LFPS3-C and LFPS5-C)

This final labour force projection scenario assumes that, in response to government initiatives to increase the overall levels of participation in the labour force, participation rates increase in a linear fashion from 2006 to 2021 before stabilising. The rates for 2021 are again derived from Bryant et al. (2004)

modified to reflect the average age specific rates for the 2000-2005 period and are shown in Table 6. Again, the rates are assumed constant post 2021.

Table 6: National-level labour force participation rates, scenario LFPS3-C and LFPS5-C

		Age Group										
Year	**Gender**	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
2006	**Male**	53.9	79.7	89.9	91.5	92.0	92.1	92.1	90.1	83.8	64.7	13.7
	Female	52.9	67.3	70.2	67.0	72.8	79.6	82.1	76.5	64.2	41.0	5.6
2011	**Male**	55.6	81.4	90.9	93.1	93.6	93.7	93.5	91.2	85.5	66.4	15.5
	Female	54.7	69.0	71.9	68.6	74.5	81.4	84.2	78.7	66.0	42.7	7.6
2016	**Male**	57.3	83.1	91.9	94.7	95.2	95.2	95.0	92.2	87.3	68.2	17.3
	Female	56.4	70.7	73.7	70.3	76.3	83.2	86.2	80.8	67.8	44.3	9.5
2021	**Male**	59.0	84.8	92.9	96.3	96.8	96.8	96.4	93.2	89.0	69.9	19.1
	Female	58.1	72.4	75.5	72.0	78.0	85.0	88.3	83.0	69.6	46.0	11.5

Labour force projections under this scenario are presented in detail by gender and overall in Appendix Tables A6A, A6B, and A6C, for the medium scenario without economic development activities (Scenario LFPS3-C) and in Appendix Tables A7A, A7B and A7C for the medium scenario including economic development activities (Scenario LFPS5-C). The projections are also depicted in Appendix Figures A5A, A5B, and A5C for Scenario 3 and Appendix Figures A6A, A6B, and A6C for Scenario 5.

In Hamilton City under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 105,696 in 2031 and to 141,692 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Hamilton City to 109,801 in 2031 and 149,208 in 2061.

In Waikato District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 31,944 in 2031 and to 39,516 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waikato District to 35,166 in 2031 and 43,913 in 2061.

In Waipa District under the medium scenario without economic development activities (Scenario 3), the labour force is projected to grow to 28,990 in 2031 and to 32,122 in 2061. Scenario 5 suggests that, adding the population effects of the development activities to the medium scenario increases the projected labour force in Waipa District to 31,890 in 2031 and 36,012 in 2061.

Overall, the trends shown by the graphs indicate significant growth in the labour force in Hamiton City, slightly slower growth in Waikato District, and more modest growth in Waipa District, particularly after 2021.

7 Census Area Unit Projections

In this section projections are made of the census usually resident population for each of the constituent Census Area Units (CAU) of the Waikato, Waipa and Hamilton City Council TLAs for the period 2007-2041. Given uncertainties regarding the underlying assumptions, it was not considered appropriate to extend these projections further.

In making these projections the cohort component method is not used. Instead, a modified constrained variant of the common housing unit (HU) methodology has been employed (see Cai, 2007, pp.205). The choice to use a modified form of the HU method instead of the cohort component method is largely due to the considerable increase in the size of the project, raising the number of full projections from 3 to 96, i.e. one for each CAU and TLA, that the use of the cohort component method would entail. In addition it was felt that the available net migration data was not of sufficient quality to justify the use of the cohort component method.

This approach stands in contrast to that adopted by SNZ which uses the cohort component method for its CAU projections.[19] In their approach CAU level mortality and fertility rates are based on the registered births and deaths, respectively, for each area to 2007 – hence they are consistent with the SNZ assumed rates for higher geographic levels (i.e. medium fertility and mortality variants for each territorial authority area and New Zealand). Net migration assumptions for the SNZ projections are based on a consideration of observed net migration during each five-year period from 1981 to 2006, the capacity of the area for further growth (for areas with net inflow), whether historical outflows can be sustained (for areas with net outflow), the desirability of the area to new migrants, and information available from and about local authority areas relating to current and future developments which may affect population change.

The HU methodology adopted here requires no explicit net migration assumptions at CAU level as it distributes TLA level population growth firstly to CAUs in which new building will occur, then allocates residual population change to the remaining CAUs.

Differences between the SNZ CAU projections and ours will then be due to two main factors: (i) the effect of how migration is treated at CAU level; and (ii) because we have had more recent access to the development intentions of the TLAs.

The HU methodology multiplies the projected number of occupied dwellings at time *t* in location/area *x* by the average number of persons per occupied

[19] See http://www.stats.govt.nz/additional-information/area-unit-population-projections.htm

dwelling at time *t* in location/area *x*. The method we use here is a variant of this approach and is shown in the following equation:

where;

$P_i(t)$ = the projected population of area *i* in year *t*,

$s_i(06)$ = is the average household size in area *i* in 2006, obtained by dividing the normally resident population of area *i* in 2006 by the number of occupied dwellings,

$H_i(t)$ = the projected number of occupied dwellings in area *i* in year *t*,

$PH(t)$ = the projected population of the particular TLA of which the CAU is part in projection year *t*.

This approach takes the average household size in CAU *i* in 2006 ($s_i(06)$) and multiplies it by the projected number of occupied dwellings in CAU *i* in year *t*;then divides this by the population that would be obtained by summing together the populations calculated by applying this method to each area. This gives us a projection of the proportion of the population living in CAU *i* at time *t*. Multiplying this proportion by the projected population, of the particular TLA of which the CAU is part, at time *t* gives us the projected population of area *i* in year *t*, $P_i(t)$.

This approach has several advantages. It allows for heterogeneity in the number of persons per dwelling across the regions under consideration, as opposed to treating all sub regions as sharing the district or national average number of persons per dwelling, and it also ensures that district and sub district projections sum to the same total population.

7.1 Dwelling projection methodology

The dwelling projections have been conducted using two separate methodologies, one for CAU for which TLA have supplied data on the future likely pattern of dwelling construction and other for CAU for which no such data are available. The difference is as follows:

Dwelling projections for CAUs with TLA growth data:

1. Allow the dwelling count to rise on the basis of historic trends to the time that growth is indicated to commence by TLA,
2. Apply TLA-supplied data,[20] and

[20] Note that the HCC has updated the CAU data it has provided to the PSC. Hence the projections here will differ significantly for certain CAU from those reported in Cameron et al. (2007). This change is due in large part to changes in HCC's sequencing of development, but also results from the growth apportioned to a notional CAU in previous projections being distributed

3. When TLA supplied data ceases, assume that the CAU's growth potential is exhausted.

Dwelling projections for CAUs with TLA growth data:

1. Project the number of dwellings on the basis of the historic trend (linear) up to the available TLA supplied data,
2. Calculate limitations on dwelling numbers in CAU without TLA growth data , using the linear dwelling projection (see 1 above) less the number of dwellings in CAU with TLA growth data,
3. Scale the projected number of dwellings in CAU without TLA growth data to the growth limitation, and
4. Growth is constrained to be non-negative.

This methodology constrains the total number of dwellings, the sum of the dwelling projections for CAUs without TLA growth data and those for which we do have data, to our TLA household projections. A further constraint is applied to ensure that that no CAU experiences negative growth in dwelling numbers. In the case of the HCC, growth outside growth cell CAUs is directed into infill areas with only a small proportion, around 25 percent, being allocated to non-growth cell non-infill CAUs.

7.2 CAU dwelling and population projections for the Hamilton subregion 2006-2041

The projection for households and population used as a base here is the PSC Medium EDA (scenario 5) populations.

The results for these projections, the projected number of CAU dwellings and the CAU population up to 2041, are shown in the Appendix Tables A8A, A8B, and A8C. The resulting population growth rates are depicted graphically in Appendix Figures A7A, A7B, and A7C.

In Hamilton City, growth is concentrated in the growth cells to the north and south of the city to 2026, then in the south and central city areas after 2026. In Waikato District there is significant growth in the area bordering the north of Hamilton City, including Ngaruawahia, and in the Te Akau CAU. In Waipa District, there is significant growth in the areas immediately surrounding Te Awamutu and Cambridge up to 2026, and significant growth in the areas bordering Hamilton City to 2016.

The results reported in the Appendix Tables differ for some CAUs considerably from those reported in recent CAU projections by SNZ. For example in Hamilton City, there are substantial differences for Rototuna, Peacocke, Burbush, Grandview and Brymer. This reflects the impact of the recent changes

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amongst actual CAUs in this projection. Examples of CAUs with greatly revised projections are: Rototuna, Peacocke, Burbush, Rotokauri and Brymer.

to HCC scheduling of subdivision, particularly the decision to switch development to the South of the city.

8 Conclusion

The projections presented in this report cover the period 2006-2061 (and 2041 for CAU projections) and attempt to come to grips with some of the dynamics facing a region with a complex and changing demography.

To conclude it is worth commenting on the spirit in which these projections should be taken. Dowell Myers argues in an often cited article that the overarching purpose of planning is to meet the needs of residents in communities more effectively, hence as the nature of communities change over time so to must the nature of plans formulated to regulate the use of resources and the built environment. But as the plans of today will not yield returns until some point in the future, the community whose needs are to be addressed is not that of the present but rather that of the future. Determining the nature, in so far as we are able, of this future community then becomes as central to the planning process as the land use map (Myers, 2001, p. 384).

Sketching the outlines of these future communities through population projections, detailed descriptions of changing characteristics (population analysis) and normative interpretation is what Myers calls demographic futures. These demographic futures should not been interpreted as an attempt to calculate future population characteristics with complete accuracy but simply as necessary tools to allow the evaluation of possible futures.

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Appendix Tables & Figures

Table A1A Hamilton City population projection scenarios 2006-2061, at five-yearly intervals by broad age category

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	*All*	*134,400*	*134,400*	*134,400*	*134,400*	*134,400*	*134,400*
	Age 0-14	29,000	29,000	29,000	29,000	29,000	29,000
	Age 15-39	55,200	55,200	55,200	55,200	55,200	55,200
	Age 40-64	36,700	36,700	36,700	36,700	36,700	36,700
	Age 65+	13,500	13,500	13,500	13,500	13,500	13,500
2011	*All*	*140,801*	*143,800*	*143,414*	*144,835*	*146,270*	*146,579*
	Age 0-14	29,719	30,600	31,624	32,141	32,666	32,541
	Age 15-39	55,159	57,000	55,800	56,434	57,074	57,607
	Age 40-64	40,662	40,600	40,495	40,673	40,853	40,791
	Age 65+	15,260	15,600	15,496	15,587	15,678	15,640
2016	*All*	*147,209*	*152,700*	*153,005*	*156,264*	*159,558*	*159,585*
	Age 0-14	30,902	31,800	33,201	34,561	35,921	35,228
	Age 15-39	54,841	59,000	57,767	59,052	60,365	61,373
	Age 40-64	43,261	43,200	43,381	43,771	44,165	43,993
	Age 65+	18,204	18,700	18,656	18,880	19,106	18,991
2021	*All*	*152,776*	*161,300*	*162,889*	*168,235*	*173,692*	*173,346*
	Age 0-14	30,907	32,300	33,333	35,675	38,050	36,854
	Age 15-39	54,043	60,900	60,411	62,333	64,315	65,750
	Age 40-64	46,180	45,800	46,875	47,571	48,278	47,905
	Age 65+	21,647	22,300	22,270	22,656	23,050	22,837
2026	*All*	*156,922*	*169,400*	*171,724*	*179,510*	*187,570*	*185,907*
	Age 0-14	29,470	32,100	33,012	36,000	39,088	37,744
	Age 15-39	50,370	62,700	61,104	64,118	67,262	67,985
	Age 40-64	51,435	48,400	51,362	52,567	53,801	53,141
	Age 65+	25,648	26,200	26,245	26,825	27,419	27,037
2031	*All*	*159,834*	*177,400*	*180,211*	*190,841*	*201,952*	*198,237*
	Age 0-14	27,140	32,400	33,094	36,513	40,112	38,821
	Age 15-39	49,538	64,800	65,173	69,861	74,768	73,686
	Age 40-64	53,522	50,100	51,653	53,372	55,151	54,418
	Age 65+	29,633	30,100	30,291	31,096	31,921	31,313

Table A1A (cont.) Hamilton City population projection scenarios 2006-2061, at five-yearly intervals by broad age category

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036	*All*	*162,035*		*188,792*	*202,520*	*217,023*	*211,052*
	Age 0-14	25,347		34,426	38,531	42,890	41,192
	Age 15-39	49,925		67,773	73,994	80,592	77,700
	Age 40-64	53,532		52,341	54,675	57,119	56,594
	Age 65+	33,231		34,252	35,320	36,421	35,566
2041	*All*	*163,617*		*197,280*	*214,483*	*232,893*	*224,101*
	Age 0-14	24,814		36,544	41,673	47,148	44,303
	Age 15-39	49,480		68,880	76,528	84,812	80,331
	Age 40-64	53,219		54,170	57,232	60,470	60,133
	Age 65+	36,104		37,685	39,049	40,463	39,334
2046	*All*	*164,349*		*205,741*	*226,951*	*249,931*	*237,533*
	Age 0-14	24,932		38,283	44,592	51,446	46,995
	Age 15-39	47,724		69,755	79,103	89,350	83,330
	Age 40-64	52,435		56,257	60,058	64,112	63,672
	Age 65+	39,258		41,447	43,198	45,023	43,535
2051	*All*	*164,007*		*213,864*	*239,574*	*267,784*	*251,066*
	Age 0-14	24,740		39,099	46,521	54,762	48,821
	Age 15-39	45,600		71,543	82,590	94,786	87,416
	Age 40-64	48,982		57,033	61,924	67,226	65,759
	Age 65+	44,685		46,189	48,540	51,010	49,070
2056	*All*	*162,446*		*221,279*	*251,858*	*285,871*	*264,338*
	Age 0-14	23,869		39,407	47,817	57,338	50,312
	Age 15-39	43,454		73,846	86,616	100,909	91,863
	Age 40-64	48,255		61,150	67,704	74,882	71,490
	Age 65+	46,868		46,876	49,721	52,742	50,673
2061	*All*	*159,824*		*228,106*	*263,940*	*304,361*	*277,557*
	Age 0-14	22,595		39,972	49,325	60,084	52,206
	Age 15-39	41,816		76,527	91,434	108,380	96,829
	Age 40-64	48,649		63,754	71,892	80,923	75,489
	Age 65+	46,764		47,853	51,289	54,974	53,035

Table A1B Waikato District population projection scenarios 2006-2061, at five-yearly intervals by broad age category

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	*All*	*45,400*	*45,400*	*45,400*	*45,400*	*45,400*	*45,400*
	Age 0-14	11,500	11,500	11,500	11,500	11,500	11,500
	Age 15-39	14,400	14,400	14,400	14,400	14,400	14,400
	Age 40-64	15,000	15,000	15,000	15,000	15,000	15,000
	Age 65+	4,500	4,500	4,500	4,500	4,500	4,500
2011	*All*	*47,594*	*48,300*	*47,597*	*48,326*	*49,065*	*49,174*
	Age 0-14	11,018	11,800	11,342	11,581	11,825	11,786
	Age 15-39	15,013	14,400	14,333	14,602	14,876	15,069
	Age 40-64	16,028	16,600	16,460	16,641	16,823	16,774
	Age 65+	5,534	5,500	5,461	5,501	5,540	5,546
2016	*All*	*49,785*	*50,900*	*49,551*	*51,184*	*52,862*	*53,424*
	Age 0-14	10,783	12,100	11,472	12,059	12,661	12,635
	Age 15-39	16,035	14,600	14,376	14,933	15,510	16,106
	Age 40-64	15,961	17,300	16,942	17,323	17,712	17,681
	Age 65+	7,006	6,900	6,761	6,869	6,979	7,002
2021	*All*	*52,145*	*53,400*	*52,363*	*55,066*	*57,885*	*58,937*
	Age 0-14	11,109	12,400	11,909	12,925	13,983	14,019
	Age 15-39	17,311	15,000	15,058	15,921	16,831	17,764
	Age 40-64	15,143	17,500	17,170	17,786	18,423	18,502
	Age 65+	8,582	8,500	8,226	8,434	8,648	8,653
2026	*All*	*54,741*	*55,700*	*54,733*	*58,580*	*62,679*	*63,593*
	Age 0-14	11,948	12,300	12,306	13,679	15,152	15,221
	Age 15-39	18,521	15,800	15,479	16,697	18,005	18,796
	Age 40-64	13,896	17,200	16,985	17,898	18,861	19,003
	Age 65+	10,376	10,400	9,963	10,306	10,661	10,572
2031	*All*	*57,184*	*57,700*	*56,653*	*61,679*	*67,136*	*67,382*
	Age 0-14	12,794	12,300	12,478	14,126	15,946	15,919
	Age 15-39	18,515	15,900	14,930	16,466	18,140	18,499
	Age 40-64	13,924	17,300	17,605	18,935	20,366	20,510
	Age 65+	11,950	12,200	11,641	12,151	12,685	12,455

Table A1B (cont.) **Waikato District population projection scenarios 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036	*All*	*59,262*		*58,289*	*64,563*	*71,489*	*70,826*
	Age 0-14	13,246		12,372	14,269	16,405	16,085
	Age 15-39	18,466		14,985	16,913	19,049	18,814
	Age 40-64	14,585		17,947	19,686	21,591	21,848
	Age 65+	12,965		12,986	13,695	14,444	14,079
2041	*All*	*61,021*		*59,568*	*67,191*	*75,751*	*73,856*
	Age 0-14	13,248		12,143	14,314	16,783	15,971
	Age 15-39	18,979		15,395	17,801	20,541	19,709
	Age 40-64	15,621		18,301	20,443	22,829	23,048
	Age 65+	13,173		13,729	14,633	15,598	15,129
2046	*All*	*62,652*		*60,740*	*69,879*	*80,333*	*76,925*
	Age 0-14	13,259		12,179	14,724	17,675	16,234
	Age 15-39	19,831		15,663	18,598	22,018	20,607
	Age 40-64	16,870		18,831	21,376	24,255	24,218
	Age 65+	12,691		14,068	15,182	16,386	15,865
2051	*All*	*64,359*		*61,833*	*72,646*	*85,268*	*80,168*
	Age 0-14	13,585		12,433	15,438	19,014	16,970
	Age 15-39	20,700		15,813	19,214	23,248	21,434
	Age 40-64	18,025		19,221	22,237	25,715	25,043
	Age 65+	12,049		14,366	15,758	17,291	16,721
2056	*All*	*66,251*		*62,759*	*75,346*	*90,346*	*83,450*
	Age 0-14	14,225		12,713	16,187	20,428	17,911
	Age 15-39	21,438		15,956	19,789	24,425	22,138
	Age 40-64	18,015		18,685	22,136	26,200	24,789
	Age 65+	12,573		15,405	17,235	19,293	18,612
2061	*All*	*68,327*		*63,534*	*77,944*	*95,467*	*86,633*
	Age 0-14	14,940		12,893	16,780	21,637	18,732
	Age 15-39	21,970		16,007	20,286	25,578	22,637
	Age 40-64	17,983		18,800	22,833	27,677	25,327
	Age 65+	13,434		15,834	18,045	20,575	19,937

Table A1C Waipa District population projection scenarios 2006-2061, at five-yearly intervals by broad age category

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	*All*	*43,700*	*43,600*	*43,700*	*43,700*	*43,700*	*43,700*
	Age 0-14	9,722	9,700	9,722	9,722	9,722	9,722
	Age 15-39	13,230	13,200	13,230	13,230	13,230	13,230
	Age 40-64	14,533	14,500	14,533	14,533	14,533	14,533
	Age 65+	6,214	6,200	6,214	6,214	6,214	6,214
2011	*All*	*44,870*	*45,800*	*45,318*	*45,823*	*46,335*	*46,630*
	Age 0-14	9,089	9,800	9,413	9,569	9,728	9,750
	Age 15-39	13,449	13,000	12,762	12,924	13,088	13,330
	Age 40-64	15,544	15,700	15,913	16,044	16,176	16,152
	Age 65+	6,787	7,300	7,229	7,286	7,343	7,398
2016	*All*	*46,013*	*47,600*	*47,313*	*48,452*	*49,610*	*50,623*
	Age 0-14	8,800	10,000	9,468	9,862	10,259	10,359
	Age 15-39	14,037	12,900	12,648	12,956	13,270	13,963
	Age 40-64	15,365	16,000	16,367	16,639	16,917	16,972
	Age 65+	7,810	8,700	8,830	8,995	9,164	9,329
2021	*All*	*47,262*	*49,200*	*49,771*	*51,652*	*53,577*	*55,466*
	Age 0-14	8,944	10,000	9,663	10,346	11,036	11,283
	Age 15-39	14,954	13,200	13,174	13,639	14,119	15,271
	Age 40-64	14,397	15,700	16,197	16,619	17,051	17,236
	Age 65+	8,966	10,300	10,737	11,049	11,371	11,676
2026	*All*	*48,650*	*50,400*	*51,835*	*54,501*	*57,275*	*59,343*
	Age 0-14	9,422	9,800	9,823	10,716	11,644	12,007
	Age 15-39	15,696	13,500	13,255	13,943	14,663	15,835
	Age 40-64	13,102	15,100	15,705	16,292	16,901	17,152
	Age 65+	10,430	12,000	13,052	13,549	14,067	14,348
2031	*All*	*49,884*	*51,600*	*53,613*	*57,066*	*60,709*	*62,414*
	Age 0-14	9,885	9,700	9,829	10,865	11,970	12,351
	Age 15-39	15,419	13,500	12,672	13,567	14,510	15,388
	Age 40-64	12,786	14,700	15,741	16,550	17,399	17,771
	Age 65+	11,794	13,700	15,371	16,084	16,830	16,904

Table A1C (cont.) **Waipa District population projection scenarios 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036	*All*	*50,792*		*54,998*	*59,246*	*63,776*	*65,001*
	Age 0-14	10,018		9,636	10,799	12,059	12,321
	Age 15-39	15,031		12,543	13,679	14,886	15,365
	Age 40-64	13,062		15,572	16,585	17,662	18,324
	Age 65+	12,681		17,246	18,183	19,169	18,991
2041	*All*	*51,405*		*55,928*	*61,002*	*66,474*	*67,050*
	Age 0-14	9,814		9,382	10,692	12,114	12,111
	Age 15-39	15,198		12,714	14,136	15,684	15,813
	Age 40-64	13,673		15,598	16,795	18,080	18,936
	Age 65+	12,721		18,233	19,379	20,596	20,190
2046	*All*	*51,854*		*56,552*	*62,533*	*69,061*	*68,847*
	Age 0-14	9,621		9,303	10,821	12,487	12,113
	Age 15-39	15,607		12,754	14,491	16,414	16,207
	Age 40-64	14,567		16,020	17,423	18,946	19,842
	Age 65+	12,060		18,476	19,798	21,214	20,685
2051	*All*	*52,276*		*56,889*	*63,856*	*71,568*	*70,517*
	Age 0-14	9,670		9,365	11,133	13,116	12,397
	Age 15-39	15,970		12,722	14,715	16,943	16,580
	Age 40-64	15,269		16,097	17,771	19,614	20,203
	Age 65+	11,368		18,705	20,237	21,895	21,337
2056	*All*	*52,751*		*56,941*	*64,936*	*73,921*	*72,057*
	Age 0-14	9,935		9,440	11,451	13,753	12,803
	Age 15-39	16,212		12,674	14,886	17,395	16,842
	Age 40-64	14,996		15,458	17,386	19,538	19,689
	Age 65+	11,608		19,369	21,213	23,235	22,723
2061	*All*	*53,313*		*56,801*	*65,822*	*76,112*	*73,457*
	Age 0-14	10,232		9,446	11,654	14,228	13,139
	Age 15-39	16,281		12,551	14,994	17,814	16,943
	Age 40-64	14,635		15,313	17,563	20,104	19,691
	Age 65+	12,165		19,491	21,612	23,966	23,684

Table A2A **Hamilton City population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	134,400	134,400	134,400	134,400	134,400	134,400
2007	135,649		136,034	136,264	136,494	136,500
2008	136,915		137,765	138,250	138,736	138,735
2009	138,195		139,593	140,360	141,131	141,288
2010	139,491		141,477	142,556	143,643	143,886
2011	140,801	143,800	143,414	144,835	146,270	146,579
2012	142,107		145,329	147,100	148,891	149,150
2013	143,406		147,268	149,398	151,552	151,759
2014	144,694		149,190	151,688	154,213	154,364
2015	145,964		151,105	153,978	156,883	156,974
2016	147,209	152,700	153,005	156,264	159,558	159,585
2017	148,420		155,036	158,692	162,388	162,349
2018	149,591		157,043	161,105	165,218	165,109
2019	150,712		159,026	163,504	168,048	167,865
2020	151,775		160,973	165,879	170,871	170,609
2021	152,776	161,300	162,889	168,235	173,692	173,346
2022	153,727		164,719	170,519	176,455	176,022
2023	154,615		166,525	172,793	179,228	178,704
2024	155,442		168,291	175,046	182,001	181,110
2025	156,210		170,014	177,276	184,773	183,501
2026	156,922	169,400	171,724	179,510	187,570	185,907
2027	157,585		173,432	181,763	190,406	188,341
2028	158,202		175,134	184,024	193,267	190,795
2029	158,780		176,831	186,293	196,149	193,264
2030	159,322		178,523	188,564	199,043	195,744
2031	159,834	177,400	180,211	190,841	201,952	198,237

Table A2A (cont.) **Hamilton City population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2032	160,319		181,925	193,153	204,911	200,772
2033	160,781		183,638	195,475	207,893	203,320
2034	161,221		185,354	197,808	210,903	205,882
2035	161,639		187,073	200,157	213,945	208,460
2036	162,035		188,792	202,520	217,023	211,052
2037	162,407		190,488	204,874	220,110	213,631
2038	162,753		192,184	207,244	223,237	216,223
2039	163,071		193,881	209,635	226,408	218,832
2040	163,360		195,580	212,048	229,627	221,458
2041	163,617		197,280	214,483	232,893	224,101
2042	163,840		198,984	216,944	236,213	226,765
2043	164,026		200,684	219,424	239,579	229,442
2044	164,175		202,380	221,921	242,990	232,131
2045	164,283		204,067	224,432	246,442	234,829
2046	164,349		205,741	226,951	249,931	237,533
2047	164,372		207,405	229,481	253,457	240,245
2048	164,350		209,052	232,013	257,011	242,957
2049	164,282		210,680	234,541	260,586	245,666
2050	164,168		212,284	237,063	264,178	248,370
2051	164,007		213,864	239,574	267,784	251,066
2052	163,793		215,411	242,067	271,392	253,746
2053	163,529		216,924	244,540	275,003	256,411
2054	163,215		218,406	246,995	278,618	259,063
2055	162,853		219,856	249,433	282,240	261,704
2056	162,446		221,279	251,858	285,871	264,338
2057	161,996		222,677	254,274	289,517	266,969
2058	161,506		224,054	256,685	293,184	269,602
2059	160,979		225,415	259,097	296,877	272,241
2060	160,417		226,765	261,513	300,600	274,892
2061	159,824		228,106	263,940	304,361	277,557

Table A2B **Waikato District population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	45,400	45,400	45,400	45,400	45,400	45,400
2007	45,827		45,809	45,936	46,062	45,995
2008	46,257		46,229	46,491	46,755	46,638
2009	46,693		46,665	47,072	47,483	47,355
2010	47,138		47,120	47,683	48,251	48,245
2011	47,594	48,300	47,597	48,326	49,065	49,174
2012	48,039		47,984	48,883	49,799	49,996
2013	48,478		48,375	49,450	50,547	50,832
2014	48,912		48,765	50,021	51,306	51,681
2015	49,347		49,157	50,598	52,077	52,544
2016	49,785	50,900	49,551	51,184	52,862	53,424
2017	50,233		50,100	51,934	53,825	54,487
2018	50,692		50,660	52,703	54,815	55,581
2019	51,163		51,225	53,483	55,823	56,679
2020	51,648		51,795	54,273	56,850	57,801
2021	52,145	53,400	52,363	55,066	57,885	58,937
2022	52,658		52,857	55,785	58,850	60,006
2023	53,177		53,344	56,500	59,816	61,080
2024	53,701		53,822	57,207	60,780	61,929
2025	54,223		54,287	57,903	61,737	62,769
2026	54,741	55,700	54,733	58,580	62,679	63,593
2027	55,252		55,155	59,235	63,601	64,392
2028	55,754		55,559	59,873	64,508	65,173
2029	56,244		55,943	60,492	65,398	65,931
2030	56,721		56,307	61,093	66,273	66,668
2031	57,184	57,700	56,653	61,679	67,136	67,382

Table A2B (cont.) **Waikato District population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2032	57,630		57,010	62,279	68,019	68,109
2033	58,062		57,351	62,867	68,895	68,815
2034	58,477		57,677	63,442	69,764	69,503
2035	58,877		57,990	64,007	70,628	70,172
2036	59,262		58,289	64,563	71,489	70,826
2037	59,634		58,560	65,093	72,329	71,445
2038	59,995		58,822	65,618	73,171	72,055
2039	60,345		59,077	66,142	74,021	72,658
2040	60,686		59,325	66,666	74,880	73,258
2041	61,021		59,568	67,191	75,751	73,856
2042	61,350		59,808	67,721	76,637	74,459
2043	61,676		60,046	68,255	77,539	75,067
2044	62,001		60,281	68,793	78,455	75,680
2045	62,325		60,512	69,335	79,387	76,299
2046	62,652		60,740	69,879	80,333	76,925
2047	62,981		60,968	70,430	81,297	77,561
2048	63,315		61,192	70,984	82,274	78,205
2049	63,656		61,411	71,538	83,263	78,855
2050	64,003		61,625	72,093	84,261	79,510
2051	64,359		61,833	72,646	85,268	80,168
2052	64,722		62,032	73,195	86,278	80,827
2053	65,092		62,225	73,740	87,292	81,486
2054	65,470		62,410	74,281	88,310	82,144
2055	65,857		62,588	74,816	89,327	82,798
2056	66,251		62,759	75,346	90,346	83,450
2057	66,653		62,923	75,871	91,365	84,096
2058	67,062		63,081	76,392	92,384	84,736
2059	67,478		63,235	76,910	93,407	85,372
2060	67,899		63,385	77,427	94,434	86,004
2061	68,327		63,534	77,944	95,467	86,633

Table A2C **Waipa District population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006	43,700	43,700	43,700	43,700	43,700	43,700
2007	43,933		44,011	44,098	44,185	44,157
2008	44,163		44,324	44,505	44,686	44,629
2009	44,394		44,646	44,928	45,211	45,166
2010	44,629		44,975	45,364	45,757	45,885
2011	44,870	45,800	45,318	45,823	46,335	46,630
2012	45,103		45,703	46,328	46,961	47,396
2013	45,331		46,094	46,842	47,601	48,176
2014	45,557		46,493	47,368	48,256	48,974
2015	45,783		46,899	47,904	48,925	49,789
2016	46,013	47,600	47,313	48,452	49,610	50,623
2017	46,247		47,794	49,073	50,375	51,542
2018	46,489		48,284	49,707	51,158	52,483
2019	46,739		48,779	50,351	51,955	53,465
2020	46,997		49,275	51,000	52,762	54,459
2021	47,262	49,200	49,771	51,652	53,577	55,466
2022	47,538		50,203	52,240	54,330	56,413
2023	47,818		50,629	52,823	55,082	57,363
2024	48,098		51,045	53,397	55,826	58,035
2025	48,377		51,449	53,958	56,559	58,697
2026	48,650	50,400	51,835	54,501	57,275	59,343
2027	48,917		52,225	55,048	57,996	59,995
2028	49,176		52,599	55,579	58,701	60,630
2029	49,425		52,955	56,093	59,389	61,247
2030	49,661		53,293	56,588	60,058	61,841
2031	49,884	51,600	53,613	57,066	60,709	62,414

Table A2C (cont.) **Waipa District population projection scenarios 2006-2061, total resident population**

Year	Scenario					
	Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2032	50,094		53,924	57,535	61,353	62,974
2033	50,289		54,217	57,986	61,980	63,512
2034	50,470		54,494	58,422	62,593	64,029
2035	50,638		54,754	58,841	63,191	64,525
2036	50,792		54,998	59,246	63,776	65,001
2037	50,935		55,213	59,622	64,335	65,443
2038	51,066		55,414	59,985	64,882	65,867
2039	51,188		55,599	60,335	65,420	66,276
2040	51,300		55,770	60,674	65,951	66,670
2041	51,405		55,928	61,002	66,474	67,050
2042	51,503		56,077	61,326	66,998	67,425
2043	51,596		56,213	61,640	67,518	67,790
2044	51,685		56,338	61,945	68,034	68,148
2045	51,771		56,451	62,243	68,548	68,500
2046	51,854		56,552	62,533	69,061	68,847
2047	51,937		56,642	62,815	69,570	69,189
2048	52,019		56,720	63,088	70,075	69,526
2049	52,102		56,787	63,352	70,576	69,859
2050	52,188		56,843	63,608	71,074	70,190
2051	52,276		56,889	63,856	71,568	70,517
2052	52,366		56,922	64,093	72,055	70,838
2053	52,457		56,942	64,319	72,533	71,152
2054	52,552		56,952	64,534	73,004	71,460
2055	52,650		56,951	64,740	73,467	71,762
2056	52,751		56,941	64,936	73,921	72,057
2057	52,856		56,923	65,124	74,368	72,347
2058	52,965		56,898	65,305	74,810	72,631
2059	53,077		56,868	65,481	75,246	72,909
2060	53,193		56,835	65,652	75,680	73,185
2061	53,313		56,801	65,822	76,112	73,457

Table A3A **Hamilton City population growth rates 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006-2011	*All*	*4.8%*	*7.0%*	*6.7%*	*7.8%*	*8.8%*	*9.1%*
	Age 0-14	2.5%	5.5%	9.0%	10.8%	12.6%	12.2%
	Age 15-39	-0.1%	3.3%	1.1%	2.2%	3.4%	4.4%
	Age 40-64	10.8%	10.6%	10.3%	10.8%	11.3%	11.1%
	Age 65+	13.0%	15.6%	14.8%	15.5%	16.1%	15.9%
2011-2016	*All*	*4.6%*	*6.2%*	*6.7%*	*7.9%*	*9.1%*	*8.9%*
	Age 0-14	4.0%	3.9%	5.0%	7.5%	10.0%	8.3%
	Age 15-39	-0.6%	3.5%	3.5%	4.6%	5.8%	6.5%
	Age 40-64	6.4%	6.4%	7.1%	7.6%	8.1%	7.8%
	Age 65+	19.3%	19.9%	20.4%	21.1%	21.9%	21.4%
2016-2021	*All*	*3.8%*	*5.6%*	*6.5%*	*7.7%*	*8.9%*	*8.6%*
	Age 0-14	0.0%	1.6%	0.4%	3.2%	5.9%	4.6%
	Age 15-39	-1.5%	3.2%	4.6%	5.6%	6.5%	7.1%
	Age 40-64	6.7%	6.0%	8.1%	8.7%	9.3%	8.9%
	Age 65+	18.9%	19.3%	19.4%	20.0%	20.6%	20.3%
2021-2026	*All*	*2.7%*	*5.0%*	*5.4%*	*6.7%*	*8.0%*	*7.2%*
	Age 0-14	-4.6%	-0.6%	-1.0%	0.9%	2.7%	2.4%
	Age 15-39	-6.8%	3.0%	1.1%	2.9%	4.6%	3.4%
	Age 40-64	11.4%	5.7%	9.6%	10.5%	11.4%	10.9%
	Age 65+	18.5%	17.5%	17.8%	18.4%	19.0%	18.4%
2026-2031	*All*	*1.9%*	*4.7%*	*4.9%*	*6.3%*	*7.7%*	*6.6%*
	Age 0-14	-7.9%	0.9%	0.2%	1.4%	2.6%	2.9%
	Age 15-39	-1.7%	3.3%	6.7%	9.0%	11.2%	8.4%
	Age 40-64	4.1%	3.5%	0.6%	1.5%	2.5%	2.4%
	Age 65+	15.5%	14.9%	15.4%	15.9%	16.4%	15.8%
2031-2036	All	*1.4%*	-	*4.8%*	*6.1%*	*7.5%*	*6.5%*
	Age 0-14	-6.6%	-	4.0%	5.5%	6.9%	6.1%
	Age 15-39	0.8%	-	4.0%	5.9%	7.8%	5.4%
	Age 40-64	0.0%	-	1.3%	2.4%	3.6%	4.0%
	Age 65+	12.1%	-	13.1%	13.6%	14.1%	13.6%

Table A3A (cont.) Hamilton City population growth 2006-2061, at five-yearly intervals by broad age category

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036-2041	*All*	*1.0%*	-	*4.5%*	*5.9%*	*7.3%*	*6.2%*
	Age 0-14	-2.1%	-	6.2%	8.2%	9.9%	7.6%
	Age 15-39	-0.9%	-	1.6%	3.4%	5.2%	3.4%
	Age 40-64	-0.6%	-	3.5%	4.7%	5.9%	6.3%
	Age 65+	8.6%	-	10.0%	10.6%	11.1%	10.6%
2041-2046	*All*	*0.4%*	-	*4.3%*	*5.8%*	*7.3%*	*6.0%*
	Age 0-14	0.5%	-	4.8%	7.0%	9.1%	6.1%
	Age 15-39	-3.5%	-	1.3%	3.4%	5.4%	3.7%
	Age 40-64	-1.5%	-	3.9%	4.9%	6.0%	5.9%
	Age 65+	8.7%	-	10.0%	10.6%	11.3%	10.7%
2046-2051	*All*	*-0.2%*	-	*3.9%*	*5.6%*	*7.1%*	*5.7%*
	Age 0-14	-0.8%	-	2.1%	4.3%	6.4%	3.9%
	Age 15-39	-4.5%	-	2.6%	4.4%	6.1%	4.9%
	Age 40-64	-6.6%	-	1.4%	3.1%	4.9%	3.3%
	Age 65+	13.8%	-	11.4%	12.4%	13.3%	12.7%
2051-2056	*All*	*-1.0%*	-	*3.5%*	*5.1%*	*6.8%*	*5.3%*
	Age 0-14	-3.5%	-	0.8%	2.8%	4.7%	3.1%
	Age 15-39	-4.7%	-	3.2%	4.9%	6.5%	5.1%
	Age 40-64	-1.5%	-	7.2%	9.3%	11.4%	8.7%
	Age 65+	4.9%	-	1.5%	2.4%	3.4%	3.3%
2056-2061	*All*	*-1.6%*	-	*3.1%*	*4.8%*	*6.5%*	*5.0%*
	Age 0-14	-5.3%	-	1.4%	3.2%	4.8%	3.8%
	Age 15-39	-3.8%	-	3.6%	5.6%	7.4%	5.4%
	Age 40-64	0.8%	-	4.3%	6.2%	8.1%	5.6%
	Age 65+	-0.2%	-	2.1%	3.2%	4.2%	4.7%

Table A3B **Waikato District population growth rates 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006-2011	*All*	*4.8%*	*6.4%*	*4.8%*	*6.4%*	*8.1%*	*8.3%*
	Age 0-14	-4.2%	2.6%	-1.4%	0.7%	2.8%	2.5%
	Age 15-39	4.3%	0.0%	-0.5%	1.4%	3.3%	4.6%
	Age 40-64	6.9%	10.7%	9.7%	10.9%	12.2%	11.8%
	Age 65+	23.0%	22.2%	21.4%	22.2%	23.1%	23.2%
2011-2016	*All*	*4.6%*	*5.4%*	*4.1%*	*5.9%*	*7.7%*	*8.6%*
	Age 0-14	-2.1%	2.5%	1.2%	4.1%	7.1%	7.2%
	Age 15-39	6.8%	1.4%	0.3%	2.3%	4.3%	6.9%
	Age 40-64	-0.4%	4.2%	2.9%	4.1%	5.3%	5.4%
	Age 65+	26.6%	25.5%	23.8%	24.9%	26.0%	26.2%
2016-2021	*All*	*4.7%*	*4.9%*	*5.7%*	*7.6%*	*9.5%*	*10.3%*
	Age 0-14	3.0%	2.5%	3.8%	7.2%	10.4%	11.0%
	Age 15-39	8.0%	2.7%	4.7%	6.6%	8.5%	10.3%
	Age 40-64	-5.1%	1.2%	1.3%	2.7%	4.0%	4.6%
	Age 65+	22.5%	23.2%	21.7%	22.8%	23.9%	23.6%
2021-2026	*All*	*5.0%*	*4.3%*	*4.5%*	*6.4%*	*8.3%*	*7.9%*
	Age 0-14	7.6%	-0.8%	3.3%	5.8%	8.4%	8.6%
	Age 15-39	7.0%	5.3%	2.8%	4.9%	7.0%	5.8%
	Age 40-64	-8.2%	-1.7%	-1.1%	0.6%	2.4%	2.7%
	Age 65+	20.9%	22.4%	21.1%	22.2%	23.3%	22.2%
2026-2031	*All*	*4.5%*	*3.6%*	*3.5%*	*5.3%*	*7.1%*	*6.0%*
	Age 0-14	7.1%	0.0%	1.4%	3.3%	5.2%	4.6%
	Age 15-39	0.0%	0.6%	-3.5%	-1.4%	0.7%	-1.6%
	Age 40-64	0.2%	0.6%	3.7%	5.8%	8.0%	7.9%
	Age 65+	15.2%	17.3%	16.8%	17.9%	19.0%	17.8%
2031-2036	All	*3.6%*	-	*2.9%*	*4.7%*	*6.5%*	*5.1%*
	Age 0-14	3.5%	-	-0.8%	1.0%	2.9%	1.0%
	Age 15-39	-0.3%	-	0.4%	2.7%	5.0%	1.7%
	Age 40-64	4.7%	-	1.9%	4.0%	6.0%	6.5%
	Age 65+	8.5%	-	11.6%	12.7%	13.9%	13.0%

Table A3B (cont.) **Waikato District population growth 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036-2041	*All*	*3.0%*	-	*2.2%*	*4.1%*	*6.0%*	*4.3%*
	Age 0-14	0.0%	-	-1.8%	0.3%	2.3%	-0.7%
	Age 15-39	2.8%	-	2.7%	5.2%	7.8%	4.8%
	Age 40-64	7.1%	-	2.0%	3.8%	5.7%	5.5%
	Age 65+	1.6%	-	5.7%	6.8%	8.0%	7.5%
2041-2046	*All*	*2.7%*	-	*2.0%*	*4.0%*	*6.0%*	*4.2%*
	Age 0-14	0.1%	-	0.3%	2.9%	5.3%	1.7%
	Age 15-39	4.5%	-	1.7%	4.5%	7.2%	4.6%
	Age 40-64	8.0%	-	2.9%	4.6%	6.2%	5.1%
	Age 65+	-3.7%	-	2.5%	3.8%	5.1%	4.9%
2046-2051	*All*	*2.7%*	-	*1.8%*	*4.0%*	*6.1%*	*4.2%*
	Age 0-14	2.5%	-	2.1%	4.8%	7.6%	4.5%
	Age 15-39	4.4%	-	1.0%	3.3%	5.6%	4.0%
	Age 40-64	6.8%	-	2.1%	4.0%	6.0%	3.4%
	Age 65+	-5.1%	-	2.1%	3.8%	5.5%	5.4%
2051-2056	*All*	*2.9%*	-	*1.5%*	*3.7%*	*6.0%*	*4.1%*
	Age 0-14	4.7%	-	2.2%	4.9%	7.4%	5.5%
	Age 15-39	3.6%	-	0.9%	3.0%	5.1%	3.3%
	Age 40-64	-0.1%	-	-2.8%	-0.5%	1.9%	-1.0%
	Age 65+	4.4%	-	7.2%	9.4%	11.6%	11.3%
2056-2061	*All*	*3.1%*	-	*1.2%*	*3.4%*	*5.7%*	*3.8%*
	Age 0-14	5.0%	-	1.4%	3.7%	5.9%	4.6%
	Age 15-39	2.5%	-	0.3%	2.5%	4.7%	2.3%
	Age 40-64	-0.2%	-	0.6%	3.1%	5.6%	2.2%
	Age 65+	6.8%	-	2.8%	4.7%	6.6%	7.1%

Table A3C **Waipa District population growth rates 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2006-2011	*All*	*2.7%*	*5.0%*	*3.7%*	*4.9%*	*6.0%*	*6.7%*
	Age 0-14	-6.5%	1.0%	-3.2%	-1.6%	0.1%	0.3%
	Age 15-39	1.7%	-1.5%	-3.5%	-2.3%	-1.1%	0.8%
	Age 40-64	7.0%	8.3%	9.5%	10.4%	11.3%	11.1%
	Age 65+	9.2%	17.7%	16.3%	17.2%	18.2%	19.1%
2011-2016	*All*	*2.5%*	*3.9%*	*4.4%*	*5.7%*	*7.1%*	*8.6%*
	Age 0-14	-3.2%	2.0%	0.6%	3.1%	5.5%	6.2%
	Age 15-39	4.4%	-0.8%	-0.9%	0.2%	1.4%	4.8%
	Age 40-64	-1.2%	1.9%	2.9%	3.7%	4.6%	5.1%
	Age 65+	15.1%	19.2%	22.1%	23.5%	24.8%	26.1%
2016-2021	*All*	*2.7%*	*3.4%*	*5.2%*	*6.6%*	*8.0%*	*9.6%*
	Age 0-14	1.6%	0.0%	2.1%	4.9%	7.6%	8.9%
	Age 15-39	6.5%	2.3%	4.2%	5.3%	6.4%	9.4%
	Age 40-64	-6.3%	-1.9%	-1.0%	-0.1%	0.8%	1.6%
	Age 65+	14.8%	18.4%	21.6%	22.8%	24.1%	25.2%
2021-2026	*All*	*2.9%*	*2.4%*	*4.1%*	*5.5%*	*6.9%*	*7.0%*
	Age 0-14	5.4%	-2.0%	1.7%	3.6%	5.5%	6.4%
	Age 15-39	5.0%	2.3%	0.6%	2.2%	3.8%	3.7%
	Age 40-64	-9.0%	-3.8%	-3.0%	-2.0%	-0.9%	-0.5%
	Age 65+	16.3%	16.5%	21.6%	22.6%	23.7%	22.9%
2026-2031	*All*	*2.5%*	*2.4%*	*3.4%*	*4.7%*	*6.0%*	*5.2%*
	Age 0-14	4.9%	-1.0%	0.1%	1.4%	2.8%	2.9%
	Age 15-39	-1.8%	0.0%	-4.4%	-2.7%	-1.0%	-2.8%
	Age 40-64	-2.4%	-2.6%	0.2%	1.6%	2.9%	3.6%
	Age 65+	13.1%	14.2%	17.8%	18.7%	19.6%	17.8%
2031-2036	All	*1.8%*	-	*2.6%*	*3.8%*	*5.1%*	*4.1%*
	Age 0-14	1.3%	-	-2.0%	-0.6%	0.7%	-0.2%
	Age 15-39	-2.5%	-	-1.0%	0.8%	2.6%	-0.1%
	Age 40-64	2.2%	-	-1.1%	0.2%	1.5%	3.1%
	Age 65+	7.5%	-	12.2%	13.0%	13.9%	12.3%

Table A3C (cont.) **Waipa District population growth 2006-2061, at five-yearly intervals by broad age category**

Year	Age	Scenario					
		Zero Migration	Stats NZ Medium	PSC Low	PSC Medium	PSC High	PSC Medium EDA
2036-2041	*All*	*1.2%*	-	*1.7%*	*3.0%*	*4.2%*	*3.2%*
	Age 0-14	-2.0%	-	-2.6%	-1.0%	0.5%	-1.7%
	Age 15-39	1.1%	-	1.4%	3.3%	5.4%	2.9%
	Age 40-64	4.7%	-	0.2%	1.3%	2.4%	3.3%
	Age 65+	0.3%	-	5.7%	6.6%	7.4%	6.3%
2041-2046	*All*	*0.9%*	-	*1.1%*	*2.5%*	*3.9%*	*2.7%*
	Age 0-14	-2.0%	-	-0.8%	1.2%	3.1%	0.0%
	Age 15-39	2.7%	-	0.3%	2.5%	4.7%	2.5%
	Age 40-64	6.5%	-	2.7%	3.7%	4.8%	4.8%
	Age 65+	-5.2%	-	1.3%	2.2%	3.0%	2.5%
2046-2051	*All*	*0.8%*	-	*0.6%*	*2.1%*	*3.6%*	*2.4%*
	Age 0-14	0.5%	-	0.7%	2.9%	5.0%	2.3%
	Age 15-39	2.3%	-	-0.2%	1.5%	3.2%	2.3%
	Age 40-64	4.8%	-	0.5%	2.0%	3.5%	1.8%
	Age 65+	-5.7%	-	1.2%	2.2%	3.2%	3.2%
2051-2056	*All*	*0.9%*	-	*0.1%*	*1.7%*	*3.3%*	*2.2%*
	Age 0-14	2.7%	-	0.8%	2.9%	4.9%	3.3%
	Age 15-39	1.5%	-	-0.4%	1.2%	2.7%	1.6%
	Age 40-64	-1.8%	-	-4.0%	-2.2%	-0.4%	-2.5%
	Age 65+	2.1%	-	3.6%	4.8%	6.1%	6.5%
2056-2061	*All*	*1.1%*	-	*-0.2%*	*1.4%*	*3.0%*	*1.9%*
	Age 0-14	3.0%	-	0.1%	1.8%	3.5%	2.6%
	Age 15-39	0.4%	-	-1.0%	0.7%	2.4%	0.6%
	Age 40-64	-2.4%	-	-0.9%	1.0%	2.9%	0.0%
	Age 65+	4.8%	-	0.6%	1.9%	3.1%	4.2%

Table A4A Hamilton City family and household projections 2006-2061, Scenario 3

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	12,965	13,629	7,325	33,919	33,320	3,619	10,609	47,548
2007	13,269	13,851	7,438	34,558	33,935	3,586	10,898	48,419
2008	13,611	13,975	7,588	35,174	34,526	3,552	10,998	49,077
2009	13,951	14,092	7,731	35,774	35,101	3,524	10,991	49,616
2010	14,289	14,202	7,868	36,359	35,661	3,504	11,092	50,257
2011	14,622	14,308	8,003	36,934	36,211	3,501	11,133	50,845
2012	14,954	14,417	8,138	37,508	36,761	3,505	11,384	51,649
2013	15,281	14,520	8,275	38,076	37,302	3,518	11,640	52,460
2014	15,604	14,616	8,415	38,636	37,836	3,538	11,902	53,276
2015	15,927	14,706	8,558	39,191	38,365	3,569	12,169	54,103
2016	16,252	14,787	8,706	39,744	38,892	3,603	12,443	54,938
2017	16,598	14,873	8,866	40,337	39,457	3,650	12,732	55,839
2018	16,955	14,948	9,033	40,936	40,027	3,703	13,030	56,760
2019	17,323	15,013	9,206	41,542	40,604	3,760	13,337	57,701
2020	17,704	15,068	9,384	42,157	41,189	3,819	13,654	58,662
2021	18,100	15,112	9,567	42,779	41,781	3,881	13,981	59,643
2022	18,443	15,246	9,694	43,383	42,371	3,947	14,290	60,609
2023	18,798	15,372	9,824	43,994	42,968	4,017	14,609	61,593
2024	19,164	15,492	9,955	44,611	43,570	4,089	14,936	62,595
2025	19,535	15,608	10,086	45,229	44,174	4,162	15,271	63,606
2026	19,911	15,722	10,214	45,847	44,778	4,233	15,613	64,623
2027	20,297	15,838	10,341	46,476	45,392	4,300	15,965	65,657
2028	20,685	15,953	10,465	47,104	46,005	4,367	16,324	66,697
2029	21,075	16,071	10,588	47,734	46,620	4,436	16,688	67,744
2030	21,464	16,192	10,710	48,366	47,238	4,505	17,053	68,796
2031	21,852	16,318	10,833	49,003	47,860	4,571	17,419	69,850

Table A4A (cont.) Hamilton City family and household projections 2006-2061, Scenario 3

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	22,237	16,451	10,961	49,649	48,491	4,634	17,785	70,910
2033	22,615	16,593	11,092	50,300	49,127	4,691	18,147	71,965
2034	22,982	16,745	11,227	50,955	49,766	4,742	18,506	73,014
2035	23,336	16,909	11,367	51,612	50,408	4,788	18,862	74,058
2036	23,674	17,085	11,511	52,270	51,050	4,828	19,214	75,092
2037	23,992	17,271	11,655	52,918	51,684	4,862	19,557	76,103
2038	24,292	17,470	11,802	53,565	52,315	4,892	19,894	77,101
2039	24,576	17,680	11,951	54,207	52,942	4,917	20,225	78,085
2040	24,842	17,902	12,100	54,844	53,564	4,941	20,550	79,055
2041	25,093	18,132	12,249	55,474	54,180	4,962	20,870	80,011
2042	25,332	18,369	12,399	56,100	54,792	4,984	21,183	80,959
2043	25,560	18,610	12,548	56,718	55,395	5,007	21,492	81,895
2044	25,781	18,852	12,696	57,329	55,992	5,034	21,795	82,821
2045	25,999	19,091	12,842	57,932	56,581	5,064	22,094	83,738
2046	26,216	19,324	12,988	58,528	57,163	5,099	22,387	84,648
2047	26,436	19,552	13,132	59,120	57,741	5,140	22,677	85,557
2048	26,662	19,771	13,275	59,708	58,315	5,187	22,965	86,467
2049	26,895	19,981	13,418	60,293	58,887	5,240	23,254	87,381
2050	27,135	20,182	13,560	60,877	59,457	5,299	23,544	88,300
2051	27,387	20,374	13,701	61,462	60,028	5,363	23,834	89,225
2052	27,649	20,557	13,841	62,046	60,599	5,432	24,124	90,154
2053	27,920	20,734	13,980	62,634	61,173	5,504	24,411	91,087
2054	28,204	20,904	14,118	63,226	61,751	5,578	24,696	92,024
2055	28,498	21,069	14,255	63,823	62,334	5,653	24,979	92,965
2056	28,802	21,231	14,392	64,425	62,922	5,729	25,262	93,913
2057	29,114	21,391	14,527	65,033	63,516	5,804	25,546	94,866
2058	29,434	21,551	14,662	65,647	64,116	5,878	25,830	95,824
2059	29,760	21,711	14,797	66,268	64,722	5,951	26,113	96,786
2060	30,091	21,873	14,933	66,897	65,336	6,021	26,394	97,751
2061	30,425	22,040	15,068	67,533	65,958	6,089	26,671	98,717

Table A4B Waikato District family and household projections 2006-2061, Scenario 3

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	4,410	5,473	2,120	12,004	11,960	506	2,956	15,422
2007	4,530	5,526	2,147	12,204	12,154	515	3,080	15,748
2008	4,672	5,537	2,189	12,399	12,344	528	3,083	15,955
2009	4,821	5,544	2,232	12,597	12,536	543	3,114	16,193
2010	4,976	5,547	2,276	12,798	12,731	557	3,151	16,439
2011	5,135	5,546	2,320	13,001	12,929	568	3,173	16,670
2012	5,288	5,534	2,360	13,182	13,103	575	3,257	16,935
2013	5,444	5,519	2,399	13,362	13,277	579	3,342	17,199
2014	5,600	5,504	2,437	13,541	13,450	582	3,430	17,462
2015	5,755	5,490	2,474	13,719	13,621	584	3,518	17,723
2016	5,909	5,477	2,509	13,895	13,790	586	3,608	17,984
2017	6,077	5,481	2,552	14,109	13,998	589	3,707	18,294
2018	6,240	5,489	2,594	14,323	14,205	592	3,808	18,605
2019	6,397	5,500	2,637	14,535	14,409	596	3,911	18,915
2020	6,548	5,514	2,681	14,743	14,610	599	4,014	19,222
2021	6,691	5,531	2,726	14,948	14,807	601	4,118	19,527
2022	6,797	5,586	2,755	15,137	14,995	604	4,216	19,814
2023	6,895	5,643	2,785	15,322	15,178	607	4,313	20,098
2024	6,984	5,703	2,816	15,504	15,358	610	4,411	20,378
2025	7,067	5,764	2,850	15,681	15,533	613	4,509	20,656
2026	7,145	5,825	2,883	15,853	15,704	617	4,608	20,929
2027	7,217	5,886	2,917	16,020	15,870	621	4,705	21,196
2028	7,287	5,944	2,952	16,183	16,031	626	4,804	21,461
2029	7,353	6,002	2,987	16,342	16,189	632	4,902	21,722
2030	7,418	6,057	3,023	16,498	16,343	638	4,999	21,979
2031	7,483	6,110	3,058	16,650	16,494	644	5,095	22,233

Table A4B (cont.) **Waikato District family and household projections 2006-2061, Scenario 3**

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	7,551	6,163	3,093	16,807	16,649	651	5,191	22,491
2033	7,621	6,213	3,127	16,961	16,801	657	5,287	22,746
2034	7,693	6,259	3,160	17,112	16,951	664	5,381	22,995
2035	7,767	6,302	3,190	17,259	17,097	671	5,474	23,242
2036	7,844	6,340	3,219	17,404	17,240	677	5,567	23,484
2037	7,921	6,374	3,245	17,540	17,375	684	5,656	23,715
2038	8,001	6,404	3,270	17,675	17,509	692	5,744	23,944
2039	8,083	6,432	3,295	17,809	17,642	699	5,830	24,171
2040	8,165	6,459	3,319	17,944	17,775	707	5,913	24,394
2041	8,249	6,486	3,344	18,079	17,908	715	5,993	24,616
2042	8,333	6,514	3,369	18,215	18,044	722	6,071	24,837
2043	8,417	6,543	3,394	18,354	18,181	730	6,146	25,057
2044	8,498	6,575	3,420	18,493	18,319	736	6,219	25,274
2045	8,578	6,609	3,446	18,633	18,457	743	6,289	25,489
2046	8,654	6,647	3,472	18,774	18,597	748	6,356	25,701
2047	8,728	6,689	3,500	18,917	18,739	753	6,419	25,911
2048	8,799	6,734	3,527	19,061	18,881	758	6,479	26,118
2049	8,867	6,783	3,555	19,205	19,025	762	6,535	26,321
2050	8,931	6,836	3,583	19,350	19,168	765	6,587	26,520
2051	8,992	6,891	3,611	19,494	19,311	768	6,636	26,715
2052	9,050	6,948	3,639	19,636	19,452	771	6,682	26,905
2053	9,105	7,006	3,667	19,778	19,592	774	6,725	27,091
2054	9,159	7,066	3,694	19,919	19,731	777	6,766	27,275
2055	9,211	7,126	3,721	20,058	19,869	781	6,806	27,456
2056	9,263	7,185	3,748	20,196	20,006	784	6,845	27,635
2057	9,314	7,244	3,775	20,334	20,142	788	6,884	27,814
2058	9,367	7,303	3,802	20,471	20,279	792	6,924	27,994
2059	9,422	7,359	3,828	20,610	20,415	796	6,965	28,176
2060	9,479	7,415	3,854	20,749	20,553	801	7,007	28,362
2061	9,539	7,469	3,881	20,889	20,692	806	7,054	28,552

Table A4C Waipa District family and household projections 2006-2061, Scenario 3

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	5,143	5,273	1,817	12,234	12,122	539	3,426	16,086
2007	5,265	5,294	1,832	12,391	12,273	545	3,500	16,318
2008	5,414	5,273	1,858	12,545	12,421	556	3,515	16,491
2009	5,571	5,246	1,884	12,700	12,570	567	3,507	16,644
2010	5,733	5,214	1,910	12,857	12,720	578	3,538	16,836
2011	5,901	5,179	1,935	13,015	12,872	586	3,566	17,023
2012	6,084	5,151	1,963	13,198	13,047	592	3,662	17,301
2013	6,270	5,120	1,991	13,380	13,222	596	3,761	17,579
2014	6,457	5,088	2,018	13,564	13,398	599	3,861	17,859
2015	6,645	5,057	2,044	13,746	13,573	601	3,964	18,137
2016	6,831	5,027	2,069	13,927	13,747	601	4,068	18,416
2017	7,020	5,005	2,096	14,121	13,933	603	4,176	18,712
2018	7,205	4,986	2,124	14,314	14,118	604	4,286	19,008
2019	7,385	4,970	2,152	14,506	14,302	605	4,398	19,305
2020	7,556	4,957	2,181	14,694	14,481	606	4,511	19,599
2021	7,720	4,947	2,211	14,878	14,658	608	4,627	19,892
2022	7,842	4,972	2,228	15,042	14,819	609	4,737	20,165
2023	7,955	5,000	2,247	15,202	14,976	610	4,849	20,435
2024	8,058	5,030	2,268	15,355	15,127	612	4,961	20,701
2025	8,155	5,060	2,289	15,503	15,273	615	5,074	20,961
2026	8,244	5,090	2,311	15,645	15,413	617	5,188	21,218
2027	8,331	5,123	2,334	15,788	15,554	621	5,304	21,479
2028	8,413	5,154	2,358	15,925	15,689	624	5,423	21,736
2029	8,491	5,183	2,382	16,056	15,817	628	5,542	21,988
2030	8,563	5,211	2,406	16,180	15,939	633	5,662	22,234
2031	8,632	5,235	2,430	16,297	16,055	638	5,781	22,473

Table A4C (cont.) **Waipa District family and household projections 2006-2061, Scenario 3**

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	8,698	5,258	2,452	16,409	16,165	642	5,900	22,707
2033	8,763	5,278	2,474	16,514	16,269	647	6,017	22,934
2034	8,824	5,294	2,495	16,613	16,366	652	6,134	23,153
2035	8,883	5,308	2,514	16,705	16,457	657	6,250	23,364
2036	8,941	5,318	2,533	16,792	16,543	662	6,363	23,568
2037	8,994	5,325	2,550	16,869	16,619	667	6,474	23,759
2038	9,046	5,330	2,565	16,941	16,689	672	6,579	23,941
2039	9,095	5,332	2,580	17,008	16,755	677	6,681	24,113
2040	9,142	5,334	2,595	17,071	16,817	682	6,776	24,276
2041	9,185	5,336	2,609	17,131	16,877	687	6,866	24,430
2042	9,227	5,340	2,624	17,191	16,936	692	6,949	24,577
2043	9,266	5,344	2,638	17,249	16,993	696	7,026	24,715
2044	9,302	5,350	2,652	17,305	17,048	700	7,096	24,844
2045	9,334	5,359	2,666	17,359	17,101	703	7,159	24,963
2046	9,362	5,371	2,680	17,413	17,154	706	7,214	25,074
2047	9,388	5,385	2,694	17,466	17,206	708	7,261	25,175
2048	9,411	5,401	2,707	17,519	17,259	709	7,300	25,268
2049	9,432	5,420	2,720	17,572	17,311	711	7,332	25,353
2050	9,452	5,441	2,732	17,624	17,362	712	7,357	25,431
2051	9,469	5,464	2,744	17,677	17,414	712	7,376	25,502
2052	9,486	5,488	2,755	17,729	17,465	713	7,389	25,567
2053	9,503	5,513	2,766	17,781	17,517	713	7,395	25,626
2054	9,520	5,538	2,776	17,834	17,569	714	7,398	25,682
2055	9,538	5,563	2,785	17,886	17,621	715	7,398	25,734
2056	9,556	5,588	2,795	17,939	17,673	715	7,396	25,784
2057	9,576	5,612	2,803	17,992	17,724	717	7,393	25,834
2058	9,598	5,635	2,812	18,045	17,777	718	7,391	25,886
2059	9,622	5,658	2,820	18,099	17,830	719	7,392	25,941
2060	9,649	5,678	2,827	18,154	17,884	721	7,396	26,001
2061	9,676	5,698	2,835	18,209	17,939	723	7,405	26,066

Table A5A Hamilton City family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	12,965	13,629	7,325	33,919	33,320	3,619	10,609	47,548
2007	13,279	13,859	7,445	34,583	33,959	3,595	10,905	48,458
2008	13,632	13,992	7,603	35,227	34,578	3,570	11,013	49,161
2009	13,993	14,124	7,759	35,876	35,202	3,557	11,019	49,778
2010	14,350	14,250	7,911	36,511	35,811	3,553	11,133	50,496
2011	14,706	14,373	8,062	37,141	36,415	3,567	11,187	51,169
2012	15,057	14,496	8,212	37,766	37,013	3,586	11,451	52,051
2013	15,406	14,616	8,366	38,389	37,609	3,615	11,721	52,945
2014	15,753	14,731	8,525	39,009	38,202	3,652	11,997	53,851
2015	16,101	14,842	8,688	39,630	38,795	3,698	12,280	54,774
2016	16,452	14,946	8,857	40,255	39,391	3,748	12,571	55,710
2017	16,827	15,058	9,041	40,925	40,032	3,809	12,879	56,720
2018	17,212	15,162	9,232	41,606	40,683	3,875	13,196	57,753
2019	17,610	15,258	9,431	42,300	41,345	3,944	13,522	58,812
2020	18,023	15,347	9,636	43,006	42,019	4,014	13,860	59,893
2021	18,450	15,428	9,846	43,724	42,704	4,086	14,209	60,998
2022	18,823	15,602	10,001	44,426	43,390	4,161	14,539	62,090
2023	19,208	15,772	10,158	45,138	44,085	4,239	14,879	63,203
2024	19,591	15,931	10,310	45,832	44,763	4,311	15,220	64,294
2025	19,979	16,087	10,461	46,527	45,441	4,381	15,568	65,390
2026	20,369	16,243	10,609	47,221	46,119	4,447	15,923	66,490
2027	20,766	16,402	10,754	47,923	46,805	4,509	16,288	67,602
2028	21,165	16,561	10,896	48,622	47,488	4,570	16,660	68,718
2029	21,562	16,723	11,036	49,320	48,170	4,634	17,036	69,839
2030	21,957	16,887	11,175	50,019	48,852	4,696	17,413	70,962
2031	22,351	17,055	11,314	50,720	49,536	4,758	17,791	72,085

Table A5A (cont.) Hamilton City family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	22,741	17,228	11,457	51,426	50,227	4,817	18,168	73,212
2033	23,126	17,409	11,603	52,137	50,920	4,872	18,541	74,333
2034	23,500	17,596	11,751	52,848	51,615	4,922	18,912	75,449
2035	23,863	17,792	11,905	53,560	52,311	4,968	19,280	76,559
2036	24,214	17,996	12,061	54,271	53,005	5,010	19,645	77,660
2037	24,547	18,207	12,218	54,972	53,690	5,048	20,001	78,739
2038	24,866	18,428	12,376	55,670	54,371	5,083	20,352	79,806
2039	25,173	18,655	12,535	56,363	55,048	5,115	20,698	80,861
2040	25,468	18,890	12,694	57,051	55,720	5,146	21,038	81,905
2041	25,752	19,129	12,852	57,733	56,386	5,177	21,375	82,939
2042	26,030	19,373	13,011	58,413	57,050	5,210	21,706	83,966
2043	26,301	19,617	13,167	59,085	57,707	5,244	22,035	84,986
2044	26,569	19,860	13,322	59,751	58,357	5,282	22,358	85,998
2045	26,838	20,098	13,475	60,412	59,003	5,324	22,678	87,005
2046	27,109	20,330	13,627	61,067	59,643	5,370	22,995	88,007
2047	27,386	20,556	13,778	61,720	60,280	5,422	23,309	89,011
2048	27,671	20,773	13,928	62,372	60,917	5,479	23,623	90,019
2049	27,964	20,982	14,077	63,023	61,553	5,541	23,939	91,032
2050	28,264	21,184	14,226	63,674	62,189	5,608	24,257	92,053
2051	28,575	21,378	14,374	64,327	62,827	5,679	24,576	93,083
2052	28,894	21,566	14,522	64,983	63,467	5,754	24,896	94,117
2053	29,221	21,751	14,670	65,642	64,111	5,830	25,214	95,155
2054	29,557	21,933	14,818	66,307	64,761	5,907	25,531	96,199
2055	29,901	22,112	14,965	66,978	65,415	5,985	25,847	97,247
2056	30,250	22,291	15,113	67,654	66,076	6,061	26,164	98,301
2057	30,603	22,472	15,261	68,336	66,741	6,136	26,483	99,360
2058	30,960	22,654	15,408	69,023	67,413	6,210	26,803	100,425
2059	31,320	22,839	15,557	69,716	68,090	6,281	27,123	101,493
2060	31,680	23,029	15,706	70,415	68,772	6,349	27,441	102,563
2061	32,040	23,223	15,856	71,120	69,461	6,416	27,757	103,634

Table A5B Waikato District family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	4,410	5,473	2,120	12,004	11,960	506	2,956	15,422
2007	4,534	5,532	2,149	12,215	12,165	516	3,082	15,762
2008	4,681	5,551	2,195	12,427	12,372	531	3,088	15,991
2009	4,838	5,570	2,243	12,652	12,591	547	3,126	16,264
2010	5,011	5,599	2,299	12,909	12,842	565	3,173	16,581
2011	5,190	5,627	2,356	13,173	13,099	582	3,208	16,888
2012	5,362	5,638	2,408	13,407	13,327	593	3,303	17,224
2013	5,537	5,650	2,459	13,646	13,559	603	3,401	17,563
2014	5,714	5,662	2,511	13,887	13,794	611	3,502	17,906
2015	5,892	5,676	2,563	14,131	14,030	618	3,604	18,252
2016	6,069	5,692	2,614	14,376	14,268	624	3,709	18,601
2017	6,264	5,732	2,675	14,671	14,555	633	3,825	19,012
2018	6,457	5,776	2,737	14,969	14,845	641	3,943	19,429
2019	6,643	5,823	2,799	15,265	15,133	648	4,063	19,844
2020	6,823	5,875	2,863	15,561	15,420	655	4,184	20,260
2021	6,997	5,932	2,928	15,857	15,707	661	4,308	20,677
2022	7,132	6,029	2,976	16,137	15,985	667	4,424	21,076
2023	7,259	6,131	3,025	16,415	16,260	673	4,541	21,474
2024	7,361	6,218	3,067	16,645	16,489	676	4,648	21,812
2025	7,456	6,306	3,109	16,871	16,712	679	4,755	22,146
2026	7,546	6,393	3,152	17,091	16,930	682	4,862	22,475
2027	7,630	6,480	3,195	17,305	17,142	685	4,969	22,797
2028	7,712	6,564	3,238	17,513	17,348	689	5,077	23,114
2029	7,790	6,645	3,281	17,715	17,549	694	5,184	23,426
2030	7,867	6,723	3,323	17,913	17,744	700	5,289	23,733
2031	7,944	6,796	3,365	18,105	17,935	706	5,394	24,035

Table A5B (cont.) Waikato District family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	8,027	6,869	3,406	18,302	18,129	712	5,499	24,341
2033	8,111	6,936	3,446	18,494	18,319	719	5,604	24,643
2034	8,199	6,998	3,484	18,681	18,505	726	5,707	24,938
2035	8,291	7,053	3,519	18,863	18,686	734	5,810	25,229
2036	8,387	7,102	3,553	19,042	18,862	742	5,912	25,516
2037	8,485	7,144	3,582	19,210	19,030	750	6,011	25,791
2038	8,587	7,180	3,610	19,377	19,195	759	6,109	26,063
2039	8,694	7,211	3,638	19,543	19,359	768	6,206	26,333
2040	8,803	7,240	3,664	19,707	19,522	778	6,300	26,600
2041	8,916	7,266	3,691	19,873	19,686	788	6,392	26,866
2042	9,030	7,293	3,718	20,041	19,852	797	6,482	27,132
2043	9,145	7,320	3,745	20,210	20,020	807	6,571	27,397
2044	9,259	7,348	3,773	20,380	20,189	816	6,657	27,662
2045	9,372	7,379	3,801	20,552	20,359	824	6,742	27,924
2046	9,482	7,414	3,830	20,726	20,531	831	6,823	28,185
2047	9,589	7,453	3,860	20,902	20,705	838	6,902	28,445
2048	9,693	7,496	3,890	21,079	20,880	844	6,978	28,702
2049	9,792	7,544	3,921	21,257	21,057	849	7,050	28,956
2050	9,886	7,597	3,952	21,435	21,233	854	7,120	29,206
2051	9,976	7,653	3,983	21,612	21,409	858	7,186	29,452
2052	10,060	7,714	4,015	21,788	21,583	861	7,249	29,693
2053	10,139	7,777	4,047	21,963	21,756	865	7,311	29,931
2054	10,214	7,843	4,079	22,136	21,927	868	7,370	30,165
2055	10,285	7,911	4,111	22,307	22,097	871	7,428	30,396
2056	10,352	7,980	4,143	22,476	22,264	874	7,486	30,624
2057	10,417	8,049	4,176	22,642	22,429	878	7,543	30,850
2058	10,481	8,119	4,208	22,808	22,593	882	7,601	31,076
2059	10,545	8,187	4,241	22,972	22,756	886	7,661	31,303
2060	10,608	8,255	4,273	23,136	22,919	890	7,722	31,531
2061	10,673	8,321	4,305	23,300	23,080	895	7,787	31,763

Table A5C Waipa District family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2006	5,143	5,273	1,817	12,234	12,122	539	3,426	16,086
2007	5,270	5,298	1,834	12,402	12,284	546	3,503	16,333
2008	5,425	5,281	1,862	12,568	12,444	557	3,523	16,524
2009	5,592	5,263	1,891	12,746	12,614	571	3,521	16,707
2010	5,780	5,251	1,926	12,957	12,819	587	3,569	16,975
2011	5,975	5,237	1,962	13,173	13,028	600	3,615	17,243
2012	6,186	5,229	2,000	13,415	13,262	611	3,730	17,602
2013	6,402	5,220	2,039	13,660	13,499	621	3,847	17,967
2014	6,620	5,212	2,077	13,909	13,739	629	3,968	18,336
2015	6,840	5,205	2,116	14,160	13,982	636	4,091	18,709
2016	7,059	5,200	2,154	14,414	14,227	641	4,217	19,086
2017	7,285	5,206	2,196	14,687	14,491	648	4,348	19,487
2018	7,506	5,217	2,238	14,961	14,756	653	4,481	19,890
2019	7,727	5,234	2,282	15,242	15,028	658	4,619	20,305
2020	7,939	5,255	2,328	15,522	15,297	664	4,760	20,721
2021	8,145	5,281	2,375	15,801	15,566	669	4,903	21,138
2022	8,304	5,344	2,408	16,057	15,819	674	5,042	21,535
2023	8,455	5,412	2,444	16,311	16,069	679	5,182	21,930
2024	8,564	5,464	2,472	16,501	16,256	681	5,303	22,240
2025	8,666	5,517	2,501	16,684	16,436	683	5,423	22,543
2026	8,759	5,571	2,530	16,860	16,610	685	5,545	22,840
2027	8,851	5,626	2,560	17,038	16,785	688	5,669	23,142
2028	8,938	5,680	2,591	17,208	16,953	690	5,795	23,438
2029	9,019	5,731	2,621	17,371	17,113	694	5,922	23,728
2030	9,096	5,778	2,651	17,525	17,265	697	6,048	24,011
2031	9,171	5,821	2,680	17,672	17,409	701	6,174	24,285

Table A5C (cont.) Waipa District family and household projections 2006-2061, Scenario 5

Year	Family Type				Household Type			
	Couples without children	Couples with children	Single parent families	Total	Family	Other multi-person	Single person household	Total
2032	9,244	5,860	2,708	17,812	17,547	706	6,300	24,553
2033	9,315	5,896	2,734	17,945	17,678	711	6,424	24,813
2034	9,386	5,925	2,759	18,069	17,801	716	6,548	25,065
2035	9,454	5,950	2,782	18,186	17,916	721	6,671	25,308
2036	9,524	5,970	2,804	18,297	18,026	727	6,790	25,543
2037	9,591	5,984	2,823	18,398	18,125	733	6,907	25,765
2038	9,659	5,993	2,841	18,493	18,218	739	7,019	25,977
2039	9,726	6,000	2,857	18,583	18,307	746	7,127	26,180
2040	9,793	6,003	2,874	18,670	18,392	752	7,229	26,374
2041	9,859	6,005	2,889	18,754	18,475	759	7,325	26,559
2042	9,926	6,007	2,905	18,839	18,559	765	7,415	26,738
2043	9,992	6,009	2,920	18,922	18,641	771	7,499	26,910
2044	10,057	6,012	2,935	19,004	18,722	776	7,576	27,074
2045	10,118	6,018	2,950	19,086	18,803	781	7,646	27,230
2046	10,178	6,026	2,965	19,168	18,884	785	7,710	27,379
2047	10,235	6,037	2,979	19,251	18,965	789	7,765	27,519
2048	10,290	6,051	2,994	19,335	19,048	792	7,814	27,653
2049	10,343	6,068	3,008	19,420	19,131	794	7,855	27,780
2050	10,395	6,088	3,022	19,505	19,215	796	7,891	27,903
2051	10,443	6,112	3,035	19,591	19,300	798	7,922	28,019
2052	10,489	6,138	3,049	19,676	19,384	799	7,948	28,131
2053	10,535	6,166	3,062	19,763	19,469	800	7,969	28,238
2054	10,580	6,194	3,075	19,849	19,555	801	7,987	28,342
2055	10,623	6,225	3,088	19,935	19,639	801	8,002	28,443
2056	10,665	6,255	3,100	20,021	19,724	802	8,017	28,543
2057	10,707	6,286	3,112	20,106	19,807	803	8,033	28,643
2058	10,749	6,317	3,125	20,190	19,890	805	8,051	28,746
2059	10,790	6,347	3,137	20,274	19,972	806	8,072	28,850
2060	10,833	6,375	3,148	20,356	20,054	807	8,098	28,959
2061	10,874	6,403	3,160	20,438	20,134	809	8,129	29,073

Table A6A Hamilton City labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	38,695	34,156	72,850	38,695	34,156	72,850	38,695	34,156	72,850
2007	39,095	34,474	73,569	39,095	34,574	73,669	39,255	34,687	73,943
2008	39,486	34,862	74,348	39,486	35,060	74,547	39,811	35,294	75,105
2009	39,920	35,207	75,127	39,920	35,502	75,422	40,413	35,864	76,277
2010	40,382	35,623	76,005	40,382	36,016	76,397	41,049	36,513	77,562
2011	40,825	36,022	76,847	40,825	36,514	77,339	41,672	37,152	78,824
2012	41,275	36,409	77,684	41,275	37,004	78,279	42,310	37,785	80,096
2013	41,697	36,830	78,527	41,697	37,535	79,232	42,928	38,462	81,390
2014	42,132	37,255	79,388	42,132	38,075	80,207	43,565	39,150	82,715
2015	42,547	37,707	80,254	42,547	38,651	81,198	44,188	39,873	84,061
2016	43,005	38,164	81,168	43,005	39,230	82,235	44,859	40,612	85,471
2017	43,587	38,679	82,266	43,587	39,865	83,451	45,664	41,419	87,084
2018	44,078	39,216	83,294	44,078	40,514	84,592	46,381	42,260	88,641
2019	44,593	39,802	84,395	44,593	41,209	85,802	47,126	43,161	90,287
2020	45,110	40,413	85,523	45,110	41,928	87,038	47,878	44,101	91,978
2021	45,686	41,016	86,702	45,686	42,646	88,332	48,702	45,043	93,745
2022	46,235	41,521	87,755	46,235	43,148	89,383	49,296	45,617	94,914
2023	46,758	42,049	88,807	46,758	43,674	90,432	49,867	46,214	96,081
2024	47,300	42,574	89,874	47,300	44,201	91,501	50,459	46,809	97,268
2025	47,857	43,135	90,991	47,857	44,772	92,628	51,069	47,440	98,509
2026	48,457	43,711	92,168	48,457	45,355	93,812	51,722	48,088	99,810
2027	49,049	44,225	93,275	49,049	45,885	94,935	52,363	48,675	101,038
2028	49,585	44,718	94,303	49,585	46,403	95,988	52,948	49,240	102,189
2029	50,124	45,207	95,331	50,124	46,925	97,049	53,536	49,800	103,336
2030	50,684	45,739	96,423	50,684	47,492	98,176	54,139	50,402	104,541
2031	51,229	46,241	97,470	51,229	48,029	99,258	54,725	50,971	105,696

Table A6A (cont.) Hamilton City labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	51,788	46,716	98,503	51,788	48,541	100,329	55,328	51,511	106,839
2033	52,298	47,146	99,445	52,298	49,009	101,308	55,879	52,005	107,884
2034	52,768	47,574	100,342	52,768	49,481	102,249	56,390	52,493	108,883
2035	53,231	48,012	101,243	53,231	49,955	103,187	56,895	52,989	109,884
2036	53,680	48,422	102,102	53,680	50,398	104,078	57,386	53,457	110,843
2037	54,109	48,813	102,922	54,109	50,817	104,926	57,860	53,903	111,764
2038	54,543	49,193	103,736	54,543	51,223	105,767	58,341	54,337	112,678
2039	54,942	49,597	104,539	54,942	51,651	106,593	58,786	54,794	113,580
2040	55,372	50,033	105,405	55,372	52,105	107,477	59,263	55,283	114,547
2041	55,811	50,463	106,274	55,811	52,553	108,364	59,747	55,768	115,515
2042	56,213	50,895	107,109	56,213	53,006	109,219	60,190	56,258	116,448
2043	56,612	51,339	107,950	56,612	53,468	110,079	60,629	56,761	117,391
2044	57,026	51,814	108,841	57,026	53,956	110,983	61,085	57,301	118,386
2045	57,437	52,298	109,734	57,437	54,448	111,885	61,536	57,851	119,387
2046	57,860	52,783	110,643	57,860	54,942	112,802	62,003	58,404	120,407
2047	58,299	53,300	111,599	58,299	55,473	113,772	62,488	58,991	121,479
2048	58,768	53,840	112,608	58,768	56,026	114,794	63,004	59,603	122,607
2049	59,288	54,430	113,718	59,288	56,627	115,915	63,572	60,268	123,840
2050	59,846	55,022	114,868	59,846	57,228	117,074	64,180	60,935	125,115
2051	60,444	55,624	116,068	60,444	57,839	118,283	64,827	61,611	126,438
2052	61,143	56,306	117,449	61,143	58,531	119,674	65,574	62,365	127,940
2053	61,897	57,036	118,934	61,897	59,273	121,170	66,379	63,165	129,544
2054	62,667	57,810	120,477	62,667	60,059	122,726	67,197	64,008	131,205
2055	63,463	58,542	122,005	63,463	60,805	124,268	68,039	64,807	132,846
2056	64,200	59,240	123,440	64,200	61,520	125,719	68,822	65,574	134,396
2057	64,914	59,941	124,855	64,914	62,239	127,153	69,583	66,343	135,926
2058	65,643	60,620	126,264	65,643	62,938	128,582	70,357	67,089	137,445
2059	66,354	61,282	127,636	66,354	63,624	129,977	71,111	67,816	138,927
2060	67,038	61,874	128,912	67,038	64,240	131,279	71,839	68,472	140,311
2061	67,720	62,464	130,184	67,720	64,859	132,579	72,565	69,126	141,692

Table A6B **Waikato District labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C**

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	13,128	10,885	24,013	13,128	10,885	24,013	13,128	10,885	24,013
2007	13,283	11,058	24,341	13,283	11,086	24,369	13,339	11,127	24,465
2008	13,474	11,217	24,691	13,474	11,272	24,746	13,587	11,357	24,944
2009	13,625	11,358	24,983	13,625	11,440	25,065	13,797	11,571	25,368
2010	13,776	11,514	25,290	13,776	11,626	25,401	14,009	11,802	25,811
2011	13,949	11,640	25,588	13,949	11,780	25,729	14,244	12,006	26,250
2012	14,031	11,731	25,762	14,031	11,901	25,932	14,390	12,177	26,567
2013	14,124	11,834	25,958	14,124	12,030	26,153	14,547	12,362	26,909
2014	14,224	11,916	26,141	14,224	12,140	26,364	14,714	12,528	27,243
2015	14,320	12,007	26,327	14,320	12,258	26,578	14,876	12,706	27,582
2016	14,426	12,080	26,506	14,426	12,359	26,785	15,052	12,867	27,918
2017	14,537	12,194	26,731	14,537	12,503	27,039	15,235	13,073	28,308
2018	14,643	12,303	26,946	14,643	12,648	27,291	15,416	13,277	28,694
2019	14,760	12,412	27,172	14,760	12,796	27,556	15,610	13,486	29,096
2020	14,882	12,509	27,391	14,882	12,937	27,819	15,813	13,683	29,496
2021	15,027	12,611	27,638	15,027	13,086	28,113	16,042	13,889	29,931
2022	15,087	12,679	27,766	15,087	13,164	28,251	16,116	13,974	30,091
2023	15,154	12,743	27,897	15,154	13,239	28,393	16,198	14,057	30,254
2024	15,241	12,819	28,060	15,241	13,321	28,562	16,298	14,150	30,448
2025	15,324	12,912	28,236	15,324	13,417	28,741	16,396	14,262	30,657
2026	15,435	13,009	28,444	15,435	13,519	28,954	16,521	14,377	30,898
2027	15,519	13,091	28,610	15,519	13,604	29,123	16,618	14,477	31,096
2028	15,580	13,176	28,756	15,580	13,688	29,268	16,692	14,580	31,272
2029	15,660	13,260	28,920	15,660	13,768	29,428	16,787	14,682	31,469
2030	15,754	13,367	29,121	15,754	13,867	29,622	16,892	14,807	31,699
2031	15,869	13,468	29,337	15,869	13,963	29,832	17,017	14,927	31,944

Table A6B (cont.) Waikato District labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	15,982	13,576	29,557	15,982	14,068	30,049	17,142	15,053	32,195
2033	16,091	13,695	29,787	16,091	14,187	30,278	17,263	15,192	32,455
2034	16,222	13,802	30,024	16,222	14,296	30,517	17,404	15,320	32,724
2035	16,363	13,931	30,294	16,363	14,423	30,786	17,557	15,470	33,027
2036	16,517	14,065	30,582	16,517	14,559	31,076	17,722	15,625	33,348
2037	16,662	14,181	30,842	16,662	14,677	31,339	17,878	15,760	33,639
2038	16,811	14,312	31,123	16,811	14,812	31,623	18,039	15,911	33,950
2039	16,953	14,444	31,397	16,953	14,948	31,901	18,190	16,061	34,251
2040	17,115	14,573	31,688	17,115	15,083	32,198	18,362	16,208	34,571
2041	17,281	14,721	32,002	17,281	15,237	32,519	18,539	16,373	34,911
2042	17,430	14,846	32,276	17,430	15,371	32,801	18,698	16,514	35,211
2043	17,562	14,992	32,554	17,562	15,523	33,085	18,841	16,674	35,515
2044	17,724	15,108	32,832	17,724	15,644	33,368	19,015	16,804	35,819
2045	17,856	15,208	33,064	17,856	15,750	33,605	19,159	16,916	36,075
2046	17,973	15,329	33,301	17,973	15,874	33,847	19,287	17,049	36,336
2047	18,104	15,435	33,539	18,104	15,986	34,091	19,429	17,168	36,597
2048	18,199	15,550	33,749	18,199	16,107	34,306	19,535	17,295	36,829
2049	18,321	15,629	33,950	18,321	16,191	34,511	19,665	17,387	37,052
2050	18,425	15,690	34,116	18,425	16,257	34,682	19,779	17,460	37,239
2051	18,512	15,770	34,282	18,512	16,341	34,853	19,876	17,552	37,428
2052	18,630	15,857	34,487	18,630	16,432	35,062	20,003	17,651	37,654
2053	18,702	15,925	34,626	18,702	16,504	35,206	20,084	17,732	37,816
2054	18,770	15,984	34,754	18,770	16,568	35,338	20,163	17,805	37,968
2055	18,849	16,023	34,872	18,849	16,612	35,461	20,251	17,858	38,109
2056	18,912	16,083	34,995	18,912	16,676	35,588	20,324	17,933	38,257
2057	19,023	16,169	35,192	19,023	16,766	35,789	20,444	18,033	38,476
2058	19,128	16,276	35,404	19,128	16,876	36,004	20,558	18,153	38,711
2059	19,244	16,385	35,629	19,244	16,987	36,231	20,682	18,274	38,956
2060	19,389	16,502	35,891	19,389	17,106	36,496	20,837	18,405	39,242
2061	19,513	16,630	36,143	19,513	17,236	36,748	20,970	18,546	39,516

Table A6C **Waipa District labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C**

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	12,863	10,967	23,830	12,863	10,967	23,830	12,863	10,967	23,830
2007	12,964	11,072	24,035	12,964	11,098	24,062	13,021	11,145	24,166
2008	13,084	11,182	24,265	13,084	11,234	24,317	13,199	11,331	24,530
2009	13,187	11,307	24,494	13,187	11,385	24,572	13,362	11,535	24,896
2010	13,295	11,383	24,679	13,295	11,487	24,783	13,531	11,691	25,222
2011	13,361	11,491	24,852	13,361	11,620	24,982	13,659	11,881	25,539
2012	13,431	11,576	25,008	13,431	11,730	25,162	13,792	12,052	25,844
2013	13,477	11,627	25,104	13,477	11,807	25,284	13,901	12,189	26,090
2014	13,537	11,716	25,253	13,537	11,921	25,458	14,029	12,368	26,396
2015	13,592	11,759	25,351	13,592	11,989	25,581	14,150	12,502	26,652
2016	13,627	11,820	25,447	13,627	12,080	25,707	14,255	12,659	26,914
2017	13,684	11,870	25,554	13,684	12,159	25,843	14,385	12,806	27,191
2018	13,728	11,934	25,662	13,728	12,252	25,980	14,503	12,971	27,473
2019	13,774	11,999	25,773	13,774	12,350	26,124	14,627	13,138	27,765
2020	13,827	12,018	25,844	13,827	12,407	26,234	14,759	13,262	28,021
2021	13,884	12,060	25,944	13,884	12,489	26,373	14,897	13,413	28,310
2022	13,899	12,066	25,965	13,899	12,504	26,403	14,926	13,436	28,362
2023	13,917	12,068	25,985	13,917	12,512	26,429	14,956	13,456	28,412
2024	13,909	12,099	26,008	13,909	12,543	26,452	14,961	13,504	28,466
2025	13,916	12,109	26,025	13,916	12,553	26,469	14,982	13,534	28,516
2026	13,930	12,138	26,068	13,930	12,585	26,515	15,010	13,580	28,590
2027	13,932	12,160	26,092	13,932	12,611	26,543	15,025	13,620	28,645
2028	13,944	12,179	26,123	13,944	12,628	26,572	15,050	13,659	28,709
2029	13,973	12,200	26,173	13,973	12,644	26,616	15,090	13,699	28,789
2030	13,988	12,240	26,228	13,988	12,677	26,664	15,115	13,759	28,874
2031	14,036	12,277	26,314	14,036	12,708	26,744	15,175	13,816	28,990

Table A6C (cont.) Waipa District labour force projections 2006-2061, Scenarios LFPS3-A, LFPS3-B, and LFPS3-C

Scenario	LFPS3-A			LFPS3-B			LFPS3-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	14,059	12,333	26,392	14,059	12,761	26,820	15,207	13,890	29,097
2033	14,114	12,370	26,484	14,114	12,800	26,914	15,271	13,946	29,217
2034	14,171	12,413	26,584	14,171	12,841	27,012	15,337	14,008	29,345
2035	14,210	12,485	26,695	14,210	12,913	27,123	15,385	14,100	29,485
2036	14,251	12,562	26,813	14,251	12,988	27,239	15,434	14,196	29,630
2037	14,307	12,642	26,949	14,307	13,069	27,376	15,496	14,295	29,792
2038	14,364	12,721	27,086	14,364	13,151	27,516	15,561	14,390	29,951
2039	14,427	12,772	27,200	14,427	13,204	27,632	15,631	14,457	30,087
2040	14,507	12,844	27,350	14,507	13,280	27,786	15,715	14,542	30,258
2041	14,569	12,951	27,520	14,569	13,389	27,958	15,784	14,663	30,447
2042	14,654	13,058	27,712	14,654	13,501	28,155	15,875	14,784	30,658
2043	14,734	13,141	27,875	14,734	13,586	28,320	15,961	14,878	30,839
2044	14,785	13,178	27,963	14,785	13,627	28,412	16,020	14,925	30,944
2045	14,844	13,232	28,075	14,844	13,684	28,528	16,085	14,987	31,072
2046	14,913	13,291	28,203	14,913	13,744	28,657	16,160	15,054	31,214
2047	14,966	13,378	28,344	14,966	13,835	28,801	16,219	15,150	31,368
2048	15,001	13,429	28,430	15,001	13,888	28,890	16,258	15,210	31,468
2049	15,013	13,435	28,449	15,013	13,898	28,911	16,275	15,223	31,498
2050	15,039	13,449	28,488	15,039	13,913	28,953	16,305	15,244	31,548
2051	15,065	13,456	28,521	15,065	13,922	28,987	16,334	15,258	31,592
2052	15,088	13,499	28,587	15,088	13,967	29,055	16,360	15,307	31,667
2053	15,088	13,543	28,631	15,088	14,013	29,101	16,364	15,358	31,721
2054	15,075	13,534	28,609	15,075	14,006	29,081	16,354	15,356	31,710
2055	15,040	13,525	28,565	15,040	13,999	29,039	16,321	15,355	31,676
2056	15,067	13,514	28,582	15,067	13,989	29,057	16,352	15,350	31,702
2057	15,081	13,543	28,624	15,081	14,019	29,100	16,368	15,385	31,753
2058	15,115	13,589	28,704	15,115	14,065	29,180	16,404	15,436	31,841
2059	15,142	13,630	28,772	15,142	14,107	29,249	16,434	15,483	31,917
2060	15,189	13,690	28,879	15,189	14,167	29,355	16,484	15,548	32,032
2061	15,242	13,719	28,961	15,242	14,195	29,437	16,540	15,582	32,122

Table A7A Hamilton City labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	38,695	34,156	72,850	38,695	34,156	72,850	38,695	34,156	72,850
2007	39,149	34,531	73,681	39,149	34,632	73,781	39,310	34,745	74,055
2008	39,600	34,983	74,583	39,600	35,182	74,782	39,926	35,416	75,342
2009	40,139	35,440	75,579	40,139	35,737	75,876	40,635	36,101	76,736
2010	40,701	35,966	76,667	40,701	36,362	77,064	41,375	36,864	78,239
2011	41,252	36,484	77,736	41,252	36,982	78,235	42,109	37,627	79,736
2012	41,791	36,969	78,760	41,791	37,573	79,364	42,840	38,365	81,205
2013	42,303	37,490	79,793	42,303	38,208	80,511	43,553	39,148	82,702
2014	42,829	38,013	80,842	42,829	38,851	81,680	44,286	39,942	84,229
2015	43,333	38,564	81,897	43,333	39,533	82,866	45,005	40,774	85,779
2016	43,882	39,119	83,001	43,882	40,218	84,100	45,774	41,621	87,396
2017	44,558	39,734	84,293	44,558	40,960	85,519	46,681	42,540	89,221
2018	45,144	40,371	85,515	45,144	41,719	86,862	47,499	43,492	90,992
2019	45,751	41,059	86,810	45,751	42,526	88,277	48,346	44,509	92,854
2020	46,360	41,773	88,133	46,360	43,360	89,720	49,198	45,567	94,765
2021	47,031	42,480	89,511	47,031	44,195	91,226	50,127	46,629	96,756
2022	47,673	43,087	90,760	47,673	44,807	92,480	50,820	47,313	98,133
2023	48,292	43,719	92,011	48,292	45,445	93,737	51,491	48,023	99,514
2024	48,873	44,285	93,158	48,873	46,018	94,891	52,123	48,661	100,784
2025	49,467	44,885	94,352	49,467	46,634	96,101	52,771	49,334	102,105
2026	50,106	45,501	95,606	50,106	47,261	97,367	53,463	50,024	103,487
2027	50,734	46,053	96,787	50,734	47,833	98,567	54,142	50,651	104,793
2028	51,305	46,583	97,888	51,305	48,391	99,695	54,764	51,255	106,020
2029	51,881	47,112	98,992	51,881	48,956	100,837	55,391	51,858	107,249
2030	52,481	47,689	100,170	52,481	49,571	102,052	56,037	52,508	108,545
2031	53,068	48,242	101,310	53,068	50,159	103,228	56,668	53,132	109,801

Table A7A (cont.) Hamilton City labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	53,674	48,772	102,446	53,674	50,727	104,401	57,321	53,732	111,052
2033	54,234	49,262	103,496	54,234	51,253	105,487	57,925	54,289	112,214
2034	54,758	49,754	104,512	54,758	51,788	106,546	58,493	54,847	113,340
2035	55,281	50,262	105,543	55,281	52,331	107,612	59,061	55,419	114,481
2036	55,794	50,746	106,540	55,794	52,846	108,640	59,621	55,968	115,589
2037	56,292	51,216	107,508	56,292	53,340	109,632	60,169	56,500	116,669
2038	56,800	51,679	108,479	56,800	53,825	110,625	60,728	57,023	117,752
2039	57,277	52,169	109,446	57,277	54,335	111,612	61,257	57,574	118,831
2040	57,790	52,692	110,482	57,790	54,873	112,663	61,822	58,159	119,980
2041	58,314	53,209	111,522	58,314	55,404	113,718	62,395	58,738	121,133
2042	58,803	53,727	112,529	58,803	55,941	114,743	62,930	59,321	122,252
2043	59,288	54,253	113,541	59,288	56,484	115,772	63,461	59,916	123,377
2044	59,790	54,810	114,600	59,790	57,052	116,842	64,009	60,545	124,554
2045	60,285	55,369	115,654	60,285	57,619	117,904	64,549	61,178	125,727
2046	60,790	55,922	116,712	60,790	58,181	118,971	65,104	61,805	126,909
2047	61,308	56,501	117,809	61,308	58,777	120,085	65,672	62,462	128,134
2048	61,852	57,096	118,948	61,852	59,388	121,239	66,266	63,136	129,402
2049	62,440	57,736	120,176	62,440	60,041	122,481	66,908	63,856	130,764
2050	63,059	58,368	121,427	63,059	60,686	123,745	67,581	64,568	132,149
2051	63,710	59,000	122,709	63,710	61,330	125,039	68,285	65,280	133,564
2052	64,457	59,705	124,162	64,457	62,050	126,507	69,085	66,062	135,146
2053	65,255	60,453	125,708	65,255	62,814	128,069	69,937	66,884	136,821
2054	66,063	61,240	127,303	66,063	63,619	129,682	70,797	67,744	138,541
2055	66,892	61,977	128,870	66,892	64,375	131,267	71,677	68,552	140,229
2056	67,653	62,675	130,328	67,653	65,093	132,746	72,487	69,322	141,810
2057	68,386	63,373	131,759	68,386	65,813	134,199	73,272	70,092	143,364
2058	69,132	64,047	133,178	69,132	66,511	135,643	74,066	70,837	144,903
2059	69,857	64,705	134,562	69,857	67,196	137,053	74,839	71,565	146,404
2060	70,555	65,290	135,845	70,555	67,808	138,364	75,585	72,219	147,804
2061	71,252	65,879	137,131	71,252	68,427	139,680	76,330	72,877	149,208

Table A7B Waikato District labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	13,128	10,885	24,013	13,128	10,885	24,013	13,128	10,885	24,013
2007	13,301	11,072	24,373	13,301	11,099	24,400	13,356	11,141	24,497
2008	13,518	11,252	24,770	13,518	11,307	24,825	13,632	11,392	25,023
2009	13,710	11,425	25,135	13,710	11,508	25,218	13,884	11,639	25,523
2010	13,947	11,647	25,594	13,947	11,760	25,707	14,183	11,938	26,121
2011	14,209	11,841	26,050	14,209	11,985	26,194	14,510	12,213	26,723
2012	14,372	11,995	26,367	14,372	12,170	26,542	14,740	12,449	27,190
2013	14,549	12,162	26,711	14,549	12,366	26,915	14,985	12,703	27,688
2014	14,736	12,311	27,047	14,736	12,546	27,283	15,243	12,941	28,184
2015	14,918	12,471	27,389	14,918	12,737	27,656	15,497	13,193	28,690
2016	15,115	12,614	27,728	15,115	12,913	28,028	15,768	13,431	29,199
2017	15,320	12,805	28,125	15,320	13,140	28,460	16,052	13,723	29,776
2018	15,525	12,994	28,519	15,525	13,371	28,896	16,340	14,016	30,355
2019	15,736	13,181	28,917	15,736	13,603	29,340	16,635	14,311	30,946
2020	15,955	13,357	29,312	15,955	13,831	29,786	16,944	14,598	31,542
2021	16,201	13,540	29,741	16,201	14,069	30,270	17,283	14,896	32,179
2022	16,357	13,687	30,044	16,357	14,231	30,588	17,459	15,067	32,526
2023	16,522	13,832	30,354	16,522	14,392	30,914	17,645	15,237	32,882
2024	16,646	13,940	30,586	16,646	14,508	31,154	17,783	15,365	33,148
2025	16,767	14,066	30,833	16,767	14,638	31,405	17,921	15,512	33,433
2026	16,916	14,197	31,113	16,916	14,775	31,691	18,086	15,664	33,750
2027	17,036	14,312	31,348	17,036	14,893	31,929	18,222	15,799	34,021
2028	17,131	14,429	31,561	17,131	15,010	32,141	18,332	15,937	34,269
2029	17,246	14,547	31,793	17,246	15,122	32,368	18,464	16,076	34,539
2030	17,377	14,688	32,065	17,377	15,255	32,632	18,607	16,238	34,845
2031	17,528	14,824	32,352	17,528	15,383	32,911	18,771	16,395	35,166

Table A7B (cont.) **Waikato District labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C**

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	17,678	14,966	32,644	17,678	15,521	33,199	18,936	16,560	35,495
2033	17,824	15,122	32,946	17,824	15,675	33,499	19,096	16,738	35,834
2034	17,992	15,264	33,256	17,992	15,817	33,809	19,277	16,904	36,182
2035	18,171	15,428	33,599	18,171	15,978	34,149	19,471	17,093	36,564
2036	18,363	15,597	33,960	18,363	16,147	34,511	19,678	17,286	36,965
2037	18,545	15,745	34,289	18,545	16,296	34,841	19,874	17,458	37,332
2038	18,731	15,909	34,640	18,731	16,462	35,193	20,074	17,645	37,719
2039	18,909	16,073	34,981	18,909	16,628	35,537	20,263	17,831	38,094
2040	19,107	16,231	35,338	19,107	16,791	35,898	20,474	18,011	38,485
2041	19,308	16,407	35,716	19,308	16,974	36,282	20,688	18,207	38,895
2042	19,490	16,556	36,046	19,490	17,131	36,621	20,882	18,376	39,258
2043	19,651	16,726	36,377	19,651	17,307	36,958	21,057	18,563	39,620
2044	19,845	16,861	36,706	19,845	17,447	37,291	21,264	18,715	39,979
2045	20,003	16,976	36,979	20,003	17,568	37,571	21,437	18,845	40,282
2046	20,143	17,111	37,255	20,143	17,708	37,852	21,591	18,995	40,586
2047	20,298	17,227	37,526	20,298	17,832	38,131	21,759	19,127	40,886
2048	20,411	17,352	37,763	20,411	17,964	38,375	21,885	19,266	41,151
2049	20,551	17,434	37,985	20,551	18,053	38,604	22,037	19,364	41,401
2050	20,672	17,496	38,167	20,672	18,121	38,793	22,169	19,440	41,609
2051	20,770	17,577	38,347	20,770	18,209	38,979	22,280	19,536	41,816
2052	20,901	17,664	38,565	20,901	18,302	39,203	22,422	19,638	42,059
2053	20,979	17,728	38,707	20,979	18,374	39,353	22,512	19,718	42,230
2054	21,049	17,783	38,831	21,049	18,435	39,484	22,595	19,788	42,383
2055	21,127	17,815	38,942	21,127	18,473	39,601	22,684	19,836	42,521
2056	21,184	17,870	39,054	21,184	18,534	39,718	22,753	19,908	42,661
2057	21,290	17,952	39,241	21,290	18,621	39,911	22,870	20,007	42,877
2058	21,385	18,057	39,442	21,385	18,730	40,115	22,976	20,128	43,104
2059	21,492	18,165	39,657	21,492	18,841	40,333	23,093	20,251	43,344
2060	21,635	18,283	39,918	21,635	18,962	40,596	23,248	20,386	43,633
2061	21,754	18,417	40,170	21,754	19,097	40,851	23,378	20,535	43,913

Table A7C Waipa District labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2006	12,863	10,967	23,830	12,863	10,967	23,830	12,863	10,967	23,830
2007	12,980	11,085	24,064	12,980	11,111	24,091	13,036	11,159	24,195
2008	13,117	11,210	24,327	13,117	11,262	24,379	13,233	11,360	24,593
2009	13,252	11,362	24,614	13,252	11,440	24,692	13,427	11,590	25,018
2010	13,438	11,502	24,940	13,438	11,608	25,045	13,676	11,813	25,489
2011	13,582	11,676	25,257	13,582	11,808	25,389	13,884	12,072	25,956
2012	13,724	11,825	25,549	13,724	11,984	25,708	14,093	12,311	26,404
2013	13,842	11,941	25,783	13,842	12,128	25,970	14,279	12,517	26,797
2014	13,978	12,097	26,074	13,978	12,312	26,290	14,486	12,770	27,256
2015	14,108	12,207	26,314	14,108	12,451	26,559	14,688	12,978	27,666
2016	14,217	12,338	26,555	14,217	12,616	26,833	14,873	13,212	28,085
2017	14,353	12,457	26,811	14,353	12,770	27,123	15,087	13,438	28,525
2018	14,476	12,594	27,069	14,476	12,940	27,416	15,291	13,685	28,976
2019	14,609	12,737	27,346	14,609	13,123	27,732	15,510	13,943	29,453
2020	14,750	12,834	27,584	14,750	13,265	28,015	15,740	14,157	29,897
2021	14,898	12,957	27,855	14,898	13,436	28,333	15,979	14,404	30,382
2022	15,002	13,041	28,043	15,002	13,534	28,535	16,103	14,513	30,616
2023	15,110	13,123	28,232	15,110	13,627	28,737	16,230	14,621	30,851
2024	15,127	13,176	28,303	15,127	13,682	28,809	16,260	14,694	30,955
2025	15,159	13,209	28,368	15,159	13,717	28,876	16,308	14,748	31,056
2026	15,200	13,263	28,464	15,200	13,775	28,976	16,364	14,822	31,185
2027	15,229	13,311	28,540	15,229	13,828	29,057	16,407	14,890	31,297
2028	15,268	13,357	28,624	15,268	13,872	29,140	16,460	14,957	31,417
2029	15,325	13,407	28,732	15,325	13,915	29,241	16,530	15,029	31,559
2030	15,370	13,477	28,847	15,370	13,977	29,347	16,587	15,120	31,707
2031	15,449	13,545	28,994	15,449	14,039	29,488	16,679	15,211	31,890

Table A7C (cont.) **Waipa District labour force projections 2006-2061, Scenarios LFPS5-A, LFPS5-B, and LFPS5-C**

Scenario	LFPS5-A			LFPS5-B			LFPS5-C		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2032	15,503	13,632	29,136	15,503	14,123	29,626	16,744	15,320	32,064
2033	15,591	13,701	29,292	15,591	14,192	29,783	16,842	15,410	32,252
2034	15,681	13,776	29,457	15,681	14,263	29,943	16,943	15,507	32,450
2035	15,751	13,881	29,632	15,751	14,366	30,117	17,024	15,634	32,657
2036	15,823	13,990	29,813	15,823	14,472	30,295	17,105	15,765	32,871
2037	15,909	14,103	30,012	15,909	14,585	30,493	17,200	15,899	33,100
2038	15,996	14,213	30,209	15,996	14,697	30,693	17,296	16,029	33,325
2039	16,089	14,294	30,383	16,089	14,778	30,867	17,398	16,127	33,525
2040	16,198	14,394	30,592	16,198	14,881	31,079	17,513	16,245	33,758
2041	16,287	14,530	30,817	16,287	15,018	31,305	17,611	16,397	34,008
2042	16,398	14,665	31,064	16,398	15,157	31,556	17,730	16,548	34,278
2043	16,503	14,771	31,275	16,503	15,265	31,768	17,843	16,668	34,511
2044	16,577	14,825	31,402	16,577	15,323	31,900	17,925	16,735	34,660
2045	16,656	14,896	31,552	16,656	15,397	32,053	18,014	16,817	34,830
2046	16,746	14,970	31,716	16,746	15,472	32,218	18,110	16,901	35,012
2047	16,817	15,073	31,890	16,817	15,579	32,396	18,189	17,014	35,203
2048	16,867	15,133	32,000	16,867	15,644	32,510	18,246	17,086	35,332
2049	16,890	15,142	32,032	16,890	15,657	32,547	18,276	17,104	35,380
2050	16,927	15,158	32,085	16,927	15,676	32,603	18,319	17,130	35,449
2051	16,963	15,165	32,128	16,963	15,686	32,649	18,361	17,146	35,507
2052	16,995	15,209	32,204	16,995	15,734	32,729	18,397	17,199	35,596
2053	16,999	15,253	32,251	16,999	15,781	32,780	18,407	17,251	35,658
2054	16,984	15,235	32,220	16,984	15,767	32,751	18,398	17,244	35,641
2055	16,942	15,220	32,162	16,942	15,754	32,696	18,360	17,238	35,598
2056	16,969	15,199	32,168	16,969	15,736	32,705	18,392	17,227	35,619
2057	16,975	15,222	32,198	16,975	15,761	32,736	18,404	17,258	35,662
2058	17,004	15,262	32,266	17,004	15,803	32,806	18,437	17,306	35,743
2059	17,022	15,296	32,318	17,022	15,837	32,859	18,460	17,348	35,808
2060	17,065	15,353	32,419	17,065	15,895	32,960	18,508	17,413	35,922
2061	17,118	15,378	32,495	17,118	15,919	33,037	18,566	17,446	36,012

Table A8A **Hamilton City Council Census Area Unit Projections, Dwellings and Population 2007-2041 at five-yearly intervals**

	Base	Dwelling Projection							Base	Population Projection						
	2006	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**	**2006**	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
Sylvester	56	596	1136	1676	2000	2000	2000	2000	180	1951	3712	5424	6362	6258	6186	6159
Flagstaff	1490	1490	1490	1490	1490	1490	1490	1490	3900	3941	3932	3894	3827	3765	3721	3705
Horsham Downs	827	1243	1660	2077	2327	2327	2327	2327	2680	4073	5424	6721	7402	7282	7197	7166
Rototuna	1113	1113	1113	1113	1113	1113	1113	1113	3299	3333	3325	3293	3236	3184	3147	3133
Huntington	1314	1731	2147	2564	2798	2900	2900	2900	3980	5296	6556	7753	8315	8478	8380	8343
Peacocke	161	260	360	460	2150	4900	7650	8750	470	771	1064	1346	6181	13858	21387	24354
Temple View	339	345	358	374	388	401	415	435	1400	1440	1489	1541	1569	1597	1633	1706
Bryant	2153	2181	2238	2312	2374	2436	2499	2593	5931	6069	6214	6358	6416	6475	6567	6783
Pukete	842	851	865	884	900	916	932	956	2490	2542	2579	2610	2611	2613	2629	2684
Pukete West	694	704	724	749	770	792	814	846	2180	2233	2291	2349	2375	2400	2438	2524
Te Rapa	136	138	143	150	156	161	167	176	230	237	245	254	259	264	270	283
Burbush	74	77	83	91	98	105	112	122	210	221	238	259	273	287	303	329
Rotokauri	62	259	749	1267	1500	1500	1500	1500	190	806	2325	3896	4533	4459	4408	4388
Nawton	1638	1657	1698	1751	1795	1838	1883	1950	4600	4703	4808	4909	4946	4983	5046	5201
Crawshaw	944	956	980	1011	1038	1064	1091	1130	2960	3028	3098	3167	3193	3220	3263	3367
Grandview	1080	1093	1120	1155	1184	1213	1243	1288	3110	3180	3252	3321	3347	3373	3417	3523
Brymer	743	923	923	923	923	923	923	923	2380	2987	2980	2951	2901	2853	2820	2808
Dinsdale North	1363	1386	1435	1497	1548	1600	1653	1731	3900	4007	4137	4274	4346	4417	4511	4704
Dinsdale South	1471	1487	1521	1564	1600	1636	1673	1727	4160	4249	4335	4415	4439	4464	4512	4639
Beerescourt	1261	1277	1310	1351	1386	1421	1457	1510	3220	3294	3370	3443	3472	3501	3547	3660
Maeroa	1397	1415	1453	1502	1542	1582	1624	1685	3740	3828	3921	4012	4050	4088	4147	4284
Frankton Junction	780	824	887	972	1033	1090	1147	1243	1750	1866	2005	2176	2273	2360	2454	2647
Swarbrick	1524	1660	1844	2080	2273	2464	2659	2953	4240	4668	5171	5777	6206	6617	7059	7806
Hamilton Lake	1555	1715	1925	2194	2421	2647	2880	3222	4030	4491	5031	5678	6157	6622	7122	7934
Melville	1635	1650	1689	1738	1779	1820	1863	1925	4960	5059	5164	5264	5297	5330	5391	5548
Glenview	1894	1915	1961	2018	2067	2115	2165	2238	5280	5396	5510	5618	5654	5691	5757	5926
Queenwood	1154	1159	1169	1183	1194	1205	1217	1234	3120	3166	3187	3193	3168	3145	3139	3169
Chedworth	1258	1275	1308	1351	1387	1423	1460	1514	3670	3756	3845	3934	3969	4005	4062	4195
Porritt	605	615	637	665	689	713	737	773	1760	1809	1870	1934	1968	2002	2046	2136
Insoll	771	772	773	774	775	776	777	779	2690	2720	2717	2695	2653	2614	2587	2581
Fairview Downs	1150	1178	1234	1307	1368	1428	1490	1582	3480	3599	3764	3947	4059	4170	4301	4546
Chartwell	904	912	929	950	968	986	1004	1032	2440	2487	2527	2561	2565	2569	2587	2646
Hamilton Central	1339	1569	1855	2211	2536	2871	3221	3705	2820	3339	3938	4649	5242	5837	6474	7414
Clarkin	1076	1082	1095	1111	1125	1138	1152	1172	3130	3180	3209	3226	3209	3194	3196	3238
Claudelands	1030	1030	1030	1030	1030	1030	1030	1030	2480	2505	2499	2475	2433	2393	2366	2355
Enderley	1490	1595	1742	1934	2083	2226	2371	2601	4060	4392	4785	5262	5570	5856	6165	6732

Table A8A (cont.) Hamilton City Council Census Area Unit Projections, Dwellings and Population 2007-2041 at five-yearly intervals

	Base	Dwelling Projection							Base	Population Projection						
	2006	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**	**2006**	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
Peachgrove	1224	1391	1603	1869	2105	2344	2593	2946	2940	3374	3879	4479	4958	5431	5939	6717
Hamilton East	1369	1453	1574	1733	1852	1964	2076	2260	3820	4096	4424	4826	5067	5286	5524	5988
Naylor	1709	1813	1964	2163	2310	2450	2590	2820	4380	4696	5073	5534	5811	6062	6335	6867
Bader	1339	1443	1586	1772	1920	2063	2209	2436	3920	4269	4682	5181	5516	5832	6173	6775
University	1514	1759	2065	2446	2793	3148	3519	4034	5220	6126	7175	8418	9445	10471	11571	13208
Silverdale	898	981	1092	1235	1353	1470	1590	1769	2630	2904	3226	3613	3891	4157	4444	4924
Hillcrest West	1209	1223	1253	1290	1322	1353	1385	1433	3730	3813	3895	3974	4001	4029	4077	4199
Riverlea	965	973	989	1009	1026	1043	1060	1085	2630	2678	2715	2744	2742	2741	2754	2808
Total	**47548**	**51169**	**55710**	**60998**	**66490**	**72085**	**77660**	**82939**	**134400**	**146579**	**159585**	**173346**	**185907**	**198237**	**211052**	**224101**

Table A8B Waikato District Council Census Area Unit Projections, Dwellings and Population 2007-2041 at five-yearly intervals

	Base	Dwelling Projection							Base	Population Projection						
	2006	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**	**2006**	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
Raglan	1131	1138	1180	1269	1328	1369	1405	1427	2718	2704	2764	2952	3067	3132	3185	3202
Western Hills	1312	1410	1486	1601	1677	1727	1763	1781	3917	4164	4327	4626	4815	4913	4965	4969
Te Uku	618	664	721	811	922	1007	1104	1212	1709	1817	1945	2172	2451	2654	2881	3134
Te Akau	361	374	390	423	446	464	479	491	989	1013	1044	1121	1176	1211	1239	1259
Te Kauwhata	477	680	896	1147	1397	1622	1844	2062	1239	1747	2270	2884	3488	4014	4518	5004
Matangi	611	685	718	778	813	837	862	889	1839	2037	2104	2265	2350	2397	2444	2499
Whitikahu	676	689	700	736	762	770	777	779	2109	2127	2130	2222	2286	2289	2287	2272
Taupiri	162	172	180	197	211	232	252	271	470	492	510	553	588	641	689	733
Eureka	719	778	809	883	945	992	1030	1062	2079	2225	2282	2471	2627	2732	2811	2872
Gordonton	303	349	409	485	552	614	673	727	979	1115	1289	1518	1717	1893	2055	2199
Kainui	810	998	1200	1452	1697	1906	2116	2301	2508	3056	3622	4351	5050	5620	6179	6655
Tamahere-Tauwhare	1507	1686	1884	2018	2074	2101	2116	2127	4747	5249	5783	6149	6278	6302	6285	6258
Waerenga	627	677	709	779	840	881	915	950	1829	1952	2018	2199	2356	2450	2519	2589
Maramarua	345	368	393	437	476	508	538	563	979	1031	1085	1200	1296	1372	1438	1491
Meremere	147	163	177	197	214	229	243	255	480	527	563	623	671	712	750	777
Huntly West	939	939	958	1015	1047	1069	1085	1094	3058	3025	3043	3199	3278	3318	3335	3330
Huntly East	1504	1537	1593	1713	1792	1849	1898	1934	4047	4089	4179	4461	4634	4740	4816	4862
Horotiu	300	396	580	671	806	967	1058	1144	899	1176	1698	1949	2326	2765	2996	3208
Te Kowhai	495	610	746	833	929	1027	1114	1194	1389	1692	2039	2260	2503	2743	2946	3128
Whatawhata	694	738	776	839	893	983	1117	1246	2119	2228	2308	2479	2620	2858	3216	3553
Ngaruawahia	1685	1836	2095	2394	2654	2880	3127	3357	5297	5708	6420	7283	8018	8625	9271	9862
Total	**15422**	**16888**	**18601**	**20677**	**22475**	**24035**	**25516**	**26866**	**45400**	**49174**	**53424**	**58937**	**63593**	**67382**	**70826**	**73856**

Table A8C Waipa District Council Census Area Unit Projections, Dwellings and Population 2007-2041 at five-yearly intervals

	Base	Dwelling Projection							Base	Population Projection						
	2006	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**	**2006**	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
Te Pahu	421	456	488	544	606	668	723	767	1221	1316	1379	1518	1673	1824	1953	2055
Hautapu	671	822	1225	1504	1546	1587	1626	1661	1892	2305	3361	4077	4148	4210	4270	4326
Cambridge North	1134	1207	1275	1415	1565	1719	1852	1961	2993	3165	3274	3589	3929	4266	4551	4778
Cambridge West	1165	1177	1179	1241	1317	1394	1454	1495	2643	2655	2602	2706	2843	2976	3071	3132
Cambridge Central	320	330	341	370	403	436	464	485	701	718	726	778	840	899	946	981
Leamington West	1089	1135	1209	1262	1316	1367	1418	1469	3083	3195	3330	3436	3544	3641	3739	3841
Leamington East	1449	1551	1644	1818	2009	2199	2371	2505	3854	4103	4255	4650	5085	5504	5875	6155
Ohaupo	162	163	203	253	284	286	289	291	430	432	527	648	720	718	716	716
Kihikihi	695	731	751	813	881	950	1007	1050	2022	2114	2125	2273	2437	2599	2728	2821
Ngahinapouri	671	742	809	915	1033	1149	1256	1343	2032	2234	2385	2664	2975	3274	3544	3756
Lake Cameron	381	409	497	563	586	607	628	649	1081	1154	1372	1535	1582	1621	1660	1701
Te Rore	149	158	163	177	192	208	221	231	430	453	456	490	527	563	592	614
Pirongia	473	502	552	588	614	640	666	693	1371	1448	1557	1639	1694	1747	1800	1856
Pokuru	165	165	167	178	190	203	213	220	470	469	463	489	517	545	566	580
Lake Ngaroto	192	194	227	415	576	609	609	609	541	542	622	1122	1542	1612	1596	1582
Tokanui	143	143	143	143	143	143	143	143	449	447	437	432	428	423	419	415
Pukerimu	159	285	474	595	604	612	620	628	420	750	1222	1517	1522	1526	1531	1539
Kaipaki	317	336	353	387	427	464	500	527	941	991	1018	1104	1205	1295	1382	1444
Rotoorangi	619	636	648	660	699	739	770	790	1752	1789	1783	1795	1882	1968	2029	2064
Te Rahu	317	338	368	413	466	518	565	603	931	988	1050	1165	1302	1431	1543	1634
Kihikihi Flat	256	347	760	923	1024	1046	1069	1092	721	971	2080	2496	2741	2768	2800	2837
Allen Road	63	63	63	63	63	63	63	63	158	157	153	151	150	148	147	146
Rotongata	278	281	281	281	281	281	281	281	851	857	838	828	821	812	804	797
Te Awamutu West	451	454	454	469	495	520	539	551	1261	1263	1235	1261	1315	1368	1404	1422
Te Awamutu Central	1311	1349	1362	1456	1561	1664	1751	1811	3223	3297	3256	3440	3649	3848	4008	4112
Te Awamutu East	988	1140	1239	1293	1350	1406	1461	1519	2563	2940	3126	3224	3331	3430	3529	3638
Te Awamutu South	1168	1169	1173	1233	1301	1368	1419	1449	3033	3018	2964	3078	3213	3343	3431	3475
Karapiro	878	960	1038	1166	1308	1438	1565	1673	2633	2860	3027	3360	3729	4055	4369	4632
Total	**16086**	**17243**	**19086**	**21138**	**22840**	**24285**	**25543**	**26559**	**43700**	**46630**	**50623**	**55466**	**59343**	**62414**	**65001**	**67050**

Figure A1 **Selected Hamilton City age-specific annual net migration rates 1991-2041**

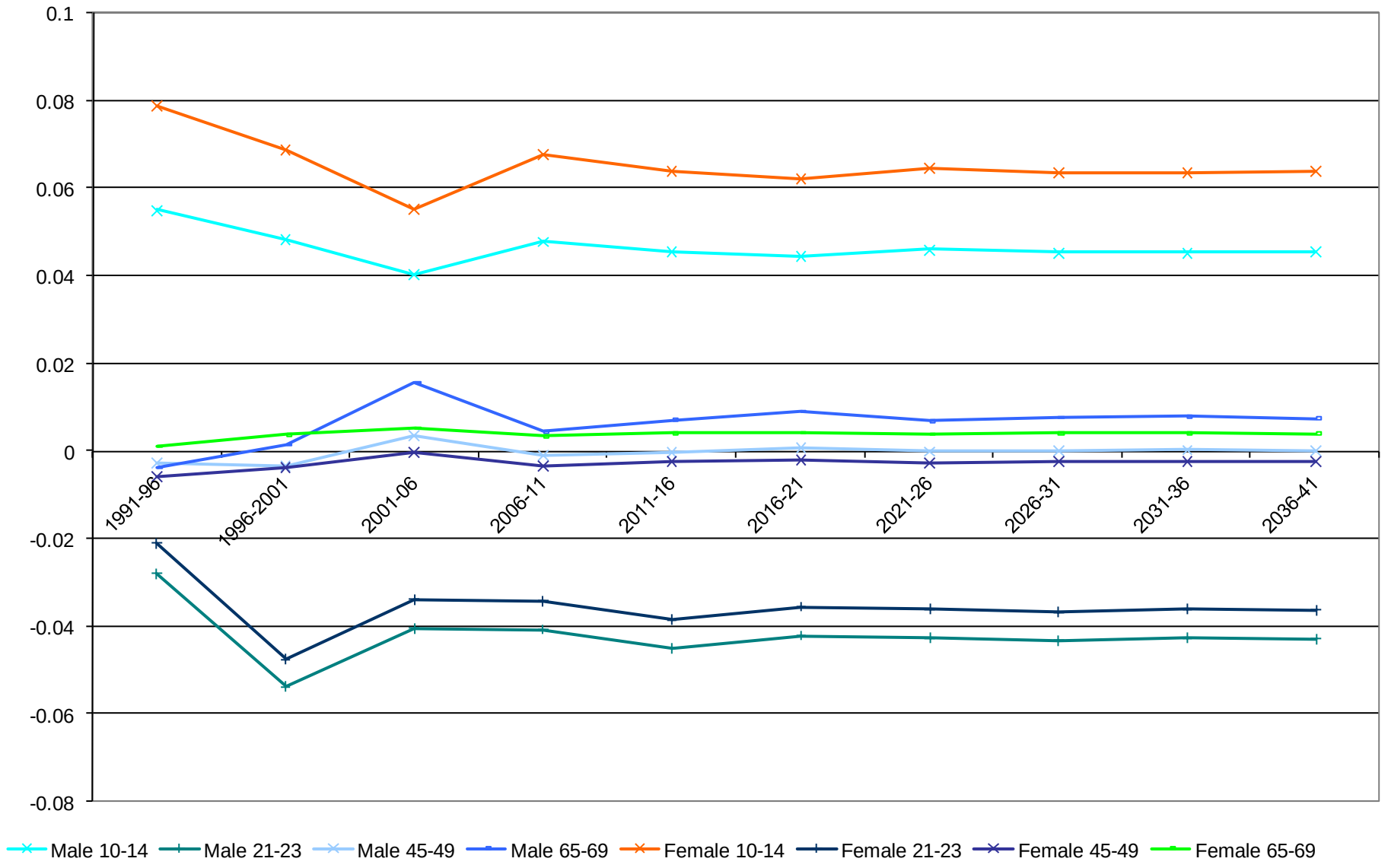


Figure A2A **Hamilton City projected population growth 1996-2061**

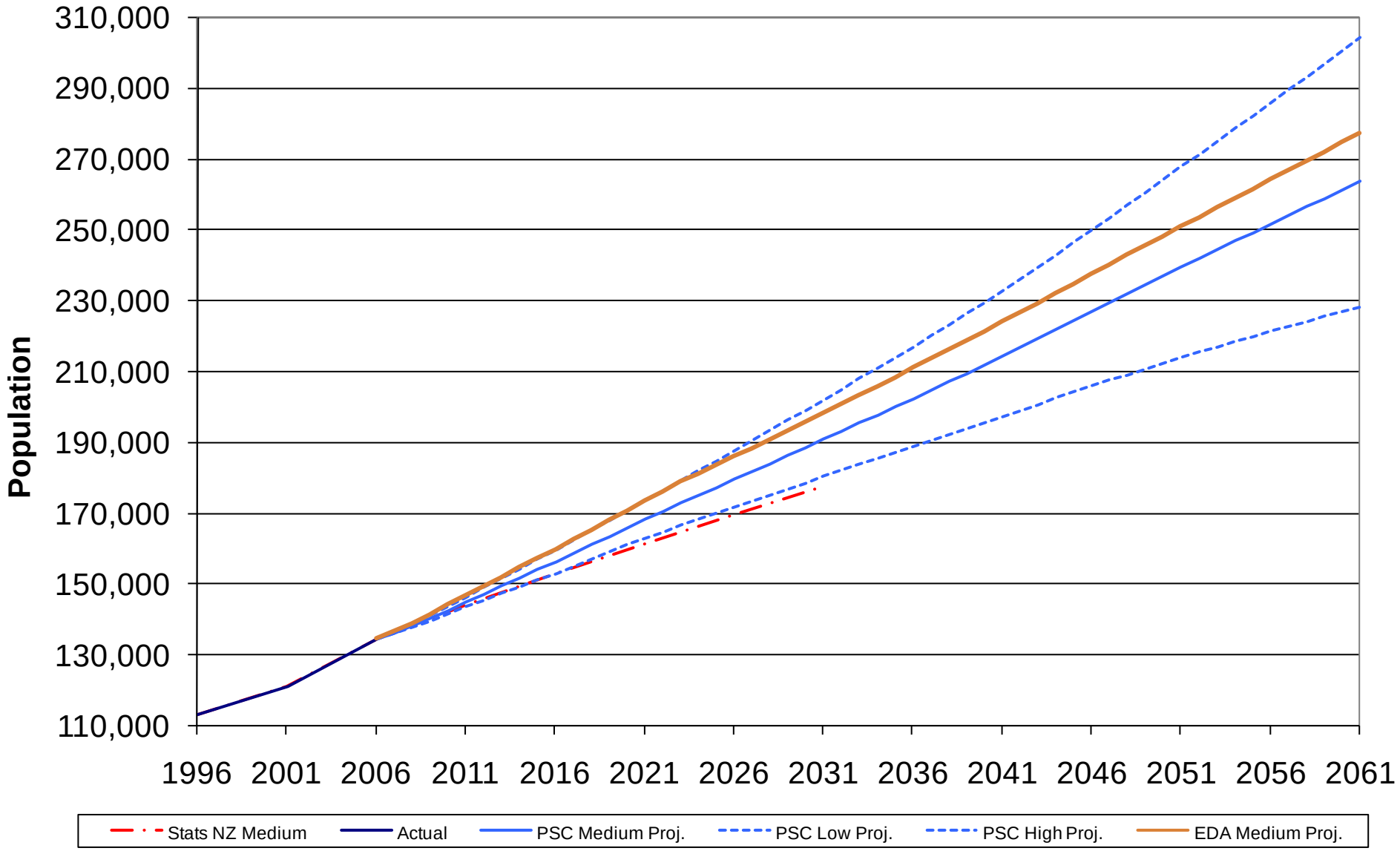


Figure A2B Waikato District projected population growth 1996-2061

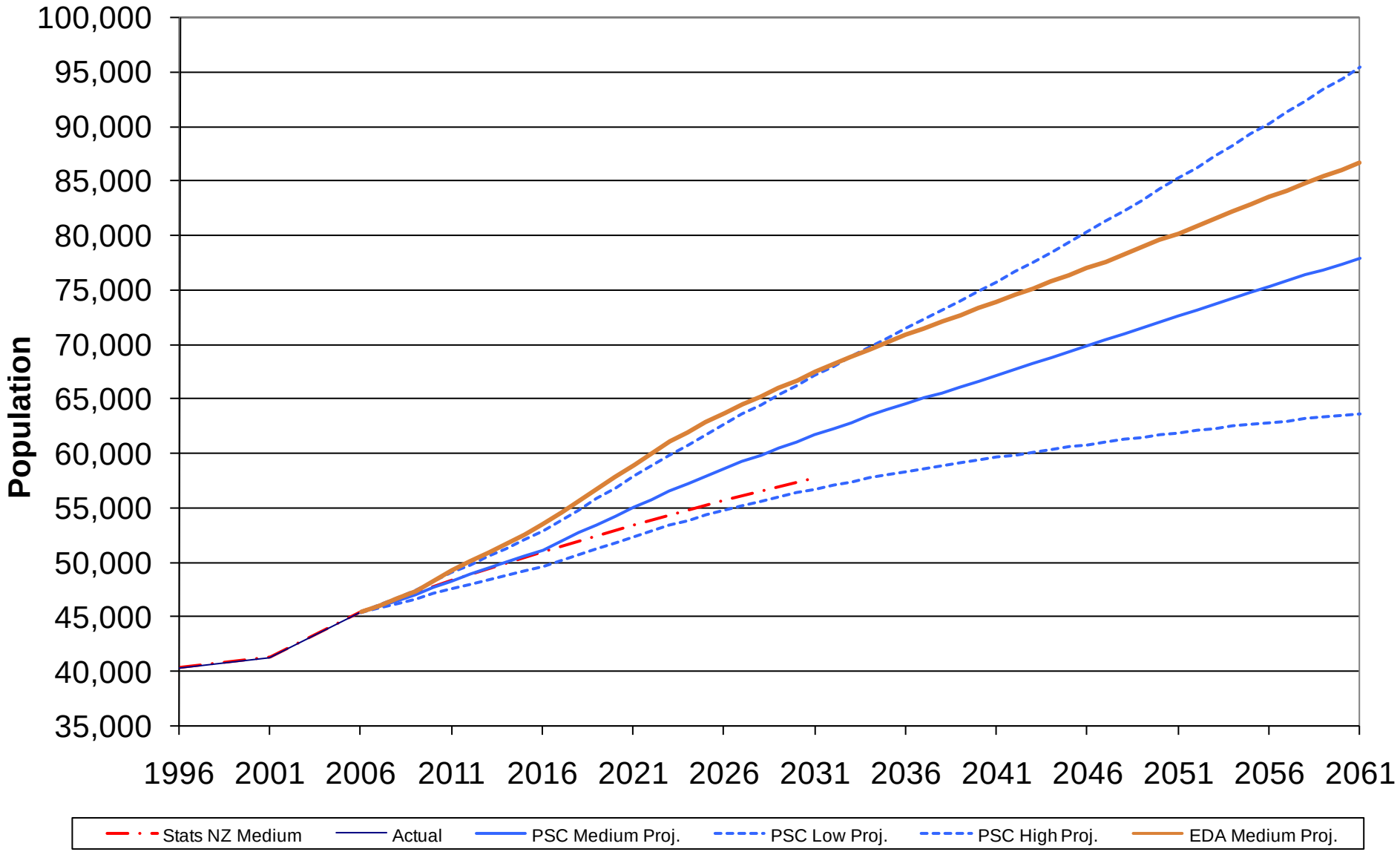


Figure A2C Waipa District projected population growth 1996-2061

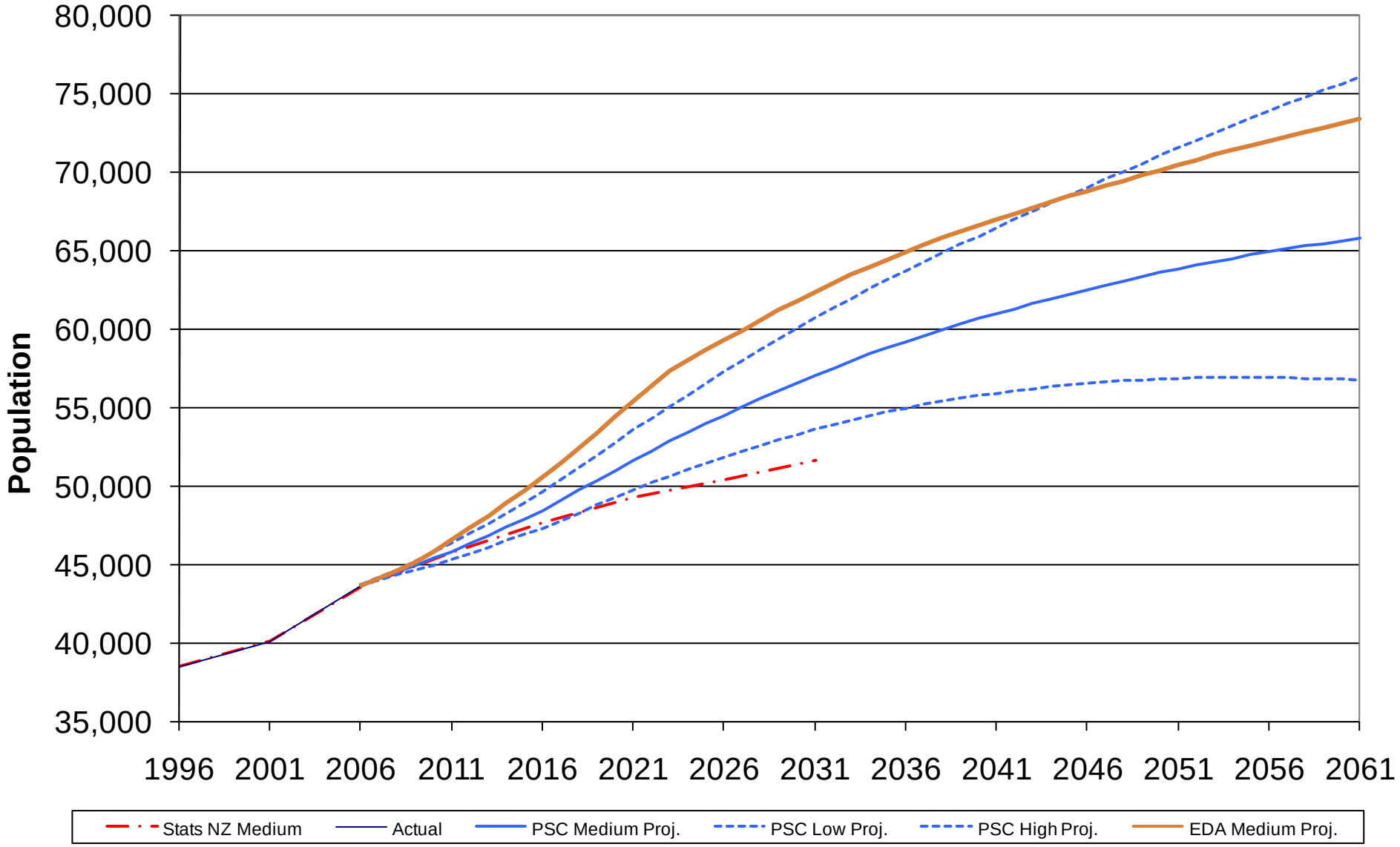
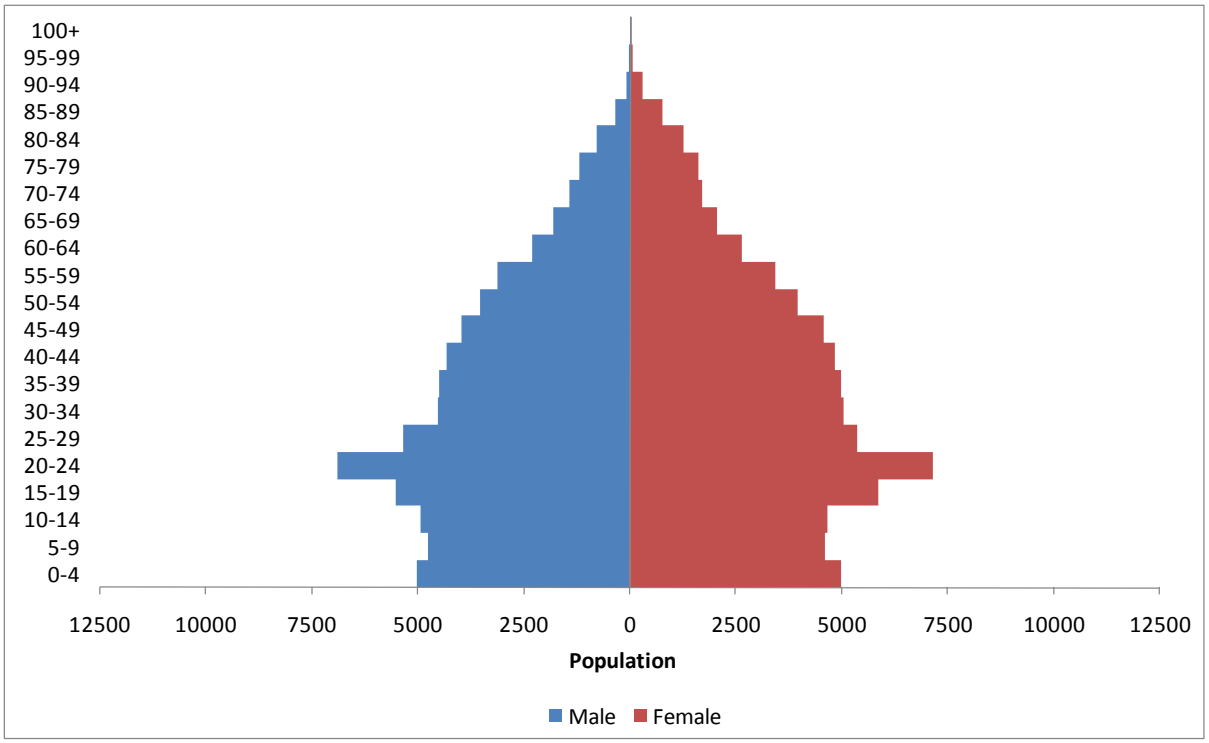


Figure A3A **Hamilton City projected population pyramids 2006 and 2061**

2006



2061

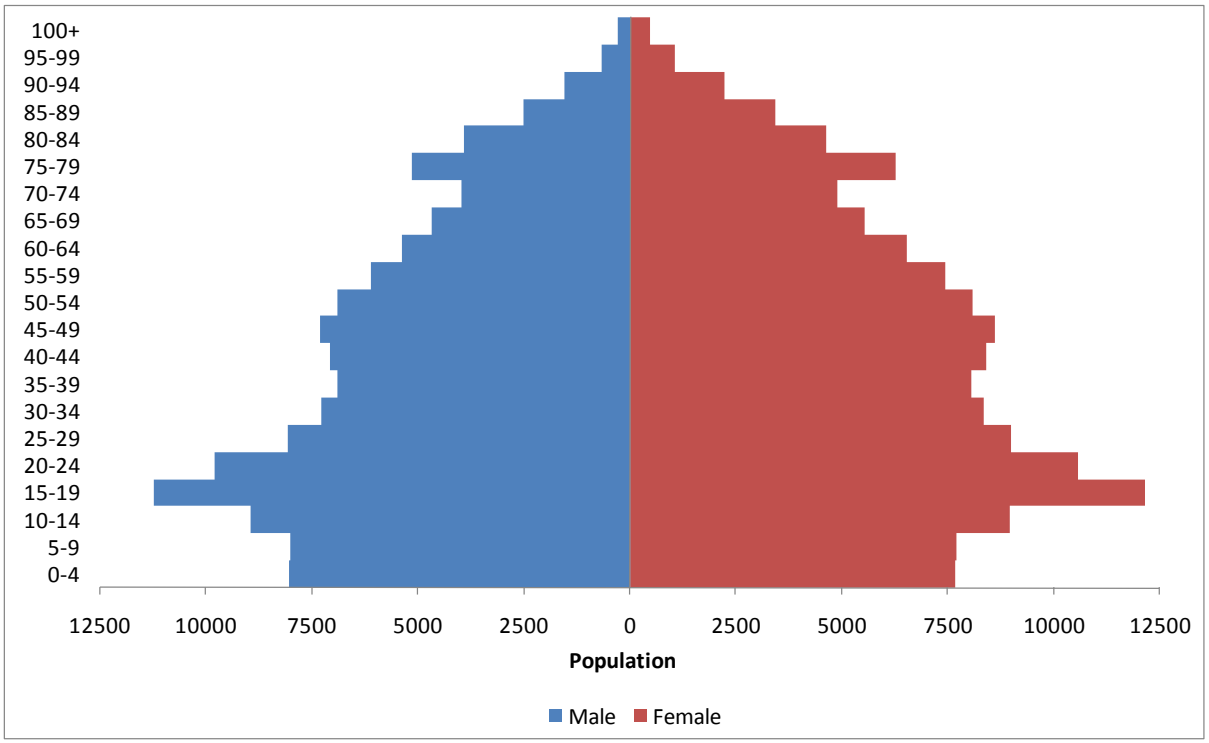
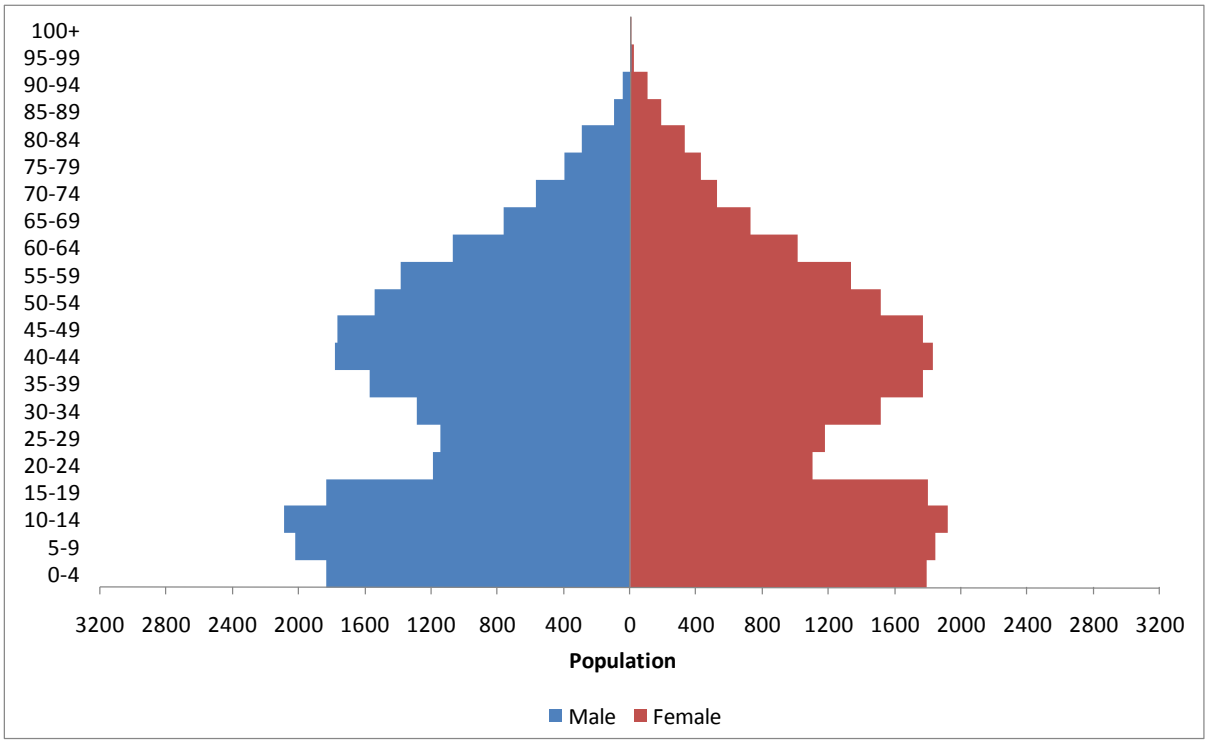


Figure A3B **Waikato District projected population pyramids 2006 and 2061**

2006



2061

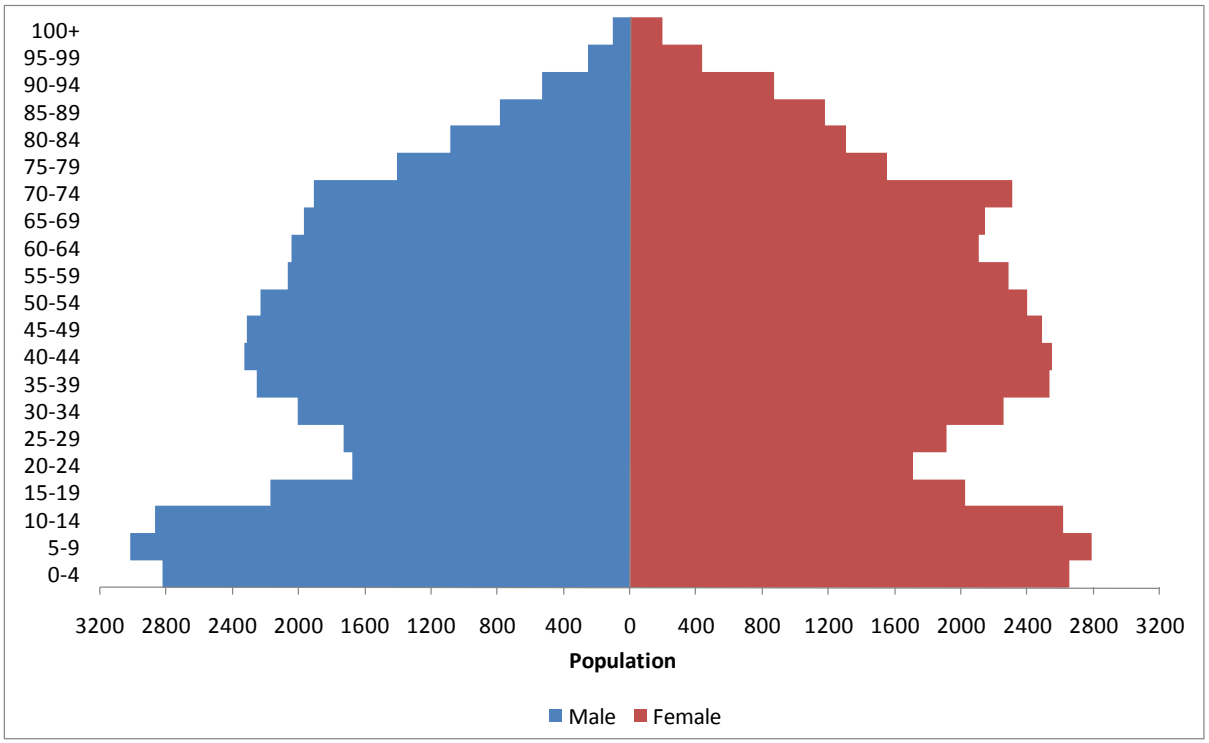
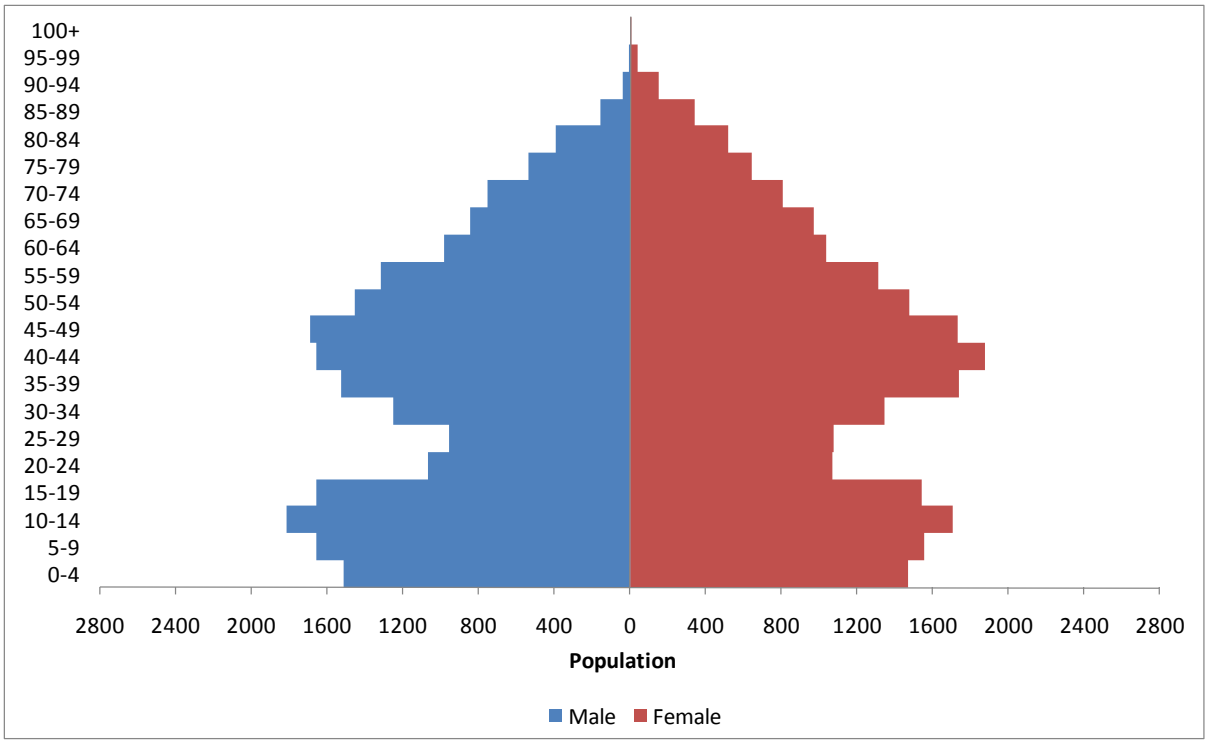


Figure A3C **Waipa District projected population pyramids 2006 and 2061**

2006



2061

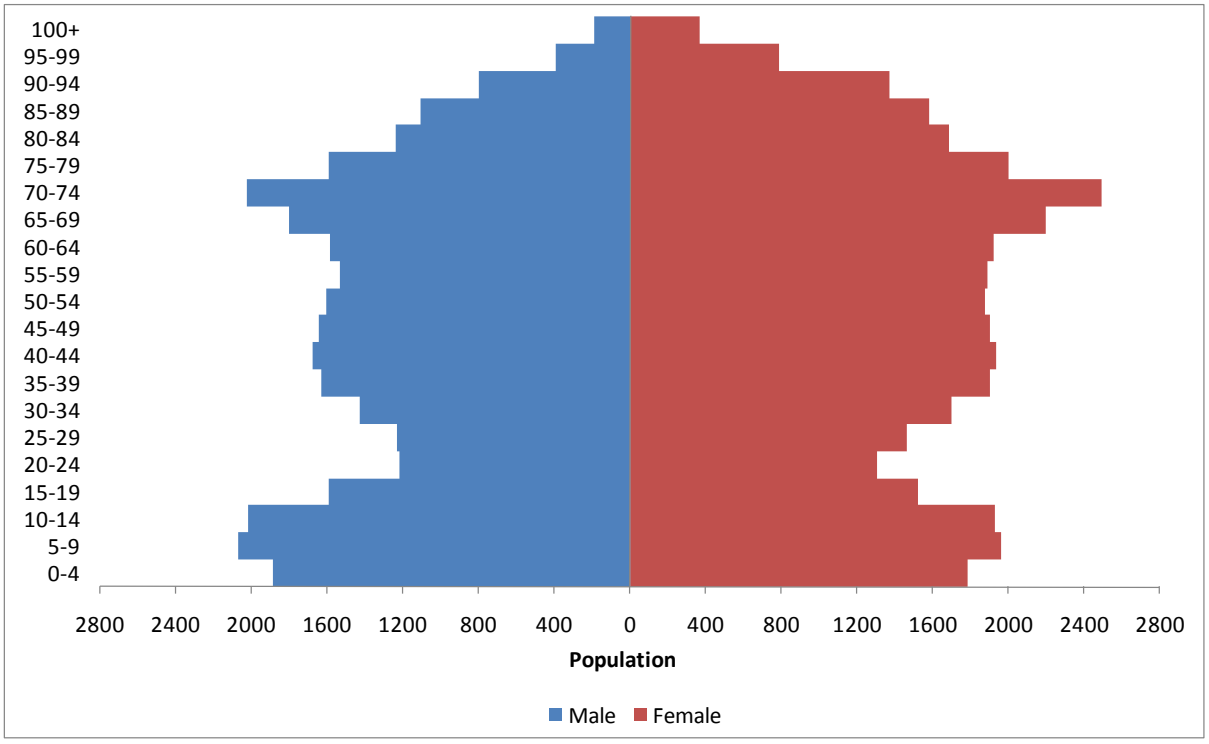


Figure A4A **Hamilton City projected number of households 1996-2061**

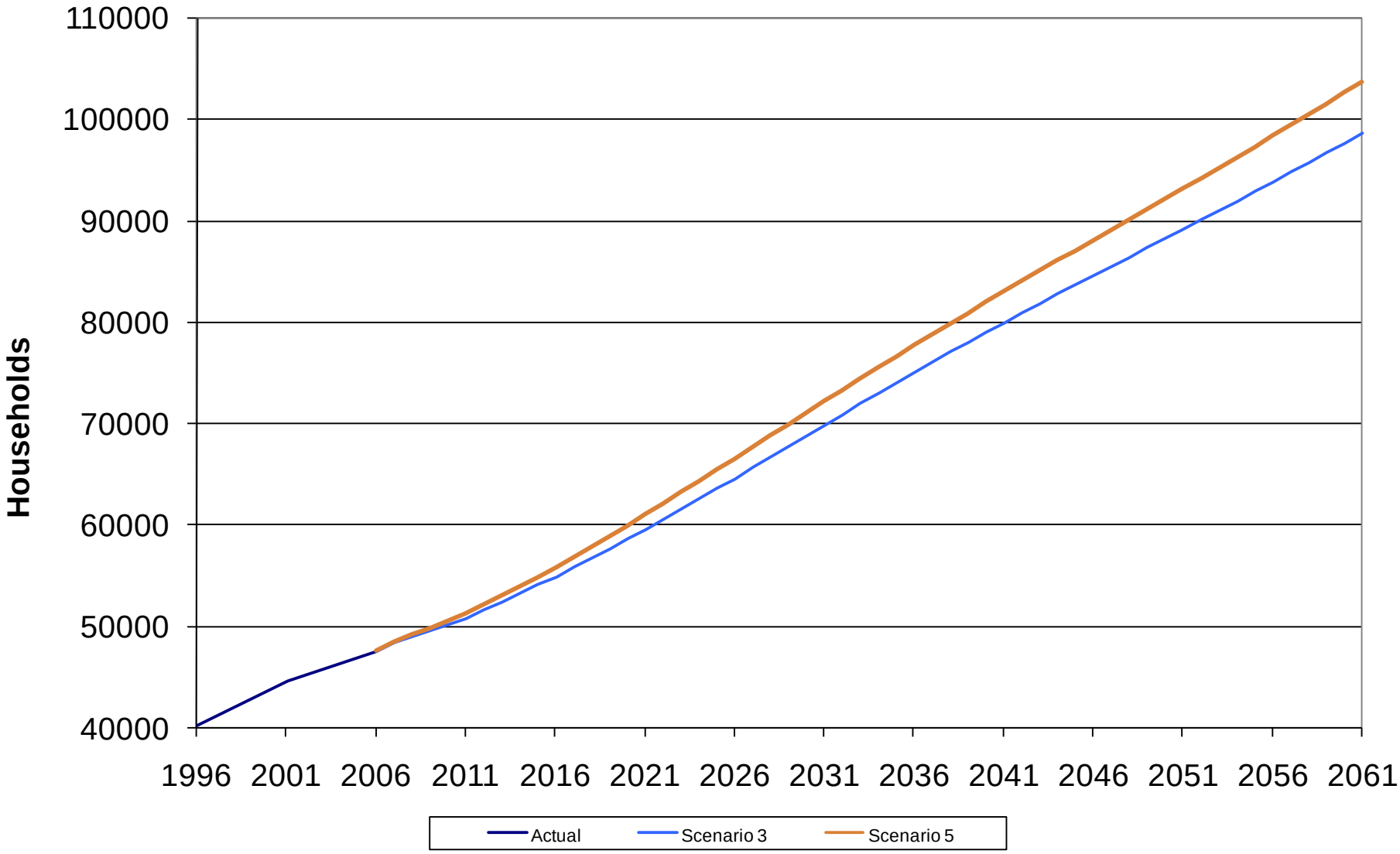


Figure A4B **Waikato District projected number of households 1996-2061**

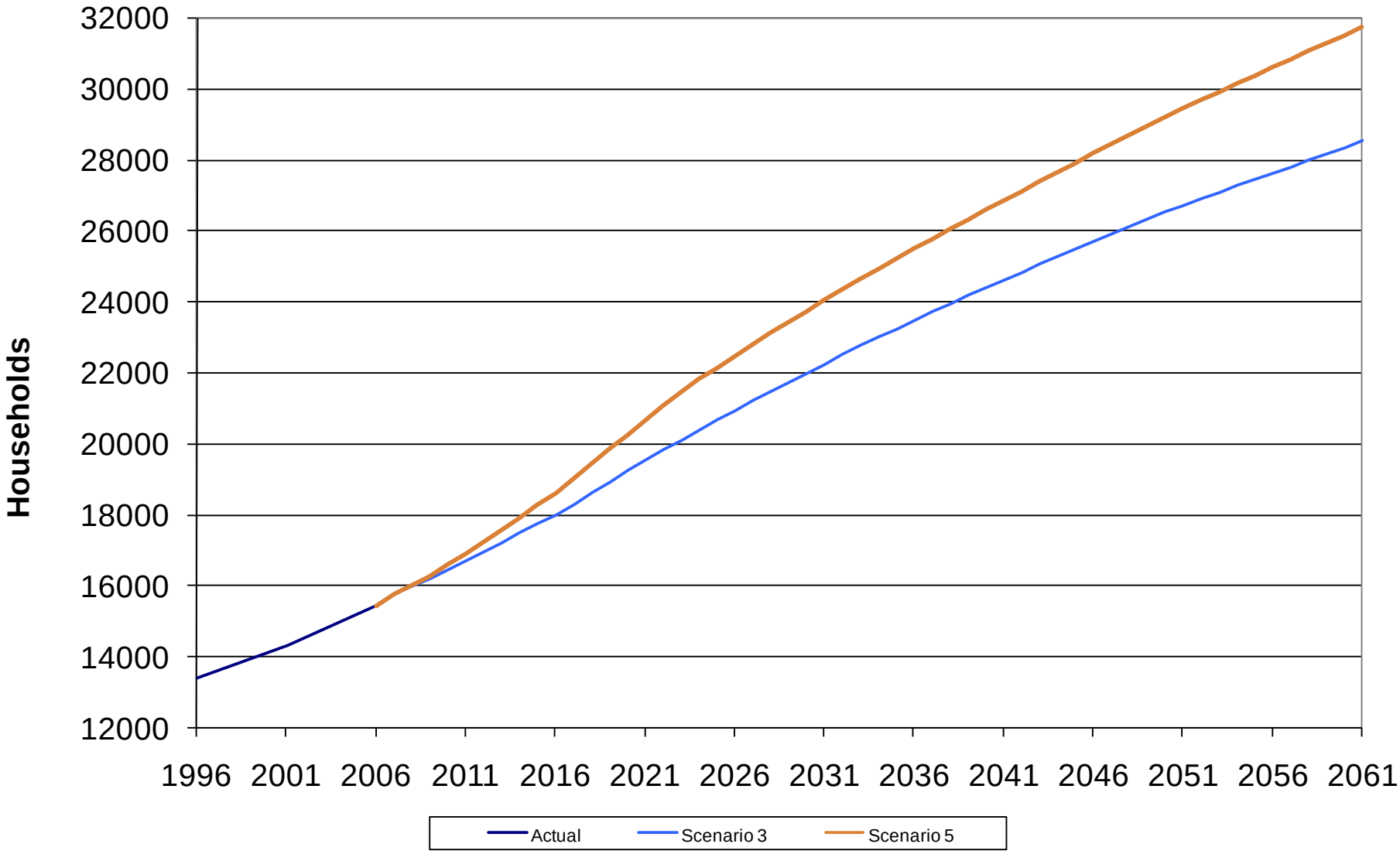


Figure A4C **Waipa District projected number of households 1996-2061**

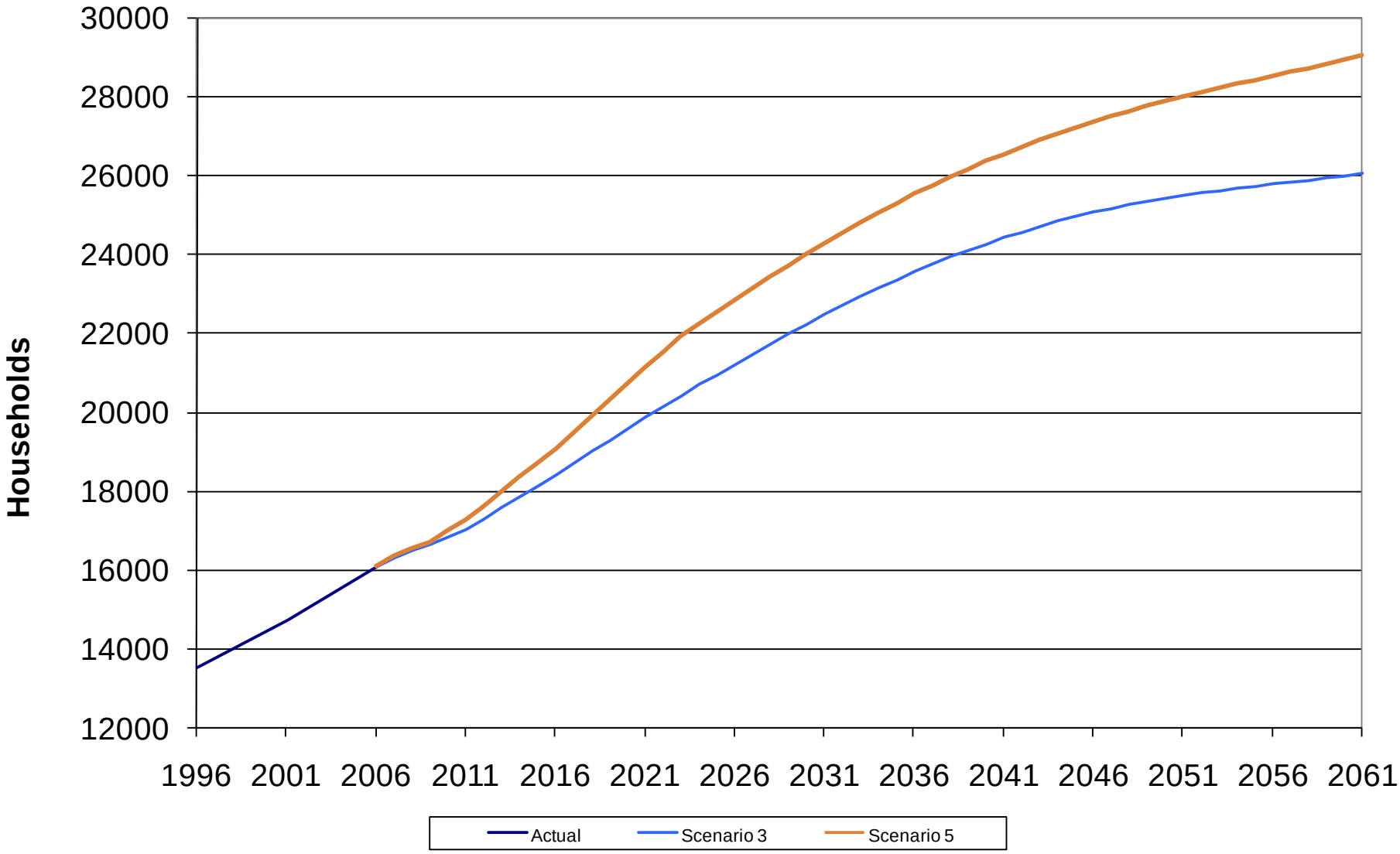


Figure A5A **Hamilton City projected labour force 2006-2061, scenarios without additional economic development**

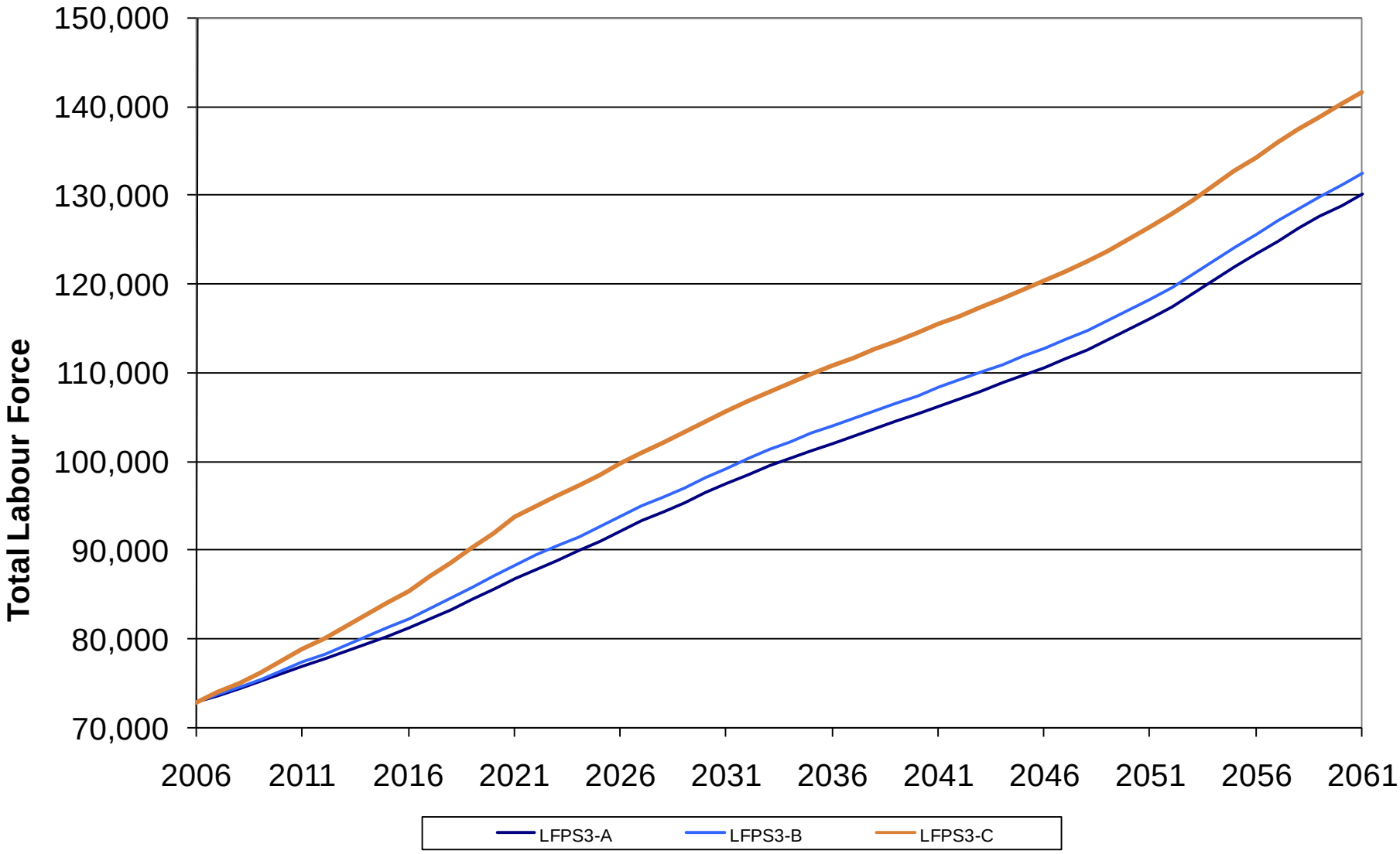


Figure A5B **Waikato District projected labour force 2006-2061, scenarios without additional economic development**

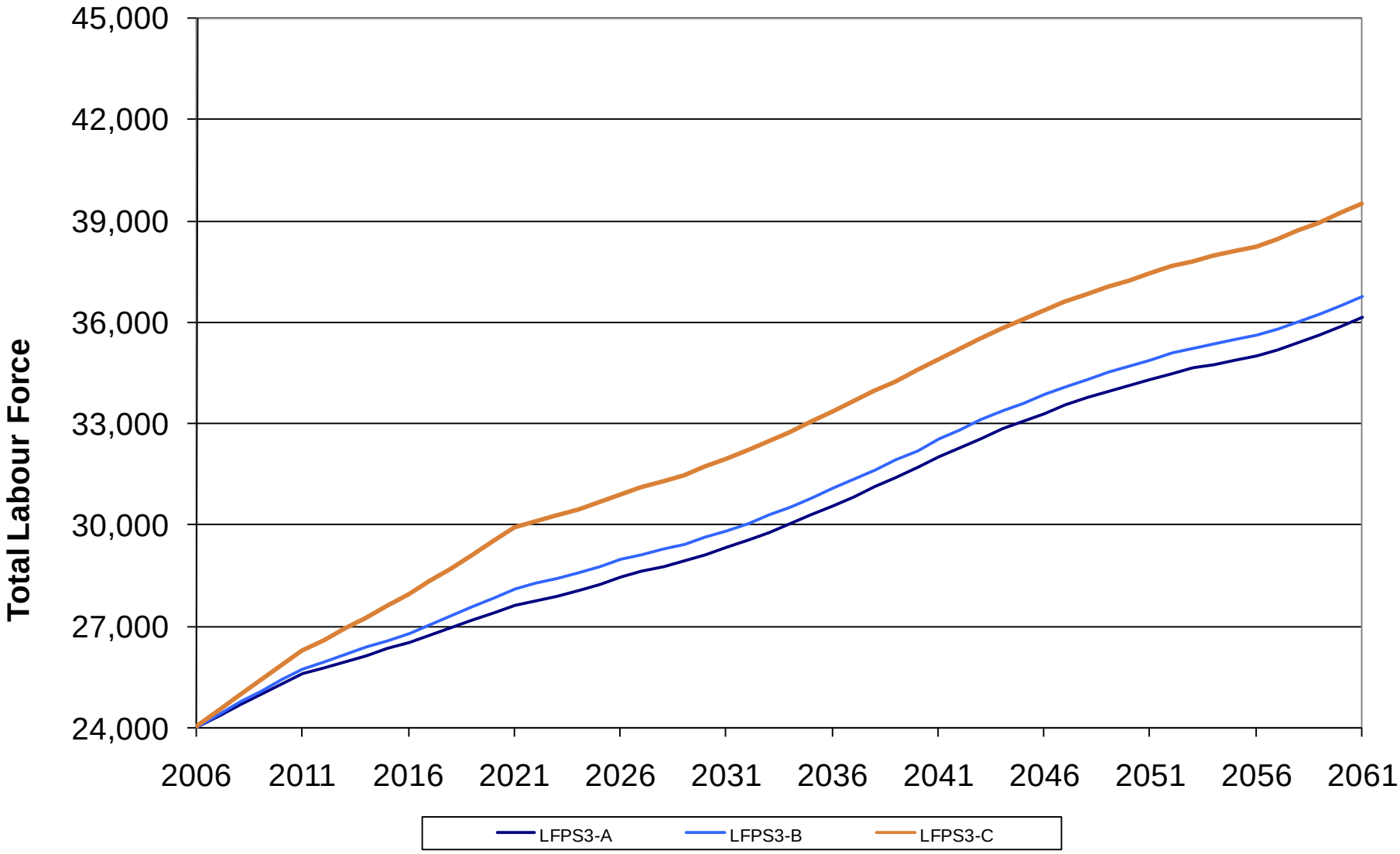


Figure A5C **Waipa District projected labour force 2006-2061, scenarios without additional economic development**

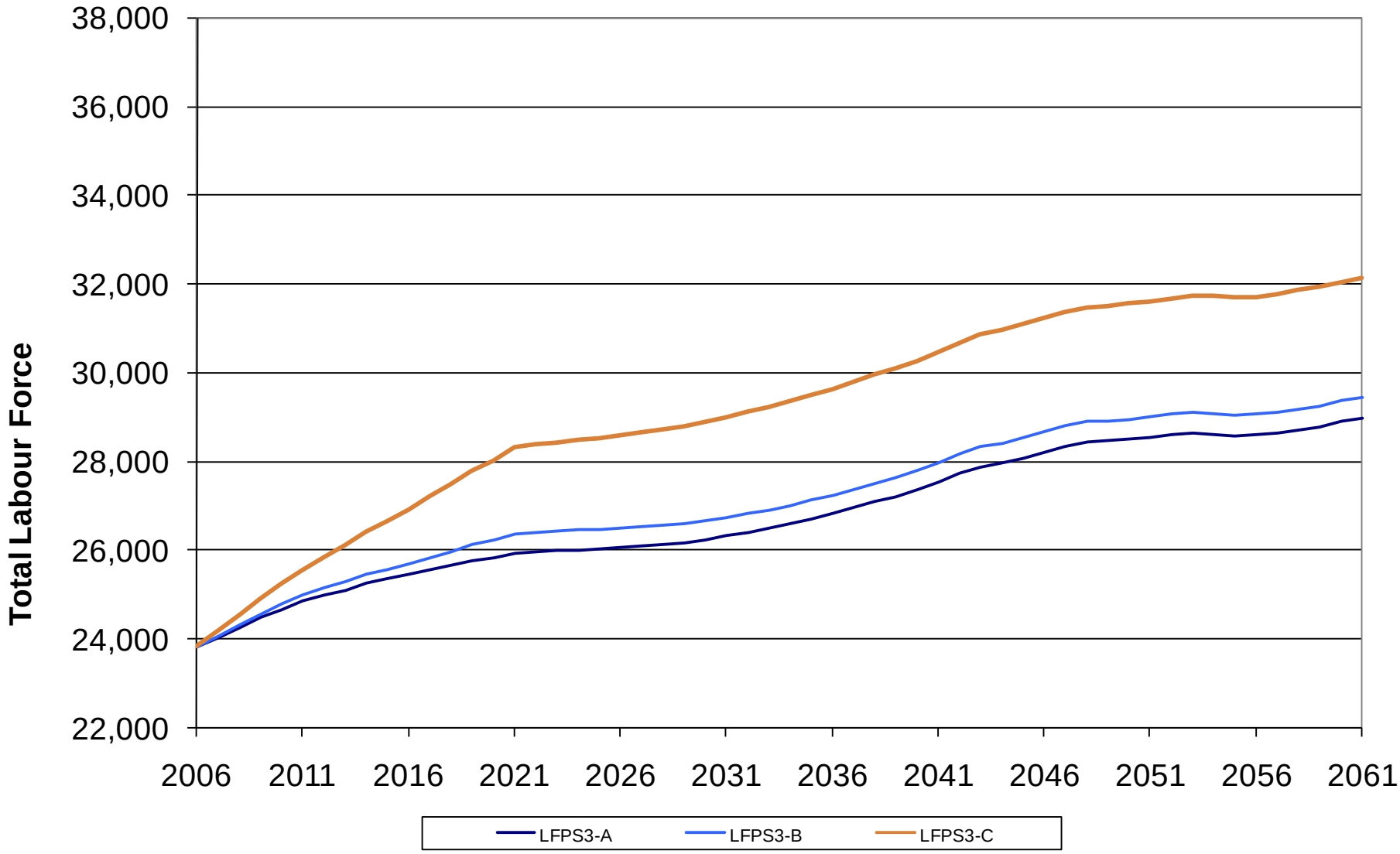


Figure A6A **Hamilton City projected labour force 2006-2061, scenarios with additional economic development**

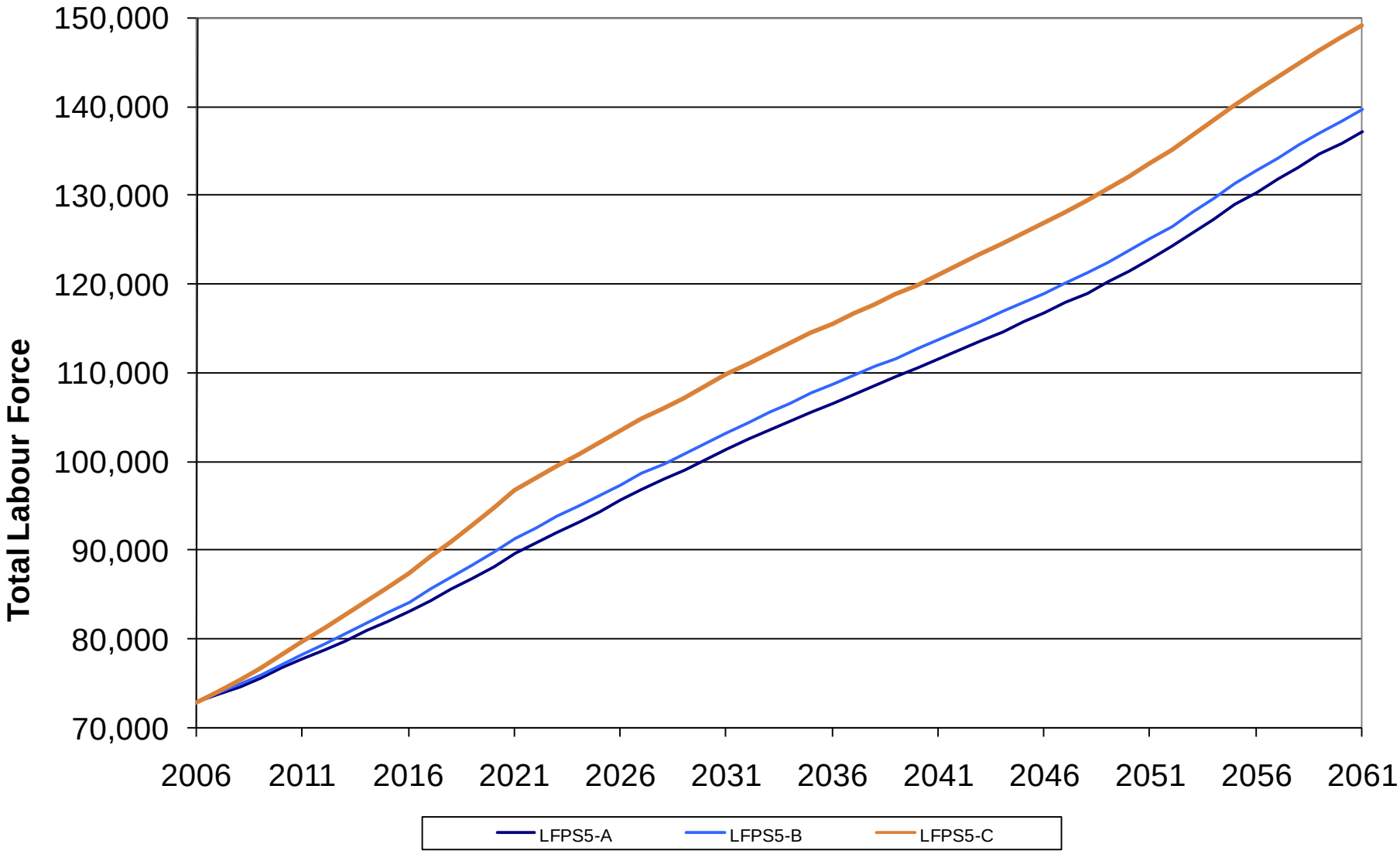


Figure A6B **Waikato District projected labour force 2006-2061, scenarios with additional economic development**

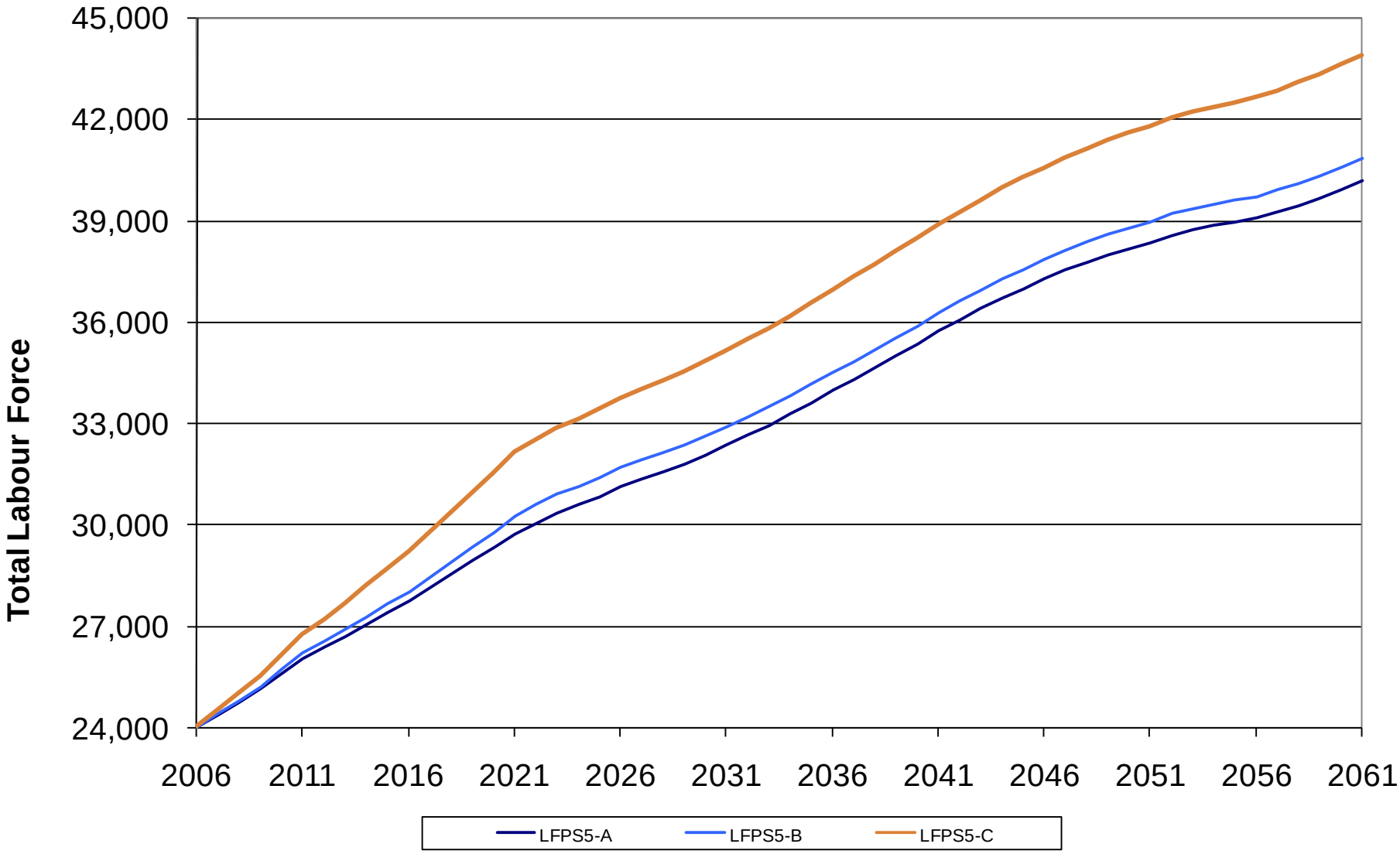


Figure A6C **Waipa District projected labour force 2006-2061, scenarios with additional economic development**

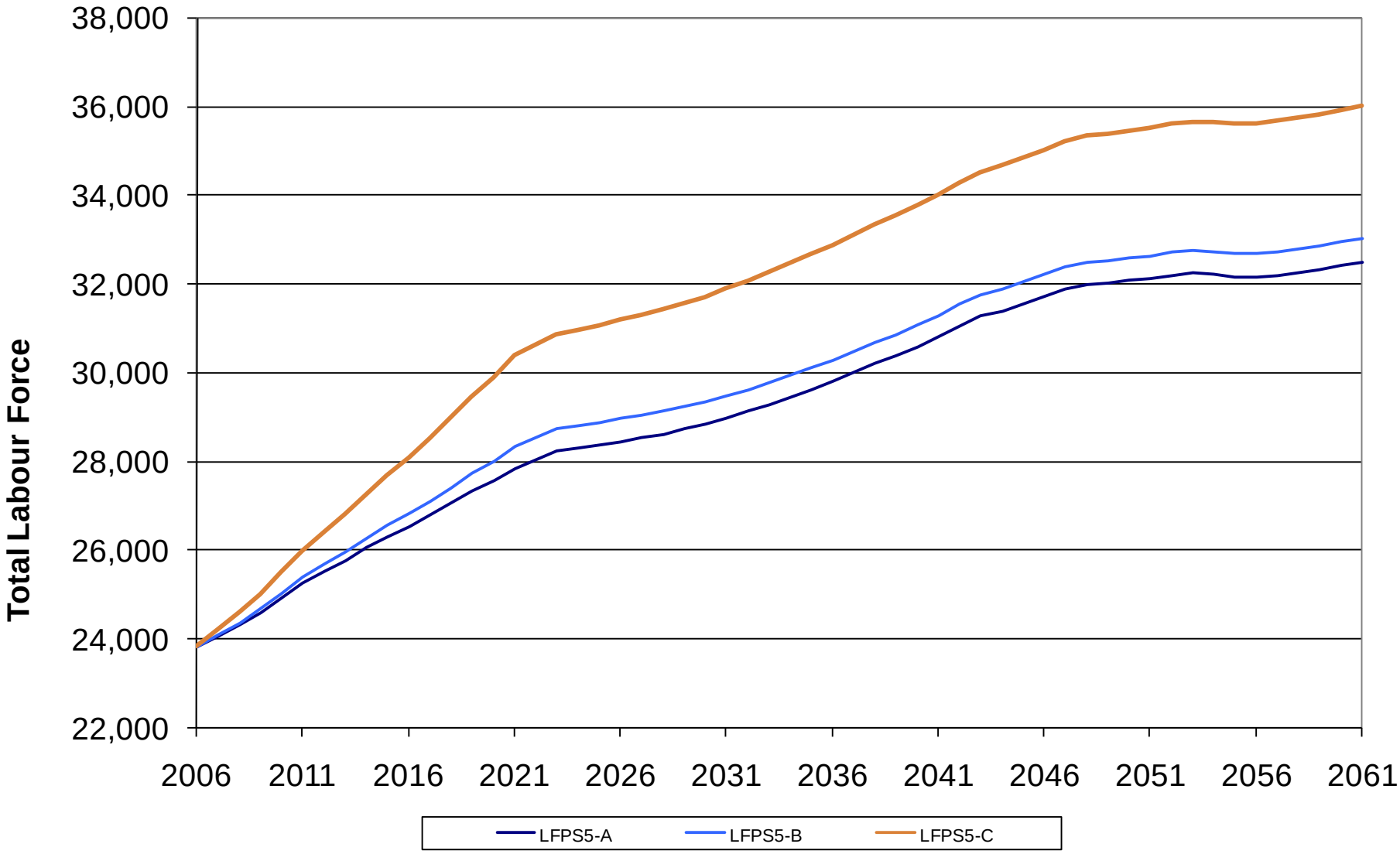
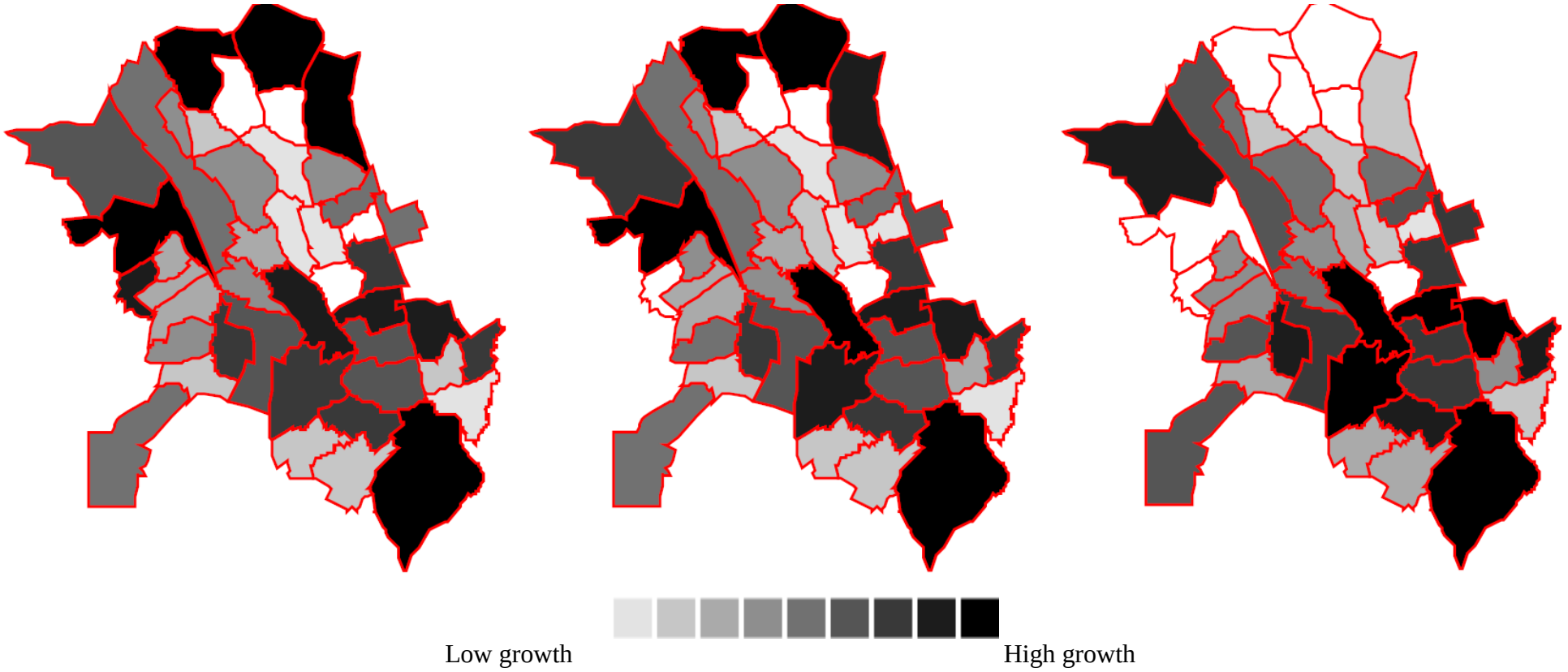


Figure A7A **Hamilton City population growth by Census Area Unit, 2006-2036**

Growth HCC 2006-2016	Growth HCC 2016-2026	Growth HCC 2026-2036



Low growth High growth

Figure A7B **Waikato District population growth by Census Area Unit, 2006-2036**

Growth Waikato 2006-2016	Growth Waikato 2016-2026	Growth Waikato 2026-2036

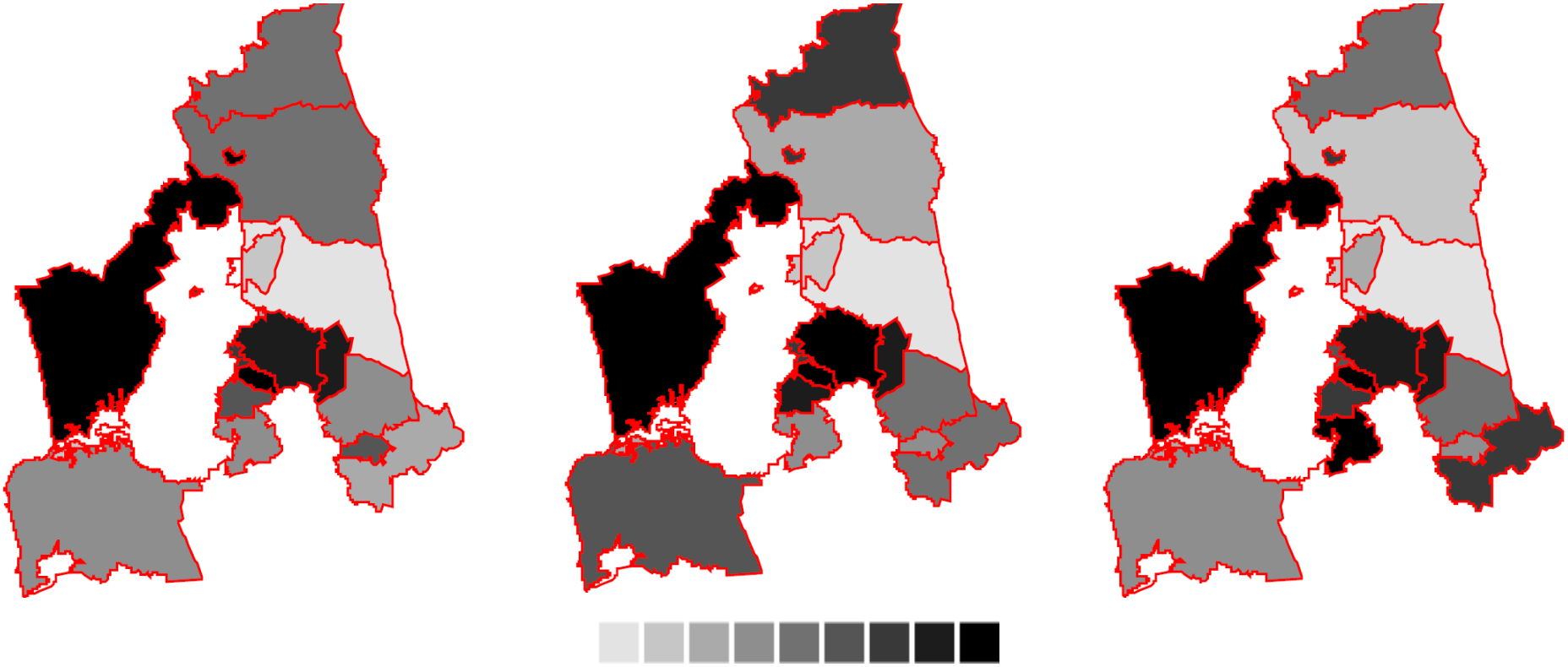
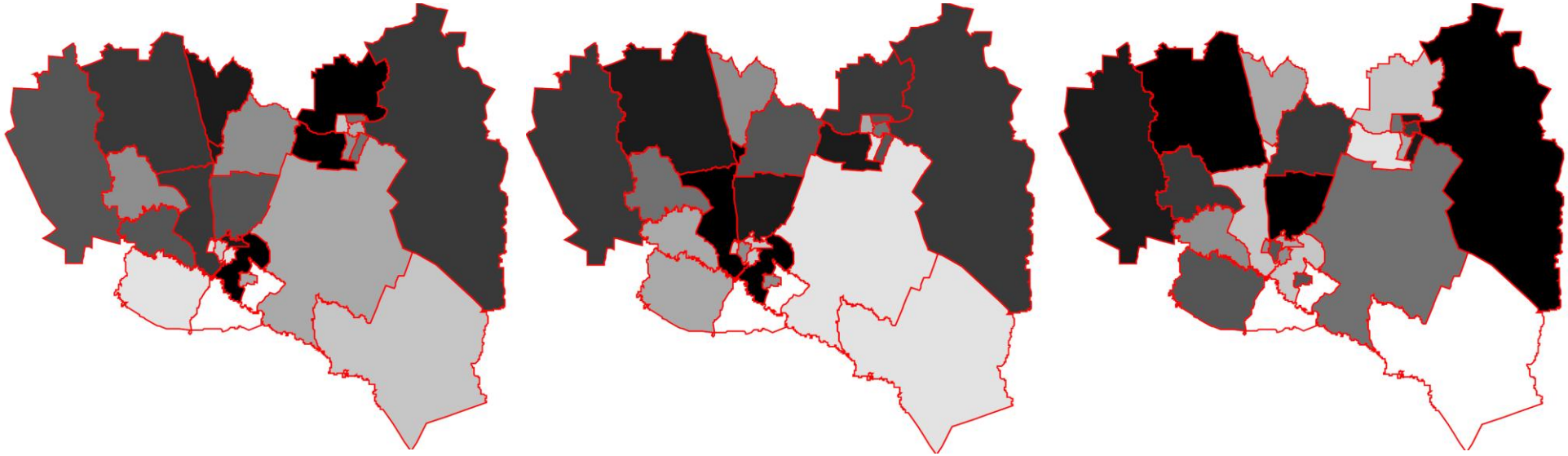


Figure A7C **Waipa District population growth by Census Area Unit, 2006-2036**

Growth Waipa 2006-2016	Growth Waipa 2016-2026	Growth Waipa 2026-2036



Low growth High growth