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# Population, family and household, and labour force projections for the Waikato region, 2013-2063

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WAIKATO
*Te Whare Wānanga o Waikato*

# Population, Family and Household, and Labour Force Projections for the Waikato Region, 2013-2063

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**Commissioned Research Report**

**Prepared for Waikato Regional Council**

July 2014

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## Executive Summary

This report provides a set of demographic projections of the Waikato Region, comprising all or parts of all of the region's eleven territorial authorities. Projections prepared for each territorial authority area include population, family and household, and labour force projections to a projection horizon of 2063.

The projections of total and age- and sex-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 sex-specific net migration rates, a significant departure from the method employed by Statistics New Zealand. Three population projection scenarios (high, medium and low) were generated, using different (but related) assumptions about future fertility, mortality (survivorship), and net migration. Family and household, and labour force, projections were then derived from the medium population projections, by applying assumptions about living arrangement type rates and labour force participation rates respectively.

In the 'medium' population projection scenario, the population of the Waikato Region as a whole is projected to increase to a peak of 505,405 in 2047 before declining to 494,298 in 2063. This overall pattern of growth followed by decline for the region as a whole is not followed uniformly by all territorial authorities. Only Waikato District and Hamilton City are projected to experience sustained population growth throughout the projection period, while four territorial authorities (Otorohanga District, South Waikato District, Waitomo District, and part-Rotorua District) are projected to decline throughout the projection period. The other five territorial authorities (Thames-Coromandel District, Hauraki District, Matamata-Piako District, Waipa District, and Taupo District) experience an initial increase in population before experiencing later population decline. Additionally, population ageing is a significant feature of the projections for all territorial authorities.

Overall, the number of households is projected to closely follow the trajectory of the population for each territorial authority. However, there is a substantial change in the distribution of households and families, with fewer couples with children and two-parent families, and more one-parent families and one-person households.

The labour force projections show a sustained increase in the labour force to 2033, after which the labour force begins to decline. However, given the significant population ageing that the region will experience the size of the future labour force depends crucially on the incentives (or disincentives) provided for older people to remain in the paid workforce.

## 1. Introduction

The Waikato Regional Council (WRC) approached the University of Waikato in early 2014 with a request to prepare population, household and labour force projections at the Territorial Authority (TA) level for the Waikato Region. This project was to align with two other projects undertaken by the National Institute of Demographic and Economic Analysis (NIDEA) at the University of Waikato for the Future Proof group of partner councils (Hamilton City Council, Waikato District Council, Waipa District Council) and for the SmartGrowth partner councils (Tauranga City Council and Western Bay of Plenty District Council). The aligned projects have been completed, and detailed demographic projections have been reported for Future Proof (Jackson *et al*., 2014a) and SmartGrowth (Jackson *et al*., 2014b). The second report also includes detailed projections for other TAs in the Bay of Plenty (Rotorua District, Whakatane District, Kawerau District, and Opotiki District).

The projections for the Waikato Region would use the Whole-of-Waikato population model which is both incorporated into, and can be run separately from, the Waikato Integrated Scenario Explorer (WISE) model (Rutledge *et al*., 2008; 2010). The WISE model is a systems-based integrated model that incorporates economic, demographic, and environmental components across the entire Waikato Region.

The goal of this suite of three projects was to adopt a common methodology and common set of demographic and economic assumptions to develop population projections across the entire Waikato and Bay of Plenty regions. Moreover, the suite of projects would build on the previous end-user informed projection methodology pioneered by Cameron *et al*. (2008). This method explicitly incorporates local information by experts and end-users with respect to the assumptions that drive the projections. The assumptions used are therefore different from those adopted for official Statistics New Zealand (SNZ) projections.

In sum, the project involved calculating population, household, and labour force projections for each TA in the Waikato Region, and for the region in total. The population projections include low, medium, and high variants based on different sets of demographic assumptions. These projections will feed into a follow-up report on projections at the Census Area Unit level (Cameron and Cochrane, 2014 forthcoming).

The report is structured as follows:

- Section 2 details the data and methodology used in preparing the projections, including the role of stakeholder feedback and consultation in calibrating the population projections;
- Section 3 presents and briefly discusses the TA level population projections, for all three (low, medium high) scenarios, and the medium family and household projections and medium labour force projections;
- Section 4 concludes.

## 2. Data and Methods

*2.1 Data*

The data used in the formulation of these projections was sourced from Statistics New Zealand (SNZ). This includes national and subnational data from the five-yearly Census of Population and Dwellings (1991, 1996, 2001, 2006, and 2013), national and subnational period life tables, national and subnational vital statistics data, the SNZ subnational population projections series, and the reported assumptions underlying those projections.

The boundaries for the projections are consistent with boundaries at the time of the 2013 Census of Population and Dwellings. In all cases, the projections presented in this report are only for those parts of each territorial authority that are contained within the Waikato Region. In particular, this affects Waitomo District, Taupo District, and Rotorua District, all of which have some Census Area Units that lie outside of the Waikato Region.

*2.2 The 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). This report follows the methodology developed by Cameron et al. (2008).

The general approach that was used in developing the population projections is as follows. 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 (see below), the population twelve months later is then calculated using 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 (the projection horizon), and separately for each sex. 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 sex-specific mortality rates by the numbers of people of each age and sex. Age- and sex-specific net migration is initially derived by multiplying age- and sex-specific net migration rates by the numbers of people of each age and sex. The procedure for deriving estimates of net migration is a key departure from the method employed by SNZ and involves calibration based on end-user information and additional local data, where available. The method for deriving these estimates is described in more detail below.

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.

### *2.3 Base Populations*

The base population used for the projections was the Estimated Resident Population (ERP) at 30 June 2013, obtained from SNZ. This ERP is only reported by SNZ in 5-year age groups, so the single-year age groups necessary for the population projection model were derived by interpolating the ERP for each territorial authority using the Census Usually Resident Population (CURP) counts by single-year-of-age from the 2013 Census of Population and Dwellings. Separate interpolations were undertaken for each sex.

One important caveat with regard to the June 2013 ERP must be noted. Although the June 2013 ERP was released by SNZ shortly after the 2013 Census data began to be released in December, the June 2013 ERP was based on the 2006 Census. To understand the rationale for this approach, it is important to understand that Usually Resident Population data are missing adjustments for census night undercount, and for people temporarily overseas on census night. Thus the ERP is the best available data for use as a base population.

Following stakeholder consultation on draft projections, Hamilton City Council noted that the 2013 ERP base population seemed unusually high relative to the 2013 CURP. The final projections were re-based to use a lower base population, based on scaling up the 2013 CURP by the same proportion as the proportional difference between the 2006 ERP and CURP. No similar adjustment for other TA base populations was deemed necessary, as the ratio of the 2013 ERP/CURP for the other TAs in the Waikato Region were proportionally similar to that of 2006.

*2.4 Fertility and Mortality Assumptions*

The fertility and mortality assumptions used in the projections were based on the subnational 'medium' fertility and mortality assumptions used by SNZ in their 2006-base subnational population projections. Having considered alternative time series for fertility and mortality, we believe that the assumptions used by SNZ with respect to fertility and mortality in their subnational population projections are adequate for our purposes (see Cameron *et al*., 2008). As SNZ uses past fertility and mortality (survivorship) rates based on the official deaths and births statistics to develop their projections, the SNZ assumptions represent an appropriate starting point.

Age-specific fertility rates by single-year-of-age (of the mother) were derived by first interpolating the five-year subnational age-specific fertility rate using the national-level age-specific fertility rate profile by single-year-of-age. The resulting profiles were then scaled to match the projected total fertility rate for each territorial authority. The total fertility rate for each territorial authority was assumed to follow the SNZ projections to 2031 then remain invariant after 2031. Sex at birth was assumed to follow a constant pattern similar to past trends, with 105.5 males for every 100 females at birth.

Age-specific survivorship rates by single-year-of-age and sex were derived by first interpolating the survivorship rates from the subnational abridged life tables for each territorial authority using the national life tables by single-year-of-age. The resulting profiles were then scaled to match the projected life expectancy at birth for each territorial authority. Life expectancy at birth for each territorial authority was assumed to follow the SNZ projections to 2031 then remain invariant after 2031.

*2.5 Migration Assumptions*

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 of net migration based on 'low', 'medium', and 'high' levels of net migration. The SNZ methodology also requires the specification of an overall 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 migration profile is then used along with the projected total net migration of each territorial authority in deriving the projections.

We adopt a substantially 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 sex- and age-specific net migration rates which are then applied to the actual profile of population in each territorial authority. These rates can then be applied in a similar way to fertility and survivorship rates in projecting the future population (see Cameron and Poot 2010; 2011).

The basic estimation of the net migration rates is as follows. First, we used SNZ data for the period 1991-2013 on Census night Usually Resident Population counts, reported sex-specific births, to estimate residual net inter-censal population change (excluding deaths). These ex-mortality residuals represent the inter-censal population change that is accounted for by mortality (deaths) and net migration, both of which can be estimated as population-level rates.

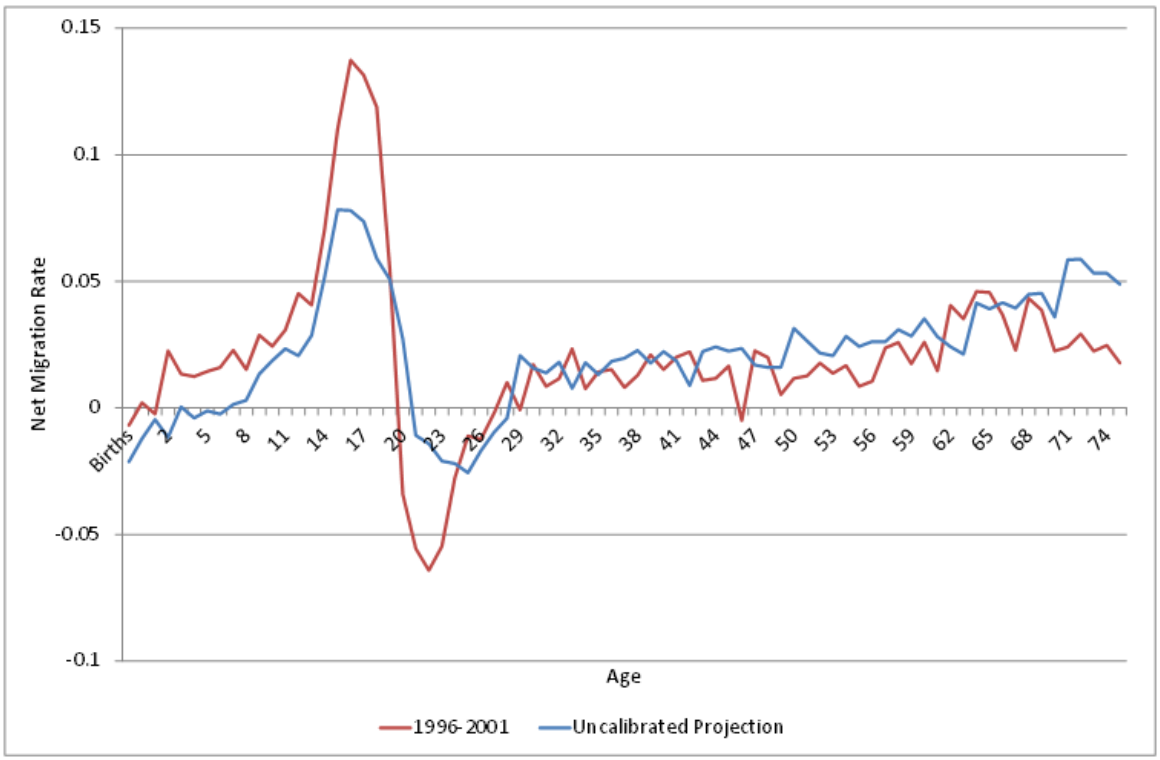
The ex-mortality residuals were converted to estimates of annual rates using log-log regression. This method explicitly recognises that each age-sex-specific population group will experience five (or seven) different age-sex-specific migration rates exactly once during each inter-censal period. To ensure that enough degrees of freedom were available for the estimation, and that the base populations were large enough for estimation, the population of each sex aged 75 and over was combined and only one rate was estimated for that group. Otherwise age-sex-specific rates were estimated for every sex at single-years-of-age.

The estimated rates represent the proportion of the population at the end of each year that had either died or migrated during the year. To convert these rates to net migration rates, age-specific mortality rates obtained from the national-level life tables were added to them, to remove the effect of mortality. As an illustration, Figure 1 presents the net migration rate profile for Hamilton City females for the 1996-2001 inter-censal period, and the corresponding uncalibrated projection of the net migration profile.

This procedure resulted in a series of four inter-censal (but annualised) net migration rates for each sex- and age-specific population group, which were projected forward to 2061, using

simple exponential smoothing.[1] Net migration is then projected by multiplying the age-sex-specific net migration rate by the age-sex-specific population at the beginning of each year. Under this method, projected net migration reflects a combination of the assumed net migration rates which vary over time, and the age-sex structure of the TA-level populations which also vary over time.

***Figure 1: Net migration profiles for Hamilton City females, 1996-2001 and uncalibrated projection***




*2.6 Validation and Calibration*

The final stage of developing population projections is validation and calibration. Validation involves running the projections model to ensure that it is behaving as expected, with base populations, fertility, survivorship and net migration assumptions being correctly applied. This step is usually straightforward.

[1] For the exponential smoothing, α was set equal to 0.1.

Calibration is necessary in models using net migration rates because of the possibility that rates cause the projected population to diverge substantially from past trends. This is particularly an issue for these projections, where the net migration projection is based on only four inter-censal periods. Calibration involves modifying the net migration profile to more closely match either past population data trends, or expected future trends. It is at this stage that end-user input is useful, in helping to determine the appropriate calibration of the model.

The process of calibration was undertaken using a combination of expert judgement and stakeholder engagement. An interim set of projections was first developed using a weighted average of the four population growth rates between each inter-censal period between 1991 and 2013 as an initial calibration guide. The weighted average that was applied was based on the mean weighted average applied in population projections developed for Smart Growth for the Bay of Plenty region (Jackson *et al*., 2014b), thereby ensuring alignment between the projections for the Bay of Plenty and Waikato regions. Then, a survey was undertaken among key stakeholders at several end-user workshops, where stakeholders were asked for each TLA:

> *Considering what you know about past trends and what you expect about future trends in each of the following territorial authority areas in the Waikato Region, which period would you expect future population growth (between now and 2031) in that area to be most like?*

The options presented were each of the four previous inter-censal periods (i.e. 1991-1996, 1996-2001, 2001-2006, and 2006-2013). In total, fifteen responses were received to the survey, some during an end-user workshop, and some via email before the workshop. Not all respondents provided information for all of the TLAs. The results of the survey are summarised in Table 1 below. The final calibration was based on a Bayesian inference approach, where the 'prior' calibration was the expert judgement from the interim projections. This prior calibration was then refined by incorporating the views of the stakeholders, who overwhelmingly felt the calibration should be more heavily weighted to the more recent periods. In combination with expert judgement this step obtained the posterior calibration (see bottom of Table 1), which results in a fairly similar calibration to that obtained for SmartGrowth (Jackson *et al*., 2014).

The result of the calibration is that the population projections were weighted to more closely reflect the experience of each TA in the most recent inter-Censal period, from 2006-2013.

The greatest weighting towards the most recent experience was for Waikato District, and the least weighting towards that period was for Thames-Coromandel District, Hauraki District, and Matamata-Piako District.

***Table 1: Bayesian Calibration Results***

| ***Prior Distribution (Original Calibration)*** | | | | | |
|---|---|---|---|---|---|
| | TCDC | Hauraki | Waikato | MPDC | Hamilton |
| 1991-1996 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 |
| 1996-2001 | 0.0339 | 0.0339 | 0.0339 | 0.0339 | 0.0339 |
| 2001-2006 | 0.0948 | 0.0948 | 0.0948 | 0.0948 | 0.0948 |
| 2006-2013 | 0.8352 | 0.8352 | 0.8352 | 0.8352 | 0.8352 |
| | | | | | |
| | Waipa | Otorohanga | SWDC | Waitomo | Taupo |
| 1991-1996 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 |
| 1996-2001 | 0.0339 | 0.0339 | 0.0339 | 0.0339 | 0.0339 |
| 2001-2006 | 0.0948 | 0.0948 | 0.0948 | 0.0948 | 0.0948 |
| 2006-2013 | 0.8352 | 0.8352 | 0.8352 | 0.8352 | 0.8352 |
| | | | | | |
| ***Survey Results*** | | | | | |
| | TCDC | Hauraki | Waikato | MPDC | Hamilton |
| 1991-1996 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1996-2001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2001-2006 | 0.500 | 0.500 | 0.000 | 0.500 | 0.143 |
| 2006-2013 | 0.500 | 0.500 | 1.000 | 0.500 | 0.857 |
| | | | | | |
| | Waipa | Otorohanga | SWDC | Waitomo | Taupo |
| 1991-1996 | 0.000 | 0.250 | 0.250 | 0.250 | 0.000 |
| 1996-2001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.167 |
| 2001-2006 | 0.167 | 0.250 | 0.250 | 0.250 | 0.333 |
| 2006-2013 | 0.833 | 0.500 | 0.500 | 0.500 | 0.500 |
| | | | | | |
| ***Posterior Distribution (Final Calibration)*** | | | | | |
| | TCDC | Hauraki | Waikato | MPDC | Hamilton |
| 1991-1996 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 |
| 1996-2001 | 0.0170 | 0.0170 | 0.0170 | 0.0170 | 0.0170 |
| 2001-2006 | 0.0984 | 0.0984 | 0.0474 | 0.0984 | 0.0567 |
| 2006-2013 | 0.8666 | 0.8666 | 0.9176 | 0.8666 | 0.9083 |
| | | | | | |
| | Waipa | Otorohanga | SWDC | Waitomo | Taupo |
| 1991-1996 | 0.0180 | 0.0280 | 0.0280 | 0.0280 | 0.0180 |
| 1996-2001 | 0.0170 | 0.0170 | 0.0170 | 0.0170 | 0.0232 |
| 2001-2006 | 0.0585 | 0.0737 | 0.0737 | 0.0737 | 0.0822 |
| 2006-2013 | 0.9065 | 0.8813 | 0.8813 | 0.8813 | 0.8766 |

*2.7 Low and High Population Projection Assumptions*

In addition to the baseline (medium) projections outlined above, we present low and high population projections which are based on alternative sets of assumptions. Following Cameron and Poot (2010; 2011), each age- and gender-specific rate (fertility, mortality/survivorship, and net migration) was multiplied by a shift factor. The percentage change in each of the rates is given by *k*, whereby *k* is based on a distribution for fertility, mortality/survivorship and migration. The entire deterministic path of fertility, mortality and net migration rates over the 2006-2061 projection period was shifted by the corresponding factors. In this way, if all multipliers were set to zero this would result in the baseline projection and the multiplier is varied around zero to increase or decrease each rate.

Following Cameron and Poot (2010; 2011), distributional assumptions for each multiplier were based on observed data from 1950 to 2009. The fertility multiplier was assumed normally distributed with a mean zero and standard deviation of 1.25 (giving a range of about +/- 5% of the mean fertility rates). The survivorship multiplier was assumed normally distributed with mean zero and a standard deviation of 0.5 (i.e. giving a range of +/- 2% of the mean mortality rates). The net migration multiplier was assumed normally distributed with mean zero and a standard deviation of 12.5 (i.e. giving a range of +/- 50% of the mean net migration rates. In all cases, the assumed variability is similar or somewhat less than that observed over the periods since 1950 and since 1991.

When applied stochastically, these shift factors can be used to generate stochastic population projections. However, in this case the shift factors were used to generate only low and high population projections. The low projections assumed 1.5 standard deviations lower fertility, mortality and net migration, while the high projections assumed 1.5 standard deviations higher fertility, mortality and net migration. These represent plausible alternative scenarios to the baseline (medium) population projection scenario.

*2.8 Family and Household Projection Assumptions*

The Family and Household projections were derived from the baseline (medium) population projections by employing additional assumptions regarding the rates of people living in different living arrangements (e.g. couples without children, couples with children, etc.), the average number of families per household, and the average number of people per multi-

person household (see Cameron *et al.*, 2007). The numbers of households are then derived from the number of people in each living arrangement type. The projection assumptions were informed by data from the 2001, 2006 and 2013 Censuses, and based on the projections used by Statistics New Zealand in their 2006-base family and household projections.

### *2.9 Labour Force Projection Assumptions*

The Labour Force projections were obtained by applying age- and sex-specific assumptions about future trends in labour force participation rates (LFPR) to the baseline (medium) population projections (see Cameron *et al*., 2007). Following Bryant *et al*. (2004) and Jackson *et al*. (2014a; 2014b), we assumed three long-run trends in labour force participation would continue into the future, specifically we assumed that: (1) age- and sex-specific participation rates increase in a linear fashion to 2033 before stabilising and remaining constant thereafter; (2) the labour force participation of prime age women increases over a twenty year period (2013-2033) so that half of the age-specific gender gap in labour force participation in 2013 is closed by 2033 (i.e. if the difference in labour force participation rates between the genders in a particular age group was six percentage points in 2013, we assume that the gap would have closed to three percentage points by 2033); and (3) current increases in labour force participation rates amongst older workers continue out to 2033 before stabilising.

In the case of the latter assumption, we essentially assume that over the twenty year period 2013-2033 the labour force participation rate profile of those older than the age group in which peak labour force participation occurs ages by five years, e.g. in 2033 the labour force participation rates of 50-54 year olds will be equal to the participation rates of 45-49 year olds in 2013. In instances where this would result in a fall in the age specific participation rate the higher (previous) rate is used. Similarly, in applying the second assumption (on changes in the labour force participation of women), if the female labour force participation rate was higher than the male labour force participation rate in any age group the higher rate was used. This ensured that the labour force participation rate of women did not fall in any age group.

The effect of considering these three assumptions separately can be seen in the FutureProof projections (Jackson *et al*., 2014). In this report we present only our preferred scenario, which corresponds to Scenario 4 in that report.

## 3. Population, Family and Household, and Labour Force Projections

This section presents the population, family and household, and labour force projections for each TA in the Waikato Region. For population, three projection scenarios are presented: (1) a high population projection; (2) a medium population projection; and (3) a low population projection. These three scenarios should be viewed as three possible futures, based on known assumptions about future fertility, mortality and net migration, and should not be interpreted as forecasts of future population. However, as noted earlier the projection assumptions are based on a continuation of previous population trends that can reasonably be expected to continue into the future. The family and household projections and labour force projections are each presented for one scenario only based on the medium population projection, as noted above.

All projections are presented in diagrammatic form[2] – tables showing the population projections numerically are included in Appendix I, and also available using the Waikato Integrated Scenario Explorer Software (Rutledge *et al*., 2008; 2010). Tables showing the family and household projections numerically are included in Appendix II, and tables showing the labour force projections numerically are included in Appendix III.

### *3.1 Population, Household and Labour Force Projections for Thames-Coromandel District*

Figure 2 presents the 2013-base population projections for Thames-Coromandel District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

[2] In the figures for the family and household projections, the difference between the sum of the four categories presented (couples with children, two-parent families, one-parent families, and one-person households) and the total number of households is made up of the number of 'other multi-person households', as well as accounting for the number of households which contain more than one family.

The June 2013 population estimate (base population) for Thames-Coromandel District is 27,030. Under the medium population projection scenario, the population increases to a peak of 28,499 in 2031 before declining to 20,253 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Thames-Coromandel District population, with annualised population growth over the period 2013-2031 of 0.29% per year, similar to the 0.38% annualised growth experienced over the period 1996-2013. Under the high scenario, the population increases to a peak of 35,359 in 2043 before declining to 31,787 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 12,901 in 2063. In comparison, the SNZ 2006-base medium projection tracks a little below the medium projection presented here.

***Figure 2: Population projections for Thames-Coromandel District, 2013-2063***

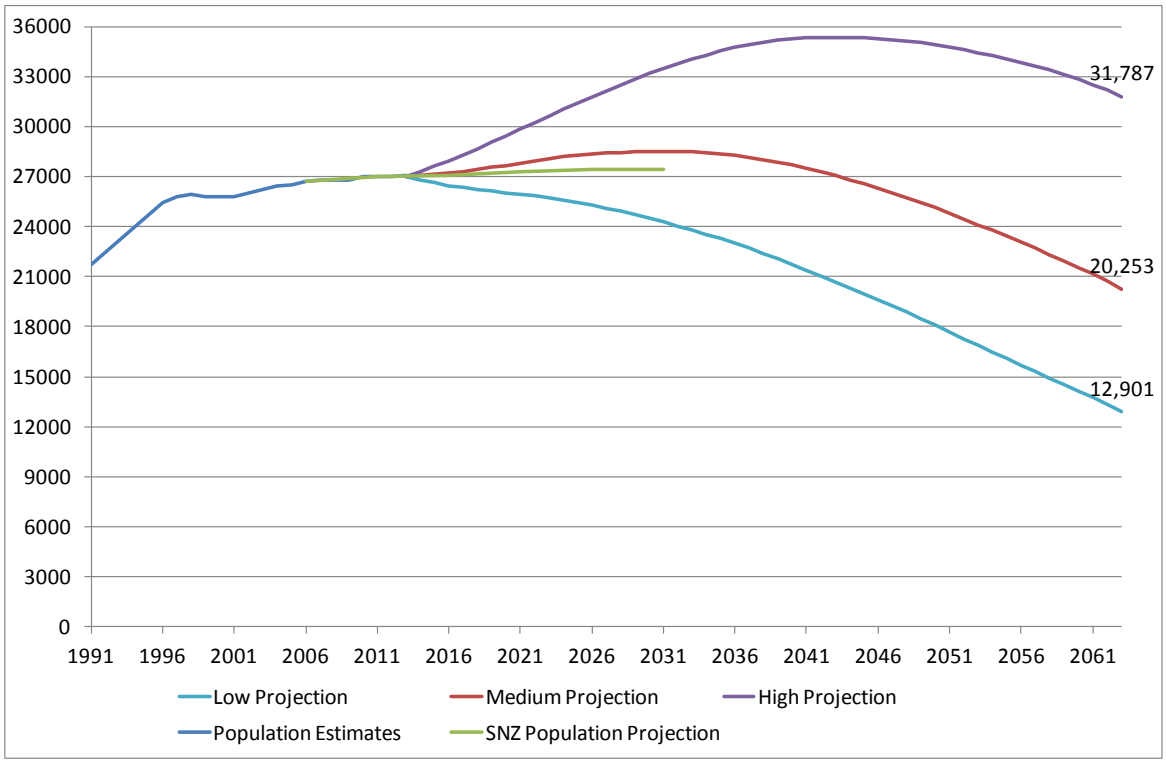
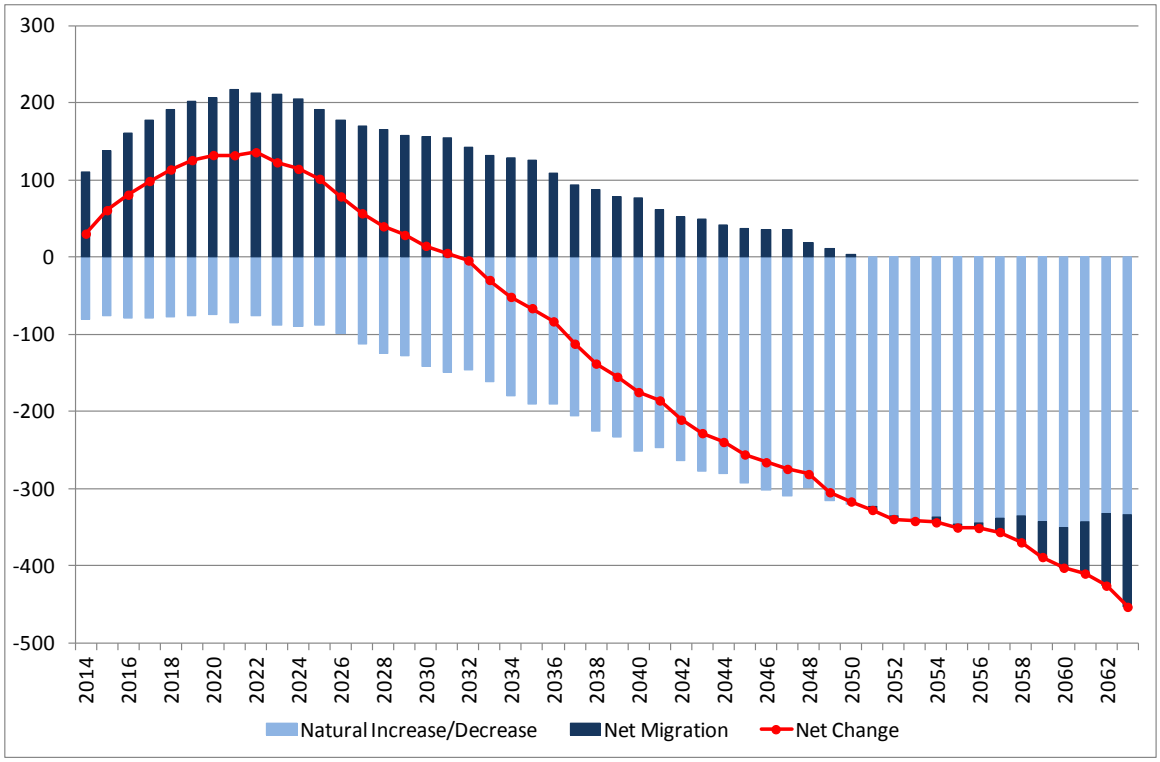



Figure 3 disaggregates the components of population change for Thames-Coromandel District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive until 2031. This is made up of net inward migration (more in-migration than out-migration), but offset by

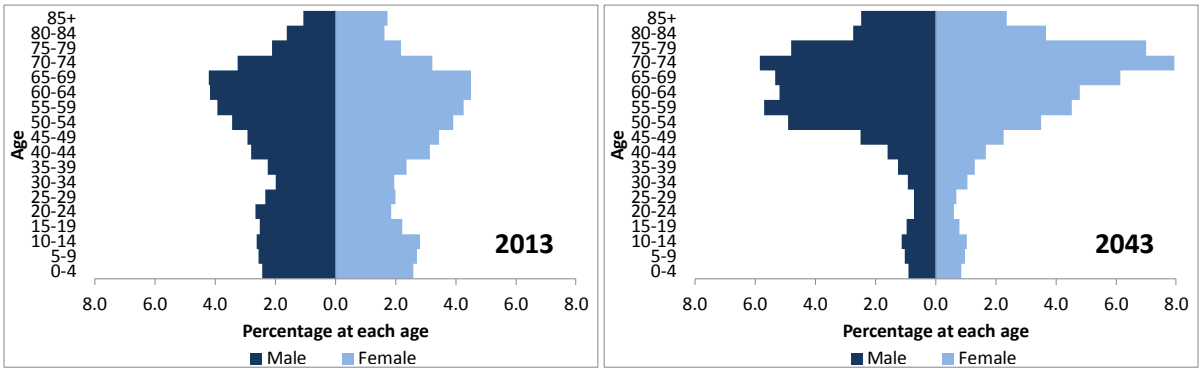
natural decrease (more deaths than births). Net migration peaks in 2021 then starts to decline, and eventually becomes negative from 2051. Natural decrease remains throughout the projection and increases in absolute terms from a net loss of nearly 80 people per year over the period 2013-2018 to a net loss of around 340 people per year over the period 2058-2063.

***Figure 3: Projected components of population change for Thames-Coromandel District, medium projection, 2014-2063***




The age structure of Thames-Coromandel District is one of the oldest in the region, as shown in Figure 4. In 2013, 25.6 percent of the population are aged 65 years and over, and this is projected to increase to 48.3 percent by 2043. This old age profile leads to the natural decrease shown in the previous figure, and the rapid ageing of the population contributes to both the increasing natural decrease and the decrease in net migration.

***Figure 4: Age-sex structure for Thames-Coromandel District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Thames-Coromandel District is shown in Figure 5. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2036. The number of one- and two-parent families decline consistently over the projection period, while the number of couples without children increases to a peak of 6,817 in 2041 before declining. The number of one-person households also peaks in 2041 before declining.

The medium labour force projection for Thames-Coromandel District is shown in Figure 6. The estimated labour force in June 2013 is 15,763. Annualised labour force growth over the period 2013-2031 is 0.92% per year, greater than the population growth rate due to increases in the labour force participation rates among older people. However, the rapid ageing of the population in Thames-Coromandel District eventually leads to a decline in the size of the labour force, which peaks at 16,069 in 2033 before declining to 9,431 in 2063.

*Figure 5: Family and household projections for Thames-Coromandel District, 2013-2063*

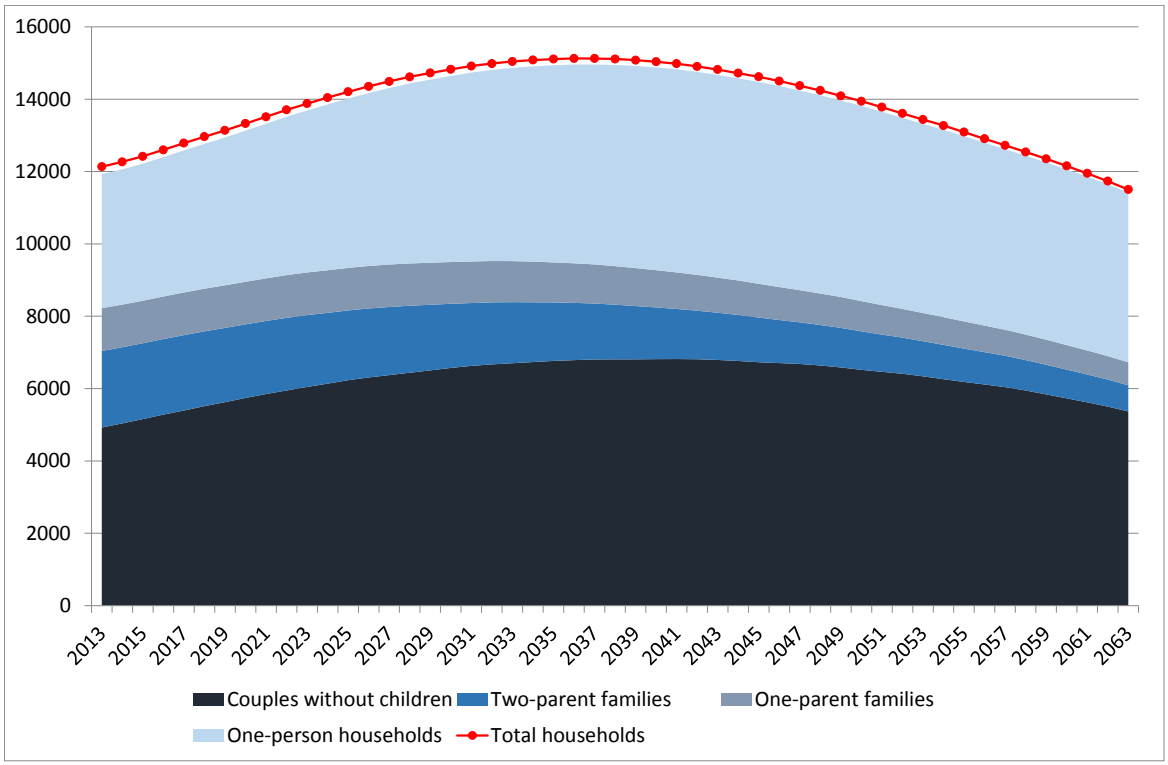
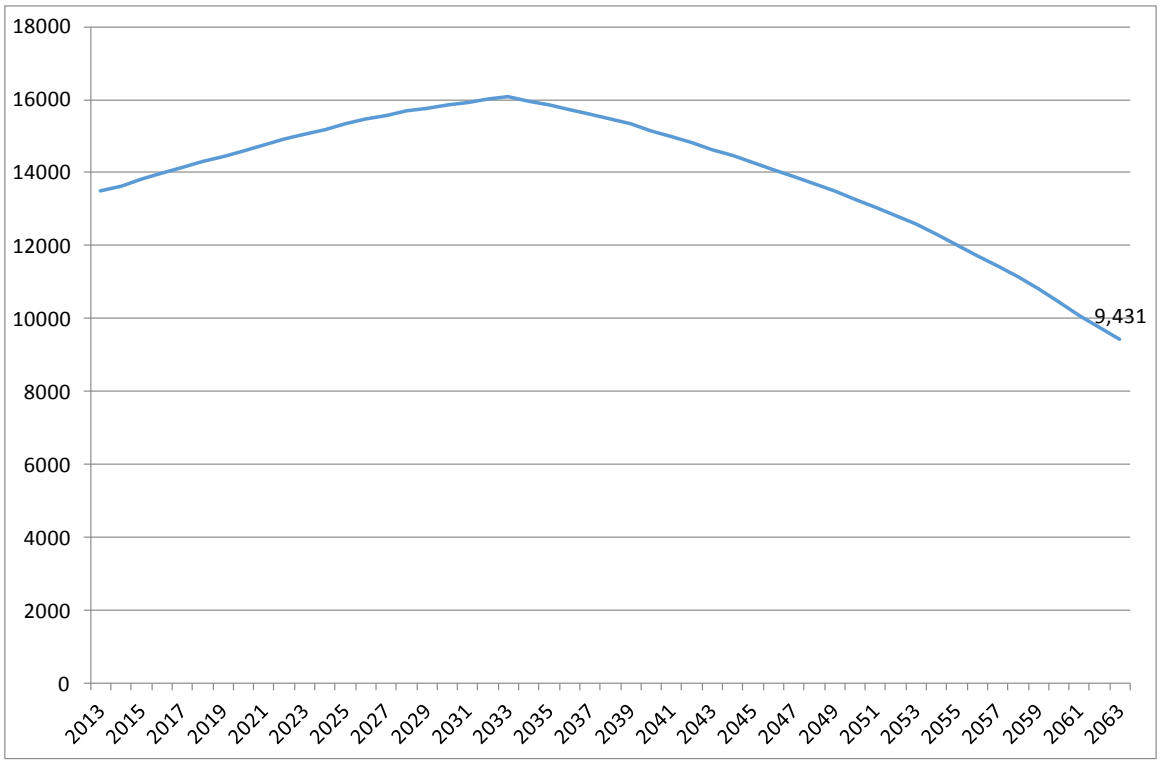



*Figure 6: Labour force projection for Thames-Coromandel District, 2013-2063*



*3.2 Population, Household and Labour Force Projections for Hauraki District*

Figure 7 presents the 2013-base population projections for Hauraki District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Hauraki District is 18,730. Under the medium population projection scenario, the population increases to a peak of 19,512 in 2032 before declining to 15,350 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Hauraki District population, with annualised population growth over the period 2013-2031 of 0.22% per year, similar to the 0.36% annualised growth experienced over the period 2001-2013. Under the high scenario, the population increases to a peak of 24,185 in 2048 before declining to 23,698 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 9,973 in 2063. In comparison, the SNZ 2006-base medium projection is initially slightly higher than the medium projection presented here, but falls away slightly after 2021.

***Figure 7: Population projections for Hauraki District, 2013-2063***

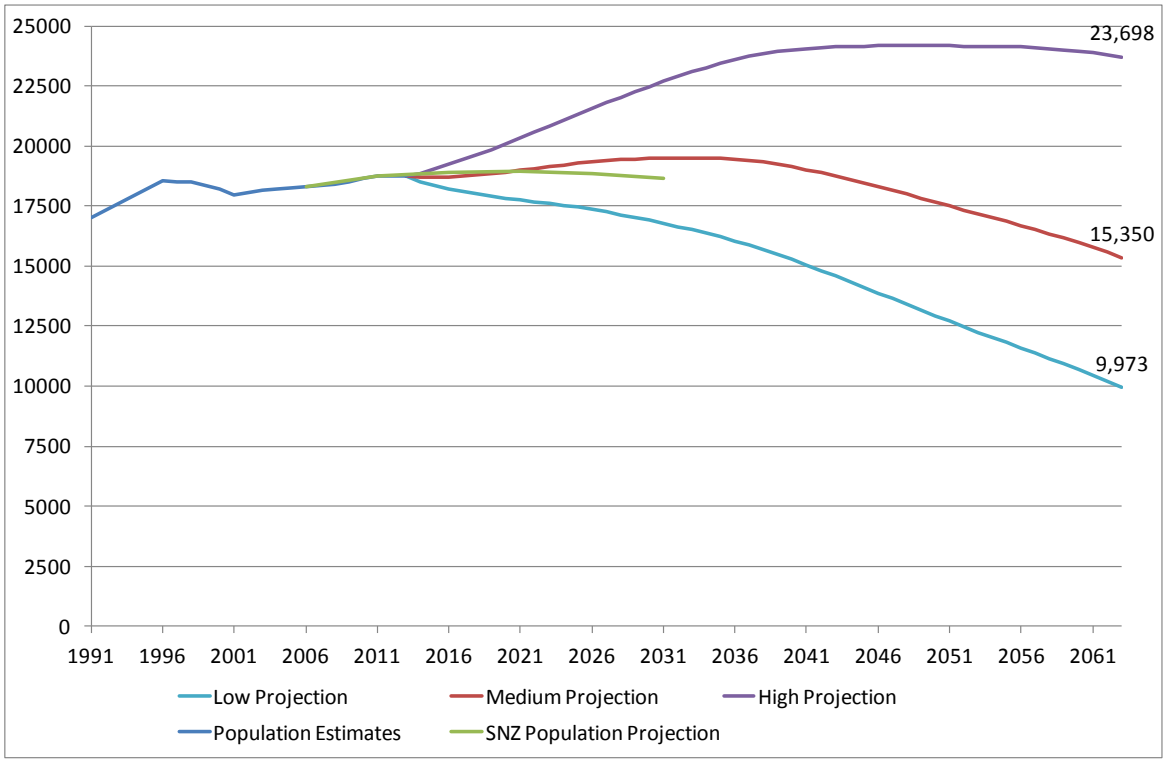
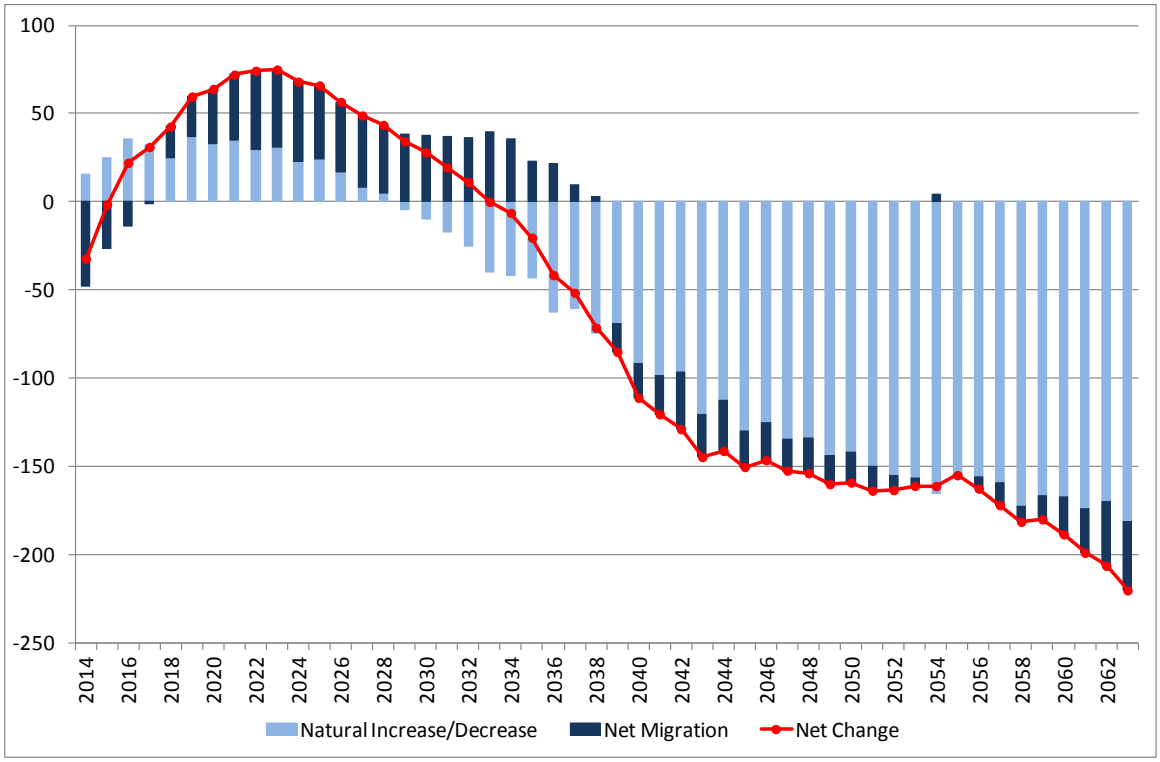


Figure 8 disaggregates the components of population change for Hauraki District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is mostly positive (except for the first two years of the projection) until 2032. This is made up of net inward migration (more in-migration than out-migration), and natural increase (more births than deaths). Net migration peaks in 2024 then starts to decline, and eventually becomes negative from 2039, apart from a small blip of positive net migration in 2054. Natural increase turns to natural decrease (more deaths than births) in 2029, after which natural decrease increases in absolute size throughout the projection period, becoming a net loss of around 170 people per year by 2058-2063.

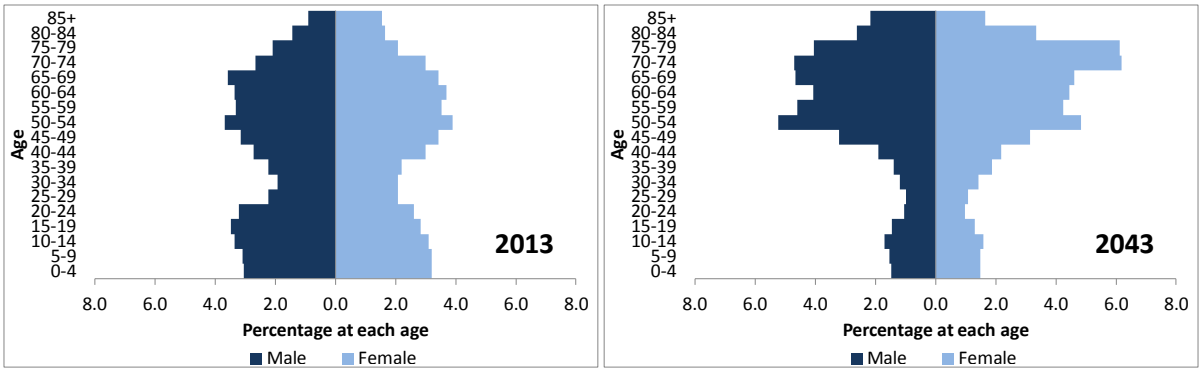
***Figure 8: Projected components of population change for Hauraki District, medium projection, 2014-2063***




The age structure of Hauraki District is also one of the oldest in the region, as shown in Figure 9. In 2013, 22.4 percent of the population are aged 65 years and over, and this is projected to increase to 40.1 percent by 2043. This old age profile leads to the eventual

natural decrease shown in the previous figure, and the rapid ageing of the population contributes to both the increasing natural decrease and the decrease in net migration.

***Figure 9: Age-sex structure for Hauraki District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Hauraki District is shown in Figure 10. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2039. The number of two-parent families declines consistently over the projection period, while the number of one-parent families increases from 497 in 2013 to 523 in 2029 before declining. The number of couples without children increases to a peak of 4,067 in 2048 before declining, while the number of one-person households peaks in 2041 before declining.

The medium labour force projection for Hauraki District is shown in Figure 11. The estimated labour force in June 2013 is 9,027. Annualised labour force growth over the period 2013-2031 is 1.03% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. However, the rapid ageing of the population in Hauraki District eventually leads to a decline in the size of the labour force, which peaks at 10,975 in 2033 before declining to 7,741 in 2063.

*Figure 10: Family and household projections for Hauraki District, 2013-2063*

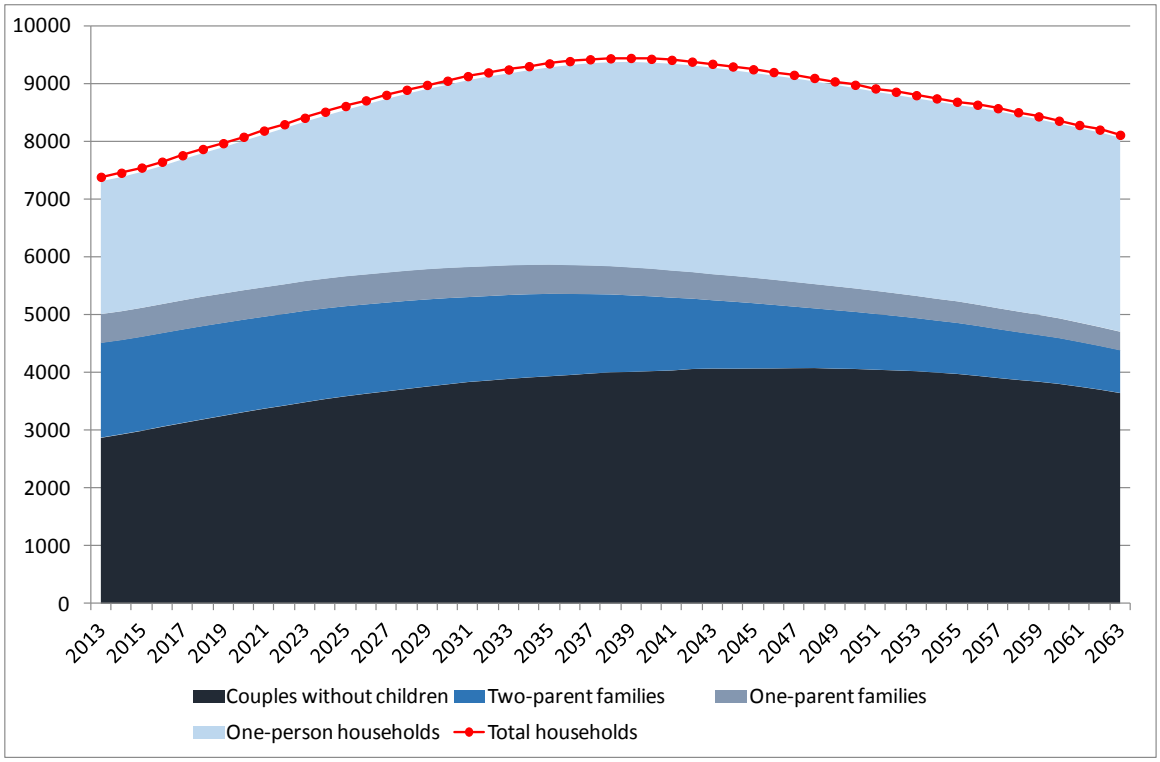
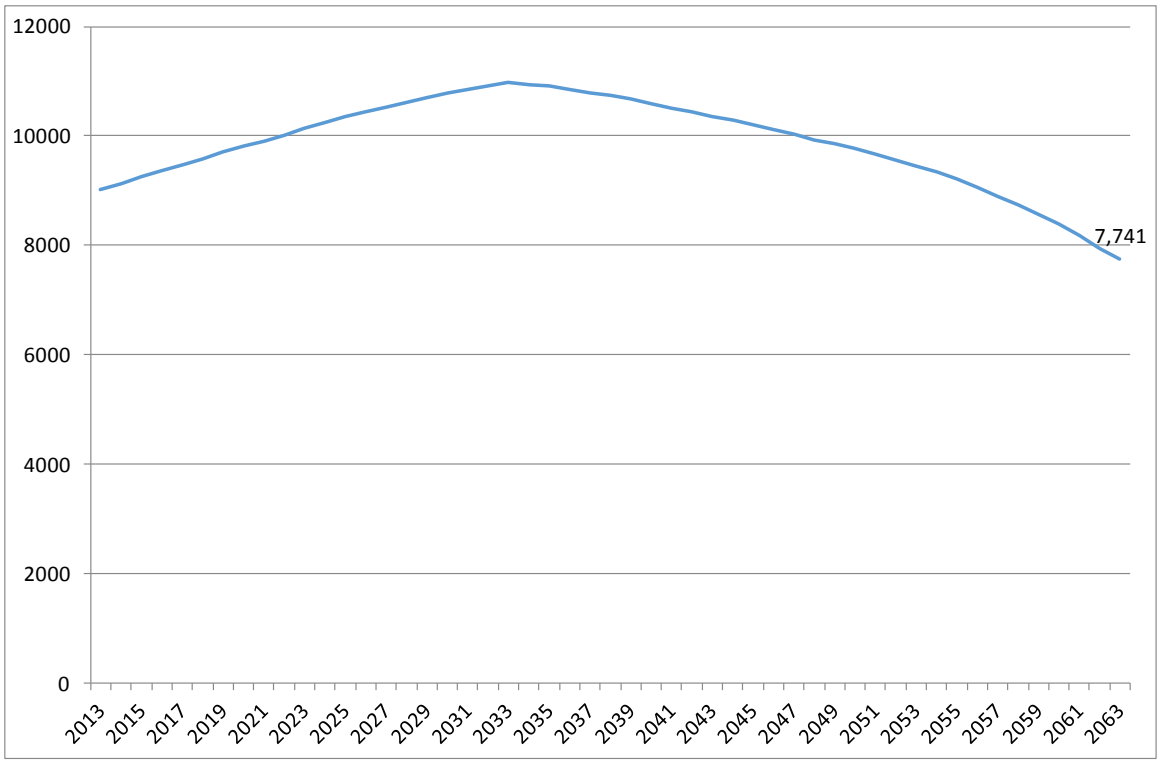



*Figure 11: Labour force projection for Hauraki District, 2013-2063*



*3.3 Population, Household and Labour Force Projections for Waikato District*

Figure 12 presents the 2013-base population projections for Waikato District to 2063, along with historical population estimates from Statistics New Zealand back to 1991 (the 1991 estimate is based on a proportion of the Waikato and Franklin Districts). The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Waikato District is 64,910. Under the medium population projection scenario, the population increases over the entire projection period, with a projected population in 2063 of 94,862. The medium projection appears to reasonably closely follow the recent trend in the Waikato District population, with annualised population growth over the period 2013-2031 of 1.25% per year, similar to the 1.31% annualised growth experienced over the period 1996-2013. Under the high scenario, the population increases over the entire period to a population of 136,237 in 2063. Under the low scenario, the population increases to a peak of 72,773 in 2037 before declining to 66,168 in 2063. In comparison, the SNZ 2006-base medium projection tracks a little below the medium projection presented here.

Figure 13 disaggregates the components of population change for Waikato District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive over the entire projection period. This is made up of substantial net inward migration (more in-migration than out-migration), and natural increase (more births than deaths). Net migration peaks in 2022 then starts to decline, but remains positive throughout the projection period. Natural increase peaks in 2025 then also starts to decline, falling much more substantially than net migration, eventually falling to a gain of only around 50 people per year by 2058-2063.

*Figure 12: Population projections for Waikato District, 2013-2063*

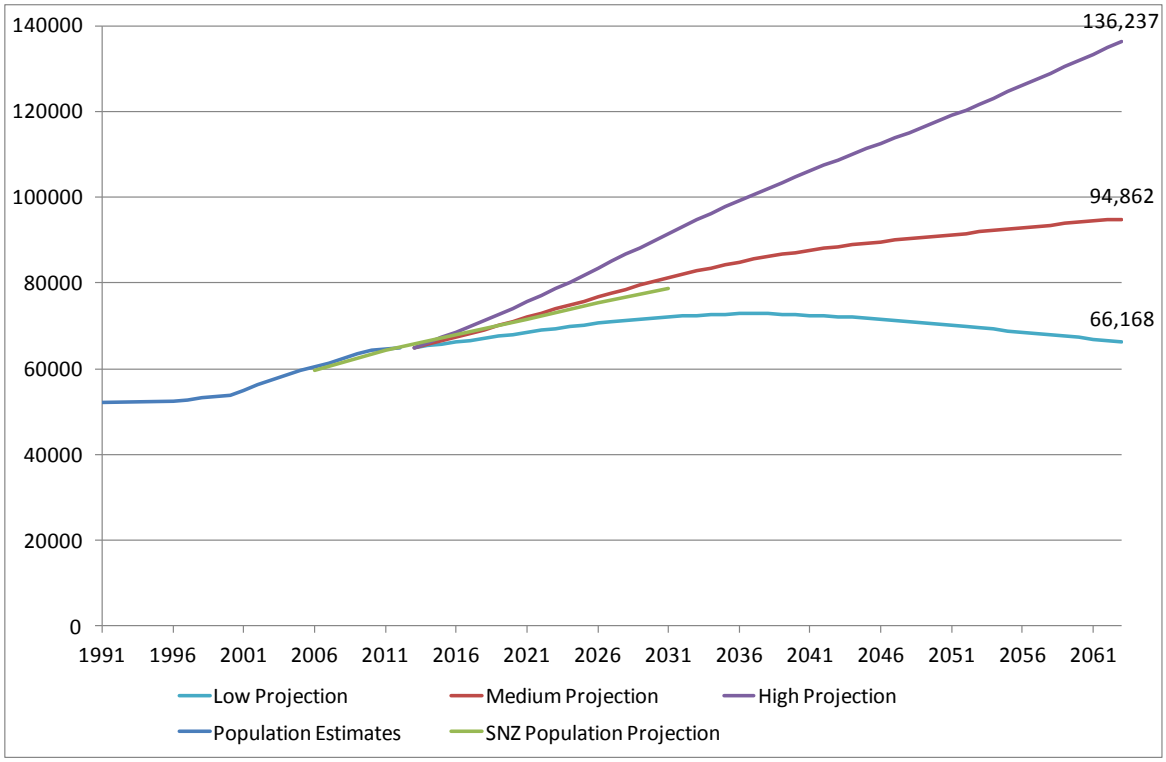
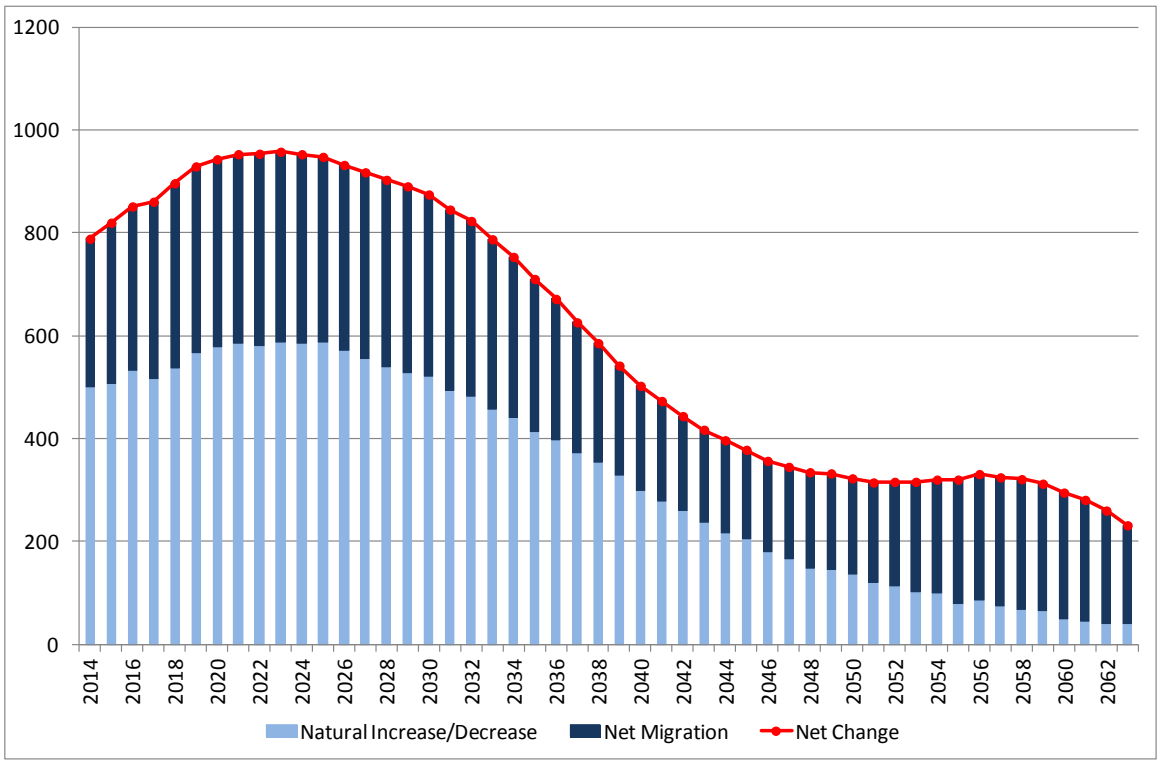
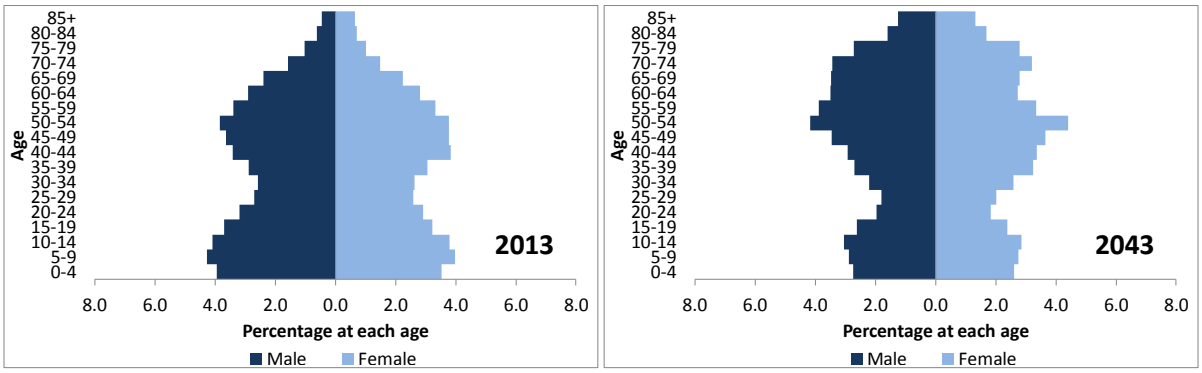



*Figure 13: Projected components of population change for Waikato District, medium projection, 2014-2063*



The age structure of Waikato District is much younger than either Thames-Coromandel or Hauraki Districts, as shown in Figure 14. In 2013, 12.2 percent of the population are aged 65 years and over, and this is projected to increase to 24.3 percent by 2043. This substantial degree of ageing leads to the slowing of natural increase shown in the previous figure, and to a lesser extent the slowing of net migration.

***Figure 14: Age-sex structure for Waikato District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Waikato District is shown in Figure 15. In terms of total households, the projection closely follows the medium population projection, with the total number of households increasing over the entire projection period. The number of two-parent families increases to 8,695 by 2044, then remains reasonably constant thereafter, while the numbers of one-parent families, couples without children, and one-person households all increase consistently over the entire projection period.

The medium labour force projection for Waikato District is shown in Figure 16. The estimated labour force in June 2013 is 34,618. Annualised labour force growth over the period 2013-2031 is 1.82% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. Unlike Thames-Coromandel or Hauraki Districts though, Waikato District does not experience any decline in the labour force over the projection period, and the labour force in 2063 is projected to be 56,126.

*Figure 15: Family and household projections for Waikato District, 2013-2063*

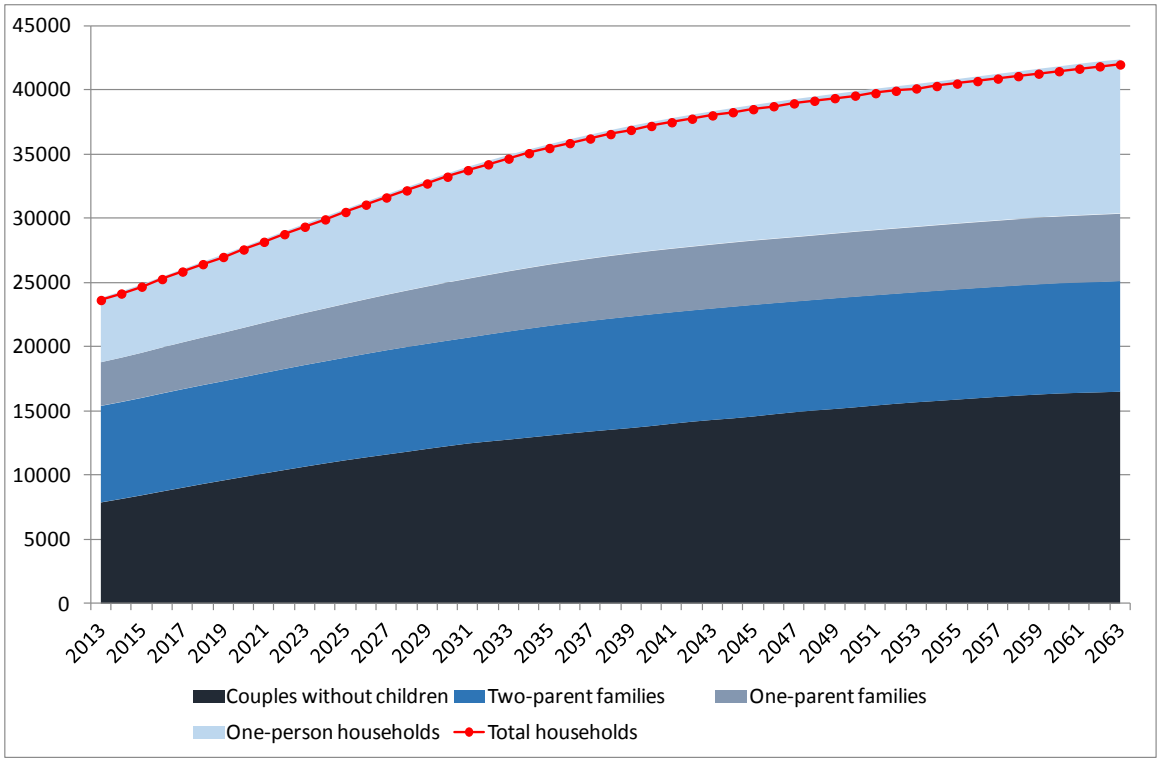
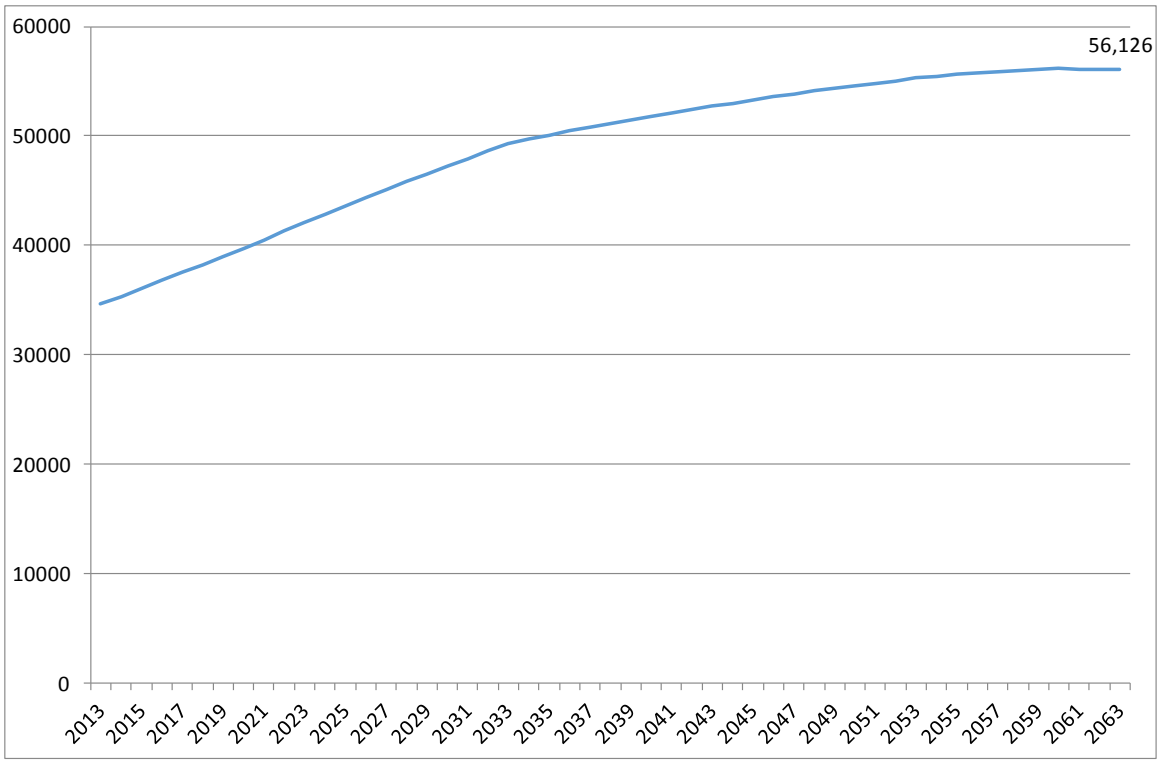



*Figure 16: Labour force projection for Waikato District, 2013-2063*



*3.4 Population, Household and Labour Force Projections for Matamata-Piako District*

Figure 17 presents the 2013-base population projections for Matamata-Piako District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Matamata-Piako District is 32,210. Under the medium population projection scenario, the population increases to a peak of 34,588 in 2037 before declining to 32,502 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Matamata-Piako District population, with annualised population growth over the period 2013-2031 of 0.34% per year, similar to the 0.51% annualised growth experienced over the period 2001-2013. Under the high scenario, the population increases over the entire projection period, with a projected population in 2063 of 42,650. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 24,808 in 2063. In comparison, the SNZ 2006-base medium projection tracks a little below the medium projection presented here.

***Figure 17: Population projections for Matamata-Piako District, 2013-2063***

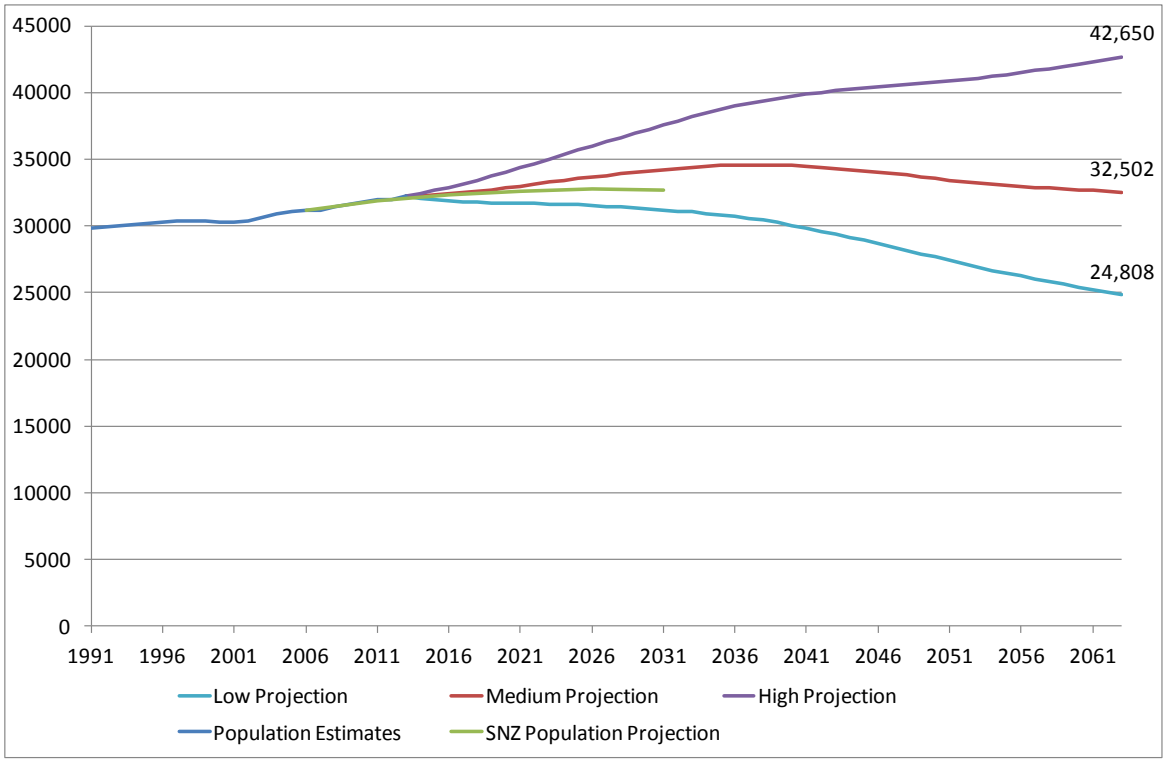
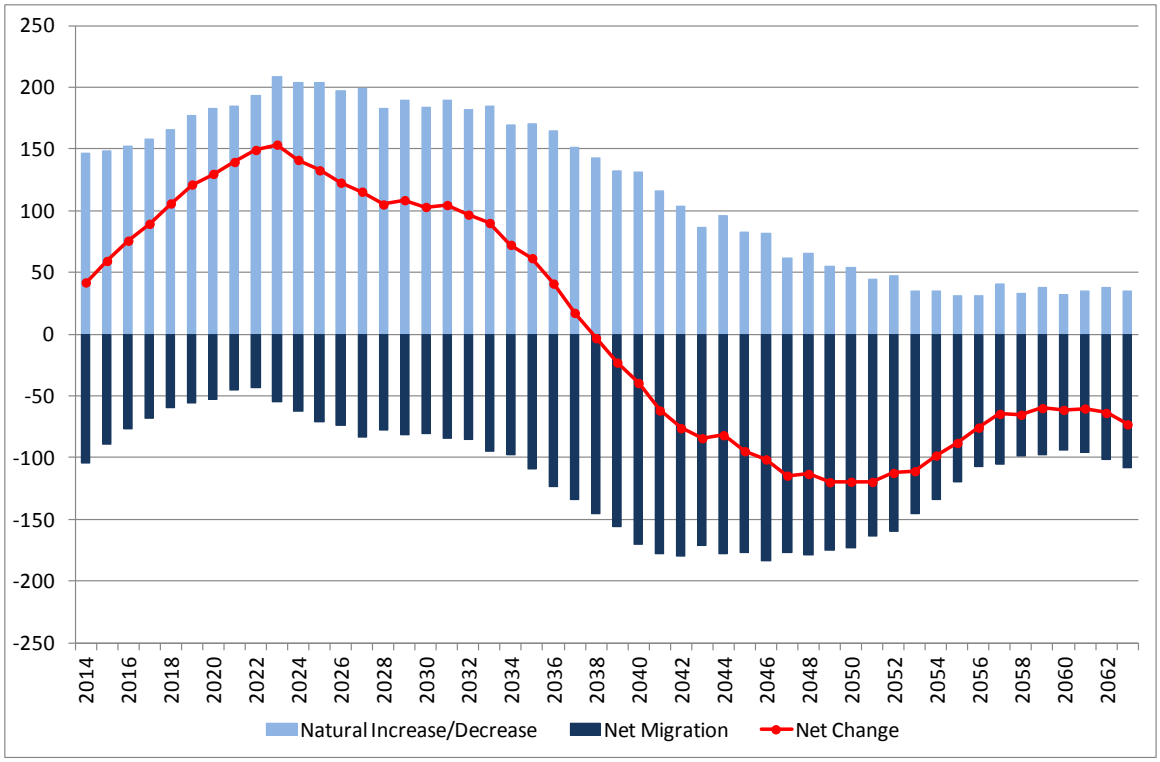


Figure 18 disaggregates the components of population change for Matamata-Piako District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive until 2037. This is made up of net outward migration (more out-migration than in-migration), but offset by natural increase (more births than deaths). Net migration peaks at a loss of 183 people in 2046 then starts to decline, but remains negative throughout the projection period. Natural increase remains throughout the projection period but decreases in absolute terms from a net gain of around 155 people per year over the period 2013-2018 to a net gain of around 35 people per year over the period 2058-2063.

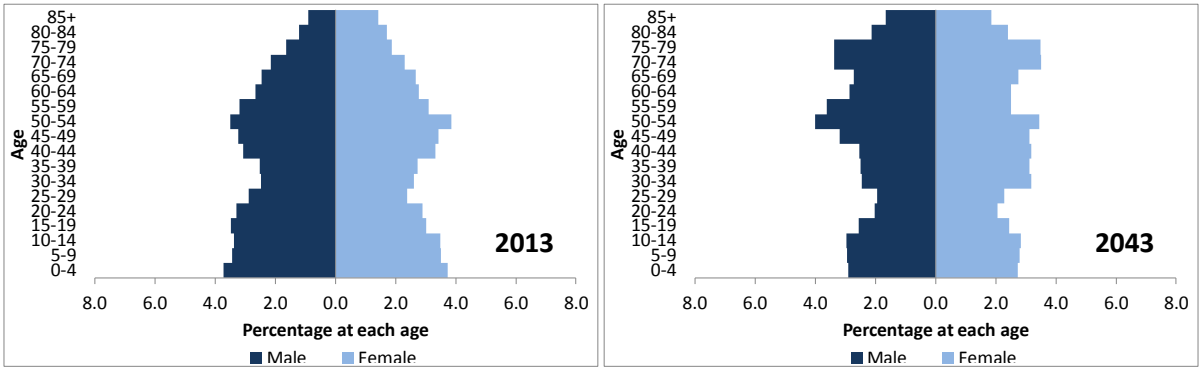
***Figure 18: Projected components of population change for Matamata-Piako District, medium projection, 2014-2063***




The age structure of Matamata-Piako District is moderately old compared with other TAs in the Waikato and the district experiences only moderate population ageing, as shown in Figure 19. In 2013, 18.3 percent of the population are aged 65 years and over, and this is projected to increase to 27.3 percent by 2043. This lesser degree of ageing keeps natural increase positive throughout the projections as shown in the previous figure. As the population ages though,

net out-migration starts to reduce as older people tend not to migrate out of the district in as large a proportion.

***Figure 19: Age-sex structure for Matamata-Piako District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Matamata-Piako District is shown in Figure 20. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2040. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 1,510 in 2013 to 1,725 in 2037 before declining, and the number of one-person households peaks in 2043 before declining. Finally, the number of couples without children increases to a peak of 5,973 in 2062, then declines slightly in 2063.

The medium labour force projection for Matamata-Piako District is shown in Figure 21. The estimated labour force in June 2013 is 16,984. Annualised labour force growth over the period 2013-2031 is 0.94% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. The labour force increases sharply to a peak of 20,304 in 2033, before declining to 19,006 in 2063.

*Figure 20: Family and household projections for Matamata-Piako District, 2013-2063*

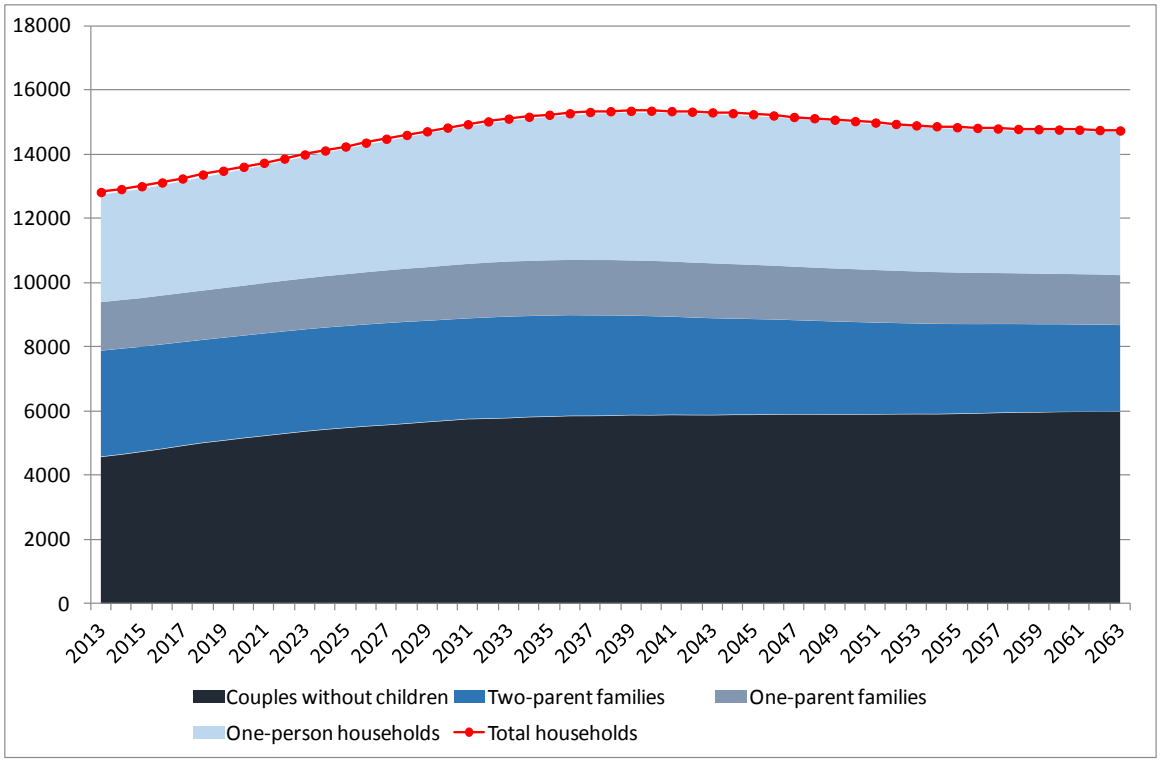
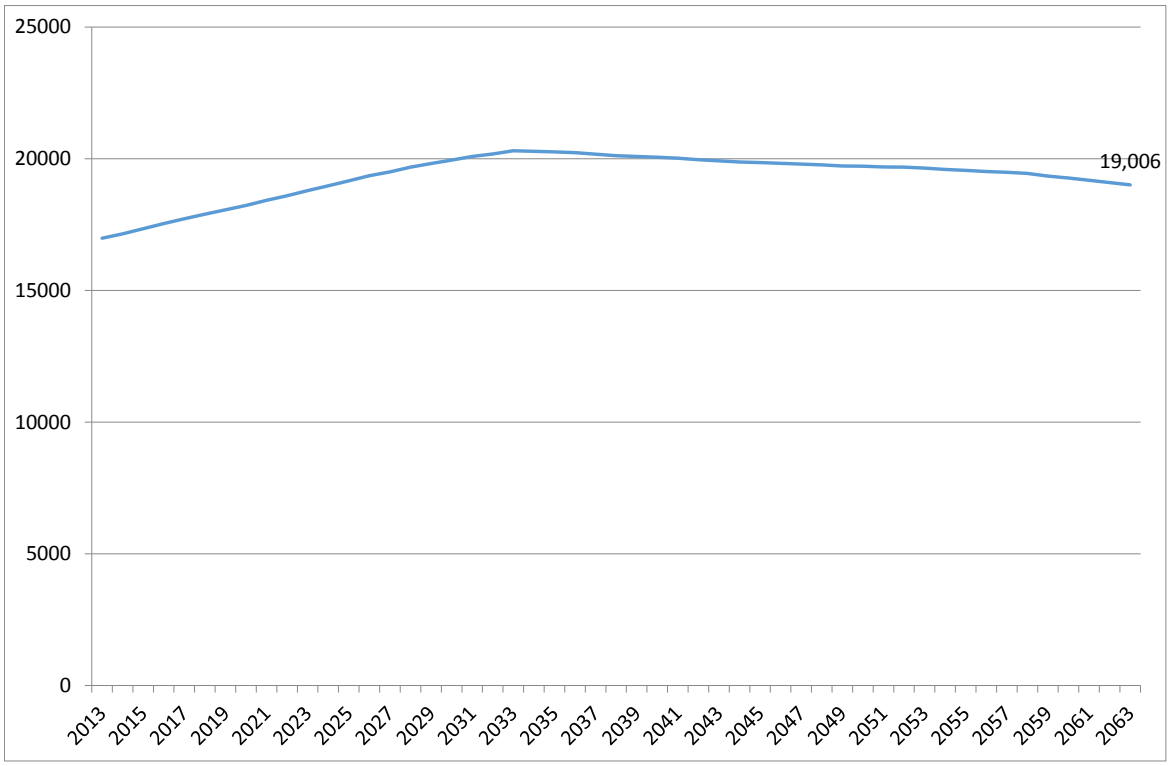



*Figure 21: Labour force projection for Matamata-Piako District, 2013-2063*



*3.5 Population, Household and Labour Force Projections for Hamilton City*

Figure 22 presents the 2013-base population projections for Hamilton City to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Hamilton City is 147,290. Under the medium population projection scenario, the population increases over the entire projection period, with a projected population in 2063 of 221,390. The medium projection appears to reasonably closely follow the recent trend in the Hamilton City population, with annualised population growth over the period 2013-2031 of 1.33% per year, which is slightly lower than the 1.54% annualised growth experienced over the period 1996-2013. Under the high scenario, the population increases over the entire period to a population of 294,270 in 2063. Under the low scenario, the population increases to a peak of 175,644 in 2046 before declining to 166,778 in 2063. In comparison, the SNZ 2006-base medium projection tracks almost exactly the medium projection presented here.

***Figure 22: Population projections for Hamilton City, 2013-2063***

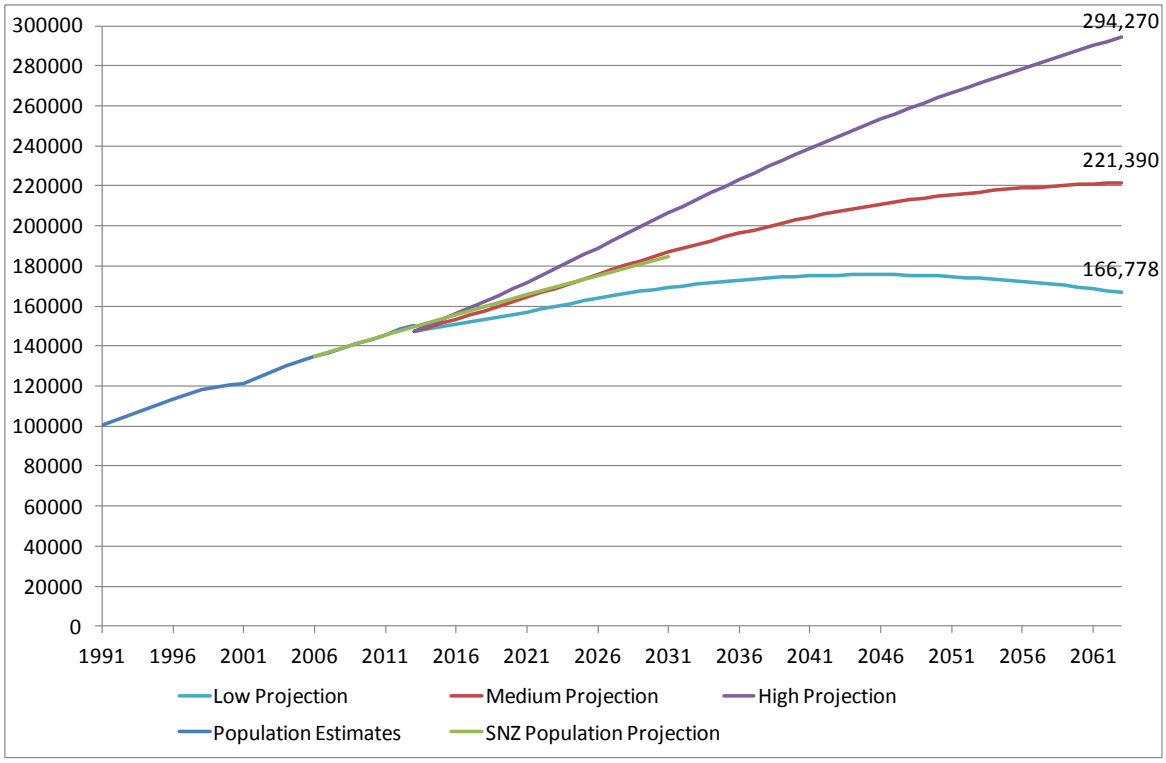
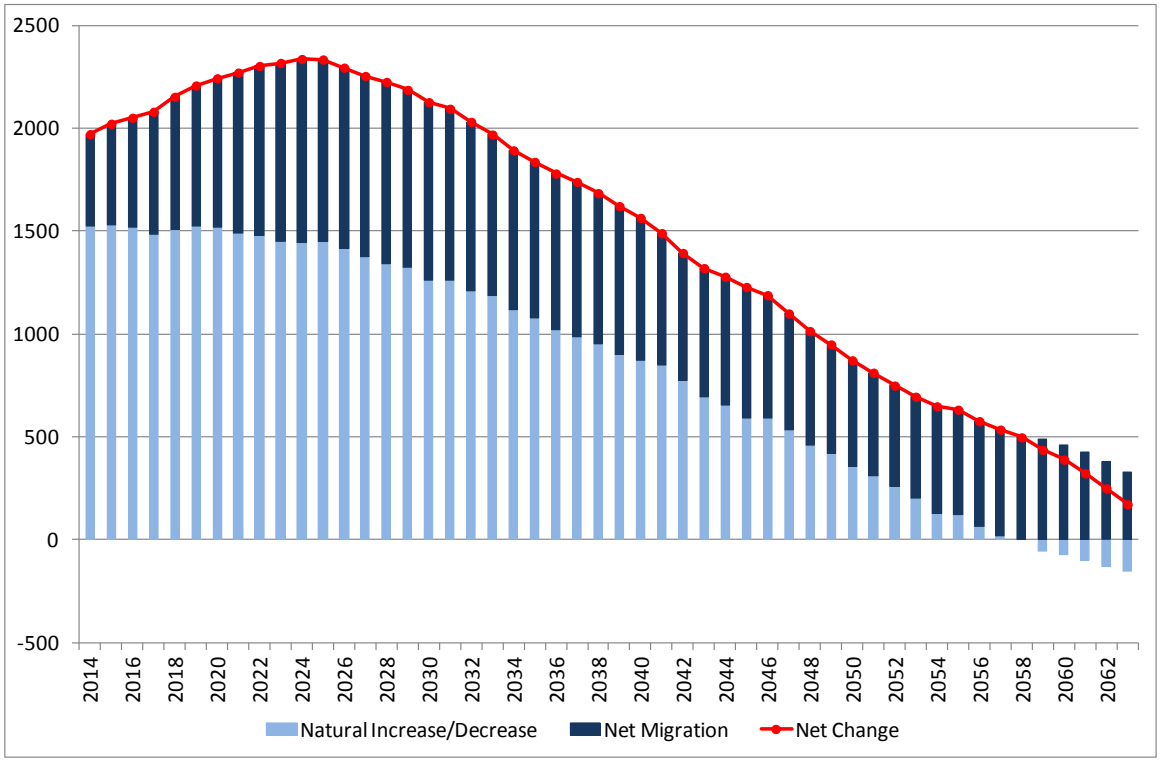


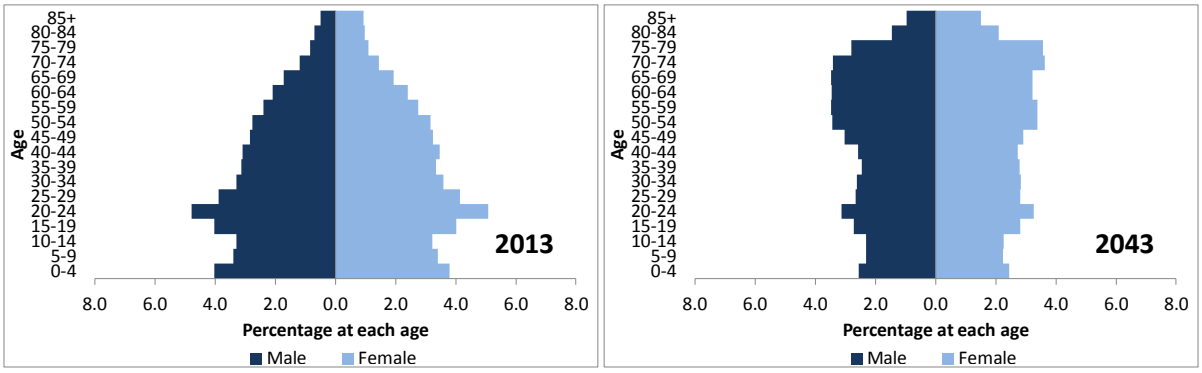
Figure 23 disaggregates the components of population change for Hamilton City over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive over the entire projection period. This is made up of substantial net inward migration (more in-migration than out-migration), and natural increase (more births than deaths). Net migration peaks in 2024 then starts to decline, but remains positive throughout the projection period. Natural increase peaks in 2015 then also starts to decline, falling much more substantially than net migration, eventually becoming natural decline (more deaths than births) from 2059 onwards.

***Figure 23: Projected components of population change for Hamilton City, medium projection, 2014-2063***




The age structure of Hamilton City is among the youngest in the region in 2013, as shown in Figure 24. In 2013, 11.3 percent of the population are aged 65 years and over, and this is projected to increase to 26.1 percent by 2043. Thus, Hamilton City is projected to age at a faster rate than many of the other TAs in the Waikato Region, considering its initially youthful age profile. This explains the shift from natural increase to natural decrease shown in the previous figure.

***Figure 24: Age-sex structure for Hamilton City, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Hamilton City is shown in Figure 25. In terms of total households, the projection closely follows the medium population projection, with the total number of households increasing over the entire projection period. The number of two-parent families increases to 16,875 by 2052 before declining, while the number of one-parent families increases to 12,254 in 2062 before declining slightly in 2063. The number of couples without children and one-person households both increase consistently over the entire projection period.

The medium labour force projection for Hamilton City is shown in Figure 26. The estimated labour force in June 2013 is 78,438. Annualised labour force growth over the period 2013-2031 is 1.88% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. The projected labour force increases to a peak of 124,589 in 2058, before declining slightly to 124,049 in 2063.

*Figure 25: Family and household projections for Hamilton City, 2013-2063*

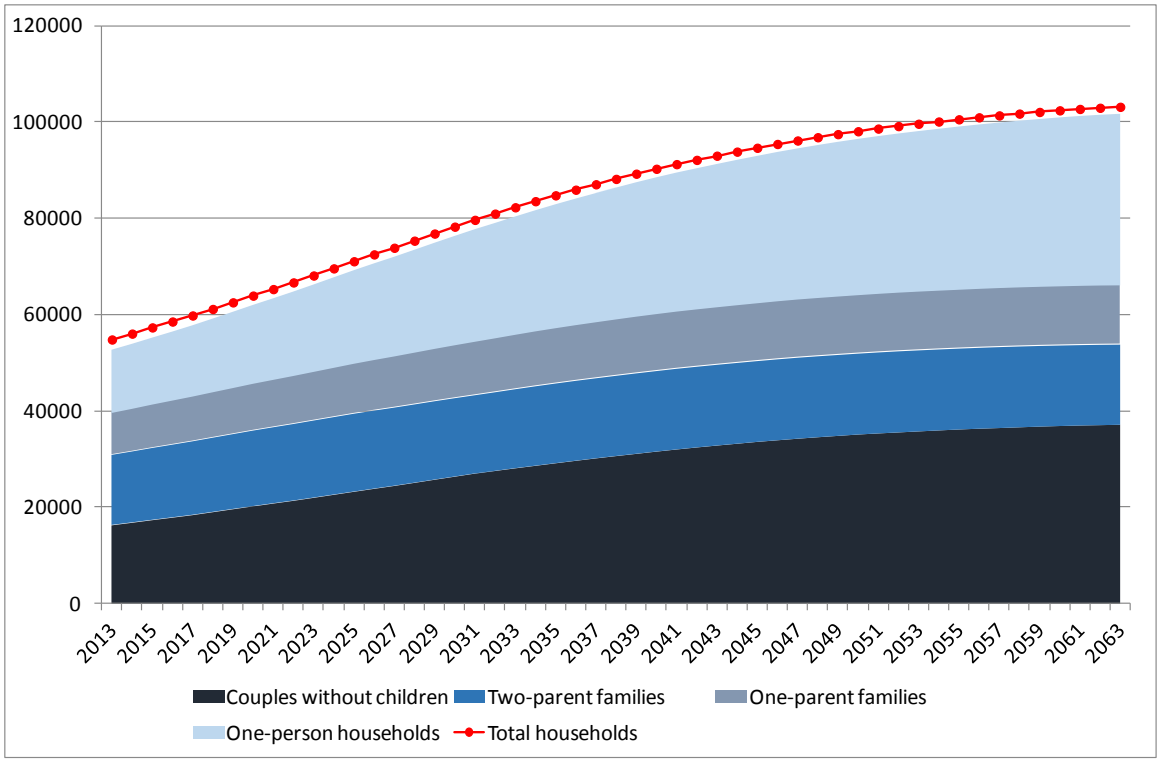
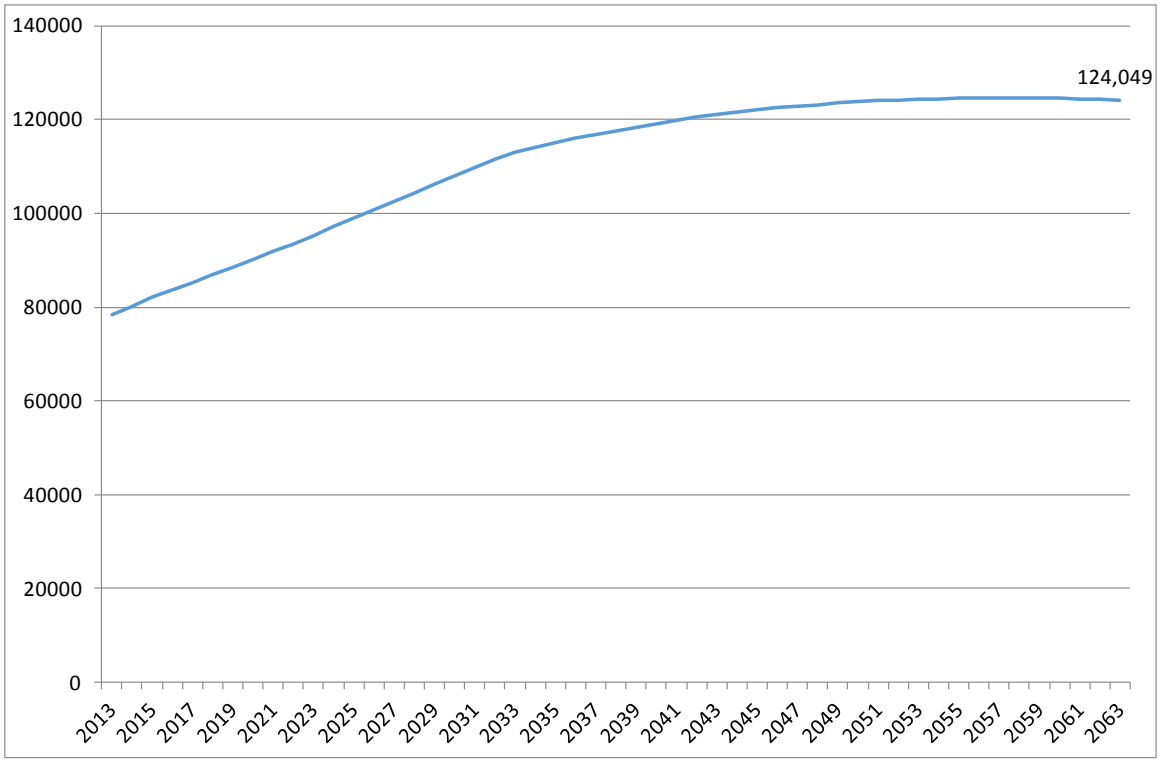



*Figure 26: Labour force projection for Hamilton City, 2013-2063*



*3.6 Population, Household and Labour Force Projections for Waipa District*

Figure 27 presents the 2013-base population projections for Waipa District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Waipa District is 46,400. Under the medium population projection scenario, the population increases to a peak of 56,515 in 2040 before declining to 51,758 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Waipa District population, with annualised population growth over the period 2013-2031 of 0.91% per year, slightly lower than the 1.12% annualised growth experienced over the period 2001-2013. Under the high scenario, the population increases over the entire projection period, with a projected population in 2063 of 71,346. Under the low scenario, the population increases to a peak of 48,528 in 2032 before declining to 37,535 in 2063. In comparison, the SNZ 2006-base medium projection follows a similar path to the medium projection presented here up to 2021, before falling below our projection.

***Figure 27: Population projections for Waipa District, 2013-2063***

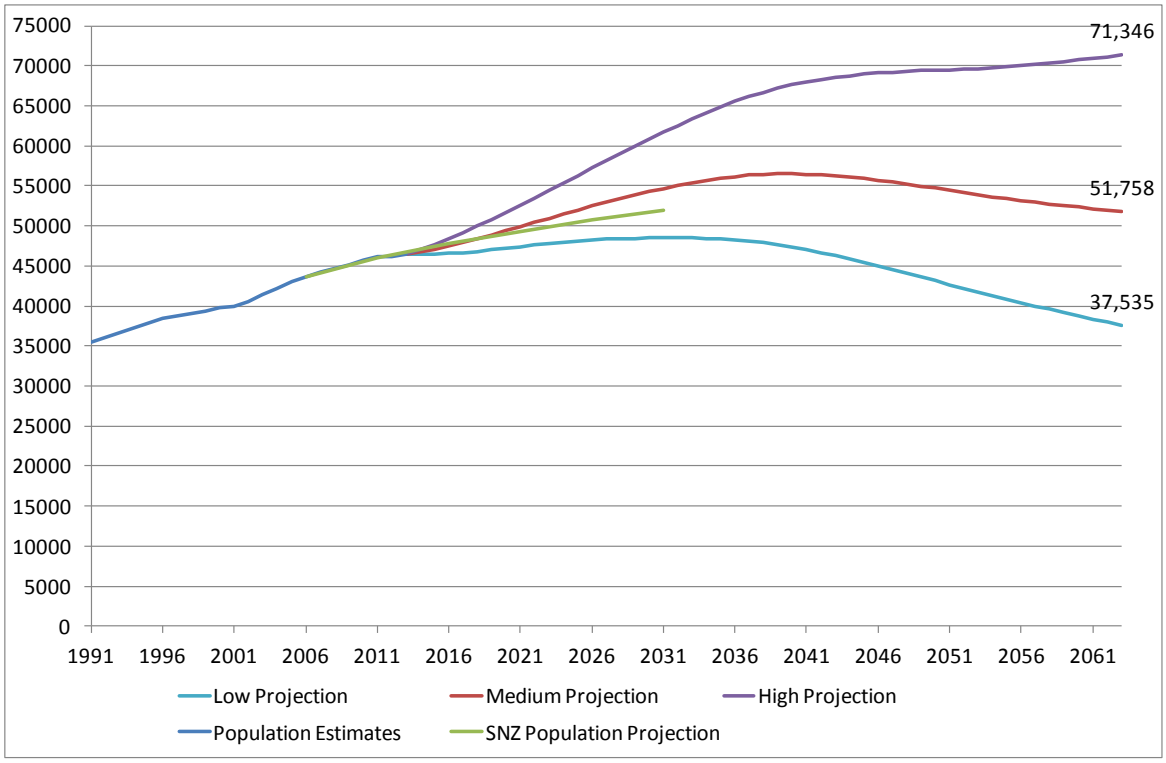
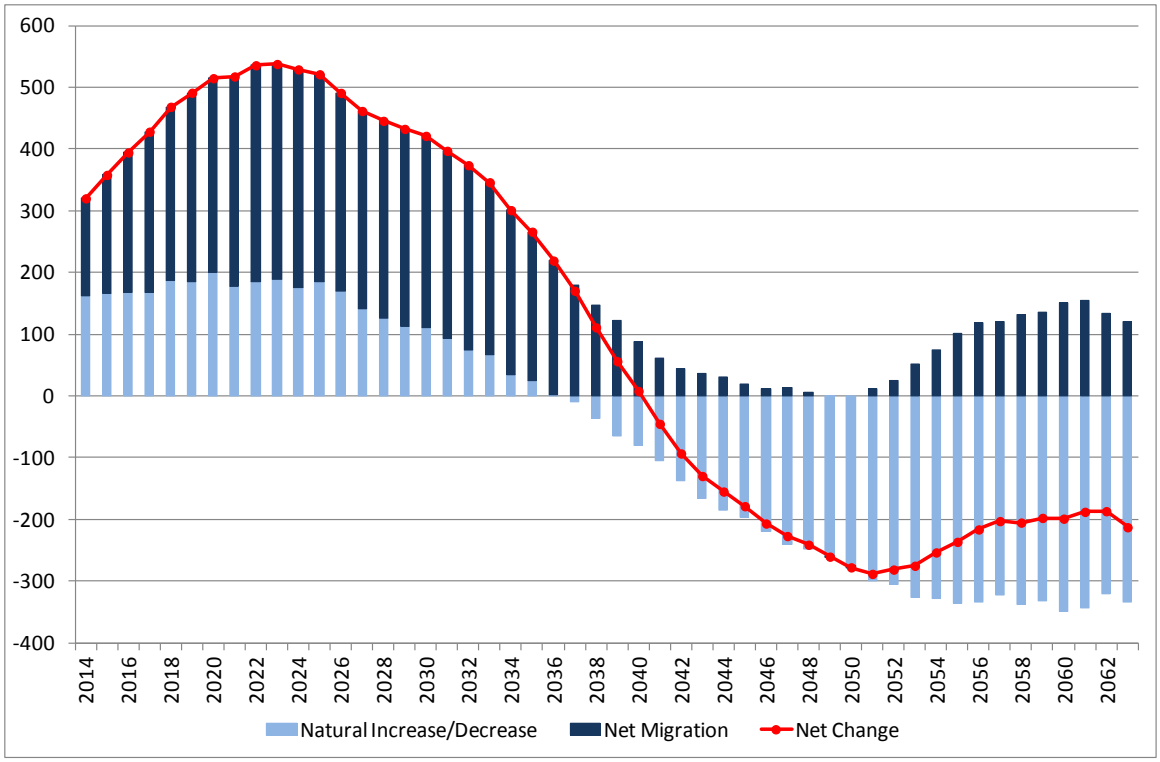


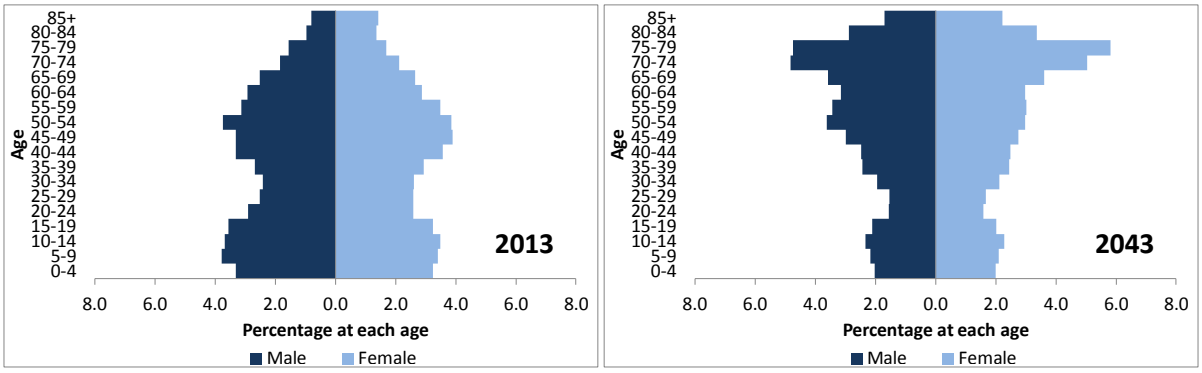
Figure 28 disaggregates the components of population change for Waipa District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive until 2040. This is made up of net inward migration (more in-migration than out-migration), and natural increase (more births than deaths). Net migration peaks at a gain of 352 people in 2024 then starts to decline, becoming slightly negative in 2049 and 2050 before recovering to net in-migration thereafter. Natural increase declines throughout the projection period and becomes natural decrease (more deaths than births) in 2037 then increasing to a net loss of around 335 people per year over the period 2058-2063.

***Figure 28: Projected components of population change for Waipa District, medium projection, 2014-2063***




The age structure of Waipa District is moderately old compared with other TAs in the Waikato but ages rapidly, as shown in Figure 29. In 2013, 16.9 percent of the population are aged 65 years and over, and this is projected to increase to 37.8 percent by 2043. This is one of the fastest rates of ageing in the region, and explains the shift from natural increase to natural decrease shown in the previous figure.

*Figure 29: Age-sex structure for Waipa District, 2013 and 2043 (medium projection)*




The medium household projection (by type) for Waipa District is shown in Figure 30. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2042. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 2,012 in 2013 to 2,295 in 2039 before declining, and the number of one-person households peaks in 2046 before declining. Finally, the number of couples without children increases to a peak of 11,111 in 2041 before declining.

The medium labour force projection for Waipa District is shown in Figure 31. The estimated labour force in June 2013 is 25,279. Annualised labour force growth over the period 2013-2031 is 1.46% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. The labour force increases to a peak of 33,464 in 2034, before declining to 29,893 in 2063.

*Figure 30: Family and household projections for Waipa District, 2013-2063*

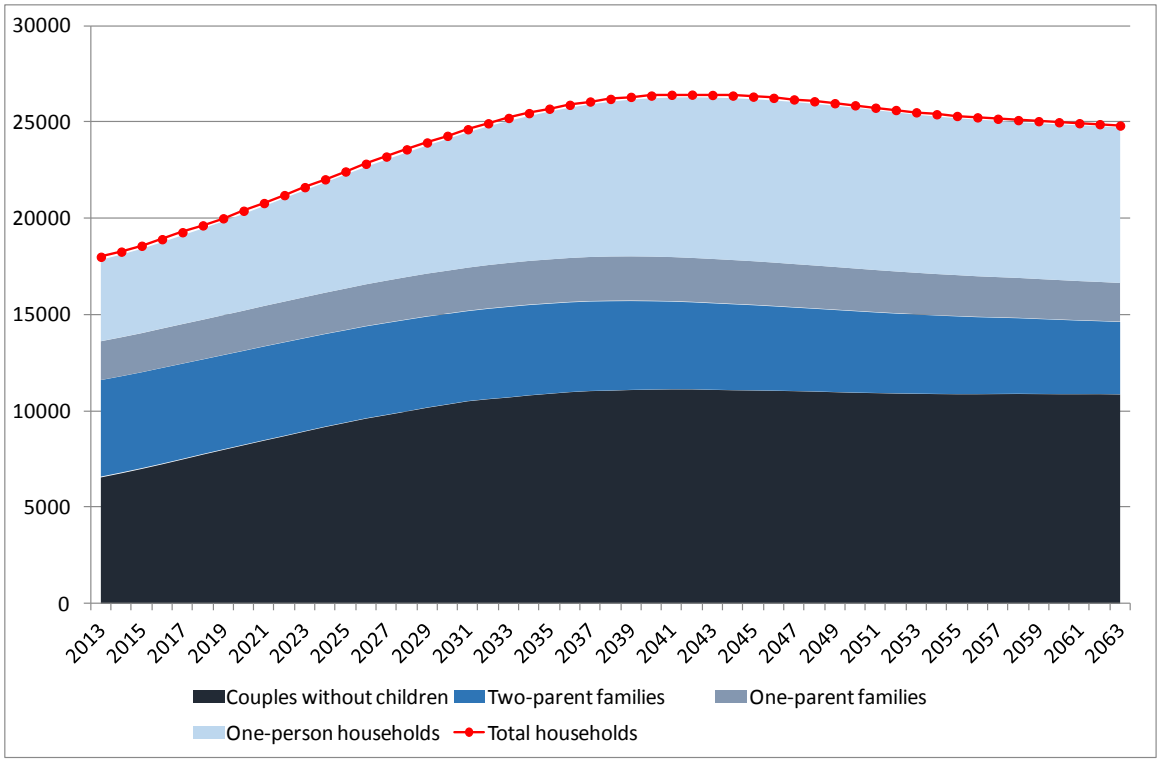
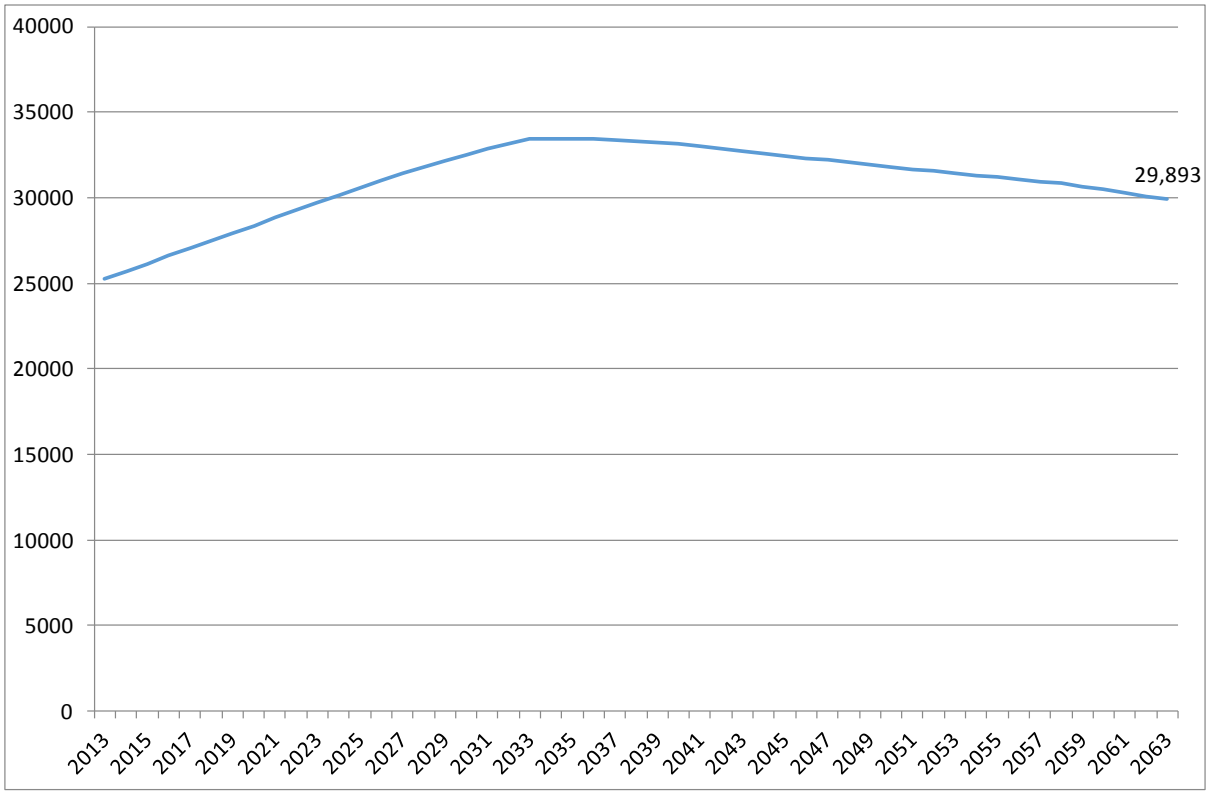



*Figure 31: Labour force projection for Waipa District, 2013-2063*



*3.7 Population, Household and Labour Force Projections for Otorohanga District*

Figure 32 presents the 2013-base population projections for Otorohanga District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Otorohanga District is 9,340. Under the medium population projection scenario, the population initially decreases to 9,175 in 2019 before increasing to a peak of 9,295 in 2029, then declining to 6,704 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Otorohanga District population, with annualised population decline over the period 2013-2031 of 0.03% per year, similar to the 0.03% annualised growth experienced over the period 2006-2013. Under the high scenario, the population increases to a peak of 10,974 in 2039 before declining to 10,289 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 4,417 in 2063. In comparison, the SNZ 2006-base medium projection sits mid-way between the medium and low projections presented here.

Figure 33 disaggregates the components of population change for Otorohanga District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario starts negative, then becomes positive from 2020, before becoming negative again from 2030 until the end of the projection period. The population change is made up of net outward migration (more out-migration than in-migration), offset by natural increase (more births than deaths). Net migration fluctuates across the projection period, while natural increase declines throughout the projection period and becomes natural decrease (more deaths than births) in 2062 and 2063.

*Figure 32: Population projections for Otorohanga District, 2013-2063*

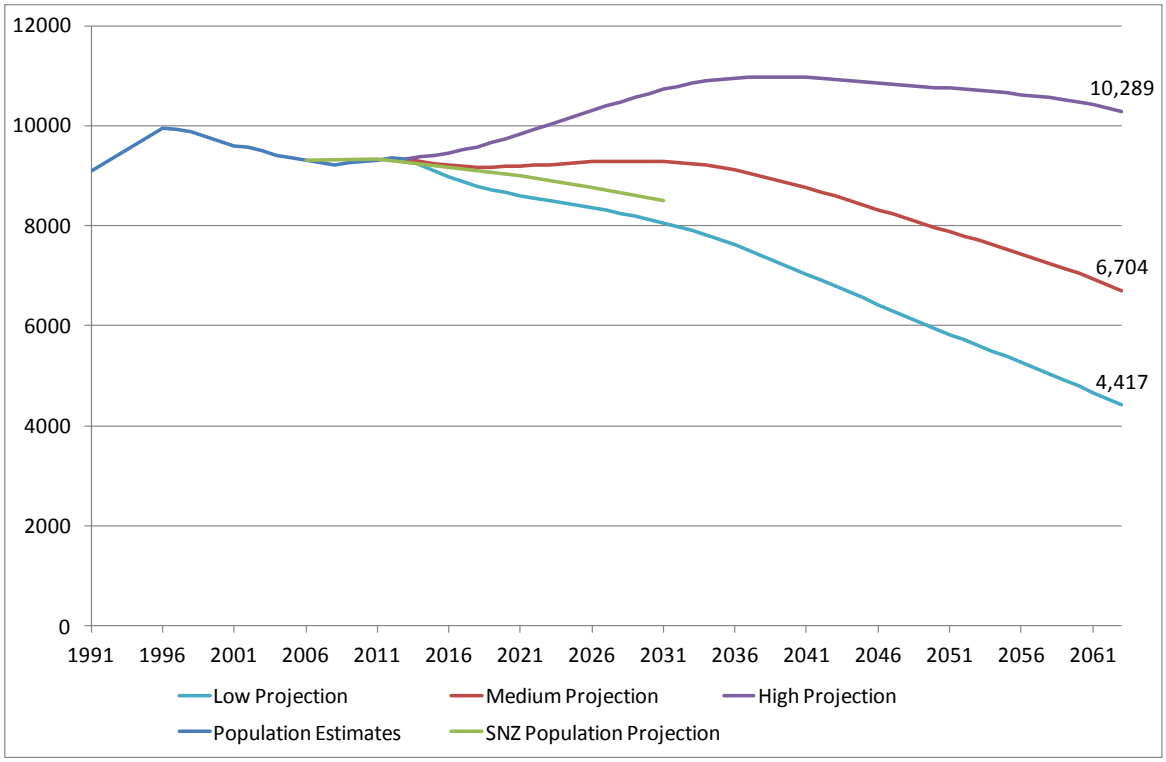
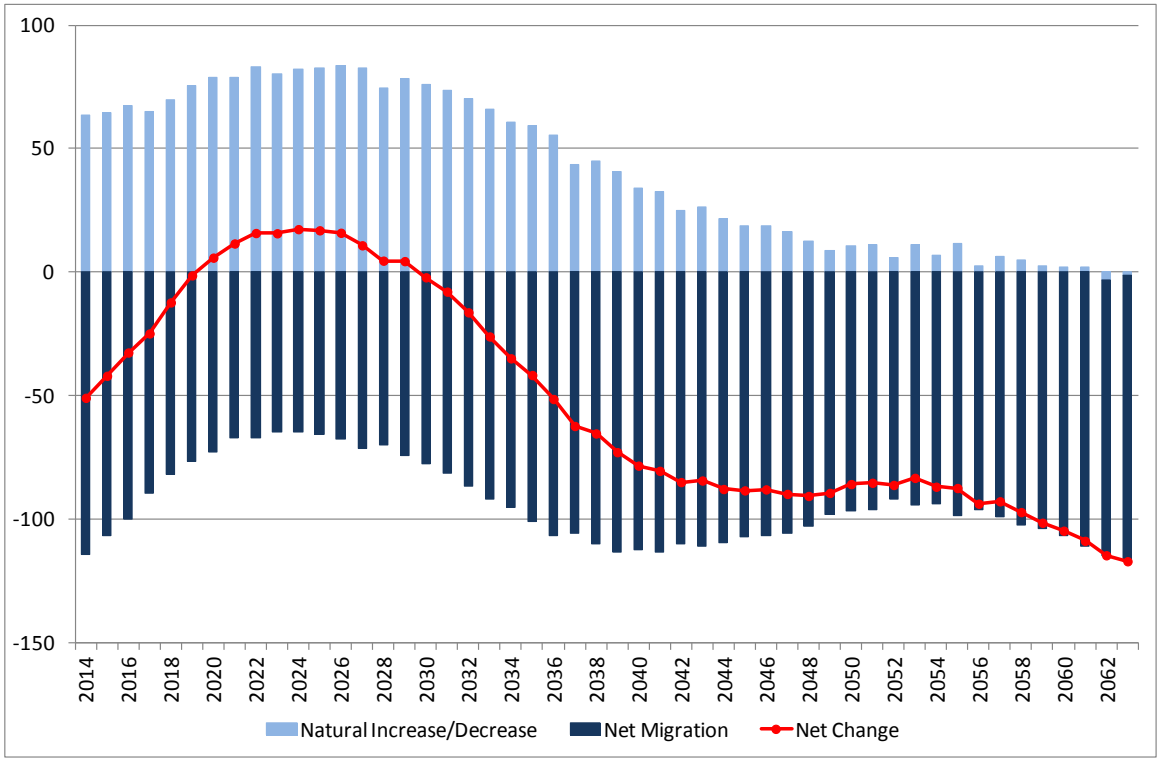
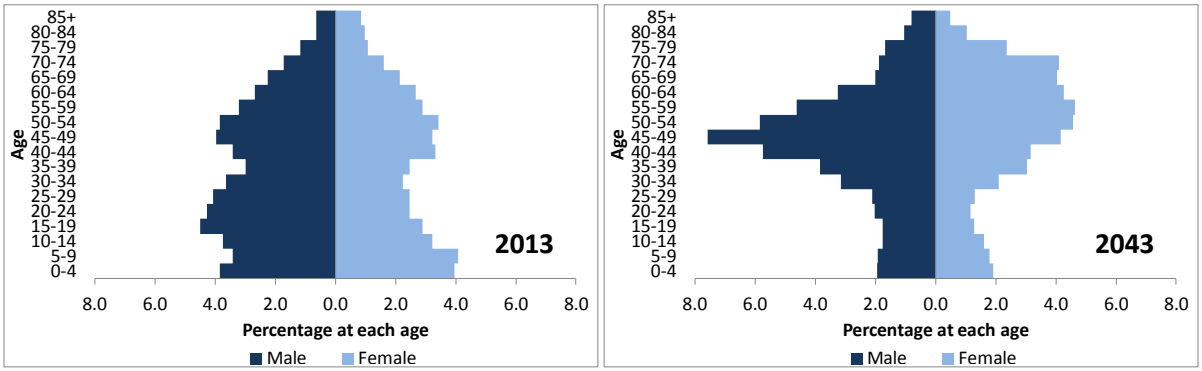



*Figure 33: Projected components of population change for Otorohanga District, medium projection, 2014-2063*



The age structure of Otorohanga District is amongst the most youthful in the Waikato Region and experiences among the least degree of population ageing, as shown in Figure 34. In 2013, 13.1 percent of the population are aged 65 years and over, and this is projected to increase to just 19.5 percent by 2043. This slower rate of population ageing explains why the district remains in natural increase throughout almost the entire projection period, as shown in the previous figure.

***Figure 34: Age-sex structure for Otorohanga District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Otorohanga District is shown in Figure 35. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2042. All four family types increase in absolute numbers before declining. The number of two-parent families increases from 1,033 to a peak of 1,158 in 2033, while the number of one-parent families peaks in 2033, the number of one-person households peaks in 2041, and the number of couples without children peaks in 2053.

The medium labour force projection for Otorohanga District is shown in Figure 36. The estimated labour force in June 2013 is 5,101. Annualised labour force growth over the period 2013-2031 is 1.09% per year, well above the almost-zero population growth rate due to increases in the labour force participation rates among older people. The labour force increases to a peak of 6,228 in 2033, before declining to 4,585 in 2063.

*Figure 35: Family and household projections for Otorohanga District, 2013-2063*

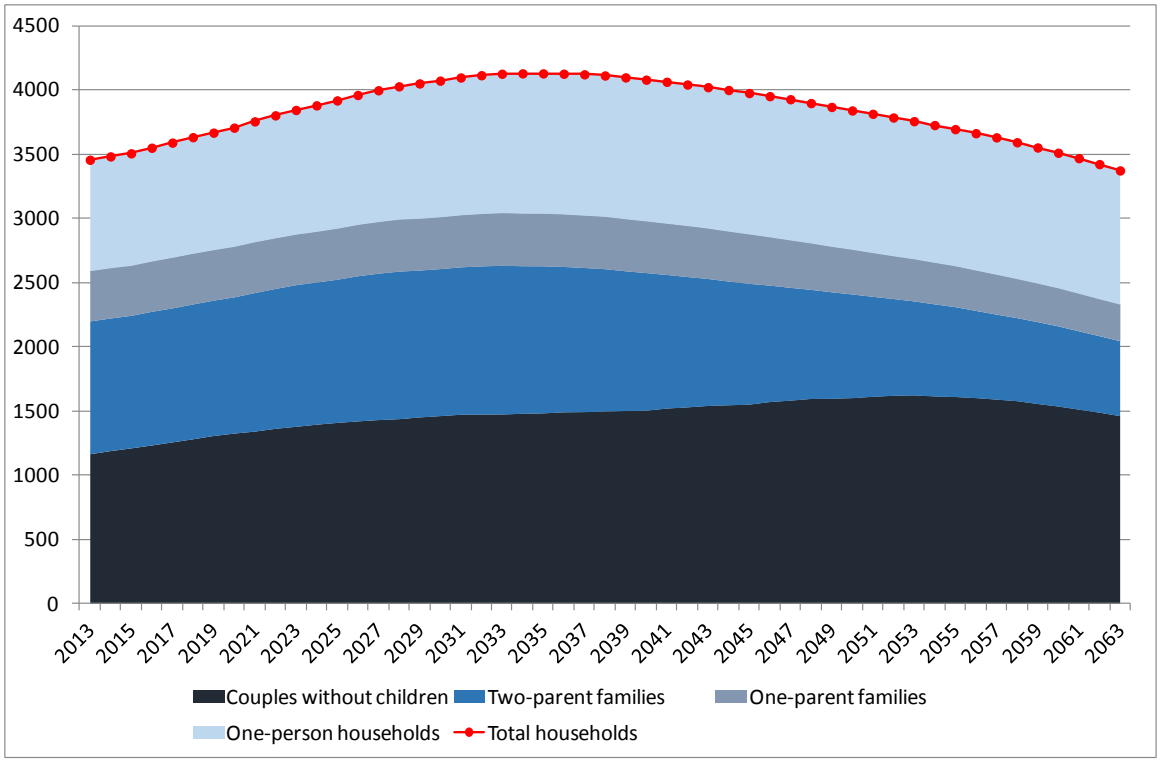
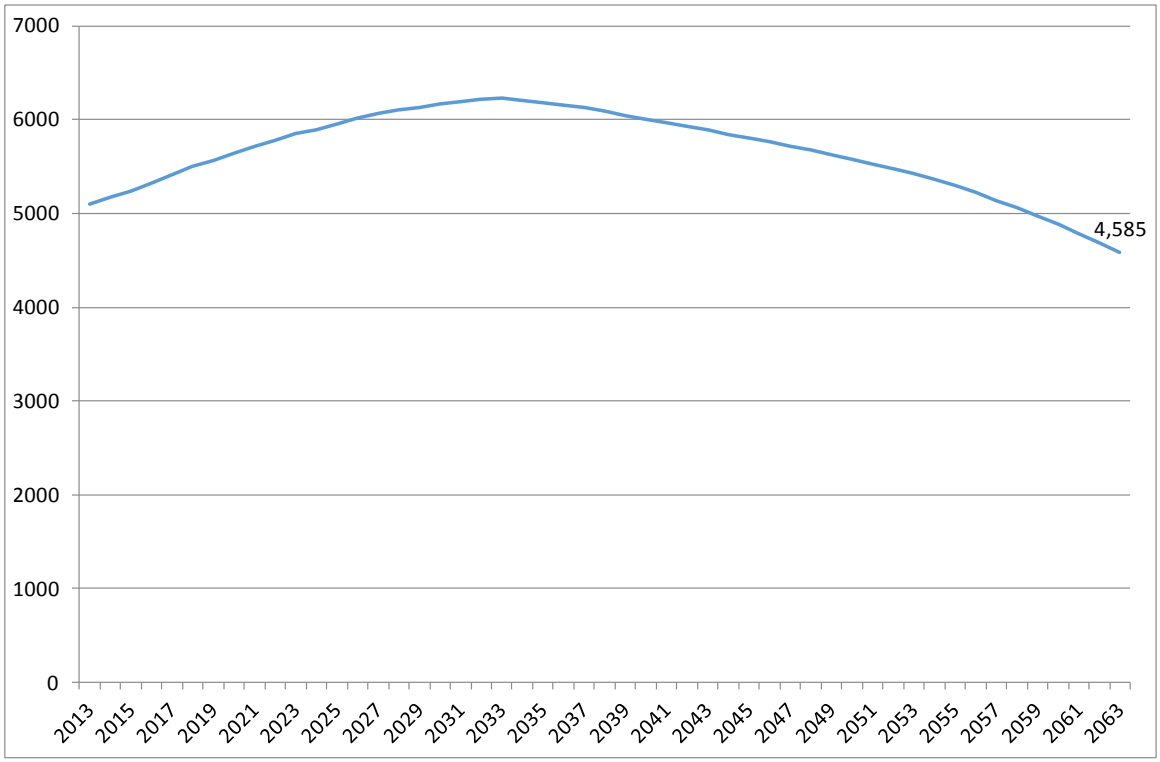



*Figure 36: Labour force projection for Otorohanga District, 2013-2063*



*3.8 Population, Household and Labour Force Projections for South Waikato District*

Figure 37 presents the 2013-base population projections for South Waikato District to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for South Waikato District is 22,530. Under the medium population projection scenario, the population declines immediately from the beginning of the projections, falling to 11,658 in 2063. The medium projection appears to reasonably closely follow the recent trend in the South Waikato District population, with annualised population decline over the period 2013-2031 of 0.78% per year, similar to the 0.73% annualised decline experienced over the period 1991-2013. Under the high scenario, the population declines immediately from the beginning of the projections, falling to 16,968 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 8,222 in 2063. In comparison, the SNZ 2006-base medium projection fairly closely tracks the medium projection presented here.

***Figure 37: Population projections for South Waikato District, 2013-2063***

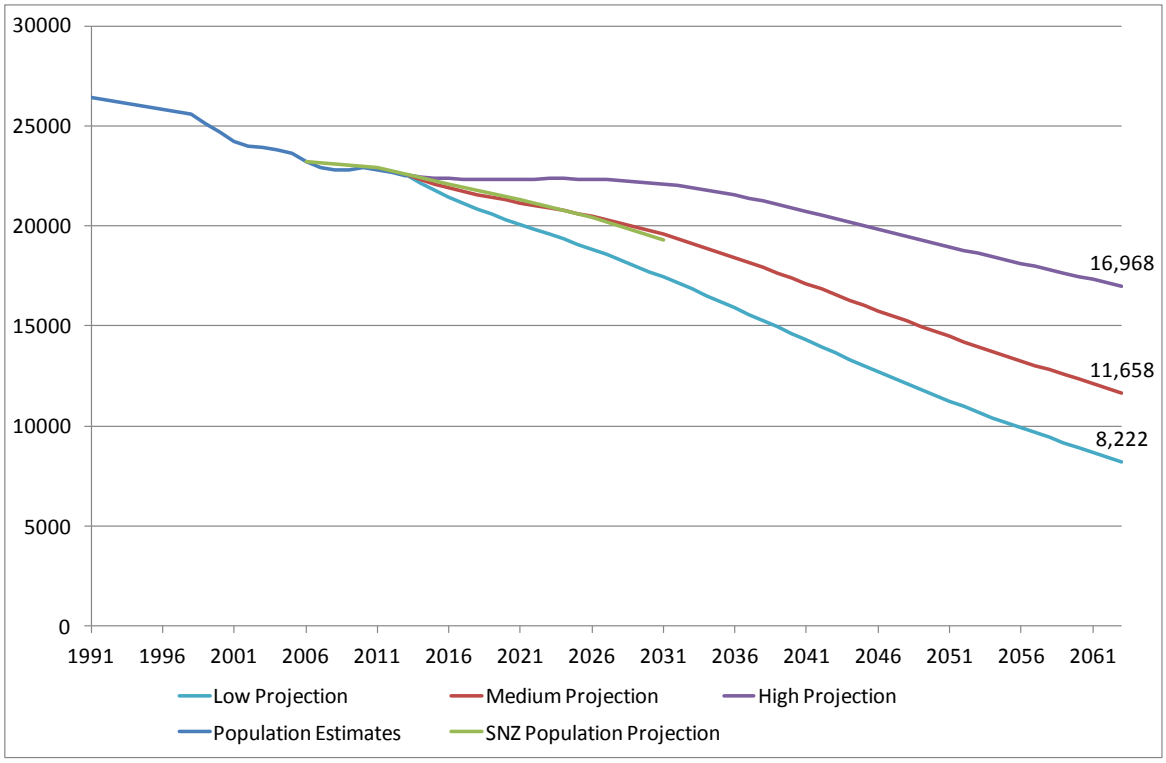
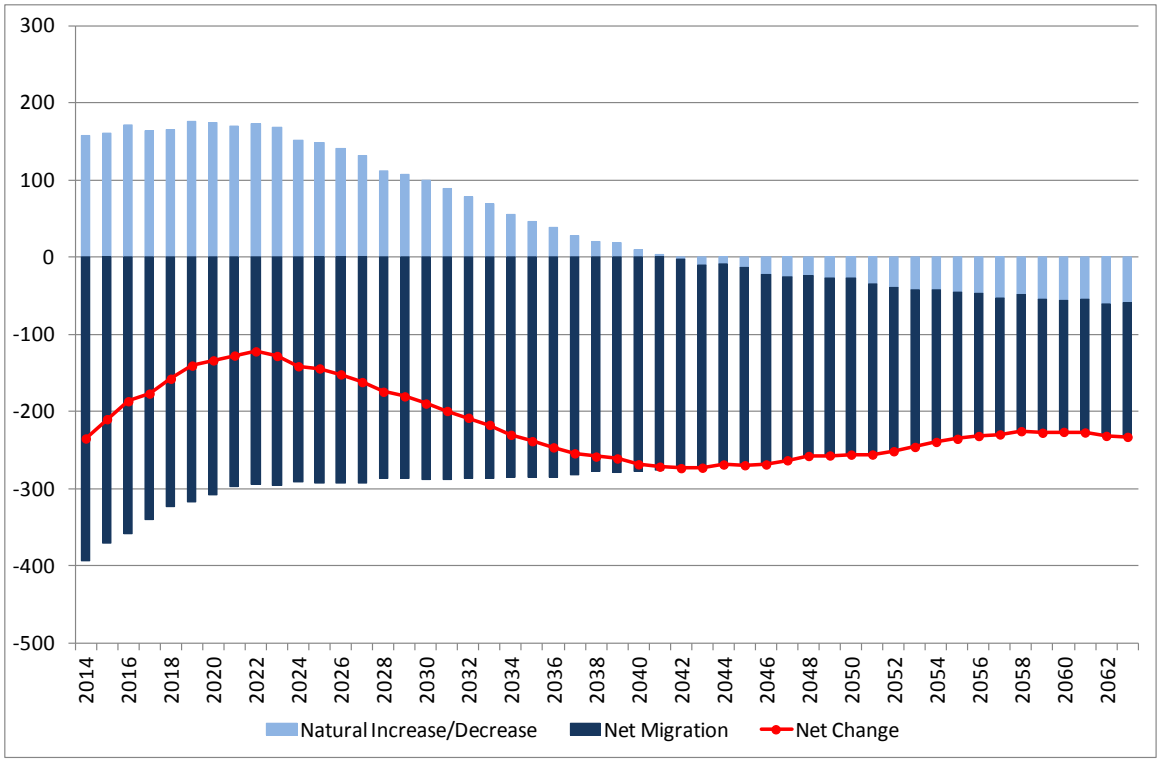


Figure 38 disaggregates the components of population change for South Waikato District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario remains negative throughout the projection period. This is made up of net outward migration (more out-migration than in-migration), offset by natural increase (more births than deaths). Net out-migration reduces in absolute number throughout the projection period, falling from a loss of about 355 people per year in 2013-2018 to a loss of about 170 people per year in 2058-2063. Natural increase declines throughout the projection period and becomes natural decrease (more deaths than births) from 2042.

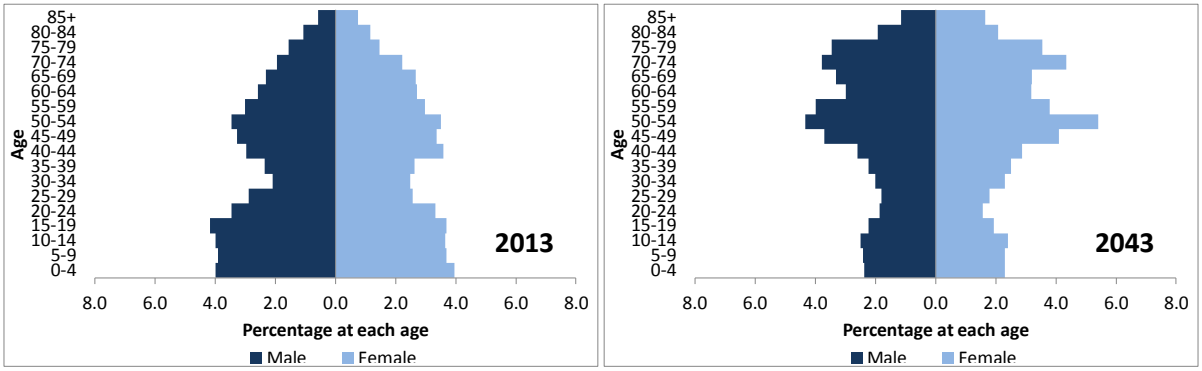
***Figure 38: Projected components of population change for South Waikato District, medium projection, 2014-2063***




The age structure of South Waikato District is also amongst the most youthful in the Waikato Region but population ageing is much more significant than in Otorohanga District, as shown in Figure 39. In 2013, 15.7 percent of the population are aged 65 years and over, and this is projected to increase to just 28.5 percent by 2043. This relatively high rate of population

ageing explains why natural increase declines consistently throughout the projection period, as shown in the previous figure.

***Figure 39: Age-sex structure for South Waikato District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for South Waikato District is shown in Figure 40. In terms of total households, the projection closely follows the medium population projection, although the total number of households increases to a peak in 2024 before declining. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 1,470 in 2013 to 1,498 in 2018 before declining, and the number of one-person households peaks in 2032 before declining. Finally, the number of couples without children increases to a peak of 2,991 in 2031 before declining.

The medium labour force projection for South Waikato District is shown in Figure 41. The estimated labour force in June 2013 is 10,823. Annualised labour force growth over the period 2013-2031 is 0.03% per year, in contrast to the declining total population and due to increases in the labour force participation rates among older people. The labour force increases to a peak of 11,065 in 2025, before declining to 6,329 in 2063.

*Figure 40: Family and household projections for South Waikato District, 2013-2063*

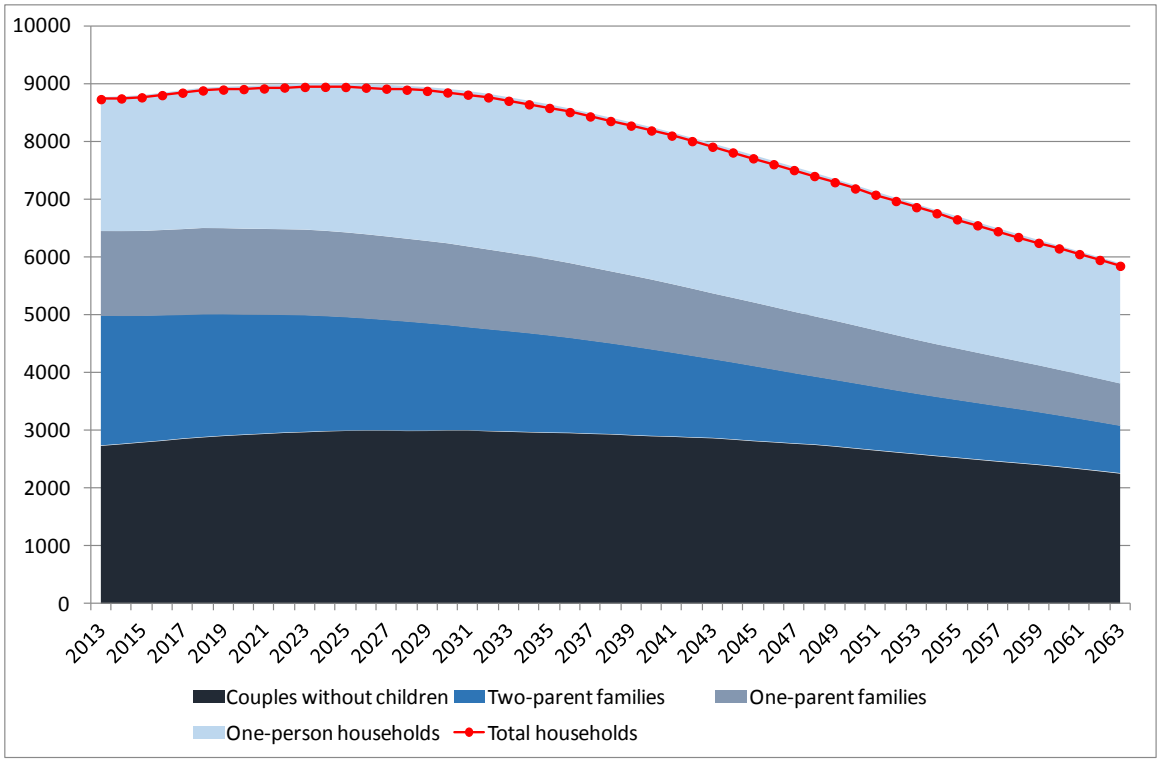
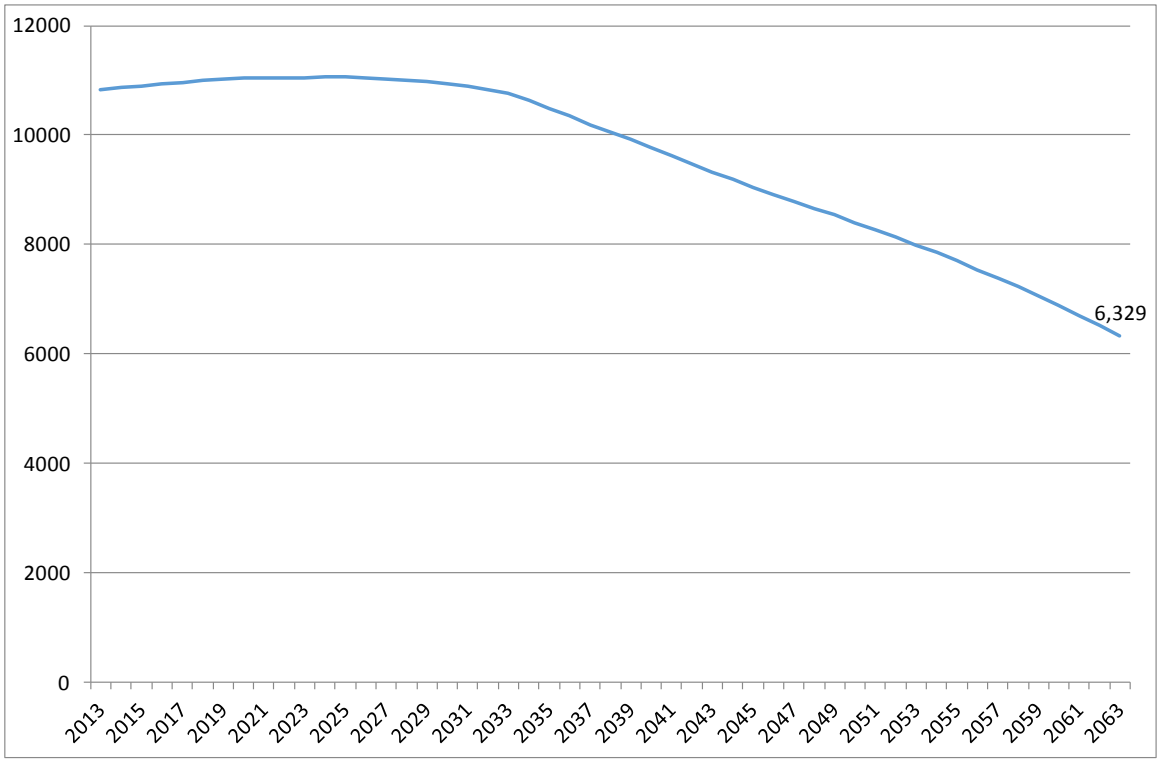



*Figure 41: Labour force projection for South Waikato District, 2013-2063*



*3.9 Population, Household and Labour Force Projections for Waitomo District*

Figure 42 presents the 2013-base population projections for Waitomo District[3] to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Waitomo District is 9,300. Under the medium population projection scenario, the population declines immediately from the beginning of the projections, falling to 5,736 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Waitomo District population, with annualised population decline over the period 2013-2031 of 0.50% per year, similar to the 0.36% annualised decline experienced over the period 1996-2013. Under the high scenario, the population increases to a peak of 9,771 in 2034 before declining to 8,620 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 3,842 in 2063. In comparison, the SNZ 2006-base medium projection tracks somewhat above the medium projection presented here.

Figure 43 disaggregates the components of population change for Waitomo District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario remains negative throughout the projection period. This is made up of net outward migration (more out-migration than in-migration), offset by natural increase (more births than deaths). Net out-migration declines in absolute numbers throughout most of the projection period, falling from a loss of about 135 people per year in 2013-2018 to a loss of about 100 people per year in 2058-2063. Natural increase declines throughout the projection period and becomes natural decrease (more deaths than births) mostly from 2055 onwards.

[3] Excluding the parts of Waitomo District that are in the Manawatu-Wanganui Region.

*Figure 42: Population projections for Waitomo District, 2013-2063*

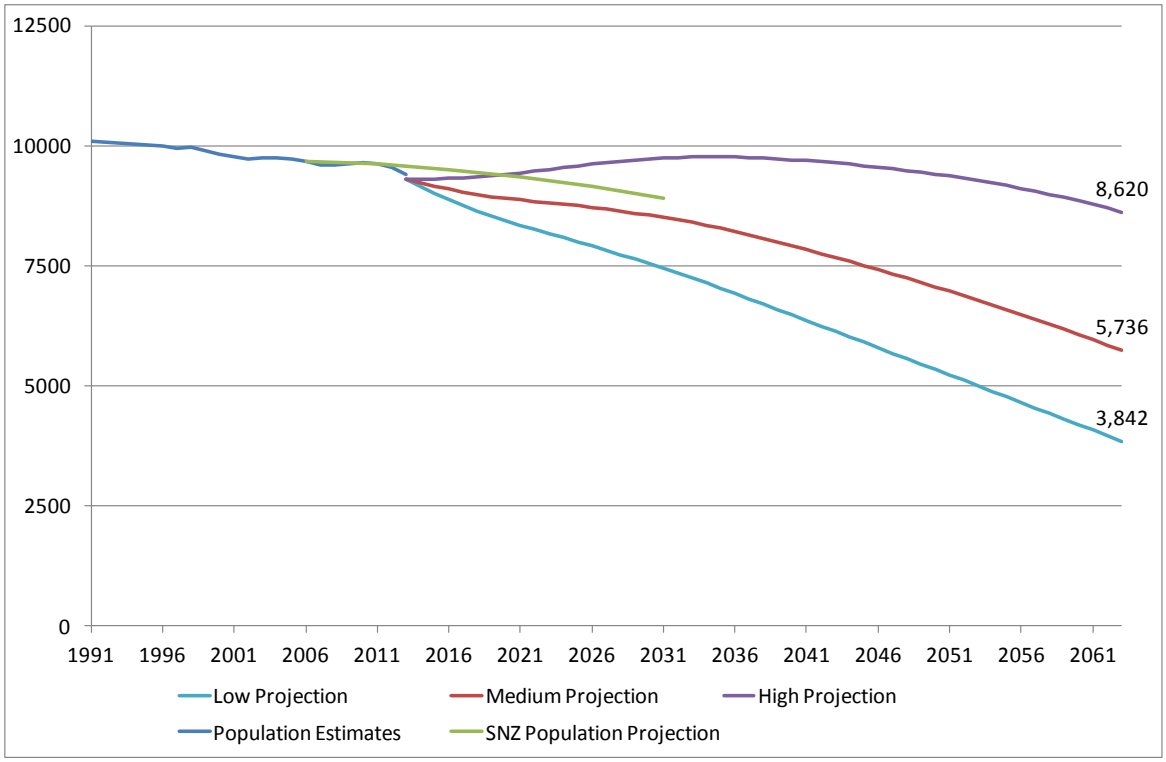
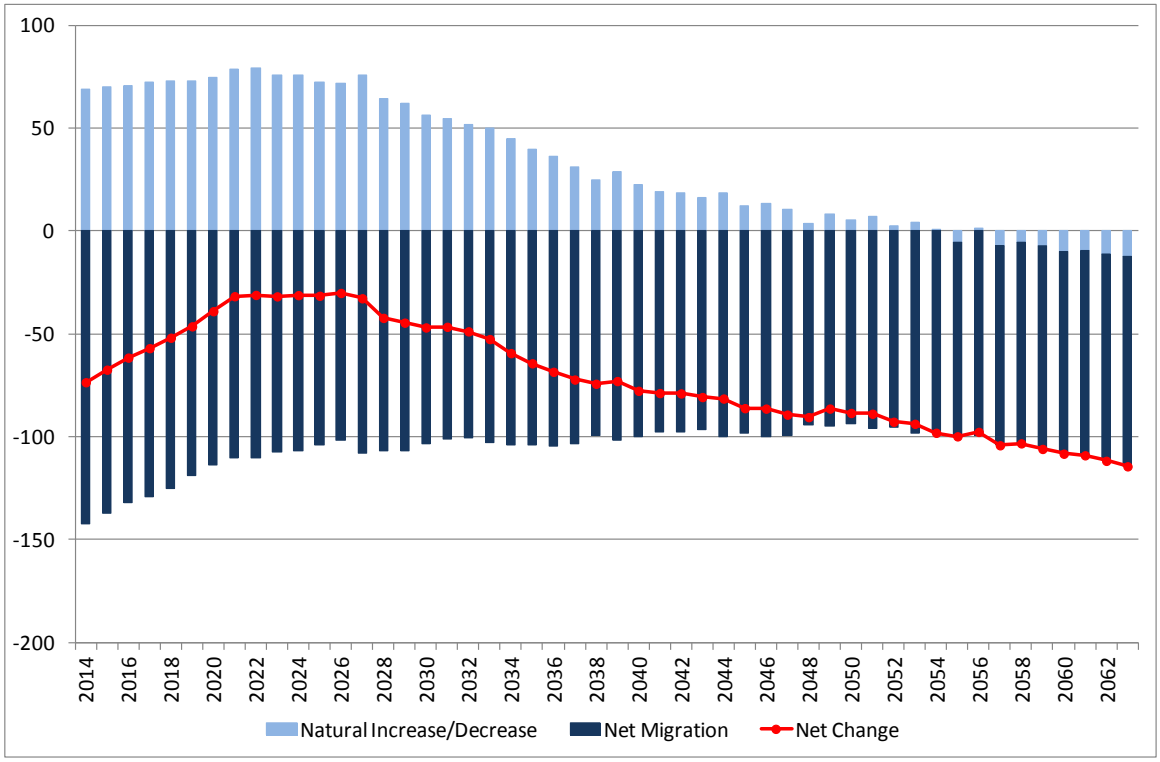
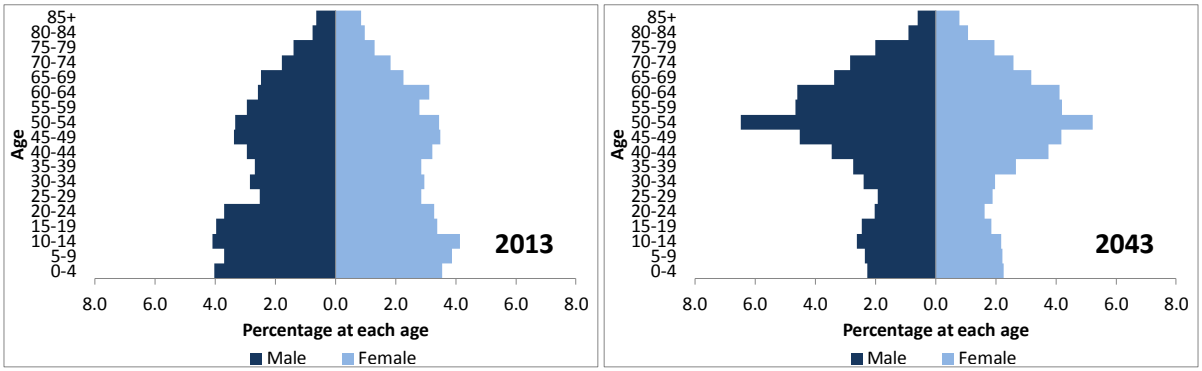



*Figure 43: Projected components of population change for Waitomo District, medium projection, 2014-2063*



The age structure of Waitomo District is amongst the most youthful in the Waikato Region and experiences the least degree of population ageing, as shown in Figure 44. In 2013, 14.2 percent of the population are aged 65 years and over, and this is projected to increase to just 19.4 percent by 2043. This slower rate of population ageing explains why the district remains in natural increase throughout almost the entire projection period, as shown in the previous figure.

***Figure 44: Age-sex structure for Waitomo District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Waitomo District is shown in Figure 45. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2031. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 575 in 2013 to 586 in 2023 before declining, and the number of one-person households peaks in 2042 before declining. Finally, the number of couples without children increases to a peak of 1,349 in 2046 before declining.

The medium labour force projection for Waitomo District is shown in Figure 46. The estimated labour force in June 2013 is 4,971. Annualised labour force growth over the period 2013-2031 is 0.49% per year, in contrast to the declining total population and due to increases in the labour force participation rates among older people. The labour force increases to a peak of 5,447 in 2033, before declining to 3,792 in 2063.

*Figure 45: Family and household projections for Waitomo District, 2013-2063*

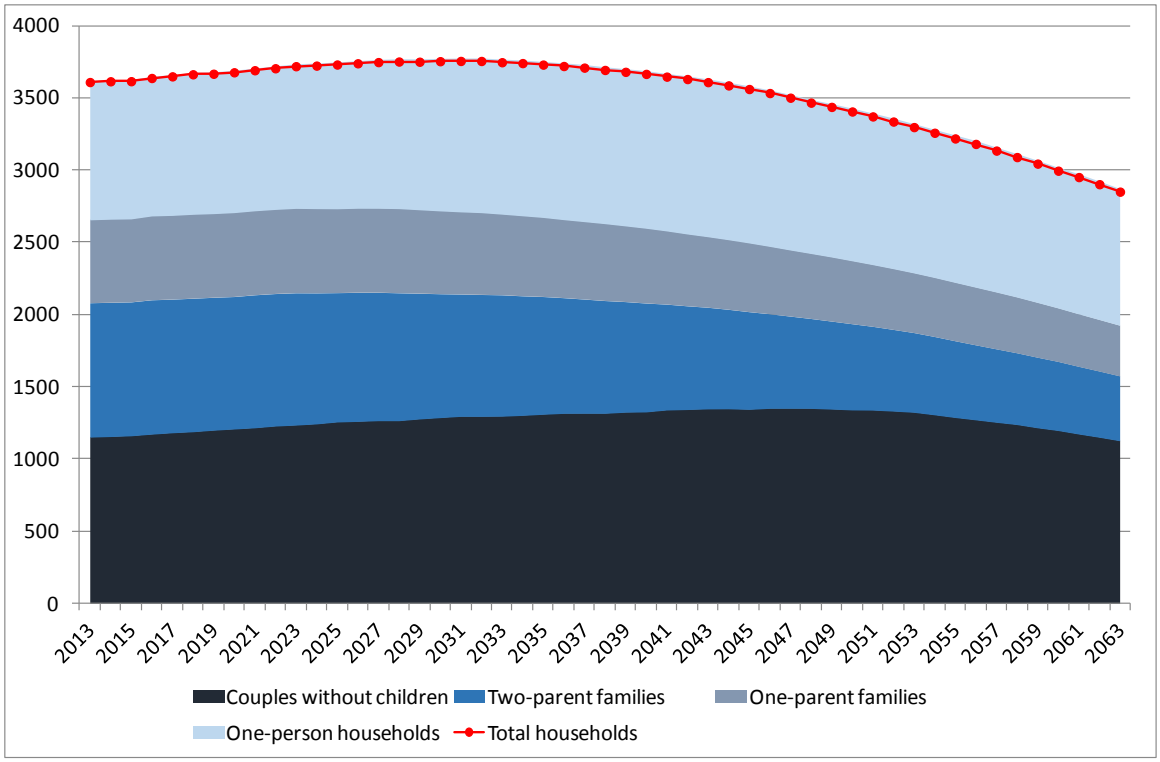
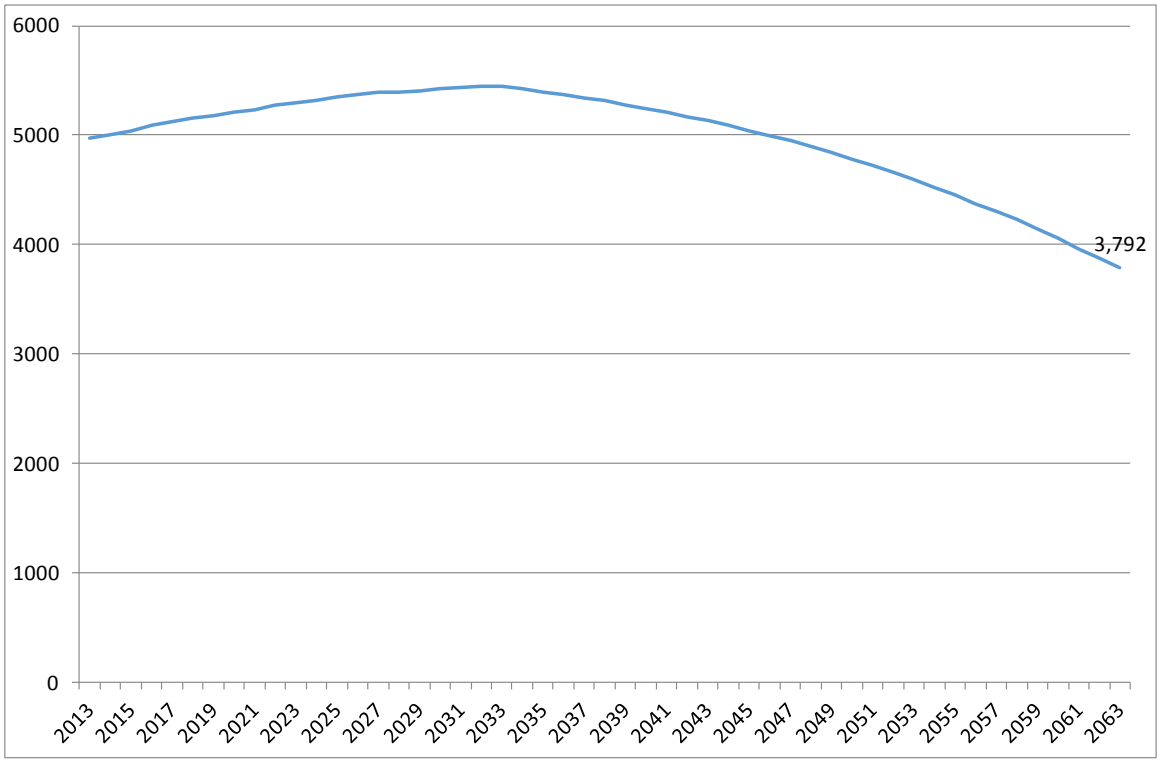



*Figure 46: Labour force projection for Waitomo District, 2013-2063*



*3.10 Population, Household and Labour Force Projections for Taupo District*

Figure 47 presents the 2013-base population projections for Taupo District[4] to 2063, along with historical population estimates from Statistics New Zealand back to 1991. The 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) is also included for comparison.

The June 2013 population estimate (base population) for Taupo District is 34,150. Under the medium population projection scenario, the population increases to a peak of 37,046 in 2035 before declining to 31,274 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Taupo District population, with annualised population increase over the period 2013-2031 of 0.43% per year, similar to the 0.36% annualised increase experienced over the period 1996-2013. Under the high scenario, the population increases to a peak of 42,750 in 2046 before declining to 41,168 in 2063. Under the low scenario, the population increases slightly to a peak of 34,192 in 2021 before declining to 23,788 in 2063. In comparison, the SNZ 2006-base medium projection tracks midway between the medium and low projections presented here.

Figure 48 disaggregates the components of population change for Taupo District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive until 2035. This is made up of net inward migration (more in-migration than out-migration), and natural increase (more births than deaths). Net migration decreases throughout the projection period, becoming negative in 2035. Natural increase also declines throughout the projection period and becomes natural decrease (more deaths than births) in 2036 then increasing to a net loss of around 80 people per year over the period 2058-2063.

[4] Excluding the parts of Taupo District that are in the Bay of Plenty, Manawatu-Wanganui, and Hawke's Bay Regions.

*Figure 47: Population projections for Taupo District, 2013-2063*

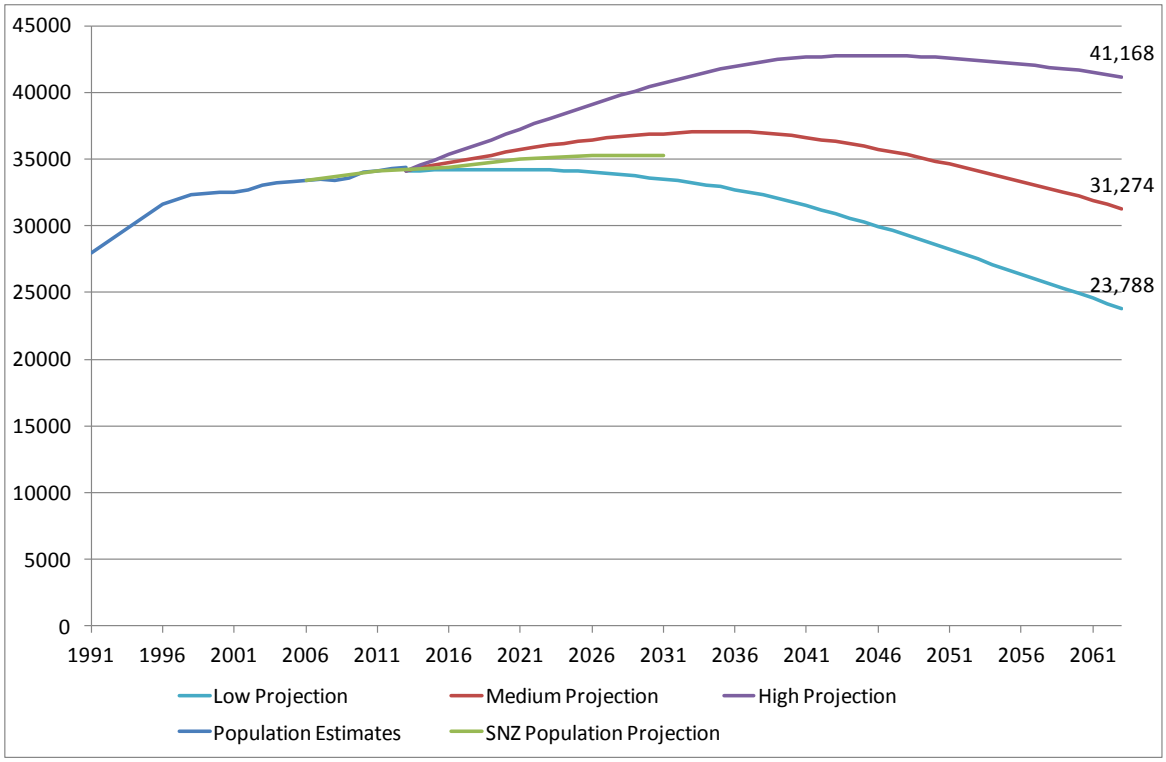
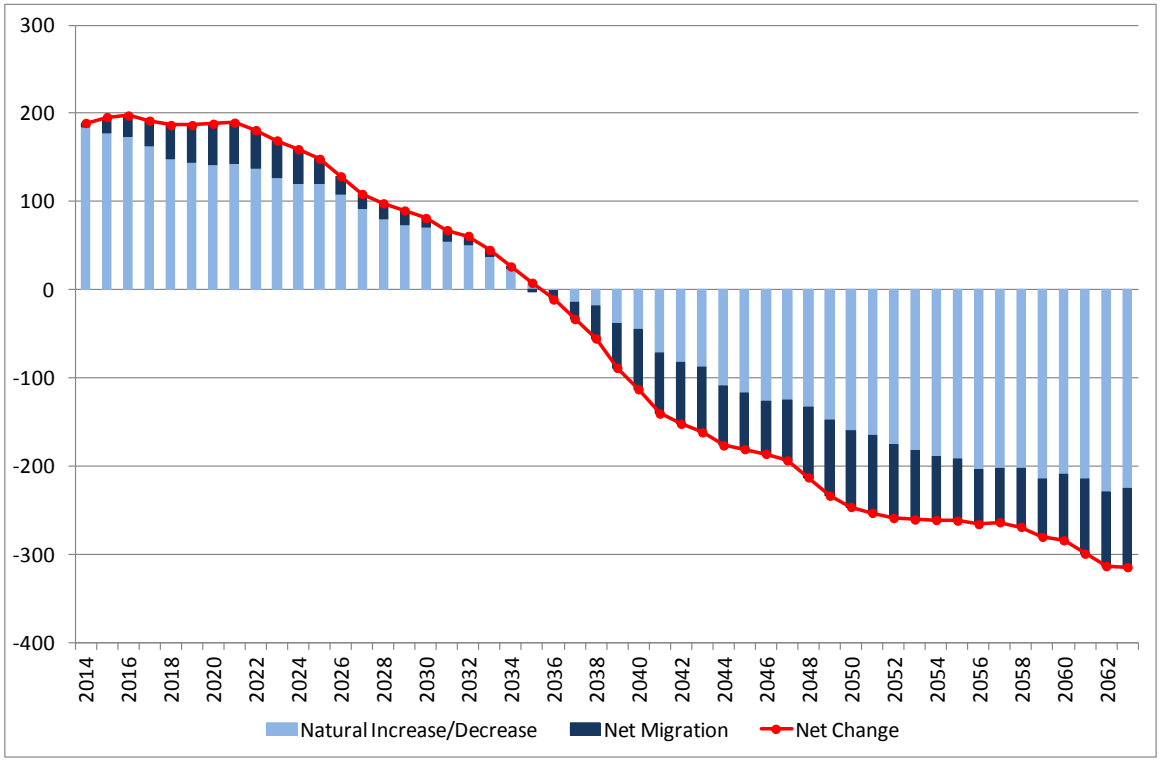
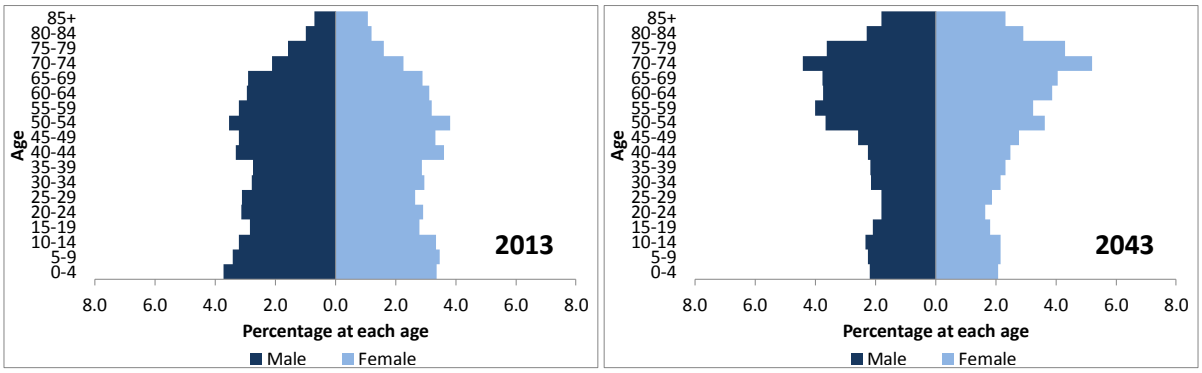



*Figure 48: Projected components of population change for Taupo District, medium projection, 2014-2063*



The age structure of Taupo District is moderately old compared with other TAs in the Waikato but ages rapidly, as shown in Figure 49. In 2013, 17.3 percent of the population are aged 65 years and over, and this is projected to increase to 34.7 percent by 2043. This is one of the fastest rates of ageing in the region, and explains the shift from natural increase to natural decrease shown in the previous figure.

***Figure 49: Age-sex structure for Taupo District, 2013 and 2043 (medium projection)***




The medium household projection (by type) for Taupo District is shown in Figure 50. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2040. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 1,749 in 2013 to 1,838 in 2029 before declining, and the number of one-person households peaks in 2048 before declining. Finally, the number of couples without children increases to a peak of 7,099 in 2043 before declining.

The medium labour force projection for Taupo District is shown in Figure 51. The estimated labour force in June 2013 is 18,367. Annualised labour force growth over the period 2013-2031 is 0.94% per year, again greater than the population growth rate due to increases in the labour force participation rates among older people. The labour force increases to a peak of 21,966 in 2033, before declining to 17,333 in 2063.

*Figure 50: Family and household projections for Taupo District, 2013-2063*

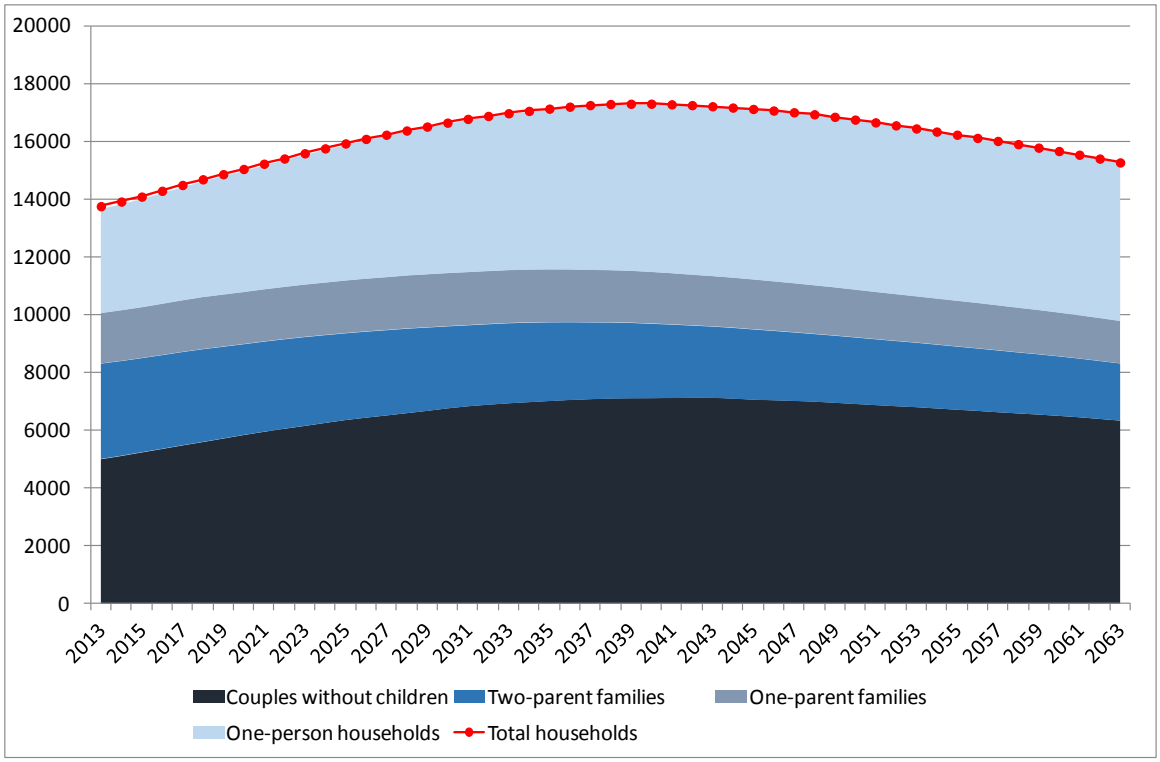
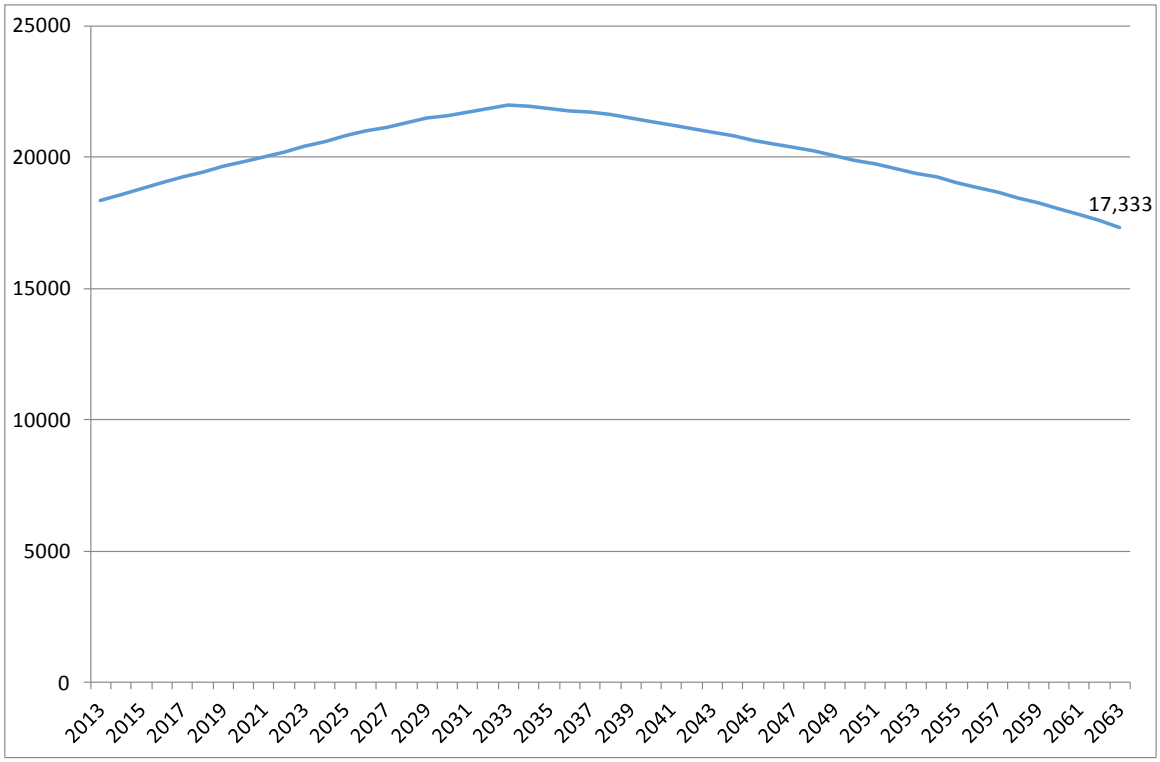



*Figure 51: Labour force projection for Taupo District, 2013-2063*

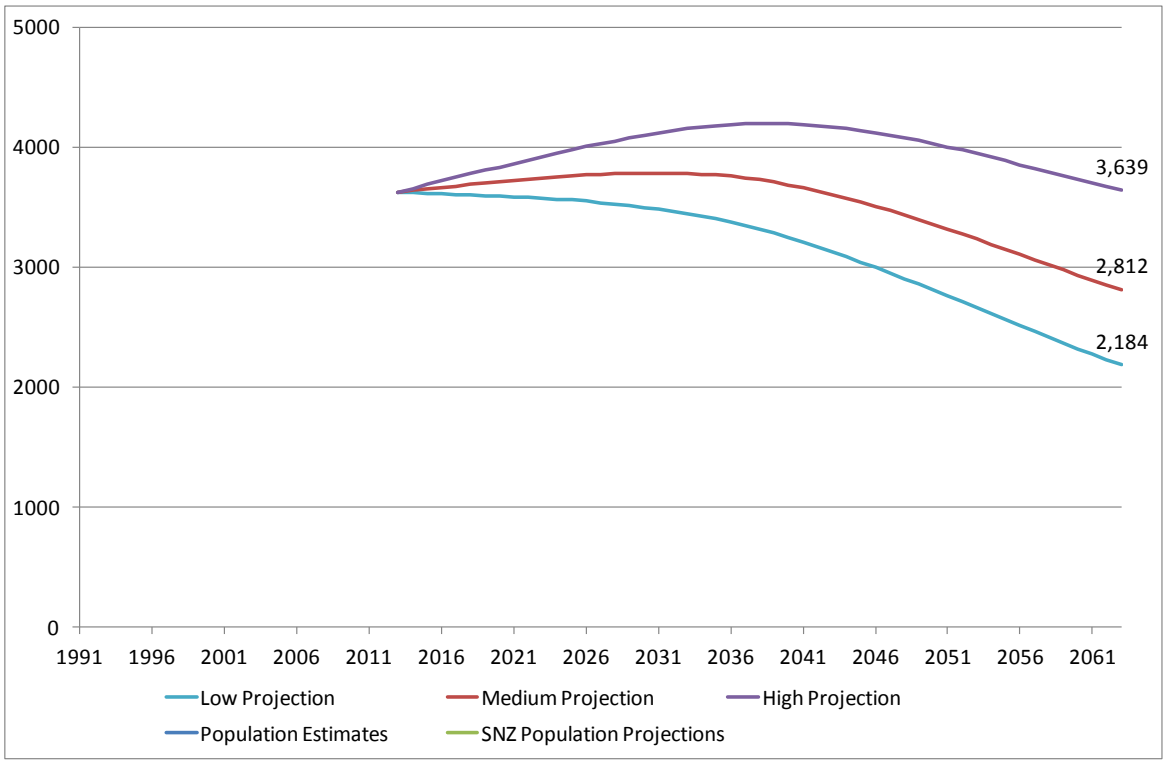


*3.11 Population, Household and Labour Force Projections for part-Rotorua District*

Figure 52 presents the 2013-base population projections for part-Rotorua District[5] to 2063. There is no corresponding 2006-base Statistics New Zealand (SNZ) medium projection for the part of Rotorua District that is included in the Waikato Region. Projections for the entire Rotorua District are available in Jackson *et al*. (2014).

The June 2013 population estimate (base population) for part-Rotorua District is 3,625. Under the medium population projection scenario, the population increases to a peak of 3,783 in 2031 before declining to 2,812 in 2063. Under the high scenario, the population increases to a peak of 4,196 in 2038 before declining to 3,639 in 2063. Under the low scenario, the population declines immediately from the beginning of the projections, falling to 2,184 in 2063.

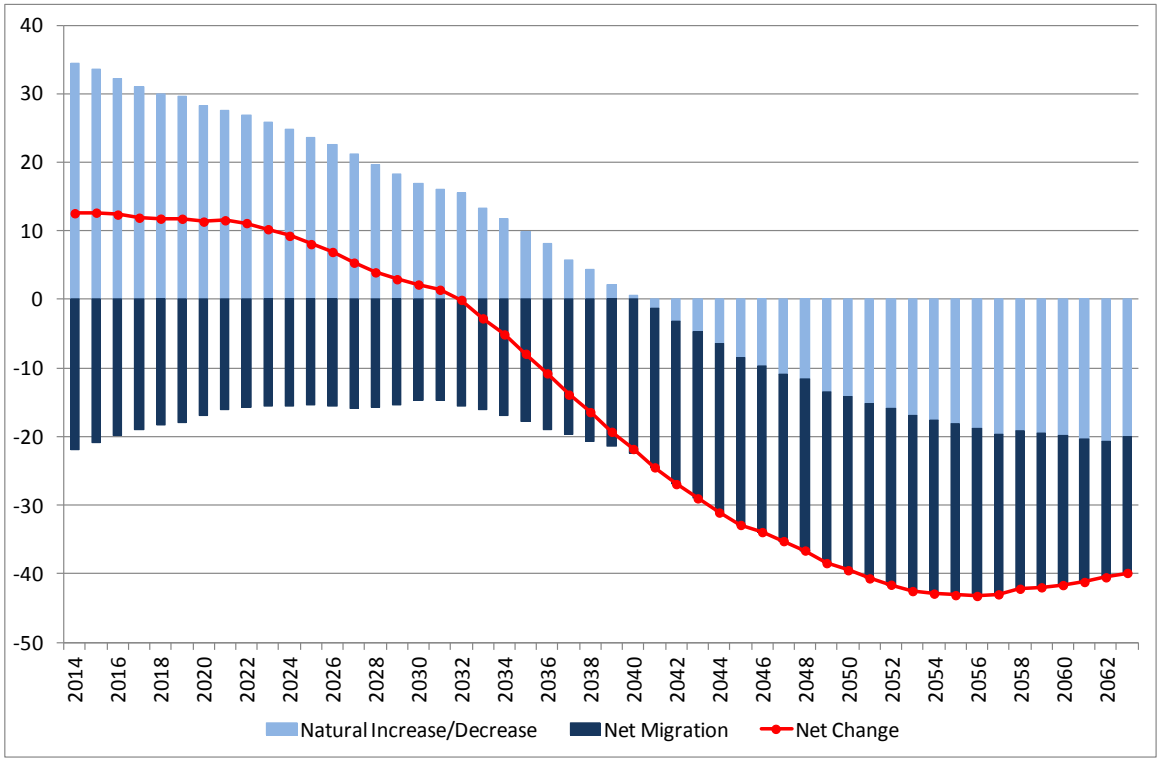
***Figure 52: Population projections for part-Rotorua District, 2013-2063***




[5] Excluding the parts of Rotorua District that are in the Bay of Plenty Region.

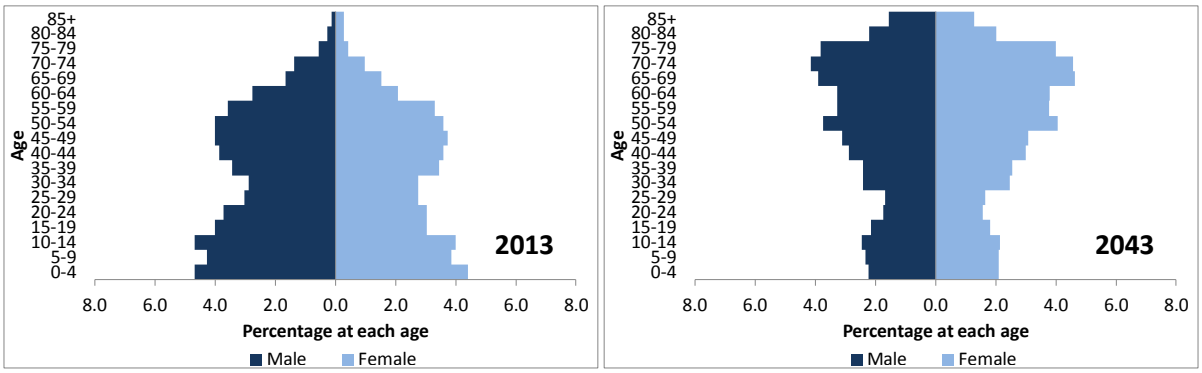
Figure 53 disaggregates the components of population change for part-Rotorua District over the period 2014-2063 for the medium population projection. As previously noted, net population change in the medium projection scenario is positive until 2031. This is made up of net outward migration (more out-migration than in-migration), more than offset by natural increase (more births than deaths). Net migration fluctuates across the projection period, while natural increase declines throughout the projection period and becomes natural decrease (more deaths than births) from 2041 onwards.

***Figure 53: Projected components of population change for part-Rotorua District, medium projection, 2014-2063***




The age structure of part-Rotorua District is the youngest in the Waikato Region but ages rapidly, as shown in Figure 54. In 2013, just 7.4 percent of the population are aged 65 years and over, but this is projected to increase to 32.2 percent by 2043. This is one of the fastest rates of ageing in the region, and explains the shift from natural increase to natural decrease shown in the previous figure.

*Figure 54: Age-sex structure for part-Rotorua District, 2013 and 2043 (medium projection)*




The medium household projection (by type) for part-Rotorua District is shown in Figure 55. In terms of total households, the projection closely follows the medium population projection, with the total number of households peaking in 2036. The number of two-parent families declines consistently over the projection period. In contrast the number of one-parent families increases from 241 in 2013 to 257 in 2031 before declining, and the number of one-person households peaks in 2046 before declining. Finally, the number of couples without children increases to a peak of 622 in 2037 before declining.

The medium labour force projection for part-Rotorua District is shown in Figure 56. The estimated labour force in June 2013 is 1,980. Annualised labour force growth over the period 2013-2031 is 0.88% per year, and the labour force increases to a peak of 2,326 in 2033, before declining to 1,623 in 2063.

*Figure 55: Family and household projections for part-Rotorua District, 2013-2063*

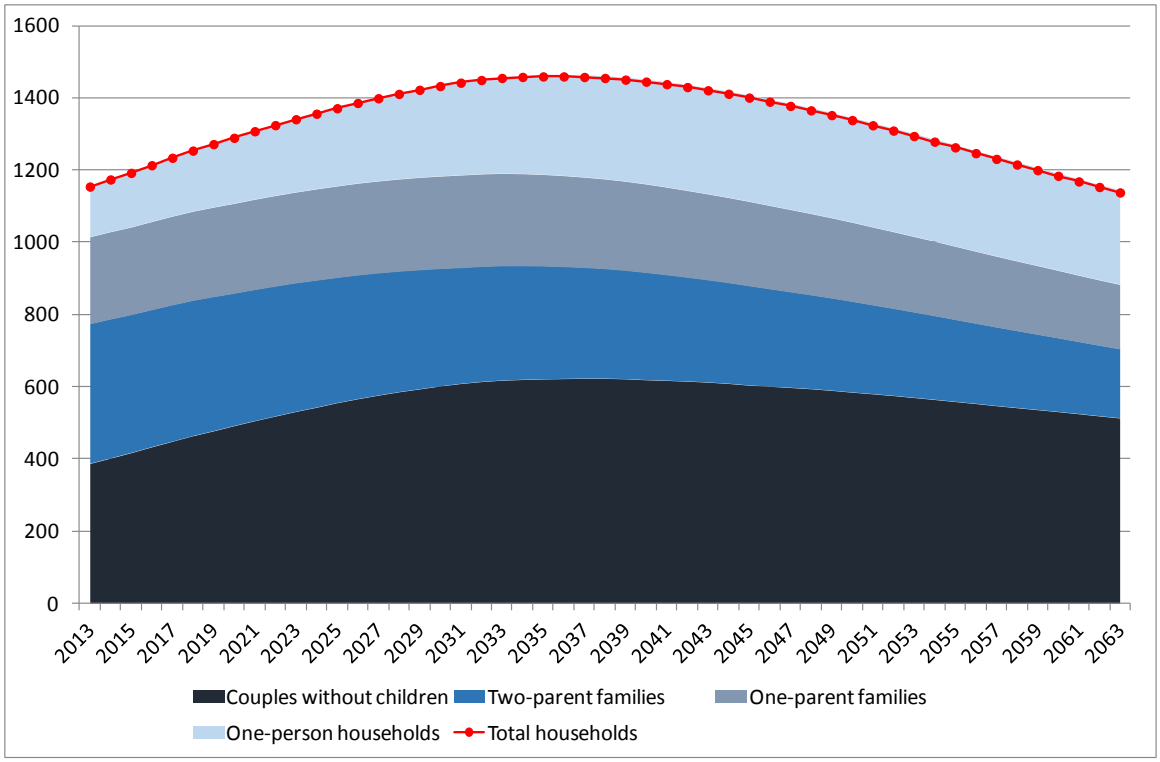
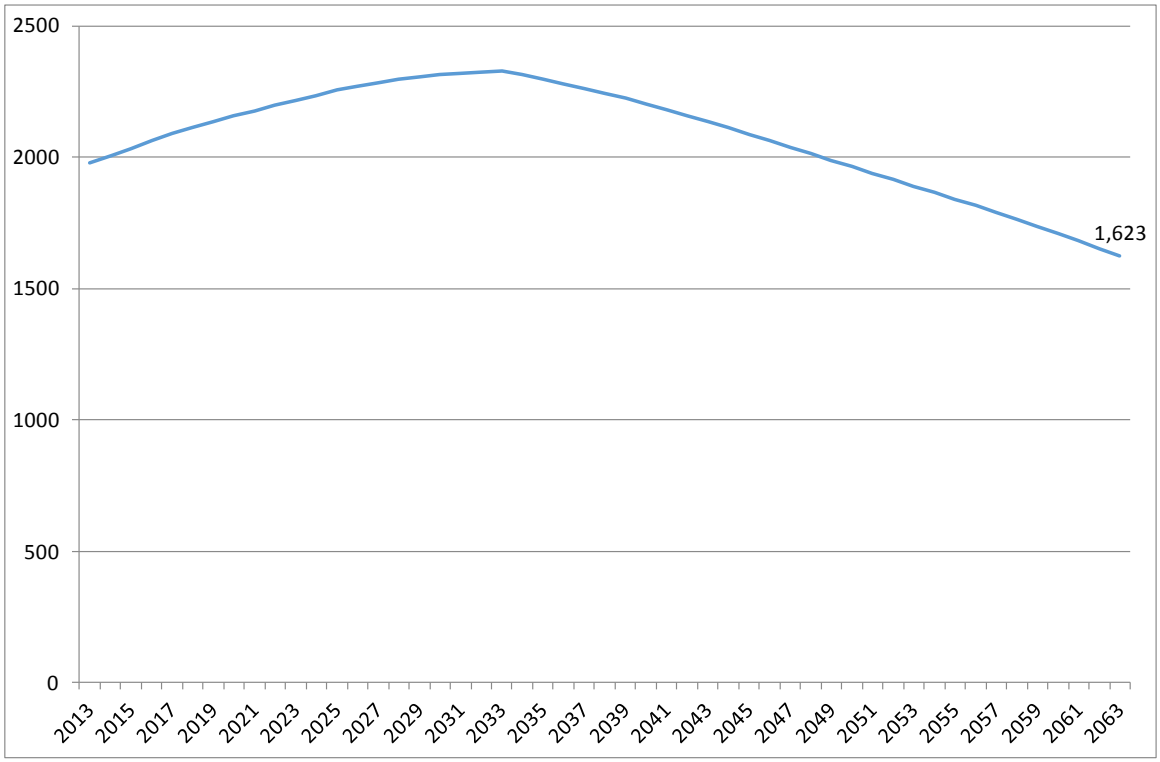



*Figure 56: Labour force projection for part-Rotorua District, 2013-2063*

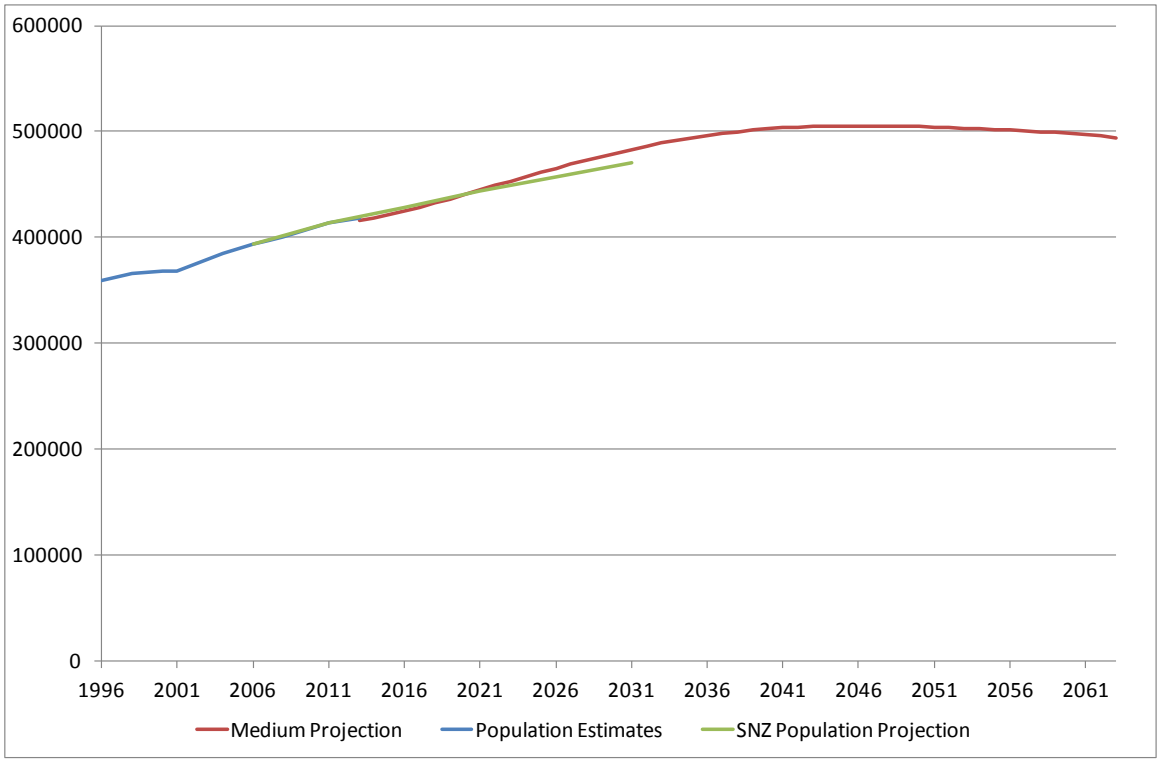


*3.12 Total Population Projection for the Waikato Region*

Figure 57 presents the 2013-base medium population projection for the Waikato Region as a whole, generated by summing the medium projections for all component TAs. Corresponding high and low projections cannot be constructed in the same way, as this requires explicit assumptions about the correlation structure between the TA-level assumptions, which are not available. Historical population estimates from Statistics New Zealand back to 1996 and the 2006-base Statistics New Zealand (SNZ) medium projection (October 2012 update) are also included for comparison.

The June 2013 population estimate (base population) for the Waikato Region is 415,515. Under the medium population projection scenario, the population increases to a peak of 505,405 in 2047 before declining to 494,298 in 2063. The medium projection appears to reasonably closely follow the recent trend in the Waikato Region population, with annualised population increase over the period 2013-2031 of 0.84% per year, similar to the 0.91% annualised increase experienced over the period 1996-2013. In comparison, the SNZ 2006-base medium projection tracks slightly below the medium projection presented here.

***Figure 57: Population projection for the Waikato region, 2013-2063***



## 4. Discussion and Conclusion

This report briefly outlined the methods and results of Territorial-Authority-level population projections for the Waikato Region from 2013 to 2063. The overall picture is one of regional population growth, albeit growth that is slowing and that reverses towards the end of the projection period. This overall picture, though, masks substantial variation in the projected population growth experience of the component territorial authorities (TAs).

Based on the results here, we can identify seven unique growth experiences of the TAs. Most of the TAs are projected to experience a period of population growth followed by eventual decline. However, the mechanisms underlying this pattern of growth and decline differ. First, Thames-Coromandel Distict is projected to experience sustained natural decrease (more deaths than births) and positive net migration (more in-migration than out-migration) that gradually becomes negative (more out-migration than in-migration). It is the only TA that experiences sustained natural decrease throughout the projection period, due to having the oldest age structure of all Waikato TAs.

Second, Hauraki and Taupo Districts are projected to experience natural increase (more births than deaths) that gradually becomes natural decrease, alongside positive net migration that gradually becomes negative. These two TAs share an old age structure, though not as old as Thames-Coromandel District.

Third, Matamata-Piako District is projected to experience sustained natural increase alongside sustained negative net migration. This arises because of the relatively moderate age profile of Matamata-Piako District and the relative youthfulness of its in-migrants.

Fourth, Waipa District is projected to experience natural increase that gradually becomes natural decrease, alongside positive net migration. Waipa District experiences the most rapid ageing of any of the TAs in the region, which leads to this outcome.

Two groups of TAs are projected to experience sustained population decline throughout the projection period, through two different mechanisms. First, Otorohanga and Waitomo Districts are projected to experience sustained natural increase that is more than offset by sustained negative net migration. This arises because these TAs have among the most youthful populations and experience the least degree of population ageing over the projection period.

Second, South Waikato District and part-Rotorua District are projected to experience natural increase that gradually becomes natural decrease, alongside sustained negative net migration. These TAs experience a substantially higher degree of population ageing than either Otorohanga or Waitomo Districts.

Finally, only two TAs (Waikato District and Hamilton City) are projected to experience sustained growth throughout the projection period, comprised of both sustained natural

increase and sustained positive net migration. Although they have the youngest age profiles of the TAs in 2013, both TAs are subject to substantial population ageing, especially Hamilton City.

Overall, the number of households is projected to closely follow the trajectory of the population for each territorial authority. However, there is a substantial change in the distribution of households and families, with fewer couples with children and two-parent families, and more one-parent families and one-person households.

The labour force projections show a sustained increase in the labour force to 2033, after which the labour force begins to decline. However, given the significant population ageing that the region will experience the size of the future labour force depends crucially on the incentives (or disincentives) provided for older people to remain in the paid workforce.

To conclude, the demographic futures (Myers, 2001) experienced by the component territorial authorities of the Waikato Region cannot be determined with complete accuracy. All of these areas are faced with a complex and changing national and international environment, and it is not possible to perfectly foresee all of the factors that might impact on future population. However, the projections presented in this report should assist planners in better understanding the demographic changes that they are faced with, and the sources and factors that underlie those demographic changes. In short, these projections are simply one tool that should be used in evaluating possible futures for the region.

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# Appendix I

***Appendix Table 1: Population projections for Thames-Coromandel District, 2013-2063***

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | **Low** | **Medium** | **High** | **Low** | **Medium** | **High** |
| **2013** | 27,030 | 27,030 | 27,030 | - | - | - |
| **2014** | 26,803 | 27,060 | 27,318 | -0.8% | 0.1% | 1.1% |
| **2015** | 26,620 | 27,121 | 27,629 | -0.7% | 0.2% | 1.1% |
| **2016** | 26,466 | 27,201 | 27,957 | -0.6% | 0.3% | 1.2% |
| **2017** | 26,335 | 27,300 | 28,303 | -0.5% | 0.4% | 1.2% |
| **2018** | 26,222 | 27,413 | 28,664 | -0.4% | 0.4% | 1.3% |
| **2019** | 26,122 | 27,539 | 29,042 | -0.4% | 0.5% | 1.3% |
| **2020** | 26,026 | 27,671 | 29,432 | -0.4% | 0.5% | 1.3% |
| **2021** | 25,927 | 27,803 | 29,828 | -0.4% | 0.5% | 1.3% |
| **2022** | 25,829 | 27,938 | 30,236 | -0.4% | 0.5% | 1.4% |
| **2023** | 25,715 | 28,061 | 30,637 | -0.4% | 0.4% | 1.3% |
| **2024** | 25,591 | 28,175 | 31,036 | -0.5% | 0.4% | 1.3% |
| **2025** | 25,453 | 28,276 | 31,428 | -0.5% | 0.4% | 1.3% |
| **2026** | 25,292 | 28,355 | 31,802 | -0.6% | 0.3% | 1.2% |
| **2027** | 25,109 | 28,411 | 32,160 | -0.7% | 0.2% | 1.1% |
| **2028** | 24,910 | 28,451 | 32,505 | -0.8% | 0.1% | 1.1% |
| **2029** | 24,704 | 28,480 | 32,840 | -0.8% | 0.1% | 1.0% |
| **2030** | 24,489 | 28,494 | 33,160 | -0.9% | 0.1% | 1.0% |
| **2031** | 24,268 | 28,499 | 33,473 | -0.9% | 0.0% | 0.9% |
| **2032** | 24,042 | 28,495 | 33,775 | -0.9% | 0.0% | 0.9% |
| **2033** | 23,800 | 28,465 | 34,045 | -1.0% | -0.1% | 0.8% |
| | | | | | | |
| **2038** | 22,387 | 28,013 | 35,044 | -1.2% | -0.3% | 0.6% |
| **2043** | 20,695 | 27,057 | 35,360 | -1.6% | -0.7% | 0.2% |
| **2048** | 18,852 | 25,739 | 35,128 | -1.8% | -1.0% | -0.1% |
| **2053** | 16,875 | 24,107 | 34,423 | -2.2% | -1.3% | -0.4% |
| **2058** | 14,932 | 22,335 | 33,394 | -2.4% | -1.5% | -0.6% |
| **2063** | 12,901 | 20,253 | 31,787 | -2.9% | -1.9% | -1.0% |

*Appendix Table 2: Population projections for Hauraki District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 18,730 | 18,730 | 18,730 | - | - | - |
| **2014** | 18,524 | 18,698 | 18,872 | -1.1% | -0.2% | 0.8% |
| **2015** | 18,359 | 18,696 | 19,038 | -0.9% | 0.0% | 0.9% |
| **2016** | 18,226 | 18,718 | 19,224 | -0.7% | 0.1% | 1.0% |
| **2017** | 18,107 | 18,749 | 19,417 | -0.7% | 0.2% | 1.0% |
| **2018** | 18,002 | 18,792 | 19,622 | -0.6% | 0.2% | 1.1% |
| **2019** | 17,915 | 18,852 | 19,845 | -0.5% | 0.3% | 1.1% |
| **2020** | 17,833 | 18,915 | 20,074 | -0.5% | 0.3% | 1.2% |
| **2021** | 17,757 | 18,988 | 20,315 | -0.4% | 0.4% | 1.2% |
| **2022** | 17,683 | 19,062 | 20,562 | -0.4% | 0.4% | 1.2% |
| **2023** | 17,608 | 19,137 | 20,814 | -0.4% | 0.4% | 1.2% |
| **2024** | 17,526 | 19,205 | 21,061 | -0.5% | 0.4% | 1.2% |
| **2025** | 17,441 | 19,271 | 21,310 | -0.5% | 0.3% | 1.2% |
| **2026** | 17,345 | 19,327 | 21,554 | -0.5% | 0.3% | 1.1% |
| **2027** | 17,243 | 19,376 | 21,792 | -0.6% | 0.3% | 1.1% |
| **2028** | 17,136 | 19,420 | 22,026 | -0.6% | 0.2% | 1.1% |
| **2029** | 17,022 | 19,454 | 22,253 | -0.7% | 0.2% | 1.0% |
| **2030** | 16,903 | 19,482 | 22,475 | -0.7% | 0.1% | 1.0% |
| **2031** | 16,779 | 19,501 | 22,686 | -0.7% | 0.1% | 0.9% |
| **2032** | 16,649 | 19,512 | 22,891 | -0.8% | 0.1% | 0.9% |
| **2033** | 16,510 | 19,512 | 23,084 | -0.8% | 0.0% | 0.8% |
| | | | | | | |
| **2038** | 15,686 | 19,321 | 23,831 | -1.0% | -0.2% | 0.6% |
| **2043** | 14,575 | 18,730 | 24,115 | -1.5% | -0.6% | 0.2% |
| **2048** | 13,406 | 17,985 | 24,185 | -1.7% | -0.8% | 0.1% |
| **2053** | 12,247 | 17,177 | 24,154 | -1.8% | -0.9% | 0.0% |
| **2058** | 11,140 | 16,345 | 24,049 | -1.9% | -1.0% | -0.1% |
| **2063** | 9,973 | 15,350 | 23,698 | -2.2% | -1.2% | -0.3% |

*Appendix Table 3: Population projections for Waikato District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 64,910 | 64,910 | 64,910 | - | - | - |
| **2014** | 65,302 | 65,698 | 66,095 | 0.6% | 1.2% | 1.8% |
| **2015** | 65,722 | 66,518 | 67,322 | 0.6% | 1.2% | 1.9% |
| **2016** | 66,165 | 67,369 | 68,596 | 0.7% | 1.3% | 1.9% |
| **2017** | 66,609 | 68,229 | 69,895 | 0.7% | 1.3% | 1.9% |
| **2018** | 67,074 | 69,126 | 71,251 | 0.7% | 1.3% | 1.9% |
| **2019** | 67,557 | 70,054 | 72,662 | 0.7% | 1.3% | 2.0% |
| **2020** | 68,037 | 70,997 | 74,111 | 0.7% | 1.3% | 2.0% |
| **2021** | 68,508 | 71,950 | 75,597 | 0.7% | 1.3% | 2.0% |
| **2022** | 68,964 | 72,904 | 77,108 | 0.7% | 1.3% | 2.0% |
| **2023** | 69,404 | 73,861 | 78,654 | 0.6% | 1.3% | 2.0% |
| **2024** | 69,821 | 74,814 | 80,221 | 0.6% | 1.3% | 2.0% |
| **2025** | 70,218 | 75,761 | 81,810 | 0.6% | 1.3% | 2.0% |
| **2026** | 70,584 | 76,693 | 83,408 | 0.5% | 1.2% | 2.0% |
| **2027** | 70,924 | 77,610 | 85,014 | 0.5% | 1.2% | 1.9% |
| **2028** | 71,239 | 78,513 | 86,627 | 0.4% | 1.2% | 1.9% |
| **2029** | 71,533 | 79,403 | 88,247 | 0.4% | 1.1% | 1.9% |
| **2030** | 71,805 | 80,278 | 89,868 | 0.4% | 1.1% | 1.8% |
| **2031** | 72,048 | 81,123 | 91,470 | 0.3% | 1.1% | 1.8% |
| **2032** | 72,265 | 81,945 | 93,064 | 0.3% | 1.0% | 1.7% |
| **2033** | 72,446 | 82,733 | 94,634 | 0.3% | 1.0% | 1.7% |
| | | | | | | |
| **2038** | 72,752 | 86,078 | 102,057 | 0.1% | 0.8% | 1.5% |
| **2043** | 72,124 | 88,456 | 108,723 | -0.2% | 0.5% | 1.3% |
| **2048** | 70,943 | 90,266 | 115,093 | -0.3% | 0.4% | 1.1% |
| **2053** | 69,467 | 91,867 | 121,721 | -0.4% | 0.4% | 1.1% |
| **2058** | 67,922 | 93,483 | 128,897 | -0.4% | 0.3% | 1.2% |
| **2063** | 66,168 | 94,862 | 136,237 | -0.5% | 0.3% | 1.1% |

*Appendix Table 4: Population projections for Matamata-Piako District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 32,210 | 32,210 | 32,210 | - | - | - |
| **2014** | 32,081 | 32,252 | 32,423 | -0.4% | 0.1% | 0.7% |
| **2015** | 31,976 | 32,311 | 32,651 | -0.3% | 0.2% | 0.7% |
| **2016** | 31,891 | 32,387 | 32,893 | -0.3% | 0.2% | 0.7% |
| **2017** | 31,823 | 32,476 | 33,148 | -0.2% | 0.3% | 0.8% |
| **2018** | 31,772 | 32,582 | 33,421 | -0.2% | 0.3% | 0.8% |
| **2019** | 31,735 | 32,704 | 33,713 | -0.1% | 0.4% | 0.9% |
| **2020** | 31,704 | 32,833 | 34,018 | -0.1% | 0.4% | 0.9% |
| **2021** | 31,681 | 32,973 | 34,336 | -0.1% | 0.4% | 0.9% |
| **2022** | 31,664 | 33,122 | 34,669 | -0.1% | 0.5% | 1.0% |
| **2023** | 31,650 | 33,276 | 35,010 | 0.0% | 0.5% | 1.0% |
| **2024** | 31,621 | 33,417 | 35,343 | -0.1% | 0.4% | 1.0% |
| **2025** | 31,581 | 33,550 | 35,673 | -0.1% | 0.4% | 0.9% |
| **2026** | 31,530 | 33,672 | 35,996 | -0.2% | 0.4% | 0.9% |
| **2027** | 31,469 | 33,788 | 36,315 | -0.2% | 0.3% | 0.9% |
| **2028** | 31,398 | 33,893 | 36,627 | -0.2% | 0.3% | 0.9% |
| **2029** | 31,331 | 34,001 | 36,943 | -0.2% | 0.3% | 0.9% |
| **2030** | 31,260 | 34,104 | 37,254 | -0.2% | 0.3% | 0.8% |
| **2031** | 31,193 | 34,209 | 37,566 | -0.2% | 0.3% | 0.8% |
| **2032** | 31,120 | 34,306 | 37,871 | -0.2% | 0.3% | 0.8% |
| **2033** | 31,041 | 34,396 | 38,169 | -0.3% | 0.3% | 0.8% |
| | | | | | | |
| **2038** | 30,419 | 34,585 | 39,386 | -0.4% | 0.1% | 0.6% |
| **2043** | 29,377 | 34,300 | 40,119 | -0.7% | -0.2% | 0.4% |
| **2048** | 28,172 | 33,794 | 40,617 | -0.8% | -0.3% | 0.2% |
| **2053** | 26,910 | 33,212 | 41,073 | -0.9% | -0.3% | 0.2% |
| **2058** | 25,826 | 32,820 | 41,791 | -0.8% | -0.2% | 0.3% |
| **2063** | 24,808 | 32,502 | 42,650 | -0.8% | -0.2% | 0.4% |

*Appendix Table 5: Population projections for Hamilton City, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 147,290 | 147,290 | 147,290 | - | - | - |
| **2014** | 148,372 | 149,260 | 150,149 | 0.7% | 1.3% | 1.9% |
| **2015** | 149,512 | 151,281 | 153,070 | 0.8% | 1.4% | 1.9% |
| **2016** | 150,679 | 153,331 | 156,033 | 0.8% | 1.4% | 1.9% |
| **2017** | 151,870 | 155,411 | 159,045 | 0.8% | 1.4% | 1.9% |
| **2018** | 153,122 | 157,563 | 162,153 | 0.8% | 1.4% | 2.0% |
| **2019** | 154,417 | 159,770 | 165,339 | 0.8% | 1.4% | 2.0% |
| **2020** | 155,737 | 162,012 | 168,582 | 0.9% | 1.4% | 2.0% |
| **2021** | 157,070 | 164,281 | 171,878 | 0.9% | 1.4% | 2.0% |
| **2022** | 158,424 | 166,583 | 175,229 | 0.9% | 1.4% | 2.0% |
| **2023** | 159,776 | 168,900 | 178,625 | 0.9% | 1.4% | 1.9% |
| **2024** | 161,128 | 171,236 | 182,072 | 0.8% | 1.4% | 1.9% |
| **2025** | 162,455 | 173,569 | 185,553 | 0.8% | 1.4% | 1.9% |
| **2026** | 163,720 | 175,863 | 189,030 | 0.8% | 1.3% | 1.9% |
| **2027** | 164,925 | 178,116 | 192,502 | 0.7% | 1.3% | 1.8% |
| **2028** | 166,080 | 180,340 | 195,980 | 0.7% | 1.2% | 1.8% |
| **2029** | 167,178 | 182,525 | 199,454 | 0.7% | 1.2% | 1.8% |
| **2030** | 168,201 | 184,651 | 202,900 | 0.6% | 1.2% | 1.7% |
| **2031** | 169,177 | 186,745 | 206,346 | 0.6% | 1.1% | 1.7% |
| **2032** | 170,073 | 188,775 | 209,762 | 0.5% | 1.1% | 1.7% |
| **2033** | 170,895 | 190,744 | 213,144 | 0.5% | 1.0% | 1.6% |
| | | | | | | |
| **2038** | 173,961 | 199,672 | 229,525 | 0.4% | 0.9% | 1.5% |
| **2043** | 175,469 | 207,058 | 244,772 | 0.2% | 0.7% | 1.3% |
| **2048** | 175,422 | 212,864 | 258,806 | 0.0% | 0.6% | 1.1% |
| **2053** | 173,721 | 216,937 | 271,440 | -0.2% | 0.4% | 1.0% |
| **2058** | 170,897 | 219,823 | 283,261 | -0.3% | 0.3% | 0.9% |
| **2063** | 166,778 | 221,390 | 294,270 | -0.5% | 0.1% | 0.8% |

*Appendix Table 6: Population projections for Waipa District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 46,400 | 46,400 | 46,400 | - | - | - |
| **2014** | 46,403 | 46,720 | 47,037 | 0.0% | 0.7% | 1.4% |
| **2015** | 46,452 | 47,078 | 47,712 | 0.1% | 0.8% | 1.4% |
| **2016** | 46,541 | 47,472 | 48,425 | 0.2% | 0.8% | 1.5% |
| **2017** | 46,664 | 47,901 | 49,177 | 0.3% | 0.9% | 1.6% |
| **2018** | 46,825 | 48,369 | 49,977 | 0.3% | 1.0% | 1.6% |
| **2019** | 47,004 | 48,860 | 50,809 | 0.4% | 1.0% | 1.7% |
| **2020** | 47,198 | 49,375 | 51,677 | 0.4% | 1.1% | 1.7% |
| **2021** | 47,386 | 49,892 | 52,562 | 0.4% | 1.0% | 1.7% |
| **2022** | 47,585 | 50,428 | 53,478 | 0.4% | 1.1% | 1.7% |
| **2023** | 47,777 | 50,966 | 54,411 | 0.4% | 1.1% | 1.7% |
| **2024** | 47,951 | 51,494 | 55,350 | 0.4% | 1.0% | 1.7% |
| **2025** | 48,110 | 52,016 | 56,294 | 0.3% | 1.0% | 1.7% |
| **2026** | 48,233 | 52,506 | 57,221 | 0.3% | 0.9% | 1.6% |
| **2027** | 48,321 | 52,968 | 58,130 | 0.2% | 0.9% | 1.6% |
| **2028** | 48,392 | 53,414 | 59,032 | 0.1% | 0.8% | 1.6% |
| **2029** | 48,450 | 53,846 | 59,927 | 0.1% | 0.8% | 1.5% |
| **2030** | 48,496 | 54,267 | 60,817 | 0.1% | 0.8% | 1.5% |
| **2031** | 48,521 | 54,664 | 61,685 | 0.1% | 0.7% | 1.4% |
| **2032** | 48,528 | 55,038 | 62,531 | 0.0% | 0.7% | 1.4% |
| **2033** | 48,513 | 55,384 | 63,346 | 0.0% | 0.6% | 1.3% |
| | | | | | | |
| **2038** | 47,891 | 56,452 | 66,694 | -0.3% | 0.4% | 1.0% |
| **2043** | 46,272 | 56,247 | 68,539 | -0.7% | -0.1% | 0.5% |
| **2048** | 44,114 | 55,239 | 69,324 | -1.0% | -0.4% | 0.2% |
| **2053** | 41,721 | 53,856 | 69,635 | -1.1% | -0.5% | 0.1% |
| **2058** | 39,574 | 52,742 | 70,338 | -1.1% | -0.4% | 0.2% |
| **2063** | 37,535 | 51,758 | 71,346 | -1.1% | -0.4% | 0.3% |

*Appendix Table 7: Population projections for Otorohanga District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 9,340 | 9,340 | 9,340 | - | - | - |
| **2014** | 9,205 | 9,289 | 9,373 | -1.4% | -0.5% | 0.4% |
| **2015** | 9,084 | 9,247 | 9,413 | -1.3% | -0.5% | 0.4% |
| **2016** | 8,975 | 9,214 | 9,460 | -1.2% | -0.4% | 0.5% |
| **2017** | 8,877 | 9,190 | 9,514 | -1.1% | -0.3% | 0.6% |
| **2018** | 8,794 | 9,177 | 9,579 | -0.9% | -0.1% | 0.7% |
| **2019** | 8,724 | 9,176 | 9,654 | -0.8% | 0.0% | 0.8% |
| **2020** | 8,662 | 9,182 | 9,737 | -0.7% | 0.1% | 0.9% |
| **2021** | 8,606 | 9,193 | 9,826 | -0.6% | 0.1% | 0.9% |
| **2022** | 8,556 | 9,209 | 9,920 | -0.6% | 0.2% | 1.0% |
| **2023** | 8,505 | 9,225 | 10,014 | -0.6% | 0.2% | 1.0% |
| **2024** | 8,457 | 9,242 | 10,110 | -0.6% | 0.2% | 1.0% |
| **2025** | 8,409 | 9,259 | 10,208 | -0.6% | 0.2% | 1.0% |
| **2026** | 8,360 | 9,275 | 10,305 | -0.6% | 0.2% | 1.0% |
| **2027** | 8,307 | 9,286 | 10,396 | -0.6% | 0.1% | 0.9% |
| **2028** | 8,249 | 9,290 | 10,482 | -0.7% | 0.0% | 0.8% |
| **2029** | 8,192 | 9,295 | 10,568 | -0.7% | 0.0% | 0.8% |
| **2030** | 8,129 | 9,293 | 10,648 | -0.8% | 0.0% | 0.8% |
| **2031** | 8,061 | 9,285 | 10,722 | -0.8% | -0.1% | 0.7% |
| **2032** | 7,985 | 9,268 | 10,788 | -0.9% | -0.2% | 0.6% |
| **2033** | 7,903 | 9,242 | 10,843 | -1.0% | -0.3% | 0.5% |
| | | | | | | |
| **2038** | 7,394 | 8,986 | 10,974 | -1.3% | -0.6% | 0.2% |
| **2043** | 6,791 | 8,585 | 10,926 | -1.7% | -0.9% | -0.1% |
| **2048** | 6,181 | 8,140 | 10,811 | -1.9% | -1.1% | -0.2% |
| **2053** | 5,608 | 7,710 | 10,704 | -1.9% | -1.1% | -0.2% |
| **2058** | 5,034 | 7,251 | 10,557 | -2.1% | -1.2% | -0.3% |
| **2063** | 4,417 | 6,704 | 10,289 | -2.6% | -1.6% | -0.5% |

*Appendix Table 8: Population projections for South Waikato District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 22,530 | 22,530 | 22,530 | - | - | - |
| **2014** | 22,130 | 22,295 | 22,460 | -1.8% | -1.0% | -0.3% |
| **2015** | 21,769 | 22,085 | 22,405 | -1.6% | -0.9% | -0.2% |
| **2016** | 21,441 | 21,898 | 22,368 | -1.5% | -0.8% | -0.2% |
| **2017** | 21,130 | 21,721 | 22,336 | -1.5% | -0.8% | -0.1% |
| **2018** | 20,844 | 21,563 | 22,320 | -1.4% | -0.7% | -0.1% |
| **2019** | 20,580 | 21,422 | 22,318 | -1.3% | -0.7% | 0.0% |
| **2020** | 20,325 | 21,288 | 22,323 | -1.2% | -0.6% | 0.0% |
| **2021** | 20,078 | 21,161 | 22,334 | -1.2% | -0.6% | 0.0% |
| **2022** | 19,838 | 21,038 | 22,351 | -1.2% | -0.6% | 0.1% |
| **2023** | 19,594 | 20,910 | 22,362 | -1.2% | -0.6% | 0.0% |
| **2024** | 19,340 | 20,769 | 22,358 | -1.3% | -0.7% | 0.0% |
| **2025** | 19,086 | 20,624 | 22,351 | -1.3% | -0.7% | 0.0% |
| **2026** | 18,826 | 20,472 | 22,336 | -1.4% | -0.7% | -0.1% |
| **2027** | 18,558 | 20,310 | 22,310 | -1.4% | -0.8% | -0.1% |
| **2028** | 18,282 | 20,135 | 22,270 | -1.5% | -0.9% | -0.2% |
| **2029** | 18,005 | 19,955 | 22,220 | -1.5% | -0.9% | -0.2% |
| **2030** | 17,722 | 19,765 | 22,159 | -1.6% | -1.0% | -0.3% |
| **2031** | 17,432 | 19,565 | 22,087 | -1.6% | -1.0% | -0.3% |
| **2032** | 17,138 | 19,357 | 22,003 | -1.7% | -1.1% | -0.4% |
| **2033** | 16,838 | 19,140 | 21,906 | -1.7% | -1.1% | -0.4% |
| | | | | | | |
| **2038** | 15,261 | 17,911 | 21,232 | -1.9% | -1.3% | -0.6% |
| **2043** | 13,647 | 16,563 | 20,372 | -2.2% | -1.6% | -0.8% |
| **2048** | 12,113 | 15,234 | 19,485 | -2.4% | -1.7% | -0.9% |
| **2053** | 10,691 | 13,967 | 18,621 | -2.5% | -1.7% | -0.9% |
| **2058** | 9,424 | 12,804 | 17,813 | -2.5% | -1.7% | -0.9% |
| **2063** | 8,222 | 11,658 | 16,968 | -2.7% | -1.9% | -1.0% |

*Appendix Table 9: Population projections for Waitomo District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 9,300 | 9,300 | 9,300 | - | - | - |
| **2014** | 9,150 | 9,226 | 9,303 | -1.6% | -0.8% | 0.0% |
| **2015** | 9,010 | 9,159 | 9,310 | -1.5% | -0.7% | 0.1% |
| **2016** | 8,879 | 9,097 | 9,320 | -1.5% | -0.7% | 0.1% |
| **2017** | 8,757 | 9,040 | 9,333 | -1.4% | -0.6% | 0.1% |
| **2018** | 8,643 | 8,988 | 9,349 | -1.3% | -0.6% | 0.2% |
| **2019** | 8,536 | 8,942 | 9,370 | -1.2% | -0.5% | 0.2% |
| **2020** | 8,437 | 8,903 | 9,398 | -1.2% | -0.4% | 0.3% |
| **2021** | 8,347 | 8,871 | 9,433 | -1.1% | -0.4% | 0.4% |
| **2022** | 8,258 | 8,840 | 9,469 | -1.1% | -0.4% | 0.4% |
| **2023** | 8,170 | 8,808 | 9,504 | -1.1% | -0.4% | 0.4% |
| **2024** | 8,083 | 8,777 | 9,540 | -1.1% | -0.4% | 0.4% |
| **2025** | 7,996 | 8,746 | 9,576 | -1.1% | -0.4% | 0.4% |
| **2026** | 7,911 | 8,715 | 9,613 | -1.1% | -0.3% | 0.4% |
| **2027** | 7,825 | 8,683 | 9,649 | -1.1% | -0.4% | 0.4% |
| **2028** | 7,730 | 8,640 | 9,673 | -1.2% | -0.5% | 0.3% |
| **2029** | 7,635 | 8,596 | 9,695 | -1.2% | -0.5% | 0.2% |
| **2030** | 7,538 | 8,549 | 9,715 | -1.3% | -0.5% | 0.2% |
| **2031** | 7,442 | 8,502 | 9,735 | -1.3% | -0.5% | 0.2% |
| **2032** | 7,344 | 8,453 | 9,753 | -1.3% | -0.6% | 0.2% |
| **2033** | 7,245 | 8,401 | 9,766 | -1.4% | -0.6% | 0.1% |
| | | | | | | |
| **2038** | 6,699 | 8,062 | 9,737 | -1.6% | -0.8% | -0.1% |
| **2043** | 6,135 | 7,673 | 9,639 | -1.7% | -1.0% | -0.2% |
| **2048** | 5,562 | 7,239 | 9,475 | -1.9% | -1.2% | -0.3% |
| **2053** | 5,003 | 6,788 | 9,273 | -2.1% | -1.3% | -0.4% |
| **2058** | 4,425 | 6,285 | 8,990 | -2.4% | -1.5% | -0.6% |
| **2063** | 3,842 | 5,736 | 8,620 | -2.8% | -1.8% | -0.8% |

*Appendix Table 10: Population projections for Taupo District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 34,150 | 34,150 | 34,150 | - | - | - |
| **2014** | 34,145 | 34,339 | 34,533 | 0.0% | 0.6% | 1.1% |
| **2015** | 34,152 | 34,535 | 34,921 | 0.0% | 0.6% | 1.1% |
| **2016** | 34,165 | 34,732 | 35,310 | 0.0% | 0.6% | 1.1% |
| **2017** | 34,173 | 34,924 | 35,694 | 0.0% | 0.6% | 1.1% |
| **2018** | 34,179 | 35,111 | 36,073 | 0.0% | 0.5% | 1.1% |
| **2019** | 34,184 | 35,297 | 36,454 | 0.0% | 0.5% | 1.1% |
| **2020** | 34,189 | 35,485 | 36,841 | 0.0% | 0.5% | 1.1% |
| **2021** | 34,192 | 35,675 | 37,234 | 0.0% | 0.5% | 1.1% |
| **2022** | 34,184 | 35,855 | 37,624 | 0.0% | 0.5% | 1.0% |
| **2023** | 34,163 | 36,025 | 38,006 | -0.1% | 0.5% | 1.0% |
| **2024** | 34,130 | 36,184 | 38,382 | -0.1% | 0.4% | 1.0% |
| **2025** | 34,085 | 36,332 | 38,750 | -0.1% | 0.4% | 1.0% |
| **2026** | 34,019 | 36,461 | 39,102 | -0.2% | 0.4% | 0.9% |
| **2027** | 33,931 | 36,569 | 39,438 | -0.3% | 0.3% | 0.9% |
| **2028** | 33,833 | 36,667 | 39,767 | -0.3% | 0.3% | 0.8% |
| **2029** | 33,727 | 36,757 | 40,088 | -0.3% | 0.2% | 0.8% |
| **2030** | 33,616 | 36,838 | 40,401 | -0.3% | 0.2% | 0.8% |
| **2031** | 33,495 | 36,906 | 40,698 | -0.4% | 0.2% | 0.7% |
| **2032** | 33,370 | 36,967 | 40,989 | -0.4% | 0.2% | 0.7% |
| **2033** | 33,231 | 37,012 | 41,264 | -0.4% | 0.1% | 0.7% |
| | | | | | | |
| **2038** | 32,300 | 36,946 | 42,315 | -0.6% | 0.0% | 0.5% |
| **2043** | 30,887 | 36,290 | 42,706 | -0.9% | -0.4% | 0.2% |
| **2048** | 29,286 | 35,340 | 42,721 | -1.1% | -0.5% | 0.0% |
| **2053** | 27,477 | 34,087 | 42,362 | -1.3% | -0.7% | -0.2% |
| **2058** | 25,678 | 32,766 | 41,877 | -1.3% | -0.8% | -0.2% |
| **2063** | 23,788 | 31,274 | 41,168 | -1.5% | -0.9% | -0.3% |

*Appendix Table 11: Population projections for part-Rotorua District, 2013-2063*

| Year | Projection | | | Growth Rate (Annualised) | | |
|---|---|---|---|---|---|---|
| | Low | Medium | High | Low | Medium | High |
| **2013** | 3,625 | 3,625 | 3,625 | - | - | - |
| **2014** | 3,620 | 3,638 | 3,656 | -0.1% | 0.3% | 0.8% |
| **2015** | 3,615 | 3,650 | 3,686 | -0.1% | 0.3% | 0.8% |
| **2016** | 3,610 | 3,663 | 3,716 | -0.1% | 0.3% | 0.8% |
| **2017** | 3,605 | 3,675 | 3,746 | -0.1% | 0.3% | 0.8% |
| **2018** | 3,600 | 3,686 | 3,775 | -0.1% | 0.3% | 0.8% |
| **2019** | 3,596 | 3,698 | 3,804 | -0.1% | 0.3% | 0.8% |
| **2020** | 3,590 | 3,709 | 3,834 | -0.1% | 0.3% | 0.8% |
| **2021** | 3,585 | 3,721 | 3,863 | -0.1% | 0.3% | 0.8% |
| **2022** | 3,580 | 3,732 | 3,893 | -0.2% | 0.3% | 0.8% |
| **2023** | 3,574 | 3,742 | 3,921 | -0.2% | 0.3% | 0.7% |
| **2024** | 3,566 | 3,752 | 3,949 | -0.2% | 0.2% | 0.7% |
| **2025** | 3,558 | 3,760 | 3,976 | -0.2% | 0.2% | 0.7% |
| **2026** | 3,548 | 3,767 | 4,003 | -0.3% | 0.2% | 0.7% |
| **2027** | 3,536 | 3,772 | 4,027 | -0.3% | 0.1% | 0.6% |
| **2028** | 3,523 | 3,776 | 4,051 | -0.4% | 0.1% | 0.6% |
| **2029** | 3,510 | 3,779 | 4,073 | -0.4% | 0.1% | 0.6% |
| **2030** | 3,495 | 3,781 | 4,095 | -0.4% | 0.1% | 0.5% |
| **2031** | 3,481 | 3,783 | 4,116 | -0.4% | 0.0% | 0.5% |
| **2032** | 3,464 | 3,782 | 4,136 | -0.5% | 0.0% | 0.5% |
| **2033** | 3,446 | 3,780 | 4,153 | -0.5% | -0.1% | 0.4% |
| | | | | | | |
| **2038** | 3,315 | 3,726 | 4,196 | -0.8% | -0.3% | 0.2% |
| **2043** | 3,128 | 3,604 | 4,166 | -1.2% | -0.7% | -0.1% |
| **2048** | 2,904 | 3,434 | 4,077 | -1.5% | -1.0% | -0.4% |
| **2053** | 2,659 | 3,232 | 3,944 | -1.7% | -1.2% | -0.7% |
| **2058** | 2,413 | 3,017 | 3,791 | -1.9% | -1.4% | -0.8% |
| **2063** | 2,184 | 2,812 | 3,639 | -2.0% | -1.4% | -0.8% |

# Appendix II

***Appendix Table 12: Family and Household Projections for Thames Coromandel District, 2013-2063***

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | **Couples without children** | **Two-parent families** | **One-parent families** | **Total families** | **Family households** | **One-person households** | **Other multi-person households** | **Total households** |
| **2013** | 4,925 | 2,116 | 1,183 | 8,224 | 8,092 | 3,701 | 342 | 12,134 |
| **2014** | 5,038 | 2,106 | 1,178 | 8,322 | 8,188 | 3,740 | 340 | 12,268 |
| **2015** | 5,158 | 2,096 | 1,175 | 8,429 | 8,293 | 3,788 | 339 | 12,420 |
| **2016** | 5,281 | 2,089 | 1,177 | 8,547 | 8,409 | 3,851 | 340 | 12,600 |
| **2017** | 5,394 | 2,083 | 1,180 | 8,657 | 8,518 | 3,927 | 340 | 12,785 |
| **2018** | 5,515 | 2,068 | 1,179 | 8,762 | 8,621 | 4,003 | 339 | 12,963 |
| **2019** | 5,625 | 2,052 | 1,178 | 8,856 | 8,713 | 4,086 | 338 | 13,137 |
| **2020** | 5,741 | 2,034 | 1,177 | 8,952 | 8,808 | 4,179 | 338 | 13,326 |
| **2021** | 5,850 | 2,020 | 1,177 | 9,047 | 8,902 | 4,272 | 338 | 13,511 |
| **2022** | 5,948 | 2,007 | 1,182 | 9,137 | 8,990 | 4,376 | 337 | 13,704 |
| **2023** | 6,046 | 1,985 | 1,179 | 9,210 | 9,062 | 4,478 | 337 | 13,877 |
| **2024** | 6,137 | 1,957 | 1,177 | 9,271 | 9,122 | 4,584 | 337 | 14,043 |
| **2025** | 6,232 | 1,928 | 1,175 | 9,336 | 9,186 | 4,681 | 337 | 14,204 |
| **2026** | 6,308 | 1,907 | 1,175 | 9,390 | 9,239 | 4,780 | 335 | 14,354 |
| **2027** | 6,373 | 1,883 | 1,174 | 9,430 | 9,278 | 4,878 | 335 | 14,491 |
| **2028** | 6,439 | 1,852 | 1,169 | 9,460 | 9,308 | 4,974 | 334 | 14,616 |
| **2029** | 6,503 | 1,814 | 1,162 | 9,478 | 9,326 | 5,063 | 334 | 14,723 |
| **2030** | 6,571 | 1,774 | 1,154 | 9,498 | 9,346 | 5,143 | 334 | 14,823 |
| **2031** | 6,628 | 1,736 | 1,148 | 9,513 | 9,360 | 5,222 | 333 | 14,915 |
| **2032** | 6,668 | 1,715 | 1,143 | 9,526 | 9,373 | 5,281 | 331 | 14,985 |
| **2033** | 6,701 | 1,687 | 1,135 | 9,524 | 9,371 | 5,343 | 329 | 15,043 |
| | | | | | | | | |
| **2038** | 6,808 | 1,511 | 1,066 | 9,385 | 9,234 | 5,561 | 314 | 15,109 |
| **2043** | 6,792 | 1,305 | 971 | 9,068 | 8,922 | 5,603 | 294 | 14,819 |
| **2048** | 6,639 | 1,119 | 869 | 8,627 | 8,489 | 5,480 | 271 | 14,240 |
| **2053** | 6,339 | 971 | 780 | 8,089 | 7,959 | 5,228 | 249 | 13,436 |
| **2058** | 5,947 | 841 | 706 | 7,495 | 7,374 | 4,942 | 225 | 12,541 |
| **2063** | 5,369 | 723 | 634 | 6,726 | 6,618 | 4,690 | 196 | 11,504 |

*Appendix Table 13: Family and Household Projections for Hauraki District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 2,862 | 1,644 | 497 | 5,003 | 4,879 | 2,302 | 200 | 7,380 |
| **2014** | 2,920 | 1,633 | 498 | 5,051 | 4,926 | 2,325 | 200 | 7,451 |
| **2015** | 2,981 | 1,629 | 500 | 5,110 | 4,984 | 2,356 | 201 | 7,540 |
| **2016** | 3,052 | 1,621 | 502 | 5,175 | 5,046 | 2,394 | 201 | 7,642 |
| **2017** | 3,116 | 1,619 | 505 | 5,240 | 5,110 | 2,442 | 201 | 7,754 |
| **2018** | 3,180 | 1,616 | 508 | 5,303 | 5,172 | 2,488 | 202 | 7,862 |
| **2019** | 3,242 | 1,608 | 508 | 5,358 | 5,225 | 2,535 | 202 | 7,963 |
| **2020** | 3,305 | 1,600 | 509 | 5,415 | 5,280 | 2,590 | 203 | 8,073 |
| **2021** | 3,364 | 1,592 | 510 | 5,466 | 5,331 | 2,647 | 203 | 8,181 |
| **2022** | 3,418 | 1,587 | 512 | 5,517 | 5,380 | 2,707 | 204 | 8,290 |
| **2023** | 3,476 | 1,582 | 514 | 5,572 | 5,433 | 2,764 | 205 | 8,402 |
| **2024** | 3,531 | 1,569 | 515 | 5,615 | 5,476 | 2,824 | 208 | 8,507 |
| **2025** | 3,579 | 1,559 | 518 | 5,656 | 5,515 | 2,883 | 208 | 8,606 |
| **2026** | 3,624 | 1,546 | 518 | 5,688 | 5,546 | 2,947 | 210 | 8,703 |
| **2027** | 3,664 | 1,536 | 520 | 5,720 | 5,578 | 3,010 | 211 | 8,799 |
| **2028** | 3,706 | 1,524 | 521 | 5,751 | 5,609 | 3,067 | 212 | 8,887 |
| **2029** | 3,747 | 1,508 | 523 | 5,779 | 5,635 | 3,124 | 212 | 8,972 |
| **2030** | 3,786 | 1,492 | 522 | 5,800 | 5,656 | 3,175 | 213 | 9,044 |
| **2031** | 3,825 | 1,470 | 520 | 5,816 | 5,671 | 3,238 | 214 | 9,123 |
| **2032** | 3,851 | 1,462 | 516 | 5,830 | 5,685 | 3,289 | 213 | 9,188 |
| **2033** | 3,880 | 1,451 | 514 | 5,845 | 5,700 | 3,326 | 213 | 9,239 |
| | | | | | | | | |
| **2038** | 3,993 | 1,348 | 489 | 5,830 | 5,685 | 3,536 | 210 | 9,431 |
| **2043** | 4,058 | 1,183 | 450 | 5,692 | 5,550 | 3,581 | 205 | 9,337 |
| **2048** | 4,067 | 1,034 | 420 | 5,520 | 5,383 | 3,514 | 194 | 9,092 |
| **2053** | 4,013 | 920 | 384 | 5,316 | 5,184 | 3,424 | 185 | 8,793 |
| **2058** | 3,861 | 828 | 357 | 5,047 | 4,921 | 3,400 | 176 | 8,498 |
| **2063** | 3,635 | 743 | 321 | 4,699 | 4,582 | 3,361 | 164 | 8,107 |

*Appendix Table 14: Family and Household Projections for Waikato District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 7,856 | 7,499 | 3,402 | 18,756 | 18,016 | 5,005 | 594 | 7,856 |
| **2014** | 8,128 | 7,530 | 3,454 | 19,112 | 18,358 | 5,159 | 603 | 8,128 |
| **2015** | 8,410 | 7,567 | 3,515 | 19,493 | 18,724 | 5,320 | 613 | 8,410 |
| **2016** | 8,708 | 7,615 | 3,583 | 19,907 | 19,121 | 5,503 | 625 | 8,708 |
| **2017** | 8,999 | 7,656 | 3,650 | 20,305 | 19,503 | 5,694 | 635 | 8,999 |
| **2018** | 9,290 | 7,685 | 3,716 | 20,691 | 19,874 | 5,888 | 646 | 9,290 |
| **2019** | 9,563 | 7,714 | 3,780 | 21,057 | 20,226 | 6,087 | 655 | 9,563 |
| **2020** | 9,840 | 7,755 | 3,850 | 21,445 | 20,599 | 6,286 | 665 | 9,840 |
| **2021** | 10,108 | 7,810 | 3,921 | 21,840 | 20,978 | 6,499 | 673 | 10,108 |
| **2022** | 10,373 | 7,861 | 3,990 | 22,224 | 21,347 | 6,715 | 683 | 10,373 |
| **2023** | 10,636 | 7,905 | 4,058 | 22,598 | 21,706 | 6,927 | 691 | 10,636 |
| **2024** | 10,889 | 7,939 | 4,126 | 22,954 | 22,048 | 7,145 | 702 | 10,889 |
| **2025** | 11,132 | 7,988 | 4,195 | 23,315 | 22,395 | 7,366 | 710 | 11,132 |
| **2026** | 11,359 | 8,048 | 4,262 | 23,669 | 22,735 | 7,589 | 718 | 11,359 |
| **2027** | 11,577 | 8,108 | 4,331 | 24,016 | 23,068 | 7,808 | 726 | 11,577 |
| **2028** | 11,791 | 8,152 | 4,402 | 24,346 | 23,385 | 8,034 | 734 | 11,791 |
| **2029** | 12,016 | 8,177 | 4,474 | 24,667 | 23,694 | 8,255 | 742 | 12,016 |
| **2030** | 12,229 | 8,207 | 4,545 | 24,981 | 23,995 | 8,475 | 749 | 12,229 |
| **2031** | 12,434 | 8,236 | 4,604 | 25,274 | 24,276 | 8,699 | 755 | 12,434 |
| **2032** | 12,592 | 8,327 | 4,646 | 25,565 | 24,556 | 8,871 | 757 | 12,592 |
| **2033** | 12,738 | 8,413 | 4,701 | 25,853 | 24,832 | 9,038 | 760 | 12,738 |
| | | | | | | | | |
| **2038** | 13,503 | 8,652 | 4,902 | 27,057 | 25,990 | 9,767 | 784 | 13,503 |
| **2043** | 14,268 | 8,676 | 5,001 | 27,945 | 26,842 | 10,346 | 808 | 14,268 |
| **2048** | 15,005 | 8,610 | 5,042 | 28,657 | 27,526 | 10,782 | 827 | 15,005 |
| **2053** | 15,641 | 8,570 | 5,110 | 29,322 | 28,165 | 11,092 | 839 | 15,641 |
| **2058** | 16,158 | 8,586 | 5,187 | 29,930 | 28,749 | 11,466 | 840 | 16,158 |
| **2063** | 16,462 | 8,619 | 5,272 | 30,352 | 29,154 | 11,969 | 839 | 16,462 |

*Appendix Table 15: Family and Household Projections for Hamilton City, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 16,257 | 14,584 | 8,760 | 39,601 | 38,007 | 13,112 | 3,678 | 54,797 |
| **2014** | 16,777 | 14,763 | 8,900 | 40,440 | 38,812 | 13,483 | 3,724 | 56,019 |
| **2015** | 17,317 | 14,957 | 9,051 | 41,325 | 39,661 | 13,883 | 3,760 | 57,305 |
| **2016** | 17,834 | 15,130 | 9,190 | 42,153 | 40,456 | 14,311 | 3,762 | 58,529 |
| **2017** | 18,361 | 15,299 | 9,326 | 42,986 | 41,256 | 14,781 | 3,746 | 59,784 |
| **2018** | 18,968 | 15,445 | 9,462 | 43,875 | 42,109 | 15,284 | 3,741 | 61,134 |
| **2019** | 19,577 | 15,578 | 9,595 | 44,749 | 42,948 | 15,814 | 3,747 | 62,509 |
| **2020** | 20,176 | 15,722 | 9,740 | 45,638 | 43,801 | 16,357 | 3,753 | 63,911 |
| **2021** | 20,762 | 15,828 | 9,860 | 46,450 | 44,581 | 16,912 | 3,774 | 65,267 |
| **2022** | 21,331 | 15,939 | 9,988 | 47,258 | 45,356 | 17,504 | 3,790 | 66,650 |
| **2023** | 21,947 | 16,042 | 10,112 | 48,100 | 46,164 | 18,122 | 3,802 | 68,087 |
| **2024** | 22,578 | 16,125 | 10,242 | 48,945 | 46,974 | 18,764 | 3,828 | 69,567 |
| **2025** | 23,200 | 16,210 | 10,378 | 49,788 | 47,784 | 19,404 | 3,857 | 71,045 |
| **2026** | 23,815 | 16,248 | 10,505 | 50,567 | 48,532 | 20,043 | 3,898 | 72,473 |
| **2027** | 24,418 | 16,270 | 10,621 | 51,309 | 49,243 | 20,673 | 3,935 | 73,852 |
| **2028** | 25,051 | 16,294 | 10,746 | 52,092 | 49,995 | 21,337 | 3,990 | 75,322 |
| **2029** | 25,699 | 16,313 | 10,864 | 52,876 | 50,748 | 22,007 | 4,046 | 76,800 |
| **2030** | 26,334 | 16,316 | 10,979 | 53,628 | 51,470 | 22,675 | 4,087 | 78,231 |
| **2031** | 26,976 | 16,291 | 11,088 | 54,355 | 52,167 | 23,347 | 4,135 | 79,648 |
| **2032** | 27,522 | 16,363 | 11,182 | 55,068 | 52,851 | 23,927 | 4,159 | 80,937 |
| **2033** | 28,068 | 16,448 | 11,284 | 55,801 | 53,554 | 24,533 | 4,170 | 82,257 |
| | | | | | | | | |
| **2038** | 30,610 | 16,706 | 11,674 | 58,991 | 56,617 | 27,339 | 4,200 | 88,156 |
| **2043** | 32,798 | 16,814 | 11,900 | 61,511 | 59,035 | 29,717 | 4,223 | 92,975 |
| **2048** | 34,522 | 16,865 | 12,053 | 63,439 | 60,885 | 31,721 | 4,204 | 96,811 |
| **2053** | 35,735 | 16,888 | 12,141 | 64,764 | 62,157 | 33,293 | 4,163 | 99,613 |
| **2058** | 36,587 | 16,843 | 12,214 | 65,644 | 63,002 | 34,569 | 4,150 | 101,721 |
| **2063** | 37,121 | 16,697 | 12,247 | 66,066 | 63,406 | 35,574 | 4,151 | 103,132 |

*Appendix Table 16: Family and Household Projections for Matamata-Piako District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 4,563 | 3,295 | 1,510 | 9,368 | 9,135 | 3,352 | 327 | 12,814 |
| **2014** | 4,636 | 3,284 | 1,516 | 9,435 | 9,201 | 3,378 | 328 | 12,907 |
| **2015** | 4,722 | 3,258 | 1,517 | 9,496 | 9,260 | 3,404 | 330 | 12,995 |
| **2016** | 4,809 | 3,243 | 1,524 | 9,577 | 9,339 | 3,441 | 333 | 13,112 |
| **2017** | 4,907 | 3,218 | 1,528 | 9,653 | 9,413 | 3,488 | 335 | 13,236 |
| **2018** | 4,998 | 3,197 | 1,535 | 9,730 | 9,488 | 3,535 | 337 | 13,360 |
| **2019** | 5,070 | 3,191 | 1,544 | 9,806 | 9,562 | 3,579 | 336 | 13,478 |
| **2020** | 5,147 | 3,181 | 1,554 | 9,882 | 9,637 | 3,627 | 337 | 13,600 |
| **2021** | 5,216 | 3,178 | 1,566 | 9,960 | 9,713 | 3,677 | 336 | 13,725 |
| **2022** | 5,285 | 3,174 | 1,578 | 10,037 | 9,788 | 3,734 | 335 | 13,857 |
| **2023** | 5,354 | 3,167 | 1,589 | 10,110 | 9,859 | 3,790 | 335 | 13,984 |
| **2024** | 5,414 | 3,164 | 1,601 | 10,179 | 9,926 | 3,847 | 335 | 14,108 |
| **2025** | 5,464 | 3,161 | 1,614 | 10,239 | 9,985 | 3,912 | 336 | 14,233 |
| **2026** | 5,512 | 3,162 | 1,627 | 10,302 | 10,046 | 3,971 | 336 | 14,353 |
| **2027** | 5,552 | 3,165 | 1,643 | 10,359 | 10,102 | 4,036 | 336 | 14,474 |
| **2028** | 5,597 | 3,160 | 1,657 | 10,414 | 10,155 | 4,101 | 338 | 14,594 |
| **2029** | 5,647 | 3,142 | 1,670 | 10,459 | 10,199 | 4,168 | 339 | 14,706 |
| **2030** | 5,691 | 3,137 | 1,685 | 10,512 | 10,252 | 4,231 | 340 | 14,822 |
| **2031** | 5,738 | 3,125 | 1,697 | 10,561 | 10,298 | 4,288 | 340 | 14,926 |
| **2032** | 5,751 | 3,142 | 1,709 | 10,602 | 10,339 | 4,338 | 338 | 15,014 |
| **2033** | 5,770 | 3,150 | 1,717 | 10,637 | 10,373 | 4,391 | 338 | 15,102 |
| | | | | | | | | |
| **2038** | 5,843 | 3,114 | 1,725 | 10,682 | 10,416 | 4,585 | 332 | 15,334 |
| **2043** | 5,860 | 3,008 | 1,710 | 10,579 | 10,316 | 4,652 | 328 | 15,296 |
| **2048** | 5,883 | 2,903 | 1,660 | 10,446 | 10,187 | 4,605 | 322 | 15,115 |
| **2053** | 5,893 | 2,812 | 1,620 | 10,326 | 10,069 | 4,507 | 316 | 14,892 |
| **2058** | 5,945 | 2,742 | 1,581 | 10,268 | 10,013 | 4,453 | 313 | 14,780 |
| **2063** | 5,971 | 2,684 | 1,556 | 10,211 | 9,957 | 4,468 | 308 | 14,732 |

*Appendix Table 17: Family and Household Projections for Waipa District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 6,547 | 5,041 | 2,012 | 13,600 | 13,279 | 4,236 | 480 | 17,995 |
| **2014** | 6,761 | 5,027 | 2,017 | 13,805 | 13,479 | 4,299 | 484 | 18,262 |
| **2015** | 6,987 | 5,008 | 2,025 | 14,020 | 13,689 | 4,390 | 489 | 18,568 |
| **2016** | 7,226 | 4,996 | 2,037 | 14,259 | 13,922 | 4,492 | 495 | 18,909 |
| **2017** | 7,474 | 4,971 | 2,046 | 14,491 | 14,149 | 4,620 | 501 | 19,270 |
| **2018** | 7,729 | 4,937 | 2,053 | 14,719 | 14,371 | 4,748 | 506 | 19,626 |
| **2019** | 7,971 | 4,920 | 2,062 | 14,953 | 14,600 | 4,882 | 510 | 19,993 |
| **2020** | 8,212 | 4,901 | 2,075 | 15,187 | 14,829 | 5,042 | 514 | 20,385 |
| **2021** | 8,452 | 4,889 | 2,090 | 15,432 | 15,068 | 5,199 | 518 | 20,785 |
| **2022** | 8,684 | 4,874 | 2,104 | 15,661 | 15,291 | 5,385 | 521 | 21,197 |
| **2023** | 8,924 | 4,851 | 2,118 | 15,893 | 15,518 | 5,567 | 526 | 21,611 |
| **2024** | 9,160 | 4,831 | 2,132 | 16,122 | 15,742 | 5,744 | 531 | 22,017 |
| **2025** | 9,376 | 4,813 | 2,148 | 16,337 | 15,951 | 5,937 | 536 | 22,424 |
| **2026** | 9,594 | 4,800 | 2,163 | 16,557 | 16,167 | 6,117 | 541 | 22,824 |
| **2027** | 9,777 | 4,790 | 2,183 | 16,749 | 16,354 | 6,302 | 544 | 23,200 |
| **2028** | 9,962 | 4,775 | 2,199 | 16,936 | 16,537 | 6,489 | 547 | 23,573 |
| **2029** | 10,157 | 4,747 | 2,211 | 17,115 | 16,711 | 6,669 | 550 | 23,931 |
| **2030** | 10,324 | 4,721 | 2,222 | 17,267 | 16,860 | 6,864 | 552 | 24,276 |
| **2031** | 10,495 | 4,696 | 2,235 | 17,425 | 17,014 | 7,050 | 554 | 24,618 |
| **2032** | 10,601 | 4,708 | 2,250 | 17,559 | 17,145 | 7,228 | 554 | 24,927 |
| **2033** | 10,689 | 4,721 | 2,261 | 17,672 | 17,255 | 7,397 | 552 | 25,204 |
| | | | | | | | | |
| **2038** | 11,046 | 4,663 | 2,296 | 18,005 | 17,580 | 8,065 | 548 | 26,193 |
| **2043** | 11,086 | 4,513 | 2,279 | 17,878 | 17,456 | 8,405 | 537 | 26,398 |
| **2048** | 10,996 | 4,318 | 2,224 | 17,538 | 17,124 | 8,419 | 526 | 26,069 |
| **2053** | 10,882 | 4,128 | 2,148 | 17,158 | 16,753 | 8,235 | 508 | 25,496 |
| **2058** | 10,874 | 3,945 | 2,072 | 16,891 | 16,492 | 8,107 | 493 | 25,093 |
| **2063** | 10,850 | 3,773 | 2,007 | 16,629 | 16,237 | 8,092 | 481 | 24,810 |

*Appendix Table 18: Family and Household Projections for Otorohanga District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 1,160 | 1,033 | 396 | 2,588 | 2,520 | 864 | 71 | 3,455 |
| **2014** | 1,184 | 1,031 | 395 | 2,611 | 2,542 | 867 | 72 | 3,481 |
| **2015** | 1,205 | 1,031 | 393 | 2,629 | 2,560 | 873 | 72 | 3,505 |
| **2016** | 1,227 | 1,040 | 395 | 2,663 | 2,593 | 883 | 73 | 3,549 |
| **2017** | 1,251 | 1,043 | 398 | 2,692 | 2,621 | 893 | 74 | 3,589 |
| **2018** | 1,275 | 1,049 | 398 | 2,723 | 2,652 | 905 | 74 | 3,631 |
| **2019** | 1,301 | 1,053 | 397 | 2,751 | 2,679 | 913 | 74 | 3,666 |
| **2020** | 1,320 | 1,060 | 398 | 2,777 | 2,704 | 927 | 74 | 3,705 |
| **2021** | 1,335 | 1,078 | 399 | 2,813 | 2,739 | 941 | 74 | 3,754 |
| **2022** | 1,357 | 1,088 | 398 | 2,843 | 2,769 | 958 | 74 | 3,801 |
| **2023** | 1,372 | 1,102 | 397 | 2,872 | 2,797 | 972 | 75 | 3,843 |
| **2024** | 1,389 | 1,106 | 399 | 2,894 | 2,818 | 986 | 75 | 3,879 |
| **2025** | 1,403 | 1,114 | 401 | 2,918 | 2,842 | 1,000 | 75 | 3,917 |
| **2026** | 1,414 | 1,130 | 404 | 2,948 | 2,870 | 1,014 | 75 | 3,960 |
| **2027** | 1,425 | 1,139 | 406 | 2,970 | 2,892 | 1,029 | 76 | 3,996 |
| **2028** | 1,432 | 1,148 | 409 | 2,989 | 2,910 | 1,041 | 75 | 4,027 |
| **2029** | 1,445 | 1,143 | 407 | 2,995 | 2,917 | 1,057 | 76 | 4,049 |
| **2030** | 1,455 | 1,144 | 408 | 3,007 | 2,928 | 1,067 | 76 | 4,071 |
| **2031** | 1,466 | 1,147 | 409 | 3,022 | 2,943 | 1,077 | 76 | 4,096 |
| **2032** | 1,468 | 1,153 | 412 | 3,033 | 2,953 | 1,085 | 76 | 4,114 |
| **2033** | 1,468 | 1,158 | 414 | 3,039 | 2,959 | 1,090 | 75 | 4,125 |
| | | | | | | | | |
| **2038** | 1,491 | 1,108 | 412 | 3,011 | 2,932 | 1,107 | 73 | 4,111 |
| **2043** | 1,534 | 988 | 397 | 2,919 | 2,843 | 1,108 | 69 | 4,020 |
| **2048** | 1,589 | 850 | 365 | 2,804 | 2,730 | 1,102 | 64 | 3,896 |
| **2053** | 1,616 | 732 | 332 | 2,680 | 2,610 | 1,085 | 61 | 3,756 |
| **2058** | 1,571 | 647 | 308 | 2,526 | 2,460 | 1,074 | 58 | 3,591 |
| **2063** | 1,455 | 584 | 289 | 2,328 | 2,267 | 1,051 | 54 | 3,372 |

*Appendix Table 19: Family and Household Projections for South Waikato District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 2,726 | 2,250 | 1,470 | 6,446 | 6,202 | 2,315 | 211 | 8,727 |
| **2014** | 2,754 | 2,220 | 1,471 | 6,446 | 6,201 | 2,329 | 210 | 8,739 |
| **2015** | 2,783 | 2,192 | 1,473 | 6,448 | 6,203 | 2,347 | 208 | 8,758 |
| **2016** | 2,812 | 2,171 | 1,481 | 6,464 | 6,218 | 2,373 | 206 | 8,797 |
| **2017** | 2,846 | 2,144 | 1,489 | 6,479 | 6,233 | 2,401 | 204 | 8,839 |
| **2018** | 2,872 | 2,129 | 1,498 | 6,499 | 6,252 | 2,424 | 202 | 8,877 |
| **2019** | 2,896 | 2,106 | 1,494 | 6,496 | 6,250 | 2,444 | 199 | 8,893 |
| **2020** | 2,915 | 2,082 | 1,490 | 6,487 | 6,241 | 2,464 | 196 | 8,901 |
| **2021** | 2,932 | 2,063 | 1,488 | 6,483 | 6,237 | 2,483 | 192 | 8,912 |
| **2022** | 2,950 | 2,041 | 1,486 | 6,478 | 6,232 | 2,508 | 188 | 8,928 |
| **2023** | 2,961 | 2,024 | 1,486 | 6,471 | 6,225 | 2,528 | 185 | 8,938 |
| **2024** | 2,975 | 1,995 | 1,480 | 6,451 | 6,206 | 2,552 | 183 | 8,940 |
| **2025** | 2,984 | 1,968 | 1,471 | 6,423 | 6,179 | 2,577 | 181 | 8,938 |
| **2026** | 2,988 | 1,942 | 1,460 | 6,390 | 6,148 | 2,599 | 179 | 8,926 |
| **2027** | 2,988 | 1,916 | 1,450 | 6,354 | 6,112 | 2,619 | 177 | 8,908 |
| **2028** | 2,982 | 1,893 | 1,439 | 6,315 | 6,075 | 2,640 | 176 | 8,891 |
| **2029** | 2,984 | 1,862 | 1,429 | 6,275 | 6,037 | 2,658 | 175 | 8,870 |
| **2030** | 2,990 | 1,825 | 1,419 | 6,234 | 5,998 | 2,671 | 174 | 8,842 |
| **2031** | 2,991 | 1,787 | 1,403 | 6,180 | 5,946 | 2,687 | 173 | 8,805 |
| **2032** | 2,978 | 1,765 | 1,384 | 6,127 | 5,894 | 2,692 | 171 | 8,757 |
| **2033** | 2,969 | 1,740 | 1,364 | 6,073 | 5,842 | 2,687 | 169 | 8,698 |
| | | | | | | | | |
| **2038** | 2,924 | 1,575 | 1,252 | 5,750 | 5,532 | 2,657 | 159 | 8,348 |
| **2043** | 2,857 | 1,368 | 1,143 | 5,368 | 5,164 | 2,592 | 146 | 7,903 |
| **2048** | 2,744 | 1,179 | 1,048 | 4,971 | 4,782 | 2,483 | 131 | 7,396 |
| **2053** | 2,580 | 1,045 | 938 | 4,563 | 4,390 | 2,349 | 118 | 6,857 |
| **2058** | 2,425 | 935 | 835 | 4,194 | 4,035 | 2,199 | 107 | 6,340 |
| **2063** | 2,247 | 823 | 738 | 3,808 | 3,663 | 2,081 | 97 | 5,842 |

*Appendix Table 20: Family and Household Projections for Waitomo District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 1,150 | 929 | 575 | 2,654 | 2,554 | 964 | 92 | 3,609 |
| **2014** | 1,154 | 928 | 576 | 2,658 | 2,558 | 965 | 92 | 3,614 |
| **2015** | 1,159 | 926 | 576 | 2,660 | 2,560 | 964 | 91 | 3,615 |
| **2016** | 1,170 | 929 | 581 | 2,681 | 2,579 | 967 | 91 | 3,637 |
| **2017** | 1,180 | 924 | 581 | 2,684 | 2,583 | 974 | 91 | 3,649 |
| **2018** | 1,187 | 923 | 582 | 2,692 | 2,590 | 981 | 92 | 3,663 |
| **2019** | 1,197 | 919 | 580 | 2,697 | 2,595 | 981 | 91 | 3,667 |
| **2020** | 1,206 | 916 | 582 | 2,704 | 2,601 | 985 | 90 | 3,677 |
| **2021** | 1,214 | 920 | 583 | 2,716 | 2,614 | 988 | 89 | 3,691 |
| **2022** | 1,226 | 916 | 583 | 2,726 | 2,623 | 993 | 89 | 3,705 |
| **2023** | 1,233 | 915 | 586 | 2,733 | 2,630 | 1,001 | 89 | 3,719 |
| **2024** | 1,241 | 906 | 584 | 2,731 | 2,628 | 1,007 | 88 | 3,723 |
| **2025** | 1,254 | 894 | 582 | 2,730 | 2,627 | 1,016 | 88 | 3,730 |
| **2026** | 1,258 | 893 | 583 | 2,734 | 2,630 | 1,021 | 87 | 3,739 |
| **2027** | 1,263 | 888 | 583 | 2,733 | 2,630 | 1,030 | 87 | 3,747 |
| **2028** | 1,263 | 884 | 584 | 2,731 | 2,628 | 1,037 | 86 | 3,751 |
| **2029** | 1,275 | 870 | 579 | 2,723 | 2,620 | 1,044 | 85 | 3,750 |
| **2030** | 1,284 | 857 | 574 | 2,715 | 2,613 | 1,056 | 85 | 3,754 |
| **2031** | 1,293 | 846 | 570 | 2,709 | 2,606 | 1,065 | 84 | 3,755 |
| **2032** | 1,293 | 843 | 567 | 2,703 | 2,601 | 1,070 | 84 | 3,755 |
| **2033** | 1,294 | 839 | 559 | 2,693 | 2,591 | 1,073 | 83 | 3,747 |
| | | | | | | | | |
| **2038** | 1,314 | 780 | 533 | 2,627 | 2,528 | 1,085 | 80 | 3,693 |
| **2043** | 1,345 | 703 | 489 | 2,537 | 2,441 | 1,092 | 76 | 3,609 |
| **2048** | 1,348 | 622 | 451 | 2,421 | 2,330 | 1,066 | 71 | 3,467 |
| **2053** | 1,321 | 552 | 414 | 2,286 | 2,200 | 1,033 | 64 | 3,297 |
| **2058** | 1,237 | 497 | 386 | 2,120 | 2,040 | 993 | 57 | 3,090 |
| **2063** | 1,125 | 449 | 350 | 1,924 | 1,851 | 947 | 52 | 2,850 |

*Appendix Table 21: Family and Household Projections for Taupo District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 4,978 | 3,311 | 1,749 | 10,038 | 9,746 | 3,602 | 401 | 13,748 |
| **2014** | 5,090 | 3,289 | 1,758 | 10,137 | 9,841 | 3,667 | 400 | 13,908 |
| **2015** | 5,211 | 3,267 | 1,762 | 10,240 | 9,942 | 3,740 | 398 | 14,080 |
| **2016** | 5,330 | 3,252 | 1,776 | 10,359 | 10,057 | 3,826 | 397 | 14,280 |
| **2017** | 5,454 | 3,237 | 1,790 | 10,481 | 10,175 | 3,911 | 396 | 14,483 |
| **2018** | 5,569 | 3,221 | 1,801 | 10,591 | 10,283 | 4,000 | 396 | 14,679 |
| **2019** | 5,690 | 3,185 | 1,804 | 10,679 | 10,368 | 4,092 | 396 | 14,856 |
| **2020** | 5,811 | 3,151 | 1,803 | 10,766 | 10,452 | 4,188 | 396 | 15,036 |
| **2021** | 5,923 | 3,130 | 1,807 | 10,860 | 10,543 | 4,280 | 395 | 15,218 |
| **2022** | 6,028 | 3,107 | 1,808 | 10,943 | 10,624 | 4,383 | 392 | 15,399 |
| **2023** | 6,126 | 3,085 | 1,812 | 11,024 | 10,702 | 4,486 | 391 | 15,579 |
| **2024** | 6,229 | 3,048 | 1,816 | 11,094 | 10,770 | 4,587 | 393 | 15,749 |
| **2025** | 6,329 | 3,013 | 1,823 | 11,165 | 10,839 | 4,688 | 392 | 15,920 |
| **2026** | 6,411 | 2,989 | 1,828 | 11,227 | 10,900 | 4,785 | 392 | 16,077 |
| **2027** | 6,487 | 2,962 | 1,830 | 11,279 | 10,951 | 4,881 | 390 | 16,222 |
| **2028** | 6,566 | 2,936 | 1,837 | 11,339 | 11,008 | 4,969 | 390 | 16,368 |
| **2029** | 6,646 | 2,896 | 1,838 | 11,379 | 11,048 | 5,065 | 392 | 16,504 |
| **2030** | 6,732 | 2,851 | 1,837 | 11,420 | 11,088 | 5,160 | 393 | 16,641 |
| **2031** | 6,805 | 2,814 | 1,836 | 11,455 | 11,121 | 5,255 | 393 | 16,770 |
| **2032** | 6,859 | 2,798 | 1,834 | 11,491 | 11,156 | 5,324 | 392 | 16,872 |
| **2033** | 6,908 | 2,783 | 1,832 | 11,523 | 11,188 | 5,388 | 390 | 16,965 |
| | | | | | | | | |
| **2038** | 7,074 | 2,643 | 1,804 | 11,521 | 11,185 | 5,719 | 380 | 17,284 |
| **2043** | 7,099 | 2,477 | 1,739 | 11,316 | 10,986 | 5,856 | 365 | 17,208 |
| **2048** | 6,965 | 2,351 | 1,683 | 10,999 | 10,678 | 5,903 | 348 | 16,929 |
| **2053** | 6,774 | 2,241 | 1,603 | 10,617 | 10,307 | 5,801 | 331 | 16,439 |
| **2058** | 6,557 | 2,119 | 1,546 | 10,222 | 9,924 | 5,660 | 312 | 15,897 |
| **2063** | 6,310 | 1,985 | 1,472 | 9,766 | 9,481 | 5,488 | 293 | 15,263 |

*Appendix Table 22: Family and Household Projections for part-Rotorua District, 2013-2063*

| Year | Families | | | | Households | | | |
|---|---|---|---|---|---|---|---|---|
| | Couples without children | Two-parent families | One-parent families | Total families | Family households | One-person households | Other multi-person households | Total households |
| **2013** | 386 | 387 | 241 | 1,014 | 970 | 139 | 46 | 1,154 |
| **2014** | 401 | 385 | 242 | 1,028 | 983 | 145 | 46 | 1,174 |
| **2015** | 416 | 382 | 243 | 1,041 | 995 | 150 | 46 | 1,192 |
| **2016** | 432 | 380 | 245 | 1,056 | 1,010 | 156 | 47 | 1,213 |
| **2017** | 448 | 378 | 246 | 1,071 | 1,024 | 162 | 47 | 1,234 |
| **2018** | 463 | 375 | 247 | 1,085 | 1,037 | 169 | 48 | 1,254 |
| **2019** | 476 | 371 | 248 | 1,096 | 1,048 | 176 | 48 | 1,272 |
| **2020** | 491 | 367 | 249 | 1,107 | 1,058 | 183 | 48 | 1,289 |
| **2021** | 504 | 363 | 251 | 1,118 | 1,069 | 190 | 49 | 1,307 |
| **2022** | 517 | 360 | 251 | 1,129 | 1,079 | 197 | 49 | 1,324 |
| **2023** | 530 | 356 | 252 | 1,138 | 1,088 | 204 | 49 | 1,341 |
| **2024** | 542 | 352 | 253 | 1,147 | 1,097 | 210 | 49 | 1,356 |
| **2025** | 554 | 347 | 254 | 1,155 | 1,104 | 217 | 49 | 1,371 |
| **2026** | 565 | 343 | 255 | 1,163 | 1,112 | 225 | 49 | 1,386 |
| **2027** | 575 | 339 | 255 | 1,169 | 1,118 | 232 | 49 | 1,399 |
| **2028** | 584 | 334 | 256 | 1,174 | 1,123 | 239 | 49 | 1,411 |
| **2029** | 592 | 330 | 256 | 1,179 | 1,127 | 245 | 50 | 1,422 |
| **2030** | 600 | 325 | 257 | 1,183 | 1,131 | 252 | 50 | 1,433 |
| **2031** | 607 | 321 | 257 | 1,185 | 1,133 | 259 | 50 | 1,442 |
| **2032** | 613 | 319 | 257 | 1,189 | 1,136 | 264 | 49 | 1,449 |
| **2033** | 616 | 317 | 257 | 1,190 | 1,138 | 268 | 49 | 1,455 |
| | | | | | | | | |
| **2038** | 621 | 304 | 249 | 1,175 | 1,123 | 286 | 46 | 1,455 |
| **2043** | 611 | 283 | 239 | 1,133 | 1,083 | 294 | 44 | 1,421 |
| **2048** | 593 | 260 | 226 | 1,079 | 1,031 | 293 | 41 | 1,365 |
| **2053** | 569 | 237 | 210 | 1,015 | 971 | 285 | 39 | 1,294 |
| **2058** | 540 | 213 | 194 | 947 | 906 | 274 | 36 | 1,215 |
| **2063** | 512 | 191 | 179 | 882 | 843 | 261 | 33 | 1,138 |

# Appendix III

***Appendix Table 23: Labour Force Projections, 2013-2063***

| Year | Thames-Coromandel District | Hauraki District | Waikato District | Matamata-Piako District | Hamilton City | Waipa District |
|---|---|---|---|---|---|---|
| **2013** | 13,504 | 9,027 | 34,618 | 16,984 | 78,438 | 25,279 |
| **2014** | 13,637 | 9,129 | 35,294 | 17,147 | 80,240 | 25,720 |
| **2015** | 13,814 | 9,263 | 36,031 | 17,346 | 82,028 | 26,150 |
| **2016** | 13,997 | 9,371 | 36,786 | 17,538 | 83,630 | 26,620 |
| **2017** | 14,159 | 9,466 | 37,523 | 17,719 | 85,205 | 27,026 |
| **2018** | 14,303 | 9,587 | 38,267 | 17,891 | 86,825 | 27,451 |
| **2019** | 14,432 | 9,707 | 39,000 | 18,058 | 88,518 | 27,916 |
| **2020** | 14,599 | 9,821 | 39,768 | 18,229 | 90,220 | 28,346 |
| **2021** | 14,757 | 9,912 | 40,524 | 18,424 | 91,880 | 28,835 |
| **2022** | 14,912 | 10,021 | 41,307 | 18,592 | 93,524 | 29,245 |
| **2023** | 15,054 | 10,140 | 42,076 | 18,788 | 95,264 | 29,693 |
| **2024** | 15,186 | 10,256 | 42,865 | 18,968 | 97,112 | 30,159 |
| **2025** | 15,336 | 10,351 | 43,637 | 19,163 | 98,911 | 30,569 |
| **2026** | 15,461 | 10,449 | 44,376 | 19,354 | 100,724 | 31,021 |
| **2027** | 15,578 | 10,536 | 45,097 | 19,501 | 102,461 | 31,414 |
| **2028** | 15,681 | 10,619 | 45,809 | 19,678 | 104,273 | 31,762 |
| **2029** | 15,763 | 10,699 | 46,526 | 19,816 | 106,128 | 32,140 |
| **2030** | 15,852 | 10,783 | 47,237 | 19,949 | 107,899 | 32,477 |
| **2031** | 15,931 | 10,849 | 47,935 | 20,088 | 109,692 | 32,841 |
| **2032** | 16,015 | 10,912 | 48,627 | 20,182 | 111,395 | 33,159 |
| **2033** | 16,069 | 10,975 | 49,293 | 20,304 | 113,058 | 33,439 |
| | | | | | | |
| **2038** | 15,472 | 10,740 | 51,150 | 20,116 | 117,609 | 33,301 |
| **2043** | 14,635 | 10,355 | 52,702 | 19,917 | 120,973 | 32,721 |
| **2048** | 13,699 | 9,935 | 54,100 | 19,769 | 123,186 | 32,076 |
| **2053** | 12,583 | 9,449 | 55,274 | 19,647 | 124,317 | 31,465 |
| **2058** | 11,128 | 8,735 | 56,004 | 19,439 | 124,589 | 30,839 |
| **2063** | 9,431 | 7,741 | 56,126 | 19,006 | 124,049 | 29,893 |

*Appendix Table 23: Labour Force Projections, 2013-2063 ctd.*

| Year | Otorohanga District | South Waikato District | Waitomo District | Taupo District | Part-Rotorua District | Waikato Region |
|---|---|---|---|---|---|---|
| **2013** | 5,101 | 10,823 | 4,971 | 18,367 | 1,980 | 219,091 |
| **2014** | 5,170 | 10,862 | 5,002 | 18,569 | 2,006 | 222,776 |
| **2015** | 5,240 | 10,897 | 5,034 | 18,797 | 2,034 | 226,633 |
| **2016** | 5,330 | 10,934 | 5,087 | 19,029 | 2,063 | 230,384 |
| **2017** | 5,418 | 10,963 | 5,122 | 19,233 | 2,089 | 233,923 |
| **2018** | 5,499 | 10,991 | 5,157 | 19,432 | 2,114 | 237,517 |
| **2019** | 5,560 | 11,015 | 5,178 | 19,627 | 2,134 | 241,145 |
| **2020** | 5,636 | 11,034 | 5,206 | 19,825 | 2,156 | 244,841 |
| **2021** | 5,708 | 11,047 | 5,234 | 20,017 | 2,177 | 248,515 |
| **2022** | 5,783 | 11,041 | 5,269 | 20,197 | 2,197 | 252,088 |
| **2023** | 5,849 | 11,053 | 5,300 | 20,406 | 2,216 | 255,839 |
| **2024** | 5,895 | 11,061 | 5,321 | 20,600 | 2,235 | 259,660 |
| **2025** | 5,957 | 11,065 | 5,350 | 20,789 | 2,254 | 263,380 |
| **2026** | 6,017 | 11,048 | 5,373 | 20,975 | 2,270 | 267,069 |
| **2027** | 6,062 | 11,023 | 5,394 | 21,135 | 2,284 | 270,484 |
| **2028** | 6,102 | 10,997 | 5,397 | 21,307 | 2,297 | 273,924 |
| **2029** | 6,132 | 10,969 | 5,409 | 21,463 | 2,305 | 277,351 |
| **2030** | 6,163 | 10,932 | 5,422 | 21,594 | 2,312 | 280,620 |
| **2031** | 6,196 | 10,883 | 5,433 | 21,724 | 2,318 | 283,889 |
| **2032** | 6,215 | 10,826 | 5,443 | 21,835 | 2,322 | 286,931 |
| **2033** | 6,228 | 10,768 | 5,447 | 21,966 | 2,326 | 289,874 |
| | | | | | | |
| **2038** | 6,090 | 10,052 | 5,312 | 21,606 | 2,243 | 293,690 |
| **2043** | 5,887 | 9,323 | 5,134 | 20,939 | 2,134 | 294,722 |
| **2048** | 5,679 | 8,664 | 4,899 | 20,226 | 2,012 | 294,245 |
| **2053** | 5,426 | 7,998 | 4,596 | 19,390 | 1,889 | 292,033 |
| **2058** | 5,063 | 7,226 | 4,230 | 18,447 | 1,762 | 287,462 |
| **2063** | 4,585 | 6,329 | 3,792 | 17,333 | 1,623 | 279,908 |