

Growth Projections

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Glossary

OUTPUT DEFINITIONS

Term	Definition
Usually Resident Population	The number of people who usually live in an area.
Total Dwellings	Any building structure, or any part of a building structure, that is used or intended to be used for human inhabitation.
Occupied Dwellings	Any dwelling which is usually has people residing in it.
Unoccupied Dwellings	Any dwelling which is usually does not have people have residing in it. These are primarily holiday homes.
Filled Jobs	The total number of jobs that are based in an area. These may be full time or part time jobs.
Rating Units - Total SUIPs	The total number of rating units. This is the sum of the individual rating units below.
Rating Units - Urban SUIPs	The number of rating units who are charged under the Urban rate.
Rating Units - Rural 1 SUIPs	The number of rating units who are charged under the Rural 1 rate.
Rating Units - Rural 2 SUIPs	The number of rating units who are charged under the Rural 2 rate.
Rating Units - Business SUIPs	The number of rating units who are charged under the Business rate.
Average Day Visitor Nights	The mean number of visitors that are within an area overnight, within in a 12-month period.
Peak Day Visitor Nights	The number of visitors that are within an area overnight, on the busiest night within in a 12-month period.
Average Day Visitor Numbers	The mean number of visitors that are within an area at any time in the day, within in a 12-month period.
Peak Day Visitor Numbers	The number of visitors that are within an area at any time in the day, on the busiest night within in a 12-month period.

OTHER DEFINITIONS

Term	Definition
Rating Unit	The unit of liability for rates is the rating unit. It is based on the concept of ownership – where, in particular, 1 certificate of title = 1 rating unit. Valuation rules allow for exceptions and oddities, as not all land in New Zealand has a certificate of title.
SUIP - Separately Used or Inhabited Part	<p>A SUIP is every rating unit and, without limitation, every additional dwelling, commercial or community activity. This includes:</p> <ul style="list-style-type: none"> a) any part or parts of a rating unit that is used or occupied by the ratepayer for more than one single use. b) any parts, whether or not actually occupied at any particular time, which are used for rental (or other form of occupation) on an occasional or long-term basis. c) vacant land and vacant premises offered or intended for use or habitation and usually used as such are defined as 'used'. <p>For the purposes of clarity, every rating unit has a minimum of one SUIP.</p>

Statistical Area 1 (SA1)	The main purpose of the SA1 geography is to provide an output geography that allows the release of more low-level data than is available at the meshblock level. Built by joining meshblocks, SA1s have an ideal size range of 100–200 residents, and a maximum population of about 500.
Statistical Area 2 (SA2)	The main purpose of the SA2 geography is to provide an output geography for higher aggregations of population data than can be provided at the SA1 level. The SA2 geography aims to reflect communities that interact together socially and economically. In populated areas, SA2s generally contain similar-sized populations. Statistical areas either define or aggregate to define urban rural areas, territorial authorities, and regional councils.
Peaking Factor	The ratio between peak day visitor numbers and average day visitor numbers
Net Migration	People moving into an area, less the people moving out of an area.

1 Executive Summary

This report presents Waimate District's 2023 growth projections, which seek to understand how Waimate might grow over the next 30 years.

Understanding growth is an extremely important component to consider when planning for the District's future and these growth projections will be used to inform a wide range of key projects, plans and strategies.

Projections through to 2053 are made for the following categories:

- Usually resident population
- Employment
- Dwellings
- Rating units
- Visitors

1.1 Methodology

Rationale developed the previous set of growth projections for Waimate District Council (WDC) in 2020. These projections were developed using a bottom-up approach. Individual growth drivers for each Statistical Area 2 (SA2) were developed using migration for employment and lifestyle as the basis of the modelling. The modelling was based off 2019 data, which was the most up to date at the time.

WDC approached Rationale to update the projections to ensure their continued relevance, check for any significant changes including the actual impact of COVID-19, and to inform the 2024 to 2034 Long Term Plan. Rationale and WDC completed a review of the 2020 projections, comparing the forecast growth to 2022 with the actual growth that has occurred. The 2020 projections generally tracked the actual growth, and it was decided that a "light update" of the projections was appropriate.

For the light update, the following items were updated.

- Historical usually resident population estimates to 2022.
- Historical filled jobs to 2022.
- Current number of rating units.
- Removal of any assumptions relating to the Covid-19 pandemic.
- Migration and growth assumptions for the Morven-Glenavy-Ikawai SA2.

All other assumptions and inputs remain unchanged from the 2020 projections.

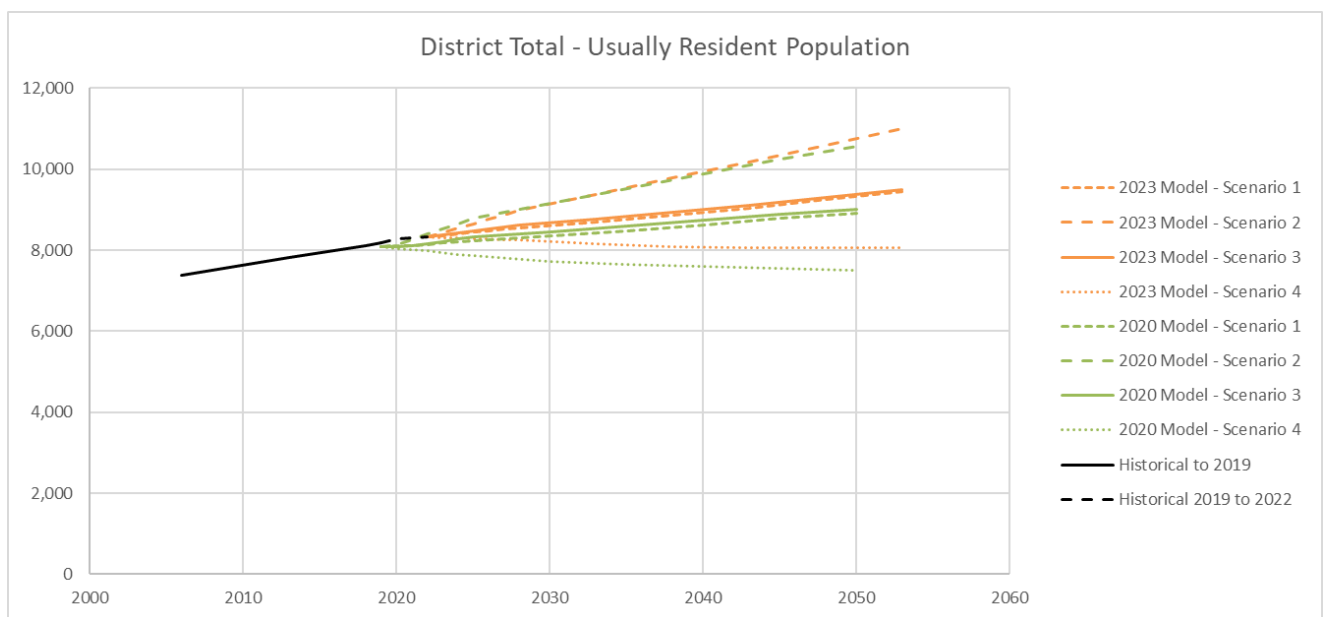


Figure 1. Comparison between the 2020 projections and the 2023 predictions.

1.2 Growth scenarios

Four growth scenarios have been modelled for each parameter representing different levels of ambition in terms of the district's growth over the next thirty years.

It is recommended that WDC adopt Scenario 3, medium growth. Unless otherwise stated, all charts and tables in this report refer to Scenario 3.

Table 1. Summary of the four growth scenarios.

	Scenario	Description
Scenario 1	Baseline	Used as a baseline to build the other three scenarios. It is derived from historical migration and employment trends.
Scenario 2	High	<p>Migration drivers and assumptions are increased by 20% above the baseline which means more people will move to Waimate and less people will leave.</p> <p>Employment levels are increased by 10% above the baseline by 2053.</p> <p>Investment in the town centre of Waimate is expected to generate an additional 20 long term jobs per year, from 2023 to 2028 (120 total).</p> <p>The Oceania Dairy plant continues to employ people at a rate of 4% (twice the MBIE forecast for food productions) through to 2053.</p>
Scenario 3	Medium	<p>Migration drivers and assumptions are set to the baseline.</p> <p>Employment levels are set to the baseline, with the exception of Waimate Town Centre.</p> <p>Investment in the town centre of Waimate is expected to generate an additional 10 long term jobs per year, from 2023 to 2028 (60 total).</p> <p>The Oceania Dairy plant continues to employ people at a rate of 2% (matching the MBIE forecast for food productions) through to 2053.</p>
Scenario 4	Low	<p>Migration drivers and assumptions are reduced by 20% which means less people will move to Waimate and more people will leave.</p> <p>Employment levels are decreased by 10% below the baseline by 2053.</p> <p>The Oceania Dairy plant stops expanding and ceases to employ people from now until 2053.</p>

1.3 Waimate District Growth Projection Summary

Table 2. Waimate District growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	7,390	7,810	8,110	8,320	8,370	8,611	8,764	8,925	9,106	9,300	9,492
Total Dwellings	3,519	3,714	3,912	4,024	4,038	4,156	4,238	4,319	4,405	4,496	4,588
Occupied Dwellings	3,000	3,228	3,327	3,409	3,429	3,529	3,594	3,662	3,740	3,823	3,906
Unoccupied Dwellings	501	468	576	615	609	628	645	657	666	673	682
Number of Jobs	1,221	1,215	1,266	1,281	1,299	1,389	1,420	1,457	1,496	1,537	1,579
Number of Businesses	2,165	2,435	2,595	2,620	2,651	2,815	2,892	2,979	3,071	3,168	3,271
Rating Units - Total SUIPs				3,910	3,924	4,025	4,098	4,171	4,248	4,328	4,410
Rating Units - Urban SUIPs				1,792	1,799	1,852	1,888	1,924	1,963	2,003	2,045
Rating Units - Rural 1 SUIPs				1,752	1,758	1,796	1,827	1,857	1,889	1,922	1,956
Rating Units - Rural 2 SUIPs				284	285	289	293	297	301	305	310
Rating Units - Business SUIPs				82	83	89	90	93	95	97	100
Total Peak Day Visitor Nights				802	812	858	906	954	1,001	1,049	1,097
Total Average Day Visitor Nights				256	259	274	289	305	320	335	351
Total Peak Day Visitor Numbers				1,482	1,500	1,583	1,669	1,756	1,843	1,930	2,017
Total Average Day Visitor Numbers				365	369	389	411	432	454	475	496

Table 3. Waimate District short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2023 - 2028)			Long Term Forecast (2023 - 2058)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	930	58	0.7%	291	48	0.6%	1,172	38	0.4%
Total Dwellings	505	32	0.8%	132	22	0.5%	565	18	0.4%
Occupied Dwellings	409	26	0.8%	120	20	0.6%	497	16	0.4%
Unoccupied Dwellings	114	7	1.3%	13	2	0.3%	67	2	0.3%
Number of Jobs	455	28	1.2%	195	33	1.2%	651	21	0.7%
Number of Businesses	60	4	0.3%	108	18	1.4%	298	10	0.7%
Rating Units - Total SUIPs				115	19	0.5%	500	16	0.4%
Rating Units - Urban SUIPs				60	10	0.5%	253	8	0.4%
Rating Units - Rural 1 SUIPs				44	7	0.4%	204	7	0.4%
Rating Units - Rural 2 SUIPs				5	1	0.3%	26	1	0.3%
Rating Units - Business SUIPs				7	1	1.3%	18	1	0.6%
Total Peak Day Visitor Nights				56	9	1.1%	295	10	1.0%
Total Average Day Visitor Nights				18	3	1.1%	94	3	1.0%
Total Peak Day Visitor Numbers				101	17	1.1%	535	17	1.0%
Total Average Day Visitor Numbers				25	4	1.1%	132	4	1.0%

1.4 Usually Resident Population

Over the next thirty years, the usually resident population of Waimate District is predicted to increase.

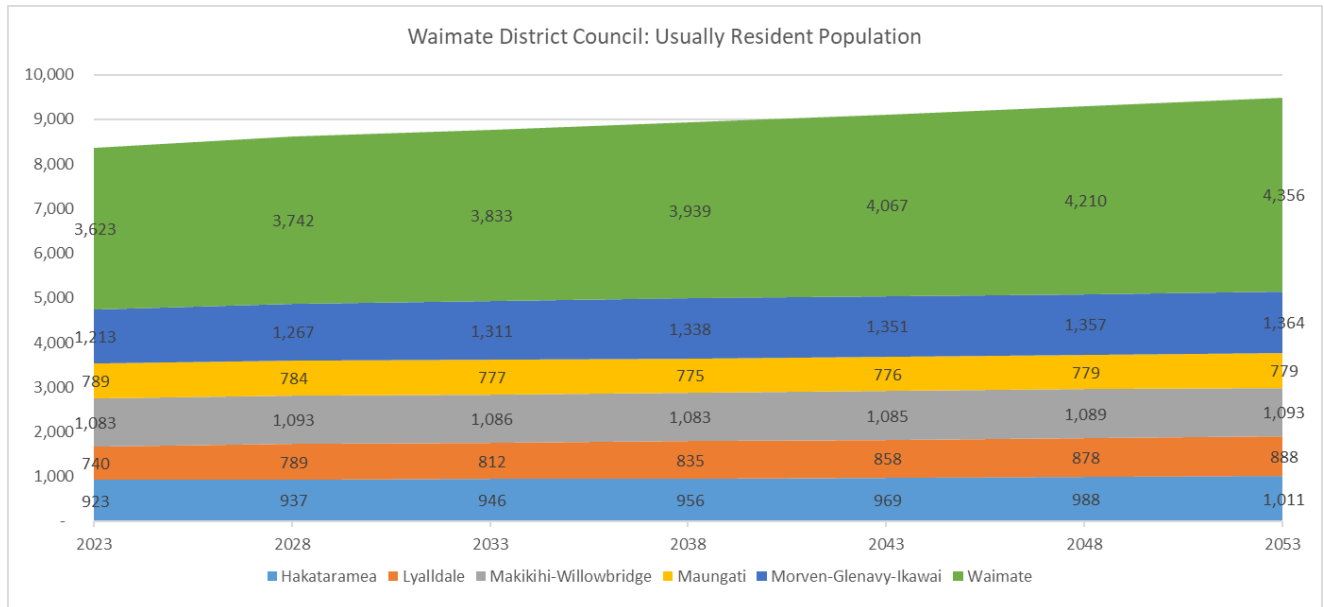


Figure 2. WDC – Usually resident population.

The average age of Waimate District's population is 44.9 years, this is older than the national average of 39.4 years (Stats NZ). Looking across the district, Waimate township has a significantly older average age of 49.7 years in 2022 when compared to the outlying rural areas. This suggests that people are living and working on farms then moving into Waimate for retirement later in life.

Table 4. Average age of District Population.

	2022	2023	2033	2043	2053
District Wide	44.9	44.9	44.5	44.2	44.6

1.5 Employment

WDC is a mostly rural district with agriculture being the prominent employer. The number of agriculture jobs has dropped since 2019, with a decline in orchards and livestock farms in Makikihi-Willowbridge, and dairy farm jobs in Morven-Glenavy-Ikawai.

The fastest growing sector is food manufacturing, driven by the expanding Oceania Dairy plant in Morven.

The other prevailing sectors are secondary supporting services including education, construction, and retail. These industries have remained relatively steady.

Whilst jobs have decreased since 2019, it is not believed that this is a long-term trend.

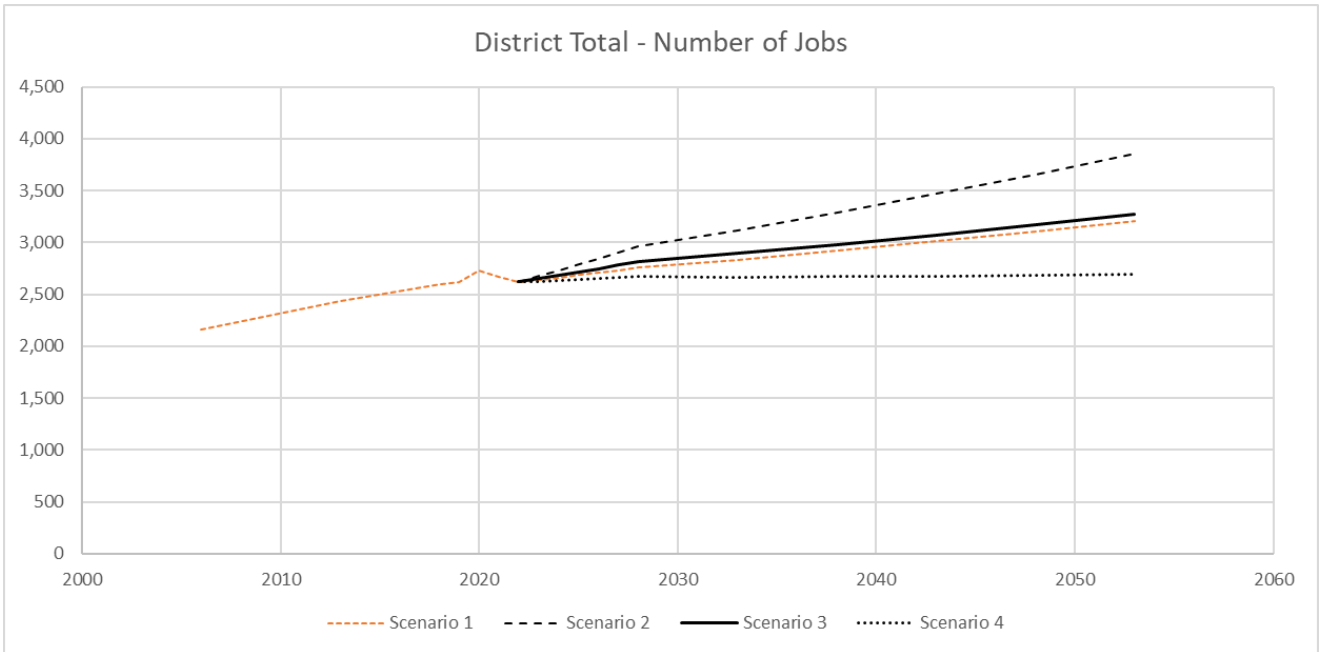


Figure 3. WDC's employment predictions in the next thirty years.

1.6 Dwellings

Waimate should continue to have a high percentage of occupied dwellings into the future. However, as the population reduces in some areas there may be an increase in the number of unoccupied dwellings in those areas.

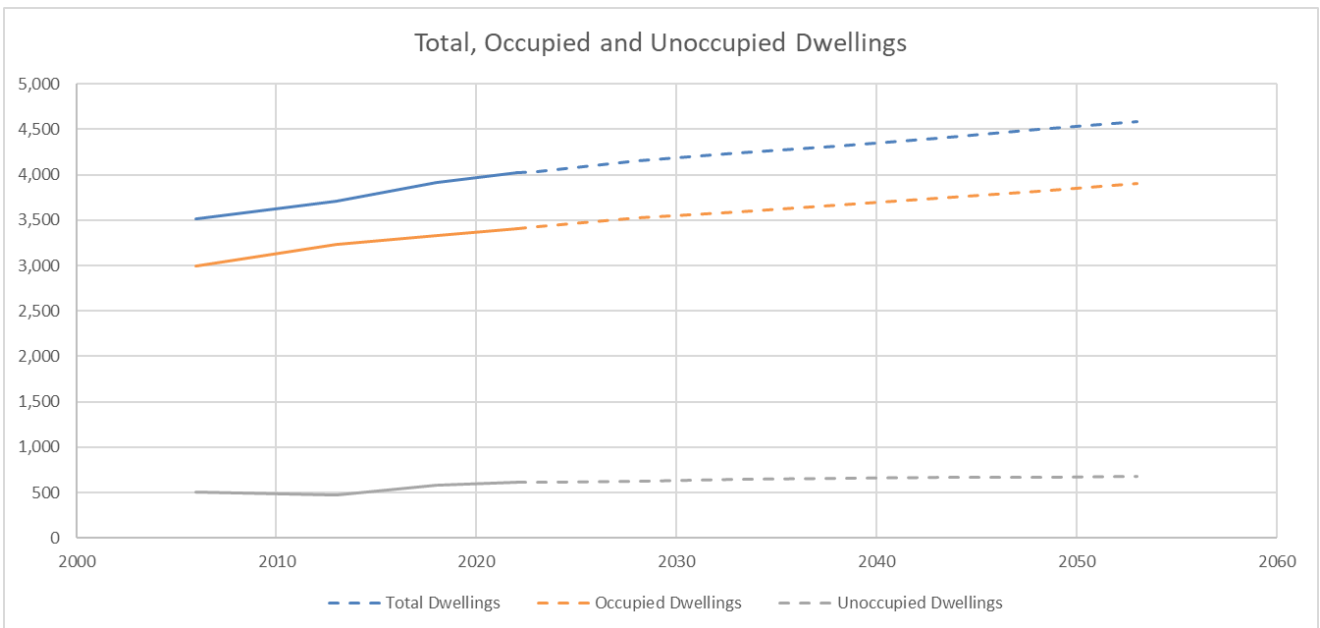


Figure 4. WDC – Dwellings.

1.7 Visitors

It is projected that the number of visitor nights will increase into the future.

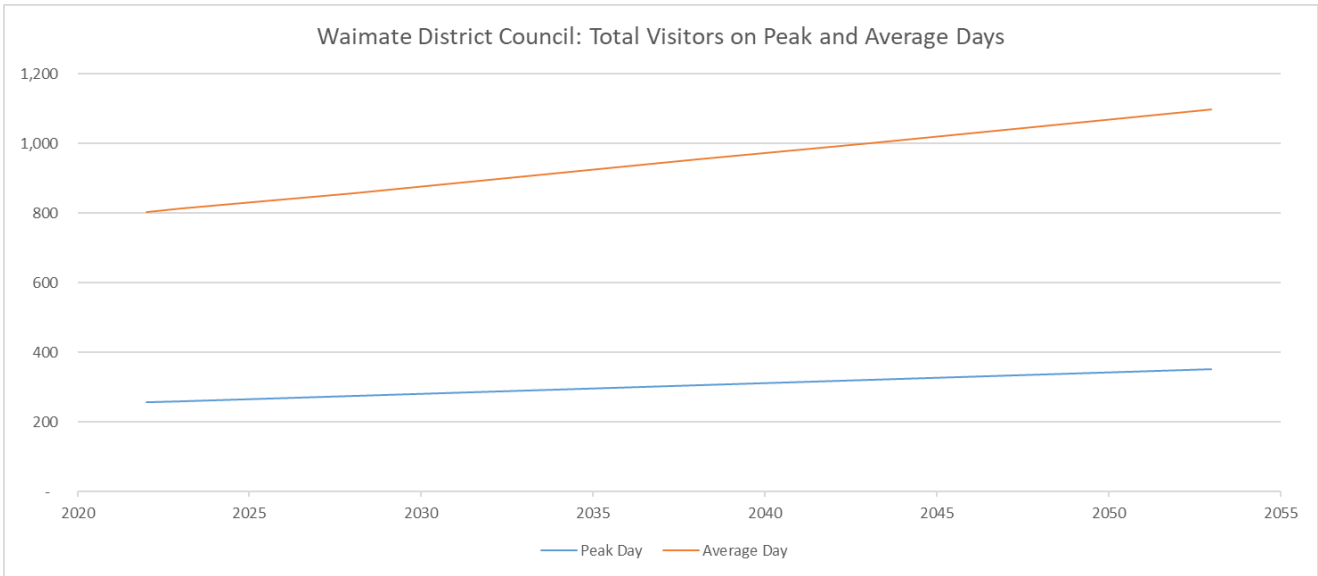


Figure 5. WDC – peak day vs. average day visitors.

1.8 Rating Units

The total number of rating units is predicted to continue to increase. Several assumptions have been made regarding future projections of Rating Units these are discussed in Section 5.

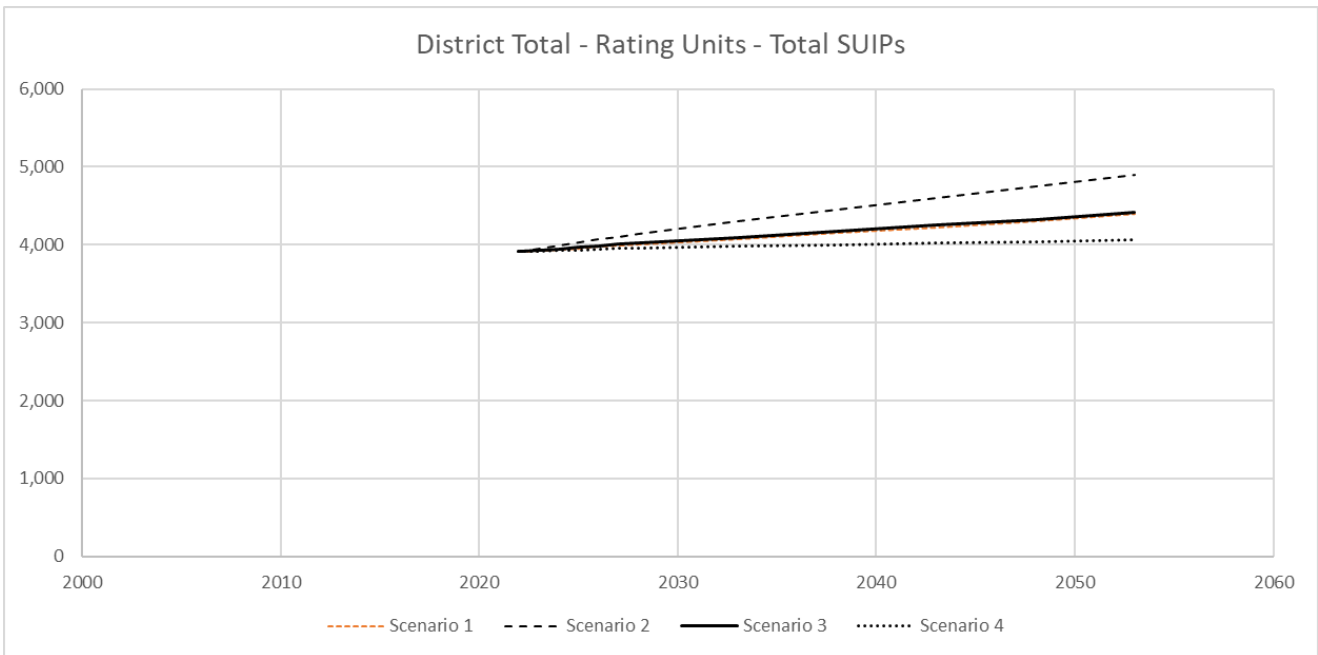


Figure 6. WDC- Rating Units – Total Separately used or inhabited part of a rating unit (SUIPs).

1.9 Recommendations

It is recommended that WDC adopt Scenario 3 as the expected level of growth in the next thirty years and use this information to inform key projects, plans and strategies.

Brief, annual check-ins with WDC staff are recommended to ensure that the projections are tracking well and that there haven't been any major changes to the economic climate in the District.

Detailed, three yearly reviews aligned with the Long Term Plan cycle are recommended to ensure the projections remain relevant for major planning decisions.

2 Purpose

*How much growth is going to occur in the Waimate District over the next 30 years?
Where is it going to occur? And what are its likely drivers?*

Understanding how the Waimate District may grow over the next 30 years, in terms of population, number of dwellings, visitors and rating units is an extremely important component of the District's future planning.

This summary report and accompanying model explains the methodology used to calculate the predicted growth, including the data used and assumptions that have been made, and presents a number of outputs which can be used to inform a range of key projects, plans and strategies, including:

- District Plan Review
- Spatial planning
- Infrastructure Strategy
- Asset Management Plans
- District Plan changes
- Tourism Strategy
- Long Term Plan

3 Context

Rationale developed the previous set of growth projections for Waimate District Council (WDC) in 2020. These projections were developed using a bottom up approach. Individual growth drivers for each Statistical Area 2 (SA2) were developed using migration for employment and lifestyle as the basis of the modelling. The modelling was based on 2019 data, which was the most up to date at the time.

WDC approached Rationale to update the projections to ensure their relevance, check for any significant changes including the actual impact of COVID-19, and to inform the 2024 to 2034 Long Term Plan. Rationale and WDC completed a review of the 2020 projections, comparing the forecast growth to 2022 with the actual growth that has occurred. The 2020 projections generally tracked the actual growth, and it was decided that a "light update" of the projections was appropriate.

For the light update, the following items were updated.

- Historical usually resident population estimates to 2022.
- Historical filled jobs to 2022.
- Current number of rating units.
- Removal of any assumptions relating to the Covid-19 pandemic.
- Migration and growth assumptions for the Morven-Glenavy-Ikawai SA2.

All other assumptions and inputs remain unchanged from the 2020 projections.

Overall, the 2023 projections show a similar rate of growth to the 2020 projections.

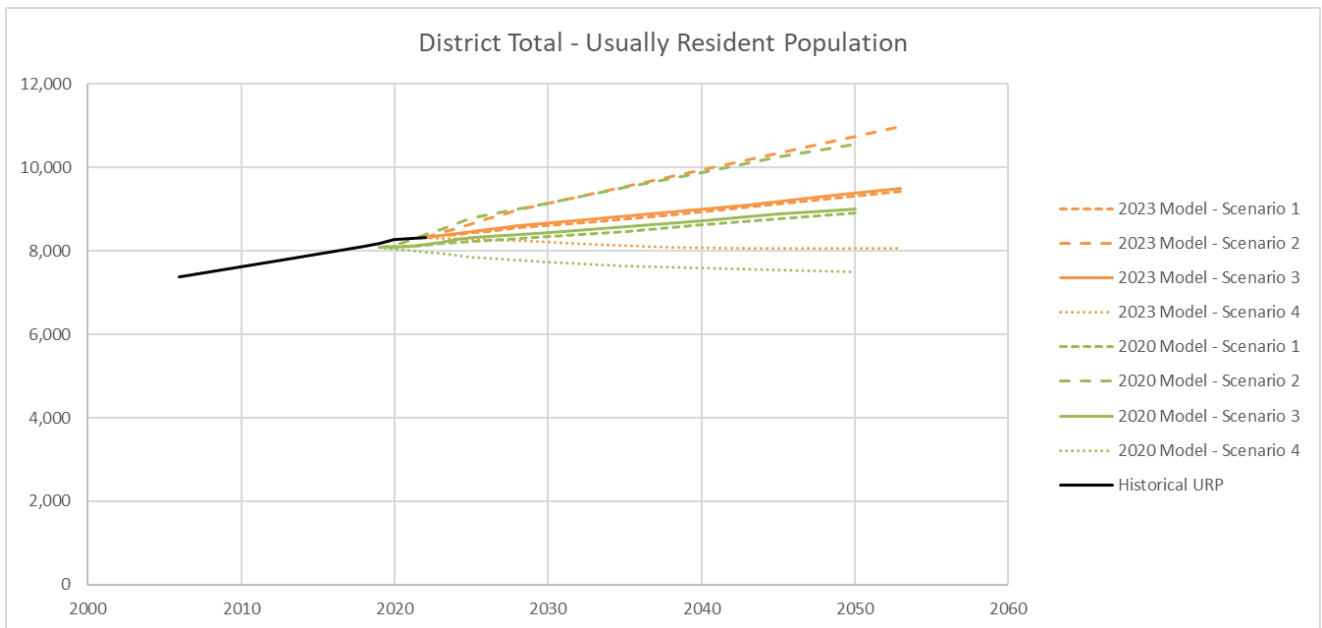


Figure 7. Comparison between Stats NZ 2013 projections and Rationale's 2020 projections.

3.1 Growth story from 2019 to 2022

WDC has experienced steady population growth over the past three years with an average yearly growth of 50 people per year. This is similar to long term historical trends. The average age in WDC has increased from 43.8 to 44.9, and there is now a larger population in both the 30 to 39 year and 60 to 84 year age groups.

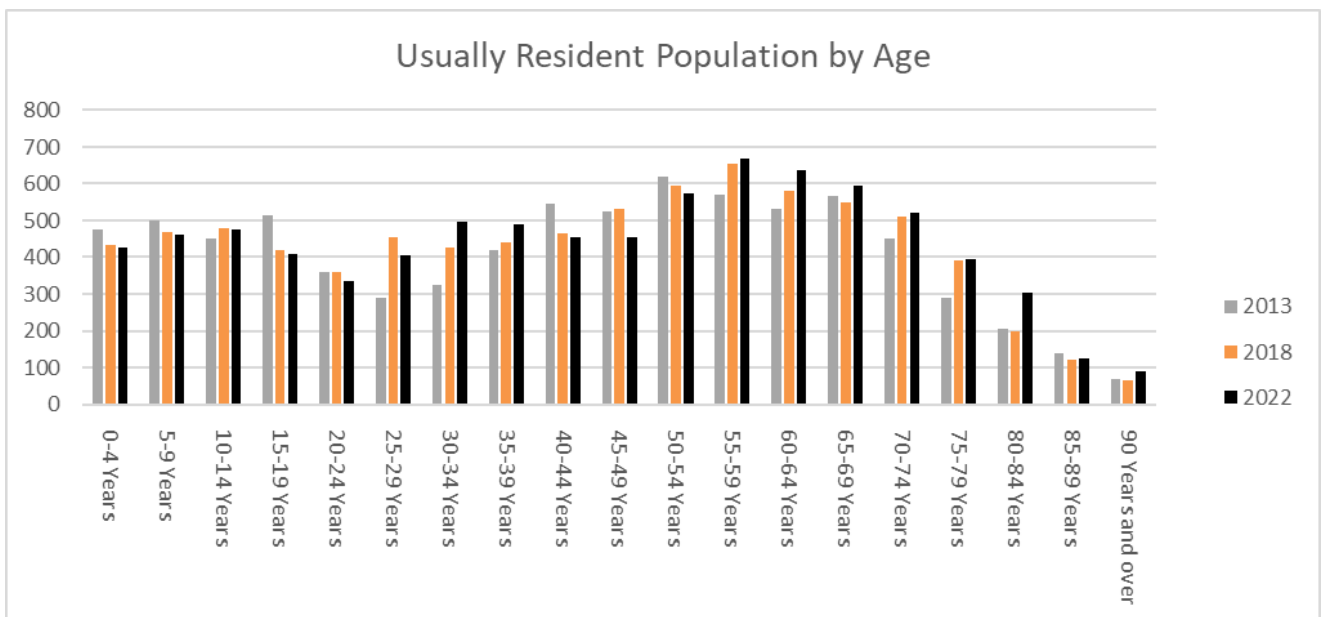


Figure 8. Waimate District's population by Age – 2013, 2018, 2022. Source: NZ Stats.

Dwelling numbers have also increased. While detailed dwelling information will not be readily available until the 2023 Census data is released (the first tranche of data is expected to be released late 2023 or early 2024), consent records provided by WDC indicates that on average around 30 new dwellings have been constructed each year since 2019. This is similar to long term trends and aligns with expectations considering the levels of population growth.

Business demography data released by Stats NZ shows an increase in jobs from 2019 to 2020, then a decrease in jobs from 2020 onwards resulting in similar levels of employment in 2019 and 2022. The decrease is in the agriculture sector in both Morven-Glenavy-Ikawai SA2 and Makikihi-Willowbridge SA2.

This is possibly a data issue as WDC staff have not been made aware of large job losses, and this trend is not prevalent elsewhere in the district or neighbouring areas. The issue could be related to the sale of a number of farms to an Ashburton based company, and subsequent employment of international migrants as farm workers. Depending on the employment model, these jobs may be attributed to a different district, or not show up at all in the business demography data.

Even without an increase in local jobs, the observed population increase is expected as WDC provides relatively affordable housing within commutable distance of both Oamaru and Timaru. The average age of the district's population has also increased, indicating an increase of people in their retirement, further increasing the population that is not reliant on local jobs.

3.2 Inflation, cost of living and labour shortages

Since the Covid-19 pandemic, New Zealand has been dealing with high levels of inflation, increased cost of living and labour shortages. This has applied pressure to most industries, including agriculture who have had difficulty sourcing temporary overseas labour, compounded the pressure from increased environmental regulations.

These economic pressures, and how they will affect WDC over the coming years, are the main uncertainties to these projections.

4 Scope

The growth projections are built up based on areas in WDC. Different areas have different outputs depending on size. This is described and illustrated below.

Table 5. Areas of focus.

District	Statistical Area 2	Statistical Area 1
Waimate District Council	Hakataramea	
	Lyalldale	St Andrews
	Makikihi-Willowbridge	
	Maungati	
	Morven-Gelnavy-Ikawai	Glenavy
	Waimate – East, West and North	

Table 6. Modelling outputs by geographical area.

	Output	District	Statistical Area 2	Statistical Area 1
Population	Usually Resident Population	✓	✓	✓
Dwellings	Total Dwellings	✓	✓	✓
	Occupied Dwellings	✓	✓	✓
	Unoccupied Dwellings	✓	✓	✓
Employment	Filled Jobs	✓	✓	
	Businesses	✓	✓	
Rating Units	Total SUIPs	✓		
	Urban SUIPs	✓		
	Rural 1 SUIPs	✓		

	Rural 2 SUIPs	✓		
	Business SUIPs	✓		
Visitors	Average Day Visitor Nights	✓	✓	
	Peak Day Visitor Nights	✓	✓	
	Average Day Visitor Numbers	✓	✓	
	Peak Day Visitor Numbers	✓	✓	

4.1 Statistical Area 2 Boundaries



Figure 9. Statistical Area 2 boundaries.



Figure 10. Rural Townships.

5 Methodology

These growth projections have been developed using a bottom up approach. Individual growth drivers were used for each Statistical Area 2 (SA2). These were then summed to understand the growth across the District.

The following figure describes the process, at a high level, which was taken to develop the projections herein. A detailed diagram that depicts the methodology has been appended.

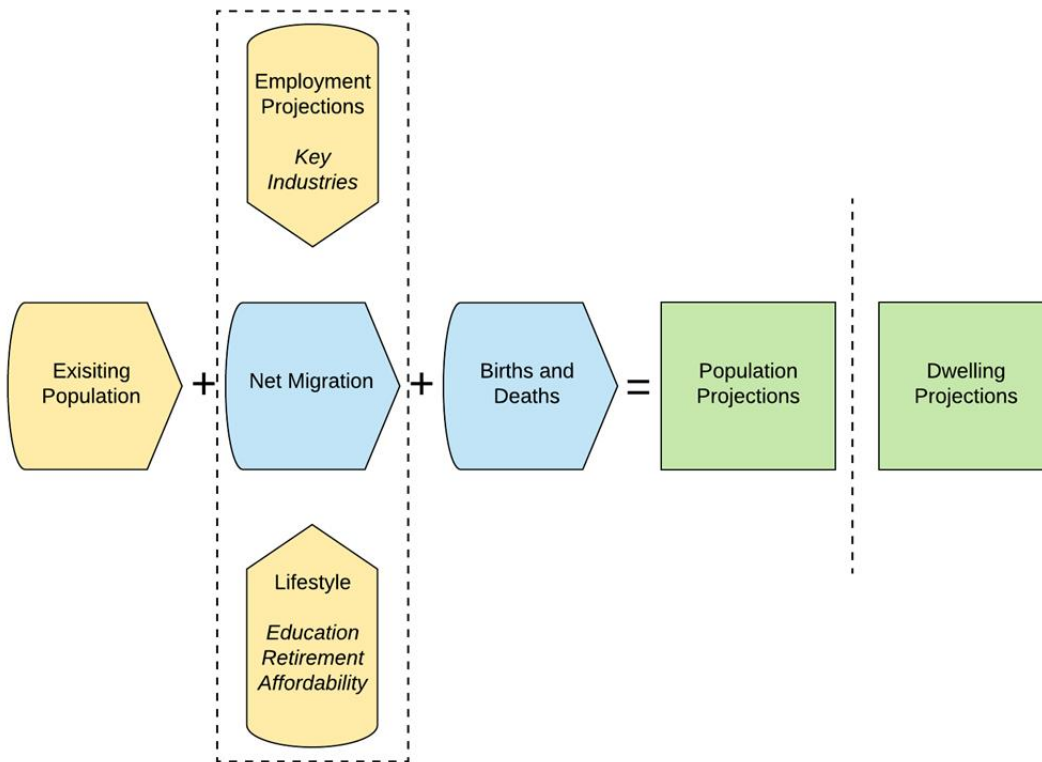


Figure 11. Growth Projections methodology – simplified.

5.1 Net Migration

The migration assumptions and inputs have not been updated from the 2020 projections for most of the areas of interest as the observed growth closely matches the projected growth. The exception to this is Morven-Glenavy-Ikawai SA2 where a full review was undertaken.

The migration model has been derived from observed trends in people moving to or from the area. It has been assumed that people move to/away from the area for one of two reasons, either employment or lifestyle.

The predictions have then been correlated against the observed migration trends between 2013 and 2018, except for Morven-Glenavy-Ikawai, which has been set to match trends between 2013 and 2022.

5.1.1 EMPLOYMENT

Historic employment records were analysed and used to understand the key industries in each area and how these have changed and evolved since 2000.

To predict future growth in jobs, an annual growth rate was calculated using an average of the growth in each of the key industries over the three years (2017 to 2019) through to 2028, and the average growth for ten years (2010 to 2019) to 2053. The exception to this rule was agriculture where the MBIE forecast NZ Wide Annual Growth to 2028 of 0.3% growth has been applied. This is due to various instabilities in the sector.

The growth rate derived from this process has been applied to the number of jobs in the previous year, starting at 2022.

In each area a percentage of migration was accounted for based on people moving in to fill new jobs or leaving as the number of jobs decreased. There was also allowance, in some areas, for dependents. These assumptions are detailed within the appendices for each area of focus.

5.1.2 LIFESTYLE

Migration for other reasons such as lifestyle, access to better care, education and career opportunities was accounted for based on the population's past propensity to move in or out for these reasons.

5.2 Births and deaths

Population was calculated as the previous year's population plus migration (for any reason) which was then overlaid by Stats NZ Births and Deaths data.

5.3 Dwellings

The number of occupied dwellings were projected by:

1. Taking the number of people per occupied household from the 2018 census
2. Occupied dwelling = usually resident population / people per occupied household

The total number of dwellings were projected by:

1. Using the ratio of total dwellings to occupied dwellings from 2018 census
2. Future total dwellings = Future occupied dwellings multiplied by the ratio (total dwellings to occupied dwellings)

Note:

- The total number of dwellings is not allowed to decrease year to year in the model, i.e. the model assumes that if a house/building is demolished it is replaced.
 - If population growth is negative, then the total number of dwellings is taken from the year before, i.e. the number of dwellings remain constant.
- Unoccupied Dwellings = total dwellings – occupied dwellings
- If the population (and occupied dwellings) decreases, unoccupied dwellings increase to make up the shortfall to keep total dwellings constant.

5.4 Visitor Projections

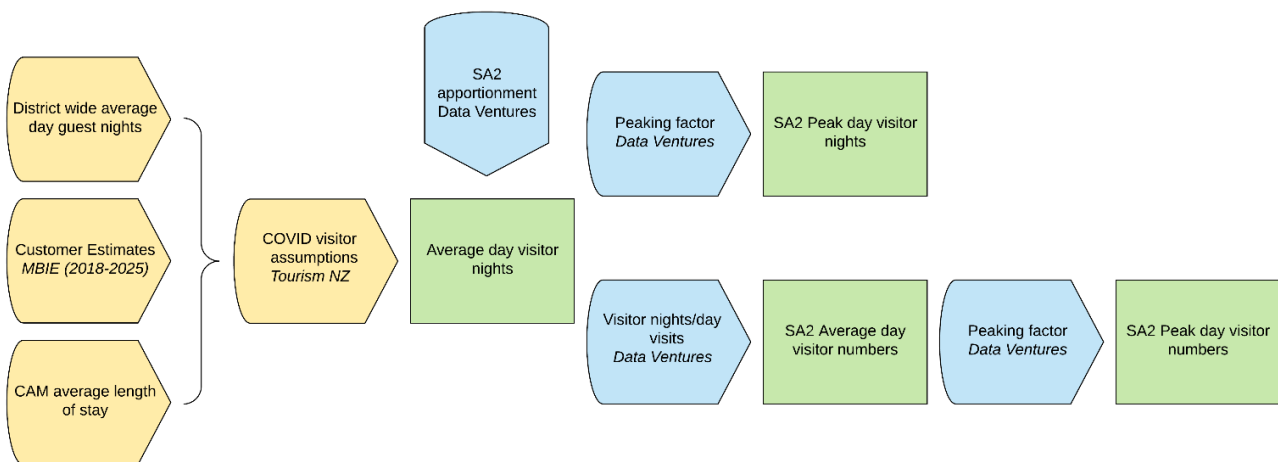


Figure 12. Visitor projections methodology.

The visitor projections methodology was calculated using the following steps which are illustrated below:

1. The projections were based on the MBIE Customer forecasts (2018 – 2025).
2. The Commercial Accommodation Monitor (Stats NZ) average length of stay was used to calculate the average yearly visitor nights
3. Data from Data Ventures was used to apportion average visitor nights to the individual SA2s. This was used to calculate the average day visitor nights.
4. The Data Ventures data was also used to calculate the peaking factors (maximum visitor population/average visitor population).
5. The calculated peaking factors were applied to the average visitor nights to get peak day visitor nights.

6. The Data Ventures data was used to calculate the day visitor to overnight visitor ratio (average visitor population/average 3am visitor population), to understand how many people were day-visitors.
7. This ratio was applied to the average day visitor nights and peak day visitor nights to calculate average and peak day visitor numbers.

5.5 Rateable Units

The Waimate rates database categorises land use using two measures:

- Type - Urban, Rural 1, Rural 2, Business
- Valuation New Zealand's Category Codes (VNZ Category)

The future projections for the number of rateable units in the Waimate District were calculated by assuming an appropriate level of growth for each VNZ Category, as shown below, then combining these to understand the growth of each Rating Unit per type to understand overall growth across the district.

It has been assumed that the number of rating units does not decrease.

Table 7. Source of assumed growth for each Valuation New Zealand Category Code.

Top Level VNZ Category	Modelled Growth
Arable	MBIE 2018 - 2028 agriculture growth forecast (0.3% pa)
Commercial	Job projections
Dairying	MBIE 2018 - 2028 agriculture growth forecast (0.3% pa)
Horticulture	MBIE 2018 - 2028 agriculture growth forecast (0.3% pa)
Industrial	Job projections
Lifestyle	Dwelling projections
Other	Assume no growth
Pastoral	MBIE 2018 - 2028 agriculture growth forecast (0.3% pa)
Residential	Dwelling projections
Specialist	Assume no growth

5.6 Data sources

Data was utilised from three key sources:

- Statistics New Zealand (Stats NZ)
- Data Ventures (commercial arm of Stats NZ)
- MBIE Tourism and Accommodation Data Sets

6 Scenarios

Four scenarios have been modelled each with their own assumptions and level of growth as described below.

6.1 Scenario 1: Baseline

Scenario 1 is used as a baseline to build the other three scenarios. It is derived from historical migration and employment trends.

The employment and lifestyle assumptions are detailed below in the section 7.

6.2 Scenario 2: High

Scenario 2, the high projection, models higher than expected growth for the district.

Migration drivers and assumptions are increased by 20% above the baseline which means more people will move to WDC and less people will leave.

Employment levels are increased by 10% above the baseline by 2053.

Investment in the town centre of Waimate is modelled to generate an additional 20 long term jobs per year, from 2023 to 2028 (120 total).

The Oceania Dairy plant continues to employ people at a rate of 4% (twice the MBIE forecast for food productions) through to 2053.

The employment and lifestyle assumptions are detailed below in the section 7.

6.3 Scenario 3: Medium

Scenario 3, the medium prediction, models the expected growth for the district.

Migration drivers and assumptions are set to the baseline as are employment levels.

Investment in the town centre of Waimate is modelled to generate an additional 10 long term jobs per year, from 2023 to 2028 (60 total).

The Oceania Dairy plant continues to employ people at a rate of 2% (matching the MBIE forecast for food productions) through to 2053.

The employment and lifestyle assumptions are detailed below in the section 7.

6.4 Scenario 4: Low

Scenario 4, the low prediction models lower than expected growth for the district.

Migration drivers and assumptions are reduced by 20% which means less people will move to WDC and more people will leave.

Employment levels are decreased by 10% below the baseline by 2053.

The Oceania Dairy plant stops expanding and ceases to employ people from now until 2053.

The employment and lifestyle assumptions are detailed below in the section 7.

7 District Assumptions and Outputs

7.1 Waimate District Growth Projections Summary

Table 8. Waimate District growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	7,390	7,810	8,110	8,320	8,370	8,611	8,764	8,925	9,106	9,300	9,492
Total Dwellings	3,519	3,714	3,912	4,024	4,038	4,156	4,238	4,319	4,405	4,496	4,588
Occupied Dwellings	3,000	3,228	3,327	3,409	3,429	3,529	3,594	3,662	3,740	3,823	3,906
Unoccupied Dwellings	501	468	576	615	609	628	645	657	666	673	682
Number of Jobs	1,221	1,215	1,266	1,281	1,299	1,389	1,420	1,457	1,496	1,537	1,579
Number of Businesses	2,165	2,435	2,595	2,620	2,651	2,815	2,892	2,979	3,071	3,168	3,271
Rating Units - Total SUIPs				3,910	3,924	4,025	4,098	4,171	4,248	4,328	4,410
Rating Units - Urban SUIPs				1,792	1,799	1,852	1,888	1,924	1,963	2,003	2,045
Rating Units - Rural 1 SUIPs				1,752	1,758	1,796	1,827	1,857	1,889	1,922	1,956
Rating Units - Rural 2 SUIPs				284	285	289	293	297	301	305	310
Rating Units - Business SUIPs				82	83	89	90	93	95	97	100
Total Peak Day Visitor Nights				802	812	858	906	954	1,001	1,049	1,097
Total Average Day Visitor Nights				256	259	274	289	305	320	335	351

Total Peak Day Visitor Numbers				1,482	1,500	1,583	1,669	1,756	1,843	1,930	2,017
Total Average Day Visitor Numbers				365	369	389	411	432	454	475	496

Table 9. Waimate District short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	930	58	0.7%	291	48	0.6%	1,172	38	0.4%
Total Dwellings	505	32	0.8%	132	22	0.5%	565	18	0.4%
Occupied Dwellings	409	26	0.8%	120	20	0.6%	497	16	0.4%
Unoccupied Dwellings	114	7	1.3%	13	2	0.3%	67	2	0.3%
Number of Jobs	455	28	1.2%	195	33	1.2%	651	21	0.7%
Number of Businesses	60	4	0.3%	108	18	1.4%	298	10	0.7%
Rating Units - Total SUIPs				115	19	0.5%	500	16	0.4%
Rating Units - Urban SUIPs				60	10	0.5%	253	8	0.4%
Rating Units - Rural 1 SUIPs				44	7	0.4%	204	7	0.4%
Rating Units - Rural 2 SUIPs				5	1	0.3%	26	1	0.3%
Rating Units - Business SUIPs				7	1	1.3%	18	1	0.6%
Total Peak Day Visitor Nights				56	9	1.1%	295	10	1.0%
Total Average Day Visitor Nights				18	3	1.1%	94	3	1.0%
Total Peak Day Visitor Numbers				101	17	1.1%	535	17	1.0%
Total Average Day Visitor Numbers				25	4	1.1%	132	4	1.0%

7.2 Employment Projections

7.2.1 KEY INDUSTRIES AND TRENDS

As of the 2020 projections, the top five industries employ 73% of those working within the district.

The growth model assumes the three year (2017 to 2019) average growth rate will continue through to 2028 and then the ten year (2010 to 2019) average growth rate through to 2053 except for agriculture which, due to the instabilities in the industry, the MBIE forecast NZ Wide Annual Growth to 2028 of 0.3% growth has been applied.

Table 10. Top five industries in WDC.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate -last 3 years	Average Annual Growth Rate -last 10 years
Agriculture, Forestry and Fishing	1071	41%	-1%	1%
Manufacturing	360	14%	19%	7%
Education and Training	169	6%	1%	1%
Retail Trade	157	6%	1%	3%
Construction	157	6%	-2%	2%

7.2.2 SCENARIOS

Employment growth has been modelled using the below assumptions. These have been assumed to be constant across all areas in WDC.

Table 11. Employment assumptions.

Scenario	Description	Assumptions
Scenario 1	Baseline	
Scenario 2	High	1. Steadily increased to 10% above the baseline by 2053. 2. Investment in the town centre of Waimate is modelled to generate an additional 20 long term jobs per year, from 2023 to 2028 (120 total). 3. The Oceania Dairy plant continues to employ people at a rate of 4% (twice the MBIE forecast for food productions) through to 2053.
Scenario 3	Medium	1. Investment in the town centre of Waimate is modelled to generate an additional 10 long term jobs per year, from 2023 to 2028 (60 total). 2. The Oceania Dairy plant continues to employ people at a rate of 2% (matching the MBIE forecast for food productions) through to 2053.
Scenario 4	Low	1. Steadily decreased to 10% below the baseline by 2053. 2. The Oceania Dairy plant stops expanding and ceases to employ people from now until 2053

7.2.3 OUTPUT

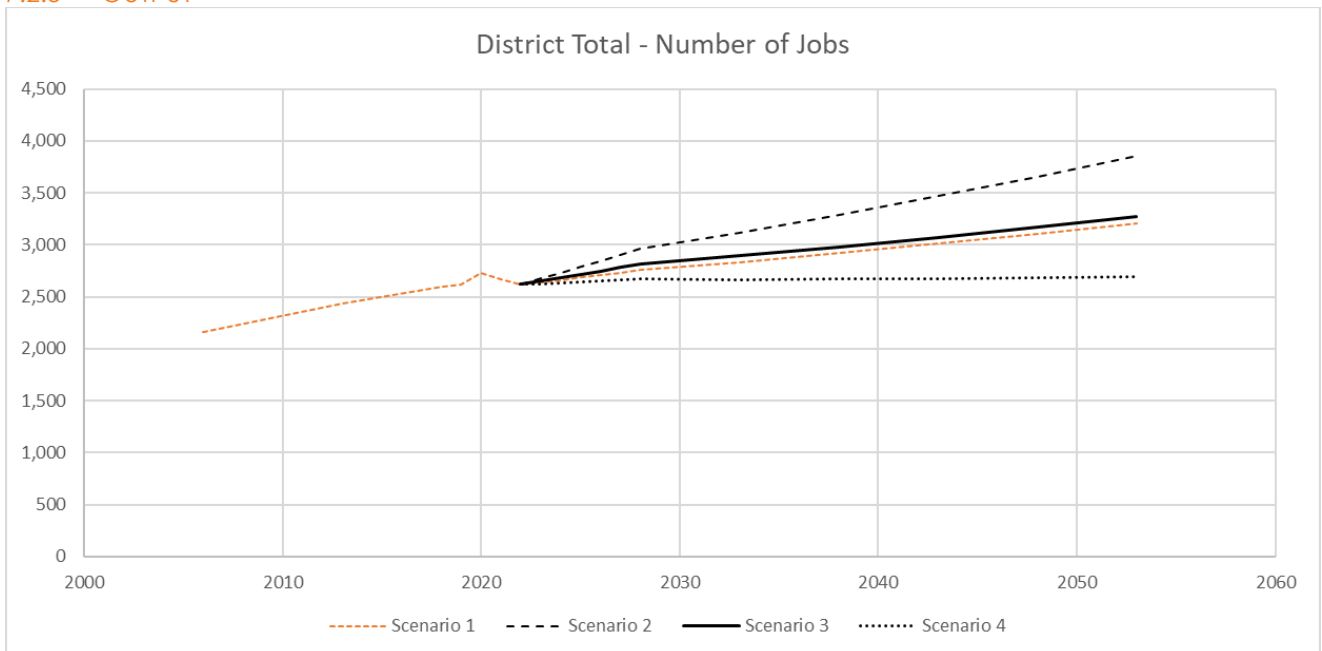


Figure 13. Number of Jobs.

7.3 Population Projections

7.3.1 KEY MIGRATION DRIVERS

The key characteristics of Waimate District's population are:

- Younger people leave the area for education and employment opportunities.
- People later in their working lives or early retirement are moving to the area for the lifestyle, affordability and/or retirement.
- Older people (over 70) are moving from the rural areas of the district to Waimate or leaving the area, likely in search of better healthcare or to be closer to family.

The key migration drivers for each area are discussed in detail in the appendices.

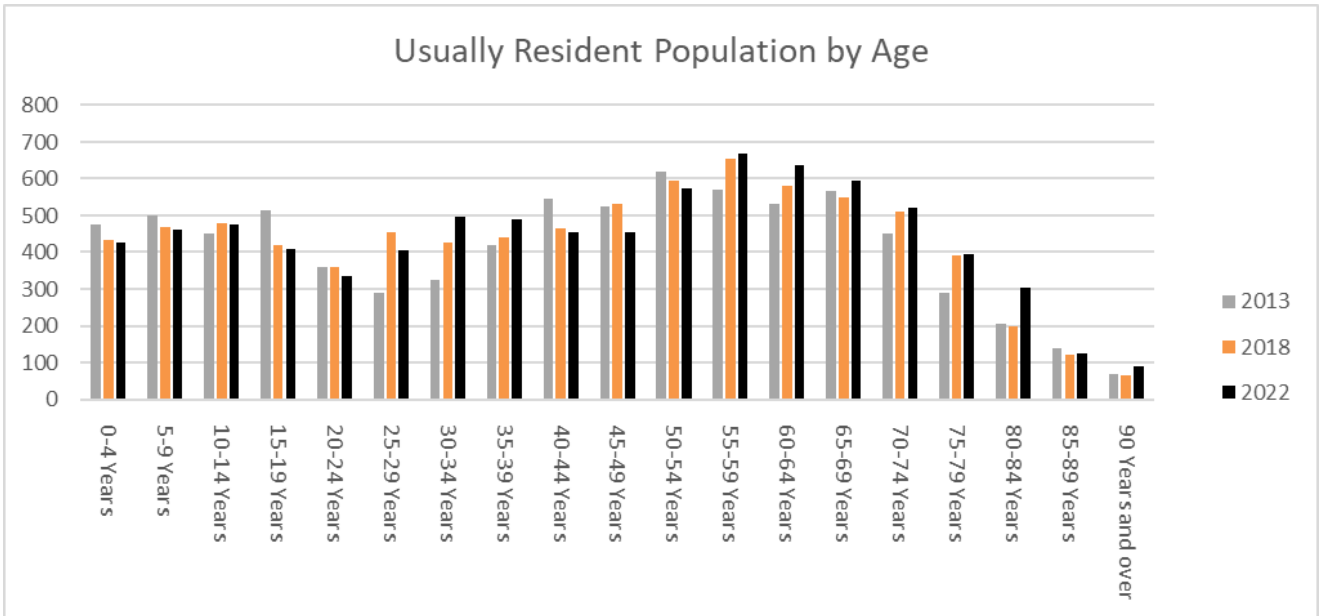


Figure 14. Waimate District's population by Age – 2013, 2018, 2022. Source: NZ Stats.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that has been occurring. This ensures that the model is accurate and reliable. Net migration is equal to inbound migration minus outbound migration.

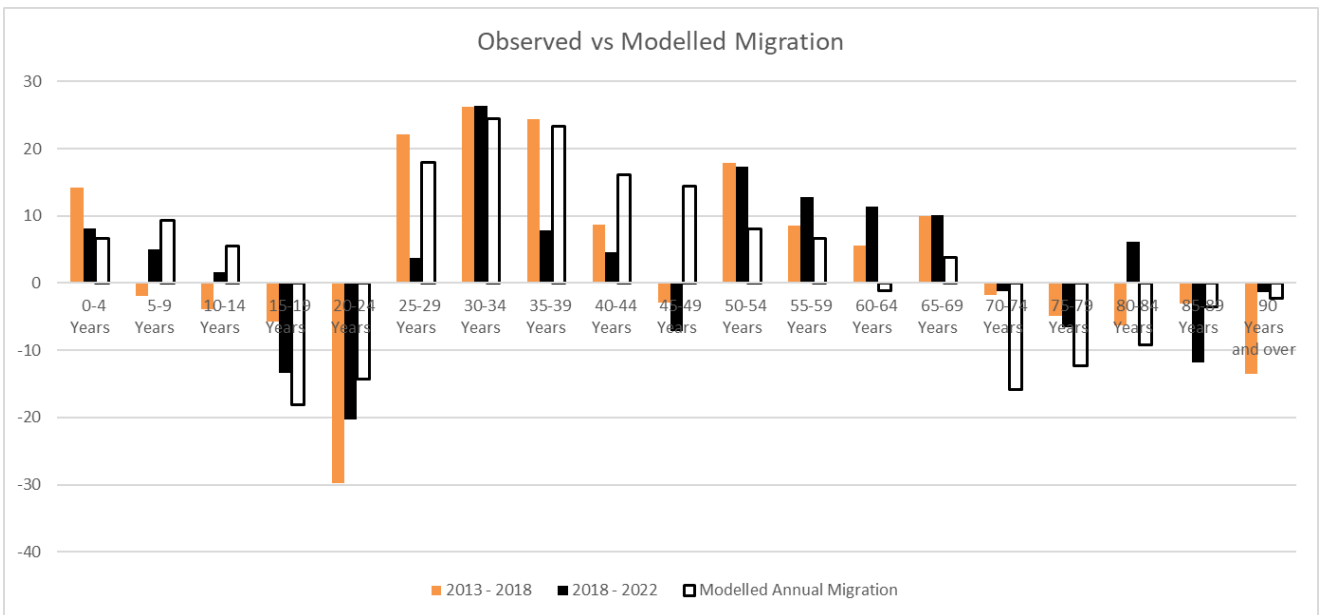


Figure 15. Net migration check.

7.3.2 OUTPUT

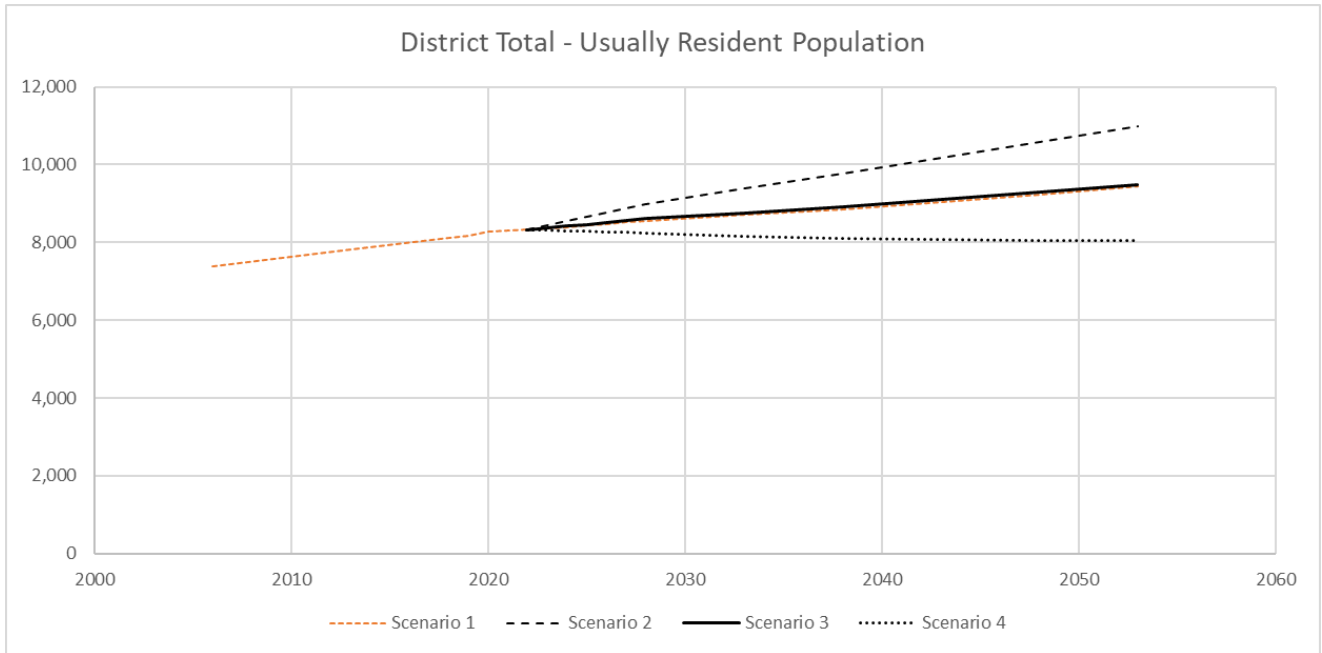


Figure 16. Usually resident population in WDC.

The average age of Waimate District's population is 44.9 years, this is older than the national average of 39.4 years (Stats NZ). Looking across the district Waimate township has a significantly older average age of 49.7 years in 2020 when compared to the outlying rural areas. This makes sense as people are living and working on farms then moving into Waimate for retirement.

Table 12. Average age of District Population.

	2022	2023	2033	2043	2053
District Wide	44.9	44.9	44.5	44.2	44.6

Table 13. Average age of District Population.

	2022	2023	2033	2043	2053
District Wide	44.9	44.9	44.5	44.2	44.6
Hakataramea	41.9	41.9	41.8	40.8	40.6
Lyalldale	42.5	42.8	44.5	45.2	46.3
Makikihi-Willowbridge	44.0	44.1	43.9	43.3	43.7
Maungati	39.0	39.2	40.3	40.5	41.8
Morven-Glenavy-Ikawai	38.6	39	42.2	44.1	45.1
Waimate	49.7	49.5	46.9	45.8	45.7

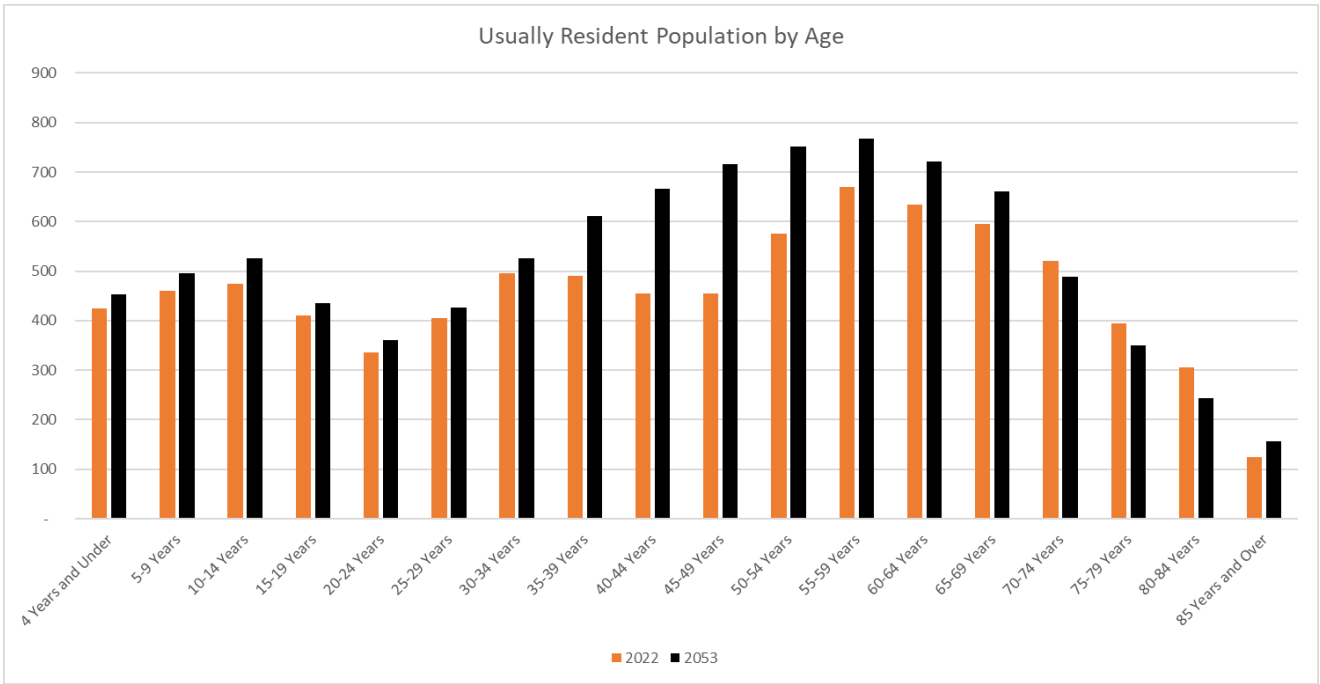


Figure 17. Age distribution of Waimate District's population in 2053.

7.4 Dwelling Projections

7.4.1 ASSUMPTIONS

It has been assumed that the number of dwellings does not decrease if population growth is negative, i.e. there will be an increase in the number of unoccupied homes if the population decreases.

7.4.2 OUTPUT

In Scenario 4 the number of unoccupied homes increases as the number of occupied dwellings decreases, this is in line with the decrease of the usually resident population.

Figure 18. Total dwellings in WDC.

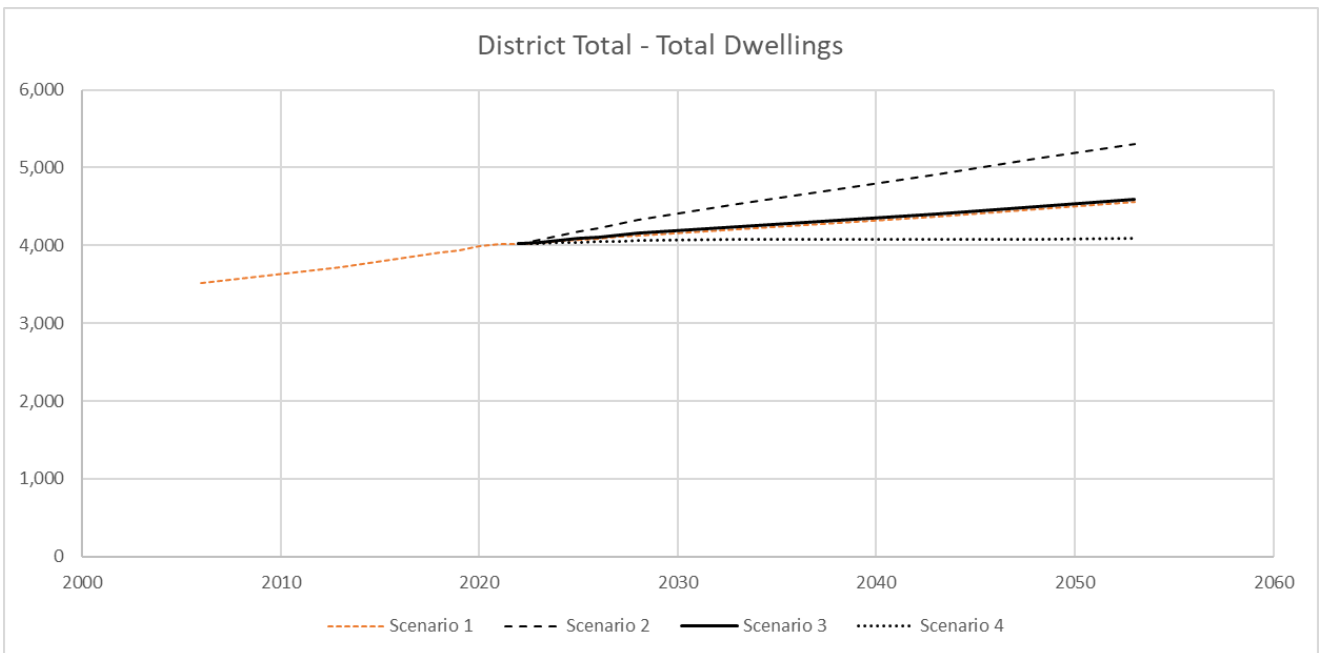


Figure 19. Occupied dwellings in WDC.

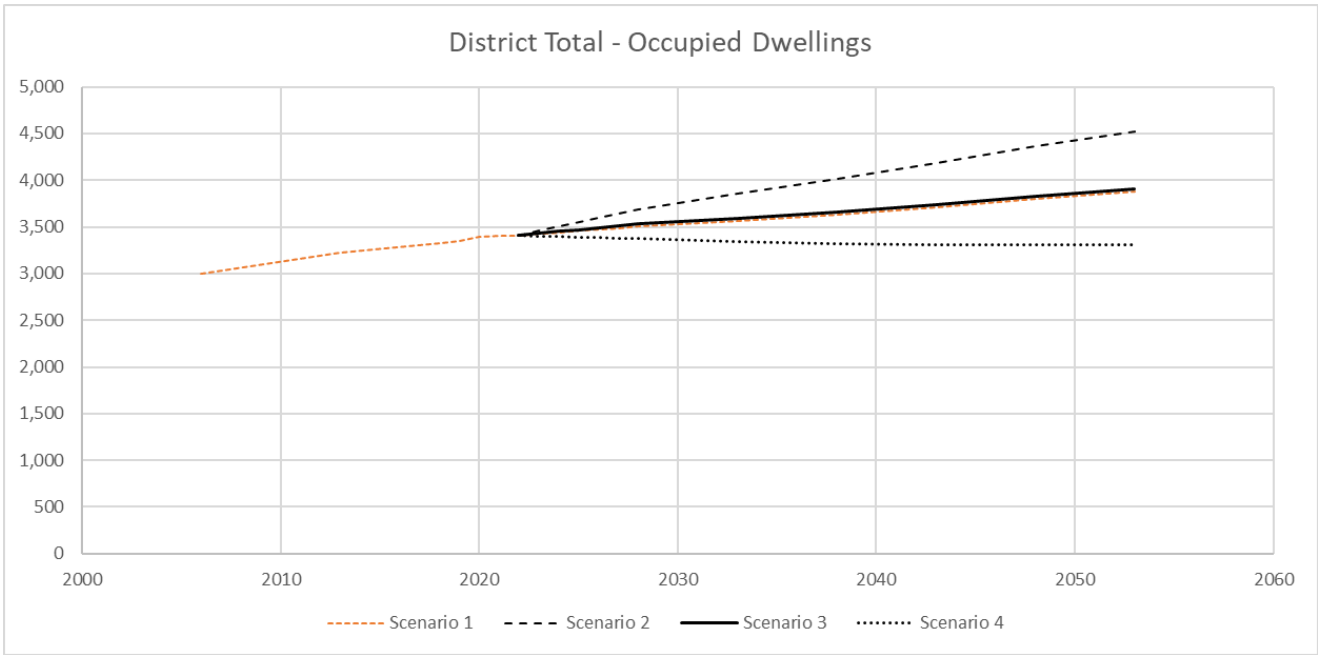
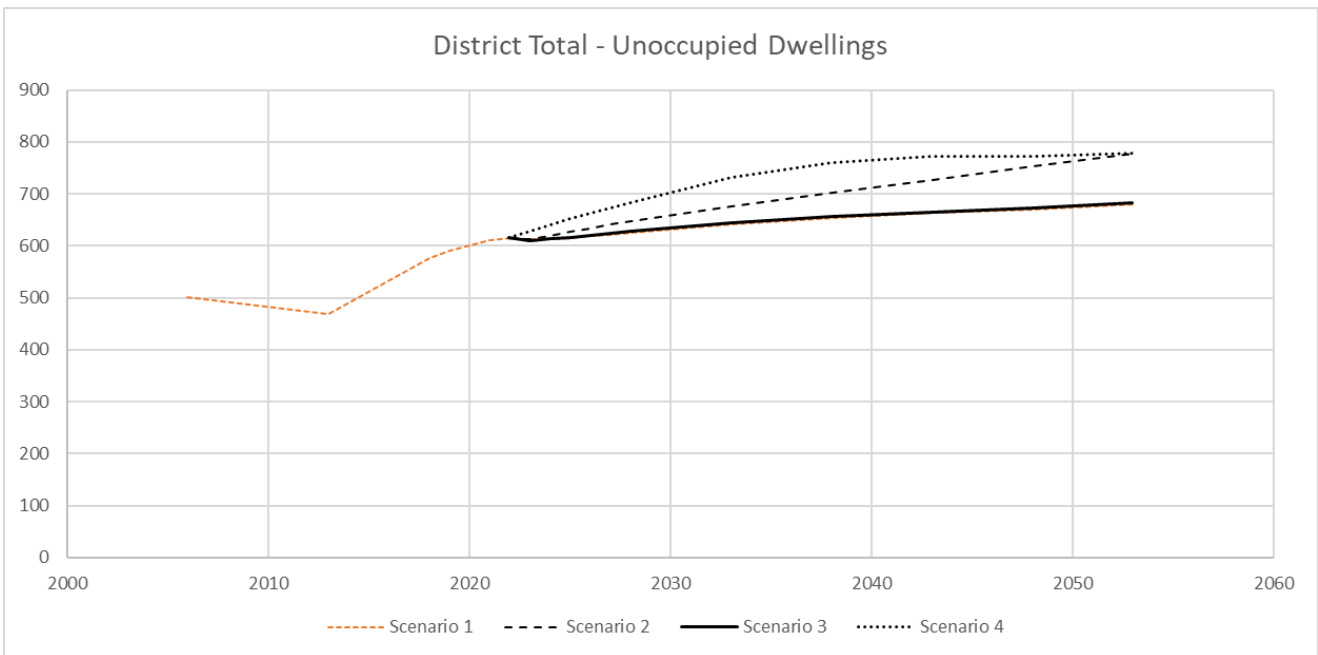


Figure 20. Unoccupied dwellings in WDC.



7.5 Visitor Projections

7.5.1 ASSUMPTIONS

No specific assumptions have been made regarding projecting visitors. The medium growth scenario is set to the baseline scenario. The high scenario is set to 10% more visitors by 2053 and the low scenario is set to 10% less visitors by 2053.

7.5.2 OUTPUT

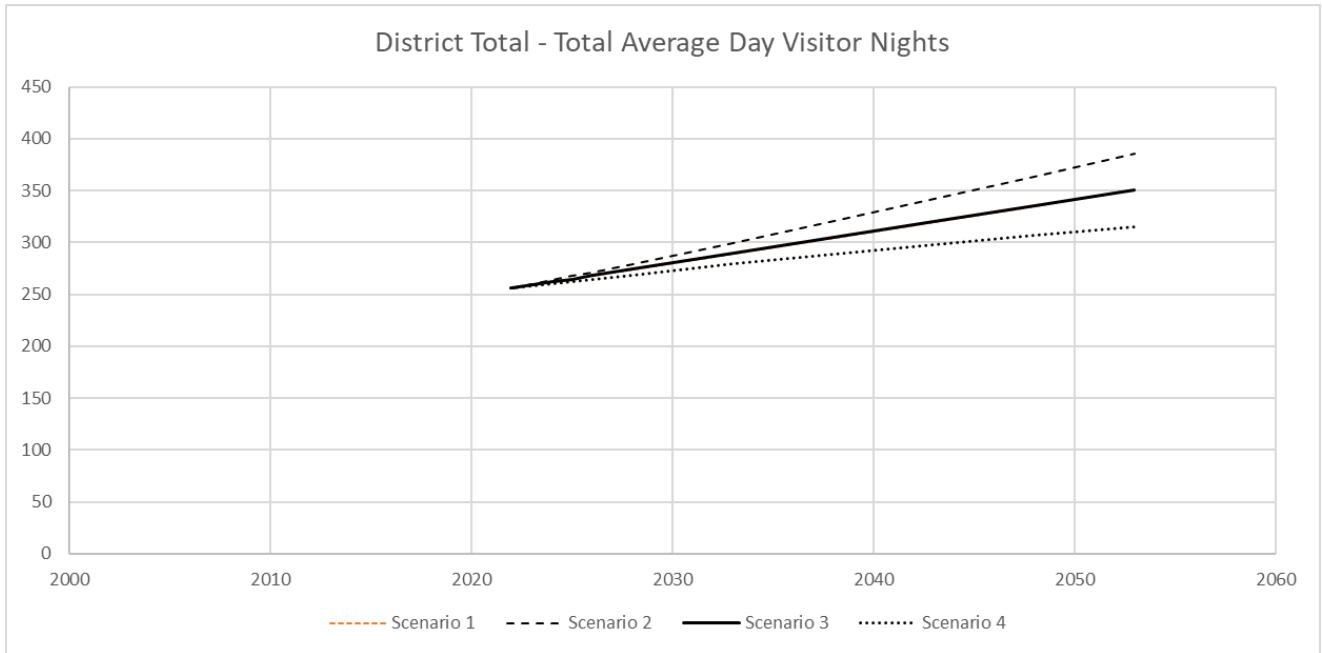


Figure 21. Average visitor nights in WDC.

7.6 Rating Units

7.6.1 ASSUMPTIONS

No assumptions have been made regarding projecting the rating units, refer to Section 5 for the methodology that has been used to calculate the projections.

7.6.2 OUTPUT

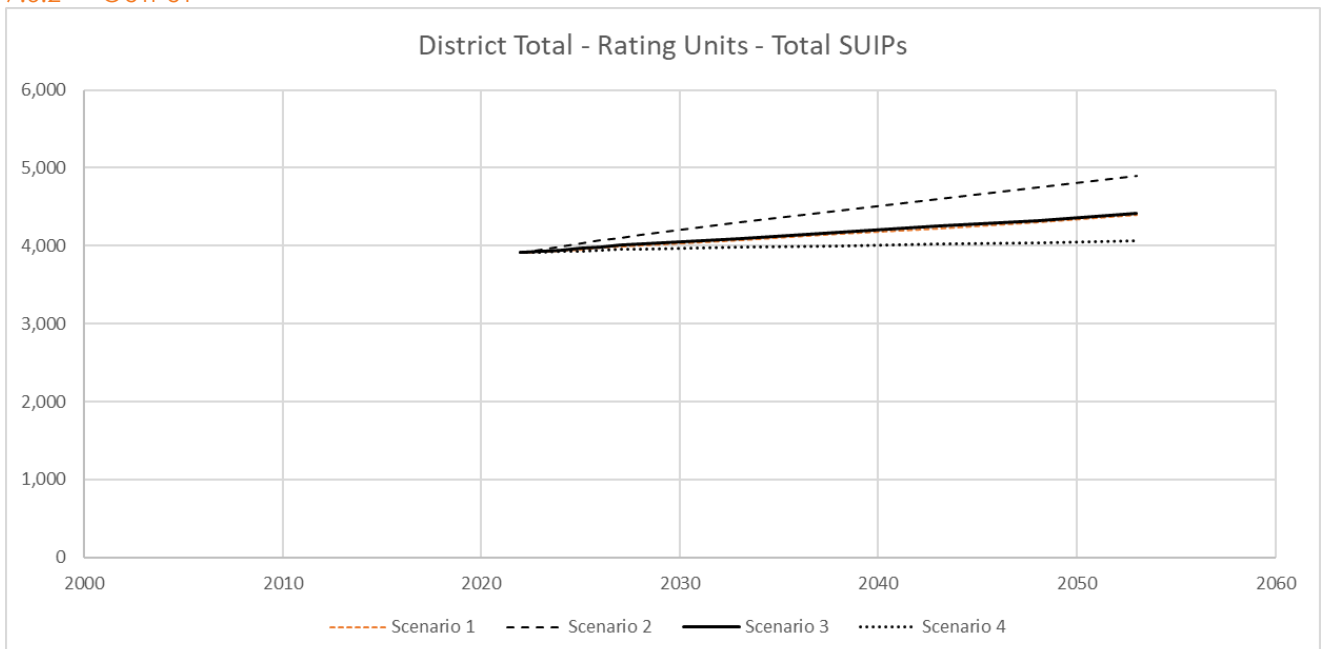


Figure 22. Rating units for WDC – Total Separately used or inhabited part of a rating unit.

8 Recommendation

It is recommended that WDC adopt Scenario 3 as the expected level of growth in the next thirty years and use this information to inform key projects, plans and strategies.

Brief, annual check-ins with WDC staff are recommended to ensure that the projections are tracking well and that there haven't been any major changes to the economic climate in the District.

Detailed, three yearly reviews aligned with the Long Term Plan cycle are recommended to ensure the projections remain relevant for major planning decisions.

9 Appendix A: Hakataramea

Hakataramea is a large rural area that is sparsely populated within the Waimate District. Whilst there has been growth in some industries the actual number of jobs is still very small.



Figure 23. SA2 boundaries of Waimate District.

9.1 Hakataramea Growth Projections Summary

Table 14. Hakataramea growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	750	790	870	920	923	937	946	956	969	988	1,011
Total Dwellings	393	387	429	454	455	462	466	471	478	487	498
Occupied Dwellings	297	318	333	352	353	359	362	366	371	378	387
Unoccupied Dwellings	93	66	96	102	102	103	104	105	107	109	112
Number of Jobs	220	240	180	180	184	204	212	221	230	239	248
Number of Businesses	213	213	234	228	233	258	269	280	291	303	314
Total Peak Day Visitor Nights				326	330	348	367	386	404	423	442
Total Average Day Visitor Nights				69	70	73	77	81	85	89	93
Total Peak Day Visitor Numbers				410	415	438	461	485	508	532	555
Total Average Day Visitor Numbers				85	86	90	95	100	105	110	114

Table 15. Hakataramea short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	170	11	1.3%	17	3	0.3%	91	3	0.3%
Total Dwellings	61	4	0.9%	8	1	0.3%	45	1	0.3%
Occupied Dwellings	55	3	1.1%	6	1	0.3%	35	1	0.3%
Unoccupied Dwellings	9	1	0.5%	2	0	0.3%	10	0	0.3%
Number of Jobs	-40	-3	-1.2%	24	4	2.1%	68	2	1.0%
Number of Businesses	15	1	0.4%	30	5	2.1%	86	3	1.0%
Total Peak Day Visitor Nights				22	4	1.1%	116	4	1.0%
Total Average Day Visitor Nights				5	1	1.1%	24	1	1.0%
Total Peak Day Visitor Numbers				27	5	1.1%	145	5	1.0%
Total Average Day Visitor Numbers				6	1	1.1%	30	1	1.0%

9.2 Employment Projections

9.2.1 KEY INDUSTRIES AND TRENDS

The Hakataramea is a large farming area, which is reflected in the number and types of jobs available in the area. There has been minimal growth in the area in recent times.

Table 16. Top five industries in Hakataramea.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Agriculture, Forestry and Fishing	140	73%	-8%	-3%
Arts and Recreation Services	15	8%	8%	3%
Construction	6	3%	33%	-
Education and Training	6	3%	33%	20%
Rental, Hiring and Real Estate Services	3	2%	-11%	-

9.2.2 OUTPUT

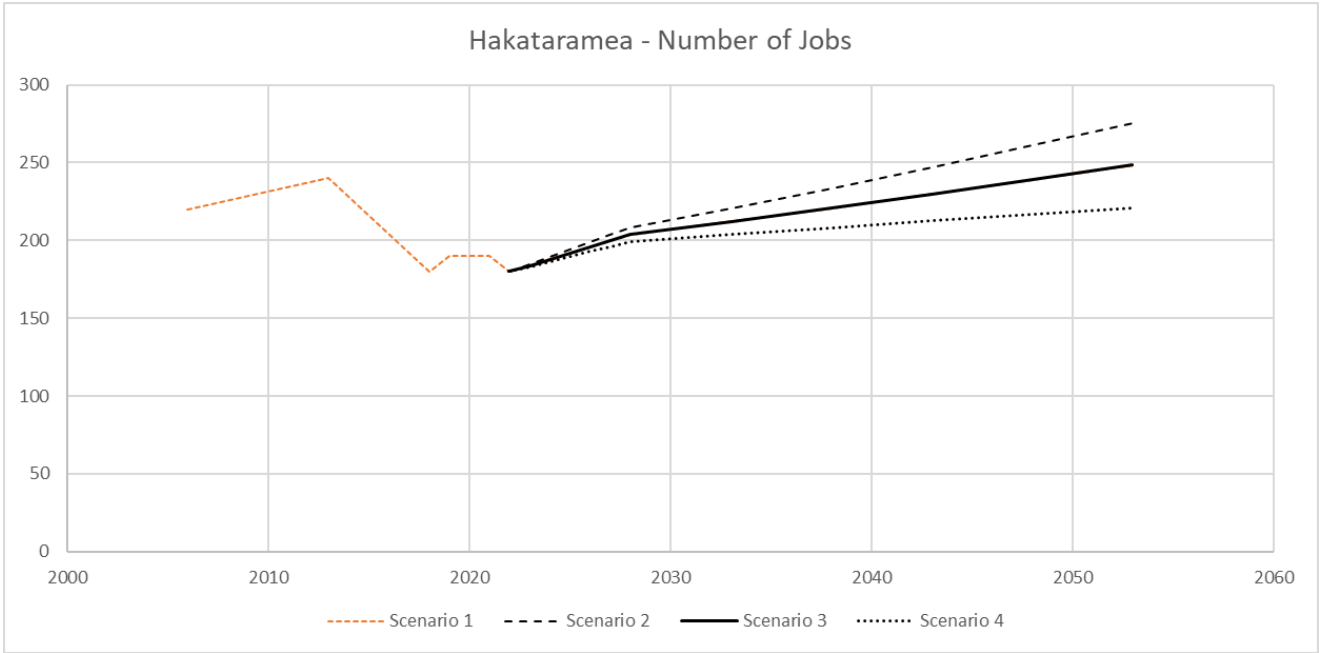


Figure 24. Number of jobs in Hakataramea.

9.3 Population Projections

9.3.1 KEY MIGRATION DRIVERS

- Young people leave the area for other opportunities such as education and employment.
- Families are moving to the area and commuting away for work.
- Later in life people tend to move away from the area for retirement and access to greater support and healthcare.

These trends are reflected below through the population by age and net migration figures.

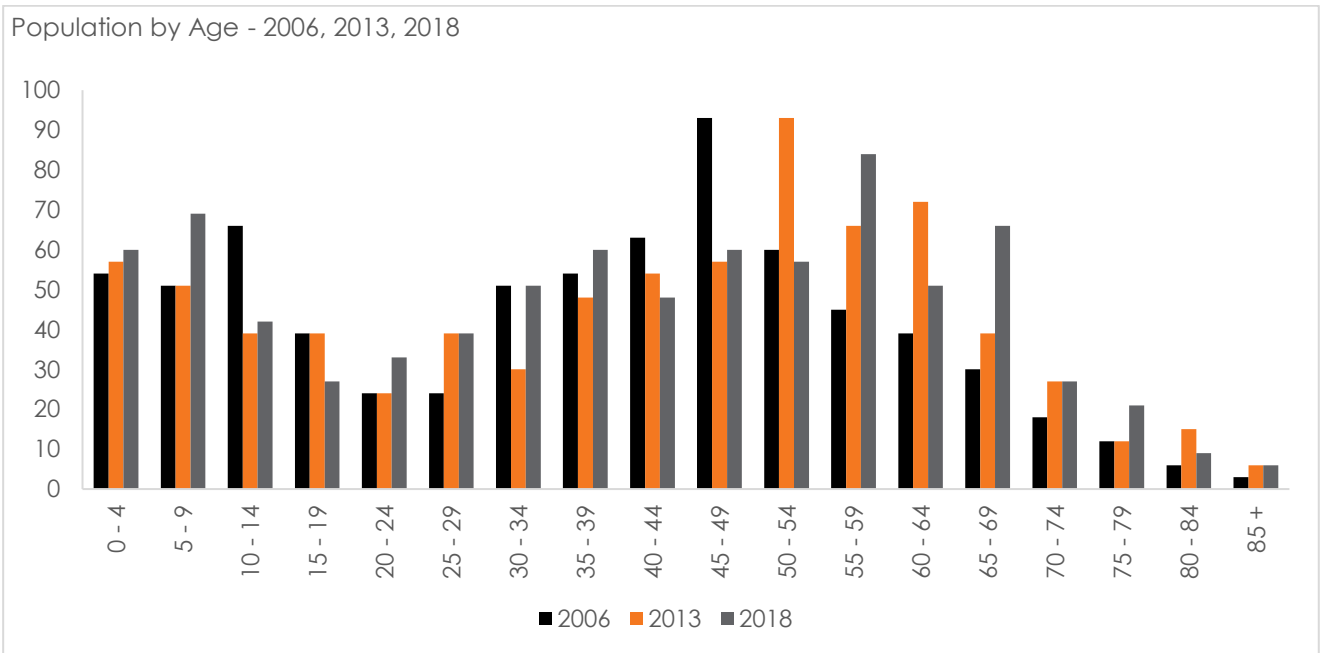


Figure 25. Hakataramea population by age, 2006, 2013, 2018. Source: Stats NZ.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that is occurring. This ensures that the modelling is accurate and reliable.

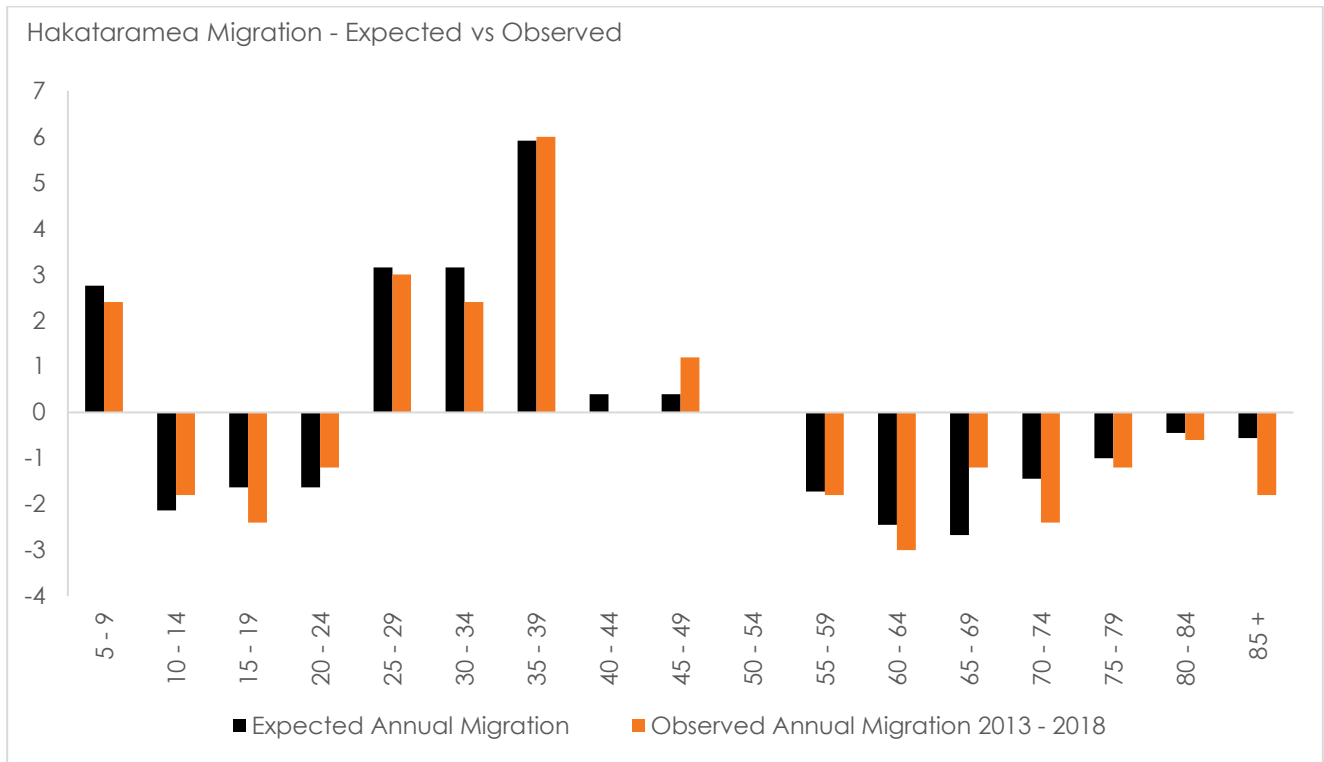


Figure 26. Net migration check.

9.3.2 OUTPUT

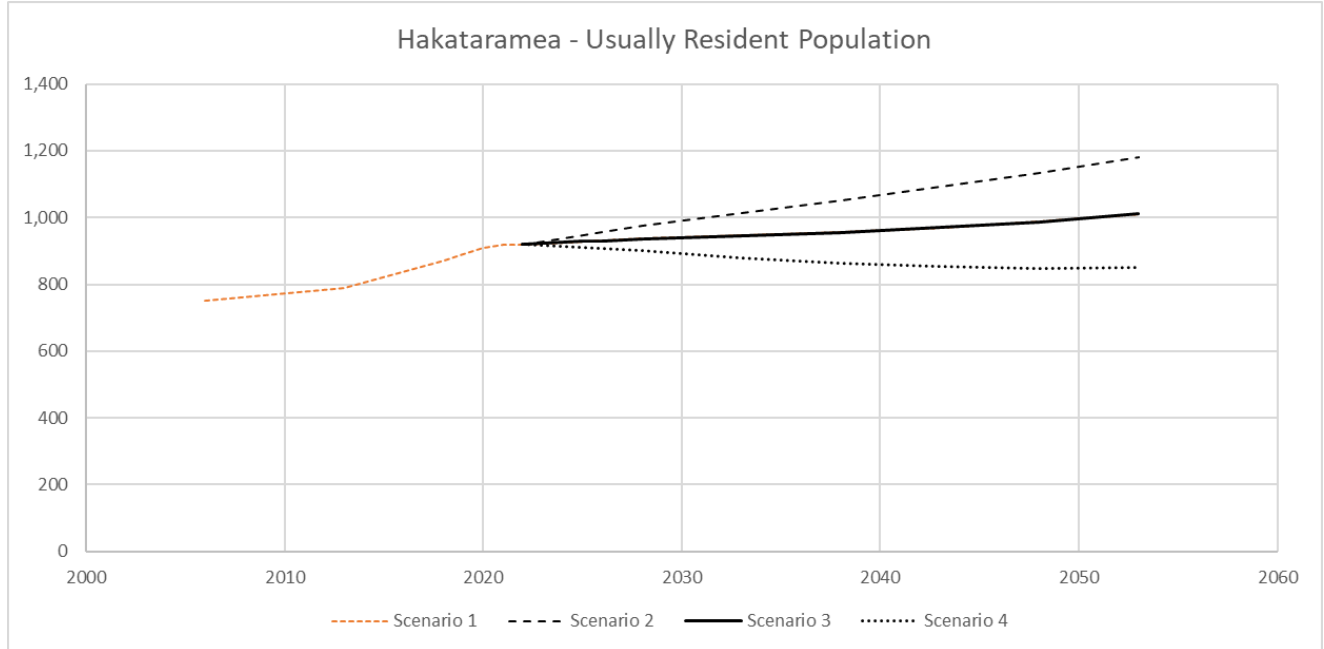


Figure 27. Hakataramea usually resident population.

9.4 Dwelling Projections

9.4.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the analysis in Hakataramea. These assumptions are available in Section 7.

9.4.2 OUTPUT

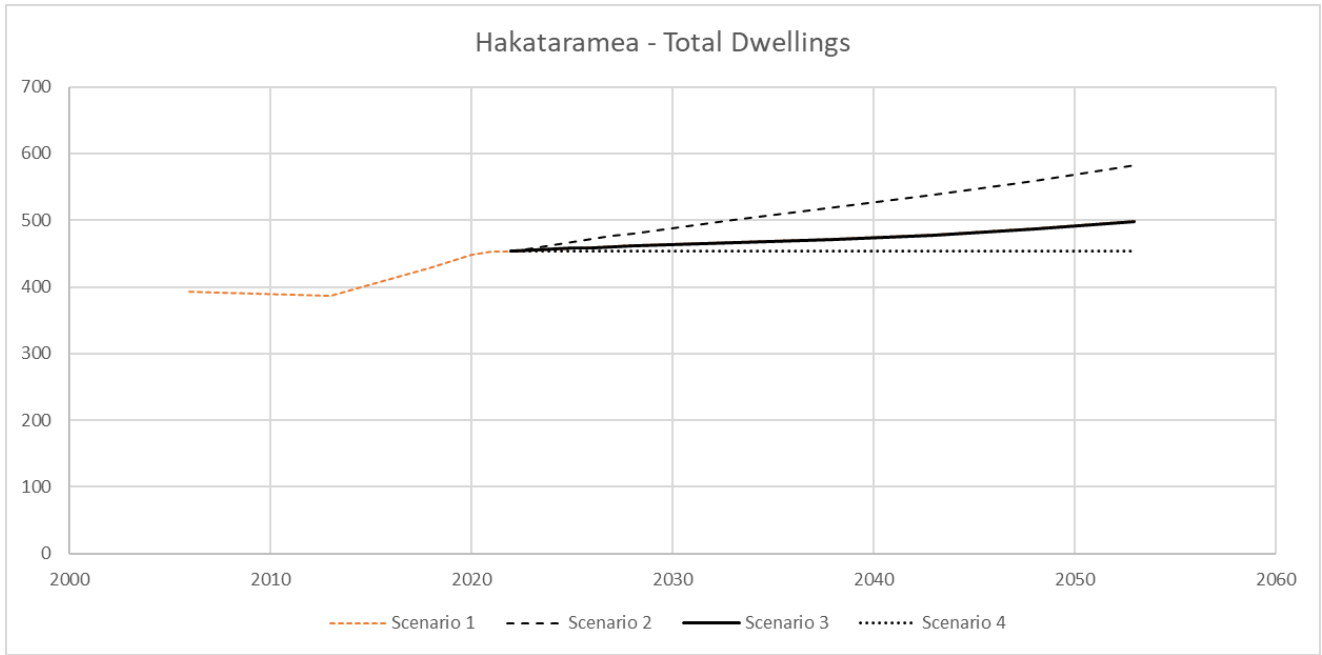


Figure 28. Total dwellings.

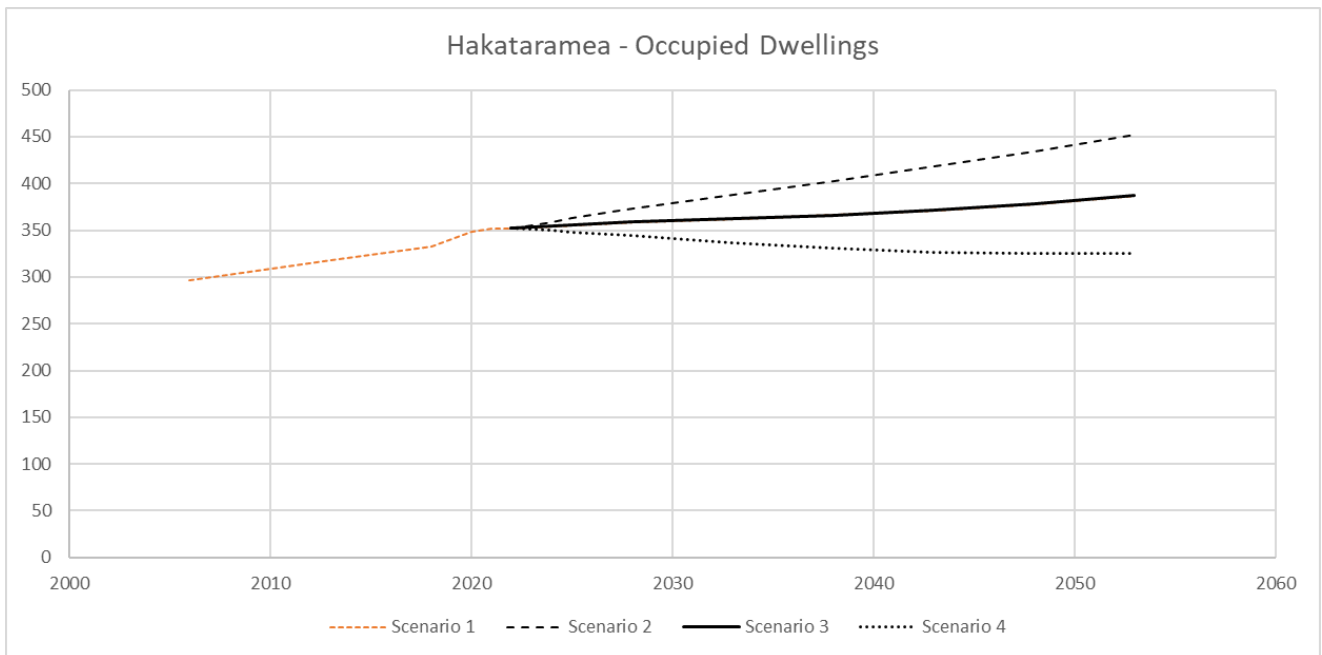


Figure 29. Occupied dwellings.

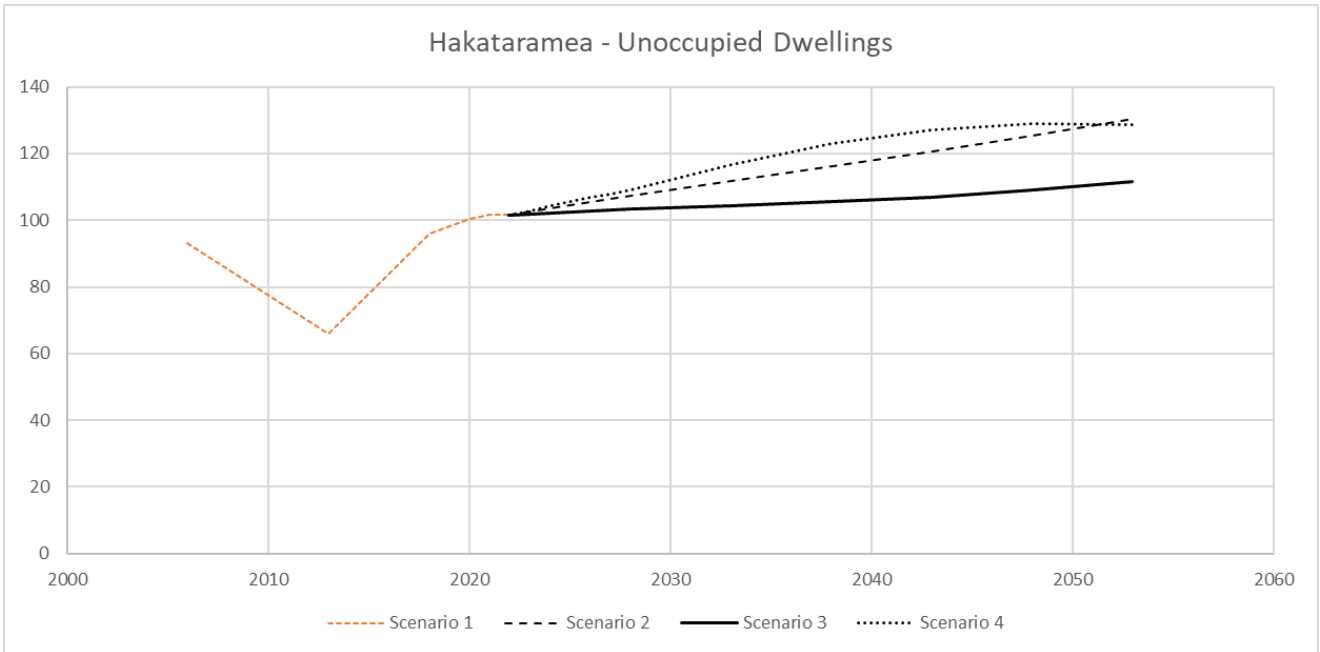


Figure 30. Unoccupied dwellings.

9.5 Visitor Projections

9.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the visitor projections analysis in Hakataramea. These assumptions are available in Section 7.

9.5.2 OUTPUT

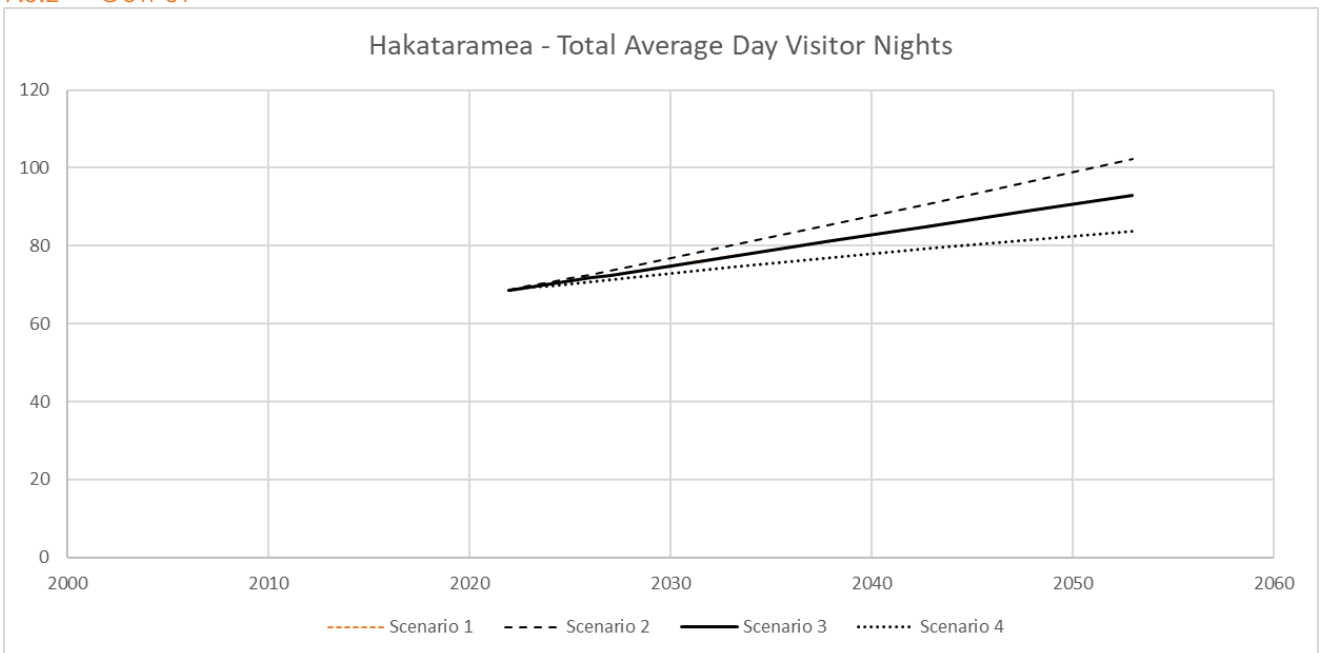


Figure 31. Hakataramea average day visitor nights.

10 Appendix B: Lyalldale

Lyalldale is a small, rural area in the north of the Waimate District. Employment trends are similar to the rest of the district.



Figure 32. SA2 boundaries of Waimate District.

10.1 Lyalldale Growth Projections Summary

Table 17. Lyalldale growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	600	660	710	730	740	789	812	835	858	878	888
Total Dwellings	237	255	267	275	278	297	305	314	323	330	334
Occupied Dwellings	219	237	243	250	253	270	278	286	294	300	304
Unoccupied Dwellings	18	15	24	25	25	27	27	28	29	30	30
Number of Jobs	100	85	130	110	116	143	144	145	146	147	148
Number of Businesses	105	87	87	90	95	117	118	119	119	120	121
Total Peak Day Visitor Nights				73	74	78	83	87	91	95	99
Total Average Day Visitor Nights				42	42	44	47	49	52	54	56
Total Peak Day Visitor Numbers				110	111	117	124	130	136	142	148
Total Average Day Visitor Numbers				49	50	53	55	58	61	64	67

Table 18. Lyalldale growth projections summary.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	130	8	1.2%	59	10	1.3%	158	5	0.6%
Total Dwellings	38	2	0.9%	22	4	1.3%	60	2	0.6%
Occupied Dwellings	31	2	0.8%	20	3	1.3%	54	2	0.6%
Unoccupied Dwellings	7	0	2.0%	2	0	1.3%	5	0	0.6%
Number of Jobs	10	1	0.6%	33	6	4.5%	38	1	1.0%
Number of Businesses	-15	-1	-1.0%	27	5	4.5%	31	1	1.0%
Total Peak Day Visitor Nights				5	1	1.1%	26	1	1.0%
Total Average Day Visitor Nights				3	0	1.1%	15	0	1.0%
Total Peak Day Visitor Numbers				7	1	1.1%	38	1	1.0%
Total Average Day Visitor Numbers				3	1	1.1%	17	1	1.0%

10.2 Employment Projections

Lyalldale is a smaller agricultural area to the north of the district. This is reflected in the number and type of jobs available. There has been minimal growth in the area.

There have been significant changes in the number of jobs in Lyalldale in the last 10 years.

A large proportion of residents commute out of the area for work, either to Waimate or Timaru.

10.2.1 KEY INDUSTRIES AND TRENDS

Table 19. Top five industries in Lyalldale.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Agriculture, Forestry and Fishing	50	50%	-5%	5%
Education and Training	18	18%	50%	13%
Transport, Postal and Warehousing	15	15%	0%	1%
Construction	3	3%	110%	-
Wholesale Trade	3	3%	-	-

10.2.2 OUTPUT

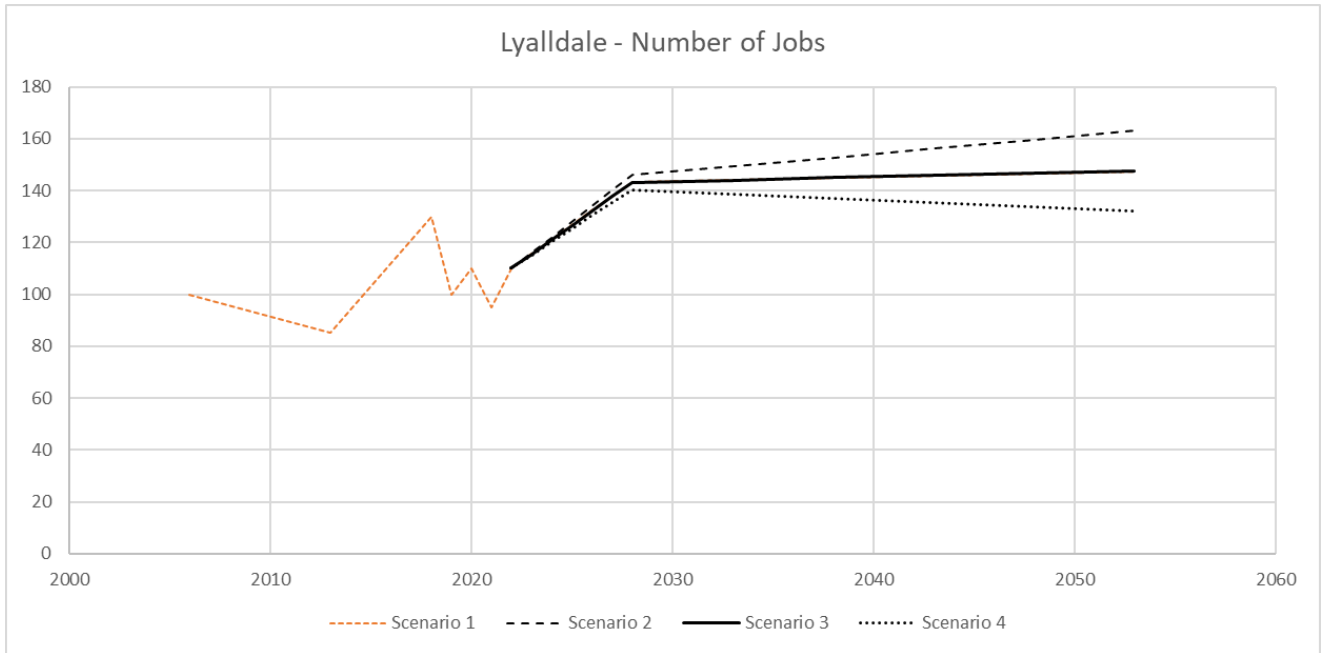


Figure 33. Number of jobs in Lyalldale.

10.3 Population Projections

10.3.1 KEY MIGRATION DRIVERS

- Migration to Lyalldale for more affordable housing compared to Timaru.
- A small number of younger people are attracted to the area for employment opportunities.
- Older people tend to leave the area for retirement and access to more support and healthcare.

These trends are reflected below through the population by age and net migration figures.

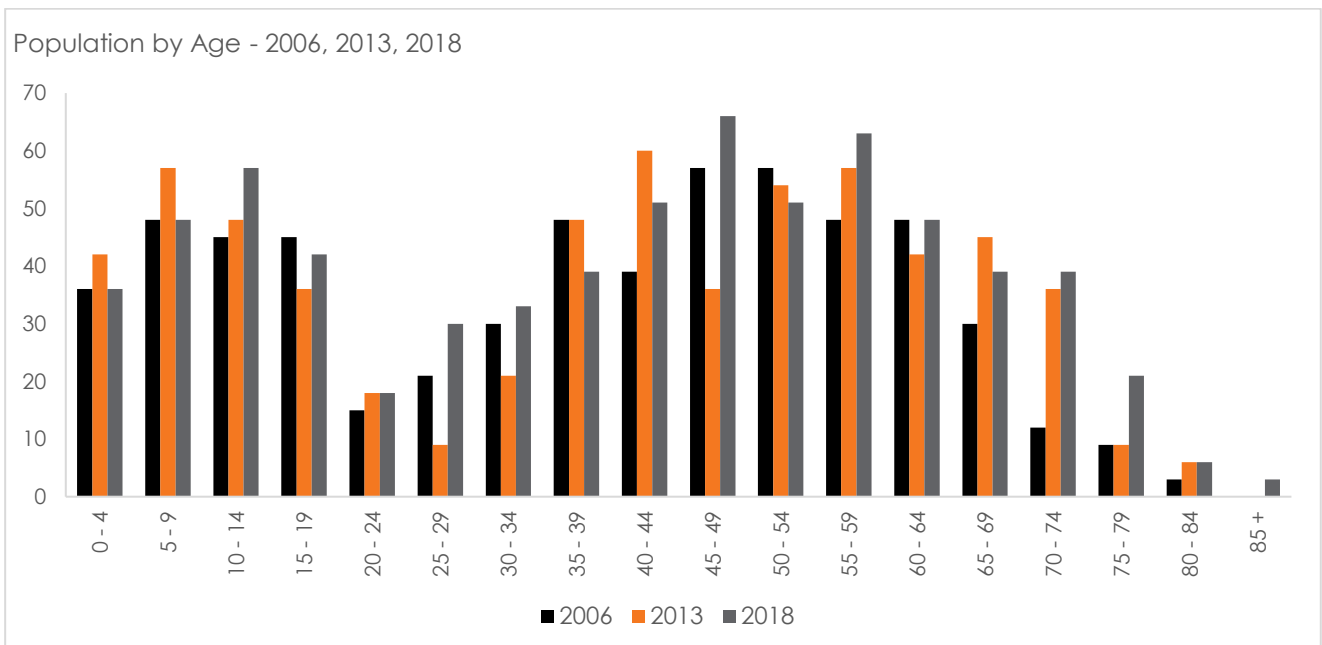


Figure 34. Lyalldale population by age, 2006, 2013, 2018. Source: Stats NZ.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that is occurring. This ensures that the modelling is accurate and reliable.

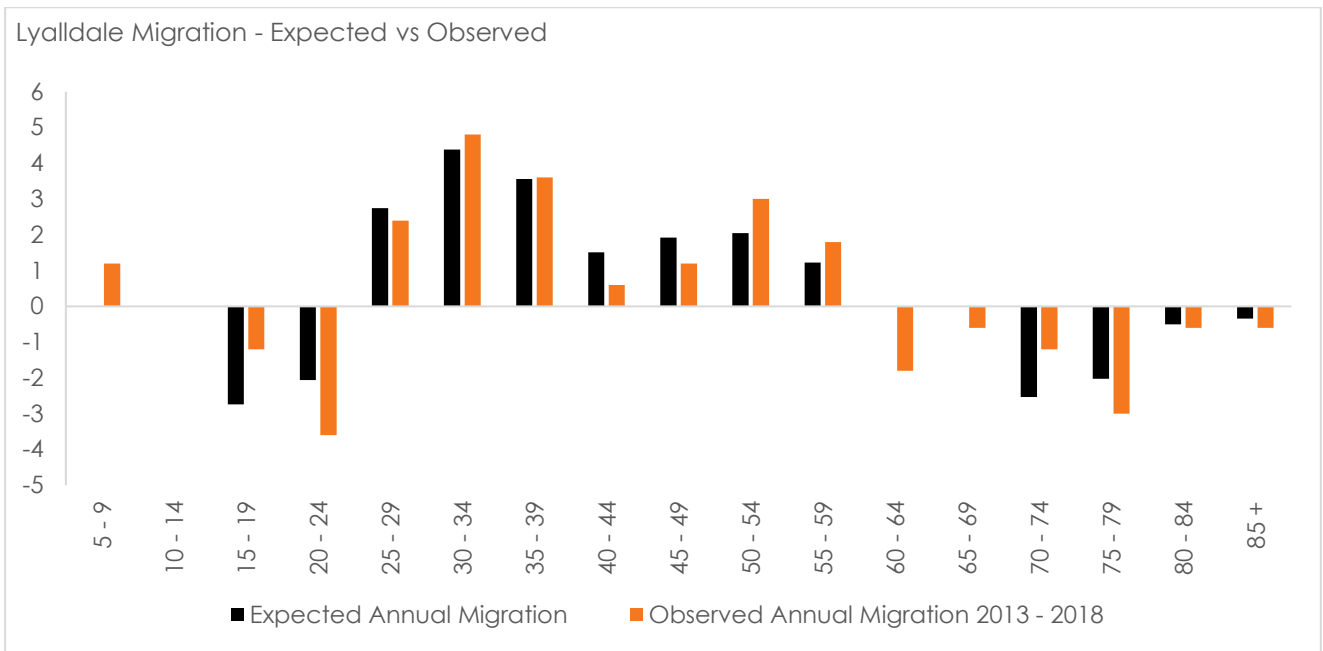


Figure 35. Net migration check.

10.3.2 OUTPUT

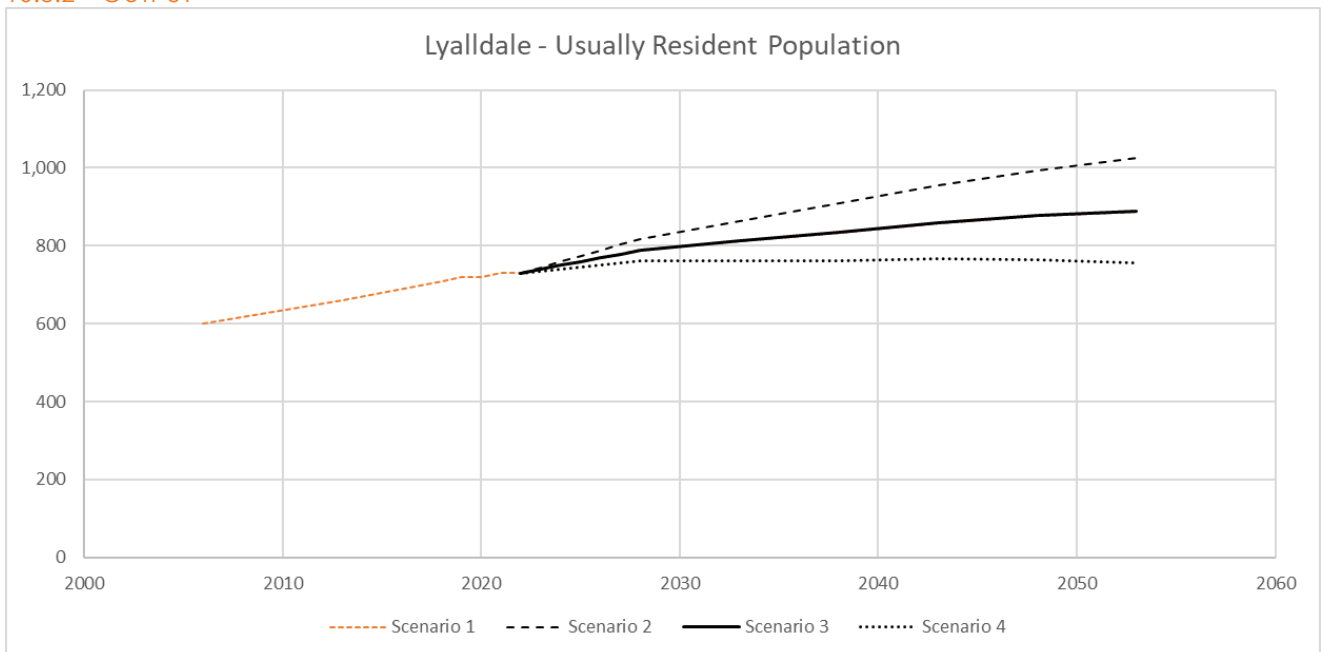


Figure 36. Lyalldale's usually resident population.

10.4 Dwelling Projections

10.4.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the dwelling projections analysis in Lyalldale. These assumptions are available in Section 7.

10.4.2 OUTPUT

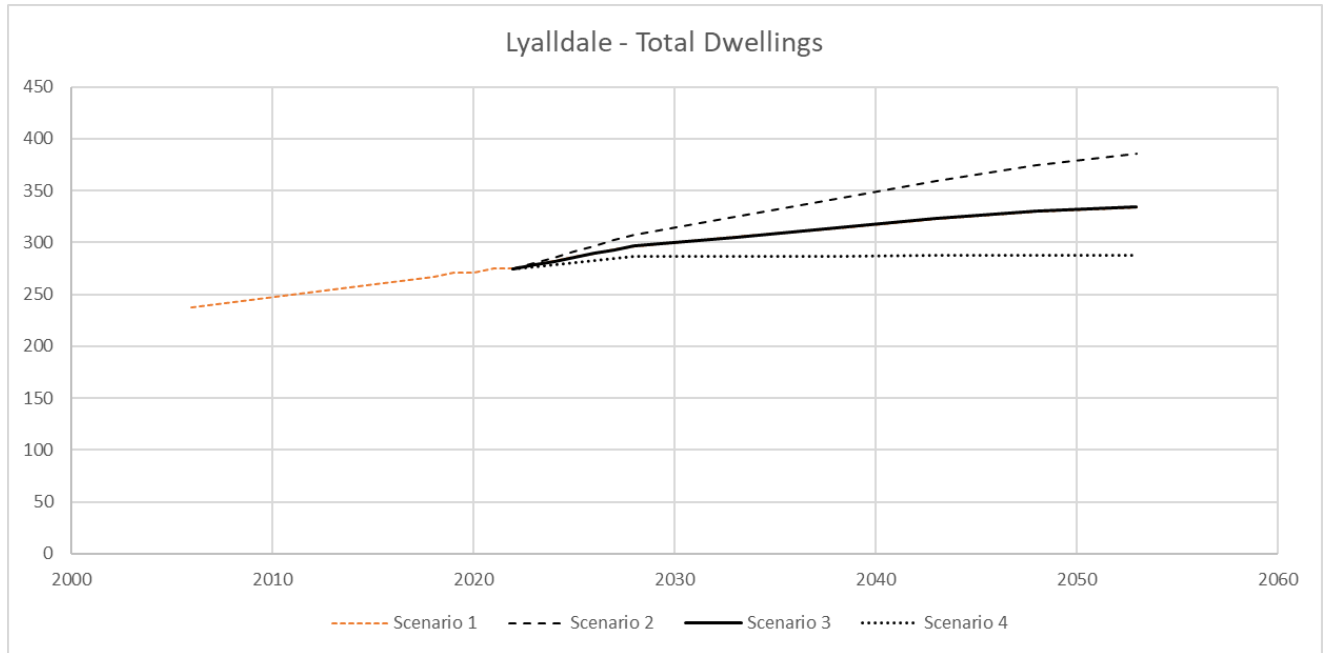


Figure 37. Total dwellings.

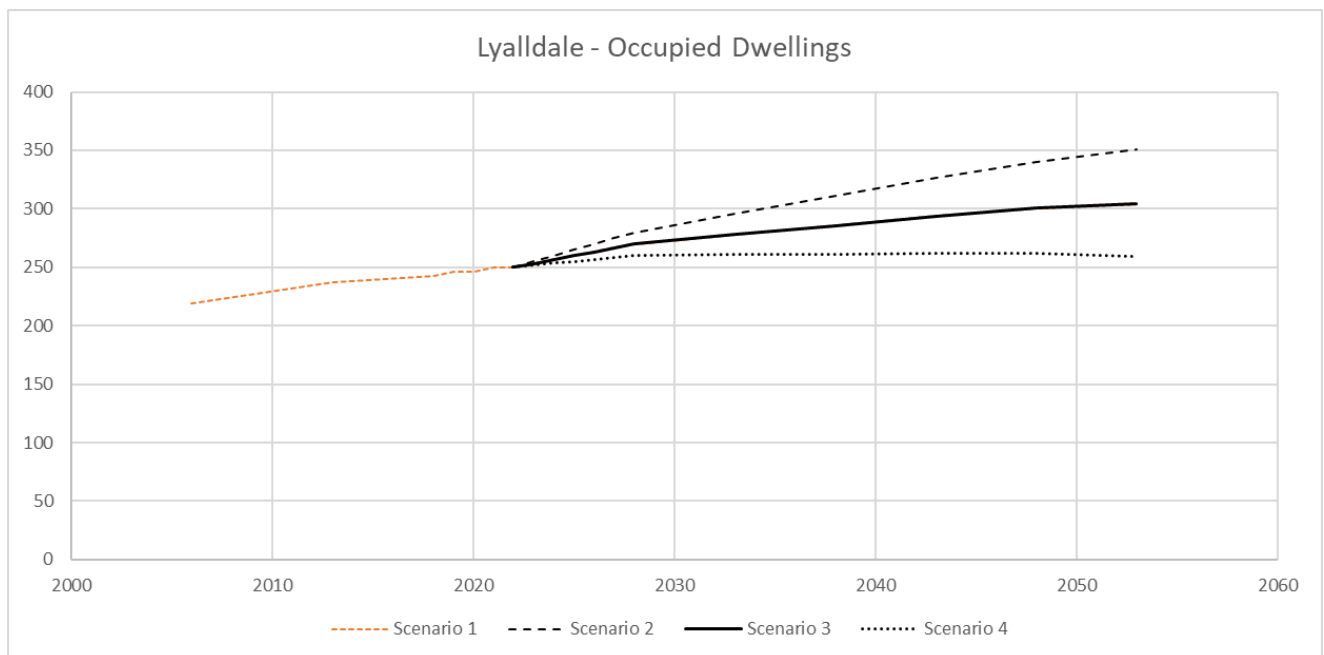


Figure 38. Occupied dwellings.

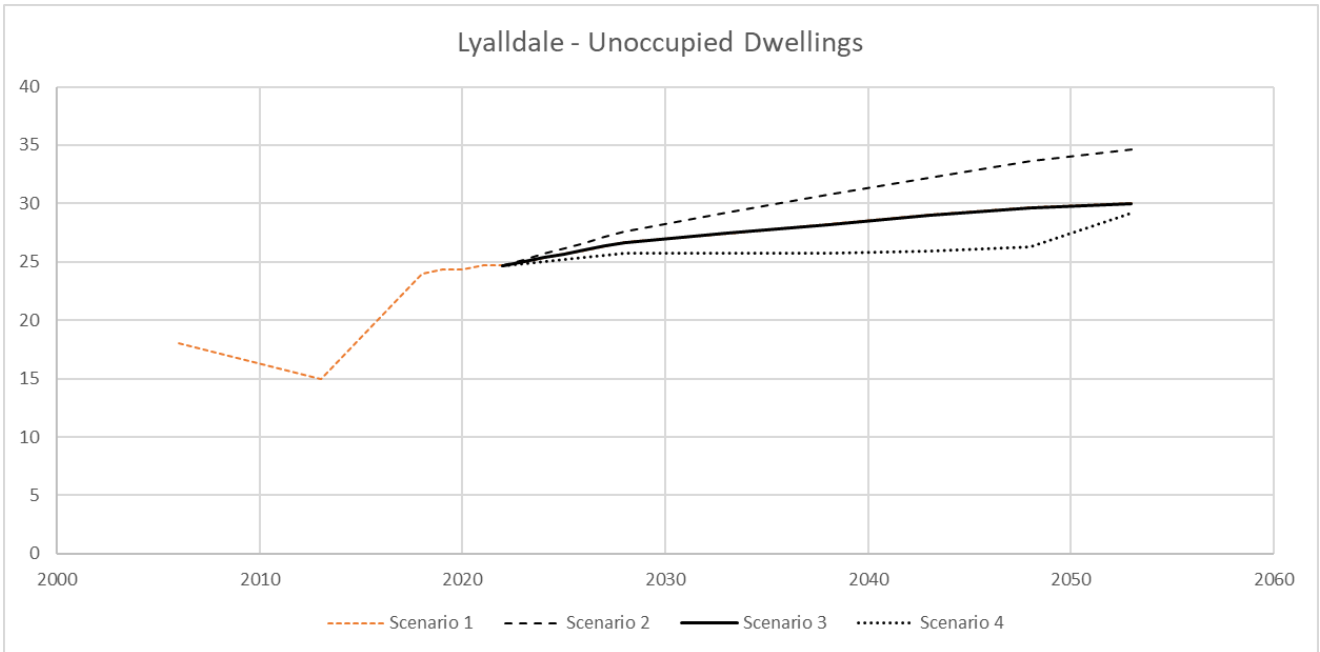


Figure 39. Unoccupied dwellings.

10.5 Visitor Projections

10.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the analysis of the visitor projections in Lyalldale. These assumptions are available in Section 7.

10.5.2 OUTPUT

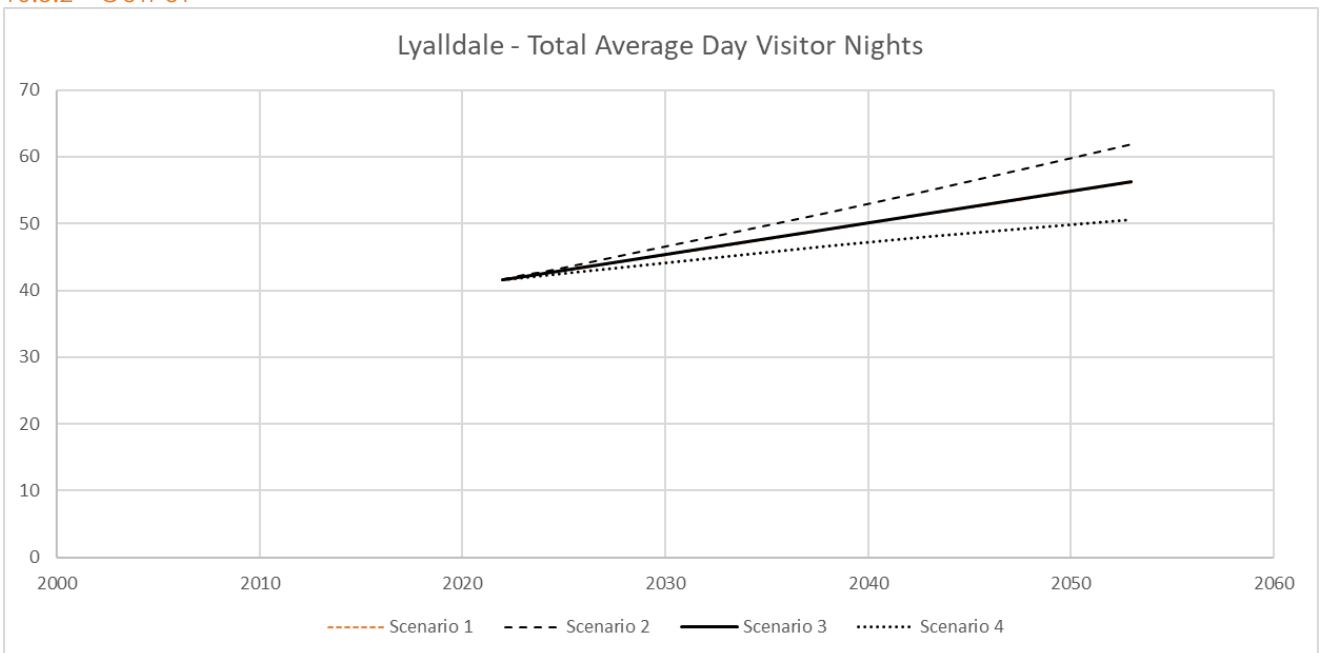


Figure 40. Lyalldale's average day visitor nights.

10.6 St Andrews

St Andrews is a small township on State Highway 1 in the north of the Waimate District. The town has experienced some population and hence dwelling growth over the last two decades. This is expected to increase through to 2053.



Figure 41. Township boundaries in the Waimate District.

Table 20. St Andrews growth projections.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	180	190	200	200	201	207	212	217	223	228	232
Total Dwellings	72	78	81	81	82	84	86	88	90	93	94
Occupied Dwellings	72	78	72	72	72	74	76	78	80	82	83
Unoccupied Dwellings	0	0	9	9	9	9	10	10	10	10	10

Table 21. St Andrews short- and long-term forecasts.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	20	1	0.7%	7	1	0.5%	32	1	0.5%
Total Dwellings	9	1	0.7%	3	0	0.5%	13	0	0.5%
Occupied Dwellings	0	0	0.0%	2	0	0.5%	11	0	0.5%
Unoccupied Dwellings	9	1		0	0	0.5%	1	0	0.5%

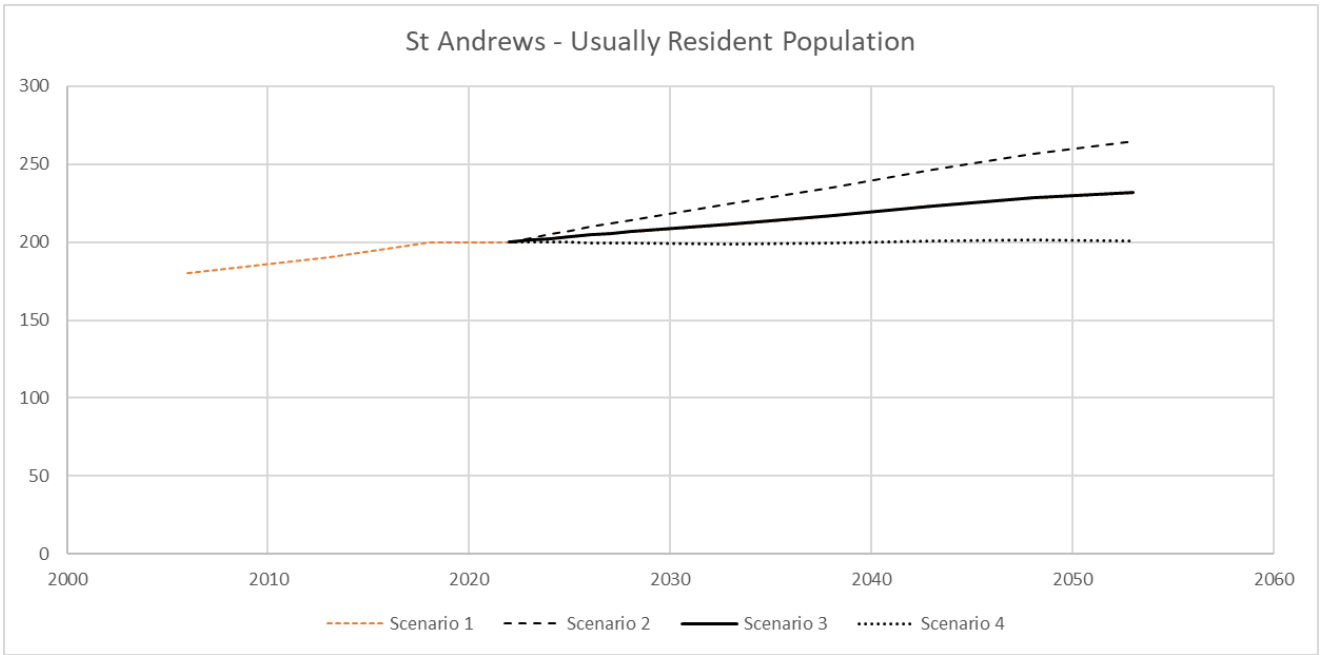


Figure 42. St Andrews usually resident population.

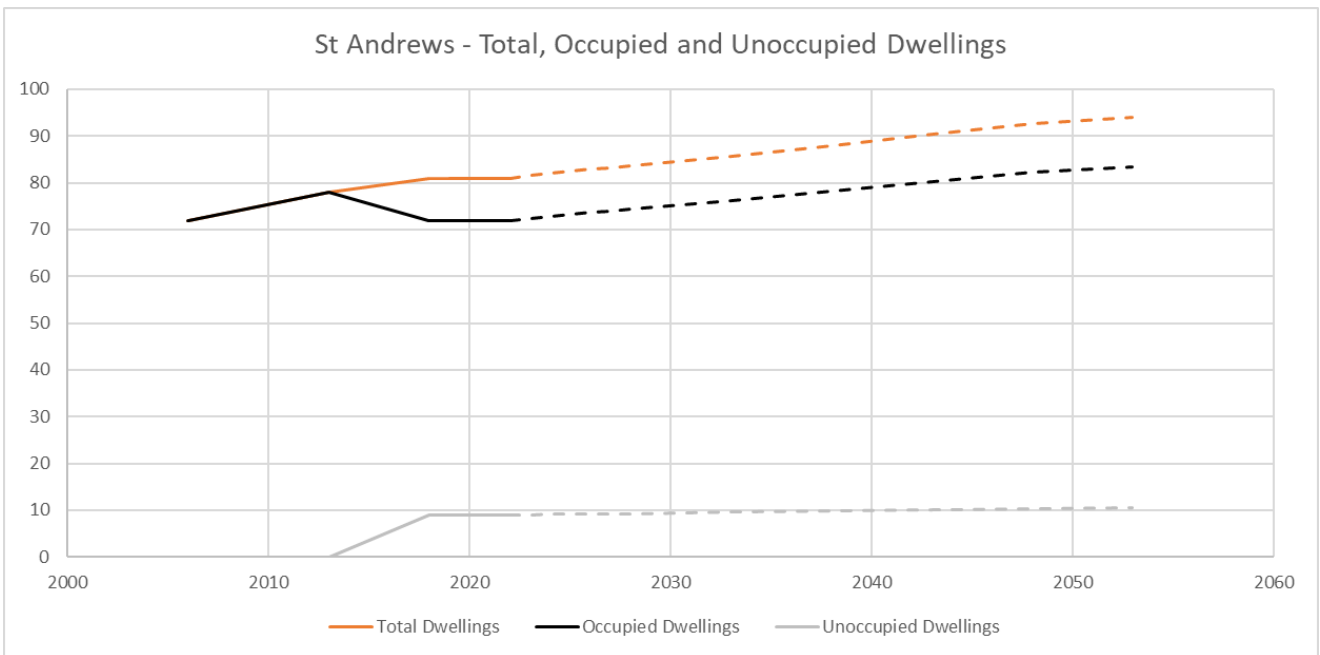


Figure 43. St Andrews total occupied and unoccupied dwellings.

11 Appendix C: Makikihi-Willowbridge

Makikihi-Willowbridge is a small, coastal area in the Waimate District.



Figure 44. SA2 boundaries of Waimate District.

11.1 Makikihi-Willowbridge Growth Projections Summary

Table 22. Makikihi-Willowbridge growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048
Usually Resident Population	1,010	1,030	1,050	1,080	1,083	1,093	1,086	1,083	1,085	1,089
Total Dwellings	414	438	462	475	476	481	481	481	481	481
Occupied Dwellings	369	408	402	413	414	418	416	415	415	417
Unoccupied Dwellings	39	30	60	62	62	62	65	66	65	64
Number of Jobs	390	410	400	320	322	329	322	320	318	316
Number of Businesses	231	240	240	231	232	238	232	231	229	228
Total Peak Day Visitor Nights				66	67	71	75	79	83	87
Total Average Day Visitor Nights				27	27	29	30	32	33	35
Total Peak Day Visitor Numbers				217	220	232	245	258	270	283
Total Average Day Visitor Numbers				55	56	59	62	65	69	72

Table 23. Makikihi-Willowbridge short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	70	4	0.4%	13	2	0.2%	13	0	0.0%
Total Dwellings	61	4	0.9%	6	1	0.2%	6	0	0.0%
Occupied Dwellings	44	3	0.7%	5	1	0.2%	5	0	0.0%
Unoccupied Dwellings	23	1	2.9%	1	0	0.2%	1	0	0.0%
Number of Jobs	-70	-4	-1.2%	9	2	0.5%	-6	0	-0.1%
Number of Businesses	0	0	0.0%	7	1	0.5%	-4	0	-0.1%
Total Peak Day Visitor Nights				5	1	1.2%	25	1	1.0%
Total Average Day Visitor Nights				2	0	1.2%	10	0	1.0%
Total Peak Day Visitor Numbers				15	2	1.1%	78	3	1.0%
Total Average Day Visitor Numbers				4	1	1.1%	20	1	1.0%

11.2 Employment Projections

11.2.1 KEY INDUSTRIES AND TRENDS

Employment trends in the Mikikihi-Willowbridge are similar to those elsewhere in the district.

Table 24. Top five industries in Makikihi - Willobridge

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Agriculture, Forestry and Fishing	240	60%	-1%	2%
Manufacturing	75	19%	3%	-6%
Accommodation and Food Services	25	6%	1%	1%
Transport, Postal and Warehousing	12	3%	0%	2%
Construction	9	2%	0%	-2%

11.2.2 OUTPUT

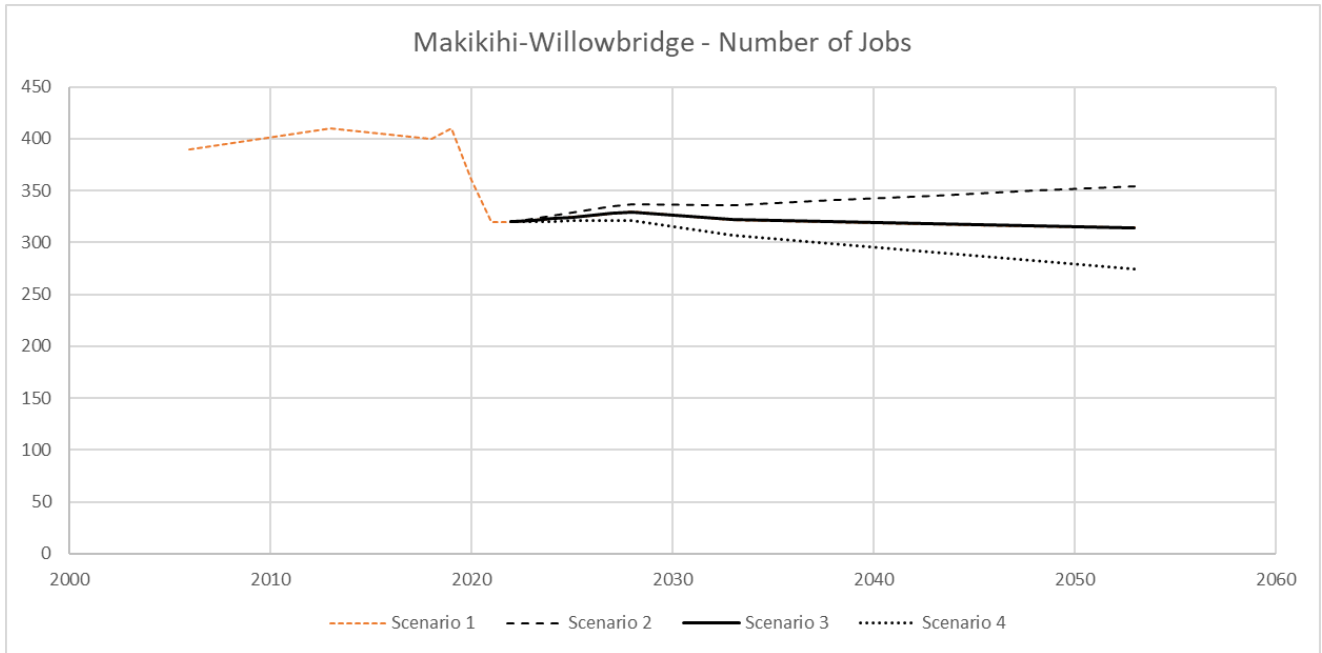


Figure 45. Number of jobs in Makikihi-Willowbridge.

11.3 Population Projections

11.3.1 KEY MIGRATION DRIVERS

- Migration to Makikihi-Willowbridge for more affordable housing compared to Timaru.
- A small number of younger people are attracted to the area for employment opportunities.
- Older people tend to leave the area for retirement and access to more support and healthcare.

These trends are reflected below through the population by age and net migration figures.

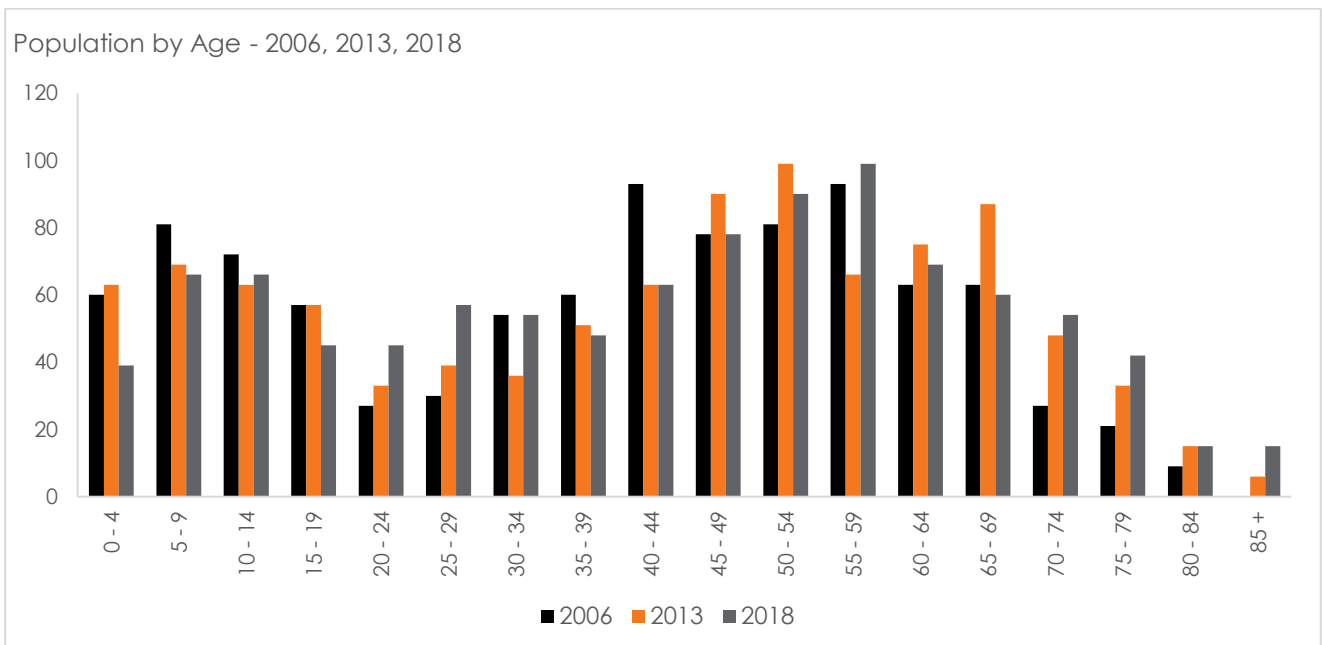


Figure 46. Makikihi-Willowbridge population by age, 2006, 2013, 2018. Source: Stats NZ.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that is occurring. This ensures that the modelling is accurate and reliable.

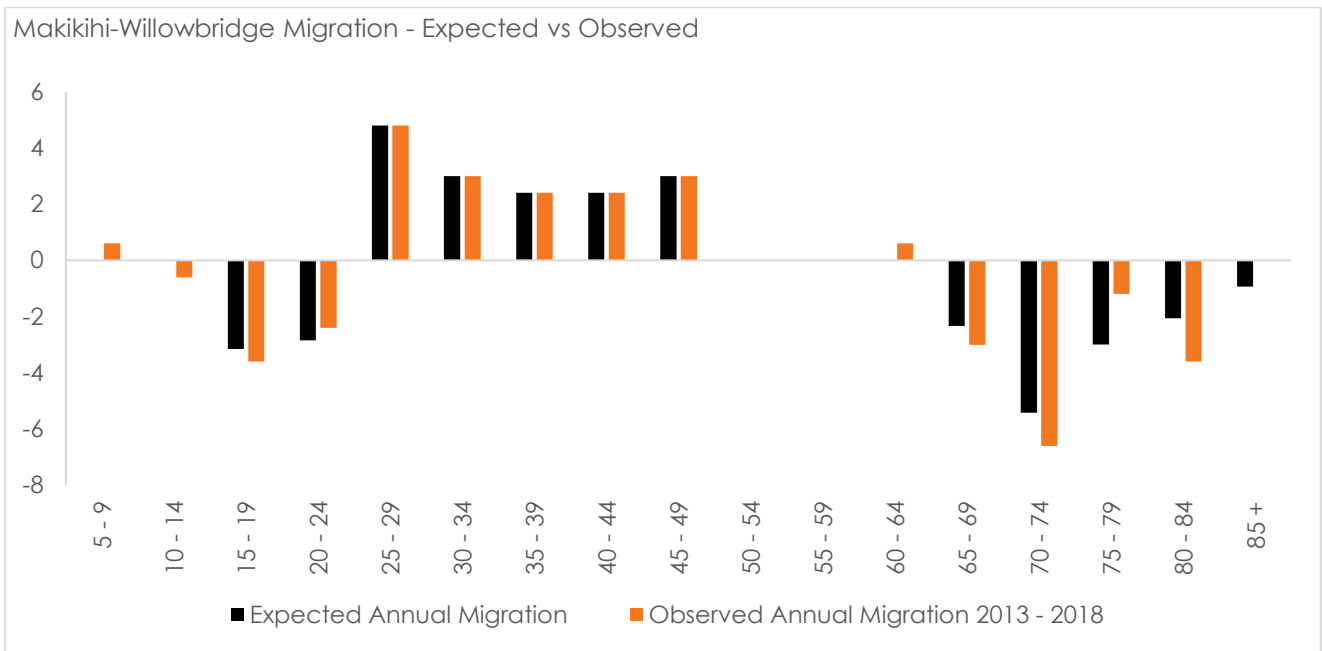


Figure 47. Net migration check.

11.3.2 OUTPUT

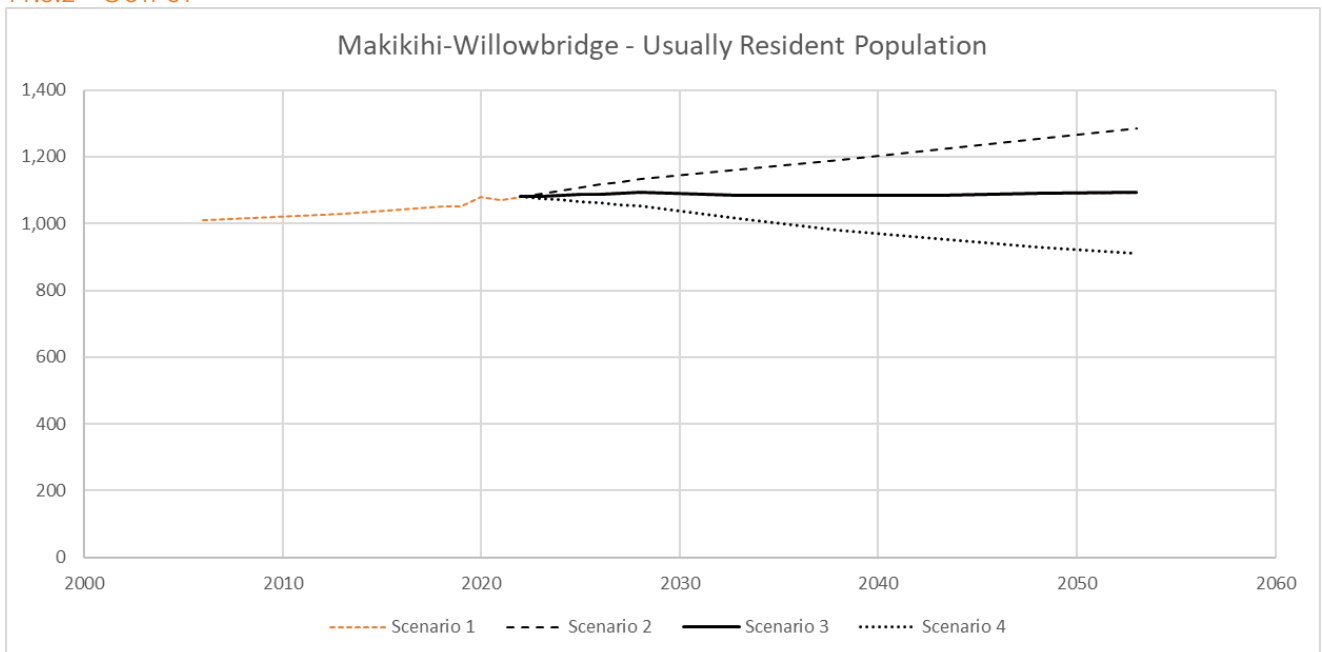


Figure 48. Makikihi-Willowbridge's usually resident population.

11.4 Dwelling Projections

11.4.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the analysis of dwelling projections in Makikihi-Willowbridge. These assumptions are available in Section 7.

11.4.2 OUTPUT

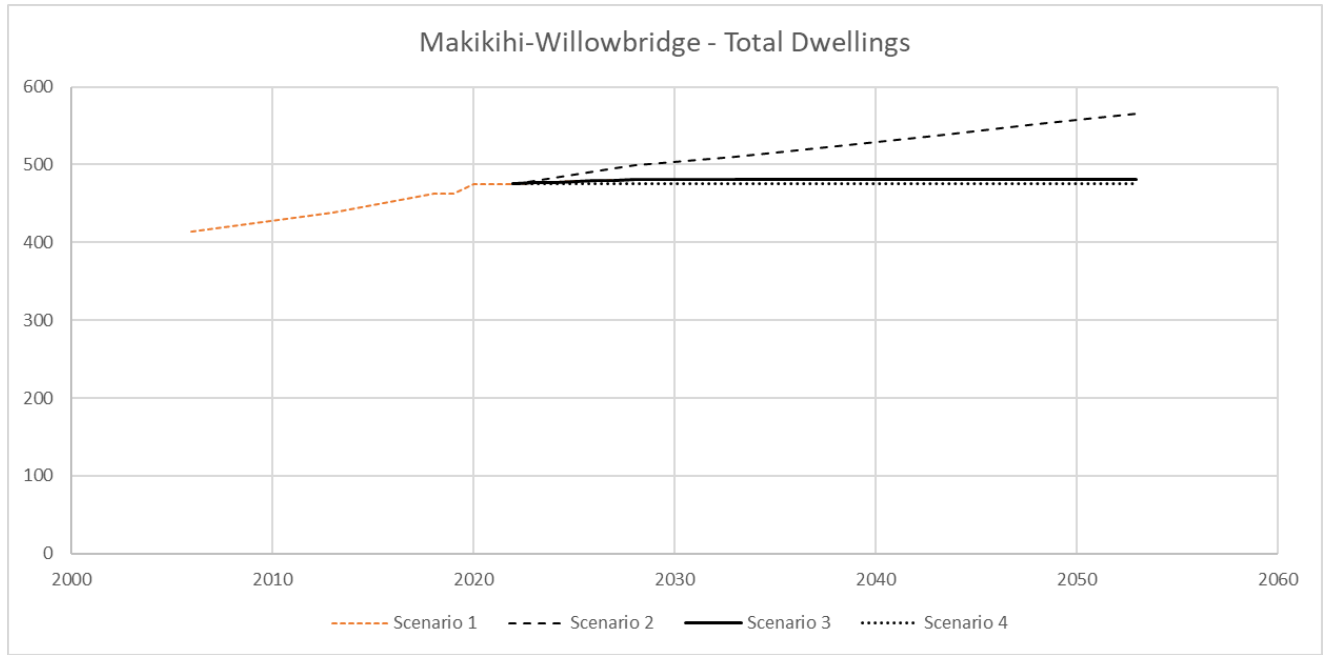


Figure 49. Total Dwellings.

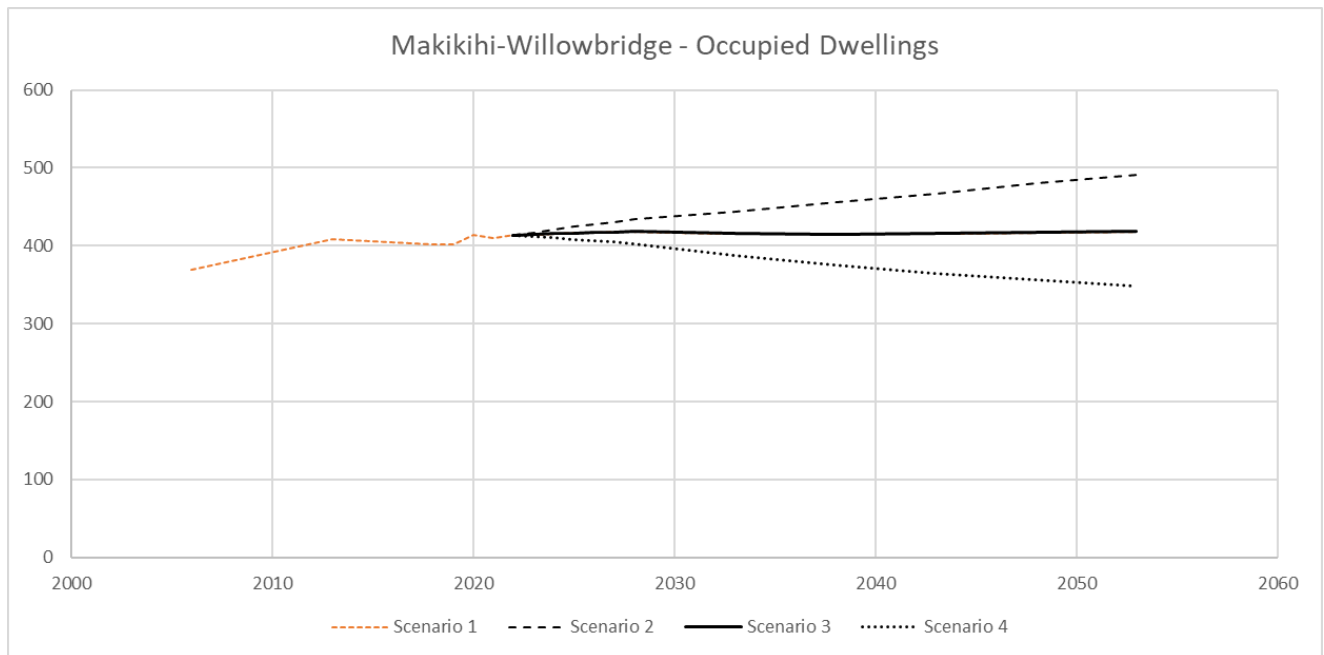


Figure 50. Occupied dwellings.

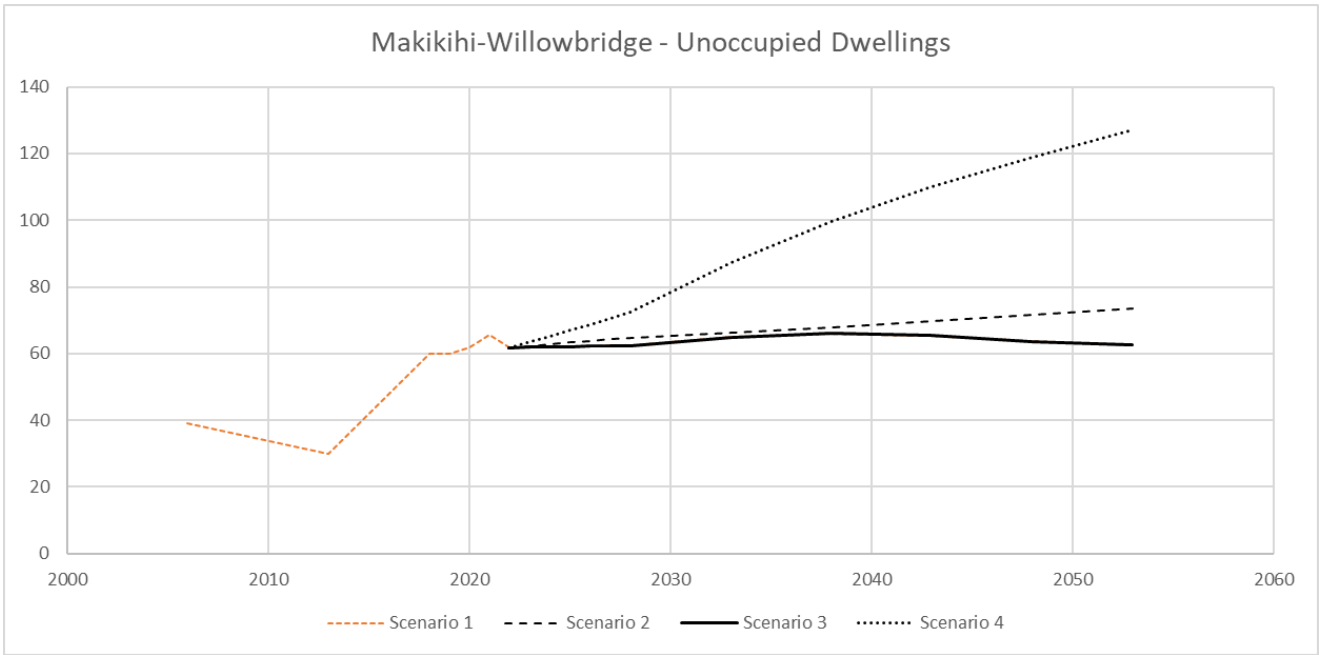


Figure 51. Unoccupied dwellings.

11.5 Visitor Projections

11.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the analysis of visitor projections in Makikihi-Willowbridge. These assumptions are available in Section 7.

11.5.2 OUTPUT

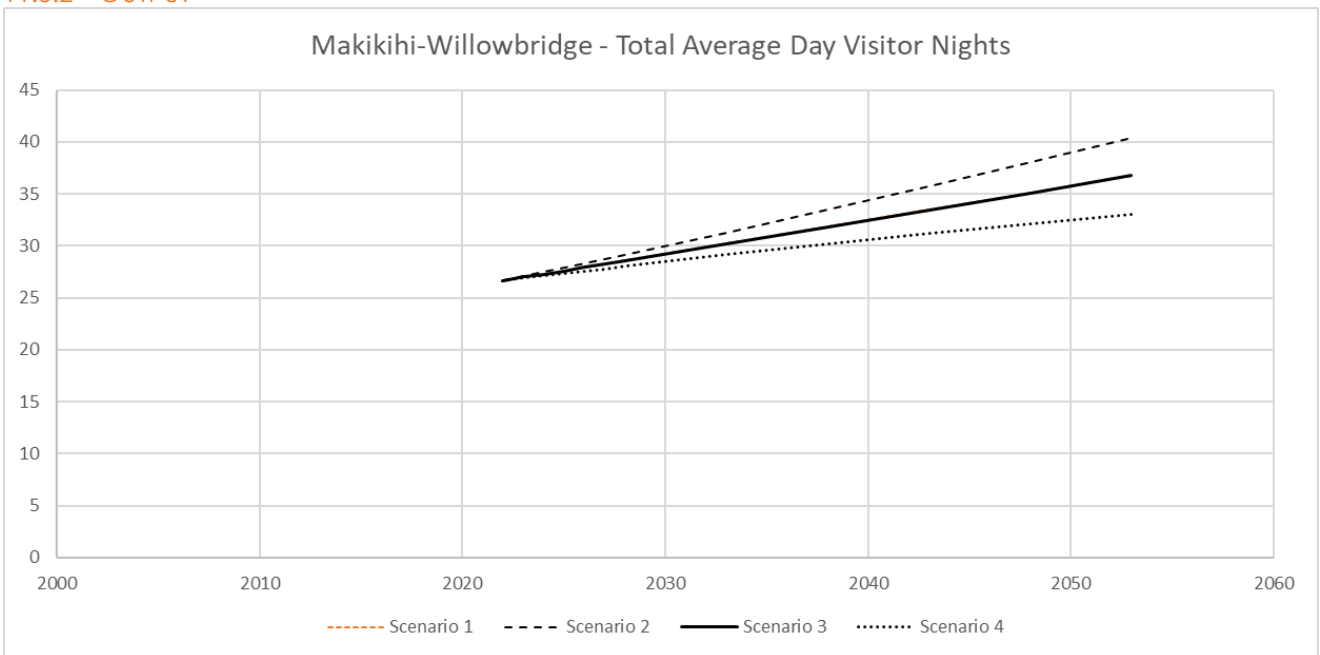


Figure 52. Makikihi-Willowbridge's average day visitor nights.

12 Appendix D: Maungati

Maungati is a predominately rural area, where much of the population commute out of the area for work.



Figure 53. SA2 boundaries of Waimate District.

12.1 Maungati Growth Projections Summary

Table 25. Maungati growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	690	760	770	790	789	784	777	775	776	779	779
Total Dwellings	339	348	366	376	376	376	376	376	376	376	376
Occupied Dwellings	252	273	282	289	289	287	285	284	284	285	285
Unoccupied Dwellings	87	72	81	86	87	88	91	92	91	90	90
Number of Jobs	150	230	200	210	212	220	224	229	233	238	243
Number of Businesses	174	177	186	207	209	216	221	225	230	235	239
Total Peak Day Visitor Nights				60	61	64	68	71	75	79	82
Total Average Day Visitor Nights				26	26	28	29	31	33	34	36
Total Peak Day Visitor Numbers				113	114	121	127	134	141	147	154
Total Average Day Visitor Numbers				42	43	45	47	50	52	55	57

Table 26. Maungati short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	100	6	0.8%	-6	-1	-0.1%	-11	0	0.0%
Total Dwellings	37	2	0.6%	0	0	0.0%	0	0	0.0%
Occupied Dwellings	37	2	0.9%	-2	0	-0.1%	-4	0	0.0%
Unoccupied Dwellings	-1	0	-0.1%	2	0	0.4%	4	0	0.1%
Number of Jobs	60	4	2.1%	10	2	0.7%	33	1	0.5%
Number of Businesses	33	2	1.1%	9	2	0.7%	32	1	0.5%
Total Peak Day Visitor Nights				4	1	1.1%	22	1	1.0%
Total Average Day Visitor Nights				2	0	1.1%	10	0	1.0%
Total Peak Day Visitor Numbers				8	1	1.1%	41	1	1.0%
Total Average Day Visitor Numbers				3	0	1.1%	15	0	1.0%

12.2 Employment Projections

Similarly, to other areas in the district the number of jobs in Maungati is variable depending on the activities in the area. These have been averaged in the future projections.

12.2.1 KEY INDUSTRIES AND TRENDS

Table 27. Top five industries in Maungati.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Agriculture, Forestry and Fishing	190	94%	-2%	4%
Rental, Hiring and Real Estate Services	6	3%	33%	15%
Construction	3	2%	-17%	5%
Professional, Scientific and Technical Services	0	0%	-	-
Arts and Recreation Services	0	0%	-	-

12.2.2 OUTPUT

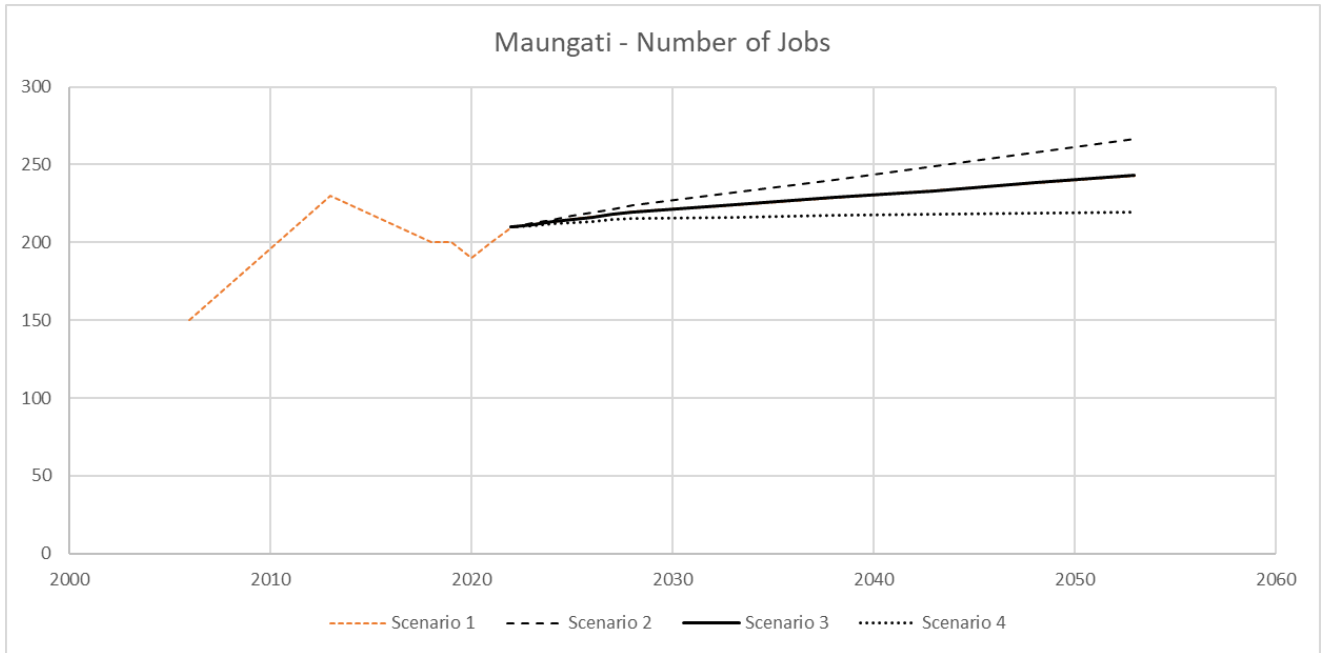


Figure 54. Number of jobs in Maungati.

12.3 Population Projections

12.3.1 KEY MIGRATION DRIVERS

- A small number of people move to the area for employment.
- There is a small amount of migration of people who commute away for work.
- Young people leave the area for other opportunities such as education and employment.
- Elderly tend to move away from the area in their later years, likely in search of better healthcare.

These trends are reflected below through the population by age and net migration figures.

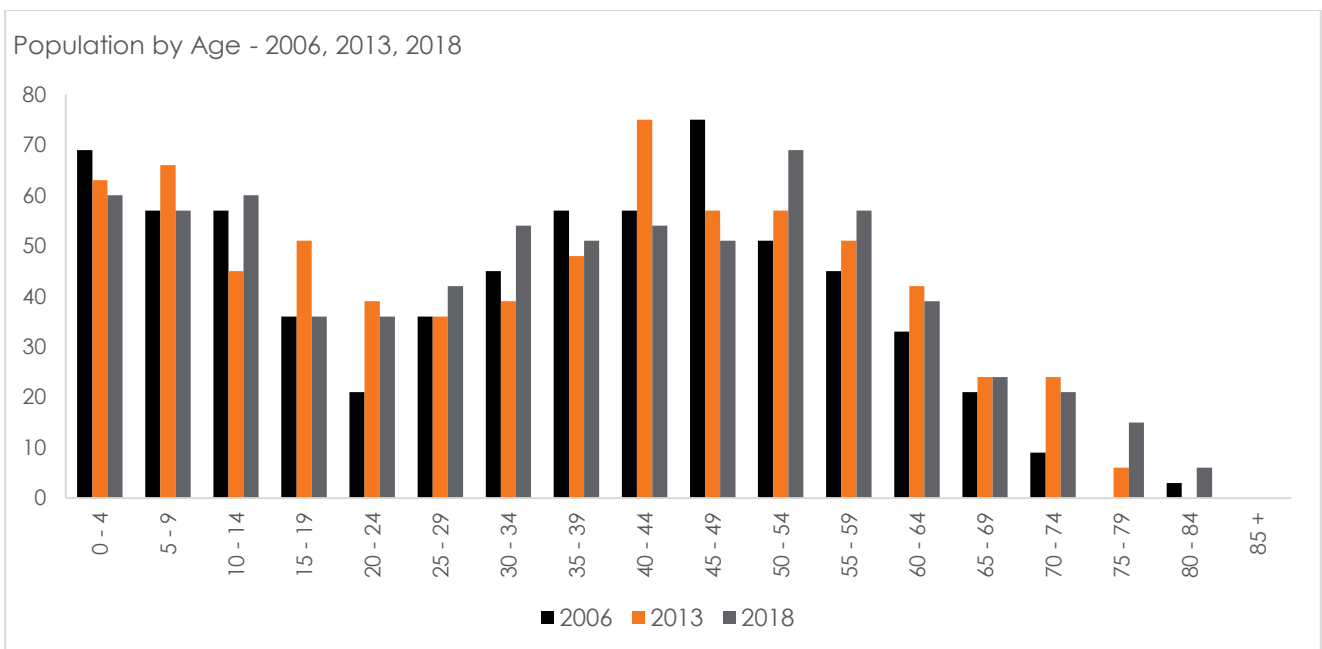


Figure 55. Maungati population by age, 2006, 2013, 2018. Source: Stats NZ.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that is occurring. This ensures that the modelling is accurate and reliable.

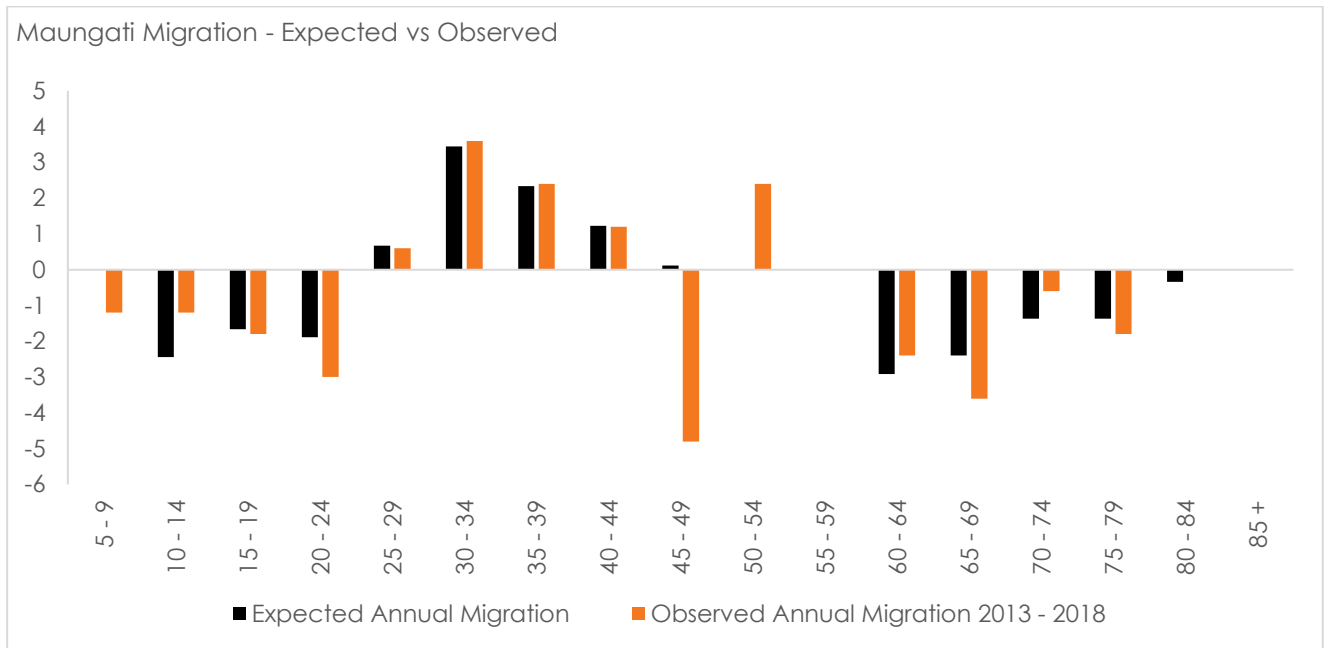


Figure 56. Net migration check

12.3.2 OUTPUT

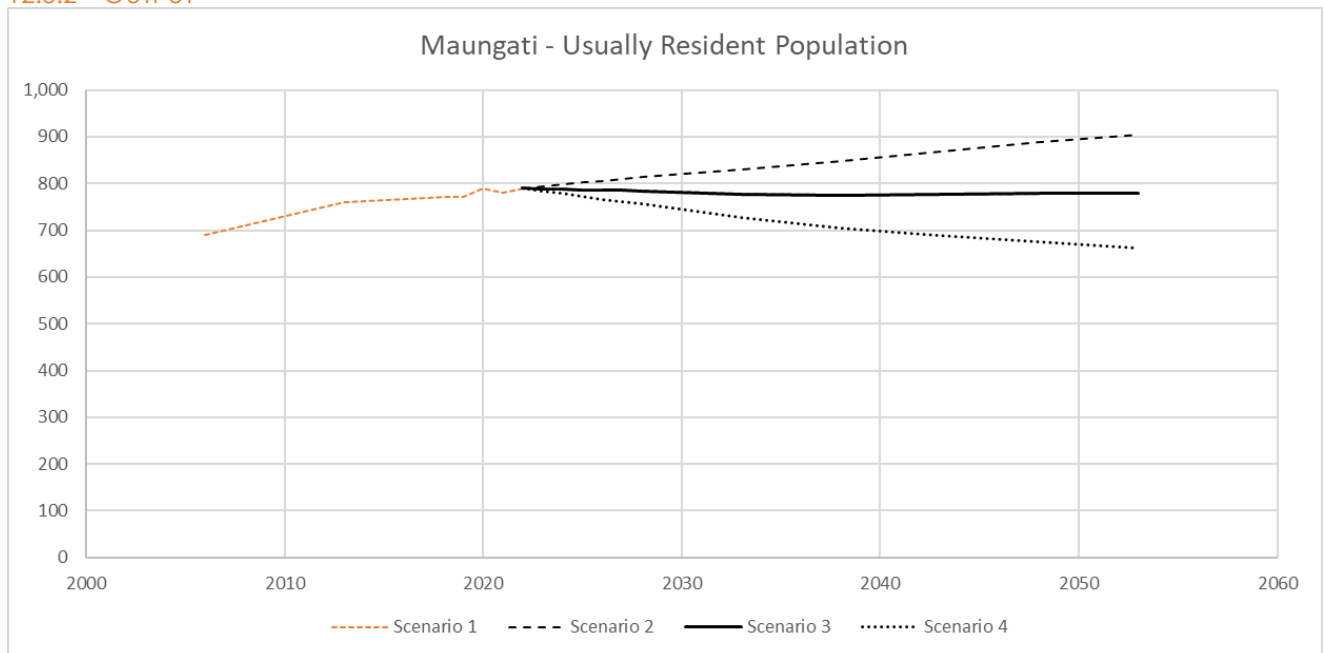


Figure 57. Maungati's usually resident population

12.4 Dwelling Projections

12.4.1 ASSUMPTIONS

It has been assumed that dwellings will not be demolished if there is negative population growth. Therefore, there is an increasing number of unoccupied dwellings in Scenario 4.

12.4.2 OUTPUT

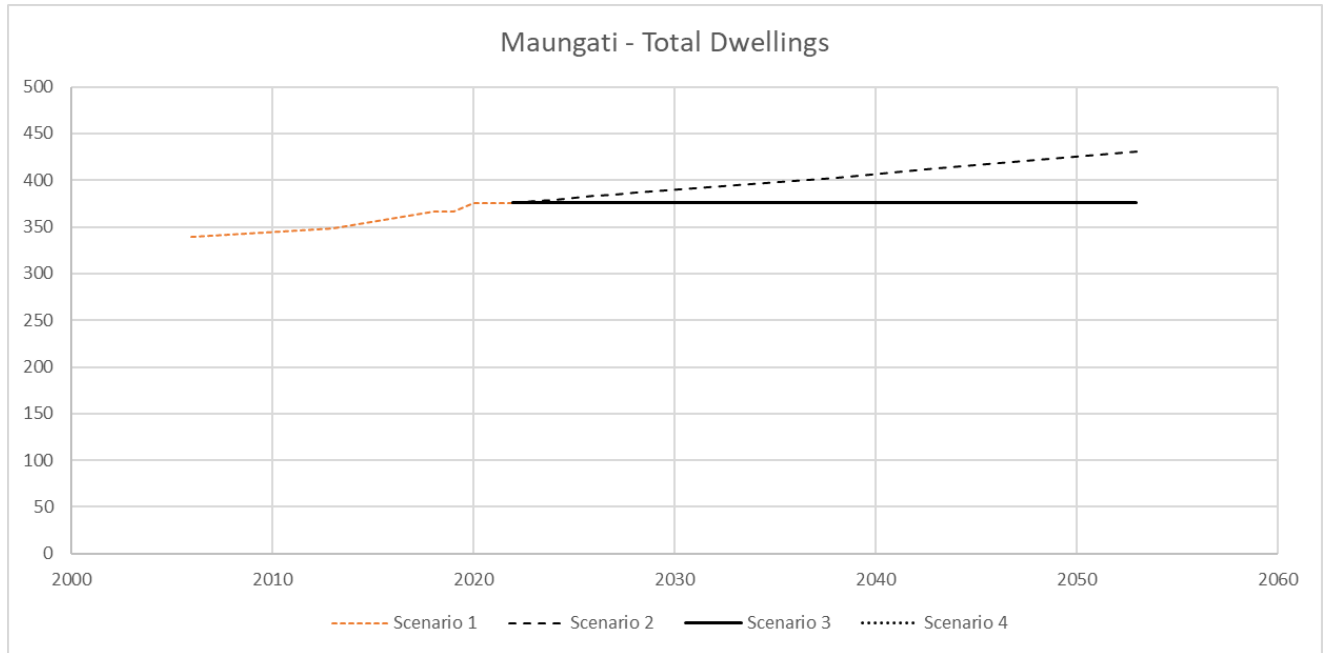


Figure 58. Total dwellings.

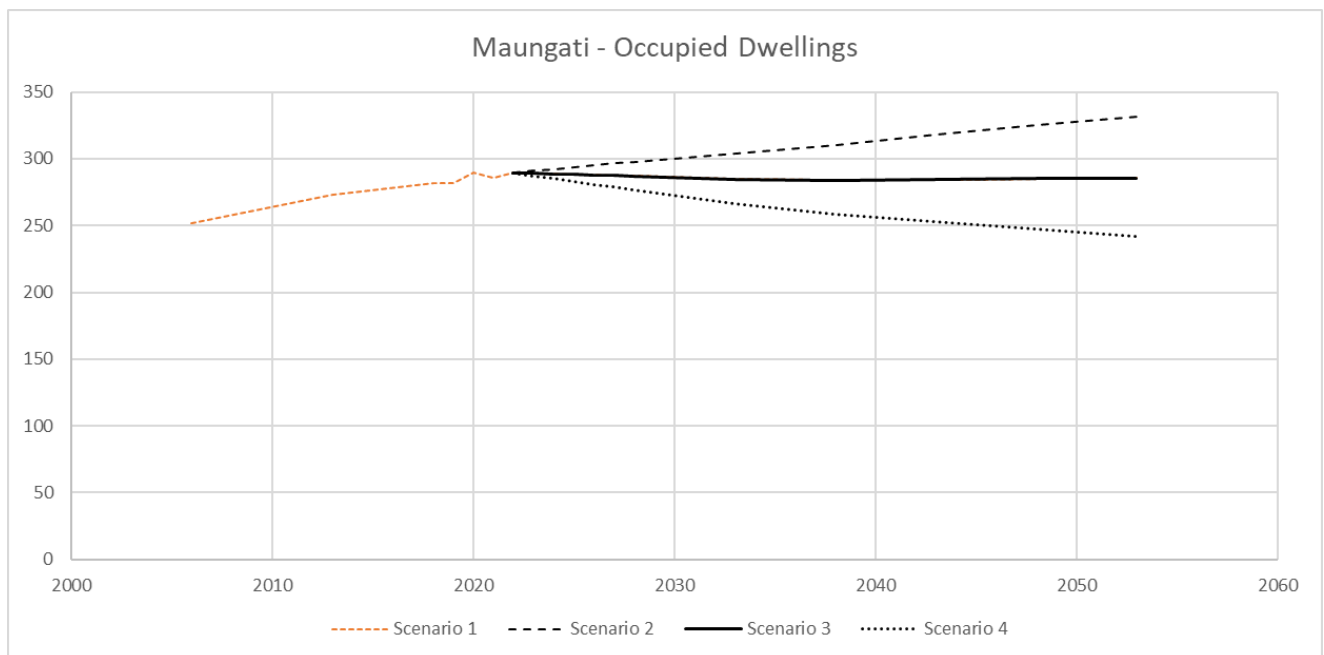


Figure 59. Occupied dwellings.

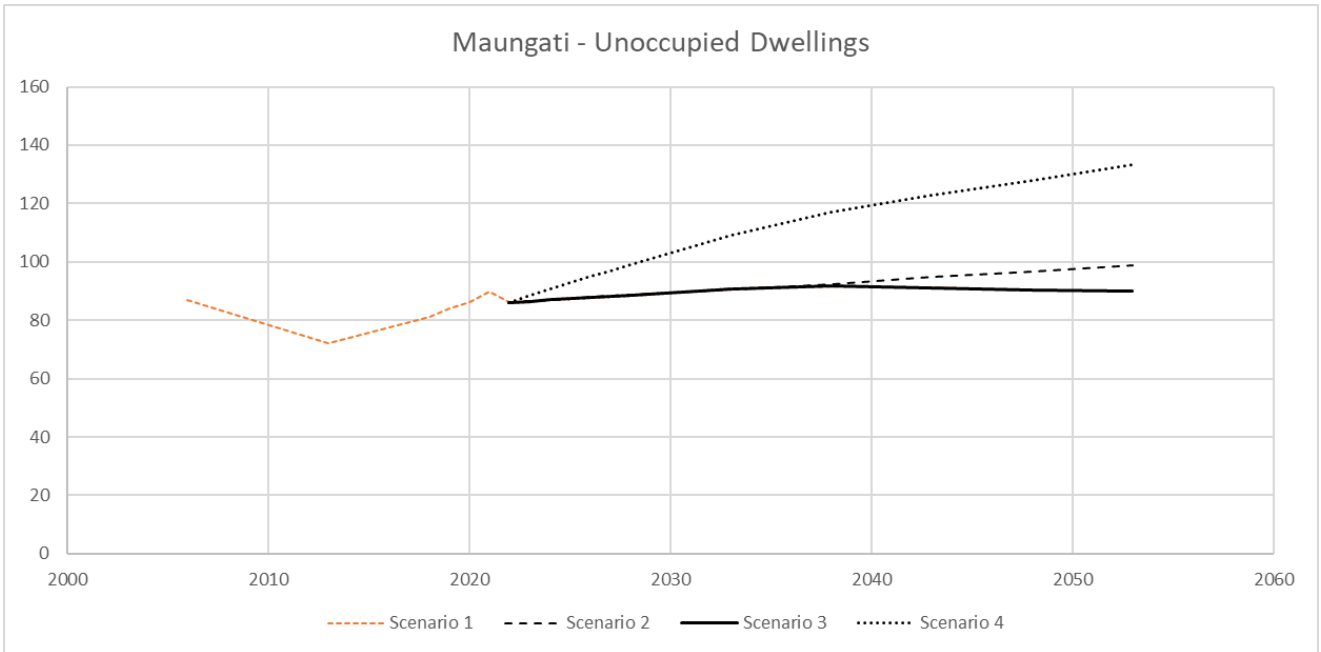


Figure 60. Unoccupied dwellings.

12.5 Visitor Projections

12.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made for the analysis of visitor projections in Maungati. These assumptions are available in Section 7.

12.5.2 OUTPUT

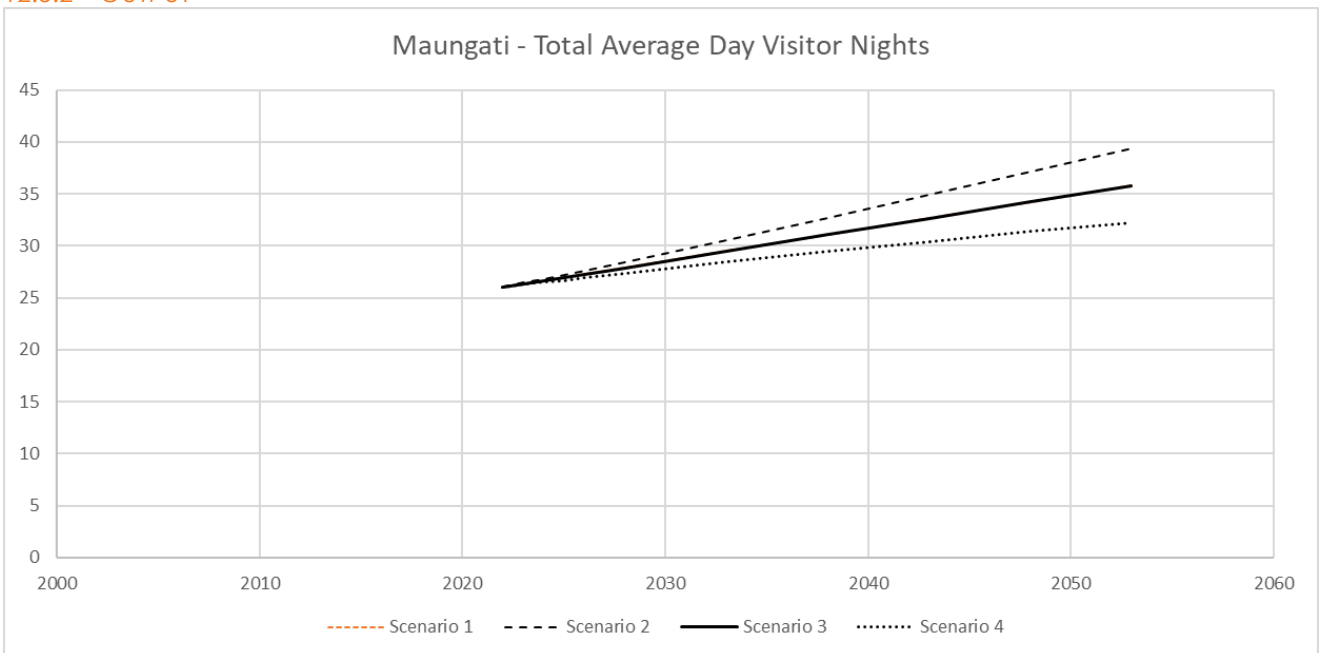


Figure 61. Maungati's average day visitor nights.

13 Appendix E: Morven-Glenavy-Ikawai

Morven-Glenavy-Ikawai has experienced more growth than projected in the 2020 projections. As such, a full review of the growth drivers has been undertaken in this SA2.

Employment trends were also reviewed, but the previous assumptions were still relevant so have remained unchanged.



Figure 62. SA2 boundaries of Waimate District.

13.1 Morven-Glenavy-Ikawai Growth Projections Summary

Table 28. Morven-Glenavy-Ikawai growth projections

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	970	1,180	1,140	1,200	1,213	1,267	1,311	1,338	1,351	1,357	1,364
Total Dwellings	483	582	609	641	648	677	700	715	721	725	729
Occupied Dwellings	360	435	447	471	476	497	514	525	530	532	535
Unoccupied Dwellings	120	141	159	171	172	180	186	190	192	193	194
Number of Jobs	222	231	240	240	243	261	280	300	321	345	369
Number of Businesses	360	490	720	810	820	880	944	1,012	1,085	1,163	1,246
Total Peak Day Visitor Nights				110	112	118	125	132	139	146	153
Total Average Day Visitor Nights				61	61	65	69	73	76	80	84
Total Peak Day Visitor Numbers				187	190	201	212	223	235	246	257
Total Average Day Visitor Numbers				92	93	98	104	109	115	121	126

Table 29. Morven-Glenavy-Ikawai short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	230	14	1.3%	67	11	0.9%	164	5	0.4%
Total Dwellings	158	10	1.8%	36	6	0.9%	88	3	0.4%
Occupied Dwellings	111	7	1.7%	26	4	0.9%	64	2	0.4%
Unoccupied Dwellings	51	3	2.2%	9	2	0.9%	23	1	0.4%
Number of Jobs	450	28	5.2%	70	12	1.4%	436	14	1.4%
Number of Businesses	18	1	0.5%	21	3	1.4%	129	4	1.4%
Total Peak Day Visitor Nights				8	1	1.2%	42	1	1.1%
Total Average Day Visitor Nights				4	1	1.2%	23	1	1.1%
Total Peak Day Visitor Numbers				13	2	1.1%	70	2	1.0%
Total Average Day Visitor Numbers				6	1	1.1%	34	1	1.0%

13.2 Employment Projections

13.2.1 KEY INDUSTRIES AND TRENDS

A large amount of employment growth can be attributed to the development of the Oceania Dairy plant in Morven. However, the factory buses employees from Timaru, Waimate and Oamaru so does not have a substantial net effect on the local population. In the coming years, the factory is likely to expand and continue to create new jobs. The table below details the assumptions that have been included in the model to account for future growth.

Table 30. Oceania Dairy Plant impact on employment.

Scenario	Description
Scenario 1 - Baseline	Assume that the Oceania Dairy plant continues to employ people at a rate of 2% (from MBIE forecast for food productions) through to 2053.
Scenario 2 - High	Assume that the Oceania Dairy plant continues to employ people at a rate of 4% (twice the MBIE forecast for food productions) through to 2053.
Scenario 3 - Medium	Assume that the Oceania Dairy plant continues to employ people at a rate of 2% (from MBIE forecast for food productions) through to 2053.
Scenario 4 - Low	Assume that the Oceania Dairy plant stops expanding and ceases to employ people from now until 2053.

Between 2021 and 2022, Stats NZ Business Demography data has shown a decrease of 130 jobs related to dairy farming. This is likely a data issue as WDC staff have not been made aware of large job losses in the dairy industry, and this trend is not prevalent elsewhere in the district. The issue could be related to the sale of a number of farms to an Ashburton based company, potentially attributing the jobs to outside of the district, however, evidence of this has not been secured.

Table 31. Top five industries in Morven-Glenavy-Ikawai.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Agriculture, Forestry and Fishing	400	51%	4%	2%
Manufacturing	260	33%	38%	-
Transport, Postal and Warehousing	60	8%	15%	11%
Education and Training	21	3%	-2%	4%
Other Services	12	2%	-12%	-

13.2.2 OUTPUT

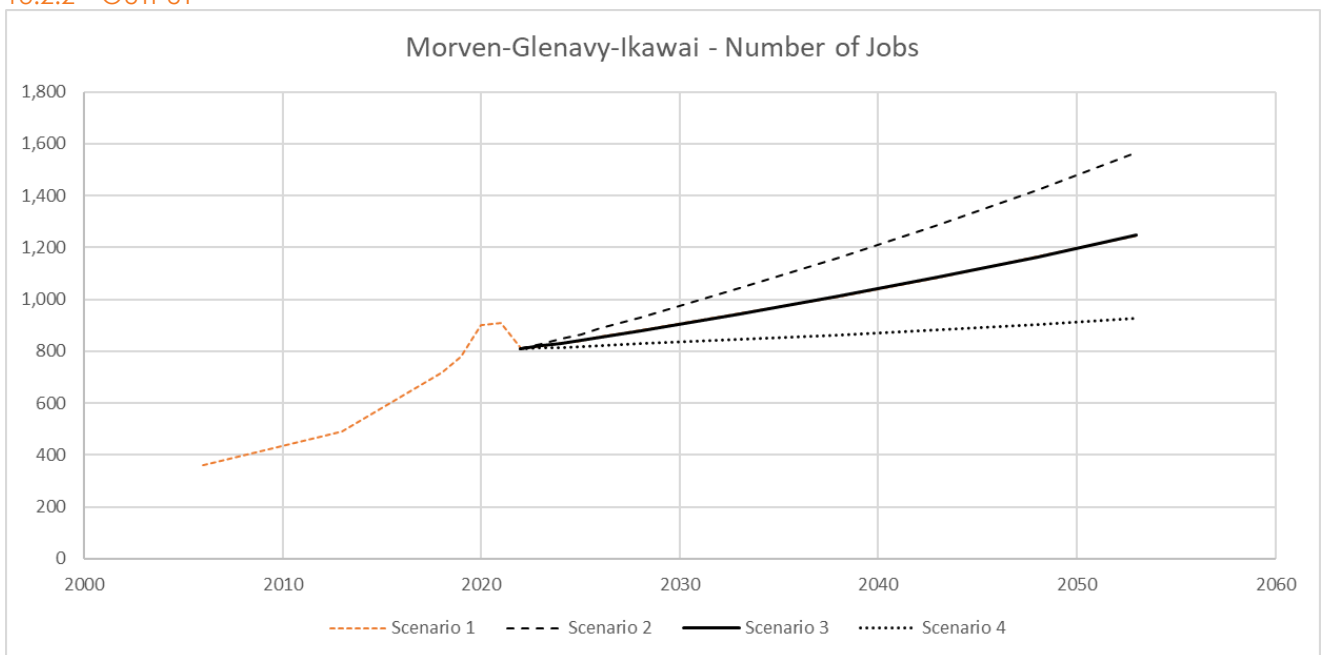


Figure 63. Number of jobs in Morven-Glenavy-Ikawai.

13.3 Population Projections

13.3.1 KEY MIGRATION DRIVERS

- Young people (15 to 24 year olds) leave the area for other opportunities such as education and employment.
- Migration to Morven-Glenavy-Ikawai as housing is comparatively more affordable than Timaru.
- Potential new trend for people to retire to Morven-Glenavy-Ikawai. As this trend has only recently been seen, it has been excluded from the model.

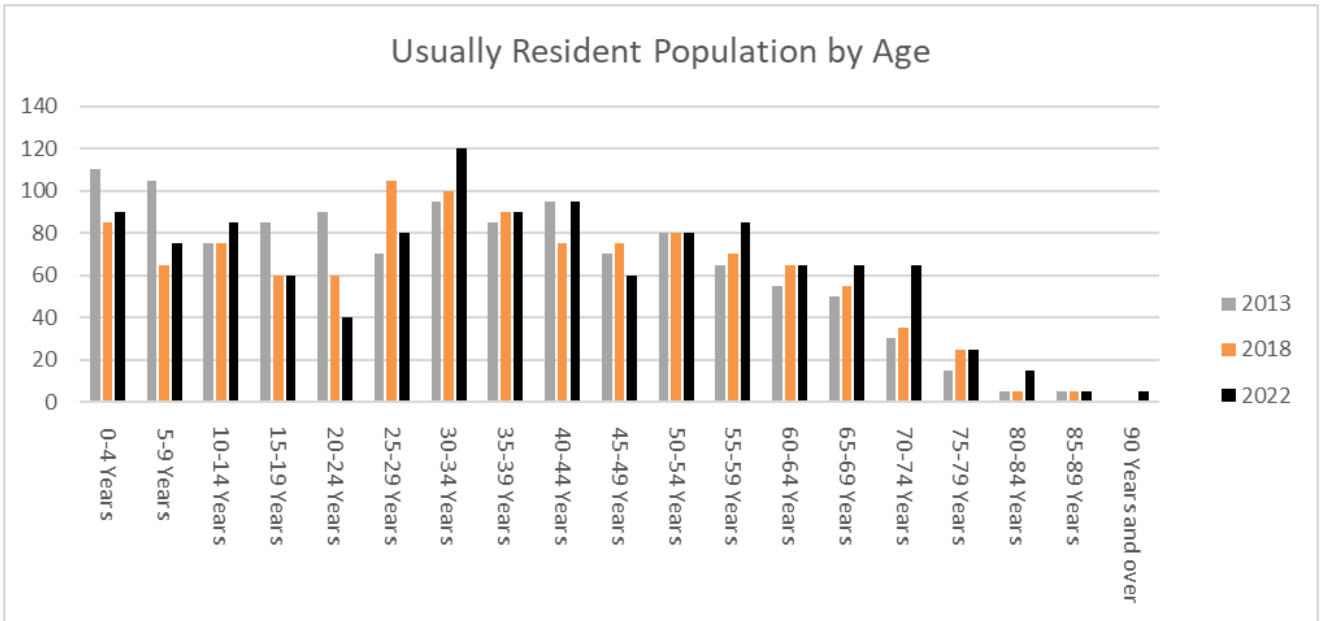


Figure 64. Morven-Glenavy-Ikawai. population by age, 2013, 2018, 2022. Source: Stats NZ.

The below graph has been produced to visualise migration trends. Whilst there has been migration occurring across most age groups, the trends identified below are the only ones that are both large enough and consistent over time to be confident modelling into the future.

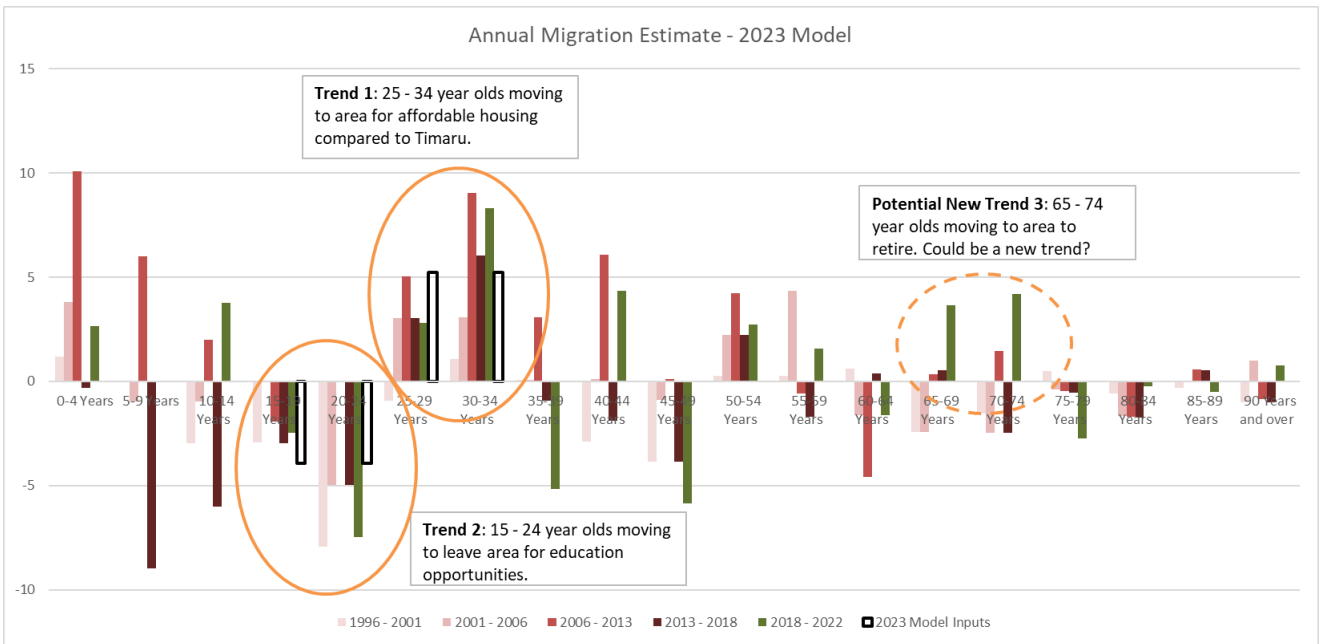


Figure 65. Net migration check.

13.3.2 OUTPUT

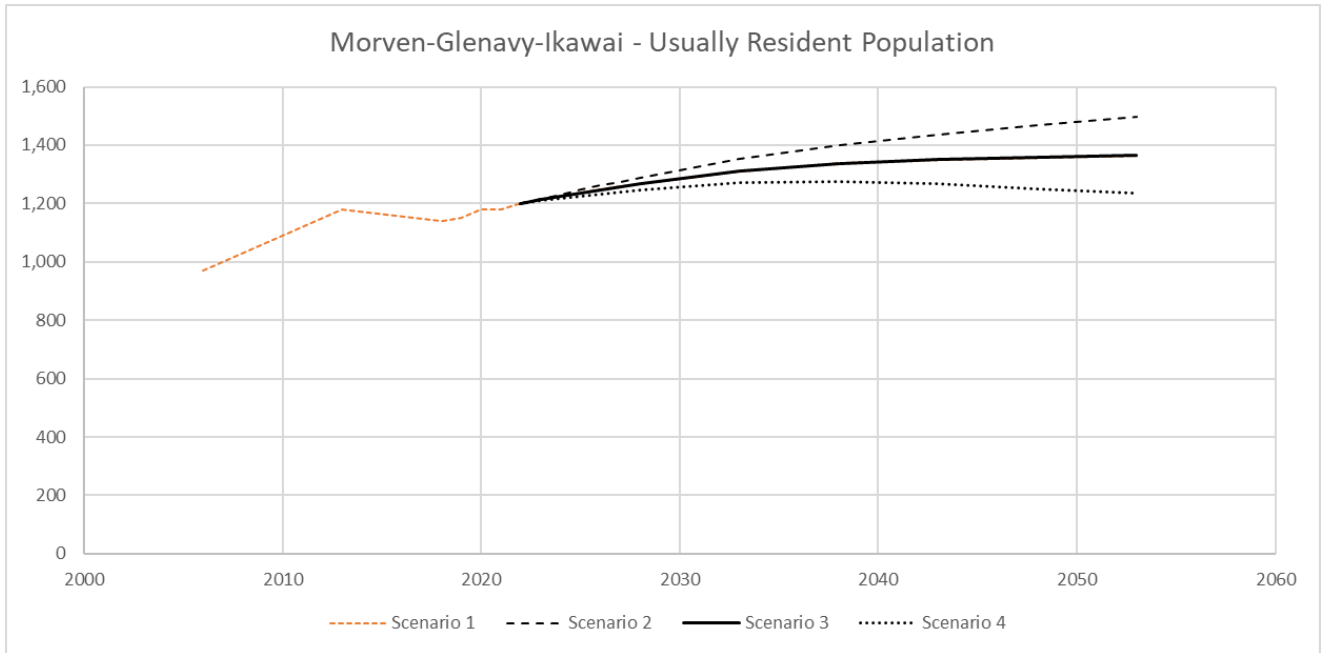


Figure 66. Morven-Glenavy-Ikawai.'s usually resident population.

13.4 Dwelling Projections

13.4.1 ASSUMPTIONS

It has been assumed that dwellings will not be demolished if there is negative population growth. These houses become unoccupied dwellings.

13.4.2 OUTPUT

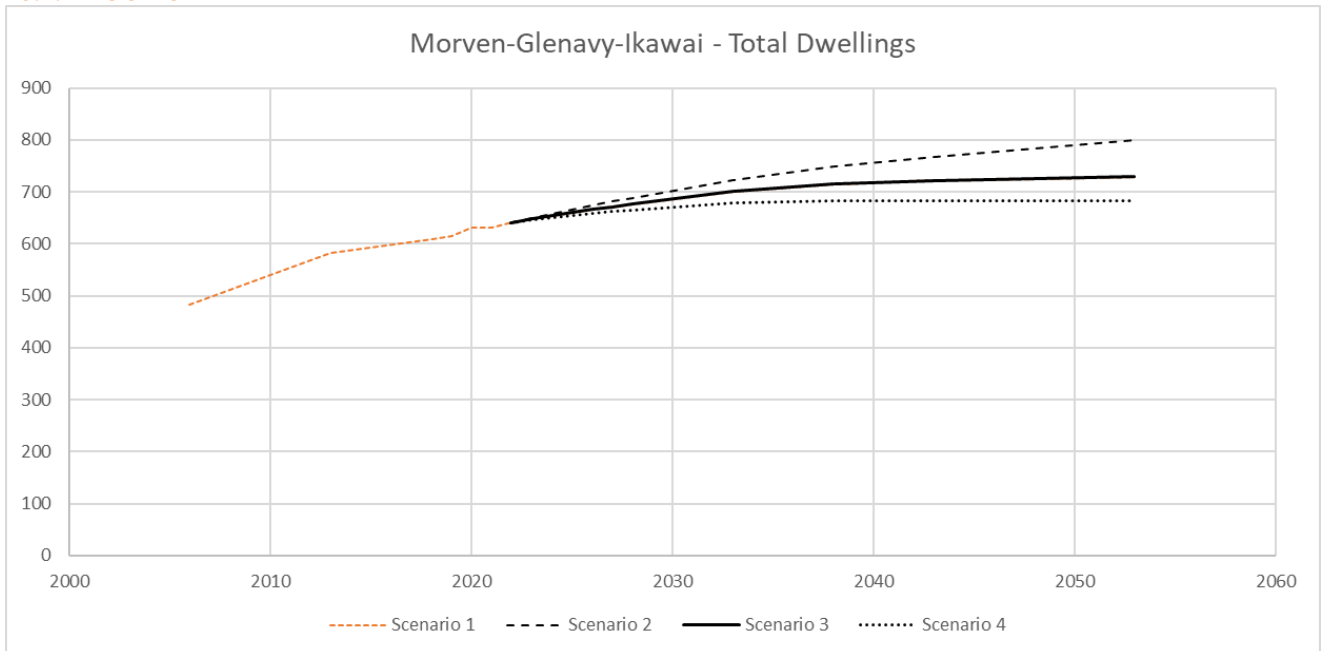


Figure 67. Total dwellings.

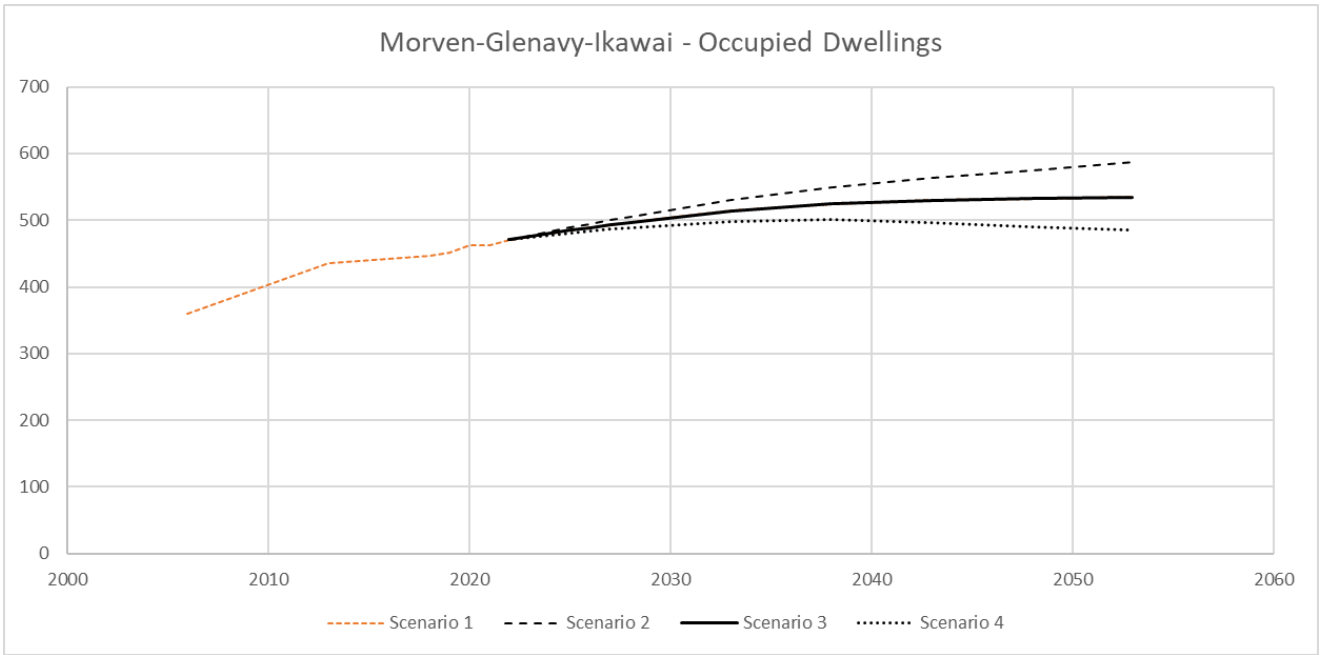


Figure 68. Occupied dwellings.

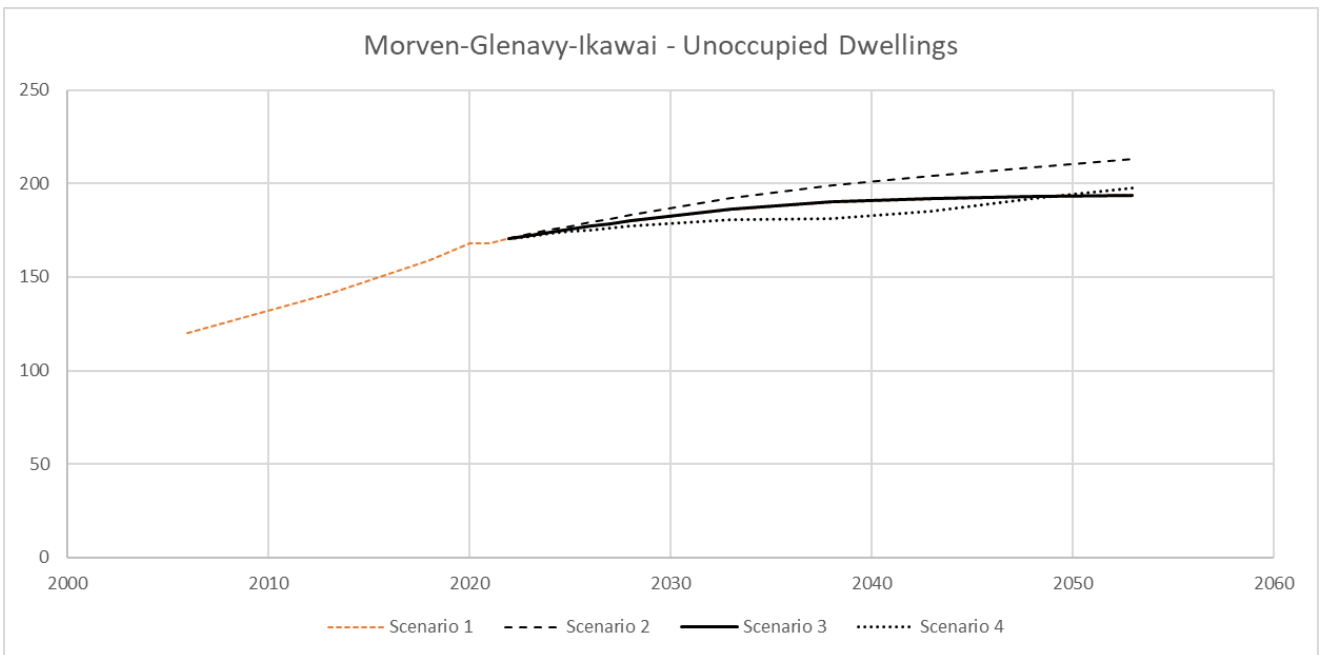


Figure 69. Unoccupied dwellings.

13.5 Visitor Projections

13.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made to the analysis of the visitor projections for Morven-Glenavy-Ikawai. These assumptions are available in Section 7.

13.5.2 OUTPUT

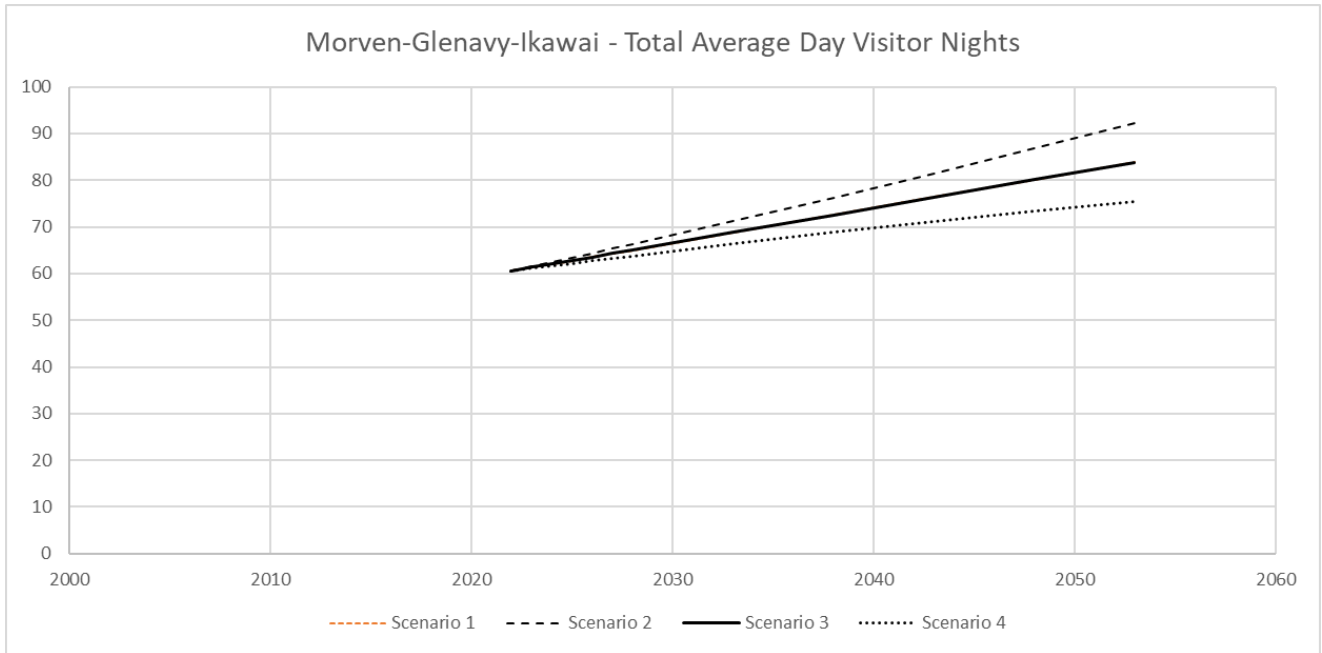


Figure 70. Morven-Glenavy-Ikawai's average day visitor nights.

13.6 Glenavy

Glenavy is a small township to the north of the Waitaki River in the south of the Waimate District. The population of the town is relatively steady.



Figure 71. Township boundaries in the Waimate District.

Table 32. Glenavy detailed growth projections.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	120	210	200	210	212	222	229	234	236	237	239
Total Dwellings	84	126	138	145	146	153	158	162	163	164	165
Occupied Dwellings	60	102	108	113	115	120	124	126	128	128	129
Unoccupied Dwellings	24	24	30	32	32	33	34	35	35	36	36

Table 33. Glenavy short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	90	6	3.6%	12	2	0.9%	29	1	0.4%
Occupied Dwellings	61	4	3.5%	8	1	0.9%	20	1	0.4%
Unoccupied Dwellings	53	3	4.1%	6	1	0.9%	15	0	0.4%

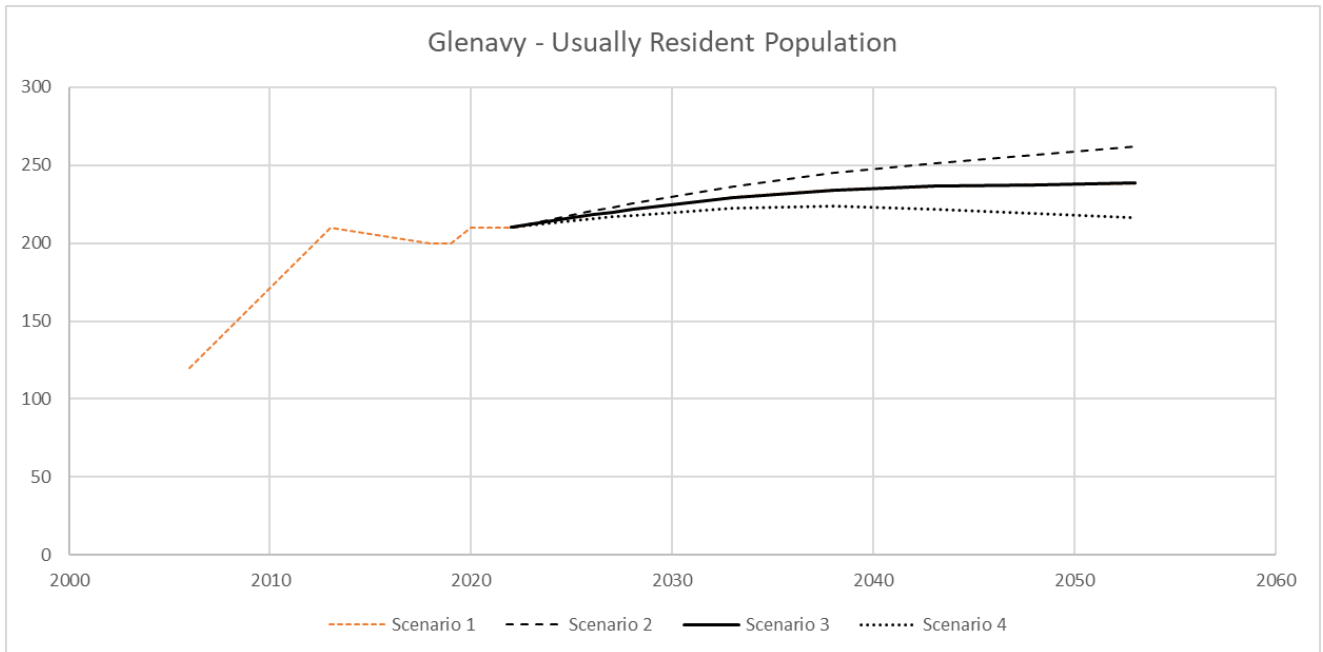


Figure 72. Glenavy usually resident population.

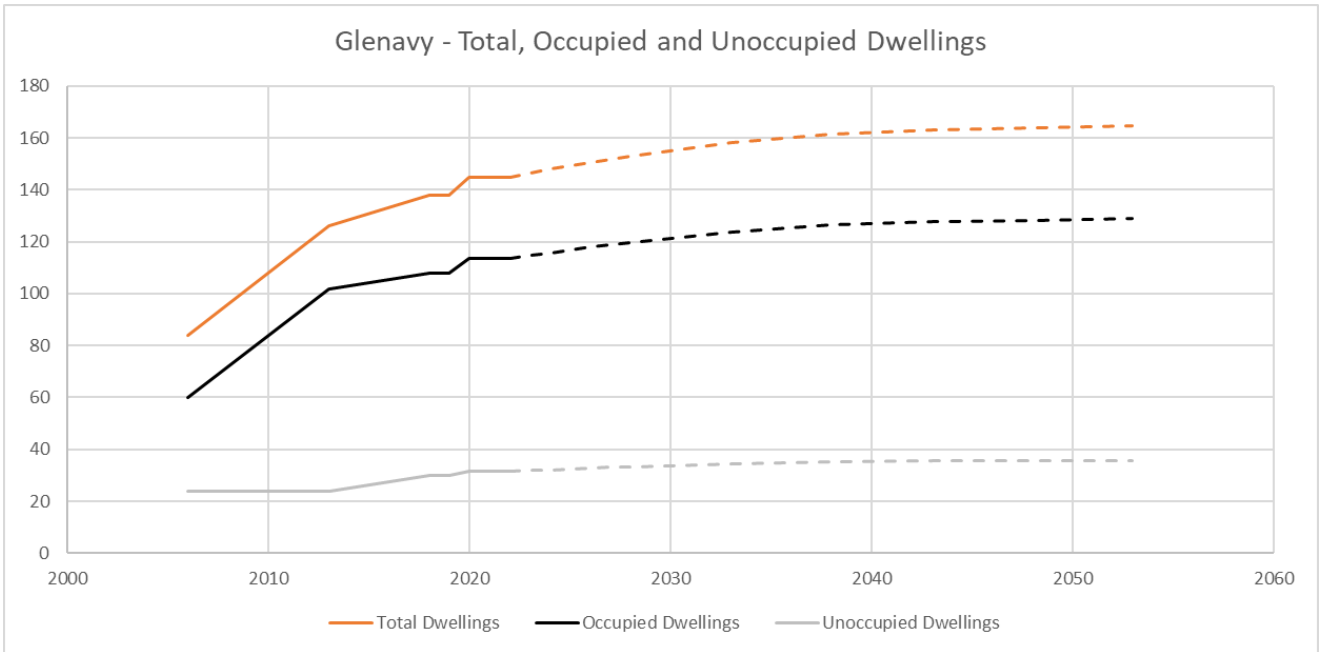


Figure 73. Glenavy total, occupied and unoccupied dwellings.

14 Appendix F: Waimate Township

Waimate township comprises three SA2 areas – Waimate East, Waimate West and Waimate North. For the purposes of projecting growth these have been treated as one area. This is due to the inextricable interactions between each SA2 area.



Figure 74. SA2 boundaries of Waimate District.

14.1 Waimate Township Growth Projections Summary

Table 34. Waimate township detailed growth projections summary.

	2006	2013	2018	2022	2023	2028	2033	2038	2043	2048	2053
Usually Resident Population	3,370	3,390	3,570	3,600	3,623	3,742	3,833	3,939	4,067	4,210	4,356
Total Dwellings	1,653	1,704	1,779	1,804	1,805	1,865	1,910	1,963	2,027	2,098	2,171
Occupied Dwellings	1,503	1,557	1,620	1,634	1,644	1,698	1,739	1,787	1,845	1,910	1,977
Unoccupied Dwellings	144	144	156	170	161	167	171	175	181	187	194
Number of Jobs	945	980	965	990	998	1,040	1,046	1,053	1,059	1,065	1,072
Number of Businesses	276	267	279	285	287	299	301	303	305	307	308
Total Peak Day Visitor Nights				166	168	178	188	199	209	219	229
Total Average Day Visitor Nights				32	33	35	37	39	41	43	45
Total Peak Day Visitor Numbers				444	449	474	501	527	553	580	606
Total Average Day Visitor Numbers				42	42	44	47	49	52	54	57

Table 35. Waimate township short- and long-term forecast.

	Historic Growth (2006 - 2022)			Short Term Forecast (2022 - 2028)			Long Term Forecast (2022 - 2053)		
	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate	Total Growth	Av. Annual Growth	Av. Annual Growth Rate
Usually Resident Population	230	14	0.4%	142	24	0.6%	756	24	0.6%
Total Dwellings	151	9	0.5%	61	10	0.6%	367	12	0.6%
Occupied Dwellings	131	8	0.5%	64	11	0.6%	343	11	0.6%
Unoccupied Dwellings	26	2	1.1%	-4	-1	-0.4%	24	1	0.4%
Number of Jobs	45	3	0.3%	50	8	0.8%	82	3	0.3%
Number of Businesses	9	1	0.2%	14	2	0.8%	23	1	0.3%
Total Peak Day Visitor Nights				12	2	1.2%	63	2	1.0%
Total Average Day Visitor Nights				2	0	1.2%	12	0	1.0%
Total Peak Day Visitor Numbers				31	5	1.1%	162	5	1.0%
Total Average Day Visitor Numbers				3	0	1.1%	15	0	1.0%

14.2 Employment Projections

14.2.1 KEY INDUSTRIES AND TRENDS

Traditionally, Waimate has been servicing the Waimate District's needs for generations providing secondary schooling, medical care, retail and the council's offices. Thus, Waimate small has a balance of industries.

In recent years there has been a significant amount of private investment into Waimate town centre. This is predicted to continue through the next 10 years. It has been assumed that in Scenario 3 (medium) the investment will create 10 jobs per year until 2028 and in Scenario 2 (high) 20 jobs per year until 2028. Additional migration to Waimate will fill these jobs.

Table 36. Top five industries in Waimate.

Industry	Number of Employees in 2019	% of workforce in 2019	Average Annual Growth Rate - last 3 years	Average Annual Growth Rate - last 10 years
Retail Trade	142	15%	0%	3%
Health Care and Social Assistance	140	15%	0%	2%
Construction	136	14%	-3%	3%
Education and Training	109	11%	-1%	1%
Agriculture, Forestry and Fishing	51	5%	-9%	4%

14.2.2 OUTPUT

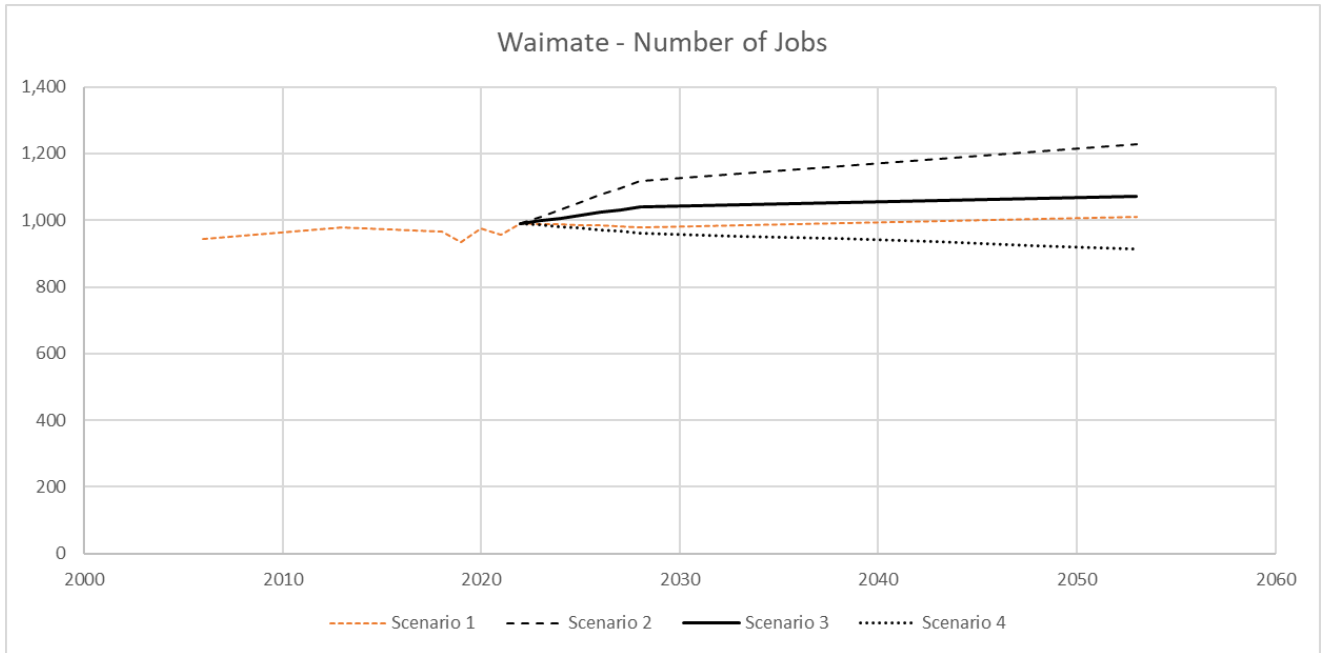


Figure 75. Number of jobs in Waimate.

14.3 Population Projections

14.3.1 KEY MIGRATION DRIVERS

- Migration to Waimate as housing is comparatively more affordable than Timaru.
- People late in their career move for work and lifestyle.
- Older population, who move to the area from other places in the district and might require care.

These trends are reflected below through the population by age and net migration figures.

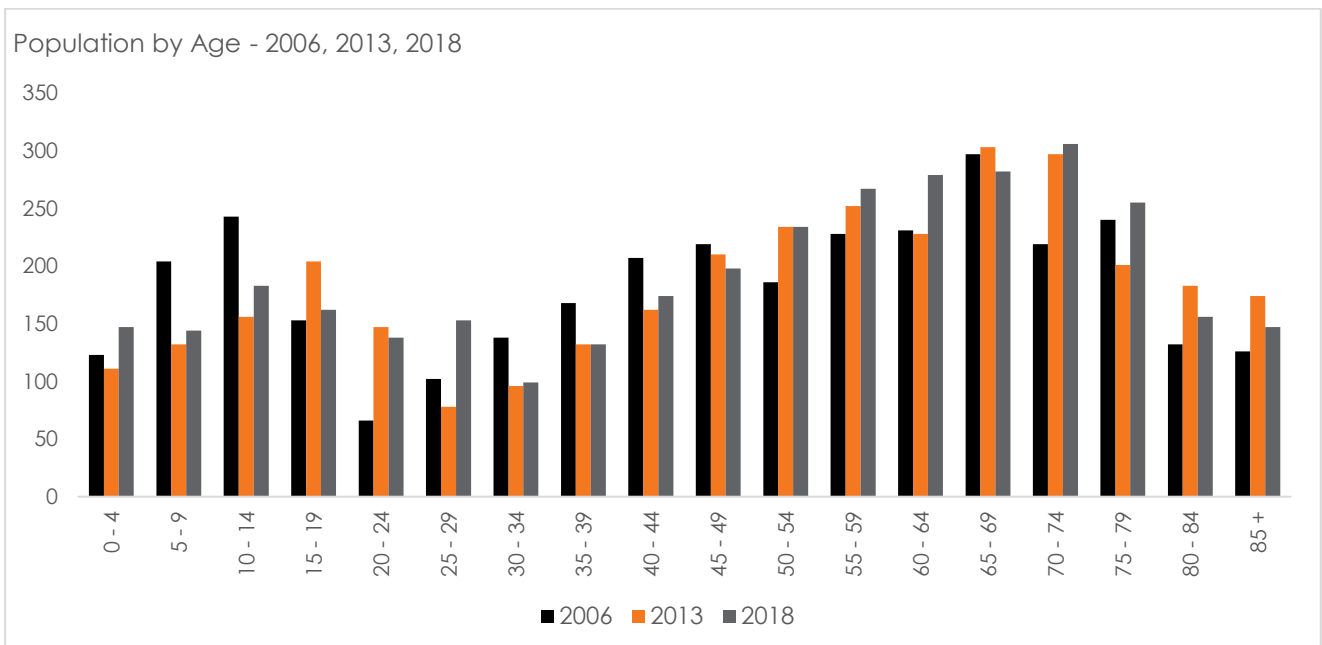


Figure 76. Waimate population by age, 2006, 2013, 2018. Source: Stats NZ.

The below graph has been produced to calibrate the migration modelling used in these projections against the observed migration that is occurring. This ensures that the modelling is accurate and reliable.

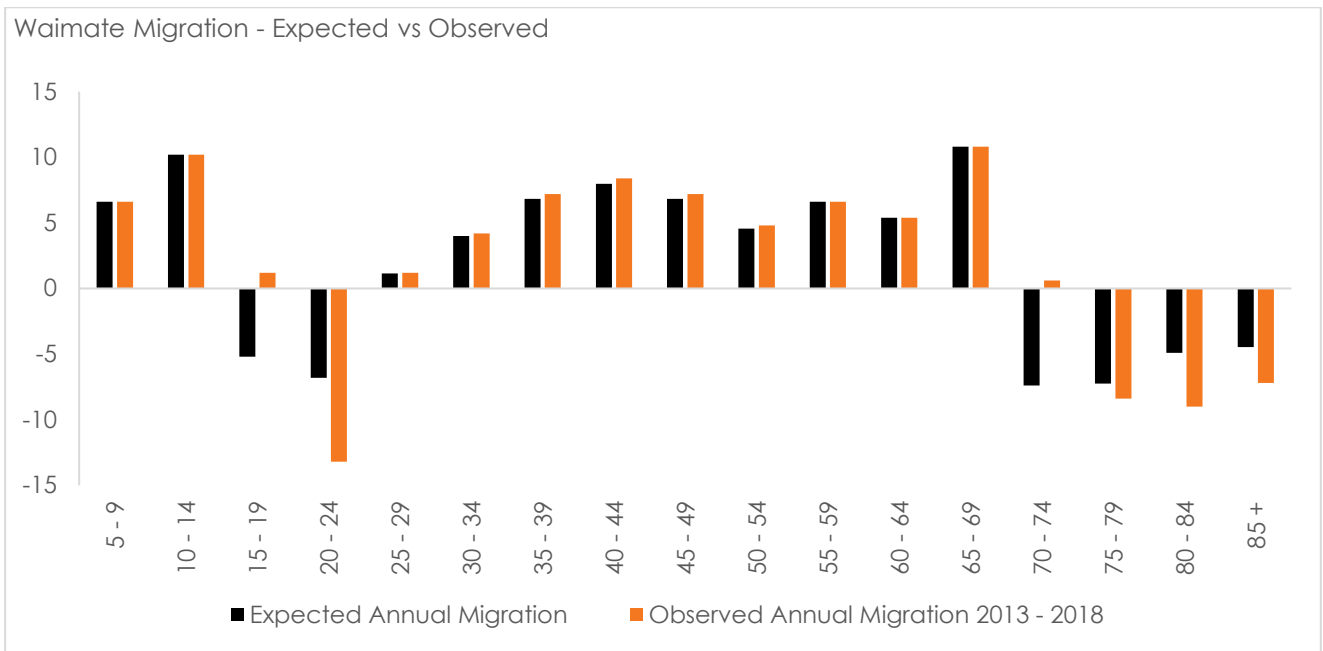


Figure 77. Net migration check

14.3.2 OUTPUT

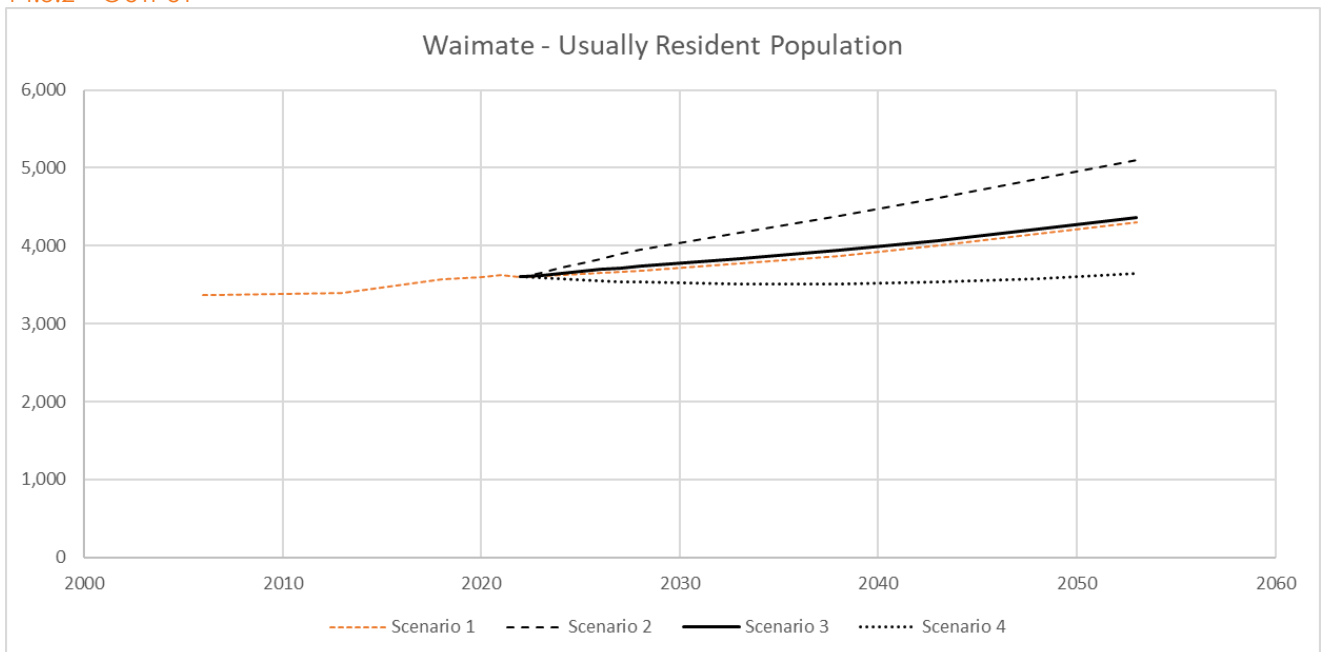


Figure 78. Waimate's usually resident population.

14.4 Dwelling Projections

14.4.1 ASSUMPTIONS

It has been assumed that dwellings will not be demolished if there is negative population growth. These houses become unoccupied dwellings.

In Scenario 4, the population decreases at times. This corresponds to fewer occupied dwellings and hence an increase in unoccupied dwellings.

14.4.2 OUTPUT

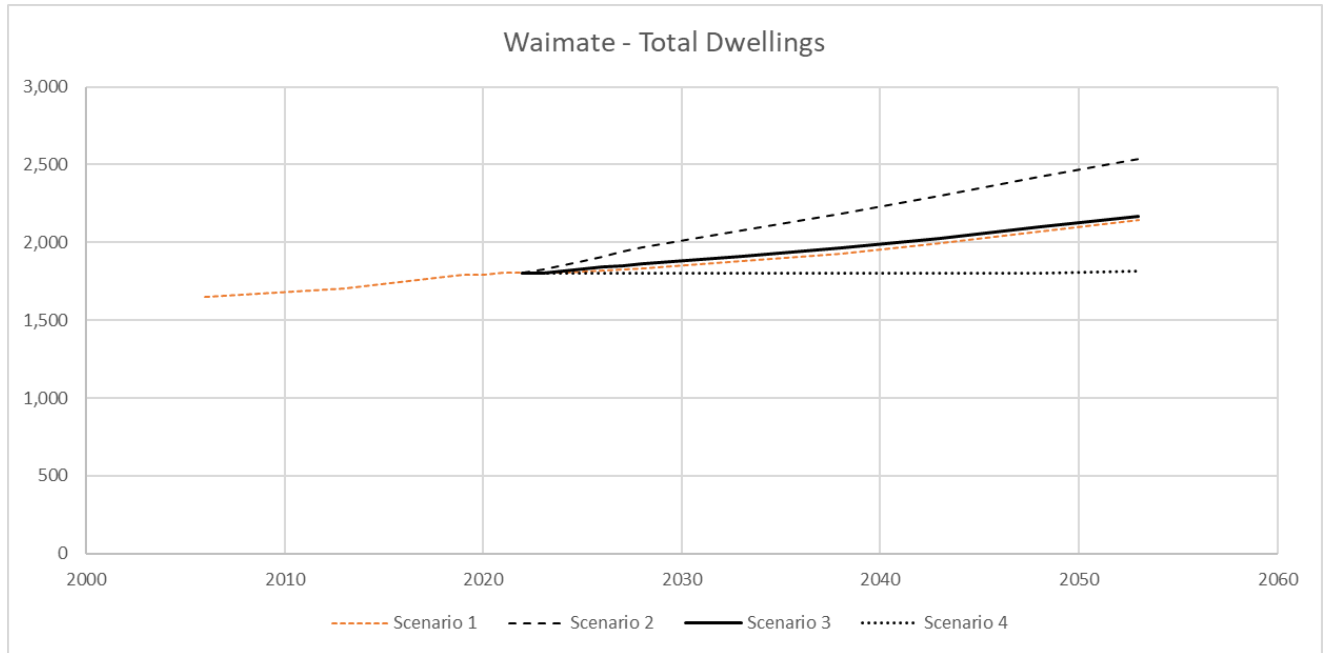


Figure 79. Total dwellings.

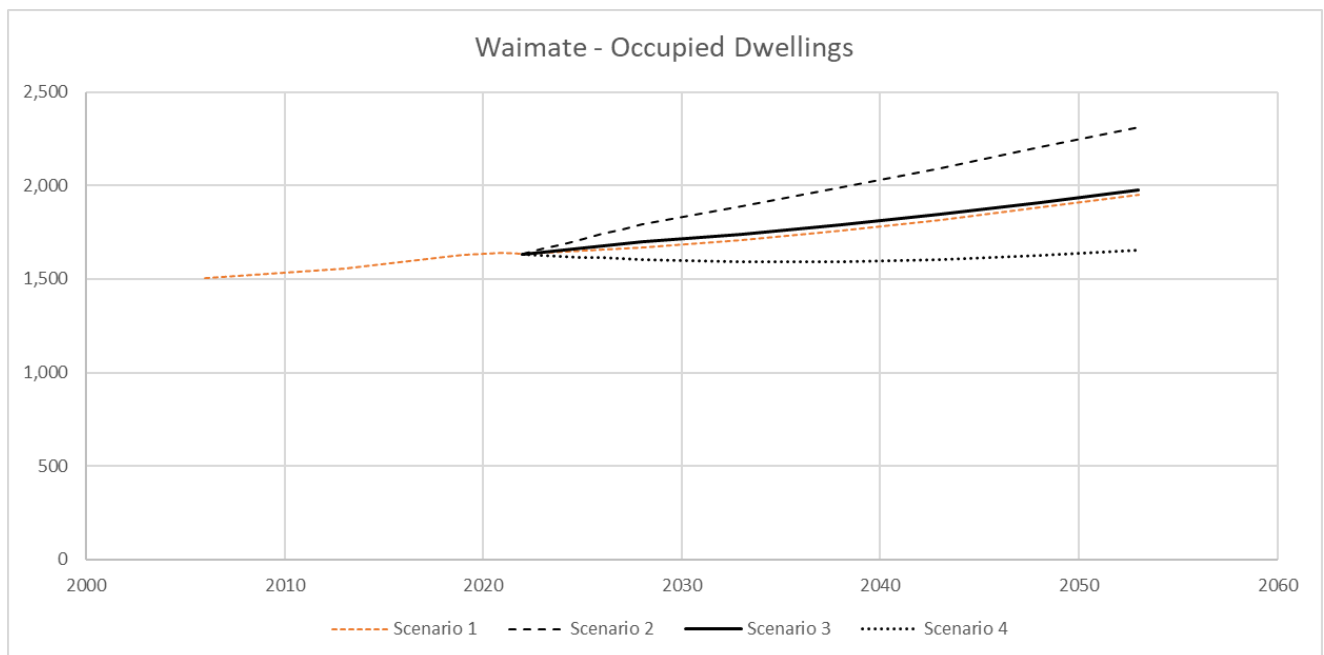


Figure 80. Occupied dwellings.

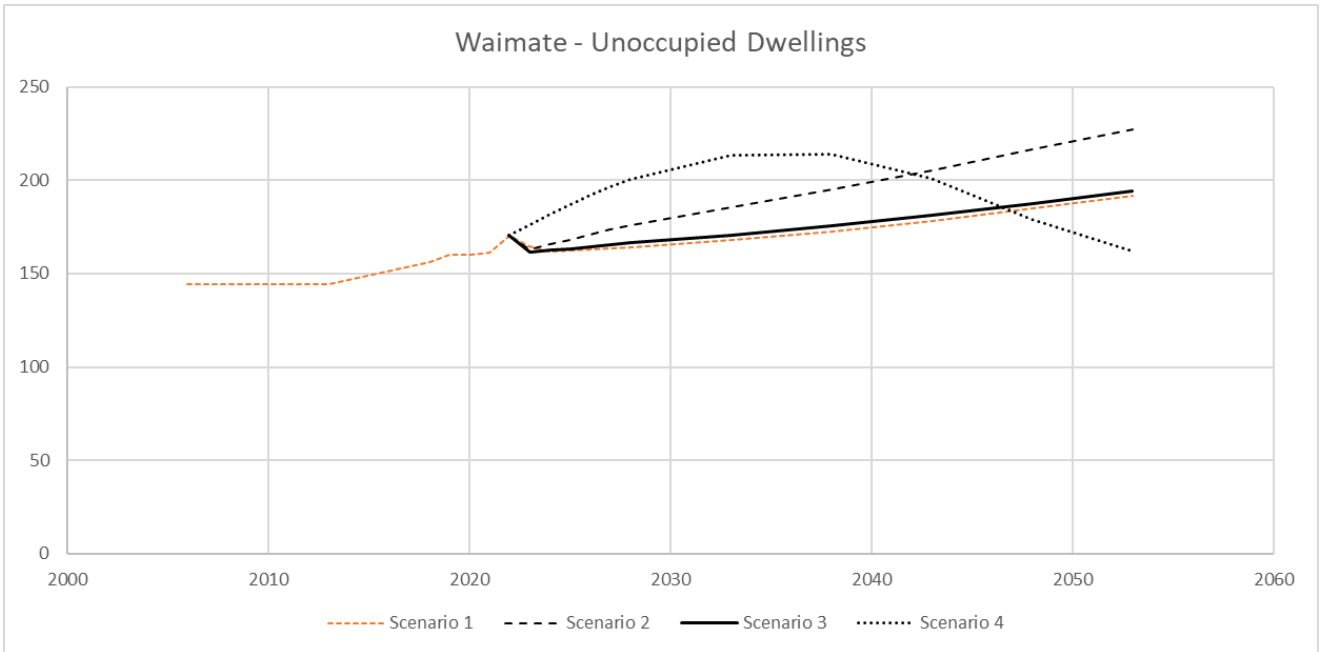


Figure 81. Unoccupied dwellings.

14.5 Visitor Projections

14.5.1 ASSUMPTIONS

No further assumptions to those outlined earlier in the report have been made to the analysis of visitor projections in Waimate. These assumptions are available in Section 7.

14.5.2 OUTPUT

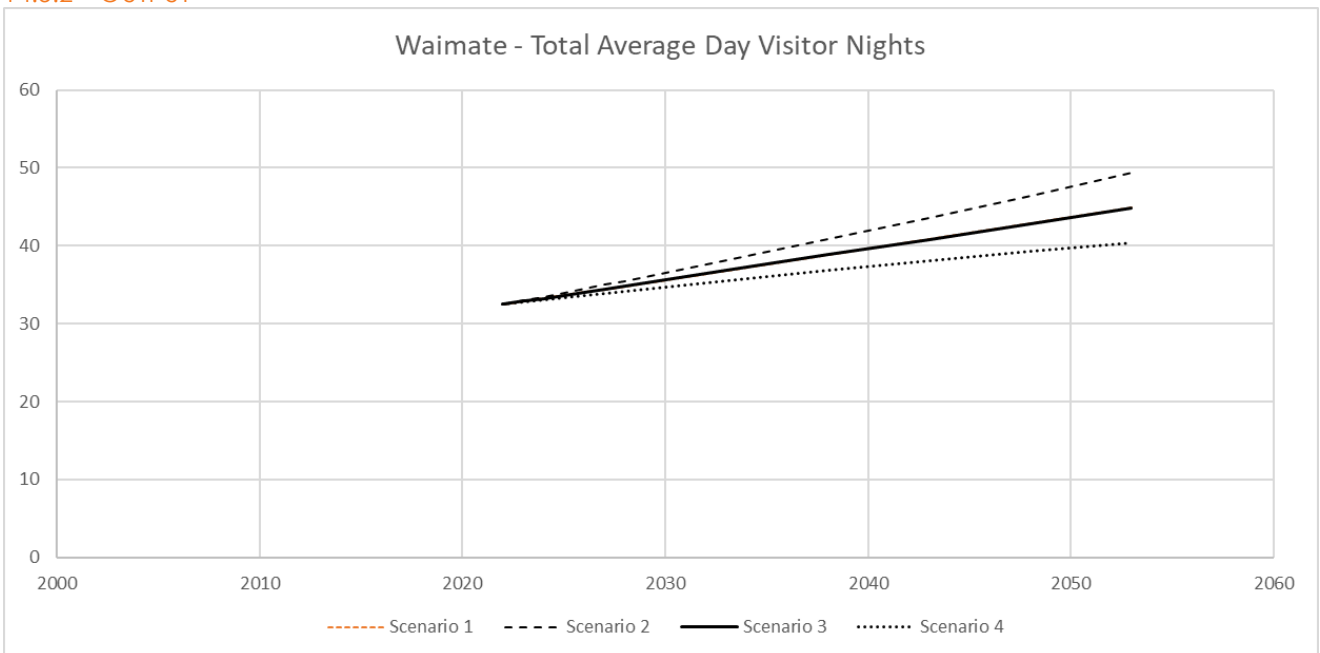


Figure 82. Waimate's average day visitor nights.

Appendix G: Growth Projections Methodology

