RESEARCH REPORT

Housing Demand and Need in Greater Christchurch

Prepared for Environment Canterbury

July 2021

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1. Executive Summary

In accordance with your instructions, we have prepared our report on the current and future housing demand in greater Christchurch. This report has been prepared for Environment Canterbury (Ecan) and the Greater Christchurch Partnership to assist them to better understand housing trends in greater Christchurch across a range of demographic characteristics. This report should not be used for any other purpose or by any other party.

The assignment's objective is to provide detailed analysis of housing demand by a range of demographic characteristics including:

- Tenure (owner occupiers, private renters and the need for social housing);
- Age of the household reference person; and
- Household composition (household types will include couple only, couples with children, one parent, one person and other).

1.1.1 Key trends

Many of the trends identified are larger societal changes in demographic and external economic forces that cannot be controlled at a local level. Among the trends detailed in the report are:

- Greater Christchurch's population is projected to grow from 536,880 in 2021 to 705,600 in 2051, an increase of 168,720 people;
- Between 2021 and 2051, the number of households living in greater Christchurch is projected to increase by 77,100 or 37%. The number of households living in Waimakariri District is projected to increase by 15,900 or 60%, Christchurch City's households are projected to increase by 35,600 or 23% of and the number of households living in Selwyn District is projected to increase by 25,600 or 103%.
- Approximately 12% of greater Christchurch's households live in Selwyn in 2021 and over the next 30 years 33% of the total growth in households is projected to occur in Selwyn District. These projected trends reflect a redistribution of where people are likely to live within greater Christchurch in the future with strong growth outside Christchurch City.
- Waimakariri and Selwyn Districts have some of the highest rates of owner occupation in the country and this is likely to continue in the future;
- The demographic profile of greater Christchurch's population is projected to change with the number of households with reference people aged 65 years and over expected to increase faster than other age groups. The aging population is also projected to result in strong growth in the number of couple only and one person households;
- In Selwyn and Waimakariri Districts the demand for smaller multiunit dwellings is projected to increase, although the vast majority of the demand is expected to be for standalone dwellings of three bedrooms or more. Christchurch City is expected to have higher levels of demand for multiunit dwellings;

- Between 1991 and 2021, house sale prices have increased at over twice the rate as household incomes. Renter housing affordability experienced a small decline over this period while home buyer affordability also declines to a large extent the rise in house prices has been offset by a fall in interest rates. It is important to note greater Christchurch's housing affordability is significantly superior relative to Auckland and Wellington;
- Housing need increased from 35,530 in 2018 to 36,800 in 2020. Relative to other local authority areas greater Christchurch has relatively lower levels of housing need.

1.1.1 Demand by demographic characteristics and tenure

Table 1.1 presents the projected change in the total number of households in greater Christchurch between 2018 and 2051.

Table 1.1: Projected growth in the number of households

	Waimakariri District		Christchurch City		Selwyn District	
	Households	Change pa	Households	Change pa	Households	Change pa
2018	24,100		151,100		21,820	
2020	25,600	750	155,000	1,950	23,900	1,040
2021	26,300	700	157,000	2,000	24,900	1,000
2024	28,400	700	162,380	1,790	27,744	950
2026	29,600	600	165,300	1,460	29,300	780
2031	32,600	600	172,400	1,420	33,400	820
2036	35,500	580	178,600	1,240	37,700	860
2041	38,000	500	184,100	1,100	42,000	860
2046	40,200	440	188,700	920	46,200	840
2051	42,200	400	192,600	780	50,500	860

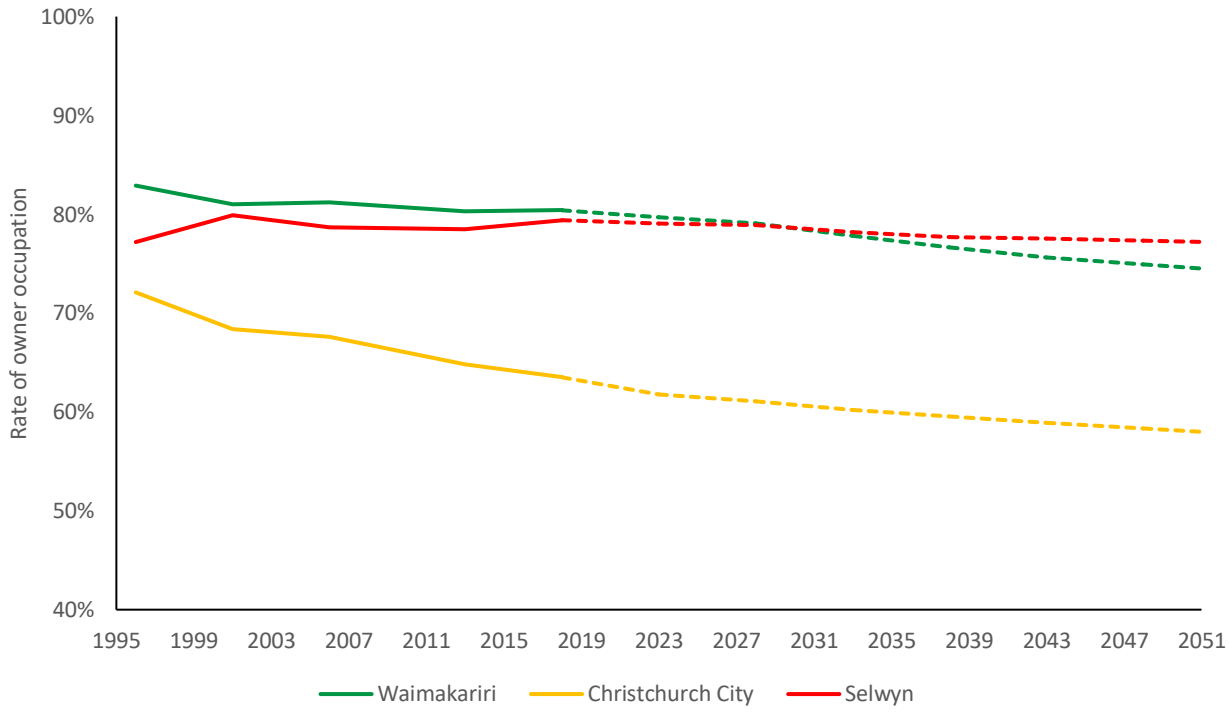
Source: Modelled from data sourced from Greater Christchurch Partnership and Statistics New Zealand

Between 2021 and 2051, the number of households living in greater Christchurch is projected to increase by 77,100 or 37%. The number of households living in Waimakariri District is projected to increase by 15,900 or 60%, Christchurch City's households are projected to increase by 35,600 or 23% of and the number of households living in Selwyn District is projected to increase by 25,600 or 103%.

Approximately 12% of greater Christchurch's households live in Selwyn in 2021 and over the next 30 years 33% of the total growth in households is projected to occur in Selwyn District. Conversely in 2021 75% of households live in Christchurch City and over the next 30 years only 46% of the total growth in households will be in Christchurch City. These projected trends reflect a redistribution of where people are likely to live within greater Christchurch in the future with strong growth outside Christchurch City.

Figure 1.1 presents the actual change in the rate of owner occupation between 1991 and 2018 along with the projected change out to 2051.

Figure 1.1: Projected rate of owner occupation



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

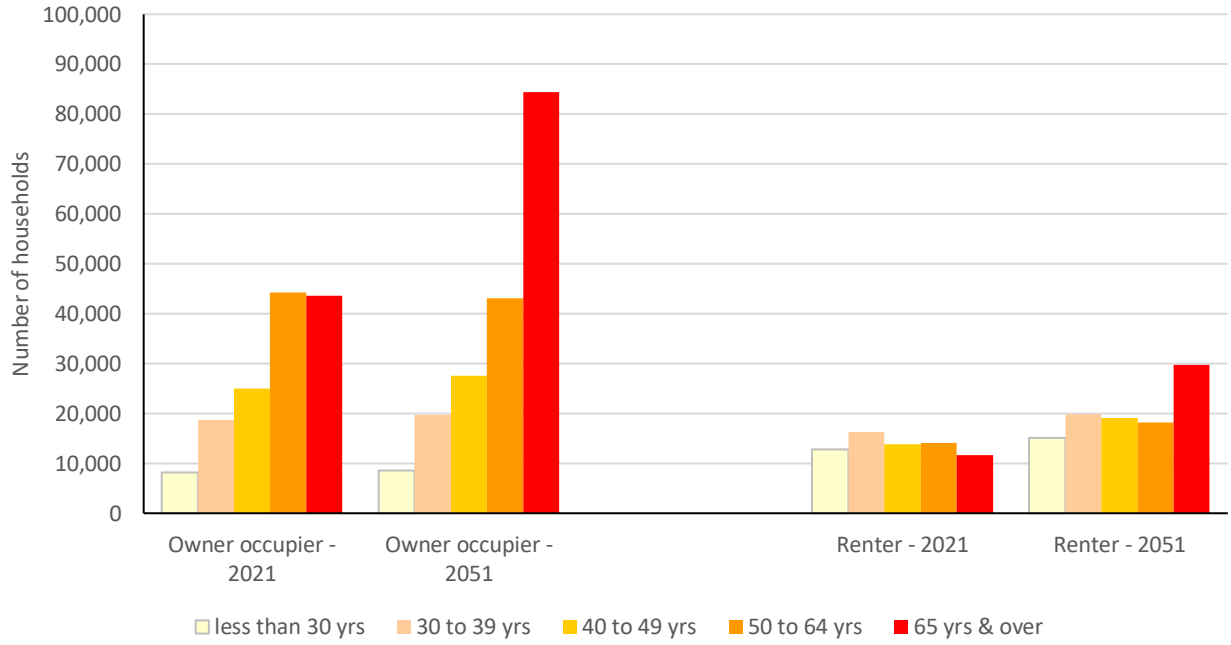
Waimakariri and Selwyn Districts have some of the highest rates of owner occupation in the country. Although the proportion of owner occupiers to decline, the rate of decline is less than our projections in other locations. This is because:

- Waimakariri and Selwyn Districts are likely to continue to attract an influx of home buyers, particularly from Christchurch,
- Have high existing rates of owner occupation in younger age cohorts, and
- Although housing affordability is not good within the Districts it is significantly better than other centres around the country.

Christchurch is expected to continue to experience an outflow of owner occupiers to surrounding local authorities and the past trend of a gradual decline in rates of owner occupation to continue.

Figure 1.2 presents the projected change in the number of households by tenure and age of the household reference person between 2021 and 2051.

Figure 1.2: The projected change in the number of households by tenure and age of the household reference person

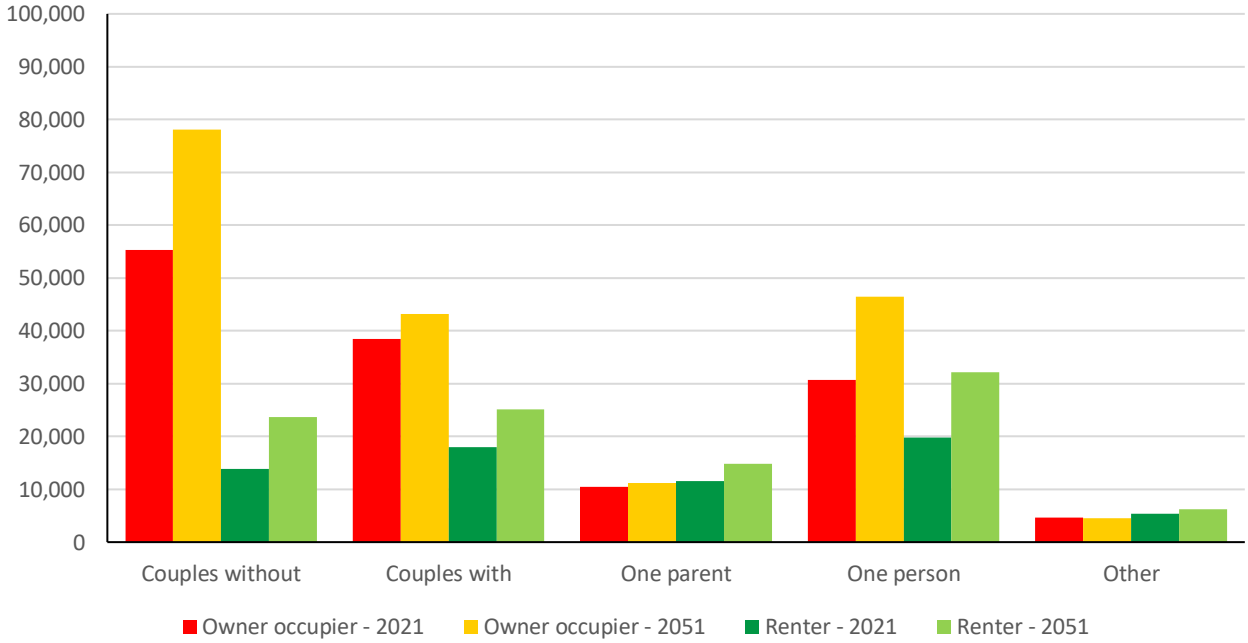


Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

The age profile of owner occupier households is projected to grow older over the next 30 years with strong growth in the number of households aged 65 years and older. The number of older renter households are also expected to increase albeit at a slower pace than owner occupiers.

Figure 1.3 presents the projected growth in the number of households by tenure and household composition.

Figure 1.3: The projected growth in the number of households by tenure and household composition



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership
NB: Results are base ten rounded

The growth in the number of households by composition reflects greater Christchurch's aging population with strong growth in the number of one person and couple without children households.

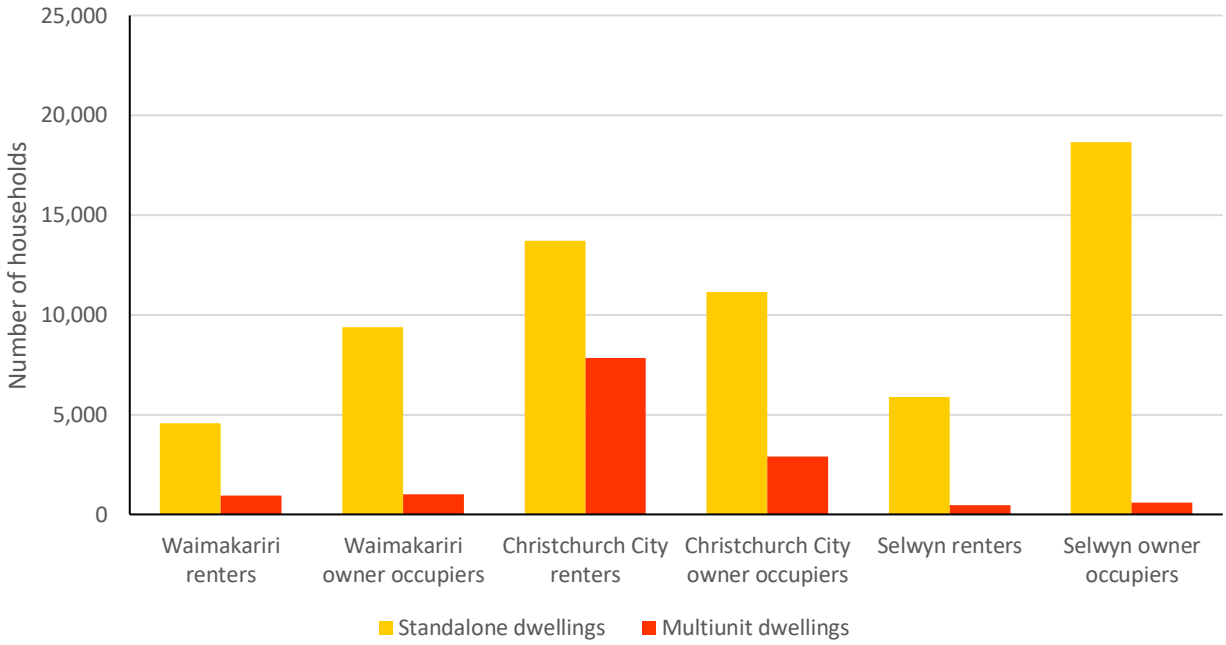
Owner occupier and renter households with reference people aged 65 years and older are projected to dominate the increase in the number of households between 2018 and 2048. Renters with reference people aged 65 years and older are projected to increase by 2,510 and account for 43% of the growth in all renters. Owner occupiers with reference people aged 65 years and older are projected to increase by 9,870 and account for 55% of the total increase in owner occupiers.

1.1.2 Demand by dwelling typology

The implications of the demographic and tenure trends on the demand for dwellings by typology[1] is presented in Figure 1.4. Dwelling typology is divided into the following categories; standalone dwelling with two bedrooms or less; standalone dwelling with three bedrooms or more; multi-unit dwelling with two bedrooms or less; and multi-unit dwelling with three bedrooms or more.

[1] An overview of the methodology used is presented in Appendix 2 and assumes the propensity for households with different characteristics (age, household composition and tenure) for different dwelling typologies remains the same between 2018 and 2038.

Figure 1.4: Projected demand by dwelling typology and tenure



Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling

Demand is likely to be strongly focused on standalone dwellings with renters having a slightly higher propensity to live in multiunit dwellings.

Table 1.2 presents the trend in household demand in Waimakariri District by tenure and dwelling typology between 2021 and 2051.

Table 1.2: Household demand by typology and tenure

	Owner occupiers				Renters			
	Standalone		Multi unit		Standalone		Multi unit	
	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm
Waimakariri								
2021	2,060	17,870	810	320	1,100	3,450	610	100
2024	2,240	19,100	910	340	1,210	3,800	690	110
2031	2,620	21,340	1,170	390	1,460	4,590	890	140
2041	3,070	23,900	1,460	440	1,860	5,860	1,190	190
2051	3,410	25,890	1,660	480	2,200	6,910	1,420	230
21 to 51	1,350	8,020	850	160	1,100	3,460	810	130
Chch City								
2021	12,730	74,200	8,140	3,800	12,760	26,840	15,260	3,250
2024	13,150	75,930	8,440	3,900	13,400	28,070	16,090	3,390
2031	13,930	78,360	9,130	4,070	14,810	30,500	17,980	3,680
2041	14,930	80,840	9,970	4,270	16,620	33,170	20,340	4,000
2051	15,590	82,470	10,460	4,390	17,930	35,390	22,070	4,280
21 to 51	2,860	8,270	2,320	590	5,170	8,550	6,810	1,030
Selwyn								
2021	1,830	17,380	100	430	1,380	3,490	190	120
2024	2,040	19,290	110	480	1,540	3,930	210	140
2031	2,640	22,850	120	620	2,050	4,690	270	190
2041	3,390	28,230	130	800	2,750	6,030	350	280
2051	4,080	33,780	150	960	3,380	7,370	430	350
21 to 51	2,250	16,400	50	530	2,000	3,880	240	230

Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling

Demand for standalone dwellings is projected to continue to be strong particularly in Waimakariri and Selwyn Districts. Demand for standalone dwellings is expected to be strong in Christchurch City and there is also a strong increase in the projected demand for multiunit dwellings particularly from renter households.

1.1.3 Housing affordability

Housing affordability comes under pressure when housing costs increase at a faster rate than household incomes. Variations in interest rates can mask the underlying trends in first home buyer affordability in the short to medium term.

Table 1.3: Rents, house prices and household incomes in Selwyn District, Christchurch City and Selwyn District between 1991 and 2020

	Waimakariri District			Christchurch City			Selwyn District		
	Median rent	Lower Quartile HP	Median household income	Median rent	Lower Quartile HP	Median household income	Median rent	Lower Quartile HP	Median household income
1991	$146	$80,000	$31,100	$147	$68,000	$31,100	$134	$61,000	$35,500
1996	$157	$95,000	$34,700	$171	$115,000	$32,900	$164	$90,000	$39,100
2001	$181	$110,500	$39,700	$171	$126,800	$36,500	$168	$104,000	$47,200
2006	$246	$240,000	$50,900	$244	$253,000	$48,200	$266	$266,000	$62,500
2013	$394	$325,000	$68,800	$356	$336,000	$65,300	$435	$399,500	$85,100
2018	$381	$380,000	$81,700	$345	$344,500	$77,600	$406	$481,500	$101,100
2019	$400	$385,000	$84,600	$345	$345,000	$80,300	$432	$457,750	$104,600
2020	$420	$402,000	$87,600	$400	$380,000	$83,100	$468	$487,000	$109,200
2021 Est	$460	$435,000	$90,700	$420	$431,000	$86,000	$500	$540,000	$113,000

Source: HUD, MBIE, Headway Systems, Corelogic and Statistics New Zealand

Market rents increased marginally faster than household incomes between 1991 and 2020. However, Selwyn District house prices increased 3.4 times faster than median household incomes between 1991 and 2020. Similar trends occurred in Waimakariri District (house prices increased 2.2 times faster than median household incomes) and Christchurch (house prices increased 2.7 times faster than median household incomes). The faster growth in house prices, relative to household incomes has continued to place pressure on housing affordability for first home buyers.

Table 1.4 presents the proportion of household income required to pay either the median rent or service the loan required to buy a dwelling priced at the lower quartile house sale price (assuming a 10% deposit).

Table 1.4: The proportion of median household income required to pay the median rent or service the mortgage required to buy at the LQHP

	Waimakariri District		Christchurch City		Selwyn District	
	% of MHI to pay median rent	% of MHI to service mortgage	% of MHI to pay median rent	% of MHI to service mortgage	% of MHI to pay median rent	% of MHI to service mortgage
1991	24%	33%	25%	28%	20%	22%
1996	24%	28%	27%	35%	22%	23%
2001	24%	24%	24%	30%	19%	19%
2006	25%	45%	26%	50%	22%	40%
2013	30%	32%	28%	35%	27%	32%
2018	24%	32%	23%	30%	21%	32%
2019	25%	31%	22%	29%	21%	30%
2020	25%	27%	25%	27%	22%	27%
2021	26%	28%	25%	30%	23%	28%

Source: Modelled based on data from RBNZ, HUD, MBIE, Headway Systems, Corelogic and Statistics New Zealand

The proportion of median household income in Selwyn District required to pay the median market rent has fluctuated between 19% and 27%. The peak of 27% occurred after the 2010/2011 earthquakes and coincides with a significant housing shortage in greater Christchurch. Subsequently, these pressures have eased and rents as a proportion of household incomes have fallen back to 22% in 2020. The proportion of median household income required to service a mortgage (assuming a dwelling is purchased at the lower quartile house sale price with a 10% deposit) has varied between 19% and 40% between 1991 and 2020. The peak (40% of household income) coincided with a peak in mortgage interest rates in the mid-2000s. Historic lows in mortgage interest rates have offset the growth in house prices at this stage of the housing market cycle.

Private renter housing stress[2] is experienced by households that have insufficient income to affordably pay their housing costs. This can occur because either housing costs are high relative to market norms or incomes in an area are low or a combination of both. Renter housing stress is defined as those households that are paying more than 30% of their gross household income in rent. Severe housing stress is those households paying more than 50% of their gross household income in rent.

Table 1.5 presents the relative levels of renter housing stress by income bands.

Table 1.5: The relative level of renter housing stress in 2001 and 2018

Gross household income	Stressed (30% or more)			Severely stressed (50% or more)		
	2001	2013	2018	2001	2013	2018
Waimakariri						
Less than $30,000	76%	83%	91%	42%	59%	82%
$30,001 to $50,000	4%	64%	82%	0%	16%	30%
$50,001 to $70,000	0%	28%	54%	0%	2%	4%
$70,001 to $100,000	0%	8%	12%	0%	2%	1%
Over $ 100,000	0%	3%	3%	0%	3%	2%
Total	40%	43%	46%	22%	20%	24%
Christchurch City						
Less than $30,000	83%	90%	93%	48%	70%	83%
$30,001 to $50,000	15%	71%	85%	0%	13%	33%
$50,001 to $70,000	5%	23%	52%	0%	0%	4%
$70,001 to $100,000	0%	7%	11%	0%	1%	1%
Over $ 100,000	0%	2%	1%	0%	0%	0%
Total	37%	37%	41%	19%	16%	20%
Selwyn						
Less than $30,000	58%	90%	94%	26%	70%	79%
$30,001 to $50,000	7%	71%	62%	S	13%	33%
$50,001 to $70,000	S	23%	46%	S	0%	5%
$70,001 to $100,000	S	7%	17%	S	1%	1%
Over $ 100,000	S	2%	1%	S	0%	0%
Total	24%	37%	32%	11%	16%	16%

Source Statistics New Zealand

The proportion of households paying unaffordable levels of rent increased in Waimakariri and Christchurch City and declined in Selwyn District, between 2001 and 2018 The proportion of renters paying high levels of rent relative to their incomes was concentrated in households with lower incomes.

[2] Renter stress is significantly lower in social housing as current income related rent policy limits the cost to 25% of income in eligible households. These households typically have needs beyond affordability although it is also important to note that if they rented their accommodation in the private market they would very likely be stressed.

Housing stress can have a number of impacts on a household. As they spend a higher proportion of their income on housing costs they have less to spend on other items. This can led to poverty. As housing costs increase relative to household incomes households face a number of choices:

- Do they pay an ever increasing amount of their income in housing costs or
- Do they crowd with other families to increase their combined income to pay the housing costs (this can lead to a number of poor social and health outcomes) or
- Do they relocate to poorer quality/cheaper housing or even shift out of their current housing market/subarea to other lower cost housing markets.

Table 1.6 presents the modelled number of stressed private renter households at 2020.

Table 1.6: Number of stressed private renter households by sub region in 2020

	Modelled number of stressed private renters 2020	Stressed renters as a % of all households
Waimakariri District	2,500	10%
Christchurch City	22,350	14%
Selwyn District	1,680	7%
Total greater Christchurch	26,530	13%

Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling & consequently total households may vary between tables.

Christchurch City has the highest modelled proportion of stressed renters, followed by Waimakariri District.

1.1.4 The housing continuum

The Housing Continuum provides insight into the relative sizes of the different housing sub-groups along a continuum which stretches from emergency and homeless households to owner occupation. Changes in the relative size of these groups reflect the pressures within the continuum overtime. This progression can be summarised as:

- Emergency, homelessness and crowding;
- Social renters with housing needs in addition to financial affordability;
- Stressed private renters paying more than 30% of their household income in rent;
- Private renters paying less than 30% of their household income in rent but unable to affordably buy a dwelling at the lower quartile house sale price (LQHP);
- Private renter households with sufficient income to affordably buy a dwelling at the lower quartile house sale price; and
- Owner occupier households.

Figure 1.5 presents the modelled housing continuum as at 2018 and 2020[3]

Figure 1.5: Housing Continuum in 2018 and 2020

Source: Modelled based on data from Statistics New Zealand

The majority of the growth in the continuum was for owner occupier households. Falling mortgage interest rates resulted in an increase in the number of relatively well-off renter households (those able to affordably buy at the lower quartile house sale price if they choose).

[3] These estimates assume the number of social housing units remains constant.

1.1.5 Housing need

Housing need is a measure of the total number of renter households within a community which require some assistance to meet their housing requirements. Total ***'renter housing need'*** encapsulates a number of different groups of households and includes the following groups:

- Financially stressed private renter households;
- Those households whose housing requirements are met by social, third sector and emergency housing; and
- People who are homeless or living in crowded dwellings.

Total renter housing need = stressed private renter households + social housing tenants + other need

This section of the report presents analysis of:

- Current levels of housing need;
- Projected growth in housing need; and
- Implications of the current and expected trends in housing need.

Estimates of current housing need build on the analysis presented in the previous sections of the report including the number of social tenants, levels of homelessness, and the number of stressed private renter households. Table 1.7 presents the analysis of total housing need as at 2018 and 2020.

Table 1.7: Total Housing Need – 2018 to 2020

	Financial Housing Stress (A)	Other Need			Total Housing Need (A + D)	% of All Renters	% of All Households
		Social Renters (B)	Other (C)	Total Other Need (B + C =D)			
Waimakariri							
2018	2,270	150	270	420	2,690	57.1%	11.2%
2020	2,500	150	290	440	2,940	57.8%	11.5%
Christchurch City							
2018	21,580	7,050	2,460	9,510	31,090	56.4%	20.6%
2020	22,350	7,050	2,480	9,530	31,880	55.8%	20.6%
Selwyn District							
2018	1,460	50	240	290	1,750	39.1%	8.0%
2020	1,670	50	260	310	1,980	39.8%	8.2%

NB: Numbers are rounded to the nearest 10.
NB: The analysis is Modelled based on data from Statistics New Zealand.

As a comparison, the relative level of housing need in other locations (as a % of renters and all households) is presented in Table 1.8.

Table 1.8: The relative level of housing need in other local authorities.

	Housing need as a % of all renters	Housing need as a % of all households
Hastings	56%	19%
Flaxmere – Hastings sub area	63%	34%
Napier City	47%	16%
Lower Hutt	79%	28%
Porirua City	69%	25%
Eastern Porirua - Porirua City	88%	54%
Tauranga	58%	21%
Western Bay of Plenty	51%	16%
Selwyn District	39.8%	8.7%

NB: These statistics are sourced from similar studies undertaken in the last two years

Selwyn District has low relative levels of housing need when compared to other locations. Table 1.9 presents analysis of the estimated growth in total housing need by financially stressed renter households and other need over the 2018 to 2048 period. These estimates assume:

- The growth in the level of 'other need' is proportionate to the growth in financially stressed renter households;
- Household incomes and market rents increase at approximately the same rate;
- There are no significant changes to the financial, structural and institutional environment in which the housing market operates over the next 30 years; and
- There are no unexpected corrections in the housing market over the next 30 years.

Table 1.9: Projected housing need – 2018 to 2048

	Total Need	Need as a % of	
		All renters	All households
Waimakariri District			
2018	2,690	57%	11%
2020	3,580	56%	12%
2028	4,680	55%	13%
2038	5,600	55%	13%
2048	2,690	57%	11%
Christchurch City			
2018	30,920	56%	20%
2020	32,030	56%	21%
2028	35,260	54%	21%
2038	39,160	54%	22%
2048	42,260	53%	22%
Selwyn District			
2018	1,750	39%	8%
2020	1,980	40%	8%
2028	2,480	38%	8%
2038	3,190	37%	8%
2048	3,810	37%	8%

NB: Numbers are rounded to the nearest 10. These projections assume rents and household incomes increase at approximately the same rate between 2018 and 2048.
Source: Modelling housing outcomes based on data from census, population projections (Statistics New Zealand), HUD, MBIE, and Kāinga Ora.

The level of housing need is projected to increase as the number of households grows.

2. Introduction

In accordance with your instructions, we have prepared our report on the current and future housing demand in greater Christchurch. This report has been prepared for Environment Canterbury (Ecan) and the Greater Christchurch Partnership to assist them to better understand housing trends in greater Christchurch across a range of demographic characteristics. This report should not be used for any other purpose or by any other party.

The assignment's objective is to provide detailed analysis of housing demand by a range of demographic characteristics including:

- Tenure (owner occupiers, private renters and the need for social housing);
- Age of the household reference person; and
- Household composition (household types will include couple only, couples with children, one parent, one person and other).

In addition, a review of the current housing stock typology is included, along with the implications of these demographic trends in terms of the type and size of dwelling typology required for future growth. The range of dwelling typologies included in the analysis are standalone housing, multi-unit dwellings and apartments. In addition to the overall demand estimates, housing affordability trends for both owner occupied and renter occupied dwellings are presented.

2.1 Subarea boundaries

The results of the analysis are summarised for greater Christchurch's housing market with additional analysis provided for the following sub-areas[4]. The subareas include:

Waimakariri District

- Rangiora
- Kaiapoi
- Woodend/ Ravensdown/Pegasus
- Oxford
- UDS Settlements
- UDS Rural

Christchurch City

- Banks Penninsula
- Central
- Inner East
- Inner West

[4] Definition of the sub area boundaries is included in Appendix 1.

- Lyttelton
- NorthEast
- NorthWest
- Port Hills
- SouthEast
- SouthWest

Selwyn District

- Rolleston
- Lincoln
- Prebbleton/West Melton
- UDS – Rural
- Darfield/Leeston
- Rural

2.2 Data sources

The data sources used in this project include:

- Population projections provided by the Greater Christchurch Partnership;
- Population and household projections sourced from Statistics New Zealand;
- Customised census data from Statistics New Zealand;
- Property transaction data source from the Ministry of Housing and Urban Development and Headway Systems; and
- Interest rate data from the Reserve Bank of New Zealand.

2.3 Affordability measures

Affordability definitions include:

- For housing to be "**affordable**" households should spend no more than 30% of their gross household income paying rent or servicing the mortgage associated with buying a property;
- A **stressed renter** household is one paying more than 30% of their gross household income in rent;
- **Housing need** is a measure of the total number of renter households within a community which require some assistance to meet their housing requirements.
- **Total 'renter housing need'** encapsulates a number of different groups of households and includes stressed private renter households, those households whose housing requirements are met by social, third sector and emergency housing; and people who are homeless or living in crowded dwellings.
- '**Other housing need**' encapsulates those households who because of their circumstances have housing needs in addition to affordability including crowded households, or are those that are homeless; and
- **Social housing** is defined as the number of households, who because of their circumstances are in Kāinga Ora (formerly Housing New Zealand Corporation), local authority, and third sector housing. Other need is defined as.

3. Housing demand by location and demographic characteristic

3.1 Introduction

The objective of this section of the report is to present the results of the housing demand analysis between 2018 and 2048 by demographic characteristic and tenure for the greater Christchurch area and by sub-market. Demographic characteristics included in the analysis are the age of the household reference person and household composition. The implications of these trends on demand by dwelling typology are also presented. An overview of the modelling methodology is presented in Appendix 2. Appendix 3 presents the methodology associated with the calculation of the projected growth in number of households based on the population projections provided by the Greater Christchurch Partnership. Appendix 4 presents the demand projections in more detail.

As agreed, the demand projections presented in this report assume population growth consistent with Statistics New Zealand's population projections :

- High growth scenario for Waimakariri District;
- Medium growth scenario for Christchurch City; and
- High growth scenario for Selwyn District;

3.2 Household projections

Greater Christchurch's population is projected to increase from 536,880 in 2021 to 705,600 in 2051, an increase of 168,720 people or 31%. All three local authorities within the greater Christchurch area are projected to experience growth with the number of people living in each area as follows:

- Waimakariri District is projected to increase from 66,160 people in 2021 to 99,860 people in 2051, an increase of 32,700 people or 49%;
- Christchurch City is projected to increase from 398,420 people in 2021 to 472,780 people in 2051, an increase of 74,360 people or 19%; and
- Selwyn District is projected to increase from 72,300 people in 2021 to 133,960 people in 2051, an increase of 61,660 people or 85%.

This strong projected population growth will also be reflected in the number of households living in in each area and consequently demand for additional dwellings. Appendix 3 presents the methodology associated with the calculation of the projected growth in number of households based on the population projections provided by the Greater Christchurch Partnership.

Table 3.1 presents the projected change in the total number of households in Waimakariri District, Christchurch City and Selwyn District between 2018 and 2051.

Table 3.1: Projected growth in the number of households

	Waimakariri District		Christchurch City		Selwyn District	
	Households	Change pa	Households	Change pa	Households	Change pa
2018	24,100		151,100		21,820	
2020	25,600	750	155,000	1,950	23,900	1,040
2021	26,300	700	157,000	2,000	24,900	1,000
2024	28,400	700	162,380	1,790	27,744	950
2026	29,600	600	165,300	1,460	29,300	780
2031	32,600	600	172,400	1,420	33,400	820
2036	35,500	580	178,600	1,240	37,700	860
2041	38,000	500	184,100	1,100	42,000	860
2046	40,200	440	188,700	920	46,200	840
2051	42,200	400	192,600	780	50,500	860

Source: Modelled from data sourced from Greater Christchurch Partnership and Statistics New Zealand

Between 2021 and 2051, the number of households living in greater Christchurch is projected to increase by 77,100 or 37%. The number of households living in Waimakariri District is projected to increase by 15,900 or 60%, Christchurch City's households are projected to increase by 35,600 or 23% and the number of households living in Selwyn District is projected to increase by 25,600 or 103%.

Table 3.2 summarises the distribution of growth across greater Christchurch over the next 30 years.

Table 3.2: Distribution of the projection growth in the number of households

	Waimakariri			Christchurch City			Selwyn			Greater Christchurch		
	Hhlds	Change		Hhlds	Change		Hhlds	Change		Hhlds	Change	
		No	% of Total		No	% of Total		No	% of Total		No	% of Total
2021	26,300			157,000			24,900			208,200		
2024	28,400	2,100	20%	162,380	5,380	52%	27,744	2,844	28%	218,524	10,324	100%
2031	32,600	4,200	21%	172,400	10,020	50%	33,400	5,656	28%	238,400	19,876	100%
2051	42,200	9,600	20%	192,600	20,200	43%	50,500	17,100	36%	285,300	46,900	100%
Total		15,900	21%		35,600	46%		25,600	33%		77,100	100%

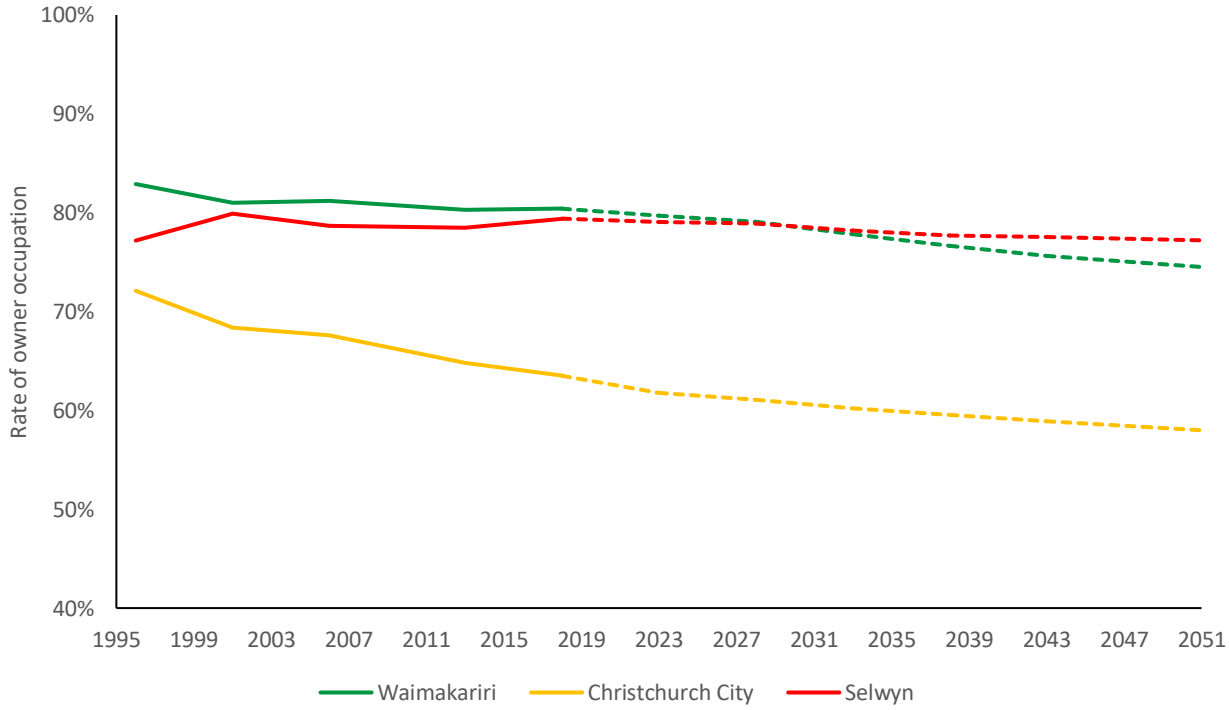
Source: Modelled from data sourced from Greater Christchurch Partnership and Statistics New Zealand

Approximately 12% of greater Christchurch's households live in Selwyn in 2021 and over the next 30 years 33% of the total growth in households is projected to occur in Selwyn District. Conversely in 2021 75% of households live in Christchurch City and over the next 30 years only 46% of the total growth in households will be in Christchurch City. These projected trends reflect a redistribution of where people are likely to live within greater Christchurch in the future with strong growth outside Christchurch City.

3.2.1 Household growth by tenure

Figure 3.1 presents the actual change in the rate of owner occupation between 1991 and 2013 along with the projected change out to 2051.

Figure 3.1: Projected rate of owner occupation



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

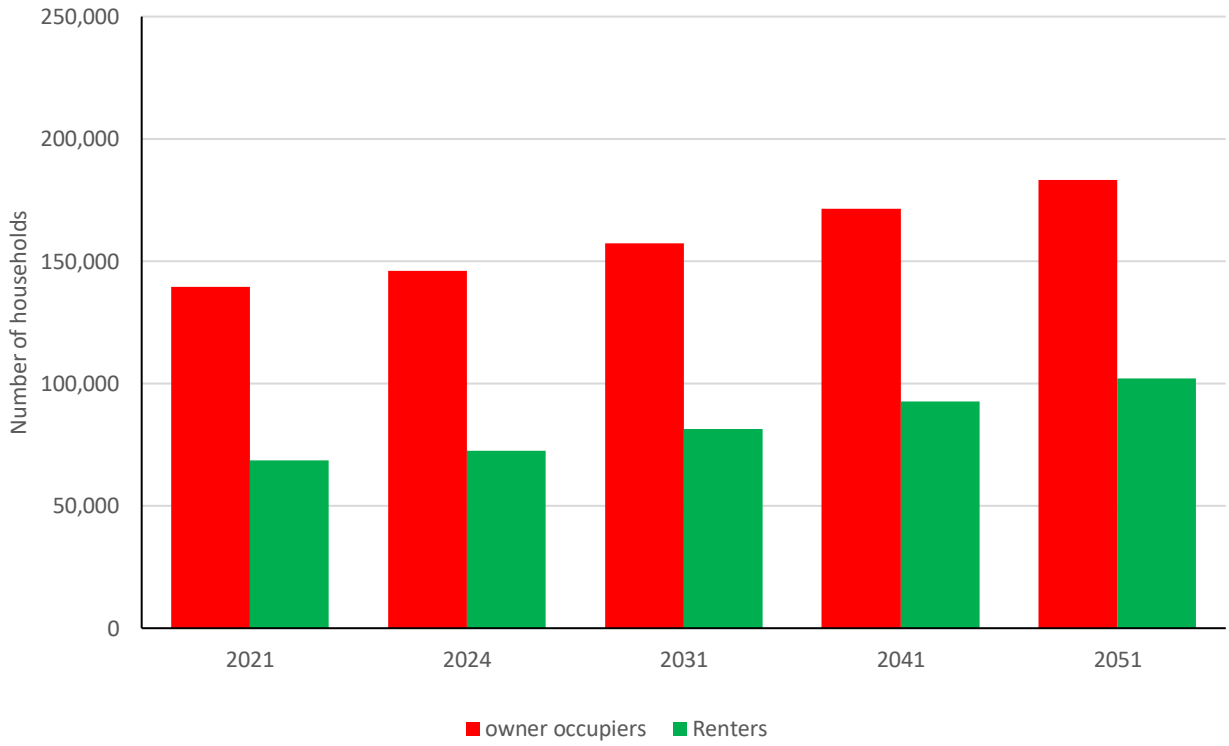
Waimakariri and Selwyn Districts have some of the highest rates of owner occupation in the country. Although we are projecting the proportion of owner occupiers to decline, the rate of decline is less than our projections in other locations. This is because:

- Waimakariri and Selwyn Districts are likely to continue to attract an influx of home buyers, particularly from Christchurch,
- Has high existing rates of owner occupation in younger age cohorts, and
- Although housing affordability is not good within the Districts it is significantly better than other centres around the country.

Christchurch is expected to continue to experience an outflow of owner occupiers to surrounding local authorities and the past trend of a gradual decline in rates of owner occupation to continue.

Figure 3.2 presents the projected growth in the number of owner occupier and renter households between 2021 and 2051.

Figure 3.2: The projected growth in the number of owner occupier and renter households



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

Both the number of owner occupier and renter households living in greater Christchurch are expected to continue to increase over the next 30 years. The number of owner occupier households is expected to increase by 43,700 or 31% and the number of renters by 33,400 or 47%.

Table 3.3 presents the projected growth in the number of owner occupier and renter households in Waimakariri District, Christchurch City and Selwyn District between 2018 and 2048.

Table 3.3: The projected growth in the number of owner occupier and renter households

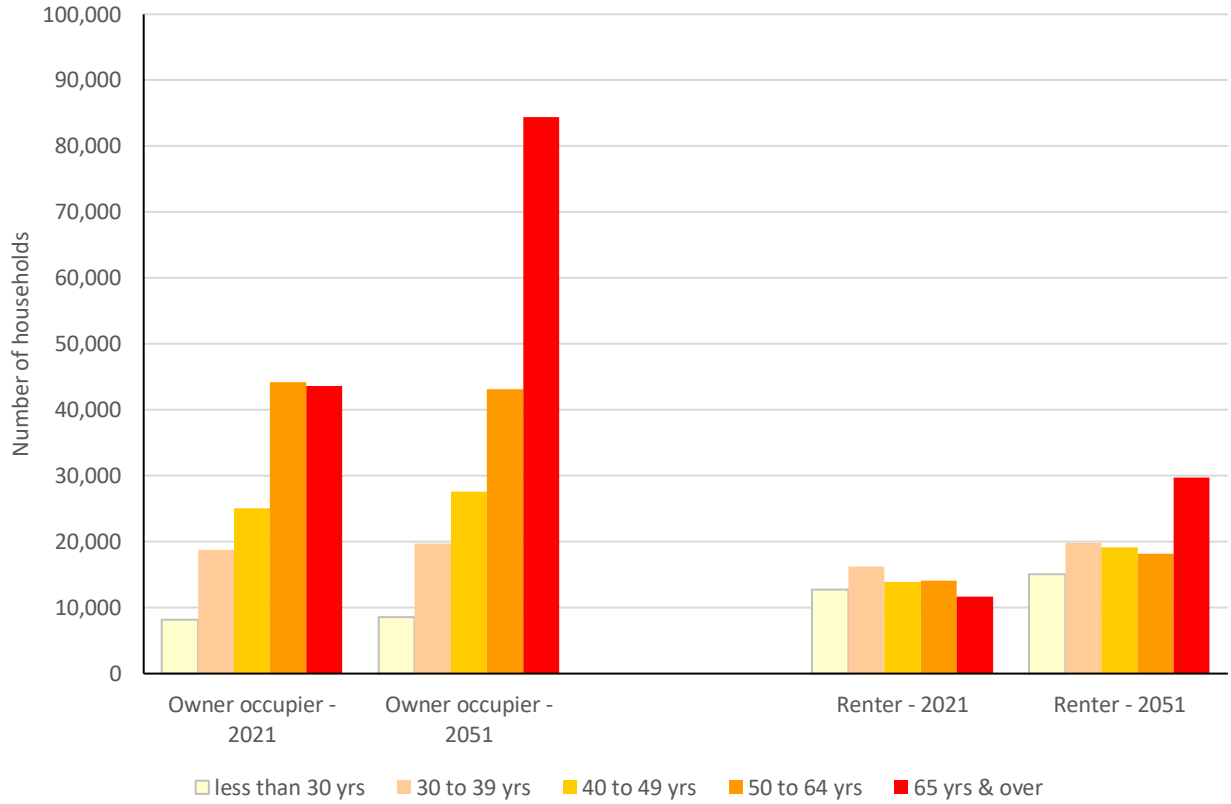
	Waimakariri District		Christchurch City		Selwyn District	
	Owner occupiers	Renters	Owner occupiers	Renters	Owner occupiers	Renters
2018	19,380	4,720	95,950	55,150	17,330	4,490
2020	20,490	5,090	97,890	57,130	18,930	4,950
2021	21,000	5,300	98,900	58,100	19,700	5,200
2024	22,600	5,800	101,418	60,962	21,922	5,822
2026	23,500	6,100	102,700	62,700	23,100	6,200
2031	25,500	7,100	105,500	67,000	26,200	7,200
2036	27,400	8,100	107,900	70,800	29,400	8,300
2041	28,900	9,100	110,000	74,100	32,600	9,400
2046	30,200	10,000	111,600	77,100	35,700	10,400
2051	31,400	10,800	112,900	79,700	39,000	11,500
Change pa						
2018 to 2020	560	190	970	990	800	230
2020 to 2021	510	210	1,010	970	770	250
2021 to 2024	530	170	840	950	740	210
2024 to 2026	450	150	640	870	590	190
2026 to 2031	400	200	560	860	620	200
2031 to 2036	380	200	480	760	640	220
2036 to 2041	300	200	420	660	640	220
2041 to 2046	260	180	320	600	620	200
2046 to 2051	240	160	260	520	660	220

Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

The composition of growth by tenure varies between the three local authority areas. Christchurch City is projected to experience stronger growth in the number of renter households which are expected to increase by 21,600 or 37% between 2021 and 2051. The number of owner occupiers in Christchurch City is also expected to grow but at a slower rate increasing by 14,000 or 14% over the same time period. Selwyn and Waimakariri are both expected to continue to experience strong growth in the number of owner occupiers between 2021 and 2051, increasing by 19,300 and 10,400 respectively.

Figure 3.3 presents the projected change in the number of households by tenure and age of the household reference person between 2021 and 2051.

Figure 3.3: The projected change in the number of households by tenure and age of the household reference person



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

The age profile of owner occupier households is projected to grow older over the next 30 years with strong growth in the number of households aged 65 years and older. The number of older renter households are also expected to increase albeit at a slower pace than owner occupiers.

Table 3.4 presents the projected growth in the number of households by tenure and age of the household reference person.

Table 3.4: The projected number of households by tenure and age of the household reference person

	Owner occupiers					Renters				
	30 yrs-	30 to 39 yrs	40 to 49 yrs	50 to 64 yrs	65 yrs & over	30 yrs-	30 to 39 yrs	40 to 49 yrs	50 to 64 yrs	65 yrs & over
Waimakariri										
2021	830	2,480	3,670	6,880	7,200	700	1,180	1,010	1,140	1,240
2024	730	2,610	3,670	7,280	8,310	620	1,380	1,090	1,290	1,430
2026	780	2,510	3,690	7,320	9,180	660	1,380	1,140	1,340	1,610
2031	920	2,390	3,740	7,310	11,160	790	1,400	1,330	1,420	2,140
2036	1,010	2,580	3,700	7,140	12,930	870	1,570	1,460	1,500	2,720
2041	1,000	2,900	3,670	7,020	14,280	880	1,850	1,540	1,590	3,260
2046	950	3,120	4,070	6,790	15,280	840	2,050	1,770	1,580	3,720
2051	880	3,260	4,710	6,420	16,160	790	2,190	2,100	1,530	4,150
Christchurch City										
2021	6,250	12,880	17,130	30,970	31,640	10,930	13,720	11,740	11,910	9,820
2024	6,090	12,540	17,200	31,110	34,480	11,140	13,830	12,460	12,470	11,050
2026	6,390	11,330	17,150	30,690	37,110	12,010	12,730	12,930	12,680	12,310
2031	6,930	9,590	16,380	29,940	42,640	13,610	11,590	13,120	13,510	15,130
2036	6,970	9,630	14,940	29,320	47,020	14,050	12,440	12,380	14,370	17,510
2041	6,650	10,420	13,720	29,250	49,960	13,650	13,910	11,900	15,170	19,520
2046	6,260	10,940	14,290	28,610	51,550	13,010	14,840	12,940	15,300	20,970
2051	5,880	11,210	15,840	27,300	52,680	12,350	15,410	14,810	14,970	22,130
Selwyn District										
2021	1,060	3,350	4,230	6,330	4,770	1,110	1,360	1,120	1,000	590
2024	1,100	3,720	4,480	6,940	5,690	1,200	1,530	1,240	1,110	740
2026	1,190	3,650	4,660	7,200	6,430	1,300	1,500	1,330	1,160	870
2031	1,450	3,530	5,130	7,810	8,320	1,590	1,490	1,520	1,320	1,290
2036	1,640	3,840	5,340	8,310	10,240	1,800	1,670	1,600	1,490	1,790
2041	1,720	4,460	5,440	8,890	12,040	1,870	1,930	1,650	1,610	2,330
2046	1,760	4,900	6,070	9,240	13,770	1,900	2,120	1,870	1,660	2,890
2051	1,790	5,220	7,060	9,400	15,540	1,920	2,270	2,200	1,660	3,460

Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

NB: Results are base ten rounded

All three local authorities are projected to experience strong growth in the number of renter and owner occupier households with reference people aged 65 years and older.

Table 3.5 presents the projected change in the number of households by tenure and age of the household reference person.

Table 3.5: Projected change in the number of households by tenure and age of the reference person

	Owner occupiers					Renters				
	30 yrs-	30 to 39 yrs	40 to 49 yrs	50 to 64 yrs	65 yrs & over	30 yrs-	30 to 39 yrs	40 to 49 yrs	50 to 64 yrs	65 yrs & over
Waimakariri										
2021 to 2024	-100	130	0	400	1,110	-80	200	80	150	190
2024 to 2031	190	-220	70	30	2,850	170	20	240	130	710
2031 to 2051	-40	870	970	-890	5,000	0	790	770	110	2,010
2021 to 2051	50	780	1,040	-460	8,960	90	1,010	1,090	390	2,910
Christchurch City										
2021 to 2024	-160	-340	70	140	2,840	210	110	720	560	1,230
2024 to 2031	840	-2,950	-820	-1,170	8,160	2,470	-2,240	660	1,040	4,080
2031 to 2051	-1,050	1,620	-540	-2,640	10,040	-1,260	3,820	1,690	1,460	7,000
2021 to 2051	-370	-1,670	-1,290	-3,670	21,040	1,420	1,690	3,070	3,060	12,310
Selwyn District										
2021 to 2024	40	370	250	610	920	90	170	120	110	150
2024 to 2031	350	-190	650	870	2,630	390	-40	280	210	550
2031 to 2051	340	1,690	1,930	1,590	7,220	330	780	680	340	2,170
2021 to 2051	730	1,870	2,830	3,070	10,770	810	910	1,080	660	2,870

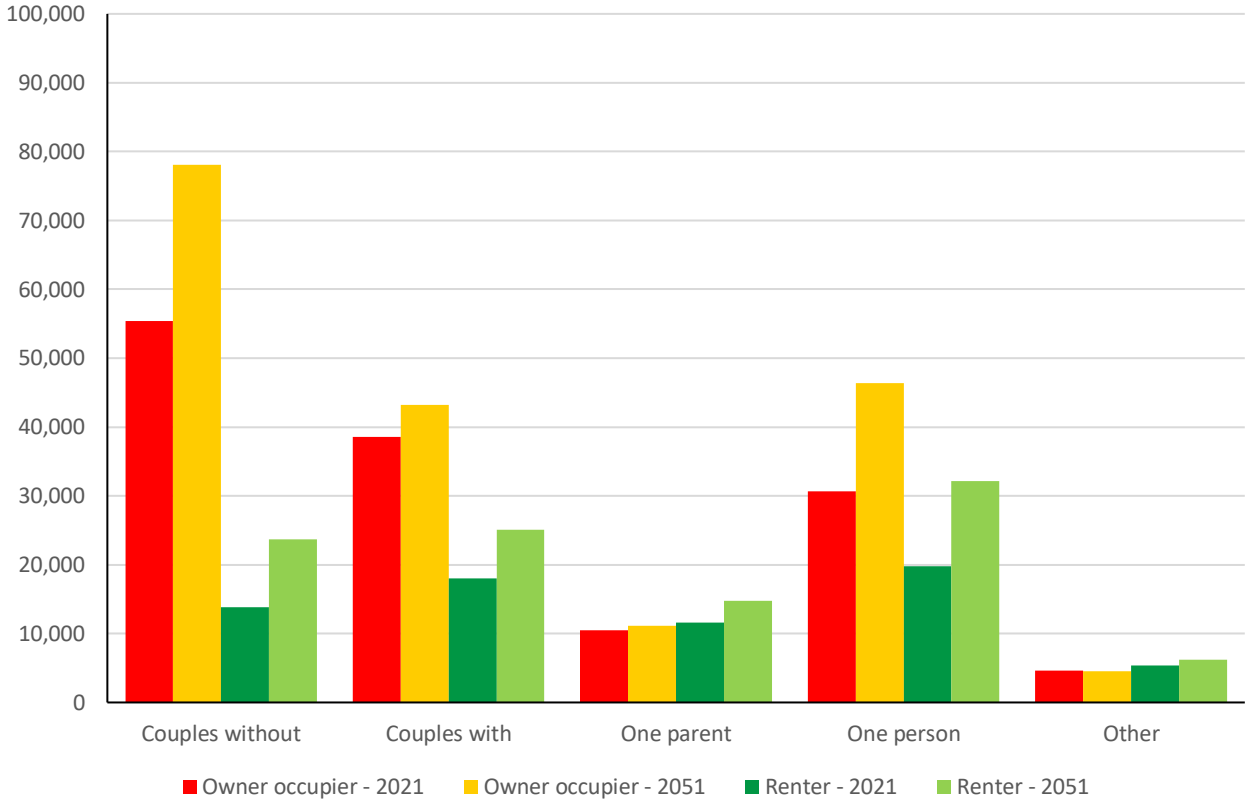
Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

NB: Results are base ten rounded

Christchurch City is projected to experience a reduction in owner occupiers in all age groups expect those aged 65 years and older and strong growth in renters across all age groups.

Figure 3.4 presents the projected growth in the number of households by tenure and household composition.

Figure 3.4: The projected growth in the number of households by tenure and household composition



Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership
NB: Results are base ten rounded

The growth in the number of households by composition reflects greater Christchurch's aging population with strong growth in the number of one person and couple without children households.

Table 3.6 presents the projected number of households by tenure and household composition.

Table 3.6: The projected number of households by tenure and household composition

	Owner occupiers					Renters				
	2021	**2024**	**2031**	**2041**	**2051**	**2021**	**2024**	**2031**	**2041**	**2051**
Waimakariri										
Couple without	9,160	10,010	11,410	13,010	14,170	1,220	1,370	1,810	2,590	3,270
Couples with	6,170	6,390	6,820	7,270	7,730	1,390	1,520	1,840	2,270	2,610
One parent	1,250	1,280	1,350	1,500	1,570	970	1,040	1,170	1,430	1,590
One person	4,060	4,500	5,520	6,620	7,510	1,540	1,700	2,080	2,600	3,050
Other	400	430	420	490	470	160	170	180	210	230
Total	21,050	22,600	25,520	28,870	31,460	5,270	5,800	7,070	9,110	10,740
Christchurch City										
Couple without	37,780	39,480	41,740	44,170	45,640	11,400	11,980	13,400	15,430	17,100
Couples with	24,900	24,980	24,830	24,220	23,940	14,600	15,320	16,690	18,020	18,940
One parent	8,250	8,160	8,070	7,980	7,900	9,990	10,300	10,870	11,600	12,120
One person	24,110	25,050	27,290	30,120	31,960	17,090	18,210	20,580	23,600	25,980
Other	3,830	3,760	3,560	3,510	3,480	5,040	5,150	5,400	5,490	5,520
Total	98,870	101,420	105,480	110,000	112,930	58,110	60,960	66,960	74,140	79,650
Selwyn										
Couple without	8,410	9,510	11,580	14,800	18,280	1,190	1,330	1,660	2,420	3,350
Couples with	7,450	8,110	9,150	10,490	11,530	1,990	2,240	2,710	3,240	3,550
One parent	1,020	1,110	1,310	1,520	1,680	610	680	780	940	1,070
One person	2,500	2,840	3,780	5,260	6,930	1,190	1,360	1,790	2,450	3,120
Other	360	360	410	480	590	200	220	280	340	420
Total	19,730	21,930	26,230	32,560	39,020	5,180	5,820	7,200	9,400	11,510

Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

NB: Results are base ten rounded

Table 3.7 presents the projected change in the number of households by tenure and household composition.

Table 3.7: Growth in the number of households by tenure and household composition

	Owner occupiers				Renters			
	21 to 24	34 to 31	31 to 51	21 to 51	21 to 24	34 to 31	31 to 51	21 to 51
Waimakariri								
Couple without	850	1,400	2,760	5,010	150	440	1,460	2,050
Couples with	220	430	910	1,560	130	320	770	1,220
One parent	30	70	220	320	70	130	420	620
One person	440	1,020	1,990	3,450	160	380	970	1,510
Other	30	-10	50	70	10	10	50	70
Total	1,550	2,920	5,940	10,410	530	1,270	3,670	5,470
Christchurch City	0	0	0	0	0	0	0	0
Couple without	1,700	2,260	3,900	7,860	580	1,420	3,700	5,700
Couples with	80	-150	-890	-960	720	1,370	2,250	4,340
One parent	-90	-90	-170	-350	310	570	1,250	2,130
One person	940	2,240	4,670	7,850	1,120	2,370	5,400	8,890
Other	-70	-200	-80	-350	110	250	120	480
Total	2,550	4,060	7,450	14,060	2,850	6,000	12,690	21,540
Selwyn	0	0	0	0	0	0	0	0
Couple without	1,100	2,070	6,700	9,870	140	330	1,690	2,160
Couples with	660	1,040	2,380	4,080	250	470	840	1,560
One parent	90	200	370	660	70	100	290	460
One person	340	940	3,150	4,430	170	430	1,330	1,930
Other	0	50	180	230	20	60	140	220
Total	2,200	4,300	12,790	19,290	640	1,380	4,310	6,330

Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

NB: Results are base ten rounded

Couples without children and one person households dominate growth for both owner occupier and renter households.

3.3 Projected growth by subarea

The projected rate of growth varies across the subareas within each local authority area. Table 3.8 presents the projected growth in the number of households between 2021 and 2051 by subarea.

Table 3.8: The projected growth in the number of households between 2021 and 2051 by subarea.

	2021	2024	2031	2041	2051	21 to 51
Rangiora	8,250	8,840	10,030	11,520	12,740	4,490
Kaiapoi	5,490	5,900	6,550	7,310	7,880	2,390
Woodend	3,180	3,610	4,600	5,900	6,930	3,750
UDS Rural Settlements	1,790	1,940	2,270	2,670	2,950	1,160
Oxford	1,040	1,110	1,250	1,420	1,540	500
Rural	6,490	6,960	7,980	9,210	10,140	3,650
Subareas' total	**26,240**	**28,360**	**32,690**	**38,030**	**42,190**	**15,950**
Banks Peninsula	1,550	1,580	1,670	1,730	1,720	170
Central City	4,510	5,610	6,690	8,240	9,890	5,380
Inner East	12,960	13,230	13,770	14,270	14,440	1,480
Inner West	8,280	8,450	8,890	9,360	9,630	1,350
Lyttelton Harbour	2,670	2,720	2,840	2,940	2,930	260
NorthEast	31,280	32,090	33,990	36,200	37,730	6,450
NorthWest	34,310	35,200	37,270	39,670	41,310	7,000
Port Hills	12,150	12,380	12,900	13,330	13,350	1,200
SouthEast	14,930	15,150	15,610	15,940	15,960	1,030
SouthWest	34,390	35,980	38,850	42,470	45,670	11,280
Subareas' total	157,030	162,390	172,480	184,150	192,630	35,600
Rolleston	7,020	8,270	10,780	14,540	18,320	11,300
Lincoln	2,770	3,280	4,290	5,800	7,320	4,550
GCP rural	5,020	5,250	5,710	6,390	7,060	2,040
Rural	5,430	5,620	5,990	6,560	7,110	1,680
Leeston & Darfield	2,040	2,180	2,460	2,890	3,300	1,260
Prebbleton & West Melton	2,620	3,150	4,210	5,790	7,400	4,780
Subareas' total	**24,910**	**27,750**	**33,430**	**41,970**	**50,510**	**25,600**

Source: Modelled based on data from Statistics New Zealand and Greater Christchurch Partnership

NB: Numbers are rounded to the nearest 10 in the modelling

Rangiora is projected to be the fastest growing area in Waimakariri with the number of households in the subarea increasing by 54% between 2021 and 2051 followed by Woodend. Christchurch City is projected to experience strong growth in SouthWest, Port Hills NorthEast and NorthWest subareas. In Selwyn District, Rolleston, Lincoln and Prebbleton/West Melton are all expected to grow strongly over the next 30 years.

3.4 Housing outcomes by ethnicity

The objective of this sub-section of the report is to provide an overview of key statistics relevant to housing outcomes by ethnicity. Analysis of trends by ethnicity is problematic due in part to the way in which Statistics New Zealand surveys respondents' ethnicity. In the Census respondents are asked to identify which ethnicities they identify with and can respond to multiple ethnic groupings. Hence there are more responses by ethnicity than people living in an area. In addition, the household reference persons ethnicity may or may not reflect the ethnicity of the rest of the people living in the dwelling.

Previous research[5] into trends in the rate of owner occupation show that the majority of the statistically significant variation in home ownership rates can be explained by age of the key householders, household composition, household income and a locational variable. The research suggests that once these variables are included in the analysis ethnicity is not a statistically significant variable. Personal and household incomes have a significant impact on housing outcomes. Lower income households typically have much higher levels of housing stress and are more likely to rent rather than own the dwelling they live in.

Table 3.9 presents the level of household income by ethnicity of the household reference person in greater Christchurch in 2018.

[5] See Morrison P. (2005) *"The changing patterns of home ownership in New Zealand"*. A report for the Centre for Housing Research Aotearoa New Zealand.

Table 3.9: Household income by ethnicity in 2018

	European / NZer & other		Māori		Pasifika		Asian		Total	
	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total
Waimakariri District										
Less than $30,000	2,979	16%	261	11%	24	10%	51	8%	3,318	15%
$30,000 to $50,000	2,814	15%	264	11%	30	12%	84	13%	3,189	14%
$50,000 to $70,000	2,337	13%	276	12%	24	10%	99	15%	2,733	12%
$70,000 to $100,000	3,126	17%	462	20%	51	20%	150	23%	3,789	17%
$100,000 to $150,000	3,849	21%	546	23%	63	25%	135	21%	4,596	21%
Over $150,000	2,610	14%	384	16%	33	13%	96	15%	3,123	14%
Total stated	17,718	97%	2196	93%	222	89%	615	94%	20,751	94%
Not stated	561	3%	159	7%	24	10%	42	6%	1,275	6%
Total	18,276	100%	2352	100%	249	100%	657	100%	22,026	100%
Christchurch City										
Less than $30,000	19,473	20%	2715	16%	483	14%	2,427	14%	25,098	18%
$30,000 to $50,000	14,175	15%	2076	12%	393	11%	2,262	13%	18,906	14%
$50,000 to $70,000	12,702	13%	2175	13%	486	14%	2,622	15%	17,985	13%
$70,000 to $100,000	14,454	15%	2796	17%	600	17%	3,351	19%	21,201	15%
$100,000 to $150,000	18,312	19%	3342	20%	744	21%	3,474	19%	25,872	19%
Over $150,000	15,036	16%	2496	15%	477	14%	2,361	13%	20,370	15%
Total stated	94,152	97%	15600	94%	3183	92%	16,497	92%	129,429	94%
Not stated	2,454	3%	1083	6%	294	8%	1,377	8%	8,952	6%
Total	96,603	100%	16683	100%	3,477	100%	17,874	100%	138,381	100%
Selwyn District										
Less than $30,000	1,464	9%	114	6%	12	5%	105	9%	1,695	9%
$30,000 to $50,000	1,659	11%	132	7%	15	7%	141	12%	1,947	10%
$50,000 to $70,000	1,779	11%	189	9%	21	10%	174	14%	2,163	11%
$70,000 to $100,000	2,790	18%	378	19%	36	16%	267	22%	3,471	18%
$100,000 to $150,000	4,290	27%	639	32%	75	34%	330	27%	5,334	28%
Over $150,000	3,792	24%	558	28%	60	27%	192	16%	4,602	24%
Total stated	15,774	100%	2,010	100%	219	100%	1,209	100%	19,212	100%
Not stated	537		141		33		117		828	
Total	16,311		2,151		252		1,326		20,040	

Source: Statistics New Zealand

Households with people of European descent account for 81% of all households living in Selwyn District. Māori households account for a further 11%, Pasifika 1% and Asian households the remaining 7%. Asian households had the loWest income profile with 43% of households earning over $100,000 per annum compared to 51% in households of European descent, 60% Māori households and 61% of Pasifika households.

Table 3.10 summarises the proportion of households by low, medium and high household incomes in 2018.

Table 3.10: The proportion of households with low medium and high household incomes by ethnicity

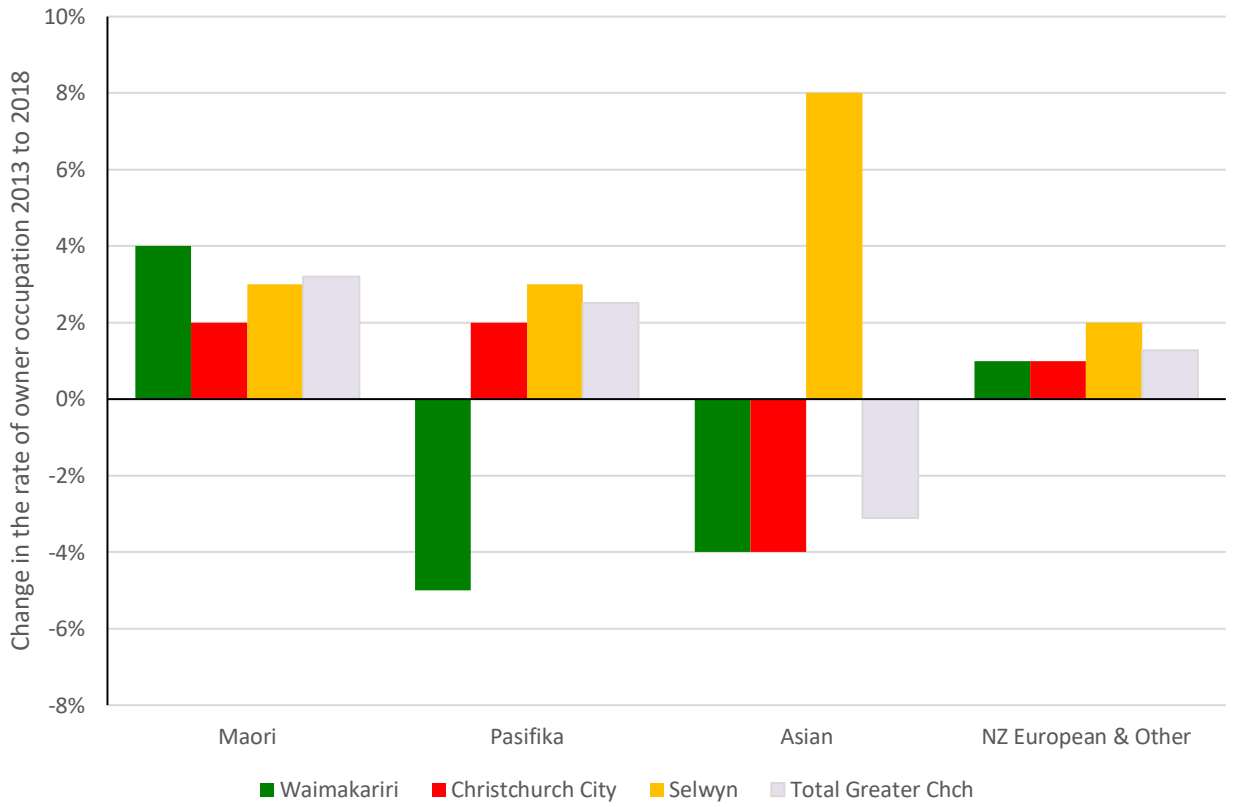
	European / NZer & other		Māori		Pasifika		Asian		Total	
	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total	Hhlds	% of Total
Waimakariri District										
Less than $70,000	8,130	46%	801	37%	78	35%	234	38%	9,240	45%
$70,000 to $100,000	3,126	18%	462	21%	51	23%	150	24%	3,789	18%
More than $100,000	6,459	36%	930	42%	96	43%	231	38%	7,719	37%
Total stated	17,715	100%	2,193	100%	225	100%	615	100%	20,748	100%
Christchurch City										
Less than $70,000	46,350	49%	6,966	45%	1,362	43%	7,311	44%	61,989	48%
$70,000 to $100,000	14,454	15%	2,796	18%	600	19%	3,351	20%	21,201	16%
More than $100,000	33,348	35%	5,838	37%	1,221	38%	5,835	35%	46,242	36%
Total stated	94,152	100%	15,600	100%	3,183	100%	16,497	100%	129,432	100%
Selwyn District										
Less than $70,000	4,902	31%	435	22%	48	22%	420	35%	5,805	30%
$70,000 to $100,000	2,790	18%	378	19%	36	16%	267	22%	3,471	18%
More than $100,000	8,082	51%	1,197	60%	135	62%	522	43%	9,936	52%
Total stated	15,774	100%	2,010	100%	219	100%	1,209	100%	19,212	100%
Greater Christchurch										
Less than $70,000	59,382	47%	8,202	41%	1,488	41%	7,965	43%	77,034	45%
$70,000 to $100,000	20,370	16%	3,636	18%	687	19%	3,768	21%	28,461	17%
More than $100,000	47,889	38%	7,965	40%	1,452	40%	6,588	36%	63,897	38%
Total stated	127,641	100%	19,803	100%	3,627	100%	18,321	100%	169,392	100%

Source: Statistics New Zealand

Households with people of New Zealander/European descent had lower propotion of households with incomes in excess of $100,000 per annum when compared Mäori and Pasifika households. Selwyn District had the highest proportion of households with incomes in excess of $100,000 per annum (52% of all households). Followed by Waimakariri (37% of all households) and Christchurch City (with 36% of all households). Christchurch City also had the highest proportion of households with incomes less than $70,000 per annum at 48% of all households, compared to 45% in Waimakariri, and 30% in Selwyn District.

Figure 3.5 presents the percentage point change in the implied level of owner occupation between 2013 and 2018 in greater Christchurch by ethnicity.

Figure 3.5: The percentage point change in the implied rate of owner occupation by ethnicity 2013 and 2018



Source: Statistics New Zealand

Rates of owner occupation increased across Mäori and New Zealander / European households in all three local authorities between 2013 and 2018. The rate of owner occupation for Pasifika households fell in Waimakariri District and increased across the balance of greater Christchurch. The rate of owner occupation for households with people of Asian descent increased in Selwyn District and fell across the balance of greater Christchurch.

Table 3.11 presents the number of households by ethnicity of the household reference person and tenure.

Table 3.11: Number of households by ethnicity and tenure

	2013			2018			Change 2013 to 2018		
	Owner Occ	Renters	HOR	Owner Occ	Renters	HOR	Owner Occ	Renters	HOR
Waimakariri District									
Mäori	1,095	561	66%	1,644	705	70%	549	144	4%
Pasifika	93	36	72%	165	81	67%	72	45	-5%
Asian	237	87	73%	456	204	69%	219	117	-4%
NZ European & Other	12,783	2,781	82%	15,132	3,144	83%	2,349	363	1%
Total	14,208	3,465	80%	17,397	4,134	81%	3,189	669	1%
Christchurch City									
Mäori	5,802	7,359	44%	7,731	8,949	46%	1,929	1,590	2%
Pasifika	999	1,617	38%	1,392	2,085	40%	393	468	2%
Asian	5,895	4,446	57%	9,474	8,400	53%	3,579	3,954	-4%
NZ European & Other	66,075	29,016	69%	67,836	28,767	70%	1,761	-249	1%
Total	78,768	42,438	65%	86,433	48,201	64%	7,665	5,763	-1%
Selwyn District									
Mäori	831	426	66%	1,488	666	69%	657	240	3%
Pasifika	75	48	61%	162	93	64%	87	45	3%
Asian	285	201	59%	882	444	67%	597	243	8%
NZ European & Other	10,128	2,415	81%	13,476	2,835	83%	3,348	420	2%
Total	11,319	3,090	79%	16,008	4,038	80%	4,689	948	1%

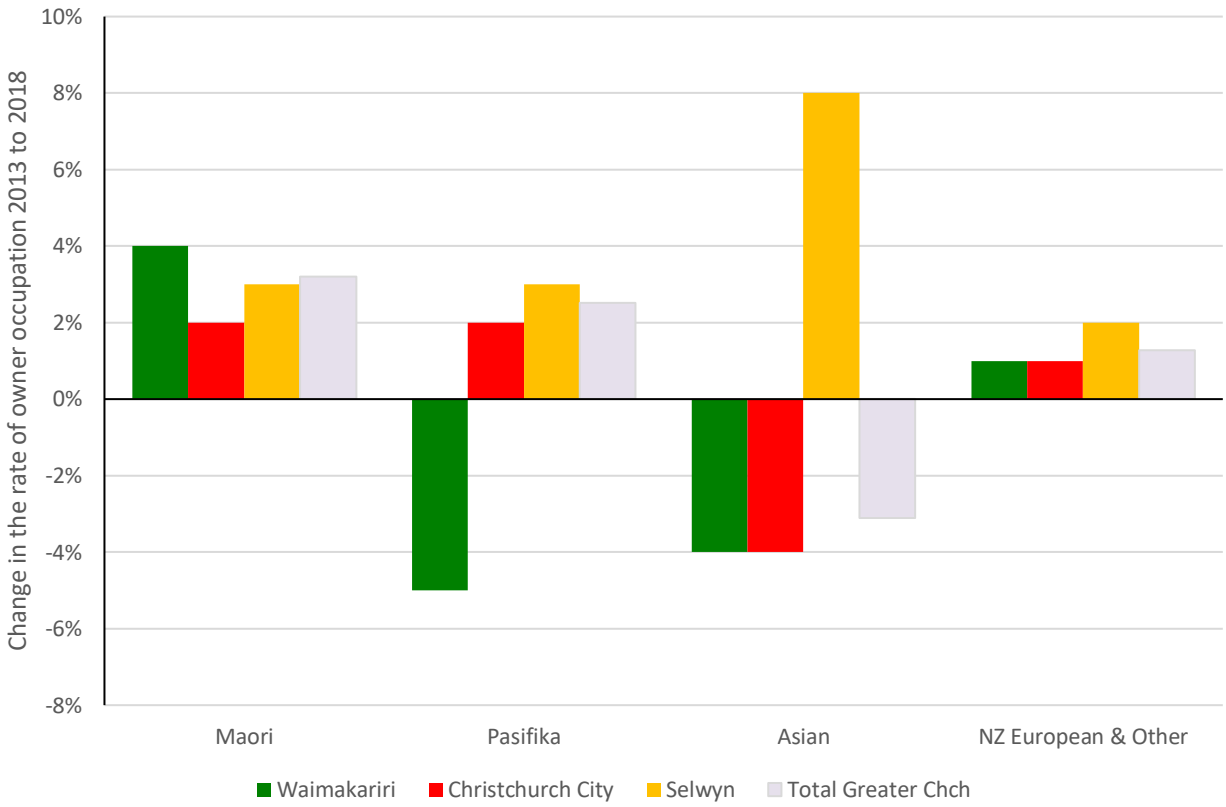
Source: Statistics New Zealand

The rates of owner occupation by ethnicity is higher in Waimakariri and Selwyn when compared to Christchurch City. Households with people of New Zealander/European descent have higher rates of owner occupation than households of other ethnicities. Other key trends include between 2013 and 2018:

- The number of owner occupiers and renter households by ethnicity increased in all three authority areas with the exception of renter households of New Zealand / European descent living in Christchurch City;
- The number of owner occupier households of New Zealander / European descent living in Selwyn and Waimakariri Districts increased faster than those living in Christchurch City (+2,349 households in Waimakariri and +3,348 households in Selwyn compared to +1,761 households in Christchurch City)
- Rate of owner occupation increased for Mäori and New Zealander / European households across all three local authority areas.
- Rates of owner occupation for Pasifika households increased in Christchurch City and Selwyn district but declined in Waimakariri District.
- Rates of owner occupation for households of Asian descent fell in Waimakariri District and Christchurch City but increased in Selwyn District.

Figure 3.6 presents the percentage point change in the implied level of owner occupation between 2013 and 2018 in greater Christchurch by ethnicity.

Figure 3.6: The percentage point change in the implied rate of owner occupation by ethnicity 2013 and 2018



Source: Statistics New Zealand

Rates of owner occupation increased across all ethnicities between 2013 and 2018.

Table 3.12 presents the trend in the number of owner occupied and renter households for reference people by ethnicity and subarea.

Table 3.12: Owner occupied and renter households by ethnicity and subarea in 2018

	Māori reference person			Non Māori reference person			Diff in
	Owner Occupier	Renter	HOR	Owner Occupier	Renter	HOR	HORs
Waimakariri District							
Rangiora	393	249	61%	4,863	1,296	79%	18% pts
Kaiapoi	423	204	67%	3,138	744	81%	14% pts
Woodend	225	87	72%	1,782	381	82%	10% pts
Oxford	30	9	77%	366	48	88%	11% pts
UDS Rural Settlements	129	18	88%	1,194	138	90%	2% pts
UDS Rural	423	126	77%	4,140	735	85%	8% pts
Total	1,623	693	70%	15,483	3,342	82%	12% pts
Christchurch City							
Banks Peninsula	111	33	77%	882	228	79%	2% pts
Central	33	210	14%	621	1,632	28%	14% pts
Inner East	393	1,116	26%	3,678	5,904	38%	12% pts
Inner West	195	531	27%	2,940	3,477	46%	19% pts
Lyttelton	165	69	71%	1,704	360	83%	12% pts
NorthEast	2,124	2,085	50%	16,410	6,510	72%	21% pts
NorthWest	1,302	1,554	46%	19,392	7,773	71%	26% pts
Port Hills	591	279	68%	8,082	1,812	82%	14% pts
SouthEast	990	1,200	45%	7,233	3,639	67%	21% pts
SouthWest	1,830	1,878	49%	17,751	7,911	69%	20% pts
	7,734	8,955	46%	78,693	39,246	67%	20% pts
Selwyn District							
Rolleston	528	207	72%	3,942	861	82%	10% pts
Lincoln	126	45	74%	1,575	375	81%	7% Pts
Prebbleton-West Melton	153	18	89%	1,860	111	94%	5% pts
GCP Rural	282	198	59%	3,150	720	81%	22% pts
Leeston & Darfield	135	54	71%	1,323	324	80%	19% pts
Rural	264	147	64%	2,652	981	73%	9% pts
Total	1,488	666	69%	14,520	3,372	81%	12% pts

Source: Statistics New Zealand

Households identifying as Māori had lower rates of owner occupation than non-Māori with the greatest difference in GCP Rural subarea. Māori households living in GCP Rural subarea also had the loWest rate (59%) of owner occupation in 2018 followed by the Rural subarea (64%).

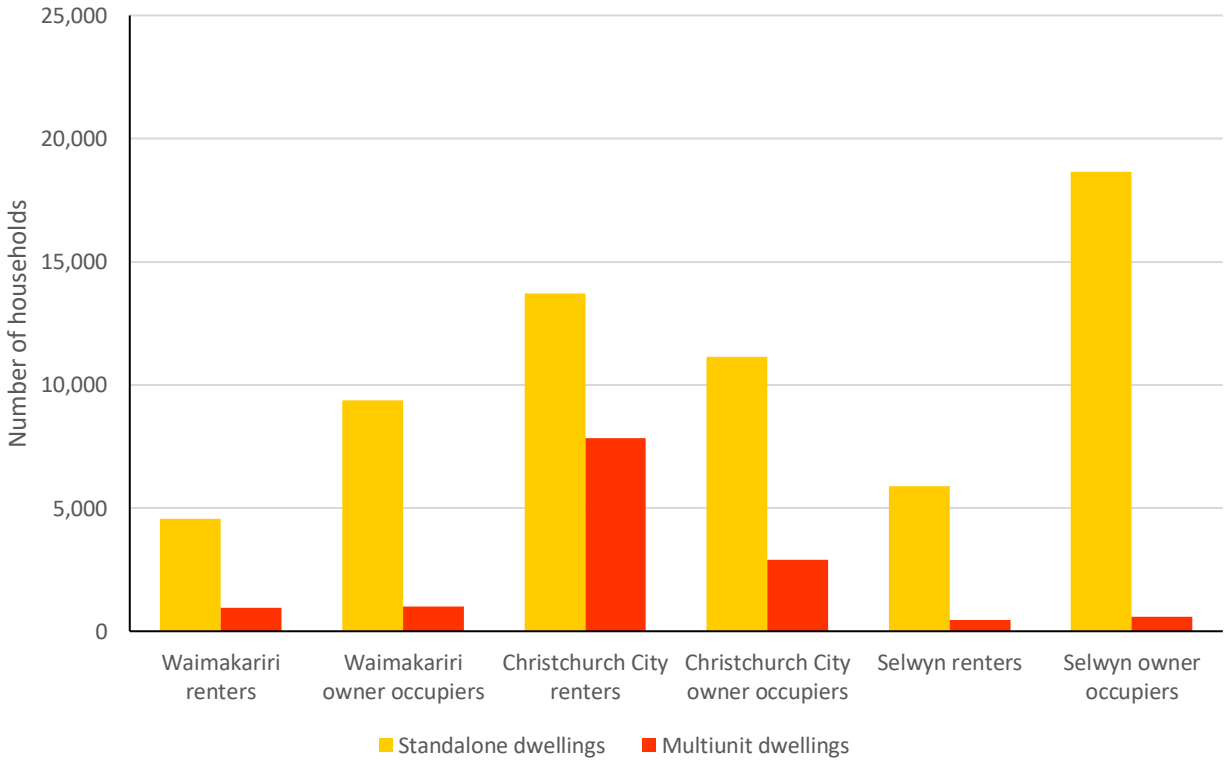
3.5 Implications of the projected growth in households for housing demand by dwelling typology

The objective of this section of the report is to present the results of the modelling of the implications of demographic and tenure trends on the demand for dwellings by typology. An overview of the methodology used is presented in Appendix 2 and assumes the propensity for households with different characteristics (age, household composition and tenure) for different dwelling typologies[6] remains the same between 2021 and 2051. Dwelling typology is divided into the following categories:

- Standalone dwelling with two bedrooms or less;
- Standalone dwelling with three bedrooms or more;
- Multi-unit dwelling with two bedrooms or less; and
- Multi-unit dwelling with three bedrooms or more.

Figure 3.7 presents a summary of the projected growth in demand by dwelling typology and tenure in between 2021 and 2051. Note more detail is provided in the following table.

Figure 3.7: Projected demand by dwelling typology and tenure



Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling

[6] Standalone dwellings are defined as single unit dwellings not attached to any other buildings. Multi unit dwellings includes a wide range of dwelling typologies where two or more dwellings are physically attached to each other. Multi-units include duplexes, terraced houses and apartments.

Demand is likely to be strongly focused on standalone dwellings with renters having a slightly higher propensity to live in multiunit dwellings. Table 3.13 presents the trend in household demand in Waimakariri District by tenure and dwelling typology between 2021 and 2051.

Table 3.13: Household demand by typology and tenure

	Owner occupiers				Renters			
	Standalone		Multi unit		Standalone		Multi unit	
	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm	2- bdrm	3+ bdrm
Waimakariri								
2021	2,060	17,870	810	320	1,100	3,450	610	100
2024	2,240	19,100	910	340	1,210	3,800	690	110
2031	2,620	21,340	1,170	390	1,460	4,590	890	140
2041	3,070	23,900	1,460	440	1,860	5,860	1,190	190
2051	3,410	25,890	1,660	480	2,200	6,910	1,420	230
21 to 51	1,350	8,020	850	160	1,100	3,460	810	130
Chch City								
2021	12,730	74,200	8,140	3,800	12,760	26,840	15,260	3,250
2024	13,150	75,930	8,440	3,900	13,400	28,070	16,090	3,390
2031	13,930	78,360	9,130	4,070	14,810	30,500	17,980	3,680
2041	14,930	80,840	9,970	4,270	16,620	33,170	20,340	4,000
2051	15,590	82,470	10,460	4,390	17,930	35,390	22,070	4,280
21 to 51	2,860	8,270	2,320	590	5,170	8,550	6,810	1,030
Selwyn								
2021	1,830	17,380	100	430	1,380	3,490	190	120
2024	2,040	19,290	110	480	1,540	3,930	210	140
2031	2,640	22,850	120	620	2,050	4,690	270	190
2041	3,390	28,230	130	800	2,750	6,030	350	280
2051	4,080	33,780	150	960	3,380	7,370	430	350
21 to 51	2,250	16,400	50	530	2,000	3,880	240	230

Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling

Demand for standalone dwellings is projected to continue to be strong particularly in Waimakariri and Selwyn Districts. Demand for standalone dwellings is also expected to be strong in Christchurch City however and a strong increase in the demand for multiunit dwellings particularly from renter households is projected.

3.6 Implications of the projected growth in households by subarea for housing demand by dwelling typology

Table 3.14 presents the projected trend in household demand by dwelling typology between 2021 and 2051 by subareas.

Table 3.14: The projected trend in household demand by dwelling typology between 2021 and 2051 by subareas.

	Standalone dwellings						Multiunit dwellings					
	2021	2024	2031	2041	2051	21 to 51	2021	2024	2031	2041	2051	21 to 51
Waimakariri Subareas												
Rangiora	7,040	7,450	8,150	9,210	10,110	3,070	1,220	1,380	1,790	2,320	2,670	1,450
Kaiapoi	5,520	6,060	6,680	7,170	2,020	330	370	450	520	570	240	0
Woodend/Pegasus/Ravenswood	3,040	3,470	4,430	5,670	6,580	3,540	110	120	160	210	270	160
UDS Rural Settlements	1,040	1,110	1,250	1,420	1,540	500	0	0	0	0	0	0
Oxford	1,780	1,930	2,240	2,580	2,800	1,020	0	0	0	0	0	0
UDS Rural	6,450	6,910	7,920	9,130	10,060	3,610	80	90	100	110	120	40
Total	24,870	26,930	30,670	35,180	33,110	12,070	1,780	2,040	2,570	3,210	3,300	1,650
Christchurch City Subareas												
Banks Peninsula	1,510	1,540	1,630	1,700	1,660	150	20	20	20	20	20	0
Central City	1,670	2,110	2,550	3,160	3,850	2,180	2,840	3,510	4,200	5,130	6,150	3,310
Inner-East	6,830	7,000	7,220	7,430	7,610	780	6,130	6,260	6,570	6,840	6,830	700
Inner-West	4,810	4,960	5,190	5,450	5,640	830	3,470	3,540	3,740	3,920	3,970	500
Lyttelton Harbour	2,630	2,680	2,790	2,900	2,880	250	40	40	50	50	50	10
NorthEast	27,450	28,140	29,540	31,200	32,420	4,970	3,850	3,990	4,510	5,050	5,320	1,470
NorthWest	29,050	29,720	31,310	33,070	34,260	5,210	5,310	5,540	5,980	6,610	7,100	1,790
Port Hills	11,150	11,380	11,810	12,080	11,920	770	1,060	1,070	1,150	1,300	1,340	280
SouthEast	12,070	12,230	12,490	12,610	12,540	470	2,880	2,920	3,100	3,320	3,430	550
SouthWest	29,220	30,430	32,720	35,610	38,330	9,110	5,170	5,510	6,120	6,890	7,380	2,210
Total	126,390	130,190	137,250	145,210	151,110	24,720	30,770	32,400	35,440	39,130	41,590	10,820
Selwyn subareas												
Rolleston	6,840	8,040	10,460	14,060	17,620	10,780	190	230	330	500	700	510
Lincoln	2,760	3,270	4,310	5,870	7,070	4,310	150	180	240	330	450	300
Prebbleton & West Melton	2,600	3,130	4,210	5,810	7,350	4,750	40	40	60	80	120	80
GCP Rural	4,920	5,130	5,580	6,260	6,900	1,980	150	170	200	240	240	90
Leeston & Darfield	2,030	2,160	2,460	2,890	3,160	1,130	100	100	120	160	200	100
Rural	5,230	5,380	5,740	6,310	6,840	1,610	240	250	280	300	300	60
Total	24,380	27,110	32,760	41,200	48,940	24,560	870	970	1,230	1,610	2,010	1,140

Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling

The distribution of demand reflects households' propensity for different dwelling typologies in each subarea. Demand for multiunit dwellings is highest in Christchurch City's central subarea.

4. Housing affordability and need

4.1 Introduction

The objective of this section of the report is to present the trends in housing affordability in Selwyn District and subareas and discuss:

- Trends in housing affordability;
- Housing continuum;
- Renter housing stress;
- Location of where low-income renters live within the district; and
- Crowding, homelessness; and
- Housing need.

4.2 Trends in housing affordability

Housing affordability varies with the movement in household incomes, interest rates, market rents and house prices. Housing affordability is considered compromised when housing costs (rents or the cost to service a mortgage plus other housing costs) exceed 30% of gross household income. Housing affordability is typically measured as:

- Renter affordability – renters' ability to pay affordably the median market rent; and
- First home buyer affordability - renters' ability to purchase a dwelling at either the lower quartile or median dwelling sale price.

Housing affordability comes under pressure when housing costs increase at a faster rate than household incomes. Variations in interest rates can mask the underlying trends in first home buyer affordability in the short to medium term.

4.3 Metropolitan area affordability trends

Housing costs across the whole metropolitan area have increased since the early 1990s. Table 4.1 presents the trend in median rents, lower quartile house prices, and median household incomes[7] in Waimakariri District, Christchurch City and Selwyn District between 1991 and 2020.

[7] Household incomes are assumed to have increased at 3.5% per annum between 2013 and 2019

Table 4.1: Rents, house prices and household incomes in Selwyn District, Christchurch City and Selwyn District between 1991 and 2020

	Waimakariri District			Christchurch City			Selwyn District		
	Median rent	Lower Quartile HP	Median household income	Median rent	Lower Quartile HP	Median household income	Median rent	Lower Quartile HP	Median household income
1991	$146	$80,000	$31,100	$147	$68,000	$31,100	$134	$61,000	$35,500
1996	$157	$95,000	$34,700	$171	$115,000	$32,900	$164	$90,000	$39,100
2001	$181	$110,500	$39,700	$171	$126,800	$36,500	$168	$104,000	$47,200
2006	$246	$240,000	$50,900	$244	$253,000	$48,200	$266	$266,000	$62,500
2013	$394	$325,000	$68,800	$356	$336,000	$65,300	$435	$399,500	$85,100
2018	$381	$380,000	$81,700	$345	$344,500	$77,600	$406	$481,500	$101,100
2019	$400	$385,000	$84,600	$345	$345,000	$80,300	$432	$457,750	$104,600
2020	$420	$402,000	$87,600	$400	$380,000	$83,100	$468	$487,000	$109,200
2021 Est	$460	$435,000	$90,700	$420	$431,000	$86,000	$500	$540,000	$113,000
Change									
91 to 96	8%	19%	12%	16%	69%	6%	22%	48%	10%
96 to 01	15%	16%	14%	0%	10%	11%	2%	16%	21%
01 to 06	36%	117%	28%	43%	100%	32%	58%	156%	32%
06 to 13	60%	35%	35%	46%	33%	35%	64%	50%	36%
13 to 18	-3%	17%	19%	-3%	3%	19%	-7%	21%	19%
18 to 19	5%	1%	4%	0%	0%	3%	6%	-5%	3%
19 to 20	5%	4%	4%	16%	10%	3%	8%	6%	4%
91 to 20	188%	403%	182%	171%	459%	167%	248%	698%	208%

Source: HUD, MBIE, Headway Systems, Corelogic and Statistics New Zealand

Market rents increased marginally faster than household incomes between 1991 and 2020. However, Selwyn District house prices increased 3.4 times faster than median household incomes between 1991 and 2020. Similar trends occurred in Waimakariri District (house prices increased 2.2 times faster than median household incomes) and Christchurch (house prices increased 2.7 times faster than median household incomes). The faster growth in house prices, relative to household incomes has continued to place pressure on housing affordability for first home buyers.

Table 4.2 presents the proportion of household income required to pay either the median rent or service the loan required to buy a dwelling priced at the lower quartile house sale price (assuming a 10% deposit).

Table 4.2: The proportion of median household income required to pay the median rent or service the mortgage required to buy at the LQHP

	Waimakariri District		Christchurch City		Selwyn District	
	% of MHI to pay median rent	% of MHI to service mortgage	% of MHI to pay median rent	% of MHI to service mortgage	% of MHI to pay median rent	% of MHI to service mortgage
1991	24%	33%	25%	28%	20%	22%
1996	24%	28%	27%	35%	22%	23%
2001	24%	24%	24%	30%	19%	19%
2006	25%	45%	26%	50%	22%	40%
2013	30%	32%	28%	35%	27%	32%
2018	24%	32%	23%	30%	21%	32%
2019	25%	31%	22%	29%	21%	30%
2020	25%	27%	25%	27%	22%	27%
2021	26%	28%	25%	30%	23%	28%

Source: Modelled based on data from RBNZ, HUD, MBIE, Headway Systems, Corelogic and Statistics New Zealand

The proportion of median household income in Selwyn District required to pay the median market rent has fluctuated between 19% and 27%. The peak of 27% occurred after the 2010/2011 earthquakes and coincides with a significant housing shortage in greater Christchurch. Subsequently, these pressures have eased and rents as a proportion of household incomes have fallen back to 22% in 2020. The proportion of median household income required to service a mortgage (assuming a dwelling is purchased at the lower quartile house sale price with a 10% deposit) has varied between 19% and 40% between 1991 and 2020. The peak (40% of household income) coincided with a peak in mortgage interest rates in the mid-2000s. Historic lows in mortgage interest rates have offset the growth in house prices at this stage of the housing market cycle.

Table 4.3 presents the household income required to affordably pay the lower quartile rent, median rent and service a dwelling purchased at the lower quartile house sale price, as a percentage of median household income.

Table 4.3: The proportion of median household income required to affordably pay rent or buy a dwelling

Year	Median rents, lower quartile house price and median income			The hhold income required to affordably pay the median rent and service a dwelling purchased at the LQHP, as a % of median hhold income	
	Median rent	Lower quartile house price	Median household income	Median Rent	Lower quartile house price
Waimakariri					
2001	$181	$110,500	$39,700	79%	79%
2006	$246	$340,000	$50,900	84%	211%
2013	$394	$325,000	$68,800	99%	108%
2018	$381	$380,000	$81,700	81%	97%
2020	$425	$402,000	$87,600	84%	91%
2021	$460	$435,000	$90,700	88%	95%
Chge 96 to 20	154%	294%	128%	+9% pts	+16% pts
Christchurch City					
2001	$171	$126,800	$36,500	81%	99%
2006	$244	$253,000	$48,200	88%	166%
2013	$356	$336,000	$65,300	94%	118%
2018	$345	$344,500	$77,600	77%	92%
2020	$400	$380,000	$83,100	83%	91%
2021	$420	$431,000	$86,000	85%	99%
Chge 96 to 20	146%	240%	136%	+4% pts	0% pts
Selwyn					
2001	$168	$104,000	$47,200	62%	63%
2006	$266	$266,000	$62,500	74%	134%
2013	$435	$399,500	$85,100	89%	107%
2018	$406	$481,500	$101,100	70%	99%
2020	$468	$487,000	$109,200	74%	89%
	$500	$540,000	$113,022	77%	94%
Chge 96 to 20	198%	419%	139%	+15% pts	+32% pts

Source: based on data from Statistics New Zealand, MBIE and Headway Systems

Housing unaffordability peaked in 2013 in the rental market and 2006 for first home buyers. Falling interest rates have improved first home buyer housing affordability since 2013. The proportion of median household income required to affordably buy a dwelling or affordably pay the median rent increased between 2020 and 2021 in all three local authority areas.

Table 4.4 presents the ratio of median house sale price to median household income between 2001 and 2020 and the proportion of household income required to service a mortgage at the median dwelling sale price by subarea.

Table 4.4: Median house price to median household income by subarea

	2001	2006	2013	2018	2020
Waimakariri Subareas					
Rangiora	4.1	6.3	6.4	7.3	7.1
Kaiapoi	3.8	5.6	6.3	6.8	7.0
Woodend	3.4	5.7	5.6	5.9	6.0
Oxford	4.6	6.8	6.7	7.5	7.0
UDS Rural Settlements	4.0	5.4	4.5	6.8	5.7
UDS Rural	2.2	4.7	3.8	4.7	5.1
Chch City Subareas					
Banks Peninsula	5.4	8.6	7.1	8.5	8.6
Central	5.8	8.1	5.5	7.7	7.4
Inner East	4.6	7.3	5.7	6.9	7.2
Inner West	6.2	8.1	7.3	10.2	10.0
Lyttelton	3.8	6.6	5.6	6.1	6.8
NorthEast	3.8	5.8	4.6	5.8	5.3
NorthWest	4.0	5.7	5.8	6.6	6.7
Port Hills	4.3	6.2	5.1	6.2	6.4
SouthEast	3.8	5.7	5.5	6.3	6.7
SouthWest	4.2	6.3	5.6	6.7	6.6
Selwyn Subareas					
Rolleston	3.4	5.1	5.3	4.7	4.7
Lincoln	4.4	5.4	6.5	5.5	5.8
Prebbleton & West Melton	3.3	5.3	5.8	5.9	6.0
Darfield and Leeston	4.2	4.8	5.8	5.3	5.4
GCP Rural	3.2	6.5	5.8	5.7	5.9
Rural	3.0	4.4	4.7	4.7	4.7

These ratios reflect the relationship between median household incomes and house prices in each subarea. High median household incomes in Selwyn District's subareas result in lower ratios in Christchurch City's subareas which typically have lower median household incomes.

Table 4.5 presents the median market rent as a percentage of the median gross household income between 2001 and 2020.

Table 4.5: Median rent as a percentage of median household income

	2001	2006	2013	2018	2020
Waimakariri Subareas					
Rangiora	26%	30%	35%	32%	33%
Kaiapoi	26%	28%	30%	31%	28%
Woodend	21%	27%	29%	28%	27%
Oxford	27%	31%	35%	39%	34%
UDS Rural Settlements	17%	18%	19%	18%	19%
UDS Rural	17%	22%	25%	28%	27%
Chch City Subareas					
Banks Pen	32%	46%	41%	38%	39%
Central	32%	35%	33%	37%	37%
Inner East	43%	47%	45%	45%	40%
Inner West	26%	30%	30%	30%	30%
Lyttelton	25%	26%	27%	27%	26%
NorthEast	27%	29%	30%	29%	24%
NorthWest	22%	23%	25%	26%	25%
Port Hills	16%	18%	19%	19%	19%
SouthEast	24%	27%	31%	33%	32%
SouthWest	28%	31%	31%	29%	29%
Selwyn Subareas					
Rolleston	21%	27%	27%	21%	21%
Lincoln	24%	23%	25%	24%	23%
Prebbleton & West Melton	25%	22%	23%	21%	20%
Darfield and Leeston	22%	25%	29%	24%	24%
GCP Rural	0%	0%	24%	19%	19%
Rural	22%	24%	24%	25%	22%

These ratios reflect the cost of market rents relative to median household incomes. The lower the ratio the more affordable the location. With some exceptions, Christchurch City's subareas are less affordable than Waimakariri and Selwyn's subareas typically as a result of lower median household incomes.

Table 4.6 presents the proportion and number of renter households that are unable to affordably[8] pay the median market rent or buy a dwelling at the lower quartile sale price.

Table 4.6: The proportion and number of renter households unable to affordably rent or buy in 2018 and 2020

	Renters unable to affordably rent at the median market rent				Renters unable to affordably purchase at lower quartile house price			
	No of private rents		% of private renters		No of private rents		% of private renters	
	2018	2020	2018	2020	2018	2020	2018	2020
Waimakariri								
Rangiora	1,200	1,356	64%	66%	1,332	1,407	71%	68%
Kaiapoi	730	820	64%	65%	778	857	68%	68%
Woodend	248	249	46%	41%	295	314	54%	51%
Oxford	283	255	82%	82%	282	255	82%	82%
UDS Rural Settlements	-	-	-	-	-	-	-	-
UDS Rural	616	611	60%	56%	545	528	53%	48%
Christchurch City								
Banks Pen	246	206	48%	46%	287	228	56%	51%
Central	1,211	1,475	52%	49%	1,294	1,569	56%	52%
Inner East	5,381	5,211	66%	63%	4,076	4,314	50%	52%
Inner West	2,466	2,464	54%	53%	3,083	3,180	67%	68%
Lyttelton	276	279	50%	51%	303	315	54%	58%
NorthEast	5,591	6,270	57%	62%	5,606	5,977	57%	59%
NorthWest	5,501	4,711	52%	44%	6,914	6,943	66%	64%
Port Hills	874	821	37%	32%	1,321	1,423	55%	56%
SouthEast	3,213	2,925	58%	52%	3,151	3,262	57%	58%
SouthWest	5,775	6,515	53%	57%	6,837	6,860	62%	60%
Selwyn								
Rolleston	320	440	29%	33%	650	740	59%	56%
Lincoln	250	300	56%	55%	360	440	81%	81%
Prebbleton-West Melton	60	80	50%	51%	100	140	84%	89%
GCP Rural	420	500	41%	47%	820	830	81%	79%
Leeston & Darfield	180	240	45%	57%	270	280	68%	67%
Rural	790	640	53%	42%	940	920	64%	60%

Oxford has the highest proportion of renters unable to affordably rent a dwelling (at the median market rent) in greater Christchurch. The Rangiora and Kaiapoi subareas are also relatively unaffordable followed by

[8] A household can affordably rent or buy a dwelling if it spends no more than 30% of its gross household income on housing costs

Christchurch City's Inner East subarea. Lincoln and Prebbleton and GCP Rural in Selwyn District are the lEast affordable subareas for a renter to affordably buy a dwelling.

Table 4.7 presents the number and proportion of private renter households unable to affordably buy at dwelling at a range of key price points.

Table 4.7: The number and proportion of private renter households unable to affordably buy at dwelling

	No of private renter households unable to affordably buy					% of private renters households unable to affordably buy				
	$500,000	$550,000	$600,000	$650,000	$700,000	$500,000	$550,000	$600,000	$650,000	$700,000
Waimakariri										
Rangiora	1,610	1,660	1,700	1,750	1,800	85%	88%	90%	93%	95%
Kaiapoi	950	990	1,020	1,050	1,080	84%	87%	89%	92%	95%
Woodend	380	400	430	460	490	69%	74%	79%	84%	90%
Oxford	350	350	350	350	350	100%	100%	100%	100%	100%
UDS Rural Set	20	60	100	140	190	4%	14%	25%	35%	45%
UDS Rural	820	860	900	940	980	79%	83%	87%	91%	94%
Chch City										
Banks Pen	410	430	460	480	500	80%	85%	89%	94%	98%
Central	1,610	1,710	1,810	1,910	2,010	69%	73%	78%	82%	86%
Inner East	6,560	6,790	7,030	7,260	7,500	81%	84%	87%	90%	93%
Inner West	3,300	3,470	3,650	3,830	4,010	72%	76%	79%	83%	87%
Lyttelton	390	410	440	470	500	70%	74%	79%	84%	89%
NorthEast	7,860	8,170	8,470	8,780	9,080	80%	83%	86%	89%	92%
NorthWest	7,930	8,270	8,620	8,960	9,310	75%	79%	82%	85%	89%
Port Hills	1,520	1,620	1,720	1,830	1,930	64%	68%	72%	76%	80%
SouthEast	4,650	4,800	4,950	5,110	5,260	84%	86%	89%	92%	95%
SouthWest	8,300	8,680	9,060	9,440	9,820	76%	79%	82%	86%	89%
Selwyn										
Rolleston	590	660	730	800	870	53%	60%	66%	72%	79%
Lincoln	400	430	450	480	510	71%	75%	80%	85%	90%
Prebbleton-West Mel	70	80	90	100	100	51%	58%	65%	72%	79%
GCP Rural	690	750	800	860	920	64%	69%	75%	80%	85%
Leeston & Darfield	390	410	430	450	470	80%	84%	89%	93%	98%
Rural	1,170	1,230	1,280	1,340	1,390	76%	80%	83%	87%	91%

The income profile of Waimakariri renter households is lower than those of Selwyn District and Christchurch City. Consequently, higher proportions of renters are unable to buy at different price points.

Table 4.8 presents the number and proportion of private renter households unable to affordably rent a dwelling at different rental price points.

Table 4.8: The number and proportion of private renter households unable to affordably rent a dwelling

	Number of private renter households unable to affordably rent						Proportion of private renter households unable to affordably rent					
	$350	$400	$450	$500	$550	$600	$350	$400	$450	$500	$550	$600
Waimakariri												
Rangiora	1,110	1,240	1,340	1,440	1,540	1,610	59%	66%	71%	76%	82%	86%
Kaiapoi	690	740	800	860	910	950	61%	65%	70%	75%	80%	84%
Woodend	180	220	260	300	340	380	34%	40%	48%	55%	63%	69%
Oxford	280	280	300	320	340	350	82%	82%	87%	92%	97%	100%
UDS Rural Setmts	-	-	-	-	-	-	-	-	-	-	-	-
UDS Rural	500	580	640	710	770	820	48%	56%	62%	68%	75%	80%
Christchurch												
Banks Peninsula	210	240	280	330	380	410	41%	46%	55%	64%	74%	80%
Central	970	1,140	1,270	1,390	1,510	1,610	42%	49%	54%	60%	65%	69%
Inner East	4,530	5,110	5,510	5,890	6,260	6,560	56%	63%	68%	73%	77%	81%
Inner West	2,110	2,420	2,650	2,880	3,110	3,300	46%	53%	58%	63%	68%	72%
Lyttelton	260	280	310	340	360	390	47%	51%	56%	61%	65%	70%
NorthEast	5,500	6,150	6,620	7,070	7,510	7,870	56%	62%	67%	72%	76%	80%
NorthWest	5,320	6,050	6,560	7,050	7,540	7,940	51%	58%	62%	67%	72%	76%
Port Hills	920	1,060	1,180	1,300	1,420	1,520	38%	44%	49%	54%	59%	64%
SouthEast	3,310	3,720	3,980	4,220	4,460	4,660	60%	67%	72%	76%	80%	84%
SouthWest	5,550	6,240	6,790	7,340	7,870	8,310	50%	57%	62%	67%	72%	76%
Selwyn												
Rolleston	250	300	380	450	520	590	23%	28%	34%	41%	48%	54%
Lincoln	220	260	300	330	370	400	39%	47%	53%	59%	66%	71%
Prebbleton-West M	40	50	50	60	60	70	31%	38%	41%	44%	47%	52%
GCP Rural	340	430	500	570	630	690	32%	40%	46%	53%	59%	64%
Leeston & Darfield	200	240	280	320	360	390	40%	49%	57%	65%	74%	80%
Rural	680	820	910	1,010	1,100	1,170	44%	53%	59%	66%	72%	76%

These outcomes reflect renter household income profiles within each subarea and their ability to affordably pay different levels of rent.

4.4 Housing stress

Private renter housing stress[9] is experienced by households that have insufficient income to affordably pay their housing costs. This can occur because either housing costs are high relative to market norms or incomes in an area are low. Renter housing stress is defined as those households that are paying more than 30% of their gross household income in rent. Severe housing stress is those households paying more than 50% of their gross household income in rent.

Table 4.9 presents the relative levels of renter housing stress by income bands.

Table 4.9: The relative level of renter housing stress in 2001 and 2018

Gross household income	Stressed (30% or more)			Severely stressed (50% or more)		
	2001	2013	2018	2001	2013	2018
Waimakariri						
Less than $30,000	76%	83%	91%	42%	59%	82%
$30,001 to $50,000	4%	64%	82%	0%	16%	30%
$50,001 to $70,000	0%	28%	54%	0%	2%	4%
$70,001 to $100,000	0%	8%	12%	0%	2%	1%
Over $ 100,000	0%	3%	3%	0%	3%	2%
Total	40%	43%	46%	22%	20%	24%
Christchurch City						
Less than $30,000	83%	90%	93%	48%	70%	83%
$30,001 to $50,000	15%	71%	85%	0%	13%	33%
$50,001 to $70,000	5%	23%	52%	0%	0%	4%
$70,001 to $100,000	0%	7%	11%	0%	1%	1%
Over $ 100,000	0%	2%	1%	0%	0%	0%
Total	37%	37%	41%	19%	16%	20%
Selwyn						
Less than $30,000	58%	90%	94%	26%	70%	79%
$30,001 to $50,000	7%	71%	62%	S	13%	33%
$50,001 to $70,000	S	23%	46%	S	0%	5%
$70,001 to $100,000	S	7%	17%	S	1%	1%
Over $ 100,000	S	2%	1%	S	0%	0%
Total	24%	37%	32%	11%	16%	16%

Source Statistics New Zealand

[9] Renter stress is significantly lower in social housing as current income related rent policy limits the cost to 25% of income in eligible households. These households typically have needs beyond affordability although it is also important to note that if they rented their accommodation in the private market they would very likely be stressed.

The proportion of households paying unaffordable levels of rent increased in Waimakariri and Christchurch City and declined in Selwyn District. The proportion of renters paying high levels of rent relative to their incomes more concentrated in households with lower incomes.

Housing stress can have a number of impacts on a household. As they spend a higher proportion of their income on housing costs they have less to spend on other items. This can led to poverty type situations. As housing costs increase relative to household incomes households face a number of choices:

- Do they pay an ever increasing amount of their income in housing costs? or
- Do they crowd with other families to increase their combined income to pay the housing costs (this can lead to a number of poor social and health outcomes)? or
- Do they relocate to poorer quality/cheaper housing or even shift out to other lower cost housing markets.

Table 4.10 presents the modelled number of stressed private renter households at 2020.

Table 4.10: Number of stressed private renter households by sub region in 2020

	Modelled number of stressed private renters 2020	Stressed renters as a % of all households
Waimakariri District	2,500	10%
Christchurch City	22,350	14%
Selwyn District	1,680	7%
Total greater Christchurch	26,530	13%

Source: Modelled based on data from Statistics New Zealand
NB: Numbers are rounded to the nearest 10 in the modelling & consequently total households may vary between tables.

Christchurch City has the highest modelled proportion of stressed renters, followed by Waimakariri District.

4.5 Crowding

The suitability of the stock relative to the population is difficult to measure. However, the level of crowding and underutilisation of the housing stock does provide a gauge of the "fit" of the dwelling stock relative to the housing market's population. Care needs to be taken as the unaffordability of housing can drive crowding. Table 4.11 presents the relative level of crowding and underutilisation of the housing stock as at 2018.

Table 4.11 The relative level of crowding and underutilisation of the housing stock in 2018

	Owner Occupiers		Renters		Total households	
	Dwellings	% of total	Dwellings	% of total	Dwellings	% of total
Waimakariri District						
1 bedroom needed (crowded)	210	1%	135	4%	345	2%
2 + bdrms needed (severely crowded)	39	0%	18	1%	57	0%
Total - crowded	249	1%	153	5%	402	2%
Total - No extra bedrooms required	1,776	10%	906	30%	2,682	13%
1 bedroom spare	5,115	30%	1,131	37%	6,246	31%
2 or more bedrooms spare	10,038	58%	873	29%	10,911	54%
Total not crowded	16,929	99%	2,910	95%	19,839	98%
Total stated	17,178	100%	3,063	100%	20,241	100%
Christchurch City						
1 bedroom needed (crowded)	1,470	2%	2,421	7%	3,891	3%
2 + bdrms needed (severely crowded)	345	0%	699	2%	1,044	1%
Total - crowded	1,815	2%	3,120	9%	4,935	4%
Total - No extra bedrooms required	11,031	13%	12,663	35%	23,694	19%
1 bedroom spare	30,681	36%	14,136	39%	44,817	37%
2 or more bedrooms spare	42,267	49%	6,228	17%	48,495	40%
Total not crowded	83,979	98%	33,027	91%	117,006	96%
Total stated	85,794	100%	36,147	100%	121,941	100%
Selwyn District						
1 bedroom needed (crowded)	147	1%	144	4%	291	2%
2 + bdrms needed (severely crowded)	42	0%	24	1%	66	0%
Total - crowded	189	1%	168	5%	357	2%
Total - No extra bedrooms required	1,242	9%	717	22%	1,959	12%
1 bedroom spare	3,882	29%	1,254	38%	5,136	30%
2 or more bedrooms spare	8,304	61%	1,152	35%	9,456	56%
Total not crowded	13,428	99%	3,123	95%	16,551	98%
Total stated	13,617	100%	3,291	100%	16,908	100%

Christchurch City had the highest relative level of crowding with 9% of renter households crowded. Selwyn has relatively low levels of crowding compared to other urban areas. Although the relative level of crowding is low, crowded households still have significant levels of housing need.

Table 4.12 presents the trend in crowding and underutilisation by tenure and subarea in 2018.

Table 4.12: Crowding trends by tenure and subarea 2018

	Owner Occupiers			Renters			Total		
	Crowded	Total Stated	% Crowded	Crowded	Total Stated	% Crowded	Crowded	Total Stated	% Crowded
Waimakariri									
Rangiora	60	5,220	1%	72	1,170	6%	132	6,390	2%
Kaiapoi	51	3,513	1%	27	672	4%	78	4,185	2%
Woodend	21	1,980	1%	15	399	4%	36	2,379	2%
Oxford	9	672	1%	9	117	8%	18	789	2%
UDS Rural Settlements	9	1,302	1%	0	111	0%	9	1,413	1%
UDS Rural	99	4,491	2%	30	594	5%	129	5,085	3%
Total Waimakariri	249	17,178	1%	153	3,063	5%	402	20,241	2%
Christchurch City									
Banks Penninsula	6	963	1%	0	165	0%	6	1,128	1%
Central	9	639	1%	105	1,554	7%	114	2,193	5%
Inner East	117	4,032	3%	537	5,802	9%	654	9,834	7%
Inner West	66	3,123	2%	363	3,363	11%	429	6,486	7%
Lyttelton Harbour	18	1,836	1%	21	318	7%	39	2,154	2%
NorthEast	363	18,414	2%	453	5,871	8%	816	24,285	3%
NorthWest	387	20,589	2%	621	6,852	9%	1,008	27,441	4%
Port Hills	90	8,625	1%	84	1,683	5%	174	10,308	2%
SouthEast	207	8,157	3%	261	3,510	7%	468	11,667	4%
SouthWest	552	19,416	3%	675	7,029	10%	1,227	26,445	5%
Total Chch City	1,815	85,794	2%	3,120	36,147	9%	4,935	121,941	4%
Selwyn									
Rolleston	51	4,524	1.1%	33	990	3.3%	84	5,514	1.5%
Lincoln	9	1,710	0.5%	36	369	9.8%	45	2,079	2.2%
Prebbleton & West M	6	2,037	0.3%	0	102	0.0%	6	2,139	0.3%
GCP rural	57	3,543	1.6%	30	789	3.8%	87	4,332	2.0%
Leeston & Darfield	12	1,491	0.8%	18	330	5.5%	30	1,821	1.6%
Rural	45	3,081	1.5%	27	951	2.8%	72	4,032	1.8%
Total Selwyn	180	16,386	1.1%	144	3,531	4.1%	324	19,917	1.6%

Source: Statistics New Zealand – Census

Overall Christchurch City had the highest proportion of crowded households with high concentrations in the Inner East, Inner West, NorthWest and SouthWest subareas. Oxford renters also experienced high levels of crowding. The Lincoln subarea (9.8% of renters) followed by Leeston/Darfield subarea renters (5.58% of renters) had the highest levels of crowding within Selwyn District.

Table 4.13 presents the relative level of crowding for people living in greater Christchurch by ethnicity.

Table 4.13: Number of people by household crowding and ethnicity

	Pasifika			Mäori			Total		
	Waimak	Chch City	Selwyn	Waimak	Chch City	Selwyn	Waimak	Chch City	Selwyn
Crowded									
2 bedrooms + needed	40	1,180	50	90	1,020	50	90	1,260	80
1 bedroom needed	70	1,930	50	280	2,900	170	390	4,600	320
Total crowded	110	3,110	100	380	3,920	220	470	5,860	400
No extra bdrms	270	3,910	140	1,190	10,370	700	2,960	28,440	2,140
1 bedroom spare	170	2,940	340	1,490	9,650	1,650	6,540	48,520	5,810
2 bedrooms+ spare	130	1,230	200	1,190	5,370	1,430	11,320	50,720	11,490
Total stated	690	11,200	770	4,250	29,310	3,990	21,280	133,530	19,840
% crowded	16%	28%	13%	9%	13%	6%	2%	4%	2%

Source: Statistics New Zealand

Overall, more people living in Christchurch City lived in crowded dwellings than Waimakariri and Selwyn Districts. Pasifika had higher levels of crowding than Mäori descent and other households. In Christchurch City, one in four people of Pasifika lived in crowded dwellings were as one in eight Mäori lived in crowded dwellings

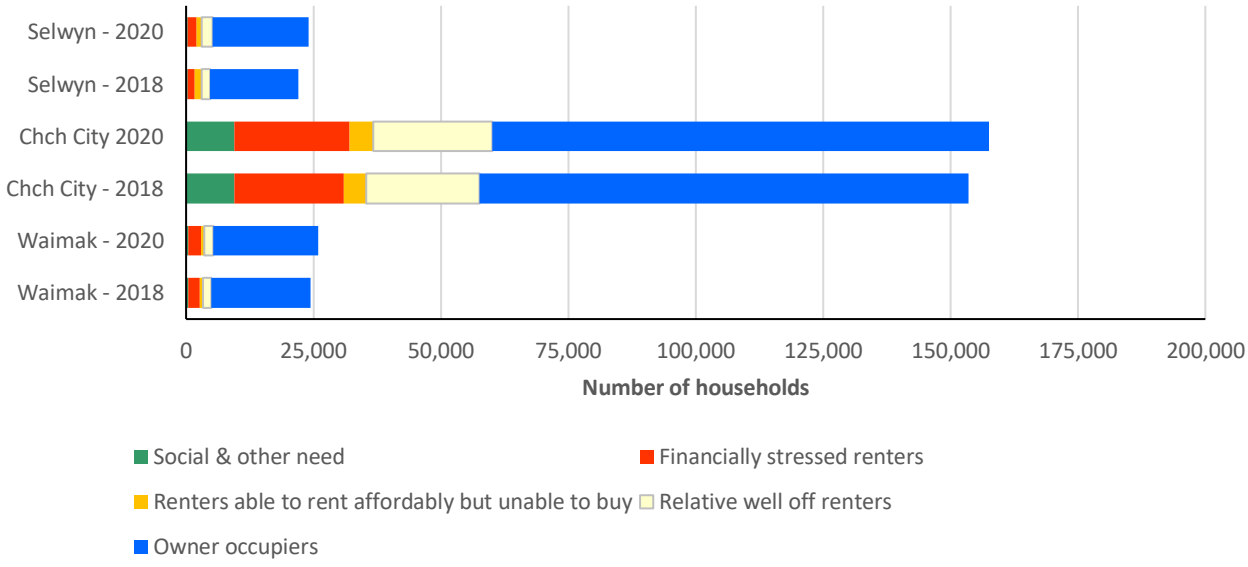
4.6 The housing continuum

The Housing Continuum provides insight into the relative sizes of the different housing sub-groups along a continuum which stretches from emergency and homeless households to owner occupation. This progression can be summarised as:

- Emergency, homelessness and crowding;
- Social renters with housing needs in addition to financial affordability;
- Stressed private renters paying more than 30% of their household income in rent;
- Private renters paying less than 30% of their household income in rent but unable to affordably buy a dwelling at the lower quartile house sale price (LQHP);
- Private renter households with sufficient income to affordably buy a dwelling at the lower quartile house sale price; and
- Owner occupier households.

Changes in the relative size of these groups reflect the pressures within the continuum overtime. Figure 4.1 presents the modelled housing continuum as at 2018 and 2020[10]

Figure 4.1: Housing Continuum in 2018 and 2020



Source: Modelled based on data from Statistics New Zealand

NB: Numbers are rounded to the nearest 10 in the modelling & consequently total households may vary between tables.

The majority of the growth in the continuum was for owner occupier households. Falling mortgage interest rates resulted in an increase in the number of relatively well-off renter households (those able to affordably buy at the lower quartile house sale price if they choose).

[10] These estimates assume the number of social housing units remains constant.

4.7 Housing need

Housing need is a measure of the total number of renter households within a community which require some assistance to meet their housing requirements. Total ***'renter housing need'*** encapsulates a number of different groups of households and includes the following groups:

- Financially stressed private renter households;
- Those households whose housing requirements are met by social, third sector and emergency housing; and
- People who are homeless or living in crowded dwellings.

Total renter housing need = stressed private renter households + social housing tenants + other need

'Other need' encapsulates those households who because of their circumstances have housing needs in addition to affordability. Social housing is defined as the number of households, who because of their circumstances are in Kāinga Ora (formerly Housing New Zealand Corporation), local authority, and third sector housing. Other need is defined as crowded households, or are homeless.

This section of the report presents analysis of:

- Current levels of housing need;
- Current need by household demographic characteristics; and
- Projected growth in housing need.

Estimates of current housing need build on the analysis presented in the previous sections of the report including the number of social tenants, levels of homelessness, and the number of stressed private renter households. Table 4.14 presents the analysis of total housing need as at 2018, and 2020.

Table 4.14: Total Housing Need – 2018 to 2020

	Financial Housing Stress (A)	Other Need			Total Housing Need (A + D)	% of All Renters	% of All Households
		Social Renters (B)	Other (C)	Total Other Need (B + C =D)			
Waimakariri							
2018	2,270	150	270	420	2,690	57.1%	11.2%
2020	2,500	150	290	440	2,940	57.8%	11.5%
Christchurch City							
2018	21,580	7,050	2,460	9,510	31,090	56.4%	20.6%
2020	22,350	7,050	2,480	9,530	31,880	55.8%	20.6%
Selwyn District							
2018	1,460	50	240	290	1,750	39.1%	8.0%
2020	1,670	50	260	310	1,980	39.8%	8.2%

NB: Numbers are rounded to the nearest 10.
NB: The analysis is Modelled based on data from Statistics New Zealand.

As a comparison, the relative level of housing need in other locations (as a % of renters and all households) is presented in Table 4.15.

Table 4.15: The relative level of housing need in other local authorities.

	Housing need as a % of all renters	Housing need as a % of all households
Hastings	56%	19%
Flaxmere – Hastings sub area	63%	34%
Napier City	47%	16%
Lower Hutt	79%	28%
Porirua City	69%	25%
Eastern Porirua - Porirua City	88%	54%
Tauranga	58%	21%
Western Bay of Plenty	51%	16%
Selwyn District	39.8%	8.7%

NB: These statistics are sourced from similar studies undertaken in the last two years

Selwyn District has low relative levels of housing need when compared to other locations.

Table 4.16 presents analysis of the estimated growth in total housing need by financially stressed renter households and other need over the 2018 to 2048 period. These estimates assume:

- The growth in the level of 'other need' is proportionate to the growth in financially stressed renter households;
- Household incomes and market rents increase at approximately the same rate;
- There are no significant changes to the financial, structural and institutional environment in which the housing market operates over the next 30 years; and
- There are no unexpected corrections in the housing market over the next 30 years.

Table 4.16: Projected housing need – 2018 to 2048

	Total Need	Need as a % of	
		All renters	All households
Waimakariri District			
2018	2,690	57%	11%
2020	3,580	56%	12%
2028	4,680	55%	13%
2038	5,600	55%	13%
2048	2,690	57%	11%
Christchurch City			
2018	30,920	56%	20%
2020	32,030	56%	21%
2028	35,260	54%	21%
2038	39,160	54%	22%
2048	42,260	53%	22%
Selwyn District			
2018	1,750	39%	8%
2020	1,980	40%	8%
2028	2,480	38%	8%
2038	3,190	37%	8%
2048	3,810	37%	8%

NB: Numbers are rounded to the nearest 10. These projections assume rents and household incomes increase at approximately the same rate between 2018 and 2048.
Source: Modelling housing outcomes based on data from census, population projections (Statistics New Zealand), HUD, MBIE, and Kāinga Ora.

Appendix One:

Subarea definitions

Waimakariri Disrict subareas	
Subarea	**SA2**
Rangiora	Rangiora North West Kingsbury Ashgrove Rangiora North East Rangiora Central Oxford Estate Rangiora South West Lilybrook Rangiora South East Southbrook
Kaiapoi	Kaiapoi North West Sovereign Palms Silverstream (Waimakariri District) Kaiapoi West Kaiapoi Central Kaiapoi East Kaiapoi South
Woodend/Pegasus/Ravenswood	Woodend Waikuku Pegasus
Oxford	Oxford
UDS Rural Settlements	Fernside Mandeville Ohoka
UDS Rural	Swannanoa-Eyreton Clarkville Pegasus Bay Tuahiwi Ashley Sefton Loburn Okuku Starvation Hill-Cust West Eyreton Eyrewell Ashley Gorge

Christchurch City subareas	
Subarea	**SA2**
Banks Peninsula	Banks Peninsula South
	Eastern Bays-Banks Peninsula
	Akaroa Harbour
	Inlet Akaroa Harbour
	Akaroa
Central City	Hagley Park
	Christchurch Central-West
	Christchurch Central-North
	Christchurch Central
	Christchurch Central-East
	Christchurch Central-South
Inner-East	Sydenham South
	St Albans North
	St Albans East
	Edgeware
	Richmond South (Christchurch City)
	Linwood West
	Sydenham Central
	Sydenham West
	Lancaster Park
	Phillipstown
	Sydenham North
Inner-West	Riccarton South
	Riccarton East
	St Albans West
	Addington North
	Holmwood
	Merivale
	Mona Vale
	Riccarton Central
	Tower Junction
	Addington West
	Addington East
Lyttelton Harbour	Teddington
	Diamond Harbour
	Port Hills
	Governors Bay
	Lyttelton
	Inlet Port Lyttelton
NorthEast	Brooklands-Spencerville
	Styx
	Malvern
	Richmond North (Christchurch City)
	Waimairi Beach
	Wainoni
	Queenspark
	Redwood North
	Redwood East
	Northcote (Christchurch City)
	Prestons

	Waitikiri Mairehau North Rutland Mairehau South Shirley West Travis Wetlands Shirley East Parklands Burwood Dallington Otakaro-Avon River Corridor North Beach Avondale (Christchurch City) Avonside Rawhiti Linwood North Aranui
NorthWest	McLeans Island Papanui East Harewood Deans Bush Belfast East Bishopdale West Christchurch Airport Yaldhurst Clearwater Belfast West Northwood Russley Regents Park Hawthornden Bishopdale North Casebrook Bryndwr South Burnside Park Marshland Avonhead North Bryndwr North Redwood West Avonhead West Bishopdale South Burnside Papanui North Avonhead East Avonhead South Northlands (Christchurch City) Papanui West Ilam North Jellie Park Ilam South Ilam University Strowan Fendalton

	Bush Inn
Port Hills	Kennedys Bush
	Westmorland
	Cashmere West
	Huntsbury
	Cashmere East
	Hillsborough (Christchurch City)
	Woolston South
	Brookhaven-Ferrymead
	Heathcote Valley
	Mount Pleasant
	Redcliffs
	Clifton Hill
	Sumner
SouthEast	Ensors
	Waltham
	Bexley
	Linwood East
	Charleston (Christchurch City)
	Woolston North
	New Brighton
	Woolston West
	Bromley South
	Beckenham
	Bromley North
	St Martins
	Opawa
	Woolston East
	South New Brighton
SouthWest	Paparua
	Wharenui
	Oaklands East
	Sockburn North
	Templeton
	Islington
	Hornby West
	Broomfield
	Islington-Hornby Industrial
	Hei
	Riccarton Racecourse
	Hornby Central
	Hornby South
	Awatea North
	Upper Riccarton
	Sockburn South
	Wigram North
	Wigram West
	Awatea South
	Riccarton West
	Middleton
	Wigram South
	Wigram East
	Oaklands West

	Halswell West
	Broken Run
	Hillmorton
	Aidanfield
	Hoon Hay West
	Spreydon West
	Halswell North
	Spreydon North
	Hoon Hay East
	Halswell South
	Spreydon South
	Somerfield East
	Somerfield West
	Hoon Hay South

Selwyn District subarea	
Subarea	**SA2**
Rolleston	Rolleston Central Rolleston Izone Rolleston North East Rolleston North West Rolleston South East Rolleston South West
Lincoln	Lincoln East Lincoln West
Prebbleton - West Melton	Prebbleton West Melton
Darfield - Leeston	Darfield Leeston
UDS Rural	Burnham Camp Halkett Newtons Road Springston Trents Ladbrooks Tai Tapu Motukarara
Rural	Craigieburn Torlesse Glenory-Hororata Glentunnel Kirwee Bankside Charing Cross Southbridge Irwell

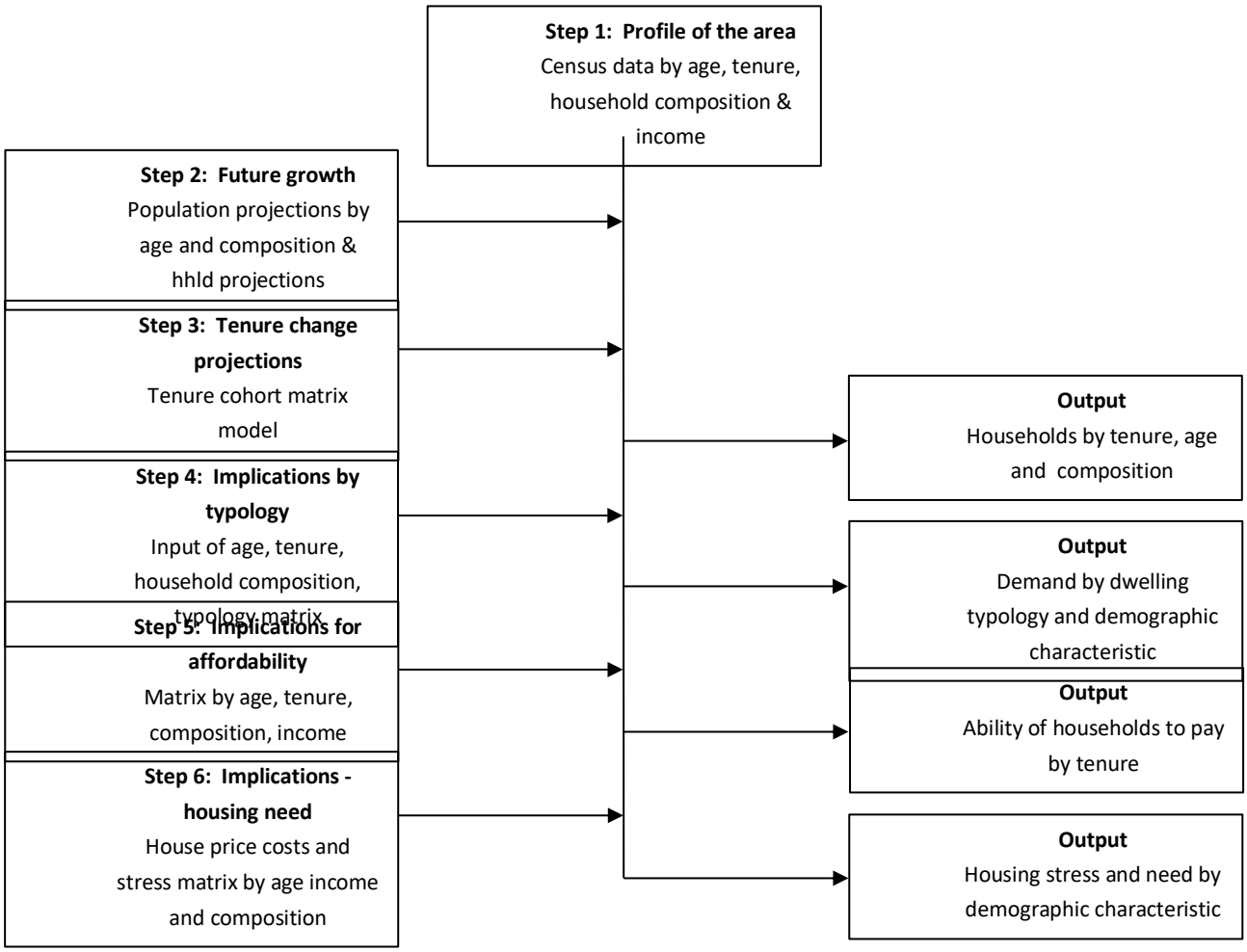
Appendix Two:

Overview of the modelling methodology

Overview of modelling methodology

The objective of this appendix is to provide a high level overview of the modelling methodology . An overview of the different stages in the modelling methodology is presented in Figure 1.

Figure 1: Overview of the modelling methodology



The approach adopted has a number of key assumptions and these include:

As agreed, the number of occupied dwellings increase in line with the projections provided by Selwyn District and modelling by IDI;

Underlying change in age structure and family composition changes associated with Statistic New Zealand's population projections hold true;

There are no significant unexpected changes to Selwyn District's and the National economies over the projection period;

There are no significant changes to the institutional and structural settings in the local housing markets.

Description of each stage follows:

Step 1: Subarea household profile

Census results are used to provide a profile of the usually resident households in each subarea by age of the reference person, household composition, household income and tenure.

Step 2: Household projections by subarea and demographic characteristic

Statistics New Zealand population projections by age and family composition are combined with their household projection data and population projections by area unit to model the projected growth in the number of usually resident households living in each subarea by age of the reference person and household composition. These results are cross referenced with the 2013 census results to form a common reference point.

Step 3: Household projections by tenure

Tenure projections (split between owner occupied dwellings and renter households) are modelled using a tenure cohort multi-dimensional matrix approach. This approach tracks individual cohorts (by age and household composition) between 1991 and 2013 by the rate of owner occupation. These trends are projected forward with reference to the tenure change of other cohorts (by age and household composition). The rate of owner occupation matrix (by age and household composition) is combined with the household projections (by age and household composition from stage 2) to provide the projected number of households by age, household composition and tenure.

Step 4: Implications of the projections by age household composition and tenure on the demand by dwelling typology

Step 4 builds on the household projection modelled in step 4. Census data is used to develop a matrix (the dwelling typology matrix) which reflects the propensity of different cohorts (by age, household composition and tenure) to live in different types of dwellings. Dwelling typology is categorised as:

Standalone dwellings of two bedrooms or less;
Standalone dwellings of three bedrooms or more;
Multi-unit dwellings of two bedrooms or less; and
Multi-unit dwellings of three bedrooms or more.

The dwelling typology matrix (reflecting the propensity of different age groups, household composition and tenure households to live in different dwelling typologies) is combined with the household projections (by tenure, age and household composition) to provide projections of the demand for different dwelling typologies by the demographic characteristics of households.

Step 5: Affordability Statistics

Customised census outputs are used to develop a profile of the usually resident households by age of the reference person, household composition, tenure and household income. This profile is used to profile household income distribution in future years in 2013 dollars assuming the underlying structure of the subarea's

income profile by age, household composition and tenure remains constant. Thus, as the proportion of different groups within the subareas population change over time so does its overall income profile.
The subareas' income profiles are combined with housing cost data sourced from MBIE's urban development dashboard to provide a range of affordability measures.

Step 6: Implications for housing need

Housing need is defined as those renter households that need assistance in providing appropriate housing to meet their requirements. Housing need in the context of this report is measured as the total number of renter households within a community which require some assistance to meet their housing requirements and encapsulates a number of different groups of households and includes the following groups:

- Financially stressed private renter households;
- Those households whose housing requirements are met by social, third sector and emergency housing; and
- People who are homeless or living in crowded dwellings.

Total renter housing need = stressed private renter households + social housing tenants + other need

'Other need' encapsulates those households who because of their circumstances have housing needs in addition to affordability. Other housing need is defined as the number of households, who because of their circumstances are in Housing New Zealand Corporation (HNZC), local authority, third sector and emergency housing, crowded households, or are homeless.

This section of the report presents analysis of:
Current levels of housing need;
Current need by household demographic characteristics;
Projected growth in housing need; and
Implications of the current and expected trends in housing need.

Secondary data sources combined with a series of semi structured interviews with social and emergency housing providers will be used to provide an estimate of the number of households in social and emergency housing and homeless people. Data on the relative level of crowded households is sourced from customised data from Statistics New Zealand.

Financially stressed households are measured using the income profile data (by household composition, household composition, tenure and income) developed in the previous stage and data from statistics New Zealand about the relative level of housing stress by these different household cohorts. The modelled output provides estimates of the number of financially stressed private renters. When combined with different scenarios of variations in key housing costs estimates of future levels of housing stressed can be modelled. The output from this stage of the analysis is the total level of renter housing need combined with projection of future need under a range of assumptions.

Overview of modelling methodology

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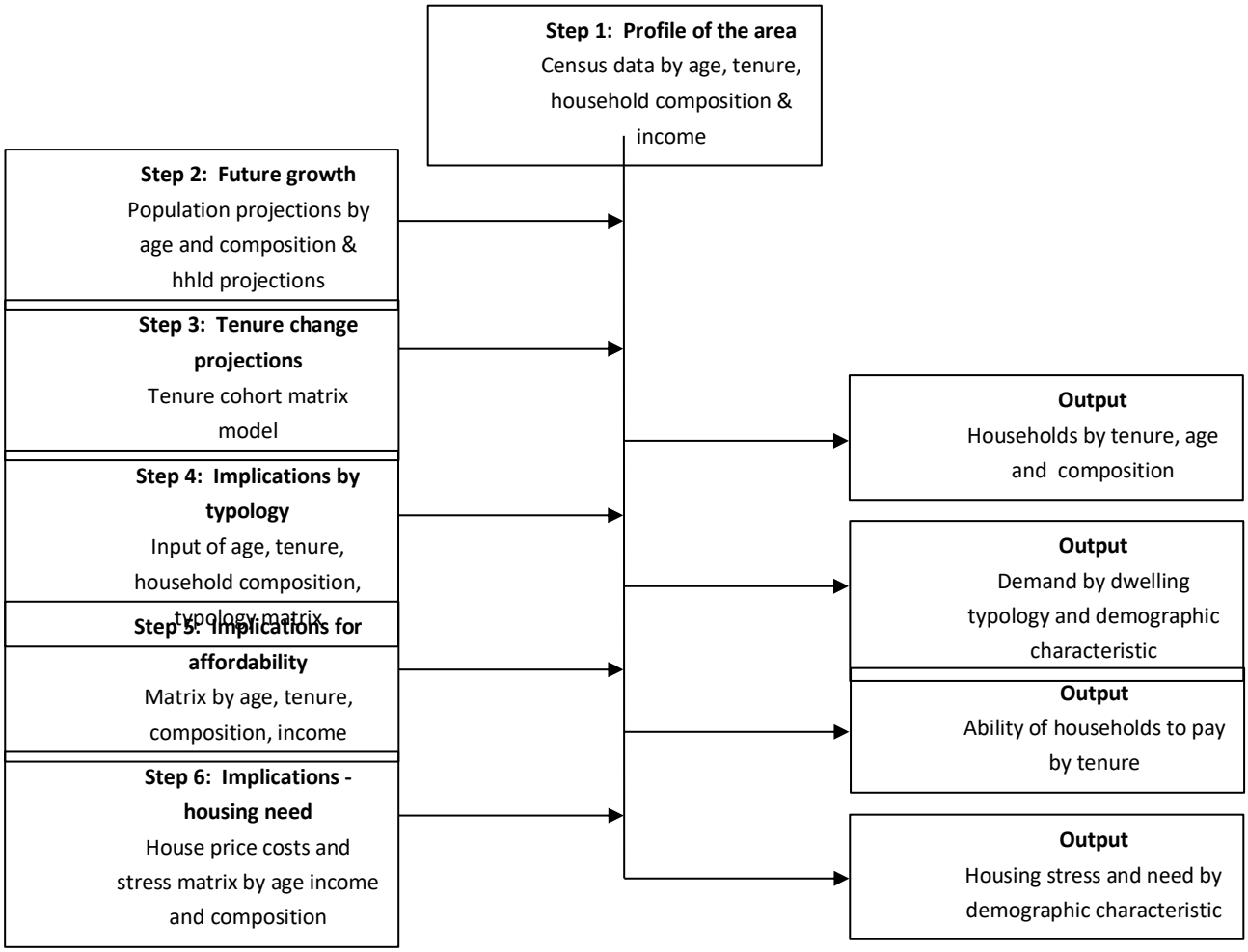

The approach adopted has a number of key assumptions and these include:

As agreed, the number of occupied dwellings increase in line with the projections provided by Selwyn District and modelling by IDI;

Underlying change in age structure and family composition changes associated with Statistic New Zealand's population projections hold true;

There are no significant unexpected changes to Selwyn District's and the National economies over the projection period;

There are no significant changes to the institutional and structural settings in the local housing markets.

Description of each stage follows:

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Statistics New Zealand population projections by age and family composition are combined with their household projection data and population projections by area unit to model the projected growth in the number of usually resident households living in each subarea by age of the reference person and household composition. These results are cross referenced with the 2013 census results to form a common reference point.

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Tenure projections (split between owner occupied dwellings and renter households) are modelled using a tenure cohort multi-dimensional matrix approach. This approach tracks individual cohorts (by age and household composition) between 1991 and 2013 by the rate of owner occupation. These trends are projected forward with reference to the tenure change of other cohorts (by age and household composition). The rate of owner occupation matrix (by age and household composition) is combined with the household projections (by age and household composition from stage 2) to provide the projected number of households by age, household composition and tenure.

Step 4: Implications of the projections by age household composition and tenure on the demand by dwelling typology

Step 4 builds on the household projection modelled in step 4. Census data is used to develop a matrix (the dwelling typology matrix) which reflects the propensity of different cohorts (by age, household composition and tenure) to live in different types of dwellings. Dwelling typology is categorised as:

Standalone dwellings of two bedrooms or less;
Standalone dwellings of three bedrooms or more;
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Multi-unit dwellings of three bedrooms or more.

The dwelling typology matrix (reflecting the propensity of different age groups, household composition and tenure households to live in different dwelling typologies) is combined with the household projections (by tenure, age and household composition) to provide projections of the demand for different dwelling typologies by the demographic characteristics of households.

Step 5: Affordability Statistics

Customised census outputs are used to develop a profile of the usually resident households by age of the reference person, household composition, tenure and household income. This profile is used to profile household income distribution in future years in 2013 dollars assuming the underlying structure of the subarea's

income profile by age, household composition and tenure remains constant. Thus, as the proportion of different groups within the subareas population change over time so does its overall income profile.
The subareas' income profiles are combined with housing cost data sourced from MBIE's urban development dashboard to provide a range of affordability measures.

Step 6: Implications for housing need
Housing need is defined as those renter households that need assistance in providing appropriate housing to meet their requirements. Housing need in the context of this report is measured as the total number of renter households within a community which require some assistance to meet their housing requirements and encapsulates a number of different groups of households and includes the following groups:

- Financially stressed private renter households;
- Those households whose housing requirements are met by social, third sector and emergency housing; and
- People who are homeless or living in crowded dwellings.

Total renter housing need = stressed private renter households + social housing tenants + other need

'Other need' encapsulates those households who because of their circumstances have housing needs in addition to affordability. Other housing need is defined as the number of households, who because of their circumstances are in Housing New Zealand Corporation (HNZC), local authority, third sector and emergency housing, crowded households, or are homeless.

This section of the report presents analysis of:
Current levels of housing need;
Current need by household demographic characteristics;
Projected growth in housing need; and
Implications of the current and expected trends in housing need.

Secondary data sources combined with a series of semi structured interviews with social and emergency housing providers will be used to provide an estimate of the number of households in social and emergency housing and homeless people. Data on the relative level of crowded households is sourced from customised data from Statistics New Zealand.

Financially stressed households are measured using the income profile data (by household composition, household composition, tenure and income) developed in the previous stage and data from statistics New Zealand about the relative level of housing stress by these different household cohorts. The modelled output provides estimates of the number of financially stressed private renters. When combined with different scenarios of variations in key housing costs estimates of future levels of housing stressed can be modelled. The output from this stage of the analysis is the total level of renter housing need combined with projection of future need under a range of assumptions.

Appendix Three:

Population and household projections

Table A3.1 presents the estimated number of households in each local authority area between 2020 and 2051 using the population projections provided by the graeter Christchurch partnership and the estimated number of people per household.

Table A3.1: Agreed population projections, average people per households and projected number of households

	Population	People per household	Households
Waimakariri			
2020	64,700	2.53	25,600
2021	66,160	2.52	26,300
2024	70,260	2.47	28,400
2026	72,620	2.45	29,600
2031	78,400	2.40	32,600
2036	83,860	2.36	35,500
2041	89,100	2.34	38,000
2046	94,060	2.34	40,200
2051	98,860	2.34	42,200
Christchurch City			
2020	394,700	2.55	155,000
2021	398,420	2.54	157,000
2024	408,780	2.52	162,380
2026	414,620	2.51	165,300
2031	428,620	2.49	172,400
2036	441,380	2.47	178,600
2041	452,860	2.46	184,100
2046	463,080	2.45	188,700
2051	472,780	2.45	192,600
Selwyn District			
2020	69,700	2.92	23,900
2021	72,300	2.90	24,900
2024	79,500	2.87	27,744
2026	83,500	2.85	29,300
2031	93,560	2.80	33,400
2036	103,660	2.75	37,700
2041	113,760	2.71	42,000
2046	123,860	2.68	46,200
2051	133,960	2.65	50,500

Appendix Four:

Household demand by subareas

Table A4.1: Household projections by subarea and household type

Waimakariri District									
Rangiora	**2018**	**2020**	**2023**	**2028**	**2033**	**2038**	**2043**	**2048**	**2053**
Couples only	2790	2980	3270	3640	3930	4270	4520	4760	4990
Couples with	1990	2040	2120	2240	2370	2450	2540	2630	2720
One parent	790	820	850	880	950	1010	1080	1120	1140
One person	1920	2060	2260	2620	2950	3220	3450	3690	3930
Other	140	140	170	160	160	190	190	190	190
Total	7630	8040	8670	9540	10360	11140	11780	12390	12970
Kaiapoi									
Couples only	1790	1930	2140	2350	2510	2680	2790	2910	3010
Couples with	1310	1350	1420	1480	1540	1570	1600	1640	1680
One parent	570	600	630	640	680	720	760	780	790
One person	1240	1330	1480	1690	1880	2030	2130	2260	2380
Other	110	110	130	130	120	140	140	130	130
Total	5020	5320	5800	6290	6730	7140	7420	7720	7990
Woodend									
Couples only	1090	1220	1420	1760	2050	2360	2640	2870	3080
Couples with	950	1020	1130	1320	1510	1660	1800	1920	2050
One parent	220	240	260	300	340	390	430	460	480
One person	440	490	580	740	900	1040	1170	1290	1420
Other	50	50	70	70	80	90	100	100	100
Total	2750	3020	3460	4190	4880	5540	6140	6640	7130
UDS Rural Settlements									
Couples only	680	740	820	940	1050	1150	1230	1300	1370
Couples with	650	680	720	790	850	900	940	980	1020
One parent	70	70	70	70	80	100	110	110	110
One person	190	210	230	280	330	360	390	420	450
Other	40	40	50	50	50	60	60	60	60
Total	1630	1740	1890	2130	2360	2570	2730	2870	3010
Oxford									
Couples only	400	420	470	520	550	600	620	660	680
Couples with	220	230	230	250	260	270	270	280	280
One parent	100	100	100	100	100	110	120	120	120
One person	240	250	280	330	360	400	420	440	470
Other	10	10	10	10	10	10	10	10	10
Total	970	1010	1090	1210	1280	1390	1440	1510	1560
Rural									
Couples only	2500	2670	2930	3310	3630	3970	4200	4430	4640
Couples with	2050	2100	2180	2320	2490	2590	2690	2790	2880
One parent	350	370	380	400	430	460	490	510	520
One person	970	1040	1140	1340	1540	1690	1820	1950	2080
Other	150	150	180	180	180	210	200	200	200
Total	6020	6330	6810	7550	8270	8920	9400	9880	10320

Christchurch City									
Banks Pen	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	690	710	730	760	790	810	820	820	810
Couples with	270	270	270	280	280	280	270	260	260
One parent	110	110	110	110	110	110	100	100	100
One person	370	380	390	410	440	460	480	490	490
Other	70	70	70	70	70	70	60	60	60
total	1510	1540	1570	1630	1690	1730	1730	1730	1720
Central City	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	1100	1450	1990	2270	2540	2810	3090	3390	3700
Couples with	290	370	500	560	620	660	700	750	800
One parent	210	270	350	380	410	440	470	510	540
One person	1160	1530	2090	2440	2820	3200	3590	3990	4380
Other	320	410	530	570	620	660	700	750	800
total	3080	4030	5460	6220	7010	7770	8550	9390	10220
Inner East	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	3320	3400	3520	3640	3710	3770	3820	3830	3840
Couples with	1880	1890	1910	1920	1910	1870	1860	1830	1800
One parent	1540	1550	1550	1560	1560	1570	1570	1560	1550
One person	4900	5030	5190	5490	5770	5990	6200	6300	6390
Other	1000	990	980	960	950	930	910	900	880
total	12640	12860	13150	13570	13900	14130	14360	14420	14460
Inner West	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	2480	2540	2620	2740	2820	2910	2970	3010	3050
Couples with	1700	1720	1730	1750	1760	1760	1760	1750	1740
One parent	810	810	810	820	840	840	850	850	850
One person	2470	2530	2610	2790	2970	3120	3250	3350	3430
Other	630	620	620	610	620	610	610	600	600
total	8090	8220	8390	8710	9010	9240	9440	9560	9670
Lyttelton Harbour	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	1030	1050	1090	1130	1160	1190	1210	1200	1200
Couples with	640	640	640	660	660	650	650	630	620
One parent	220	220	210	210	210	210	210	200	200
One person	640	650	670	710	750	790	810	820	830
Other	90	90	90	90	90	80	80	80	80
total	2620	2650	2700	2800	2870	2920	2960	2930	2930
North East	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	8920	9170	9540	10030	10440	10850	11190	11430	11680
Couples with	8350	8450	8570	8770	8910	8950	9020	9070	9110
One parent	4320	4360	4390	4470	4600	4690	4770	4840	4880
One person	7280	7480	7770	8380	9010	9560	10050	10420	10770
Other	1560	1550	1540	1540	1570	1570	1560	1570	1560
total	30430	31010	31810	33190	34530	35620	36590	37330	38000

North West	2018	2020	2023	2028	2033	2038	2043	2048	2053
Couples only	10480	10770	11190	11760	12250	12730	13130	13410	13700
Couples with	9680	9790	9940	10170	10330	10370	10460	10520	10560
One parent	3730	3750	3770	3840	3950	4030	4100	4150	4180
One person	7740	7960	8270	8910	9560	10140	10670	11050	11420
Other	1750	1740	1730	1730	1750	1750	1750	1750	1740
total	33380	34010	34900	36410	37840	39020	40110	40880	41600
Port Hills									
Couples only	4700	4790	4940	5130	5290	5420	5500	5490	5500
Couples with	3640	3660	3680	3720	3740	3710	3680	3620	3570
One parent	890	890	890	890	910	910	900	900	890
One person	2300	2350	2410	2570	2730	2850	2950	3000	3040
Other	390	380	380	370	370	360	360	350	340
total	11920	12070	12300	12680	13040	13250	13390	13360	13340
South East									
Couples only	3810	3890	3990	4110	4190	4240	4290	4280	4280
Couples with	3330	3340	3360	3370	3340	3270	3230	3180	3130
One parent	2370	2370	2360	2360	2360	2350	2350	2330	2300
One person	4370	4460	4590	4840	5080	5250	5420	5490	5550
Other	800	790	780	760	750	730	720	700	690
total	14680	14850	15080	15440	15720	15840	16010	15980	15950
South West									
Couples only	10000	10470	11160	11910	12560	13210	13820	14350	14900
Couples with	8790	9050	9430	9790	10070	10240	10480	10710	10930
One parent	3800	3900	4020	4160	4320	4460	4600	4740	4850
One person	7820	8180	8710	9530	10360	11130	11890	12520	13140
Other	2180	2200	2240	2270	2330	2360	2390	2430	2460
total	32590	33800	35560	37660	39640	41400	43180	44750	46280

Selwyn District									
Rolleston	**2018**	**2020**	**2023**	**2028**	**2033**	**2038**	**2043**	**2048**	**2053**
Couples only	1880	2290	2780	3460	4260	5120	6010	6900	7840
Couples with	2710	3140	3640	4270	4870	5430	5900	6360	6840
One parent	390	450	530	630	740	810	890	940	990
One person	530	640	780	1060	1390	1740	2150	2550	2970
Other	150	170	200	200	300	320	340	400	460
total	5660	6690	7930	9620	11560	13420	15290	17150	19100
Lincoln									
Couples only	740	910	1100	1360	1640	1960	2270	2600	2950
Couples with	820	950	1100	1270	1420	1560	1680	1740	1810
One parent	180	210	250	290	350	390	410	440	470
One person	420	510	620	840	1080	1340	1630	1950	2280
Other	60	60	70	70	100	100	110	120	130
total	2220	2640	3140	3830	4590	5350	6100	6850	7640
GCP Rural									
Couples only	2020	2150	2290	2460	2670	2870	3090	3320	3560
Couples with	1750	1780	1810	1830	1820	1830	1810	1770	1730
One parent	260	260	280	280	290	300	290	290	290
One person	600	630	680	800	930	1050	1190	1320	1460
Other	130	130	130	130	140	140	140	150	160
total	4760	4950	5190	5500	5850	6190	6520	6850	7200
Rural									
Couples only	2070	2190	2300	2410	2530	2690	2840	3000	3170
Couples with	1660	1660	1670	1650	1620	1580	1540	1470	1390
One parent	330	330	340	340	350	340	340	330	320
One person	1060	1090	1150	1320	1480	1660	1840	2020	2220
Other	110	110	110	110	120	120	110	120	130
total	5230	5380	5570	5830	6100	6390	6670	6940	7230
Leeston - Darfield									
Couples only	750	800	870	950	1040	1150	1250	1350	1460
Couples with	520	530	550	560	570	580	580	580	580
One parent	170	180	190	190	200	200	200	200	200
One person	430	460	500	600	700	800	910	1010	1110
Other	30	30	30	30	30	30	30	30	30
total	1900	2000	2140	2330	2540	2760	2970	3170	3380
Prebbleton /West Melton									
Couples only	760	950	1180	1500	1870	2270	2690	3140	3610
Couples with	960	1150	1370	1630	1880	2110	2310	2470	2640
One parent	120	140	170	200	250	280	310	320	330
One person	160	200	240	340	450	570	710	860	1010
Other	40	40	50	50	80	90	90	110	140
total	2040	2480	3010	3720	4530	5320	6110	6900	7730

Table A4.2: Subarea's by Tenure

	Rate of owner occupation	Total households	Owner occupiers	Renters
Waimakariri District				
Total Rangiora				
2018	77.0%	7,630	5,880	1,750
2023	73.1%	8,670	6,340	2,330
2028	71.8%	9,540	6,850	2,690
2033	69.8%	10,360	7,240	3,120
2038	68.4%	11,140	7,620	3,520
2043	67.1%	11,780	7,910	3,870
2048	66.0%	12,390	8,180	4,210
2053	64.8%	12,970	8,410	4,560
Total Kaiapoi				
2018	78.6%	5,020	3,950	1,070
2023	75.3%	5,800	4,370	1,430
2028	74.0%	6,290	4,650	1,640
2033	72.2%	6,730	4,860	1,870
2038	70.8%	7,140	5,050	2,090
2043	68.9%	7,420	5,110	2,310
2048	67.9%	7,720	5,240	2,480
2053	66.9%	7,990	5,350	2,640
Total Woodend/Pegasus/Ravenswood				
2018	80.9%	2,750	2,220	530
2023	79.6%	3,460	2,750	710
2028	78.0%	4,190	3,270	920
2033	76.2%	4,880	3,720	1,160
2038	74.4%	5,540	4,120	1,420
2043	73.0%	6,140	4,480	1,660
2048	72.3%	6,640	4,800	1,840
2053	71.5%	7,130	5,100	2,030
Total UDS Rural Settlements				
2018	89.3%	1,630	1,460	170
2023	88.7%	1,890	1,680	210
2028	86.3%	2,130	1,840	290
2033	83.9%	2,360	1,980	380
2038	81.7%	2,570	2,100	470
2043	80.3%	2,730	2,190	540
2048	79.1%	2,870	2,270	600
2053	77.8%	3,010	2,340	670

	Rate of owner occupation	Total households	Owner occupiers	Renters
313200 Oxford				
2018	80.8%	970	780	190
2023	80.1%	1,090	870	220
2028	79.3%	1,210	960	250
2033	77.9%	1,280	1,000	280
2038	76.4%	1,390	1,060	330
2043	75.0%	1,440	1,080	360
2048	74.0%	1,510	1,120	390
2053	72.9%	1,560	1,140	420
Total UDS Rural				
2018	83.7%	6,020	5,040	980
2023	83.1%	6,810	5,660	1,150
2028	82.6%	7,550	6,240	1,310
2033	82.4%	8,270	6,810	1,460
2038	81.7%	8,920	7,290	1,630
2043	81.3%	9,400	7,650	1,750
2048	81.2%	9,880	8,020	1,860
2053	81.0%	10,320	8,360	1,960
Christchurch City				
Total Banks Peninsula				
2018	78.8%	1,510	1,190	320
2023	77.5%	1,570	1,220	350
2028	76.2%	1,630	1,240	390
2033	74.9%	1,690	1,270	420
2038	73.4%	1,730	1,270	460
2043	72.4%	1,730	1,250	480
2048	71.6%	1,730	1,240	490
2053	70.9%	1,720	1,220	500
Total Central City				
2018	25.7%	3,080	790	2,290
2023	25.6%	5,460	1,400	4,060
2028	25.8%	6,220	1,600	4,620
2033	25.3%	7,010	1,780	5,230
2038	25.0%	7,770	1,950	5,820
2043	24.8%	8,550	2,120	6,430
2048	24.8%	9,390	2,330	7,060
2053	24.9%	10,220	2,540	7,680

	Rate of owner occupation	Total households	Owner occupiers	Renters
Total Inner-East				
2018	35.9%	12,640	4,540	8,100
2023	34.8%	13,150	4,580	8,570
2028	33.9%	13,570	4,600	8,970
2033	33.0%	13,900	4,590	9,310
2038	32.1%	14,130	4,530	9,600
2043	31.1%	14,360	4,470	9,890
2048	30.6%	14,420	4,410	10,010
2053	30.0%	14,460	4,340	10,120
Total Inner-West				
2018	43.3%	8,090	3,500	4,590
2023	42.1%	8,390	3,530	4,860
2028	41.4%	8,710	3,610	5,100
2033	40.2%	9,010	3,620	5,390
2038	39.3%	9,240	3,640	5,600
2043	39.1%	9,440	3,690	5,750
2048	39.0%	9,560	3,730	5,830
2053	38.9%	9,670	3,760	5,910
Total Lyttelton Harbour				
2018	81.3%	2,620	2,130	490
2023	80.3%	2,700	2,170	530
2028	79.2%	2,800	2,220	580
2033	78.1%	2,870	2,240	630
2038	77.1%	2,920	2,250	670
2043	76.3%	2,960	2,260	700
2048	75.8%	2,930	2,220	710
2053	75.4%	2,930	2,210	720
Total NorthEast				
2018	67.6%	30,430	20,570	9,860
2023	67.2%	31,810	21,390	10,420
2028	66.8%	33,190	22,150	11,040
2033	66.0%	34,530	22,790	11,740
2038	65.4%	35,620	23,290	12,330
2043	65.3%	36,590	23,890	12,700
2048	65.1%	37,330	24,320	13,010
2053	65.0%	38,000	24,710	13,290
Total NorthWest				
2018	68.5%	33,380	22,870	10,510
2023	67.5%	34,900	23,550	11,350
2028	67.0%	36,410	24,380	12,030
2033	66.6%	37,840	25,180	12,660
2038	66.0%	39,020	25,760	13,260
2043	65.7%	40,110	26,340	13,770
2048	65.4%	40,880	26,720	14,160
2053	65.0%	41,600	27,060	14,540

	Rate of owner occupation	Total households	Owner occupiers	Renters
Total Port Hills				
2018	80.3%	11,920	9,570	2,350
2023	79.9%	12,300	9,830	2,470
2028	79.3%	12,680	10,050	2,630
2033	78.6%	13,040	10,250	2,790
2038	77.7%	13,250	10,300	2,950
2043	77.4%	13,390	10,360	3,030
2048	76.9%	13,360	10,280	3,080
2053	76.5%	13,340	10,200	3,140
Total SouthEast				
2018	62.1%	14,680	9,120	5,560
2023	61.9%	15,080	9,330	5,750
2028	61.2%	15,440	9,460	5,980
2033	60.6%	15,720	9,520	6,200
2038	59.8%	15,840	9,480	6,360
2043	59.2%	16,010	9,470	6,540
2048	58.9%	15,980	9,410	6,570
2053	58.6%	15,950	9,340	6,610
Total SouthWest				
2018	66.3%	32,590	21,600	10,990
2023	65.3%	35,560	23,230	12,330
2028	64.8%	37,660	24,420	13,240
2033	64.2%	39,640	25,470	14,170
2038	63.7%	41,400	26,380	15,020
2043	64.1%	43,180	27,700	15,480
2048	64.3%	44,750	28,760	15,990
2053	64.4%	46,280	29,810	16,470
Selwyn District				
Total Rolleston				
2018	80.5%	5,660	4,550	1,110
2023	79.4%	7,930	6,300	1,630
2028	79.6%	9,620	7,660	1,960
2033	78.8%	11,560	9,110	2,450
2038	78.4%	13,420	10,520	2,900
2043	78.0%	15,290	11,930	3,360
2048	77.5%	17,150	13,300	3,850
2053	77.1%	19,100	14,720	4,380

	Rate of owner occupation	Total households	Owner occupiers	Renters
Total Lincoln				
2018	80.1%	2,220	1,780	440
2023	79.5%	3,140	2,500	640
2028	79.2%	3,830	3,040	790
2033	78.0%	4,590	3,580	1,010
2038	77.6%	5,350	4,150	1,200
2043	77.0%	6,100	4,700	1,400
2048	76.7%	6,850	5,260	1,590
2053	76.4%	7,640	5,840	1,800
Prebbleton and West Melton				
2018	93.9%	2,040	1,920	120
2023	93.1%	3,010	2,800	210
2028	92.3%	3,720	3,430	290
2033	91.6%	4,530	4,150	380
2038	90.0%	5,320	4,790	530
2043	89.9%	6,110	5,490	620
2048	89.6%	6,900	6,180	720
2053	89.3%	7,730	6,900	830
Total Leeston and Darfield				
2018	79.1%	1,900	1,500	400
2023	79.4%	2,140	1,700	440
2028	78.7%	2,330	1,830	500
2033	78.2%	2,540	1,990	550
2038	77.7%	2,760	2,140	620
2043	76.2%	2,970	2,260	710
2048	75.7%	3,170	2,400	770
2053	75.3%	3,380	2,550	830
Total GCP Rural				
2018	78.7%	4,760	3,750	1,010
2023	78.6%	5,190	4,080	1,110
2028	77.4%	5,500	4,260	1,240
2033	76.8%	5,850	4,490	1,360
2038	75.9%	6,190	4,700	1,490
2043	75.6%	6,520	4,930	1,590
2048	75.4%	6,850	5,170	1,680
2053	75.2%	7,200	5,410	1,790
Total Rural				
2018	71.6%	5,230	3,750	1,480
2023	70.8%	5,570	3,940	1,630
2028	69.5%	5,830	4,050	1,780
2033	68.4%	6,100	4,180	1,920
2038	67.5%	6,390	4,310	2,080
2043	67.0%	6,670	4,470	2,200
2048	67.1%	6,940	4,660	2,280
2053	67.2%	7,230	4,860	2,370

Table A4.3: Households by typology and subarea

	Standalone		Multi unit		Standalone	Multi Unit	Total
	2-	3+	2-	3+	Total	Total	Alll
Rangiora							
2018	1,150	5,434	870	181	6,584	1,051	7,635
2023	1,356	5,986	1,111	217	7,342	1,328	8,670
2028	1,441	6,419	1,348	252	7,860	1,600	9,460
2033	1,632	6,708	1,598	322	8,340	1,920	10,260
2038	1,809	7,048	1,866	347	8,857	2,213	11,070
2043	1,980	7,467	2,004	395	9,447	2,399	11,846
2048	2,113	7,831	2,161	385	9,944	2,546	12,490
2053	2,241	7,986	2,340	413	10,227	2,753	12,980
Kaiapoi							
2018	623	4,099	264	34	4,722	298	5,020
2023	748	4,694	319	40	5,442	359	5,801
2028	902	4,932	371	45	5,834	416	6,250
2033	1,003	5,200	419	48	6,203	467	6,670
2038	1,096	5,461	453	50	6,557	503	7,060
2043	1,171	5,584	484	52	6,755	536	7,291
2048	1,181	5,842	504	52	7,023	556	7,579
2053	1,226	6,048	522	53	7,274	575	7,849
Woodend							
2018	247	2,372	50	46	2,619	96	2,715
2023	292	3,034	60	58	3,326	118	3,444
2028	374	3,655	70	71	4,029	141	4,170
2033	447	4,245	90	83	4,692	173	4,865
2038	489	4,810	100	95	5,299	195	5,494
2043	533	5,389	120	107	5,922	227	6,149
2048	559	5,788	130	118	6,347	248	6,595
2053	584	6,154	150	128	6,738	278	7,016
Oxford							
2018	0	970	0	0	970	0	970
2023	0	1,090	0	0	1,090	0	1,090
2028	0	1,210	0	0	1,210	0	1,210
2033	0	1,280	0	0	1,280	0	1,280
2038	0	1,390	0	0	1,390	0	1,390
2043	0	1,440	0	0	1,440	0	1,440
2048	0	1,510	0	0	1,510	0	1,510
2053	0	1,560	0	0	1,560	0	1,560

	Standalone		Multi unit		Standalone	Multi Unit	Total
	2-	3+	2-	3+	Total	Total	Alll
UDS Settlements							
2018	62	1,563	0	0	1,625	0	1,625
2023	83	1,802	0	0	1,885	0	1,885
2028	97	2,003	0	0	2,100	0	2,100
2033	110	2,221	0	0	2,331	0	2,331
2038	115	2,401	0	0	2,516	0	2,516
2043	122	2,504	0	0	2,626	0	2,626
2048	128	2,587	0	0	2,715	0	2,715
2053	135	2,720	0	0	2,855	0	2,855
UDS Rural	0	0	0	0	0	0	0
2018	787	5,196	0	72	5,983	72	6,055
2023	888	5,871	0	87	6,759	87	6,846
2028	991	6,499	0	94	7,490	94	7,584
2033	1,100	7,107	0	98	8,207	98	8,305
2038	1,204	7,647	0	105	8,851	105	8,956
2043	1,311	8,011	0	114	9,322	114	9,436
2048	1,373	8,427	0	115	9,800	115	9,915
2053	1,430	8,811	0	115	10,241	115	10,356
Christchurch City Banks Peninsula							
2018	290	1,210	0	20	1,500	20	1,520
2023	270	1,260	0	20	1,530	20	1,550
2028	280	1,310	0	20	1,590	20	1,610
2033	300	1,350	0	20	1,650	20	1,670
2038	310	1,380	0	20	1,690	20	1,710
2043	320	1,370	0	20	1,690	20	1,710
2048	330	1,350	0	20	1,680	20	1,700
2053	330	1,310	0	20	1,640	20	1,660
Central							
2018	710	380	1,690	290	1,090	1,980	3,070
2023	1,280	770	2,870	550	2,050	3,420	5,470
2028	1,450	900	3,290	610	2,350	3,900	6,250
2033	1,650	1,030	3,740	660	2,680	4,400	7,080
2038	1,840	1,120	4,130	710	2,960	4,840	7,800
2043	2,030	1,270	4,570	760	3,300	5,330	8,630
2048	2,260	1,390	5,050	780	3,650	5,830	9,480
2053	2,500	1,460	5,540	830	3,960	6,370	10,330

	Standalone		Multi unit		Standalone	Multi Unit	Total
	2-	3+	2-	3+	Total	Total	Alll
Inner East							
2018	3,010	3,610	5,050	960	6,620	6,010	12,630
2023	3,180	3,785	5,195	1,020	6,965	6,215	13,180
2028	3,290	3,845	5,405	1,040	7,135	6,445	13,580
2033	3,410	3,845	5,605	1,040	7,255	6,645	13,900
2038	3,520	3,815	5,745	1,040	7,335	6,785	14,120
2043	3,650	3,845	5,885	990	7,495	6,875	14,370
2048	3,700	3,885	5,885	950	7,585	6,835	14,420
2053	3,740	3,885	5,925	900	7,625	6,825	14,450
Inner West							
2018	1,650	3,010	2,490	910	4,660	3,400	8,060
2023	1,760	3,160	2,465	1,060	4,920	3,525	8,445
2028	1,850	3,250	2,565	1,090	5,100	3,655	8,755
2033	1,950	3,290	2,695	1,100	5,240	3,795	9,035
2038	2,040	3,310	2,775	1,100	5,350	3,875	9,225
2043	2,140	3,380	2,825	1,110	5,520	3,935	9,455
2048	2,190	3,410	2,880	1,080	5,600	3,960	9,560
2053	2,250	3,430	2,915	1,055	5,680	3,970	9,650
Lyttelton							
2018	660	1,910	40	10	2,570	50	2,620
2023	710	1,950	30	10	2,660	40	2,700
2028	720	2,030	40	10	2,750	50	2,800
2033	740	2,080	40	10	2,820	50	2,870
2038	770	2,100	40	10	2,870	50	2,920
2043	790	2,120	40	10	2,910	50	2,960
2048	790	2,090	40	10	2,880	50	2,930
2053	800	2,080	40	10	2,880	50	2,930
NorthEast							
2018	4,670	22,040	2,720	1,030	26,710	3,750	30,460
2023	4,880	23,060	2,840	1,080	27,940	3,920	31,860
2028	5,180	23,760	3,120	1,180	28,940	4,300	33,240
2033	5,520	24,430	3,390	1,260	29,950	4,650	34,600
2038	5,780	24,970	3,630	1,300	30,750	4,930	35,680
2043	5,990	25,500	3,780	1,350	31,490	5,130	36,620
2048	6,140	25,930	3,890	1,360	32,070	5,250	37,320
2053	6,290	26,370	3,980	1,380	32,660	5,360	38,020
NorthWest							
2018	3,940	24,430	3,550	1,510	28,370	5,060	33,430
2023	4,080	25,420	3,750	1,730	29,500	5,480	34,980
2028	4,290	26,360	4,000	1,770	30,650	5,770	36,420
2033	4,540	27,200	4,280	1,850	31,740	6,130	37,870
2038	4,780	27,870	4,530	1,920	32,650	6,450	39,100
2043	4,950	28,410	4,760	1,980	33,360	6,740	40,100
2048	5,100	28,820	4,950	2,050	33,920	7,000	40,920
2053	5,250	29,250	5,080	2,090	34,500	7,170	41,670

	Standalone		Multi unit		Standalone	Multi Unit	Total
	2-	3+	2-	3+	Total	Total	Alll
Port Hills							
2018	1,320	9,570	710	320	10,890	1,030	11,920
2023	1,390	9,930	740	330	11,320	1,070	12,390
2028	1,430	10,200	770	330	11,630	1,100	12,730
2033	1,490	10,420	820	350	11,910	1,170	13,080
2038	1,520	10,510	900	360	12,030	1,260	13,290
2043	1,540	10,560	960	360	12,100	1,320	13,420
2048	1,540	10,420	970	350	11,960	1,320	13,280
2053	1,550	10,350	1,000	350	11,900	1,350	13,250
SouthEast							
2018	3,060	8,820	2,260	580	11,880	2,840	14,720
2023	3,190	8,990	2,240	660	12,180	2,900	15,080
2028	3,290	9,120	2,340	680	12,410	3,020	15,430
2033	3,390	9,140	2,460	700	12,530	3,160	15,690
2038	3,450	9,100	2,530	720	12,550	3,250	15,800
2043	3,520	9,120	2,600	750	12,640	3,350	15,990
2048	3,530	9,050	2,650	770	12,580	3,420	16,000
2053	3,530	8,990	2,670	770	12,520	3,440	15,960
SouthWest							
2018	5,050	22,860	3,630	1,180	27,910	4,810	32,720
2023	5,520	24,570	4,150	1,260	30,090	5,410	35,500
2028	5,940	25,870	4,520	1,350	31,810	5,870	37,680
2033	6,340	26,980	4,890	1,400	33,320	6,290	39,610
2038	6,730	27,980	5,240	1,450	34,710	6,690	41,400
2043	7,100	29,090	5,520	1,500	36,190	7,020	43,210
2048	7,380	30,150	5,670	1,560	37,530	7,230	44,760
2053	7,640	31,220	5,850	1,620	38,860	7,470	46,330

	Standalone		Multi Unit		Standalone	Multiunit	Total
	2- bdrms	3+ bdrms	2- bdrms	3+ bdrms	Total	Total	All
Rolleston							
2018	110	5,410	120	140	5,520	140	5,660
2023	160	7,560	180	210	7,720	210	7,930
2028	200	9,150	250	280	9,350	280	9,630
2033	260	10,950	320	360	11,210	360	11,570
2038	330	12,660	400	440	13,000	440	13,440
2043	400	14,370	480	530	14,770	530	15,310
2048	450	16,080	580	640	16,530	640	17,170
2053	500	17,860	680	750	18,350	750	19,100
Lincoln							
2018	20	2,200	120	140	2,220	140	2,360
2023	20	3,090	170	210	3,120	210	3,330
2028	30	3,810	210	280	3,840	280	4,120
2033	30	4,590	280	360	4,620	360	4,980
2038	40	5,390	280	360	5,430	360	5,780
2043	40	6,120	350	440	6,170	440	6,610
2048	50	6,860	430	530	6,910	530	7,440
2053	50	7,130	510	640	7,180	640	7,810
Prebbleton/West Melton							
2018	10	2,020	30	30	2,020	30	2,050
2023	10	2,970	30	30	2,980	30	3,010
2028	10	3,690	50	50	3,710	50	3,760
2033	20	4,520	60	60	4,530	60	4,590
2038	20	5,290	70	70	5,310	70	5,380
2043	20	6,110	90	90	6,130	90	6,220
2048	20	6,940	110	110	6,970	110	7,070
2053	30	7,580	130	130	7,610	130	7,730
UDS Rural							
2018	300	4,380	70	140	4,690	140	4,830
2023	340	4,730	70	160	5,080	160	5,240
2028	380	4,990	80	180	5,370	180	5,550
2033	430	5,290	90	210	5,710	210	5,930
2038	480	5,560	100	250	6,040	250	6,290
2043	550	5,850	100	250	6,410	250	6,650
2048	610	6,170	90	240	6,780	240	7,020
2053	630	6,340	90	230	6,970	230	7,200
Darfield & Leeston							
2018	90	1,810	90	90	1,900	90	1,980
2023	100	2,020	100	100	2,120	100	2,220
2028	110	2,220	110	110	2,320	110	2,430
2033	110	2,430	120	120	2,540	120	2,670
2038	120	2,660	130	130	2,780	130	2,910
2043	120	2,840	160	160	2,960	160	3,130
2048	130	3,020	190	190	3,140	190	3,340

2053	130	3,050	200	200	3,180	200	3,380
Rural							
2018	830	4,230	100	230	5,070	230	5,290
2023	900	4,440	100	250	5,340	250	5,580
2028	980	4,590	120	270	5,580	270	5,850
2033	1,070	4,780	130	290	5,850	290	6,140
2038	1,170	4,970	140	300	6,140	300	6,430
2043	1,260	5,160	140	300	6,430	300	6,730
2048	1,350	5,360	150	300	6,710	300	7,010
2053	1,390	5,540	150	300	6,930	300	7,230