

berl

Kāpiti Coast District population and dwelling projections

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Making sense of the numbers

The requirement

This report is in response to Kāpiti Coast District Council tasking Business and Economic Research Limited (BERL) to develop updated medium and high population and housing projections for the District and its SA2 areas from 2020-2050.

BERL's approach

To meet these requirements, we:

- Analysed past population trends in the District, relative to trends in the wider Wellington Region and in New Zealand as a whole
- Reviewed various other recent population projections for the District, and
- Developed a projection model that took account of a range of variables, including the effect of the District's population structure on birth and death rates, and the impact of transport improvements and COVID-19 on migration patterns.

The medium and high projections were based on alternative assumptions about the variables.

The findings

Our high projection indicates that the District's population will rise from 55,503 in 2020, to 77,641 in 2050. This represents a total increase in the District's population of 40 percent, or an annual average growth rate of 1.13 percent.

Our medium projection indicates that the District's population will rise from 55,503 in 2020, to 74,594 in 2050. This represents a total increase in the District's population of 34 percent, or an annual average growth rate of 0.99 percent.

Both these projections imply a considerably faster growing population in the District than Statistics New Zealand's current high projection, which implies an annual average growth rate of 0.81 percent.

Both of our projections of the District's population growth rate are lower than the annual average of 1.5 percent between 1996 and 2019. In the past, the District has benefitted from population growth that has been driven wholly or largely by net migration, but we now expect lower net migration in the future, especially while the COVID-19 pandemic endures. We also expect that the District will experience little, if any, excess of births over deaths because it has relatively few people of child-bearing age, and many older people.

Between 6,350 and 7,000 new dwellings will be needed to house the projected additional population in the District. Based on the distribution of infill capacity, known developments and green field opportunities, we project that just over half of these dwellings will be located in just three of the District's 25 SA2 areas.

Recommended projection

There are risks to the Council associated with both over- and under-estimating the actual population growth, but it is recommended that our medium projection should be used for the purposes of the LTP. Given the uncertainty surrounding how COVID-19 will affect the population and the economy, it would probably be marginally better for the Council to adopt the medium projection and risk having to play catch-up, than for the Council to adopt the high projection and risk over-investing in infrastructure.

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1 Introduction

1.1 Objectives

This report presents the results of work by Business and Economic Research Limited (BERL) for the Kāpiti Coast District Council (the Council) to develop updated population projections for the District.

The objectives of the work were to:

- Provide updated medium and high population and housing projections for the District and its SA2 areas from 2020-2050
- Reflect relevant factors, including recent and historic growth rates, anticipated completion of major roading projects and longer term growth prospects for the District
- Identify changes and assumptions relating to household composition
- Provide a recommendation on the scenario to use to inform the LTP process.

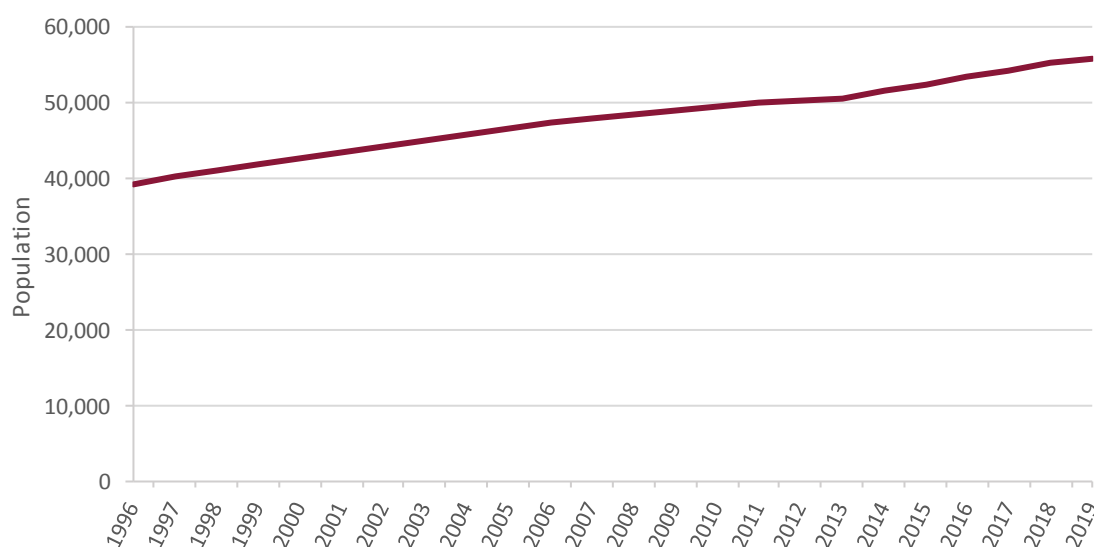
1.2 Recent population trends

Total population

By way of background, Figure 1-1 shows that the District's population increased from an estimated 39,400 in 1996 (the earliest year for which Statistics New Zealand (Statistics NZ) has data for the District) to an estimated 56,000 in 2019.

The growth rate in the District's population between 1996 and 2019 was an annual average of 1.5 percent per annum, although the graph indicates that there were periods of slower and faster growth. The population increased at a fairly steady rate between 1996 and 2009. The growth then slowed markedly between 2010 and 2013, before accelerating again.

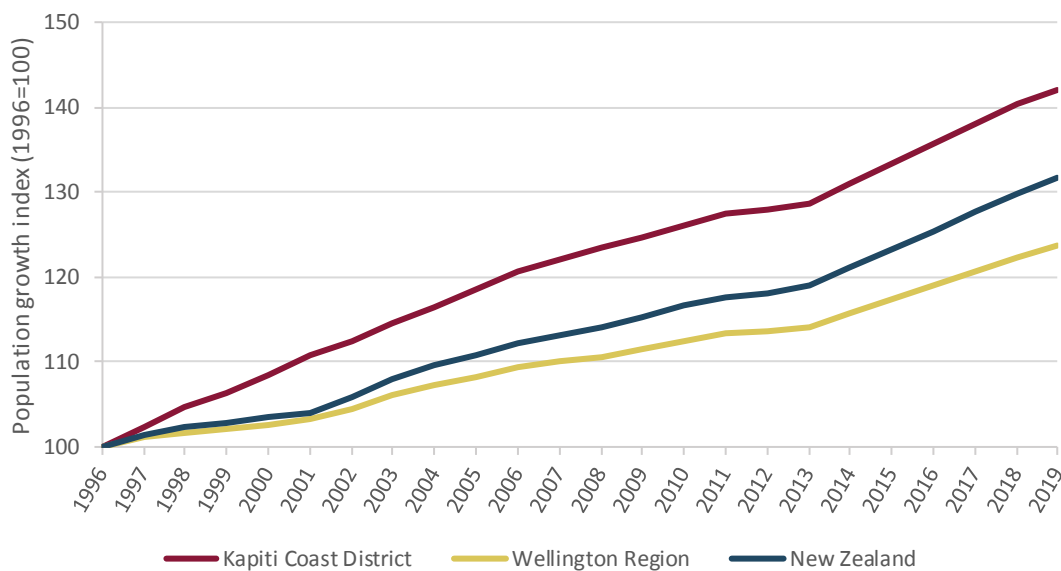
Figure 1-1 Growth of Kāpiti Coast District population, 1996-2019



Source: Statistics New Zealand

Figure 1-2 shows that the District's population increased considerably more rapidly between 1996 and 2019 than the population of both the Wellington Region and New Zealand. Overall during that time period, Kāpiti Coast's population grew by 42 percent, compared to 24 percent in the Wellington Region as a whole, and 32 percent nationally.

Figure 1-2 Indexes of population (1996=100)



Source: Statistics New Zealand

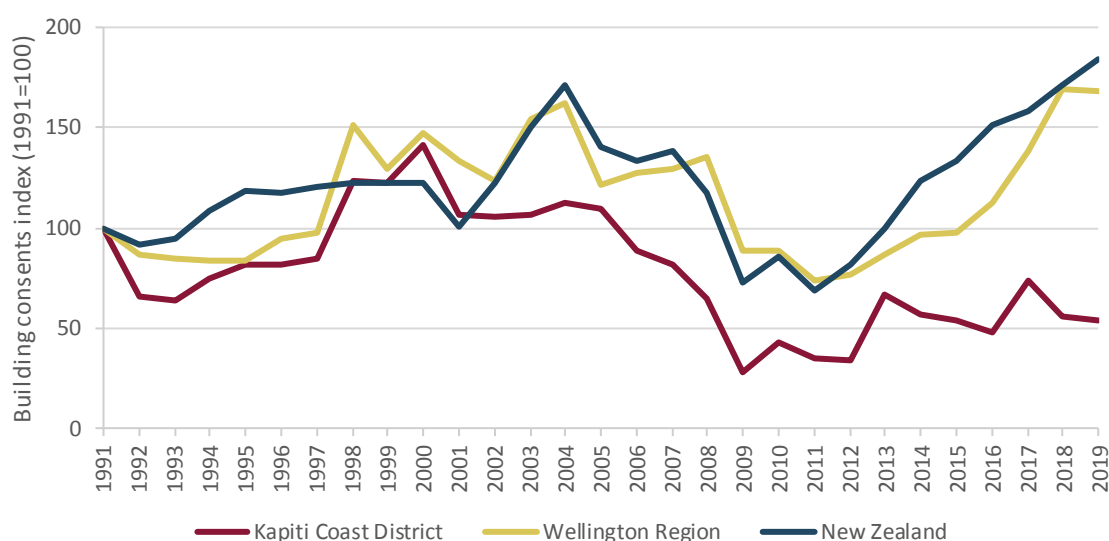
Consents data

Despite the fact that the population of the District has grown significantly faster than the populations of the Wellington Region and New Zealand, the number of consents for new dwelling units in the District appears not to have kept pace. Dwelling units include houses, apartments, townhouses, retirement village units and other dwellings.

Figure 1-3 indicates that, compared to the Wellington Region and New Zealand, the indexed number of dwelling unit consents in the District fell behind in the early years of the century. By 2009, the number of consented dwelling units in the District fell to less than 30 percent of the 1991 level. The number of consents in the District recovered after 2009, but at a slower rate than in the Wellington Region or New Zealand as a whole.

This pattern is difficult to understand, although one possibility is that, compared to the Wellington Region and New Zealand, a much greater proportion of the additional population in the District was accommodated in what were previously second or holiday homes, rather than in new builds.

Figure 1-3 Indexes of consents for new dwelling units (1991=100)



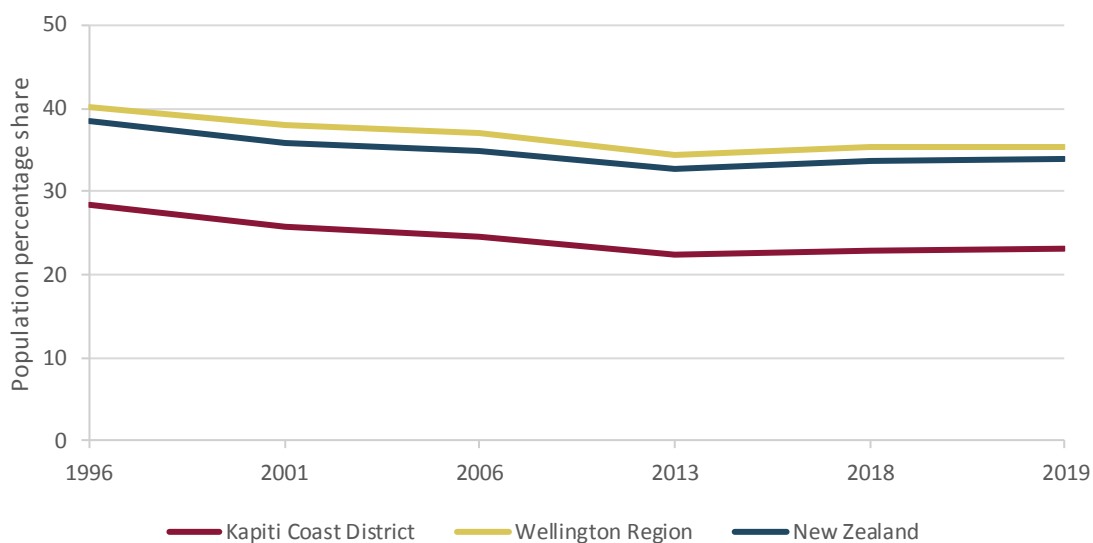
Age structure of the population

Compared to both the Wellington Region as a whole and nationally, Kāpiti Coast District has a small share of its population in the 15-39 year age group (Figure 1-4) and a large share in the 65 years and over age group (Figure 1-5). Kāpiti's share of the population in the 0-14 years and 40-64 years age group has been similar to the shares of the age groups in the regional and national populations.

In all three populations, the share of people aged 0-14 years has been falling steadily, while the share of people aged 65 years and over has been increasing.

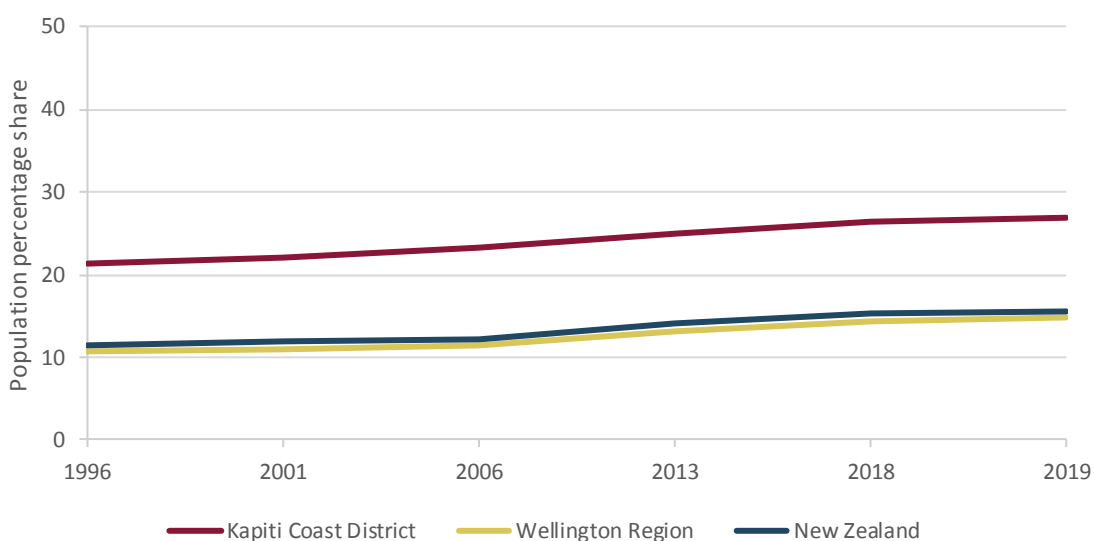
Together, Figure 1-4 and Figure 1-5 imply that the relatively rapid growth in the District's population has been mainly driven by migration from elsewhere in New Zealand and overseas. The District's relatively small population in the 15-39 year age group, and its relatively large population in the 65 years and over age group, imply a low whole population birth rate and a large whole-population death rate. In other words, the District has experienced a relatively low natural rate of increase in its population.

Figure 1-4 Share of the total population in the 15-39 year age group



Source: Statistics New Zealand

Figure 1-5 Share of the population in the 65 years and over age group



Source: Statistics New Zealand

1.3 Recent population estimates and projections

Total population

Table 1-1 summarises other recent population estimates and projections for the District. Statistics NZ has yet to release its 2020 estimate, but .id estimated the population would currently be 55,503, which is the estimate BERL recently used for its work for Greater Wellington Regional Council on the COVID-19 economic impact. We note, however, that the Council believes that the District's

population was 57,000 in June 2020. It is emphasised that the other estimates and projections in the table are shown for reference only, although we state in Section 2 which of the projections we consider to be the most suitable as the starting point for the projections in this report.

The table also indicates that Statistics NZ's estimate of the District's population in 2019 is almost as high as its previously published medium projection of the population for the year 2028. However, it should be noted that the current Statistics NZ projections are on a 2013 population base, and that the projections are expected to be revised upwards, when projections on a 2018 population base are released around the end of this year.

Table 1-1 Other recent population projections for Kāpiti Coast District

	Actual/estimated			Projected				
	2018	2019	2020	2023	2028	2033	2038	2043
Census	53,940							
Statistics NZ estimate		56,000						
Statistics NZ medium projection				54,700	56,200	57,500	58,500	59,400
Statistics NZ high projection				57,100	60,000	62,700	65,200	67,500
.id			55,503	56,738	59,122	62,152	65,448	68,548
BERL COVID-19 projection best case - GWRC		55,163	55,503	56,137	58,786			
BERL COVID-19 projection mid-point - GWRC		55,163	55,503	55,999	58,482			
BERL COVID-19 projection worst case - GWRC		55,163	55,503	55,995	57,938			

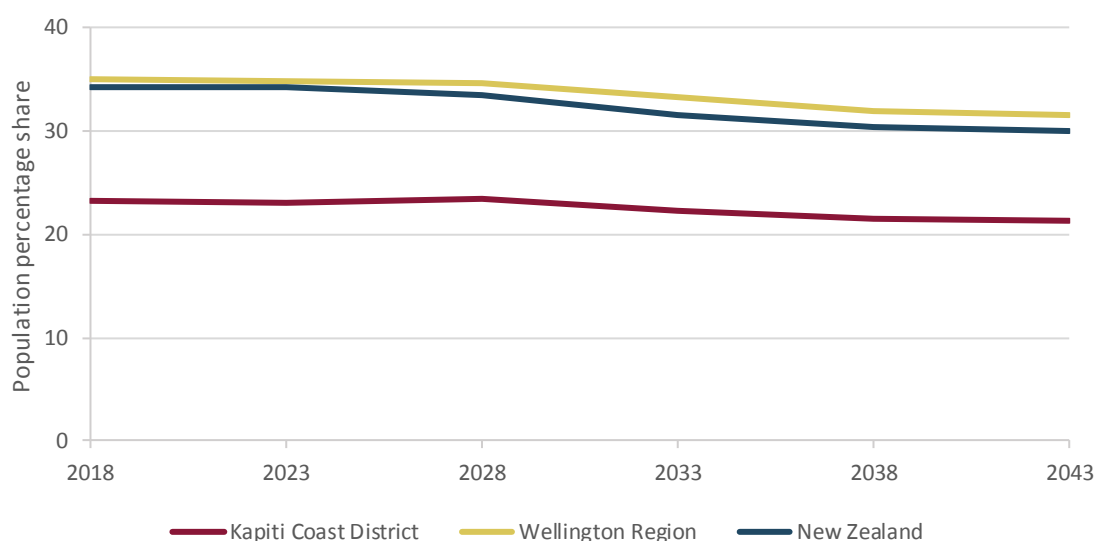
Sources: Statistics New Zealand, .id, BERL

.id's projection is closer to Statistics NZ's high projection than to the medium projection, and it surpasses even the high projection by 2038. BERL's projections were up to 2030 only, and they were different from the other projections in that they took explicit account of how COVID-19 would impact on population growth under different scenarios. Under each of the COVID-19-based projections, the population is projected to grow more slowly than .id expects to be the case.

Structure of the population

The following two graphs are based on Statistics NZ's medium population projection. Figure 1-6 indicates that the District is projected to continue having a significantly smaller proportion of its population, than both the Wellington Region and New Zealand as a whole, in the main child-bearing 15-39 age group. However, the gap between this age group's share of the total population in the District and the group's share regionally and nationally is projected to close slightly over time.

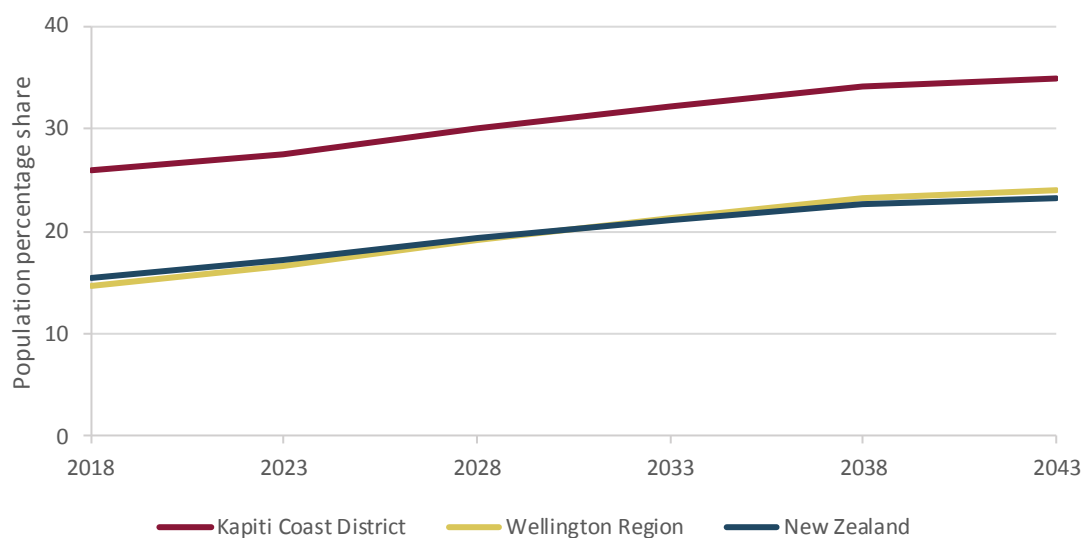
Figure 1-6 Projected share of the population in the 15-39 years age group (medium projection)



Source: Statistics New Zealand

Figure 1-7 indicates that the elderly population's share of the total in the District is likely to remain significantly higher than their share in the regional and national population.

Figure 1-7 Projected share of the population in the 65 years and over age group (medium projection)



Source: Statistics New Zealand

In all three populations (District, Region and all New Zealand), the share of people aged 15-39 years is projected to fall, especially after 2028, while the share of people aged 65 years and over is projected to increase continually. Kāpiti District's share of the population in the 0-14 years and 40-

64 years age group is projected to remain similar to the shares of the age groups in the regional and national populations.

In combination, Figure 1-6 and Figure 1-7 imply that the District will continue to experience a relatively slow natural increase in its population, with a relatively low whole population birth rate and a relatively high whole population death rate.

2 BERL's population and dwellings model

2.1 Modelling approach

Our approach to developing medium and high projections for the District's population, and for each of its SA2 areas, was as follows:

1. Review recent projections (see Table 1-1) to assess which projection was the most suitable as a potential starting point for our population growth modelling
2. Adjust the most suitable projection, to account for:
 - i. Population cohort change (births and deaths)
 - ii. Household size of new households moving into the District
 - iii. The expected effect of COVID 19 on international net migration
 - iv. The effect of Transmission Gully, Peka Peka to Ōtaki expressway, and further possible transport infrastructure improvements on migration into the District from elsewhere in the Region
3. Estimate population growth at District level for both projections, and then allocate additional population to SA2s, based on known developments, infill capacity and green field opportunities.

After analysing the range of projections available, the projection we selected as the basis for the modelling was the Statistics NZ high projection. This projection had the advantage of being finely-grained, with the population projections disaggregated to show:

- Population by age group and sex
- Population by SA2 area
- Birth, death and net migration rates.

The Statistics NZ projections are divided into five years blocks of time, but we created even more finely-grained projections, by applying birth, death, and net migration rates to each year's projected population.

The effect of COVID-19 on international migration is extremely uncertain, but we note that, at national level, net migration collapsed from 7,782 in the second quarter of 2019, to just 802 in the second quarter of 2020, a decrease of 90 percent. During that period, net migration of New Zealand citizens turned from a loss of 3,011 people, to a gain of 2,085. However, net migration of non-New Zealand citizens turned from a gain of 10,791 people, to a loss of 1,284. On this basis, we expect net international migration into the District to decrease dramatically for several years. By contrast, it is likely that net migration from elsewhere in New Zealand into the District will increase because of roading improvements and better working-from-home opportunities.

We captured the effect of the completion of the Transmission Gully and Peka Peka to Ōtaki parts of the Wellington Northern Corridor by separately modelling what would need to happen to migration into the District, if the proportion of employed residents who worked outside the District increased over time towards the levels now seen in Porirua and Upper Hutt. Both Porirua and Upper Hutt are currently significantly more accessible than the Kāpiti Coast District for commuters into Wellington, but the Northern Corridor improvements will increase the District's relative accessibility and attractiveness as a place to live.

We worked on the basis that the District level increases in population would be distributed between the different SA2 areas within the District according to what additional housing supply is likely to become available in each area. For this purpose, we used data on infill capacity, known developments and green field development opportunities, provided to us by the Council.

2.2 Variables and assumptions

Our model took account of the following variables:

- Natural increase (births and deaths)
- Net migration (domestic and international)
- Transmission Gully and Peka Peka to Ōtaki effect from 2022
- COVID 19 impact across a five year period (2020-2025)
- Population per dwelling for new dwellings
- Future dwelling developments

The key modelling assumptions were that:

- The completion of Transmission Gully and the Peka Peka to Ōtaki sections of the Wellington Northern Corridor would increase the District's population through net migration by 163 people per year in our medium projection, and by 234 people per year in our high projection
- Consistent with our COVID-19 related projections for the Wellington Regional Council, our medium projection assumes that the effect of COVID 19 would be to reduce the District's inward migration between 2020 and 2025, by 1,600 people, compared to what it would have been in the absence of the pandemic. In our high projection, the reduction is 1,100 people between 2020 and 2025
- For the distribution of the projected population between the different SA2 areas, we assumed, for our medium projection, that 95 percent of known developments would be completed, 80 percent of identified infill opportunities would be taken up and 90 percent of green field developments would be completed. For our high projection, the assumed proportions were 95 percent for infill opportunities, 95 percent for known developments, and 100 percent for new green field developments
- Under our medium projection, we have assumed an average household size of 2.5 for new dwellings built in the District. This assumed average household size is similar to the current household size of 2.45, as determined from 2018 Census data. For our high projection, we have assumed an average household size of 3.5 for new dwellings built in the District. This is based on a much higher percentage share of families moving into new dwelling builds than the medium projection.

It should be noted that the first two of the key assumptions above affect the total size of the projected population, while the third and fourth key assumptions affect only its distribution within the District.

3 BERL's projections

3.1 The District's projected total population

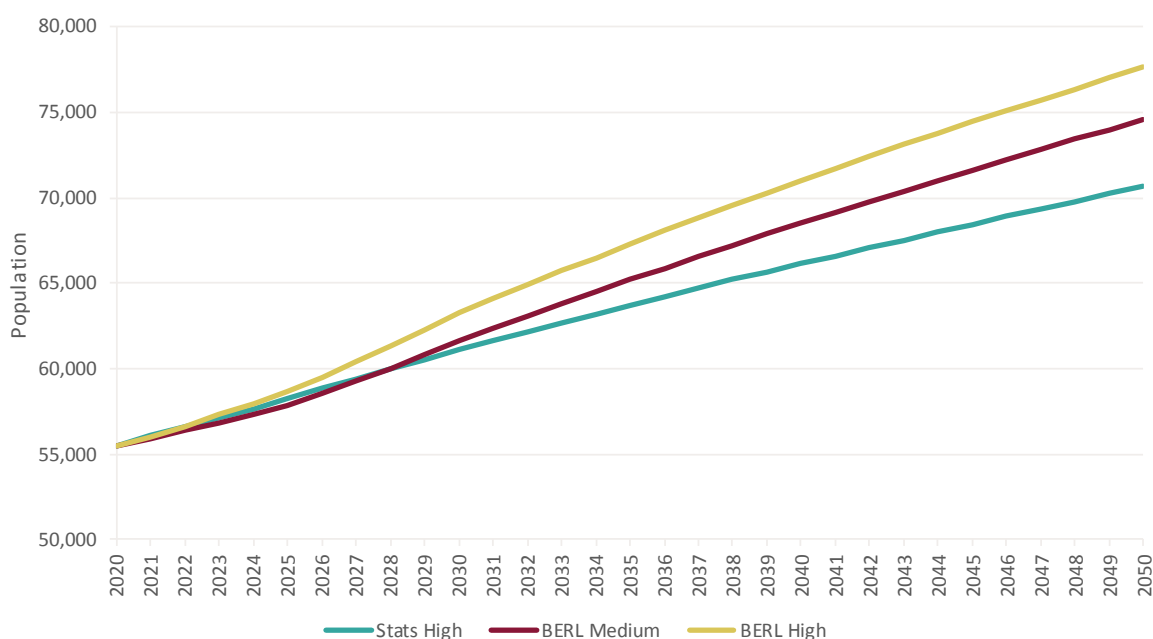
Figure 3-1 indicates that, based on our high projection, the District's population will rise from 55,503 in 2020, to 77,641 in 2050. The total increase in the District's population over the period is projected to be 40 percent, which translates to an annual average percentage growth rate of 1.13 percent.

Based on our medium projection, the District's population will rise from 55,503 in 2020, to 74,594 in 2050. This implies a total increase in the District's population over the period of 34 percent, which translates to an annual average percentage growth rate of 0.99 percent.

For the purposes of comparison, the current Statistics NZ high projection suggests that the District's population will grow to 70,720 by 2050, an overall increase of 27 percent, or 0.81 percent a year.

A year-by-year breakdown of our projections is shown in Appendix A.

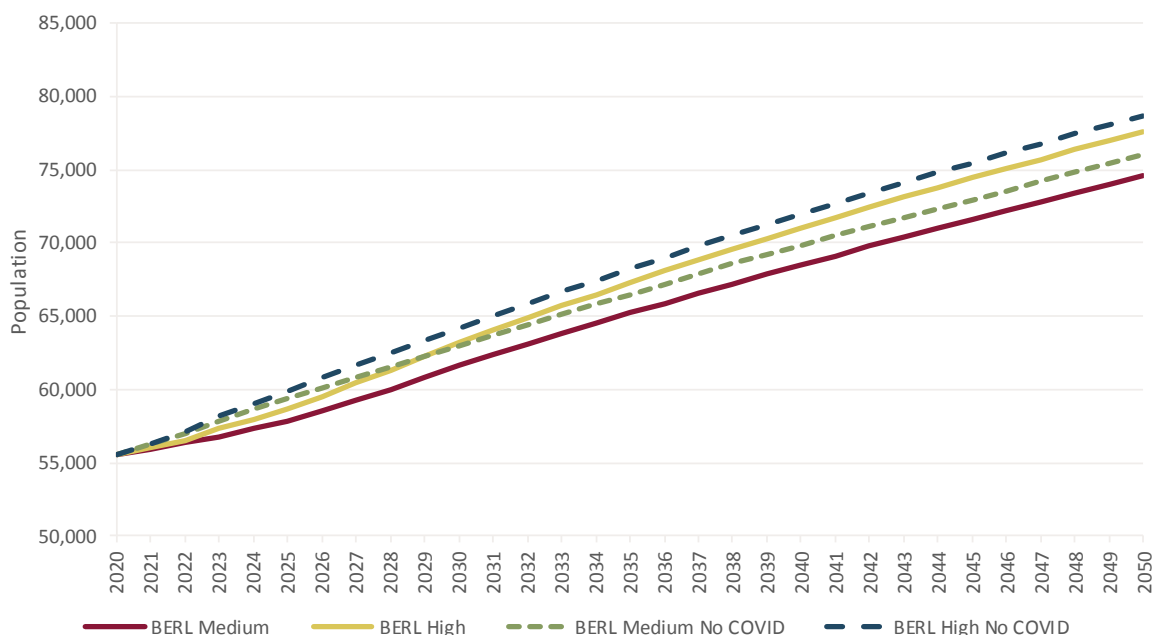
Figure 3-1 Kāpiti Coast District population projections



Source: BERL

Figure 3-2 shows how our allowance for COVID-19 in our modelling affects our projections. In the absence of COVID-19, we would have projected a population of 78,705 under the high projection. This would have meant a total increase in the population of 42 percent, or 1.17 percent a year. Our medium projection of the population in 2025 in the absence of COVID-19 would have been 75,982. This would have meant a total increase in the population of 37 percent, or 1.05 percent a year.

Figure 3-2 Kāpiti Coast District projections without COVID-19 impacts



Source: BERL

3.2 Distribution of projected population within the District

Table 3-1 shows the projected absolute population growth occurring in each SA2 within the District out to 2050, for each of the three projections (Statistics NZ high, BERL medium, and BERL high). This shows that across the two BERL projections, the three SA2's that make-up the Waikanae urban area (Waikanae Park, Waikanae West, and Waikanae East) will see population growth of between 6,700 and 8,350 people across the 30 years to 2050. Another fast growing area is Otaki (Otaki, Otaki Beach, and Waitohu) which will see population growth of between 3,740 and 4,900 people across the next 30 years.

At the other end of the growth spectrum is Paekakariki and Otaki Forks, both of which are expected to see only a small increase in population size under both BERL projections. In addition, Paraparaumu Beach and Raumati Beach urban areas which will see smaller population increases of around 700 people for Raumati Beach, and 400 to 850 people for Paraparaumu Beach, over the next 30 years. This lower population stems from low numbers of expected new dwellings being built in these areas.

The two BERL projections are in contrast to the Statistics New Zealand high projection which is projecting only small population growth in Otaki and Waikanae Park, and much higher population projections for Paraparaumu Beach North, Raumati Beach West, Maungakotukutuku, and Paekakariki. The main difference between the projections, is BERL's use of dwelling projections to distribute population growth, rather than Statistics New Zealand's use of historic growth parameters.

Table 3-1 Projected absolute population growth, 2020-2050, Statistical Area 2

Statistical Area 2	Population growth 2020-2050		
	Statistics NZ High	BERL Medium	BERL High
Waikanae Park	557	3,598	4,720
Otaki	953	3,109	4,121
Waikanae West	2,875	2,161	2,521
Paraparaumu Central	567	1,278	1,429
Paraparaumu East	323	1,156	1,411
Raumati South	764	1,003	951
Waikanae East	644	935	1,106
Forest Lakes (Kapiti Coast District)	176	676	882
Paraparaumu North	580	676	631
Peka Peka	541	563	817
Otaihanga	482	411	573
Raumati Beach East	829	411	434
Waitohu	274	377	497
Maungakotukutuku	742	353	356
Paraparaumu Beach East	379	326	206
Waikanae Beach	510	309	224
Raumati Beach West	1,001	298	243
Paraparaumu Beach West	342	267	132
Otaki Beach	494	255	279
Te Horo	499	250	195
Paraparaumu Beach North	1,108	248	81
Paekakariki	416	234	145
Otaki Forks	159	195	183
Kapiti Island	0	0	0
Tararua Forest Park	0	0	0

Source: BERL

Table 3-2 shows the percentage share of the District's additional population that is projected to flow into each of the District's SA2s. The table implies that around 20 percent of the population growth in each of the two BERL projections will flow into the Waikanae Park SA2. As shown in Table 3-3, this SA2 is expected to have around 1,400 new dwellings to accommodate the growth.

Overall, just under 50 percent of the District's population growth is expected in the Waikanae Park, Waikanae West, and Otaki SA2's, which, given the method used to allocate the population to SA2's, is consistent with Table 3-3, which shows that around 50 percent of new dwellings will be built in these three SA2's.

Of interest it should be noted that some SA2's would see larger percentage shares of the total population flowing into them under the BERL medium, compared to the BERL high. This is caused by the difference in the two projections assumptions around take-up of green field developments, known developments and infill housing, along with household size taking up residence in the new dwellings, and lastly the controls in the model used to ensure population flows into SA2s with spare capacity when others hit their capacity limits.

Table 3-2 Percentage share of population growth, 2020-2050, Statistical Area 2

Statistical Area 2	Percentage share of population growth 2020-2050		
	Statistics NZ High	BERL Medium	BERL High
Waikanae Park	3.7	18.8	21.3
Otaki	6.3	16.3	18.6
Waikanae West	18.9	11.3	11.4
Paraparaumu Central	3.7	6.7	6.5
Paraparaumu East	2.1	6.1	6.4
Raumati South	5.0	5.3	4.3
Waikanae East	4.2	4.9	5.0
Forest Lakes (Kapiti Coast District)	1.2	3.5	4.0
Paraparaumu North	3.8	3.5	2.9
Peka Peka	3.6	2.9	3.7
Otaihanga	3.2	2.2	2.6
Raumati Beach East	5.4	2.2	2.0
Waitohu	1.8	2.0	2.2
Maungakotukutuku	4.9	1.8	1.6
Paraparaumu Beach East	2.5	1.7	0.9
Waikanae Beach	3.4	1.6	1.0
Raumati Beach West	6.6	1.6	1.1
Paraparaumu Beach West	2.2	1.4	0.6
Otaki Beach	3.2	1.3	1.3
Te Horo	3.3	1.3	0.9
Paraparaumu Beach North	7.3	1.3	0.4
Paekakariki	2.7	1.2	0.7
Otaki Forks	1.0	1.0	0.8
Kapiti Island	0.0	0.0	0.0
Tararua Forest Park	0.0	0.0	0.0

Source: BERL

3.3 The District's projected additional dwellings

To determine each SA2's share of the District's population change each year, we have made use of data on infill capacity, known developments and green field development opportunities, provided to us by the Council. Under each projection, we have assumed a different level of take-up for each of these methods for increasing dwellings within each SA2. In addition to determining the number of new dwellings being added to each SA2, each year, each projection has a household size expected to live in the new dwelling.

Therefore by multiplying the number of new dwellings by the expected household size, we are able to determine the additional number of new people able to be added to each SA2, each year. To allocate the District's population change to the SA2's, we use a combination of the number of available dwellings in each SA2 and historic growth patterns. In addition we have added controls into the model to ensure that additional population cannot be added to an SA2 with no spare capacity if another SA2 has spare capacity.

Table 3-3 shows that under the BERL high projection that there could be a surplus of dwellings in the District by 2050. Under the high projection, this surplus is modelled to be around 640 dwellings. Under the BERL medium projection there will be a deficit of dwellings in the District by 2050. Under the medium projection, this surplus is modelled to around 1,280 dwellings. A projected deficit of dwellings implies that it might be necessary for the Council to designate additional areas for residential development, while a projected surplus might cause developers to slow the speed of house building in their developments.

Table 3-3 Projected additional dwellings under BERL projections, by Statistical Area 2

Statistical Area 2	BERL Medium		BERL High	
	New Dwellings	Surplus/Deficit	New Dwellings	Surplus/Deficit
Waikanae Park	1,369	-70	1,443	94
Otaki	1,148	-96	1,271	94
Waikanae West	736	-128	766	46
Paraparaumu Central	409	-102	450	42
Paraparaumu East	398	-64	440	37
Raumati South	309	-92	309	37
Waikanae East	309	-65	339	23
Forest Lakes (Kapiti Coast District)	246	-24	271	19
Paraparaumu North	197	-73	216	36
Peka Peka	202	-23	239	6
Otaihanga	140	-24	170	6
Raumati Beach East	114	-50	144	20
Waitohu	122	-29	150	8
Maungakotukutuku	110	-31	116	14
Paraparaumu Beach East	79	-51	85	26
Waikanae Beach	62	-62	92	28
Raumati Beach West	63	-56	93	24
Paraparaumu Beach West	60	-47	60	22
Otaki Beach	68	-34	98	18
Te Horo	69	-31	69	13
Paraparaumu Beach North	24	-75	24	1
Paekakariki	60	-34	60	19
Otaki Forks	60	-18	60	8
Kapiti Island	0	0	0	0
Tararua Forest Park	0	0	0	0
Kapiti Coast District	6,354	-1,279	6,965	641

Source: BERL

Differences in infill, green field and known developments between the two projections is the reason why under the medium projection 6,354 new dwellings will be built between 2020 and 2050, while under the high projection 6,965 new dwellings will be built between 2020 and 2050. It is the difference in assumed household size between the projections that is making the biggest impact on whether the projection has a dwelling deficit or dwelling surplus across the thirty years.

In addition, the table shows that under both BERL projections that just over half of all new dwellings will be built in just three SA2's. These are Waikanae Park with around 20 percent of new dwellings, Otaki with around 18 percent of new dwellings, and lastly Waikanae West with 11 percent of new dwellings. While the next two largest growing SA2's are Paraparaumu Central and Paraparaumu East, it is still expected that well over half of new dwellings, and therefore new population, will go into the northern urban areas of the District (Otaki and Waikanae).

More detailed medium and high population and dwelling projections, showing the pattern of change over time, are shown in Appendix B and Appendix C.

4 The recommended projection

Our medium projection for the District's population in 2050 is just more than 3,000, or four percent, lower than our high projection, but this difference is still potentially significant in terms of the Council's finances.

In response to the Council's requirement to know which of the two projections should be used to inform the LTP process, our recommendation is that it should be the medium projection. This recommendation is based on how we perceive the respective risks to the Council of over- or under-estimating the actual population growth.

Over-estimating the growth of the population would tend to lead the Council to undertake capital expenditure on infrastructure earlier than there is revenue to pay for it. The capacity created by the expenditure might eventually be taken up, but the result of the premature expenditure would be that the Council would incur higher interest and borrowing costs than it would if the over-estimation had been avoided.

By contrast, under-estimating growth could mean that the Council's planned infrastructure investment will be inadequate, compared to needs. If unexpected growth eventuates, the Council might be able to designate extra development capacity, and negotiate additional developer agreements to fund it. However, designating extra capacity and negotiating agreements could be costly in terms of Council time and effort. Moreover, delaying infrastructure investment might result in the Council having to pay more in real terms than it would otherwise have needed, because of asset price increases and other cost inflation.

Neither over- or under-estimating growth is obviously preferable. However, on balance, we believe that it would be better, especially given the uncertainty surrounding how COVID-19 will affect the population and the economy, to proceed cautiously and plan on the basis of our medium projection. Put simply, we think it would be marginally better, under current circumstances, for the Council to risk having to play catch-up, than for the Council to risk over-investing.

Appendix A BERL's year by year population projections

Year	high projection	medium projection
2020	55,503	55,503
2021	55,985	55,890
2022	56,570	56,375
2023	57,304	56,769
2024	57,903	57,329
2025	58,674	57,884
2026	59,531	58,532
2027	60,405	59,252
2028	61,303	59,967
2029	62,265	60,802
2030	63,271	61,679
2031	64,105	62,397
2032	64,939	63,115
2033	65,723	63,813
2034	66,507	64,506
2035	67,291	65,199
2036	68,075	65,892
2037	68,854	66,585
2038	69,578	67,228
2039	70,302	67,866
2040	71,026	68,504
2041	71,745	69,137
2042	72,464	69,770
2043	73,123	70,378
2044	73,777	70,986
2045	74,426	71,594
2046	75,075	72,197
2047	75,719	72,800
2048	76,363	73,398
2049	77,002	73,996
2050	77,641	74,594

Source: BERL

Appendix B BERL medium population and dwelling projections

BERL medium population projection by SA2 for specified years.

Statistical Area 2	BERL medium population projections								
	2020	2023	2026	2029	2032	2035	2040	2045	2050
Waikanae Park	2,154	2,383	2,789	3,234	3,676	4,153	4,931	5,494	5,752
Otaki	3,605	3,793	3,974	4,146	4,541	4,888	5,446	6,040	6,714
Waikanae West	4,523	4,609	4,768	4,963	5,144	5,465	6,055	6,486	6,684
Paraparaumu Central	4,133	4,222	4,358	4,538	4,696	4,821	5,016	5,194	5,411
Paraparaumu East	2,340	2,421	2,532	2,685	2,835	2,954	3,140	3,313	3,496
Raumati South	3,878	3,893	3,982	4,134	4,273	4,395	4,599	4,768	4,881
Waikanae East	2,473	2,531	2,664	2,838	2,986	3,083	3,166	3,268	3,408
Forest Lakes (Kapiti Coast District)	686	712	754	860	963	1,033	1,150	1,274	1,362
Paraparaumu North	3,686	3,759	3,834	3,942	4,040	4,090	4,149	4,231	4,362
Peka Peka	635	685	746	814	880	933	1,013	1,098	1,198
Otaihanga	831	862	893	932	992	1,053	1,107	1,168	1,242
Raumati Beach East	2,457	2,472	2,491	2,527	2,582	2,631	2,713	2,791	2,868
Waitohu	1,045	1,115	1,171	1,222	1,258	1,286	1,335	1,371	1,422
Maungakotukutuku	1,384	1,454	1,521	1,572	1,596	1,613	1,641	1,680	1,737
Paraparaumu Beach East	2,762	2,789	2,820	2,874	2,910	2,928	2,959	3,006	3,088
Waikanae Beach	3,362	3,382	3,401	3,444	3,477	3,495	3,527	3,579	3,671
Raumati Beach West	2,961	2,980	3,006	3,046	3,077	3,095	3,126	3,175	3,259
Paraparaumu Beach West	2,443	2,460	2,479	2,514	2,543	2,560	2,591	2,636	2,710
Otaki Beach	1,877	1,913	1,930	1,960	1,986	2,002	2,029	2,069	2,132
Te Horo	1,471	1,495	1,524	1,557	1,580	1,597	1,626	1,664	1,721
Paraparaumu Beach North	4,192	4,204	4,226	4,275	4,313	4,322	4,329	4,360	4,440
Paekakariki	1,802	1,817	1,837	1,866	1,891	1,908	1,936	1,975	2,036
Otaki Forks	803	819	835	857	877	894	921	954	998
Kapiti Island	0	0	0	0	0	0	0	0	0
Tararua Forest Park	0	0	0	0	0	0	0	0	0
Kapiti Coast District	55,503	56,770	58,535	60,800	63,116	65,199	68,505	71,594	74,592

BERL medium dwelling projections showing the number of new dwellings by SA2 for the period ending in the specified year.

Statistical Area 2	BERL medium projections of new dwellings							
	2020-2023	2023-2026	2026-2029	2029-2032	2032-2035	2035-2040	2040-2045	2045-2050
Waikanae Park	92	162	173	171	191	310	210	60
Otaki	75	69	56	150	138	220	220	220
Waikanae West	34	60	60	60	122	223	147	30
Paraparaumu Central	35	51	56	52	46	71	53	45
Paraparaumu East	32	41	53	54	45	71	57	45
Raumati South	6	32	45	45	45	75	51	10
Waikanae East	23	50	59	51	36	30	30	30
Forest Lakes (Kapiti Coast District)	10	16	40	39	27	45	45	24
Paraparaumu North	29	30	30	30	18	20	20	20
Peka Peka	20	24	24	24	20	30	30	30
Otaihanga	12	12	12	21	23	20	20	20
Raumati Beach East	6	6	6	16	18	30	22	10
Waitohu	27	21	15	11	10	18	10	10
Maungakotukutuku	28	25	15	6	6	10	10	10
Paraparaumu Beach East	11	12	12	8	6	10	10	10
Waikanae Beach	8	6	6	6	6	10	10	10
Raumati Beach West	7	8	6	6	6	10	10	10
Paraparaumu Beach West	6	6	6	6	6	10	10	10
Otaki Beach	14	6	6	6	6	10	10	10
Te Horo	9	10	8	6	6	10	10	10
Paraparaumu Beach North	4	6	6	6	2	0	0	0
Paekakariki	6	6	6	6	6	10	10	10
Otaki Forks	6	6	6	6	6	10	10	10
Kapiti Island	0	0	0	0	0	0	0	0
Tararua Forest Park	0	0	0	0	0	0	0	0
Kapiti Coast District	500	665	706	786	795	1,253	1,005	644

Appendix C BERL high population and dwelling projections

BERL high population projection by SA2 for specified years.

Statistical Area 2	BERL high population projections								
	2020	2023	2026	2029	2032	2035	2040	2045	2050
Waikanae Park	2,154	2,486	3,047	3,674	4,240	4,868	5,873	6,578	6,874
Otaki	3,605	3,879	4,113	4,330	4,870	5,334	6,072	6,848	7,726
Waikanae West	4,523	4,643	4,841	5,067	5,272	5,658	6,351	6,838	7,044
Paraparaumu Central	4,133	4,258	4,435	4,655	4,844	4,970	5,168	5,340	5,562
Paraparaumu East	2,340	2,459	2,595	2,802	2,992	3,136	3,359	3,548	3,751
Raumati South	3,878	3,892	3,983	4,146	4,286	4,399	4,594	4,745	4,829
Waikanae East	2,473	2,560	2,733	2,953	3,131	3,238	3,318	3,424	3,579
Forest Lakes (Kapiti Coast District)	686	724	784	935	1,069	1,160	1,309	1,467	1,568
Paraparaumu North	3,686	3,778	3,862	3,970	4,060	4,090	4,123	4,190	4,317
Peka Peka	635	718	820	924	1,020	1,092	1,200	1,316	1,452
Otaihanga	831	884	933	989	1,067	1,147	1,219	1,302	1,404
Raumati Beach East	2,458	2,484	2,503	2,539	2,595	2,644	2,731	2,812	2,892
Waitohu	1,045	1,146	1,219	1,283	1,327	1,360	1,423	1,471	1,542
Maungakotukutuku	1,384	1,481	1,572	1,634	1,648	1,652	1,664	1,690	1,740
Paraparaumu Beach East	2,762	2,794	2,832	2,884	2,901	2,893	2,887	2,907	2,968
Waikanae Beach	3,362	3,390	3,404	3,439	3,458	3,457	3,463	3,499	3,586
Raumati Beach West	2,961	2,991	3,013	3,049	3,068	3,071	3,083	3,121	3,204
Paraparaumu Beach West	2,443	2,460	2,466	2,490	2,500	2,496	2,496	2,517	2,575
Otaki Beach	1,877	1,934	1,954	1,987	2,010	2,021	2,045	2,085	2,156
Te Horo	1,471	1,500	1,528	1,558	1,572	1,577	1,590	1,616	1,666
Paraparaumu Beach North	4,192	4,203	4,224	4,245	4,266	4,273	4,273	4,273	4,273
Paekakariki	1,802	1,821	1,830	1,853	1,865	1,866	1,873	1,897	1,947
Otaki Forks	803	823	839	861	878	891	913	942	986
Kapiti Island	0	0	0	0	0	0	0	0	0
Tararua Forest Park	0	0	0	0	0	0	0	0	0
Kapiti Coast District	55,504	57,308	59,530	62,267	64,939	67,293	71,027	74,426	77,641

BERL high dwelling projections showing the number of new dwellings by SA2 for the period ending in the specified year.

Statistical Area 2	BERL high projections of new dwellings							
	2020-2023	2023-2026	2026-2029	2029-2032	2032-2035	2035-2040	2040-2045	2045-2050
Waikanae Park	98	170	179	177	201	325	223	70
Otaki	81	75	62	165	153	245	245	245
Waikanae West	37	63	63	63	125	228	152	35
Paraparaumu Central	38	57	62	58	50	77	58	50
Paraparaumu East	35	44	59	60	51	79	62	50
Raumati South	6	32	45	45	45	75	51	10
Waikanae East	26	53	62	54	39	35	35	35
Forest Lakes (Kapiti Coast District)	11	19	43	42	30	50	50	26
Paraparaumu North	31	30	30	30	20	25	25	25
Peka Peka	24	30	29	28	23	35	35	35
Otaihanga	15	15	15	24	26	25	25	25
Raumati Beach East	9	9	9	19	21	35	27	15
Waitohu	29	23	18	14	13	23	15	15
Maungakotukutuku	29	28	17	6	6	10	10	10
Paraparaumu Beach East	12	15	14	8	6	10	10	10
Waikanae Beach	11	9	9	9	9	15	15	15
Raumati Beach West	10	11	9	9	9	15	15	15
Paraparaumu Beach West	6	6	6	6	6	10	10	10
Otaki Beach	17	9	9	9	9	15	15	15
Te Horo	9	10	8	6	6	10	10	10
Paraparaumu Beach North	4	6	6	6	2	0	0	0
Paekakariki	6	6	6	6	6	10	10	10
Otaki Forks	6	6	6	6	6	10	10	10
Kapiti Island	0	0	0	0	0	0	0	0
Tararua Forest Park	0	0	0	0	0	0	0	0
Kapiti Coast District	550	726	766	850	862	1,362	1,108	741