Private Plan Change Request – Urban Estates Limited
Appendix F – Economic Assessment –Significant Development Assessment (Urban Economics)

URBAN ECONOMICS

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Economic Cost-Benefit Analysis for: Rolleston Residential Plan Change

PREPARED FOR

Urban Estates Ltd

ABOUT US

OUR AREAS OF EXPERTISE

Economic Analysis

Our work aims to bridge the gap between land-use planning and urban economics. Our focus is on the interaction between land markets, land-use regulations, and urban development. We have developed a range of methodologies using a quantitative approach to analyse urban spatial structure and audit land-use regulations.

Property Research

We provide property and retail market research to assist with planning and marketing of new projects. This includes identification of new sites and market areas, assessments of market potential and positioning, and the evaluation of market-feasibility of specific projects.

Development Advisory

We provide development planning and costing advisory services to support small and large-scale developments.

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1. Key Points

Canterbury was the second fastest growing region for both the 2013-2018 and 2018-2020 periods. Over the 2018-2020 period, Canterbury was projected to grow at 8,200 people per annum, however it achieved a much faster rate of growth, of 11,630 people per annum. This is comparable to the rate of growth achieved over the 2013-2018 period of 11,590 people per annum. In broad terms, Canterbury has recorded the second fastest rate of growth of any region, of around 11,600 per annum for the past 7 years.

Christchurch, Selwyn and Waimakariri all achieved a faster rate of growth than projected over the 2018-2020 period. Christchurch was projected to grow at a rate of 4,320 per annum, however the actual growth rate was 5,450 people per annum. Selwyn was projected to achieve growth of 2,000 per annum, however the actual growth rate was 3,200 people per annum. Waimakariri was projected to achieve growth of 1,180 per annum, it too exceeded projections achieving a growth rate of 1,700 people per annum.

The Our Space Greater Christchurch Settlement Pattern Update report includes a growth projection over the next decade that is derived from the Statistics NZ 2013 base projections. These projections are based on 2013 Census data and are considered by Statistics NZ to be out-of-date and unreliable. This is clearly evident in the regional disparities between the projection and actual rates of growth that have been achieved.

Our Space expects 2,690 additional households per annum to reside in greater Christchurch over the next decade. However, actual growth rates show that in the order of 4,500 additional households will be added to the population annually over this period. This means that the Our Space expected growth rate is 70% below the actual growth rate, and likely to be 70% below the revised Statistics NZ growth projection that will be released next year.

In early-mid 2021 Statistics NZ will provide 2018 projections, and these will account for both the 2018 Census data and the recent trends.

Rolleston achieved a growth rate of 540 households per annum over the 2018-2020 period, and a similar rate of 520 households per annum over the 2013-2018 period. Rolleston has therefore maintained steady growth of around 530 households per annum for the past seven-year period. This equates to just under 50% of the district's growth.

The Selwyn District Growth Model projects population and household growth for the 2018-2048 period. This shows expected growth of 290 households per annum over the next decade, around half the rate achieved over the previous seven years (530 per annum). While this accounts for the redistribution of growth from Selwyn to Christchurch, which is a strategic objective, it does not account for the rapid rate of growth seen across Christchurch as a whole, which increases the quantity of growth that needs to be enabled in Rolleston and Selwyn more generally.

Selwyn District has increased from 20% of all consents issued within the greater Christchurch

region in 2010, to 30% in 2020. More notably, Rolleston has increased from 6% of all consents issued within the greater Christchurch region in 2010, to 20% in 2020. The reason for this unprecedented rate of growth is that Rolleston offers affordable 3-4 bedroom family houses for around $500,000, and affordable family housing is in high demand. No other location in Christchurch can offer a significant quantity of affordable family housing at this price.

A section of $100,000 - $200,000 results in a house and land package of $400,000 - $500,000, which is a crucial price point for many young family households looking to get a new house. Selwyn sold 75% of all sections in this price range, Waimakariri sold 18% and Christchurch sold only 7%. It is the inability of Christchurch and Waimakariri to produce any significant number of sections in this price range that is underpinning the large sale rate being achieved in Selwyn.

Rolleston accounts for 35% of all lots sold in Greater Christchurch. This is entirely due to its ability to produce low priced lots, in the $100,000 - $200,000 range. Rolleston produced 62% of Greater Christchurch's low priced lots over the last twelve months, in the $100,000 - $200,000 range. Based on these figures, it is reasonable to conclude that Rolleston plays a major role in producing low priced lots and houses in Greater Christchurch, particularly affordable 3-4 bedroom family houses.

Rolleston has demand for around 750 dwellings per annum. This is evident in recent building consents, which are expected to be over 1,000 per annum for the full year 2020 and recent historical household growth, which has been within the 500-600 range per annum for seven years.

The demand for houses within Rolleston is almost entirely within the $400,000 - $600,000 price range for a new 3-4 bedroom family house. Rolleston has a comparative advantage in producing these dwellings within the wider region, and this is in part supported by the range of social and commercial amenities available.

Christchurch has had sufficient land available to remain relatively affordable when compared to other cities across New Zealand. With an average price of $526,000, this compares favorably to other major regions. This has given Christchurch a competitive advantage in attracting and retaining its population, which is the second largest in New Zealand.

The Canterbury region has performed better during the recent national increase in prices that has occurred as a result of lower interest rates over the past 6-12 months. Canterbury has seen an increase in price of $61,000, notably less than the other main regions that have increased between $78,000 and $145,000. This is due to the availability of low-priced development land, however with recent rates of construction, there is the risk that the price of development land increases and Christchurch's relative affordability and attractiveness, when compared to other cities, is diminished.

There is estimated **infill capacity for 1,250 dwellings** remaining in Rolleston. Some of this would not be available over the next decade due to land banking, and therefore would not be considered to be 'reasonably expected' to be developed as new capacity under the NPS-UD, however for the purpose of this analysis, a conservative approach has been adopted of assuming that all of this land

will be developed over the next decade.

The remaining **greenfield priority areas have capacity for 730 dwellings**, as these are in large part already developed. The **future development areas have capacity for 5,880 dwellings**.

The construction impact of new dwellings in the proposal is estimated to create 780 FTE jobs in the construction sector over the life of the project. As the project has a construction period of 4 years, this translates to 210 FTE jobs per annum.

The proposed site contains 63 hectares of land classified by Corelogic as lifestyle blocks. It is therefore assumed that no jobs in the agricultural sector are lost as a result of the proposal.

The proposal would result in the construction of approximately 840 dwellings over 4 years, at an estimated total cost of $312 million. This translates to a total value added per annum figure of $24.5 million to the construction industry or a present value (PV) of $60.3 million.

After dwellings have been constructed, they provide accommodation services to new residents. Based on a rental yield of 4% per annum, this is valued at $15 million per annum once all dwellings are built, or a net present value (NPV) of $135.7 million over the next thirty years.

The Christchurch Southern Motorway Stage 2 is being development with a cost of $195 million, and a completion date of 2021. Additional development at Rolleston will generate various development contributions and rates that will contribute to the significant public cost of this investment, and ensure it is paid for in an economic timeframe.

There are several specific infrastructure investments in Rolleston. These range from water supply, town square updates and local parks. These have a total cost of $13.4 million. Given the imminent shortage of land for new lots and dwellings in Rolleston, the proposal would ensure that additional development contributions and rates are available to pay for the cost of this investment.

The Selwyn district has capacity for 9,725 dwellings. The Our Space report estimates demand for 8,600 dwellings over the next decade. This results in a surplus capacity of 1,125 dwellings over this time period.

Our Space make the strategic decision of allocating less demand to Selwyn and Waimakariri and more demand to Christchurch than has historically been observed in the market. This approach is anticipated to enable various efficiencies (e.g. public transport) however must be balanced against the need to provide housing that is able to meet the basic price and size elements of demand (e.g. 3-4 bedroom family houses for $500,000).

Based on historic trends seen over the past seven years, there is demand for an additional 4,500 dwellings per annum over the next decade. This is 70% higher than the Our Space report's demand estimate of 2,690 dwellings per annum over the next decade. The demand estimates are significantly higher than those relied upon by Our Space (27% of growth over the next decade should be in Selwyn). However, the distribution of demand should nevertheless follow the same proportional distribution sought by Our Space so the efficiencies sought are able to be realised.

This results in demand for 14,400 dwellings in Selwyn, when the 20% buffer required by the NPS-UD is applied.

In total, Selwyn has capacity for 9,725 dwellings, and with demand for 14,400 dwellings over the next decade, these is a shortfall in capacity of 4,675 dwellings over this time period.

Based on this higher level of demand, Selwyn only has 6.8 years of supply remaining. This does not meet the NPS-UD requirements for the district.

Urban Economics has undertaken an alternative capacity assessment for Rolleston. Rolleston has infill development capacity for 1,250 dwellings remaining. Given demand for 9,000 additional dwellings over the next decade (accounting for the NPS-UD 20% buffer and the Our Space proportional distribution objective), Rolleston will have a shortage of 7,750 dwellings under the proposed district plan. At present, Rolleston has capacity for only 1.4 years of demand. This does not meet the NPS-UD requirements.

The greenfield priority areas are largely developed, and only have capacity for 730 dwellings remaining. If these areas were all live zoned, there would be only 2.2 years of capacity available in Rolleston.

The future development areas have a notable amount of development capacity remaining. In particular, there is potential for 5,880 additional dwellings. This would enable 6.5 years of capacity.

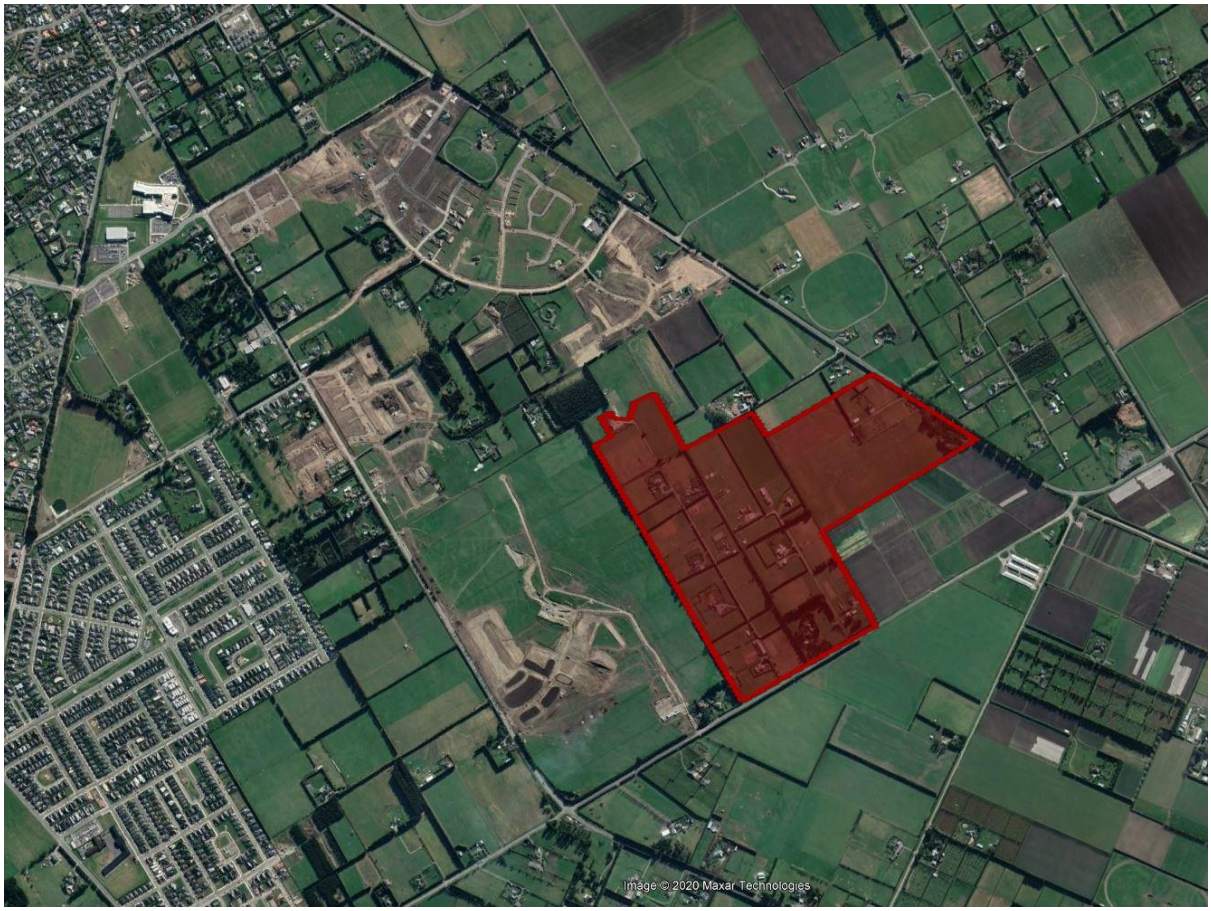
If the existing infill, greenfield priority, and future development areas are all live zoned, this would result in a shortfall of 3,120 dwellings (over ten years) and only enable 8.7 years of capacity. This would not meet the NPS-UD capacity requirements.

The proposal would enable an additional 840 dwellings. This equates to less than 0.9 years of demand (900 per annum when the NPS-UD 20% buffer is accounted for). Given there is only 1.4 years of capacity presently available in Rolleston, an additional 0.9 years of supply would contributive to offsetting the immediate shortage facing Rolleston, and provide a small part of the additional capacity required to meet the NPS-UD requirements.

2. Introduction

This report provides an evaluation of the economic costs and benefits for 63ha of proposed residential zoned land in Rolleston, Selwyn District. This site would enable approximately 840 lots. It is bounded by Lincoln Rolleston Road to the north-east and Selwyn Road to the south-east.

Figure 1: Site Location



Source: Google Maps

3. Population & Household Growth in New Zealand

This section compares historic and projected population growth, for the regions and key districts across New Zealand.

Canterbury was the second fastest growing region for both the 2013-2018 and 2018-2020 periods. Over the 2018-2020 period, Canterbury was projected to grow at 8,200 people per annum, however it achieved a much faster rate of growth, of 11,630 people per annum. This is comparable to the rate of growth achieved over the 2013-2018 period of 11,590 people per annum. In broad terms, Canterbury has recorded the second fastest rate of growth of any region, of around 11,600 per annum for the past 7 years.

Figure 2 shows that Christchurch, Selwyn and Waimakariri all achieved a faster rate of growth than projected over the 2018-2020 period. Christchurch was projected to grow at a rate of 4,320 per annum, however the actual growth rate was 5,450 people per annum. Selwyn was projected to achieve growth of 2,000 per annum, however the actual growth rate was 3,200 people per annum. Waimakariri was projected to achieve growth of 1,180 per annum, it too exceeded projections achieving a growth rate of 1,700 people per annum.

The Our Space Greater Christchurch Settlement Pattern Update report ("Our Space report") includes a growth projection over the next decade that is derived from the Statistics NZ 2013 base projections. These projections are based on 2013 Census data, and are considered by Statistics NZ to be out-of-date and unreliable. This is clearly evident in the regional disparities between the projection and actual rates of growth that have been achieved. In early-mid 2021 Statistics NZ will provide 2018 projections, and these will account for both the 2018 Census data and the recent trends, as shown by the 2018-2020 population estimates in figures 1 and 2.

When translated to household growth (which correlates with additional dwellings), Our Space expects 2,690 additional households per annum to reside in Greater Christchurch over the next decade. However, actual growth rates show that in the order of 4,500 additional households will be added to the population annually over this period. This means that the Our Space expected growth rate is 70% below the actual growth rate, and likely to be 70% below the revised Statistics NZ growth projection that will be released next year. This is a major shortcoming of the Our Space strategy and will mean that the majority of the capacity estimates substantially under-provide for growth and will probably not meet the requirements of the NPS-UD by early to mid 2021.

Figure 2: Regional Projected Population Growth versus Actual Growth 2013-2020 (per annum)

Area	Projected Growth Per Annum		Actual Growth Per Annum		Actual Growth vs Projected	
	2013 - 2018	2018 - 2019	2013 - 2018	2018 - 2020	2013 - 2018	2018 - 2020
Bay of Plenty	4,760	2,980	8,950	8,360	4,190	5,380
Waikato	8,520	5,260	9,490	10,490	970	5,230
Wellington	5,700	3,460	7,880	7,930	2,180	4,470
Canterbury	12,060	8,200	11,590	11,630	-470	3,430
Otago	3,400	2,040	5,610	5,180	2,210	3,140
Northland	2,280	1,440	4,200	4,400	1,920	2,960
Manawatu	1,860	820	3,230	3,400	1,370	2,580
Hawke's Bay	1,220	660	2,850	3,120	1,630	2,460
Taranaki	1,100	680	1,540	1,690	440	1,010
Tasman	500	340	1,040	1,200	540	860
Southland	640	180	920	950	280	770
Marlborough	260	180	800	750	540	570
Nelson	620	380	800	950	180	570
Gisborne	300	180	500	600	200	420
West Coast	-100	0	-110	-50	-10	-50
Auckland	41,340	31,880	32,320	31,350	-9,020	-530
Total	84,460	58,680	91,610	91,950	7,150	33,270

Source: Statistics NZ

Figure 3: District Projected Population Growth versus Actual Growth 2013-2020 (per annum)

Area	Projected Growth Per Annum		Actual Growth Per Annum		Actual Growth vs Projected	
	2013 - 2018	2018 - 2019	2013 - 2018	2018 - 2020	2013 - 2018	2018 - 2020
Tauranga	2,960	2,240	4,440	4,650	1,480	2,410
Queenstown-Lakes	1,720	1,140	2,560	2,450	840	1,310
Far North	460	240	1,460	1,550	1,000	1,310
Hamilton	3,700	2,680	3,680	3,950	-20	1,270
Lower Hutt	760	360	1,480	1,600	720	1,240
Hastings	660	420	1,600	1,650	940	1,230
Selwyn	3,040	2,000	3,320	3,200	280	1,200
W. Bay of Plenty	800	460	1,580	1,600	780	1,140
Christchurch	6,100	4,320	5,420	5,450	-680	1,130
Whangarei	1,380	980	2,080	2,100	700	1,120
Waikato	1,740	1,300	2,340	2,350	600	1,050
Rotorua	680	320	1,280	1,250	600	930
Tasman	500	340	1,040	1,200	540	860
Dunedin	1,100	600	1,540	1,450	440	850
New Plymouth	960	640	1,240	1,400	280	760
Waipa	1,040	660	1,260	1,400	220	740
Wellington	3,060	1,960	2,740	2,500	-320	540
Waimakariri	1,720	1,180	1,800	1,700	80	520
Palmerston North	940	640	960	1,050	20	410
Auckland	41,340	31,880	32,320	31,350	-9,020	-530
Total	74,660	54,360	74,140	73,850	-520	19,490

Source: Urban Economics, Statistics NZ

4. Population & Household Growth in Selwyn District

This section evaluates the historic and projected population and household growth for key towns in the Selwyn District.

4.1. Historic Population Growth and Forecasts

Figure 4 shows the Statistics NZ actual rate of population and household growth for the 2006-2020 period.

Rolleston achieved a growth rate of 540 households per annum over the 2018-2020 period, and a similar rate of 520 per annum over the 2013-2018 period. Rolleston has therefore maintained steady growth of around 530 households per annum for the past seven year period. This equates to just under 50% of the district's growth.

Figure 4: Selwyn District Historic Population and Household Growth (2006 - 2020)

		Historic			Actual	Growth Rates					
	Area	2006	2013	2018	2020	2006 - 2013	Per Annum	2013 - 2018	Per Annum	2018 - 2020	Per Annum
Population	Rolleston	5,210	10,050	18,400	21,910	4,840	610	8,350	1,670	3,510	1,760
	Lincoln	2,920	4,050	6,840	8,130	1,130	140	2,790	560	1,290	650
	Prebbleton	2,080	2,910	4,680	4,970	830	100	1,770	350	290	150
	Rural Areas and Other Settlements	24,740	29,690	33,400	34,710	4,950	620	3,710	740	1,310	660
	Total	34,950	46,700	63,320	69,720	11,750	1,470	16,620	3,320	6,400	3,200
Households	Rolleston	1,630	3,030	5,620	6,690	1,400	180	2,590	520	1,070	540
	Lincoln	890	1,200	2,140	2,540	310	40	940	190	400	200
	Prebbleton	640	870	1,500	1,590	230	30	630	130	90	50
	Rural Areas and Other Settlements	8,310	9,900	11,380	11,830	1,590	200	1,480	300	450	230
	Total	11,470	15,000	20,640	22,650	3,530	450	5,640	1,140	2,010	1,020

Source: Urban Economics, Statistics NZ

Figure 5 shows the Selwyn District Growth Model projected population and household growth for the 2018-2048 period. This shows expected growth of 290 households per annum over the next decade, around half the rate achieved over the previous seven years (530 per annum). While this accounts for the redistribution of growth from Selwyn to Christchurch, which is a strategic objective, it does not account for the rapid rate of growth seen across Greater Christchurch as a whole, which increases the quantity of growth that needs to be enabled in Rolleston and Selwyn more generally.

Figure 5: Selwyn District Growth Model Population and Household Growth Projections (2018 - 2048)

		Projections					
		2018	2020	2023	2028	2038	2048
Population	Rolleston	17,350	20,500	24,130	26,470	31,010	35,400
	Lincoln	6,950	8,380	10,140	11,800	15,000	18,080
	Prebbleton	3,920	4,100	4,380	4,840	5,720	6,570
	Rural Areas and Other Settlements	29,900	31,030	32,710	35,500	40,880	46,070
	Total	58,120	64,010	71,360	78,610	92,610	106,120
Households	Rolleston	6,200	7,320	8,650	9,670	11,670	13,650
	Lincoln	2,570	3,100	3,770	4,470	5,860	7,250
	Prebbleton	1,450	1,520	1,630	1,830	2,240	2,640
	Rural Areas and Other Settlements	11,200	11,520	12,300	13,610	16,190	18,720
	Total	21,420	23,460	26,350	29,580	35,960	42,260

Source: Selwyn District Growth Model

Figure 6 shows the household growth projections for the main towns in Selwyn for the 2018-2038 period. It is evident that Rolleston is expected to experience a rapid decline in growth, from around 530 households per annum (based on the Selwyn District growth model) to around 200 households per annum. This rapid decline does not reflect market demand, rather the strategic objective to limit growth in Rolleston and direct growth back to Christchurch.

Figure 6: Selwyn District Growth Model Projected Population and Household Growth Rates (2018 - 2048)

		Projected Growth Rates									
	Area	2018 - 2020	Per Annum	2020 - 2023	Per Annum	2023 - 2028	Per Annum	2028 - 2038	Per Annum	2038 - 2048	Per Annum
Population	Rolleston	3,150	1580	3,630	1210	2,340	470	4,540	450	4,390	440
	Lincoln	1,430	720	1,760	590	1,660	330	3,200	320	3,080	310
	Prebbleton	180	90	280	90	460	90	880	90	850	90
	Rural Areas and Other Settlements	1,130	570	1,680	560	2,790	560	5,380	540	5,190	520
	Total	5,890	2950	7,350	2450	7,250	1450	14,000	1400	13,510	1350
Households	Rolleston	1,120	560	1,330	440	1,020	200	2,000	200	1,980	200
	Lincoln	530	270	670	220	700	140	1,390	140	1,390	140
	Prebbleton	70	40	110	40	200	40	410	40	400	40
	Rural Areas and Other Settlements	320	160	780	260	1,310	260	2,580	260	2,530	250
	Total	2,040	1020	2,890	960	3,230	650	6,380	640	6,300	630

Source: Selwyn District Growth Model

5. Housing Demand

This section evaluates housing demand, in terms of both the quantity and price of housing in both Selwyn and 41in the Greater Christchurch area.

5.1. Regional Housing Assessment

Figures 7-10 show the price of houses sold across Christchurch over the 2018-2020 period. This shows a widespread distribution of prices, in part reflecting the difference in price between old and new houses.

Figure 7: Greater Christchurch Residential Dwelling Sales (Oct 2018 – Oct 2020)

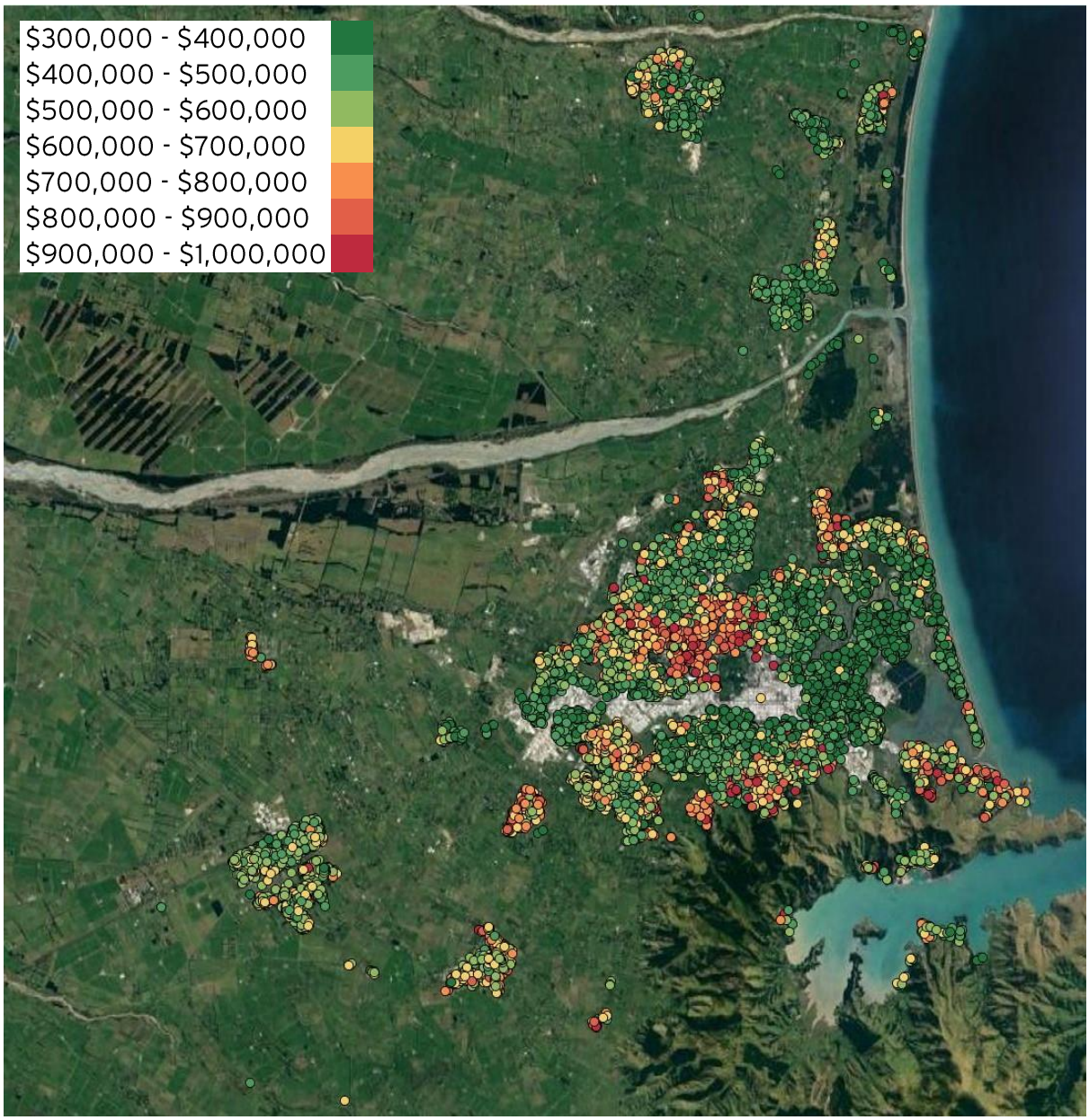
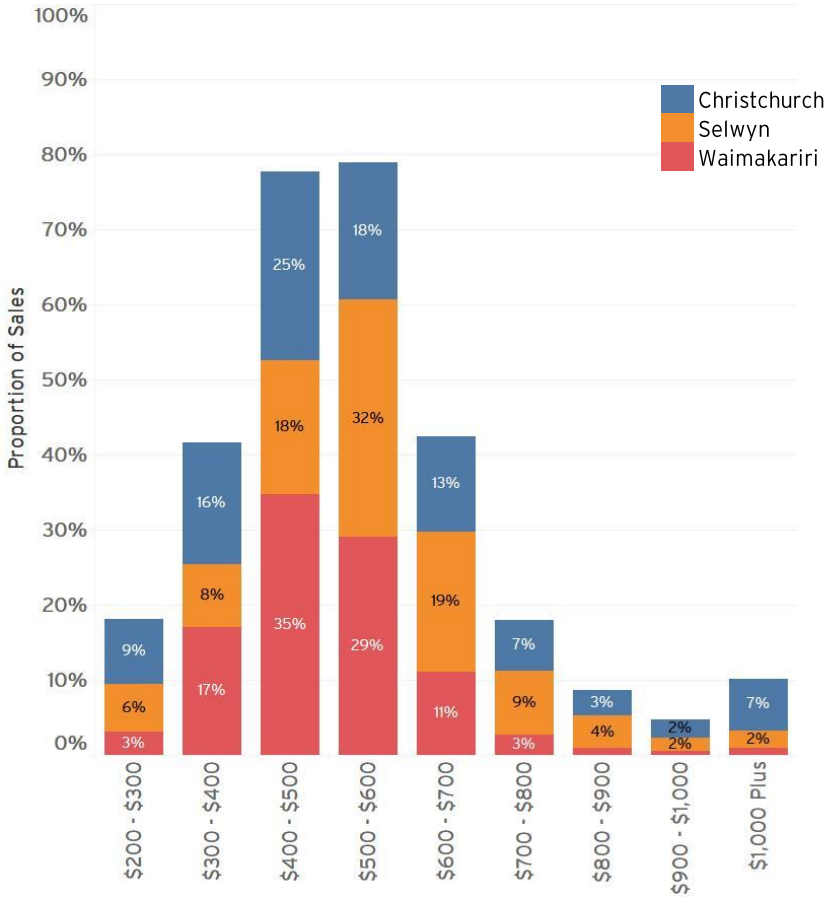


Figure 8: Greater Christchurch Residential Sales (Oct 2018 - Oct 2020)



Source: Corelogic

Figure 9: Greater Christchurch Residential Sales (Oct 2018 - Oct 2020)

Price Bracket (000)	Christchurch City	Selwyn District	Waimakariri District
$200 - $300	9%	6%	3%
$300 - $400	16%	8%	17%
$400 - $500	25%	18%	35%
$500 - $600	18%	32%	29%
$600 - $700	13%	19%	11%
$700 - $800	7%	9%	3%
$800 - $900	3%	4%	1%
$900 - $1,000	2%	2%	0%
$1,000 Plus	7%	2%	1%

Source: Corelogic

5.2. Building Consents

The following figure shows the building consents issued for Selwyn District and Greater Christchurch over the past ten years.

Selwyn District has increased from 20% of all consents issued within the Greater Christchurch region in 2010, to 30% in 2020. More notably, Rolleston has increased from 6% of all consents issued within the Greater Christchurch region in 2010, to 20% in 2020. The reason for this unprecedented rate of growth is that Rolleston offers affordable 3-4 bedroom family houses for around $500,000, and affordable family housing is in high demand. No other location in Christchurch can offer a significant quantity of affordable family housing.

Figure 10: Selwyn District Building Consents (2010 - 2020)

	Rolleston				Selwyn				Christchurch				
Year	Stand Alone	Terrace	RV Units	Total	Stand Alone	Terrace	RV Units	Total	Stand Alone	Terrace	Apartment	RV Units	Total
2010	150	0	0	150	400	0	0	400	1,960	340	60	70	2,430
2011	150	0	0	150	430	0	0	430	1,620	250	50	80	2,000
2012	140	0	0	140	770	10	0	760	2,570	190	40	310	3,110
2013	500	0	0	500	1,270	0	0	1,270	4,000	390	50	180	4,620
2014	680	30	0	710	1,300	40	0	1,340	5,090	860	130	250	6,330
2015	600	10	0	610	1,220	20	0	1,240	4,340	1,460	80	290	6,170
2016	580	40	0	620	1,180	80	0	1,260	3,690	1,070	240	500	5,500
2017	550	10	10	570	1,220	20	10	1,250	3,340	750	160	230	4,480
2018	500	10	0	510	1,020	20	0	1,040	2,760	740	210	240	3,950
2019	740	0	20	760	1260	10	20	1300	3,140	830	100	450	4,520
2020*	1,010	10	0	1,020	1,430	30	80	1,540	4490	1530	180	440	5,110

Source: Statistics NZ, Urban Economics
*Oct-Dec 2020 estimated

5.3. House Price Analysis

Figures 11-14 show the value of sections sold across Christchurch over the last 12 months. Sections typically represent 40% of the end house value (i.e. a $200,000 section results in a $500,000 'house and land' package).

Of particular interest is figure 13 which shows sections sold in the $100,000 - $200,000 range. As is evident, the majority of these are in Selwyn. In particular, Selwyn sold 75% of all sections in this price range, Waimakariri sold 18% and Christchurch sold only 7%. It is the inability of Christchurch and Waimakariri to produce any significant number of sections in this price range that is underpinning the large sale rate being achieved in Selwyn (e.g. if Christchurch could produce a large number of sections in the $100,000 - $200,000 range it would, and these would sell in larger number than seen in Selwyn). As noted earlier, a section of $100,000 - $200,000 results in a house and land package of $400,000 - $500,000, which is a crucial price point for many young family households looking to get a new house.

Figure 11: Vacant Sections Sold in Last 12 Months ($100,000 - $200,000) (300m^2 – 1000m^2)

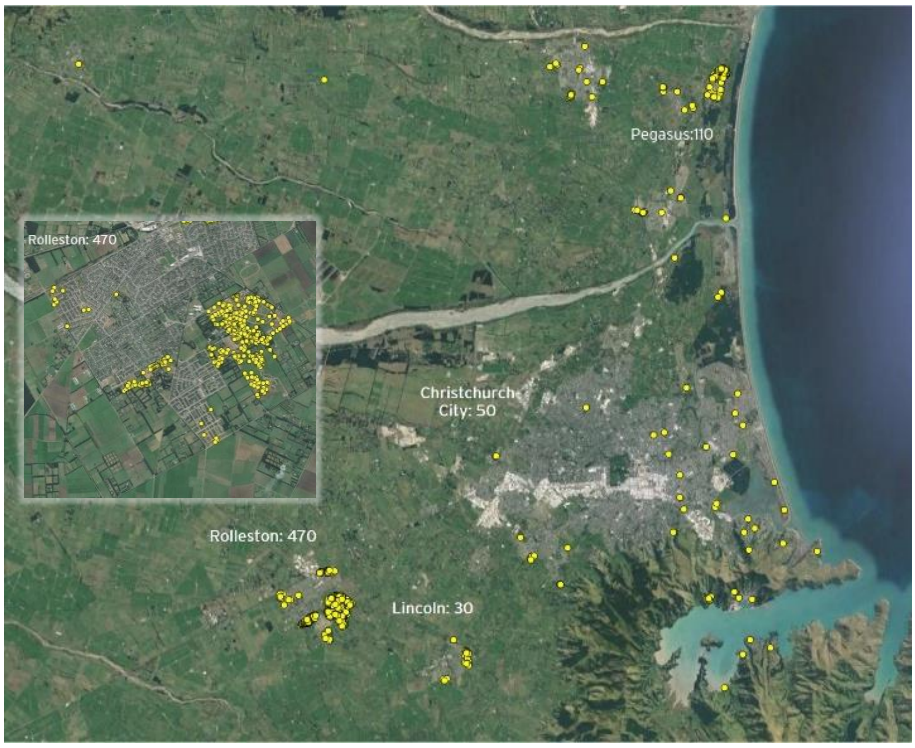


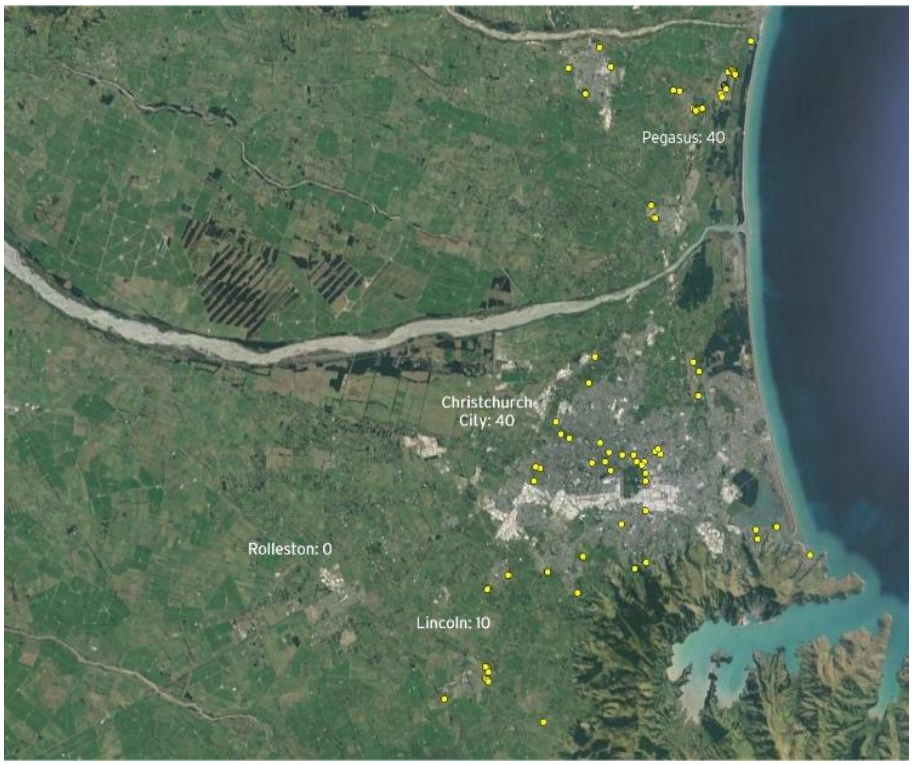
Figure 12: Vacant Sections Sold in Last 12 Months ($200,000 - $300,000) (300m^2 – 1000m^2)

Source: Corelogic

Figure 13: Vacant Sections Sold in Last 12 Months ($300,000 - $400,000) (300m^2 – 1000m^2)

Source: Corelogic

Figure 14: Vacant Sections Sold in Last 12 Months ($400,000 Plus) (300m^2 – 1000m^2)



Source: Corelogic

Figure 15 provides a count of the sections sold in each district/town, and corresponds to figures 11-14. The main points to note are:

- 55% of all lots sold in Greater Christchurch were in Selwyn.
- 63% of all lots sold in Selwyn were in the $100,000 - $200,000 range.
- Rolleston accounts for 35% of all lots sold in Greater Christchurch. This is entirely due to its ability to produce low priced lots, in the $100,000 - $200,000 range. Rolleston produced 62% of Greater Christchurch's low priced lots, in the $100,000 - $200,000 range over the last twelve months.
- Based on these figures, it is reasonable to conclude that Rolleston plays a major role in producing low priced lots and houses in Greater Christchurch, particularly affordable 3-4 bedroom family houses. Rolleston is to a large extent a price anchor for the wider region, with all other locations effectively having prices that are in relation to those set at Rolleston. Without a strong supply of lots and houses at Rolleston, no other district or town will be able to produce low priced lots, and this will result in a significant increase in dwelling prices across Greater Christchurch, to a level seen in smaller cities (Wellington has an average dwelling price of $790,000, and Tauranga has an average dwelling price of $750,000, for example).
- Christchurch City is predominantly producing lots in the $200,000 - $300,000 range, with house and land packages in the $600,000 - $800,000 range, for 3-4 bedroom family houses.
- More generally, Christchurch is only producing 25% of the region's new lots, confirming it has a shortage of affordable development land.

Figure 15: Vacant Sections Sold in Last 12 Months (300m^2 – 1000m^2)

Territorial Authority	$100,000 - $200,000	$200,000 - $300,000	$300,000 - $400,000	$400,000 Plus	Total
Christchurch City	50	270	50	40	410
Selwyn	570	180	60	100	910
Rolleston	*470*	*20*	*0*	*70*	*560*
Lincoln	*30*	*80*	*0*	*10*	*120*
Waimakariri	140	70	20	60	290
Pegasus	*110*	*10*	*0*	*40*	*160*
Total	760	520	130	200	1610
Christchurch City	3%	17%	3%	2%	25%
Selwyn	35%	11%	4%	6%	57%
Rolleston	*29%*	*1%*	*0%*	*4%*	*35%*
Lincoln	*2%*	*5%*	*0%*	*1%*	*7%*
Waimakariri	9%	4%	1%	4%	18%
Pegasus	*7%*	*1%*	*0%*	*2%*	*10%*
Total	47%	32%	8%	12%	100%

Source: Corelogic

5.4. Housing Demand in Rolleston by Price and Type

Having considered the foregoing data, it is evident that Rolleston has demand for around 750 dwellings per annum. This is reflected in recent building consents, which are estimated at over 1,000 per annum for the full year 2020 (a leading indicator) and recent historical household growth, which has been within the 500-600 range per annum for seven years.

The demand for houses within Rolleston is almost entirely within the $400,000 - $600,000 price range for a new 3-4 bedroom family house. Rolleston has a comparative advantage in producing these dwellings within the wider region, and this is in part supported by the range of social and commercial amenities available.

5.5. Nominal Price Growth in Key Regions

Canterbury has had sufficient land available to remain relatively affordable when compared to other cities across New Zealand. With an average price of $526,000, this compares favorably to other major regions, as shown in figure 16, which fall in the $700,000 - $1 million range.

It is worth noting that Canterbury has also performed better during the recent national increase in prices that has occurred as a result of lower interest rates over the past 6-12 months. Canterbury has seen an increase in price of $61,000, notably less than the other main regions that have increased between $78,000 and $145,000. This is due to the availability of low priced development land, however with recent rates of construction, there is the risk that the price of development land increases and Christchurch's relative affordability and attractiveness, when compared to other cities, is diminished.

Figure 16: Nominal Price Growth Key Regions 2019-2020

Region	Median Price		Nominal Price Change	
	Nov-19	Nov-20		
Christchurch City	$481,000	$548,000	$67,000	14%
Selwyn	$547,000	$585,000	$38,000	7%
Waimakariri	$465,000	$528,000	$63,000	14%
Canterbury	**$465,000**	**$526,000**	**$61,000**	**13%**
Wellington Region	$690,000	$790,000	$100,000	14%
Bay Of Plenty	$636,000	$753,000	$117,000	18%
Waikato Region	$592,000	$670,000	$78,000	13%
Auckland	$885,000	$1,030,000	$145,000	16%

Source: REINZ

6. Housing Capacity

This section assesses the capacity for additional housing in Rolleston.

Figure 17 shows the existing and future dwelling capacity at Rolleston, by land type. The Greenfield Priority Areas are shown in green, and the Future Development Areas are shown in orange.

The dwelling capacity for these two land types have been assessed at 12 dwellings per hectare, as identified in the Our Space document. The total dwelling yields of each area of land are shown in the map in figure 17 and in the table in figure 18. In addition, the infill capacity is included also. This relates to undeveloped large sites that are live zoned (GRZ and NCZ) within the proposed district plan.

In summary, there is estimated **infill capacity for 1,250 dwellings** remaining in Rolleston. Some of this would not be available over the next decade due to land banking, and therefore would not be considered to be 'reasonably expected' to be developed as new capacity under the NPS-UD, however for the purpose of this analysis, a conservative approach has been adopted of assuming that all of this land will be developed over the next decade.

The remaining **greenfield priority areas have capacity for 730 dwellings**, as these are in large part already developed. The **future development areas have capacity for 5,880 dwellings.**

Figure 17: Existing and Future Dwelling Capacity in Rolleston[1]

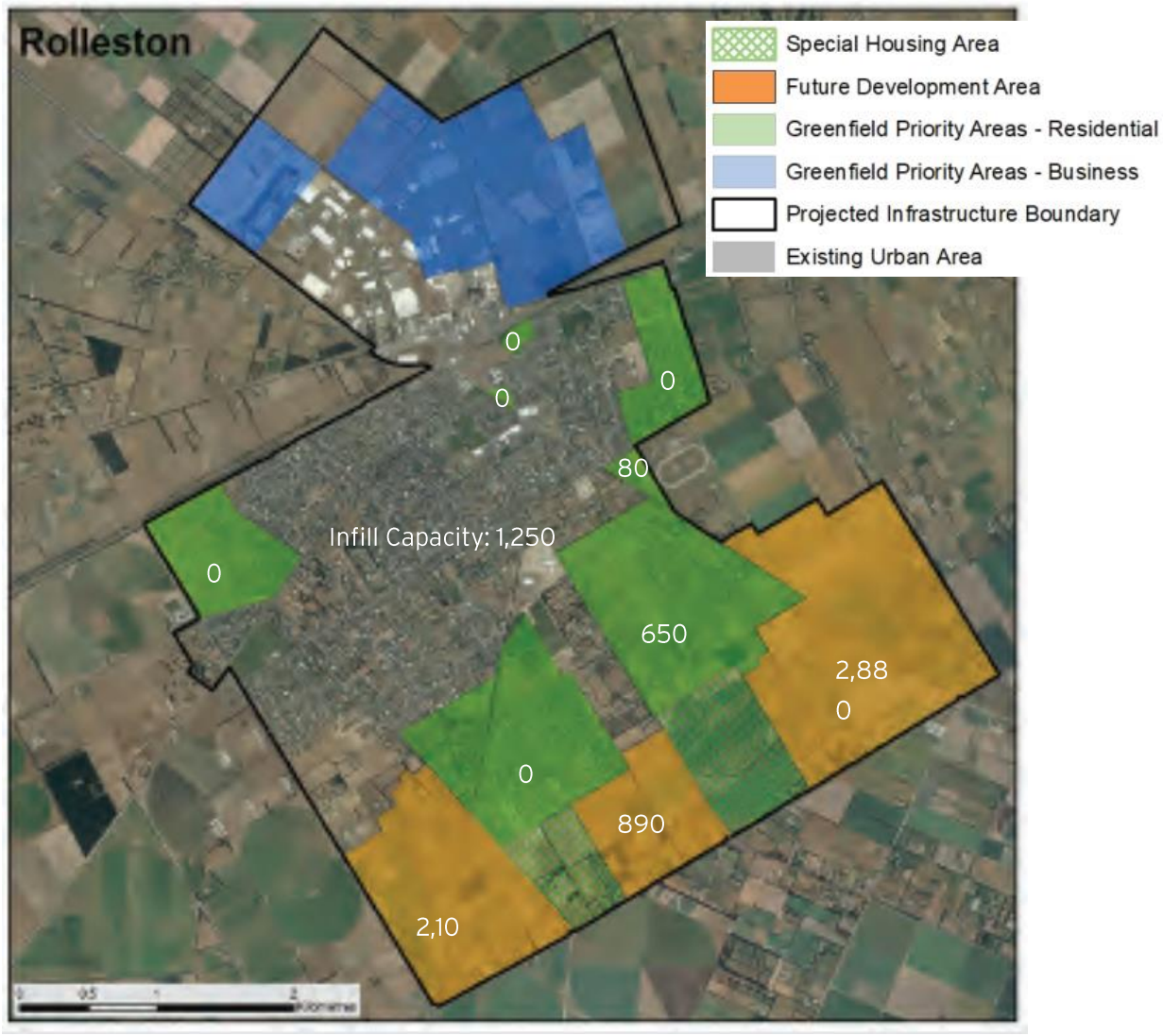


Figure 18: Existing and Future Dwelling Capacity in Rolleston

Land Type	Hectares	Dwellings Per Hectare	Dwellings
Infill Development	104	12	1,250
Greenfield Priority Area	61	12	730
Future Development Area	490	12	5,880
Total Capacity			**7,860**

Source: Our Space, Urban Economics

[1] Greenfield Priority Areas displaying 0 capacity are now part of the existing Urban Area and have been completely developed since this image was initially put together for the Our Space documentation.

7. Employment Impact

Figure 19 displays the employment impact of the construction of new dwellings under the proposal. The key points to note are:

- The construction of new dwellings is estimated to create 780 FTE jobs in the construction sector over the life of the project. As the project has a construction period of 4 years, this translates to 210 FTE jobs per annum.
- The proposed site contains 63 hectares of land classified by Corelogic as lifestyle blocks. It is therefore assumed that no jobs in the agricultural sector are lost as a result of the proposal.
- The proposal therefore represents a net addition of 210 FTE jobs per annum over the life of the project, or a total of 780 jobs. This is considered to be a net economic benefit, in large part, as Rolleston has an imminent shortage of development land, and there are no other locations in Christchurch that can demonstrably produce a large quantity of 3-4 bedroom family homes in the $400,000 - $600,000 price range.

Figure 19: Employment Impact

	Per Annum	Total
Construction FTE	210	780

Source: Urban Economics

8. Local Economy Impact

The following figure displays the estimated impact of the 10% Terrace, 90% Stand Alone development proposal on the local economy. This is considered to be a likely outcome, in terms of dwelling mix, of a large masterplanned development on the site. The key points to note are:

- The proposal would result in the construction of approximately 840 dwellings over 4 years, at an estimated total cost of $312 million. This translates to a total value added per annum figure of $24.5 million to the construction industry or a net present value (NPV) of $60.3 million.
- After dwellings have been constructed, they provide accommodation services to new residents[2]. Based on a rental yield of 4% per annum, this is valued at $15 million per annum once all dwellings are built, or a NPV of $135.7 million over the next thirty years.
- New residents spend money across a wide array of sectors including but not limited to, retail trade, recreation, health services, utilities and education. The value added to these

[2] Only the proportion of growth applicable to migration from other areas is included in estimates on the value of accommodation services and household expenditure in order to avoid double counting existing residents. This has been determined through examination of census migration data and reinforced through real estate agent interview answers on buyer origin.

sectors as a result of the proposal is $17.7 million per annum or a PV of $273.4 million over the course of thirty years.

- The NPV of the proposal is $469.4 million and results in a significant economic benefit.

Figure 20: Economic Impact of the proposal

		Value Added per Annum ($m)	Present Value ($m)	Time Period
Construction Period	House Construction	$24.5	$60.3	4
Ongoing Benefits	Household Expenditure	$17.7	$273.4	30
	Accomodation Services	$15.0	$135.7	30
Net Present Value			$469.4	30

Source: Urban Economics

9. Masterplanned Developments

One of the most notable benefits of large masterplanned developments is that they enable a diverse range of housing, in particular medium-density terrace and town houses. This is due to the quality of the environment that can be created with good urban design. Consequently, many buyers choose a terrace or town house in a large masterplanned development, rather than a conventional stand alone house in a smaller development, even if the price is similar.

The main implications for Rolleston are that large masterplanned developments are a fundamental requirement to achieving a diverse range of housing, in terms of type, size and price. This is because developers of masterplanned developments are able to integrate higher density housing into their masterplan in a manner that is more attractive to new home buyers than smaller 5-10 unit developments on existing 'quarter acre' (for example) lots in existing suburbs, or in smaller 20-100 lot developments which tend to focus entirely on conventional 400-700m^2 lots. Large developments are also better placed to access development finance, because they can create economies of scale through design and construction that creates additional value. They also have an incentive to produce a high-quality development in order to maintain sales for the life of the project (e.g. 5-10 years).

It is therefore the large masterplanned developments that will offer housing across a range of price points and will support strong demand for new housing in Rolleston and other locations in the Selwyn district. Most notably, new masterplanned developments are well placed to supply smaller town and terrace in the $400,000 - $500,000 price range, which is an attractive nominal price point within the regional market, particular for younger singles and couples and families looking to purchase their first property, and for empty nesters and retirees that are looking to down size and access equity for retirement. This is particularly important given Selwyn district has potential shortage of housing in the sub $400,000-$500,000 price range.

10. Thresholds for Community Amenities

The following figure displays the location of the site in relation to local amenities. The key points to note are:

- The site is well serviced for educational amenities. The nearest schools are within a 6 – 8 minute drive, them being; Rolleston Christian School, Rolleston College, Three Trees Learning Centre, Clearview Primary School, and the proposed Primary School in Acland Park (outlined in red on the map).
- The site is well serviced for recreational amenities. Foster Park and the Selwyn Aquatic Centre are a 5 – 8 minute drive to the sites north.
- The site is 6 - 8 minute drive from Rolleston Square, with access to a range of amenities such as food, banks, and medical facilities.
- The site is considered well serviced for amenities.

Figure 21: Local Amenities

Source: Google Maps

11. Infrastructure Efficiency

There are several notable infrastructure investments in Rolleston, which are outlined as follows.

11.1. Motorway Extension

The Christchurch Southern Motorway Stage 2 is being development with a cost of $195 million, and a completion date of 2021. Additional development at Rolleston will generate various development contributions and rates that will contribute to the significant public cost of this investment, and ensure it is paid for in an economic timeframe.

Figure 22: Southern Motorway Extension Summary

Project	Cost ($m)	Completion Date	Current Capacity	Increase in Capacity
Christchurch Southern Motorway Stage 2	$195	Early 2021	Approx 20,000 + Cars per Day	Estimated at double the current capacity. Travel time between Rolleston and Christchurch City will be cut in half.

Source: NZTA

11.2. Current Rolleston Specific Infrastructure Investments

Figure 23 outlines some of the specific infrastructure investments in Rolleston. These range from water supply, town square updates and local parks. These have a total cost of $13.4 million. Given the imminent shortage of land for new lots and dwellings in Rolleston, the proposal would ensure that additional development contributions and rates are available to pay for the cost of this investment.

Figure 23: Current Infrastructure Investments, Rolleston

Project	Cost ($m)
Rolleston – Goulds Rd/Lowes Rd Reserve Development	$0.3
New Neighbourhood Reserves Development	$0.1
Rolleston Water Supply Extension	$0.7
Rolleston Town Centre Roading Projects	$12.0
Rolleston Water Source Improvements	$0.3
Total	$13.4

Source: Selwyn District Council

12. NPS-UD

The key provisions of the NPS-UD that relates to efficient residential land markets is as follows:

NPS-UD: *"Objective 2: Planning decisions improve housing affordability by supporting competitive land and development markets."*

"Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum: have or enable a variety of homes that:

(i) meet the needs, in terms of type, price, and location, of different households…"

"Policy 2: Tier 1, 2, and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term [1 to 3 years], medium term [3 to 10 years], and long term. [11 to 30 years]"

"Policy 8: Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well functioning urban environments"

Figure 24 provides a summary of the Our Space report demand and capacity estimates for the region, by district. The main points to note are:

- Total demand is estimated for 26,900 additional dwellings over the next decade, or 2,690 per annum.
- The NPS-UD requires a 20% demand buffer, which means that total capacity that is required to be planned for over the next decade is 32,300 dwellings, or 3,230 per annum.
- The total capacity required for SDC is 8,600 dwellings, when the 20% buffer required by the NPS-UD is applied.
- In total, Selwyn has capacity for 9,725 dwelling, and with demand for 8,600 dwellings over the next decade, these is a surplus capacity of 1,125 dwellings over this time period.
- Our Space make the strategic decision of allocating less demand to Selwyn and Waimakariri and more demand to Christchurch City than has historically been observed in the market. This approach is anticipated to enable various efficiencies (e.g. public transport) however it must be balanced against the need to provide housing that is able to meet the basic price and size elements of demand (e.g. 3-4 bedroom family houses for $500,000).

Figure 25 provides an alternative estimate of demand and capacity. The main points to note are:

- Total demand is estimated for 45,000 additional dwellings over the next decade, or 4,500 per annum. This is 70% higher than the Our Space report demand estimate of 2,690 dwellings per annum, and this is explained in section 4. This demand estimate continues to apply the same proportional distribution of growth across the three districts, as sought by Our Space, and therefore continues to achieve the various efficiencies sought by this

distribution of growth (e.g. public transport).

- The NPS-UD requires a 20% demand buffer, which means that total capacity that is required to be planned for over the next decade is 54,000 dwellings, or 5,400 per annum.
- The demand estimates are significantly higher than those relied upon by Our Space. However, the distribution of demand should nevertheless follow the same proportional distribution sought by Our Space (27% of growth over the next decade should be in Selwyn). This results in demand for 14,400 dwellings in Selwyn, when the 20% buffer required by the NPS-UD is applied.
- In total, Selwyn has capacity for 9,725 dwellings, and with demand for 14,400 dwellings over the next decade, these is a shortfall in capacity of 4,675 dwellings over this time period.
- Based on this higher level of demand, Selwyn only has 6.8 years of supply remaining. This does not meet the NPS-UD requirements for the district.

Figure 24: Our Space NPS-UD Housing Capacity Table

DEMAND

District	10 Year	30 Year	10 Year p.a.	30 Year p.a.
CCC	14,500	25,200	1,450	840
SDC	7,200	13,500	720	450
WDC	5,200	8,400	520	280
Total	**26,900**	**47,100**	**2,690**	**1,570**

CAPACITY REQUIRED NPS-UD (+20%)

District	10 Year	30 Year	10 Year p.a.	30 Year p.a.
CCC	17,400	55,950	1,740	1,865
SDC	8,600	17,290	860	576
WDC	6,300	13,360	630	445
Total	**32,300**	**86,600**	**3,230**	**2,887**

CAPACITY REQUIRED NPS-UD SHORTAGE/SHORTFALL

District	Capacity	Target	10 year	30 year
CCC	59,950	55,950	38,745	4,000
SDC	9,725	17,290	1,125	-7,575
WDC	4,200	13,360	-2,100	-9,175
Total	**73,875**	**86,600**	**37,770**	**-12,750**

Source: Our Space

Figure 25: Urban Economics NPS-UD Housing Capacity Table

UE DEMAND		
District	10 Year	10 Year p.a.
CCC	24,300	2,430
SDC	12,000	1,200
WDC	8,700	870
Total	45,000	4,500

UE CAPACITY REQUIRED NPS-UD (+20%)		
District	10 Year	10 Year p.a.
CCC	29,200	2,900
SDC	14,400	1,400
WDC	10,400	1,000
Total	54,000	5,400

UE CAPACITY REQUIRED NPS-UD SHORTAGE/SHORTFALL				
District	Capacity	Demand 10 Year	10 Year Surplus/ Shortage	Years of Supply
CCC	59,950	29,200	30,750	20.5
SDC	9,725	14,400	-4,675	6.8
WDC	4,200	10,400	-6,200	4.0
Total	73,875	54,000	19,875	13.7

Source: Our Space, Urban Economics

Figure 26 provides an alternative demand and capacity estimate for Rolleston. This relies in the capacity estimates for infill, greenfield and future residential land, undertaken in section 6, and the estimated demand for residential dwellings in Rolleston estimated in section 5. The main points to note are:

- Rolleston has infill development capacity for 1,250 dwellings remaining.
- Given demand for 9,000 additional dwellings over the next decade (accounting for the NPS-UD 20% buffer and the Our Space proportional distribution objective), Rolleston will have a shortage of 7,750 dwellings under the proposed district plan. At present, Rolleston has capacity that is able to meet only 1.4 years of demand. This does not meet the NPS-UD requirements.
- The greenfield priority areas are largely developed, and only have capacity for 730 dwellings remaining. If these areas were all live zoned, there would be only 2.2 years of capacity available in Rolleston.
- The future development areas have a notable amount of development capacity remaining. In particular, there is potential for 5,880 additional dwellings. This would enable 6.5 years of capacity.
- If the existing infill, greenfield priority and future development area are all live zoned, this would result in a shortfall of 3,120 dwellings and only enable 8.7 years of capacity. This would not meet the NPS-UD capacity requirements.

Figure 26: Urban Economics NPS-UD Housing Capacity Table for Rolleston

Land Type	UE Capacity	UE Demand 10 Year	10 Year Surplus/ Shortage	Years of Supply
Infill Development	1,250	9,000	-7,750	1.4
Greenfield Priority Area	730	9,000	-8,270	0.8
Future Development Area	5,880	9,000	-3,120	6.5
Total	**7,860**	**9,000**	**-1,140**	**8.7**

Source: Our Space, Urban Economics

The proposal would enable an additional 840 dwellings. This equates to less than 0.9 years of demand (900 per annum when the NPS-UD 20% buffer is accounted for). Given there is only 1.4 years of capacity presently available in Rolleston, an additional 0.9 years of supply would contributive to offsetting the immediate shortage facing Rolleston, and provide a small part of the additional capacity required to meet the NPS-UD requirements.

13. Summary of Cost and Benefits

The proposal would provide additional development land in Rolleston that would enable ongoing provision of affordable family housing in Selwyn and the wider region. No other location is demonstrably able to produce a large quantity of low cost affordable housing. Rolleston is therefore of regional significance as it acts as a low house price anchor for Greater Christchurch. This is a large economic and social benefit, as it ensures Christchurch is competitive at attracting and retaining firms and people within the national context.

The proposal would enable ongoing high rates of construction activity that would provide employment for 780 FTEs and several hundred million dollars in economic activity.

The proposal would displace a small number of lifestyle blocks which have a relatively low economic contribution.

Rolleston has an existing level of social and economic amenities that would be supported by additional housing and population.

Rolleston and Selwyn have significant ongoing investment in various public infrastructure. The proposal would generate significant additional development contributions and rates that would contribute to the cost of this infrastructure.

14. Conclusions and Recommendations

The proposal has several significant economic benefits and no significant economic costs, and is therefore recommended for approval.