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Final Report: 27 January 2022

Economic Assessment of Proposed Fast-Track Development in Waimakariri District

Prepared for:

Bellgrove Rangiora Limited

Authorship

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1. Executive Summary

The Waimakariri District is one of the fastest growing areas in New Zealand. During the 10 years ended 30 June 2020, Waimakariri had the third-highest rate of population growth in New Zealand. Although recent population growth was spread across several locations, Rangiora is the district's primary urban area and one of its main growth locations. However, Rangiora's residential land is now largely depleted, with more required to meet projected growth over time.

Bellgrove Rangiora Limited (BRL) own nearly 100 hectares of rural land in two blocks on the eastern outskirts of Rangiora, which is currently zoned for rural purposes. To help bring some of that land to market and help the district recover from the devastating effects of Covid-19 as quickly as possible, BRL is considering seeking consent under the COVID-19 Recovery (Fast-track Consenting) Act 2020 for a portion of the works (Stage 1). To assist, this report assesses the likely economic effects of the development, particularly its impacts on the local housing market, and its impacts on jobs and incomes. In addition, this report briefly considers a range of wider economic effects of the proposal.

Having identified the site and then briefly described its strategic context and expected yields, we next summarise the current state of the local housing market for context. We show that Rangiora locals have different characteristics to the district average, including that they are typically older, less likely to live with a partner, more likely to have recently moved to the district, and more likely to need a smaller dwelling than has previously been provided. We also summarise the findings of a recent housing assessment by Livingstone and Associates, which projected demand for an additional 3,950 dwellings in Rangiora over the next 30 years. However, despite this strong growth in demand, Rangiora has run out of residential land, with only limited scope to provide additional housing within the existing urban area. Accordingly, additional land like the proposal is immediately required to enable dwelling growth to keep pace with demand over time.

The proposed development of approximately 200 lots within the Fast-Track stages of the development will have important effects on the local land and housing markets. First, it will help restore the supply of local residential land, which is important given the recent profound and prolonged shortage, while also boosting land market competition (which is critical to the ongoing efficient operation of the district housing market).

Second, the proposal will help the district to meet its medium-term housing bottom line, as identified in the Strategic Directions chapter of its Proposed District Plan (PDP). Consequently, the proposal also satisfies a key criterion for potential early release of the land in the district's new Rangiora North East Development Area.

Third, the proposal helps the district to better meet the needs of an evolving population by enabling smaller homes to be built on more compact sections. Indeed, despite ongoing changes in local demography, recent additions to the building stock have mainly been large, three- or four-bedroom homes on sections of at least 600m^2. These are too big for many households, particularly

the smaller and older households that are projected to become far more common in future. We also note that the proposal's economic merits are bolstered by the fact that it will be a master-planned development by a willing and able group with a proven track record of delivering quality outcomes in the district.

Future development of the land, and the subsequent construction of new dwellings on it, will also create significant one-time boosts in regional and national GDP, jobs, and wages. We estimated these using a well-known technique called multiplier analysis, which traces development spending through its various supply chains to estimate the overall economic impacts, including flow-on effects. To summarise: including flow-on effects, over a two- or three-year period, we estimate that the proposal could have the following **regional impacts**:

- A one-time boost in regional GDP of nearly $43 million;
- Employment for almost 460 people-years (e.g. 230 full time employees for 2 years); and
- Additional household incomes of nearly $22 million.

The corresponding **national impacts**, which are higher than the regional ones because the national economy captures more of the overall flow-on effects, are:

- A one-time boost in national GDP of nearly $86 million;
- Employment for 860 people-years (or 430 people employed full-time for 2 years); and
- Additional household incomes of almost $41 million.

Critically, not only will the proposal provide a significant boost in employment for hundreds of district/regional workers, but Fast-Track consent will also avoid the need to seek approval via a lengthy and costly fully-notified RMA consent process for a non-complying activity. Indeed, with RMA consents required from both the district and regional Councils, and given various factors that could significantly delay the granting of both, Fast-Track approval could bring the project forward by up to 2 years. This, in turn, will help the district to recover from the destructive impacts of Covid-19 much faster than it would do otherwise.

Finally, we considered a range of other likely economic effects of the proposal. They include:

- *Improved District Self-Sufficiency* – the project will help improve district employment self-sufficiency. This is important, because the district had the second lowest number of jobs per working age resident in 2019, with about 40% of its workers commuting daily to Christchurch City for employment.

- *Critical Mass and Support for Key Activity Centres (KACs)* – Future residents of the new subdivision will help create critical mass for various local services that may otherwise not be viable. This is important, because the district is currently very reliant on Christchurch City for everyday household goods and services. Overall, we estimated that future

households of the Fast-Track homes will spend about $5.4 million per annum on core retail goods and services.

- *Infrastructure Efficiency* - the subject site is just across the road from a recent growth area and is also within Rangiora's projected infrastructure boundary. As a result, it is likely to achieve high levels of infrastructure efficiency. This, in turn, avoids unnecessary financial risks and costs for the Council while helping to keep the prices of new homes as low as possible.

- *Highest & Best Use of Land* - the proposal will also enable the land to be put to its highest and best use, which is a precondition for economic efficiency to hold in the underlying land market.

- *Investment Signal Effects* - the development will provide a signal of confidence in the district economy, which may help spur on, accelerate, or bring forward other developments.

Given the various economic benefits of the proposal, as summarised above, we strongly support it on economic grounds.

2. Introduction

2.1. Context and Purpose of Report

The Waimakariri District is one of the fastest growing areas in New Zealand. During the 10 years ended 30 June 2020, Waimakariri had the third-highest rate of population growth in New Zealand. Although recent population growth was spread across several locations, Rangiora is the district primary urban area and one of its main growth locations. However, Rangiora's residential land is now largely depleted, with more required to meet projected growth over time.

Bellgrove Rangiora Limited (BRL) own nearly 100 hectares of rural land in two blocks on the eastern outskirts of Rangiora, which is currently zoned for rural purposes. To help bring some of that land to market as quickly as possible, BRL is seeking consent approval for Stage 1 of the works under the COVID-19 Recovery (Fast-track Consenting) Act 2020. To assist, this report assesses the likely economic effects of the development, particularly its impacts on the local housing market, and its impacts on jobs and incomes. In addition, this report briefly considers a range of wider economic effects of the proposal.

2.2. Structure of Report

The remainder of this report is structured as follows:

- **Section three** identifies the location of the proposed development, describes its zoning and strategic context, then identifies the number and sizes of new residential lots that it seeks to create.

- **Section four** briefly describes the current state of the local housing market to provide context for the proposal.

- **Section five** assess the proposal's likely impacts on the local housing market.

- **Section six** estimates the proposal's impacts on GDP, jobs, and wages, and

- **Section seven** briefly describes other wider economic effects of the proposal.

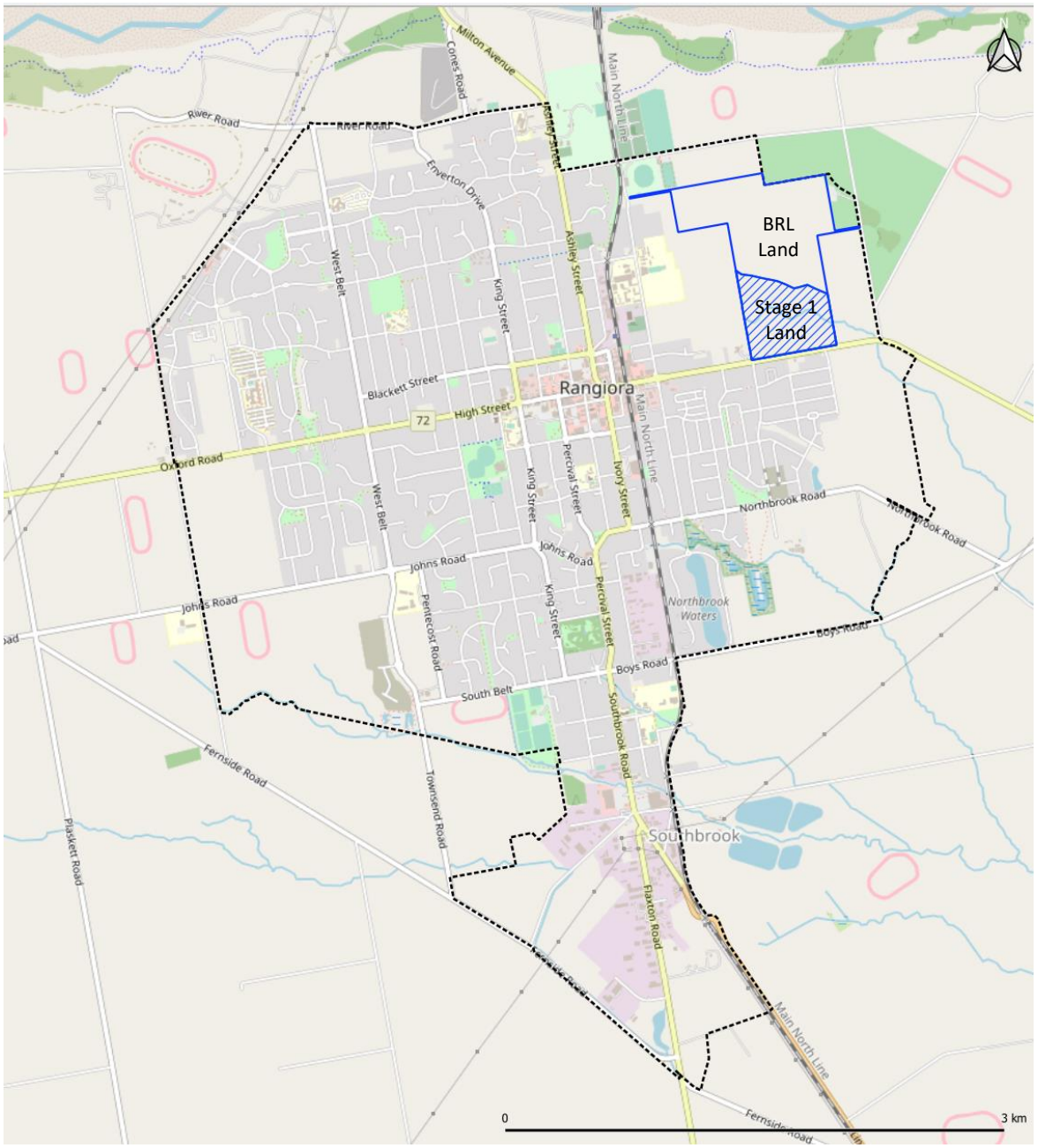
3. About the Development

This section briefly describes the proposed development.

3.1. Location & Description of Subject Site

The subject site is located at 52 and 76 Kippenberger Avenue (as indicated by the blue outline in Figure 1). It is bound by Coldstream Road and the Rangiora Golf Club to the north, rural land to the east and west, and Kippenberger Avenue to the south. The site spans approximately 63 hectares and is relatively flat. It also falls within Rangiora's projected infrastructure boundary, which is depicted by the dotted black line in the figure below. The hatched blue area shows the Stage 1 of the development.

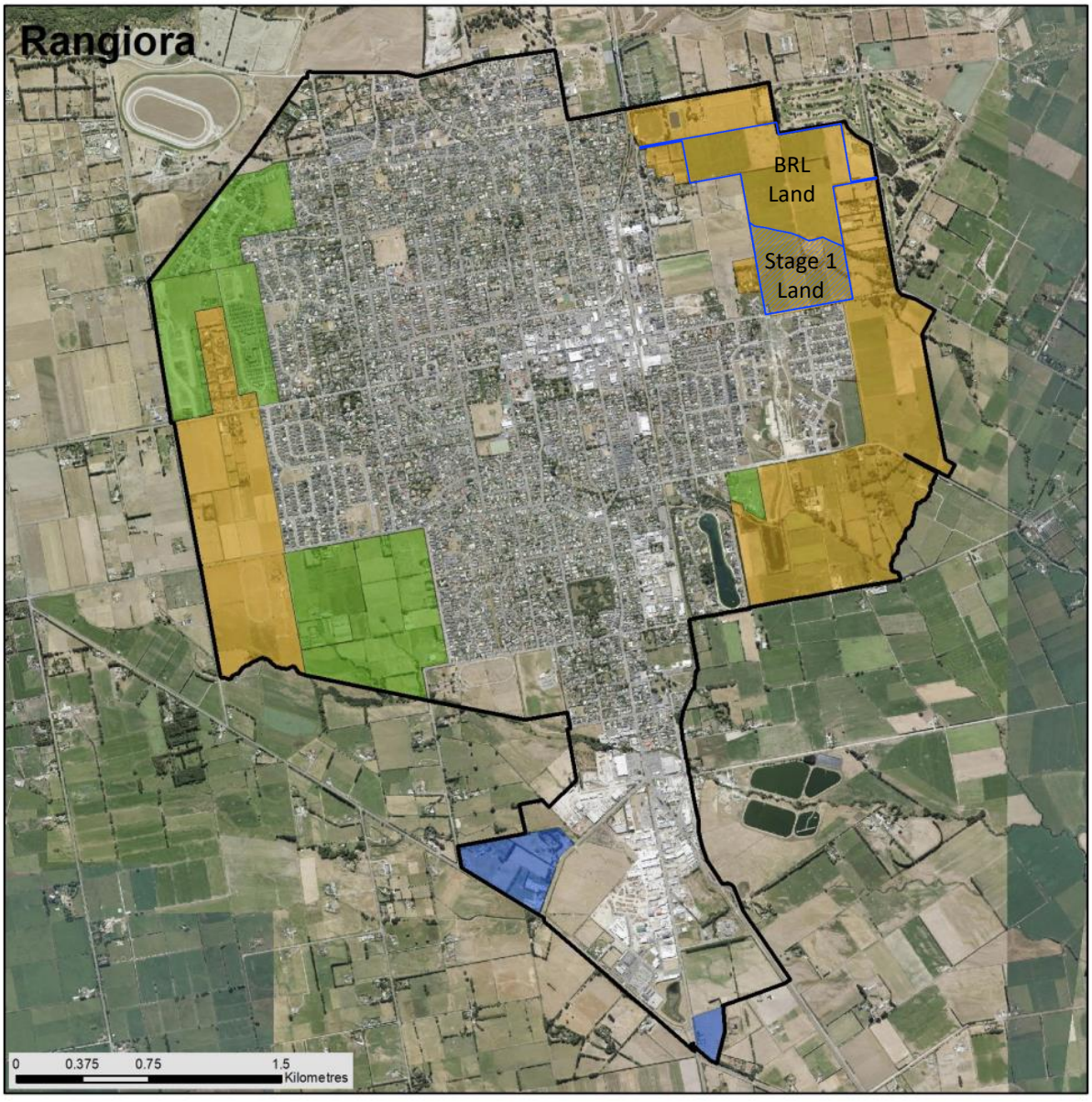
Figure 1: Location of Subject Site



3.2. Zoning & Strategic Context

The site is currently zoned Rural under the Waimakariri District Council (WDC) Operative Waimakariri District Plan (WDP). However, spatial planning (the development of Our Space 2018-2048) undertaken by WDC in collaboration with its subregional partners – Christchurch City Council (CCC) and Selwyn District Council (SDC) – recently identified the site and land around it as a future development area. The map below shows these future development areas shaded in orange, with the subject site's boundary overlaid in blue.

Figure 2: Location of Subject Site within Proposed Future Development Areas (Shaded in Orange)



These proposed future development areas were advanced via a plan change to the Canterbury Regional Policy Statement, which was approved in July 2021. Throughout this time, WDC and BRL have continued to work collaboratively to bring forward parts of the subject site for development as soon as possible.

3.3. Indicative Structure Plan – Fast-Track Stages

Stage 1 of the development will occupy the southwestern corner of the site, spanning approximately 21 hectares. Most of it will be zoned for residential purposes, with a small amount (~0.5 ha) of supporting Commercial/Business zoned land in the north-western corner. Land to the east is more challenging to develop due to geotechnical conditions and will be used for stormwater management and passive recreation purposes. The figure below illustrates the plan.

3.4. Indicative Fast-Track Yields and Lot Sizes

Figure 3 shows the latest indicative subdivision plan for Stage 1, which yields 198 residential lots of varying shapes and sizes.

Figure 3: Fast-Track Stages Indicative Lot Sizes and Layout

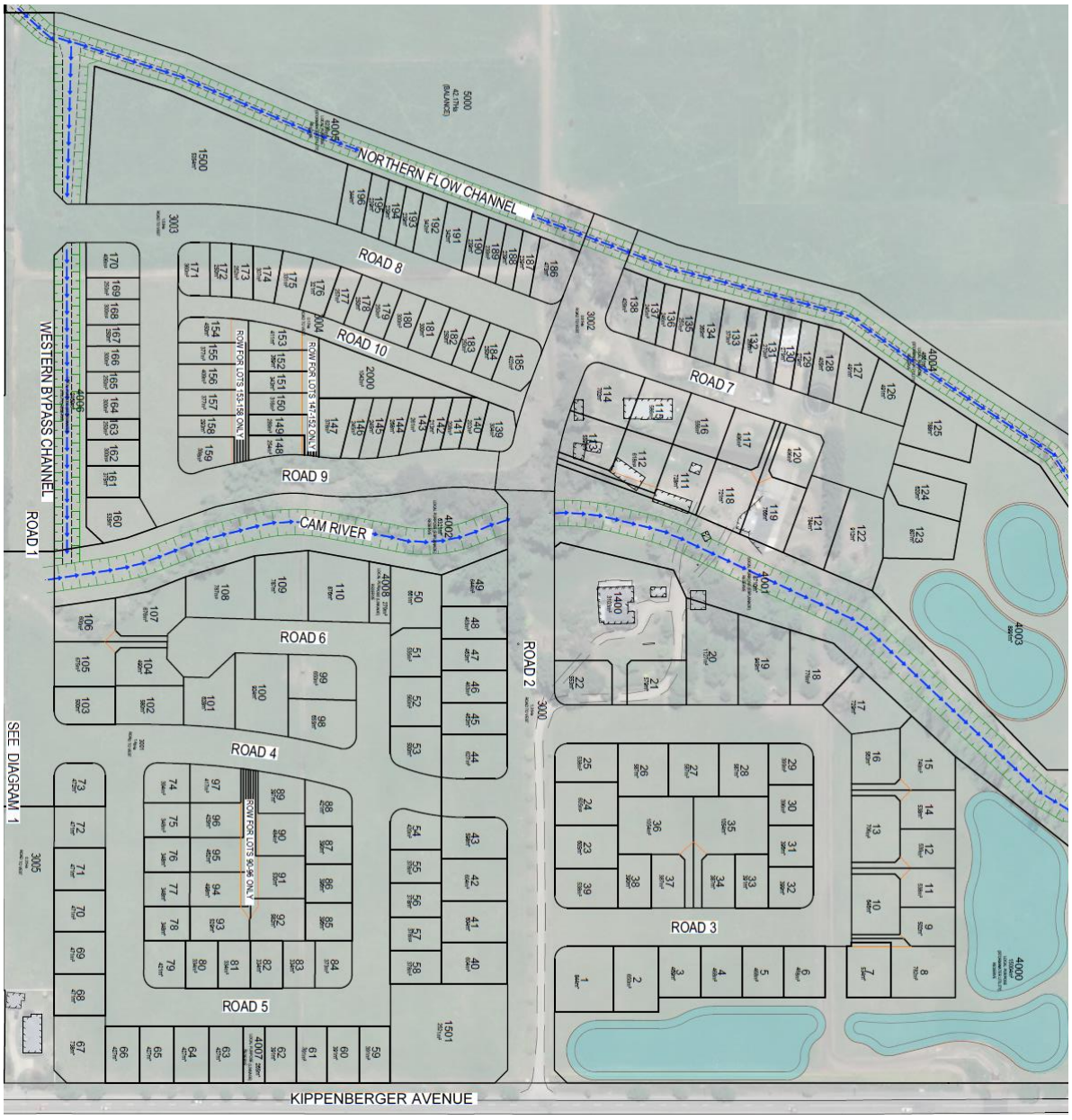
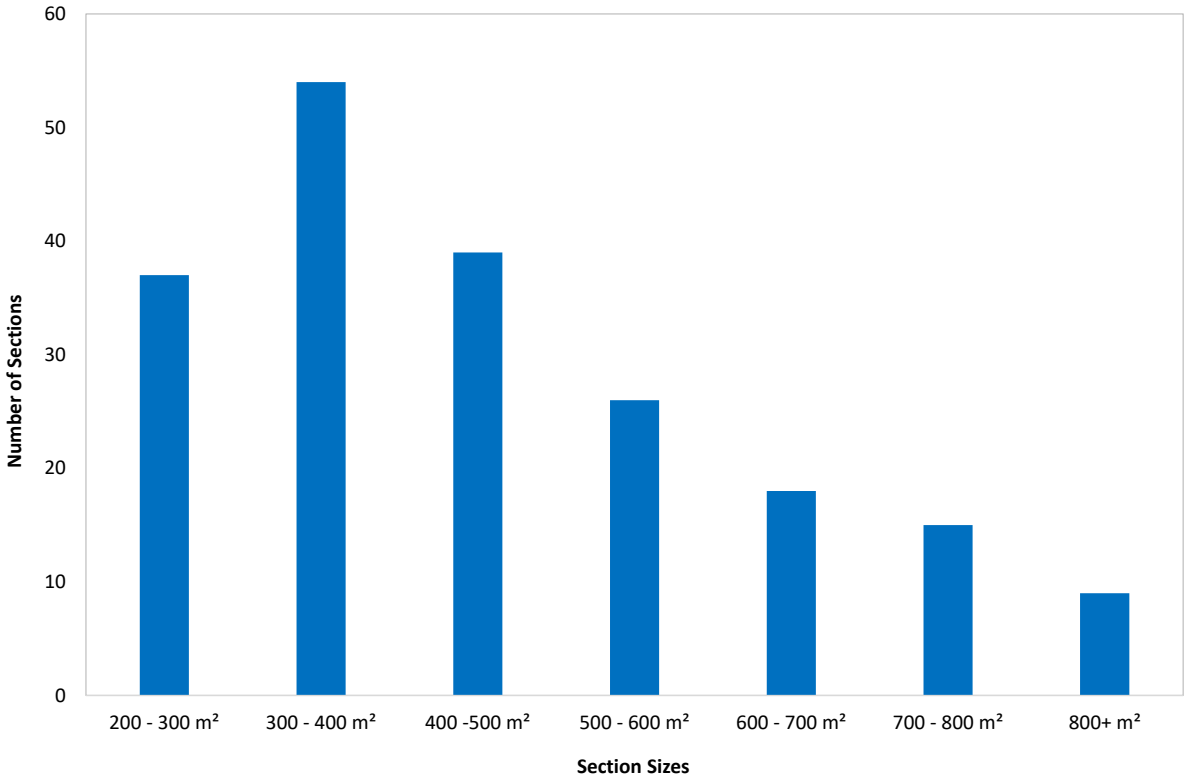


Table 1 and Figure 4 summarise the sizes of lots created via the Fast-Track stages.

Table 1: Summary of Indicative Fast-Track Lot Sizes (m^2)

Statistics	*Fast-Track Stages*
Number of Lots	198
Average Size	464
Median Size	421
Mode (most common size)	250
Minimum Size	202
Maximum Size	1,127
Range (max-min)	925

Figure 4: Distribution of Indicative Fast-Track Lot Sizes



The median section size in the Fast-Track stages is 421m^2, while the average is 464m^2. The smallest section is 202m^2, the largest is 1,127 m^2, while the most common (applying to 11 lots) is 250m^2. Overall, and as we elaborate on later, the section sizes provided in Stage 1 is significantly smaller than has previously been provided in Rangiora.

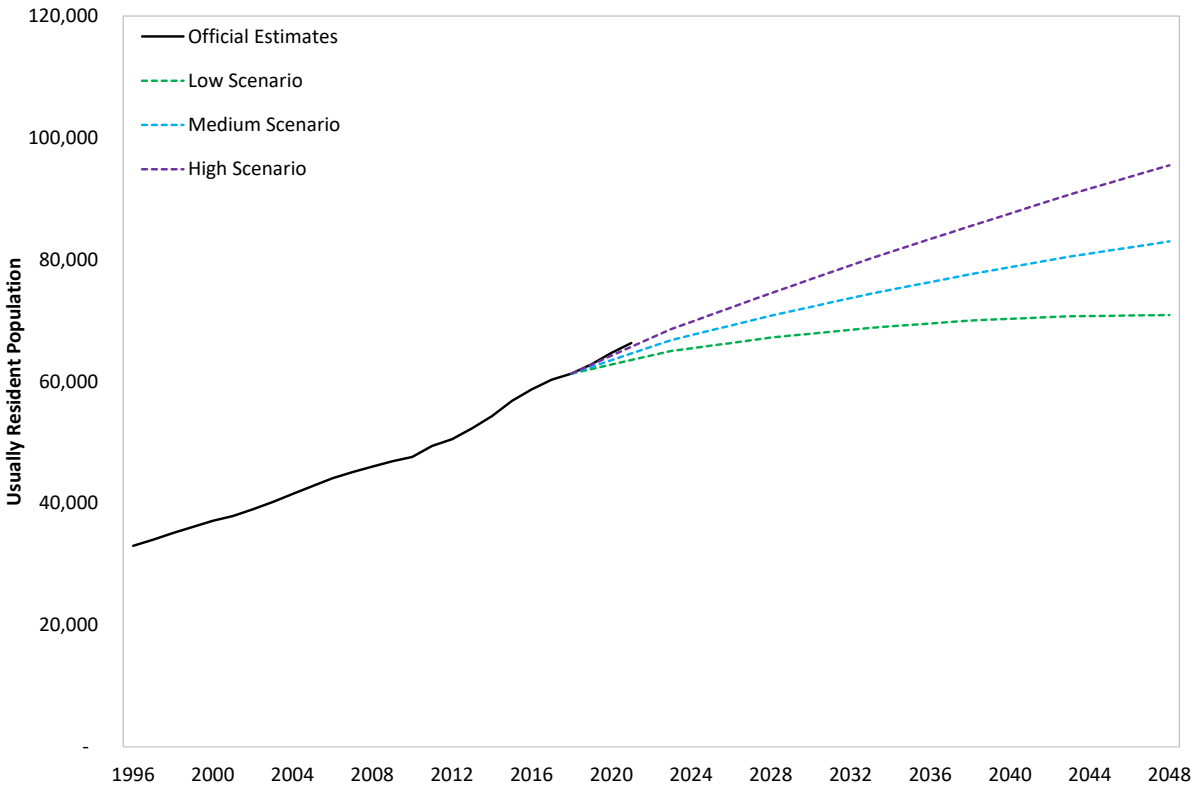
4. Housing Market Context

This section describes the local housing market in which the proposal will occur.

4.1. District Population Growth

Waimakariri's population has grown rapidly over the last 25 years, particularly following the earthquakes in 2010/11. This strong growth continues today, with Statistics New Zealand's population estimates as at 30 June 2021 exceeding even their high population growth scenario. This is illustrated in the chart below.

Figure 5: Waimakariri District Population Estimates vs Official Projections



There are two likely drivers of the district's sustained high population growth. First, land and housing in the district is still relatively affordable, particularly compared to Christchurch city. This has caused demand from the city to continue spilling-over into both Waimakariri and Selwyn well after the quakes. A similar pattern is evident in districts near Auckland, where high house prices have also pushed people out of the city into nearby areas with more affordable options.

Second, the Covid-19 pandemic has caused people to reflect on what they really need and want out of life, including their housing choices. People now appear even more willing to trade off a slightly longer commute to live in areas that better meet their day-to-day needs. For the Waimakariri district, this effect has been strengthened by recent State Highway improvements, which have made commuting into the city for work and leisure quicker and easier than before. Selwyn district is experiencing similar effects, with growth there also exceeding the high scenario.

4.2. Rangiora Demographic Summary

In early 2018, at the latest census, there were almost 7,000 households with 17,800 usual residents living in Rangiora. This translates to an average household size of 2.58, which is lower than the rest of the district (where the average household size was 2.7). Rangiora's smaller household sizes partly reflects its older population, who tend to live in smaller households. Specifically, 25% of Rangiora's population was older than 65 in 2018, compared to only 16% for the rest of the district.

Further, compared to the rest of the district, Rangiora's population in 2018 was:

- Less likely to live with a partner
- Less likely to be working or in the labour force
- If working, more likely to be a sales worker and less likely to be a manager
- Less likely to earn over $70,000 per annum (the highest personal income bracket)
- More likely to live in an attached dwelling than stand-alone
- More likely to live in a dwelling with three or fewer bedrooms
- More likely to have only one motor vehicle
- More likely to have moved to the district in the last five years, and
- More likely to be on NZ superannuation.

4.3. Projected Dwelling Demand

In 2020, Livingstone and Associates were commissioned to analyse the district's housing market to help inform Council planning and processes. Their report is very comprehensive and, amongst other things, includes household projections for Rangiora and the rest of the district. These are shown in the table below.

Table 2: Household Projections (from Livingstone & Associates Report)

Year	Rangiora	Rest of District	Total
2018	7,370	16,130	23,500
2023	8,250	18,450	26,700
2028	8,930	20,420	29,350
2033	9,570	22,230	31,800
2038	10,160	23,840	34,000
2043	10,740	25,330	36,070
2048	11,320	26,840	38,160
Change	**3,950**	**10,710**	**14,660**
Annual Growth Rate	1.4%	1.7%	1.6%

According to Table 2, the number of households in Rangiora will increase by nearly 4,000 between 2018 and 2048 (from 7,370 to 11,320). This represents an annual average growth rate of 1.4%. Slightly higher growth is forecast in the rest of the district, where the annual growth rate is forecast to be 1.7%.

While not clear from the projections above, Livingstone and Associates also note that the district's demography will change significantly over the next 30 years, which will alter the types and sizes of

dwellings required to house its future population. For example, nearly all the projected growth in households tabulated above represents couples without children or people living alone. In addition, the average age of residents is projected to increase significantly. Accordingly, future households will require smaller dwellings located in areas with easy access to essential services.

4.4. Available Residential Land

We used Core Logic's Property Guru tool to identify all dwellings built and sold in Rangiora over the last 10 years to plot their location within the township. These new dwellings are illustrated by the red and orange outlines in the map below, with the subject site overlaid for context.

Figure 6: Location of New Dwellings Built and Sold since 2010 in Rangiora

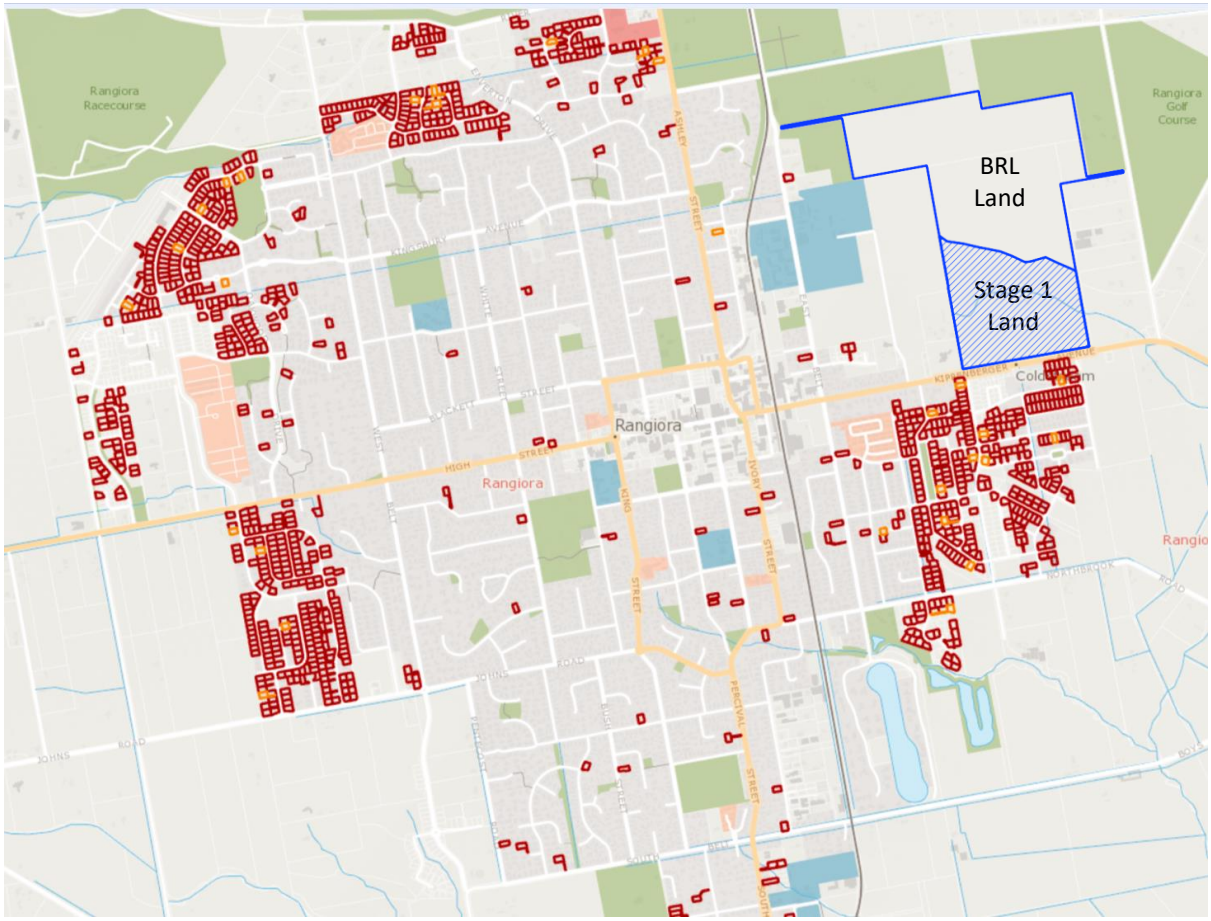


Figure 6 shows that most Rangiora dwellings built and sold since 2010 have been in new greenfield locations on the town's eastern, northern, and western edges. In fact, of the approximately 1480 new dwellings built/sold since 2010, only about 2% were inside the existing core urban area, with the other 98% or so dotted around the edges.

This high concentration of new development on the urban periphery differs from many other areas of New Zealand, where new dwellings are spread more evenly across new and existing urban areas. This profound lack of development inside Rangiora's existing urban area, in turn, appears

to reflect its relatively low land prices, which erodes the financial merits of redeveloping existing sites and therefore push new development to greenfield areas on the urban fringe.[1]

Herein lies an issue for the district, and for Rangiora more specifically. Currently, there is little – if any – greenfield land available for development in Rangiora. In fact, according to discussions with local property market participants, there are no residential sections currently available in Rangiora.

There is a small amount of undeveloped land at Townsend Fields, but this won't become available until mid-2022. However, with only 50 titles available in the next stage, and with registrations of interest already received from 500 parties, it will sell-out within days if not weeks.

Rangiora aside, the next closest residential subdivision is at Ravenswood, which is about a four-minute (4 km) drive east of the subject site along Rangiora-Woodened Road. That development is expected to yield approximately 1,100 sections upon completion but, like other nearby subdivisions, has also been inundated with enquiries by building companies and individuals alike. In fact, demand for new sections at Ravenswood has been so acute that the developer is now using a ballot system to ration new sections as they become available. Further, the next stage (6A) won't yield any additional titles for about 2 years, with only 30 new lots on offer.

In short, there is a profound shortage of available residential land in and around Rangiora to absorb strong and sustained demand for additional dwellings in the area.

[1] Generally speaking, the higher the value of land relative to the value of improvements/buildings, the more viable that redevelopment of existing sections is, and vice versa.

5. Impacts on the Housing Market

This section analyses the proposal's housing market impacts.

5.1. Restoring the Supply of Residential Land

As shown in the previous section, Rangiora is devoid of developable residential land. The only land that will be available in the short-term is the next stage of Townsend Fields, where 50 new titles will be released next year. However, with more than 10 expressions of interest already received per new title available, that land is effectively sold before it even hits the market.

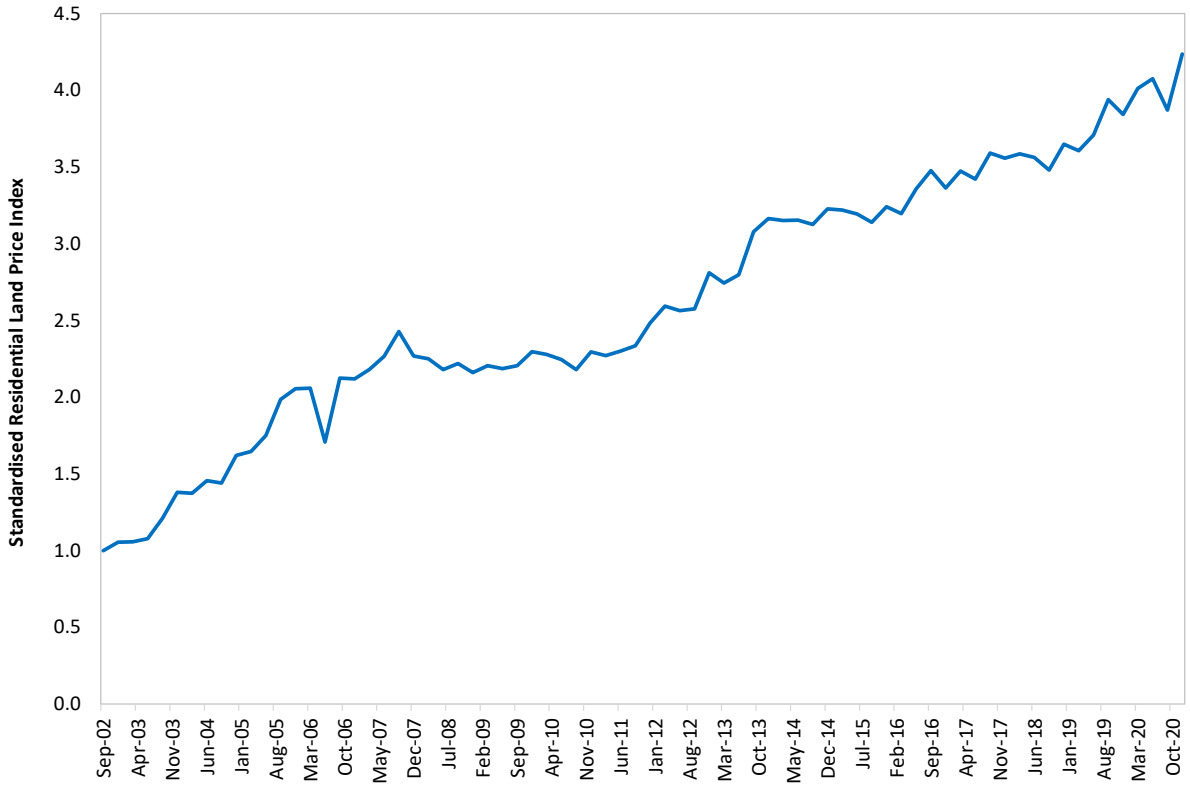
The significant and prolonged mismatch between the market supply and demand of residential sections in and around Rangiora has placed upward pressure on land, and thus dwelling, prices. For example, we understand that sections in Ravenswood that sold for $140,000 to $160,000 prior to the Covid-19 lockdown in 2020 are now selling for between $340,000 to 380,000 (an increase of well in excess of 100% over a 18-month period).

There has also been a noticeable increase in the prices of new sections at Townsend Fields. For example, stage 1 of that development also went on sale before Covid-19, with sections going for $180,000 to $220,000. Now, 18 months later, other sections of similar sizes are selling for $400,000 to $430,000 (again, an increase of more than 100%).

A similar story has played out at Pegasus, which is also less than a 10-minute drive from Rangiora. There, sections that were selling for $150,000 to $180,000 before Covid-19 are now ranging between $300,000 and $400,000, with premium lots fetching up to $600,000 in recent months.

These market observations are confirmed by data published under the National Policy Statement on Urban Development 2020 (NPSUD). This requires Councils in high growth areas – like Waimakariri District – to monitor and report changes in the quality- and size-adjusted prices of new residential sections. This indicator removes the effects of changes in section size and quality from one period to the next so that a consistent time series can be tracked. According to that indicator, which is reproduced below, the price of a new residential section in the district has more than quadrupled over the last 18 years. This equates to a compound annual growth rate (CAGR) of 8.4%.

Figure 7: Standardised Land Price Index for Residential Sections in Waimakariri District (from NPSUD)



While these increases in land price are yet to cause profound affordability issues, with district prices still relatively affordable compared to elsewhere in New Zealand, they are starting to have an impact. For example, a recent report on housing affordability by Core Logic (June 2021) showed that the district's median dwelling price is 6.5 times the median income, while a value of three is commonly accepted as the benchmark of affordability.[2] In other words, prices are now more than double the affordable level.

Further, the same report showed that a first-home buyer household in the district would need to save 15% of their gross incomes for 8.7 years to accumulate a 20% house deposit. Thus, not only are house prices themselves increasingly unaffordable, but even the task of saving a deposit is a significant undertaking.

The proposal acknowledges and directly responds to the acute need for more residential land to meet growth in demand over time. While Stage 1 of the proposal is not large enough alone to resolve mounting pressures on land prices, they are a big step in the right direction.

Perhaps unsurprisingly, with such strong demand for new sections and virtually no corresponding supply, Stage 1 of this development have also been met with unprecedented enquiry volumes. In fact, we understand that BRL has already fielded firm commitments for new sections on their land from more than 20 reputable building companies across the Canterbury region.

[2] Core Logic, The NZ Housing Affordability Report, February 2021

5.2. Land Market Competition

In addition to directly boosting district dwelling capacity, the proposal will also help to foster competition in the local land market. This is important because, as recognised through objective 2 of the NPSUD, competition is the cornerstone of economic efficiency. When the land market becomes more competitive, land developers have a greater incentive to get their product to the market in a more timely and cost-effective manner, thus further helping to keep district housing as affordable as possible.

Absent competition, landowners experience "market power", which enables them to charge more for land and be slower in releasing it to the market. Both outcomes conspire against affordability and reduce the overall efficiency of the housing market. Indeed, this sort of market power is likely to explain some of the rapid growth in land and dwelling prices over the last 12 months, as shown just above.

Moreover, not only does the direct boost in supply and increased land market competition (discussed above and created by the proposal) have direct economic benefits by making land and dwellings more affordable than they would have been otherwise, they can also have broader impacts.

Specifically, by reducing the rate at which dwelling prices grow, future residents will spend less on weekly rent or mortgage payments than they would have otherwise, which will boost disposable incomes. With a significant proportion of that extra money likely to be spent locally, lower future dwelling prices (relative to the status quo) will also create additional economic stimulus for the wider benefit of the local area through increased household spending over time.

5.3. Meeting PDP Development Area Criteria

WDC recently notified their Proposed Waimakariri District Plan (pWDP). Amongst other things, it identifies certain parcels of rural land as "Future Development Areas", and establishes a bespoke process via which they can become available for development prior to rezoning. The subject site comprises part of the North East Rangiora Development Area.

To be eligible for early development, land in these new development areas must satisfy various certification criteria, one of which is that the:[3]

> "Development will provide additional residential capacity to help achieve or exceed the projected total residential demand as identified in UFD – 01 (for the medium term) as indicated by the most recent analysis undertaken by Council in accordance with the NPS-UD and published on the District Council website."

UFD – 01 is an objective in the Strategic Directions section of the pWDP relating to Urban Form and Development. It states that sufficient feasible development capacity for residential activity

[3] DEV-NER-S1 Criterion (1)(a)

must be maintained to meet specified housing bottom lines and a changing demographic profile of the district. Those bottom lines are shown in the table below.

Table 3: Housing Bottom Lines

Term	Timeframe	Development Capacity	Bottom Lines
Short to Medium Term	(2018-2028)	Residential Units	6,300
Long Term	(2028-2048)	Residential Units	7,100
30 Year Time frame	(2018-2048)	Residential Units	13,400

To identify the need for additional housing capacity to meet or exceed these bottom lines, as required by the criterion above, we reconciled these demand targets with the Council's latest estimates of supply (as contained in the 2021 Housing Development Capacity Assessment).[4] To that end, Table 4 reconciles the medium-term bottom line of 6,300 additional dwellings with the district's feasible capacity under three capacity scenarios.

- Excluding the district's future urban development areas (FUDAs);
- Including district FUDAs at a density of 12.5 households per hectare; and
- Including district FUDAs at a density of 15 households per hectare.

Table 4 Dwelling Capacity and Demand over the Medium-Term

Capacity Scenarios	Feasible Capacity	Housing Bottom Line	Surplus/Shortfall
Excluding FUDAs	2,273	6,300	- 4,027
Including FUDAs @ 12.5 hh/ha	7,673	6,300	1,373
Including FUDAs @ 15 hh/ha	9,123	6,300	2,823

According to Table 4, the district faces a profound shortfall of approximately 4,000 over the medium term if the FUDAs are excluded, but has a surplus if they are all developed over the next 10 years.

Technically speaking, under the NPSUD, these FUDAs should be excluded from the calculations of medium-term feasible capacity because they are not yet zoned accordingly for housing[5] under either an operative or proposed district plan. Accordingly, the district faces a significant dwelling shortfall over the medium term if NPSUD definitions are strictly applied, and needs most (if not all) FUDAs to become available for development as soon as possible. On that basis, we conclude that there is a strong and compelling need to enable the subject site to meet housing bottom lines.

However, the need for the subject site is arguably even more acute because the reconciliation of supply and demand in Table 4 is based on estimated feasible capacity, not likely future market

[4] https://www.greaterchristchurch.org.nz/assets/Documents/greaterchristchurch/Capacity-Assessment-reports-2021/Greater-Christchurch-Housing-Development-Capacity-Assessment-July-2021.pdf

[5] Noting that clause 3.4(2) goes on to state that land is 'zoned' for housing only if the housing use is a permitted, controlled, or restricted discretionary activity on that land.

supply. These two metrics can differ markedly, with likely market supply (which is ultimately tasked with meeting future demand) often being only a fraction of feasible capacity, particularly over the short to medium term. There are several reasons why some parcels with estimated feasible capacity will not become part of medium-term market supply (and hence help meet the bottom line of 6,300 dwellings, including:

- *Developer intentions* - some landowners have no clear intention to develop in the short- to medium-term, nor to sell their land to others who may wish to develop it.

- *Tax implications* – greenfield land-owners are liable for taxes on recent land value uplifts caused by rezoning. These taxes are greatest in the first year following the rezoning, but gradually diminish over time and then cease 10 years later. In some cases, efforts to avoid or minimise these taxes could cause land to be withheld from the market for up to a decade.

- *Land banking and drip-feeding* – other landowners intend to develop in future, but are currently withholding supply to capitalise on inevitable land price inflation, while some are drip-feeding supply to maintain prices and hence maximise returns.

- *Site constraints* – the Council's estimates of likely supply appear to consider only infrastructure as a potential site constraint and therefore overlook other factors that affect developability, such as contamination or awkward site shape/topography.

- *Operational capacity* – some landowners face operational capacity constraints, which limit the number of new residential lots that they can supply per annum.

- *Financing* – similarly, some landowners face capital/financing constraints that also limit their ability to supply.

Given these various market forces, actual market supply is only ever a modest proportion of feasible capacity.

Finally, we note that the capacity requirements set out in both UFD – 01 and the NPSUD are minima, not targets, and they must be achieved "at all times". Thus, even if a Council appears to have "sufficient" capacity to meet demand, that does not negate the benefits of providing more.

In summary, based on the Council's latest estimates of feasible capacity (relative to its housing bottom lines), and noting the various factors that naturally limit the supply of feasible capacity over the short to medium term, we consider that the proposal clearly satisfies criterion (1)(a) for early release in the North East Rangiora Development Area.

5.4. Meeting the Needs of an Evolving Population

Rangiora's population, like most of New Zealand, is changing. People are getting older, and households are getting smaller. However, despite these demographic shifts, new dwellings built and sold in Rangiora over the last 10 years are relatively unchanged, with:

- 83% having at least 600m^2 of land;
- 80% having at least 160m^2 of floorspace; and
- 93% having three or four bedrooms.

These large, new homes on generous-sized sections are unlikely to meet the future needs of a rapidly-evolving population. For context, Figure 8 compares the section sizes of new dwellings built in Rangiora over the last 10 years to those proposed within Stage 1 of Bellgrove.

Figure 8: Comparison of Bellgrove Stage 1 Section Sizes to Rangiora 10-year Average

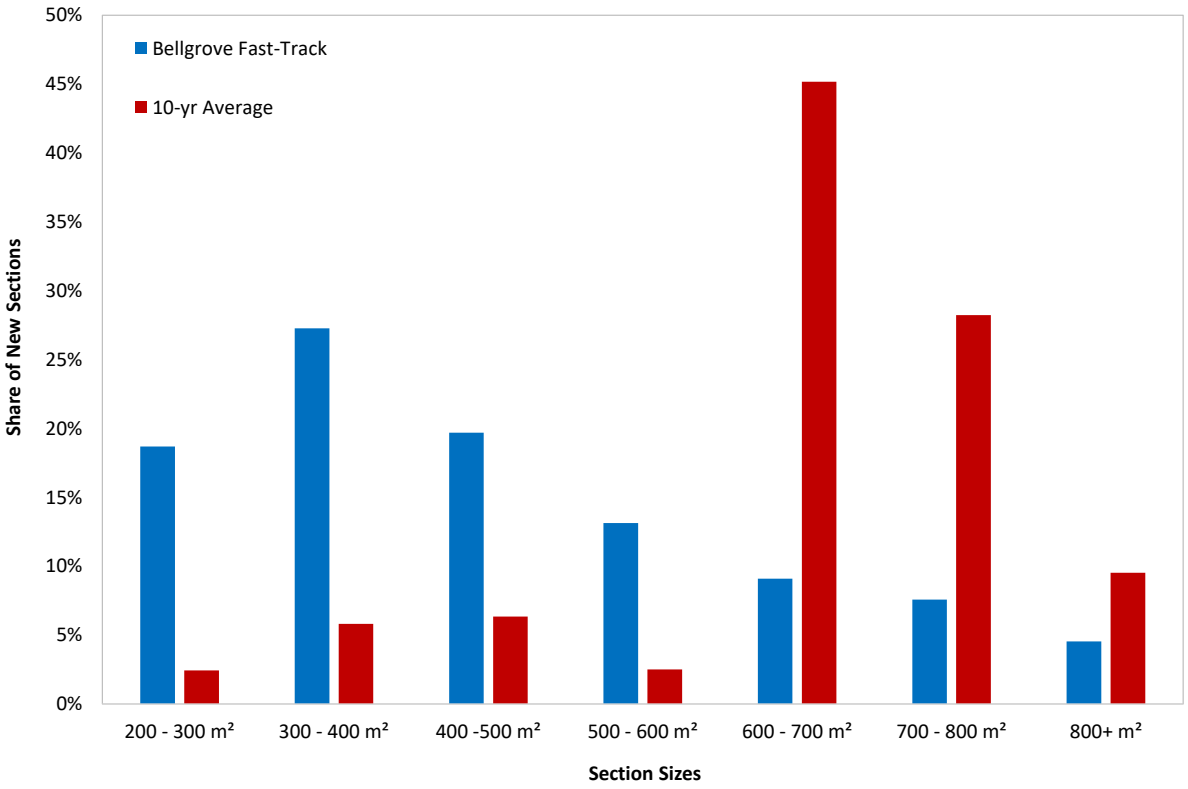


Figure 8 confirms that the proposed Stage 1 sections will deliver much smaller section sizes than have previously been provided. For example, whereas only 17% of new sections over the last 10 years were 600m^2 or smaller, 79% of Bellgrove's Stage 1 will be 600m^2 or smaller. These smaller sections, in turn, will improve affordability by reducing land costs. Also, by enabling more intensive use of that land, as measured by the floorspace ratio, more floorspace can be provided per square metre of land.

The floorspace ratio, or FAR as its better known, equals a property's floorspace divided by its land. Thus, if a 200m^2 home occupies an 800m^2 site, its FAR is 0.25. The FARs of homes recently built

in Rangiora are relatively low, partly because land has historically been cheap and hence there has been less incentive to use it as intensively as in other parts of New Zealand. In fact, the average FAR of new homes built in Rangiora since 2011 was only 31%. In other areas, a FAR of double this is not uncommon.

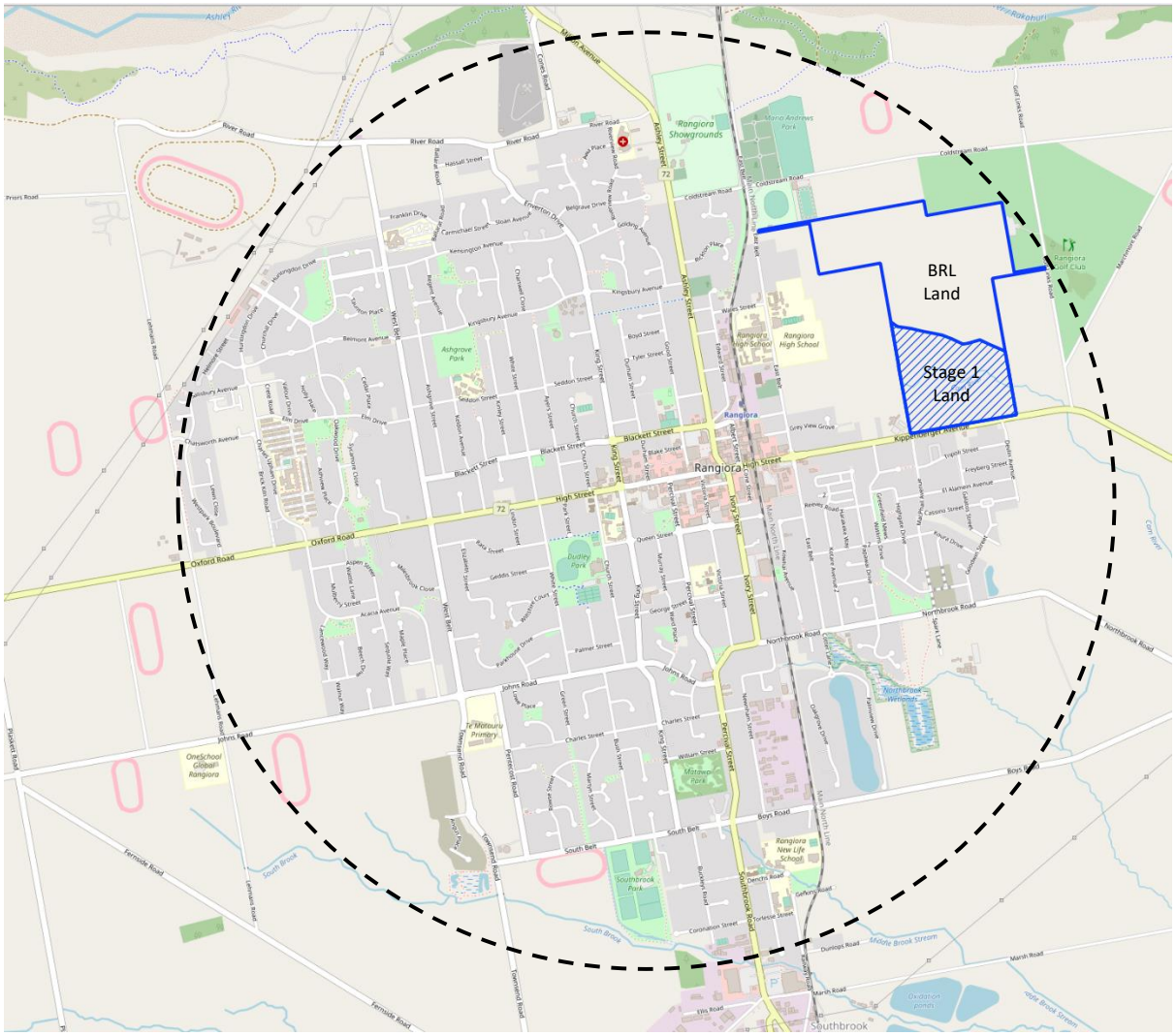
By providing much smaller sections at Bellgrove, while also enabling/encouraging higher FARs, a typical Rangiora dwelling (or something smaller) can still easily be provided. For example, a 200m^2 home can still fit on a 400m^2 section with a FAR of 50%, which is highly achievable.

In summary: the proposed Stage 1 will combine smaller section sizes with more intensive development intensity to provide more affordable dwellings that better meet the needs of an evolving local population. At the same time, these smaller sections put the land to its highest and best use, which is a precondition for economic efficiency to hold in the underlying land market.

5.5. Location and Developer Benefits

Finally, we note that the proposal's economic merits are bolstered by the fact that it will be a master-planned development completed by a willing and able group with a proven track record of delivering quality outcomes in the district. Further, because the site is adjacent to recent growth on the southern side of Kippenberger Ave, the development represents an orderly expansion of the town that helps fill notable gaps in the northeast. This is illustrated below in the figure below.

Figure 9: Role of Development in Plugging "Spatial Gaps" in the Northeast of the Township



6. Impacts on GDP, Jobs, and Wages

This section describes the methodology used to estimate the development's economic impacts.

6.1. Overview

The process of developing the land, then planning/designing/constructing the homes that will comprise Bellgrove Stage 1 will create jobs and incomes for numerous district workers. We quantified the likely one-off economic impacts of these activities using a technique called multiplier analysis, which enables the wider economic impacts of a change in one sector (or sectors) to be traced through to estimate the overall impacts, including flow-on effects. These impacts include:

- **Direct effects** – which capture onsite activities directly enabled by the project, plus the impacts of businesses that supply goods and services directly to the project; plus

- **Indirect effects** – which arise when businesses working directly on the project source goods and services from their suppliers, who in turn may need to source good/services from their own suppliers, and so on; and

- **Induced effects** – which occur when a share of the additional wages and salaries generated by the project (directly or indirectly) are spent in the local/regional economy and therefore give rise to additional rounds of economic impacts.

Effects are usually measured in terms of:

- **Contributions to value-added (or GDP).** GDP measures the difference between a firm's outputs and the value of its inputs (excluding wages and profits). It captures the value that a business adds to its inputs to produce its own outputs.

- **The number of people employed** – this is measured in terms of employment counts, which include both part-time and full-time workers.

- **Total wages and salaries** paid to workers, which are reported as 'household incomes.'

6.2. Methodology

We developed a land development and building construction model to capture the financial flows of the two activities by key stage, including planning, consent, design, land development, building construction, and sell-down. A share of each cost was then allocated to the regional economy, with the balance allocated to the rest of New Zealand. Then, we overlaid those regional/national costs estimates with corresponding economic multipliers to derive the one-off impacts on GDP, incomes, and employment. In addition, we captured the impacts of people directly or indirectly employed by the process, and modelled subsequent spending by them in the regional/national economy to estimate the overall impacts of the development, including flow-on effects.

6.3. Development Inputs and Assumptions

BRL provided us with indicative land development costs, which total about $13.5 million. These cover all costs required to ready the site for development, including onsite infrastructure. To estimate likely building costs, we first grouped sections by size to estimate the likely size of new homes built. Then, we converted that total residential GFA to an estimate of total construction costs using average build rates provided in consent data, which suggest an average of about $1,800/m^2. In addition, we capture the economic impacts of the subsequent marketing and sales process assuming 2% realtor fees on an average dwelling price of $570,000. Table 5 presents our assumed dwelling sizes by section size band.

Table 5: Assumed Dwelling Sizes by Section Size

Section Size	No. of sections	Assumed FAR	Avg. Land Area	Avg. GFA
Up to 400m^2	91	0.45	315	140
400m^2 to 500m^2	39	0.40	455	180
500m^2 to 600m^2	26	0.35	550	195
600m^2 and over	42	0.30	745	225
Total Fast-Track Stages	**198**	**0.37**	**460**	**170**

6.4. Estimated Regional Economic Impacts

We combined the methodology and inputs/assumptions above to estimate the one-off regional impacts of activities enabled by Bellgrove Stage 1. The table below presents the results.

Table 6: One-Off Regional Economic Impacts (spread over 2 to 3 years)

Planning/Design/Consent	Direct	Indirect	Induced	Total
Regional GDP ($ millions)	$1.2	$0.4	$0.3	$1.9
Employment (People-years)	11.0	4.0	3.3	18.3
Salaries/Wages ($ millions)	$0.7	$0.2	$0.1	$1.0
Land Development/Infrastructure	**Direct**	**Indirect**	**Induced**	**Total**
Regional GDP ($ millions)	$4.1	$2.7	$1.6	$8.4
Employment (People-years)	38.7	28.5	16.2	83.4
Salaries/Wages ($ millions)	$2.8	$1.5	$0.6	$4.8
House Construction	**Direct**	**Indirect**	**Induced**	**Total**
Regional GDP ($ millions)	$13.8	$11.7	$5.1	$30.6
Employment (People-years)	156.9	131.1	51.1	339.1
Salaries/Wages ($ millions)	$7.2	$6.1	$1.9	$15.2
Marketing & Sell Down	**Direct**	**Indirect**	**Induced**	**Total**
Regional GDP ($ millions)	$0.9	$0.5	$0.2	$1.6
Employment (People-years)	10.2	5.5	2.4	18.1
Salaries/Wages ($ millions)	$0.4	$0.2	$0.1	$0.7
One-Off Totals	**Direct**	**Indirect**	**Induced**	**Total**
Regional GDP ($ millions)	$20.0	$15.3	$7.2	$42.5
Employment (People-years)	216.8	169.1	73.0	458.9
Salaries/Wages ($ millions)	$11.1	$8.0	$2.7	$21.7

Table 6 shows that the various activities involved with preparing the land for development and then constructing and selling new houses will have significant regional impacts. While these impacts are greatest during house construction, they are significant across the full development lifecycle. In fact, including flow-on effects, our analysis suggests the various tasks associated with developing and selling new homes on the land could have the following **regional impacts**:

- A one-time boost in regional GDP of nearly $43 million;
- Employment for almost 460 people-years (e.g. 230 full time employees for 2 years); and
- Additional household incomes of nearly $22 million.

6.5. Estimated National Economic Impacts

The corresponding national economic impacts, which tend to be higher than regional ones because the national economy is more self-sufficient and hence captures a higher proportion of total flow-on effects[6], are shown in the table below.

Table 7: One-Off National Economic Impacts (spread over 2 to 3 years)

Planning/Design/Consent	**Direct**	**Indirect**	**Induced**	**Total**
National GDP ($ millions)	$1.3	$0.7	$0.8	$2.9
Employment (People-years)	12.9	7.4	7.1	27.4
Salaries/Wages ($ millions)	$0.7	$0.4	$0.3	$1.4
Land Development/Infrastructure	**Direct**	**Indirect**	**Induced**	**Total**
National GDP ($ millions)	$4.5	$6.2	$4.1	$14.9
Employment (People-years)	41.4	58.8	37.8	138.0
Salaries/Wages ($ millions)	$3.0	$3.0	$1.6	$7.6
House Construction	**Direct**	**Indirect**	**Induced**	**Total**
National GDP ($ millions)	$15.4	$32.8	$16.9	$65.1
Employment (People-years)	180.4	332.2	154.3	666.8
Salaries/Wages ($ millions)	$8.1	$16.1	$6.4	$30.6
Marketing & Sell Down	**Direct**	**Indirect**	**Induced**	**Total**
National GDP ($ millions)	$1.0	$1.1	$0.6	$2.7
Employment (People-years)	10.5	10.6	5.8	26.9
Salaries/Wages ($ millions)	$0.4	$0.5	$0.2	$1.1
One-Off Totals	**Direct**	**Indirect**	**Induced**	**Total**
National GDP ($ millions)	$22.2	$40.8	$22.4	$85.6
Employment (People-years)	245.2	409.0	205.0	859.1
Salaries/Wages ($ millions)	$12.2	$20.0	$8.5	$40.7

[6] In multiplier analyses, the broader the geographic scope of the study area, the more likely it is that firms can source all the goods and services that they need from other firms in the study area, rather than having to import them from elsewhere. As a result, the broader the study area, the higher the total economic impacts of a proposed development, because a higher proportion of the supply chain spending remains in the study area and hence gives rise to flow-on effects. As a result, national economic impacts almost invariably include higher flow-on effects than regional ones.

Again, there are significant economic impacts across all stages, particularly during house construction. Overall, including flow-on effects, we estimate that the various tasks associated with developing and selling new homes on the land could have the following **national impacts**:

- A one-time boost in national GDP of nearly $86 million;
- Employment for 860 people-years (or 430 people employed full-time for 2 years); and
- Additional household incomes of almost $41 million.

6.6. Direct & Indirect Full-Time Jobs by Project Stage

In addition to the economic impacts presented above, we also estimated the direct and indirect full-time jobs created at each key stage of the project. These are set out below, and represent national full-time employees (based on an average 0.9 FTEs per employee count).[7]

- In 2022, 12 direct FTE jobs will be created in the planning/design/consent stages, with a further 7 FTE jobs created indirectly in sectors that support planning/design/consent.

- In 2023, 37 direct FTE jobs will be created in the earthworks and local infrastructure stages, with a further 53 FTE jobs created indirectly in sectors that support earthworks and local infrastructure.

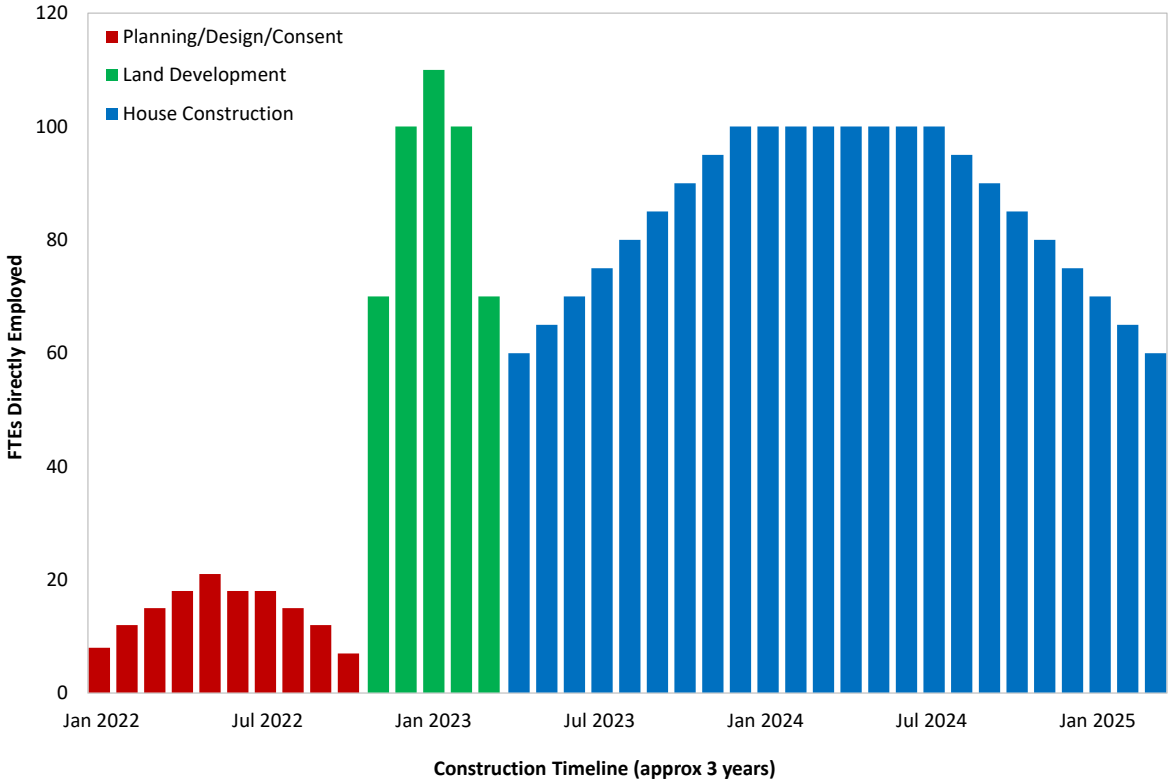
- In 2023, 81 direct FTE jobs will be created in house construction, with a further 149 FTE jobs created indirectly in sectors that support house construction.

- In 2024, 9 direct FTE jobs will be created in sales and marketing, with a further 9 FTE jobs created indirectly in sectors that support sales and marketing.

Figure 10 provides a graphical representation of this information. It shows the number of national FTE employees created at each phase of the project (excluding sales and marketing). It confirms that house construction accounts for the bulk of employment generated by the proposal.

[7] The ratio of 0.9 FTEs per worker was derived from detailed Australian data on employment for the construction industry, which we assume reflects New Zealand's workforce.

Figure 10: Direct National FTEs Employed by Bellgrove Stage 1 Development



6.7. Project Acceleration

Not only will the project provide meaningful employment for a wide range of district workers, as illustrated above, but gaining approval via the Fast-Track process will also help those jobs to be created much sooner than they likely would otherwise. Absent the Fast-Track process, the proposal would otherwise be subjected to two publicly-notified, non-complying resource consent processes under the RMA – one for the district Council, and another for the regional Council.

In our experience, non-complying resource consent process for large projects like the proposal could take up to two years to complete. There are several factors that may prolong the process, including:

- Multiple rounds of further information requests under section 92 of the RMA;
- Submitters raising unexpected or complicated issues during public consultation;
- Lengthy evidence exchange periods prior to the hearing (which can be exacerbated by the higher onus associated with non-complying consents. i.e. the gateway tests);
- The number of witnesses required to give evidence at the hearing;
- Long periods taken to reach a decision; and
- The numerous tasks associated with potential appeals to the Environment Court.

Figure 11 demonstrates the potential complexity of a fully-notified consent process under the RMA. When potential interactions between the (separate but interrelated) district and regional Council consenting processes are considered, consent could take well over two years via standard

RMA pathways. By avoiding these lengthy processes, gaining Fast-Track consent instead will help bring forward the project by up to 18 or 24 months, and therefore help the district recover from the devastating effects of Covid-19 faster than it would otherwise.

Figure 11: Process for Fully Notified Resource Consent Applications

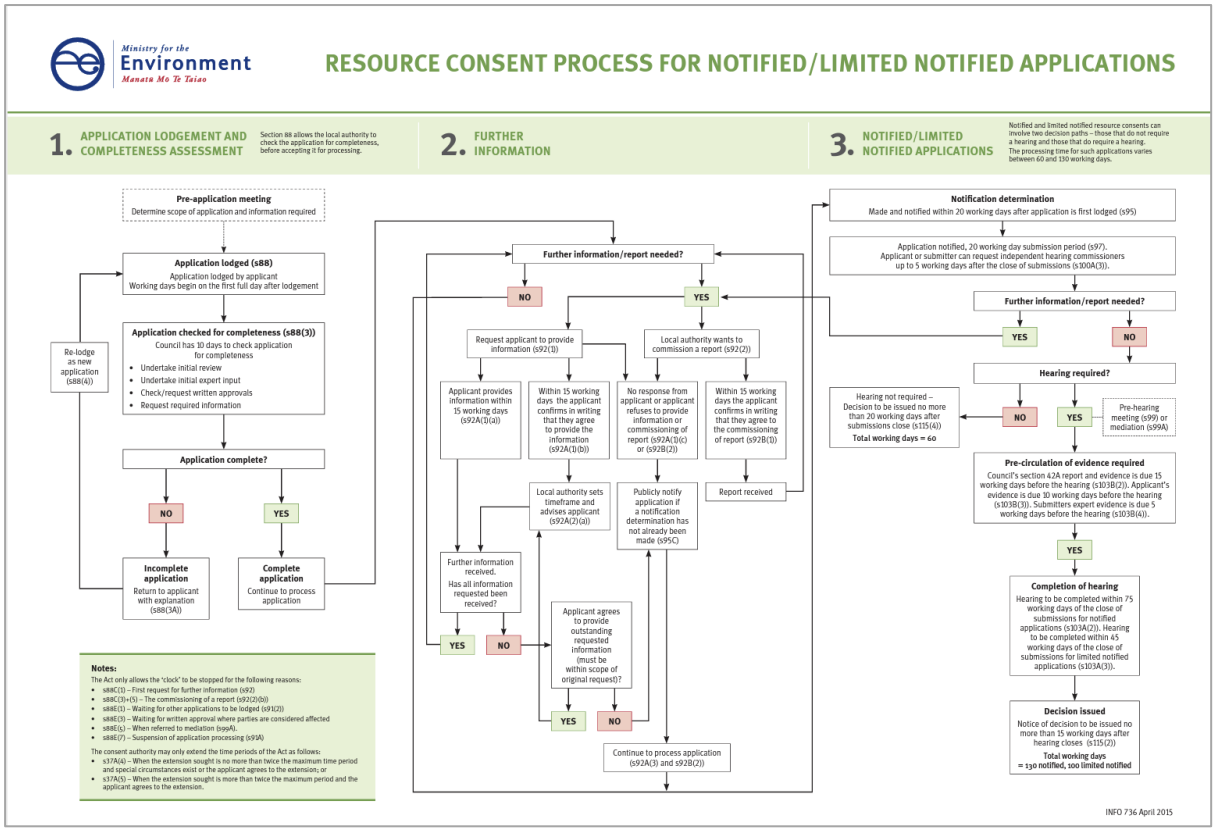
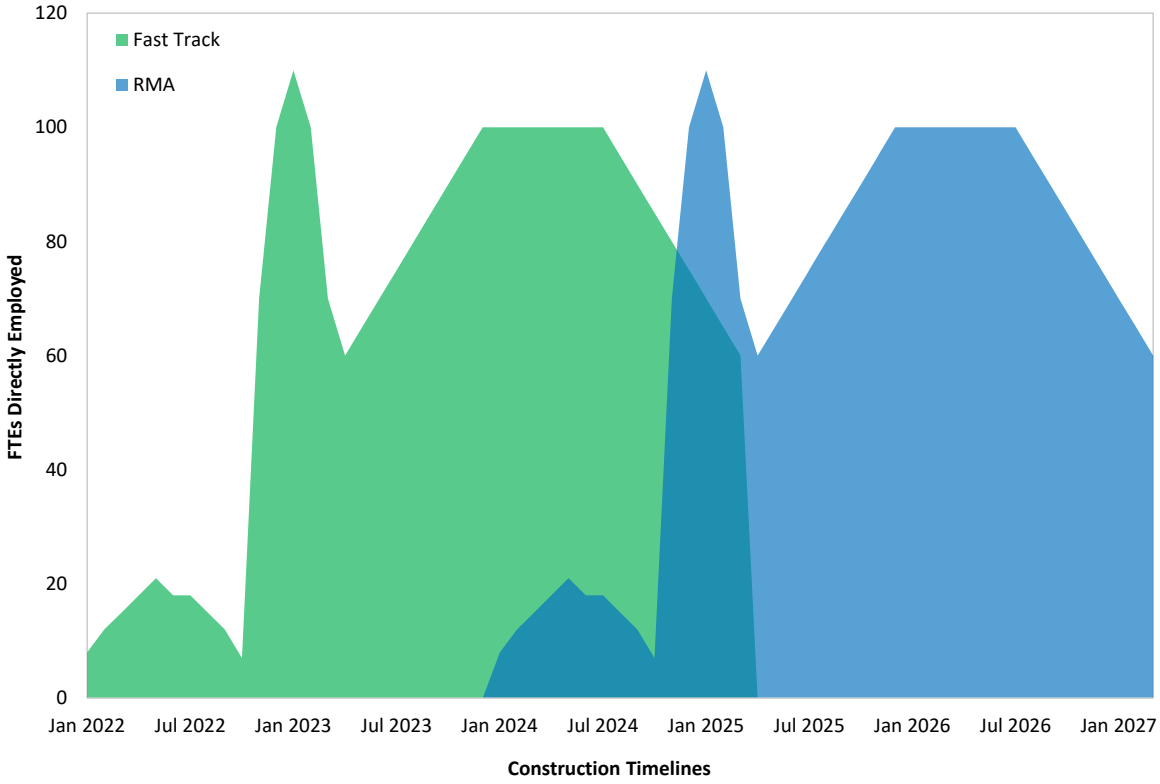


Figure 11 demonstrates the resulting impacts of Fast-Track consent on the timing of employment created, assuming a 2-year acceleration of the project. It takes the values in Figure 10 and compares their timing under the Fast-Track application and the RMA resource consent process.

Figure 12: Comparison of Direct Employment Timelines for the RMA vs Fast-Track Processes



7. Wider Economic Effects of Proposal

This section briefly considers a range of wider economic effects of the proposal, including the timing impacts of consent being granted under the FastTrack process.

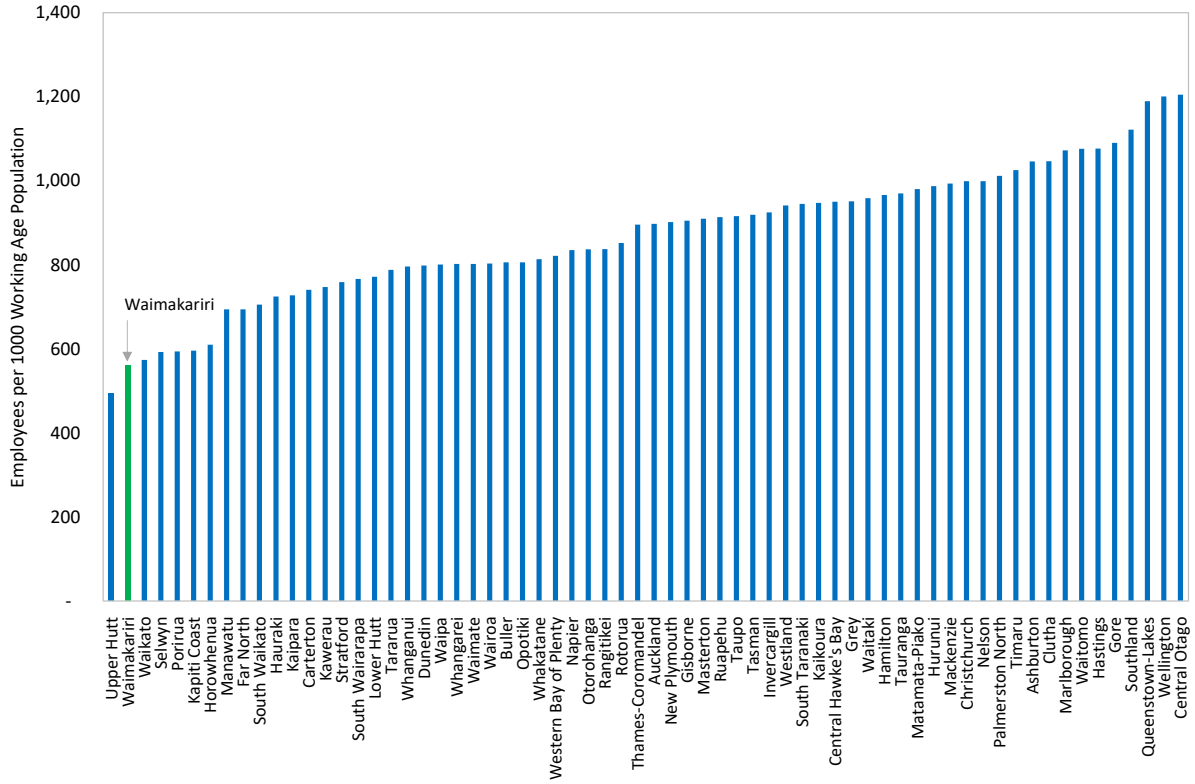
7.1. Support for Covid-Affected Workers

Although New Zealand has done an outstanding job of stopping the spread of Covid-19 by entering lockdown earlier than most other countries, and has also benefitted from its isolated geography, the pandemic's economic effects have still been profound. While the proposed development is not a panacea for the economic woes foisted on the regional and national economies by the pandemic, it will provide a strong, short-term demand for labour, some of which can potentially be filled by workers that have lost their jobs to Covid-19. Indeed, with construction expected to provide full-time national employment for 430 people for two years, it will provide a much-needed boost in short term economic stimulus.

7.2. Improved District Employment Self-Sufficiency

Not only will the proposal provide employment for Covid-affected workers, but it will also help to improve the district's overall employment self-sufficiency. This is critical because, as shown in the figure below, Waimakariri district's employment self-sufficiency was the second lowest in New Zealand in 2019.

Figure 13: District Employees per 1000 Working Age Population - 2019



In 2019, the district had just 561 jobs per 1000 working age residents, compared to a national average of 898. This low rate of local jobs per worker is why so many district residents commute

to Christchurch City. In fact, 2013 census data showed that 40% of all workers living in the district worked in Christchurch City – one of the highest rates of outflow in the country.

7.3. Critical Mass and Support for Key Activity Centres

The proposed development is located just east of the Rangiora Key Activity Centre (KAC), and is also just a short distance west of the emerging Ravenswood KAC. As the proposed new subdivision is developed and fills up with residents, they will help create critical mass for a range of local services that may otherwise not be viable. This is important, because the district is currently very reliant on Christchurch City to supply a wide range of everyday household goods and services.

In fact, detailed Marketview (electronic transaction) data provided to us by the Council during another recent project showed that nearly half of all district resident spending on core retail goods and services leaked out to Christchurch City in 2019. The development, along with existing residents and the future residents of other growth areas, will provide critical mass to gradually improve the viability of local service provision. As a result, it will reduce the need to commute to the city. That, in turn, will reduce fossil fuel use, reduce harmful emissions, and reduce the scope for motor accidents.

To provide a sense of scale, we used our *Integrated Retail Model* to estimate likely core retail spending by future occupants of the homes proposed in Bellgrove Stage 1. Table 8 presents the results.

Table 8: Estimated Annual Spending on Core Retail Goods/Services by Fast-Track Households

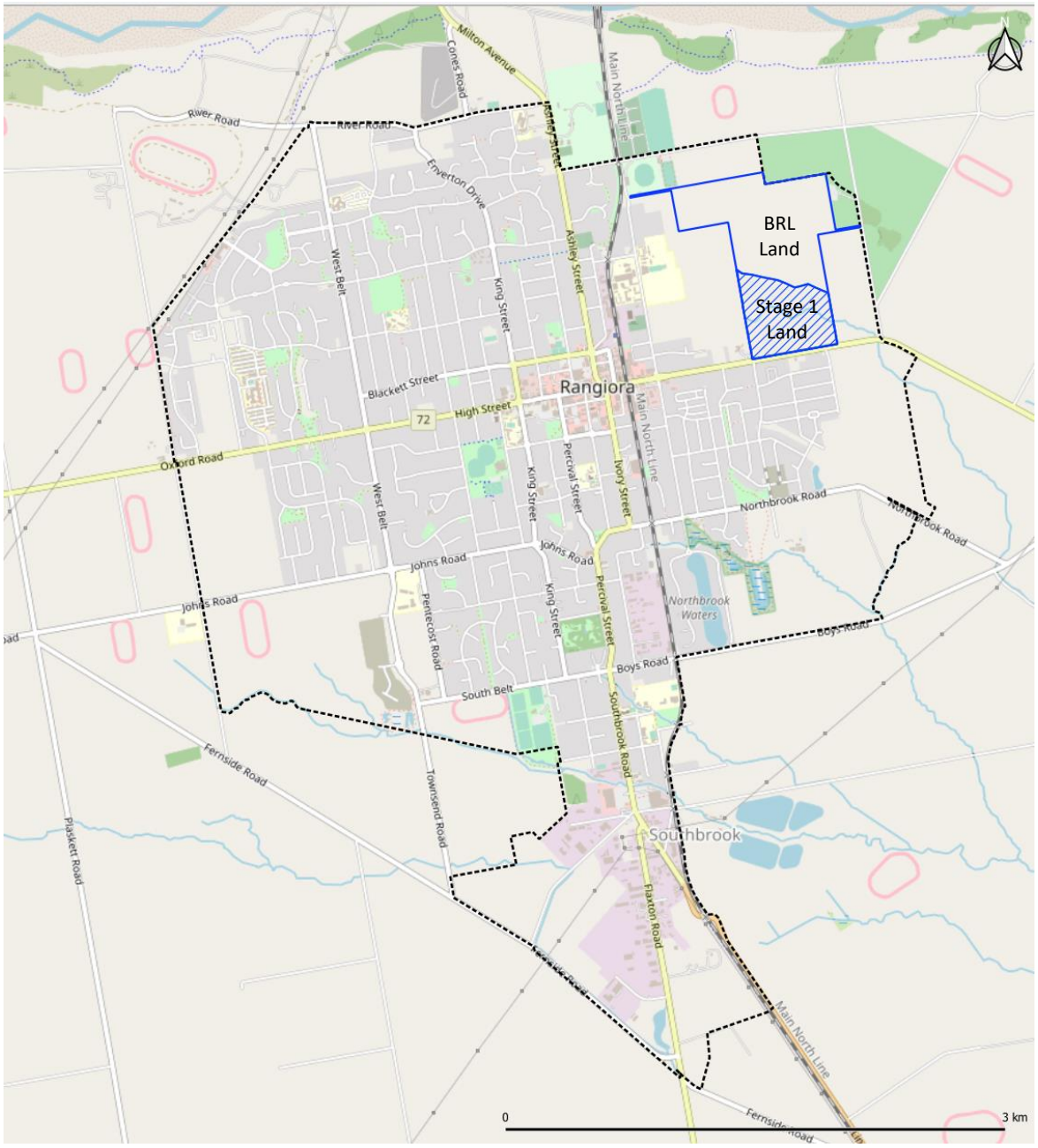
Core Retail Store Types	**Annual Spend**
Clothing, footwear, and personal accessories retailing	$335,000
Department stores	$445,000
Electrical and electronic goods retailing	$290,000
Food and beverage services	$715,000
Food retailing	$2,170,000
Furniture, floor coverings, houseware, and textile goods retailing	$210,000
Hardware, building, and garden supplies retailing	$690,000
Pharmaceutical and personal care goods retailing & other	$340,000
Recreational goods retailing	$205,000
Total Core Retail Spending	**$5,400,000**

In summary, we estimate that future households of the Bellgrove Stage 1 homes will spend about $5.4 million per annum on core retail goods and services. This additional spending will help support the district's new and emerging KACs while improving the viability of local goods/services provision for the benefit of all.

7.4. Infrastructure Efficiency

While growth confers many benefits on the district, such as critical mass to support local businesses, it also carries significant costs. For Councils, one of the most pressing costs associated with growth is the need to provide local infrastructure, such as water, wastewater, and roads. Fortunately, the subject site is just across the road from a recent growth area and is also within Rangiora's projected infrastructure boundary (as denoted by the dashed black outline in the map below). As a result, the development is likely to achieve high levels of infrastructure efficiency. This, in turn, avoids unnecessary financial risks and costs for the Council – as service provider – while helping to keep the costs of new homes as low as possible.

Figure 14: Location of Subject Site within Infrastructure Boundary



7.5. Highest & Best Use of Land

The proposal will also enable the land to be put to its highest and best use, which is a precondition for economic efficiency to hold in the underlying land market.

7.6. Investment Signal Effects

Finally, we note that the development will provide a strong signal of confidence in the district economy, which may help spur on, accelerate, or bring forward other developments.