BEFORE THE SELWYN DISTRICT COUNCIL

IN THE MATTER OF	Clause 21 of the First Schedule of the Resource Management Act 1991 (Plan Change 72)
IN THE MATTER OF	**TRICES ROAD REZONING GROUP** (Applicant)

STATEMENT OF EVIDENCE OF FRASER JAMES COLEGRAVE

Dated: 14 January 2021

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INTRODUCTION

1 My full name is Fraser James Colegrave. I am an economist and the managing director of Insight Economics, an economics consultancy based in Auckland. Prior to that, I was a founding director of another consultancy, Covec Limited, for 12 years.

2 I hold a Bachelor of Commerce (1st Class Honours) in Economics from the University of Auckland.

3 I have over 24 years' commercial experience, the last 21 of which I have worked as an economics consultant. During that time, I have successfully led and completed more than 500 consulting projects across a broad range of sectors.

4 My main fields of expertise are land-use and property development. I have worked extensively in these areas for dozens of the largest developers in New Zealand. In addition, I regularly advise Local and Central Government on a range of associated policy matters.

5 Over the last 15 years, I have worked on numerous land use and property development projects across Greater Christchurch, including several in Selwyn. To date, I have also provided evidence on four other district plan changes over the last 6 months (PC67, PC69, PC73, and PC75).

6 I also regularly appear as an expert witness before Councils, Boards of Inquiry, Independent Hearing Panels, the Land Valuation Tribunal, the EPA, the Environment Court, the Family Court, and the High Court of New Zealand.

CODE OF CONDUCT

7 Although this is not an Environment Court hearing, I note that in preparing my evidence I have reviewed the Code of Conduct for Expert Witnesses contained in Part 7 of the Environment Court Practice Note 2014. I have complied with it in preparing my evidence. I confirm that the issues addressed in this statement of evidence are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

8 My evidence addresses the following:

8.1 A brief description of the proposed plan change;

8.2 A quick summary of Prebbleton's residents and dwellings;

8.3 Past and future district population growth;

8.4 The need for the plan change at the district level according to the Council's requirements under the National Policy Statement On Urban Development 2020 (NPSUD);

8.5 The need for the plan change at the sub-district level; and

8.6 An assessment of the economic costs and benefits of the plan change, particularly in light of the perceived need for it according to my earlier NPSUD analysis.

9 In preparing my evidence I have reviewed the valuation evidence of Mr. Sellars and the real estate/ market demand evidence of Mr. Jones. I have also considered the economic assessment for rezoning land in Prebbleton prepared by Urban Economics that was lodged with the private plan change request.

SUMMARY

10 Plan Change 72 (PC72) seeks to rezone approximately 28.7 hectares of land in Prebbleton to accommodate around 320 dwellings (333 dwellings if the entire PC72 Site is zoned Living Z as recommended by the Council planner).

11 Having briefly profiled Prebbleton's existing residents and dwellings, I then show that the district's population has grown rapidly in recent years, with this fast growth projected to continue well into the foreseeable future.

12 However, the Council is currently not meeting its obligations to provide at least sufficient capacity to meet the demand for new dwellings, as required by the NPSUD, at either the district or sub-district level.

13 This is both because the Council's estimates of demand for additional dwellings are too low, while its estimates of likely capacity to meet that demand are overstated.

14 When the various issues identified herein are addressed to provide more reliable estimates of dwelling supply/demand, the district clearly faces significant supply shortfalls under the short, medium, and longer terms. Accordingly, additional land needs to be identified and rezoned as soon as possible to meet NPSUD obligations, and to enable the efficient operation of the local land market.

15 Overall, it is my assessment that the proposal will provide strong economic benefits, including:

15.1 Providing a substantial, direct boost in market supply to meet current and projected future shortfalls;

15.2 Bolstering land market competition, which helps deliver new sections to the market quicker and at better average prices;

15.3 Providing a variety of housing options/typologies to meet diverse needs and preferences, which is also required by the NPSUD.

15.4 Contributing to achieving critical mass to support greater local retail/service provision.

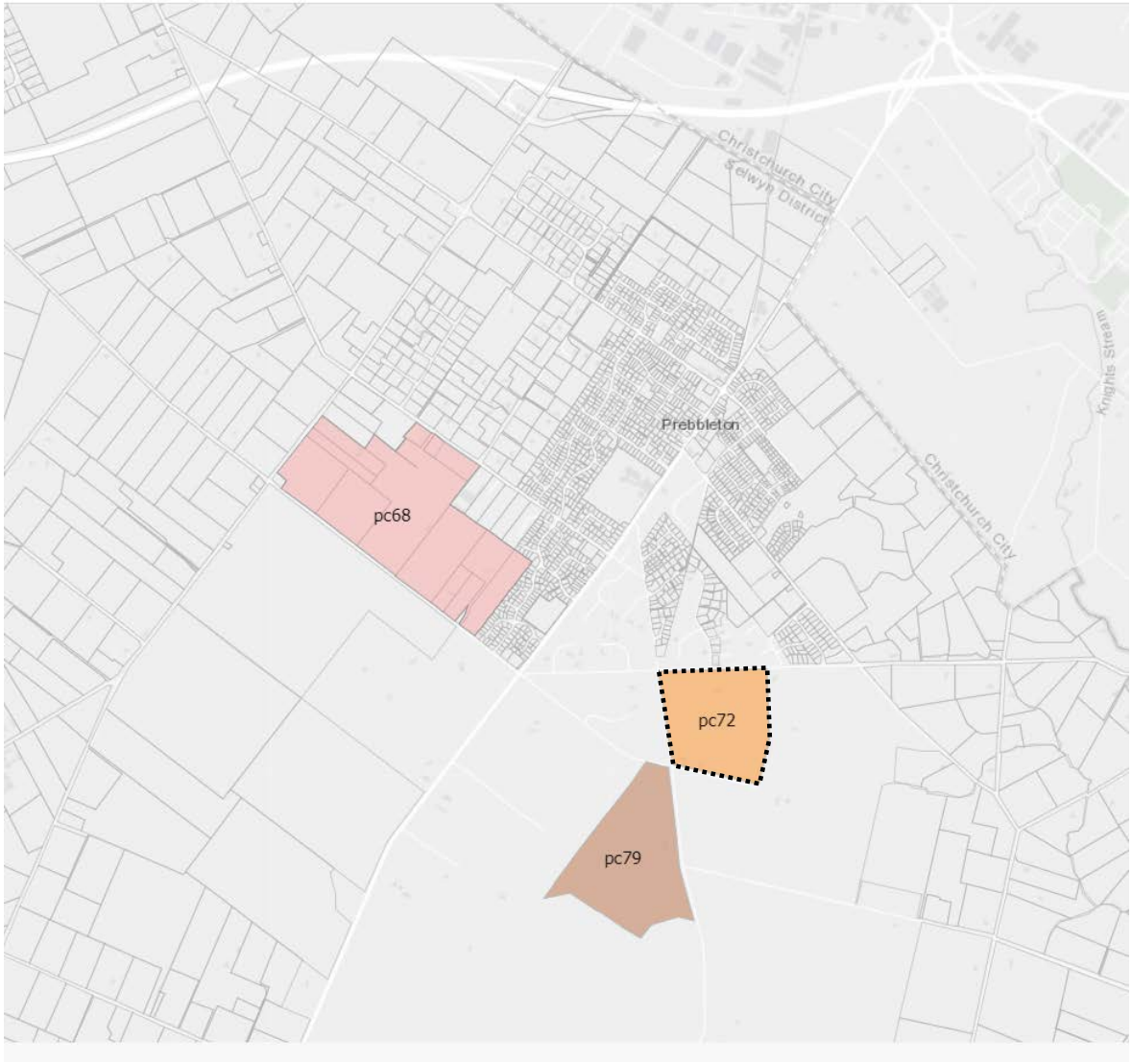
15.5 The one-off economic stimulus associated with developing the land and constructing the dwellings that will be enabled there.

16 Given the strong and enduring benefits of the proposed plan change, and noting the absence of any material economic costs, I support it on economic grounds.

ABOUT THE PROPOSED PLAN CHANGE

17 Plan Change 72 (PC72) seeks to rezone approximately 28.7 hectares of land in Prebbleton to accommodate approximately 320 dwellings. The subject land is zoned as Inner Plains under the Operative District Plan, and as General Rural Zone under the Proposed District Plan. The map below identifies the site's location.

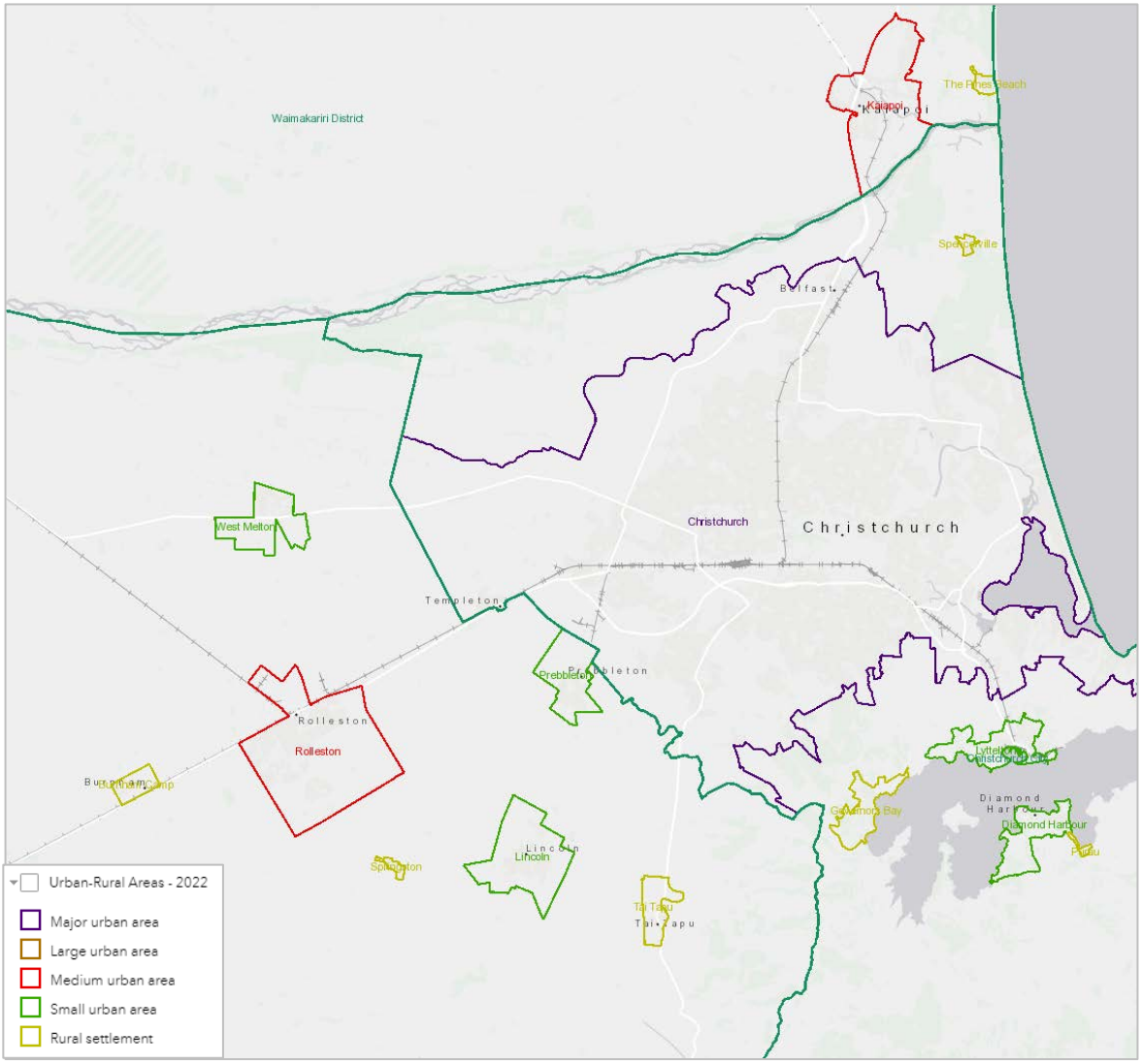
Figure 1: Location of Subject Site



ABOUT PREBBLETON

18 Prebbleton is an urban township in the Selwyn district, located approximately 13km east of Rolleston, adjacent to Christchurch City. Its location is illustrated in the chart below based on Statistic New Zealand's Urban/Rural groups.

Figure 2: Prebbleton Urban Context



19 As at the 2018 census, there were nearly 1,500 occupied dwellings in Prebbleton[1] with 4,515 usual residents (~an average household size of 3.02). The median age was 40.6 years, and the median personal income was $48,000. More than 92% of residents identified as European, 5% as Maori, and nearly 7% Asian.[2]

20 Prebbleton has grown rapidly, especially over the last 10 years, with the population doubling from 2,510 in 2010 to 5,020 in 2021 (an annual growth rate of 6.5%).

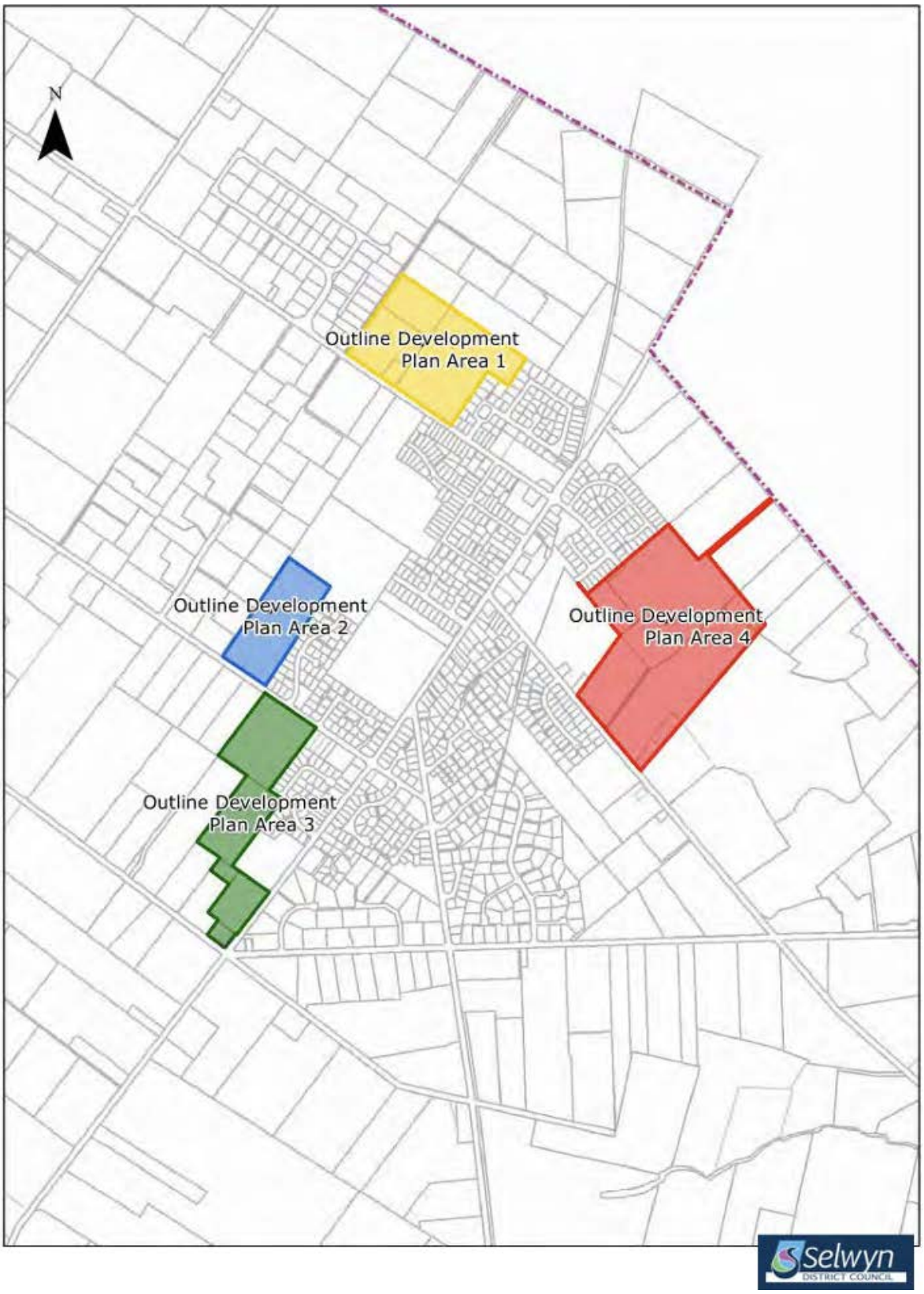
21 Because of this strong recent population growth, most of the established residential-zoned areas in Prebbleton are fully-developed. However, the Operative Selwyn

[1] Defined as the Prebbleton SA2 area. Data sourced from https://www.stats.govt.nz/tools/2018-census-place-summaries/prebbleton

[2] Numbers do not sum to 100% as people may identify with more than one ethnicity.

District Plan (OSDP) also includes four Outline Development Plan Areas (ODPAs) zoned Living Z, which provide for a minimum Lot size of 550m^2 and minimum average lot sizes of 700m^2, and medium density housing in locations shown on the ODP. Figure 3 displays the location of the ODPAs.

Figure 3: Locations of the four ODPAs in Prebbleton



22 One of these ODPAs is fully developed, with the rest in varying states of completion. Only ODP Area 4 includes provision for medium density housing, on a limited basis. However, resource consent has been obtained for the Ashford retirement village within ODPA 4, which is currently under construction by Bupa on the southeastern edge of the township. A Summerset retirement village is also under construction on the former Meadows Mushroom site on Springs Road, but this does not form part of an ODPA.

23 The OSDP applies more than a dozen residential zones and sub-zones to the Prebbleton area. However, the recently-notified Proposed Selwyn District Plan (PSDP) greatly simplifies this, with each Prebbleton land parcel zoned as either:

23.1 General Residential Zone (GRZ);

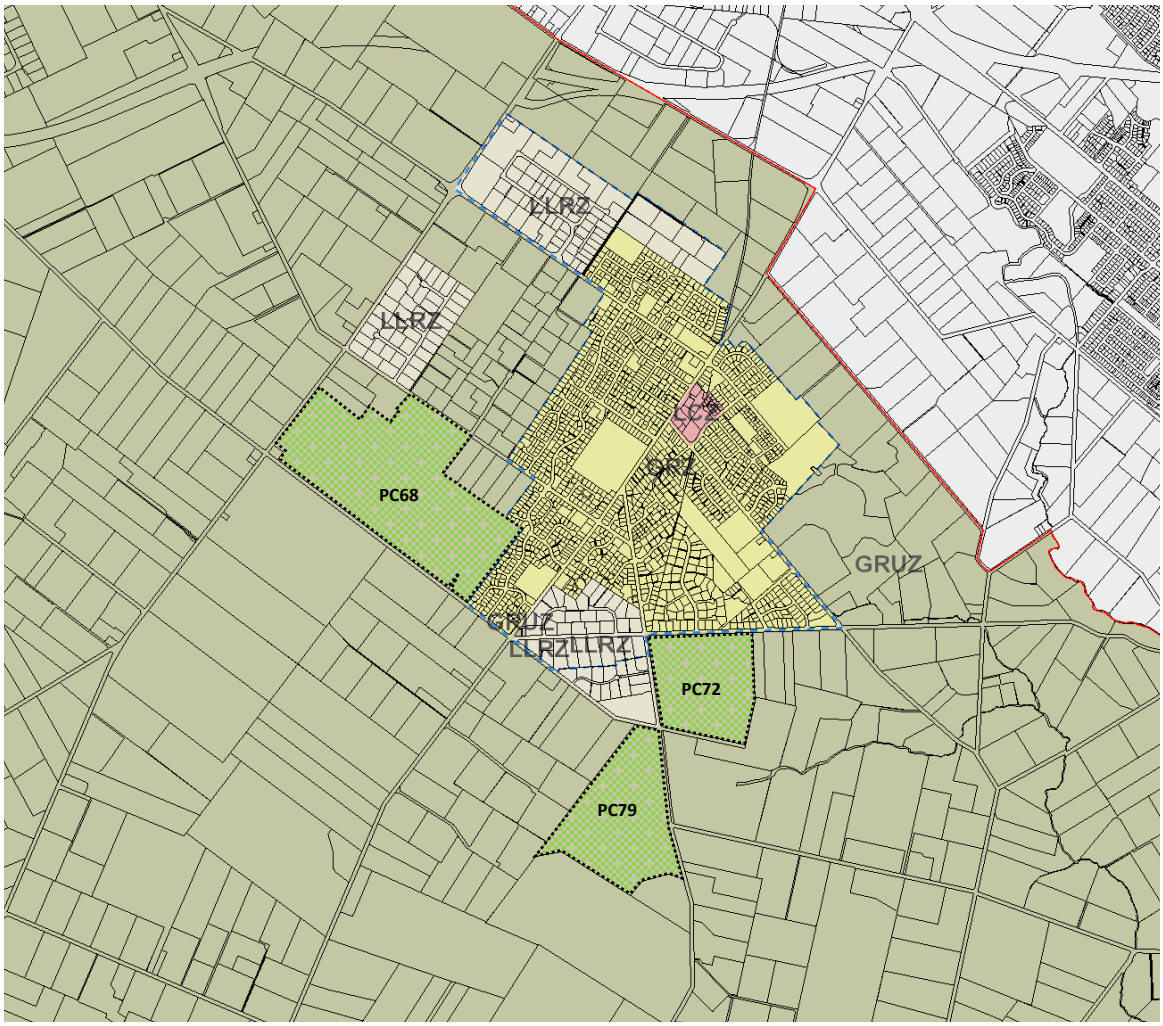
23.2 Large Lot Rural Zone (LLRZ);

23.3 General Rural Zone (GRUZ); or

23.4 Local Commercial Zone (LCZ).

24 The following map illustrates the PSDP zoning pattern and overlays the three plan change areas for context.

Figure 4: Plan Change Areas Overlaid on PSDP Zoning for Prebbleton



25 To gain a better understanding of Prebbleton's existing dwelling stock, I used Core Logic's Property Guru tool to profile them. Table 1 presents the results for the two PSDP urban/residential zones that are proposed to apply there. Please note that this categorisation by PSDP zone is not intended to elevate the status of that plan, nor to diminish the role or importance of the operative plan. Rather, it is simply an easy way to group existing Prebbleton properties into those that are more urban in nature, and those that are predominantly rural-residential.

Table 1: Summary of Existing Prebbleton Dwelling Stock by PSDP Zone

Summary Statistics	**GRZ**	**LLRZ**
Number of Dwellings	1,352	130
Avg Dwelling GFA (m^2)	240	340
Avg Section Size (m^2)	1,040	5,970
Avg No. of Bedrooms	3.8	4.4
Avg Floor Area Ratio	0.23	0.06
Average Property Values	**GRZ**	**LLRZ**
Land Value	$300,000	$535,000
Capital Value	$725,000	$1,280,000
Decade Built	**GRZ**	**LLRZ**
Pre-1950s	2%	0%
1950 – 1959	1%	0%
1960 – 1969	2%	2%
1970 – 1979	3%	2%
1980 – 1989	2%	1%
1990 – 1999	1%	1%
2000 – 2009	34%	58%
2010 – 2019	49%	28%
2020 – 2029	6%	8%
Wall Materials	**GRZ**	**LLRZ**
Brick	48%	46%
Roughcast, etc	27%	36%
Weatherboard	9%	5%
Concrete	6%	3%
Other	9%	10%
Roof Materials	**GRZ**	**LLRZ**
Steel / G-Iron	81%	78%
Tile Profile	17%	21%
Other	2%	1%

26 According to Table 1, the average dwelling in the GRZ has 240m^2 of floorspace on a 1,040m^2 section, with an average of nearly 4 bedrooms. 90% of these dwellings were built since 2000. The average capital value is $725,000, and the average land value is $300,000.

27 Dwellings in the LLRZ have different characteristics, as one would expect. On average, homes there span 340m^2 of floorspace on a 5,970m^2 section, and have an average of 4.4 bedrooms. 94% were built since 2000. The average capital value is $1,280,000, and the average land value is $535,000.

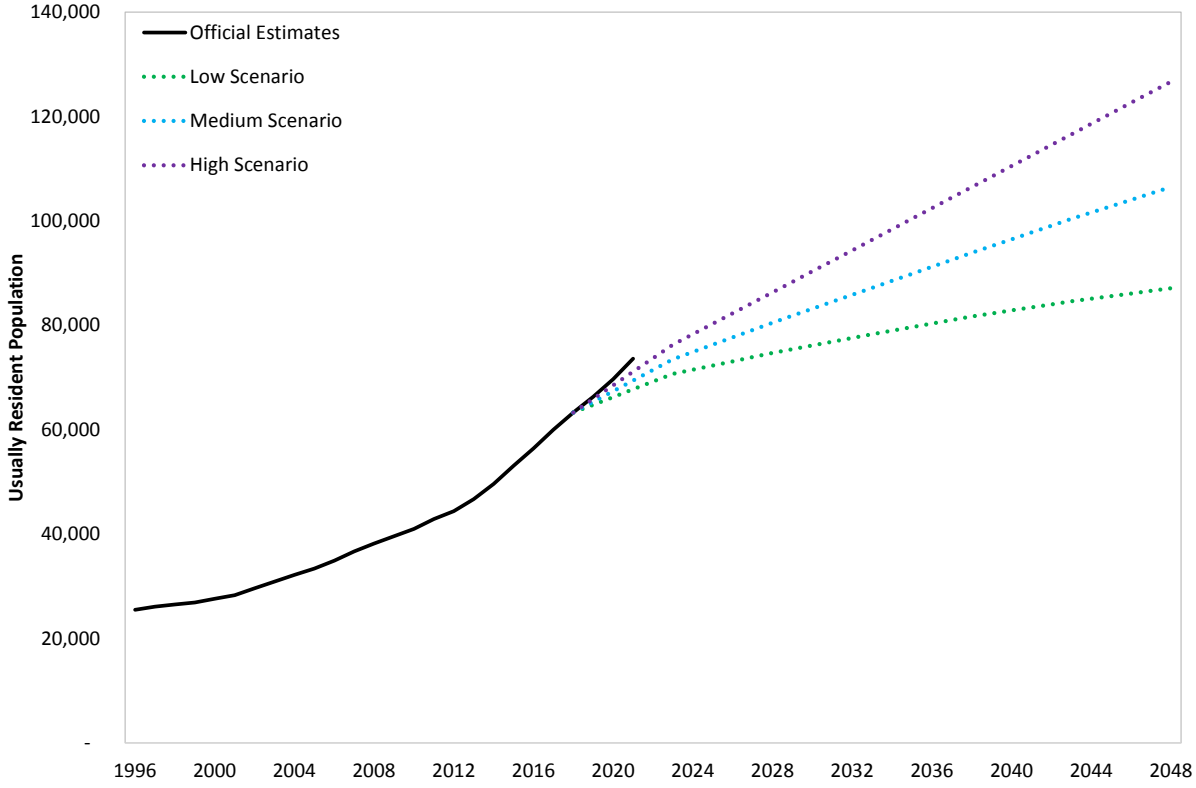
PAST AND FUTURE DISTRICT POPULATION GROWTH

28 Selwyn is one of New Zealand's fastest growing areas. Over the last 25 years, its population growth rate was second only to Queenstown, and nearly 3.5 times the national average of 1.6% per annum.

29 According to official population projections, this rapid growth is set to continue, with Statistics New Zealand's picking Selwyn to have the fastest population growth of all territorial authorities to 2048 under its low, medium, and high scenarios.

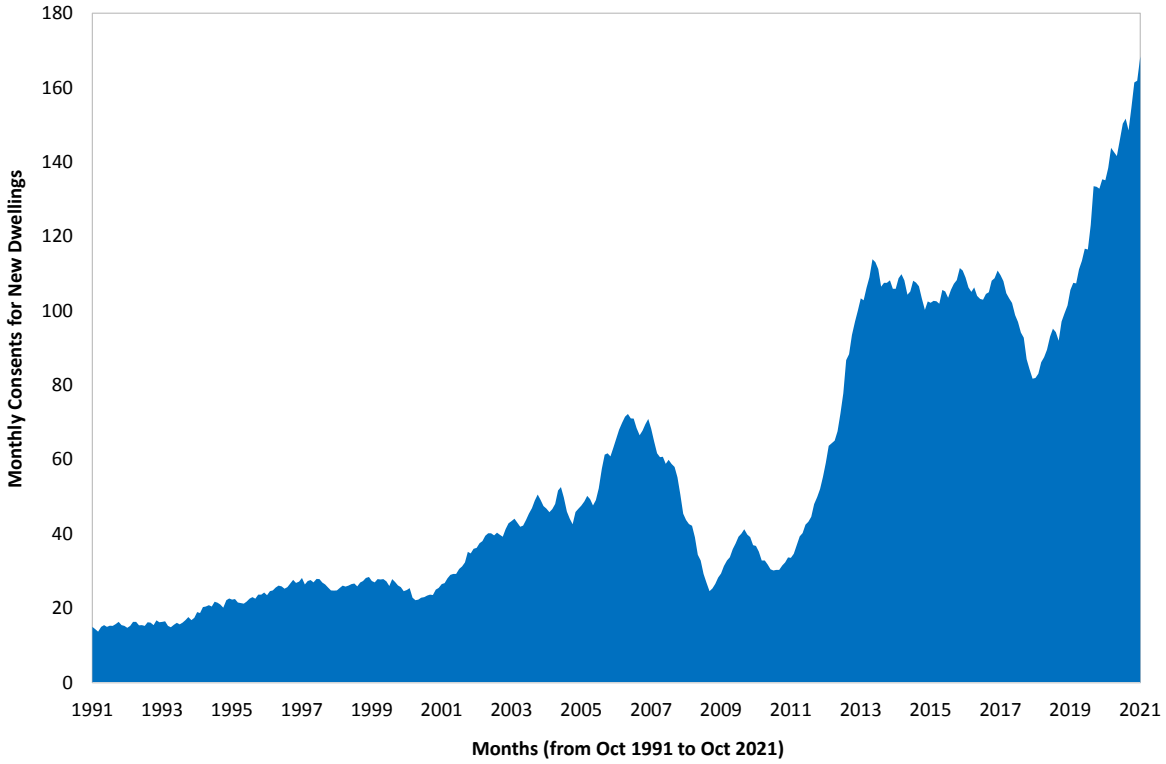
30 And, according to the latest population estimates to 30 June 2021, Selwyn is on track to exceed even Statistics New Zealand's high population growth scenario. This is illustrated in the chart below, which overlays the latest official population projections with official population estimates to 31 June 2021.

Figure 5: Selwyn District Official Population Projections vs Official Population Estimates



31 The district's rapid ongoing population growth is also (naturally) captured in building consent statistics. For example, the chart below shows the number of new dwellings consented in the district over the last 30 years (using a 12-month moving average). For the year ended 30 October 2021, a record 2,020 new dwellings were consented.

Figure 6: Consents for New Residential Dwellings in Selwyn District (Oct 1991 to Oct 2021)



32 Figure 5 shows that dwelling consents grew steadily between 1991 and 2007, then dropped sharply (presumably due to the GFC). They remained subdued until about 2011/12, then picked up again after the Canterbury earthquakes. For the next four to five years (to about 2017), new consents remained at about 100 per month. However, they dipped again in 2018 before rebounding strongly to reach record highs over the last two to three years.

33 In my opinion, this strong recent trend represents an enduring demand for living in Selwyn.

THE NEED FOR THE PLAN CHANGE AT THE DISTRICT LEVEL

34 The National Policy Statement on Urban Development 2020 (NPSUD) came into effect in August 2020. Like its predecessor, the NPSUDC 2016, the NPSUD requires Councils in high growth areas to provide (at least) sufficient development capacity to meet expected future demand for additional dwellings over the short-, medium-, and long-term.

35 In addition, the NPSUD imposes strict monitoring and reporting requirements to ensure that any capacity shortfalls are identified and rectified as soon as possible.

36 The NPSUD's requirements for monitoring and providing development capacity vary across three tiers, with the strictest requirements imposed on Councils in tier 1

urban environments. These represent the highest-growth areas, and also places where capacity shortfalls have historically been the most acute.

37 Selwyn District comprises part of the Greater Christchurch Tier 1 urban environment and is therefore required under the NPSUD to complete a detailed housing and business development capacity assessment (HBA) every three years. The HBA synthesizes a raft of information about the supply and demand for new dwellings to ensure that sufficient capacity is being provided in the right places and at the right time to keep pace with demand through to the long term.

38 On 30 July 2021, the Greater Christchurch Partnership (GCP) published its latest HBA for its three partner Councils: Christchurch City, Selwyn District, and Waimakariri District.[3]

39 The table below summarises the estimated feasible capacity and projected future demand for additional dwellings in Selwyn according to the latest HBA for three different capacity scenarios:

39.1 Excluding Rolleston's future development areas (FUDAs) (which were identified in the 2018-2048 Our Space strategy);

39.2 Including Rolleston's FUDAs at a density of 12.5 households per hectare; and

39.3 Including Rolleston's FUDAs at a density of 15 households per hectare.

Table 2: Selwyn District Feasible Capacity and Dwelling Demand in Latest HBA

Scenario 1: Excluding Future Urban Development Areas (FUDAs)			
Timeframes	Feasible Capacity	Demand incl buffer	Surplus/Shortfall
Short Term	4,578	2,714	1,864
Medium term	6,452	8,541	2,089
Long term	6,452	25,338	18,886
Scenario 2: Including Future Urban Development Areas (FUDAs) @ 12.5 hh/ha			
Timeframes	Feasible Capacity	Demand incl buffer	Surplus/Shortfall
Short Term	4,578	2,714	1,864
Medium term	12,208	8,541	3,667
Long term	12,208	25,338	13,130
Scenario 3: Including Future Urban Development Areas (FUDAs) @ 15 hh/ha			
Timeframes	Feasible Capacity	Demand incl buffer	Surplus/Shortfall
Short Term	4,578	2,714	1,864
Medium term	13,502	8,541	4,961
Long term	13,502	25,338	11,836

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

40 Table 1 shows that, when the FUDAs in Rolleston are excluded, the latest HBA reveals a significant shortfall in feasible district dwelling capacity over the medium-term (3 to 10 years) and long-term (10 to 30 years). When the FUDAs are included, however, the medium-term shortfall disappears leaving only a long-term deficit.

41 While these latest dwelling supply/demand figures may seem to imply no short-term need to provide additional dwelling capacity to meet demand, there are several reasons why this is unlikely to be the case.

42 First, the capacity requirements set out in 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 additional capacity. In general, more is better.

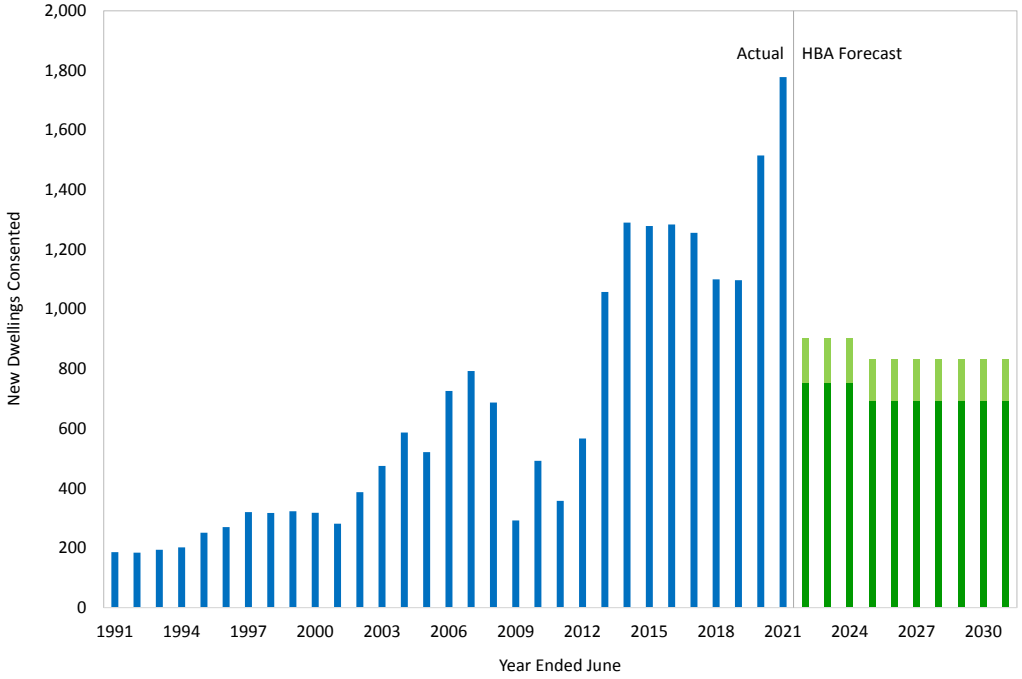
43 Second, the Council has used the FUDA's as part of its medium-term capacity. However, clause 3.2 of the NPSUD requires that for capacity to be 'sufficient' to meet expected demand, it must be (among other things) 'plan enabled.' Clause 3.4 of the NPSUD goes on to state that development is 'plan-enabled' for housing if, in relation to the medium term, it is on land zoned accordingly for housing[4] under either an operative or proposed district plan. This is not the case for the FUDAs in Rolleston and as such these areas cannot be considered in any medium-term development capacity assessment.

44 Thirdly, the Council's estimates of future dwelling demand appear too conservative. Specifically, the HBA assumes short-term demand for only 2,714 new dwellings over the next three years, and a medium-term demand for only 8,541 over the next 10 years (both including 20% competitiveness margins). These equate to annual run rates of about only 900 dwellings over the short term, and 850 over the medium term, which are far lower than recent building consent volumes.

45 Figure 2 provides more details. It compares the HBA's projected dwelling demand to 2031 (the green bars) to actual district building consents granted since 1991 (the blue bars). The light green segments at the top of the HBA forecast bars represent the NPSUD competitiveness margins.

[4] 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.

Figure 7: Recent Building Consent Volumes vs HBA Demand Estimates[5]



46 Clearly, the HBA's forecasts of short- to medium-term future do not reflect recent trends and are thus highly likely to understate the true extent of future demand. When the competitiveness margins (i.e. the light green bits at the top of the HBA bars) are stripped out to make it a like-for-like comparison with the blue bars (which are raw consent numbers and thus exclude any margins), this anomaly becomes even more stark.

47 For context, 2,020 consents for new dwellings were granted in the district for the year ended 30 October 2021. This rate is more than double the short-term demand estimate of 900 additional dwellings adopted in the HBA (incl competitiveness margins).

48 Not only does the HBA for Selwyn adopt very low estimates of demand, but its estimates of feasible capacity (to meet that demand) appear overstated. There are several issues at play here, which I now work through one by one.

49 First, when calculating feasible capacity in existing greenfield areas, the modelling assumes that 75% of the land will be available for development.[6] In FUDA areas, it assumes that all land will be available for development.

[5] Building Consent data was retrieved from http://infoshare.stats.govt.nz/

[6] See page 42 of the HBA (30 July 2021).

50 As discussed in the appendix, I consider these assumptions unrealistic, and instead recommend that a 65% yield assumption be adopted for existing greenfield areas, and 85% for the FUDAs (based on recent studies and discussions with developers).

51 Another issue, which I also discuss in the appendix, is that the HBA's assumption of an inexplicably low profit margin on house construction. This contradicts MBIE's official guidance for feasibility modelling, and further distorts feasible capacity estimates.

52 Finally, the model used to estimate feasible capacity appears to contain several anomalies, which further overstate district dwelling capacity. These were covered in detail in the evidence of Greg Akehurst for Plan Change 69.[7] In summary, the model:

52.1 Appears to count capacity residing outside of the Greater Christchurch urban environment as defined by the NPSUD, such as Darfield and Leeston;

52.2 Assumes that some district reserves will be developed for residential purposes; and

52.3 Includes residential capacity on developed non-residential sites[8]

53 To summarise, not only has the HBA understated likely future demand, but its estimates of feasible capacity are also overstated.

54 At the same time, it is critical to distinguish feasible capacity (as per the HBA) and likely market supply (which is ultimately tasked with meeting future demand).

55 Indeed, there are several reasons why feasible capacity may not form part of market supply, particularly over the short to medium term. They include:

55.1 *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.

55.2 *Tax implications* – Greenfield landowners 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.

55.3 *Land banking and drip-feeding* – other landowners intend to develop in future, but are currently withholding supply to capitalise on inevitable land price

[7] Evidence of G Akehurst, PC69 at [55];[66];[77] - Greg-Akehurst-economics-FINAL.pdf (selwyn.govt.nz)

[8] For example, the model assumes that the Kindergarten at 76-80 Granite drive can provide 2 infill sites, which is highly unlikely given the acute need for early childhood education provision in Rolleston.

inflation, while some are drip-feeding supply to maintain prices and hence maximise returns.

55.4 *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.

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

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

56 Given these various market forces, it follows that actual market supply will only ever be a modest proportion of feasible capacity, and hence that reliance on "just enough" feasible capacity to meet demand will invariably lead to significant and prolonged market shortages.

57 To provide a more reliable basis for assessing the adequacy, or otherwise, of the district's current land supply, I recreated my table 1 above to reflect the various supply/demand issues just discussed.

58 These revised supply/demand estimates take Table 1 as their starting point, and incorporate the following adjustments:

58.1 Short-term demand equals 80% of the number of new consents granted in the district over the last 5 years (plus a 20% competitiveness margin).

58.2 Medium term demand equals 70% of the number of new consents granted in the district over the last 5 years (plus a 20% competitiveness margin).

58.3 Long term demand equals 60% of the number of new consents granted in the district over the last 5 years (plus a 15% competitiveness margin).

58.4 The FUDAs are excluded from medium-term capacity because they do not meet the definitions in section 3.4 of the NPSUD i.e FDUAs are not "plan enabled".

58.5 65% of land residing in existing greenfield areas will be available for residential development, with the other 35% used for roads, reserves, and commercial activities.[9] For the FUDAs, 85% of the land will be available for residential development.

[9] Further, 80% of existing feasible capacity is assumed to be within the district's greenfield areas, and 20% within infill areas.

58.6 Likely market supply equals 60% of short-term feasible capacity, 75% of medium-term, and 90% of long-term. This reflects the fact that the various market constraints identified at para 55 above are typically more acute in the short-term but less so in the longer term.

58.7 No adjustments are made for the inordinately low developer margin of 6.6% because it is impossible to identify the impacts on feasible capacity. Neither are any adjustments made for the various modelling inconsistencies noted at para 52. Accordingly, my revised totals are conservative and continue to overstate feasible capacity and hence likely market supply.

58.8 Sufficiency is based on the relationship between demand and likely market supply, not demand and feasible capacity.

59 Bearing these adjustments in mind, Table 3 presents my revised dwelling supply/demand estimates for the district.

Table 3: Revised Dwelling Supply/Demand Estimates

Scenario 1: Excluding Future Urban Development Areas (FUDAs)				
Timeframes	Feasible Capacity	Likely Market Supply	Demand incl buffer	Surplus/Shortfall
Short Term	4,090	2,454	3,886	-1,432
Medium term	5,764	4,323	11,819	-7,496
Long term	5,764	5,187	30,438	-25,251
Scenario 2: Including Future Urban Development Areas (FUDAs) @ 12.5 hh/ha				
Timeframes	Feasible Capacity	Likely Market Supply	Demand incl buffer	Surplus/Shortfall
Short Term	4,090	2,454	3,886	-1,432
Medium term	5,764	4,323	11,819	-7,496
Long term	10,656	9,591	30,438	-20,847
Scenario 3: Including Future Urban Development Areas (FUDAs) @ 15 hh/ha				
Timeframes	Feasible Capacity	Likely Market Supply	Demand incl buffer	Surplus/Shortfall
Short Term	4,090	2,454	3,886	-1,432
Medium term	5,764	4,323	11,819	-7,496
Long term	11,756	10,581	30,438	-19,857

60 Table 3 confirms that, when the Council's supply and demand estimates are revised to better reflect reality, that there are significant shortfalls across all three timeframes. Accordingly, additional supply needs to be identified and rezoned as soon as possible (despite the findings of the HBA).

61 Even when the various private plan changes mooted – or recently made operative - for the district's townships are included, there is still a significant shortfall over the

long term. For example, Table 3 shows that these private plan changes add nearly 12,160 additional dwellings if all are accepted (including PC72). This is significantly less than the long-term supply shortfall of nearly 20,000 dwellings identified just above.

Table 4: Capacity of Proposed/Recently Operative Private Plan Changes

Plan Change	Inside FUDA /	Total Dwellings
63 – Darfield	Yes	440
64 – Rolleston (now operative)	Yes	969
67 – West Melton	No	131
68 – Prebbleton	No	820
69 – Lincoln	No	2,000
70 – Rolleston	Yes	800
71 – Rolleston	Partially	440
72 – Prebbleton	No	320
73 – Rolleston	No	2,100
74 – West Melton	No	130
75 – Rolleston	Yes	280
76 – Rolleston	Yes	150
77 – West Melton	No	525
78 – Rolleston	Yes	750
79 – Prebbleton	No	633
81 – Rolleston	No	350
82 – Rolleston	No	1,320
Total		**12,158**

THE NEED FOR THE PLAN CHANGE AT THE SUB-DISTRICT LEVEL

62 Having determined a pressing need for additional capacity at the district level, including PC72, I now drill down to consider the need for additional capacity at the sub-district level.

63 In my experience, Prebbleton is usually considered to form a housing submarket with West Melton, which are both similar distances from Rolleston and have traditionally catered for larger homes on larger sections (although this is evolving).

64 For example, an October 2021 memo by Ben Baird[10] for the Council grouped West Melton & Prebbleton together to form a submarket and then assessed their likely dwelling supply/demand balance. Table 5 below presents the details. It reveals a significant shortfall over the medium and longer terms. In fact, medium term demand is ten times capacity, while long term demand is about 30 times higher.

Table 5: Supply/Demand Balance for Prebbleton and West Melton

Additional Dwellings	Medium Term	Long Term
Feasible Capacity	181	181
Demand (incl comp margins)	1,859	5,530
Surplus/Shortfall	**-1,678**	**-5,349**

[10] Ben Baird, Growth Planning in Selwyn District, Technical Memo, 1 October 2021.

65 This acute lack of supply is corroborated by market metrics, such as "time to sell." For many residential subdivisions across both Selwyn and Waimakariri that I have bene involved with, section sales have far exceeded all expectations, with enquiries often outweighing available sites by more than 10 to 1.

66 Next, I compiled a list of the proposed plan changes for Prebbleton and West Melton and identified their plan-enabled capacity. Then, I derived their likely contributions to future market supply over the three NPSUD timeframes. These likely market supply figures are intended to provide a more meaningful measure of capacity against which to assess demand. They are defined to equal:

66.1 20% of plan enabled capacity over the short term;

66.2 75% of plan enabled capacity over the medium term; and

66.3 90% of plan enabled capacity over the long term.

Table 6: Plan Enabled Capacity and Likely Market Supply of Private Plan Changes

		Likely Market Supply		
Private Plan Changes	**Plan Capacity**	**Short Term**	**Medium Term**	**Long Term**
68 - Prebbleton	820	164	615	738
72 - Prebbleton	295	59	221	266
79 - Prebbleton	633	127	475	570
67 - West Melton	131	26	98	118
74 - West Melton	130	26	98	117
77 - West Melton	525	105	394	473
Total	**2,534**	**507**	**1,901**	**2,282**

67 My short-term likely supply figures reflect the fact that these plan changes are not yet decided, let alone ready for development, so only a fraction of their capacity will be available over the short term to 2024. The medium and longer term likely supply figures, conversely, mostly reflect other market factors/constraints that naturally limit the rate of future supply, as discussed above at para 55.

68 When my estimates of the likely market supply associated with the various plan changes in West Melton and Prebbleton are added to the shortfalls identified in Ben Baird's memo, there is just enough capacity to meet demand over the medium term if all plan changes are granted (including PC72). However, even then, there is still a significant shortfall projected over the longer term.

Table 7: Sub-Market Supply and Demand Including Private Plan Changes

Additional Dwellings	**Medium Term**	**Long Term**
Capacity	181	181
Demand	1,859	5,530
Surplus/Shortfall	**-1,678**	**-5,349**

Likely Plan Change Supply	1,901	2,282
Revised Surplus/Shortfall	**223**	**-3,067**

69 Not only is there a significant dwelling shortfall projected over the longer term, as tabulated above, but there is also an acute lack of new sections available to absorb short-term demand pressures. For example, Gary Sellers Evidence has found that there are very few sections currently available in Prebbleton.[11] This is consistent with Evidence previously prepared by Gary Sellars for PC67.[12]

70 Due to Covid-19 restrictions, I have been unable to conduct site visits like I usually would. However, I instructed my Christchurch-based colleague (Billy Hansen) to perform a thorough site visit of all Prebbleton subdivision areas in early December 2021. At the time of his visits, there were no sections advertised as being for sale (via onsite hoardings etc). I acknowledge that Gary Sellars has identified that one section has a for sale sign – which may be explained by the timing of the respective visits. In either event, the number of sections being advertised is very low/none.[13]

71 I also note that, while Prebbleton is often grouped with West Melton as a separate submarket (as noted above), it arguably also forms its own distinct housing market. This, in turn, reflects Prebbleton's proximity to, and easy accessibility from, Christchurch City. In short, because Prebbleton is located so close to the city, it benefits from the growth and development of nearby areas there (such as Halswell). In addition, Prebbleton has existing public transport services to/from the city. Plus, it has an urban outlook to the north and east but a rural one to the west and south, so it effectively gets "the best of both worlds." For these reasons, I consider Prebbleton to comprise its own housing market, despite often being grouped in with West Melton.

THE COST AND BENEFITS OF THE PLAN CHANGE

72 Having established above that there is a pressing near-term need to identify and rezone additional land to meet forecast growth in demand, I now consider the likely economic costs and benefits of the plan change.

Boost in Market Supply

73 Perhaps somewhat obviously, the proposed plan change will provide a substantial, direct boost in the district's dwelling capacity, thereby helping to narrow the gap between likely future supply and demand.

[11] Evidence of G Sellars PC72 at [7.3]

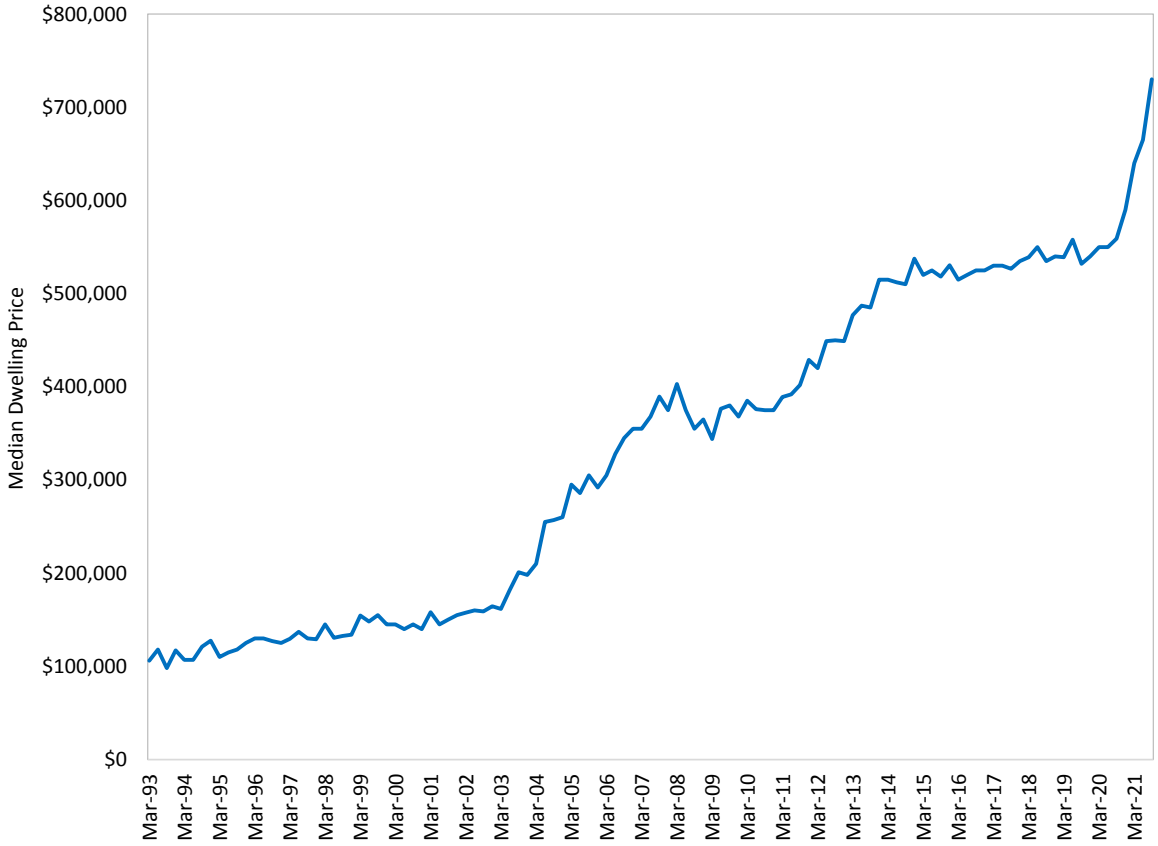
[12] Evidence of G Sellars PC67 at [7.12]-[7.14] (link to G Sellars PC67 - Selwyn District Council)

[13] Evidence of G Sellars PC72 at [7.3]

74 All other things being equal, this supply boost will help the market to be more responsive to growth in demand, thereby reducing the rate at which district house prices grow over time (relative to the status quo).

75 Further, although the district's housing has been reasonably affordable compared to other parts of New Zealand in the past, its prices have surged recently. This is illustrated in the chart below, which incorporates the latest data published under the NPSUD to 30 September 2021.

Figure 8: Selwyn District Median Dwelling Prices (from NPSUD Data)



76 Figure 4 confirms that district dwelling prices have increased steadily over time, but recently shot up after a prolonged period of consolidation. In fact, they increased 10% over the last 3 months (ended 30 September 2021), and 31% over the last 12 months, which will likely be starting to reduce affordability.

77 Even prior to this recent spike in house prices, district housing had started to become relatively unaffordable. For example, the latest affordability report by Core Logic (30 June 2021)[14] showed that the median house price was 7.3 times the

[14] https://www.corelogic.co.nz/sites/default/files/2021-09/210909_CoreLogicNZ_Housing-Affordability-Report_Q2_FINAL.pdf

median household income. By comparison, the benchmark for affordability is a ratio of only three.

78 In addition, the latest Core Logic report showed that it takes about 9.8 years to save the deposit for a new home in Selwyn. Thus, not only are house prices themselves increasingly unaffordable, but even saving the deposit for a new home is an onerous task that is starting to become well beyond the reach of many households.

79 The plan change directly responds to this need for additional dwelling capacity by enabling the development of approximately 320 new homes over time (plus supporting commercial activity).

80 In my view, and from an economic perspective, this represents a highly significant boost in supply. To assess whether this satisfies the definition of "significant" in clause 3.8 of the NPSUD (which relates to unanticipated or out-of-sequence plan changes), I reviewed the latest HBA.[15] At page 10, it discusses consultation with the development community (during the course of writing the HBA) and describes landowners that could develop 20 or more dwellings as being significant.

81 As such (and particularly given the shortfalls I have described), I consider that the proposed development of approximately 320 dwellings on the subject site represent a significant increase in capacity for the Selwyn district, from both an economic and market perspective and by virtue of the way that term is used in the HBA (and by extension how it might be considered for the purposes of clause 3.8 of the NPSUD).

82 To put the supply boost in context, I note that the 320 new lots provided would increase likely short-term district supply by 13%, and medium term by 7%.[16] I consider this a material contribution, especially from just one development.

Land Market Competition

83 In addition to directly boosting district dwelling capacity, the proposed plan change 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.

84 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

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

[16] Based on the likely short term supply estimate of 2,454 dwellings in Table 3, and the medium term figure of 4,323.

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 in Figure 4 above. It also helps explain the exorbitant rises in Prebbleton section prices over the last year or so, as detailed in the evidence of Mr Sellars. Mr Sellars is able to demonstrate the extent of price escalation by identifying site-specific examples within Prebbleton. [17]

85 Moreover, not only do 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.

86 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.

Helps Provide for a Range of Housing Typologies

87 The NPSUD requires high growth areas, like Selwyn, to not only provide at least sufficient capacity to meet future demand in aggregate, but to also provide a range of housing typologies to meet a wide range of needs and preferences.

88 This is shown in the excerpt below, which displays the first part of policy 1 of the NPSUD:

Table 8: Policy 1 of the NPSUD

2.2 Policies

Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

(a) have or enable a variety of homes that:

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

89 Because of Prebbleton's proximity and easy accessibility to the city, it tends to attract a slightly different demographic to the rest of the district. This is reflected in Census 2018 data. Specifically, compared to the district average, Census 2018 data show that Prebbleton residents are more likely to:

89.1 Live in larger households (3.02 vs 2.92);

[17] Evidence of G Sellars PC72 at [6.30] – [6.37]

89.2 Identify as European (86% vs 81%)

89.3 Be partnered (76% vs 72%)

89.4 Work as a professional (26% vs 19%)

89.5 Earn more than $70,000 per annum (34% vs 24%)

89.6 Be of Christian faith (43% vs 37%)

89.7 Never have smoked (75% vs 67%)

89.8 Take a public bus to school (9% vs 3%)

89.9 Use gas or electricity for heating (75% vs 60%)

89.10 Live in a stand-alone dwelling (99% vs 95%)

89.11 Live in a home with four or more bedrooms (75% vs 53%)

89.12 Own their home (93% vs 76%)

90 These differences confirm that people and households based in Prebbleton differ from the district average in many respects, and hence that they effectively form their own district housing sub-market.

91 Accordingly, not only does the proposal make a significant contribution to both Prebbleton, specifically and the district overall (as per para 75), but it also helps give effect to policy 1, which requires Councils to provide various housing choices to meet a diverse range of needs and preferences.

Critical Mass to Support Greater Local Retail/Service Provision

92 Currently, Selwyn district residents rely heavily on centres in Christchurch City to meet their daily household needs. For example, the table below shows the destination of Selwyn district resident spend in 2019 using detailed Marketview data provided to us by Waimakariri District Council on a recent, separate matter.

Table 9: Destination of Selwyn District Resident Spend in 2019

Spending Categories	Selwyn District	CHCH City	Rest of Region	Rest of NZ	Total
Apparel and Personal	15%	73%	3%	10%	100%
Cafes, Restaurants, Bars, Takeaways	31%	47%	6%	15%	100%
Department Stores and Leisure	16%	73%	3%	8%	100%
Fuel & Automotive	44%	40%	8%	8%	100%
Groceries & Liquor	50%	39%	4%	6%	100%
Home, Hardware & Electrical	10%	80%	3%	6%	100%
Other Consumer Spending	18%	58%	6%	18%	100%

All Categories	**34%**	**52%**	**5%**	**9%**	**100%**

93 Table 11 shows that only a third of Selwyn resident spend is retained in the district, with more than half leaking out to Christchurch City. While some of that city spending may occur before, during, or after working there, others reflect specific trips.

94 By enabling the resident population to grow, including via additional development on the subject site, the district will eventually be able to support greater local retail/service provision and be less reliant on the city to meet its household needs.

95 This, in turn, will not only support greater district economic activity and hence employment, but also reduce vehicle travel and the harmful emissions associated with it.

96 More specifically, greater district critical mass – including at the subject site – will help the Council and community to realise its ambitions for a renewed Rolleston Town Centre, thereby elevating its current status as a lower-order KAC to a fully-functioning town centre that fulfils a wider range of roles and functions.

97 In addition, it will provide growing local support for the fledgling Prebbleton commercial area, where a Freshchoice supermarket opened last year, and where a shopping centre development is currently underway.

98 That said, I acknowledge that future households in Prebbleton will continue to meet a significant share of their household needs from centres in Christchurch City too.

99 In addition, future residents of the plan change area will help create critical mass to improve the provision of improved public transport facilities and services over time.

One-Off Economic Stimulus

100 Constructing the 320 new homes enabled by the proposal will generate significant one-off economic impacts.

101 I quantified these using a technique called multiplier analysis, which is based on detailed matrices called input-output tables. These tables describe the various supply chains that comprise an economy, and therefore enable the wider economic impacts of a change in one sector (or sectors) to be traced through to estimate the overall impacts.[18]

[18] The multipliers used here are for the Canterbury region, and were derived by my organization. They are widely used by a range of public and private organisations across New Zealand, including Lincoln University.

102 These impacts include:

102.1 *Direct effects* – which capture onsite activities directly enabled by the proposal; plus

102.2 *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

102.3 *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.

103 These economic effects are usually measured in terms of:

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

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

103.3 *Total wages and salaries* paid to workers, which are often labelled 'household incomes.'

104 Having defined these key terms, the following table shows the estimated economic impacts of the various activities enabled by the proposal.

Table 10: One-Off Regional Economic Impacts of Construction

Economic Impact Measures	**Direct**	**Indirect**	**Induced**	**Total**
Regional GDP ($ millions)	$46	$32	$16	$94
Employment (people-years)[19]	510	350	165	1,025
Wages/Salaries ($ millions)	$27	$17	$6	$50

105 In summary, I estimate that future construction activity enabled by the proposal could boost regional GDP by $94 million, including flow on effects, generate employment for 1,025 people years, and generate $50 million in household incomes.

106 Assuming (say) a 10-year construction period, these translate to annual impacts of $9.4 million in regional GDP, including flow on effects, full time employment for 10 people, and $5 million in household incomes.

[19] One person-year means one person employed for a full year. Hence, 100 people-years could mean 100 people employed for one year, 50 people employed for 2 years, and so on.

RESPONSE TO SECTION 42A REPORT

107 Paras 57 to 74 of the Section 42A report discuss the plan change's contribution to dwelling capacity, particularly in the context of the NPSUD. It concludes that PC72 represents a significant increase in development capacity, and hence meets the first limb of the tests under Policy 8.

108 Further, it considers that the Council's estimates of available capacity are likely to overstate the true amount, and that the risks of oversupplying residential land (via the plan change) are far outweighed by the impacts of potentially undersupplying.

109 I agree with these statements, and note their alignment with my assessment herein.

RESPONSE TO SUBMISSIONS

110 Environment Canterbury (ECan) and Christchurch City Council (CCC) both oppose the plan change. While many of their concerns relate to matters beyond my area of expertise, both submissions are predicated on the belief that there is already sufficient dwelling capacity to meet demand, particularly at the sub-regional level.

111 For example, para 29 of the ECan submission argues that "Further development capacity in Prebbleton is not required to meet medium and long term housing targets, identified in Our Space 2018–2048 and expressed in the CRPS."

112 Similarly, para 9 of the CCC submission states "Development beyond the greenfield priority areas and the future development areas in Map A exceeds the amount of housing and business capacity required to meet medium and long term targets, identified in Our Space 2018–2048 Greater Christchurch Settlement Pattern Update Whakahāngai O Te Hōrapa Nohoanga and expressed in the CRPS. Thus additional capacity is in excess of what is needed. Development in these areas is not meeting a capacity shortfall."

113 As described in detail above, however, the latest estimates of district feasible capacity are flawed. They contain a litany of conceptual and technical issues, which render them of limited inferential value. Further, when those various issues are resolved to provide more accurate estimates of future supply, there are significant district capacity shortfalls over all three NPSUD timeframes.

114 Accordingly, I disagree with the presumption of sufficient capacity upon which these submissions appear to rely.

115 The ECan and CCC submissions also infer that it is more appropriate to identify and plan for additional dwelling capacity via future HBAs, rather than via private plan changes.

116 I agree that the HBA process can be a useful avenue to provide for future capacity, but they are not the only way, nor necessarily the best.

117 The issue is timing. In short, with a 3-year gap between each HBA, and given the very long lead times associated with both land development and house construction, relying just on HBAs to address capacity shortfalls is inadequate, in my view.

118 A more timely and responsive approach is desirable, both from a market and regulatory (i.e. NPSUD) perspective.

CONCLUSION

119 This evidence has shown that the proposed development enabled by Plan Change 72 represents a significant boost in dwelling capacity, which will help keep pace with demand while also helping to meet NPSUD requirements. Overall, the proposal will generate a wide range of enduring economic benefits and avoid any material economic costs, such as foregone rural production. Accordingly, I support the proposal on economic grounds and see no reason to deny it.

Dated: 14 January 2022

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Fraser Colegrave

Appendix: Critique of Feasible Capacity Assumptions / Modelling

120 This appendix critiques various aspects of the Council's latest estimates of feasible dwelling capacity, as contained in the 2021 Housing Capacity Assessment.[20]

Assumed Development Yields

121 When calculating the feasible capacity for new dwellings still residing in the district's existing greenfield areas, which account for most of the short-run supply, the modelling assumes that only 25% of such land will be used for infrastructure (such as roads, parks, and reserves). Thus, it assumes that 75% of the land will be available for development.[21] In FUDA areas, it assumes a 100% yield.

122 To ground-truth these assumptions, I reviewed a recent, detailed report on residential development densities by Harrison Grierson, which was commissioned by the GCP.[22] It profiles the development outcomes achieved across various recent greenfield subdivisions, several of which were in Greater Christchurch.

123 I extracted data from that report to identify the proportion of land in each subdivision used for residential dwellings versus commercial uses or infrastructure. The results are tabulated below, and show that only 60% of greenfield land is typically available for new housing, not 75% as the HBA modelling suggest.

Table 11: Land Use Coverage Ratios in Recent Greenfield Subdivisions

Greenfield Development	Residential	Commercial	Infrastructure	Total
Spring Grove (Belfast, Christchurch)	53%	0%	47%	100%
Golden Sands (Papamoa, Tauranga)	58%	1%	41%	100%
Huapai Triangle (Kumeu, Auckland)	58%	1%	41%	100%
Longhurst (Halswell, Christchurch)	63%	2%	35%	100%
Greenhill Park (Chartwell, Hamilton)	53%	0%	47%	100%
Faringdon (Rolleston, Selwyn)	63%	1%	36%	100%
Sovereign Palms (Kaiapoi, Waimakariri)	71%	1%	28%	100%
Average	**60%**	**1%**	**39%**	**100%**

124 I acknowledge that the proportion of land available for residential development varies across the case study areas in Table 10, and I also understand that geotechnical conditions are a key driver. For example, in low-lying, flood prone

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

[21] See page 42 of the HBA (30 July 2021).

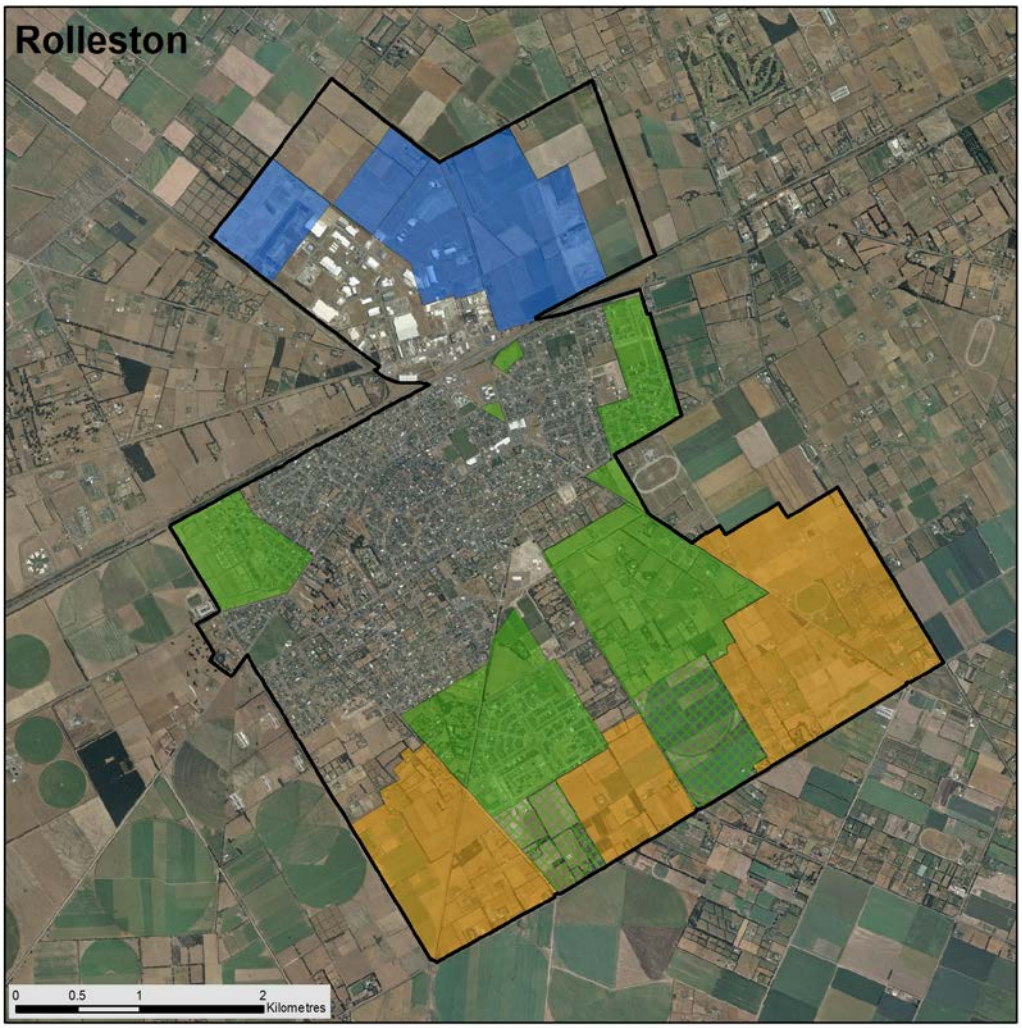
[22] https://www.selwyn.govt.nz/__data/assets/pdf_file/0005/475466/UG-Chapter-Appendix-3-HG-Greenfield-Density-Analysis.pdf

areas, more land is generally needed for stormwater management, with less required in more elevated and well-drained areas.

125 Based on discussions with district developers – including the developer of PC67, who has developed more than 2,700 sections across Greater Christchurch over the last 10 to 15 years – I understand that a net yield of 65% is more likely to reflect future development outcomes across Selwyn district, not the 75% assumed in the HBA. I return to this point shortly.

126 Yet another issue with the Council's estimates of feasible capacity relate to the FUDAs identified in the 2018-2048 Our Space Strategy, which are represented by the orange blocks in the map below.

Figure 9: Map of Rolleston Future Urban Development Areas (FUDAs)



127 According to the HBA, these FUDAs can accommodate an additional 5,756 to 7,050 dwellings at densities of 12.5 and 15 dwellings per hectare, respectively.

128 While the HBA is not explicit about the land area underpinning these estimates, the lower figure translates to approximately 460 hectares of developable land, while the higher equates to about 470 hectares. Hence there is a discrepancy of 10 hectares of land within the FUDAs in these figures.

129 To verify the amount of land contained with the FUDAs, which seem to differ between the HBA's two density scenarios, I used Canterbury Maps to trace their outlines. The results show that these FUDAs span roughly 462 hectares in total.

130 Herein lies the problem. As discussed just above, not all land in these FUDAs will be available for residential development, with some instead required for roads, reserves, and other infrastructure that is expressly excluded from the definition of net density in the Canterbury Regional Policy Statement and which dictates the 12 dwellings per hectare target. Consequently, the estimates of feasible capacity residing in the FUDAs need to be scaled down too to allow for the land required by these excluded features.

131 Because the assumed yields of 12 to 15 dwellings per hectare for the FUDAs reflect net densities, they already account for local roads and reserves etc. To account for other non-residential land uses – such as arterial roads, stormwater areas, commercial activities, schools, and so on – I understand that the FUDA yields should be scaled down by about 15%.

Assumed Profit Margin on House Construction

132 Another significant issue that seriously undermines the veracity of the HBA's estimates of feasible development capacity is the profit margin that is assumed to be required by developers.

133 According to official guidance published by MBIE, feasibility assessments should adopt a default development margin of 20%, with this value altered only upon review from the development community.

134 In my 20 years of working with developers and other property professionals, this target return is accurate, although many developers target a higher return of around 25% to reflect the significant risks associated with property development.

135 The analysis underpinning the latest HBA for Selwyn, however, adopts a far lower development margin of only 6.6%. This much smaller margin, in turn, lowers the financial hurdle required for hypothetical developments to be considered commercially feasible, and therefore directly overstates likely future dwelling supply.

136 Interestingly, bullet 2 in appendix 3 of the HBA acknowledges that a 20% development margin is recommended by MBIE, but notes that the assessment has departed from it "to better recognize local and actual market parameters."

137 I am unaware of any basis for this assertion. Indeed, I am unaware of any developers in the Greater Christchurch area that would risk millions of dollars of

their own capital to potentially earn a 6.6% development margin. Nor am I aware of any lenders that would inject capital into a venture where the profit margins are so thin and hence the project is at risk of potential default. Interestingly, this inexplicably low profit margin also was not reviewed or endorsed by the development community, as required by official guidance.

138 To put it in context, a target return of 6.6% could only ever be considered a "black swan" scenario that might be used to assess the absolute worst case, but it would never be used as the baseline assumption. It simply makes no sense, so I dug deeper to better understand the origins of this rather unusual and misleading assumption.

139 My query was answered on page 50 of the HBA, where the authors cite data from Stats New Zealand, which allegedly showed a development margin of only 6.6% for house construction.

140 I then obtained a copy of that data from Stats NZ and identified the 6.6% figure to put it in context. Regrettably, the HBA's authors appear to have mistaken two similar but entirely different financial metrics.

141 The first metric is the development margin, which is the profit that a developer seeks to earn over and above their costs for a given project. The second is net profit after tax, or NPAT, which measures the profit earned by a venture when all costs – including tax – are deducted.

142 In short, it appears that the HBA's authors have mistakenly used the NPAT figure from those financial data and assumed that it equals the developer margin. However, NPAT accounts for a wide range of costs that do not feed into the calculation of developer margins, such as fixed operating costs, depreciation, amortization, and income tax.

143 The upshot of all this is that the HBA has used an implausibly low developer margin to calculate the commercial feasibility of building new homes in the district, and therefore has overstated the true extent of feasible development capacity. These figures are an improvement on the previous HBA, however, which assumed that all plan-enabled capacity would be commercially feasible to develop.