Before the Selwyn District Council

under: the Resource Management Act 1991

in the matter of: Proposed Private Plan Change 69 to the Operative District Plan: Lincoln South

and: **Rolleston Industrial Developments Limited**
Applicant

Statement of evidence of Greg Akehurst (economics)

Dated: 4 November 2021

Reference: JM Appleyard (jo.appleyard@chapmantripp.com)
LMN Forrester (lucy.forrester@chapmantripp.com)

chapmantripp.com
T +64 4 499 5999
F +64 4 472 7111

PO Box 993
Wellington 6140
New Zealand

Auckland
Wellington
Christchurch

chapman tripp

STATEMENT OF EVIDENCE OF GREG AKEHURST

INTRODUCTION

1 My full name is Gregory Michael Akehurst.

2 I am a founding director at Market Economics and have Bachelors Degrees in Geography and Economics from Auckland University. I have more than 25 years' experience in assessing the economic effects of growth and change in the New Zealand economy. I have particular experience in assessing the effects of growth on existing economies and on urban form. I have also carried out significant work in assessing requirements for housing and business land to assist Councils in setting development and growth strategies and to meet their obligations under national direction (NPS-UDC 2016 and NPS-UD 2020). I am a member of the Resource Management Law Association.

3 I have worked on a number of land use and property development projects in the greater Christchurch area – including establishing Labour models of the Canterbury Rebuild post the earthquakes in 2010 and 2011. This work included building a residential rebuild model of Canterbury to assess the economic and labour implications of alternative rebuild scenarios. In addition, I have worked on a number of economic and residential development projects across the Greater Christchurch area. I am very familiar with the economy and the issues faced by the districts.

4 I am also very conversant with the NPS-UDC and NPS-UD process. I was engaged by MBIE in 2017 to write the guidance manual for Councils looking to evaluate business land sufficiency under the NPS-UDC.

5 Of direct relevance to this assessment, I have directed and carried out a number of primary studies across New Zealand into housing preferences, and particularly the trade-offs households make when faced with budget constraints and housing needs. This research has been carried out in Auckland, Dunedin, Hamilton, Nelson/Tasman and is underway in Marlborough. It is used by these councils to help inform their NPS-UD responses and their future development strategies.

6 Market Economics had been engaged by Selwyn District to prepare the Selwyn Capacity for Growth Model ("SCGM") and have provided advice over a number of years relating to the effects of growth to help Selwyn District Council meet their requirements under the NPS-UDC and more recently the NPS-UD. This model was created by my colleague at the time, Rodney Yeoman. Rodney subsequently left Market Economics employment in early April 2021, retaining Selwyn District as a client providing advice and support for the SCGM.

7 Market Economics do not have any ongoing arrangements to update the SCGM or provide advice for SDC with respect to growth and change in the district.

8 I am familiar with the plan change application by Rolleston Industrial Developments Limited (the *Applicant*) to rezone approximately 190 hectares of land on Springs Road, Lincoln to enable approximately 2,000 residential sites and a small commercial zone.

CODE OF CONDUCT

9 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

10 My evidence relates to:

10.1 Site description and characteristics;

10.2 Recent Growth in Selwyn District;

10.3 Capacity Estimates and the SCGM issues;

10.4 Capacity enabled by proposal;

10.5 Urban Growth Context and the NPS;

10.6 Conclusions relating to PC69 in Lincoln.

SITE CHARACTERISTICS

11 The Plan Change or the Outline Development Plan (ODP) area comprises approximately 190 hectares and is bounded by the Te Whariki and Verdeco subdivisions to the north, Collins Road to the south, an ephemeral waterway termed Western Boundary Drain to the west, and the LII River to the east.

12 The Plan Change is to rezone the 190ha site outlined in Figure 1, below from Rural Outer Plains Zone to Living Z and Business 1 (Local Centre). The proposal is to provide approximately 2,000 residential lots at an overall minimum net density of 12 households

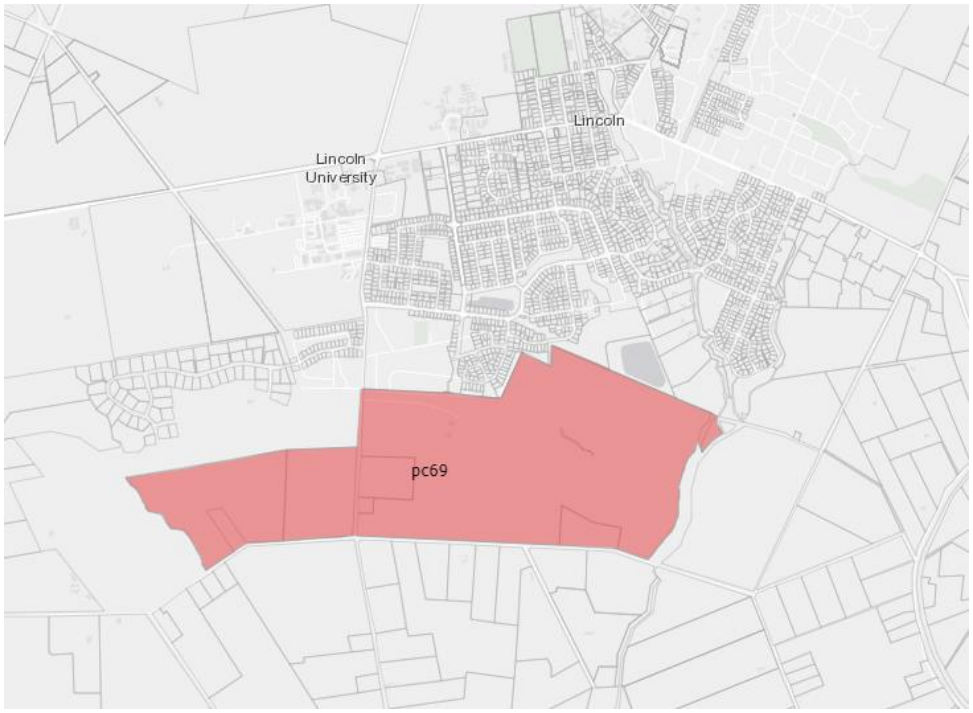
per hectare. The ODP does include higher density residential areas (15 hhlds/ha) adjacent to some key open spaces and green corridors.

13 Living Z zoning is proposed for the majority of the site. This is aimed at aligning with the existing Te Whariki development immediately to the north. The Living Z provides for a range of lot sizes from 600sqm down to a maximum average of 350sqm on the Medium Density Comprehensive land.

14 Finally, three local centres are provided for (Business 1 zoned local centres) with floor space limited to 450sqm in total and any single tenancy limited to a maximum of 350sqm. These are designed to meet the convenience needs of local residents only. Their scale is such that they will have no impact on any of the Key Activity Centres.

15 Figure 1 outlines the ODP in relation to existing Lincoln township. The land is currently used for a mix of cropping and grazing.

Figure 1: Plan Change 69 location, Lincoln



SELWYN DISTRICT GROWTH

16 Selwyn District is one of the fastest growing local authority areas in New Zealand – second only to Queenstown Lake District in percentage terms. In the post Christchurch earthquake environment, significant growth that might otherwise have gravitated towards locations within Christchurch City has redirected

to the Selwyn District towns in close proximity to Christchurch (notably Rolleston, Lincoln and Prebbleton).

17 Selwyn is a very important component in accommodating Greater Christchurch growth. Currently Selwyn accommodates 12% of households – however over the next 30 years, 33% of total residential growth in Greater Christchurch will be accommodated in Selwyn[1].

SCGM GROWTH PROJECTIONS

18 Council model future growth using the Selwyn Capacity for Growth Model ("SCGM"). The growth modules in the SCGM allow council officers to adjust growth futures for Selwyn and assess the implications in terms of uptake of capacity over time. This is a good thing as it provides insights into how the market is likely to operate under different future scenarios and allows change to be modelled efficiently.

19 The idea behind providing a range of future growth futures in the model is that they cover the range of actual growth futures – and that what eventually occurs is captured within the range of scenarios modelled. However, that does not appear to be the case with the SCGM at the moment.

20 The model operates with 5 growth scenarios, ranging from Medium, Long Term Plan, Medium-High (Our Space), Medium High and High. Annual growth (as modelled) ranges from an increase in dwelling numbers of between 735 under the Medium Projection between 2019 and 2023 and 1,152 for the M-High (Our Space) projection (Figure 2).

Figure 2: Annual Dwelling Growth, Selwyn District, 2019 - 2053

Dwellings (Population - NJ (2019-rebase))	2023	2028	2033	2038	2043	2048	2053
High	975	931	935	934	937	934	932
Medium-High	855	819	818	815	814	804	796
Medium-High (Our Space)	1,152	958	808	719	656	594	532
LTP	941	861	854	844	838	823	802
Medium	735	706	700	696	691	673	661

21 However, as Ben Baird notes in his 19 August Growth Memo, (paragraph 42), the number of net new dwellings has exceeded the above values in practically every year between 2013 and 2021 (Figure 3).

[1] '*Housing Demand and Need in Greater Christchurch'*, prepared for Environment Canterbury, Livingston and Associates Ltd, July 2021.

Figure 3: Table 1 Dwelling Projection Comparison, B. Baird Growth Memo (19 August 2021)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net New Dwellings	1,249	1,166	1,203	1,279	1,219	1,005	1,092	1,593	1,710*
Stats High Projection**						929	929	929	929

Table 1: Dwelling Projection Comparison
**based on current numbers extrapolated out for the year*
***Converted to households by using 2.8.*
NB This includes more demand than the 2021 Capacity Assessment covered

22 Mr Baird goes on to say that what is driving the growth is not clear – given that national population numbers are only growing at around 0.6% to June 30th (down from 2% increases on average annually over the past 5 years). The key change at the national level is the closing of the borders to immigration (down to 4,700 from an average of 62,000 annually over the past 5 years).

23 However, the key driver for Selwyn growth (as Mr Baird identifies in paragraph 41) is internal migration (85%) of which the vast majority comes from Christchurch City (70%). As noted, the key growth group is younger families seeking lower cost options than offered within Christchurch, while remaining within sensible commuting distance to the city.

24 It is clear from recent history that growth in numbers over the past 9 years far exceeds both Statistics New Zealand's "High" projections (2018 – 2021) and the projection sets utilised in the SCGM.

25 This presents a significant credibility issue for Selwyn's growth modelling. It is vital that the model relied upon to make capacity decisions encapsulates likely or reasonably anticipated growth futures. Given recent growth far exceeds modelled growth under any of the 5 scenarios developed for the model, Council run the risk of significantly undercounting future growth in the short to medium term, thereby undersupplying capacity to meet that future growth and failing to meet their obligations under the NPS-UD, as well as driving prices up.

26 This is especially the case where the demand and supply balance is tight. Under the updated estimates provided by Formative in July 2021[2] (appended at **Appendix 1**), it is clear that uptake has exceeded modelled growth by a significant margin (uptake of 1,978 in Selwyn Urban areas between December 2019 and April 2021 (so just over 1 year). This compares to between 1,140 and 1,530 if the range drawn from the Growth model are applied to this time period.

[2] Formative Memo to SDC, Re: Residential Capacity 2021 – Draft, 08/07/2021, Appended at Appendix 1

27 Excluding the FUDA's around Rolleston, which are not yet Plan Enabled per Clause 3.4 of the NPSUD[3], feasible capacity (of at most 4,578) would last 3.5 years before completely exhausted – based on short term growth matching the average of the past 5 years (2017 to 2021 drawn from Figure 3 above = 1,323 per year) and not necessarily the growth modelled in the SCGM.

28 This existing feasible capacity barely covers the 'short term', and assumes that recent uptake is accurately represented.

29 I also note that the capacity currently identified in Lincoln (some 1,467 dwellings in 2021) remains unchanged in the short, medium and long term[4]. This implies that no additional capacity is currently to be provided to meet strong growth anticipated.

30 Recent residential demand in Lincoln has seen capacity drop from 3,020 in 2016 to 1,461 in 2021, or by more than half, or by an average of over 300 sections annually. The Council's own Growth Planning Memorandum shows that, in Lincoln, the deficit occurs inside the medium term such that the area is undersupplied by more than 300 dwellings inside 10 years.[5].

31 The net result of this will be significant price rises as developers will be able to charge more in the face of significant supply constraints.

32 I do not believe it is an appropriate response by Council to say that considering a higher projection above Statistics NZ high projection is not appropriate as it requires more work[6]. If the projections that are being considered constantly undercount growth, then there will be shortfalls in the short term that will drive prices up – before the revision comes around in three years' time.

33 Given that the role the projection scenarios play is to allow council to consider feasible outcomes – then including a projection that (at least in the short term) matches recent growth is vital.

CAPACITY ESTIMATES AND SCGM

34 My company (Market Economics) developed Selwyn's Capacity for Growth Model originally in 2017 to assist the Council in meeting their requirements under the NPS-UDC. The current version of the model was updated by two of my senior colleagues in 2019 and has

[3] The land is not zoned for housing in the operative plan as required to be plan enabled in the short term, nor zoned for housing use in the proposed plan – as required to be plan enabled in the medium term.

[4] Residential Capacity 2021 – Draft Memo, (08/07/2021), Formative.

[5] Table 5, Growth Planning in Selwyn District Memorandum, (19 Aug 2021) B. Baird, SDC

[6] Growth planning in Selwyn District, para 45, Ben Baird, Aug 2021

been used to inform Selwyn District Council of residential and business capacity and sufficiency for the NPS-UD.

35 The model is based entirely on the capacity for growth model Market Economics developed for Future Proof Partners in Waikato for the NPS-UDC in 2017. It draws on the approach pioneered by Critchlow and Auckland Council in 2006. The capacity model is built in a software package called FME that allows manipulation of spatial data. Effectively, it applies a series of geometric shapes to land parcels allowing estimation of further development capacity. The model takes account of planning provisions from zoning rules (such as minimum lot size) and precinct overlays, setbacks, driveway access and living space requirements.

36 The SCGM provides an accurate initial estimate of future developable capacity, from which it is possible to eliminate parcels that may be zoned but not available for development – such as designations, parks and reserves and land that may have geotechnical issues such as slope hazards, earthquake liquefaction issues and other issues.

37 The model provides a first cut at capacity and is a basis for commercial feasibility analysis and uptake, such that Council can arrive at a 'Reasonably expected to be realised' capacity figure (as required under the NPS-UD).

38 As it currently stands, there appear to be issues with estimates of capacity included in the model. While I have not had time to complete a thorough assessment of each parcel and the capacity it adds to the model, there are a number of examples that cause me some concern – especially if they represent the tip of systemic errors in over-estimating capacity.

39 As I understand it, the model allows Selwyn to assess demand and capacity to meet demand at the whole district level as well as for the portion of the District that sits within the Greater Christchurch Urban Area. It is therefore important that, when discussing capacity to meet urban growth demands – as required under the NPS-UD, that it is capacity within the urban portions of Selwyn that are included into the capacity assessment.

40 In the Growth Memo prepared by Ben Baird (19 August 2021) it states at para 53 that;

> *"The demographic projections show growth is largely driven by internal migration from Christchurch, mostly young families. These families are generally looking for affordable housing within close proximity to Christchurch in a township setting. The demand for housing that has been observed in Selwyn indicates a strong preference for stand alone houses.*

The outcomes in the housing market shows that demand is fairly homogenous and can be met within the 'one market' of Selwyn's townships.

41 A key driver of location decision making for households is proximity to work. A key definer of urban environments and urban markets is travel to work. The Greater Christchurch urban extent has been set with this in mind, meaning that the townships within that extent operate as one large urban area.

42 The NPS-UD defines an Urban Environment as being, "*any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that;*

a) is, or is intended to be, predominantly urban in character, and

b) is, or is intended to be, part of a housing and labour market of at least 10,000 people

43 Under this definition and noting that Greater Christchurch is consistently defined by the local authorities as the 'urban environment', Darfield and Leeston do not qualify as part of the Christchurch urban environment. Darfield is approximately 45km from the Christchurch CBD – more than twice the distance Rolleston (which sits on the south western extent of the urban environment) is from the CBD. Leeston is almost 41km from Christchurch CBD – an additional 21km further than Lincoln (which also sits on the south western edge of the urban environment).

44 Appended to this evidence at **Appendix 2** are two maps that outline the extent of both Greater Christchurch and the urban areas that will accommodate the majority of future growth. It is clear that the boundaries of not only the urban areas, but of Greater Christchurch itself exclude Darfield and Leeston. They are not urban settlements in the NPS-UD sense.

45 Leeston and Lincoln will appeal to very different markets and capacity provided in Lincoln (or importantly, not provided) cannot be substituted with capacity located in Leeston (over 20km further away). By exactly the same reasoning Darfield and Lincoln (or Rolleston) are very different markets due to distance from the urban edge. This means that townships across Selwyn are definitely not "one market".

46 There also appears to be an allocation of demand issue with the SCGM. Growth is initially split between Rural, Rural Residential, Infill and Greenfield at the District level for each projection year.

47 These totals are then split between Census Are Units (CAU)[7] on the basis of each CAU's share of total capacity for each demand type and each CAU's share of building consents. These percentages are added together and divided by 2 to get an average.

48 The resulting 'Model Share' is then applied to allocate growth for each forecast year to 2053. This means that recent building consent profiles impact growth allocation over 30 years into the future. It is not clear if this is in error, or if the implications of the decision to adopt this approach were fully thought through. While recent building consents are an important guide for allocating growth over the next few years (as they are a clear indication of preference or ability to meet the market), they should only have a minor or no influence outside say 3-5 years, and even less influence 10 – 30 years.

49 A final issue is that the model is purely mechanical. It simply seeks to allocate growth where-ever there is capacity (plus recent building consent activity). This means there doesn't appear to be an ability for it to progressively fill an area from the most proximate to Christchurch or around townships such as Lincoln, to the most distant (for example). It is unlikely that actual growth patterns will follow the mechanical process modelled.

50 The implications of this are that, if the model is not allocating growth to locations appropriately, the model will not accurately reflect where demand pressures will be felt. I understand other experts in this hearing, such as **Mr Tim Carter** from a developer's, perspective have raised the same issue (albeitfrom slightly different perspectives) and have arrived at similar conclusions.

51 I suggest that Council, as part of their review, look at allocation methods in use in other jurisdictions that look to address this issue.

Data Issues at the Parcel Level

52 Capacity in the SCGM begins at the parcel level. As described above, each parcel in the SCGM is coded according to zone and all zone provisions are applied to translate raw land to developable sections and therefore dwelling capacity.

53 It is important that, through this process, parcels in residential zones but that are not available for residential development are identified and removed from measures of capacity. This is an important but time-consuming manual process. It appears that there is work to do on Selwyn's capacity estimates, as a number of parcels that have been included in the capacity estimates need to be removed.

[7] Census Area Units (CAU's) were Stats NZ's suburb level spatial definition. They have been replaced recently by Statistical Areas (level 1 and 2), or SA2 at the suburb level. The SCGM was originally developed using CAU's but has recently been updated to SA2s as the spatial unit.

54 While I have not been able to work through all parcels to assess the extent of the issue, if the ones I have identified point to a more systemic issue, then Selwyn's model maybe overstating urban capacity to a significant extent.

Point 1. Inclusion of non-Urban Capacity in Urban measure of capacity

55 It appears that a number of sites and locations are now being included in measures of urban capacity. The model identifies capacity of 144 dwellings on a parcel in Castle Hill (id 7971519).

56 Castle Hill is approximately 100km inland from central Christchurch in the foothills of the Southern Alps and, while it sits within Selwyn District, it should play no part in urban capacity as it falls well outside of Greater Christchurch.

57 The same holds true for the more distant townships such as Darfield and Leeston. I note in the memo prepared by Formative to Selwyn District Council that Darfield and Leeston are included as Urban Zones in Figure 4 and 5[8]. This capacity in Figure 5 of 936 dwellings is included in the Urban Areas total of 4,578 rather than in the Minor Settlements and rural component that adds to a district total of 5,223 as at June 2021.

58 The Formative numbers differ from the numbers provided by Ben Baird, in his August 19 s42a memo for PC 67 (Figure 4). This shows Rolleston with capacity of 2,154 – almost 140 dwellings higher than the Formative 2021 assessment of 2,017. Mr Baird's numbers for Lincoln, Prebbleton, West Melton are almost the same as the Formative numbers (1,642 vs 1,625). While Mr Baird's estimates for Rolleston do not include the FUDA potential capacity for the long term (estimated as 5,893 in the Formative memo, Figure 5), his estimates for Darfield and Leeston include an additional 1,874 dwelling capacity, as a result of proposed plan changes.

Figure 4: Table 3 Growth Model Update for Capacity Assessment

Area	2019	2021*
Rolleston	3,506	2,154
Lincoln	1,842**	1,461
Prebbleton, West Melton, and Tai Tapu	437	181***
Darfield and Leeston		2,656
Total GCP	5,663	6,452

Table 3: Growth Model Update for Capacity Assessment
**Capacity includes proposed plan potential capacity of 1,874*
***Capacity since it was produced has changed based on updates to the model*
****Capacity here is only Prebbleton and West Melton*

[8] Appended to this statement in Appendix 1

59 Given the distance of the minor settlements of Darfield and Leeston to the urban edge, they should not be treated as urban capacity. People seeking to locate there are not selecting between these settlements and other urban options such as Lincoln, or Rolleston.

60 Including them overstates urban capacity by 936 dwellings in the short term and up to 2,656 in the medium to long term. Removing them from the calculation sees the urban area total at 3,642 (June 2021), some 20% lower. This capacity of 3,642 would only last 2.75 years based on short term growth matching the average of the past 5 years (2017 to 2021 drawn from Figure 3 above = 1,323) as similarly noted earlier.

61 This issue is starkly portrayed in the GCP HDCA report (Tables 1, 2 and 4, copied below). Between the Short Term and Medium Term for Selwyn, additional capacity is almost solely added at Darfield and Leeston. At the beginning of the medium-term period, true urban capacity is down to around 928 (excluding Darfield and Leeston). This is made up from the 4,578 from Table 1 highlighted yellow, less the 936 from Darfield and Leeston = 3,642 minus short term growth of 2714 = 928 dwellings by 2023.

62 The only additional capacity to cater for the medium-term growth of 5,827 in Selwyn is provided at Darfield and Leeston (an additional

Table 1: Urban Housing Sufficiency within Greater Christchurch in the Short Term (2021 – 2024)

Area	Feasible Capacity	Short term demand + 20% Margin	Surplus / Shortfall
Waimakariri	2,273	1,833	440
Christchurch	101,994	6,372	95,622
Selwyn	4,578	2,714	1,864
Total	108,845	10,919	97,926

Table 2: Urban Housing Sufficiency within Greater Christchurch in the Medium Term 2021 – 2031 – excluding Selwyn and Waimakariri Future Urban Development Areas

Area	Feasible Capacity	Medium term demand + 20% short term margin	Surplus / Shortfall
Waimakariri	2,273	5,410	-3,137
Christchurch	101,994	18,215	83,779
Selwyn	6,452	8,541	-2,089
Total	110,719	32,166	78,553

1,720 dwellings). Given the growth is urban growth it will not be focused on Darfield and Leeston, meaning it will consume the 928 dwellings in urban Selwyn very quickly, leading to significant price rise pressures and a true urban medium-term shortfall closer to 4,900 than the 2,089 recorded in Table 2 below.

Table 4: Housing Urban Sufficiency within Greater Christchurch in the Long Term 2021-2051 including Selwyn and Waimakariri Future Urban Development Areas at 15hh/ha.

Area	Feasible Capacity + FUDA 12/12.5hh/ha	Feasible Capacity + FUDA 15hh/ha	Long term Demand + 15% long term margin	Long term Surplus / Shortfall @ 15hh/ha	Long term Surplus / Shortfall @ 12/12.5hh/ha
Waimakariri	12,192	13,642	13,059	583	-867
Christchurch	101,994	101,994	41,231	60,763	60,763
Selwyn	12,208	13,502	25,338	-11,836	-13,130
Total	126,394	129,138	79,628	48,344	46,766

63 Long term capacity also reduces by 2,656, increasing the shortfall to -14,492 at 15 hh/ha or -15,786 at 12.5hlds/ha.

Point 2: Inclusion of all setbacks

64 It appears that the model does not currently account for setbacks – other than the basic setbacks listed under Rule 4.9.2. It appears to ignore the state Highway setback of 40m and other constraints such as the existing bunding for sites in ODP Area 1 on Fountain Place and Joy Place.

65 This is demonstrated in parcels 7741418 and 7078851. These sites are listed as having infill capacity of 1 and 2 lots respectively. Individually 1 and 2 lots in and of themselves may not be significant – but if it points to an overall lack of oversight to ensure that all provisions have been applied in the model, then the effects might be a significant overstating of capacity.

Point 3: Reserves included in the model

66 It appears as though a number of reserves have been included in estimates of infill capacity in the model. For example, the Stonebrook subdivision water race. The model assumes that the water race can provide capacity of 6 infill sites (id 7703161 and 770 3159 giving 4 and 2 sites respectively).

67 As above, I am not sure if this issue is an isolated example, or points to a wider issue of model checking.

Point 4: Access Issues under District Plan

68 It also appears as though some potential rear development sites have been included as capacity, when access restrictions under the

Operative District Plan mean they are fully discretionary (in other words, not plan enabled as defined by the NPS-UD).

69 An example of this is 5/50 Stonebrook Drive (parcel id 6555941). The model identifies that this large site could accommodate 3 infill development sites.

70 Notwithstanding that, due to the property's value, it would not be commercially feasible to purchase the site and develop it, the operative plan provisions state that more than 6 sites on a shared access or driveway requires the access to be vested as a road to Council. In this instance the existing accessway is not wide enough to comply with plan requirements for roads.

71 It is unclear whether the rest of the model has taken account of any transport related provisions of the plan, such as the above.

Point 5: Inclusion of developed sites as capacity

72 Selwyn is a fast-growing district (second only to Queenstown Lakes in percentage terms). This means that capacity is consumed quickly. The Formative memo to Council (July 2021) highlights that in Rolleston alone, 42% of the identified capacity in 2019 has been consumed by 2021. The real figure may be significantly higher than this as the building consents used to highlight this shift may only cover 16 – 19 months of development. Regardless, that level of growth requires short term capacity sites to be identified quickly and brought to market to ensure that shortages do not influence price.

73 In response to such rapid growth Council need to ensure that parcels that have been fully developed are removed from capacity as soon as possible. It appears that there are sites within the model that are included as capacity, yet are already fully developed.

74 An example of this is the Mary Brittan Lifestyle Villas (Parcel id 7647615). This is listed as having 18 greenfield sites. A second example is 600 Springston Rolleston Rd (parcel id 8015619). This site is assumed to have 28 greenfield development sites and 3 infill sites. However, both are currently fully developed.

75 This is potentially an ongoing issue, but it is incumbent on Council to keep up to date with consents to ensure capacity is constantly updated. This is particularly important as the margin between sufficient capacity and shortfall is so tight within the District and Rolleston specifically.

76 If the issue is widespread, then the model will be overstating capacity to a significant extent.

Point 6: Inclusion of non-residential parcels in residential areas

77 Distributed across most residential areas, district plans allow for non-residential activities to occupy residential properties. These parcels need to be identified and removed from infill capacity estimates as it is unlikely they represent future capacity – in particular in the short to medium term.

78 It appears as though there are a number of examples in the SCGM where day care and preschool centres have been included as capacity. They include;

48 Braithwaite Drive (preschool) – 4 greenfield sites

14 Learners Road (Preschool) - 3 infill sites

971 Goulds Road (preschool) - 3 infill sites

183 Brookside Road (preschool) - 1 infill site

76-80 Granite Drive (Kindergarden) - 2 infill sites

79 While again the numbers identified here are low in and of themselves, it points to a potentially larger issue in that there may be other sites that need to be removed from the capacity assessment based on the activities occurring on them.

80 It is not clear the extent of this issue.

Point 7: Development Density Assumptions

81 Finally, in this section there appears to be a mismatch between the levels of density assumed in the model for a number of sites and what is allowed on those sites under the Operative District Plan.

82 A key example of this is the 2 parcels of land that were the subject of PC73. The SCGM lists them as having capacity for 174 sites (the Holmes Block) and 144 sites (Skellerup Block). However, in the Operative District Plan the Holmes Block is limited to 97 sites and the Skellerup Block to 51 sites.

83 The Operative Plan allows for only 47% of the capacity modelled in the SCGM. Development intensities above this are discretionary or non-complying and not plan enabled. Accordingly, the SCGM overstates capacity by 170 households.

84 Again, the extent to which this is a systemic problem across the models' estimates of capacity is not clear, however it potentially could be significant leading to a significant overstating of capacity to meet growth in the short to medium term.

Development Densities

85 In a more general sense, it may be the case that within the SCGM, insufficient account is made of land required for infrastructure (parks, reserves and local roads). The model assumes that allowing an additional 25% per parcel captures this component, however the ratio is traditionally significantly higher than 25%.

86 At present the model would divide a large development parcel (of say 10,000sqm) into lots by dividing the area by 625sqm (this assumes the final lot size is 500sqm x 1.25 to account for infrastructure). That would give a yield of approximately 16 dwellings per ha (in this example).

87 However, traditionally a higher figure is used. **Mr Fraser Colgrave,** in his evidence statement for PC 67, quotes from work carried out by Harrison Grierson for the GCP that points to only around 60% of land being available for development.

88 The implications of that are yields that move down to 14 dwellings per ha from 16. Applying this across the entire greenfield estate has a big impact – reducing capacity by 12.5%.

Capacity Conclusions

89 The implication of these identified issues is potentially a significant overstating of capacity within the model as it currently stands. Some of the overstating relates to the pace of growth within the district, and some potentially relates to not applying all plan provisions that impact on capacity at the parcel level.

90 Given the rapid consumption of capacity, the issues I have highlighted in the main assessment tool used to monitor and assess growth, should promote Council to take a precautionary approach (in other words, lean towards the provision of additional capacity to cater for growth). Councils should be seeking to encourage additional capacity provided by plan changes such as PC69 in order to avoid residential price rises brought about by scarcity leading to a deterioration in housing affordability.

URBAN FORM CONTEXT AND NPS-UD

91 The National Policy Statement Urban Development 2020 (NPS-UD) came into effect in August 2020. The NPSUD requires (Policy 2) that Councils in Tier 1, 2, and 3 local authorities (the high growth areas), at all times, provide at least sufficient development capacity to meet expected demand for housing over the short term, medium term and long term.

92 In addition to this, the NPS-UD has recognised that providing additional development capacity has benefits assuming it contributes to a well-functioning urban environment – regardless of

whether the additional capacity is anticipated (by way of an existing growth strategy or future land zoning) or not. Policy 8 clearly encourages local authorities to be "*responsive to plan changes that would add significantly to development capacity and contribute to well functioning urban environments, even if the capacity is:*

a) Unanticipated by RMA planning documents, or

b) *Out-of-sequence with planned land release*"

93 In the case of this Private Plan Change 69, the development capacity has not been anticipated in the RMA planning documents and it is out of sequence with planned land release. However, the proposed plan change will potentially add 2,000 dwellings to Lincoln. This is a significant addition of capacity at the local township level and the Selwyn District level. Even though it is anticipated that Christchurch itself will add over 32,300 dwellings in the medium term[9], given PC69 is a single development proposal, it provides for a significant portion overall Christchurch growth. Therefore, it is incumbent on Council to be responsive to this proposal.

94 The definition of 'well functioning' urban environments is contained in Policy 1 of the NPS-UD. It states that they are urban environments that, as a minimum (with respect to housing):

a) Have or enable a variety of homes that meet the needs in terms of type, price and location of households

b) ….

c) Have good accessibility for all people between housing, jobs, community services, natural spaces and open spaces including by way of public or active transport, and

d) Support, and limit as much as possible adverse impacts on the competitive operation of land and development markets, and

e) …

f) …

95 It is clear that the additional residential capacity enabled by the proposed plan change will help facilitate a variety of dwelling typologies and dwelling options, immediately adjacent to the existing Lincoln Township, helping facilitate public transport access to Rolleston and Christchurch. Finally, by adding over 190ha of

[9] Environment Canterbury Submission as reported in Section 42 Report PC 73, paragraph 129, page 31.

residential land to the market, is helping support the competitive operation of land and development markets.

CONCLUSIONS

96 I have identified a number of issues with both the capacity estimates relied on in the SCGM and the demand projections that drive consumption of capacity. The net effect of these issues is a reduction in the sufficiency of capacity to meet demand in the short to medium term.

97 If the issues identified above in terms of capacity estimates across parcels where no capacity exists are manifest across the entire model, then it may be overstating Selwyn's ability to cater for growth to a significant degree.

98 I have not had time to search them all out and correct them for this hearing - and that is not really the developer's job to do, it is Council's role. This means Council should be engaging with additional capacity opportunities as they come before them, especially in light of demand projections understating growth in the short to medium term.

99 Given that the existing model has highlighted a very small surplus in the medium term and a shortfall in the long term, slight changes in estimates of capacity or in demand projections will lead to Selwyn not being able to ensure sufficient supply in the medium term. This is significant, as the medium term begins in 3 years, and the RMA processes to bring additional capacity online to meet any identified shortfall, and then development time to translate capacity into dwellings, means the process needs to begin now.

100 Based on my assessment of the additional capacity that PC69 facilitates, the limited capacity that currently exists to cater for growth in the medium to longer term, and the uncertainty in estimates of capacity and growth due to identified issues with the SCGM, I believe that PC 69 is an appropriate way to sustainable management of land resources in and around Lincoln.

Dated: 4 November 2021

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Greg Akehurst

APPENDIX 1

Memo

To: Ben Baird, Strategy and Policy Planner, Selwyn District Council

From: Rodney Yeoman, Director

Date: 08/07/2021

Re: Residential Capacity 2021 - Draft

Over the last two decades, Selwyn District has experienced rapid growth in population, from around 28,300 in 2001 to 69,700 in 2020. Population in the District has grown by 4.9% per annum, which is much faster than almost every other district in New Zealand, only Queenstown Lakes is growing at a similar rate.

Furthermore, in the last few years there has been a rapid increase in residential development activity, both in terms of dwelling construction and applications for new development areas. This rapid uptake of capacity has exceeded all expectations, both official Statistics NZ projections and Council's growth modelling. Therefore, the Selwyn District Council (SDC) is concerned that the existing research on residential capacity may not provide a sufficiently accurate account of the capacity available now within the district to accommodate short term demands.

This memo uses the outputs of *Selwyn Capacity Growth Model* (SCGM)[1], council officer's report[2], recent development activity[3] and other research that is underway[4] to provide an estimate of the amount of remaining capacity as of June 2021. This will be used by SDC to meet the reporting requirements of the National Policy Statement on Urban Development (NPSUD).

Introduction

The NPSUD includes a set of reporting requirements, which relate to urban development capacity, both in terms of residential and business activity. A key part of the requirements is that Tier 1 councils must investigate how much capacity is enabled within their planning frameworks and the extent to which this capacity may be developed by the market. Councils are also required to assess the potential future demands of the community. The comparison of t

he developable supply[5] and demand projections provides an indication of whether there is sufficient urban development capacity to meet the needs of the community. In the case that there is deemed to be insufficient supply then the local council must act to provide more capacity.

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[1] Yeoman, R (2020) Selwyn Capacity for Growth Model 2019.
[2] Selwyn District Council (2020) Housing and Business Development Capacity Assessment Update – 9th December.
[3] Statistics New Zealand (2021) New dwelling consented: April 2021.
[4] Formative (2021) Selwyn Residential Feasibility Assessment 2021 - Draft.
[5] Plan-enabled, infrastructure-read, feasible and reasonably expected to be realised.

In late 2019, SDC commissioned an update of the SCGM which is a detailed cadastral-level capacity assessment model.[6] This work provided a detailed measurement of residential capacity available in 2019. SDC used the results from the SCGM to update the Council Housing and Business Capacity Assessment and inform the 2021 Long-term Plan.[7] That assessment showed that residential capacity within the district was expected to be exhausted within the medium term.

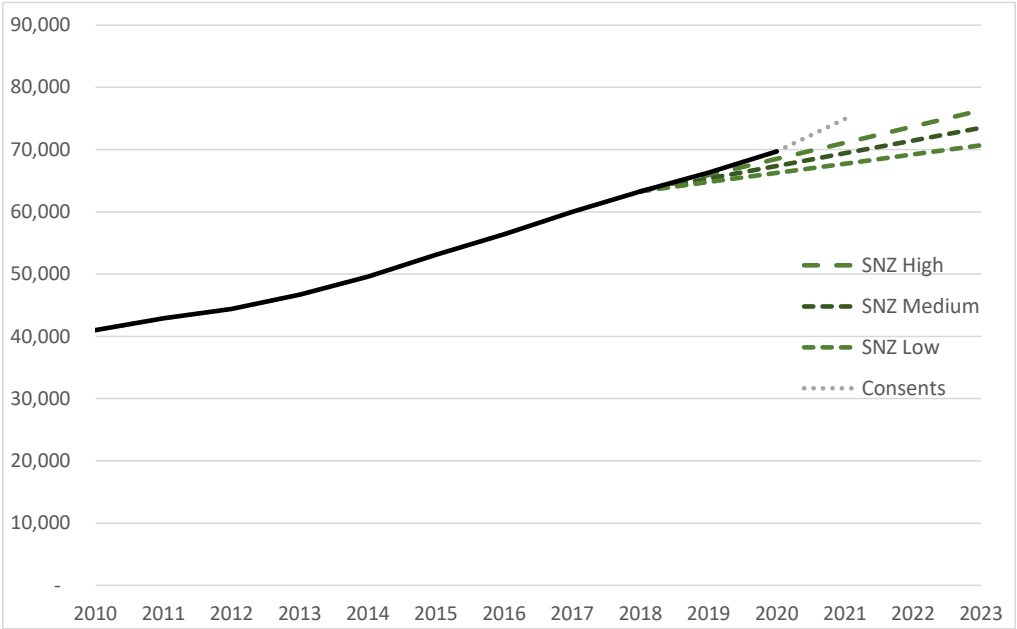
Unfortunately, there is insufficient time within the NPSUD reporting timeframes to conduct a full update of the SCGM.[8] This memo adopts an approach which combines the detailed results from the SCGM with the recent growth in residential development that has been observed in Selwyn District to provide an updated estimate of the remaining residential capacity which is available for future growth.

Residential Development 2020-2021

The population in Selwyn District has grown rapidly over the last few years, from 63,300 in 2018 to 69,700 in 2020, which is equivalent to growth of approximately 3,200 people per annum (see Figure 1).[9]

The recently released official population projection (SNZ Medium) suggest that the population could reach 73,500 in 2023, which is growth of approximately 2,000 per annum.[10] Under the high projection the population would reach 76,300, which is equivalent to growth of approximately 2,600 per annum.

Figure 1: Selwyn District Population Estimate 2010-20 and Population Projections 2018-23



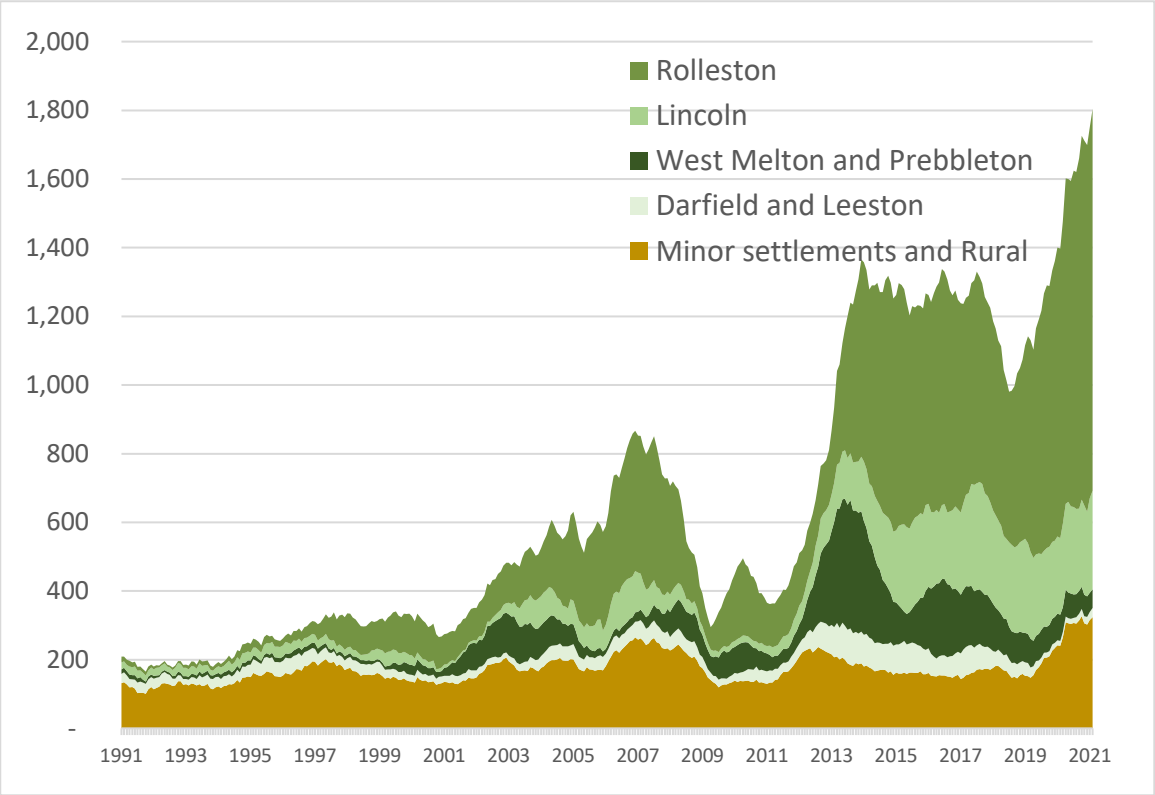
The District has again reached another record level of residential development in 2021, with 1,804 new dwellings being consented in the last year.[11] If each of these dwellings houses an average family then

[6] Yeoman, R (2020) Selwyn Capacity for Growth Model 2019.
[7] Selwyn District Council (2020) Housing and Business Development Capacity Assessment Update – 9th December.
[8] Councils are required to report by in July 2021.
[9] Statistics New Zealand (2020) Subnational population estimates (TA, SA2), by age and sex, at 30 June 1996-2020 (2020 boundaries).
[10] Statistics New Zealand (2021) Subnational population projections: 2018(base)–2048 – Medium, published 31 March.
[11] Statistics New Zealand (2021) New dwelling consented: April 2021.

the District's population could grow by approximately 5,300 in 2021.[12] This is more than double the growth in the official projections and the total population in 2021 could reach 75,000, which exceeds the official population projection two years earlier than expected (see grey dotted line in Figure 1).

Most of the growth in residential development activity has occurred in in the Urban areas of District (Rolleston, Lincoln and to a lesser degree Wet Melton/Prebbleton), with the share of development in these area increasing from 47% in the year 2000 to 81% in 2021. In the last twelve months there have been 1,450 new dwelling consents in these three urban areas, which is over 120 per month on average (Figure 2).[13]

Figure 2: Selwyn District New Dwelling Building Consents 1991 – 2021, annual moving average



The population and building consents data both suggest that there has been a rapid increase in growth in residential activity in Selwyn District over the last two years.

There have also been a number of private plan changes in the past six months, which could potentially spur increased development activity in the near future (with approx. 10,500 capacity).[14]

The rapid growth in the past few years and the market-led development plans for the near future are both important for SDC planning. It is prudent to develop an updated estimate of capacity as of April 2021. The following section takes the cadastral estimates of capacity from SCGM and Stats NZ building consents data to provide an updated assessment of currently available capacity.

[12] Statistics New Zealand (2020) Statistical area 1 dataset for 2018 Census about households for all New Zealand – Selwyn District average household has 2.9 persons.
[13] Based on SA2 boundaries that do not concord perfectly with urban areas or minor settlements.
[14] Correspondence from Selwyn District Council officers – June 2nd 2021.

Estimated Residential Capacity June 2021

The residential capacity metrics in this memo apply the definitions set out in the NPSUD for the short term. That is development capacity for housing that is "plan-enabled", "infrastructure ready", "feasible" and "reasonably expected to be realised".[15]

Specifically, the following definitions have been adopted,

a) "plan enabled" means zoned within the operative District Plan.
b) "infrastructure ready" means existing infrastructure is available.
c) "feasible" means commercially viable to a developer based on the current relationship between costs and revenue.
d) "reasonably expected to be realised" means modifying densities using information about past development.

The SCGM 2019 assessed zoned (plan enabled) and modified (expected to be realised) capacity. While the provision of infrastructure has been reviewed separately by Council and feasibility is being evaluated in separate research[16].

The SCGM provides an estimate theoretical zoned capacity of 7,983 dwellings within the urban areas in 2019 and a further 1,351 in minor settlements. Also, it is our understanding that zoned land within the infrastructure boundary must be serviced or readily serviceable. Therefore, it is considered that there was a capacity of 9,334 dwellings in the total District that was both plan-enabled and infrastructure ready, as defined in s3.4 of the NPSUD.

However, developers do not generally achieve lot densities enabled within zone, which means that the theoretical zoned capacity represents an upper limit on potential development that could be achieved. For example, in greenfield developments the subdivision pattern and road layouts can result in a range of different sized lots. This means that the average lot size achieved is generally lower than what is enabled within the zone. Conversely, in some instances infill developments can result in densities that are higher than the maximum enabled in the zone.

The SCGM also estimates modified capacity of 6,556 dwellings within the urban areas in 2019 and a further 1,073 in minor settlements. Based on draft research on feasibility testing, most of this dwelling capacity will also be commercial feasible. [17] Therefore, it is considered that there was a capacity of 7,629 dwellings in the total District that was both feasible and reasonably expected to be realised, as defined in s3.26 of the NPSUD.

Figure 3: Selwyn District Capacity Assessment – as at 2019

Assessment 2019	Urban Areas	Minor settlmnts	Total	NPSUD
SCGM 2019 - Zoned	7,983	1,351	9,334	Plan-enabled
Infrasturcture Boundary				Infastructure Ready
Residential Feasibility Module	6,556	1,073	7,629	Feasible
SCGM 2019 - Modified				Expected to be realised

[15] National Policy Statement on Urban Development 2020, s 3.25 (1).
[16] Formative (2021) Selwyn Residential Feasibility Assessment 2021.
[17] Ibid.

Since December 2019, there are estimated to have been approximately 2,005 new dwellings consented within the urban areas and a further 433 in the minor settlements and rural parts of the District (see Figure 4).[18]

However, not all of the dwellings will have been completed or occupied, so in some cases they would represent an opportunity to house future growth. However, it would be reasonable to expect that most of the dwellings will be completed and occupied by the end of 2021.

Notwithstanding the issue of when the houses are occupied, it is likely that the capacity in the urban area in 2019 of 6,556 dwellings will be substantially reduced to a level between 4,500 to 4,600 as at June 2021. This remaining capacity is available to meet short term demands in 2022 and 2023.

Figure 4: Selwyn District Capacity Assessment – as at June 2021

Sub areas - Urban zones only	2019	Uptake*	2021
Rolleston	3,506	1,489	2,017
Lincoln	1,842	375	1,467
West Melton and Prebbleton	238	80	158
Darfield and Leeston	970	34	936
Urban Areas	**6,556**	**1,978**	**4,578**
Minor settlements and Rural	1,073	428	645
Total Selwyn District	**7,629**	**2,406**	**5,223**

**some of the uptake in the Rural areas will have occurred in rural zones.*

Also there are proposed changes to the District Plan that would enable capacity in the medium term (additional 1,975 after 2023) and future development areas that will provide more capacity in the long term (additional 5,756 after 2030). While this medium and long term capacity is still being planned, it is considered likely that much of the capacity will be needed to accommodate future demands.

Figure 5: Selwyn District Capacity Assessment – Short, Medium and Long term

Sub areas - Urban zones only	Short (2021-23)	Medium (2023-30)	Long (2030+)
Rolleston	2,017	2,154	7,910
Lincoln	1,467	1,461	1,461
West Melton and Prebbleton	158	181	181
Darfield and Leeston	936	2,656	2,656
Urban Areas	**4,578**	**6,452**	**12,208**
Minor settlements and Rural	645	746	746
Total Selwyn District	**5,223**	**7,198**	**12,954**

Rodney Yeoman

Director

M: 021 118 8002

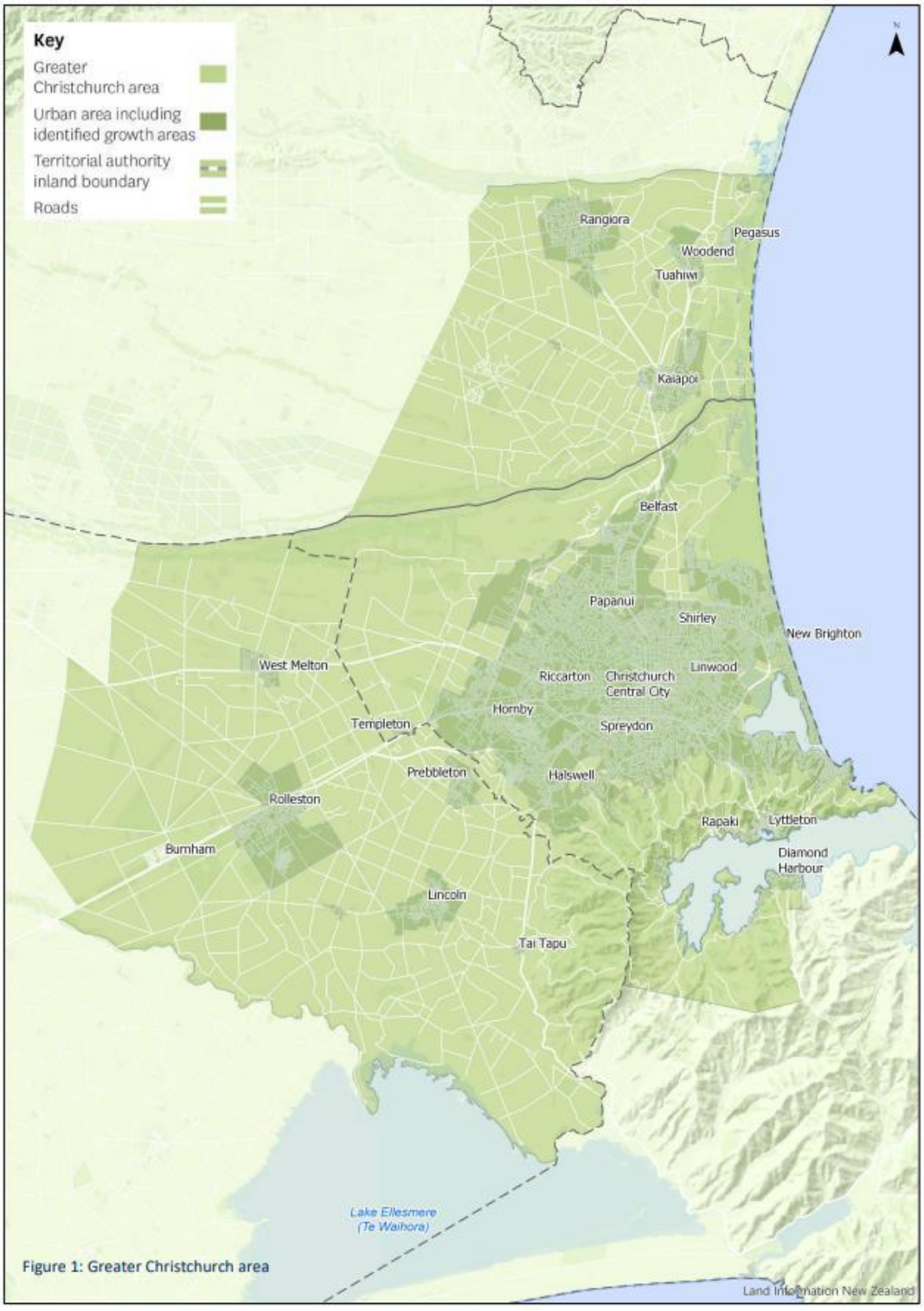
E: rodney@formative.co.nz

W: www.formative.co.nz

[18] Statistics New Zealand (2021) New dwelling consented: April 2021.

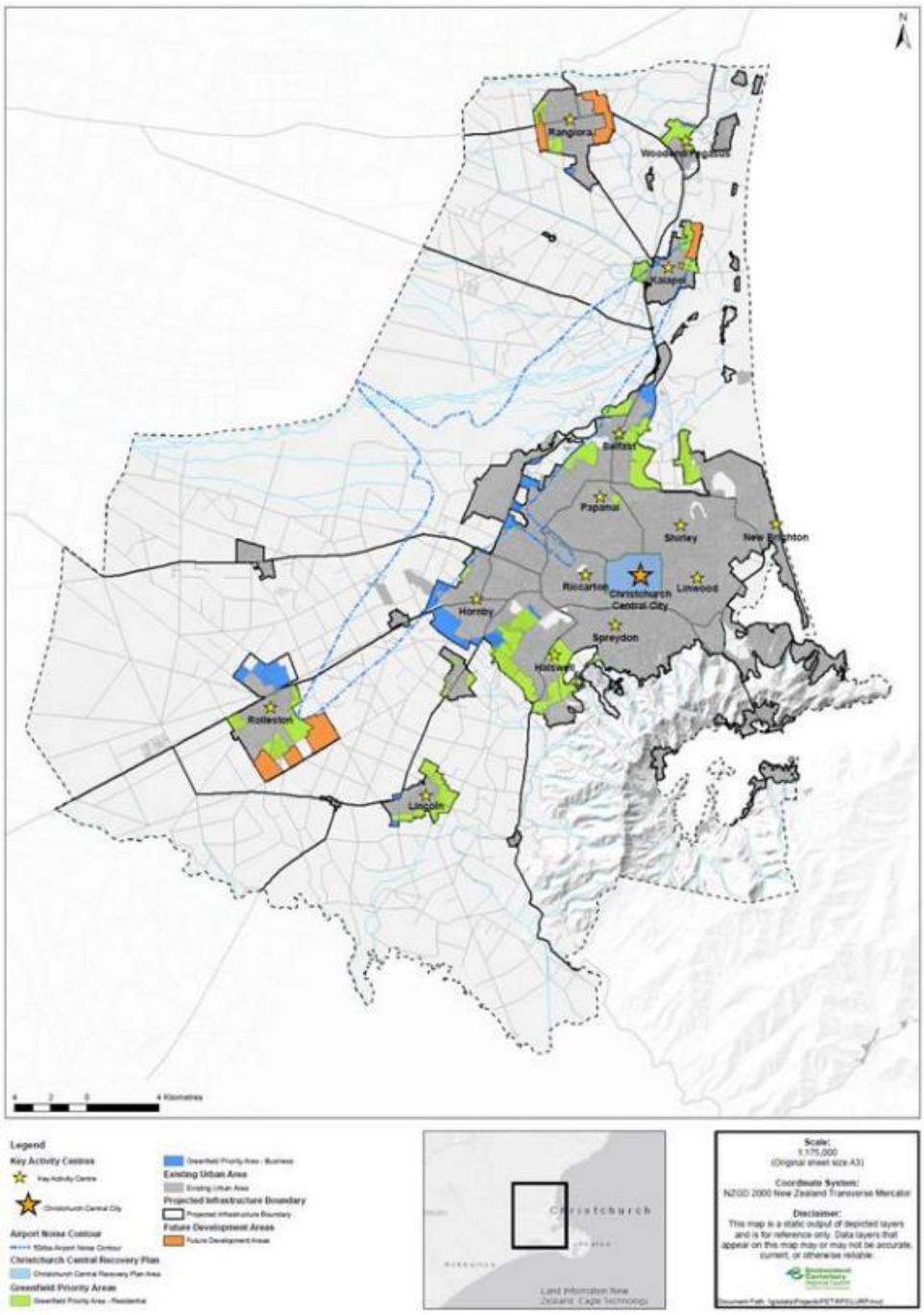
APPENDIX 2

Figure 5: Greater Christchurch, Urban Area defined.



Source: Greater Christchurch Partnership Our Space 2018-2048 (Map of Greater Christchurch Area

Figure 6: Map A – Greenfield Priority Areas and Future Development Areas.



Source: CPRS, Map A Chapter 6