

Before the Selwyn District Council

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*under:* the Resource Management Act 1991

*in the matter of:* Proposed Private Plan Change 80 to the Operative District Plan

*and:* **Two Chain Road Limited**  
*Applicant*

Evidence of Natalie Hampson (economics)

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Dated: 5 October 2022

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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



## EVIDENCE OF NATALIE HAMPSON

### INTRODUCTION

- 1 My full name is Natalie Dianne Hampson. I am a Director at Market Economics Limited (*M.E*). I have held this position since mid-2019. I hold a Master of Science degree in Geography from the University of Auckland (first class honours).
- 2 I have worked in the field of economics for over 20 years for commercial and public sector clients. I joined M.E in 2001, and I have specialised in studies relating to land use analysis, assessment of demand and markets, the form and function of urban economies and growth, policy analysis, and evaluation of economic outcomes and effects, including costs and benefits.
- 3 I have applied these specialties in studies throughout New Zealand, and across most sectors of the economy, notably assessments of new developments, plan and policy changes, urban and rural planning (including under National Policy Statements) and understanding specific sectors such as the retail, commercial, industrial, residential, tourism, education, recreational marine, aquaculture, liquor licencing and major event industries. I am currently an associate member of the NZ Planning Institute and a member and regional committee treasurer of the Resource Management Law Association.
- 4 With respect to the scope of this evidence, I have been the principal developer and author of the 2017 Business Development Capacity Assessment (*BDCA*) for Queenstown Lakes District Council under the National Policy Statement on Urban Development Capacity 2016 (*NPS-UDC*) and a subsequent update in 2020 also under the NPS-UDC. This model has underpinned the district plan review with regards to industrial zoning, and I continue to act for Queenstown Lakes District Council on industrial zoning appeals and other industrial zone variations. I am also the principal developer and author of the 2021 BDCA for Rotorua District Council under the National Policy Statement on Urban Development 2020 (*NPS-UD*) and have an ongoing role in advising the Council's Future Development Strategy with regards to future business growth areas. Related to both of the above projects, I was the project manager and contributing author for both Council's Housing and Business Development Capacity Assessments (*HBAs*). I have a detailed understanding of Council requirements under the NPS-UDC and now the NPS-UD.
- 5 M.E had been engaged by Selwyn District Council (*SDC*) to prepare the Selwyn Capacity for Growth Model (*SCGM*) which covers both a BDCA and the housing equivalent and have provided advice over a number of years relating to the effects of growth to help SDC 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 and Derek Foy subsequently left M.E employment in early April 2021, retaining SDC as a client, providing ongoing advice and support for the SCGM.

- 6 M.E do not have any ongoing arrangements to update the SCGM or provide advice for SDC with respect to urban growth and change in the district.
- 7 I am familiar with private plan change 80 (*PC80*) and have provided evidence on the rezoning of this site for the Proposed Selwyn District Plan (*PDP*) process.

### **CODE OF CONDUCT**

- 8 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**

- 9 My evidence relates to:
  - 9.1 Demand and capacity for industrial land in the Greater Christchurch Partnership (*GCP*) area of Selwyn District, and specifically Rolleston, as set out in the SCGM 2017 and subsequent updates of that model carried out by M.E.
  - 9.2 Changes that have occurred since the results of the SCGM 2017 were published by the GCP in 2018.
  - 9.3 Limitations of the SCGM to account for industrial land demand and capacity in Rolleston.
  - 9.4 Brief comment on the rezoning request to create additional industrial land in Rolleston in the context of my findings.
  - 9.5 My response to submissions that raise economic issues.
  - 9.6 My response to the S42A report, including the economic review and commentary by Mr Foy of Formative Limited.

- 10 In preparing my evidence, I have reviewed and considered the following:
- 10.1 The material submitted with PC80 with regard to the request to rezone the subject site (Two Chain Road) to Business 2A Zone (B2A) under the Operative Selwyn District Plan (ODP);
  - 10.2 The evidence of Ms Kim Seaton, Mr Nick O'Styke, Mr Sam Staite and Mr Tim Carter for PC80;
  - 10.3 Documentation related to Private Plan Change 66 (PC66) including requestor and council evidence and S42A report;
  - 10.4 The SCGM 2017 Technical Report, SCGM 2017 model files, SCGM 2019 model files, memoranda between M.E and SDC relating to the SCGM and updates (various), GCP Economic Futures Model (EFM) Technical Report - as supplied by SDC or held on the M.E network;<sup>1</sup>
  - 10.5 A range of documentation associated with the PDP (and available online) including (but not limited to) the Urban Growth Topic (and supporting material such as the SDC Growth and Demand report) and General Industrial Zone and Port Zone Topic;
  - 10.6 The GCP Housing and Business Development Capacity Assessment (HBDCA) Summary (March 2018), BDCA (October 2018) and Our Space 2018-2048;
  - 10.7 A memo supplied on request by SDC on the 4<sup>th</sup> October 2022 titled 'Selwyn Business Land Update – 2021' that was dated 23<sup>rd</sup> December 2021 and prepared for Council by Formative Limited; and
  - 10.8 The Greater Christchurch Freight Demand Statement (2014) and Freight Infrastructure Statement (2014) by Aurecon.

### **SUMMARY OF EVIDENCE**

- 11 The Applicant is seeking a change to the ODP to create a new 98ha area of B2A Zone on Two Chain Road. The site is currently zoned Rural Inner Plains Zone under the ODP and sits outside the Projected Infrastructure Boundary shown in Map A of the CRPS. The site adjoins the corner of the existing industrial area, separated by Railway Road. It will increase the area zoned for industrial use in the

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<sup>1</sup> Noting that these files have been viewed by M.E on a 'commercial in confidence' basis.

GCP area of Selwyn District by 25% and the area zoned for industrial use specifically in Rolleston by 26%<sup>2</sup>.

- 12     Reviewing the areas identified for future urban growth in the CRPS (i.e., consideration of any additional areas to support industrial activities) will only occur when a BDCA and Future Development Strategy (*FDS*) demonstrate a need for additional suitable development capacity (i.e. insufficient capacity in the short, medium or long-term)<sup>3</sup>. I note that the PDP has a similar requirement. As worded, this policy will mean that it is very important that the BDCA is appropriately estimating demand and capacity for industrial activities in Rolleston.
- 13     My evidence shows that that may not have been the case in the BDCA 2018, and it may not be the case in the future if the same approach and assumptions continue to be applied in the SCGM for Rolleston.
- 14     I consider that the BDCA 2018 is likely to have under-estimated long-term demand for industrial land in Rolleston and therefore overstated long-term sufficiency. While Council has more up-to-date versions of the SCGM, including growth projections that show higher employment growth, there has been no further publication of sufficiency results by Council, with the 2018 Our Space findings on business land appearing to be the sole basis for planning and decision making.
- 15     Those 2018 findings are out-dated and potentially limited in their ability to accurately reflect demand and capacity for Rolleston's remaining vacant industrial land. Yet, Council is not required to publish a new BDCA and FDS until 2024<sup>4</sup>. That is a long time to wait in the context of a high growth economy for greater certainty on Rolleston's industrial sufficiency.
- 16     Based on my assessment, demand for Rolleston's industrial land is now higher than previously reported and capacity has continued to reduce. It is therefore likely that sufficiency is lower than previously understood. A precautionary approach is therefore needed. This is consistent with the NPS-UD which encourages the provision of more capacity rather than less.
- 17     The Rolleston industrial area is unique in its road and rail transport attributes, and it does not operate like many typical urban industrial

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<sup>2</sup>     Calculations based on the gross area of PC80 relative to the zoned parcel area of the B2, B2A and B2B zones. Some parcels of B2A zone, including PC66, are still gross land areas and not net developable areas.

<sup>3</sup>     The CRPS can also take into consideration other relevant contextual information.

<sup>4</sup>     Councils are required to update their HBAs at least every three years, but can update that work more frequently.

zones. It is a strategically important industrial hub in the region and in the South Island and a large portion of its demand drivers are unrelated to local growth. I support the request to rezone the Two Chain Road site as B2A Zone. The proposed land will provide additional feasible capacity that will allow Rolleston to enhance its reputation as a key freight-focussed industrial hub.

- 18 It will also help to address a short-fall of industrial capacity in Selwyn District to meet long-term demand – a situation only now confirmed (but not quantified) in the S42A report.

### **EVIDENCE**

- 19 Under the ODP, the extent of industrial zoning that falls within the GCP area of Selwyn District includes approximately 14ha gross zone area<sup>5</sup> in Lincoln and approximately 349ha gross<sup>6</sup> zone area<sup>7</sup> in Rolleston, excluding PC66 which added an additional 27ha gross zone area to Rolleston (total gross zoning of 390ha).
- 20 The Rolleston industrial area is shown in Figure 1. The older established B2 Zone area is to the south (closest to the State Highway). The newer, establishing B2A Zone area (including PC66 shown with a green outline) extends to the north and east of the B2 Zone. The B2A Zone includes two large inland ports (shown in red) and a precinct set aside for large format retail (*LFR*) in accordance with the structure plan in Appendix 43 of the ODP (shown in blue).

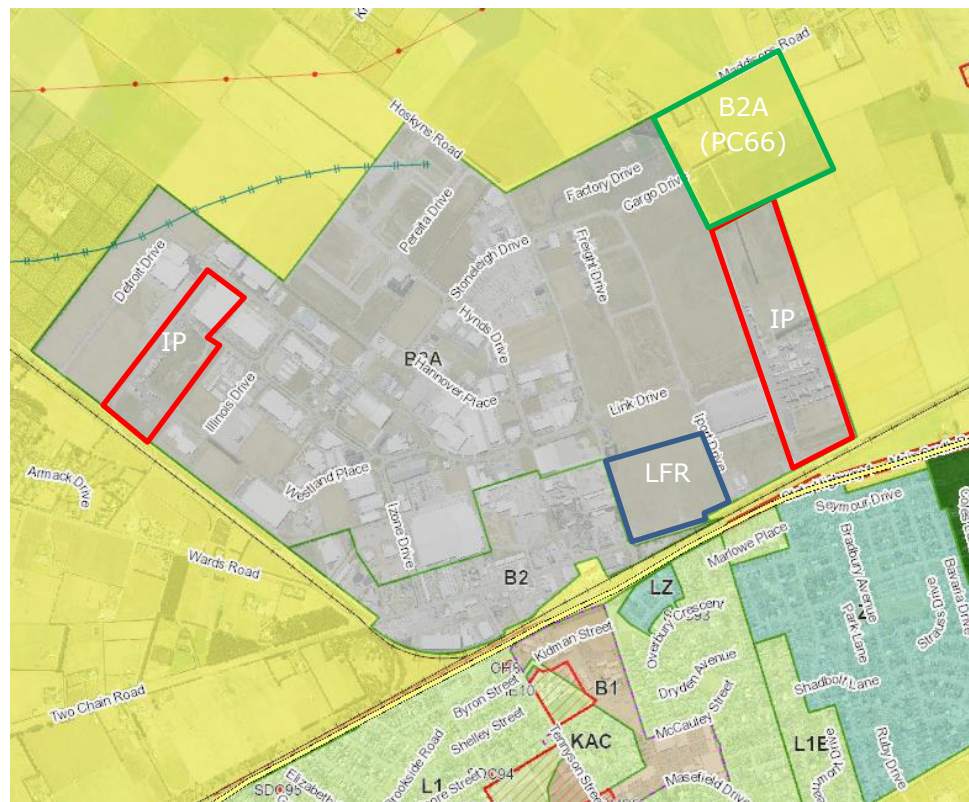
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<sup>5</sup> Approximately 11.4ha of net developable land excluding stormwater areas in the outline development plan.

<sup>6</sup> SDC, PDP S32 Report – Urban Growth, page 19.

<sup>7</sup> M.E estimates the net developable land excluding roads as 345ha (excluding PC66).

Figure 1 – ODP Industrial Zoning Showing Inland Ports and LFR Precinct – Rolleston



- 21 In 2018, the SCGM showed significant surplus capacity relative to projected industrial land demand in the GCP area of Selwyn District over the long-term (i.e., within Lincoln and Rolleston combined). My evidence is focussed on that business demand and capacity modelling, which was originally developed and maintained by M.E but is now maintained by Formative Limited.

#### **SCGM Background and Overview**

- 22 The SCGM was first built by M.E for SDC in 2017 with a 2016 base year for demand, capacity and sufficiency. The model is a technical scenario-based platform that allows the user (Council) to select different settings and see the associated results. Reporting on preferred settings and results was never a key deliverable required of M.E (although some results and recommended settings were included within the Technical Report provided to SDC after the model was handed over)<sup>8</sup>.
- 23 Following its development, the SCGM was used to inform SDC's contribution to the GCP HBDCA 2018 under the NPS-UDC, which in turn contributed to the GCP Our Space 2018-2048 report. As explained below, it is my understanding that the 2018 HBDCA and

<sup>8</sup> The Technical Report was prepared in early 2018.

Our Space report are the only publicly available discussions of industrial zone sufficiency that the public can access and rely on.

- 24 The recent S42A report for PC66 (dated July 2021) appears to confirm this. That report stated the following with regard to evidence provided by Mr Foy (of Formative) for Council: *"Mr Foy has also considered whether the proposal meets an identified business demand. His view is that the work undertaken for Our Space 2018-2048 demonstrates that there is already sufficient industrial land zoned across Greater Christchurch and that consequently, there is no need for additional industrial land to be zoned, **based on the best current understanding of the demand-supply situation**"* (paragraph 94, emphasis added).
- 25 Since 2018, the SCGM has had a series of updates and modifications. The first major update occurred in 2019/2020<sup>9</sup>, which generated a new 2019 base year for the model. It incorporated:
  - 25.1 updated population growth projections;
  - 25.2 wholly replaced district employment projections; and
  - 25.3 updated the remaining capacity of the business zones to reflect the situation in 2019. This accounted for take-up of vacant land between 2016 and 2019, as well as some corrections where parcels were included in error in the original model.
- 26 The update also included some additional functionality and reporting detail.
- 27 I am not aware of any Council document that explains (publicly) how the sufficiency of industrial zones in the Greater Christchurch area of the district looks according to the SCGM 2019. But the update confirms that the HBDCA 2018/Our Space 2018-2048 is not the most "current" Council understanding of industrial demand and capacity.
- 28 There was a further small update of the SCGM in 2020. This retained the 2019 population and dwelling growth projections but rebased them to 2020 and updated housing capacity to account for growth (uptake) between 2019 and 2020. It is my understanding that there were no changes to business modelling inputs or outputs

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<sup>9</sup> When reviewing the historical files at M.E it appears that there were 8 versions/iterations of the 2019 update.



at that time. The 2020 update informed the LTP<sup>10</sup>, including Council's official growth projections 2021-2051.<sup>11</sup>

- 29 Again, I can find no evidence of any further changes to the business model since the 2019/2020 updates, which were unreported by Council to the best of my knowledge. It is possible that there have been no further updates because it was not a requirement for the HBDCA 2021 to report on the sufficiency of business land. Business land sufficiency is next required (under the NPS-UD) in the Greater Christchurch HBDCA due in 2024.
- 30 A key challenge in determining SDC's current position on business land sufficiency is that the business demand and capacity results were last (publicly) published in 2018. Since then, there has been several Council documents and memos to/from Council but a clear picture of changing sufficiency over recent years is difficult to gauge. This includes the effect that the new employment projections have had on land demand over the long-term and the ongoing consumption (development) of vacant zoned land.
- 31 Even with access to some of the original models (i.e., 2019/2020 updates), it is challenging for me (who had no direct involvement in the projects carried out by M.E at the time) to interpret the changes made in each version of the model; understand why they were made; and then track the results in some sort of meaningful way. This level of insight is limited to the staff directly involved in the project, who have worked closely with Council over many years<sup>12</sup>.
- 32 It *is* clear from my high-level review that changes have been made on both the demand and capacity side of the business model over time. In and of itself, this makes comparability of results between versions (and relative to the original results reported in the HBDCA 2018) difficult. Having attempted to quantify changes in demand and capacity across the model versions that I do have access to, I have decided that this is too complex and is best left to Council to communicate.
- 33 However, based on my review of the material (which includes council correspondence that was made available), I can make a number of high-level<sup>13</sup> observations about the SCGM including

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<sup>10</sup> Long Term Plan.

<sup>11</sup> A further update of the SCGM occurred in 2021 (by Formative) for housing capacity, accounting for growth (uptake) between 2020 and 2021. This informed SDC's contribution to the Greater Christchurch HBDCA 2021 under the NPS-UD.

<sup>12</sup> This is true for all projects run by M.E – with the senior staff member leading the project to have an intimate knowledge of the work being carried out. Staff not included on the project team will have only a high-level understanding of the nature of the project and the who the client is.

<sup>13</sup> It is not possible for me to provide specific details of models that have not had results published by SDC.

factors that will influence the model's results when next updated/reported, and that may limit its ability to reliably inform industrial demand in Rolleston over time. I discuss these below.

- 34 In making these observations, or pointing out potential limitations and issues, it is not my intent to undermine the SCGM as a tool to inform SDC planning and decision making going forward. All models, including alternative model approaches that I have developed for other clients but for the same NPS-UDC/UD purpose, have their limitations. The SCGM has been developed in a comprehensive way (in collaboration with Council) and is based on the best local data available at the time and the assumptions have been reported transparently.
- 35 Rather, my intent is:
- 35.1 to highlight some potential weaknesses of that particular methodology that may not be well understood by those relying on the model to inform planning decisions in Rolleston's industrial area; and
- 35.2 to emphasise that planning and decision making for business land should not rely solely on the SCGM given its limitations<sup>14</sup>, as all models should be considered in a wider context, including what is happening on the ground. In this case, a more detailed understanding of what is happening in the Rolleston industrial area is required as it is increasingly a form of economic growth and development that is not easily captured by a model designed for 'typical' urban industrial zones and activity, and that is required to assess all urban zones in the district using a consistent approach.

### **SCGM Update Implications and Limitations** ***Demand is Higher***

- 36 The HBDCA 2018, which is the most comprehensive picture of industrial demand, capacity and sufficiency in the GCP area of Selwyn District publicly available, is based on the SCGM 2017 version.

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<sup>14</sup> I'm aware that notified Policy UG-P15 directs that new areas to support industrial activities only occur when a BDCA and FDS demonstrates a need for additional suitable development capacity within the township. This policy is very similar to one recently notified in PC5B in Christchurch City, where I gave evidence cautioning against such a directive policy. A key reason for this was that the Christchurch BDCA reports sufficiency according to four broad quadrants of the city and would not reliably inform the need for up-zoning in a specific centre. The notified policy was later removed in the s42A report. The SCGM differs in that it reports sufficiency for specific townships. Importantly though, UG-P15 specifies a 'BDCA' and not the SCGM per se. There is scope for a BDCA to provide a broader analysis than simply what is in the SCGM, and this may be appropriate with respect to further detail around the Rolleston industrial zone in future updates of that report.

- 37 The SCGM 2017 utilises employment projections (by sector) from the Economic Futures Model (EFM) developed by M.E for the GCP Urban Development Strategy. The model produces projections of employment under a business-as-usual future – i.e., where it is assumed that economic activity continues to grow and locate in the same mix of areas across the region and under the same or similar structure. The projections are not forecasts. They show employment growth based on a range of input assumptions, which are more reliable in the short-term and become less reliable (as with all projections) over the medium and long-term.
- 38 The EFM ran off medium-high population projections for SDC available at the time and produced unconstrained employment projections by sector for Greater Christchurch, including the entire Selwyn District. The EFM relies on a trajectory of past trends (including exports). It assumed limited growth in the primary sector (stable growth in processing for exports). The construction sector projections were based on regional-level outputs of the National Construction Occupation Modelling, which predicted that the Christchurch rebuild would be complete in the medium-term (at the time, this was soon after 2021), followed by a substantial drop in construction and supporting employment across the region. Intermediate demands in the EFM (particularly wholesale, transport, professional services etc) were driven by growth in final demand (i.e., mainly population growth projections of the day).
- 39 Limitations of the EFM were documented and understood by the partner councils. The HBDCA 2018 noted, for example, that the employment projections will not reflect recent policy shifts and supply constraints across the GCP area that may change the trajectory of industrial activity in particular locations. The EFM does not capture, for example, road improvements that make Rolleston even more accessible to central Christchurch or the airport/ports (Lyttleton and Timaru). The Iport Business Park in Rolleston was “*only just developing*” at the time of the HBDCA 2018 (with the EFM based on 2016 employment patterns).
- 40 The limitations of the EFM signal, at the very least, that the demand results of the HBDCA 2018 need to be relied on with care, particularly the medium and long-term results.
- 41 The SCGM 2017 quantifies the percentage share of Selwyn District employment found within B2/B2A/B2B zones in 2016 and holds this share constant over time.<sup>15</sup> Applying these shares to the EFM employment projections, it gives an estimate of total employment growth anticipated to seek a B2/B2A/B2B zone location in Rolleston/Lincoln over the long-term. This approach reflects the mix

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<sup>15</sup> I am uncertain (from the details provided in the SCGM Technical Report) if this is applied at the sector level, or just total combined employment.

of activities enabled in the zones under operative planning provisions.

- 42 That total employment is then converted to demand for floorspace and developable land area.
- 43 The results in the 2018 HBDCA showed 53ha of industrial land demand in the long-term in the GCP area of Selwyn District (Rolleston and Lincoln) inclusive of a competitiveness margin as required by the NPS-UDC.<sup>16</sup> See Table 1 below. This comprised modelled demand for 37ha net zone area or 46ha of gross zone area including roads and services. The competitiveness margin brings this up to 53ha of gross zone demand by 2048.

*Table 1 – Copy of Industrial Zone Demand from the HBDCA 2018*

Table 9: Industrial demand summary for Greater Christchurch (hectares)

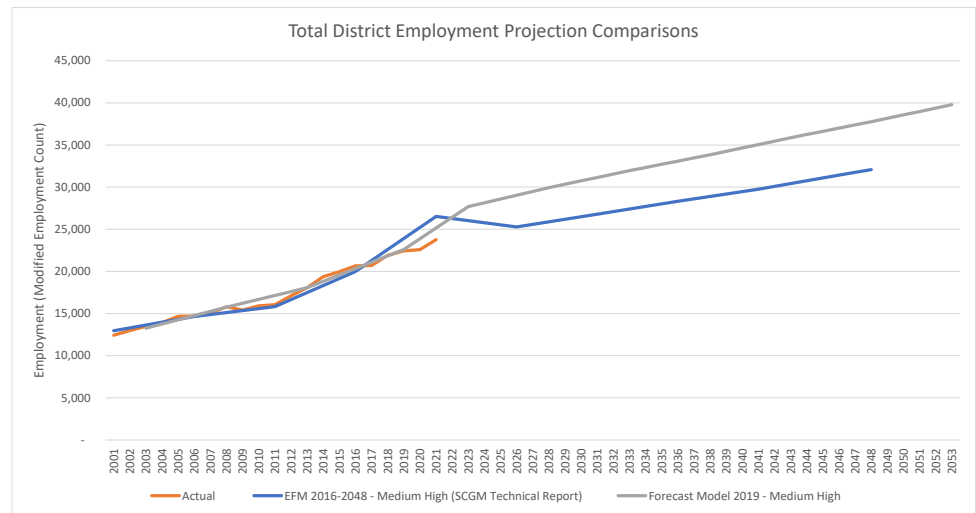
Area	Short (3 years)	Medium (10 years)	Long (30 years)
Christchurch	89	32	482
Selwyn	27	29	53
Waimakariri	90	71	102
Greater Christchurch	206	132	637

- 44 The SCGM showed only 2ha of additional demand between 2022 and 2028 (the medium-term) which translates to annual average demand of less than 0.3ha pa over that period, and a further 24ha of demand between 2029 and 2048 (the long-term) which translates to annual average demand of 1.2ha pa over that period.
- 45 The absence of any meaningful demand growth during the medium-term is attributed to *"the ending of the earthquake rebuild and the reduction in demands for inputs to the rebuild efforts, which has flow on impacts to sectors that tend to locate in industrial zones"* (page 28, HBDCA 2018).
- 46 It is noteworthy that the SCGM 2019 replaced the EFM employment projections with a new employment Forecast Model (also developed by M.E at SDC's request). It is important that projections are reviewed and updated regularly, and this was particularly relevant given SDC's strong growth and other changes in regional and national economic drivers.
- 47 The new projections (which are published by SDC as part of their LTP) show much stronger total employment growth for Selwyn District than in the earlier EFM (Grey line in Figure 2). This includes much steadier growth in industrial sector employment – no longer

<sup>16</sup> My evidence is limited to the Selwyn District results. I have not considered the implications of the EFM for Christchurch City or the SCGM on Waimakariri District (where the same model framework is applied).

showing the slow-down associated with the predicted end of the “rebuild” (Blue line).

*Figure 2 – Comparison of Selwyn District EFM (2016) and Forecast Model (2019) Employment Projections – Medium High Scenario*



- 48 Modelling steps in the 2019 SCGM that convert total employment projections to projections for the B2/B2A/B2B zones in the GCP area of Selwyn District, and then convert those to floorspace and land demand, appear to remain broadly similar to the 2017 SCGM.
- 49 All else being equal, I would therefore expect the increase in employment growth in industrial sectors would show that short, medium and long-term demand for industrial floorspace and land in Rolleston and Lincoln would be higher than reported in the HBDCA 2018, but this change in demand cannot be verified in the absence of published results.

### Capacity Has Been Taken Up

- 50 Table 2 shows that in 2016, the vacant capacity of the B2/B2A/B2B zones in Rolleston and Lincoln was 245ha. Based on my understanding, this is calculated from a desktop analysis that treats lots with less than 50sqm of floorspace as vacant.

Table 2 - Copy of Industrial Zone Capacity from the HBDCA 2018

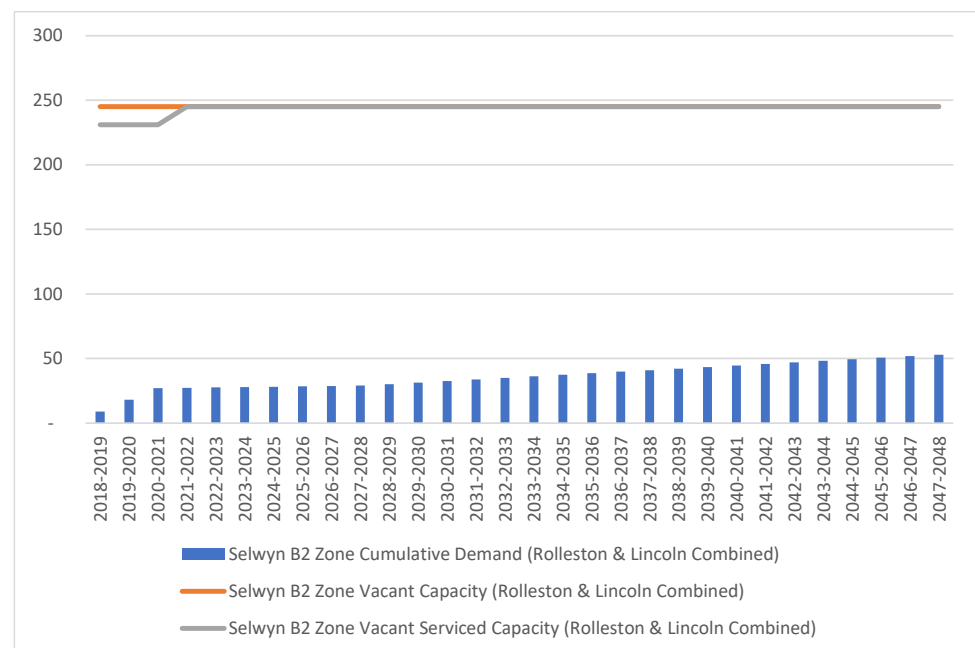
Table 16: Vacant industrial land in Selwyn and Waimakariri districts (hectares)

Area	sub-market area	Vacant	Vacant potential	net capacity	Total net capacity
					354 - 433
Selwyn	N/A	245	27	245-272	
Waimakariri <sup>14</sup>	N/A	109	52	109 - 161	

Source: WDC/ SDC, Market Economics Limited

- 51 When comparing vacant capacity with demand (and setting aside vacant potential capacity discussed further below), Figure 3 shows that the SCGM 2017 did indeed show a significant surplus of industrial zone capacity in Rolleston and Lincoln combined.<sup>17</sup>

Figure 3 – Greater Christchurch Selwyn District Area Industrial Zone Sufficiency as Reported in the HBDCA 2018



- 52 The HBDCA 2018 report stated that "Ongoing stakeholder engagement and monitoring of the uptake of industrial land is

<sup>17</sup> I note that Figure 2 shows sufficiency according to the conventions of the NPS-UDC, which required only a single (current) snap-shot of capacity based on what is plan enabled. Under the NPS-UD, capacity estimates can include proposed zoning in the medium term and identified future growth areas in the long term, but requires that all business capacity is plan enabled, infrastructure serviced/planned and feasible (suitable).

*required to quantify whether this projected over-supply reflects the market realities"* (page 37). I am unsure if that engagement has taken place.

- 53 The HBDCA 2018 report also stated that Council commissioned a company (JLL<sup>18</sup>) to do a ground survey of vacant capacity in the B2/B2A/B2B zones (Rolleston and Lincoln) to identify up-take of industrial sites between the 2016 snap-shot of the SCGM 2017 and the 2018 baseline of the HBDCA. This reduction of capacity was not included in the results with the rationale being that the large scale of sufficiency meant that this marginal change did not impact on the sufficiency conclusions. Based on the surplus in Figure 3, this was a reasonable approach.
- 54 Figure 3 is not however what industrial sufficiency looks like today.
- 55 As stated above, the 2019 update of the SCGM included the JLL up-take findings, removed further capacity that was taken up 2018-2019, and corrected some capacity included in error. This change in vacant zoned capacity for industrial land has not been reported by Council to the best of my knowledge<sup>19</sup>.
- 56 There has been *further* uptake of that vacant capacity between 2019 and today. All else being equal, capacity in the B2/B2A/B2B zones today is lower, and demand (as discussed above) is higher, meaning that sufficiency is also lower.

#### ***Average Workspace Ratio (WSR) – Floorspace Demand***

- 57 A key input to the SCGM which determines floorspace demand is the Workspace Ratio (WSR). This ratio is an estimate of the "*intensity of the use of floorspace in the business zones of the district*" (SCGM 2017 Technical Report, M.E). It is an 'average' ratio that is used for all future employment growth assigned to the B2/B2A/B2B zones (B2 zones) across the district. It is used to convert projected employment in the B2 zones into projected realisable development floorspace demand (based on observed development patterns). The demand results are sensitive to this assumption.
- 58 The SCGM Technical Report sets out how the ratio is developed. The 2017 version<sup>20</sup> of the SCGM adopts a range of 168sqm/job (Low), 120sqm/job (Medium), and 100sqm/job (High) for the combined B2 zones which can be selected by the user. I understand that the 168sqm/job value was the recommended setting. This means for

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<sup>18</sup> Jones Lang LaSalle (2018) Field survey of Business zones in UDS area.

<sup>19</sup> Council is required to continue to monitor the uptake of vacant land in business zones under the NPS-UD.

<sup>20</sup> Version 10 on file.

every new employee estimated to locate in a B2 zone, there is demand for 168sqm of floorspace.

- 59 The 2019 update of the SCGM has a range of 180sqm/job (Low), 169sqm/job (Medium), and 120sqm/job (High) for the combined B2 zones which can be selected in the model. I understand that the 169sqm/job value was the recommended setting – essentially the same ratio as recommended in the 2017 model, despite the 2019 value being the 'Medium' value and the 2017 value being the 'Low' value.
- 60 A limitation of the WSR is that it is an average of the B2 zones across the district that may not represent the nature of industrial development in the B2A zone today, or the direction of anticipated growth in that zone in the future.
- 61 The model sums total floorspace and total employment in a sample of meshblocks for each zone, combining all economic activities present at the time. The meshblocks<sup>21</sup> are sourced from B2 zones in the GCP part of the district (i.e. Rolleston as the Lincoln industrial zone is undeveloped) and in smaller towns in the rest of the district. While the results will be weighted towards Rolleston development and employment trends (being the largest industrial development area), the average ratio is still influenced by the other areas of B2 zone.
- 62 Based on my estimates (and using the 2016 data in the 2017 SCGM), the ratio specifically for Rolleston would be 120% of the district average ratio (i.e. requiring more floorspace per worker) and the ratio calculated for B2 zones in the rest of the district (excluding Rolleston) would be 56% of the district average ratio (i.e. requiring less floorspace per worker). This implies that using an average WSR in the model means that floorspace demand per additional worker is underestimated in Rolleston and overestimated in the rest of the district.
- 63 This difference is not unexpected when one considers that Rolleston is the main industrial zone for the district and so sustains larger businesses and the sectors most likely to be attracted to the larger urban centre (i.e., manufacturing, transport, warehousing etc). In the smaller towns, the B2 zones will contain smaller service businesses that meet the needs of local households and other local businesses.
- 64 I consider that the under-representation of industrial floorspace demand in Rolleston may be more material than that described above, because the sample of meshblocks within the Rolleston B2

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<sup>21</sup> The 2019 SCGM uses SA1s as the spatial unit of employment data instead of meshblocks.



zone extent is likely to be focussed on development and employment patterns in the older, established B2 zone area and not the B2A area.

- 65 The B2 zone has a different look and feel to the B2A zone area now developing in Rolleston (and this is where the vacant capacity is limited). The land parcels in the B2A zone are being offered at much larger sizes, which are attracting much larger businesses. The zone is being promoted for its strategic transport linkages and this is attracting large storage/logistics/warehousing type operators. While I have not analysed it, I anticipate that the B2A zone has a different employment structure than the B2 zone (different mix of sectors) and that these new activities are likely to have much higher floorspace per worker ratios than has historically been seen in Rolleston (or elsewhere in the district).
- 66 Compounding this issue, the district average B2 zone WSR is held constant over the long-term (30 years) in the SCGM. While in many urban economies this would be a reasonable assumption – where the role of the industrial economy and therefore industrial zones is not expected to change considerably over time – this may not be sound for projecting industrial demand in Rolleston given the increased specialisation of the B2A zone in attracting freight focussed manufacturing, storage and transport operations (driven by the inland ports but also the strategic rail and road transport connections of the zone). I do not consider that the static WSR assumption will sufficiently recognise the expected change in the employment structure of the B2A zone (and PC66 area) as it develops over time.
- 67 Of interest, the SCGM Technical Report stated that the assumptions around the WSR were likely to “overestimate floorspace” demand in the district. I think the opposite is more likely to be true for the Rolleston B2A industrial area.

***Average Floor Area Ratio – Land Demand and Capacity***

- 68 The approach for developing Floor Area Ratios (*FAR*) is described in the SCGM Technical Report in terms of its role in estimating floorspace capacity on vacant sites<sup>22</sup>, but it plays an equally important role in converting floorspace demand into land demand by zone<sup>23</sup>. *“The resulting employment in each zone is converted to floorspace demand using the WSR, which is then converted to land demand using FAR”* (SDC Growth and Demand, Appendix 2, M.E Memo).
- 69 The FAR is the ratio of floorspace to land parcel area. In industrial zones, where buildings are typically single storey (although with

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<sup>22</sup> Vacant land area multiplied by the FAR (i.e., 0.45) equals floorspace capacity.

<sup>23</sup> Floorspace divided by FAR (i.e., 0.45) equals land area.

higher than average ceiling heights), the FAR can broadly be thought of as building site coverage (expressed as a percentage).

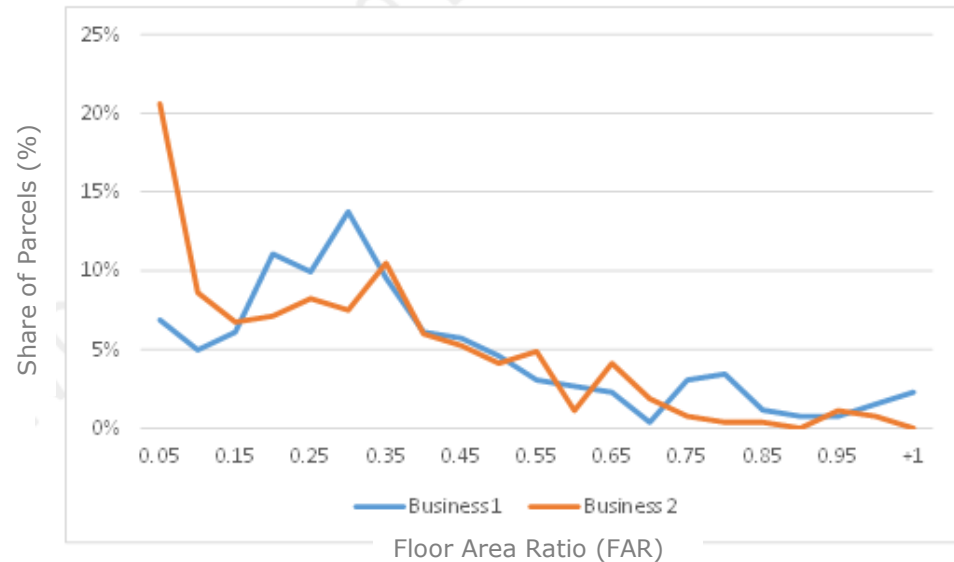
- 70 Like the WSR, the model applies a single average FAR to the B2 zones in the district. The same limitations discussed above for the WSR therefore apply in terms of representing (or not) the future growth in the B2A zone of Rolleston.
- 71 Unlike the WSR, the analysis has been done at a parcel level in each zone to understand the distribution of FARs in each zone type. The analysis *"only assessed properties that have floorspace, i.e., vacant properties have been excluded"* (Technical report). Based on my review of the SCGM 2019, I understand that parcels with less than 50sqm floorspace are treated as vacant, but the FAR analysis goes further and treats parcels with less than a 0.05 FAR (5% site coverage) as vacant. This appears to exclude some relatively large buildings and may (if not already ground truthed) under-represent yard-based activities which have only small ancillary office/on-site buildings relative to land area.
- 72 Figure 4 shows the percentage distribution of FARs in the B1 and B2 zones from the 2017 SCGM (based on 2016 data)<sup>24</sup>. FARs range from 0.05 (indicatively 5% site coverage assuming single storey development) in the combined B2 zone to 1.0+ (indicatively 100% site coverage). The Technical report states that most of the industrial areas (B2 zoned) had a FAR of less than 0.24 (and an average of 0.27) according to 2016 data analysis.

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<sup>24</sup> I do not have an equivalent graph from the 2019 SCGM (update) but I understand the same methodology was applied.

Figure 4 – Copy of FAR analysis from 2017 SCGM (2016 data)

Figure 6.17: Distribution of FAR for Commercial (B1) and Industrial (B2) zones



- 73 A statistical analysis was applied for the 2017 SCGM to identify the FAR associated with different proportions of the cumulative total when ranked in order. The results are shown in Table 3 below copied from the Technical Report.
- 74 It shows the median (middle) and average FAR, as well as the 70<sup>th</sup>, 80<sup>th</sup> and 95<sup>th</sup> percentile. To interpret these percentiles: at the 80<sup>th</sup> percentile, 80% of existing parcels assessed had a FAR of less than or equal to 0.45 (indicatively 45% site coverage). I note that in the 2019 update of the SCGM, the 70<sup>th</sup> percentile, 80<sup>th</sup> percentile and 95<sup>th</sup> percentile FAR were amended to 0.39, 0.47 and 0.56 respectively<sup>25</sup>.

Table 3 – Copy of SCGM 2017 FAR Statistical Analysis (2016 Data)

Figure 6.18: Summary Statistics of FAR for Commercial (B1) and Industrial (B2) zones

Summary Statistics	Median	Average	70th Percentile	80th Percentile	95th Percentile
Business 1	0.29	0.36	0.41	0.52	0.74
Business 2	0.24	0.27	0.36	0.45	0.56

- 75 The Technical Report stated the following for the SCGM 2017: "We consider that the 80<sup>th</sup> percentile for each zone represents an achievable level of development for each zone, specifically, it is an

<sup>25</sup> The median and the average is not already calculated in the 2019 SCGM update, and I have not attempted to generate it.

*observed fact that development has exceeded this level and therefore it is reasonable (conservative) to assume that other parcels in the zone could be developed to this level".* The 70<sup>th</sup> percentile is set as a Low option in the model, the 80<sup>th</sup> percentile is the Medium setting and the 95<sup>th</sup> percentile is the High setting.

- 76 I have some concerns with the decision to limit the model to the 70<sup>th</sup> to 95<sup>th</sup> percentile of FAR (site coverage) for the B2 zone while excluding the average and median from the model and recommending the 80<sup>th</sup> percentile as the preferred setting. It contradicts the finding that the average FAR is just 0.27 (indicatively 27% site coverage) using 2016 data. When it is stated that there are examples where FARs have exceeded the 80<sup>th</sup> percentile, this means that only 20% of all parcels analysed had a FAR of 0.45 or greater – these are the exception and not the norm. Half of all parcels analysed had a FAR of less than 0.24 (24% site coverage).
- 77 While I have not replicated the analysis to estimate if a FAR of 0.45 (later updated to 0.47) is realistic or not in the context of the B2A zone in Rolleston (where significant industrial growth has occurred and is expected), I consider that care is needed in assuming that all vacant sites will achieve this level of site coverage in the future, when the average site coverage in that B2A zone may be significantly less.
- 78 That level of site coverage (when combined with the average WSR) suggests that future industrial growth will not include land extensive or yard based/outdoor storage type activities, which seems unlikely particularly given the rationale of zoning PC66 (to capitalise on the open border with the inland port and its associate rail sidings).
- 79 The SCGM model is very sensitive to the FAR selected. On the demand side, the higher the FAR (and the FAR is already set well above the average for the B2 zones) the lower the industrial land demand will appear when applied to the industrial floorspace demand. For Rolleston, I consider that the industrial floorspace demand estimates are likely to be too low (discussed above), so when the high FAR is applied to a low floorspace demand, then the potential under-estimation is compounded in Rolleston.
- 80 From a capacity perspective, the higher the FAR, the higher the floorspace capacity on vacant industrial sites in the B2 Zones. When compared with floorspace demand in the B2 zone that is potentially underestimated in Rolleston, the greater the surplus of capacity looks.
- 81 Given the sensitivity of both demand and capacity results in B2 zones to the FAR settings in the model (only the 80<sup>th</sup> percentile was ever reported back in 2018), this further highlights the need to take

a precautionary approach on previously published industrial sufficiency results, particularly with respect to Rolleston.

***Vacant Potential Land - Capacity***

- 82 The SCGM reports 'vacant potential capacity' in addition to 'vacant capacity' as shown previously in Table 2. It relates to the net additional capacity that could be developed on a site when existing development is below what could be expected to be realised on that site based on observed development patterns<sup>26</sup>. For example, it is the difference between the actual FAR of a site and the 70<sup>th</sup>-95<sup>th</sup> percentile FAR selected in the model.
- 83 Development in industrial zones is highly variable across a broad range of activities. The 2017 SCGM FAR analysis demonstrated this (Figure 4) with a broad ranging distribution of FARs in B2 zones compared to a more concentrated distribution of FARs in B1 zones (where shop and office space is more substitutable and built form is more controlled by zone standards and rules). This is because industrial zones comprise everything from yards and outdoor storage businesses to workshops, warehousing and factories. Different businesses have unique building and site requirements.
- 84 It therefore makes little sense to me that activities with lower FARs could, or would, build-out their un-utilised site capacity when their current FAR most likely represents their operational and functional needs – particularly in rapidly developing industrial zones like the B2A zone where development is relatively new and often developed under a custom design-and-build sales model.
- 85 Only if an existing business was constrained by its existing floorspace, and they were able to sacrifice yard/ parking/ manoeuvring space to expand the built area (increasing the FAR), would further development on site be likely. This might be more likely in areas where vacant industrial land is very scarce. Where there are opportunities for land development and the market supports churn of business premises, then the decision to invest in expanding the current premises will be weighed up against options to move to another larger premises or build new on a vacant site.
- 86 Based on my experience, vacant potential capacity is a metric not commonly used to date in BDCAs produced elsewhere in high growth/Tier 1 and 2 territorial authorities. Achieving a uniform intensity of development in industrial zones (as implied by the vacant potential capacity metric) is neither an efficient or effective way to cater for industrial employment growth. I consider that this metric should be used with particular care with respect to industrial

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<sup>26</sup> Not to be confused with redevelopment capacity which is the net additional capacity that could be achieved if the site was redeveloped to plan provision maximums. The SCGM/HBDCA does not report redevelopment capacity.

zones (and given little weight in terms of its contribution to industrial sufficiency reporting in my view).

**CURRENT ESTIMATE OF VACANT INDUSTRIAL LAND  
(GREATER CHRISTCHURCH AREA OF SELWYN DISTRICT)**

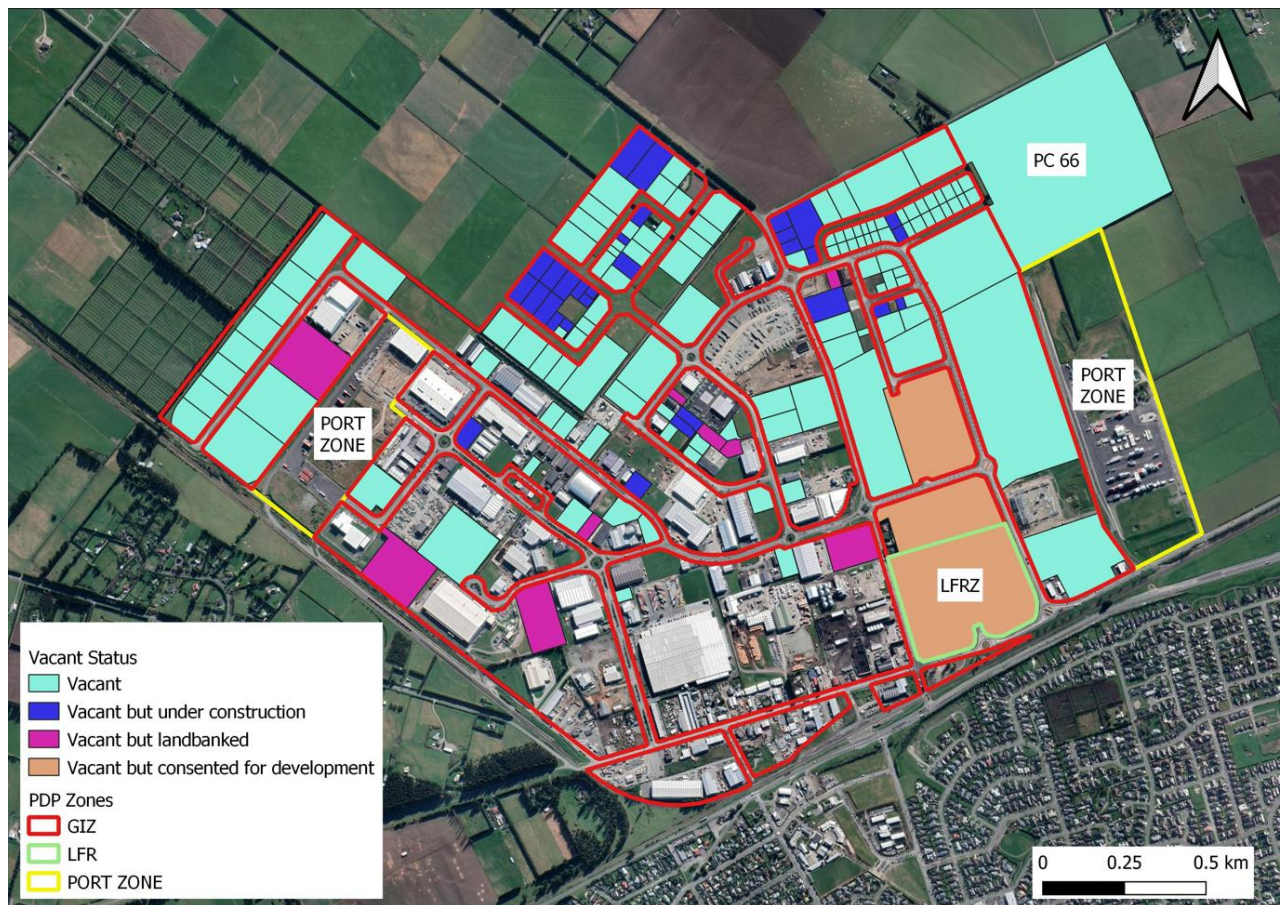
- 87 For this evidence, I have carried out a desktop survey of vacant sites in the Rolleston industrial zones to get an understanding of how vacant capacity might look today. This desktop analysis has been carefully ground truthed by Mr Carter and his team (based on their specific local knowledge of the zone and site visits in July 2022).
- 88 I am unsure if my criteria for vacant sites matches those applied by M.E staff back when the SCGM was first developed. I have not arbitrarily treated parcels with less than 50sqm of floorspace as vacant as this may capture yard-based activities which are a legitimate and common land use in industrial zones. I have focussed on whole sites unless there was a clearly delineated developable area that is not currently being regularly used<sup>27</sup>.
- 89 I have excluded the inland ports from vacant capacity as those are unique sites with fluctuating container storage activities that may at times use more or less of the zone area<sup>28</sup>. My focus is also on operative zoned land, which qualifies as short-term development capacity under the NPS-UD. Because the PDP does not extend the zoned land, my vacant capacity estimates could also be considered to represent medium-term development capacity.
- 90 Figure 5 shows my estimates of the sites that are:
- 90.1 currently vacant;
  - 90.2 currently vacant but under construction (so won't be vacant in the near future);
  - 90.3 currently vacant but owned (land-banked) by existing nearby businesses; and
  - 90.4 currently vacant but have consented development activities.

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<sup>27</sup> In which case, I have manually split some primary land parcels.

<sup>28</sup> The dimension of those sites reflects the length of rail siding able to be created.

*Figure 5 – Current Estimates of Vacant Parcels in the Rolleston Industrial Area (July 2022)*



- 91 I have not shown the Lincoln B2B zone but include it in my analysis below to provide coverage of industrial capacity in the GCP area of Selwyn District (consistent with the scope of the HBDCA 2018).
- 92 Based on my estimates and assumptions and the extent of industrial zoning also considered in the SCGM 2017<sup>29</sup> (Grey block within Table 4 below), there are no vacant parcels left in the B2 Zone in Rolleston, 140ha of vacant developable land in the B2A Zone in Rolleston excluding the LFR precinct (48% of the estimated gross zone area), 12.6ha of vacant developable land in the B2A Zone LFR precinct, and 11ha of developable vacant land in the B2B Zone in Lincoln (79% vacant). This is a combined total of industrial vacant land capacity in the GCP area of Selwyn District of 163ha to meet short-medium term demand (or 151ha excluding the area set aside for LFR).
- 93 This compares, although may not compare directly, with 245ha of vacant industrial land reported in the HBDCA 2018 based on desktop

<sup>29</sup> I.e. excluding the recently operative PC66 now added to the B2A zone.



analysis in 2016 (Table 2 above). This may suggest that vacant capacity has reduced by just under 82ha between 2016 and 2022 (particularly if vacant land assumptions are similarly applied).

*Table 4 – Estimated Vacant Land Capacity in Greater Christchurch Industrial Areas*

Zone Code	Town	Total Zone Parcel Area	Vacant Uncon- ditionally	Vacant Under Con- struction	Vacant Consented for Develop- ment (not under con- struction)	Vacant - Land Banked by Nearby Business	Sub-Total Con- ditionally Vacant	Vacant Uncon- ditionally + Con- ditionally	Share of Zone Uncondi- tionally Vacant	Share of Zone Uncon- ditionally or Con- ditionally Vacant
<b>OPERATIVE ZONING EXCLUDING PC 66</b>										
B2	Rolleston	43	-	-	-	-	-	-	0%	0%
B2A	Rolleston	294	104	12	12	12	35	140	35%	48%
B2A (LFR Precinct)	Rolleston	13	-	-	13	-	13	13	0%	100%
	<i>Sub-Total Rolleston</i>	<i>349</i>	<i>104</i>	<i>12</i>	<i>25</i>	<i>12</i>	<i>48</i>	<i>152</i>	<i>30%</i>	<i>44%</i>
B2B	Lincoln (Approximate)	14	11	-	-	-	-	11	79%	79%
<b>Total Industrial Zones - Greater Christchurch Area</b>		<b>363</b>	<b>115</b>	<b>12</b>	<b>25</b>	<b>12</b>	<b>48</b>	<b>163</b>	<b>32%</b>	<b>45%</b>
<b>OPERATIVE ZONING INCLUDING PC 66</b>										
B2	Rolleston	43	-	-	-	-	-	-	0%	0%
B2A	Rolleston	321	131	12	12	12	35	167	41%	52%
B2A (LFR Precinct)	Rolleston	13	-	-	13	-	13	13	0%	100%
	<i>Sub-Total Rolleston</i>	<i>376</i>	<i>131</i>	<i>12</i>	<i>25</i>	<i>12</i>	<i>48</i>	<i>179</i>	<i>35%</i>	<i>48%</i>
B2B	Lincoln (Approximate)	14	11	-	-	-	-	11	79%	79%
<b>Total Industrial Zones - Greater Christchurch Area</b>		<b>390</b>	<b>142</b>	<b>12</b>	<b>25</b>	<b>12</b>	<b>48</b>	<b>190</b>	<b>36%</b>	<b>49%</b>

Source: LINZ, SDC, Property Guru, M.E, Carter Group (Ground Truthing). Excludes unzoned land in Projected Infrastructure Boundary.

\*Inland ports (B2A Zone) treated as containing no vacant land on the basis that use of this land does not follow typical industrial zone development.

### Plan Enabled Capacity Has Changed

94 Table 4 also shows the effect of PC66 which very recently became operative, adding approximately 27ha of gross vacant B2A zoning to Rolleston (refer to the Blue block in Table 4). Including PC66 in the B2A Zone, the total industrial zoned land area in the Greater Christchurch area is approximately 390ha, or 378ha excluding the LFR precinct, and vacant industrial capacity increases to an estimated 190ha, or 178ha excluding the LFR precinct (with 167ha of this in Rolleston). Net vacant capacity of 190ha (or more accurately 178ha excluding the LFR precinct) is still a significant drop relative to the 245ha reported in 2018 if based on similar 'vacant' assumptions.

95 Table 4 (and Figure 5) provide further zone insight on current vacant capacity in the operative industrial zones (including PC66). This analysis allows understanding on what vacant capacity might look like in the near future (if reassessed) and some of the nuances of industrial land demand and capacity in Rolleston. The following draws on the Blue block in Table 4 which is based on the ODP zoning with inclusion of the PC66 land:

95.1 12ha of the total 190ha of vacant industrial capacity in notified industrial zones (inclusive of PC66) is currently under construction. Very shortly, this means that vacant capacity will decrease by a further 12ha to 178ha once these developments are complete and occupied.



- 95.2 A further 25ha of the total 190ha of vacant industrial capacity is vacant but has been consented for development. This includes all 13ha of the LFR precinct, the Costco site and the parcel of land south of Link Drive and north of the LFR precinct. If these consents are given effect to, this 25ha of B2A Zone may soon need to be reclassified as 'vacant under construction' capacity. In the near future, if developed and occupied as consented, this land will also be removed from vacant capacity. Cumulatively with the land currently under construction, industrial vacant capacity in the Greater Christchurch area will drop to 154ha.
- 95.3 Finally, a further 12ha of the total 190ha of vacant industrial capacity is vacant but owned by nearby existing businesses and land banked for their own future business development. The future expansion of existing businesses onto these parcels (with associated employment growth) is captured as part of the employment projections for Rolleston and is not separate to it. Care is therefore needed in considering this category of vacant capacity and it cannot be discounted in the short-term like vacant land under construction or potentially vacant consented land described above. However, I have included it to point out that this 12ha of land is not available to the wider market, such that it reduces the amount of vacant land available for new or relocating businesses seeking to establish in the Rolleston industrial area.
- 95.4 The truly vacant land that is assumed to be available to the wider market to purchase or lease at present, that is free of any of the conditions above – i.e., is not under construction, is not already consented for development, and is not being land banked by an existing industrial business, equates to 142ha of the 190ha of total vacant capacity. This includes the 27ha of gross capacity recently added through PC66.
- 96 This analysis highlights how a snap-shot of zoned vacant industrial capacity will quickly become out of date in a high growth area such as Rolleston. Vacant capacity is constantly changing as development takes place – hence the need to regularly monitor it under the NPS-UD.
- 97 While I have not included long-term industrial capacity in Rolleston in my high-level analysis, this can include land identified for future business growth in a growth strategy (with the Projected Infrastructure Boundary identified in the CRPS Map A of Chapter 6 meeting that criterion).
- 98 This area adds to long-term capacity able to be included in the SCGM (assuming it has the necessary infrastructure identified and is suitable for development). I note that the northern area now

identifies a hazard overlay in the PDP. I am not sure to what extent this would make that area un-suitable for industrial development. Further, PC66 occupies some of the Projected Infrastructure Boundary, and so was already included in the above short-medium term calculations. Only the balance of the land inside the Infrastructure Boundary in Rolleston is therefore applicable in the long-term. I discuss this further below.

## RESPONSE TO SUBMISSIONS

- 99 In response to **Submitter PC80-0003 (Ms Sadie Scott)**, point 1 of that submission states that a significant portion of the land in the Izone is still available for development. In addition to significant business zones in Hornby and Sockburn, the proposed B2A Zone site at Two Chain Road is therefore not needed.
- 100 While I have not examined development capacity in Christchurch City as part of this evidence<sup>30</sup>, my analysis above shows that the amount of B2A Zone land that is likely to be available to provide for medium to long-term industrial growth is substantially less than what may appear to be undeveloped land. This is because many sites are already consented for development or are being land-banked by existing businesses anticipating future expansion.
- 101 Demand for the industrial land in Rolleston is strong, driven by its strategic location and transport attributes. Take up of remaining vacant land will continue to be steady in my view. I consider that it is timely to ensure that suitable additional industrial land is zoned now (keeping in mind the lag between decision making and lots being released to the market), to provide confidence to the market that growth will not be constrained and to ensure that land that offers further opportunities to create rail sidings is not lost to other competing land uses in the near future. I therefore disagree with the submitter that PC80 is not needed.
- 102 **Submitter PC80-0009 (Environment Canterbury, Mr Parish)**, states that the plan change request is inconsistent with the CRPS on the basis that it sits outside the areas shown on Map A in Chapter 6 for integrated future urban growth.
- 103 On this first point, it is relevant that all of the Business Priority Greenfield Areas in Rolleston have already been zoned, highlighting that Map A is no-longer very forward looking<sup>31</sup>. The development capacity of that zoned land has been discussed in my evidence above.

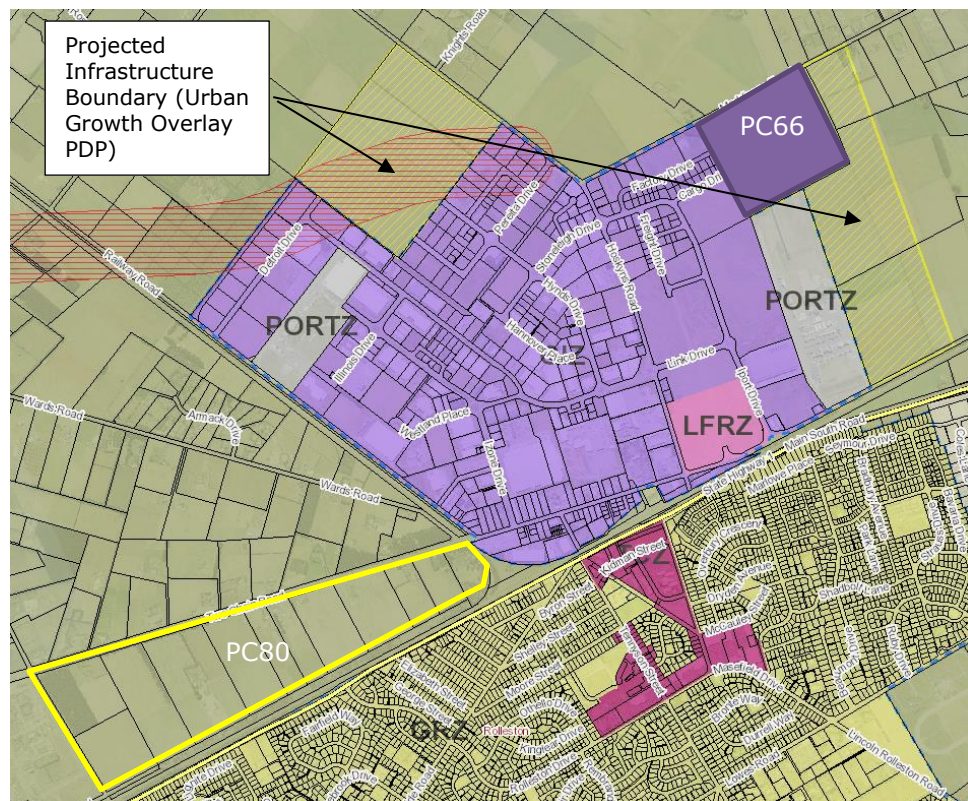
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<sup>30</sup> I accept the evidence of Mr Foy on this issue.

<sup>31</sup> The priority greenfield areas were identified to provide for growth up to 2028.

- 104 That leaves just the area within the Projected Infrastructure Boundary in Map A to provide for long term growth. This is best shown using the online PDP maps where the Projected Infrastructure Boundary is renamed the Urban Growth Overlay (Figure 6). The yellow hatched area to the north-west is estimated at 49ha (gross) and the yellow hatched area to the east is estimated at 51ha (gross). Total gross area of 100ha or indicatively 70-80ha of net developable land once roads etc are provided. This long-term identified capacity is additional to the vacant capacity estimated in the already zoned industrial areas assessed in my evidence above (Table 4).
- 105 Only the eastern future growth area provides the opportunity for industrial development with access to a rail siding (or adjoining an inland port). The eastern area does not follow current property boundaries and it is unknown if both areas are in multiple or single ownership (which can affect the way and rate at which it is brought to market).

*Figure 6 – Projected Infrastructure Boundary in Rolleston (Source PDP Maps, notated as Urban Growth Overlay)*



- 106 As noted above, the north-west area contains an area of the Greendale Fault Avoidance Overlay in the PDP. While industrial development in this area need not be avoided under policy NH-P15 of the notified PDP, rezoning and subdivision of that land is

restricted under policy NH-P18 unless further assessment is carried out and risks can be remedied or mitigated. It is not yet known how the identification and regulation of the fault avoidance area will influence the commercial feasibility (suitability) of developing that land or how likely it is to be realised in the future (relative to alternatives that do not contain natural hazards).

- 107 Despite the constraints to the north-west growth area, I consider that both areas (indicatively 70-80ha net development capacity) could be zoned industrial and developed at some point in the future. However, it is important to take a strategic and long-term view when planning for industrial growth, with Rolleston relatively unique in terms of drivers of demand. I consider that it is necessary to look beyond the growth areas identified in the CRPS.
- 108 The Environment Canterbury submission points out<sup>32</sup> that nothing has triggered a review of the growth areas identified in Map A of Chapter 6 under Policy 6.3.11 (Monitoring and Review). It refers to (relies on) the 2018 Our Space report (essentially the 2018 BDCA) demonstrating a significant surplus of industrial capacity in the GCP area of Selwyn District. With respect to Policy 8 of the NPS-UD, and in the absence of criteria included in the CRPS on what constitutes an out-of-sequence proposal that provides significant capacity and supports a well-functioning urban environment, the submission again relies on the 2018 Our Space findings.
- 109 As discussed in my evidence above, the 2018 Our Space findings are out-of-date, have not been carried out under the NPS-UD, and are based on modelling which has a number of compounding limitations with respect to modelling both demand and capacity for industrial activity in the B2A zone in Rolleston. There is no certainty on what the current sufficiency results are in the short, medium and long-term. Hence, my recommendation that the Our Space/BDCA 2018 results be relied on with considerable care.
- 110 Environment Canterbury considers that the proposal should demonstrate that it meets an identified business demand<sup>33</sup>. I consider that the proposal *is* directly responding to proven demand for industrial development capacity in Rolleston, and specifically demand for zoned land with a unique combination of State Highway and rail network accessibility. I believe the application (including the RFI response) provides sufficient evidence on this. In terms of Policy 8 of the NPS-UD, from an economic perspective I believe the proposed site does provide significant capacity for urban growth and contributes to a well-functioning urban environment.

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<sup>32</sup> Paragraph 7.

<sup>33</sup> Paragraph 10.

- 111 The joint **Submission PC80-0010**, raises similar concerns to Environment Canterbury with regard to the out-of-sequence nature of the proposal and that it should be left to "*wider planning processes to determine the placement of areas*" to meet the long-term needs for expanding industrial zones.
- 112 As discussed above, I consider that the CRPS provides some guidance on the long-term direction of suitable industrial land (with respect to the Projected Infrastructure Boundary) but is not forward looking enough in light of the rapid uptake of capacity in the B2A zone (with Priority Greenfield Areas now all zoned and being developed). Further, the district plan review did not result in any additional industrial zoning to provide for medium term growth. It is therefore my observation that recent 'wider planning processes' that affect Selwyn District are not responding in a way or at a rate that provides long-term certainty to the community – and this is putting the onus on private plan changes such as PC80 to ensure that demand in the medium and long-term can be met.<sup>34</sup>
- 113 The joint submission also states that PC80 "*will result in a decrease in ... property values*" and considers that these negative effects (among others stated) will affect properties on the northern side of Two Chain Road, further north, south of State Highway and district wide. The submission provides no evidence to support this claim (i.e. based on the existing industrial zoned area in Rolleston, or based on effects that have occurred elsewhere).
- 114 I am not aware of any data or evidence in New Zealand that shows that industrial zoning has a widespread negative effect on residential property values. Based on the Census Area Units that surround the existing Rolleston industrial area<sup>35</sup>, the MHUD NPS-UD Market Indicators Dashboard<sup>36</sup> shows that average dwelling sales prices in each area are the highest they have ever been (since 1993 – the beginning of the data time series).

### RESPONSE TO OFFICER'S REPORT

- 115 Paragraph 83 of the S42A report concludes that PC80 is an appropriate location for the expansion of the industrial area; the location offers particular transport benefits; and that the site will assist in fulfilling long-term demand. Paragraph 120 concludes that the proposal meets the criteria of providing significant capacity and

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<sup>34</sup> It is too soon to tell if the FDS 2024 will identify new areas suitable for industrial growth over the long-term.

<sup>35</sup> I.e. West Melton, Rolleston North-East, Rolleston North-West and Rolleston South-East CAUs (2017).

<sup>36</sup> <https://huddashboards.shinyapps.io/urban-development/>

contributes to a well-functioning urban environment. My evidence aligns with these conclusions.

- 116 The S42A report (and Mr Foy's economic evidence appended to the S42A report) identifies "*a lack of quantification of how much industrial land may be required in Selwyn to meet projected demand*" (paragraph 119) but accepts Mr Foy's view that the benefits of providing greater supply outweigh the costs and is consistent with the NPS-UD's intent to supply 'at least' sufficient capacity to meet long-term demand. I agree with these findings but consider the criticism of a lack of demand quantification to be mis-directed.
- 117 The application and RFI response *qualify* demand for the proposed site. I have not *quantified* demand, other than to point out that demand will be higher than quantified in published material (i.e., the BDCA 2018 and Our Space 2018) and that Council's SCGM is likely to be under-estimating land demand in the B2A Zone based on model assumptions I have reviewed.
- 118 In general, I endorse the reliance on Council determined demand analysis carried out under the NPS-UD, so long as the limitations of any demand modelling are understood, and the analysis is kept as up to date as practicable (with the frequency at which new information is published commensurate with the rate of change occurring in the urban environment). It would be inefficient in this case for the applicant to develop an alternative quantification of industrial land demand as this would duplicate complex work already carried out by Council. I believe that Council has more up to date data on industrial land demand in the GCP area of Selwyn District and ideally (and for consistency) this would have been used as a reference point for PC80 if made available.
- 119 Mr Foy's economic evidence is focussed on a peer review of the Brown Copeland and Co Ltd economic report appended to the plan change request. However, relevant to the scope of my evidence – particularly the lack of updated results from the Council's SCGM – Mr Foy states that "*my understanding is, from work undertaken by Formative for SDC, that some additional industrial land is projected to be required to adequately provide for growth in the long-term*" (page 7).
- 120 This is a very important acknowledgement that the Our Space result of a significant surplus of industrial capacity in Selwyn District is no longer valid, and that more recent data shows that that very large surplus has been eroded in a relatively short period of time, to the point that there is now an estimated short fall in the long-term. Given that capacity modelling under the NPS-UD requires that the capacity identified in the Projected Infrastructure Boundary be included, the demand for additional industrial land is over and above

what is identified in Map A of Chapter 6 in the CRPS. This statement by Mr Foy validates my concerns and evidence. It supports the need to provide additional land for industrial growth in Selwyn District. I in turn support Mr Foy's view that supplying that additional industrial land in Rolleston is the most efficient economic outcome for the district.

- 121 In light of Mr Foy's reference to work carried out by Formative on more recent assessment of industrial land sufficiency, a request was put to Council on the 3<sup>rd</sup> October 2022 for any updated information that might be available. Council has in turn supplied a memo prepared by Formative for Council dated 23<sup>rd</sup> December 2021. I received this memo on the 4<sup>th</sup> October having substantially finalised my evidence, but make the following key points on its relevance to my evidence:

121.1 The assessment builds on the updated SCGM 2019<sup>37</sup> (which the author states indicated sufficient industrial capacity), providing further updates through to 2021 necessitated by further progression of the district plan review, recent changes in supply (including proposed private plan changes), rapid growth and uptake of capacity that exceeded the earlier expectations of the modelling, a council survey of vacant land in early 2021 and feedback from key industrial land holders. The purpose of the memo is stated as providing SDC with an understanding of the business land position as of June 2021.

121.2 While the results of the memo have not previously been made public<sup>38</sup>, it confirms that Council has continued (as expected they would) to develop information on the changing demand, capacity and sufficiency of industrial land since Our Space was published.

121.3 The memo acknowledges that recent industrial floorspace growth includes developments that have low employment to floorspace ratios (such as storage activities) – a limitation I have identified in the SCGM assumptions with respect to Rolleston's B2A Zone. It states that even the SCGM 2019 model underestimated development (demand) in the B2A Zone (with the SCGM 2017 therefore significantly underestimating demand). It identifies the changing role of Selwyn's industrial land in the context of the GCP area and that the presence of the inland ports is likely to be a driver of industrial land demand in Rolleston.

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<sup>37</sup> The Our Space results are based on the older SCGM 2017.

<sup>38</sup> Mr Foy did not allude to them for his evidence on PC66.

121.4 While the capacity update is not based on a parcel level analysis, it acknowledges the loss of industrial capacity in the B2A zone for future LFRZ and also the consented Costco site.

121.5 The assessment is for the total district and not just the GCP area. It considers estimates of vacant zoned industrial and, plus the contribution of capacity through plan change 61 and 66. Applying a new uptake rate of 13ha per annum, it estimates that zoned (or expected to be zoned) vacant capacity would last 11 more years<sup>39</sup>. It concludes that *"If no additional industrial land was provided, then there could be a risk of a shortfall in the long run"* (page 15).

121.6 This conclusion did not take account of the 100ha (gross) in the Projected Infrastructure Boundary or PC80. If both of these areas were included in capacity, they estimate sufficiency for 25 years<sup>40</sup> – still not sufficient to meet the NPS-UD requirements for the long-term (i.e. 30 year outlook). An alternative higher rate of land demand is also considered in the memo (19-21ha/annum). Under this scenario, the sufficiency of industrial capacity in the district is reduced to 16-18 years (instead of 25 years).

121.7 The recommendation of the memo is for Council to begin planning for more long-term industrial supply.

## CONCLUSION

122 The CRPS<sup>41</sup> relies on the HBDCA 2018, and in turn the results of the SCGM 2017 in determining that no further industrial land needs to be identified beyond the Projected Infrastructure Boundary in Rolleston to meet projected long-term demand.

123 Those results are now out-dated. There are more current employment projections sitting in a more up-to-date version of that model that show a much higher trajectory of employment growth. If nothing else, this shows that demand over the long-term is now higher. It is also my evidence that assumptions around WSR and FAR in the model are likely to have under-represented land demand in the Rolleston industrial area and over-estimated floorspace capacity in the original 2018 reported results and those assumptions will have the same effect in the latest version of the model.

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<sup>39</sup> The assessment considers the gross zone area of Lincoln's B2B zone, PC91, PC66 (and subsequently the Projected Infrastructure Boundary and PC 80 capacity). If the average uptake rate of 13ha/annum is for developable land area, then the vacant capacity would last for a shorter period than stated as some capacity will be lost to roads etc (potentially 20-30% in greenfield areas).

<sup>40</sup> Ibid.

<sup>41</sup> The same applies to the approach taken in the Selwyn PDP.



- 124 Capacity has also changed, with reductions associated with strong up-take of vacant sites since 2016 and additions to capacity thanks to PC66. The net vacant capacity available for industrial and service activity is however significantly less than reported in 2018, particularly in the short-medium term.
- 125 When combined, these factors mean that the current sufficiency of industrial land capacity in the GCP area of Selwyn District is highly uncertain. Mr Foy has now confirmed (at a high-level only) that based on Formative's work for Council, a shortfall of industrial capacity to meet long-term demand in Selwyn District has now been estimated. This shortfall is set out in the memo supplied by Council on the 3<sup>rd</sup> of October 2022.
- 126 In light of:
- 126.1 strong projected growth in resident households in Rolleston – which will drive a portion of demand for industrial land;
  - 126.2 the projected growth of population in Canterbury and the wider South Island that will drive demand for industrial land for manufacturing, processing, wholesaling, import distribution and freight handling in strategic locations close to Lyttelton Port and Prime Port;
  - 126.3 projected growth in demand for Canterbury's bulk and container-based export products that will drive demand for land for processing, product storage/warehousing, container filling/handling/storage and freight in strategic locations close to Lyttelton Port and Prime Port;
  - 126.4 the limited and diminishing supply of free-hold vacant industrial land capacity in Rolleston;
  - 126.5 high-level confirmation that Council's modelling under the NPS-UD now shows insufficient industrial capacity to meet long-term demand;
  - 126.6 the strategic importance of the proposed site due to its location and orientation relative to the rail network; and
  - 126.7 agreement from economic experts that the economic benefits of the zoning request are expected to outweigh any actual or likely economic costs;
- 127 I support the re-zoning of this land to B2A Zone.

Dated: 5 October 2022



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Natalie Hampson