

Before an Independent Hearings Panel
Appointed by Waimakariri District Council

under: the Resource Management Act 1991

in the matter of: Submissions and further submissions on the Proposed
Waimakariri District Plan

and: Hearing Stream 12: Rezoning requests (larger scale)

and: **Carter Group Property Limited**
(Submitter 237)

and: **Rolleston Industrial Developments Limited**
(Submitter 160)

Statement of evidence of Natalie Dianne Hampson (Commercial
Economics & Housing Sufficiency) on behalf of Carter Group
Limited and Rolleston Industrial Developments Limited

Dated: 5 March 2024

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**STATEMENT OF EVIDENCE OF NATALIE DIANNE HAMPSON ON
BEHALF OF CARTER GROUP LIMITED AND ROLLESTON INDUSTRIAL
DEVELOPMENTS LIMITED**

INTRODUCTION

- 1 My full name is Natalie Diane Hampson. I am the Director of Savvy Consulting Limited and was previously a Director at Market Economics Limited (M.E) from mid-2019 to the end of October 2023. 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 with a particular focus on economic assessment within the framework of the Resource Management Act (*RMA*). Since 2001 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 considerable experience in the field of retail economics, including modelling and assessing commercial centres, their role in urban economies, shopping behaviour (spending patterns and trip behaviour), understanding demand and supply, and assessing the distributional effects of retail development. While at M.E I was involved in the development of their Retail Gravity Model.
- 4 I have also provided evidence on a range of plan changes, submissions and resource consent applications relating to commercial centres in the Greater Christchurch area. This includes Plan Change 5, Halswell North, and Belfast North in Christchurch City and the proposed Large Format Retail Zone and Lincoln Town Centre in Selwyn District. I have a sound knowledge of the Greater Christchurch spatial economy.
- 5 I am familiar with the Submitter's request to rezone land bound by Mill Road, Whites Road, Bradleys Road (the *Site*).
- 6 I was involved in private plan change 31 (*PC31*) to rezone this land under the operative District Plan.

CODE OF CONDUCT

- 7 Although this is not an Environment Court hearing, I note that in preparing my evidence I have reviewed the Code of Conduct for Expert Witnesses contained in Part 9 of the Environment Court Practice Note 2023. I have complied with it in preparing my evidence. I confirm that the issues addressed in this statement of evidence are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to

consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 8 The first part of this evidence is focussed on an assessment of the sufficiency of total housing development capacity in the urban environment of Waimakariri District to meet projected medium-term demand, based on available Council and other data.
- 9 The second part of my evidence is focussed on the appropriateness of the proposed Local Centre Zone portion of the Site. This is assessed based on the economic costs and benefits of the commercial centres enabled by the proposed zoning, including distributional effects on the existing centre network.
- 10 In preparing my evidence, I have reviewed:
 - 10.1 Greater Christchurch Housing and Business Development Capacity Assessments (*HBAs*) 2018, 2021 and 2023 (with the last two limited to Housing Development Capacity Assessments);
 - 10.2 Waimakariri Residential Capacity and Demand Model – IPI 2023 Economic Assessment, Formative, 8 December 2023 (*WCGM 2022*);
 - 10.3 Minute 5: Questions for Mr Yeoman – response, prepared for PC31;
 - 10.4 Review of Formative WCGM22 Development Model, Chris Sexton, Inovo Projects, 30 August 2023 (presented in the Supplementary Evidence of Mr Akehurst, 5th September 2023, PC31);
 - 10.5 Independent Hearing Panel Decision Report, PC31, 27th October 2023;
 - 10.6 The Proposed District Plan (*PDP*);
 - 10.7 The National Policy Statement on Urban Development 2020 (*NPS-UD*);
 - 10.8 WCGM 2022 medium-term and long-term feasible and reasonably expected to be realised capacity by parcel and zone, supplied by Waimakariri District Council 1st March 2024;
 - 10.9 The Waimakariri Rural Residential Strategy, 2019, Waimakariri District Council;
 - 10.10 The evidence of **Mr Akehurst** and **Mr Tim Walsh**; and

10.11 The relevant documents from PC31.

SUMMARY OF EVIDENCE

Development capacity

- 11 While the WCGM 2022 contains detailed housing demand and capacity data at a township/settlement level, results have only been reported for the three main urban townships and the total district residential zones. From this the rest of the district outside the three main urban townships can be deduced and shows a shortfall of capacity in the short/medium-term. Importantly, there are no reported results for the Greater Christchurch urban environment.
- 12 Using capacity data by town/settlement supplied from the WCGM 2022 and more recent and ground truthed capacity estimates for the three main urban townships presented in evidence for PC31, I have calculated the total capacity in the Greater Christchurch urban environment. I conclude that based on WCGM 2022 demand projections (inclusive of the competitiveness margin), there is a shortfall of capacity to meet Greater Christchurch urban environment demand in the medium-term.
- 13 Ōhoka is part of the Greater Christchurch urban environment and the proposed rezoning provides an opportunity to help ensure Council is meeting its obligations under Policy 2 of the NPS-UD to zone at least sufficient capacity to meet projected medium-term demand.

The proposed Local Centre Zone

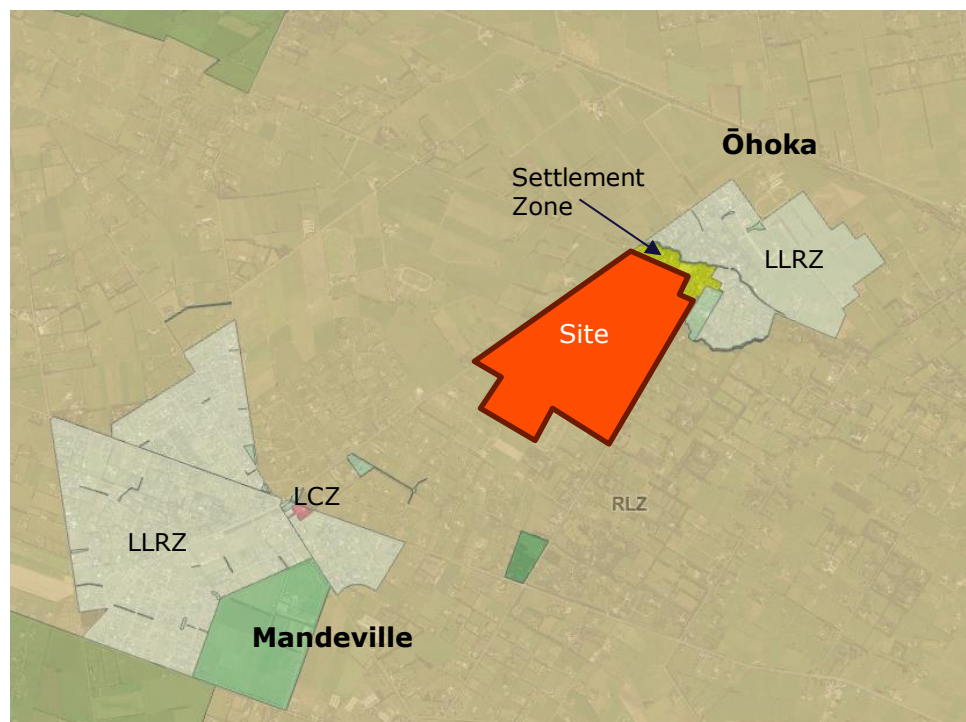
- 14 Using M.E's Food, Grocery and Liquor Retail Gravity Model for Greater Christchurch, I have developed a number of demand and supply scenarios to estimate the potential future effects of the Local Centre Zone land proposed in the rezoning request on the Waimakariri centre network.
- 15 Those scenarios consider a lower and upper dwelling yield for the rezoning request and a corresponding lower and upper supply of food, grocery and liquor employment in the proposed centre that was deemed reasonable for a local centre providing for day to day shopping needs.
- 16 The Gravity Model showed that no centre, including the nearby Mandeville centre, would suffer more than minor adverse effects on centre amenity, vitality and vibrancy based on the food, grocery and liquor store supply assumptions modelled.
- 17 As food, grocery and liquor sector effects are a good indicator of how other convenience retail and service activities may impact the centre network, I conclude that the distributional effects of a new centre that combined a range of convenience activities within the Site would not lead to any significant adverse effects on other centres in Waimakariri District.

- 18 To ensure this outcome, I support a total gross floor area (*GFA*) cap for Local Centre Zone land in the rezoning request of between 2,500-3,000sqm.

SITE DESCRIPTION AND CHARACTERISTICS

- 19 The rezoning request seeks to rezone approximately 156 hectares of land in Ōhoka from Rural Lifestyle Zone to Settlement Zone, Large Lot Residential Zone, and Local Centre Zone. The Site is primarily located at 535 Mill Road. The Site is for the most part bounded by Whites, Mill and Bradleys Road.

Figure 1 – Map showing location of the Site in Ōhoka



- 20 The Site adjoins the proposed Settlement Zone and will extend Ōhoka's residential area south of Mill Road. Figure 1 shows the Site in relation to the existing Ōhoka urban area. The Site, and the wider existing Ōhoka community sits within the 2018 Statistical Area 2 (SA2) called Mandeville-Ōhoka. As indicated by the name, it also includes the Mandeville community.¹
- 21 Between 850 and 1,057 dwellings are estimated to be enabled by the rezoning request as currently proposed.² The lower dwelling yield includes a primary school in the development. The upper

¹ I note that StatisticsNZ has updated the SA2 boundaries for 2023 to split Ōhoka from Mandeville. As Census data is reported by 2018 SA2 boundaries, this is the necessary basis of the M.E Retail Gravity Model demand modelling.

² I am aware that one of the development areas may be suitable for a recreational polo sports ground, however I have treated this area as comprising residential development as per the submission on the Proposed District Plan.

dwelling yield reflects the inclusion of a retirement village in the proposed development and the school site instead occupied by an estimated 42 dwellings. While indicative only, this potential retirement village is estimated to provide 220 residential units and is assumed to replace 55 standard residential sections (so a net increase of 165 dwelling units).³ While there are two further yield scenarios (where there is neither a school or a retirement village (yield of 892 dwellings) or a retirement village and a school (yield of 1,015 dwellings)), these fall in between the lower and upper yield scenarios, and are not further examined.

- 22 The residential areas of the rezoning request will be staged. I have been advised that the first stage of housing could be built and occupied by 2028. This is indicative only. The final stage of housing is estimated to be built and occupied by 2038 – so a 10 year residential development period is assumed for this evidence.⁴
- 23 There is currently no commercial centre in Ōhoka serving existing residents. The one existing retail store is a petrol station with limited convenience and grocery offering. This is located on White’s Road and is proposed to be zoned Settlement Zone in the Proposed Plan. The next closest centre is at Mandeville (Local Centre Zone).
- 24 While I do not have data that shows where residents of Ōhoka currently shop, I do have data that shows which retail centres residents of the wider Mandeville-Ōhoka SA2 visited in 2021. This is based on GPS data that tracks a sample of cell phones over a year.⁵ I have included a map in **Appendix 1** showing the results of that data. I have limited the extent of the map to just those centres in southern Waimakariri District, Christchurch City and northern Selwyn District.⁶
- 25 It shows that Mandeville-Ōhoka residents visit the local Mandeville centre. Large concentrations of visits are also observed in Rangiora, Southbrook and Kaiapoi. There are also concentrations of visits to Northwood and Papanui/Northland’s in Christchurch City, as well as the Christchurch CBD. These patterns confirm expected shopping behaviour, with the Mandeville centre providing for some local convenience shopping needs, with the balance of shopping needs met by higher order centres (which may also be close to places of employment or schools).

³ Indicative yield advised by submitters. I understand that from a traffic generation perspective, 4 retirement households equate to 1 standalone dwelling household. As such, the upper dwelling yield of 1,057 still has a household traffic equivalent of 892 standalone dwellings.

⁴ This may be optimistic and will depend on demand for housing in Ōhoka.

⁵ The GPS data does not indicate spending in centres, only a sustained duration spent at those centres which we define as a ‘visit’.

⁶ While the data does show visits further afield, this is typically associated with domestic travel.

- 26 Spending by Mandeville-Ōhoka SA2 residents will make up a (small) portion of sales in each centre visited. Therefore, I would expect those same centres to experience some reduction in spending if local retail and service supply in Ōhoka was increased to meet more of the residents' needs locally. This change in spending patterns is the basis of assessing retail distributional effects later in my evidence.
- 27 The Outline Development Plan for the rezoning request (set out in the evidence of **Mr Walsh**) locates the centre (Local Centre Zone) fronting Mill Road. I understand that the extent of this proposed Local Centre Zone is indicative. That said, I have been advised by the submitters that it has a gross area of 2.15ha and I have relied on this figure as the starting point of my analysis. The proposed Local Centre Zone is intended to serve not only the needs of the future residents within the Site, but the existing Ōhoka community and the surrounding rural community. This could include some convenience demand from Mandeville residents (particularly for store types/businesses not supplied in the Mandeville Village centre).

ASSESSMENT OF URBAN HOUSING DEMAND, CAPACITY AND SUFFICIENCY IN WAIMAKARIRI DISTRICT AND IMPLICATIONS FOR ŌHOKA

Greater Christchurch Urban Environment within Waimakariri District

- 28 The urban environment within Waimakariri District that forms part of the Greater Christchurch urban environment is defined by Map A in the Canterbury Regional Policy Statement (*CRPS*). Map A is relied on by the *CRPS* and the Greater Christchurch Spatial Plan to implement the NPS-UD. This is discussed in more detail in **Mr Walsh's** evidence.
- 29 The notified *PDP* describes the urban environment of the Waimakariri District more widely to pick up all the towns and settlements of the district both inside and outside of the Greater Christchurch area. It includes all the urban zones including the Large Lot Residential Zone (*LLRZ*).
- 30 Taking that approach, the urban towns and settlements that fall within the Greater Christchurch urban environment are therefore Rangiora, Woodend⁷/Pegasus, and Kaiapoi (which I collectively refer to as the *main urban townships*), and the settlements of Fernside, Mandeville, Ōhoka, Swannanoa, Tuahiwi, Waikuku, Waikuku Beach, Woodend Beach, The Pines Beach and Kairaki.
- 31 Ōhoka is therefore part of the Greater Christchurch urban environment within Waimakariri District. This was also the

⁷ Including Ravenswood.

conclusion of the independent hearings panel for PC31 in their decision report.⁸

- 32 The scope of what is, and what is not, included in the Greater Christchurch urban environment is directly relevant to how housing demand, capacity and sufficiency should be reported for Waimakariri District in the Greater Christchurch HBAs, and in Waimakariri District Council's own housing modelling, which informs the Greater Christchurch HBAs. I discuss this further below within the context of available information on housing sufficiency in Waimakariri District.

Greater Christchurch HBAs – Results for Waimakariri District

- 33 At the time of preparing the notified PDP, the Council relied on the Greater Christchurch HBA of March 2018 which concluded that there was sufficient land zoned for housing in the short-term in the Waimakariri District urban environment, but that there was also potential for emerging shortages in capacity in the medium-term.⁹ Hence, a key focus of the PDP was to provide additional housing capacity in the Waimakariri District urban environment in the form of increased densities in a Medium Density Residential Zone (*MRZ*) and General Residential Zone (*GRZ*) in existing residential areas. As far as I'm aware, the demand, capacity and sufficiency reported in the HBA 2018 was in fact limited to the three main urban townships and not the total urban environment.
- 34 The Greater Christchurch HBA 2021 update (based on the notified PDP but also higher dwelling growth rates) showed sufficient capacity in the short-term, with a larger shortfall in the medium-term with the New Development Areas (*which I refer to as Future Development Areas or FDAs*) excluded. Exclusion of the FDAs accounted for the fact that, at the time of that assessment, those areas were not zoned for residential purposes. However, when the capacity of FDAs was included in the medium-term calculations, there was sufficient development capacity. This approach signalled the potential for FDAs to be live zoned (where not constrained for residential development) to address a medium-term shortfall. Again, as far as I'm aware, the demand, capacity and sufficiency reported in the HBA 2021 was in fact limited to the three main urban townships.
- 35 The Greater Christchurch HBA 2023 update estimated a small surplus of urban capacity for housing demand over the medium-term for the Waimakariri District (+350 dwellings). As with the preceding HBAs, this result was based on the Council's Capacity for Growth Model (*WCGM*). The latest version of that model (2022) took into account the additional capacity enabled by the PDP including that which was enabled through Variation 1 as Council's response to implementing Medium Density Residential Standards (*MDRS*).

⁸ Independent Hearing Panel Decision Report on PC31 dated 27 October 2023, paragraph 53.

⁹ S32A – Residential, page 11.

Variation 1 live zoned some notified FDAs to increase zoned greenfield capacity. The HBA 2023 accounted only for demand, capacity and sufficiency in the three main urban townships (as confirmed by the capacity figures reported by Formative in 2023).¹⁰

- 36 Sufficiency of housing capacity does not need to be reported at a location level according to clause 3.2 of the NPS-UD, but HBAs are required to assess demand and capacity according to locations within the urban environment (clauses 3.24 and 3.25 of the NPS-UD). In that context, I consider that sufficiency can and should be reported at the location level. The WCGM 2022 (developed for Council by Formative) does this, even if the Greater Christchurch HBAs have not reported this level of detail for Waimakariri District. The following section is therefore based on the more detailed WCGM 2022.

Capacity and Demand Modelling in the WCGM 2022

- 37 While the HBA 2023 indicated a medium-term capacity surplus of 350 dwellings for Waimakariri's combined main urban townships, the report for the WCGM 2022¹¹ showed a larger medium-term surplus of 970 plan enabled, infrastructure served, feasible and reasonably expected to be realised capacity for net additional dwellings (herein referred to as '*feasible and RER capacity*'). This increase is due to using a lower household demand projection for the main urban townships than in the HBA 2023 (i.e. 4,970 in the medium-term including the competitiveness margin¹² compared to 5,600) and otherwise keeping the feasible and RER capacity the same as reported in the HBA 2023.
- 38 Councils can adopt a preferred growth projection for the purpose of modelling housing demand and sufficiency under the NPS-UD,¹³ and as such, while different from the Greater Christchurch HBA 2023, I have accepted the demand projection contained within the WCGM 2022 as a valid scenario of projected dwelling growth (inclusive of the required competitiveness margin) for the purpose of my analysis below.¹⁴
- 39 Table 1 provides a high-level summary of demand and feasible and RER capacity for housing across Waimakariri District, at the level of

¹⁰ Waimakariri Residential Capacity and Demand Model – IPI 2023 Economic Assessment, Formative, December 2023.

¹¹ Waimakariri Residential Capacity and Demand Model – IPI 2023 Economic Assessment, Formative, December 2023.

¹² The medium-term competitiveness margin is 20% (NPS-UD Clause 3.22).

¹³ NPS-UD Clause 3.24(5).

¹⁴ It is noted that in his evidence for PC31 (Summary Statement, 7 August 2023), Mr Yeoman for the Council stated that he considers that demand (including the competitiveness margin) in the urban environment of Waimakariri District could be within the range adopted in the WCGM 2022 and the HBA 2023 (paragraph 81).

detail reported by Formative for the WCGM 2022. The model assumes:

- 39.1 that 79% of district wide demand for housing will be for the combined residential zones located in Rangiora, Kaiapoi and Woodend/Pegasus (the main urban townships);
- 39.2 that 92% of the feasible and RER housing capacity provided by the PDP in residential zones over the medium-term is provided within the main urban townships; and
- 39.3 that 91% of housing demand in the medium-term across the district is for standalone dwellings, with just 9% of demand for attached dwellings.

Table 1 – Summary of WCGM 2022 Short/Medium-Term (2023-2033) Results (Formative, Dec. 2023)

Residential Zones by Location	Parameter	WCGM 2022 Results
Rangiora	Demand + Margin	1,260
	Feasible and RER Capacity	2,451
	Sufficiency	1,191
Kaiapoi	Demand + Margin	1,230
	Feasible and RER Capacity	1,287
	Sufficiency	57
Woodend/Pegasus	Demand + Margin	2,480
	Feasible and RER Capacity	2,196
	Sufficiency	- 284
Total Urban Area *	Demand + Margin	4,970
	Feasible and RER Capacity	5,934
	Sufficiency	964
Rest of District	Demand + Margin	1,290
	Feasible and RER Capacity	546
	Sufficiency	- 744
Total District	Demand + Margin	6,260
	Feasible and RER Capacity	6,480
	Sufficiency	220

Source: Formative, December 2023. * This is just the sum of the three main urban areas, not all residential zones in the Greater Christchurch Urban Area within Waimakariri District.

- 40 In terms of results, the WCGM 2022 shows that across the main urban townships of Rangiora, Kaiapoi and Woodend/Pegasus, there is a surplus of capacity of just under 970 feasible and RER dwellings. For the district overall, there is a smaller surplus of 220 feasible and

RER dwellings to meet demand growth (inclusive of the margin) over the next 10 years.

- 41 The WCGM 2022 shows that the PDP generally is supplying at least sufficient zoned capacity to meet projected housing demand growth across the district, including at least sufficient capacity to meet projected demand across the main urban townships in the short/medium-term (as required by Policy 2 of the NPS-UD). However, it is not providing sufficient feasible and RER capacity in all locations of demand, including in:
- 41.1 Woodend/Pegasus, where there is an estimated shortfall of 284 dwellings in the short/medium-term (i.e. between 2023 and 2033). I note, Formative describe this as a technical shortfall driven only by the addition of the competitiveness margin;¹⁵ and
- 41.2 in the rest of the district residential zones outside of the main urban townships, where there is an estimated capacity shortfall of 744 dwellings in the short/medium-term.
- 42 As is evident from the Formative 2023 report on the WCGM 2022 results summarised in Table 1, there has been no reporting of housing sufficiency for the Greater Christchurch urban environment within the district as would be expected under the NPS-UD (and CRPS). There are only results for the three main urban townships, the combined three main urban townships and the total district. The combined residential zones in the rest of the district can be deduced for the reported results. The rest of the district includes towns/settlements inside the Greater Christchurch urban environment and beyond that boundary (such as Loburn, Ashley, Cust, West Eyreton, Sefton and Oxford).
- 43 This is not to say that the results for the combined Greater Christchurch urban environment cannot be calculated in the WCGM 2022, as the model contains all the necessary detail. Rather, it has just been a decision by Formative and/or Council to focus on the three main urban townships in their reporting.
- 44 I have recently been supplied capacity data from the WCGM 2022 by town/settlement.¹⁶ Table 2 compares a summary of that short/medium-term data alongside the feasible and RER capacity shown in Table 1 above. It shows that the feasible and RER capacity that was reported (or more precisely deduced) as being in the rest of the district outside the main urban townships (546 dwellings) is in fact made up of:

¹⁵ Formative, December 2023, page 35.

¹⁶ Mr Akehurst also has this data, having received it for PC31.

- 44.1 capacity for 230 dwellings in rest of the Greater Christchurch urban environment,¹⁷ and
- 44.2 capacity for 316 dwellings in the rest of the district (outside the Greater Christchurch urban environment).¹⁸
- 45 According to WCGM 2022, the Greater Christchurch urban environment therefore has feasible and RER dwelling capacity of 6,164 dwellings in the short/medium term (95% of total district residential zone capacity).

Table 2 – More detailed breakdown of WCGM 2022 short/medium-term feasible and RER dwelling capacity by township/settlement

Urban Area/Township	Short/Medium-Term Feasible & Reasonably Expected Dwelling Capacity (n)	
	WCGM 2022 Reported Urban Environment	WCGM 2022 Applied to Greater Christchurch Urban Environment
Rangiora	2,451	2,451
Kaipoi	1,287	1,287
Woodend/Pegasus/Ravenswood	2,196	2,196
SUB-TOTAL MAIN URBAN TOWNSHIPS	5,934	5,934
Fernside	-	-
Mandeville	-	-
Ohoka	-	21
Swannanoa	-	-
Tuahiwi/SPKN Zone**	-	140
Waikuku	-	-
Waikuku Beach	-	69
Pines/Kairaki *	-	-
Woodend Beach *	-	-
SUB-TOTAL REST OF GREATER CHRISTCHURCH URBAN ENVIRONMENT	-	230
TOTAL URBAN ENVIRONMENT	5,934	6,164
Rest of District Urban Areas ***	546	316
TOTAL DISTRICT URBAN AREAS	6,480	6,480

Source: Waimakariri District Council, WCGM 2022

* While listed as being in the WCGM 2022 (Appendix A, Formative, 2023), there is no data - therefore assumed no capacity.

** The WCGM 2022 describes this Tuahiwi as a Settlement Zone in the PDP, but there is only the Special Purpose - Kainga Nohoanga Zone. I have assumed these might be one in the same.

*** Includes Loburn, Ashley, Cust, West Eyreton, Sefton and Oxford outside the Greater Christchurch Urban Environment.

- 46 I have a number of concerns with the short/medium-term capacity estimates contained in the towns/settlements that are not the three main urban townships summarised in Table 2. I discuss concerns with the capacity of the three main urban townships separately below.
- 47 In the time available,¹⁹ I have focussed my review on the capacity estimates for the LLRZ in the data and have not run any checks on

¹⁷ Mr Akehurst's evidence refers to this as Area 2.

¹⁸ Mr Akehurst's evidence refers to this as Area 1.

¹⁹ I only received the data on the 1st March 2024.

the General Residential Zone or Settlement Zone. The LLRZ is notified in Fernside, Mandeville, Ōhoka, Swannanoa and Waikuku within the Greater Christchurch urban environment, and in Oxford, Ashley, West Eyreton and Loburn outside the Greater Christchurch urban environment. However, the WCGM 2022 assumes no feasible and RER capacity in any of these zone locations in the medium-term, and only capacity in the long-term in this zone.²⁰

- 48 This is despite the growth of rural residential housing being a significant resource management issue for the district, and consent data showing steady supply patterns, particularly in the east of the district.²¹
- 49 To me, this seems a key error in the WCGM 2022, and one that can only be explained by Formative.²² As such, I think the sub-total of feasible and RER dwelling capacity in the short/medium-term in the rest of the district outside the three main urban townships could be higher (in the order of 692 instead of 546 reported, with the capacity in the rest of the Greater Christchurch urban environment outside of the three main urban townships in the order of 333 instead of 230). I base these increases on the capacity reported in the long-term for those same LLRZ parcels.
- 50 I return to the WCGM 2022 capacity in the rest of the Greater Christchurch urban environment further below.

Capacity Modelling Tested in PC31 & Implications for Sufficiency (Main Urban Townships)

- 51 Objective 7 of the NPS-UD requires councils to have robust information about their urban environments. In the context of that objective, it is noted that the WCGM 2022 feasible and RER capacity results for the three main urban townships were a key focus of the evidence in PC31. That evidence was presented in August 2023 and a decision was issued at the end of October 2023.
- 52 In short, PC31 evidence by Mr Sexton at Inovo Projects (Inovo) showed a more current (August 2023) and ground truthed assessment of short/medium-term capacity in the main urban

²⁰ I have also found a number of parcels missing from the capacity results for the LLRZ and LLRZO that would appear to yield additional dwellings based on Formative's feasible and RER lot size of 6,000sqm. There is insufficient detail in the data I have been supplied to work out why these parcels have been excluded. This may mean the reported large lot capacity is even more conservative than reported.

²¹ Waimakariri District Rural Residential Strategy, 2019.

²² While unconfirmed, it may be that Formative have applied the same commercial feasibility assumption to the LLRZ in the medium-term as they have with the rest of the urban zones. If this is the cause of the zero capacity, I consider this inappropriate as rural residential housing is typically developed by owner-occupiers and not commercial developers. As such, different assumptions need to be applied (with the majority of plan enabled capacity likely to be reasonably realised).

townships than that presented in the WCGM 2022 which was carried out in August 2022.²³

- 53 Instead of a total urban surplus of 964 dwellings as estimated by Formative (Table 1), the Inovo assessment indicated potential for a shortfall of 609 dwellings. Key reasons for the significant difference in figures (i.e. a drop of capacity equating to 1,573 dwellings) estimated by Inovo include:
- 53.1 Further take-up of dwellings – i.e. some vacant sections as well as houses that were under construction at the time of the Formative capacity assessment (August 2022) were developed/completed and occupied (so are no longer counted as capacity in August 2023).²⁴
 - 53.2 Removal of areas that cannot be developed for housing but were included in the WCGM 2022 as providing housing capacity (reserves, council facilities, pre-schools, churches, land with covenants or encumbrances etc).
 - 53.3 Adopting different yields in some greenfield areas based on publicly available developer information or consents.²⁵
 - 53.4 Applying a greenfield yield based on the CRPS net density approach (deducting 12.5% of gross area for stormwater management and then multiplying remaining land by 15 dwellings/hectare). This compared with Formative’s approach of removing 25% of gross land area for all infrastructure (including roads) and applying feasible and RER lot sizes for each zone.
 - 53.5 Physical inspection of sites identified as vacant or providing infill capacity.
- 54 The Independent Hearings Panel Decision Report on PC31 accepted evidence demonstrating *“the limitations of the modelling exercise undertaken by Formative, due to the fact that it presents a theoretical picture of development capacity and was not extensively ground truthed by Formative. We conclude on the evidence of Mr Sexton, Mr Walsh and Mr Akehurst that there is a very real likelihood that the model has overstated residential capacity”*

²³ I understand that Mr Sexton has provided a further update on his PC31 evidence for the submitters. This is also relied on in Mr Akehurst’s evidence. For consistency with my analysis for other submitters, I rely only on Mr Sexton’s PC31 findings.

²⁴ To be clear, change in numbers associated with take-up of capacity should not be interpreted as an error or limitation of the model.

²⁵ Formative also identified ‘developer yields’ for several greenfield areas but did not adopt them in the WCGM 2022 (either adopting a higher or lower figure). Inovo indicate different ‘developer yields’ for some of the same greenfield areas. I have not sought to further validate either set of assumptions but adopt the Inovo figures on the basis that they are more recent and may reflect changes made to developer proposals.

(paragraph 81). The Panel “strongly recommend that ... Council take steps to review the calculations provided by Formative and review realisability of the areas currently identified for future urban growth within the district” (paragraph 84). As discussed in **Mr Akehurst’s** evidence, Formative have adhered to the same WCGM 2022 results irrespective of the advice in the PC31 Decision Report.²⁶

55 Table 3 provides the high-level breakdown of the WCGM 2022/Inovo assessment by township from PC31.

55.1 In Rangiora, Inovo remove capacity for 463 dwellings, which creates a smaller medium-term (10 year) surplus of 728 dwellings.

55.2 In Kaiapoi, Inovo remove capacity for 314 dwellings, which results in a shortfall of 257 dwellings rather than a surplus of 57 over the next 10 years.

55.3 In Woodend/Pegasus, Inovo remove capacity of 796 dwellings, further increasing the shortfall in 10 years’ time from 284 to 1,080 dwellings.

Table 3 – Summary of WCGM 2022 Medium-Term Capacity Results v Inovo Projects Results

Residential Zones by Location	Parameter	WCGM 2022 Results *	Inovo Projects Results **	Difference
Rangiora	Demand + Margin	1,260	1,260	-
	Feasible and RER Capacity	2,451	1,988	- 463
	Sufficiency	1,191	728	- 463
Kaiapoi	Demand + Margin	1,230	1,230	-
	Feasible and RER Capacity	1,287	973	- 314
	Sufficiency	57	- 257	- 314
Woodend/Pegasus	Demand + Margin	2,480	2,480	-
	Feasible and RER Capacity	2,196	1,400	- 796
	Sufficiency	- 284	- 1,080	- 796
Total Urban Area *	Demand + Margin	4,970	4,970	-
	Feasible and RER Capacity	5,934	4,361	- 1,573
	Sufficiency	964	- 609	- 1,573

Source: Formative, December 2023. * This is just the sum of the three main urban areas, not all residential zones in the Greater Christchurch Urban Area within Waimakariri District.

** Source: Supplementary Evidence of Mr Akehurst. Adopts WCGM 2022 demand + margin and Inovo capacity estimates.

56 Formative provided a number of caveats to the ‘theoretical’ or ‘technical’ shortfall of capacity in Woodend/Pegasus in their model which suggests it isn’t an issue that necessarily needs to be addressed by Council in the short/medium-term. I rely on the PC31 evidence of Inovo when it comes to feasible and RER capacity as at

²⁶ Mr Akehurst’s evidence, paragraph 16.

August 2023 for the three main urban townships. There is clear evidence that the medium-term shortfall in Woodend/Pegasus is not 'theoretical', is much larger than assessed at the time of the WCGM 2022, is rapidly increasing and sits alongside a shortfall in Kaiapoi in the short/medium-term.

- 57 Irrespective of market preferences for substitute locations, Table 3 shows that only a portion of unmet demand in Woodend/Pegasus and Kaiapoi could be provided for in Rangiora before it too has insufficient capacity. Hence, the overall shortfall in the combined main urban townships according to Inovo.
- 58 While Inovo's evidence for PC31 did not consider capacity in other residential zones beyond the main urban townships, as noted above, Formative has already estimated a shortfall in the rest of the Waimakariri district's residential zones. Combined with Inovo's overall estimated shortfall across the main urban townships, this means there is a feasible and RER capacity shortfall across the whole district of around -1,353 dwellings, and not a surplus of 220 dwellings as reported by Formative (Table 1).

Determining a shortfall in housing capacity in the Greater Christchurch urban environment

- 59 As set out above, a shortfall of short/medium-term capacity can be calculated for the rest of the district outside of the three main urban townships using the WCM 2022 results published by Formative. This is based on WCGM 2022 demand in this 'rest of district' area of 1,290 (inclusive of the competitiveness margin) and capacity of 546 feasible and RER dwellings, to give a shortfall of 744 dwellings.
- 60 Even if that capacity estimate is conservative (due to no capacity being included in the LLRZ in the short/medium-term discussed above), and a more accurate picture of LLRZ capacity was added back into the data, the WCGM 2022 would still show a shortfall in the 'rest of district' by my estimates.
- 61 What we don't know, is whether there are catchments within the 'rest of district' that have sufficient capacity relative to demand for that catchment (a surplus) and other catchments in the 'rest of district' that have a large shortfall. This is because the overall shortfall for the 'rest of district' *could* (in theory) be the net result of a small surplus and a larger shortfall (i.e., +2 and -6 = -4).
- 62 Of key interest for this evidence is determining the sufficiency of the Greater Christchurch urban environment in the short-medium term which is not reported. I do not have dwelling demand data from the WCGM 2022 to compare against the feasible and RER dwelling capacity data I have for the Greater Christchurch urban environment.²⁷

²⁷ I understand that this is contained in Mr Akehurst's evidence.

- 63 However, I do not need that demand data to be confident that there would be a capacity shortfall in the rest of the Greater Christchurch urban environment outside the main urban townships. This is because you would only need 18% of the demand in the 'rest of district' calculated in the WCGM 2022 (i.e., 1,290 inclusive of the margin) to be located in this catchment over the medium-term before the modelled capacity of 230 dwellings was consumed.
- 64 Conversely, even if the capacity was higher at around 333 to account for likely capacity in the LLRZ in this catchment, this would only require 26% of 'rest of district' demand to be located in this catchment before zoned capacity was used up.
- 65 These shares of required demand are well below the relative share of existing dwellings in this catchment and therefore well below the catchment's reasonable share of future growth in the medium-term. While I have not quantified this, the shortfall outside of the main urban townships but within Greater Christchurch could (and should) be verified by a more transparent inspection of the WCGM 2022.
- 66 Importantly, this means that the WCGM 2022 shortfall in the 'rest of the district' is not masking a small surplus in the Greater Christchurch urban environment outside the main urban townships (for example) and a larger shortfall in the area outside Greater Christchurch (to result in a net shortfall as hypothesised above), or vice versa. It seems apparent that there is a shortfall in both parts of the 'rest of district' in the short/medium-term.
- 67 Relying on the Inovo capacity PC31 results from August 2023 which show a shortfall of capacity in the main urban townships in the short-medium term when compared with WCGM 2022 demand for that location, this means that while there may be at least sufficient capacity zoned in Rangiora, there is very likely a:
- 67.1 a shortfall across the three main urban townships combined;
 - 67.2 a shortfall in the rest of Greater Christchurch urban environment outside the main urban townships;
 - 67.3 therefore, a shortfall in the total Greater Christchurch urban environment;
 - 67.4 a shortfall in the rest of the district (rural environment) beyond the Greater Christchurch urban environment; and
 - 67.5 therefore, a shortfall in the total district in the short/medium-term.
- 68 While **Mr Akehurst** has presented evidence on revised dwelling demand projections from those contained in the WCGM 2022²⁸, and

²⁸ Which I have adopted for the purpose of my evidence.

relies on **Mr Sexton's** latest evidence on capacity rather than Inovo's PC31 figures, his alternative assessment reaches the same conclusions with regards to the Greater Christchurch urban environment and total district shortfalls in the short/medium-term.

CONCLUSIONS ON HOUSING SUFFICIENCY IN THE URBAN ENVIRONMENT

- 69 The Greater Christchurch urban environment is clearly delivering locations, dwelling types and dwelling prices that appeal to a large share of households seeking residential properties in the Waimakariri District. In light of the shortfall in capacity in the urban environment (and district overall), and a strong rate of demand growth, I consider that the Council needs to zone additional land in in the urban environment to meet its obligations under Policy 2 of the NPS-UD (to ensure sufficiency), Policy 1a(i) (to enable a variety of homes that meet the needs of households in terms of type, price and location) and Policy 1d (to support the competitive operation of land and development markets).
- 70 In the context of that requirement, the Ōhoka rezoning proposal provides an opportunity to help address the need for at least sufficient capacity zoned in the Greater Christchurch urban environment.

APPROACH TO ESTIMATING THE DISTRIBUTIONAL EFFECTS OF THE PROPOSED LOCAL CENTRE ZONE

- 71 The focus of this evidence is to estimate the potential retail distributional effects of the proposed Local Centre Zone in the rezoning request on the existing centre network. While the Local Centre Zoned land can be expected to include some non-retail businesses – particularly commercial service type activities – these activities tend to be of secondary concern in managing adverse effects on centres, with centre amenity, vitality and vibrancy most commonly linked to the presence and performance of the retail activity. That said, I still consider the combined effects of retail and complementary service activity potentially enabled in the rezoning request on the centre network in my conclusions.
- 72 In order to assess the retail effects of developing the proposed commercial zoned land I have adapted M.E's *Retail Gravity Model* for Greater Christchurch.²⁹ This model has been calibrated to match the approximate 2021 market situation across the main centres of Waimakariri District, Christchurch City and Selwyn District (the *Study Area*). Using this calibrated baseline, changes in the location and scale of demand and supply can be made, with the model

²⁹ At the time of carrying out the gravity modelling for this evidence, I was a Director of M.E.

estimating how this impacts the performance of existing centres over time.

Food, Grocery and Liquor Retail Modelling

- 73 M.E's Retail Gravity Model comprises 5 Sub-models to reflect different groups of retail store types – which often generate different types and frequencies of shopping patterns (so are best modelled separately). I have focussed on running the 'Food, Grocery and Liquor' Sub-model.³⁰
- 74 The reason for this is that supermarkets (or large grocery stores) in particular, play a core role in the functional amenity delivered by centres – with food shopping typically the most frequent of all shopping trips. Supermarkets are anchor stores, around which other retail and commercial service activities often seek to co-locate. The customer foot-traffic and cross shopping stimulated by food and grocery stores (and especially supermarkets) is key to providing investment certainty for smaller stores considering whether to establish in a centre, and in helping to sustain the turnover of those complementary activities.
- 75 The Supervalu supermarket in the Mandeville centre and the FreshChoice supermarket in the Oxford centre are, for example, the anchors of those centres. Similarly, I consider that a supermarket is preferable (if not essential) to support the viability and functional amenity of the proposed Local Centre Zoned land in the Site. A supermarket and some additional small format food and liquor stores therefore form the supply scenario that I have run in the 'Food, Grocery and Liquor' Sub-model for this evidence. In doing so, I capture the effects of the largest store likely to occur in the rezoning request, along with a mix of other food and liquor stores that could be expected in a convenience-based centre.
- 76 In my experience, supermarkets (or large grocery stores) provide the most realistic indication of a centre's trade catchment³¹ and the distributional effects of food, grocery and liquor activity provide a sound basis for inferring the distributional effects of most convenience retail and commercial service activities.
- Calibrating the Food, Grocery and Liquor Retail Sub-Model**
- 77 As stated above, the M.E Retail Gravity Model for Greater Christchurch is calibrated to a 2021 base year. This means that estimated demand for food, grocery and liquor retail arising from households and businesses across all SA2s³² in Waimakariri,

³⁰ The ANZSICs in this retail category include 'Supermarket and Grocery Stores', 'Fresh Meat, Fish and Poultry Retailing', 'Fruit and Vegetable Retailing', 'Liquor Retailing', and 'Other Specialised Food Retailing'.

³¹ I.e., the area from which it draws regular customers.

³² Applying 2018 SA2 boundaries.

Christchurch and Selwyn in that year closely matches the sales in food, grocery and liquor stores in that Study Area in 2021.³³

- 78 In recognition that some centres have very localised catchments, and some have district or even region-wide catchments (in the case of the Christchurch CBD for example), calibration of a Gravity Model requires different attractiveness's to be set for each centre. The higher the attractiveness, the more that centre pulls in spend (and therefore draws from a wider catchment). Suburban convenience centres tend to have only low attractiveness settings because they need only draw demand from a localised catchment. Similarly, rural centres also tend to have low attractiveness settings, as they don't need to work very hard to attract demand (even from a broad area) because there are very few competing centres (shopping alternatives).
- 79 The Food, Grocery and Liquor Sub-model is the easiest of the Sub-models to calibrate because food and liquor spending is highly motivated by convenience and because supply is relatively evenly spread across a centre network (particularly in urban areas) and therefore close to the source of demand.³⁴
- 80 Another feature of the M.E Gravity Model is that while it is driven by spending (demand) and sales in retail store types (i.e., monetary transactions), the model uses employment equivalents for both demand and supply. Using an employment metric overcomes the difficulty of obtaining (or even deriving) sales data for individual stores (which is commercially sensitive). Employment data by detailed store types is however freely available (down to a street block or SA1 geographic area) from StatisticsNZ. There is also a strong correlation between annual sales and employment within each store type in a given year.
- 81 Annual demand for each retail store type (calculated according to 2018 SA2 boundaries) can also be converted relatively simply from dollars to employment sustained by that spending by applying average ratios of demand and supply across the Study Area. The results of the Food, Grocery and Liquor gravity modelling run for this evidence (i.e., distributional effects discussed further below), are therefore expressed in terms of changes in employment in each

³³ A feature of the M.E Gravity Model for Greater Christchurch is that it assumes a 'closed system', with no leakage in or out of the Study Area. The model does identify flows of spending across territorial boundaries within the Study Area. This closed system approach is not considered a material limitation with respect to the Food, Grocery and Liquor Sub-model for the reason stated above.

³⁴ In contrast, appliance and furniture shopping is infrequent and households are willing to drive longer distances to compare and purchase goods. Appliance and furniture supply is also concentrated in the largest centres (which have wide catchments) and are less ubiquitous compared to food retail supply.

centre. The unit of employment used by M.E in the model is the 'modified employment count' or MEC.³⁵

82 While the M.E Retail Gravity Model currently includes all of the main centres in the Study Area, it does not include every centre or every store (with some food, grocery and liquor stores located in non-centre zones). The list of centres contained in the calibrated model are shown in **Appendix 2**. In 2021, these centres captured:

82.1 89% of total food, grocery and liquor supply (employment) in Waimakariri District.

82.2 68% of total food, grocery and liquor supply (employment) in Christchurch City.

82.3 91% of total food, grocery and liquor supply (employment) in Selwyn District.

83 It is important not to model all household and business demand for food, grocery and liquor retail arising in the Study Area when not all supply of those store types is included in the Sub-model. This would also challenge the ability to calibrate demand and supply in the model. As such, I have scaled down demand in each territorial authority pro-rata the share of supply captured in modelled centres in each territorial authority (stated above).³⁶ In doing so, a portion of demand is left to sustain the supply in other centres/locations not included in the supply side of the Sub-model.

Supply of Food, Grocery and Liquor Retail 2021

84 2021 employment in the food, grocery and liquor sector that exists in centres³⁷ included in the Retail Gravity Sub-model is summarised for Waimakariri Centres in Figure 2 below.³⁸

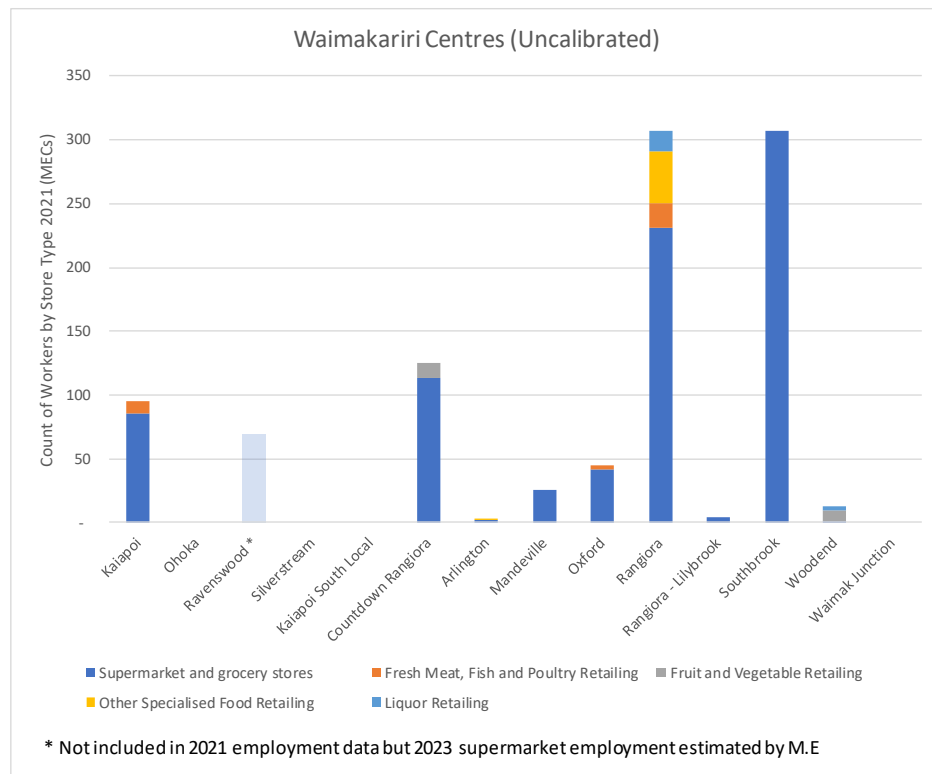
³⁵ This is based on StatisticsNZ data on employee counts and M.E estimates of working proprietors in each ANZSIC.

³⁶ While this scaling could also be done by applying an overall average % capture across the Study Area, this was tested and the scaling applied with district level capture percentages provided more intuitive leakage results, particularly for the food, grocery and liquor sector.

³⁷ Centres are defined at the SA1 level.

³⁸ The StatisticsNZ Business Directory capture employment as at February each year.

Figure 2 – Count of Food, Grocery and Liquor Store Employment by Centre in Waimakariri, 2021 (MECs)



- 85 Figure 2 shows that the largest count of employment in the food, grocery and liquor sector in 2021 was in Rangiora Town Centre and Southbrook. The Rangiora employment comprises a mix of store types in the sector, while the Southbrook employment is supermarket only (Pak'n Save). The Countdown Rangiora centre has the next highest employment count, followed by Kaiapoi Town Centre. Mandeville contained approximately 26 supermarket staff in 2021, and the larger Oxford centre contained a total of 45 food and supermarket jobs.
- 86 This level of centre employment is sustained by demand in that year (with demand assumed to equal supply within the Study Area). As demand apportioned to modelled centres increases over time with household and employment growth, the amount of employment in the food, grocery and liquor sector is also expected to grow to meet that demand. This may be through existing stores employing more staff, or new businesses being sustained in the market. The following sections summarise M.E's demand approach and spending projections and the implications this has for future employment supply across the centre network.
- 87 Figure 2 shows that not all centres included in the Gravity Model contained food, grocery and liquor employment in 2021. This is not to say that that will always be the case, but the model does not have the functionality to add employment in a centre that does not

have any in the calibrated baseline. Some centres are relatively new. An important part of Gravity Modelling is to manually include known changes in supply as part of the status quo scenario. An example of this is the Ravenswood centre where a New World has opened in 2021 but after StatisticsNZ reported employment for 2021. I have included estimated employment for this store as part of the 2023³⁹ (and subsequent) model run,⁴⁰ so that it forms part of the status quo supply picture. I have shown that estimated employment in Figure 2, to illustrate where it fits in the supply context.

- 88 Since the PC31 hearing, the Woolworths supermarket opened in the Waimakariri Junction centre in Kaiapoi. It opened in December 2023 with between 80-85 staff, making its first full trading year 2024. The M.E Gravity Model has now been updated to include this latest change in supply. As that new store caused its own trade competition effects, the status quo scenario discussed in this evidence differs from the status quo scenario discussed in PC31.
- 89 I have not sought to include known supply changes in Christchurch City or Selwyn District given the focus on Waimakariri District.⁴¹

Growth in Demand for Food, Grocery and Liquor Retail 2021-43

- 90 The M.E Grocery, Liquor & Other Food Retail Gravity Sub-model is based on SA2⁴² household projections for Waimakariri, Christchurch City and Selwyn districts. These SA2 projections were recently updated using a combination of the most recent population projections by StatisticsNZ (December 2022), as well as the 2021 household projections at the territorial authority level. Considering the anticipated significant growth in the Waimakariri and Selwyn districts, the model adopts the High household projections for these districts, while adopting a Medium growth projection for Christchurch City.⁴³ This set of projections is referred to as the "status quo" household demand scenario for this evidence.

³⁹ The model currently contains the following time periods: 2021, 2023, 2026, 2028, 2033, 2038, 2043.

⁴⁰ I am unsure why no supermarket employment was recorded in the SA1 in the 2022 StatisticsNZ Business Directory (BD). Estimated employment of 70 MECs was based on employment in similarly sized supermarkets, but I accept this may be conservative. The model does grow the estimated store employment over time as a result of household and business growth in its trade catchment.

⁴¹ The Countdown in the Northwood SupaCentre closed in early 2023 and a new (replacement) store opened just prior (end of 2022), only a short distance away in the North West Belfast Centre. This relocation of supermarket employment has not been made in the model but would have little impact on the gravity model results.

⁴² Defined by 2018 SA2 boundaries.

⁴³ This approach is consistent with the approach taken in the Greater Christchurch HBA 2023 report.

- 91 I note that the total district household growth adopted to run M.E's Gravity Model, including the distribution of growth at the SA2 level, is not necessarily the same as Council may be using to run the Waimakariri Capacity for Growth Model, or referred to in **Mr Akehurst's** evidence. While Council's model is understood to adopt a High growth projection series, the level of detail needed in the household projections for the Retail Gravity Model (where households are broken into 47 household types) is not a level of detail contained in Council's/Formative's projections, hence my reliance on StatisticsNZ data.
- 92 There are expected to be some minor differences between the household growth projections applied in the Gravity Model and those adopted by Council (or relied on by **Mr Akehurst**) at the district and sub-district level, but in the absence of a side-by-side comparison at the 2018 SA2 level, I cannot be certain of the scale of these differences. I do not anticipate that such differences would have a material impact on my evidence conclusions.
- 93 The status quo projections relied on in the Retail Gravity Model for Waimakariri District indicate that the district had approximately 24,960 households in 2021 and this is projected to increase by 46% to 2043 reaching 36,400 households. This is total growth of 11,440 households over the 22-year period and equates to an average annual increase of around 520 households.
- 94 Based on this status quo household growth projection, M.E's retail demand model (explained further in **Appendix 3**) indicates that in 2023, total home-based household demand for food, grocery and liquor retailing in Waimakariri District may be approximately \$310m, increasing to \$329m in 2026 and \$496m by 2043. This is total growth between 2023 and 2043 of \$186m or 60%. Not all of this household demand is retained in Waimakariri District as some will be directed to Christchurch (and minimal spend directed to Selwyn District). Further, I have scaled back the demand arising from households in each SA2 that enters the Gravity Model on account of some food, grocery and liquor supply being excluded from the model.
- 95 The Gravity Model also adds to household demand from home the estimated demand from businesses, spend while at work and estimated spend by tourists on food, grocery and liquor retail. As discussed, this dollar spend is translated into employment equivalents. I outline the calibrated status quo employment sustained by current and projected demand in Waimakariri modelled centres further below.
- 96 As stated previously, the rezoning request is anticipated to have a minimum yield of 850 dwellings including a school and excluding potential capacity for a retirement village. Including the potential for a retirement village to be located in the development and excluding a school, the upper dwelling yield could be 1,057. To be

conservative, I have removed around 45% of the yield of the potential retirement village on the basis that the Gravity Model is interested in households as spending units. I have assumed a mix of independent and non-independent living in the retirement village, with the latter having food provided and not necessarily purchased from the centre network like independent residents might. My food, grocery and liquor demand projections are therefore based on a range of 850 (lower) and 960 (upper) households that may carry out daily and weekly shopping within the Site and other Study Area centres.

- 97 The status quo household growth projections (StatisticsNZ) indicate that the Mandeville-Ōhoka SA2 is projected to have 1,250 households in 2026, increasing to 1,670 households by 2043. This is projected household growth of 420 over the period that the Site is estimated to be developed. This is strong growth, and only three SA2s in the district are projected to have a higher quantum of growth in that period according to StatisticsNZ. These include:
- 97.1 Waikuku SA2 (which includes the land adjoining the eastern boundary of the Rangiora urban area and across to include Ravenswood and ending at the coast), total growth of 1,180 households 2026-2043;
 - 97.2 Fernside SA2 (which includes the land adjoining the western boundary of Rangiora and Southbrook urban area and south to join Ōhoka), total growth of 660 households 2026-2043; and
 - 97.3 Rangiora North East SA2 (which includes some land in the existing urban area of Rangiora and the North East Future Development Area), total growth of 460 households 2026-2043.
- 98 At 420 additional households, the Mandeville-Ōhoka SA2 is projected (by StatisticsNZ) to have the same household growth as the Pegasus SA2 between 2026 and 2043. These household growth projections indicate that the Site is located in an area of expected high demand and would therefore provide zoned capacity to meet that demand.
- 99 That said, the total capacity of the rezoning request is greater than the projected growth of households in the Mandeville-Ōhoka SA2 between 2026 (noting that the first stage of houses is estimated to be delivered around 2028) and 2043, according to StatisticsNZ. Assuming that the rezoning request takes up all growth in the SA2 (i.e., 420 new households), the residual is between 430 and 540 additional (spending) households.⁴⁴ If all dwellings in the rezoning

⁴⁴ Based on the modelled range of households contributing to demand in centres of 850-960 discussed in paragraph 95. I am aware that under the proposed district plan, there is some greenfield and infill capacity in the Residential Large Lot Zone in Ōhoka, and potential for infill capacity in Mandeville. While subdivision of this

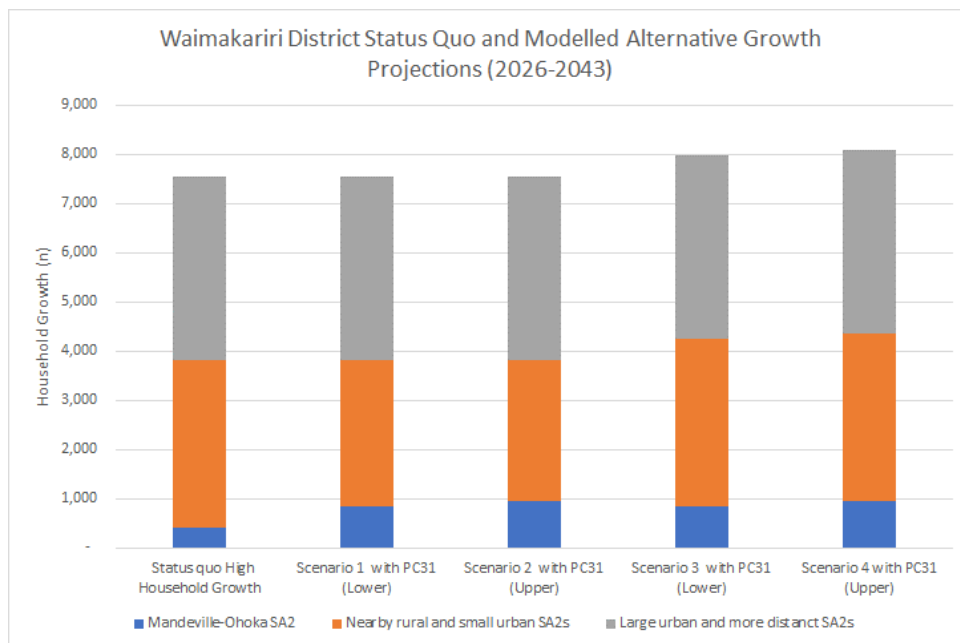
request are assumed to be taken up by (indicatively) 2038 then this implies that the rezoning request would need to:

- 99.1 attract additional growth of 430 (lower) to 540 (upper) households away from other parts of the district (a reallocation of projected district growth so that more occurs in Ōhoka); or
 - 99.2 attract 430 (lower) to 540 (upper) net additional households to the district not anticipated in the growth projections.
- 100 The latter scenario is not considered likely or realistic but is included for the purpose of sensitivity testing in the Gravity Model. It may be reasonable to expect that the development (if strongly marketed) could attract *some* households from outside of the district (including from Christchurch and Selwyn) that were not anticipated in the growth projections, but not all of them. To be conservative, I rely on a redistribution of projected growth within the district as the basis of distributional effects modelling as this will show the maximum distributional effect on Waimakariri centres associated with the rezoning request (based on modelled inputs) in my view.
- 101 These modified growth projections are constructed as four scenarios. Scenarios 1 and 2 reflect the preferred 'redistributed' residual growth outcome with a lower and upper dwelling yield for the rezoning request respectively. Scenarios 3 and 4 reflect the 'net additional' to total district growth outcome to take up all capacity of the rezoning request with a lower and upper dwelling yield respectively.
- 102 For scenarios 1 and 2, it is assumed that the proposed development will increase the number of households in the Mandeville-Ōhoka SA2 by redistributing growth from neighbouring rural and small urban SA2s rather than drawing household growth from across the whole district. I have selected 11 out of 32 (2018) SA2s in the district from which some projected household growth is reallocated to Ōhoka. These SA2s are concentrated in the south-east of Waimakariri District and were selected because they are indicative of locations where households seek to live near main urban areas, but not in them, and in commuting distance of Rangiora, Kaiapoi and parts of Christchurch. This is on the basis that Ōhoka offers similar commuting characteristics.
- 103 A table showing the status quo and Scenario 1-4 household projections developed for the Gravity Modelling of the rezoning request are included in **Appendix 4** and are summarised below (Figure 3). **Appendix 4** shows the SA2s from which a portion of

existing zoned land can take up some of the projected household growth, the majority is in fragmented ownership and therefore likely to be realized more slowly relative to a comprehensive development by the submitters. As such, I consider that take up of the rezoning request will occur ahead of most infill capacity.

projected household growth has been redirected to the Mandeville-Ōhoka SA2.

Figure 3 – Status Quo and Alternative Modelled 2026-2043 Growth Projections Assuming Full Take up of the Rezoning Request Housing Capacity before 2043



- 104 I acknowledge that the nearby SA2s selected to reallocate demand in scenarios 1 and 2 (on the assumption that the rezoning request will be fully taken up and at a faster rate of household growth otherwise projected for the Mandeville-Ōhoka SA2), influence where distributional effects may be felt in the centre network. For example, if I had reallocated all growth from Rangiora, then the reduction in projected household spending in Rangiora would have largely impacted centres in, or nearest, Rangiora. However, the rezoning request (and Ōhoka generally) does not offer a residential environment directly comparable to Rangiora, and hence I do not see the rezoning request competing strongly with the Rangiora urban area for household growth. I consider that the reallocation of household growth in my scenarios 1 and 2 is reasonable for the purpose of assessing distributional effects.

Status Quo Scenario - Food, Grocery and Liquor Retail Supply 2023-43

- 105 Table 4 below is the output of the calibrated Food, Grocery and Liquor Retail Sub-model. While the model is run for the whole Study Area, the results are just shown for Waimakariri District centres. In 2021, the model indicates that district demand for retail in this sector is 109% of supply located in the district. In other words, some Food, Grocery and Liquor Retail spend leaks south to centres in Christchurch City (although not as much as food, grocery and

liquor stores demand from Selwyn leaks north to Christchurch City in 2021).

- 106 This leakage is very slightly improved by the addition of a new centre in the rezoning request. In the status quo scenario, the Ravenswood New World is included from 2023 onwards and Waimakariri Junction Woolworths is included from 2026 onwards⁴⁵ as discussed above (i.e., known additions to supply post February 2021).
- 107 Table 4 shows that demand would sustain total food, grocery and liquor store employment in modelled centres in Waimakariri of 1,048 MECs in 2023. Based on status quo High growth projections and excluding any impacts from the rezoning request on both demand and supply patterns, employment in the sector is estimated to increase to 1,142 MECs in 2026, and 1,692 MECs by 2043. This is total growth of 550 jobs in the food, grocery and liquor sector spread across 11 centres between 2026 and 2043. I note that the Mandeville centre (a key focus for this assessment) would be projected to sustain an additional 17 food, grocery and liquor MECs between 2026 and 2043 if it remained the only Local Centre Zone in the wider vicinity.
- 108 Table 4 is the baseline against which the potential effects of the rezoning request can be measured and assumes no other future supply changes in the market.

Table 4 – Status Quo Food, Grocery and Liquor Store Employment by Centre in Waimakariri Without the rezoning request (MECs)

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	Growth 2026- 2043
Arlington	5	5	5	6	6	7	2
Countdown Rangiora	135	143	150	166	191	212	69
Kaiapoi	98	74	77	83	93	101	27
Kaiapoi South Local	-	-	-	-	-	-	-
Mandeville	33	35	37	40	47	52	17
Oxford	55	58	61	66	74	82	24
Rangiora	312	330	348	384	441	491	161
Rangiora - Lilybrook	5	6	6	7	8	8	3
Ravenswood	73	78	84	97	117	135	57
Silverstream	-	-	-	-	-	-	-
Southbrook	318	318	335	369	424	470	153
Waimak Junction	-	81	85	92	103	112	31
Woodend	14	14	14	16	19	21	8
Ohoka	-	-	-	-	-	-	-
Total Waimakariri Centres	1,048	1,142	1,203	1,326	1,523	1,692	550
Mandeville & Ohoka Combined	33	35	37	40	47	52	17

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2024.

DISTRIBUTIONAL EFFECTS OF THE REZONING REQUEST

The rezoning request Supply Estimates

- 109 Table 5 sets out my working to estimate plan enabled and likely GFA in the Local Centre Zone land identified in the Outline Development Plan. The calculations deduct a share of gross land area to account

⁴⁵ Even the first year of trading is 2024, the next model year after 2023 is 2026.

for roads, stormwater management, pedestrian linkages, ample carparking, and a village square.

Table 5 – Sequential Working of Potential GFA in the Local Centre Zone Land Indicated in the Latest Outline Development Plan

	Local Centre Zone
Indicative Gross Local Centre Zone Area (sqm)	21,500
Net land share (excluding infrastructure)	70%
Indicative Net Local Centre Zone Area (sqm)	15,050
<i>Maximum Building Coverage</i>	55%
Indicative Ground Floor Building Footprint (Maximum) (sqm)	8,278
<i>Estimated share of ground floor building with an upper floor</i>	40%
Estimated first floor GFA (sqm)	3,311
Total Plan Enabled and Expected GFA (sqm)	11,589

Source: RIDL, Savvy Consulting

- 110 By my estimates, the rezoning request could reasonably deliver up to 11,589sqm GFA if built to the maximum site coverage enabled and allowing for indicative 40% of the ground floor space to contain an upper floor.⁴⁶
- 111 While that potential GFA provides substantial scope for estimating the share that may be taken up by food, grocery and liquor stores, I have considered a potential supply that reflects that Ōhoka is a smaller urban settlement, and the Local Centre Zone is intended as a convenience centre. As such I have modelled the employment equivalent of the following⁴⁷:
- 111.1 Either a small supermarket equal to the size of the Mandeville SuperValue (460sqm or around 25 MECs); or
- 111.2 A small-moderate supermarket equal to the size of the Oxford FreshChoice (710sqm or around 40 MECs); and
- 111.3 Four additional stores comprising one each of a specialised food retail store, liquor store, butchers, fruit and vegetable store (indicatively 160sqm each on average with a combined MEC count of around 16-19).
- 112 Combined, these five indicative stores give a lower combined supply of around 43-44 MECs or higher combined supply of around 56-59 MECs (with the slightly larger supermarket option). I have run the

⁴⁶ While it is less common for small convenience centres to be developed to two storeys (i.e., ground and one upper floor), proposed rule LCA-BFS1 provides for an 10m building height. The submitters indicated that their urban design advice was to provide some two storey buildings. My 40% assumptions is based on this outcome.

⁴⁷ Conversion from GFA to MECs was based on an analysis of supermarket size and employment trends in Waimakariri and Selwyn District and average Waimakariri MECs per business ratios for each store type.

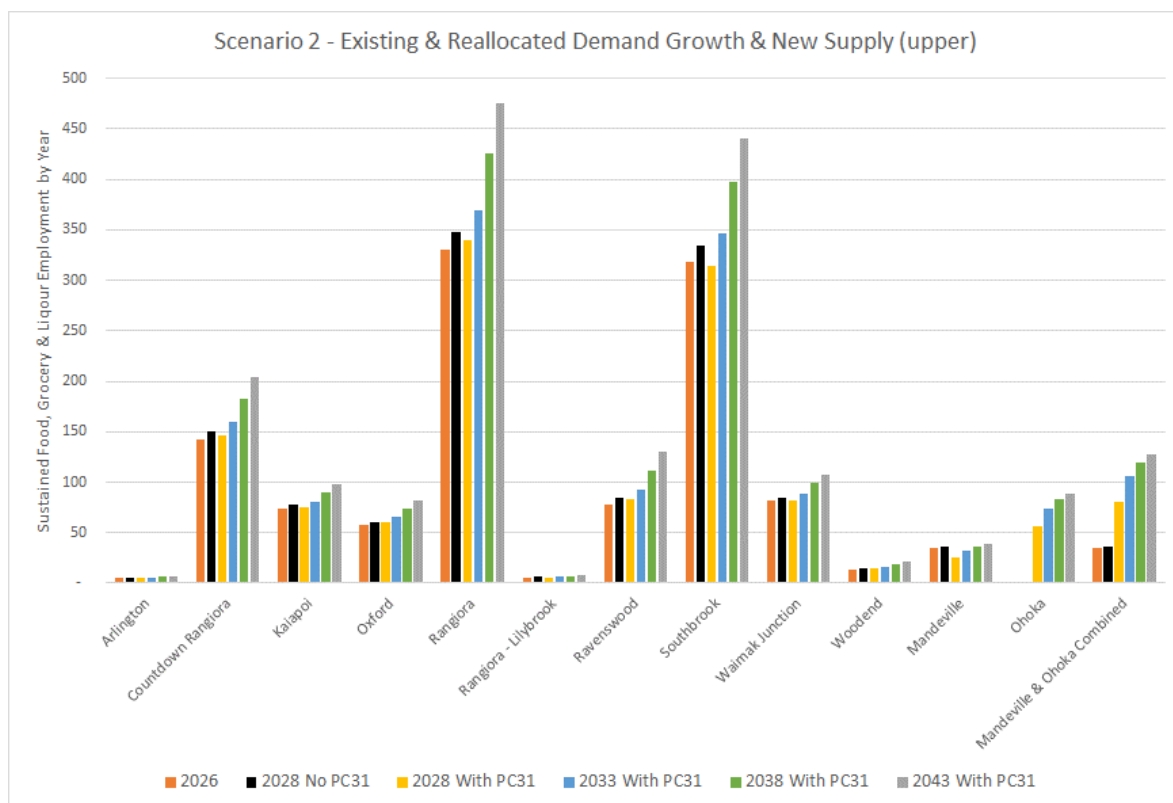
lower supply alongside the lower dwelling yield scenario for the rezoning request and the higher supply alongside the upper dwelling yield scenario for the rezoning request. An indicative staging plan supplied to me indicates that the commercial land would be developed as part of Stage 1 (with the staging moving south from Mill Road over time). I have introduced the food, grocery and liquor MEC supply for the rezoning request in 2028 in the Gravity Model but note it could be expected sometime between 2028 and 2030.

Food, Grocery and Liquor Supply Changes with the Rezoning Request

- 113 Given that I have sought to model distributional effects associated with potential changes to both supply and demand patterns associated with the rezoning request, it can be difficult to understand the dynamic changes that the Gravity Model is applying using just the outputs. As such, I have tested changes to demand and supply separately to help provide confidence that the Model is delivering logical results. These scenarios, and the results they show, are described in **Appendix 5**.
- 114 Having tested these rezoning request changes in isolation, I am confident that the combined demand and supply scenarios can be relied on.⁴⁸ The results for scenarios 1 and 2 are detailed in **Appendix 5**, with the slightly higher impacts of Scenario 2 summarised in Figure 4 below, which shows food, grocery and liquor employment sustained in Waimakariri centres between 2026 and 2043.

⁴⁸ Notwithstanding that all models have limitations, and that Gravity Models are a simulation of current and future shopping patterns only.

Figure 4 – Scenario 2 Impacts of the Rezoning Request on Centre Employment (Food, Grocery and Liquor Employment Only) – Higher dwelling yield and higher employment supply



115 Excluding the Mandeville centre (discussed separately below), the key findings for food, grocery and liquor centre employment impacts under scenarios 1 and 2 are as follows:

115.1 When comparing where each centre providing a food, grocery and liquor role would be in terms of projected employment in 2028 without the rezoning request (i.e., black bars in Figure 4) and where that employment would be with the rezoning request in 2028 (i.e., yellow bars in Figure 4), the impact ranges from a -1% reduction of food, grocery and liquor employment in Oxford, Ravenswood and Woodend, and a -6% reduction in Southbrook (Pak'n Save). The Key Activity Centres of Rangiora and Kaiapoi have an estimated impact in 2028 of -2% and -3% respectively. These are the impacts under scenario 2 (with the higher dwelling yield in the rezoning request, but also a slightly higher supply of centre employment to go with that). Under scenario 1 (850 dwellings in the rezoning request and slightly lower supply of centre employment to go with that), the impacts across all of those centres are lower again.

115.2 This shows that based on the GFA/employment modelled, direct trade impacts on the centre network are very minor. Importantly, all of these centres (except Southbrook) would

still have experienced growth in their food, grocery and liquor store employment between 2026 and 2028 – the period when the centre in the rezoning request would (at the earliest) have started operating. Southbrook’s employment would be 1% lower in 2028 than it was in 2026 (a minimal reduction equivalent to 4 less jobs out of a significant 318). This means that while all centres (other than Mandeville) may face a very minimal opportunity cost in terms of future employment in 2028, there is no real cost as all but one centre will continue to grow - improving in vitality, vibrancy and social and functional amenity delivered to the community.⁴⁹

115.3 These results show that:

- (a) some of the proposed rezoning request food, grocery and liquor supply modelled in scenarios 1 and 2 is sustained by the growth already projected in the Mandeville-Ōhoka SA2;
- (b) some is sustained by additional household growth attracted to Ōhoka by the rezoning request;
- (c) some is sustained by retaining more existing local demand within Ōhoka; and
- (d) retail demand growth generally in the district is such that any redistribution of spending (including minor redistribution of household growth towards Ōhoka) offsets nearly all potential impacts on employment in centres.

115.4 As far as the wider centre network is concerned, the Gravity Model shows that the scale of food, grocery and liquor activity (43-56 MECs in 2028) is sustainable if the residential dwelling capacity of the rezoning request were to be approved. Had I modelled considerably more food, grocery and liquor employment in the proposed Local Centre Zone, the impacts on other centres would have been correspondingly larger (less sustainable). However, I am confident that a small incremental increase on the supply I modelled would also avoid any significant adverse effects on the functional and social amenity of the wider centre network.

116 Here I focus on potential impacts on the Mandeville centre under scenarios 1 and 2:

116.1 Mandeville is a small convenience centre that I understand is fully developed, but has some additional land (5,635sqm

⁴⁹ That net growth is bigger again, if measured against today’s (2023) employment and centre amenity.

gross) zoned in the PDP to enable further carparking⁵⁰ and floorspace growth. It currently has a small Supervalu supermarket (estimated at around 460sqm GFA) and 7 other tenants including a self-service petrol station, a childcare centre, beauty salon and four food and beverage outlets. The Supermarket made up 26% of centre employment in 2021 according to StatisticsNZ data.

- 116.2 Growth in the Mandeville centre's trade catchment between 2023 and 2026 (i.e., just prior to development of the proposed centre) is estimated to sustain around 2 additional jobs in the food, grocery and liquor sector (and would sustain additional jobs in other retail and service activities too (but are unquantified)). This indicates that proposed plans to extend the village centre are likely to be realisable in the short term. It is on this basis that I compare the relative impacts of the rezoning request on the 2026 baseline for Mandeville, i.e., impacts on a slightly bigger centre than seen today (and potentially fully developed in terms of proposed zone area).
- 116.3 The modelled impact of the rezoning request scenario 1 or 2 show that in 2028, the rezoning request could reduce Mandeville food, grocery and liquor employment by 24-33% compared with what it might otherwise have expected to be in 2028. This equates to a reduction of 9-12 jobs.
- 116.4 Expressed a different way, food, grocery and liquor employment in Mandeville would be 21-29% less in 2028 than expected employment in 2026 (before the rezoning request centre opened its doors (i.e., 7-10 less than in 2026)). Importantly, under scenario 1, Mandeville would have recovered food, grocery and liquor employment back to 2026 levels by 2033. Under scenario 2, the model shows that employment would take till between 2033 and 2038 to return to expected 2026 levels. The centre would continue positive food, grocery and liquor employment growth beyond those years even with the rezoning request fully operational due to ongoing growth in its catchment.
- 116.5 The Gravity Model indicates that Mandeville is the only centre likely to experience more than minor direct trade competition effects (not to be confused with impacts on centre viability and amenity, discussed further below). However, the Modelling also shows that sustainable employment in the proposed Ōhoka centre (of the rezoning request) would continue to grow over and above the employment supplied when initially developed.

⁵⁰ Already consented and developed.

116.6 Given how close Ōhoka and Mandeville are, with residents easily able to access either centre, it seems likely that some of the additional employment sustainable at Ōhoka could instead be met in Mandeville, helping to offset the modelled employment impacts. The model is somewhat limited in its ability to show this 'overflow' of demand within the same spatial unit (SA2) of demand, but if I had constrained employment in the rezoning request in each time period to the initial employment estimated for the centre, then some of the unmet demand would benefit Mandeville.⁵¹

116.7 I consider it relevant that Mandeville and Ōhoka are likely to have some trade catchment overlap and that the Mandeville and Ōhoka communities (present and future) will benefit from having two centres as a result of the rezoning request, rather than just the one at Mandeville. This includes more choice and potentially a bigger mix of activities locally available. By 2028, the modelling indicates that locally available food, grocery and liquor employment could be 36 MECs greater across the combined centres than in 2026 in net terms under scenario 1 (i.e., the addition of employment in Ōhoka, less the reduction in employment in Mandeville is still net positive growth).

116.8 A reduction of 7-10 sustained jobs in 2028 in the SuperValue (compared to expected 2026 employment), or spread over the SuperValue and any new food, grocery and liquor stores that may appear in the Mandeville centre extension in the short-term future, does not necessarily equate to actual job losses. There are other ways that store owners can respond to a drop in demand, including reducing staff hours or operating at a lower but still viable productivity rate.

116.9 I also consider that such short-medium term (temporary) impacts would not necessarily lead to any store closures in the Mandeville centre. The submission by Mandeville Village Limited Partnership indicates that the centre is performing above expectations. It is likely that it can absorb some trade competition and will be more resilient if expanded by the time the centre in Ōhoka is trading as it will have a moderately larger and more diverse role.

Effects of the rezoning request Local Centre Zone land on other retail and service store types

117 I have only modelled scenarios of food, grocery and liquor activity developed in the rezoning request and the potential effects of this activity on the centre network. Expressed as floorspace, scenarios 1 and 2 accounted for indicatively 1,100-1,350sqm retail GFA depending on the size of the supermarket store and smaller tenancy

⁵¹ This outcome is confirmed by testing a scenario with PC31 dwellings and no centre.

size assumptions. A Local Centre Zone would also be expected to accommodate a small mix of food and beverage retail activity (takeaways, cafes, restaurants/bar), commercial services (such as a hair salon, beauty salon, vets), maybe a health care facilities (such as a medical centre), potentially a preschool (as seen in Mandeville), and any complementary convenience retail, such as a chemist (particularly if a medical centre is provided).

- 118 Effects arising from this additional activity will be felt across the centre network depending on what activity is included in different centres and the scale of the new activity supplied. For example, any additional floorspace in the rezoning request will not further impact Countdown Rangiora as the supermarket makes up 90% of the employment on that site. A vet clinic or a medical centre would have no impact on Mandeville as the centre does not (currently) contain those activities.
- 119 Where there is direct competition, I expect that other retail and commercial employment impacts on the centre network would be no greater in percentage terms than the food, grocery and liquor impacts of the rezoning request under scenarios 1 or 2 in 2028 (compared with that same year in the status quo). Further, strong growth in demand across the district is likely to offset any impacts arising from a small commercial centre in the rezoning request such that centres show continued employment growth across all store types even with the rezoning request.
- 120 I estimate that the total employment impact of the rezoning request centre on the Mandeville centre in the first year of trading to be no greater than the percentage impact felt by the food, grocery and liquor stores (i.e. a 21-29% reduction in 2028 relative to expected 2026 employment). This is on the basis that the overall scale of the centre is controlled and taking into consideration a mix of activities occupying that GFA, not all of which will necessarily compete with supply in Mandeville. The impact of the rezoning request's Local Centre Zoned land on all current and potential additional stores in Mandeville would be offset by catchment growth over time. This recovery period could be lessened with appropriate limits on the scale of new centre floorspace in Ōhoka, particularly if future demand growth indicatively sustainable in Ōhoka spills over to the Mandeville Centre.

Conclusions on Distributional Effects of the rezoning request

- 121 Adverse distributional effects on centres are not measured according to the direct sales/employment impacts indicated by the outputs of a gravity model, but rather the consequent effects of changes in demand on a centres' overall vibrancy, viability and amenity. None of the food, grocery and liquor employment impacts on the wider centre network, including key activity centres, modelled for the rezoning request are of a level that would cause adverse distributional effects on those centres. While unmodelled, I consider that when other retail and commercial service activities are included

in the rezoning request centre scenario, that the distributional effects on the wider centre network will still be negligible and quickly offset by district growth.

- 122 While the direct impacts on the Mandeville centre are more substantial in percentage terms than other centres, I do not consider that they would result in a more than minor impact on the overall viability, vibrancy and amenity of the Mandeville centre in the short-medium term. I have considered these potential impacts under circumstances where the rezoning request centre is developed in its entirety between 2028 and 2030 and with dwelling growth in the rezoning request occurring at a rate faster than current growth projections for the area. If centre development was staged and the residential development proceeded more slowly, impacts on Mandeville may be less than those modelled.
- 123 It is appropriate to provide convenience retail and service activity as part of the rezoning request. The number of existing households in Ōhoka, combined with the number of dwellings potentially anticipated in the Site, can sustain a new local centre in addition to the Mandeville centre and still allow some household demand to flow to higher-order centres. Including Local Centre Zoned land as part of the rezoning request contributes to a well-functioning urban environment in that part of the district.⁵²
- 124 I support the rezoning request with the inclusion of a local centre offering. In the absence of a new Ōhoka centre, it is my view that the Mandeville Local Centre Zone may not have sufficient capacity (even as expanded by the PDP) to efficiently cater for all local catchment growth on its own (with the rezoning request housing as part of that catchment). I base this on my testing of scenarios in the Food, Grocery and Liquor Sub-model (**Appendix 5**).
- 125 I consider that there are net benefits to the Mandeville and Ōhoka communities from having Local Centre Zoned land in both locations and that they can both be sustained within the medium-term. While some store types may compete, it is also likely that the centres will complement each other in terms of their offering.

Recommendations for Proposed Local Centre Zones

- 126 My key concern with the Local Centre Zone indicated as part of the Outline Development Plan for the rezoning request is the gross size of the land area shown. The plan enabled GFA over the shown area is large (and larger than anticipated within a Local Centre Zone)⁵³ and I have not contemplated a scenario where all of that is potentially occupied by retail, commercial service and other activity permitted in a Local Centre Zone. Such an outcome would go far

⁵² I acknowledge there are other factors that must also contribute to making a well-functioning urban environment. Those matters are outside the scope of my evidence.

⁵³ Notified LCZ-P1: "generally comprise 1,000m² to 4,000m² total floor space".

beyond the role of a local convenience centre and would certainly have potential for significant distributional effects.

- 127 As such, I recommend a total GFA cap for the rezoning request's Local Centre Zoned land that allows for a functional convenience centre scaled commensurate with projected local demand. As discussed in my assessment, food, grocery and retail demand is considered appropriate (in terms of effects) at between 1,100-1,350sqm (equivalent to 44-56 MECs). This included a supermarket of between 460 and 710sqm GFA, but a slightly larger supermarket may also be sustainable. Allowing for some additional retail and service activity, and potential allowance for a medical centre (for example), I consider that a total GFA cap of 2,500-3,000sqm would be appropriate for the rezoning request, with the upper end of that range taking into account the potential for a retirement village to be included in the proposed development (total indicative dwelling yield of 1,057).
- 128 I anticipate a number of potential social and economic benefits for a centre opposite the Ōhoka Domain (which is currently the location of the popular Ōhoka Farmers Market) and in close proximity to the school and retirement village (if supplied as part of the development). As such, I support a consolidated centre fronting Whites Road with a total GFA cap of 2,500-3,000sqm GFA.
- 129 I am relatively less concerned with the gross area of that Local Centre Zone shown in the Outline Development Plan if a GFA cap can be included as it will be the controlling factor on centre scale and would still provide flexibility for the landowner to deliver for a range of non-building infrastructure (i.e., a market square and/or additional parking to facilitate the Ōhoka Farmers Market) suitable for the location.

CONCLUSION ON PROPOSED LOCAL CENTRE ZONE

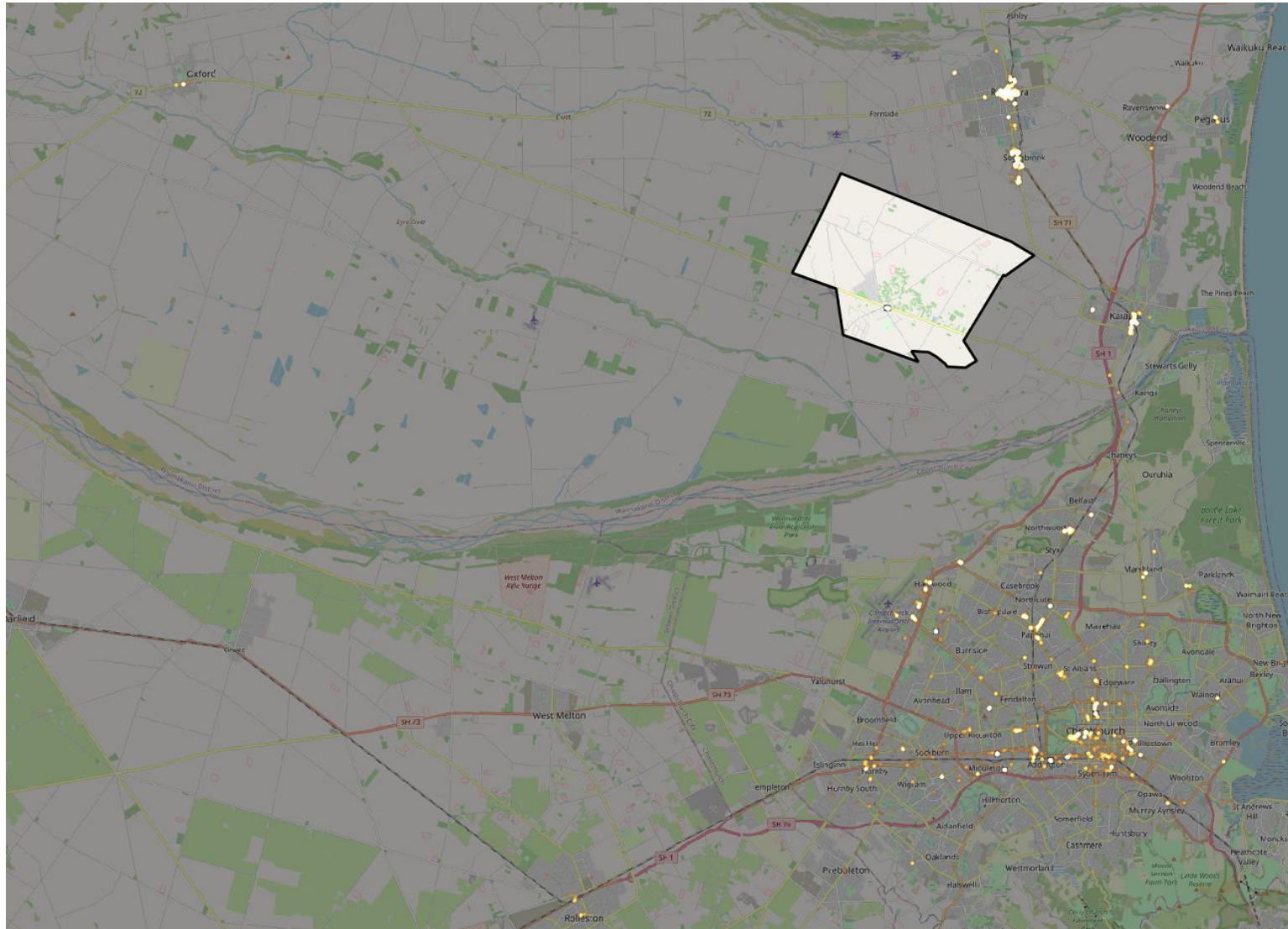
- 130 Given the housing densities and potential dwelling yield proposed for the rezoning request, provision of a local centre as part of the development is a key opportunity to ensure that residents in the Site, the Ōhoka settlement and the adjacent areas have their supermarket and other convenience retail and service needs met in an efficient and effective manner. It is also an opportunity to establish a community focal point for the Ōhoka settlement, with associated amenities such as the potential for a market square and additional parking to support the Ōhoka Farmers Market.
- 131 Setting a total GFA cap of between 2,500-3,000sqm GFA for the Site will ensure a functional local centre can develop that meets the day-to-day shopping needs of the community in the long-term without generating any significant adverse distributional effects on existing centres, including Mandeville. Negligible adverse effects on the district's KACs or town centres are anticipated from a new centre of this recommended size. While Mandeville will face relatively more

employment impacts compared to other more distant centres, these are temporary and not expected to result in more than minor impacts on centre viability, vibrancy and social and functional amenity delivered to its trade catchment.

Dated: 5 March 2024

Natalie Dianne Hampson

APPENDIX 1 – DISTRIBUTION OF SHOPPING CENTRE VISITS 2021 BY ŌHOKA-MANDEVILLE SA2 RESIDENTS (SAMPLE).



APPENDIX 2 – CENTRES INCLUDED IN M.E'S RETAIL GRAVITY MODEL (SA1 DEFINED) AND 2021 EMPLOYMENT

Territorial Authority	Centre Name	Total Food, Grocery, Liquor	Other Retail	Total Retail	Non-Retail	Total	Total Food, Grocery, Liquor %	Other Retail %	Total Retail %	Non-Retail %	Total %
		MECs 2021	MECs 2021	MECs 2021	MECs 2021	MECs 2021					
Waimakariri District	Arlington	3	3	6	198	205	2%	2%	3%	97%	100%
Waimakariri District	Countdown Rangiora	125	-	125	14	139	90%	0%	90%	10%	100%
Waimakariri District	Kaipoi	96	81	177	465	642	15%	13%	28%	72%	100%
Waimakariri District	Kaipoi South Local	-	62	62	494	556	0%	11%	11%	89%	100%
Waimakariri District	Mandeville	26	4	30	70	100	26%	4%	30%	70%	100%
Waimakariri District	Ohoka *	-	-	-	64	64	0%	0%	0%	100%	100%
Waimakariri District	Oxford	45	17	62	185	247	18%	7%	25%	75%	100%
Waimakariri District	Rangiora	307	528	835	2,021	2,856	11%	18%	29%	71%	100%
Waimakariri District	Rangiora - Lilybrook	4	0	4	38	42	9%	1%	10%	90%	100%
Waimakariri District	Ravenswood	-	24	24	84	108	0%	22%	22%	78%	100%
Waimakariri District	Silverstream	-	-	-	28	28	0%	0%	0%	100%	100%
Waimakariri District	Southbrook	307	224	530	1,225	1,755	17%	13%	30%	70%	100%
Waimakariri District	Waimak Junction	-	10	10	44	54	0%	18%	18%	82%	100%
Waimakariri District	Woodend	13	9	22	73	95	14%	9%	23%	77%	100%
Christchurch City	Addington	4	50	54	1,088	1,142	0%	4%	5%	95%	100%
Christchurch City	Akaroa	19	55	75	285	359	5%	15%	21%	79%	100%
Christchurch City	Aranui	-	-	-	12	12	0%	0%	0%	100%	100%
Christchurch City	Avonhead	71	41	112	151	263	27%	15%	43%	57%	100%
Christchurch City	Barrington	198	178	376	397	774	26%	23%	49%	51%	100%
Christchurch City	Belfast	-	-	-	75	75	0%	0%	0%	100%	100%
Christchurch City	Bishopdale	206	39	245	311	557	37%	7%	44%	56%	100%
Christchurch City	Central City	144	1,850	1,993	34,364	36,357	0%	5%	5%	95%	100%
Christchurch City	Church Corner	174	16	190	95	285	61%	5%	67%	33%	100%
Christchurch City	Edgeware	120	50	170	182	351	34%	14%	48%	52%	100%
Christchurch City	Fendalton	209	52	261	87	348	60%	15%	75%	25%	100%
Christchurch City	Ferrymead	132	286	418	1,382	1,800	7%	16%	23%	77%	100%
Christchurch City	Halswell	188	12	200	96	297	63%	4%	67%	33%	100%
Christchurch City	Hillmorton	7	15	22	249	271	3%	5%	8%	92%	100%
Christchurch City	Hornby	-	-	-	46	46	0%	0%	0%	100%	100%
Christchurch City	Ilam/Clyde	27	19	46	263	309	9%	6%	15%	85%	100%
Christchurch City	Industrial - Addington/CC South	645	735	1,380	5,446	6,826	9%	11%	20%	80%	100%
Christchurch City	Industrial - Hornby North	451	1,545	1,996	6,630	8,626	5%	18%	23%	77%	100%
Christchurch City	Industrial - Papanui/Casebrook	387	1,009	1,396	2,722	4,118	9%	24%	34%	66%	100%
Christchurch City	Industrial - Wigram/Hillmtn/Mdltm	353	1,748	2,101	24,645	26,746	1%	7%	8%	92%	100%
Christchurch City	Linwood	132	283	415	802	1,217	11%	23%	34%	66%	100%
Christchurch City	Lytelton	13	23	36	515	551	2%	4%	7%	93%	100%
Christchurch City	Marshland	14	228	241	124	365	4%	62%	66%	34%	100%
Christchurch City	Merivale	124	180	304	1,658	1,962	6%	9%	15%	85%	100%
Christchurch City	Moorhouse	-	317	317	243	560	0%	57%	57%	43%	100%
Christchurch City	New Brighton	94	47	141	361	502	19%	9%	28%	72%	100%
Christchurch City	Papanui/Northlands	-	60	60	306	365	0%	16%	16%	84%	100%
Christchurch City	Parklands	91	-	91	100	191	48%	0%	48%	52%	100%
Christchurch City	Redcliffs	36	13	49	58	107	34%	12%	46%	54%	100%
Christchurch City	Riccarton	339	1,185	1,524	2,084	3,608	9%	33%	42%	58%	100%
Christchurch City	Richmond	97	25	122	187	309	31%	8%	39%	61%	100%
Christchurch City	Shirley	135	309	443	824	1,267	11%	24%	35%	65%	100%
Christchurch City	South City	4	221	225	2,016	2,241	0%	10%	10%	90%	100%
Christchurch City	St Martins	215	4	219	35	254	85%	1%	86%	14%	100%
Christchurch City	Sumner	23	32	55	270	325	7%	10%	17%	83%	100%
Christchurch City	Supa Centa	71	257	328	102	431	17%	60%	76%	24%	100%
Christchurch City	Wairakei/Greers	5	31	36	133	169	3%	18%	21%	79%	100%
Christchurch City	Woolston	108	45	153	252	406	27%	11%	38%	62%	100%
Christchurch City	Worcester/Stammore	13	5	18	84	102	13%	5%	18%	82%	100%
Selwyn District	Darfield	28	59	86	607	693	4%	8%	12%	88%	100%
Selwyn District	Leeston	36	36	73	423	495	7%	7%	15%	85%	100%
Selwyn District	Lincoln	208	20	228	293	521	40%	4%	44%	56%	100%
Selwyn District	Prebbleton	51	6	56	207	263	19%	2%	21%	79%	100%
Selwyn District	Rolleston	356	43	399	102	500	71%	9%	80%	20%	100%
Selwyn District	Rolleston - Main South Line Shops	10	25	35	602	637	2%	4%	6%	94%	100%
Selwyn District	Rolleston North (LFR)	-	1	1	40	40	0%	1%	1%	99%	100%
Selwyn District	West Melton	25	8	33	260	293	9%	3%	11%	89%	100%
Total Modelled Centres		7,858	15,216	23,074	157,249	180,324	4%	8%	13%	87%	100%

Source: M.E Greater Christchurch Retail Gravity Model 2023. Centres defined by SA1. * M.E assumes that the Ohoka Gas Station and workshop is registered as a non-retail industry.

APPENDIX 3 – STATUS QUO HOUSEHOLD GROWTH – M.E ESTIMATED FOOD, GROCERY AND LIQUOR SPEND FROM HOUSEHOLDS (HOME BASED SPENDING)

I have used M.E's Retail Demand Model to estimate the current and projected household spend on grocery, liquor, and other food stores at the SA2 level across the Study Area. In addition to household demand for these store types, there is also demand by businesses and international visitors (although these make up a minor component). Household demand is broken down into three types of spending – household spend from home (i.e. home-based trips, and summarised in the table below), household spend from work, and household spend while travelling domestically. This analysis models household spend from home in detail, on the basis that it accounts for 91% of total household spend on groceries, liquor and other food (national average). The additional components of demand are added using a more high-level approach.

The spending is closely aligned with the distribution of households and household growth although it captures the different mix and spending power of household types in each 2018 defined SA2 and includes an assumed 1% annual increase in real spend per household between 2021-2043.

Waimakariri Statistical Area 2 (SA2)	Household Spend From Home (Status Quo Projections) – Grocery, Liquor & Other Food (\$m)										
	2021	2023	2026	2028	2033	2038	2043	2023-2043 (n)	2023-2043 (%)	Share of Growth	
Mandeville-Ohoka	\$ 16	\$ 16	\$ 18	\$ 19	\$ 20	\$ 24	\$ 27	\$ 10.2	63%	6%	
Waikuku	\$ 9	\$ 11	\$ 13	\$ 16	\$ 20	\$ 26	\$ 32	\$ 20.8	182%	11%	
Pegasus	\$ 13	\$ 15	\$ 16	\$ 17	\$ 19	\$ 22	\$ 24	\$ 9.2	62%	5%	
Rangiora South East	\$ 12	\$ 13	\$ 14	\$ 15	\$ 17	\$ 19	\$ 21	\$ 8.6	67%	5%	
Rangiora North West	\$ 11	\$ 13	\$ 13	\$ 14	\$ 15	\$ 17	\$ 19	\$ 6.3	50%	3%	
Fernside	\$ 7	\$ 8	\$ 9	\$ 11	\$ 14	\$ 17	\$ 20	\$ 12.0	157%	6%	
Kingsbury	\$ 13	\$ 14	\$ 15	\$ 15	\$ 15	\$ 17	\$ 19	\$ 4.9	36%	3%	
Clarkville	\$ 7	\$ 7	\$ 8	\$ 8	\$ 9	\$ 10	\$ 11	\$ 3.6	50%	2%	
Oxford Estate	\$ 6	\$ 6	\$ 7	\$ 7	\$ 8	\$ 8	\$ 9	\$ 2.9	46%	2%	
Pegasus Bay	\$ 5	\$ 5	\$ 6	\$ 6	\$ 7	\$ 7	\$ 8	\$ 2.5	47%	1%	
Swannanoa-Eyreton	\$ 5	\$ 5	\$ 5	\$ 5	\$ 6	\$ 7	\$ 7	\$ 2.7	57%	1%	
Tuahiwi	\$ 4	\$ 4	\$ 5	\$ 5	\$ 5	\$ 6	\$ 6	\$ 1.9	44%	1%	
Ashgrove	\$ 7	\$ 8	\$ 8	\$ 9	\$ 10	\$ 11	\$ 12	\$ 3.9	49%	2%	
Ashley Gorge	\$ 5	\$ 6	\$ 6	\$ 7	\$ 7	\$ 8	\$ 9	\$ 3.2	54%	2%	
Ashley-Sefton	\$ 11	\$ 11	\$ 12	\$ 13	\$ 14	\$ 16	\$ 18	\$ 6.2	55%	3%	
Eyrewell	\$ 9	\$ 9	\$ 10	\$ 11	\$ 12	\$ 13	\$ 15	\$ 5.6	60%	3%	
Kaiapoi Central	\$ 10	\$ 11	\$ 12	\$ 12	\$ 13	\$ 14	\$ 15	\$ 4.0	36%	2%	
Kaiapoi East	\$ 1	\$ 1	\$ 2	\$ 1	\$ 1	\$ 1	\$ 1	\$ 0.1	-10%	0%	
Kaiapoi North West	\$ 9	\$ 10	\$ 10	\$ 11	\$ 11	\$ 12	\$ 14	\$ 3.9	40%	2%	
Kaiapoi South	\$ 9	\$ 9	\$ 10	\$ 10	\$ 11	\$ 12	\$ 12	\$ 3.3	37%	2%	
Kaiapoi West	\$ 5	\$ 6	\$ 6	\$ 6	\$ 6	\$ 7	\$ 8	\$ 1.8	32%	1%	
Lilybrook	\$ 14	\$ 15	\$ 16	\$ 16	\$ 17	\$ 19	\$ 20	\$ 5.6	38%	3%	
Loburn	\$ 10	\$ 11	\$ 12	\$ 12	\$ 13	\$ 15	\$ 16	\$ 5.6	52%	3%	
Okuku	\$ 4	\$ 4	\$ 4	\$ 4	\$ 5	\$ 5	\$ 6	\$ 2.4	65%	1%	
Oxford	\$ 10	\$ 11	\$ 12	\$ 12	\$ 13	\$ 14	\$ 16	\$ 4.7	42%	3%	
Rangiora North East	\$ 9	\$ 9	\$ 10	\$ 11	\$ 13	\$ 16	\$ 18	\$ 8.6	91%	5%	
Rangiora South West	\$ 11	\$ 11	\$ 12	\$ 13	\$ 14	\$ 16	\$ 17	\$ 6.0	52%	3%	
Silverstream (Waimakariri District)	\$ 5	\$ 5	\$ -	\$ 7	\$ 8	\$ 9	\$ 11	\$ 5.6	0%	3%	
Southbrook	\$ 4	\$ 4	\$ 4	\$ 4	\$ 5	\$ 5	\$ 6	\$ 1.7	44%	1%	
Sovereign Palms	\$ 17	\$ 18	\$ 19	\$ 20	\$ 22	\$ 25	\$ 28	\$ 9.8	55%	5%	
Starvation Hill-Cust	\$ 11	\$ 12	\$ 13	\$ 13	\$ 14	\$ 16	\$ 17	\$ 5.5	46%	3%	
West Eyreton	\$ 7	\$ 7	\$ 8	\$ 8	\$ 9	\$ 10	\$ 11	\$ 3.7	51%	2%	
Woodend	\$ 13	\$ 14	\$ 15	\$ 16	\$ 18	\$ 21	\$ 23	\$ 9.3	66%	5%	
Total Waimakariri District	\$ 288.3	\$ 310.2	\$ 328.9	\$ 353.0	\$ 389.0	\$ 446.6	\$ 495.9	\$ 185.7	60%	100%	

Source: M.E Retail Demand Model 2023, StatisticsNZ. Excludes Rangiora Central SA2 which has not current or projected households.

APPENDIX 4 – STATUS QUO AND ALTERNATIVE HOUSEHOLD GROWTH SCENARIOS 2026-2043

Waimakariri Statistical Area 2 (SA2)	Status Quo		2026 to 2043 Household Growth				
	2026 Households	2043 Households	Status quo	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Mandeville-Ohoka	1,250	1,670	420	850	960	850	960
Waikuku	1,170	2,350	1,180	1,100	1,080	1,180	1,180
Pegasus	1,320	1,740	420	360	340	420	420
Rangiora South East	1,240	1,590	350	300	280	350	350
Rangiora North West	1,220	1,410	190	140	130	190	190
Fernside	730	1,400	660	610	600	660	660
Kingsbury	1,230	1,360	120	80	70	120	120
Clarkville	580	730	140	110	110	140	140
Oxford Estate	560	680	110	80	80	110	110
Pegasus Bay	540	650	100	80	80	100	100
Swannanoa-Eyreton	370	460	80	70	60	80	80
Tuahiwi	370	430	60	40	40	60	60
Ashgrove	750	880	130	130	130	130	130
Ashley Gorge	550	680	130	130	130	130	130
Ashley-Sefton	1,020	1,270	240	240	240	240	240
Eyrewell	780	980	200	200	200	200	200
Kaiapoi Central	1,120	1,240	110	110	110	110	110
Kaiapoi East	160	110	50	50	50	50	50
Kaiapoi North West	950	1,050	100	100	100	100	100
Kaiapoi South	830	910	70	70	70	70	70
Kaiapoi West	540	580	30	30	30	30	30
Lilybrook	1,440	1,570	130	130	130	130	130
Loburn	900	1,180	280	280	280	280	280
Okuku	300	400	100	100	100	100	100
Oxford	1,090	1,240	150	150	150	150	150
Rangiora North East	1,060	1,530	460	460	460	460	460
Rangiora South West	1,090	1,300	210	210	210	210	210
Silverstream	600	910	310	310	310	310	310
Southbrook	350	400	40	40	40	40	40
Sovereign Palms	1,520	1,900	370	370	370	370	370
Starvation Hill-Cust	1,000	1,230	230	230	230	230	230
West Eyreton	620	750	130	130	130	130	130
Woodend	1,270	1,640	360	360	360	360	360
Total Households/ Growth	28,770	36,400	7,740	7,740	7,740	8,160	8,270
% Growth (2026 to 2043)			27%	27%	27%	28%	29%

Source: StatisticsNZ, M.E

APPENDIX 5 – FOOD, GROCERY AND LIQUOR GRAVITY MODELLING RESULTS – WITH AND WITHOUT THE REZONING REQUEST

Prior to running the core 'With the rezoning request' growth scenarios, some test-only scenarios were run to help confirm that way that the Gravity Model was responding to changes in demand and supply separately:

- a) Adding scenario 1 demand but no new centre(s) in the rezoning request (Scenario Y). Scenario 1 is the lower dwelling yield (850) with dwelling demand partially redistributed. The Sub-model shows that compared with the status quo projection of food, grocery and employment in modelled centres over time, that at the district level there is no change in total sustained employment (same total household count and demand), and growth across all centres on account of High household growth and other demand. Employment in the Mandeville centre grows faster than would otherwise be the case due to more demand in Ōhoka (which currently forms part of its trade catchment) and accounts for a slightly larger share of district food, grocery and liquor employment growth 2026-2043 (5% instead of 3% in the status quo scenario). Southbrook (as the next closest full-service supermarket to Ōhoka) also benefits from the additional households in Ōhoka. Other centres in the district have between 0-2% less employment in 2043 that they would have under the status quo in that year due to the slight redistribution of household growth (but all experience positive growth compared to the (pre-impact) 2026 year).
- b) Adding the lower yield of food, grocery and liquor MECs in the rezoning request Local Centre Zone area but not the dwellings in the rezoning request (Scenario X). The lower yield of MECs was around 43. To be clear, this is not a realistic scenario as the submitters would not contemplate a convenience centre if the residential dwelling capacity of the rezoning request was not approved. The Sub-model shows that compared with the status quo projection of food, grocery and employment in modelled centres over time, that at the district level there is no material change in total sustained employment (same total household count and demand)⁵⁴, and a decrease in employment sustained across all centres in 2028 (compared to 2028 in the status quo scenario) due to more demand of existing residents being met in Ōhoka and less being spent in other shopping destinations. That said, excluding Mandeville, all centres would still have more or equal employment in 2028 compared to 2026, as strong growth in demand would offset the trade competition effects of the new Ōhoka centre. Only Mandeville would take longer (2043) to recover to 2026 employment levels, having sustained an estimated 30% reduction in employment from 2028 compared with the same years in the status quo scenario. Importantly, while the Mandeville centre would sustain less employment than it otherwise might, the Mandeville and Ōhoka community would be better off in net terms due to access to two relatively close centres.

The following two tables provide detailed results from the core/preferred 'with the rezoning request' scenarios 1 and 2 relative to the status quo baseline.

⁵⁴ The model shows very slight recovery of leakage Christchurch with increased supply in Waimakariri District (a shift of 3 food, grocery and liquor MECs).

Scenario 1 - Existing & Reallocated Demand Growth & New Supply (lower)**COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - STATUS QUO (WITHOUT PC31)**

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	Growth 2026-2043
Arlington	5	5	5	6	6	7	2
Countdown Rangiora	135	143	150	166	191	212	69
Kaiapoi	98	74	77	83	93	101	27
Mandeville	33	35	37	40	47	52	17
Oxford	55	58	61	66	74	82	24
Rangiora	312	330	348	384	441	491	161
Rangiora - Lilybrook	5	6	6	7	8	8	3
Ravenswood	73	78	84	97	117	135	57
Southbrook	318	318	335	369	424	470	153
Waimak Junction	-	81	85	92	103	112	31
Woodend	14	14	14	16	19	21	8
Ohoka	-	-	-	-	-	-	-
Total Waimakariri Centres	1,048	1,142	1,203	1,326	1,523	1,692	550
Mandeville & Ohoka Combined	33	35	37	40	47	52	17

COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH PC31

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	Growth 2026-2043
Arlington	5	5	5	5	6	7	2
Countdown Rangiora	135	143	147	161	185	206	64
Kaiapoi	98	74	76	81	91	99	24
Mandeville	33	35	28	35	39	42	7
Oxford	55	58	61	65	74	82	23
Rangiora	312	330	342	373	429	479	149
Rangiora - Lilybrook	5	6	6	6	7	8	2
Ravenswood	73	78	83	93	113	131	53
Southbrook	318	318	319	353	405	449	131
Waimak Junction	-	81	83	89	100	109	28
Woodend	14	14	14	16	18	21	7
Ohoka	-	-	43	55	62	66	66
Total Waimakariri Centres	1,048	1,142	1,206	1,333	1,530	1,698	557
Mandeville & Ohoka Combined	33	35	71	90	102	108	73

CHANGE IN COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH VS WITHOUT PC31 YEAR ON YEAR COMPARISON

Modelled Centres	Jobs (MECs)							Growth 2026-2043	Jobs (MECs)			
	2023	2026	2028	2033	2038	2043	2028		2033	2038	2043	
Arlington	-	-	-	0	0	0	0	0	-2%	-4%	-3%	-3%
Countdown Rangiora	-	-	-	3	5	6	6	6	-2%	-3%	-3%	-3%
Kaiapoi	-	-	-	2	2	2	2	2	-2%	-2%	-2%	-2%
Mandeville	-	-	-	9	5	7	10	10	-24%	-13%	-15%	-19%
Oxford	-	-	-	0	0	0	0	0	-1%	-1%	-1%	-1%
Rangiora	-	-	-	6	12	12	12	12	-2%	-3%	-3%	-2%
Rangiora - Lilybrook	-	-	-	0	0	0	0	0	-2%	-3%	-3%	-3%
Ravenswood	-	-	-	1	4	4	4	4	-1%	-4%	-4%	-3%
Southbrook	-	-	-	16	16	19	22	22	-5%	-4%	-4%	-5%
Waimak Junction	-	-	-	2	2	3	3	3	-2%	-3%	-3%	-3%
Woodend	-	-	-	0	0	0	0	0	-1%	-3%	-2%	-2%
Ohoka	-	-	-	43	55	62	66	66	N/A	N/A	N/A	N/A
Total Waimakariri Centres	-	-	-	3	7	7	6	6	0%	1%	0%	0%
Mandeville & Ohoka Combined	-	-	-	34	50	55	56	56	93%	124%	118%	108%

CHANGE IN COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH PC31 COMPARED TO 2026

Modelled Centres	Jobs (MECs)							Growth 2026-2043	Jobs (MECs)			
	2023	2026	2028	2033	2038	2043	2028		2033	2038	2043	
Arlington	-	-	-	0	1	1	2		3%	11%	27%	42%
Countdown Rangiora	-	-	-	5	18	42	64		3%	13%	30%	45%
Kaiapoi	-	-	-	1	7	17	24		2%	9%	22%	33%
Mandeville	-	-	-	7	0	5	7		-21%	1%	13%	20%
Oxford	-	-	-	2	7	16	23		4%	12%	27%	40%
Rangiora	-	-	-	11	42	98	149		3%	13%	30%	45%
Rangiora - Lilybrook	-	-	-	0	1	2	2		3%	13%	29%	44%
Ravenswood	-	-	-	5	15	35	53		7%	19%	44%	68%
Southbrook	-	-	-	1	36	87	131		0%	11%	28%	41%
Waimak Junction	-	-	-	2	8	19	28		2%	10%	23%	34%
Woodend	-	-	-	1	2	5	7		5%	16%	36%	54%
Ohoka	-	-	-	43	55	62	66		N/A	N/A	N/A	N/A
Total Waimakariri Centres	-	-	-	64	192	389	557		6%	17%	34%	49%
Mandeville & Ohoka Combined	-	-	-	36	56	67	73		103%	159%	191%	209%

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2024. Centres with no sector employment in 2024 not shown.

Scenario 2 - Existing & Reallocated Demand Growth & New Supply (upper)

COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - STATUS QUO (WITHOUT PC31)

Modelled Centres	Jobs	Jobs	Jobs	Jobs	Jobs	Jobs	Growth 2026-2043
	(MECs) 2023	(MECs) 2026	(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043	
Arlington	5	5	5	6	6	7	2
Countdown Rangiora	135	143	150	166	191	212	69
Kaiapoi	98	74	77	83	93	101	27
Mandeville	33	35	37	40	47	52	17
Oxford	55	58	61	66	74	82	24
Rangiora	312	330	348	384	441	491	161
Rangiora - Lilybrook	5	6	6	7	8	8	3
Ravenswood	73	78	84	97	117	135	57
Southbrook	318	318	335	369	424	470	153
Waimak Junction	-	81	85	92	103	112	31
Woodend	14	14	14	16	19	21	8
Ohoka	-	-	-	-	-	-	-
Total Waimakariri Centres	1,048	1,142	1,203	1,326	1,523	1,692	550
Mandeville & Ohoka Combined	33	35	37	40	47	52	17

COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH PC31

Modelled Centres	Jobs	Jobs	Jobs	Jobs	Jobs	Jobs	Growth 2026-2043
	(MECs) 2023	(MECs) 2026	(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043	
Arlington	5	5	5	5	6	7	2
Countdown Rangiora	135	143	146	159	183	204	62
Kaiapoi	98	74	75	80	90	98	23
Mandeville	33	35	25	32	36	38	4
Oxford	55	58	60	65	74	81	23
Rangiora	312	330	340	369	425	475	145
Rangiora - Lilybrook	5	6	6	6	7	8	2
Ravenswood	73	78	83	92	112	130	52
Southbrook	318	318	314	347	398	441	123
Waimak Junction	-	81	82	88	99	108	27
Woodend	14	14	14	16	18	21	7
Ohoka	-	-	56	74	83	88	88
Total Waimakariri Centres	1,048	1,142	1,206	1,335	1,532	1,700	559
Mandeville & Ohoka Combined	33	35	81	107	119	127	92

CHANGE IN COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH VS WITHOUT PC31 YEAR ON YEAR COMPARISON

Modelled Centres	Jobs	Jobs	Jobs	Jobs	Jobs	Jobs	Growth 2026-2043	Jobs	Jobs	Jobs	Jobs
	(MECs) 2023	(MECs) 2026	(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043		(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043
Arlington	-	-	0	0	0	0	0	-3%	-5%	-4%	-4%
Countdown Rangiora	-	-	4	7	7	8	8	-3%	-4%	-4%	-4%
Kaiapoi	-	-	2	3	3	3	3	-3%	-3%	-3%	-3%
Mandeville	-	-	12	8	11	13	13	-33%	-20%	-23%	-26%
Oxford	-	-	0	0	1	1	1	-1%	-1%	-1%	-1%
Rangiora	-	-	8	15	16	16	16	-2%	-4%	-4%	-3%
Rangiora - Lilybrook	-	-	0	0	0	0	0	-3%	-4%	-4%	-4%
Ravenswood	-	-	1	5	5	5	5	-1%	-5%	-4%	-3%
Southbrook	-	-	21	23	26	29	29	-6%	-6%	-6%	-6%
Waimak Junction	-	-	3	3	4	4	4	-3%	-4%	-4%	-4%
Woodend	-	-	0	1	1	1	1	-1%	-3%	-3%	-2%
Ohoka	-	-	56	74	83	88	88	N/A	N/A	N/A	N/A
Total Waimakariri Centres	-	-	4	9	9	8	8	0%	1%	1%	0%
Mandeville & Ohoka Combined	-	-	44	66	73	75	75	121%	164%	156%	145%

CHANGE IN COUNT OF SUSTAINED FOOD, GROCERY & LIQUOR EMPLOYMENT - WITH PC31 COMPARED TO 2026

Modelled Centres	Jobs	Jobs	Jobs	Jobs	Jobs	Jobs	Growth 2026-2043	Jobs	Jobs	Jobs	Jobs
	(MECs) 2023	(MECs) 2026	(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043		(MECs) 2028	(MECs) 2033	(MECs) 2038	(MECs) 2043
Arlington	-	-	0	0	1	2		2%	10%	26%	41%
Countdown Rangiora	-	-	4	17	41	62		3%	12%	28%	43%
Kaiapoi	-	-	1	6	16	23		1%	8%	21%	31%
Mandeville	-	-	10	3	1	4		-29%	-8%	3%	10%
Oxford	-	-	2	7	15	23		4%	12%	27%	40%
Rangiora	-	-	9	39	95	145		3%	12%	29%	44%
Rangiora - Lilybrook	-	-	0	1	2	2		2%	11%	28%	43%
Ravenswood	-	-	5	14	34	52		7%	18%	43%	67%
Southbrook	-	-	4	29	80	123		-1%	9%	25%	39%
Waimak Junction	-	-	1	7	18	27		1%	9%	22%	33%
Woodend	-	-	1	2	5	7		5%	15%	35%	53%
Ohoka	-	-	56	74	83	88		N/A	N/A	N/A	N/A
Total Waimakariri Centres	-	-	65	194	391	559		6%	17%	34%	49%
Mandeville & Ohoka Combined	-	-	46	72	85	92		132%	205%	242%	263%

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2024. Centres with no sector employment in 2024 not shown.