Before the Independent Hearings Panel
at Waimakariri District Council

under: the Resource Management Act 1991

in the matter of: Proposed private plan change RCP31 to the Operative Waimakariri District Plan

and: **Rolleston Industrial Developments Limited**
Applicant

Evidence of Natalie Dianne Hampson

Dated: 6 July 2023

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EVIDENCE OF NATALIE DIANNE HAMPSON

1 My full name is Natalie Diane Hampson. I am a Director at Market Economics Limited (*M.E*). I have held this position since mid-2019. I hold a Master of Science degree in Geography from the University of Auckland (first class honours).

2 I have worked in the field of economics for over 20 years for commercial and public sector clients. I joined Market Economics in 2001, and I have specialised in studies relating to land use analysis, assessment of demand and markets, the form and function of urban economies and growth, policy analysis, and evaluation of economic outcomes and effects, including costs and benefits.

3 I have 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. I have been involved in the (ongoing) development of M.E's 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 have not previously been involved in the proposed private plan change (*PC31*), including any assessments that have informed the Section 32A report that was notified. Despite this, I am familiar with the plan change through the various documentation and briefing by the applicant.

CODE OF CONDUCT

6 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

7 This evidence is focussed on the appropriateness of the proposed Business 4 Zone land notified within PC31. 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. This evidence relies on the residential development of PC31 as proposed, and does not consider the appropriateness of the residential zoning per se. This is covered in the evidence of **Mr Akehurst**.

8 Included in my evidence is my response to the submissions by Mandeville Village Partnerships (submitter 551) on the proposed Business 4 Zone land, and my response to the Section 42 report - specifically appendix 4 to that report prepared by Formative on economic costs and benefits. While that report covers a wide scope, I focus on the assessment related to the proposed Business 4 zoning.

SUMMARY

9 Using M.E's proprietary 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 Business 4 Zone land proposed in PC31 on the Waimakariri centre network.

10 Those scenarios consider a lower and upper dwelling yield for PC31 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.

11 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.

12 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 in PC31 would not lead to any significant adverse effects on other centres in Waimakariri District.

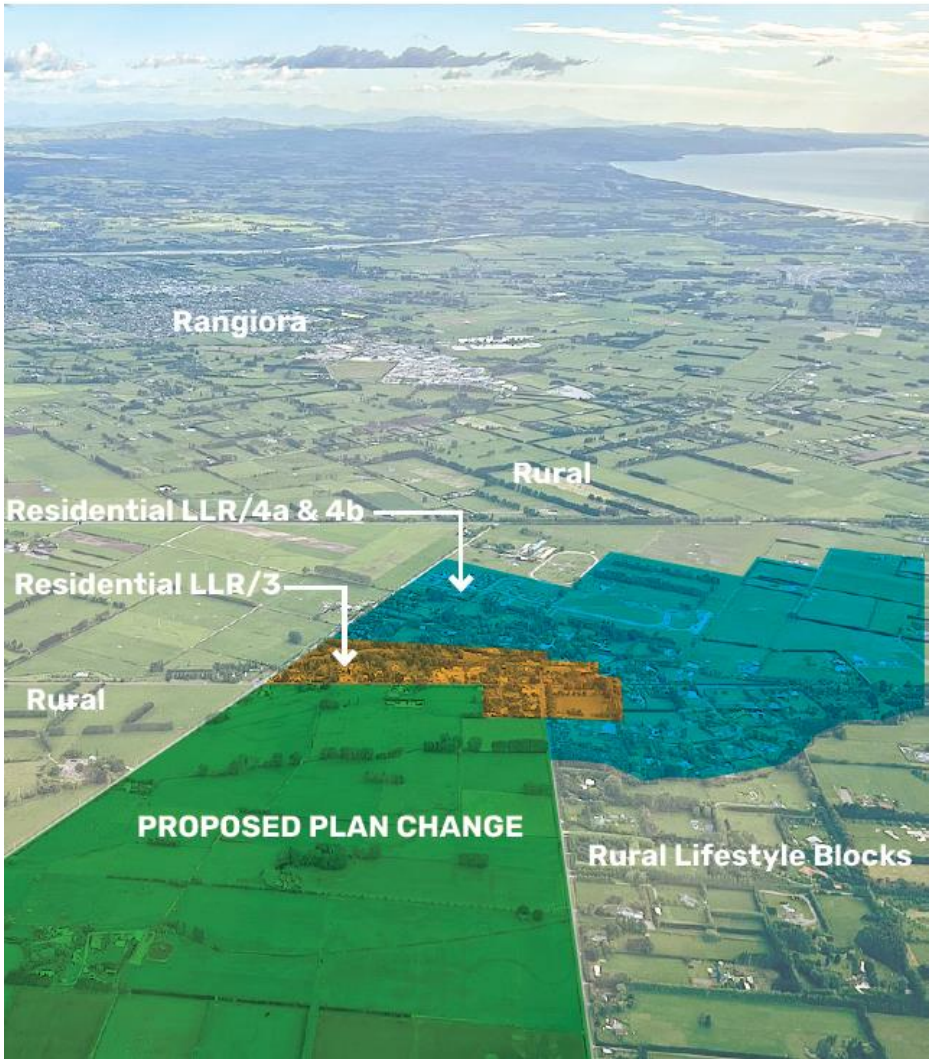
13 To ensure this outcome, I support a total gross floor area (*GFA*) cap for Business 4 Zone land in PC31 of between 2,500-3,000sqm. This is consistent with Formative's analysis which indicated that total GFA of 2,700sqm was likely to be sustainable if PC31 was approved. I consider that consolidating this floorspace in the Business 4 Zone

proposed on Whites Road will maximise the social and economic benefits of providing convenience retail and service activity as part of PC31. Alternatively, a portion of the total GFA cap could be used to develop a small group of shops in the Business 4 Zoned land on Mills Road once the larger centre was fully developed.

SITE DESCRIPTION AND CHARACTERISTICS

14 PC31 seeks to rezone approximately 156 hectares of land in Ōhoka from Rural to Residential 2, 4A and Business 4.[1] PC31 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 PC31 in Ōhoka[2]



[1] This is the amended proposal. The notified plan change originally sought Residential 3 and 4A, Business 4 and Residential 8.

[2] Map courtesy of Reset Urban Design.

15 The site adjoins the existing Residential 3 Zone and will extend Ōhoka's residential area south of Mill Road. Figure 1 shows PC31 in relation to the existing Ōhoka urban area. PC31, and the wider existing Ōhoka community sits within the Statistical Area 2 (SA2) called Mandeville-Ōhoka. As indicated by the name, it also includes the Mandeville community.

16 Between 850 and 1,057 dwellings are estimated to be enabled by the plan change as currently proposed.[3] The lower dwelling yield includes a primary school in the development. The upper 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).[4] 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.

17 The residential areas of PC31 will be staged. M.E estimates that the first stage of housing could be built and occupied in 2026.[5] This is indicative only. The final stage of housing is estimated to be built and occupied by 2036 – so a 10 year residential development period is assumed for this evidence.[6]

18 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 zoned Residential 3. The next closest centre is at Mandeville (Business 4 Zone).

19 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

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[3] 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 notified Outline Development Plan.

[4] Indicative yield advised by RIDL. 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.

[5] The Formative Report assumes that year 1 is 2024 (page 27). This is not realistic in my view.

[6] This may be optimistic and will depend on demand for housing in Ōhoka and the ability of PC31 to attract housing demand given that it will compete with several other greenfield household developments. Formative have also adopted a 10 year development period (page 27).

based on GPS data that tracks a sample of cell phones over a year.[7] 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.[8]

20 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).

21 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.

22 The latest Outline Development Plan for PC31 (set out in the evidence of **Mr Walsh**) currently indicates two discrete centres (Business 4 Zone land). One is facing Mill Road and is referred to in this evidence as the "Small Proposed Centre". The other "Large Proposed Centre" adjoins Whites Road. I understand that the extents of these Business 4 zones are indicative. That said, I have been advised by RIDL that they have a gross area of 0.40ha and 1.60ha respectively and I have relied on these figures as the starting point of my analysis. The Business 4 zoned areas are intended to serve not only the needs of the future residents within PC31, 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).

APPROACH TO ESTIMATING THE DISTRIBUTIONAL EFFECTS OF THE PROPOSED BUSINESS 4 ZONE CENTRES

23 The focus of this evidence is to estimate the potential retail distributional effects of the proposed and notified Business 4 Zone land in PC31 on the existing centre network. While the Business 4 zoned land can be expected to include some non-retail businesses –

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[7] The GPS data does not indicate spending in centres, only a sustained duration spent at those centres which we define as a 'visit'.

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

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 PC31 on the centre network in my conclusions.

24 In order to assess the retail effects of developing the proposed commercial zoned land I have adapted Market Economics' *Retail Gravity Model* for Greater Christchurch. 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 estimating how this impacts the performance of existing centres over time.

Food, Grocery and Liquor Retail Modelling

25 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). In the time available to prepare this evidence, I have focussed on running the 'Food, Grocery and Liquor' sub-model.[9]

26 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.

27 The Supervalue 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 preferrable (if not essential) to support the viability and functional amenity of the proposed Business 4 zoned land in PC31. 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 PC31,

[9] 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'.

along with a mix of other food and liquor stores that could be expected in a convenience-based centre.

28 In my experience, supermarkets (or large grocery stores) provide the most realistic indication of a centre's trade catchment[10] 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

29 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 SA2s in Waimakariri, Christchurch and Selwyn in that year closely matches the sales in food, grocery and liquor stores in that Study Area in 2021.[11]

30 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).

31 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.[12]

32 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

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10 I.e., the area from which is draws regular customers.

11 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.

12 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.

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.

33 Annual demand for each retail store type 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 centre. The unit of employment used by M.E in the model is the 'modified employment count' or MEC.[13]

34 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:

34.1 89% of total food, grocery and liquor supply (employment) in Waimakariri District.

34.2 68% of total food, grocery and liquor supply in Christchurch City.

34.3 91% of total food, grocery and liquor supply in Selwyn District.

35 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, we have scaled down demand in each territorial authority pro-rata the share of supply captured in modelled centres in each territorial authority (stated above).[14] 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.

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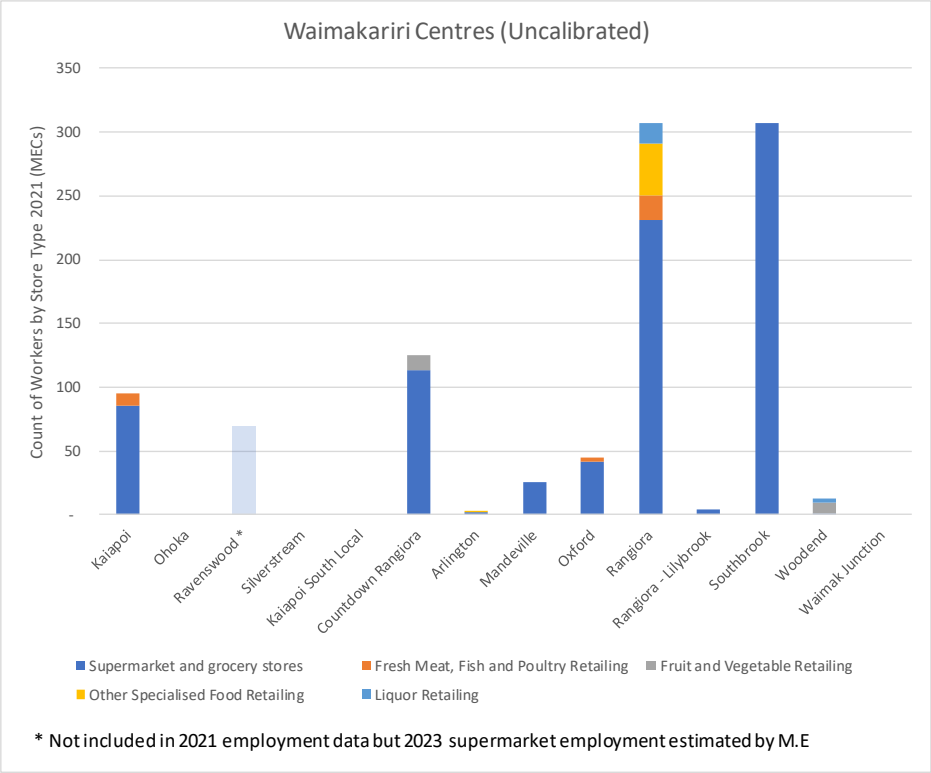
[13] This is based on StatisticsNZ data on employee counts and M.E estimates of working proprietors in each ANZSIC.

[14] 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.

Supply of Food, Grocery and Liquor Retail 2021

36 2021 employment in the food, grocery and liquor sector that exists in centres[15] included in the Retail Gravity Sub-model is summarised for Waimakariri Centres in Figure 2 below.[16]

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



37 Figure 2 shows that the largest count of employment in the food, grocery and liquor sector 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.

38 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

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15 Centres are defined at the SA1 level.

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

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.

39 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 include known changes in supply as part of the status quo scenario. An example of this is the Ravenswood centre. A New World has opened in 2021 but after StatisticsNZ reported employment for 2021. M.E have included estimated employment for this store as part of the 2023[17] (and subsequent) model run,[18] 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.

40 While there is some information on the internet that Waimakariri Junction is anticipating a supermarket, I have not managed to verify the time and scale of that supply. I have opted not to include any food, grocery and liquor employment in that centre (or Silverstream) in the status quo scenario.[19] Given the location of those centres relative to Ōhoka, and Ōhoka residents' shopping patterns, this is not expected to have a material impact on my conclusions. I have not sought to include known supply changes in Christchurch City or Selwyn District given the focus on Waimakariri District.[20]

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

41 The M.E Grocery, Liquor & Other Food Retail Gravity Sub-model is based on SA2 household projections for Waimakariri, Christchurch

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

18 I am unsure why no supermarket employment was recorded in the SA1 in the 2022 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.

19 I have not sought to bring in known supply changes in Christchurch City or Selwyn District for this model run as the significant majority of distributional effects fall within Waimakariri District, and therefore would have no impact on results.

20 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 would have little impact on the gravity model results.

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.[21] This set of projections are referred to as the "status quo" household demand scenario for this evidence.

42 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 our reliance on StatisticsNZ data.

43 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 Akehurs**t) at the district and sub-district level, but in the absence of a side-by-side comparison at the 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.

44 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.

45 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, we have scaled back the demand arising from households in each SA2 that enters the Gravity Model on account of

[21] This approach is consistent with the approach taken in the Greater Christchurch HBA 2023 report.

some food, grocery and liquor supply being excluded from the model.

46 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.

47 As stated previously, PC31 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.[22] 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 PC31 site and other Study Area centres.

48 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 PC31 is estimated to be developed.[23] 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:

48.1 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;

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[22] I acknowledge that Formative have estimated plan enabled capacity for PC31 that is higher again (page 21), although I understand that stormwater management requirements on the site increases the area typically needed to provide for infrastructure (i.e., roads and reserves), which may make the developer's yield closer to what can be reasonably expected.

[23] In contrast, Formative have modelled growth of 430 households between 2022 and 2043 in a smaller Ōhoka catchment that excludes the settlement of Mandeville. While Formative's SA1 defined Ōhoka catchment includes some areas outside the Mandeville-Ōhoka SA2 that I have modelled, this may indicate that the household growth projections that I have modelled for both Ōhoka and Mandeville combined are conservative relative to Council's projections.

48.2 Frnside 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

48.3 Rangiora North East SA2 (which includes some land in the existing urban area of Rangiora and the North East urban growth overlay areas), total growth of 460 households 2026-2043.

49 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 PC31 is located in an area of expected high demand and would therefore provide zoned capacity to meet that demand.

50 That said, the total capacity of PC31 is greater than the projected growth of households in the Mandeville-Ōhoka SA2 between 2026 (when the first stage of houses is estimated to be delivered) and 2043, according to StatisticsNZ. Assuming that PC31 takes up all growth in the SA2 (i.e., 420 new households)[24], the residual is between 430 and 540 additional (spending) households.[25] If all dwellings in PC31 are assumed to be taken up by (indicatively) 2036 then this implies that the plan change would need to:

50.1 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

50.2 attract 430 (lower) to 540 (upper) net additional households to the district not anticipated in the growth projections.

51 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

[24] Formative assumes that PC31 will not take up any of the projected 430 household growth in their Ōhoka catchment area and would attract net additional growth from elsewhere in the district. While this does not seem realistic in my view (as PC31 is responding to demand in Ōhoka), I agree that Formative have taken a conservative approach to avoid underestimating centre demand.

[25] Based on the modelled range of households contributing to demand in centres of 850-960 discussed in paragraph 47. 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 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 RIDL. As such, I consider that take up of PC31 will occur ahead of most infill capacity.

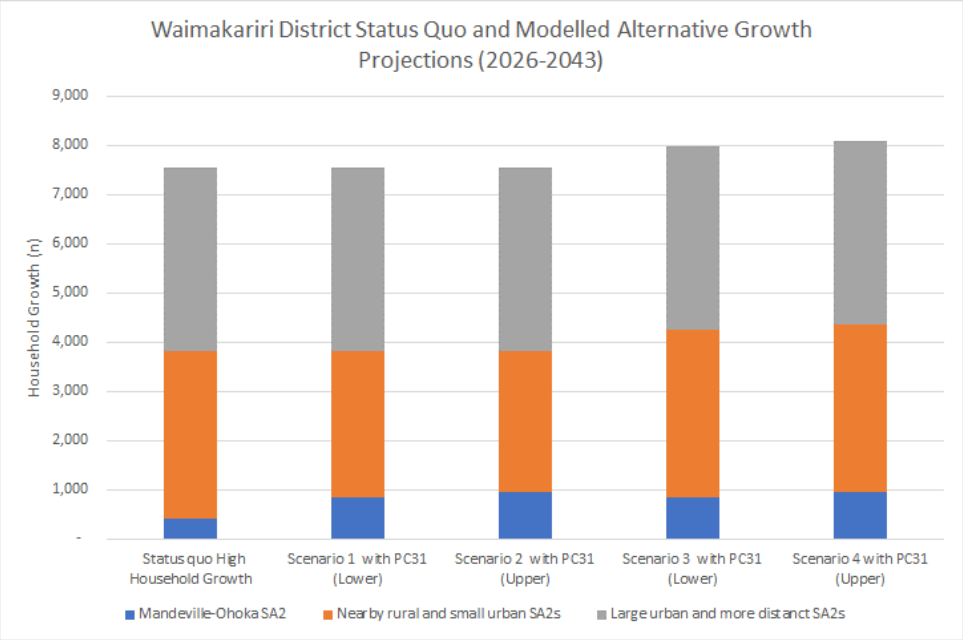
growth projections, but not all of them. To be conservative, I rely on a redistribution of projected growth within the district as the basis of distributional effects modelling as this will show the maximum distributional effect on Waimakariri centres associated with the plan change (based on modelled inputs) in my view.

52 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 PC31 respectively. Scenarios 3 and 4 reflect the 'net additional' to total district growth outcome to take up all capacity in PC31 with a lower and upper dwelling yield respectively.

53 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 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 a similar living environment.

54 A table showing the status quo and Scenario 1-4 household projections developed for the Gravity Modelling of PC31 are included in **Appendix 4** and are summarised below (Figure 3). **Appendix 4** shows the SA2s from which a portion of 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 PC31 Housing Capacity before 2043



55 I acknowledge that the nearby SA2s selected to reallocate demand in scenarios 1 and 2 (on the assumption that PC31 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, PC31 (and Ōhoka generally) does not offer a residential environment directly comparable to Rangiora, and hence I do not see PC31 competing strongly with 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

56 Table 1 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 food, grocery and liquor stores demand from Selwyn leaks north to Christchurch City in 2021). This leakage is very slightly improved by the addition of a new centre in PC31. In the status quo scenario, the Ravenswood

New World is included from 2023 onwards as discussed above (i.e., known additions to supply post February 2021).

57 Table 1 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 PC31 on both demand and supply patterns, employment in the sector is estimated to increase to 1,132 MECs in 2026, and 1,680 MECs by 2043. This is total growth of just under 550 jobs in the food, grocery and liquor sector spread across 10 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 Business 4 Zone in the wider vicinity.

58 Table 1 is the baseline against which the potential effects of PC31 can be measured, and assumes no other future supply changes in the market.

Table 1 – Status Quo Food, Grocery and Liquor Store Employment by Centre in Waimakariri Without PC31 (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	146	154	170	195	217	*71*
Kaiapoi	98	104	109	117	131	142	*37*
Kaiapoi South Local	-	-	-	-	-	-	*-*
Mandeville	33	36	37	41	48	53	*17*
Oxford	55	58	61	66	74	82	*24*
Rangiora	312	337	355	392	450	501	*164*
Rangiora - Lilybrook	5	6	6	7	8	9	*3*
Ravenswood	73	81	88	101	121	140	*58*
Silverstream	-	-	-	-	-	-	*-*
Southbrook	318	343	361	398	457	506	*163*
Waimak Junction	-	-	-	-	-	-	*-*
Woodend	14	15	16	18	21	23	*8*
Ohoka	-	-	-	-	-	-	*-*
Total Waimakariri Centres	**1,048**	**1,132**	**1,193**	**1,316**	**1,511**	**1,680**	***547***
Mandeville & Ohoka Combined	33	36	37	41	48	53	*17*

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2023.

DISTRIBUTIONAL EFFECTS OF PC31

PC31 Supply Estimates

59 Table 2 sets out my working to estimate plan enabled and likely GFA in the combined Business 4 Zone land areas identified in the latest Outline Development Plan. At this stage, I have looked at the total GFA potential and not split this over the two proposed centres. I provide recommendations regarding the two separate Business 4 Zone areas later in my evidence.

Table 2 – Sequential Working of Potential GFA in the Combined Business 4 Zone Land Indicated in the Latest Outline Development Plan

Indicative Gross Business 4 Zone Area - Large Proposed Centre	16,000	sqm
Indicative Net Business 4 Zone Area - Large Proposed Centre (less land for infrastructure) (70%)	11,200	
Indicative Gross Business 4 Zone Area - Small Proposed Centre	4,000	sqm
Indicative Net Business 4 Zone Area - Small Proposed Centre (land for infrastructure N/A, 100%)	4,000	
Indicative Net Business 4 Zone Area - Combined	15,200	sqm
Maximum Site Coverage (proposed amended rule 31.1.1.10)	55%	
Indicative Ground Floor Building Footprint (Maximum)	8,360	sqm GFA
Estimated share of ground floor building with an upper floor	40%	
Estimated First Floor GFA	3,344	sqm GFA
Total Plan Enabled and Expected GFA	11,704	sqm GFA

Source: RILD, S32 Report, M.E

60 By my estimates, PC31 could reasonably deliver up to 11,700sqm GFA if built to the maximum site coverage enabled and allowing for indicative 40% of the ground floor space to contain an upper floor.[26] This is more than the range stated in the Section 32 report, which suggested between 5,700-6,900sqm GFA across both proposed centres. The Section 32 report indicated that the GFA range allowed for roads, stormwater management, pedestrian linkages, ample carparking and a village square in the larger proposed centre. While this may reflect RIDL intentions, it is prudent that Council consider the floor space capacity that is plan enabled.[27]

61 While that potential GFA provides substantial scope for estimating the share they 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 Business 4 Zone is intended as a convenience centre.[28] As such I have modelled the employment equivalent of the following[29]:

61.1 Either a small supermarket equal to the size of the Mandeville SuperValue (460sqm or around 25 MECs); or

[26] While it is less common for small convenience centres to be developed to two storeys (i.e., ground and one upper floor), proposed amended rule 31.1.1.24 for PC31 provides for an 8m building height. RIDL indicated that their urban design advice was to provide some two storey buildings. My 40% assumptions is based on this outcome. I believe two storey buildings would be limited to the larger proposed centre.

[27] If all buildings were two storeys, then the maximum plan enabled capacity could be as high as 16,720sqm GFA.

[28] If under the PDP the proposed centre zoning would be Local Centre Zone, the role of the centre would be daily and weekly shopping, including convenience. This suggests more depth and functionality than simply convenience activity of a Business 4 Zone under the operative plan.

[29] 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.

61.2 A small-moderate supermarket equal to the size of the Oxford FreshChoice (710sqm or around 40 MECs); and

61.3 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 19).

62 Combined, these five indicative stores give a lower combined supply of 44 MECs or higher combined supply of 59 MECs (with the slightly larger supermarket option). I have run the lower supply alongside the lower dwelling yield scenario for PC31 and the higher supply alongside the upper dwelling yield scenario for PC31. 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 PC31 in 2028 in the Gravity Model but note it could be expected sometime between 2026 and 2028.

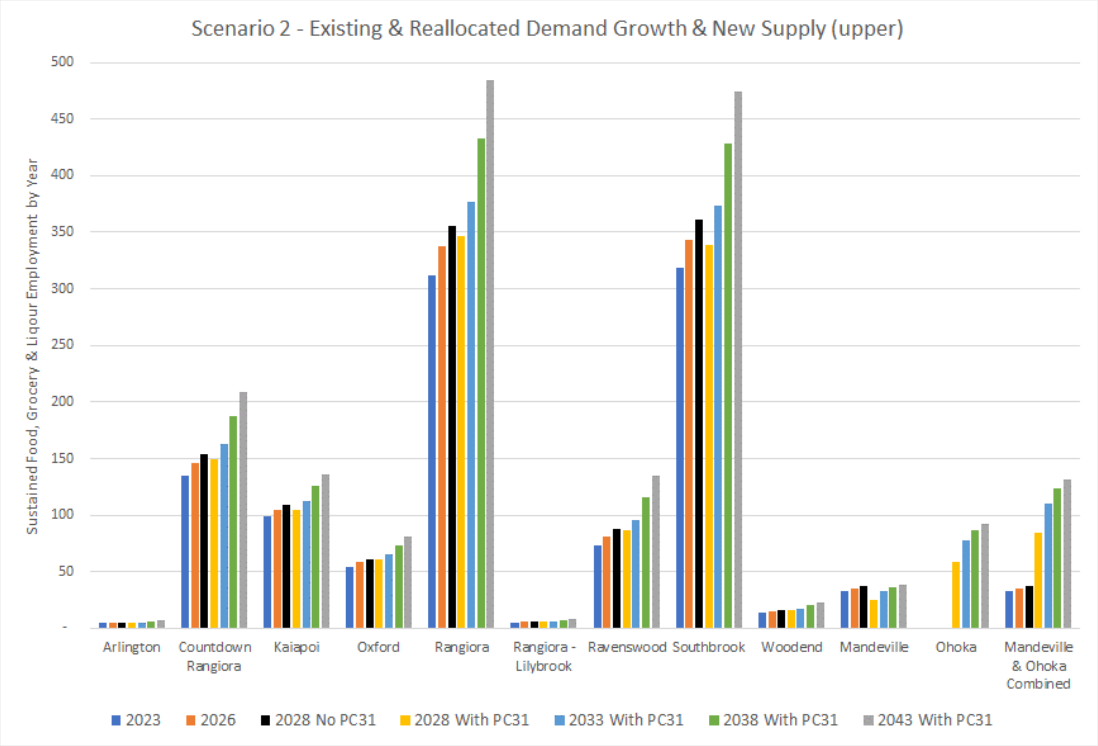
Food, Grocery and Liquor Supply Changes with PC31

63 Given that I have sought to model distributional effects associated with potential changes to both supply and demand patterns associated with PC31, 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**.

64 Having tested these PC31 changes in isolation, I am confident that the combined demand and supply scenarios can be relied on.[30] 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 2023 and 2043.

[30] 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 PC31 on Centre Employment (Food, Grocery and Liquor Employment Only) – Higher dwelling yield and higher employment supply



65 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:

65.1 When comparing where each centre providing a food, grocery and liquor role would be in terms of projected employment in 2028 without PC31 (i.e., black bars in Figure 4) and where that employment would be with PC31 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 -3% and -4% respectively. These are the impacts under scenario 2 (with the higher dwelling yield in PC31, but also a slightly higher supply of centre employment to go with that). Under scenario 1 (850 dwellings in PC31 and slightly lower supply of centre employment to go with that), the impacts across all of those centres are lower again.

65.2 This shows that based on the GFA/employment modelled, direct trade impacts on the centre network are very minor. Importantly, all of these centres would still have experienced growth in their food, grocery and liquor store employment

between 2026 and 2028 – the period when the PC31 centre would have started operating. This means that while they may face a very minimal opportunity cost in terms of future employment in 2028, there is no real cost as all centres will continue to grow - improving in vitality, vibrancy and social and functional amenity delivered to the community.[31]

65.3 These results show that:

(a) some of the proposed PC31 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 plan change;

(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 any potential impacts on employment in centres.

65.4 As far as the wider centre network is concerned, the Gravity Model shows that the scale of food, grocery and liquor activity (44-56 MECs in 2026-28) is sustainable if the residential dwelling capacity of PC31 were to be approved. Had I modelled considerably more food, grocery and liquor employment in the proposed Business 4 Zone area, 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.

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

66.1 Mandeville is a small convenience centre that I understand is fully developed, but has some additional land (5,635sqm gross) zoned in the Proposed District Plan (*PDP*) to enable further carparking[32] and floorspace growth. It currently has a small Supervalue supermarket (estimated at around 460sqm

[31] That net growth is bigger again, if measured against today's (2023) employment and centre amenity.

[32] Already consented and developed.

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.

66.2 Growth in the Mandeville centre's trade catchment between 2023 and 2026 (i.e., just prior to development of PC31) is estimated to sustain around three 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 PC31 on the 2026 baseline for Mandeville, i.e., impacts on a slightly bigger centre than seen today (and fully developed in terms of proposed zone area).

66.3 The modelled impact of PC31 scenario 1 or 2 show that in 2028, PC31 could reduce Mandeville food, grocery and liquor employment by 25-33% compared with what it might otherwise have expected to be in 2028. This equates to a reduction of 9-12 jobs.

66.4 Expressed a different way, food, grocery and liquor employment in Mandeville would be 21-30% less in 2028 than expected employment in 2026 (before the PC31 centre opened its doors (i.e., 7-11 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 PC31 fully operational due to ongoing growth in its catchment.

66.5 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 Ōhoka centre (PC31) would continue to grow over and above the employment supplied when initially developed.

66.6 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 of demand, but if I had constrained employment in PC31 in each time period to the initial employment estimated for the centre, then some of the unmet demand would benefit Mandeville.[33]

66.7 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 PC31, 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 38 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).

66.8 A reduction of 7-11 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.

66.9 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 PC31 Business 4 Zone land on other retail and service store types

67 I have only modelled scenarios of food, grocery and liquor activity developed in PC31 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 size assumptions. A Business 4 Zone centre 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),

[33] This outcome is confirmed by testing a scenario with PC31 dwellings and no centre.

and any complementary convenience retail, such as a chemist (particularly if a medical centre is provided).

68 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 PC31 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.

69 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 PC31 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 PC31 such that centres show continued employment growth across all store types even with PC31.

70 I estimate that the total employment impact of the PC31 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 21-30% reduction in 2028 relative to expected 2026 employment). This is on the basis that the overall scale of the centre was 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 PC31's Business 4 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 zoning in Ōhoka, particularly if future demand growth indicatively sustainable in Ōhoka spills over to the Mandeville Centre.

Conclusions on Distributional Effects of PC31

71 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 PC31 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 a PC31 centre scenario, that the distributional effects on the wider centre network will still be negligible and quickly offset by district growth.

72 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 PC31 centre is developed in its entirety between 2026 and 2028 and with dwelling growth in PC31 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.

73 It is appropriate to provide convenience retail and service activity as part of PC31. The number of existing households in Ōhoka, combined with the number of dwellings potentially anticipated in the plan change 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 Business 4 zoned land as part of PC31 contributes to a well-functioning urban environment in that part of the district.[34]

74 I support PC31 with the inclusion of a local centre offering. In the absence of a new Ōhoka centre, it is my view that the Mandeville Business 4 Zone may not have sufficient capacity (even as expanded by the PDP) to efficiently cater for all local catchment growth on its own (with PC31 housing as part of that catchment). I base this on my testing of scenarios in the Food, Grocery and Liquor sub-model (**Appendix 5**).

75 I consider that there are net benefits to the Mandeville and Ōhoka communities from having Business 4 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 PC31 Business 4 Zones

76 My key concern with the Business 4 Zone indicated as part of the latest Outline Development Plan for PC31 is the gross size of the land area shown. While it has been reduced from the notified version, the plan enabled GFA over the combined areas is large and I have not contemplated a scenario where all of that is potentially occupied by retail and commercial service activity. Such an outcome would go far beyond the role of a local convenience centre and would certainly have potential for significant distributional effects.

[34] 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.

77 As such, I recommend a total GFA cap for PC31 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 PC31, 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 dwelling).

78 My second concern with the proposed Outline Development Plan for PC31 is the provision for two areas of Business 4 Zone – a large and a small proposed centre. This would require the recommended total GFA cap to be split over two locations that are relatively close to each other. I consider that this dilutes the potential foot traffic and vibrancy generated by the retail and commercial floorspace over two separate locations and will lead to less efficient travel patterns.

79 My primary recommendation would be to have a single centre in PC31 to maximise the functional and social amenity delivered to the local community and better support the viability of all future businesses. I consider a single centre would have better economic and social outcomes for current and future residents of Ōhoka (and surrounds).

80 In terms of which location is better (Mill Road or Whites Road), I anticipate a number of potential social and economic benefits for the centre if it was 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 would recommend a consolidated centre fronting Whites Road with a total GFA cap of 2,500-3,000sqm GFA.

81 I am relatively less concerned with the gross area of that Business 4 Zone 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.

82 My alternative recommendation would be to retain the second, smaller area of centre zoning on Mill Road but:

82.1 Provide a zoning lower in the centre hierarchy (i.e. a Neighbourhood Centre in the context of the PDP, leaving the larger centre on Whites Road as a Local Centre);

82.2 Any GFA must fit within the overall GFA cap (i.e., 2,500-3,000sqm); and

82.3 No development can proceed until the larger centre is fully developed and tenanted, and subject to an assessment on the economic health of the Mandeville Village Centre.

RESPONSE TO SUBMISSION

Mandeville Village Partnership (551)

83 This submission states that Plan Change 33 approved the Mandeville Business 4 Zone to provide for the convenience needs of the Mandeville, Ōhoka and Swannanoa catchment – a catchment where more rural residential growth was anticipated. On page 1 of the submission, PC31 is likened to rural residential growth. It is my view that PC31 would deliver mainly urban residential demand and a relatively small amount of rural residential (large lot) demand. As such, I do not consider that PC33 anticipated the likes of PC31.

84 PC31 would change the residential landscape within the Mandeville, Ōhoka and Swannanoa catchment, such that the greatest concentration of residential dwellings would be centred on Ōhoka in the future and not Mandeville.

85 On pages 5 and 6 of the submission, the submitter relies on the wording of the PDP objectives and policies for Local Centres to infer that the Mandeville Village is intended to serve the Ōhoka community. This is reiterated on page 9, where the submitter states that "*it is critical that the Mandeville North Business 4 Zone (MNB4Z) remains the key local centre for commercial activity within the wider area. This is important to preserve the hierarchy of commercial areas sought under the PDP and to preserve the primacy of Town Centres*".

86 I do not interpret the PDP provisions for Local Centres as requiring the Mandeville centre to serve the Ōhoka community in perpetuity. The provisions refer to serving local residential or nearby rural areas. What is nearby (or nearest) any centre will change as supply changes (i.e. when new centres are added to the network which may be necessary to cater for greenfield growth).

87 With a district that is experiencing high growth, adding to the centre network is both expected to meet demand in areas of growth and ensures an efficient urban form is maintained. Providing for a commercial centre(s) in PC31 is a reflection of these economic

processes and is not inconsistent with the intentions of the PDP provisions for Local Centres.

88 My modelling suggests that – in the absence of including a new centre with PC31 - that over time, the Mandeville centre may not have sufficient capacity to efficiently meet all catchment demand as PC31 becomes fully developed. Rather, my modelling indicates that both centres can be sustained in the medium term. I do not anticipate any risk to the Mandeville centre expanding floorspace on the proposed additional Business 4 Zone site. The submitter indicates a well performing and successful centre that needs to expand. This latent demand plus growth anticipated in the short-term is likely to be more than enough to sustain the expansion in my view.

89 Further, my modelling also shows that PC31 will have negligible adverse effects on the Town Centres of the district. Expanding the centre network to include an Ōhoka centre poses no threat to the primacy of higher order centres if appropriately sized.

90 The submission also makes the point that the wording of the s32 report that describes the purpose of the proposed centre closely aligns with the wording describing the role of Neighbourhood Centres in the PDP. As such, they also consider that any centre in PC31 should be limited to a Neighbourhood Centre. I disagree with this outcome (and the wording used in the s32 report). I consider a Local Centre is the most appropriate and efficient role of the (larger) centre within PC31 (and can be sustained as such without any significant distributional effects, including on Mandeville). As noted in my evidence, if a second centre was to be retained in the PC31 zoning, only this should have a lower role in the centre hierarchy (and be controlled in terms of timing).

RESPONSE TO S42A REPORT

91 The S42A report adopts Formative's recommendations for a total GFA cap of 2,700sqm for a commercial centre that would support the proposed community, but does not support the proposed Business 4 zoning as notified on the basis of insufficient evidence on distributional effects. My evidence has been prepared to address that information gap in the original application.

92 The following provides my response to the Formative Report with respect to the provision of Business 4 Zone land within PC31. I have included a few comments/footnotes on the Formative Report as it related to my evidence above. I do not repeat those points here. For clarity, I do not address residential aspects of the Formative Report as these are covered by other experts.

93 The Formative Report relies on a dwelling yield of 850-900 households for the purposes of estimating centre demand.[35] This does not acknowledge the potential yield of retirement village in the proposed development, which, based on advice from RIDL could have an indicative capacity of 220 household units and increase the upper dwelling yield to 1,057 in net terms. I conservatively model a range of 850-960 'spending' households for the purposes of estimating demand for food, grocery and liquor floorspace/employment. This is not substantially different to the range adopted by Formative. However, for other activities that could locate in the proposed Business 4 Zone, such as personal services, hospitality or a medical centre, it may be more appropriate to apply the full range of 850-1,057 dwellings to estimate demand. This aspect of the Formative approach is therefore potentially under-estimating centre GFA *if* a retirement village eventuates in PC31, although I acknowledge that in other aspects of their analysis, they have been conservative (i.e., generous) to avoid understating sustainable floorspace.

94 Formative consider that "*for the most part, we would expect that much of the demand this is drawn by PC31 would other have been located in the areas around these main towns in the District, or elsewhere in Christchurch*" (page 24). The towns referred to are Rolleston, Kaiapoi and Woodend/Ravenswood. I consider this statement is broadly consistent with the assumptions I have applied in my Gravity Model to draw additional housing demand to Ōhoka in order to take up capacity in PC31 within a 10 year period (i.e., scenarios 1 and 2).

95 We do however differ in that Formative draw the full dwelling yield of PC31 from those areas, while I draw only the net additional growth required over and above the growth already projected in the Mandeville-Ōhoka SA2. Between us, we therefore cover a range of potential growth outcomes.

96 In section 4.2.1, Formative disagrees with the statement made in the s32 report that 5,700-6,500sqm of commercial floorspace is a modestly sized centre that is intended to serve the day to day needs of the local community. As discussed in my evidence, I agree with Formative on this issue and would not support a centre of the scale indicated by the s32 report in the proposed location (and with that particular zoning).

97 Formative and I have applied different analysis tools to answer essentially the same question. I have applied a Gravity Model which is focussed on understanding distributional effects across the centre network, while Formative have defined a discrete primary trade catchment for the centre and estimated the projected convenience

[35] Page 4, page 14,

retail and service demand in dollar and sqm GFA terms that can be sustained by that catchment in the long term. I consider that these two approaches are complementary and in combination provide a sound basis for decision making.

98 Importantly, our assessments reach similar conclusions:

98.1 I estimate that total centre GFA of between 2,500sqm and 3,000sqm would be sustainable while also avoiding significant distributional effects on other centres including Mandeville. Further, that this range should be used to impose a total GFA cap for PC31. Formative estimate that 2,700sqm of total retail and commercial service floorspace would be required to meet long term convenience demand inclusive of PC31 in Ōhoka, while still allowing Mandeville Centre to continue to grow (page 29).

98.2 We both recommend a supermarket anchor. I tested a supermarket ranging from 460-710sqm GFA but estimated that a slightly larger supermarket would still not trigger significant distributional effects. Formative support a supermarket (or large grocery store) of between 500-1,000sqm (page 29).

98.3 While the extents have been amended since PC31 was notified, we both identify that the gross zoned area of the Business 4 Zone is larger than required to support expected GFA, even allowing for a low intensity of development on the site. It is my evidence that imposing a total GFA cap alleviates any concerns about the scale of the gross zone area while maintaining flexibility for the landowner to provide other amenities suited to the local community.

98.4 We both agree that the larger Business 4 Zone area should equate to a Local Centre role in PDP terms and is appropriately located within the PC31 site (page 31). We both agree that the second smaller centre on Mill Road (if retained)[36] would need to be only a small group of shops (i.e., small relative to the Local Centre), but it lacks a strong economic rationale for inclusion of PC31 (page 39).

CONCLUSION

99 Given the housing densities and potential dwelling yield proposed for PC31, provision of a local centre as part of the development is a key opportunity to ensure that residents in the plan change site, the

[36] It is my evidence that a single Local centre would deliver the most economic benefits, but if the second smaller centre was to be zoned, it's development should be delayed till after the Local centre is fully developed and the Mandeville centre can be demonstrated to be in strong economic health.

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.

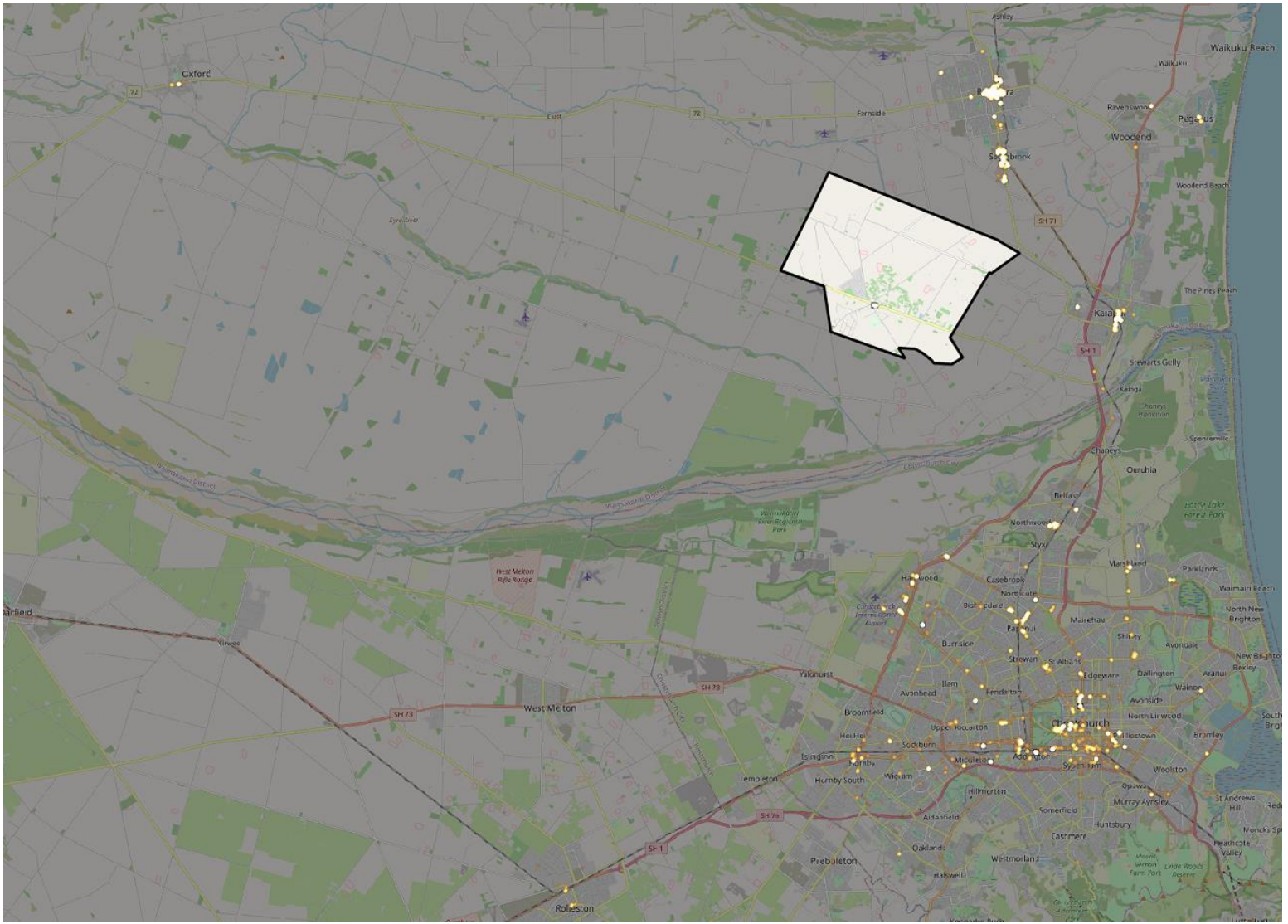
100 Setting a total GFA cap of between 2,500-3,000sqm GFA for the PC31 site will ensure a functional local centre can develop that meets the day-to-day shopping needs of the community in the long-term without generating any significant adverse distributional effects on existing centres, including Mandeville. 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.

101 While I consider there to be a number of economic benefits of consolidating the total GFA cap in a single centre, if a second area of commercial zoning is to be retained in PC31, I recommend that it should be zoned (in the context of the PDP) at a lower level in the centre hierarchy (i.e. as a Neighbourhood Centre) and delivered within the same GFA cap for PC31. Its development should also be delayed until the large local centre is fully developed and could be subject to an assessment that demonstrates the economic performance and health of the Mandeville centre.

Dated: 6 July 2023

Natalie 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 MECs 2021	Other Retail MECs 2021	Total Retail MECs 2021	Non-Retail MECs 2021	**Total MECs 2021**	Total Food, Grocery, Liquor %	Other Retail %	Total Retail %	Non-Retail %	**Total %**
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	Kaiapoi	96	81	177	465	**642**	15%	13%	28%	72%	**100%**
Waimakariri District	Kaiapoi 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/Mdltn	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	Lyttelton	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/Stanmore	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 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, Liqour & 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 PC31

Prior to running the core 'With PC31' 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 PC31. 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 PC31 Business 4 Zone area but not the dwellings in PC31. The lower yield of MECs was 44. To be clear, this is not a realistic scenario as RIDL would not contemplate a convenience centre if the residential dwelling capacity of PC31 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)[37], 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 PC31' scenarios 1 and 2 relative to the status quo baseline.

[37] 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	146	154	170	195	217	*71*
Kaiapoi	98	104	109	117	131	142	*37*
Mandeville	33	36	37	41	48	53	*17*
Oxford	55	58	61	66	74	82	*24*
Rangiora	312	337	355	392	450	501	*164*
Rangiora - Lilybrook	5	6	6	7	8	9	*3*
Ravenswood	73	81	88	101	121	140	*58*
Southbrook	318	343	361	398	457	506	*163*
Woodend	14	15	16	18	21	23	*8*
Ohoka	-	-	-	-	-	-	-
Total Waimakariri Centres	**1,048**	**1,132**	**1,193**	**1,316**	**1,511**	**1,680**	***547***
Mandeville & Ohoka Combined	33	36	37	41	48	53	*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	146	151	165	189	211	*65*
Kaiapoi	98	104	106	114	127	138	*34*
Mandeville	33	36	28	36	40	43	*7*
Oxford	55	58	61	65	74	82	*23*
Rangiora	312	337	349	380	437	488	*151*
Rangiora - Lilybrook	5	6	6	7	7	8	*3*
Ravenswood	73	81	87	97	117	136	*55*
Southbrook	318	343	344	381	436	482	*139*
Woodend	14	15	16	17	20	23	*8*
Ohoka	-	-	45	58	65	69	*69*
Total Waimakariri Centres	**1,048**	**1,132**	**1,197**	**1,324**	**1,520**	**1,687**	***555***
Mandeville & Ohoka Combined	33	36	73	93	105	111	*76*

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

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	*Growth 2026-2043*	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043
Arlington	-	-	- 0	- 0	- 0	- 0	- *0*	-2%	-4%	-3%	-3%
Countdown Rangiora	-	-	- 3	- 5	- 6	- 6	- *6*	-2%	-3%	-3%	-3%
Kaiapoi	-	-	- 3	- 3	- 4	- 4	- *4*	-3%	-3%	-3%	-3%
Mandeville	-	-	- 9	- 6	- 7	- 10	- *10*	-25%	-14%	-16%	-19%
Oxford	-	-	- 0	- 0	- 0	- 0	- *0*	-1%	-1%	-1%	-1%
Rangiora	-	-	- 7	- 12	- 13	- 13	- *13*	-2%	-3%	-3%	-3%
Rangiora - Lilybrook	-	-	- 0	- 0	- 0	- 0	- *0*	-3%	-3%	-3%	-3%
Ravenswood	-	-	- 1	- 4	- 4	- 4	- *4*	-1%	-4%	-4%	-3%
Southbrook	-	-	- 17	- 18	- 21	- 24	- *24*	-5%	-4%	-5%	-5%
Woodend	-	-	- 0	- 0	- 1	- 0	- *0*	-1%	-3%	-2%	-2%
Ohoka	-	-	45	58	65	69	*69*	N/A	N/A	N/A	N/A
Total Waimakariri Centres	**-**	**-**	**4**	**8**	**8**	**7**	***7***	**0%**	**1%**	**1%**	**0%**
Mandeville & Ohoka Combined	-	-	36	52	57	59	*59*	95%	126%	120%	111%

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

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	*Growth 2026-2043*	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043
Arlington	-	-	0	1	1	2		3%	11%	27%	42%
Countdown Rangiora	-	-	5	18	43	65		3%	13%	29%	44%
Kaiapoi	-	-	1	9	23	34		1%	9%	22%	32%
Mandeville	-	-	- 7	- 0	4	7		-21%	0%	12%	20%
Oxford	-	-	2	7	16	23		4%	12%	27%	40%
Rangiora	-	-	11	43	100	151		3%	13%	30%	45%
Rangiora - Lilybrook	-	-	0	1	2	3		3%	12%	29%	44%
Ravenswood	-	-	5	15	35	55		7%	19%	44%	67%
Southbrook	-	-	1	37	93	139		0%	11%	27%	40%
Woodend	-	-	1	2	5	8		5%	16%	35%	53%
Ohoka	-	-	45	58	65	69		N/A	N/A	N/A	N/A
Total Waimakariri Centres	**-**	**-**	**64**	**191**	**387**	**555**		**6%**	**17%**	**34%**	**49%**
Mandeville & Ohoka Combined	-	-	38	58	69	76		105%	162%	194%	212%

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2023. Centres with no sector employment in 2023 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 (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	146	154	170	195	217	*71*
Kaiapoi	98	104	109	117	131	142	*37*
Mandeville	33	36	37	41	48	53	*17*
Oxford	55	58	61	66	74	82	*24*
Rangiora	312	337	355	392	450	501	*164*
Rangiora - Lilybrook	5	6	6	7	8	9	*3*
Ravenswood	73	81	88	101	121	140	*58*
Southbrook	318	343	361	398	457	506	*163*
Woodend	14	15	16	18	21	23	*8*
Ohoka	-	-	-	-	-	-	-
Total Waimakariri Centres	**1,048**	**1,132**	**1,193**	**1,316**	**1,511**	**1,680**	***547***
Mandeville & Ohoka Combined	33	36	37	41	48	53	*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	146	150	163	187	209	*63*
Kaiapoi	98	104	105	113	126	136	*32*
Mandeville	33	36	25	33	37	39	*3*
Oxford	55	58	60	65	74	81	*23*
Rangiora	312	337	347	377	433	484	*147*
Rangiora - Lilybrook	5	6	6	6	7	8	*2*
Ravenswood	73	81	87	96	116	135	*54*
Southbrook	318	343	339	374	428	474	*131*
Woodend	14	15	16	17	20	23	*8*
Ohoka	-	-	59	77	87	92	*92*
Total Waimakariri Centres	**1,048**	**1,132**	**1,198**	**1,326**	**1,522**	**1,689**	***557***
Mandeville & Ohoka Combined	33	36	84	110	123	131	*96*

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

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	*Growth 2026-2043*	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043
Arlington	-	-	- 0	- 0	- 0	- 0	- *0*	-3%	-5%	-4%	-4%
Countdown Rangiora	-	-	- 4	- 7	- 8	- 8	- *8*	-3%	-4%	-4%	-4%
Kaiapoi	-	-	- 4	- 5	- 5	- 5	- *5*	-4%	-4%	-4%	-4%
Mandeville	-	-	- 12	- 9	- 11	- 14	- *14*	-33%	-21%	-23%	-26%
Oxford	-	-	- 0	- 0	- 1	- 1	- *1*	-1%	-1%	-1%	-1%
Rangiora	-	-	- 9	- 16	- 17	- 17	- *17*	-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	-	-	- 23	- 25	- 29	- 32	- *32*	-6%	-6%	-6%	-6%
Woodend	-	-	- 0	- 1	- 1	- 1	- *1*	-1%	-3%	-3%	-3%
Ohoka	-	-	59	77	87	92	*92*	N/A	N/A	N/A	N/A
Total Waimakariri Centres	**-**	**-**	**5**	**10**	**10**	**10**	***10***	**0%**	**1%**	**1%**	**1%**
Mandeville & Ohoka Combined	-	-	47	69	76	78	*78*	125%	167%	160%	148%

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

Modelled Centres	Jobs (MECs) 2023	Jobs (MECs) 2026	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043	*Growth 2026-2043*	Jobs (MECs) 2028	Jobs (MECs) 2033	Jobs (MECs) 2038	Jobs (MECs) 2043
Arlington	-	-	0	0	1	2		2%	10%	26%	41%
Countdown Rangiora	-	-	4	17	41	63		2%	11%	28%	43%
Kaiapoi	-	-	0	8	21	32		0%	8%	20%	31%
Mandeville	-	-	- 11	- 3	1	3		-30%	-9%	2%	9%
Oxford	-	-	2	7	15	23		4%	12%	27%	40%
Rangiora	-	-	9	39	96	147		3%	12%	29%	44%
Rangiora - Lilybrook	-	-	0	1	2	2		2%	11%	28%	42%
Ravenswood	-	-	5	14	35	54		7%	18%	42%	66%
Southbrook	-	-	- 5	30	85	131		-1%	9%	25%	38%
Woodend	-	-	1	2	5	8		5%	15%	34%	52%
Ohoka	-	-	59	77	87	92		N/A	N/A	N/A	N/A
Total Waimakariri Centres	**-**	**-**	**65**	**194**	**389**	**557**		**6%**	**17%**	**34%**	**49%**
Mandeville & Ohoka Combined	-	-	49	74	88	96		136%	209%	246%	268%

Source: M.E Greater Christchurch Retail Gravity Model - Food, Grocery and Liquor Sub-model, 2023. Centres with no sector employment in 2023 not shown.