

Appendix G:

Demand and Supply Assessment

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Demand & Supply Assessment

Shannon Farm Private Plan Change,
Cromwell

23rd May 2019 – Final

m.e
consulting



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Shannon Farm Private Plan Change,
Cromwell

Prepared for

New Zealand Cherry Corp (Leyser) Limited
Partnership

Document reference: NZCP001.18/Report/Economic Assessment of Demand – Shannon Farm PPC FINAL

Date of this version: 23rd May 2019

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Executive Summary

Cromwell Ward has been growing strongly relative to the rest of the Central Otago District and is projected to capture the major share of dwelling growth over the long term. Managing residential growth in Cromwell Ward is therefore a key issue for Council, and this is evident in the Cromwell Masterplan process currently underway.

An assessment of recent growth shows that a significant share of dwelling growth has occurred in Cromwell's rural fringe and rural areas in addition to the Cromwell urban area. To meet this market demand, rural property owners have been actively subdividing in recent years to create and sell lots that can be categorised as rural residential or rural lifestyle in size, where zoning or consents allow, freeing up capital in the process. This pattern of land use change is less evident elsewhere in Central Otago District. The reason that this demand is focussed so strongly on Cromwell Ward is expected to be driven by a combination of the amenity provided by Lake Dunstan, Cromwell township and community, and the relative proximity to both Queenstown and Wanaka – which offer additional amenity and employment opportunities.

The rapid increase in supply of rural residential (indicatively ranging from 2,000sqm to 1ha in size) and rural lifestyle lots (indicatively ranging from 1ha – 8ha in size) has not been spread evenly throughout Cromwell's rural fringe/rural area. There are distinct pockets in places such as Queensbury, Lowburn and Bannockburn, as well as along the lake and river edge and following the route of Ripponvale Road. In many cases the presence of rural residential and rural lifestyle lots is linked to an enabling district plan zone. There is also evidence of more *ad hoc* and large-scale subdivisions in the rural zone.

A key feature of the geography of this supply is the relative proximity to Cromwell township, although Queensbury is a clear outlier in that trend. By nature, households seeking rural residential or rural lifestyle properties look to balance space and privacy (and potentially the opportunity for hobby or small-scale primary production) with relative proximity to shops, services, employment and schools.

Council's dwelling projections suggest that there will be continued strong demand for dwellings in Cromwell's rural fringe/rural areas over the long term – in the order of 32 per year between 2016 and 2043. Based on past trends, a significant share of that demand is expected to be for rural residential and rural lifestyle lots in relative proximity to Cromwell township.

The Shannon Farm private plan change caters directly for that market demand – supplying a mix of both property types at a range of sizes (and therefore prices) that replicate and/or complement existing zone densities in the Cromwell Ward. It potentially provides capacity for 18% of projected long-term dwelling growth outside of urban Cromwell (and within Cromwell Ward) to 2043.

Importantly, based on M.E's spatial analysis, the location of the site fits logically within the context of the existing rural residential and rural lifestyle property estate. It is a logical extension of the Rural Residential Zone along Ripponvale Road. It contributes to dwelling capacity while also protecting the opportunity for future expansion of the neighbouring horticultural activity and protecting Cromwell's outstanding natural landscapes.



1 Introduction

NZ Cherry Partnership (NZCP) is seeking a private plan change from the Central Otago District Council relating to a 243ha site of mixed agricultural land located on Ripponvale Road in the rural fringe of Cromwell. The plan change request seeks an alternative rural-residential / rural-lifestyle type zoning that will enable approximately 142ha of the site to be developed in the future by way of resource consent.

A structure plan has been prepared that provides for an anticipated maximum yield of 160 rural residential and rural lifestyle lots as well as an open space network, provision of recreational features and expansion of the Outstanding Natural Landscape (ONL) on the west slope. A diversity of lot sizes is proposed (between 2,000sqm and >3ha) to ensure efficient use of the land resource (and contours/features). The proposed plan change is also anticipated to set aside a large area (29.3ha) of land which can be used in the future to expand the adjacent cherry farm (and associated operations).

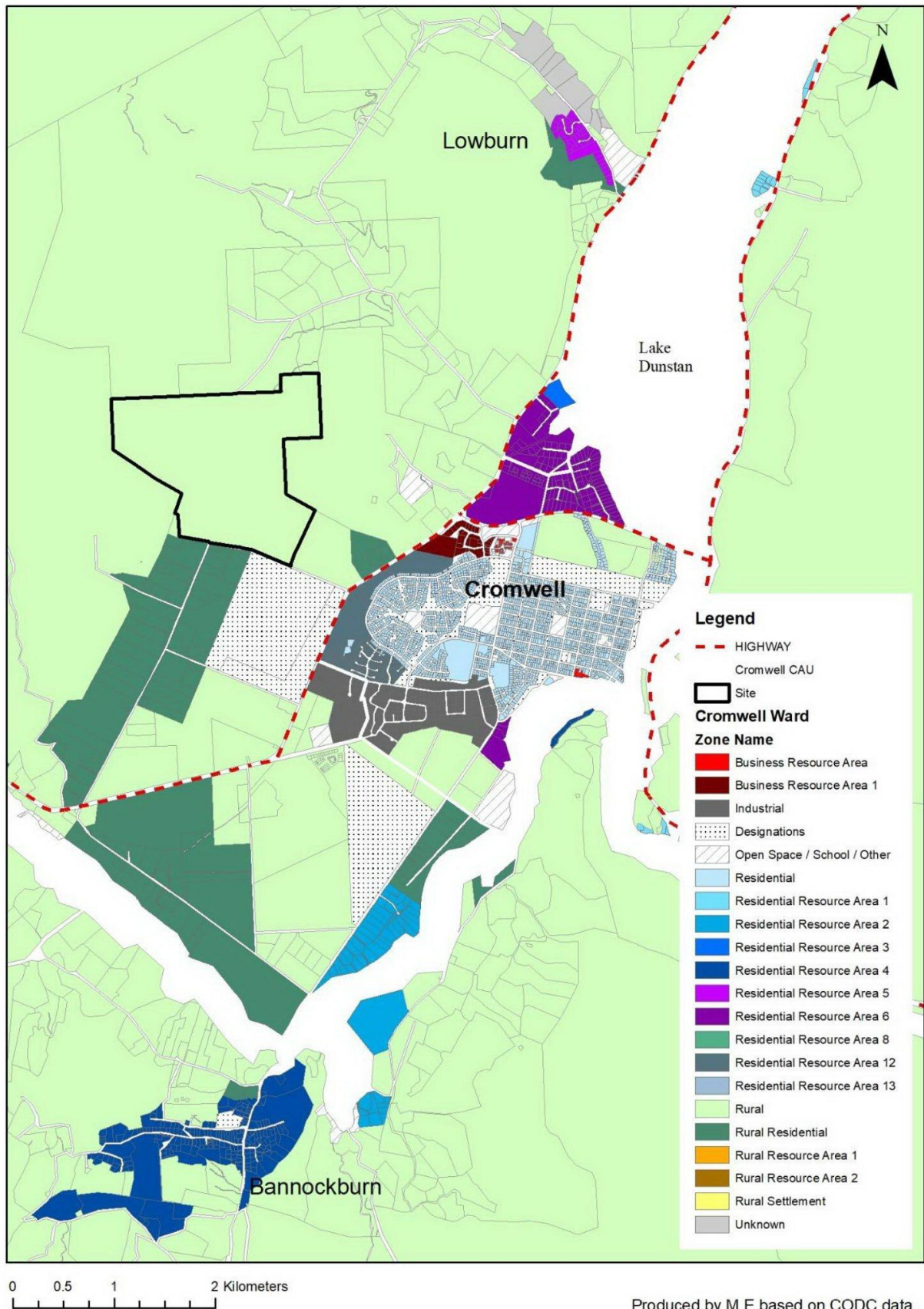
For the purposes of this report, Market Economics (M.E) has referred to lot sizes according to “residential”, “rural residential”, “rural lifestyle” and “rural” categories. This report is focussed on assessing future demand for rural residential and rural lifestyle properties (lots) in Cromwell’s rural surrounds, so that the proposed private plan change can be considered in that context. This report considers both the quantum of demand and its location, including relative to past and existing supply patterns.

1.1 The Proposal

Figure 1 provides a map locating the plan change land relative to existing Operative District Plan zoning. The underlying data of this map is a property level dataset supplied by Central Otago District Council (CODC) (October 2017)¹. The land is located at the northern end of Ripponvale Road where it turns south-east to join back onto State Highway 6. As the crow flies, the site (measured from the adjacent corner on Ripponvale Road) lies approximately 2.9km from the centre of Cromwell township. By road, it is approximately 3.4km from the centre of town. The land is currently zoned Rural Resource Area (Rural). Adjacent zones include Rural and Rural Residential Zone. A portion of the land is also opposite the Cromwell Racecourse (designation land).

¹ M.E has reconciled, to the best of our ability, the zone codes included in the data with the actual zone names based on a comparison with Operative District Plan maps (online PDFs). Not all zone codes could be matched. M.E has changed the zoning of some parcels where they appeared to conflict with zoning maps.

Figure 1 – Map of Proposed Plan Change Site Relative to Operative District Plan Zoning





1.2 Rural Residential and Rural Lifestyle Living

As mentioned above, rural residential and rural lifestyle are treated as two different products/markets of demand in this report. Based on research M.E has recently completed² for Far North District Council, the socio-economic profile of rural residential and rural lifestyle households is very similar, although collectively they are materially different from the average profile of urban communities and more traditional rural (farming) households. Compared to the average urban household, rural residential and rural lifestyle households have a tendency to be older couples, have higher incomes, are more likely to be European ethnicity³, are more likely to be self-employed or receive interest or dividends, and are more likely to be full time employed in managerial or professional occupations.

What does set rural residential and rural lifestyle households apart is their preferences for section size. Rural residential properties can be generally characterised as large dwellings with spacious grounds (often all landscaped and actively maintained). These households tend to like the convenience of being relatively close to urban centres (for work and shopping) while having a larger property (and associated privacy) than typically offered in residential zones. While there is demand for reticulated infrastructure services, this is not always the case and can often be dealt with onsite.

Rural lifestyle properties are larger again and can generally be characterised as large dwellings with spacious grounds that are often landscaped and maintained in association with the house site in addition to land that may be used for small scale (hobby) farming or horticultural (orchard) activities (i.e. has potential for some primary production area in addition to the house site, although this might not be the key source of income). These households are often prepared to be a little further out from the urban centres as a trade-off for the larger land holding. Rural lifestyle properties generally have onsite servicing for three waters.

Throughout the country, the terminology of zoning, their intended purpose and their minimum lot sizes vary. 4Sight Consulting (2018) concluded from a literature review that rural residential lots commonly varied between 3,000sqm and 2ha and rural lifestyle lots commonly varied between 2-10ha. However, in the context of planning rules and historical supply patterns in Far North District (for example), they considered a range of 2,000sqm – 2ha was more applicable for rural residential and 2-8ha was more applicable for ‘rural lifestyle’ in that location⁴.

Similarly, the planning rules and historical supply patterns of Central Otago District provide the context for how these categories may apply in the Cromwell Ward⁵. In light of the operative zones and the natural breaks that occur between those minimum lot sizes in the Cromwell Ward (when placed in order⁶), M.E considers:

² M.E has yet to be advised of a URL link where the report will (presumably) be made publicly available. “Rural Environmental Economic Analysis – Far North District Council, September 2018, 4Sight Consulting (lead) and Market Economics (subcontractor).

³ This was particularly relevant in the Far North, although less relevant in COD.

⁴ See footnote 2 for source.

⁵ Local context is relevant – the thresholds of urban, rural residential and rural lifestyle vary by location and are influenced by local level planning controls/minimum lot sizes.

⁶ See Appendix 1.

- Rural residential lots currently range from 3,000sqm to 1ha in size. This lower threshold is based on a natural break (jump) between a 1,500sqm minimum lot size and a 3,000sqm minimum lot size that coincides with a geographic switch from urbanised locations (i.e. the central streets/core of the RRA4 zone applied in Bannockburn) to rural fringe locations (i.e. the RRA1 zone applied in small lakeside pockets, RRA5 applied in Lowburn, RRA6 applied in the urban edge of Cromwell and RRA2 applied more generally in Cromwell's rural fringe)
- Rural lifestyle lots currently range from 1ha to 8ha in size. This lower threshold is based on the natural break (jump) between a 4,000sqm minimum lot size and a 1ha minimum lot size that coincides with a geographic switch from rural fringe locations (i.e. the RRA2 zone applied generally in the rural fringe of Cromwell) to more distant locations (i.e. the RuRA2 applied near Crippletown and Bendigo). M.E does not consider that Crippletown or Bendigo offer a typical rural residential environment given their distance from urban centres. We therefore include this zone (and minimum lot size) within the rural lifestyle category.
- Anything above 8ha is typically beyond 'lifestyle' or hobby farming and would need to be managed more akin to a productive rural property⁷. This lower threshold is based on the existing average lot size for the Rural Zone.
- Anything less than or equal to 1,500sqm is therefore considered as residential or urban land use, albeit at a low density when the minimum is 1,500sqm.

These thresholds are very specific for the purpose of systematic categorisation and analysis. Lots that are just 1sqm above a threshold result in that lot being categorised in the next largest category in our analysis, when realistically they have the same function as those lots just below the threshold. Allowing for a buffer around these thresholds would result in double counting and so has been avoided. The limitations associated with defining rural lifestyle blocks, for example, with exact size thresholds needs to be acknowledged⁸.

Based on these adopted thresholds within Cromwell Ward, M.E's approach does not limit rural residential properties to the Rural Residential Zone in the district plan (and should not be confused with such). In fact, the Rural Residential Zone enables rural lifestyle properties in our view (and based on our categorisation).

Based on the minimum lot size standards currently present in the Cromwell Ward, the Residential Resource Area (RRA) 1 (3,000sqm minimum), RRA 2 (4,000sqm min. and min. 1ha average), RRA 5 (3,000sqm minimum) and RRA 6 (4,000sqm minimum) all enable rural residential properties. The RRA 2 (1ha minimum average), Rural Resource Area 2 (1ha minimum), Rural Residential zone (2ha minimum) and Rural zone (2ha minimum) all directly or potentially currently enable rural lifestyle properties (see summary in Appendix 1).

The indicative yield and categorisation of dwelling lots in the Shannon Farm plan change are summarised in Figure 2 (this is based on a figure slightly less than the maximum yield of 160). The plan change creates a 2,000sqm minimum lot size that is new within the context of operative Cromwell Ward zones (although it is also the *average* lot size for the RRA4 zone in Bannockburn). Given its rural fringe location, we believe

⁷ This should not be confused with an economically viable farming property as these would need to be much larger. Horticultural properties are however economically viable at smaller lifestyle sizes, including between 4-8ha.

⁸ This issue arises later in the report when discussing Queensberry.

this defines a new threshold for the rural residential category (i.e. down from the existing 3,000sqm minimum lot size but still above the 1,500sqm upper residential threshold⁹).

The plan change also creates a 3ha minimum lot size that is new in the context of operative Cromwell Ward zones. This minimum lot size is another point of difference offered by the plan change but sits comfortably within the existing rural lifestyle category of lot sizes. The other minimum lot sizes offered by the plan change (3,000sqm, 4,000sqm and 1ha) are consistent with supply enabled in other Cromwell Ward zones – particularly the RRA1 and RRA5 (3,000sqm), RRA6 and RRA2 (4,000sqm) and the RuRA2 (1ha). The second table in Appendix 1 places the proposed Shannon Farm structure plan areas within the context of existing Cromwell Ward operative zones (in size order).

Overall, 70% of the proposed plan change lots (indicatively 107) will satisfy demand for rural residential living in Cromwell’s rural fringe. The remaining 30% (indicatively 45) will cater for those wanting larger rural lifestyle properties.

Figure 2 – Indicative Yield of Dwelling Lots Based on Proposed Shannon Farm Structure Plan

M.E Category	Size	Count	Share	Structure Plan Code
Rural Residential	2,000sqm minimum	35	23%	RL1
Rural Residential	3,000sqm minimum	33	22%	RL2
Rural Residential	4,000sqm minimum	39	26%	RL3
Rural Lifestyle	1ha minimum	27	18%	RL4
Rural Lifestyle	3ha minimum	18	12%	RL5
Total		152	100%	

Source: NZ Cherry Partnership, 27th February 2019

Figure 3 contains a copy of the structure plan showing of where proposed rural residential and rural lifestyle lots will be located on the site as well as other features of the private plan change.

⁹ This threshold is consistent with the bottom range of rural residential properties in the Far North District, for example.

Figure 3 – Proposed Structure Plan of the Shannon Farm Private Plan Change



1.3 Study Area

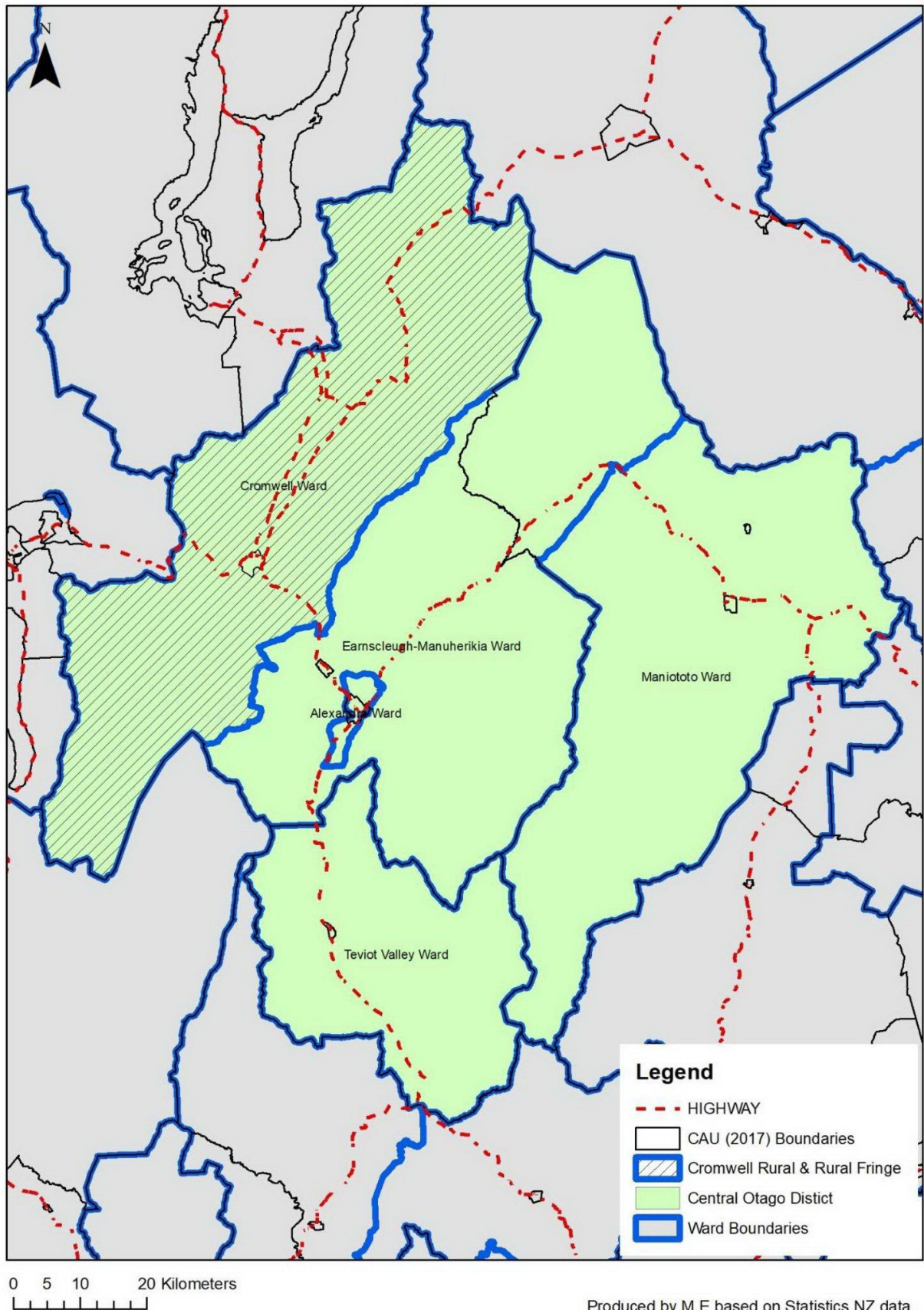
Aspects of this report rely on total district data. However, where possible, the analysis is focussed on the Cromwell Ward, and particularly the spatial patterns and trends occurring outside the Cromwell Census Area Unit (CAU). This encapsulates the rural fringe and rural surrounds of Cromwell Ward. Figure 4 shows a map of the total district, ward and CAU boundaries.

1.4 Approach

Central to M.E’s approach is examination of the projected dwelling demand in Central Otago District (COD), and in turn Cromwell Ward, alongside the current supply of properties/land titles in Cromwell Ward by size and location. M.E has not considered vacant plan enabled capacity, and so has not established a position on current sufficiency (or otherwise) of rural residential or rural lifestyle capacity outside the urban area. However, both demand and supply provide useful and relevant context against which the rural residential and rural lifestyle capacity enabled by the proposed private plan change can be evaluated.

M.E considers not just future demand, but past and present demand. This establishes the basis of future demand projections (validation), but also demonstrates how past growth has manifested ‘on the ground’.

Figure 4 – Map of Relevant Study Area Boundaries





Recent growth patterns in Cromwell Ward are examined in terms of lot size and location over time in section 2 of the report.

The current supply of land parcels is examined in section 3 of the report, reflecting the cumulative effect of historical demand and growth patterns. Section 4 assesses projected demand for dwellings in the district overall, and in Cromwell's rural fringe / rural area to 2043. It is this demand that drives further rural subdivision.

Section 5 provides brief conclusions. Several appendices are included which supplement detail covered in sections 2-4.

2 Recent Changes

This section examines trends in the district and Cromwell Ward housing market over time. Data from three sources has been analysed, that together highlight strong and steady past growth of rural residential and rural lifestyle properties in Cromwell’s rural fringe/rural area.

2.1 District Wide Past Dwelling Growth by Type

The following district level analysis is sourced from an M.E model that is based on data purchased from CoreLogic. The time period of the dataset is 1996 to 2015. It shows that across COD, there has been total growth of 2,080 residential dwellings. Growth accelerated the latter half of that period. For example, total dwellings grew by 20% between 1996 and 2005, but 51% between 1996 and 2015 (Figures 5 and 6).

Properties classified (by CoreLogic) as Lifestyle properties, increased from 630 in 1996 (11% of total district dwellings) to 1,240 by 2015 (15% of total dwellings). This is total growth of 610 or 97%. This percentage growth rate is more than double the growth of residential (non-lifestyle) dwellings (44%) – albeit that they dominate the dwelling estate in absolute terms.

Figure 5 – Central Otago District Growth of Residential Properties by Type 1996-2015 (CoreLogic)

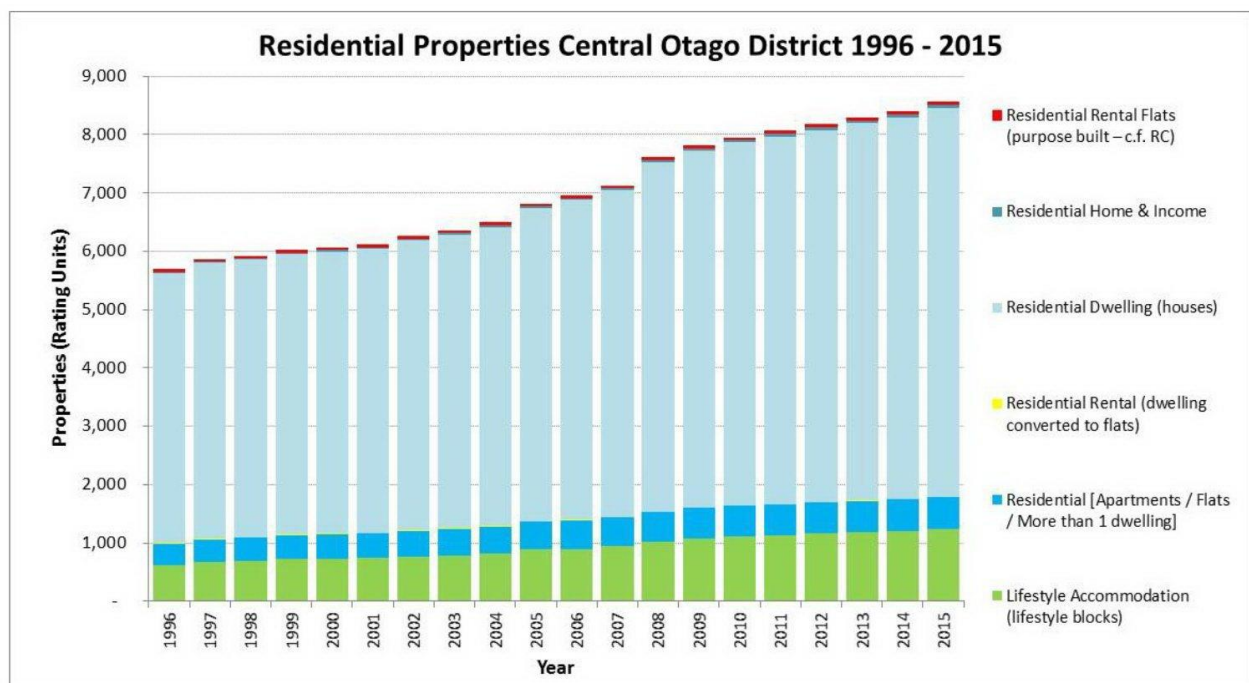


Figure 6 – Central Otago District Growth of Residential Properties by Type 1996-2015 (CoreLogic)

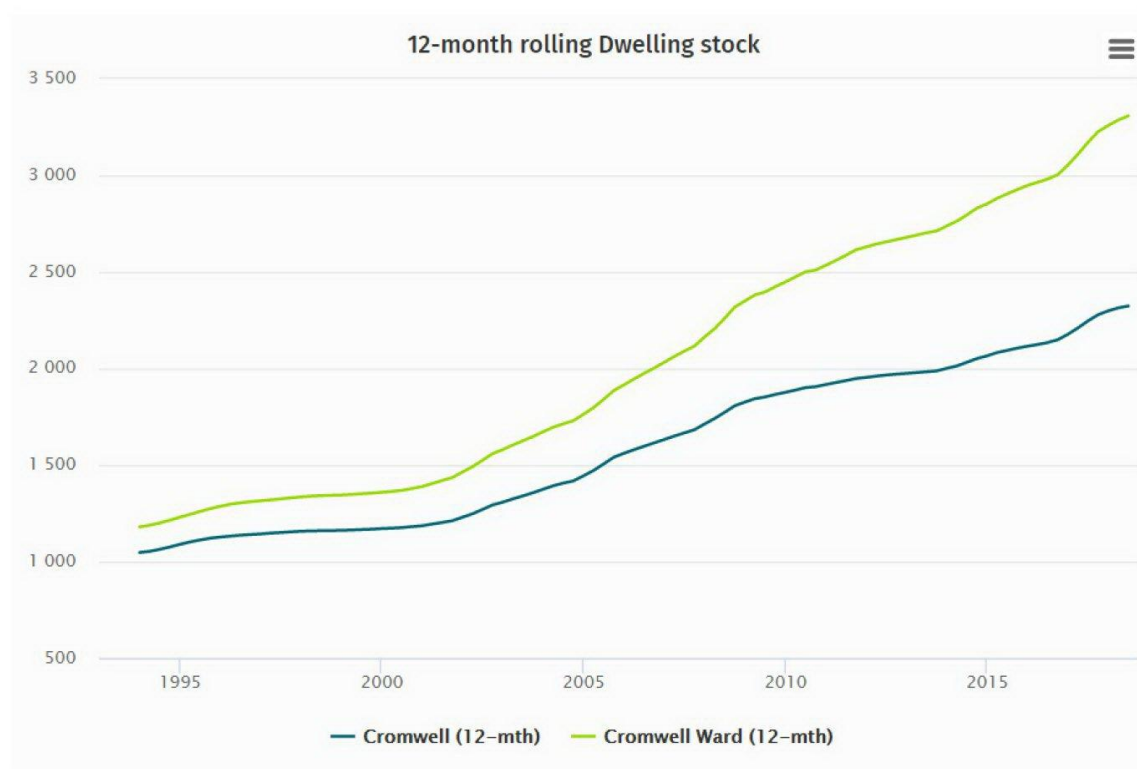
PROPERTY TYPE	1996	2000	2005	2010	2015	1996-05	1996-05 %	1996-15	1996-15 %
Lifestyle Accommodation	630	730	890	1,120	1,240	260	41%	610	97%
Residential Apartments (1+ dwg)	370	420	480	530	540	110	30%	170	46%
Residential Rental	10	10	10	10	10	-	0%	-	0%
Residential Dwelling	4,630	4,840	5,370	6,220	6,670	740	16%	2,040	44%
Residential Home & Income	10	30	30	40	60	20	200%	50	500%
Residential Flats	40	50	50	50	50	10	25%	10	25%
TOTAL	5,690	6,080	6,830	7,970	8,570	1,140	20%	2,880	51%
Lifestyle Accommodation	11%	12%	13%	14%	14.5%				
Residential Apartments (1+ dwg)	7%	7%	7%	7%	6.3%				
Residential Rental	0%	0%	0%	0%	0.1%				
Residential Dwelling	81%	80%	79%	78%	77.8%				
Residential Home & Income	0%	0%	0%	1%	0.7%				
Residential Flats	1%	1%	1%	1%	0.6%				
TOTAL	100%	100%	100%	100%	100%				


Source: Corelogic 2016

2.2 Cromwell Ward Past Dwelling Growth by Location

The following data is sourced from the Ministry of Business, Innovation & Employment (MBIE) NPS – Urban Development Capacity Dashboard. It contains data up to an including June 2018. The top line in the graph shows the total dwelling stock in Cromwell Ward. The lower line shows the dwelling stock contained within the Cromwell CAU (approximate urban area). The dwelling stock located in the rural fringe/rural area of Cromwell Ward is therefore represented by the area between the two lines. The underlying data for Figure 7 is summarised in Appendix 2.

Figure 7 – Historical Growth in Dwellings in Cromwell CAU and Total Cromwell Ward





Similar to the district wide data in section 2.1, this data shows the rapid growth of dwellings in the Cromwell Ward, including the acceleration of growth in the early 2000s. It also shows the faster rate of growth in the rural fringe/rural areas of the Ward relative to the rate of growth within the Cromwell CAU.

Between the year ending June 1994 and June 2018, the count of dwellings in Cromwell's rural fringe/rural areas has increased by 847 or 618% (Appendix 2). This is an average annual increase of 35 dwellings. For every 3 dwellings that developed in the Cromwell urban area each year over that period, 2 were developed in the rural fringe/rural area.

2.3 Past Growth – Spatial Temporal Trends

In this section the timing, nature and location of past growth in the Cromwell Ward (measured using freehold land titles) is examined. This builds on the total growth of dwellings known to have occurred in Cromwell's rural fringe/rural areas over time (section 2.2 above) and shows specifically where that growth occurred and what sized lots that growth comprised of. This leads to a better understanding of recent growth trends for rural residential and rural lifestyle properties in Cromwell Ward.

The underlying data is sourced from a publicly available LINZ GIS shape file¹⁰. This dataset shows the latest title boundaries¹¹ and the date in which they were formed through subdivision (i.e. received title). Spatial and data analysis of this dataset allows the areas of active subdivision change to be identified. This gives an indication of where growth (or land use change) has occurred during different time periods – i.e. it indicates the growth pathway of Cromwell Ward.

It is important to acknowledge that this data does not provide any insight of the land use of titles. Specifically, it does not establish if land is subdivided to support a future residential dwelling. There are many reasons why land is subdivided. Generally, though, in areas experiencing strong demand for rural residential and rural lifestyle properties (as has been evident in Cromwell Ward), rural subdivision – particularly of pastoral farms - tends to reflect the desire to free up some capital by carving off one or more rural residential or rural lifestyle lots as zoning, consents or plan changes allow. Understanding the size of lots created provides greater certainty of the link between subdivision activity and subsequent growth of residential (as opposed to productive) land uses.

Figure 8 shows the distribution of titles that fall within (or intersect) the Cromwell CAU and those that fall within (or intersect) the rural fringe/rural areas or balance of Cromwell Ward by year of title issue¹². The MBIE data on dwelling counts showed rapid growth from the early 2000s. This is also evident in the title date dataset. However, this data more clearly shows that subdivision activity significantly slowed during the late 2000s through to 2012 in both the urban area and the rural fringe/rural areas. This is mirrored in the dwelling count data¹³ – and is likely a response of the residential market to the global financial crisis

¹⁰ New Zealand Title Data dataset from Land Information New Zealand.

¹¹ Downloaded in August 2018.

¹² Prior to the year 2000, data is aggregated so care is needed to distinguish those counts from the single year data reported between 2000 and 2017. Furthermore, the 2018 data is not a complete calendar year.

¹³ The similarity in the temporal trends between subdivision activity and dwelling growth supports the use of title issue data as an indicator of residential growth, notwithstanding delays between subdivision and dwelling completion.



and ensuing recovery period. Subdivision activity since 2013 has been strong – particularly in the rural fringe/rural areas.

Figure 8 – Count of Titles Issued by Year for Cromwell Urban and Rural Areas

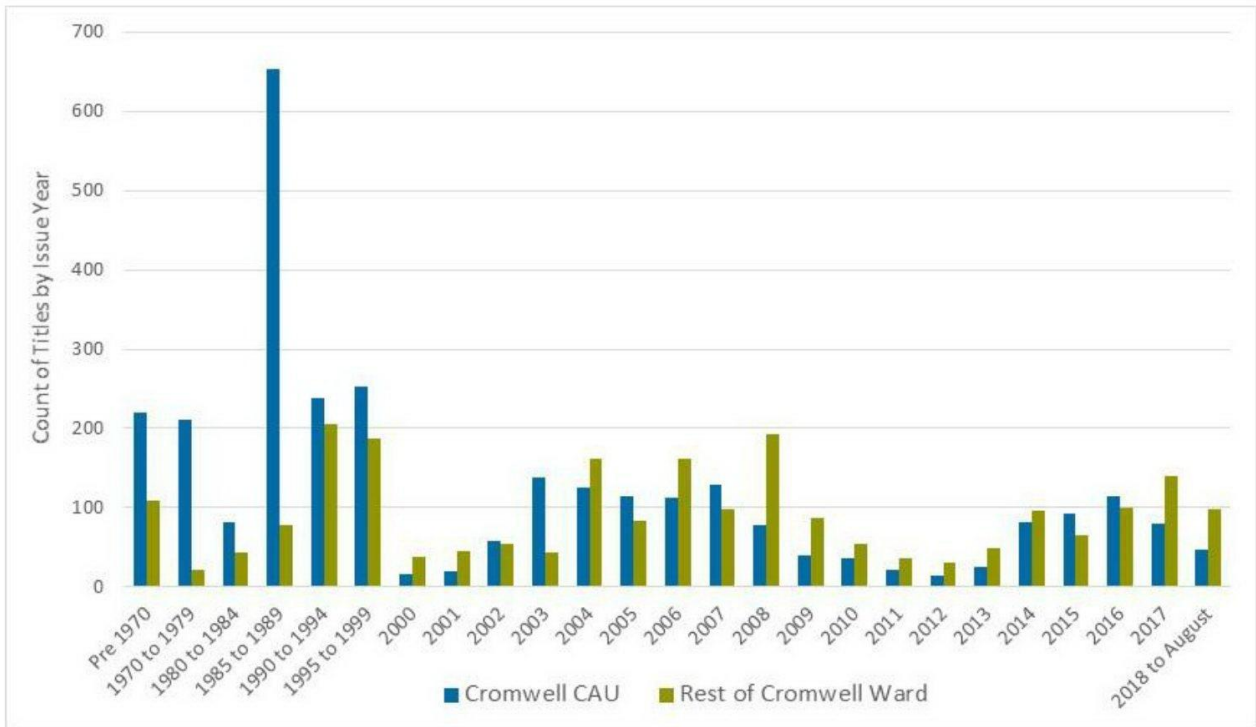
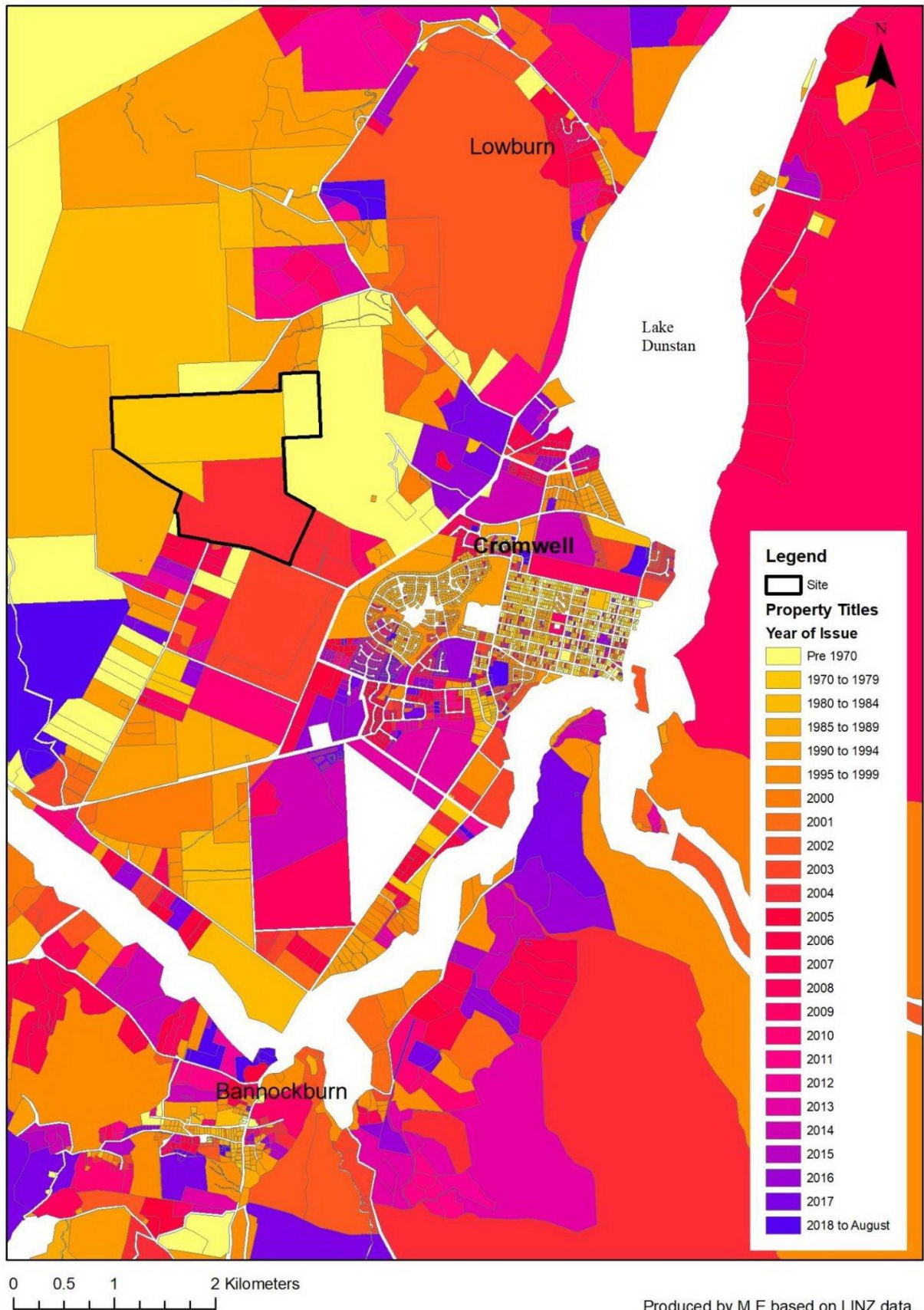


Figure 9 represents the data in map form. It shows the early established urban residential areas in Cromwell, which have experienced little change since initial subdivision. Urban growth and land use change has more recently occurred in the southern end of Waenga Drive and throughout the industrial zone as well as north of Shortcut Road towards the lake. Outside the Cromwell CAU, the fringe areas of Bannockburn (including up towards Cornish Point) have undergone extensive land use change in recent years. It is likely that demand for river/lake views has driven the recent subdivision activity along the Kawarau River and along both sides of Lake Dunstan within an easy drive of the town centre. The recent growth in Lowburn is evident as are hotspots of recent subdivision up Burn Cottage Road.

Appendix 3 shows the full Cromwell Ward extent and shows large areas of recent subdivision activity north of Cromwell urban area (on both sides of the lake) as well as south of Cromwell (around wider Bannockburn). There are very few rural areas that have not undergone some sort of boundary change/subdivision since the early 2000's (unlike in the neighbouring ward where large areas have remained unchanged since that period).

This analysis shows that subdivision in the rural fringe of Cromwell is very active and much of it has occurred in the last eight years. This is further evidence of the growing popularity of the rural fringe areas and the strong demand for land use change – whether to create lots for housing and/or for vineyards/horticulture.

Figure 9 –Titles by Year of Issue – Lowburn, Cromwell and Bannockburn Extent





Appendix 4 provides a summary of titles by broad size and year of issue in Cromwell's rural fringe/rural area¹⁴. Looking at when different sized land parcels were created/modified provides further insight of recent demand trends outside the urban area. The data shows:

- 54% of rural residential lots (as defined in this report) in the rural fringe/rural area were created (or modified) since 2000. 15% were created since 2013.
- 72% of rural lifestyle lots in the rural fringe/rural area were created (or modified) since 2000. A significant 25% were created since 2013.
- 75% of residential lots (those less than 2,000sqm for the purpose of this report) in the rural fringe/rural area were created (or modified) since 2000. A significant 31% were created since 2013.

This further confirms that the very active subdivision trends seen throughout Cromwell's rural fringe/rural areas have supplied lots aimed at residential, rural residential and rural lifestyle land uses, in response to strong market demand.

¹⁴ For the purpose of this analysis, the area of cross lease and unit title properties were divided by the number of lots per deposited plan title to give an indicative section size for each and avoid double counting of land area.



3 Present Supply

This section establishes a current snap-shot of land supply in Cromwell Ward. Current patterns, combined with past trends (section 2), are the base indicator of future demand (addressed in section 4). This analysis is based on a summary of current land parcels by size and location (noting that parcels do not always equate to rateable properties as these may comprise one or more titles, particularly outside the urban area). It highlights where land has been developed for rural residential and rural lifestyle properties, and in doing so, where future growth may logically occur.

3.1 Current Property Estate Size Profile

Using the LINZ dataset (August 2018) of land parcels (titles) that fall generally within the Cromwell CAU (indicative main urban area) and in the rest of the Ward (rural fringe/rural areas), Figure 10 summarises the size profile of these two locations. The underlying data is tabled in Appendix 5. As expected, the Cromwell CAU dominates the medium-low density residential lots and the rural area dominates the larger lots and rural properties. There is however some overlap. The Cromwell CAU has a few remaining large land parcels that may or may not be further subdivided in future. The rest of the Cromwell Ward includes some Residential Resource zones that have delivered urban scale developments – these include Pisa Moorings and Bannockburn.

Figure 10 – Cromwell Ward Titles by Size Bracket and Urban – Rural Location

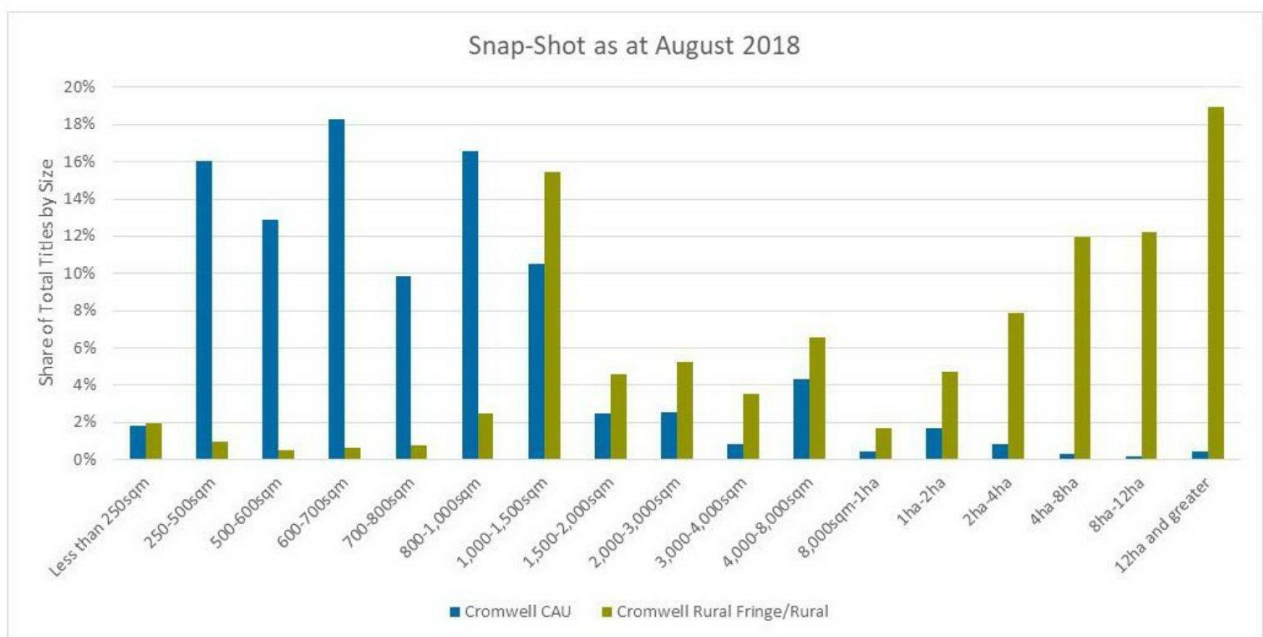


Figure 11 aggregates the size brackets into the indicative rural residential and rural lifestyle size categories (defined for the purposes of this report). It should be noted that the land use of these parcels is not known and not all parcels will contain, or be intended for, residential dwellings. Indeed, the number of parcels far

exceeds the number of dwellings reported in Cromwell Ward, so is a broad indicator of dwelling potential, not dwelling supply as titles are the unit of land that can be bought and sold and in theory developed.

It should also be noted that there are approximately 280 land parcels that are in the 8ha-12ha size bracket (12% of all titles in the Cromwell rural fringe/rural area). Many of these are close to the 8ha threshold adopted for the rural lifestyle category and in practice function as rural lifestyle properties. As such, the rural lifestyle category shows a conservative count and share of land parcels.

The analysis shows that there are approximately 390 rural residential sized land parcels in the Cromwell rural fringe/rural area (being the Ward area outside the Cromwell CAU), 17% of all land parcels. These rural residential sized parcels account for 61% of all parcels of this size within the Ward and 24% of all parcels of this size within the District.

Figure 11 – Summary of Rural Residential and Rural Lifestyle Sized Titles


Location	Indicative Size				Total Titles
	Residential (Less than 2,000sqm)	Rural Residential (2,000sqm to 1ha)	Rural Lifestyle (1ha - 8ha)	Rural (Greater than 8ha)	
Count of Titles (within or intersecting)					
Cromwell CAU	2,654	244	85	18	3,001
Cromwell Rural Fringe/Rural	622	388	558	710	2,278
Total Cromwell Ward	3,276	632	643	728	5,279
Rest of COD	5,642	970	1,674	2,404	10,690
Total District	8,918	1,602	2,317	3,132	15,969
Share of Titles by Category					
Cromwell CAU	88%	8%	3%	1%	100%
Cromwell Rural Fringe/Rural	27%	17%	24%	31%	100%
Total Cromwell Ward	62%	12%	12%	14%	100%
Rest of COD	53%	9%	16%	22%	100%
Total District	56%	10%	15%	20%	100%
Share of Titles by Location (Total District)					
Cromwell CAU	30%	15%	4%	1%	19%
Cromwell Rural Fringe/Rural	7%	24%	24%	23%	14%
Total Cromwell Ward	37%	39%	28%	23%	33%
Rest of COD	63%	61%	72%	77%	67%
Total District	100%	100%	100%	100%	100%
Share of Titles by Location (Cromwell Ward)					
Cromwell CAU	81%	39%	13%	2%	57%
Cromwell Rural Fringe/Rural	19%	61%	87%	98%	43%
Total Cromwell Ward	100%	100%	100%	100%	100%

Source: LINZ August 2018, M.E. Size thresholds are exact and will not capture titles that are close to these thresholds.

Titles do not necessarily equate to ratable properties. Properties can comprise one or more titles, particularly in non urban areas.

There are at least 560 rural lifestyle sized land parcels in the Cromwell rural fringe/rural area, 24% of all land parcels. These rural lifestyle sized parcels account for 87% of all parcels of this size within the Ward and 24% of all parcels of this size within the District.

Overall, between 42% and 50% of parcels in Cromwell's rural fringe/rural area (allowing for a portion of the 8-12ha sized parcels that function as lifestyle blocks to be included) are currently rural residential or rural lifestyle sized titles. Given recent growth trends for these types of properties, this share is expected to



climb higher every year in the future to meet demand, resulting in further fragmentation of rural properties where feasible to do so.

3.2 Current Property Estate Spatial Patterns

This section maps the data discussed above to highlight the location of rural residential and rural lifestyle sized land parcels. Figure 12 includes all title size brackets and shows some clear spatial patterns for Cromwell and the rural fringe areas. Figure 13 isolates just those parcels falling within the rural residential and rural lifestyle sized categories. Appendix 6 shows a wider extent of this map to include Queensberry to the north.

Key observations include:

- More recent growth in the Cromwell CAU (i.e. around Waenga Drive) has resulted in higher densities of development than older residential areas.
- Many areas that have been developed at that same time (i.e. multi-lot or larger scale subdivisions) have generally resulted in uniform lot sizes. See for example north and east of Shortcut Road.
- Bannockburn has developed (somewhat) in a concentric circle style with smaller lots in the centre, fringed by rural residential and then rural lifestyle lots. This is generally considered an efficient urban form where there is a transition between urban and rural land uses that can help manage reverse sensitivity effects.
- Cromwell's current urban extent is flanked by extensive areas of horticultural land or designated land. This has resulted in rural residential and rural lifestyle development being slightly further out, rather than acting as a buffer between urban and productive rural land uses.
- Rural residential and lifestyle parcels are concentrated around the river and lake margins. Examples include (but are not limited to) Pearson Road and Bannockburn Road.
- Rural residential and lifestyle parcels are concentrated in valleys and/or close to roads.
- Lowburn has developed as a combination of rural residential and rural lifestyle properties.
- Queensberry is an extensive area of rural lifestyle blocks (many of which are just above the 8ha threshold applied in this analysis and so are not highlighted in Appendix 6). This area is relatively remote with poorer access to urban centres of Wanaka or Cromwell compared to other areas that have been developed for the rural lifestyle market.
- Ripponvale Road has been extensively developed into rural residential and rural lifestyle sized land parcels. Many of these rural lifestyle blocks include productive land uses (horticulture).
- In the context of these spatial patterns, M.E considers that the proposed plan change site represents an appropriate and logical location for additional rural residential and rural lifestyle development within close proximity of Cromwell township.

Figure 12 - Cromwell Ward Titles by Size Bracket and Location

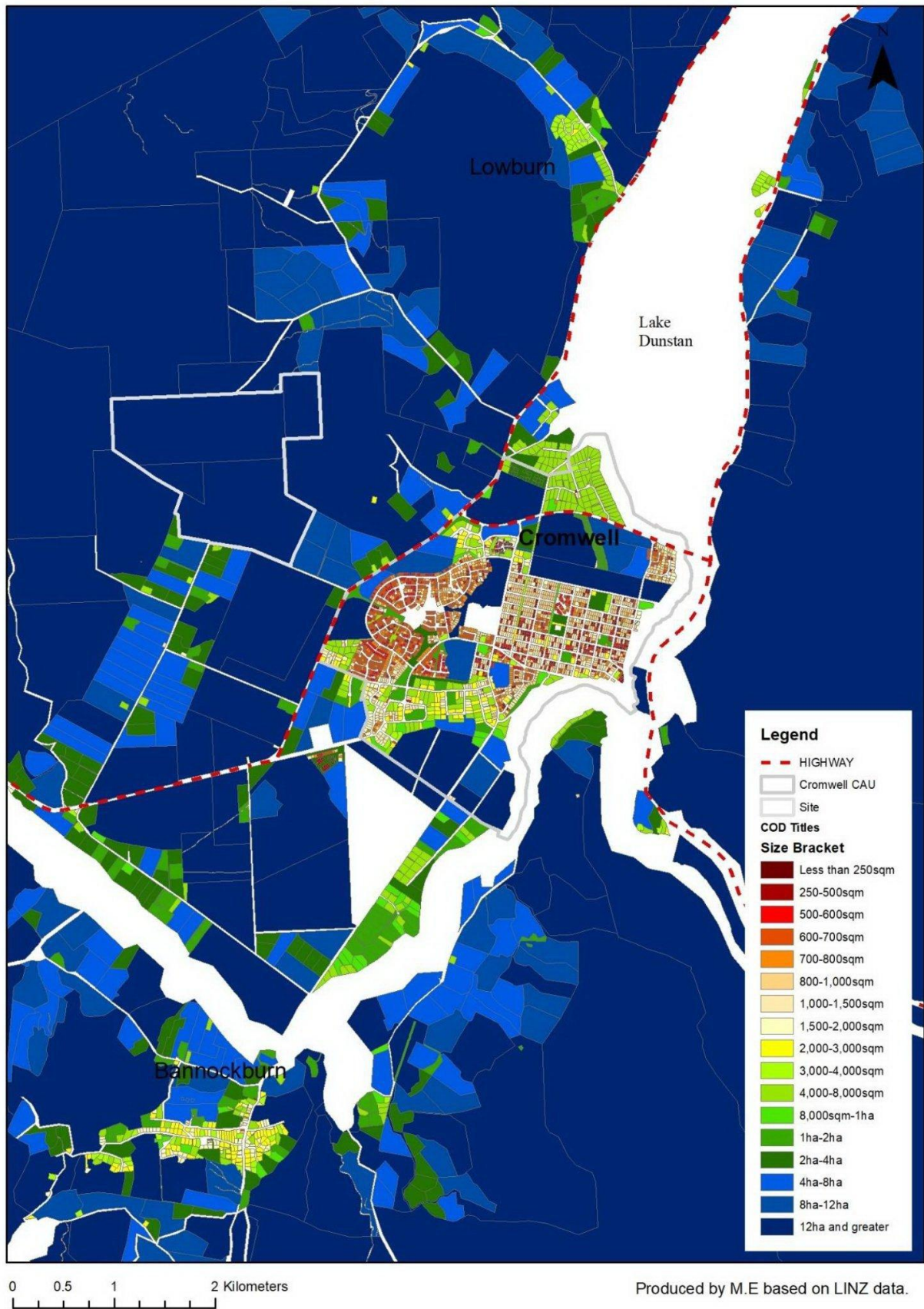
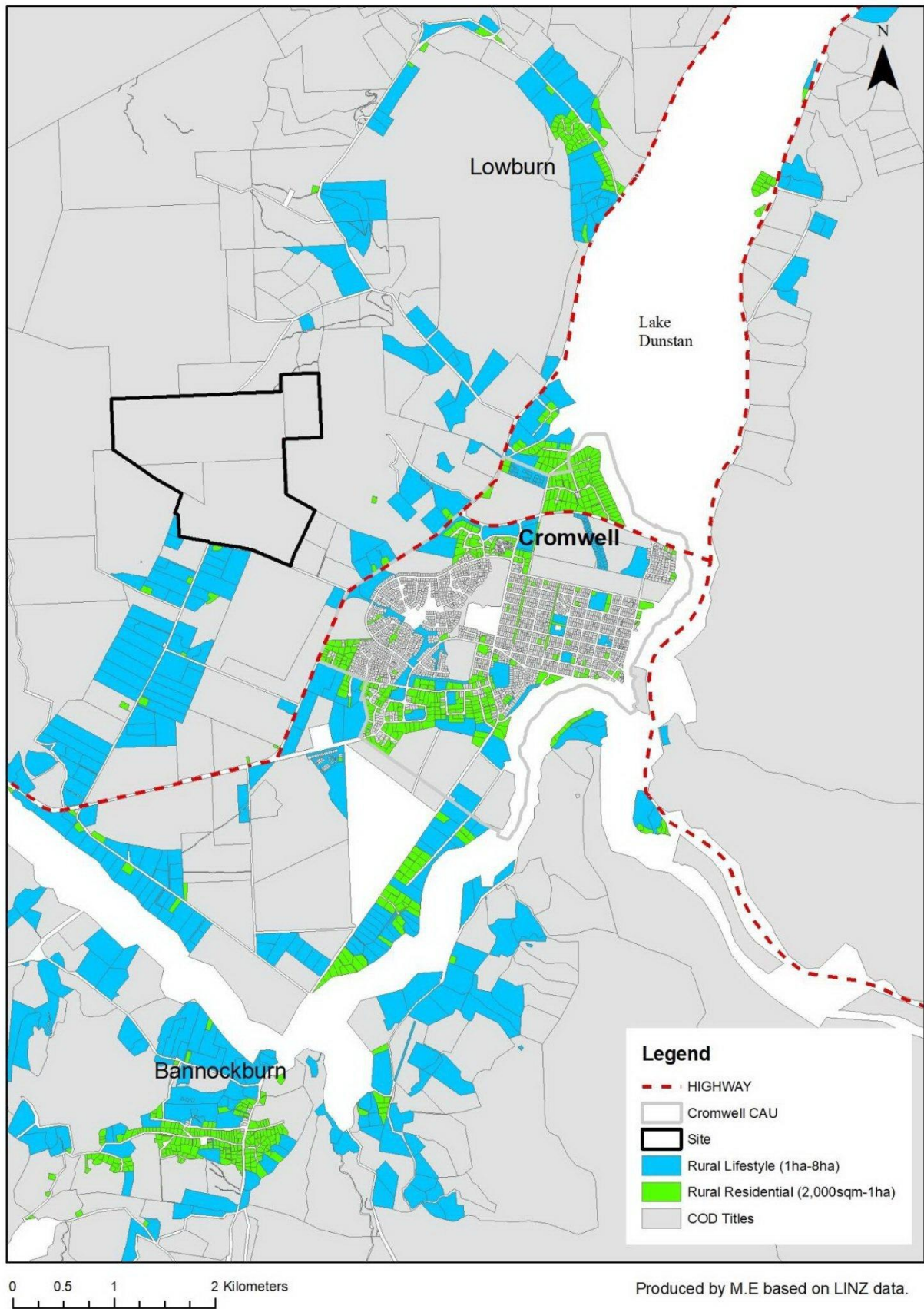


Figure 13 - Cromwell Ward Rural Residential and Rural Lifestyle Titles by Location





4 Future Growth

This section of the report assesses the appropriateness of the proposed rural residential and rural lifestyle capacity provided for in the Shannon Farm plan change. A key economic issue is whether the plan change responds to projected demand for additional residential capacity in Cromwell's rural fringe, at an appropriate scale and including lot sizes/dwelling typologies that reflect the anticipated demand of current and future households. This is relevant as it determines the likely effectiveness and efficiency of the plan change to achieve its objectives.

Housing demand is defined here in terms of the housing requirements of the resident population and visitor populations. These broadly equate to occupied and usually unoccupied dwellings. The main dimensions of housing demand are the number of dwellings required at each point in time into the future and the nature of those dwelling requirements in terms of dwelling type (and dwelling value). Dwelling demand directly affects demand for residential land, just as residential land supply and planning provisions in combination affect development capacity. The adequacy or sufficiency of dwelling capacity can be broadly defined at the highest level in terms of the numbers of dwellings able to be supplied, but also in terms of their type, value and location.

The analysis in this section draws on two data sources:

- M.E's total district dwelling demand model. This model incorporates the analysis discussed in Appendix 7 on current household-dwelling relationships. It summarises household projections¹⁵ by type and occupied (resident) dwelling projections by type (linked to the changing household structure).
- CODC's dwelling projections for Cromwell Ward, broken down by urban Cromwell, outer Cromwell and rural Cromwell (as shown in Appendix 8).

The former provides evidence of the sorts of households and dwellings that need to be provided for in the district generally to meet future demand (under a high growth outlook). The latter does not provide a breakdown of dwelling types but provides evidence of where dwelling growth is anticipated across Cromwell Ward (under a medium-high¹⁶ growth outlook). Note, given the different outlooks and sources of data, the dwelling increases are not directly comparable.

¹⁵ The household projections are calculated using the StatisticsNZ February 2017 population high growth projection series (to reflect an upper limit for expected growth) divided by the mean household size figures from the previous StatisticsNZ series (2015).

¹⁶ The 'modified' or recommended growth projection by Rationale sits only slightly above the medium growth projection and below the average between medium and high.

4.1 District Wide Household Growth Future

Figure 14 shows the projected resident household numbers in COD by household type¹⁷. This indicates growth of 2,210 households between 2016 and 2028 (around 184 per year in the medium term), and growth of an estimated 4,120 households by 2043 (long term average growth of 153 per year, and a 49% increase overall).

It also indicates that 'one person' and 'couple' households will account for a growing share of the household structure – growing by 70% and 57% respectively compared to an overall average of 49%. Combined they increase from a 66% share of households to a 71% share by 2043. It is noted that in rural residential and rural lifestyle areas, couple households account for the largest share¹⁸. This indicates that, from purely a household type perspective, the driver of future demand in rural fringe locations will continue to be strong in COD.

Figure 14 - Central Otago Projected Households by Type 2016-2043 – High

Household Type	2016	2018	2023	2028	2033	2038	2043	2016-28	2016-33	2016-43	2016-43 (%)
COUNT OF HOUSEHOLDS											
One Person	2,030	2,170	2,480	2,770	3,030	3,250	3,450	740	1,000	1,420	70%
Couple	3,540	3,790	4,260	4,650	4,990	5,270	5,550	1,110	1,450	2,010	57%
2 Parents 1-2chn	1,560	1,620	1,680	1,730	1,790	1,840	1,900	170	230	340	22%
2 Parents 3+chn	460	470	490	490	500	520	550	30	40	90	20%
1 Parent Family	550	580	600	620	650	660	680	70	100	130	24%
Multi-Family Hhlds	60	70	70	80	80	80	90	20	20	30	50%
Non-Family Hhlds	290	310	320	360	370	380	390	70	80	100	34%
TOTAL	8,490	9,010	9,900	10,700	11,410	12,000	12,610	2,210	2,920	4,120	49%
STRUCTURE % BY YEAR											
One Person	24%	24%	25%	26%	27%	27%	27%	33%	34%	34%	
Couple	42%	42%	43%	43%	44%	44%	44%	50%	50%	49%	
2 Parents 1-2chn	18%	18%	17%	16%	16%	15%	15%	8%	8%	8%	
2 Parents 3+chn	5%	5%	5%	5%	4%	4%	4%	1%	1%	2%	
1 Parent Family	6%	6%	6%	6%	6%	6%	5%	3%	3%	3%	
Multi-Family Hhlds	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Non-Family Hhlds	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Source: Statistics NZ, M.E

4.2 District Wide Occupied Dwelling Growth Future

This section addresses future occupied dwelling projections for COD (to meet demand of resident households). It assumes no constraints to dwelling demand as the objective is to determine what sort of housing supply the District needs to deliver in order to accommodate the preferences of a changing demographic/market. The analysis below addresses dwelling demand for resident households (whether renting or owner occupiers) only. It excludes demand for holiday homes which needs to be considered separately (and in addition).

¹⁷ The M.E model projections also contain detail on household age and income in combination with household type (210 household groups).

¹⁸ Based on research by M.E in Far North District.

The 2013 analysis of household and dwelling structures (Appendix 7) and household projections summarised above (but analysed in detail in M.E's model) drive the projections of future dwellings by type and tenure in COD¹⁹. The model generates a number of potential scenarios in terms of detached and attached dwelling preferences. If the demand/preference shift is activated, the projection factors down the detached (standalone) dwellings and factors up the attached dwellings (+/- balanced so projected households remain unaltered).

In the **Status Quo Scenario**, the 2013 COD relationships between each household type, age and income, and the dwellings occupied are assumed to carry through *pro rata*. That is, there is no projected shift in dwelling type preferences in the district. In this option, the only changes in demand come about from demographic change. Figures 15 and 16 show the results.

Figure 15 - COD Occupied Dwellings by Type 2016-43 High – Status Quo Preferences

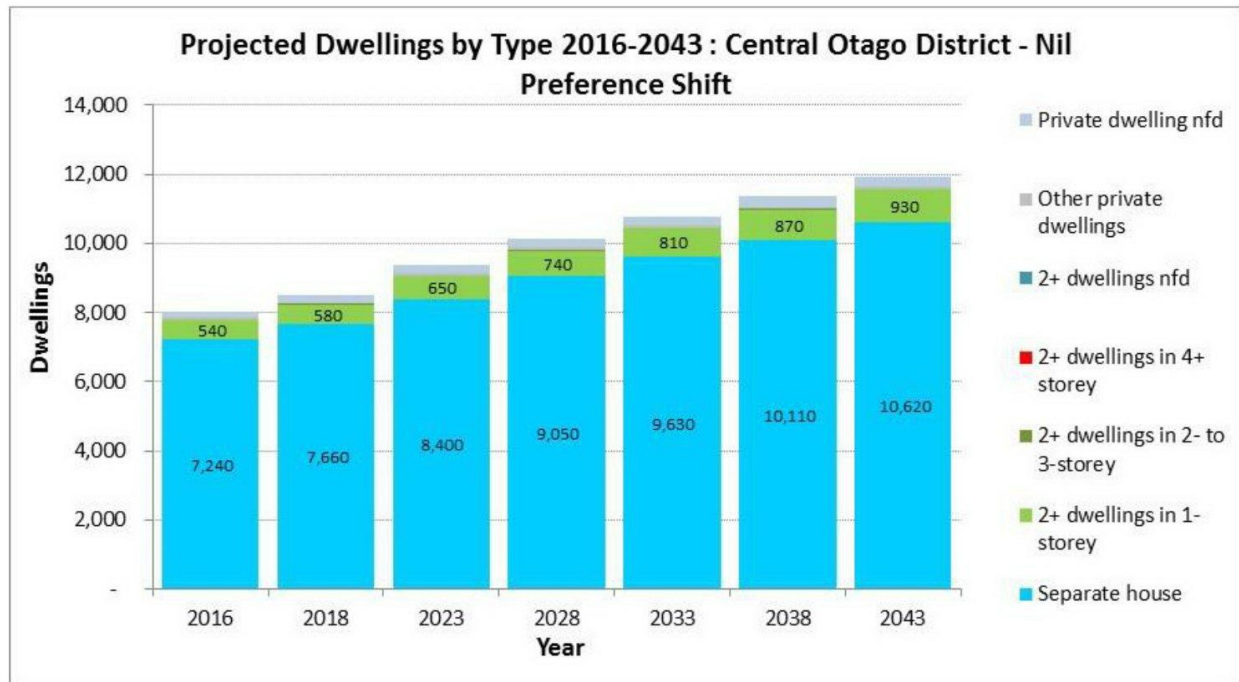
Dwelling Type	2016	2018	2023	2028	2033	2038	2043	2016-28	2016-33	2016-43
COUNT OF DWELLINGS										
Separate house	7,240	7,660	8,400	9,050	9,630	10,110	10,620	1,810	2,390	3,380
2+ dwellings in 1-storey	540	580	650	740	810	870	930	200	270	390
2+ dwellings in 2- to 3-storey	20	20	20	30	30	30	30	10	10	10
2+ dwellings in 4+ storey	-	-	-	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-	-	-	-
Other private dwellings	50	50	60	60	60	60	70	10	10	20
Private dwelling nfd **	190	200	230	250	260	280	290	60	70	100
TOTAL	8,040	8,510	9,360	10,130	10,790	11,350	11,940	2,090	2,750	3,900
STRUCTURE % BY YEAR										
Separate house	90%	90%	90%	89%	89%	89%	89%	87%	87%	87%
2+ dwellings in 1-storey	7%	7%	7%	7%	8%	8%	8%	10%	10%	10%
2+ dwellings in 2- to 3-storey	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ dwellings in 4+ storey	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ dwellings nfd	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other private dwellings	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%
Private dwelling nfd **	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Statistics NZ, M.E ** Not Further Defined

Scenario: Nil Shift/Status Quo Preferences, High 2017 Growth Future

¹⁹ It should be noted that the number of private occupied dwellings differs from the number of estimated households in 2016. This is not unusual, but the reasons may differ by TA. In some instances, it can reflect a latent demand for dwellings (i.e. a current undersupply relative to the number of households). In some cases, dwellings may include a separate flat meaning that a residential property supports more than one household (while not necessarily being classified as a multi-family household in the Census). Another potential cause is households living in non-private households. M.E has not examined the likely cause(s) that may apply in COD and has assumed, for the purpose of this report, that there is not an undersupply. The key focus is on the projected dwellings, with the household projections an input to that result.

Figure 16 - COD Occupied Dwellings by Type 2016-43 High – Status Quo Preferences



The key findings from the Status Quo Scenario are:

- Total District demand for 2,090 additional resident dwellings in the medium term (by 2028). This is an overall increase of 26%.
- Total District demand for 3,900 additional resident dwellings by 2043. This is an overall increase of 49%.
- Separate, standalone homes will continue to dominate market demand – making up 89% of total dwelling demand by 2043 compared to 90% in 2016. A further 1,810 standalone dwellings will be required by 2028. The increase is 3,380 by 2043.

M.E has run a medium preference shift scenario, the results of which are contained in Appendix 9. Under that scenario, separate, standalone homes will continue to dominate market demand – but will reduce in share from 90% of demand in 2016 to 83% by 2043. A further 1,540 standalone dwellings will be required across the district by 2028. This increases to 2,730 by 2043.

The following section gives an indication of where that dwelling demand will be focussed on the ground. Clearly though, COD needs to ensure that there is a ready supply of sections able to accommodate dwelling demand, and standalone dwellings in particular.

4.3 Cromwell Ward Total Dwelling Growth Future

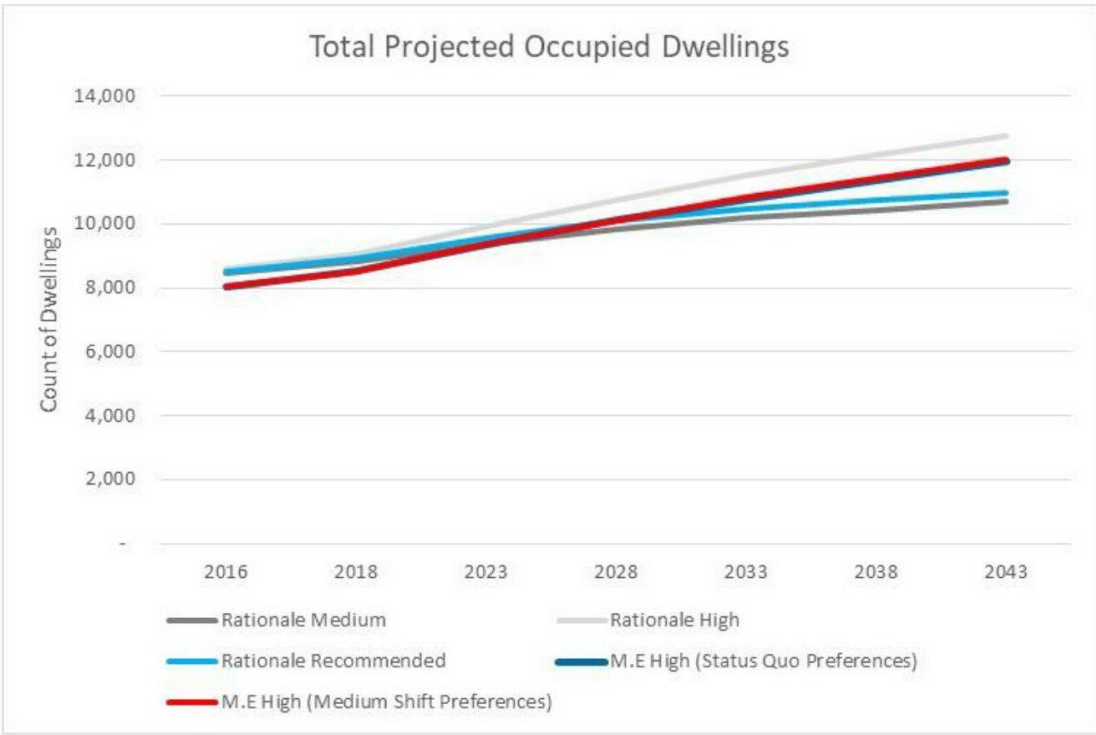
This analysis relies upon CODC’s dwelling growth projections, produced by Rationale Limited (2016)²⁰. M.E’s resident dwelling projections (at the combined dwelling type level, Figure 15) are broadly consistent

²⁰ CODC Growth Projections 2018 to 2018 Resident Population, Visitors, Dwellings, Rating Units. Rationale Limited, August 2016.



with the Rationale projections of occupied dwellings for the total District (Figure 17). M.E’s projections start from a slightly lower base in 2016 and grow at a slightly faster rate to end up at the same point as Rationale’s Recommended Scenario in the medium term (2028) but continue to grow at the same rate to end up higher than the Rationale Recommended Scenario in the long term (although lower than the Rationale High scenario). On top of these projections, Rationale also include demand for unoccupied dwellings (holiday homes).

Figure 17 - Comparison of M.E and Council Dwelling Projections (Total Occupied) 2016-2043



The Rationale projection report states that:

The majority of the dwelling growth is projected to occur in the Cromwell and Vincent Community Board areas. A small amount of dwelling growth is projected in the Teviot Valley and Maniototo Community Board areas (page 2).

Figure 18 summarises the Rationale dwelling projections. They indicate that Cromwell Ward accounts for 35% of the District’s total dwellings in 2016, increasing to a projected 40% share in 2043. This increasing relative share is due to a faster growth rate occurring in and around Cromwell compared to the rest of the District – a 50% projected increase in dwellings across the total Cromwell Ward by 2043 compared to just a 19% increase in the rest of the district over that period.

Overall, Cromwell Ward accounts for 59% of district wide growth projected between 2016 and 2043. This equates to approximately 1,850 additional dwellings.

Of key relevance to the Shannon Farm plan change is that the rural fringe/rural areas of Cromwell Ward (i.e. those areas outside Cromwell CAU or the approximate urban area) are expected to have a significantly faster dwelling growth rate than the Cromwell urban area (an average of 70% growth to 2043 compared

to a rate of 40%). In absolute terms, Rationale project approximately 860 additional dwellings in the rural fringe/rural areas of the Ward by 2043 and approximately 990 additional dwellings in the Cromwell CAU (urban area). This means that just under half (47%) of all dwelling growth projected across the Ward, will be in the rural fringe/rural area.

Figure 18 - Cromwell Ward Relative to Total District Dwelling Growth, Rationale

Occupied Dwellings

	2016	2018	2023	2028	2033	2038	2043	Growth 2016-43	Growth 2016-43
Cromwell	2,016	2,182	2,401	2,612	2,703	2,769	2,835	819	41%
Cromwell Rural	231	245	272	297	318	337	355	124	54%
Outer Cromwell	687	749	862	970	1,061	1,139	1,217	530	77%
<i>Sub-Total Rural Fringe/Rural</i>	<i>918</i>	<i>994</i>	<i>1,133</i>	<i>1,266</i>	<i>1,379</i>	<i>1,476</i>	<i>1,572</i>	<i>654</i>	<i>71%</i>
Total Cromwell Ward	2,934	3,176	3,534	3,878	4,082	4,245	4,407	1,473	50%
Rest of District	5,581	5,749	6,016	6,252	6,406	6,501	6,588	1,007	18%
District	8,515	8,925	9,550	10,130	10,488	10,746	10,995	2,480	29%
Total Cromwell Ward as Share of District	34%	36%	37%	38%	39%	40%	40%	59%	

Unoccupied Dwellings (Holiday Homes)

	2016	2018	2023	2028	2033	2038	2043	Growth 2016-43	Growth 2016-43
Cromwell	442	478	525	569	588	601	615	173	39%
Cromwell Rural	59	63	71	79	85	90	96	37	62%
Outer Cromwell	257	278	314	349	378	403	428	171	67%
<i>Sub-Total Rural Fringe/Rural</i>	<i>316</i>	<i>341</i>	<i>385</i>	<i>427</i>	<i>463</i>	<i>493</i>	<i>524</i>	<i>208</i>	<i>66%</i>
Total Cromwell Ward	758	819	910	996	1,051	1,094	1,139	381	50%
Rest of District	1,361	1,405	1,482	1,544	1,581	1,617	1,646	286	21%
District	2,119	2,224	2,392	2,540	2,632	2,711	2,785	666	31%
Total Cromwell Ward as Share of District	36%	37%	38%	39%	40%	40%	41%	57%	

Total Dwellings

	2016	2018	2023	2028	2033	2038	2043	Growth 2016-43	Growth 2016-43
Cromwell	2,459	2,660	2,926	3,181	3,291	3,370	3,450	991	40%
Cromwell Rural	289	308	343	375	403	427	451	161	56%
Outer Cromwell	944	1,027	1,176	1,318	1,439	1,542	1,645	701	74%
<i>Sub-Total Rural Fringe/Rural</i>	<i>1,234</i>	<i>1,335</i>	<i>1,519</i>	<i>1,694</i>	<i>1,842</i>	<i>1,969</i>	<i>2,096</i>	<i>862</i>	<i>70%</i>
Total Cromwell Ward	3,692	3,995	4,445	4,875	5,133	5,339	5,546	1,854	50%
Rest of District	6,942	7,154	7,497	7,795	7,987	8,118	8,234	1,293	19%
District	10,634	11,149	11,942	12,670	13,120	13,457	13,780	3,146	30%
Total Cromwell Ward as Share of District	35%	36%	37%	38%	39%	40%	40%	59%	

Source: CODC, Rationale 2017. Row 1 equates to the Cromwell CAU (urban cromwell)

This growth outlook means that suitable land in Cromwell’s urban and rural fringe/rural areas need to be identified, zoned and (where applicable) serviced – at appropriate times and at appropriate scales - to ensure that projected dwelling demand can be met without undue constraint. In the rural fringe/rural areas, a significant share of this growth will take the form of rural residential and rural lifestyle properties that support standalone dwellings.



5 Conclusions

The analysis completed for this report provides evidence of a clear and significant market in Cromwell Ward for rural residential and rural lifestyle living. Such properties, which have grown strongly in response to past market demand, particularly since the early 2000s, are a significant feature of the current property estate and rural landscape. With strong dwelling growth projected in Cromwell's rural fringe/rural area over the long term, continued demand for subdivision of rural land should be expected.

While there has been a focus on rural subdivision in relatively close proximity to the Cromwell urban area (including Bannockburn and Lowburn), a significant share of recent land use change is occurring further and further away (north and south). To the extent that this has resulted in residential dwellings in those locations (and there is clear evidence to support this in places like Queensberry), these households have relatively lower levels of accessibility to places of employment, community facilities and shops and services.

Future growth is likely to be clustered around areas where current households reside. The implicit assumption is that households revealed preferences for location to date, hold true into the future. While ultimately it is land owners that determine whether subdivision will occur, proximity to areas that have already been developed enhances the value and therefore feasibility of adjacent land development.

Section 31(1)(aa) of the RMA provides that statutory functions of District Councils include the establishment, implementation and review of objectives, policies and methods to ensure that there is sufficient development capacity in respect of housing and business land to meet the expected demands of the district. These functions are directed to achieving the purpose of the Act, including enabling people and communities to provide for their social, economic and cultural wellbeing.

Where rural residential and rural lifestyle properties can be encouraged in areas closer to Cromwell town centre, it results in greater efficiencies, with associated benefits for social and economic wellbeing.

The proposed Plan Change – which would enable a maximum of 160 rural residential and rural lifestyle properties in Cromwell's rural fringe, responds directly to clear market demand. Based on Council's total dwelling growth projections, it would cater for approximately 18% of long-term demand projected between 2016 and 2043 in outer and rural Cromwell.

It is important that adequate capacity for rural residential and rural lifestyle growth in the Cromwell rural area is enabled to increase competition between land owners and to provide the market with confidence that sections and or dwellings are not in short supply (which increases prices and speculative behaviour).

The location of the plan change area is logical and advantageous given its close proximity to Cromwell town centre and key employment areas. It continues an existing rural residential / rural lifestyle land use pattern along Ripponvale Road and in the fringe of Cromwell generally, while also enabling further growth of horticultural activity in this area.

Appendix 1 – Minimum Lots Sizes and Categorisation

Existing Operative Zones – Cromwell Ward

Zone	Minimum Lot Size (sqm)	Average Lot Size no less than (sqm)	Generally Locality(s)	M.E Category
Residential (Reticulated)	250	na	Cromwell urban	Residential
RRA12 *	500	na	Cromwell urban	Residential
RRA13	600	800	Pisa Moorings	Residential
Residential (Unreticulated)	800	na	Cromwell urban	Residential
RRA3	1,000	na	Pisa Moorings, Cromwell lake edge	Residential
RRA8	1,500	na	Near Crippletown/Bendigo	Residential
RRA4	1,500	2,000	Bannockburn	Residential
RRA1	3,000	na	Small pockets lakeside	Rural Residential
RRA5	3,000	na	Lowburn	Rural Residential
RRA6	4,000	na	Urban edge	Rural Residential
RRA2	4,000	10,000	Cromwell rural fringe	Rural Residential & Rural Lifestyle
RuRA2	10,000	na	Near Crippletown/Bendigo	Rural Lifestyle
Rural Residential	20,000	na	Cromwell rural fringe, incl. Lowburn and Bannockburn	Rural Lifestyle
Rural	20,000	80,000	General rural	Rural Lifestyle & Rural
RuRA1	100,000	250,000	Near Crippletown/Bendigo	Rural

Source: Central Otago District Operative District Plan, M.E. * 1,000sqm minimum adjacent to SH6.

Existing Operative Zones – Cromwell Ward with Shannon Farm Structure Plan Areas

Zone	Minimum Lot Size (sqm)	Average Lot Size no less than (sqm)	Generally Locality(s)	M.E Category
Residential (Reticulated)	250	na	Cromwell urban	Residential
RRA12 *	500	na	Cromwell urban	Residential
RRA13	600	800	Pisa Moorings	Residential
Residential (Unreticulated)	800	na	Cromwell urban	Residential
RRA3	1,000	na	Pisa Moorings, Cromwell lake edge	Residential
RRA8	1,500	na	Near Crippletown/Bendigo	Residential
RRA4	1,500	2,000	Bannockburn	Residential
RL1 - Shannon Farm	2,000	na	Cromwell rural fringe	Rural Residential
RRA1	3,000	na	Small pockets lakeside	Rural Residential
RRA5	3,000	na	Lowburn	Rural Residential
RL2 - Shannon Farm	3,000	na	Cromwell rural fringe	Rural Residential
RRA6	4,000	na	Urban edge	Rural Residential
RL3 - Shannon Farm	4,000	na	Cromwell rural fringe	Rural Residential
RRA2	4,000	10,000	Cromwell rural fringe	Rural Residential & Rural Lifestyle
RuRA2	10,000	na	Near Crippletown/Bendigo	Rural Lifestyle
RL4 - Shannon Farm	10,000	na	Cromwell rural fringe	Rural Lifestyle
Rural Residential	20,000	na	Cromwell rural fringe, incl. Lowburn and Bannockburn	Rural Lifestyle
Rural	20,000	80,000	General rural	Rural Lifestyle & Rural
RL5 - Shannon Farm	30,000	na	Cromwell rural fringe	Rural Lifestyle
RuRA1	100,000	250,000	Near Crippletown/Bendigo	Rural

Source: Central Otago District Operative District Plan, M.E, Shannon Farm Proposed Structure Plan. * 1,000sqm minimum adjacent to SH6.

Appendix 2 – Growth in Dwelling Stock 1994-2018

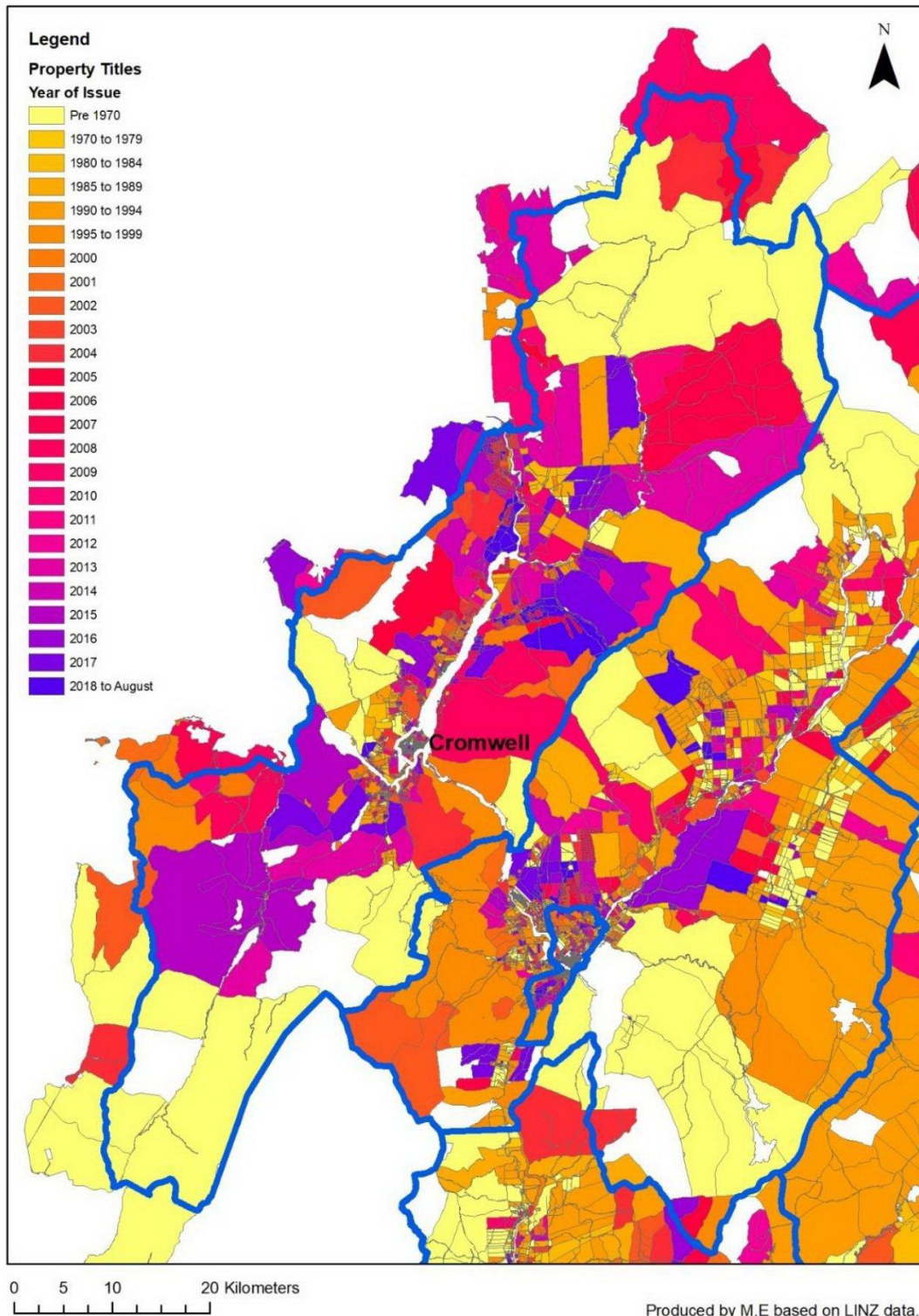
This dataset underpins Figure 7.

Quarter	Year	Cromwell	Cromwell Rural Fringe/Rural	Total Cromwell Ward	Rural Fringe / Rural Dwellings as Share of Total Ward
Q2	1994	1,063	137	1,200	11%
Q2	1995	1,112	148	1,260	12%
Q2	1996	1,137	167	1,304	13%
Q2	1997	1,151	174	1,325	13%
Q2	1998	1,160	182	1,342	14%
Q2	1999	1,166	185	1,351	14%
Q2	2000	1,176	193	1,369	14%
Q2	2001	1,203	217	1,420	15%
Q2	2002	1,270	255	1,525	17%
Q2	2003	1,340	285	1,625	18%
Q2	2004	1,407	307	1,714	18%
Q2	2005	1,506	334	1,840	18%
Q2	2006	1,597	378	1,975	19%
Q2	2007	1,666	424	2,090	20%
Q2	2008	1,773	488	2,261	22%
Q2	2009	1,853	543	2,396	23%
Q2	2010	1,901	599	2,500	24%
Q2	2011	1,937	649	2,586	25%
Q2	2012	1,966	690	2,656	26%
Q2	2013	1,983	720	2,703	27%
Q2	2014	2,032	763	2,795	27%
Q2	2015	2,094	810	2,904	28%
Q2	2016	2,134	847	2,981	28%
Q2	2017	2,246	925	3,171	29%
Q2	2018	2,324	984	3,308	30%
Total Growth 1994-2018		1261	847	2108	
Percentage Growth 1994-2018		119%	618%	176%	
Average Growth Per Annum		53	35	88	

Source: <https://mbienz.shinyapps.io/urban-development-capacity/>



Appendix 3 – Titles by Year of Issue – Cromwell Ward Extent



Appendix 4 – Cromwell Rural Fringe/Rural Area Titles by Size & Year

This dataset underpins section 2.3.

Year of Title Issue	Residential (Less than 2,000sqm)	Rural Residential (2,000sqm to 1ha)	Rural Lifestyle (1ha - 8ha)	Rural (Greater than 8ha)	Total Titles	Residential (Less than 2,000sqm)	Rural Residential (2,000sqm to 1ha)	Rural Lifestyle (1ha - 8ha)	Rural (Greater than 8ha)	Total Titles
Pre 1970	14	24	35	36	109	2%	6%	6%	5%	5%
1970 to 1979	5	5	8	3	21	1%	1%	1%	0%	1%
1980 to 1984	6	12	12	14	44	1%	3%	2%	2%	2%
1985 to 1989	6	40	13	19	78	1%	10%	2%	3%	3%
1990 to 1994	79	55	37	34	205	13%	14%	7%	5%	9%
1995 to 1999	44	42	51	51	188	7%	11%	9%	7%	8%
2000	-	6	12	19	37	0%	2%	2%	3%	2%
2001	1	9	16	20	46	0%	2%	3%	3%	2%
2002	7	2	12	33	54	1%	1%	2%	5%	2%
2003	1	6	17	19	43	0%	2%	3%	3%	2%
2004	65	12	22	62	161	10%	3%	4%	9%	7%
2005	22	12	22	27	83	4%	3%	4%	4%	4%
2006	38	50	32	42	162	6%	13%	6%	6%	7%
2007	15	3	33	47	98	2%	1%	6%	7%	4%
2008	96	13	30	54	193	15%	3%	5%	8%	8%
2009	16	25	23	23	87	3%	6%	4%	3%	4%
2010	4	6	21	23	54	1%	2%	4%	3%	2%
2011	4	5	18	9	36	1%	1%	3%	1%	2%
2012	5	4	7	15	31	1%	1%	1%	2%	1%
2013	12	2	16	19	49	2%	1%	3%	3%	2%
2014	33	12	23	29	97	5%	3%	4%	4%	4%
2015	7	19	18	21	65	1%	5%	3%	3%	3%
2016	42	9	22	26	99	7%	2%	4%	4%	4%
2017	54	6	37	43	140	9%	2%	7%	6%	6%
2018 to August	46	9	21	22	98	7%	2%	4%	3%	4%
Total Titles	622	388	558	710	2,278	100%	100%	100%	100%	100%
Since 2000	468	210	402	553	1,633	75%	54%	72%	78%	72%
Since 2013	194	57	137	160	548	31%	15%	25%	23%	24%

Source: LINZ, M.E



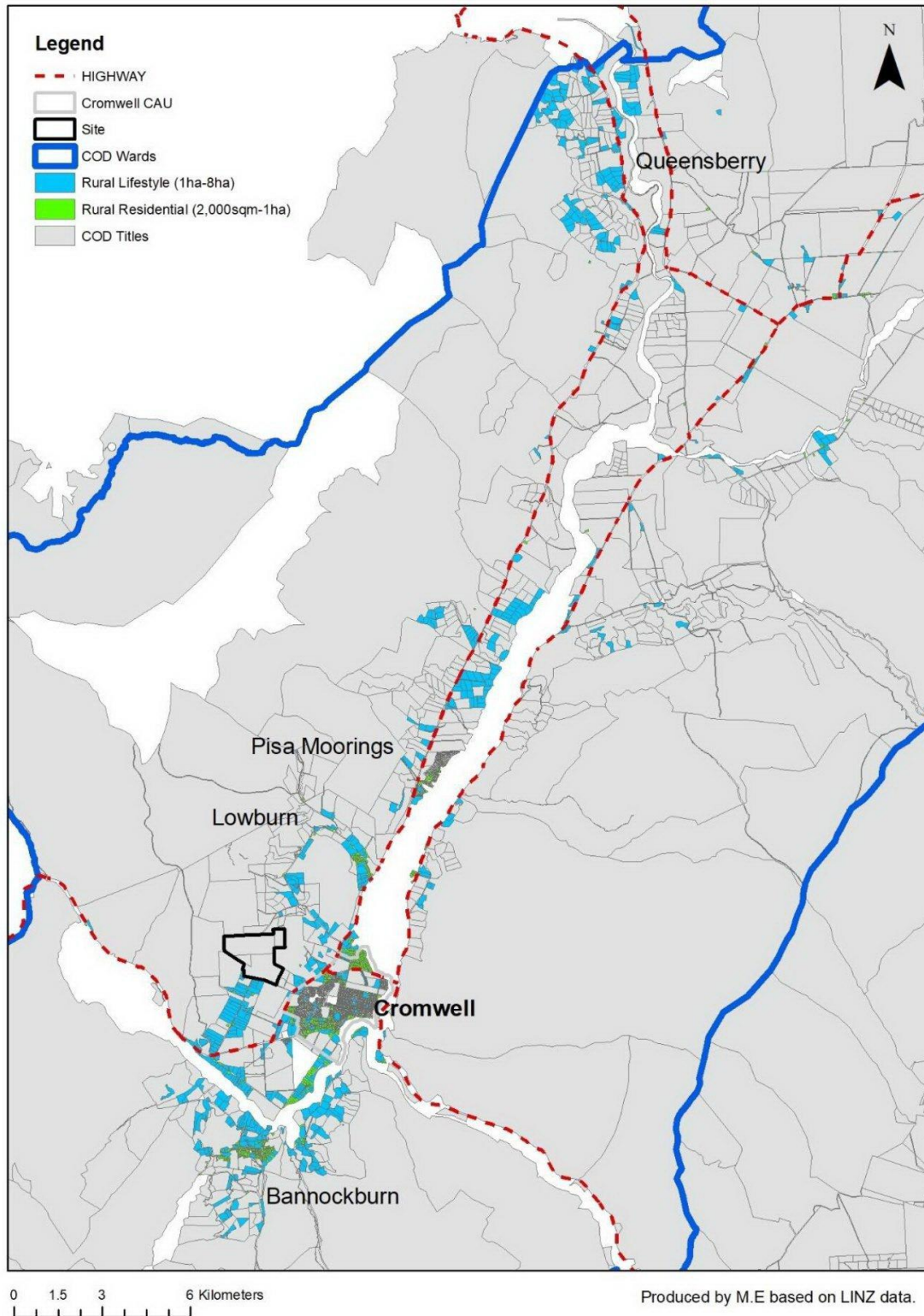
Appendix 5 – 2018 COD Titles by Size Bracket

Location	Size Bracket																Total Titles	
	Less than 250sqm	250-500sqm	500-600sqm	600-700sqm	700-800sqm	800-1,000sqm	1,000-1,500sqm	1,500-2,000sqm	2,000-3,000sqm	3,000-4,000sqm	4,000-8,000sqm	8,000sqm-1ha	1ha-2ha	2ha-4ha	4ha-8ha	8ha-12ha		12ha and greater
Count of Titles (within or intersecting)																		
Cromwell CAU	55	482	386	548	295	497	316	75	76	25	129	14	50	25	10	5	13	3,001
Cromwell Rural Fringe/Rural	44	22	11	15	17	56	352	105	119	80	150	39	107	179	272	279	431	2,278
Total Cromwell Ward	99	504	397	563	312	553	668	180	195	105	279	53	157	204	282	284	444	5,279
Rest of COD	244	729	478	651	650	1,296	1,319	275	327	170	348	125	419	586	669	385	2,019	10,690
Total District	343	1,233	875	1,214	962	1,849	1,987	455	522	275	627	178	576	790	951	669	2,463	15,969
Share of Titles by Category																		
Cromwell CAU	2%	16%	13%	18%	10%	17%	11%	2%	3%	1%	4%	0%	2%	1%	0%	0%	0%	100%
Cromwell Rural Fringe/Rural	2%	1%	0%	1%	1%	2%	15%	5%	5%	4%	7%	2%	5%	8%	12%	12%	19%	100%
Total Cromwell Ward	2%	10%	8%	11%	6%	10%	13%	3%	4%	2%	5%	1%	3%	4%	5%	5%	8%	100%
Rest of COD	2%	7%	4%	6%	6%	12%	12%	3%	3%	2%	3%	1%	4%	5%	6%	4%	19%	100%
Total District	2%	8%	5%	8%	6%	12%	12%	3%	3%	2%	4%	1%	4%	5%	6%	4%	15%	100%
Share of Titles by Location (Total District)																		
Cromwell CAU	16%	39%	44%	45%	31%	27%	16%	16%	15%	9%	21%	8%	9%	3%	1%	1%	1%	19%
Cromwell Rural Fringe/Rural	13%	2%	1%	1%	2%	3%	18%	23%	23%	29%	24%	22%	19%	23%	29%	42%	17%	14%
Total Cromwell Ward	29%	41%	45%	46%	32%	30%	34%	40%	37%	38%	44%	30%	27%	26%	30%	42%	18%	33%
Rest of COD	71%	59%	55%	54%	68%	70%	66%	60%	63%	62%	56%	70%	73%	74%	70%	58%	82%	67%
Total District	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: LINZ August 2018, M.E. Size thresholds are exact and will not capture titles that are close to these thresholds. Titles do not necessarily equate to ratable properties. Properties can comprise one or more titles, particularly in non urban areas.



Appendix 6 – Cromwell Ward Rural Residential & Lifestyle Parcels 2018





Appendix 7 – 2013 District Household - Dwelling Type Profile

Current Housing Demand – Resident Households

Household Types

The NPS requires assessment of housing demand by different types of household within a community, including demographics (household structure, size and age) which are important drivers of housing needs, and household incomes, which are an important driver of ability to pay.

Households may be defined on a number of dimensions, and the more standard ones are household type (such as single persons, couples or 2-parent families), household size or the number of members, the age of the householders, and their income level. These dimensions directly influence housing preferences and affordability.

A standard household typology used by M.E has been applied, based on Census information. The typology broadly conforms with Statistics New Zealand (SNZ) household types, although it offers more detail on matters directly relevant to housing affordability²¹.

Households are further differentiated by household age. This is the age of the “reference person” (as identified for Census purposes) and is a strong indicator of a household’s stage in the life-cycle. It is important because housing needs and future expectations vary during the life-cycle. For this analysis, six age bands are used – from young adults of 15-29 years, 30-39 years, 40-49 years, 50-64 years, 65-74 years, through to older households in the 75 years and over age band.


The third key point of differentiation is household income level. This is based on 2013 Census bands which broadly correspond with household income quintiles, though do not correspond exactly. The five bands used in the 2013 Census are less than \$30,000 per year (pre-tax); \$30,000 to 50,000; \$50,000 to 70,000; \$70,000 to 100,000; and more than \$100,000.

These combinations provide the option to define up to 210 household groups – 7 types x 6 age bands x 5 income bands – although this level of disaggregation is typically applied only at national level, or for large regional or TA populations. For most analyses, detail by household type and income, or by household type and age, is easily sufficient to identify the most important patterns of demand.

Dwelling Types

There is a substantial amount of information available from the 2013 Census to identify dwelling types. A customized dataset at the TA level has been used which identifies dwelling numbers by type and location within COD, to show dwellings as being a separate house or one of 2 or more dwellings in a building (attached dwellings). Dwelling type categories are:

²¹ This typology has been applied over many years to effectively differentiate household needs – both for dwellings and a range of consumer goods and services – according to both requirements and ability to pay (driven by income levels).

- 
- a. Separate house (77.0% nationally);
 - b. (one of) 2 or more dwellings in a 1-storey building (9.6%)
 - c. 2 or more dwellings in a 2- to 3-storey building (5.8%)
 - d. 2 or more dwellings in a 4+ storey building (1.4%)
 - e. 2 or more dwellings not further defined (0.03%)
 - f. Other private dwellings (0.4%)
 - g. Private dwellings not further defined (5.8%)

Simple cross-tabulation of household types with these dwelling types for COD offers a base analysis of the relationship of households and dwellings.

Dwelling Occupancy

Dwelling occupancy is used here as a key indicator of demand. This is because the Census describes the households which occupy a dwelling, and their tenure as owners or renters, but it does not identify the owners of dwellings which are occupied by renters²².

Accordingly, the household which occupied a dwelling as at Census 2013 is taken here as the best indicator of that household's demand for that dwelling. This is on the basis that the Census 2013 snapshot is a sound indicator of the dwellings sought by those owner occupiers, and the type of dwelling sought by those renting a dwelling.

Demand by Household Type and Dwelling Type

The outputs from this data analysis are estimates of the dwelling types in which households of each type resided, as at the 2013 Census. These estimates are generated at the TA level, by summing the CAU figures.

At the CAU level the number of dwellings will not be the same as the number of usually resident households. This is because some dwellings counted at Census time may be unoccupied or occupied by visitors (i.e. holiday homes).

For that reason, the analysis of the household type-dwelling type relationships is based on the number of usually resident households. These households are in effect distributed across dwelling-types, which means that the demand for dwellings is equated with occupancy by the number of households. I.e. for any given number of households of any type, there will be demand for x separate dwellings and y attached dwellings.

Figures 1 and 2 show the overall pattern for COD, as at 2013.

²² Including those who may not be paying rent, as family members or others.

Figure 1 - Central Otago Dwelling Occupancy by Household Type 2013

Dwelling Type	Household Type								Total Hhlds 2013
	One Person Hhld	Couple Hhld	2 Parents 1-2chn	2 Parents 3+chn	1 Parent Family	Multi-Family Hhlds	Non-Family Hhlds	Hhld Type NEI *	
COUNT OF HOUSEHOLDS/DWELLINGS									
Separate house	1,269	2,808	1,138	296	321	12	68	-	5,912
2+ dwellings in 1-storey	276	115	34	8	26	-	-	-	459
2+ dwellings in 2- to 3-storey	10	7	-	-	-	-	-	-	17
2+ dwellings in 4+ storey	-	-	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-	-	-
Other private dwellings	26	12	-	-	2	-	-	-	40
Private dwelling nfd **	96	64	17	4	9	-	-	90	280
Total Private Dwellings	1,677	3,006	1,189	308	358	12	68	90	6,708
STRUCTURE % BY HOUSEHOLD TYPE									
Separate house	75.7%	93.4%	95.7%	96.1%	89.7%	100.0%	100.0%	0.0%	88.1%
2+ dwellings in 1-storey	16.5%	3.8%	2.9%	2.6%	7.3%	0.0%	0.0%	0.0%	6.8%
2+ dwellings in 2- to 3-storey	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	1.6%	0.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%
Private dwelling nfd	5.7%	2.1%	1.4%	1.3%	2.5%	0.0%	0.0%	100.0%	4.2%
Total Private Dwellings	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OVERALL % STRUCTURE									
Separate house	18.9%	41.9%	17.0%	4.4%	4.8%	0.2%	1.0%	0.0%	88.1%
2+ dwellings in 1-storey	4.1%	1.7%	0.5%	0.1%	0.4%	0.0%	0.0%	0.0%	6.8%
2+ dwellings in 2- to 3-storey	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Private dwelling nfd	1.4%	1.0%	0.3%	0.1%	0.1%	0.0%	0.0%	1.3%	4.2%
Total Private Dwellings	25.0%	44.8%	17.7%	4.6%	5.3%	0.2%	1.0%	1.3%	100.0%

Source: Statistics NZ Census 2013 * Not Elsewhere Included, ** Not Further Defined

The 2013 Census data provides detail for 6,708 households²³. The key parameters of 2013 housing demand are:

- Couples with no children at home are the dominant household type (44.8%), with single person households making up 25.0% of the total and families with children making up (27.7%), non-family households (flating situations) account for just 1.0% and 1.3% of households are undefined.
- A number of dwelling types are not present in the Central Otago market in 2013. There are no dwellings in 4 storey buildings for example and very few dwellings in 2-3 storey buildings.
- Separate houses (which may be one or more storeys) are the dominant dwelling type (88.1%), with town houses, terrace houses and apartments accounting for 7.7% (some 4.2% are undefined);

²³ This compares to 7,413 households identified on Census night and an estimated 7,870 resident private households as at June 2013. The household-type – dwelling-type analysis (based on the sample of 6,708 households forms a profile subsequently applied to household projections with a 2016 base year.

- d. The shares occupying separate houses varies with 2-parent families in the 96% range, while single parent families have 89.7% (and 7.8% in attached dwellings), couples have 93.4% (and 4.5% in attached dwellings), and single person households 75.7% (and 18.6% in attached dwellings).

Figure 2 - Central Otago Dwelling Occupancy by Household Type 2013

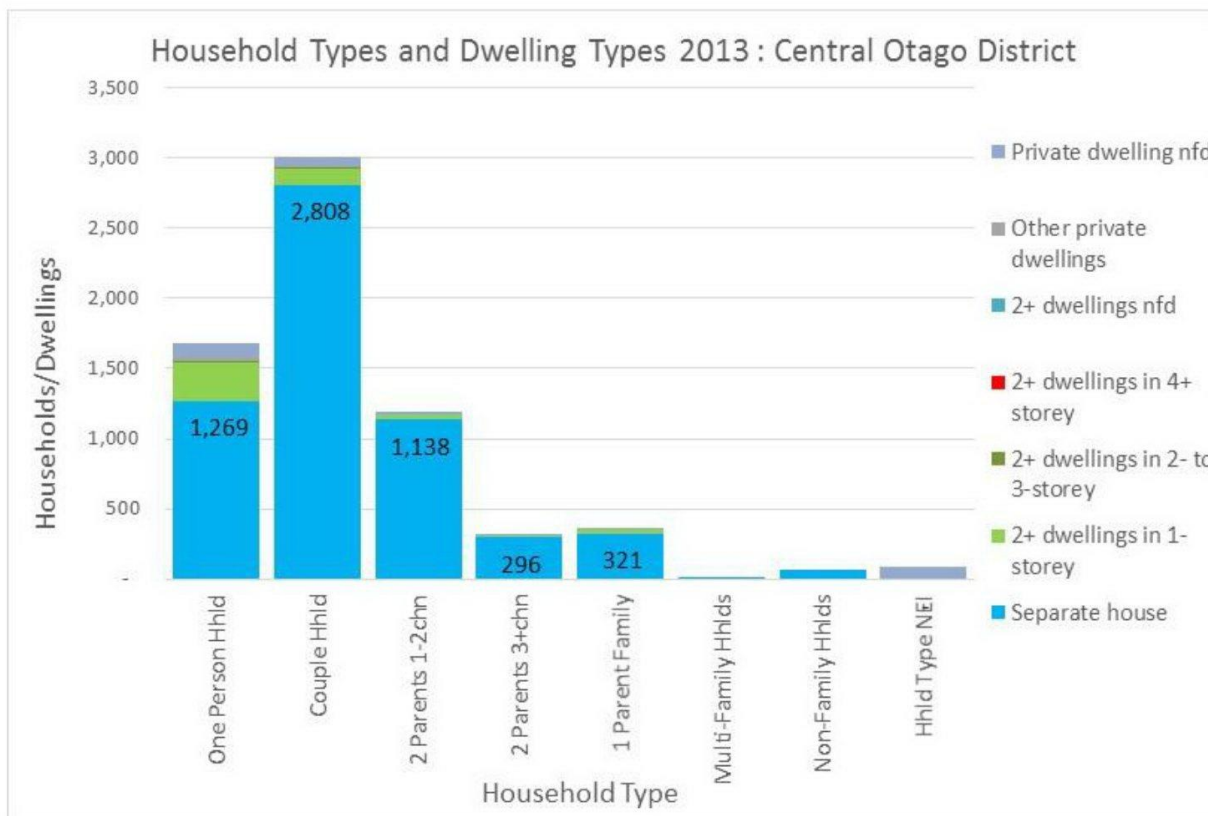


Figure 3 shows how dwelling occupancy varies with household income.

The key features are:

- a. The greatest number of households (20.9%) are in the lowest income quintile (less than \$30,000 per annum), followed by households in the second lowest income quintile (19.7% in the \$30-50,000 per annum band). The highest income band (\$100,000 or more per annum) relates to 15.1% of households in the District.
- b. The share of households living in separate (standalone) dwellings increases with household income and correspondingly, the share living in attached dwellings decreases with greater income. In other words, there is a converse relationship between income and dwelling density.
- c. In the lowest income band, 76.6% of households live in separate houses and 18.9% live in attached dwellings. In the highest income band, 96.7% of households live in separate houses and 2.2% live in attached dwellings.

Figure 3 - Central Otago Dwelling Occupancy by Household Income 2013

Dwelling Type	Household Income Band						Total
	Income < \$30K	Income \$30-50K	Income \$50-70K	Income \$70-100K	Income \$100K +	Income Not Stated	
COUNT OF HOUSEHOLDS/DWELLINGS							
Separate house	1,074	1,194	1,006	1,102	981	555	5,912
2+ dwellings in 1-storey	232	85	49	30	22	41	459
2+ dwellings in 2- to 3-storey	9	3	2	2	-	1	17
2+ dwellings in 4+ storey	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-
Other private dwellings	24	7	3	4	-	2	40
Private dwelling nfd **	63	33	26	17	11	130	280
Total Private Dwellings	1,402	1,322	1,086	1,155	1,014	729	6,708
STRUCTURE % BY INCOME BAND							
Separate house	76.6%	90.3%	92.6%	95.4%	96.7%	76.1%	88.1%
2+ dwellings in 1-storey	16.5%	6.4%	4.5%	2.6%	2.2%	5.6%	6.8%
2+ dwellings in 2- to 3-storey	0.6%	0.2%	0.2%	0.2%	0.0%	0.1%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	1.7%	0.5%	0.3%	0.3%	0.0%	0.3%	0.6%
Private dwelling nfd **	4.5%	2.5%	2.4%	1.5%	1.1%	17.8%	4.2%
Total Private Dwellings	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OVERALL % STRUCTURE							
Separate house	16.0%	17.8%	15.0%	16.4%	14.6%	8.3%	88.1%
2+ dwellings in 1-storey	3.5%	1.3%	0.7%	0.4%	0.3%	0.6%	6.8%
2+ dwellings in 2- to 3-storey	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.6%
Private dwelling nfd **	0.9%	0.5%	0.4%	0.3%	0.2%	1.9%	4.2%
Total Private Dwellings	20.9%	19.7%	16.2%	17.2%	15.1%	10.9%	100.0%

Source: Statistics NZ Census 2013 ** Not Further Defined

Figure 4 shows how dwelling occupancy varies with household age.

The key features are:

- The largest group of households in 2013 was in the 50-64 year age group (32.3%), followed by similar counts in the 40-49 year age group (18.1%) and 65-74 year age group (17.7%). Households aged 39 years or younger make up 18.8% of households and those households aged 75+ account for a 13.0% share.
- Separate (standalone) dwelling occupancy peaks when households are aged 30-39 years (with attached dwelling occupancy at its lowest).
- Attached dwelling occupancy is high in the youngest household group (8.0%) then declines through middle age households before increasing again. It peaks in the oldest household age group (the 75+ age households have 16.3% in attached dwellings). In other words, there is a relationship between life stage (age) and dwelling density.

The district wide significance of older, predominantly couple households without children in standalone homes, and the relationship between higher incomes and standalone home occupancy are characteristics that align closely with the typical profile of rural residential and rural lifestyle property owners (discussed in section 1.2). Future growth in this sector of the resident community will be the key driver of future demand for rural residential and rural lifestyle properties. This is addressed further in section 4.2.

Figure 4 - Central Otago Dwelling Occupancy by Household Age 2013

Dwelling Type	Age of Household Reference Person						Total
	15-29	30-39	40-49	50-64	65-74	75+	
COUNT OF HOUSEHOLDS/DWELLINGS							
Separate house	402	737	1,108	1,942	1,042	681	5,912
2+ dwellings in 1-storey	33	34	58	110	91	133	459
2+ dwellings in 2- to 3-storey	1	-	-	8	4	4	17
2+ dwellings in 4+ storey	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-
Other private dwellings	3	2	4	20	6	5	40
Private dwelling nfd **	22	30	43	90	47	48	280
Total Private Dwellings	461	803	1,213	2,170	1,190	871	6,708
STRUCTURE % BY AGE BRACKET							
Separate house	87.2%	91.8%	91.3%	89.5%	87.6%	78.2%	88.1%
2+ dwellings in 1-storey	7.2%	4.2%	4.8%	5.1%	7.6%	15.3%	6.8%
2+ dwellings in 2- to 3-storey	0.2%	0.0%	0.0%	0.4%	0.3%	0.5%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.7%	0.2%	0.3%	0.9%	0.5%	0.6%	0.6%
Private dwelling nfd **	4.8%	3.7%	3.5%	4.1%	3.9%	5.5%	4.2%
Total Private Dwellings	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OVERALL % STRUCTURE							
Separate house	6.0%	11.0%	16.5%	29.0%	15.5%	10.2%	88.1%
2+ dwellings in 1-storey	0.5%	0.5%	0.9%	1.6%	1.4%	2.0%	6.8%
2+ dwellings in 2- to 3-storey	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.0%	0.0%	0.1%	0.3%	0.1%	0.1%	0.6%
Private dwelling nfd **	0.3%	0.4%	0.6%	1.3%	0.7%	0.7%	4.2%
Total Private Dwellings	6.9%	12.0%	18.1%	32.3%	17.7%	13.0%	100.0%

Source: Statistics NZ Census 2013 ** Not Further Defined



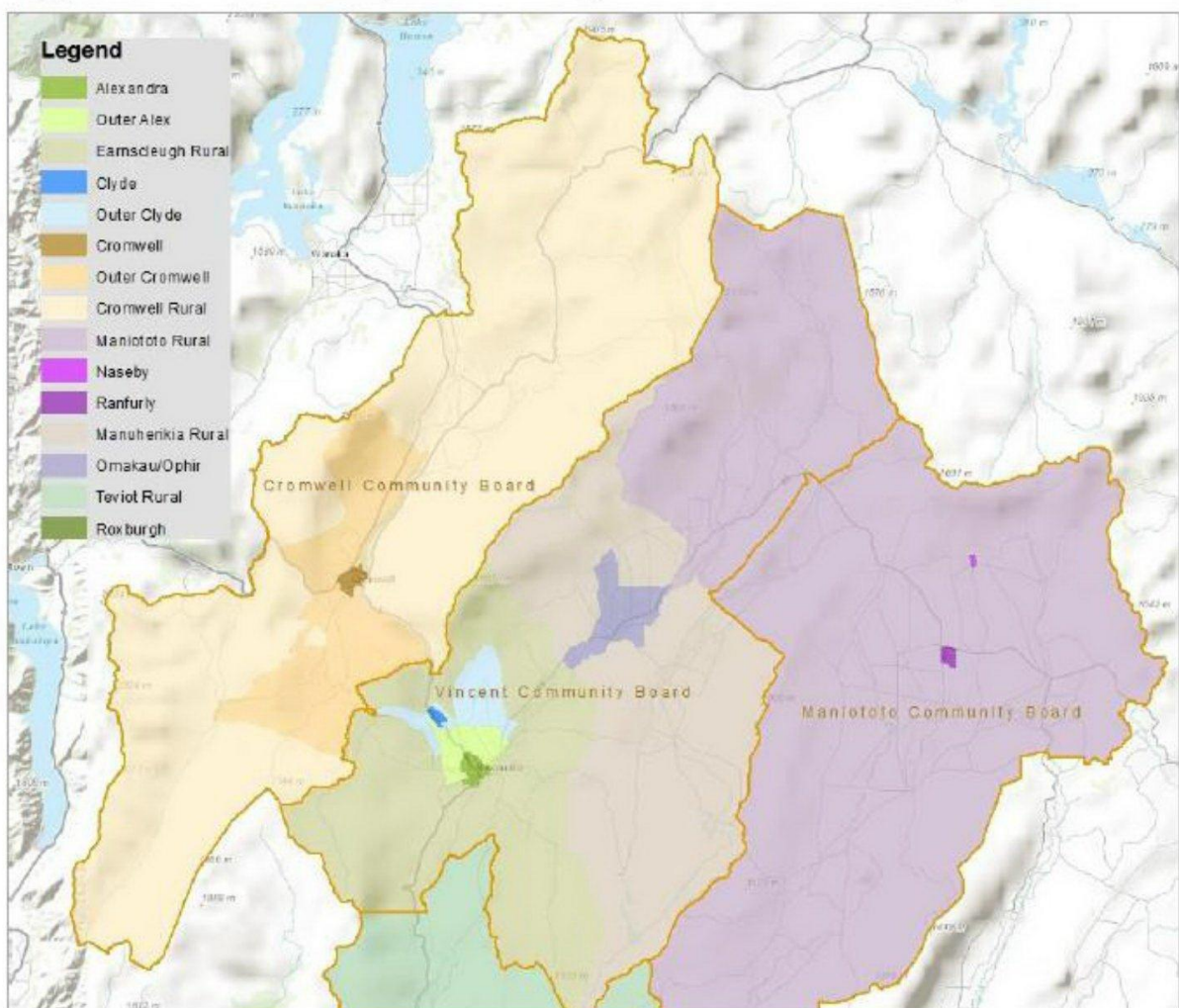
Appendix 8 – Rationale Dwelling Projection Area Definitions

Catchment of Cromwell, Outer Cromwell and Cromwell Rural for Dwelling Projections Analysis (Rationale)



Central Otago District
Growth Projections 2018 to 2048

Appendix A – District, Community Board and Area Map





Appendix 9 – Medium Preference Shift COD Dwelling Projections

This section provides the results of an alternative future dwelling demand scenario for COD than the status quo scenario outlined in Section 4.

The two figures below present district-wide dwelling projections for the **Medium Preference Shift Scenario**. This scenario reflects only a moderate shift from current Central Otago dwelling preferences (2013) towards the national average dwelling preferences (on the assumption that TAs move closer to national average patterns as they grow in size). The national average is heavily weighted towards the large metropolitan urban areas which sustain higher density housing options – hence a greater propensity to occupy attached dwellings. The model has the option of a medium, high or very high shift towards the national average preferences.

M.E has selected the medium shift scenario for this report to be conservative. This approach takes into account the historic development of the dwelling estate in the District, which to-date has not faced any significant land supply constraints and has in turn allowed standalone dwellings to dominate supply and urban areas to spread. However, the scenario also takes into account that urban sprawl leads to reduced urban form efficiencies and a housing supply that fails to offer a variety of residential densities (including dwelling types) puts greater pressure on housing affordability, particularly for low income households and first home buyers. Changing levels of housing affordability are a key driver of changing preferences towards smaller residential sections and attached dwellings – this is becoming increasingly evident in many high growth areas throughout New Zealand.

The key findings from the Medium Preference Shift Scenario are:

- Same or similar overall demand for dwellings (i.e. the household demand does not change, just the mix of dwelling types).
- Separate, standalone homes will continue to dominate market demand – but will reduce in share from 90% of demand in 2016 to 83% by 2043. A further 1,540 standalone dwellings will be required by 2028. This increases to 2,730 by 2043.
- Strong percentage growth in demand for attached dwellings, particularly attached single storey dwellings which increase by 163% by 2043 over 2016 demand levels (a nominal increase of 390 dwellings by 2028 and 880 by 2043). Total attached dwelling growth is 420 in the medium term and 960 in the long term driven by changes in household demography combined with a moderate shift away from the 2013 relationship between household and dwelling types.

COD Projected Dwellings by Type 2016-2043 – High – Medium Preference Shift

Dwelling Type	2016	2018	2023	2028	2033	2038	2043	2016-28	2016-33	2016-43
COUNT OF DWELLINGS										
Separate house	7,240	7,580	8,230	8,780	9,230	9,710	9,970	1,540	1,990	2,730
2+ dwellings in 1-storey	540	630	780	930	1,100	1,180	1,420	390	560	880
2+ dwellings in 2- to 3-storey	20	20	30	30	40	40	50	10	20	30
2+ dwellings in 4+ storey	-	-	-	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-	-	-	-
Other private dwellings	50	50	70	70	80	90	100	20	30	50
Private dwelling nfd	190	230	270	320	380	400	470	130	190	280
TOTAL	8,040	8,510	9,380	10,130	10,830	11,420	12,010	2,090	2,790	3,970
STRUCTURE % BY YEAR										
Separate house	90%	89%	88%	87%	85%	85%	83%	74%	71%	69%
2+ dwellings in 1-storey	7%	7%	8%	9%	10%	10%	12%	19%	20%	22%
2+ dwellings in 2- to 3-storey	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
2+ dwellings in 4+ storey	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ dwellings nfd	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other private dwellings	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Private dwelling nfd	2%	3%	3%	3%	4%	4%	4%	6%	7%	7%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Statistics NZ, M.E ** Not Further Defined

Scenario: Medium Shift in Attached Preferences, High 2017 Growth Future

COD Projected Dwellings by Type 2016-2043 – High – Medium Preference Shift

