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Economic Assessment of Proposed Clyde Industrial Zone

Private Plan Change 23 – Central Otago District

Prepared for: Hartley Road Partnership – September 2024- Final

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Private Plan Change 23 – Central Otago District

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Executive Summary

This report has been prepared by Savvy Consulting Limited (Savvy) to assess the economic costs and benefits of a request to rezone 5.62ha of land in Clyde, Central Otago District (COD), from Rural Resource Area (Rural Zone) to Industrial Resource Area (Industrial Zone). Guided by the relevant district, regional and higher-order objectives and policies related to urban expansion and providing for industrial activities, this report has assessed the current location, role and growth of existing Industrial Zones, their vacant capacity, the medium-term demand for industrial zoned land, the sufficiency of existing Industrial Zones to meet that demand, and the overall suitability of the proposed site for industrial zoning.

Generally, it is more economically efficient to consider options for expansion of existing industrial zones before creating new ones, to ensure that the adverse effects of industrial activities are consolidated in relatively few locations. However, this is not always practicable where other land uses have developed around existing Industrial Zones as they have in Alexandra, foreclosing further expansion. Further, this approach must be balanced with the need to provide for industrial activities in locations of demand.

Clyde is an urban area that already sustains industrial activity, but in the absence of a local Industrial Zone (such as provided in most other towns and settlements of the district) the Clyde community has been reliant on supply of industrial activities in Alexandra. This urban form is increasingly inefficient as Clyde grows – and Clyde *has* been identified as an area that is constrained by a lack of local employment and yet, can support substantial residential growth in the medium and long term.

Providing for future housing growth in Clyde as set out in PC19 and the Spatial Plan without also providing increased employment opportunities and business land, will not support a well-functioning urban environment. I consider that the proposed site is a suitable and effective location for an Industrial Zone. I do not consider there to be any other more practicable or feasible alternative locations to provide the equivalent development capacity in the locality. Providing a local Industrial Zone in Clyde responds to an insufficiency (absence) of industrial development capacity in the Clyde urban area and assists with an insufficiency of industrial development capacity in the Alexandra urban area in the short-medium term. Zoning of the proposed site will support the provision of at least sufficient Industrial Zone capacity in the Vincent Ward and district overall.

Having considered the economic costs and benefits of the proposal, I conclude that the long term economic benefits far outweigh any potential long term costs. I support the rezoning from an economic perspective.

1 Introduction

This report has been prepared by Savvy Consulting Limited (Savvy) to assess the economic costs and benefits of a request to rezone a piece area of land in Clyde, Central Otago District (COD), from Rural Resource Area (Rural Zone) to Industrial Resource Area (Industrial Zone). The scope of this independent economic assessment has been designed to assist with section 32A reporting as well as assessment against district and regional planning provisions, and higher order statutory documents (namely the National Policy Statement on Urban Development (NPS-UD) and National Policy Statement for Highly Productive Land (NPS-HPL), from an economic perspective.

1.1 Proposal

Hartley Road Partnership are seeking to provide for a 5.62ha (gross) Industrial Zone in Clyde at the intersection of State Highway 8 and Springvale Road. The greenfield site (Figure 1.1) sits to the east of the main urban area of Clyde, separated by State Highway 8. Not all of the site is proposed for Industrial Zone. It is also bounded to its east by the cemetery on Springvale Road and a steep hill to the rear of the site, meaning that the site is well contained.

Figure 1.1 – Site to Contain Proposed Industrial Zone Relative to Clyde Township

1.2 Policy Framework for Industrial Zoning

The following selected planning provisions help to set the context of what economic effects (costs and benefits) are of key relevance for this plan change request.

1.2.1 National Policy Statement – Urban Development

Legal advice provided by MacTodd to the hearings panel for PC19[1] indicates that Cromwell is an urban environment in accordance with the NPS-UD, and therefore COD is a Tier 3 territorial authority (TA). As a Tier 3 TA, Central Otago District Council (CODC) is "*strongly encouraged to do the things that Tier 1 or 2 local authorities are obliged to do under Parts 2 and 3 of the NPS-UD*".[2] In other words, observe the objectives and policies of the NPS-UD.

Most objectives and policies relate to decisions that affect the urban environment (i.e., Cromwell). That said, Policy 2 (and related Clauses 3.2 and 3.3) simply require that Tier 3 TAs provide at least sufficient development capacity to meet expected demand for housing and for business land over the short, medium, and long term,[3] with clause 3.2 referring to urban areas (not limited to the urban environment). This is also the requirement of s31(1)(aa) of the RMA. As such, my interpretation of the legal advice and the NPS-UD is that Policy 2 is the key backdrop to this economic assessment.

1.2.2 Regional Policy Statement (RPS)

Objective 4.5 and Policy 4.5.1 of the Operative RPS (2019) require that urban growth occurs in a strategic and coordinated way and integrates effectively with adjoining urban and rural environments. It directs that supply and demand of industrial zoned land is monitored, that sufficient industrial land is made available (i.e. relative to demand), and that land is used efficiently. Policy 5.3.3 acknowledges that land suitable for industrial activities is a finite resource and directs local councils to provide specific Industrial Zones.

The Proposed RPS 2021 includes similar direction. For example, UFD-02 (Development of urban areas) requires that urban areas develop and change to allow business and other non-residential activities to meet the needs of communities in appropriate locations. UFD-03 reflects the requirements of the NPS-UD – that there is sufficient development capacity for business needs in the short, medium and long term. The requirement for strategic planning to

[1] Council initiated plan change on residential zones in the district.
[2] Clause 1.5, NPS-UD.
[3] I.e. the next 3, 10 and 30 years.

take place prior to development, expansion or redevelopment of urban areas is strengthened in the Proposed RPS.

1.2.3 Operative District Plan

The operative District Plan pre-dates both RPSs and the NPS-UD (and its predecessor the NPS-UDC). Objective 6.3.1 of the COD District Plan requires that planning decisions meet the present and reasonably foreseeable needs of people and communities in urban areas in order to promote the sustainable management of those areas. This includes providing for growth (demand) in urban areas in efficient locations when needed. Policy 6.4.2 sets out the effects that must be avoided, remedied or mitigated when enabling expansion of urban areas generally.

Objective 9.1.1 recognises that industrial activities, while an essential part of the economy that must be provided for in urban areas, have the potential to adversely affect the amenity values of neighbouring land uses, or create reverse sensitivity effects on other land uses. Policy 9.2.1 and 9.2.3 therefore direct planning decisions to provide appropriate locations for the growth of industrial activities where effects can be managed.

My interpretation of the District Plan is that there is no strategic guidance on which urban areas should include an Industrial Zone(s). Rather, where there is a need to provide Industrial Zone capacity in urban areas to provide for industrial activity demand, the emphasis is on finding an appropriate location for that zone where adverse effects (including reverse sensitivity effects) can be managed. That said, the Vincent Spatial Plan (2022) now gives effect to the strategic planning requirement from the RPS for urban growth in Clyde, Alexandra and Omakau/Ophir and will guide future changes to the District Plan. This is discussed later in the report with respect to strategic planning for new industrial zones.

1.2.4 Summary of Relevant Economic Effects to Consider

Based on the above planning and policy framework, the key economic concepts that need to be addressed for this plan change relate to demand for industrial development capacity (zoning) over the short, medium and long term; the location of that demand and where it is most efficiently met; the capacity of existing and identified future industrial zones; the sufficiency of existing and identified industrial zones to meet projected demand; the suitability of the proposed site for industrial development (i.e. does it represent feasible development capacity); and the economic costs and benefits of the proposal to test if it is an efficient use the land and supports an efficient urban form.

1.3 Report Scope

To meet the requirements set out above, the approach of this economic assessment considers:

a) the town and settlement pattern of the district and the economic inter-dependencies of those areas, including how they are currently served by industrial zones;

b) the relative function/role of existing industrial zones (relative to the towns/settlements they are located in and relative to each other);

c) the vacant capacity of existing and identified future industrial zones (as an indication of their ability to provide for future growth);

d) the demand for industrial zoned land, driven by projected population and dwelling growth;

e) the indicative sufficiency of industrial zoned and identified land relative to locations of demand;

f) the economic costs and benefits of the proposed zoning, taking into account any forgone primary productive capacity; and

g) conclusion on the efficiency of the proposed zoning from an economic perspective.

1.3.1 Data Sources

This report has considered and/or relied on a range of data sources to inform the analysis. This includes:

- CODC's 2020 and 2022 growth projections prepared by Rationale,
- CODC's GIS data for Operative and notified PC19 zoning,
- the Operative District Plan,
- PC19 Section 42A report (2023) and PC18 S32A Report,
- CODC's Vincent Spatial Plan 2022,
- StatisticsNZ population estimates, projections, residential consents and business demography data,
- aerial imagery, and
- the Primary Production Capacity Report (Patersons, 2024).

2 Existing & Planned Industrial Zones

2.1 Study Area and Urban Structure

The study area for this assessment is the whole of COD, although particular focus is given to the locations where there are operative Industrial Zones and the area covered by the recent Vincent Spatial Plan (2022) prepared by CODC. That is, the townships of Clyde, Alexandra and Omakau within Vincent Ward.[4] Figure 1.2 identifies the locations of the main towns/ settlements in COD. While Clyde and Alexandra are relatively close to each other, the district is characterised by a small number of urban and rural centres spread over a large geographic area.

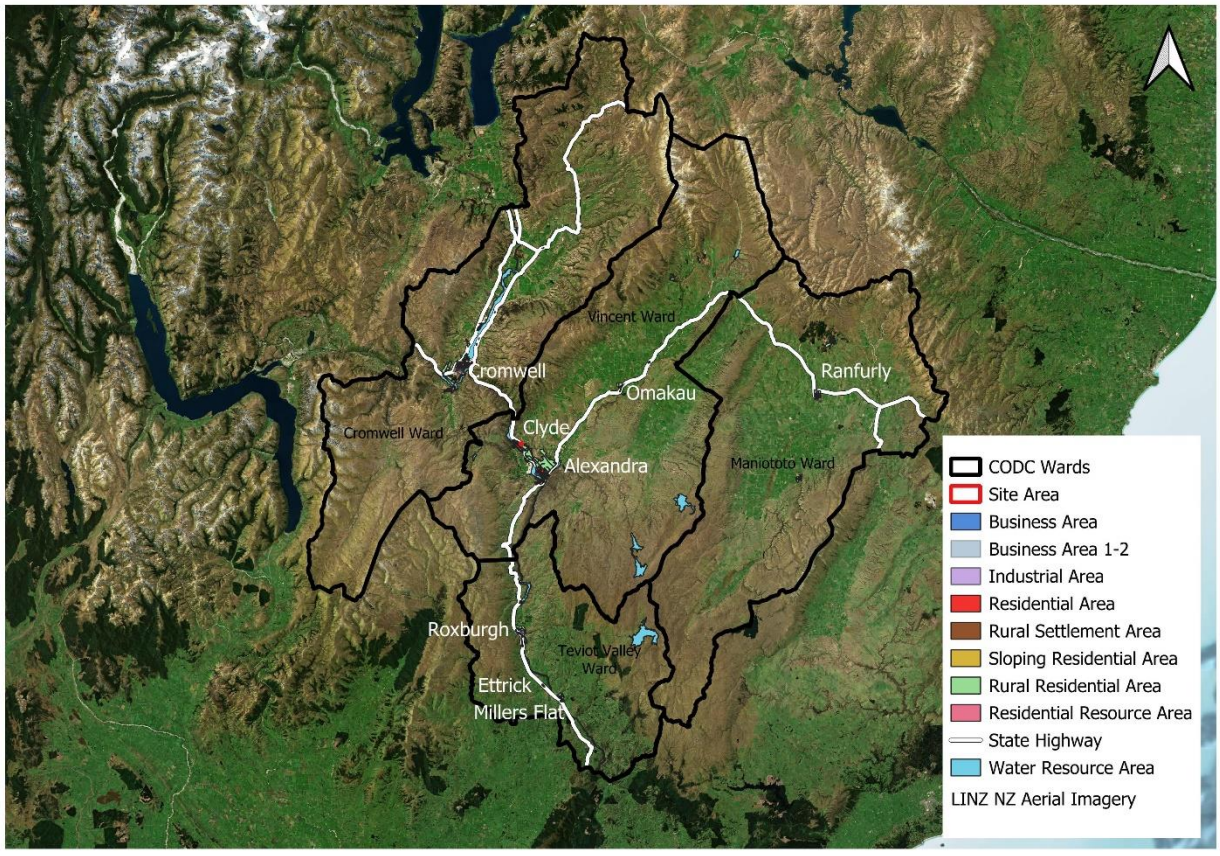


Figure 2.1 – Study Area for Assessment – Main Towns & Settlements of COD

In terms of an urban hierarchy, Cromwell, Alexandra, Ranfurly and Roxburgh are the main centres within each ward. Cromwell has taken over as the largest centre in the district in

[4] StatisticsNZ 2023 Ward Boundaries.

population terms[5] (although not in employment terms) and serves primarily the Cromwell Ward.[6] Alexandra is the second largest centre in population terms and the largest in employment terms and serves the higher order needs of those living in the Vincent, Maniototo and Teviot Valley Wards – so a much larger geographic catchment. In population terms, Clyde is the third largest of the discrete townships/settlements in the district (Figure 2.2) in population terms.

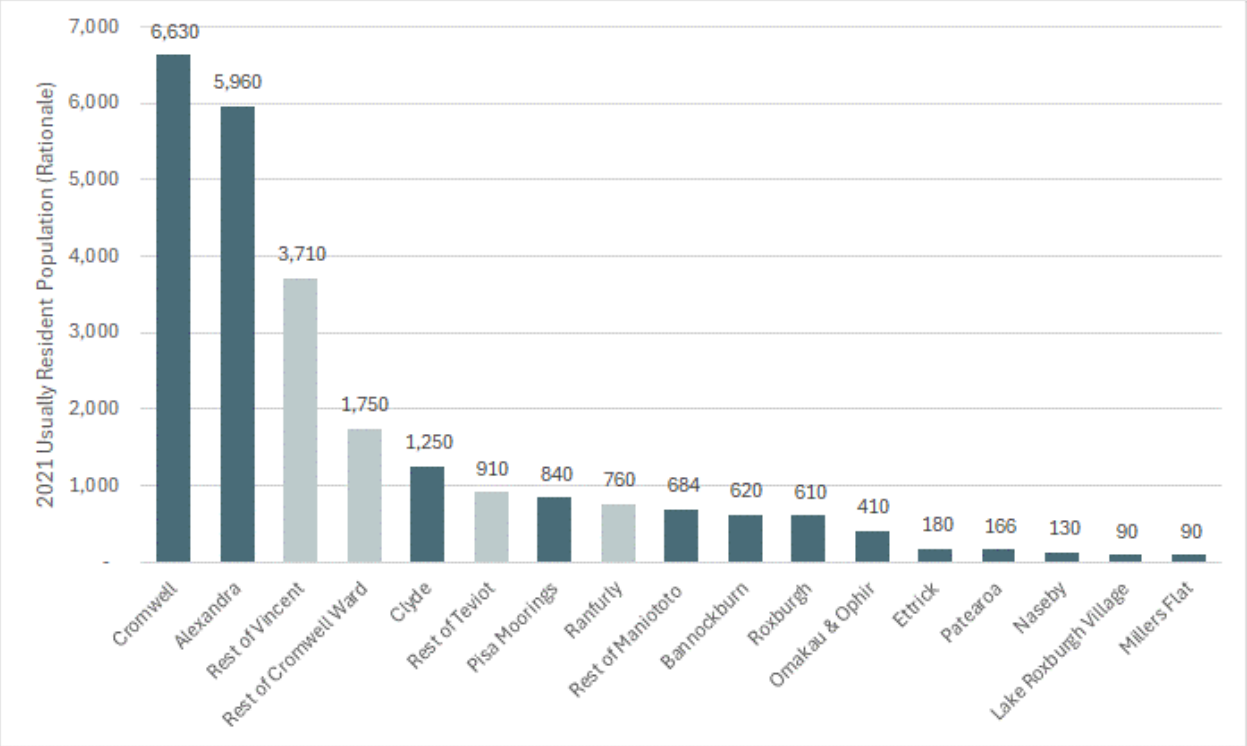


Figure 2.2 –COD Towns & Settlements Usually Resident Population 2021 (Rationale)

This urban structure is directly relevant to the role of Industrial Zones within the district, including where growth in demand for Industrial Zones is most efficiently met.

2.2 Operative District Plan Urban Area Zoning

Table 2.1 provides a list of the main towns and settlements in COD that contain either Residential Zoning or Settlement Zoning. The ward that they fall within is noted, and for completeness, the 'rest of ward' area is represented (and which may include rural settlements not otherwise listed).

[5] StatisticsNZ 2023 Estimates.

[6] Cromwell also has some economic and workforce linkages with Queenstown and Wanaka in Queenstown Lakes District.

Some key trends are evident in the approach to zoning in the operative District Plan. This includes that most urban areas include some Rural Residential zoning adjoining or near the Residential or Settlement Zone. This is appropriate to provide for a range of dwelling types to meet community needs.

Table 2.1 – Current Operative Plan Zone Provision by Urban Area

Ward	Town/Settlement	Zone Category *				
		Residential	Rural Settlement	Rural Residential (in close proximity)	Business	Industrial
Cromwell	Cromwell	Y	-	Y	Y	Y
Cromwell	Pisa Moorings	Y	-	-	*PPC21*	*PPC21*
Cromwell	Bannockburn	Y	-	Y	-	-
Cromwell	Rest of Cromwell Ward	-	Y	Y	-	-
Vincent	Alexandra	Y	-	Y	Y	Y
Vincent	Clyde	Y	-	Y	Y	-
Vincent	Omakau & Ophir	Y	-	Y	Y	Y
Vincent	Rest of Vincent	Y	Y	Y	-	-
Maniototo	Ranfurly	Y	-	Y	Y	Y
Maniototo	Naseby	Y	-	Y	Y	Y
Maniototo	Patearoa	Y	-	Y	-	Y
Maniototo	Rest of Maniototo	-	Y	Y		
Teviot Valley	Roxburgh	Y	-	Y	Y	Y
Teviot Valley	Lake Roxburgh Village	Y	-	-	-	-
Teviot Valley	Ettrick	Y	-	-	-	Y
Teviot Valley	Millers Flat	Y	-	Y	-	Y
Teviot Valley	Rest of Teviot	-	-	-	-	-

*Source: CODC Operative Zone Maps. * Rural zone excluded.*

Next, seven of the urban areas include a Business Zone. Where an urban area does not include a Business Zone, they are generally dependent on the nearest Business Zone for convenience retail and service needs. As discussed above, higher order retail and service needs are generally directed to either Cromwell or Alexandra (whichever is closest).

While not every settlement can sustain a viable Business Zone, the operative District Plan has sought to provide most towns and settlements with an Industrial Zone. Nine urban areas in the district include a local Industrial Zone (Table 2.1). Not only does this concentrate employment opportunities within urban areas (close to places of residence), but it consolidates industrial activities that might otherwise be dispersed in the Rural Zone[7] into a suitable location where effects can be appropriately managed (and agglomeration benefits can be realised for co-located businesses).

[7] Or seek to take up capacity in a Business Zone (where enabled or approved).

The only areas that do not include an Industrial Zone are Pisa Moorings[8] and Bannockburn in Cromwell Ward, Clyde in the Vincent Ward and Lake Roxburgh Village in the Teviot Valley Ward, with Clyde being larger than each of these areas in terms of resident population, and much larger than some towns and settlements that already contain Industrial Zones.

Currently, any demand for industrial activities arising from homes or businesses in or near Pisa Moorings and Bannockburn will be met in Cromwell. Any demand arising in or near Clyde will be met in Alexandra and any demand arising in or near Roxburgh Village will be met in Roxburgh.

At the same time, there will be some industrial activities located in the two main towns (Cromwell and Alexandra) that service much wider catchments (in addition to local demand), in the same way as the Business Zones in these towns function at the top of the commercial centre hierarchy. As such, a portion of industrial demand from each urban area can be met locally (if a zone is provided) and a portion of demand will be met in the Cromwell and Alexandra Industrial Zones (whichever is closest).

2.2.1 Current Private Plan Changes

While Pisa Moorings does not currently include a Business Zone or its own local Industrial Zone (Table 2.1), PPC21 (Parkburn Quarry) seeks to include provision for both zone types, in addition to further Residential Zone capacity, to provide for local demand and projected growth in this urban area. PPC21 will significantly increase the self-sufficiency of the Pisa Mooring community and reduce the need for road travel to Cromwell for work and convenience shopping.

In September 2024 CODC accepted the independent hearings panel's recommendation to approve PPC21. With PPC21 approved, the only urban areas not provided with a local Industrial Zone will then be Clyde, Bannockburn and Roxburgh Village. At the time of finalising this report, PPC21 had yet to be included in the operative District Plan. On that basis, the analysis in the remainder of this report does not include the Parkburn Quarry Industrial Zone, but its contribution is acknowledged where relevant.

2.3 Current Role of Industrial Zones & Recent Growth

Table 2.2 summarises, in a general sense, the role of the various Industrial Zones provided throughout COD. As stated above, all Industrial Zones have a local role - serving the household and business needs of the local and surrounding community – but Alexandra and

[8] Discussed below.

Cromwell Industrial Zones have a wider catchment role. This wider role arises from their strategic location (geographically) within the district, and from being within urban areas with the largest workforce and supporting infrastructure. The large local demand in these two main townships sustains a greater number of industrial activities, but the strategic location makes it efficient for some of those businesses to also service a wider catchment from a centralised location.

Table 2.2 – Functional Role of Existing Industrial Zones

Ward	Town/Settlement	Existing Industrial Zone	Industrial Zone Role / Catchment	Main Industrial Service Hub
Cromwell	Cromwell	Y	Local & Ward	Cromwell
Cromwell	Pisa Moorings	-	N/A	Cromwell
Cromwell	Bannockburn	-	N/A	Cromwell
Cromwell	Rest of Cromwell Ward	-	N/A	Cromwell
Vincent	Alexandra	Y	Local & Ward	Alexandra
Vincent	Clyde	-	N/A	Alexandra
Vincent	Omakau & Ophir	Y	Local	Alexandra
Vincent	Rest of Vincent	-	N/A	Alexandra
Maniototo	Ranfurly	Y	Local	Alexandra
Maniototo	Naseby	Y	Local	Alexandra
Maniototo	Patearoa	Y	Local	Alexandra
Maniototo	Rest of Maniototo		N/A	Alexandra
Teviot Valley	Roxburgh	Y	Local	Alexandra
Teviot Valley	Lake Roxburgh Village	-	N/A	Alexandra
Teviot Valley	Ettrick	Y	Local	Alexandra
Teviot Valley	Millers Flat	Y	Local	Alexandra
Teviot Valley	Rest of Teviot	-	N/A	Alexandra

Source: CODC Operative Zone Maps, Savvy.

The following sub-section provides a closer look at the two main industrial zones in COD – Cromwell and Alexandra. This analysis is based on business and employment data reported by StatisticsNZ[9] at a Statistical Area 1 (SA1) level.[10]

SA1 boundaries do not perfectly match the Industrial Zone boundaries and as such, may include land uses outside the Industrial Zone that contain businesses and employment. The SA1 boundaries are however a relatively close match with the Industrial Zones in these two main towns and while not all business/employment activity outside the Industrial Zone can be identified and removed, primary production activity (farming and horticulture) has been

[9] Business Demography Statistics.

[10] SA1 2018 boundaries have been used.

removed from the data where this related to rural land captured within the SA1s.[11] Services to agriculture, forestry and hunting have however been retained in the data (where applicable).

For all other areas with an Industrial Zone, the SA1 boundaries covered land substantially larger than the Industrial Zone, and often the whole settlement and extensive rural areas. As such, there is too much uncertainty around Industrial Zone activity to provide meaningful analysis of those local Industrial Zones.

2.3.1 Cromwell Industrial Zone

Appendix A contains a detailed table of the analysis for the Cromwell Industrial Zone. Key findings for this zone include:

- There were an estimated 269 businesses in the Industrial Zone in February 2023, which is 68 (34%) more businesses (net) than there was in 2018.
- Approximately 75% of those businesses (47 total) fall within broad industries[12] that may be considered more likely to seek an Industrial Zone location than not.[13] This group of businesses grew by 30% since 2018, suggesting that businesses in other sectors (while making up only 25% of total businesses) were growing at an above average rate in the Industrial Zone.
- The two industries experiencing the largest business count growth 2018-2023 were construction and rental, hiring and real estate services, with growth of 22 and 14 businesses respectively.
- Construction businesses make up 21% of all businesses in the Industrial Zone in 2023, followed by rental, hiring and real estate services (16%), wholesale trade (15%) and manufacturing businesses (13%).

[11] Other data cleaning included removal of hydro power generation where this was appearing (perhaps incorrectly) within the SA1s for the Alexandra Industrial Zones, and removal of most Shearing Services employment where the shearing service business was the place where all shearing gang employment was registered, but is unlikely to be based within the zone.

[12] Using 1-digit ANZSIC categories (albeit only the support services activity within Agriculture, Forestry and Fishing.

[13] For the purposes of this report, this includes services to agriculture, forestry and hunting, manufacturing, electricity, gas, water and waste services, construction, wholesaling, transport, postal and warehousing. I have also included the total Rental, hiring and real estate services industry on the basis that this includes vehicle hire, machinery and equipment hire, event hire and scaffolding businesses, even though real estate and some hiring services would be expected in business zones and not industrial zones.

- Total estimated employment in the Industrial Zone in 2023 was 1,834.[14] This increased by 237 (in net terms)[15] or 15% from 2018.
- Average business size in the Industrial Zone has reduced slightly from 8 workers/business in 2018 to just under 7 workers/business in 2023.
- Employment in industries considered more likely to seek an Industrial Zone location than not accounted for 82% of total estimated employment in the zone.
- The two industries experiencing the largest employment count growth 2018-2023 were wholesaling and construction, with growth of 111 and 44 workers respectively.
- Construction businesses make up 32% of all employment in the Industrial Zone in 2023, followed by manufacturing (17%), and wholesaling (16%).
- The Industrial Zone plays a key role in the overall township, accounting for 28% of all businesses and 46% of all employment in Cromwell. Business growth in the Industrial Zone (which is the metric that relates strongly to take up of vacant land) is growing at an above average rate compared to growth in other zones that enable business activity (namely the Business Zones). While accounting for 28% of all businesses, the Industrial Zone accounted for 40% of all Cromwell business growth since 2018.

In light of the strong recent growth in take up of the Industrial Zone in Cromwell, and strong projected growth, PC18 (initiated by Council in response to the Cromwell Master Plan) added substantial development capacity adjoining the existing Industrial Zone.

2.3.2 Alexandra Industrial Zones

There are two discrete areas of Industrial Zoning in Alexandra, on the east and west side of the township. Appendix A contains a detailed table of the analysis for the combined Alexandra Industrial Zones. Key findings for this zoned land include:

- There were an estimated 121 businesses in the Industrial Zone in February 2023 (much less than in Cromwell), which is 9 (8%) more businesses (net) than there was in 2018.
- Approximately 61% of those businesses (74 total) fall within broad industries that may be considered more likely to seek an Industrial Zone location than not. This group of businesses grew by 10% since 2018, suggesting that businesses in other sectors (which

[14] Employment is measured as total jobs – comprising the StatisticsNZ employee count plus estimated working proprietors and sole traders.

[15] Refer Appendix A. There were decreases in some industries and growth in others.

make up the remaining 39% of total businesses in the Industrial Zones) were growing at a below average rate.

- The three industries experiencing the largest business count growth 2018-2023 were professional, scientific and technical services (8 additional businesses) and construction and rental, hiring and real estate services, with growth of 4 businesses each over that period.
- Rental, hiring and real estate service businesses make up 18% of all businesses in the Industrial Zone in 2023, followed by construction and professional, scientific and technical services on 16% each.
- Total estimated employment in the Industrial Zones in 2023 was 1,049. This increased by 22 (in net terms) or 2% from 2018.
- Average business size in the Industrial Zone has reduced slightly from 9.2 workers/business in 2018 to 8.7 workers/business in 2023. Businesses in the Alexandra Industrial Zones are on average, slightly larger than businesses in Cromwell's Industrial Zone.
- Employment in industries considered more likely to seek an Industrial Zone location than not accounted for 68% of total estimated employment in the zone.
- The two industries experiencing the largest employment count growth 2018-2023 were construction and food services, with growth of 102 and 29 workers respectively.
- Construction businesses make up 48% of all employment in the Industrial Zones in 2023. All other industries accounted for between 0%-8% each of the total zone employment.
- The Industrial Zone plays a moderate role in the overall township, accounting for 15% of all businesses and 23% of all employment in Alexandra. Business growth in the Industrial Zones (which is a key driver in the take up of vacant land) is growing at an above average rate compared to growth in other zones that enable business activity (namely the Business Zone). While accounting for 15% of all businesses, the Industrial Zone accounted for 27% of all Alexandra business growth since 2018 (albeit that growth was minor).

Figure 2.3 compares the employment composition of the Industrial Zones in Cromwell and Alexandra in 2023. The analysis shows that both zones have a broad mix of business types – suggesting relatively enabling zone provisions. Construction related businesses dominate the Industrial Zones in Alexandra. While construction has a key role in Cromwell's Industrial Zone, manufacturing (which includes processing), wholesaling and transport/warehousing are also

a key focus in Cromwell – with much of this driven by the surrounding horticultural activity and its strategic location on the State Highway network.

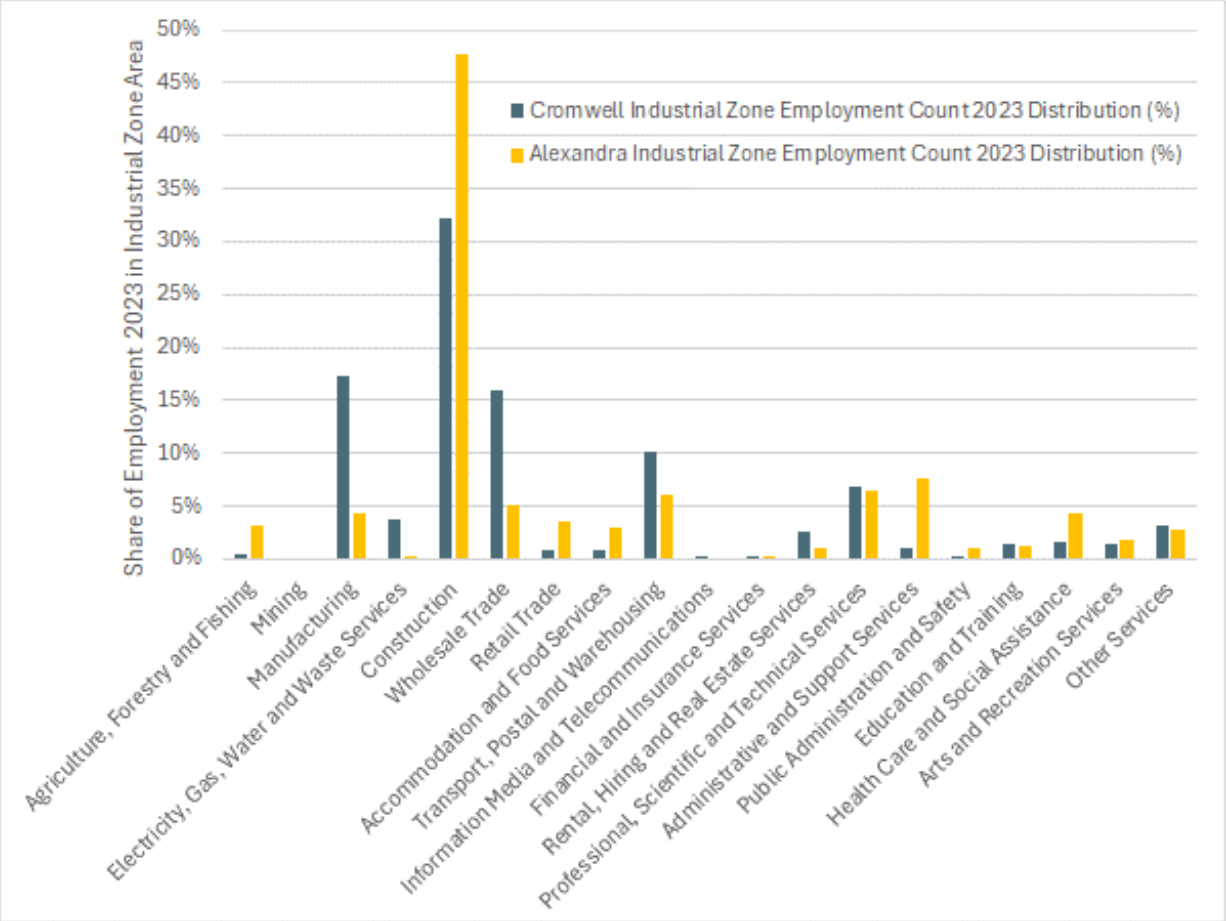


Figure 2.3 – Comparison of Employment Mix in Cromwell and Alexandra Industrial Zone 2023

2.4 Capacity for Growth in Industrial Zones

The following provides a desktop assessment of estimated vacant land capacity in existing Industrial Zones across COD. This analysis has been carried out at the primary parcel level. Where a parcel contained more than one zone, the parcel area was split, and only the Industrial Zone portion was retained. Parcels have also been 'cookie-cut' by designations within the Industrial Zone to provide greater insight on existing (or intended) land use.

Figure 2.4 illustrates the results for Alexandra's two Industrial zones (east and west). Appendix B contains the maps for all other Industrial Zones.

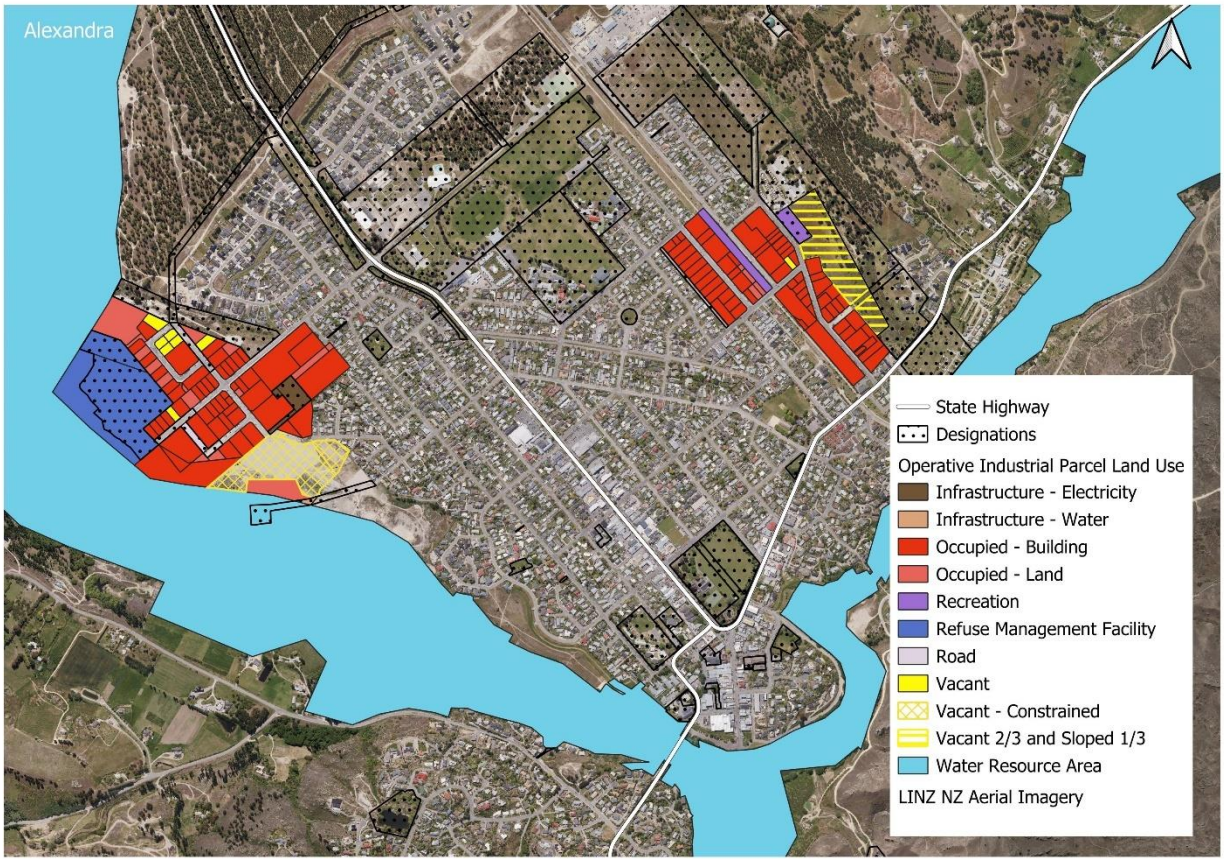


Figure 2.4 – Alexandra Industrial Zone Land Use, Including Vacant Capacity

Table 2.3 provides a high-level summary of the land use that makes up all capacity of each Industrial Zone. Essentially, it identifies land designated for planting, recreation or roading and assumes that this does not represent capacity for industrial activities.[16] Overall, designations not providing for industrial activities makes up between 0%-28% of total Industrial Zone land area – with Naseby's Industrial Zone most impacted by non-developable land area. In Cromwell and Alexandra however, 97-99% of the zoned area in the Industrial Zones is theoretically available for development.

[16] 93% of the planting designations within Industrial Zones occur in Cromwell. 82% of the designated recreational land within Industrial Zones is in Alexandra East. 60% of the designated roading land within industrial Zones is in Alexandra West.

Table 2.3 – High Level Summary of Land Use Capacity in Existing Industrial Zones (2024)

	Alexandra East	Alexandra West	Total Alexandra	Cromwell	Ettrick	Millers Flat	Naseby	Omakau	Patearoa	Ranfurly	Roxburgh	Total Industrial Zone Locations
Land Use Type Area (ha)												
Designation - Planting	-	-	-	4.5	-	-	0.4	-	-	-	-	4.9
Designation - Recreation	0.6	-	0.6	-	-	-	-	-	-	-	0.1	0.7
Designation - Road	-	0.2	0.2	-	-	-	-	-	-	0.2	-	0.4
Industrial Capacity	17.3	34.9	52.1	141.7	4.4	3.3	0.9	5.6	1.0	42.8	33.1	284.9
Total Industrial Zone	17.8	35.1	52.9	146.2	4.4	3.3	1.3	5.6	1.0	42.9	33.2	290.9
Share of Land Use Type Area in Each Location (%)												
Designation - Planting	0%	0%	0%	3%	0%	0%	28%	0%	0%	0%	0%	2%
Designation - Recreation	3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Designation - Road	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Industrial Capacity	97%	99%	99%	97%	100%	100%	72%	100%	100%	100%	100%	98%
Total Industrial Zone	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Share of Location in Each Land Use Type (%)												
Designation - Planting	0%	0%	0%	93%	0%	0%	7%	0%	0%	0%	0%	100%
Designation - Recreation	82%	0%	82%	0%	0%	0%	0%	0%	0%	0%	18%	100%
Designation - Road	0%	60%	60%	0%	0%	0%	0%	0%	0%	40%	0%	100%
Industrial Capacity	6%	12%	18%	50%	2%	1%	0%	2%	0%	15%	12%	100%
Total Industrial Zone	6%	12%	18%	50%	2%	1%	0%	2%	0%	15%	11%	100%

Source: LINZ, CODC, Savvy. Land use survey as at April 2024.

Table 2.4 drills down into just the parcel land area within existing Industrial Zones that is not already designated for non-industrial (non-development) activities. This is a total parcel area of 284.9ha across the district, of which 50% (or 141.7ha) is in Cromwell, 12% is in Alexandra West, 6% is in Alexandra East (combined 18% in Alexandra), 15% is in Ranfurly and 12% is in Roxburgh. This gives a clear indication of the relative size of Industrial Zones across the district, with Cromwell substantially larger, thanks to PC18.

Useable land area in each of the Industrial Zones is divided into three broad categories of land use:

- infrastructure (electricity, sewage, telecoms and water – most are designated but not all),
- occupied parcels (sites with buildings, sites that are industrial yards, and other land uses where businesses are operating), and
- vacant parcels – with further detail provided on whether that vacant capacity is readily available for development, constrained by slope (a significant deterrent to industrial development), constrained by other physical characteristics, or currently covered in bush/forest (which may require a consent for vegetation clearance – also a deterrent for feasible development).

Table 2.4 – Detailed Results of Parcel Land Use in Industrial Zones (April 2024) Excluding Parcels Designated for Non-Industrial Development

	Alexandra East	Alexandra West	Total Alexandra	Cromwell	Ettrick	Millers Flat	Naseby	Omakau	Patearoa	Ranfurly	Roxburgh	Total Industrial Zone Locations
Land Use Category Area (ha)												
Infrastructure - Electricity	-	0.8	0.8	-	-	-	-	-	-	-	-	0.8
Infrastructure - Sewage	-	-	-	-	-	-	-	-	-	-	6.4	6.4
Infrastructure - Telecoms	-	-	-	-	-	-	-	0.0	-	-	-	0.0
Infrastructure - Water	-	0.1	0.1	-	-	-	-	-	-	-	-	0.1
Sub-Total Infrastructure	-	0.9	0.9	-	-	-	-	0.0	-	-	6.4	7.3
Occupied - Building	11.8	15.6	27.4	60.3	4.3	3.3	-	2.0	0.9	18.2	0.7	117.0
Occupied - Land (i.e. Yard)	0.3	4.1	4.4	30.0	0.1	-	-	0.6	-	4.6	2.2	41.9
Occupied - Lifestyle (Dwelling)	-	-	-	-	-	-	-	-	-	4.5	-	4.5
Occupied - Recreation	0.8	-	0.8	-	-	-	-	-	-	-	-	0.8
Occupied - Refuse Management	-	8.5	8.5	10.4	-	-	-	-	-	-	3.2	22.2
Sub-Total Occupied	13.0	28.2	41.2	100.7	4.4	3.3	-	2.5	0.9	27.3	6.1	186.4
Vacant - Readily Available	2.9	0.9	3.8	41.0	-	-	-	2.9	0.2	15.5	20.5	83.9
Vacant - Bush Cover	-	-	-	-	-	-	0.9	-	-	-	-	0.9
Vacant - Sloped	1.4	-	1.4	-	-	-	-	0.1	-	-	-	1.5
Vacant - Other Contraints	-	4.8	4.8	-	-	-	-	-	-	-	-	4.8
Sub-Total Vacant	4.3	5.8	10.1	41.0	-	-	0.9	3.0	0.2	15.5	20.5	91.2
Total Industrial Capacity	17.3	34.9	52.1	141.7	4.4	3.3	0.9	5.6	1.0	42.8	33.1	284.9
Share of Land Use Category Area in Each Location (%)												
Sub-Total Infrastructure	0%	2%	2%	0%	0%	0%	0%	1%	0%	0%	19%	3%
Sub-Total Occupied	75%	81%	79%	71%	100%	100%	0%	45%	84%	64%	19%	65%
Sub-Total Vacant	25%	17%	19%	29%	0%	0%	100%	54%	16%	36%	62%	32%
Total Industrial Capacity	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Share of Location in Each Land Use Category (%)												
Sub-Total Infrastructure	0%	12%	12%	0%	0%	0%	0%	1%	0%	0%	87%	100%
Sub-Total Occupied	7%	15%	22%	54%	2%	2%	0%	1%	0%	15%	3%	100%
Sub-Total Vacant	5%	6%	11%	45%	0%	0%	1%	3%	0%	17%	23%	100%
Total Industrial Capacity	6%	12%	18%	50%	2%	1%	0%	2%	0%	15%	12%	100%

Source: LINZ, CODC, Savvy. Land use survey as at April 2024, minor amendments in September 2024 based on new information.

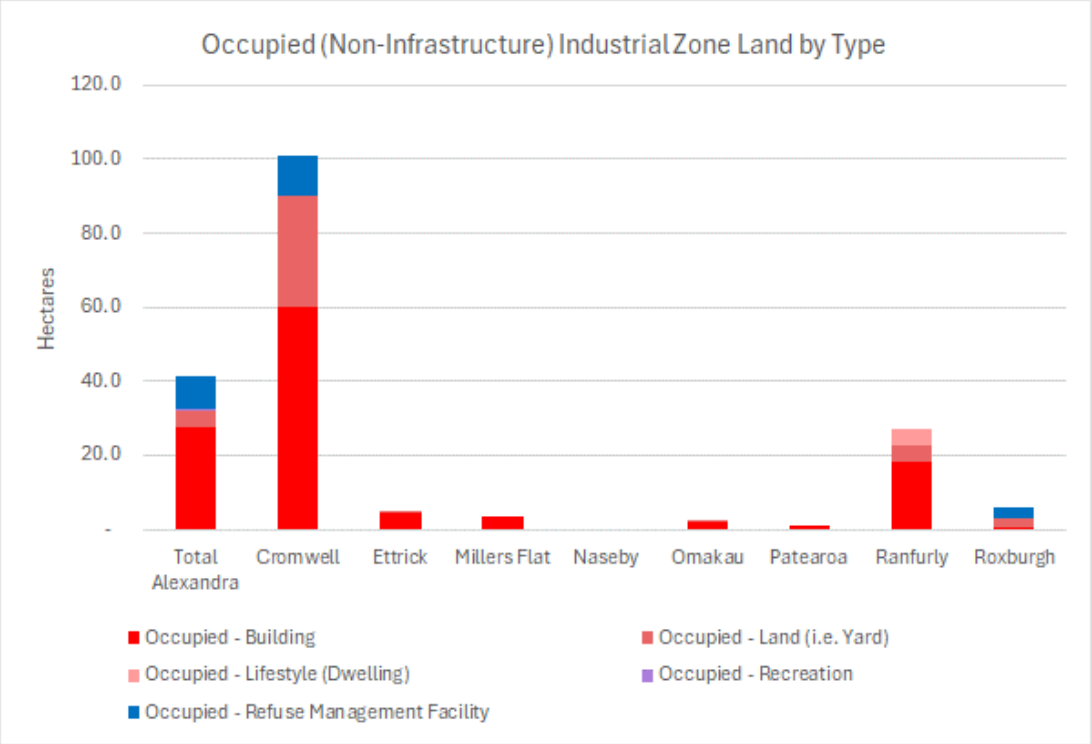


Figure 2.5 – Summary of Occupied Land in Industrial Zones by Urban Area

Figure 2.5 is a graphical summary of occupied land contained in Table 2.4. It shows that approximately 100ha of Industrial Zone land in Cromwell is occupied. Unlike in other Industrial Zones, the Cromwell Industrial Zone includes substantially more yard-based lots with no permanent buildings. Just over 41ha of land in Alexandra's Industrial Zones is occupied, with parcels assigned to Refuse Management taking up nearly 21% of occupied land. Recreation activity accounts for a minor share of occupied land in Alexandra East (6% - some designated and the rest being zoned area used by the Otago Rail Trail), but this equates to 2% of total east and west occupied Industrial Zone land.

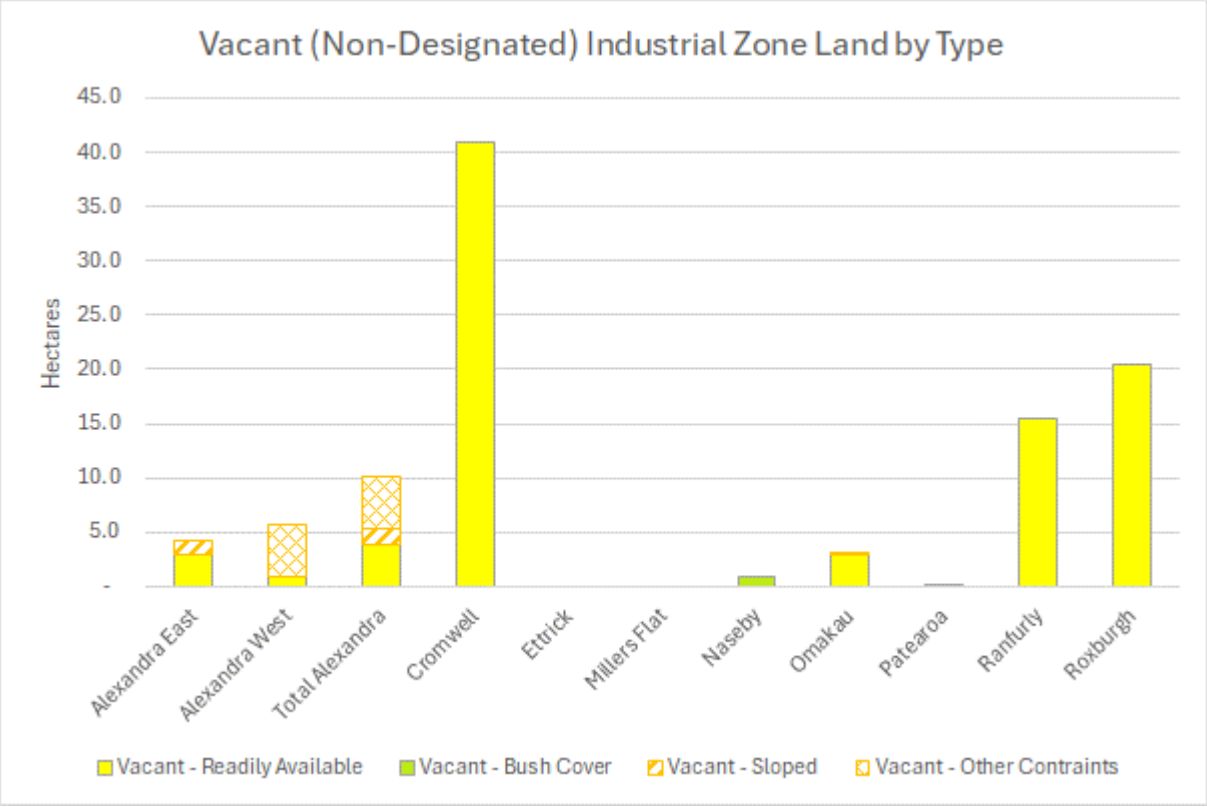


Figure 2.6 – Summary of Vacant Land in Industrial Zones by Urban Area

Figure 2.6 is a graphical summary of vacant land contained in Table 2.4 and is key to this assessment. As a result of PC18, Cromwell has the largest amount of vacant industrial land, with 41ha total. Roxburgh (20.5ha) and Ranfurly (15.5ha) have the second and third largest areas of vacant Industrial Zone land, all of which represents readily available development capacity to the best of my knowledge.

Alexandra has a combined total of 10.1ha of vacant land in the Industrial Zones, although approximately 1.4ha of this is sloped land in Alexandra East. This sloped terrace riser area occupies around a third of the 4.2ha vacant site owned by Canepa Development Limited and

has a grade of 1:4 (i.e. 25%) which is not considered suitable for industrial use. As such, only 2.6ha of the Canepa land is considered readily available vacant land.

A further 4.8ha in Alexandra West has a range of other physical constraints (Figure 2.4). According to Patersons, this site has geotechnical and land contamination issues on around 70-80% of its area. The site consists of flattened, unconsolidated gold dredge tailings that have been subject to quarrying in the 1980s. The tailings are subject to subsidence and differential settlement. The site is also underlain by historic coal mining tunnels whose spatial extent is unknown. Flood risk is also an issue. The contamination is from dumping of agri-chemicals in the 1970s from orchards that used to exist on adjoining land. If some of the site is developable, I do not have sufficient information to determine where that suitable land sits relative to the existing occupied industrial areas (i.e. if it is contiguous and/or accessible). As such, I have discounted the full site from vacant capacity given this uncertainty.

If this terrace riser in Alexandra East and multi-constrained land in Alexandra West is excluded, there is only one vacant lot (around 810sqm) and approximately 2.8ha of greenfield land in Alexandra East Industrial Zone and 7 vacant lots in Alexandra West Industrial Zone (totalling around 9,440sqm). This is total unconstrained and readily available vacant land of 3.8ha.

Alexandra has the fourth lowest share of its useable Industrial Zone area vacant (or any category) at just 19%. Patearoa has a lower share as vacant capacity (16%). Ettrick and Millers Flat have no remaining vacant capacity when measured at a parcel level. In terms of unconstrained, readily available vacant land in Industrial Zones, Alexandra also has the fourth lowest share (7% of total industrial capacity, after Ettrick, Millers Flat and Naseby that have 0% each). This is a very low share and quantum of readily available vacant capacity to have in the district's second largest industrial area.

2.5 Vincent Spatial Plans

The Vincent Spatial Plans (for Alexandra-Clyde and Omakau-Ophir) are non-statutory documents that are guiding CODC initiated zoning decisions. The purpose of the Spatial Plans is to provide strategic direction to future urban growth in each of the towns.

The Alexandra-Clyde Spatial Plan identifies a modest new area (6.1ha gross) of future Industrial Zone in Alexandra (on Dunstan Road) (Figure 2.7). It is not contiguous with the

Alexandra East Industrial Zone as that zone area is already bordered by Residential Zones and the designated town belt recreation area.[18]

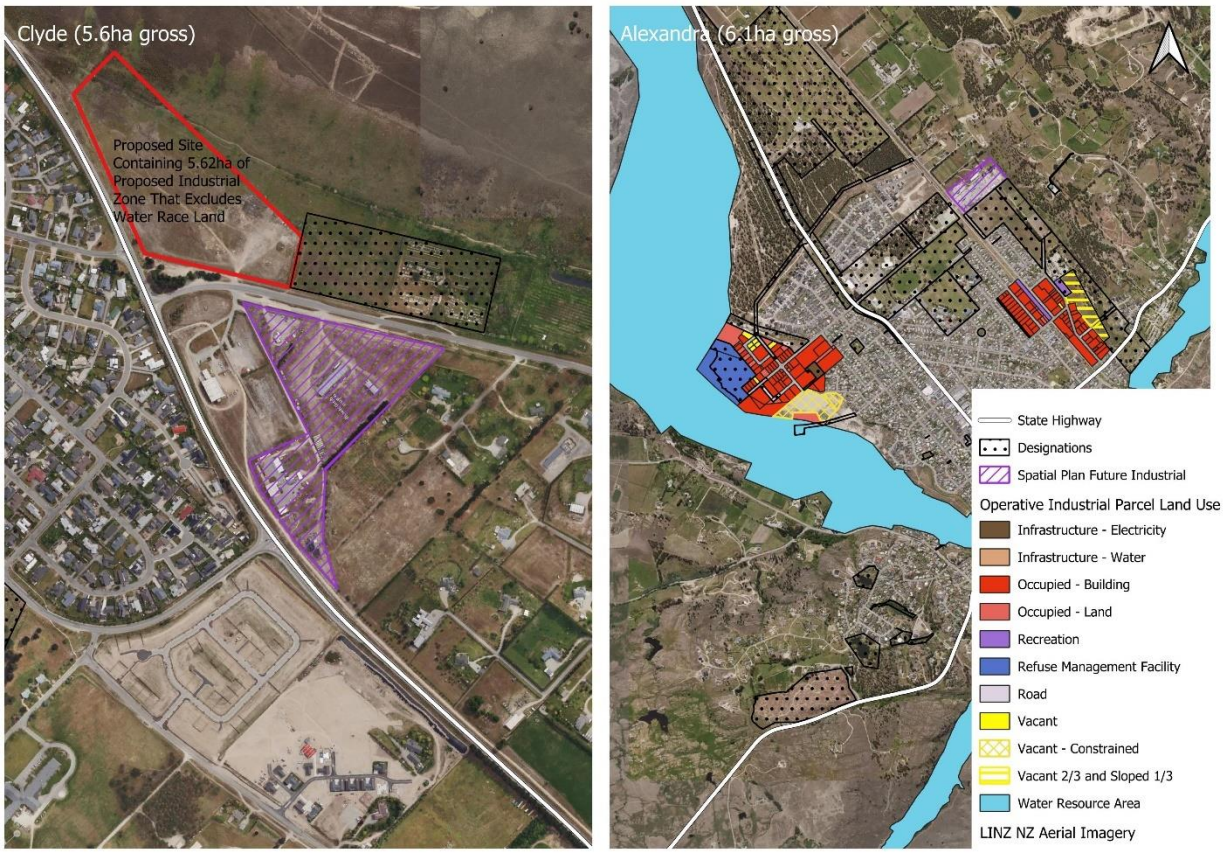


Figure 2.7 – Vincent Spatial Plan – Areas Identified for Future Industrial Zones in Clyde & Alexandra

Based on aerial photos, this appears to be spot zoning in recognition of existing industrial activities. While some of the land parcels within the identified area are not intensively used at present (most have buildings, but a large site is utilised by yard-based activity), I estimate that there is very little potential to accommodate new activities enabled in the Industrial Zone by the District Plan if these activities remain. The exception may be the northern corner of land which looks vacant in the aerial images. Access to this corner site appears to be via adjoining land at present, so that may limit its ability to be purchased/leased by other businesses in future.

Overall, I consider that the Spatial Plan will not provide any material additional development capacity for activities enabled in the Industrial Zone in Alexandra, and readily available

[18] The Industrial Zone in Alexandra West is also effectively hemmed in my existing and proposed residential zoning meaning that contiguous expansion is not likely.

vacant capacity in the short, medium and long term is therefore limited to the 3.8ha within the existing Industrial Zones.

There is no Industrial Zone presently in Clyde, but the Spatial Plan identifies an area (5.6ha gross) opposite the proposed plan change Site that is intended to be zoned Industrial in the future by CODC (Figure 2.7). Again, the Spatial Plan appears to just recognise existing industrial activities on that land. Use of one of the parcels of land is restricted under Scheduled Activity 105I to a storage shed associated with "*power generation and associated facilities.*" The other parcel contains the Clyde rural fire station. Assuming the Schedule is not lifted, I do not consider that the identified future Industrial Zone in Clyde will provide material development capacity for new activities enabled in the Industrial Zone. This means that the Spatial Plan does not deliver any development capacity for new industrial activities in Clyde in the short, medium or long term.

3 Industrial Zone Demand & Sufficiency

3.1 CODC Growth Projections

CODC's growth projections are produced by Rationale Limited, with the most current projections (as I understand it) being the 2022 projections. These projections include (but are not limited to) population, dwelling and employment projections and are provided at a township/settlement level and total ward level.[19] Projections draw on data by StatisticsNZ and have a 2021 base year. Projected years include 2024, 2034 and 2054, and while 2024 is based on projected data, taking 2024 as the base year allows medium (10 year) and long term (30 year) growth to be calculated consistent with NPS-UD requirements.

Table 3.1 – COD Dwelling Projections by Township/Ward 2024-2054 (Rationale)

Ward	Town/Settlement	Count of Dwellings							Medium Term Growth (2024-34)	Long Term Growth (2024-54)
		2018	2019	2020	2021	2024 (p)	2034 (p)	2054 (p)		
Cromwell	Cromwell	2,736	221	3,002	3,104	3,404	4,202	5,744	798	2,340
Cromwell	Rest of Cromwell Ward	1,338	4,006	1,517	1,560	1,784	2,541	4,012	757	2,228
Cromwell	Sub-Total Cromwell Ward	5,121	5,247	5,384	5,452	5,787	6,828	8,728	1,041	2,941
Vincent	Alexandra	2,631	2,675	2,697	2,715	2,838	3,224	3,983	386	1,145
Vincent	Clyde	786	799	801	802	838	919	971	81	133
Vincent	Omakau & Ophir	222	235	249	249	273	355	513	82	240
Vincent	Rest of Vincent	1,482	1,538	1,637	1,686	1,838	2,330	3,261	492	1,423
Vincent	Sub-Total Vincent Ward	5,121	5,247	5,384	5,452	5,787	6,828	8,728	1,041	2,941
Maniototo	Ranfurly	459	461	458	460	474	510	534	36	60
Maniototo	Naseby	297	298	302	311	318	336	348	18	30
Maniototo	Patearoa	111	111	114	118	121	129	135	8	14
Maniototo	Rest of Maniototo	336	339	345	344	349	361	368	12	19
Maniototo	Sub-Total Maniototo Ward	1,203	1,209	1,219	1,233	1,262	1,336	1,385	74	123
Teviot Valley	Roxburgh	369	369	368	370	380	411	471	31	91
Teviot Valley	Lake Roxburgh Village	45	45	45	45	47	52	62	5	15
Teviot Valley	Ettrick	102	102	102	102	104	110	121	6	17
Teviot Valley	Millers Flat	57	58	58	63	64	68	75	4	11
Teviot Valley	Rest of Teviot	411	418	471	431	451	517	642	66	191
Teviot Valley	Sub-Total Teviot Ward	984	992	1,044	1,011	1,046	1,158	1,371	112	325
	Total District	11,382	11,675	12,166	12,360	13,283	16,065	21,240	2,782	7,957

Source: Rationale, 2022.

I have carried out some checks at a township and ward level to see how the Rationale population and dwelling projections are tracking relative to data since released for 2022 and 2023. When inserting June Year End Population Estimates, the Rationale population projection for 2024 looks consistent and appropriate. When inserting June Year End Residential Dwelling Consents (and allowing for a one-year lag following consents for dwellings to be completed),

[19] Using mainly SA2s and 2023 ward boundaries.

the Rationale dwelling projections for 2024 look consistent and appropriate (within +/- 2% of forecast 2024 dwellings). As such, the Rationale projections for dwellings are adopted for this assessment, as published.

Table 3.1 shows that across the district, dwellings are projected to increase by just over 2,780 in the medium term (from just over 13,383 estimated for 2024 to 16,065 by 2034). This is total growth of 21% or an average increase of 278 dwellings over the next 10 years. Growth over the long term is estimated at nearly 7,960 additional dwellings (to reach 21,240 dwellings by 2054).

Cromwell Ward, is anticipated to account for 56% of medium-term dwelling growth in the district, followed by Vincent Ward at a 37% share. These shares are expected to remain relatively stable over the long term (to 2054).

Within the Vincent Ward, the majority of dwellings are in Alexandra (49% share in 2024), followed by the Rest of Vincent Ward area (32% share) which reflects mainly the concentration of dwellings in the Rural Residential Zones east and west of Alexandra and Clyde (Table 3.1 and Figure 3.1). Clyde currently accounts for 14% of Vincent ward dwellings (estimated at 838), and Omakau-Ophir combined account for just 5%.

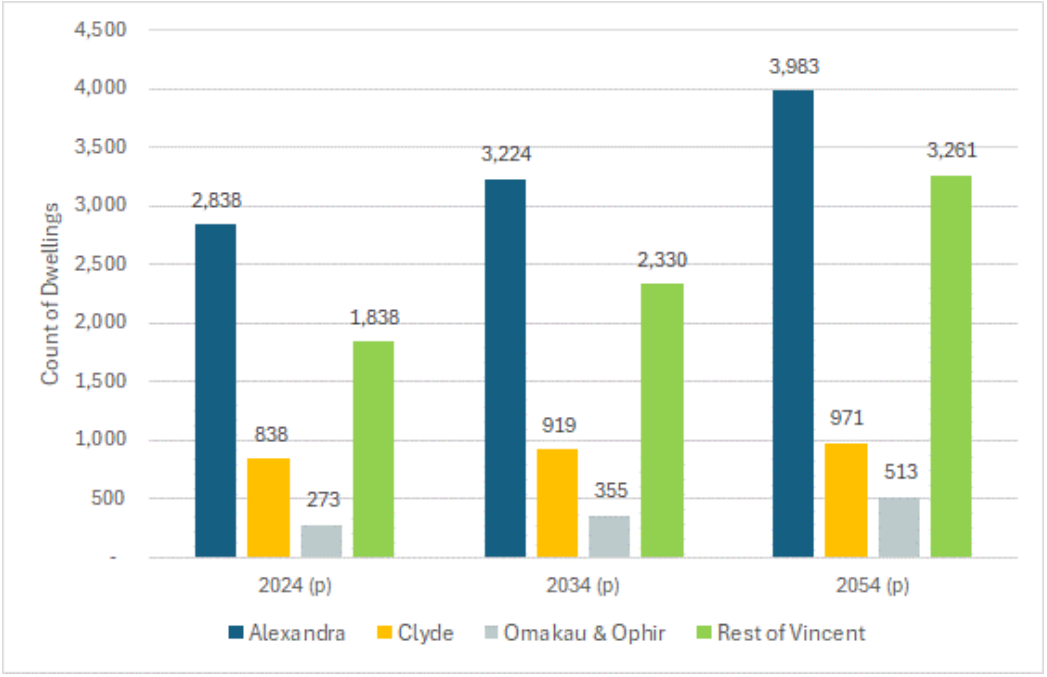


Figure 3.1 – Dwelling Projections by Township, Vincent Ward 2024-2054 (Rationale)

In terms of projected growth within Vincent Ward, Alexandra is anticipated to grow by an average of 39 dwellings per annum over the medium term (to 2034), with a similar average rate (38 per annum) over the long term. Rural Residential growth (in the Rest of Vincent Ward) is expected to be even higher, with an average increase of 49 dwellings/annum over the

medium term and 47/annum over the long term. By contrast, Clyde is projected to grow by an average of 8 dwellings/annum in the medium term, decreasing to 4 dwellings/annum in the long term, and Omakau-Ophir to have consistent growth over the long-term of 8 dwellings per annum.

This means that despite Alexandra accounting for 49% of ward dwellings currently, it is projected to have just 37% of the growth in dwellings over the medium term. Similarly, while Clyde has 14% of current dwellings in Vincent Ward, it is projected to account for just 8% of the dwelling growth to 2034. This is all driven by relatively stronger growth anticipated outside of the urban areas, in the Rural Residential Zones.

3.1.1 Constrained Demand in Clyde

While I understand that the dwelling projections discussed above are not constrained by development capacity for housing (which is preferable for growth projections, especially in the context of NPS-UD assessment), the recommended (medium) growth projections for Clyde are still constrained. The projections show a slow-down of growth in the short term and a plateauing of population and dwelling growth in the long-term. Rationale states that this slow down "*is driven by a projected plateauing of employment opportunities*".[20] Indeed, employment projections included in the Rationale report for Clyde show an annual average increase over the long term of just 1 additional person employed per annum.

At face value, the employment projections seem conservative for Clyde given strong recent growth in bike tourism, and tourism generally in the town (post Covid-19) and demands on the Dunstan Hospital (which serves a far-reaching catchment, and which has the prospect for some expansion of services/facilities). While the Clyde Business Zone is fixed in size, there is likely to be potential for some additional businesses, and/or existing businesses to sustain additional staff over time. The same applies to the Dunstan Hospital.

It is also surprising, given that Rationale identify Alexandra and Cromwell as places where Clyde workers commute, that local employment opportunities in Clyde itself is treated as a constraint on population growth as presumably commuting will still be a valid option for future residents.

While discussed later on, the provision of a local industrial zone in Clyde would provide for growth in local job opportunities, and may stimulate a transfer in housing demand from elsewhere in the district to Clyde.[21] By Rationale's current logic, the proposed plan change

[20] Rational, 2022, page 30.

[21] I do not anticipate that it would sustain net additional dwelling growth at the district level (relative to projected growth).

could (at the very least) help remove the constraints applied to Clyde's growth, and population (and subsequently dwelling) growth assumptions could be elevated (relative to current projections) as a result. A minor to moderate increase in reported medium and long term dwelling growth in Clyde township would be reasonably anticipated under a scenario where the proposed private plan change is approved.

3.1.2 PC19 Implications

Despite only modest (and potentially conservative) growth in dwellings projected for Clyde by Rationale, CODC has identified significant additional residential development capacity in and around Clyde in the Alexandra-Clyde Spatial Plan, which is being implemented by PC19.

Figure 3.2 illustrates the changes proposed (notified) in PC19 for Clyde beyond the existing Residential Zone area. While not shown, PC19 also provides for a Medium Density Residential Zone in and around the town centre (extending to Whitby Road) which will encourage intensification (infill and redevelopment) over time.

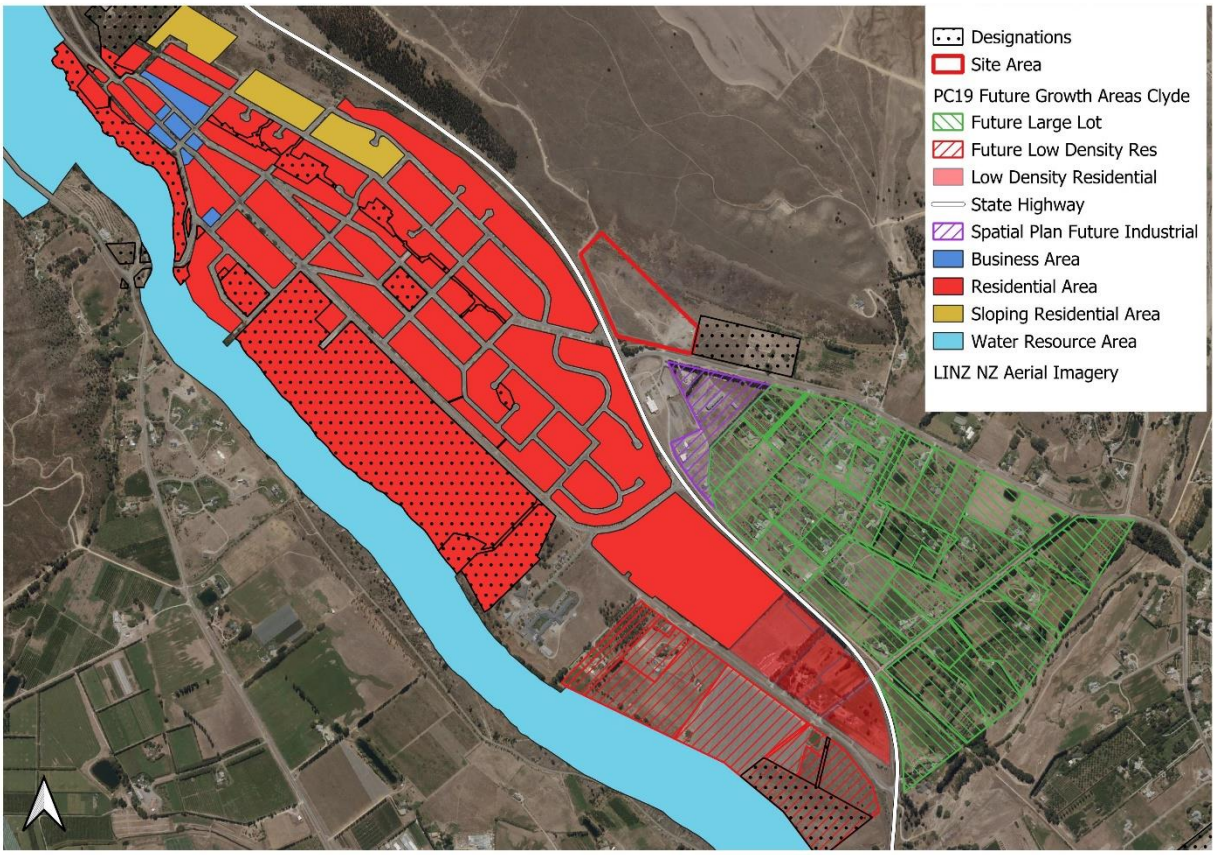


Figure 3.2 – PC19 Proposed Residential Zoning (Outside Existing Residential Zone)

PC19 live zones 12ha of additional Low Density Residential Zone on the northern side of Muttontown Road[22], and creates a large (29ha) area of Future Low Density Residential Zone on the southern side of Muttontown Road.[23] Combined with any existing vacant development capacity in the Residential zone, plus the potential for intensification around the town centre, these areas provide housing capacity that is likely to be sufficient for demand growth well beyond the next 30 years based on Rationale's current growth projections for Clyde township (or even moderately higher growth projections).

In addition, PC19 creates an 80ha Future Large Lot Residential Zone which intensifies the existing Rural Residential Zone currently containing an estimated 37 dwellings. While part of Clyde, this area falls outside the Clyde township SA2 boundary, and therefore provides long term housing capacity for the 'Rest of Vincent Ward' (discussed earlier and projected to have a demand growth rate greater than within any one urban area of Vincent Ward).

In summary, while dwelling growth is not currently constrained in Clyde township (with some vacant capacity available in the Residential Zone at present), and is expected to increase at a moderate (albeit potentially conservative) rate according to Rationale, the zoning that would be put in place by PC19 is considered likely to ensure that supply of housing in and around Clyde is not constrained over the long term future (i.e. the next 30 years).[24]

3.2 Projected Demand for Industrial Zoning

This sub-section provides estimates of future demand for Industrial Zoning in COD. A high-level modelling approach has been adopted for the purpose of this report. While considered sufficient in the context of the overall assessment objectives, I acknowledge that the approach is not as robust as modelling that would, for example, be expected for a Housing and Business Development Capacity Assessment (HBA) under the NPS-UD.[25] The adopted approach relies on a number of assumptions, and like all models, it comes with a number of limitations.

[22] This land is currently occupied by 4 dwellings (estimate) which may or may not be retained if the land is developed.
[23] This land is currently occupied by 4 dwellings (estimate) which may or may not be retained if the land is live zoned and developed in the future.
[24] This assumes the Future growth zones, are live zoned as required during that period.
[25] Such an approach was outside the budget and timeframes available for this assessment.

3.2.1 Approach and Assumptions

In summary, the approach takes existing 2024 dwellings by location (as estimated by Rationale), and current estimates of occupied Industrial Zone land by location (based on the desktop land use survey discussed earlier) to generate 2024 ratios of occupied Industrial Zone land per dwelling. These ratios are then multiplied by projected dwellings in 2034 to give a projected estimate of occupied Industrial Zone land in that year in each location. The modelling is limited to the medium term as any limitations of the approach would be amplified in the long term (i.e. there would be greater uncertainty).

The key assumptions (and therefore limitations) of this high-level approach include:

- It assumes a state of equilibrium exists in 2024 (i.e., there is no redundant occupied land in Industrial Zones and no latent demand). As most existing Industrial Zones have at least some vacant capacity, this helps supports the assumption of no latent demand. As the land use survey could not detect any vacant buildings, the assumption about any redundancy cannot be verified.
- It assumes that the 2024 ratio of occupied Industrial Zone land holds constant over the medium term (with no productivity gains). Over the medium term, the risk of overstating demand through this assumption is minimised because a portion of vacant land in existing Industrial Zones is already subdivided into lots. So, even if future businesses require less land than businesses today, a portion of them will be limited to take-up of the existing supply of vacant industrial lots.
- It also assumes that all growth in demand needs to be met through occupation of additional land (either existing businesses expanding or new businesses establishing). In reality, some growth in demand over the medium term is likely to be met by existing businesses and within the existing land footprint of those businesses. That said, this assumption is consistent with the NPS-UD guidance for business demand modelling in HBAs.
- It is neutral on whether there is leakage of Industrial Zone demand in or out of the district. The 2024 occupied Industrial Zone area is a reflection of the net demand supplied in COD and assumes leakage trends remain constant over the medium term.
- It assumes dwelling growth in COD (and each part of COD) is the sole indicator of Industrial Zone demand in the district. That is, it does not take into account wider economic drivers of demand that may increase or decrease demand independent of the trends in dwelling growth. An example of this might include changes in export

values for horticultural products produced in the district which might drive more or less processing, warehousing and transport land use in Industrial Zones in the future.

The approach requires an allocation of Industrial Zone demand 'on the ground'. In recognition that a portion of Industrial Zone demand can be met locally (where there is a local Industrial Zone) and simultaneously a portion of demand is met in one of the two larger industrial areas of Cromwell and Alexandra (whichever is closest), two allocation scenarios have been used.

Scenario 1 generates occupied Industrial Zone land/dwelling ratios at the ward level, and then allocates that demand to existing Industrial Zones using the percentage distribution of occupied Industrial Zone land (2024) within each ward.

Scenario 2 applies the same approach as Scenario 1 for the Cromwell ward, but for the rest of the district,[26] it generates a single occupied Industrial Zone land/dwelling ratio for that catchment. It then allocates that demand to existing Industrial Zones using the percentage distribution of occupied Industrial Zone land (2024) within that wider catchment.

Both scenarios are similar and recognise the primary role of Cromwell and Alexandra in servicing industrial activity demand across their broad catchments despite the presence of some local Industrial Zones. However, using localised or catchment wide demand ratios produces slightly different final demand figures. Combined, the two scenarios are used to create a range of medium-term demand results for each location.

3.2.2 Medium Term Demand Results

Table 3.2 shows that across the district, the occupied area of existing Industrial Zones is estimated to increase by 29.1ha - 31.1ha by 2034, assuming no constraints on Industrial Zone capacity. While Cromwell currently has a 54% share of total occupied Industrial Zone land in the district, it is estimated to account for 55-58% of medium term growth in occupied Industrial Zone land, depending on the scenario applied.[27] This equates to growth of 18.1ha over the next 10 years.

Demand in the Vincent Ward is estimated to equate to 6.6ha – 7.9ha of additional occupied Industrial Zone land over the medium term. Based on current zoning options, the significant majority is estimated to be met in Alexandra (6.2ha – 7.4ha), with only a small share (0.4ha – 0.5ha) supplied in Omakau.

[26] I.e. the sum of Vincent, Maniototo and Teviot Valley Wards.

[27] This result is generally consistent with Rationale's employment projections.

Demand in the Maniototo Ward and Teviot Valley Ward is estimated at 1.6ha – 4.3ha and 1.5ha – 2.1ha respectively of additional occupied land in Industrial Zones by 2034.

Table 3.2 – Estimated Medium Term Industrial Zone Demand by Scenario (2024)

Ward	Town/Settlement	Estimated 2024 Dwellings *	Medium Term Dwelling Growth (2024-34) *	Total Occupied Industrial Zone Area 2024 (ha)	Projected Total Occupied Industrial Zone 2034		Projected Net Increase in Occupied Industrial Zone 2034	
					Scenario 1 (ha)	Scenario 2 (ha)	Scenario 1 (ha)	Scenario 2 (ha)
Cromwell	Cromwell	3,404	798	100.7	118.8	118.8	18.1	18.1
Cromwell	Rest of Cromwell Ward	1,784	757	-	-	-	-	-
Cromwell	Sub-Total Cromwell Ward	5,787	1,041	100.7	118.8	118.8	18.1	18.1
Vincent	Alexandra	2,838	386	41.2	48.6	47.4	7.4	6.2
Vincent	Clyde	838	81	-	-	-	-	-
Vincent	Omakau & Ophir	273	82	2.5	3.0	2.9	0.5	0.4
Vincent	Rest of Vincent	1,838	492	-	-	-	-	-
Vincent	Sub-Total Vincent Ward	5,787	1,041	43.7	51.6	50.4	7.9	6.6
Maniototo	Ranfurly	474	36	27.3	28.9	31.4	1.6	4.1
Maniototo	Naseby	318	18	-	-	-	-	-
Maniototo	Patearoa	121	8	0.9	0.9	1.0	0.1	0.1
Maniototo	Rest of Maniototo	349	12	-	-	-	-	-
Maniototo	Sub-Total Maniototo Ward	1,262	74	28.1	29.8	32.4	1.6	4.3
Teviot Valley	Roxburgh	380	31	6.1	6.8	7.1	0.7	0.9
Teviot Valley	Lake Roxburgh Village	47	5	-	-	-	-	-
Teviot Valley	Ettrick	104	6	4.4	4.9	5.1	0.5	0.7
Teviot Valley	Millers Flat	64	4	3.3	3.7	3.8	0.4	0.5
Teviot Valley	Rest of Teviot	451	66	-	-	-	-	-
Teviot Valley	Sub-Total Teviot Ward	1,046	112	13.9	15.4	16.0	1.5	2.1
	Total District	13,283	2,782	186.4	215.5	217.5	29.1	31.1

*Source: * Rationale, 2022. Savvy.*

3.3 Sufficiency of Existing Industrial Zones

Policy 2 (and related clauses 3.2 and 3.3) of the NPS-UD requires that Tier 3 TAs provide at least sufficient development capacity to meet expected demand for housing and for business land over the short, medium, and long term. Tier 3 territorial authorities are not required to apply the competitiveness margin on top of demand. As such, this sub-section compares the medium term demand growth for Industrial Zones described above with the current estimates of vacant plan enabled capacity in existing Industrial Zones discussed in Section 2.4. As constrained land is not considered suitable (feasible) for industrial development, the analysis does not include highly sloped[28] or other physically constrained vacant land[29] in the sufficiency calculations.

[28] Such as the terrace rise land in Alexandra East and the small site in Omakau that drops steeply below the road.
[29] I.e. the land in Alexandra West that has multiple constraints including subsidence, flood risk and contamination.

The results are summarised (by scenario of demand) in Table 3.3. Indicative shortfalls of capacity by 2034 are shown in red. In all wards except Vincent Ward, current zoned readily available vacant capacity is sufficient to meet projected demand over the medium-term, even without utilising vacant Industrial Zoned land currently covered in bush.

Table 3.3 – Industrial Zone Capacity Sufficiency Estimates by Scenario – Medium Term

Ward	Town/Settlement	Projected Net Increase in Occupied Industrial Zone 2034		Vacant Capacity - Readily Available Only*	Vacant Readily Available Capacity - Sufficiency Medium Term		Vacant Capacity - Readily Available + Vacant Bush Land	Vacant Readily Available + Bush Capacity - Sufficiency Medium Term	
		Scenario 1 (ha)	Scenario 2 (ha)		Scenario 1 (ha)	Scenario 2 (ha)		Scenario 1 (ha)	Scenario 2 (ha)
Cromwell	Cromwell	18.1	18.1	41.0	22.9	22.9	41.0	22.9	22.9
Cromwell	Rest of Cromwell Ward	-	-	-	-	-	-	-	-
Cromwell	Sub-Total Cromwell Ward	18.1	18.1	41.0	22.9	22.9	41.0	22.9	22.9
Vincent	Alexandra	7.4	6.2	3.8	-3.6	-2.4	3.8	-3.6	-2.4
Vincent	Clyde	-	-	-	-	-	-	-	-
Vincent	Omakau & Ophir	0.5	0.4	2.9	2.4	2.5	2.9	2.4	2.5
Vincent	Rest of Vincent	-	-	-	-	-	-	-	-
Vincent	Sub-Total Vincent Ward	7.9	6.6	6.7	-1.1	0.1	6.7	-1.1	0.1
Maniototo	Ranfurly	1.6	4.1	15.5	13.9	11.4	15.5	13.9	11.4
Maniototo	Naseby	-	-	-	-	-	0.9	0.9	0.9
Maniototo	Patearoa	0.05	0.13	0.17	0.12	0.04	0.17	0.12	0.04
Maniototo	Rest of Maniototo	-	-	-	-	-	-	-	-
Maniototo	Sub-Total Maniototo Ward	1.6	4.3	15.7	14.0	11.4	16.6	14.9	12.3
Teviot Valley	Roxburgh	0.7	0.9	20.5	19.9	19.6	20.5	19.9	19.6
Teviot Valley	Lake Roxburgh Village	-	-	-	-	-	-	-	-
Teviot Valley	Ettrick	0.5	0.7	-	-0.5	-0.7	-	-0.5	-0.7
Teviot Valley	Millers Flat	0.4	0.5	-	-0.4	-0.5	-	-0.4	-0.5
Teviot Valley	Rest of Teviot	-	-	-	-	-	-	-	-
Teviot Valley	Sub-Total Teviot Ward	1.5	2.1	20.5	19.0	18.4	20.5	19.0	18.4
	Total District	29.1	31.1	83.9	54.8	52.8	84.9	55.7	53.8

** Excludes Vacant Sloped land, Vacant - Other Constraints Land, Vacant Bush Land.*

In the Cromwell Ward, Cromwell's Industrial Zone is estimated to have a medium term surplus of 22.9ha in 2034, so is well placed to accommodate demand growth into the long term.[30]

In the Maniototo Ward, there is sufficient capacity in all existing Industrial Zones to meet projected demand over the medium term. In Patearoa, it is estimated that the Industrial Zone could be nearly fully occupied by 2034. One response may be to increase plan enabled capacity in Patearoa. Alternatively, any shortfalls beyond the medium term (not modelled) could be supplied instead in Ranfurly where there is estimated to be surplus capacity. This is considered to be an appropriate outcome for this ward in the long term given that Ranfurly is the main centre in the ward.

[30] PPC21 further increases the surplus/sufficiency of industrial capacity in the Cromwell Ward in the medium-term.

In the Teviot Valley Ward, there is an implied minor shortfall of capacity in the Ettrick and Millers Flat Industrial Zones by 2034. One response may be to increase plan enabled capacity in each settlement. Alternatively, there is an estimated large surplus of capacity in Roxburgh, and like in the Maniototo Ward, it would be an appropriate outcome for any unmet demand to be met in Roxburgh, given it is the main centre for the ward.

In the Vincent Ward, there is a net shortfall by 2034 of 1.1ha under the Scenario 1 demand allocation and a very minor surplus of 0.09ha under the Scenario 2 demand allocation. At the ward level, this result is a combination of an implied shortfall of capacity in the Alexandra Industrial Zones by 2034 of between 2.4ha – 3.6ha and an implied surplus of capacity in Omakau of between 2.4ha – 2.5ha. This result suggests that Alexandra only has sufficient suitable vacant capacity to cater for 5-6 years of demand growth before being fully occupied. While there is a surplus of Industrial Zone capacity in Omakau that could in theory accommodate a portion of this unmet demand, the distance of Omakau from Alexandra (as well as from Clyde and the popular rural residential areas close to Clyde and Alexandra who would be reliant on much of that industrial activity) is such that it would not be an efficient way to address even a portion of the Alexandra shortfall.

The most efficient way to address the projected shortfall in Alexandra is to provide additional plan enabled industrial capacity in Alexandra, or nearby. As both existing Industrial Zones in Alexandra cannot be expanded based on existing or intended zoning for other land uses, any additional Industrial Zone capacity in Alexandra would need to be in a discrete location.

As discussed, the Alexandra-Clyde Spatial Plan identified two new Industrial Zones – one in each town, but as the intent is to recognise existing industrial activities on those sites, live zoning these two areas within the next 10 years is unlikely to materially assist with addressing the projected shortfall in Alexandra.

3.4 Proposed Clyde Industrial Zone

Clyde is in a unique situation of being the third largest discrete township in the district and yet not having its own local Industrial Zone. Much smaller towns and settlements than Clyde, which have not been identified as strategic growth areas, have local Industrial Zones which provide a range of benefits to those local communities. This urban form still allows a large share of local industrial demand to flow to higher order centres (and the ensuing economic benefits that come from having those larger geographic concentrations of business activity).

This has likely been the result of Clyde historically being a popular holiday home destination with a small resident population that is relatively close to Alexandra. However, the permanent

resident population of Clyde has grown steadily, and it has (or will have) significant capacity to accommodate further population/dwelling growth over the long term.

While it is still close to Alexandra, the larger its population gets, the less efficient it will be for all of the town's (and surrounding rural catchment's) demand for Industrial Zone activity to be supplied wholly elsewhere (i.e. in Alexandra). Increasing the self-sufficiency of Clyde in terms of local employment opportunities as well as local access to industrial activities (goods and services) will increase the functional and social amenity of the town and reduce car-based travel (and associated greenhouse gas emissions) over the long-term.

Based on the demand modelling approach outlined earlier,[31] applying the ratios of occupied Industrial Zone/dwelling for 2024 to just the dwellings within the Clyde township (and not the rural residential dwellings that may be closest to Clyde), indicatively Clyde already sustains total demand for Industrial Zone land of between 6.3ha – 8.9ha based purely on its share of current dwellings (and according to Scenario 1 and 2 approaches). At present all of this demand is assumed to be met in Alexandra. By 2034, and based on potentially conservative growth projections, the Clyde community could sustain total demand for 6.9ha – 9.7ha of Industrial Zone land.

Only a portion of this total demand is likely to be sustainable locally in the medium-term, with much of it still being most efficiently supplied in Alexandra. At 5.62ha (gross), the proposed Industrial Zone for Clyde would, in my view, be sufficient to cater for long term local demand for industrial activities in Clyde. While some activity that may be attracted to the proposed Industrial Zone may represent a redistribution of existing demand away from Alexandra, this distributional effect would be likely to occur gradually.

The remaining portion of activity that may be attracted to the proposed Industrial Zone is likely to be sustained by new local dwelling growth in Clyde. This represents an opportunity cost for growth that may have otherwise occurred in Alexandra but is a minor opportunity cost over time. Slowing the expected rate of demand for Alexandra Industrial Zones over the medium term, will extend the time over which the existing Industrial Zones are 'sufficient', albeit it is only expected to be sufficient for another 5-6 years before there is no capacity remaining. Even with a Clyde Industrial Zone, I conclude that Alexandra cannot meet the test of medium term sufficiency, and more suitable greenfield land needs to be zoned in accordance with the RPS and NPS-UD.[32]

[31] And notwithstanding the limitations of the modelling.

[32] Given the lead in times between zoning and lots being available to the market, providing more zoned capacity in Alexandra should not be delayed.

4 Loss of Highly Productive Land

As set out in the Land Productivity Report (Patersons, 2024), the proposed site includes some LUC 3 land and therefore qualifies as highly productive land (HPL) under the interim provisions of the NPS-HPL.[33] The key clause of the NPS-HPL that is relevant for plan changes seeking urban expansion on HPL in Tier 3 TAs is clause 3.6(4).[34] It states that TAs may allow urban rezoning of HPL only if three tests are met. This sub-section considers those three tests.

4.1.1 A) the rezoning is required to provide sufficient development capacity in the district

The relevant time frame for understanding sufficiency in this context is the medium term, as only a medium term shortfall of capacity requires a live zoning response. This contrasts with long term shortfalls which can be responded to with either additional live zoning or the identification of suitable areas for future development in a growth strategy, spatial plan or similar document.

Section 3.3 above has carried out a high-level sufficiency assessment of demand and capacity for industrial zoning in COD in the medium term, broadly consistent with NPS-UD guidance. The key finding was that Clyde is an urban area that generates demand for industrial activity. By 2034, this demand is estimated to sustain an indicative 6.9ha – 9.7ha of occupied Industrial Zone land. There is no Industrial Zone provided in Clyde and the future Industrial Zone areas identified in the Clyde Spatial Plan are not expected to provide development capacity for new business activity. In simple terms, this indicates that insufficient Industrial Zone capacity has been provided in the District Plan for the Clyde urban area and this requires a zoning response.

Alternatively, if the legacy approach of treating Clyde as a satellite residential area of Alexandra is maintained,[35] whereby Clyde is, and will forever be, 100% dependent on Alexandra for the supply of industrial activity, then the analysis also shows that Alexandra is estimated to face a shortfall of Industrial Zone capacity in the medium term. The future Industrial Zone area identified in the Alexandra Spatial Plan is not expected to provide development capacity for new business activity that will materially assist with this projected shortfall.

[33] Until HPL is mapped by the Otago Regional Council, HPL is defined as LUC 1, 2 and 3.
[34] The tests are similar under Clause 3.10.
[35] Which I do not support as an efficient urban form going forward.

As the primary industrial area of the Vincent, Maniototo and Teviot Valley Wards, it is not efficient for the projected shortfall of capacity in Alexandra to be met by surplus capacity in smaller, distant townships like Ranfurly, Roxburgh or even Omakau. Further, it is considered that surplus capacity in Cromwell is needed for future demand arising within the Cromwell Ward and is not an appropriate substitute for providing additional zoned capacity in or near Alexandra. The distance to Cromwell also renders this a less efficient solution.

As such, the projected insufficiency of Industrial Zone capacity in Alexandra in the medium term is not able to be offset by capacity already provided elsewhere in the District Plan and therefore requires a zoning response.

Overall, I consider that the test of medium term insufficiency is met – either for Clyde as a location of demand, or for Alexandra (which Clyde is currently dependent on).

4.1.2 B) There are no other reasonably practicable and feasible options to provide the required development capacity

The land in the vicinity of Alexandra and Clyde contains pockets of LUC 3 land. Appendix C contains maps that show the LUC 3 land, operative District Plan zoning, Spatial Plan future industrial areas, and in the case of Clyde, the PC19 greenfield growth areas.

Alexandra does not contain any HPL in Rural Zone areas adjoining the urban zones, and generally there is none adjoining the Rural Residential Zone. While relatively unconstrained by HPL, this does not mean that there are any obviously practicable and feasible options to provide additional Industrial Zone land.

The only potential option that could be feasible (from an industrial development perspective) would be to utilise some of the Large Lot Residential Zone on Dunstan Road identified in the Spatial Plan. This would displace existing dwellings on that land as well as reduce the opportunity to provide for large lot living in a suitable location close to the town. Both considerations may make this option impracticable.

Clyde is relatively more constrained by HPL (Appendix C). HPL covers the flat land right along Springvale Road until just beyond the greenbelt proposed in the Spatial Plan. Similarly, it covers the land on the eastern side of State Highway 8 until just beyond the greenbelt. Assuming any land west of the Clutha River is not an appropriate location for urban expansion, the proposed Industrial Zone site is potentially the only site adjoining the existing urban area that is not already occupied by high value residential properties, notified for higher value urban zoning (i.e. residential) or identified for future residential zoning or large lot infill, that would also provide for a consolidated urban form in Clyde.

The next available option would be a standalone Industrial Zone south of Clyde in the less dense Rural Residential Zone. This is likely to be impracticable and result in a less efficient urban form.

As low value rural land immediately adjacent to the existing urban area of Clyde, and opposite the proposed future Industrial Zone, I consider that the proposed site is the most reasonably practicable and feasible option to provide additional Industrial Zone capacity in either Clyde or Alexandra at this current time. As such, I consider this test to be met.

4.1.3 C) The … economic benefits of rezoning outweigh the … economic costs of foregone land-based primary production

Clause 3.6(4)(c) requires environmental, social, cultural and economic costs and benefits to be assessed. I focus here only on the economic costs and benefits. The core tangible economic benefits arising from the proposed Industrial Zone are the GDP and employment effects of:

- completing the one-off land development of the site (short term benefit),
- completing the one-off construction of buildings and/or other improvements[36] on the indicative 21 lots,[37] (spread over the short, medium and long-term) and
- the ongoing operation of new businesses that establish in the zone (long term benefit).

While the land development may be expected to be completed in a single stage, the take up of the future lots by new businesses is expected to be gradual and potentially spread over the short, medium and long term. As such, the economic benefits will accrue slowly after an initial short-term impact.

The following assumptions have been used to quantify the indicative economic impacts of the construction stages of the proposed zone only (i.e., the first two bullet points above).

- 21 lots delivered and all lots contain a building. Very indicatively, I have adopted an average building size of 400sqm and a commercial construction cost of $2,000/sqm.
- Design, planning and consents take place over 6 months, the land development takes place over 12 months and the construction of buildings occurs over 10 years.[38] Total development period of 11.5 years.

[36] Not all future lots in the proposed zone will necessarily contain buildings as they may be used for industrial yards. That said, most yards tend to include some small ancillary building. Other improvements would still include fencing, security, signage, sealed/concreted areas etc.

[37] Based on indicative subdivision plan provided.

[38] This may be longer, but the economic impacts will be the same.

- I have applied land development costs obtained from other development projects I have been involved in, and assumed that the planning, design and consenting indicatively equates to 1% of land development costs.

Future explanation, assumptions and caveats of my approach are set out in Appendix D. In summary, using multiplier analysis, Table 4.1 shows the indicative direct, indirect, induced and total economic impacts of the construction of the proposed Industrial Zone. I estimate that the proposal could:

1. Contribute $\$_{2020}$16 million in value added to the COD economy over 11.5 years.
2. Generate wages/salaries for COD households to the value of $\$_{2020}$7 million over 11.5 years.
3. Sustain employment for around 118 FTE-years across a broad range of sectors in COD (or equivalent to around 10 full-time workers (on average) for 11.5 years).

Table 4.1 – Direct, Indirect, Induced and Total Economic Impacts of the Development of the Proposed Industrial Zone on the Central Otago Economy ($2020)

	Direct Impact	Indirect Impact	Induced Impact	**Total Impact**
Design/Planning/Consents				
FTEs (annual average)	0.2	0.1	0.1	**0.4**
Value Added ($\$_{2020}$m)	$ 0.01	$ 0.01	$ 0.01	**$ 0.03**
Gross Household Income ($\$_{2020}$m)	$ 0.01	$ 0.00	$ 0.00	**$ 0.01**
Land Development				
FTEs (annual average)	5	8	4	**17**
Value Added ($\$_{2020}$m)	$ 0.7	$ 1.0	$ 0.6	**$ 2.3**
Gross Household Income ($\$_{2020}$m)	$ 0.5	$ 0.5	$ 0.2	**$ 1.2**
Commercial Construction				
FTEs (annual average)	2	6	2	**10**
Value Added ($\$_{2020}$m)	$ 2.8	$ 7.4	$ 3.0	**$ 13.3**
Gross Household Income ($\$_{2020}$m)	$ 1.2	$ 3.7	$ 1.2	**$ 6.1**
Total Project				
FTEs - Years	25	67	26	**118**
Value Added ($\$_{2020}$m)	$ 4	$ 8	$ 4	**$ 16**
Gross Household Income ($\$_{2020}$m)	$ 2	$ 4	$ 1	**$ 7**

Source: StatisticsNZ, Savvy Consulting. Results are in $2020 and employment terms.

The above economic impacts do not include the ongoing positive economic impacts of the businesses that may establish in the proposed zone. Those positive economic impacts are additional and long term. There are other long term tangible and intangible economic benefits of the proposal that could be included here, but they are discussed further in Section 5.

The purpose of quantifying and qualifying (Section 5) the above economic benefits is to contrast them with the economic benefits foregone (i.e. costs) of using the site for industrial activities rather than protecting it for land-based primary production over the long term.

Where land offers feasible potential for primary production (either now or in the future), this can be modelled using a range of assumptions. However, I rely on the assessment by Patersons which concludes that the proposed site is unlikely to overcome the constraint of access to water (such as would be needed for irrigation). As such, the land is considered to have negligible potential for land-based primary production over the long term, and therefore no further modelling is warranted.

As the proposed rezoning offers long term economic benefits for COD (of which only some have been quantified), and there are no foreseeable costs from utilising the LUC 3 land for industrial development, the long term benefits substantially outweigh the long term costs and I consider that the third test of clause 3.6(4)(c) has been met.

5 Conclusions

This final section of the report considers the locational attributes of the site for industrial development, as this relates directly to the NPS-UD requirement for councils to provide development capacity that is commercially feasible and reasonably expected to be realised. In the context of business land, the term 'suitable' is often substituted for feasible. This is followed by a summary of economic costs and benefits of the plan change request, and final conclusions.

5.1 Location Attributes of Proposed Industrial Zoning

This sub-section examines the suitability of the proposed site from a development or developer perspective. The NPS-UD provides flexibility on how 'suitability' is determined, but at a minimum, must include suitability in terms of location and site size. This assessment adopts a Multi Criteria Analysis (MCA) approach in keeping with the guidance under the earlier NPS-UDC.[39] While MCA is typically used to compare multiple options, it is still a useful framework to evaluating a single option – in this case, the proposed site.

MCA requires key metrics (criteria) to be identified that are important in the selection and development process for different land uses. Typically, each criterion is independently weighted (before being scored) in consultation with the council and other development stakeholders to determine which criteria should play a large or small role in the development and locational decision relevant to that district. In the absence of this consultation, I have excluded weighting for the purposes of this assessment and have also used a qualitative rather than numeric scale for scoring each criterion.

Table 5.1 contains criteria that are commonly applied for the assessment of sites for industrial development. I have scored each criterion using a 7 point scale (ranging from very positive through to very negative). The MCA shows that there are no negative attributes of the proposed site from an industrial development perspective. Overall, I consider that the site is suitable for Industrial Zoning and would therefore represent feasible and reasonably expected to be realised development capacity if approved.

[39] I have developed and applied MCA frameworks for HBAs in both Queenstown Lakes District and Rotorua District. The MCA in this section adopts criteria for industrial land development published in HBAs prepared by Market Economics Limited (where I was previously a Director and led the respective HBA/MCA projects).

Table 5.1 – Multi Criteria Analysis of the Suitability of the Proposed Industrial Zone

Criterion	Evaluation
Ability to buffer adverse effects from residential and sensitive activities	Very Positive – the site is separated from residential zoning by State Highway 8.
Access to major road/ transport routes	Very Positive – State Highway 8 is adjacent the site.
Co-location or clustering with complementary business activities	Somewhat Positive – some industrial activities are opposite the site.
Distances to freight ports	Neutral – no site in COD is particularly close to freight ports.
Exposure and profile for future businesses	Very Positive – many sites will have signage visible from Springvale Road.
Flat site, large and contiguous parcels, supports efficient subdivision	Moderately Positive – large parts of the site are flat or only slightly sloping. While not large, it is appropriate in scale for a local industrial zone role and relative to local demand.
Single / simple ownership structure	Very Positive – the site is in single ownership.
Represents vacant capacity / greenfield	Very Positive – the site is bare land.
Low level of traffic / congestion in vicinity	Very Positive – the nearby roads and intersections do not suffer from congestion.
Low natural hazard risk	Moderately Positive – see S32A Report.
Proximity to labour force	Moderately Positive – the site is adjacent to the third largest township in COD by population.

Proximity to resident household customers	Very Positive – Residential Zoning is located on the other side State Highway 8 and Rural Residential zoning is located south of Springvale Road.
Proximity to specialist demand sectors	Moderately Positive - horticulture and farming occurs in the rural areas surrounding Clyde.
Serviceable with network infrastructure	Moderately Positive – the site can be connected to urban infrastructure (see s32A Report).
Total Suitability	Suitable for Industrial Development

5.2 Economic Benefits

Based on the analysis carried out for this assessment and the discussion contained in previous report sections, and acknowledging that some economic benefits may be a transfer effect and not net additional to Vincent Ward, the economic benefits of the proposed rezoning can be summarised as follows:

- Development of the land and future construction of new buildings will generate value added in the COD economy, sustaining jobs and household incomes.
- Provides a range of additional jobs in the Clyde township and therefore provides opportunities for some current and future residents of Clyde to work close to where they live. Reduced commuting travel compared to the status quo.
- Provides a range of industrial services in the Clyde township, improving the accessibility of these services for current and future residents of Clyde (with reduced road travel compared to the status quo of travelling to Alexandra (most likely) for those services). Increased local functional amenity (attractiveness of Clyde as a place to live).

- Increases the self-sufficiency and resilience of the Clyde community while still maintaining economic and social connections with Alexandra (being the higher-order urban area).
- Potential to attract net additional businesses and investment in the Vincent Ward, including net additional households (business owners and staff). Flow on benefits for local businesses and service providers.
- Supports a competitive industrial land market by introducing a new landowner to the market, and an alternative location to meet demand.
- Supports the provision of at least sufficient Industrial Zone capacity in Clyde, the Vincent Ward and district overall to meet projected short and medium term demand for Industrial Zoned land.

5.3 Economic Costs

The economic costs of the proposed rezoning can be summarised as follows:

- Introduces a new area of Industrial Zone in the district where the effects of industrial activities (externalities) need to be managed. Dispersal of industrial activities over a greater number of locations. However, as discussed in other documents supporting the plan change request, the site is appropriately located to avoid any significant adverse effects, and other effects can be appropriately remedied or mitigated.
- Occupies LUC 3 land and therefore removes the productive capacity of the land for land-based primary production over the long term. However, the site is unlikely to support land-based primary production due to permanent constraints. As such, this cost is theoretical only and does not apply in practice.
- May result in distributional effects on the Alexandra Industrial Zones. This is expected to be limited to re-capture of a portion of Clyde demand back to Clyde. Any adverse distributional effects are considered to be minor in the context of the scale of Alexandra's Industrial Zones (and likely fall under the category of trade competition).
- May result in opportunity costs for the take up vacant industrial land in Alexandra's Industrial Zones. That is, it may slow the rate of growth in Alexandra by providing a local Industrial Zone in Clyde. However, this extends the capacity of the Alexandra Industrial Zones to meet demand from its extensive catchment over the medium term (a benefit), but does not remedy a medium term shortfall of capacity in Alexandra that will also need a zoning response.

5.4 Efficiency Conclusions

In a general sense, it is more economically efficient to consider options for expansion of existing industrial zones before creating new ones, to ensure that the adverse effects of industrial activities are consolidated in relatively few locations. However, this is not always practicable where other land uses have developed around existing Industrial Zones as they have in Alexandra, foreclosing further expansion. Further, this approach must be balanced with the need to provide for industrial activities in locations of demand.

Clyde is an urban area that already sustains industrial activity, but in the absence of a local Industrial Zone (such as provided in most other towns and settlements of the district, and now including in Pisa Moorings via PPC21) the Clyde community has been reliant on supply of industrial activities in Alexandra. This urban form is increasingly inefficient as Clyde grows – and Clyde *has* been identified as an area that is constrained by a lack of local employment and yet, can support substantial residential growth in the medium and long term.

Providing for future housing growth in Clyde as set out in PC19 and the Spatial Plan without also providing increased employment opportunities and business land, will not support a well-functioning urban environment in my view.

I consider that the proposed site is a suitable and effective location for an Industrial Zone that will contribute to a well-functioning urban environment. I do not consider there to be any other more practicable or feasible alternative locations to provide the equivalent development capacity in the locality. Providing a local Industrial Zone in Clyde responds to an insufficiency (absence) of industrial development capacity in the Clyde urban area and assists with an insufficiency of industrial development capacity in the Alexandra urban area in the medium term. Zoning of the proposed site will support the provision of at least sufficient Industrial Zone capacity in the Vincent Ward and district overall.

While the site includes LUC 3 land, there are no foreseeable costs to the productive capacity of the district associated with the proposed urban zoning. Having considered the economic costs and benefits of the proposal, I conclude that over the long term, the economic benefits far outweigh any potential costs. I support the rezoning from an economic perspective.

Appendix A – Industrial Zone Profiles

Cromwell

1 Digit ANZSIC Description	Industrial Zone Business Count 2018	Industrial Zone Business Count 2023	Growth 2018-2023 (n)	Growth 2018-2023 (%)	Industrial Zone Employment Count 2018	Industrial Zone Employment Count 2023	Growth 2018-2023 (n)	Growth 2018-2023 (%)	Industrial Zone Business Count 2023 Distribution (%)	Industrial Zone Employment Count 2023 Distribution (%)	Total Town 2023 Business Count	Total Town 2023 Employment Count	Industrial Zone Share of Total Town Business Count 2023	Industrial Zone Share of Total Town Employment Count 2023
Agriculture, Forestry and Fishing *	1	4	2	192%	8	9	1	18%	1%	0%	19	32	18%	28%
Mining	-	-	-	0%	-	-	-	0%	0%	0%	-	-	0%	0%
Manufacturing	40	36	-4	-10%	291	318	27	9%	13%	17%	63	383	57%	83%
Electricity, Gas, Water and Waste Services	4	7	4	106%	146	68	-78	-54%	3%	4%	9	69	83%	98%
Construction	35	57	22	63%	546	591	44	8%	21%	32%	235	947	24%	62%
Wholesale Trade	32	40	8	26%	180	291	111	61%	15%	16%	54	325	74%	90%
Retail Trade	5	4	-1	-15%	13	16	2	18%	2%	1%	52	488	9%	3%
Accommodation and Food Services	2	6	4	146%	3	14	11	321%	2%	1%	50	318	12%	4%
Transport, Postal and Warehousing	15	15	0	2%	225	186	-39	-17%	6%	10%	41	242	37%	77%
Information Media and Telecommunications	-	2	2	0%	-	1	1	0%	1%	0%	6	35	25%	3%
Financial and Insurance Services	7	8	1	17%	1	2	1	163%	3%	0%	36	27	21%	8%
Rental, Hiring and Real Estate Services	29	43	14	49%	24	49	25	102%	16%	3%	183	110	24%	44%
Professional, Scientific and Technical Services	12	17	5	40%	70	124	55	78%	6%	7%	70	218	24%	57%
Administrative and Support Services	3	7	4	136%	3	21	18	590%	2%	1%	34	59	20%	35%
Public Administration and Safety	2	1	-1	-45%	18	3	-15	-83%	0%	0%	5	27	23%	11%
Education and Training	1	2	1	120%	3	28	24	712%	1%	2%	11	269	20%	10%
Health Care and Social Assistance	4	6	2	40%	9	29	20	230%	2%	2%	29	223	21%	13%
Arts and Recreation Services	1	2	1	100%	25	27	2	7%	1%	1%	19	65	11%	42%
Other Services	9	13	4	51%	33	59	27	82%	5%	3%	43	157	30%	38%
Total Industries	201	269	68	34%	1,597	1,834	237	15%	100%	100%	958	3,994	28%	46%
Indicative Industrial Zone Industries	155	202	47	30%	1,419	1,510	91	6%	75%	82%	604	2,108	33%	72%

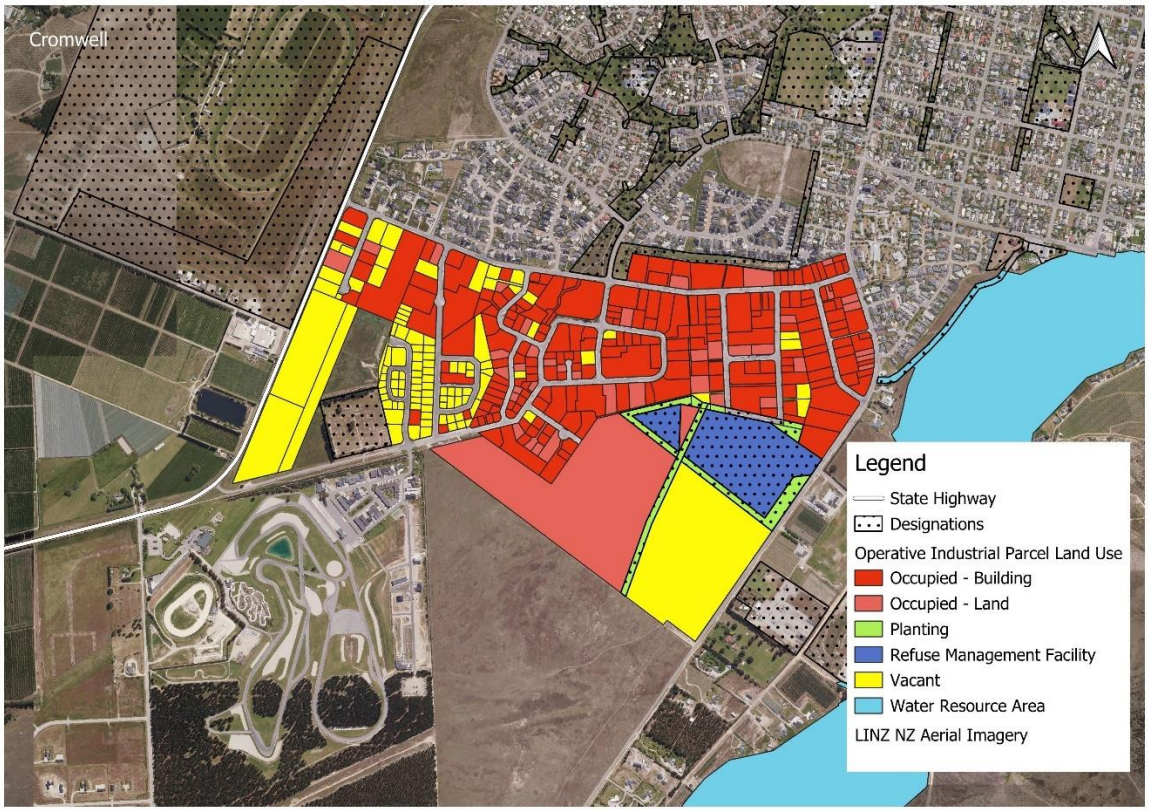
*Source: StatisticsNZ Business Demography Statistics YE February, Savvy. * With the exception of Agricultural and forestry support services, agriculture business and employment have been removed as these are likely a result of SA1 defined areas including rural land on the fringe of each area.*

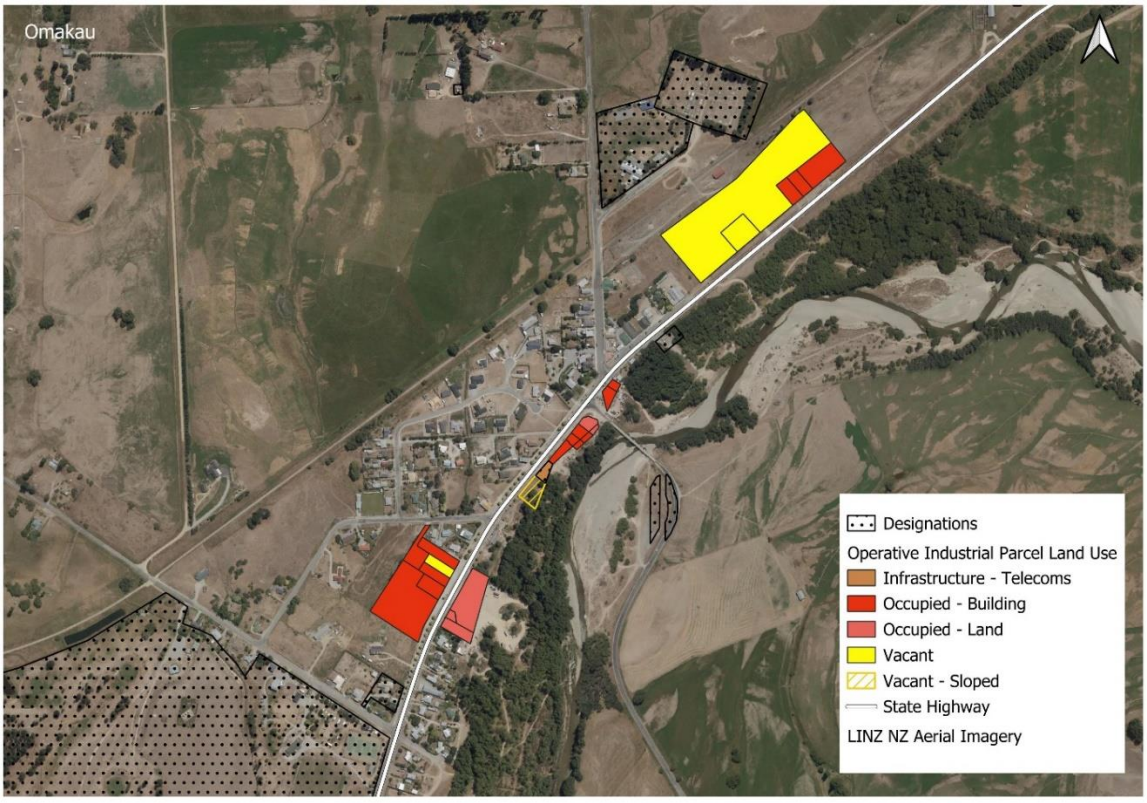
Alexandra

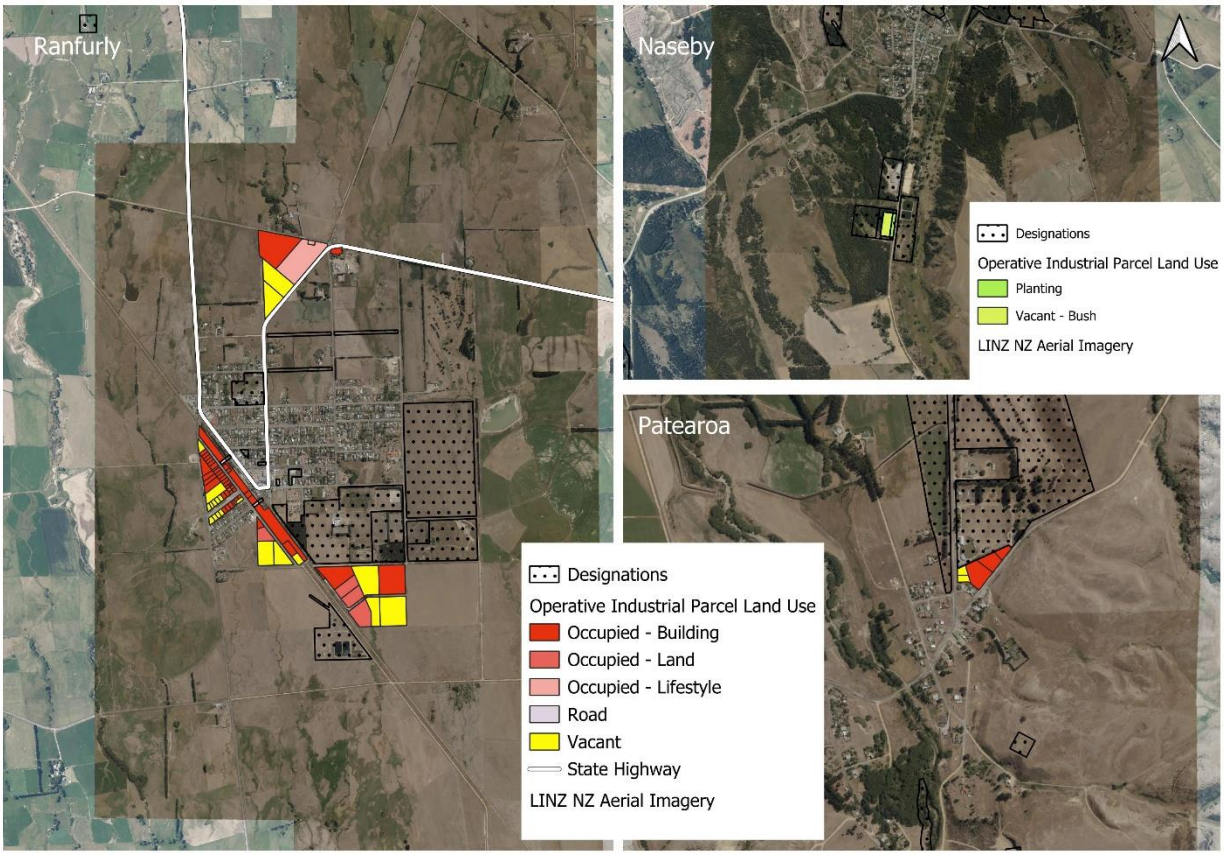
1 Digit ANZSIC Description	Industrial Zone Business Count 2018	Industrial Zone Business Count 2023	Growth 2018-2023 (n)	Growth 2018-2023 (%)	Industrial Zone Employment Count 2018	Industrial Zone Employment Count 2023	Growth 2018-2023 (n)	Growth 2018-2023 (%)	Industrial Zone Business Count 2023 Distribution (%)	Industrial Zone Employment Count 2023 Distribution (%)	Total Town 2023 Business Count	Total Town 2023 Employment Count	Industrial Zone Share of Total Town Business Count 2023	Industrial Zone Share of Total Town Employment Count 2023
Agriculture, Forestry and Fishing *	6	6	0	7%	29	34	5	16%	5%	3%	26	93	23%	36%
Mining	-	-	-	0%	-	-	-	0%	0%	0%	1	1	0%	0%
Manufacturing	13	10	-2	-18%	84	46	-38	-45%	8%	4%	32	114	32%	41%
Electricity, Gas, Water and Waste Services	1	2	1	143%	12	3	-9	-74%	1%	0%	4	40	40%	8%
Construction	15	19	4	29%	400	502	102	25%	16%	48%	135	869	14%	58%
Wholesale Trade	11	11	1	5%	74	54	-20	-27%	9%	5%	26	82	44%	66%
Retail Trade	5	4	-1	-20%	30	37	7	23%	3%	4%	64	565	6%	7%
Accommodation and Food Services	1	2	1	82%	2	30	29	1800%	2%	3%	42	276	5%	11%
Transport, Postal and Warehousing	4	4	-1	-19%	124	64	-61	-49%	3%	6%	20	121	18%	53%
Information Media and Telecommunications	2	-	-2	-100%	1	-	-1	-100%	0%	0%	7	26	0%	0%
Financial and Insurance Services	2	4	1	61%	1	1	0	25%	3%	0%	52	74	7%	1%
Rental, Hiring and Real Estate Services	18	22	4	21%	6	11	5	83%	18%	1%	160	82	14%	13%
Professional, Scientific and Technical Services	12	19	8	65%	45	69	24	53%	16%	7%	80	310	24%	22%
Administrative and Support Services	4	5	1	26%	74	79	5	6%	4%	8%	30	876	18%	9%
Public Administration and Safety	2	1	-2	-63%	4	12	8	188%	1%	1%	13	243	7%	5%
Education and Training	3	3	-0	-4%	28	13	-14	-52%	2%	1%	17	260	15%	5%
Health Care and Social Assistance	4	3	-2	-41%	43	46	3	7%	2%	4%	34	373	8%	12%
Arts and Recreation Services	3	2	-2	-48%	24	20	-4	-17%	1%	2%	15	64	11%	31%
Other Services	7	6	-1	-16%	48	30	-17	-37%	5%	3%	57	194	10%	16%
Total Industries	112	121	9	8%	1,027	1,049	22	2%	100%	100%	815	4,661	15%	23%
Indicative Industrial Zone Industries	67	74	7	10%	729	713	-16	-2%	61%	68%	404	1,401	18%	51%

*Source: StatisticsNZ Business Demography Statistics YE February, Savvy. * With the exception of Agricultural and forestry support services, agriculture business and employment have been removed as these are likely a result of SA1 defined areas including rural land on the fringe of each area.*

Appendix B – Vacant Capacity

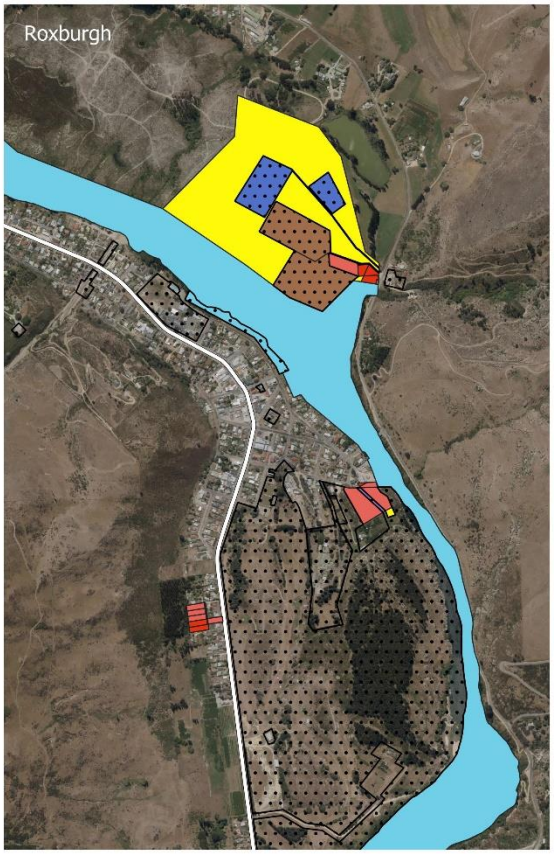


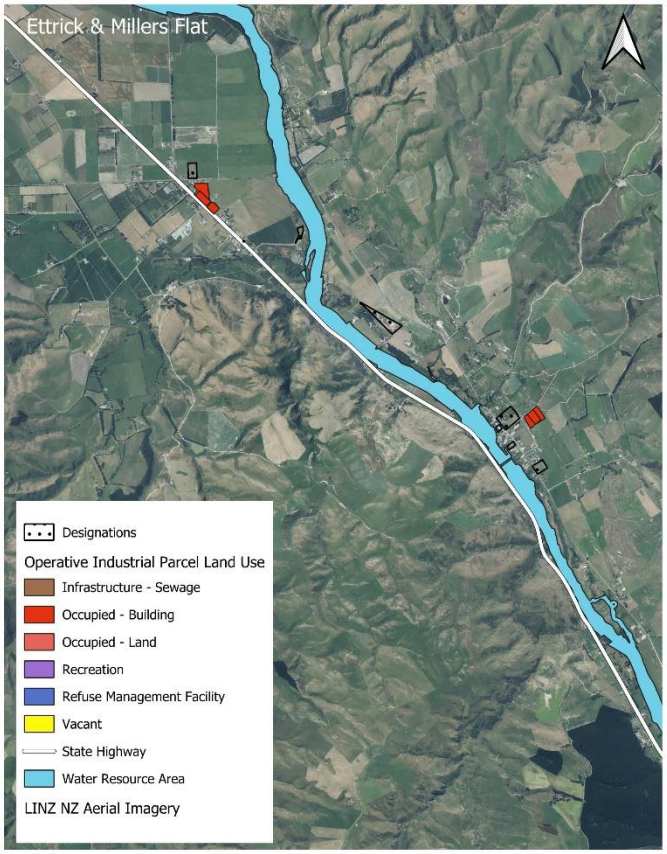



Ranfurly
Designations
Operative Industrial Parcel Land Use
Occupied - Building
Occupied - Land
Occupied - Lifestyle
Road
Vacant
State Highway
LINZ NZ Aerial Imagery

Naseby
Designations
Operative Industrial Parcel Land Use
Planting
Vacant - Bush
LINZ NZ Aerial Imagery

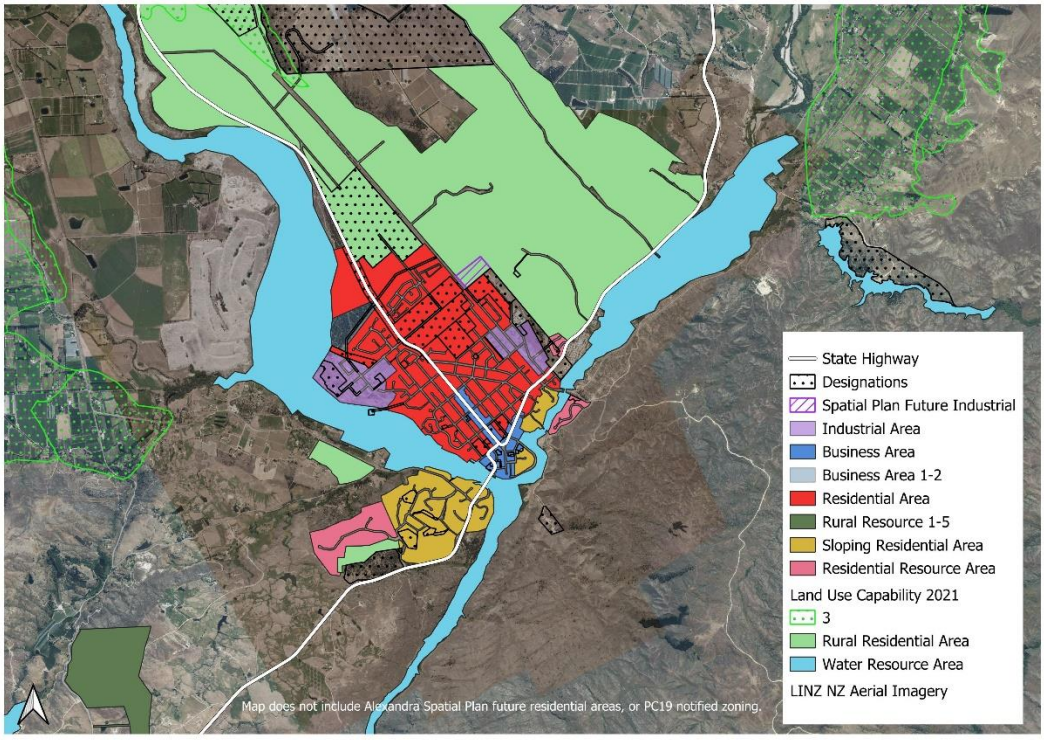
Patearoa


Roxburgh

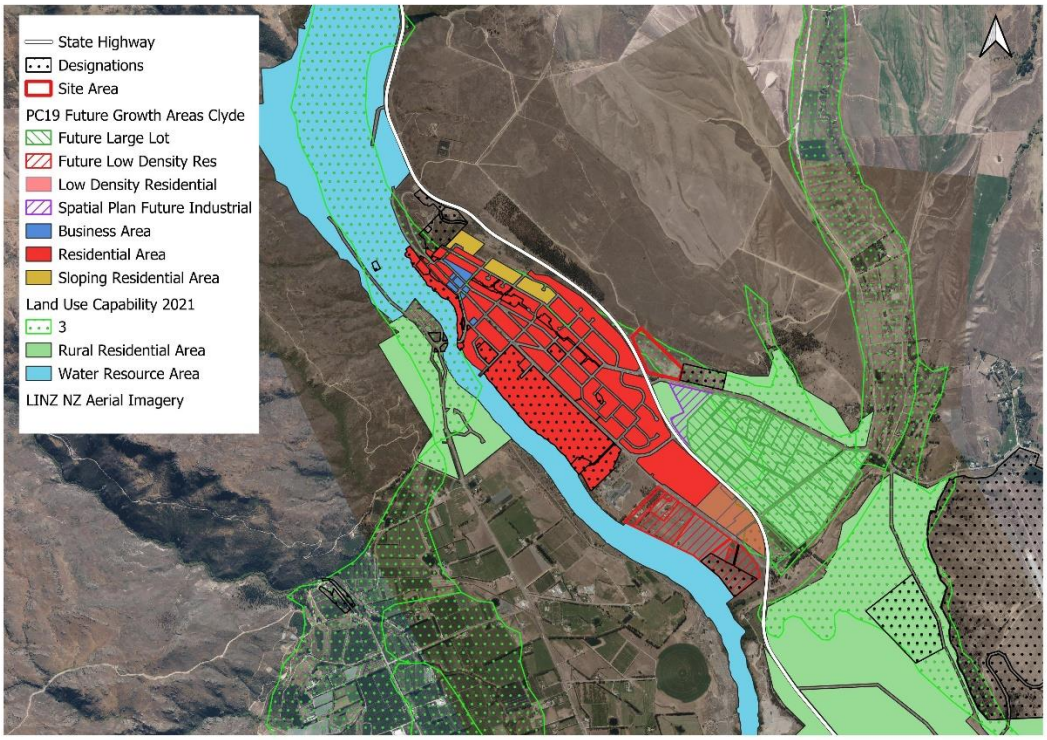

Ettrick & Millers Flat
Designations
Operative Industrial Parcel Land Use
Infrastructure - Sewage
Occupied - Building
Occupied - Land
Recreation
Refuse Management Facility
Vacant
State Highway
Water Resource Area
LINZ NZ Aerial Imagery

Appendix C – HPL Maps

Alexandra



Clyde



Appendix D – Economic Impact Terminology & Assumptions

Multiplier analysis is a commonly used modelling technique for measuring economic impacts. Direct, indirect and induced economic impacts can be estimated using multipliers derived from regional or national input-output tables. Multipliers are summary measures of the economic interdependence between industries and final demand. The contribution of an industry to an economy is not limited to the value it creates directly. This is because an increase in final demand for an industry has repercussions throughout the whole economy, causing increases in output beyond the initial change in demand. This is known as the multiplier effect. The higher the multiplier the more far-reaching the local value added and employment impacts are likely to be from an increase in demand.

The most common limitations of all input-output based modelling (including multiplier analysis) is the historical and fixed nature of multipliers which are typically calculated from input-output tables from surveys undertaken several years earlier. Therefore, they may not accurately reflect the relationships between sectors in the current economy.[40] This assessment relies on the latest national input-output table prepared by StatisticsNZ[41] which reflects the economy in the year ending June 2020. While the construction sector has faced significant cost increases since 2020, it is considered that the supply chain structure of all industry sectors (including the construction sector) is still broadly relevant today.

This assessment includes the following types of economic impacts:

a) Direct effects – which capture onsite and offsite activities directly engaged by the proposed project;

b) Indirect effects – which arise when businesses working directly on the project stimulate the creation of further demand through the purchases that they make in other sectors of the economy; and

[40] In the real world, technical relationships will change over time. These changes are driven by new technologies, relative price shifts, product substitutions and the emergence of new industries. For this reason, input-output analysis is generally regarded as suitable for short-run analysis, where economic systems are unlikely to change greatly from the initial snapshot of data used to generate the base input-output table.

[41] Accessed, with thanks, from Insight Economics.

c) Induced effects – which arise from the increased demand for goods and services made by households who have received increased income as a result of the direct and indirect effects of the project.

These economic impacts have been measured in terms of:

- Contributions to value-added (akin to GDP). Value added is the principal measure of economic activity, and is estimated as operating surplus, wages and salaries paid to staff and working proprietors, depreciation, taxes and subsidies.
- The number of FTEs employed – which is measured in terms of full-time equivalent workers (FTEs) for a 12-month period.
- Total wages and salaries paid to workers, which are often labelled 'gross household incomes'.

Assumptions and Modelling Inputs

For simplicity, I have adopted the multipliers from the following industry sectors contained in the national input-output table:

- Design/planning/consents – 100% to the 'Scientific, architectural and engineering services' sector.
- Land development – 100% to the 'Heavy and civil engineering construction' sector.
- Commercial construction – 100% to the 'Non-residential building construction' sector.

Other key assumptions for the modelling are as follows:

- Anticipated expenditure is deflated to June 2020 prices prior to applying the June 2020 multipliers. This is done using the Producers Price Index.
- Economic impacts are expressed in 2020 dollar and employment terms. It is not appropriate to re-inflate economic impacts to dollars of the day.
- The national multipliers are assumed to represent the multipliers that applied in the COD in June 2020. That is, it is assumed that industries in the COD economy have the same interdependencies with other industries as they do nationally.
- All direct expenditure on the proposed development, including indirect and induced spending, is assumed to be with business located in COD. That is, 100% of the impact is assumed to accrue to the COD economy, with no leakage to other districts or regions.

Caveats

These district economic impacts apply to the proposed development. It is important to acknowledge that these same or similar impacts would arise from a development of a similar scale and composition in another location in COD and are not entirely unique to this proposal/site.

Furthermore, some of these impacts would be a result of expenditure that is transferred from other locations in the district. Specifically, if the proposal was not approved for development, one would typically expect that the demand for industrial activities would be satisfied in another location within the district. This means that at a district level much of the economic value associated with the proposal may not be net additional or new, as this value would occur regardless of whether the proposed development occurs or not.

That said, to the extent that the proposal addresses a shortfall in industrial zone capacity in the locality of demand, that may not necessarily be addressed through other planning processes in a timely manner, then more of the economic impact can be considered net additional. This is because a shortfall of industrial zone capacity may result in some business growth being directed elsewhere (or being suppressed). In this light, the proposed development can be seen as enabling projected growth.

Development is also contingent on available land in suitable locations for urban growth, landowners willing to develop that land, and landowners having the financial capability and experience to develop – such as the applicant. These combined attributes are rare in any district, and this means that more, rather than less, of the estimated economic impacts can be treated as net additional and specific to the proposal.