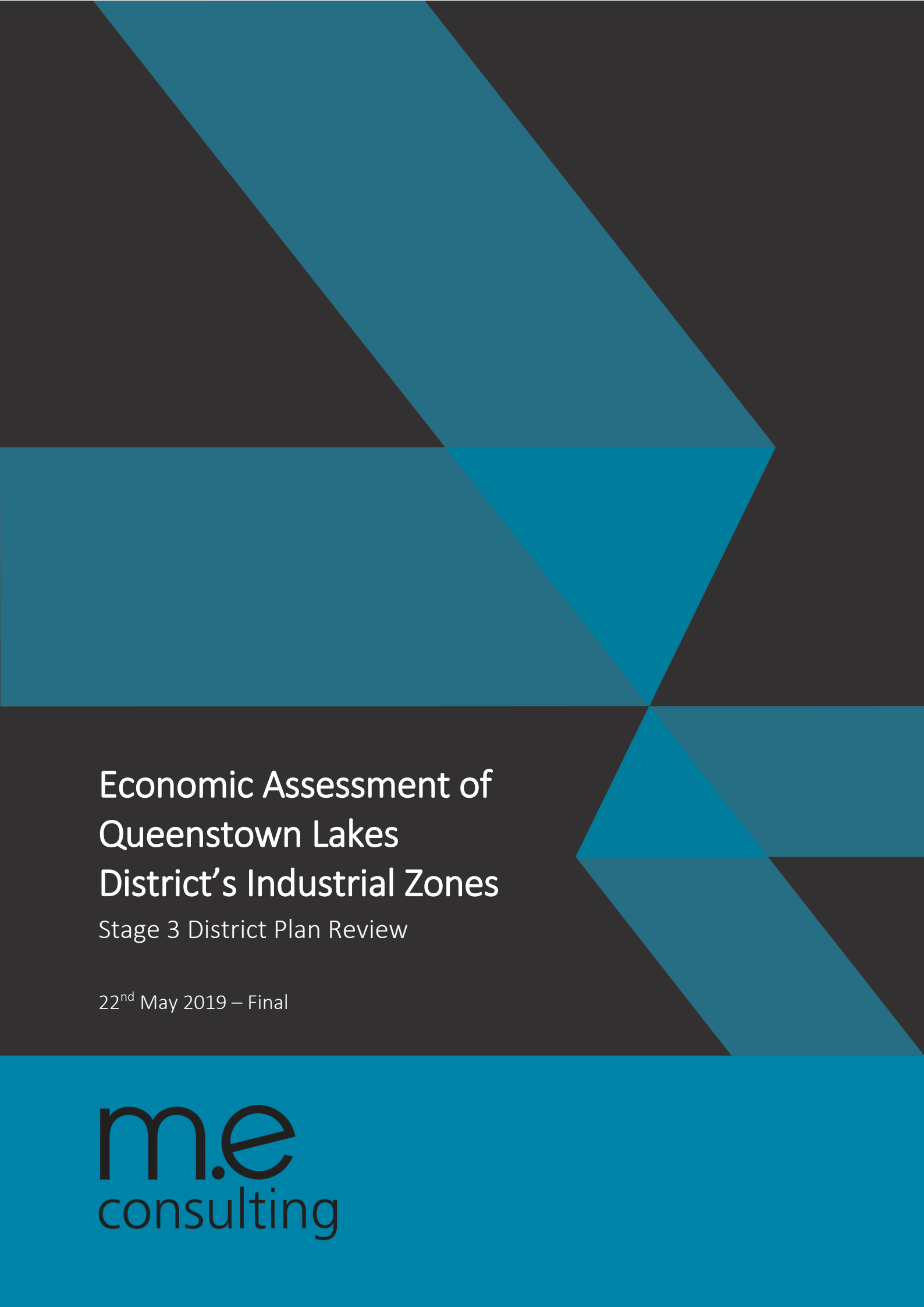




Economic Assessment of Queenstown Lakes District's Industrial Zones

Stage 3 District Plan Review

22nd May 2019 – Final

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consulting



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Stage 3 District Plan Review

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Executive Summary

This report, which informs the Stage 3 District Plan Review, provides an economic assessment of the Queenstown Lakes District (QLD) 'industrial economy' and the role of the Industrial, Industrial B, Ballantyne Road Mixed Use Special Zone and the Gorge Road (Operative) Business zones in meeting the current and future needs of that economy.

M.E has analysed a range of spatial economic datasets including the StatisticsNZ Business Directory, the QLD Economic Futures Model and Council's own survey of current business activities in each of the above mentioned zones to identify and describe QLD's industrial economy and examine its structure, economic role, distribution, recent changes and projected future growth. The industrial economy relationships between each part of the district are examined, including the relationships between QLD and Cromwell. The business mix within each of the zones is also examined, to identify similarities and differences.

QLD's current (2017) industrial economy comprises of businesses involved in Manufacturing; Construction; Waste Collection, Treatment and Disposal; Wholesaling; Road Transport; Delivery Services; Storage; Vehicle, Machinery and Equipment (construction related) Hire; Automotive, Appliance, Machinery and Equipment Repair and Maintenance Services; and industrial Dry Cleaning (non-retail component). QLD's industrial economy is unique to the district and not especially influenced by industrial economy trends happening at the national level. The mix of activities differs from the national average and other districts of a similar population size.

QLD does not have a significant manufacturing base. The main manufacturing businesses are those supplying the construction industry which dominates the industrial economy and accounts for the greatest share of recent growth. Wholesaling also makes up a small share of businesses, although is growing quickly, so can expect a slightly greater role in the future.

Overall, QLD's industrial economy is characterised by small scale businesses that serve local level demand. While there is some dependence on inputs supplied from the rest of New Zealand, the industrial economies in Wanaka and Queenstown-Arrowtown are largely self-sufficient with only limited trade between the wards. Cromwell's industrial economy, while characterised by slightly larger businesses, is smaller in size than both Queenstown and Wanaka. It serves a portion of QLD's demand but is more dependent on output from Queenstown and Wanaka, than the other way around.

Industrial economy businesses operate in a range of physical forms including factories, warehouses, workshops, yards and offices (or a combination of these as ancillary activities). Only a small portion (between 5-13%) of industrial economy businesses have a functional or operational need to locate in an industrial zone (2017). Those that do, tend to be relatively larger (in employment terms) and relatively more 'heavy industrial' in nature. These include businesses that operate in large spaces (i.e. warehouse style buildings or workshops), require onsite storage of machinery, vehicles or materials (i.e. yard based activities), generate large truck movements, and/or have externality effects such as dust and noise.

A large share of the industrial economy generates no demand for zoned capacity (industrial or otherwise) and does not need to be provided for in a district plan sense. These businesses (found in the residential



zones) are dominated by tradesman in the Construction sector, or very small-scale home-based manufacturing businesses.

QLD's industrial economy is growing rapidly and has demonstrated growth rates faster than the rest of the district's economy. This is expected to continue, with the future structure of the industrial economy likely to be similar to what's here today. As such a 'business as usual' outlook is appropriate to guide future planning. However, there are a number of factors which are impacting on the viability of those industrial economy businesses that have a functional need to locate in industrial zones. These are matters which can be addressed as part of the district plan review process.

Notably, while the industrial economy overall has been growing, the industrial economy share of businesses in the district's industrial zones has been declining over time. This has occurred because of flexible zone provisions that have allowed, particularly in the Industrial Zone, a range of activities that do not have a functional need to be in an industrial zone (and can locate in other zones such as Town Centre, Business Mixed Use and some Special zones).

Office and commercial activities (that are not ancillary to other activities on site) are the biggest concern, and Glenda Drive contains several examples of intensive forms of office development. Enabling a mix of activities in the industrial zones, combined with rising land values, drives landowners to maximise returns by supplying premises that will attract the highest value land use possible. Land extensive industrial activities are then priced out of the market. With diminishing feasible capacity remaining in the zones (with Coneburn and Ballantyne Mixed Use zones still in a holding pattern) it is important that this trend is halted else existing industrial activities will become increasingly vulnerable and the growth of a critical portion of the local industrial economy will be constrained.

This report provides a number of high-level recommendations for managing activities and effects in and on industrial zones. Some flexibility may be appropriate, particularly when it does not compromise ground floor industrial activities but providing greater protection for industrial activities that have a functional need to be in industrial zones is key. The QLD economy has grown considerably since the Industrial zone was created. The market is now large enough to sustain a less mixed-use industrial zone and this will lead to greater efficiencies for the economy as a whole.



1 Introduction

Queenstown Lakes District Council (QLDC) are undertaking a rolling review of their operative district plan. As part of stage three of the review, Council are examining the provisions that manage the Industrial, Industrial B, Ballantyne Road Mixed Use Special Zone and the Operative Business Zone in Gorge Road. To inform the evidence base of that review workstream, Market Economics (M.E) has been commissioned to provide an economic assessment of the Queenstown Lakes District (QLD) industrial economy and the role of the above industrial zones in meeting the current and future needs of that economy.

1.1 Research Objective

Council seeks a greater understanding of the QLD industrial economy – its geography; its structure/composition (including any evidence of functional clusters); its changing role/profile in the context of the wider district, regional and national economy; its future direction; demand growth; its land use and built form requirements; and the way in which it interfaces with other sectors, zones and customers (whether other businesses or final consumers (households)). These aspects inform the potential changes anticipated in the QLD industrial economy that will need to be enabled and managed through industrial zone provisions over the life of the proposed district plan (PDP). It also informs the diversity of land use activity that industrial zones need to cater for (now and in the future). At the highest level, this requirement helps ensure that industrial zones (and associated provisions) will be ‘fit for purpose’ in the medium-term future.

Council also seeks greater understanding of the factors that affect the viability and vulnerability/resilience of industrial land use activities in QLD – both detrimental and helpful factors. This is a combination of:

- a) macro-economic factors that are influencing industrial economy trends nationally (imports, exports, prices/competition, strategies, incentives, regulations, trade agreements etc);
- b) district wide economic factors that are influencing the QLD industrial economy (growth, land supply/capacity, land/lease prices, housing affordability, skilled and unskilled workforce, living costs, access/traffic congestion, support services, logistics etc); and
- c) micro-economic factors that are influencing industrial zoned land (competition from other (higher value) land uses, land ownership, infrastructure, planning rules and standards that influence built form (development) and activity on site, decision making and precedent effects).

This component is wider than just an assessment of the effectiveness of operative industrial zone provisions, it considers – from the perspective of the industrial business owner – the full range of factors that both facilitate and support the establishment and operation of that business in QLD and/or constrain its current operation and its ability to grow/adapt in the years to come. While district plan provisions may only be able to influence some of these factors, this *wider* perspective will help Council with its broader strategy of supporting the industrial economy.



The objective of the report is to address these two broad requirements. Where appropriate (and within M.E's expertise), recommendations are included on potential objective/policy directions that will better enable the sustainable management of the identified industrial zones. This includes providing feedback to Council team members on options and draft provisions as they develop. The economic assessment will help Council understand the scale and significance of different options, as well as their potential effectiveness and efficiency for the purpose of s32 report drafting.

1.2 Data, Scope and Report Outline

The assessment is limited to a desktop study of available data sources. This includes data from QLDC, Statistics New Zealand and M.E's proprietary datasets and models. At the time of drafting, the relevant district plan is the Stage 1 decisions version. Where mapping is required to support analysis in this report, the GIS zoning layer is based on the notified Stage 1 (and Stage 2 visitor accommodation sub-zones and open space) proposed district plan zones – being the copy already held by M.E. This has saved time in preparing this report and any differences to the Stage 1 decisions versions maps are inconsequential to the analysis and conclusions.

This report relies predominantly on Statistics New Zealand Business Directory data. This data (which is available as a time series) records business counts and employment in each meshblock according to the Australia New Zealand Standard Industrial Classification 2006 (ANZSIC). This data is the base standard for spatial economic analysis as it provides a consistent dataset for total New Zealand at a relatively fine spatial resolution. The ANZSIC structure is a concordance that allows 506 individual business types (also called 6-digit ANZSICs) to be aggregated up to broader groups and ultimately 19 economic sectors or 'divisions'. Similarly, meshblocks can be grouped easily to match ward, district and region boundaries.

The 6-digit ANZSIC classification defines businesses by their 'primary activities'. The ANZSIC framework identifies a list of mutually exclusive primary activities for each 6-digit ANZSIC, so there can be a variety of businesses that match the range of primary activities in any one 6-digit ANZSIC. Businesses are assigned to a 6-digit ANZSIC based on their primary activity only. As such, if a business sells clothes and footwear, but clothing is their primary activity, they are classed a Clothing Retailer.

A limitation of the Business Directory data for this study is that the 6-digit ANZSIC description of any business refers to its business type, but not the operational/functional form of that business. As such, it does not indicate if a House Construction business, for example, operates out of an office, a yard or is a self-employed tradesman that has no physical premises (although the data can give an indication of the average size of that business within a meshblock).

This is relevant as, the QLDC Stage 1 decisions version district plan refers to 'activities' that can or cannot occur in different land use zones. These activities relate to the operational/functional form of businesses which is necessary in order to manage effects in each zone. Those activities are not limited to specific ANZSICs. As such, enabling a 'yard based service activity' could in fact relate to a range of potential 6-digit ANZSICs.

It is important to keep this distinction in mind throughout this report, where analysis is strongly focussed on ANZSICs. The scope of the report (and associated discussion) seeks to bridge this gap so that the findings of the analysis translate into relevant resource management considerations for industrial zone planning.



Section 2 of the report describes QLD's industrial economy for the purpose of this report. It explores its current structure and role in the wider economy. It assesses its distribution and role by ward.

Section 3 examines linkages and trade relationships between the industrial economy in each ward of QLD and with areas outside the district. It identifies upstream and downstream activities supporting and sustained by the industrial economy in each location.

Section 4 takes the analysis down to the zone level and explores the role of the stage three review industrial zones relative to each other and other zones in the district.

Section 5 looks at recent changes in the QLD industrial economy; trends and changes that have led to today's industrial economy in terms of its structure and geography.

Section 6 looks forward at projected growth of the industrial economy and explores macro and micro level drivers that influence and impact on current and future industrial land use activities.

Section 7 provides an overall summary and recommendations for the review of the specified industrial zones. A number of appendices contain further detail which supports sections 2-6.



2 QLD's Industrial Economy

This section provides an overview of QLD's industrial economy. It describes how the industrial economy has been identified, what activities it comprises of, what role it plays in the wider QLD economy and how it compares to the industrial economy of other areas in New Zealand. We then examine how that industrial economy is spread across the district's wards and explore similarities and differences between those wards and relative to neighbouring Cromwell Ward in Central Otago District (COD).

2.1 Definition Approach

The scope of the industrial economy in QLD will differ depending on whether you take a traditional 'economic sectors' approach, a 'zone enabled activity' approach or a 'land use/building typology' approach. It is relevant to consider all three (and highlight the differences).

It is often stated¹ that the industrial sector (aka Secondary Sector) comprises those activities that fall within ANZSIC 1-digit categories of C (Manufacturing), D (Electricity, Gas, Water and Waste Services) and E (Construction). The benefit of this Secondary Sector approach is that it allows for consistent comparison across districts/regions and transcends what might or might not have been enabled in local planning provisions. The limitation of this approach is that it does not fully capture the various land use activities (i.e. functional forms) of businesses within these sectors. A business coded within Utilities might operate a site that is purely office based or a specialist plant (i.e. water treatment facility) or a yard-based operation – all of which might seek very different locations (zones) within a district. This traditional definition of industrial sectors also misses out a range of businesses that tend to seek an industrial zone (transport/freight companies, wholesalers and bus depots for example) – that is, there is sometimes a disjoint between defined industrial sectors and actual industrial land use.

By comparison, if the activities currently enabled in the District's industrial zones are used to guide the potential scope of the industrial economy you get a much wider set of activities as follows:

- The Industrial Zone enables (permitted or controlled) a wide range of activities as long as they meet site and zone standards, with only commercial recreation discretionary; non-ancillary retail, airport operation, visitor accommodation and factory farming non-complying; and new activities sensitive to aircraft noise in the Queenstown Airport Outer Control Boundary prohibited.
- The Industrial B Zone enables (permitted or controlled) a more focussed range of activities as long as they meet site and zone standards, with commercial, community, factory farming, airport operation, and specified non-ancillary retail activity non-complying. Only visitor accommodation, unspecified non-ancillary retail and non-ancillary offices are prohibited. Non-complying retail includes all wholesaling sectors, equipment hire, food and beverage outlets, automotive and marine supplies, garden and patio supplies and more.

¹ <http://www.economywatch.com/world-industries/industrial-sector> for example.

- The Ballantyne Road Mixed Use Zone variously enables (permitted or controlled) a more focussed range of activities as long as they meet site and zone standards, with hire equipment and motor vehicle sales discretionary; commercial activities (other than showrooms, offices and yard based services), community activities, education, industrial activities, service activities, health and day care facilities, licensed premises, factory farming, motor vehicle repair and servicing, entertainment and waste management facilities all non-complying. No employment-based sector is prohibited across all precincts of the zone.

The disadvantage of adopting this ‘on the ground’ approach for this study is that permissive provisions (or approved discretionary or non-complying consents) mean the resulting industrial economy would be described too broadly and unduly overlaps the retail and commercial office economy for example. The advantage is that its more closely tied to the local characteristics of industrial land use activities in QLD – recognising the importance of service activity for example. Overall it is considered that (on its own) this is not an appropriate approach to identify the QLD industrial economy. It has a degree of circularity that will not allow the users of this report to consider true industrial land use activities independently of operative zone provisions.

The third potential approach to describing the scope of the industrial economy is based more on a land use and building typology perspective – identifying the activities that occupy the sorts of buildings or sites typically provided for or anticipated in industrial zones from an effects, urban form and amenity outcome². This includes, for example, warehouse type buildings/structures, factories, yards and other special purpose plants/buildings. When approached in this way (and there is a degree of overlap between this approach and the ‘on the ground’ approach), you generally capture a more diverse range of activities than the industrial sector approach but a smaller range (sub-set) of activities than the ‘on the ground’ approach (more focussed on the true industrial land use activities rather than all potentially enabled activities). An advantage of this approach is that it is expected to align reasonably closely with the site and zone standards of industrial zones. The disadvantage is that you end up with too many sectors/industries (defined by ANZSIC) for a concise description and analysis.

The implication is that any one approach is not appropriate for this study. Starting with core and commonly identified industrial sectors is the recommended starting point. Activities that are actually on the ground in QLD industrial zones, combined with knowledge of typical industrial land use typologies, can then be used as a filter/cross check. It is important to identify what falls outside and what falls within the identified industrial economy so that the scope of subsequent analysis in this report is clearly understood.

With the above issues in mind, M.E has identified the QLD industrial economy as follows:

1. We coded 2013 meshblocks to (Stage 1 decisions version) district plan zones by location in the study area – being all of QLD and Cromwell Ward in neighbouring COD. Meshblock boundaries are often coarser than zone boundaries. This means that the representation of zones using meshblocks is approximate only and at times captures multiple zones in one meshblock, so some detail is lost. Given the focus on industrial zones, capturing their full

² This was the approach taken in the BDCA demand modelling which looked at the relationship between building typologies/land use types and industries (at the 6-digit ANZSIC level) based on national averages and summarised to the 48-sector level. Refer Appendix 8 of the final BDCA. This also includes a step which weighted the 48 sector findings to align with the structure of the QLD economy (relative to the national average).



extent has been given priority but an implication of this approach is that it can include activity that sits within the meshblock but outside the industrial zone. This spatial coding of meshblocks is however common practice and allows for systematic desktop analysis of meshblock level data. The accuracy of the meshblock coding is discussed later in the report with regard to analysis of the four industrial zones of interest. The Council's own ground truthing data of each industrial zones offers greater accuracy of what activities are in the zone areas, so is a useful cross check (albeit that it is based on district plan 'activities' rather than 'ANZSIC industries' used in M.E's analysis, so is not directly comparable).

2. We appended 2017 business (and employment) counts by 6-digit ANZSIC to those meshblocks. This allowed us to summarise 2017 business (and employment) counts by 6-digit ANZSIC to approximate Stage 1 decisions version district plan zones and wards.
3. M.E then selected 6-digit ANZSICs where there was one or more business in either the combined Wanaka Industrial Zone areas, Arrowtown Industrial Zone area, Queenstown Industrial Zone area (Glenda Drive) or Gorge Road Business (Operative) Zone area that fell within the following industry sectors:
 - A - Agriculture, Forestry and Fishing Support Services (but excluding primary production)
 - C - Manufacturing
 - D - Waste Services (but excluding Electricity Supply, Gas Supply, and Water/Sewerage Supply Services)
 - E - Construction
 - F - Wholesale Trade
 - I - Transport, Postal and Warehousing
 - L - Rental and Hiring Services (but excluding Real Estate Services)
 - S - Other Services (but limited to automotive servicing, equipment/appliance repair services and laundry and dry-cleaning services)
4. The above step identified only the more industrial land use businesses present in QLD's industrial (or Business (operative)) zones. It does not pick up all businesses in these zones. The next step was to select 6-digit ANZSICs where there was one or more business (2017) in any other zone of QLD, on the basis that not all 'industrial' businesses locate in the industrial zones. This step was limited to ANZSICs not already selected in the following more typical industrial sectors:
 - C - Manufacturing
 - D - Waste Services (but excluding Electricity Supply, Gas Supply, and Water/Sewerage Supply Services)
 - E - Construction
 - F - Wholesale

- 
- I - Transport, Postal and Warehousing

5. The above two steps cumulatively captured all 6-digit ANZSICs in the Construction sector, but only selected 6-digit ANZSICs in other divisions.

The above approach identifies industrial businesses that are (given sufficient scale³) considered likely to seek an industrial zone location, or, alternatively occupy a building or site that one might typically associate with the urban form and amenity of industrial zones (i.e. Yards, warehouses, service depots, factories). These may include ancillary office and retail space.

As the selection of 6-digit ANZSICs is limited to what is actually present in QLD, the result is an industrial economy unique to QLD – as at 2017. This selection may not be representative of QLD’s past industrial economy or future industrial economy – both of which are analysed later in this report.

The final selection of 6-digit ANZSICs in QLD’s industrial economy has been cross checked with primary data collected by QLDC of business activities present in the 3 developed (fully or partially) zones of interest⁴. That data is more accurate in terms of what’s in and not in the actual zone boundaries but does not have an ANZSIC basis for categorising activities, so does not enable a direct comparison. However, M.E has directly compared the nature of businesses⁵ categorised as Industrial, Light Industrial, Outdoor Storage, Yard Based Industrial and Yard Based Service Activity with the industries included in the QLD industrial economy definition and they overlap. This data is discussed further in Section 4.4

As a final cross check, M.E has compared the selected industries in the identified industrial economy with M.E’s national dataset on the average mix of building / land use typologies by 6-digit ANZSIC⁶. This further confirmed that the identified QLD industrial economy does not miss any industries that have a high estimated share of activity in either Warehouses, Factories, Commercial Yards, Industrial Yards, Other Built Industrial or Outdoor Industrial typologies.

Having confirmed that the adopted approach has identified an appropriate set of businesses to describe QLD’s industrial economy, Appendix 1 provides a full list by 6-digit ANZSIC and related summary concordance.

2.2 Key Parameters of the QLD Industrial Economy

Figure 2.1 provides a high-level summary of the composition of the QLD industrial economy – as identified for this report. In total, it comprises just under 1,930 businesses and approximately 6,250 workers⁷ (2017). It therefore accounts for 25% of all business in the QLD economy in 2017 (7,710) and 22.5% of all workers (27,800).

³ The Business Directory data from Statistics NZ is limited to those businesses registered with IRD/ GST. It therefore excludes very small-scale businesses.

⁴ The Ballantyne Road Mixed Use Zone is a zone of interest to the review but is currently undeveloped/greenfield.

⁵ Based on the business name recorded in the QLDC ground truthing survey and estimating the ANZSIC this might fall within.

⁶ This data was used as a key input to the QLDC BDCA 2017.

⁷ Employment is measured as the ‘Modified Employment Count’. This includes the Employee Count reported by Statistics NZ and M.E estimates of Statistics NZ working proprietors excluded from the Employee Count by each ANZSIC.

Appendix 2 provides a detailed breakdown by 6-Digit ANZSIC. This highlights the diversity of businesses and the count within each 6-digit ANZSIC. Not all of the industrial economy contains much depth/choice between businesses. There are 27 businesses that are the only business in that ANZSIC. A further 38 businesses are one of just two in the same ANZSIC. This does not mean that these businesses are necessarily small, although some are. The two Photographic, Optical and Ophthalmic Equipment Manufacturing businesses, have an average employment count of 13-14 each. The two Metal and Mineral Wholesaling businesses have an average of 9 workers each. Some businesses are unique within the district because they serve a district (or larger) catchment (i.e. the market cannot sustain more than one). Others are unique because they are less common generally (rare).

At the other end of the scale, there are 392 businesses in the House Construction ANZSIC, 78 in the Electrical Services ANZSIC and 76 in the Painting and Decorating Services ANZSIC. We note that individual builders not employed (via wages or salary) by a building company are often registered as sole traders who contract themselves to other builders/building companies. This means that a builder and a building business can be one in the same. The average size of businesses in the House Construction ANZSIC is 3, so half of all businesses have one or two workers. There is approximately one electrician for every 4 house builders and one painter for every 5 house builders.

Overall, business that fall within the Construction 'division' (being the broadest aggregation in the ANZSIC framework) make up 61% of all businesses and 56% of all employment in the QLD industrial economy in 2017. Manufacturing accounts for 12% of businesses and 14% of employment (with an average business size of 4 workers each). The Wholesale Trade division makes up 8% and 9% respectively. Appendix 2 provides the structure at the detailed ANZSIC level.

Figure 2.1 – Summary Structure of QLD Industrial Economy 2017 – Total District

ANZSIC Division	Industrial Economy Selection	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n) *	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
A	Selected Ag/Forestry/Fishing Support Services	50	2.6%	0.7%	130	2.1%	0.5%	3
C	Manufacturing	225	11.7%	2.9%	862	13.8%	3.1%	4
D	Waste Services Group Only	15	0.8%	0.2%	103	1.6%	0.4%	7
E	Construction	1,168	60.6%	15.2%	3,465	55.5%	12.5%	3
F	Wholesale Trade	154	8.0%	2.0%	573	9.2%	2.1%	4
I	Selected Transport, Postal and Warehousing	85	4.4%	1.1%	312	5.0%	1.1%	4
L	Selected Rental and Hiring Services	128	6.6%	1.7%	371	5.9%	1.3%	3
S	Selected Other Services	102	5.3%	1.3%	434	6.9%	1.6%	4
QLD Industrial Economy		1,928	100.0%	25.0%	6,249	100.0%	22.5%	3
Rest of QLD Economy (all other ANZSICs)		5,782		75.0%	21,551	344.9%	77.5%	4
Total QLD Economy		7,710		100.0%	27,800		100.0%	4

Source: M.E, Statistics NZ Business Frame 2017

2.3 QLD Industrial Economy Comparison

The identified QLD industrial economy is unique to QLD and so comparisons with the other districts/cities in New Zealand would ideally require the industrial economy of those areas to be identified in a consistent way. That was not practical for the purpose of this study. However, we have compared the identified QLD industrial economy with the equivalent industries in other locations to see how this selection of businesses compares as a share of total economic activity, and also the relative mix of activities within those selected industries.

To compare QLD's industrial economy we have selected the two districts with a usually resident population (2017) slightly smaller than QLD (when ranked in order). These are Whakatane District and Taupo District. And the two districts with a slightly larger population (Upper Hutt City and Whanganui District). We have also considered Dunedin – being a large city near to Queenstown; Auckland City (as our largest metropolitan city); total Otago Region; and total New Zealand.

Figure 2.2 shows that the selected businesses that make up QLD's industrial economy account for 25% of total businesses. This is not dissimilar to New Zealand overall, Taupo District, and Auckland. In Upper Hutt, those selected businesses play a greater role in the local economy (31% of all businesses) and in Whakatane District, they play a lower role relative to the rest of the economy. Employment-wise, QLD's share of workers in the selected businesses is much smaller than all of the comparators. Nationally, those businesses account for 29% of total employment. This is due to the small average size of industrial businesses in QLD compared with elsewhere (3 per business compared to 5 per business for total New Zealand).

Figure 2.2 – Comparison of QLD Industrial Economy Industries Share of Total Economy 2017

Activity as Share of Total Economy	Queenstown-Lakes District	Taupo District	Upper Hutt City	Whanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
Businesses within QLD Industrial Economy	25.0%	25.8%	30.6%	23.7%	20.3%	22.9%	25.8%	22.8%	24.4%
Employment within QLD Industrial Economy	22.4%	24.9%	26.1%	31.5%	24.6%	23.2%	29.9%	25.5%	29.0%
Businesses in Manufacturing Sector	2.9%	4.1%	4.7%	4.9%	3.3%	4.0%	4.2%	3.4%	4.0%
Employment in Manufacturing Sector	3.1%	6.8%	7.7%	14.2%	7.3%	6.4%	9.4%	7.6%	9.7%

Source: M.E, Statistics NZ Business Frame 2017.

Figure 2.3 provides the same comparison of business counts falling within QLD's identified industrial economy but summarised by ANZSIC division. Appendix 3 provides the associated summary table. It shows that relative to the comparator areas, Construction accounts for a relatively higher share of total selected businesses, second only to Upper Hutt. Waste Services accounts for a similar share of businesses in all locations. Wholesale Trade in QLD also plays a lower relative role. This is consistent with the long distance of QLD from sea or air freight ports (in terms of wholesaling imported products) or proximity to a primary production hub. Combined with the lower relative role for Transport and Warehousing, it shows that QLD is not well located to be a logistics (distribution) hub.

The divisions where QLD plays a relatively stronger role in the selected businesses is Rental and Hiring Services (in an industrial or industrial service role). This activity includes 64 Other Goods and Equipment Rental and Hiring Not Elsewhere Classified businesses⁸, 39 Passenger Car Rental and Hiring businesses and 21 Other Motor Vehicle and Transport Equipment Rental and Hiring businesses. The majority of these businesses are sustained by Queenstown's significant tourism role.

⁸ Examples of primary activities includes art work rental, bike rental, camping equipment rental, costume hire, appliance rental, furniture rental, pot plant rental, suit hire and office machinery rental.



Figure 2.3 – Comparison of Share of Businesses (2017) within Identified QLD Industrial Economy

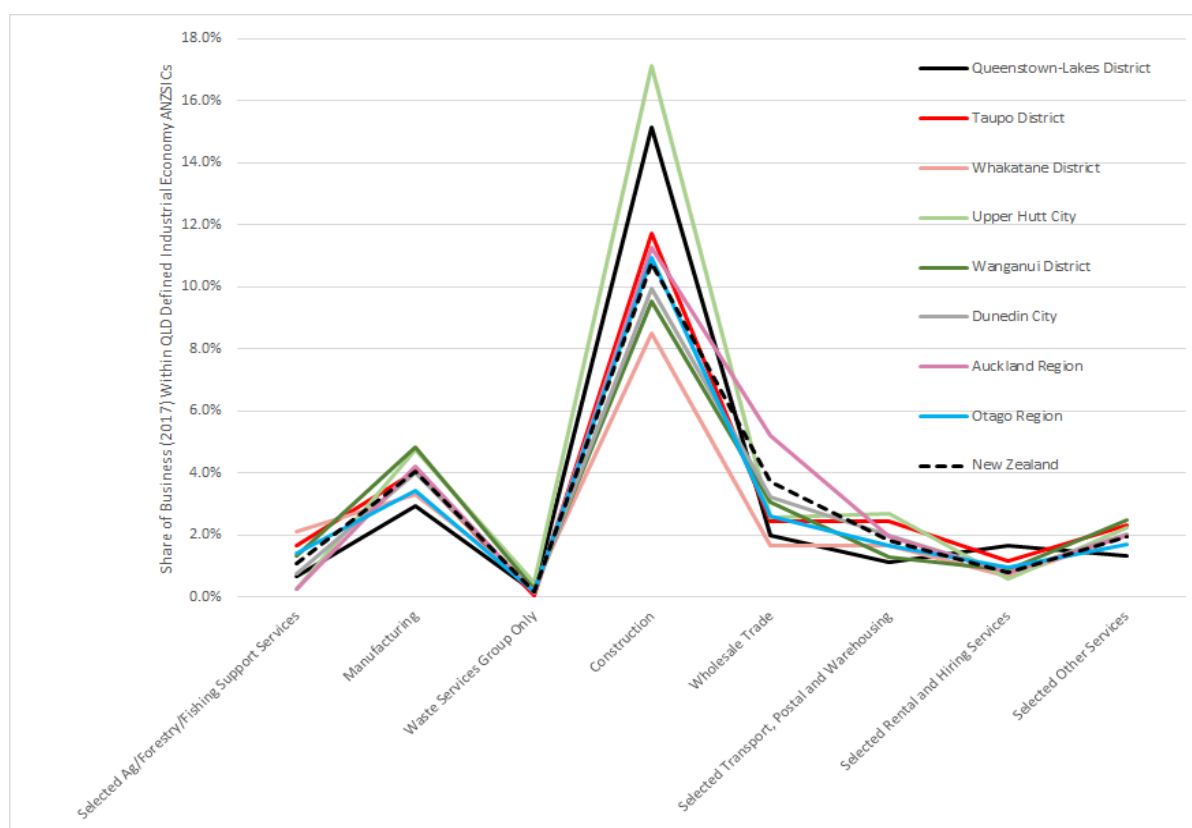


Figure 2.4 – Comparison of Share of Employment (2017) within Identified QLD Industrial Economy

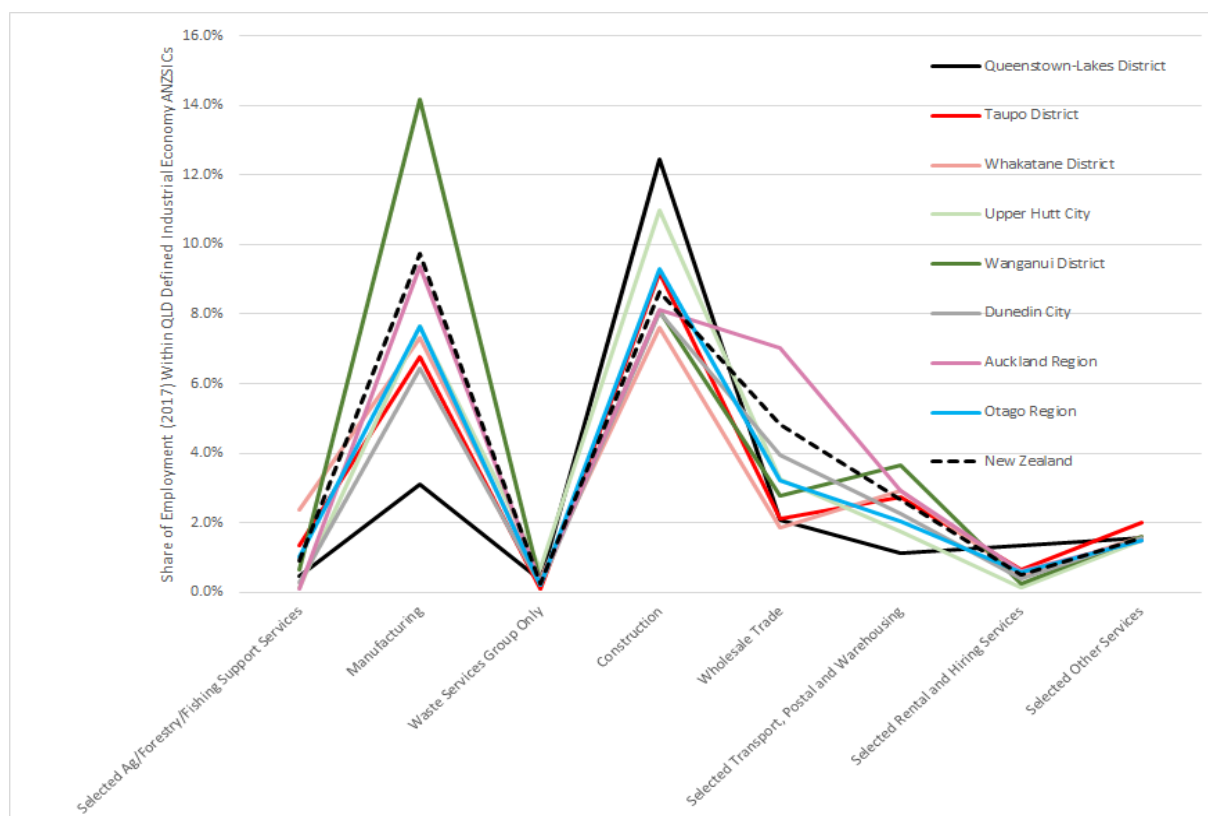


Figure 2.4 compares employment in the selected businesses by location. This further highlights the small scale of QLD's Manufacturing base in employment terms (as well as business terms) and the significant role of Construction within the QLD industrial economy compared to elsewhere (see also Appendix 3).

To provide another useful perspective to the comparison, we have looked at the total count of businesses in the Manufacturing division. This approach does not limit the business and employment count just to Manufacturing businesses that are found in QLD but captures each area's Manufacturing sector. Further detail is provided in Appendix 4.

Figure 2.2 (above) shows Manufacturing accounts for 2.9% of total businesses in QLD. This is low compared to the comparators, which range from a 3.3% share in Whakatane District and a 4.9% share in Whanganui. The share of employment in QLD's Manufacturing sector is 3.1% of total employment (2017). This is even lower relative to the comparators which range from 6.4% in Dunedin City to 14.2% in Whanganui District. This highlights that QLD does not have a strong manufacturing base and what businesses it does have in that division, tends to be smaller in scale than those found elsewhere.

Figure 2.5 – Comparison of Share of Businesses (2017) within Manufacturing Sector

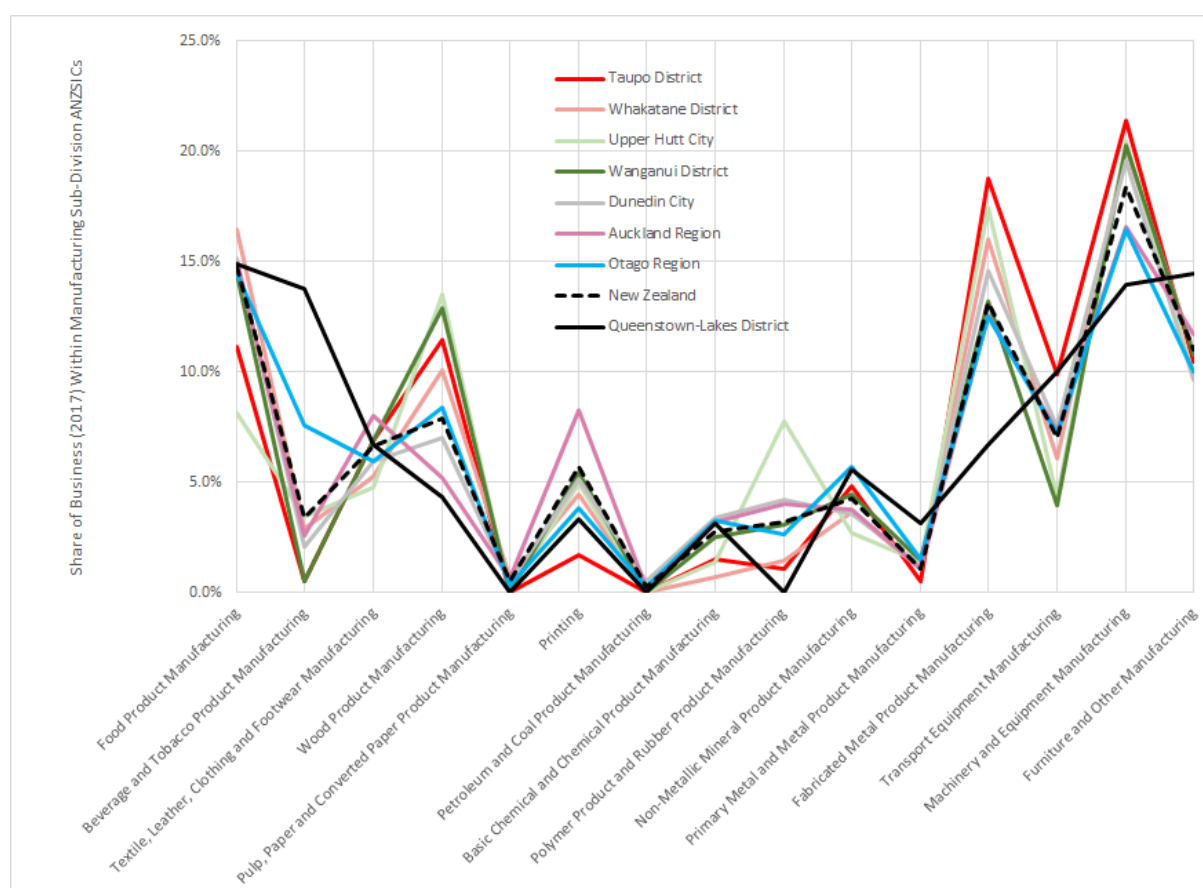
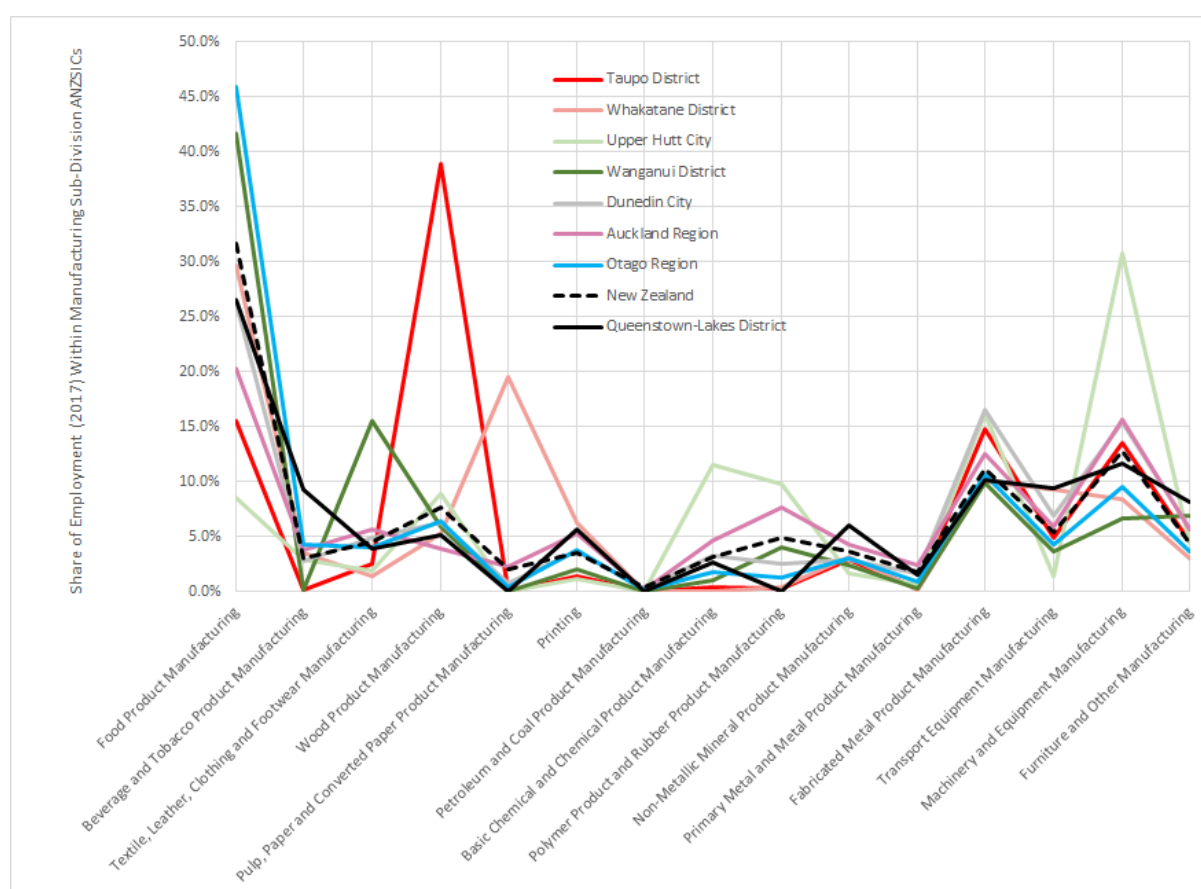


Figure 2.5 and Appendix 4 provide a breakdown of Manufacturing by ANZSIC Sub-Division. QLD's Manufacturing sector is not what is typically found in New Zealand. Relative to the comparators, QLD has a higher share of Beverage Product Manufacturing businesses, Non-Metallic Mineral Product

Manufacturing⁹, Transport Equipment Manufacturing and Furniture and Other Manufacturing businesses. In several Sub-Divisions, the mix of manufacturing businesses is similar to the national average. But QLD has a particularly small relative role in Wood Product Manufacturing, Printing, Polymer/Rubber Product Manufacturing, Fabricated Metal Product Manufacturing, and Machinery and Equipment Manufacturing – all heavy or factory-based Manufacturing activities. Figure 2.6 (and Appendix 4) further highlight the specialisation of other comparator areas and the more unique employment profile of QLD's Manufacturing sector.

Figure 2.6 – Comparison of Share of Employment (2017) within Manufacturing Sector



The same analysis of comparable Manufacturing employment is analysed using location quotients in Figure 2.7. The coloration is relative within each area to highlight those Manufacturing Sub-Divisions where employment is concentrated (or not¹⁰) relative to the national average. QLD has a higher concentration of Beverage Manufacturing employment, Furniture and Other Manufacturing, Transport Equipment

⁹ Examples of businesses include other ceramic product manufacturing, ready mixed concrete manufacturing, concrete product manufacturing, and other non-metallic mineral product manufacturing (for which primary activities include abrasives manufacturing, brick/silica lime manufacturing, imitation brick or stone manufacturing, chalk product manufacturing, insulation/glass fibre/mineral wool manufacturing, ground mineral earths manufacturing, processed lightweight aggregate manufacturing, slag crushing, stone product manufacturing).

¹⁰ Values greater than 1 show a relative concentration relative to the average (in this case total New Zealand). Values less than 1 show an under-representation and values close to one show a similar relative share as the average.

Manufacturing, Printing and Non-Metallic Mineral Product Manufacturing. These are the Manufacturing Sub-Divisions that QLD specialises in.

Figure 2.7 - Share of Employment (2017) within Manufacturing Sector – Location Quotient

Manufacturing Sub-Division	Queenstown-Lakes District	Taupo District	Upper Hutt City	Wanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
Food Product Manufacturing	0.8	0.5	0.3	1.3	0.9	0.8	0.6	1.5	1.0
Beverage and Tobacco Product Manufacturing	3.1	0.0	1.0	0.0	1.1	0.9	1.2	1.4	1.0
Textile, Leather, Clothing and Footwear Manufacturing	0.9	0.6	0.4	3.5	0.3	1.1	1.3	0.9	1.0
Wood Product Manufacturing	0.7	5.1	1.2	0.8	0.7	0.8	0.5	0.8	1.0
Pulp, Paper and Converted Paper Product Manufacturing	-	-	-	-	9.7	0.4	1.1	0.2	1.0
Printing	1.6	0.4	0.3	0.6	1.8	1.0	1.5	1.1	1.0
Petroleum and Coal Product Manufacturing	-	-	-	-	-	0.7	0.3	0.3	1.0
Basic Chemical and Chemical Product Manufacturing	0.8	0.1	3.7	0.3	0.0	1.0	1.5	0.6	1.0
Polymer Product and Rubber Product Manufacturing	-	0.0	2.0	0.8	0.1	0.5	1.6	0.3	1.0
Non-Metallic Mineral Product Manufacturing	1.6	0.8	0.5	0.7	0.8	0.8	1.2	0.8	1.0
Primary Metal and Metal Product Manufacturing	0.8	0.1	0.4	0.2	0.1	0.9	1.3	0.5	1.0
Fabricated Metal Product Manufacturing	0.9	1.3	1.5	0.9	0.9	1.5	1.1	1.0	1.0
Transport Equipment Manufacturing	1.7	0.9	0.3	0.7	1.7	1.3	1.1	0.8	1.0
Machinery and Equipment Manufacturing	0.9	1.1	2.4	0.5	0.7	1.2	1.2	0.7	1.0
Furniture and Other Manufacturing	1.9	1.0	1.0	1.6	0.7	1.3	1.3	0.8	1.0
Total Manufacturing Sector	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Source: M.E. Statistics NZ Business Frame 2017.

Colour scale applied within each area and not across all areas.

2.4 QLD Industrial Economy by Ward

This section looks at the distribution of QLD's industrial economy across the wards of the District – being Wanaka, Queenstown-Wakatipu (Queenstown) and Arrowtown. A key point of interest for this research was the role or relationship QLD has with the industrial economy in Cromwell in neighbouring COD – given that it is closer to either Queenstown or Wanaka, than Queenstown and Wanaka are to each other¹¹. We have therefore included the Cromwell Ward in our wider study area. Figure 2.8 also shows other geographic areas commonly referred to in this report.

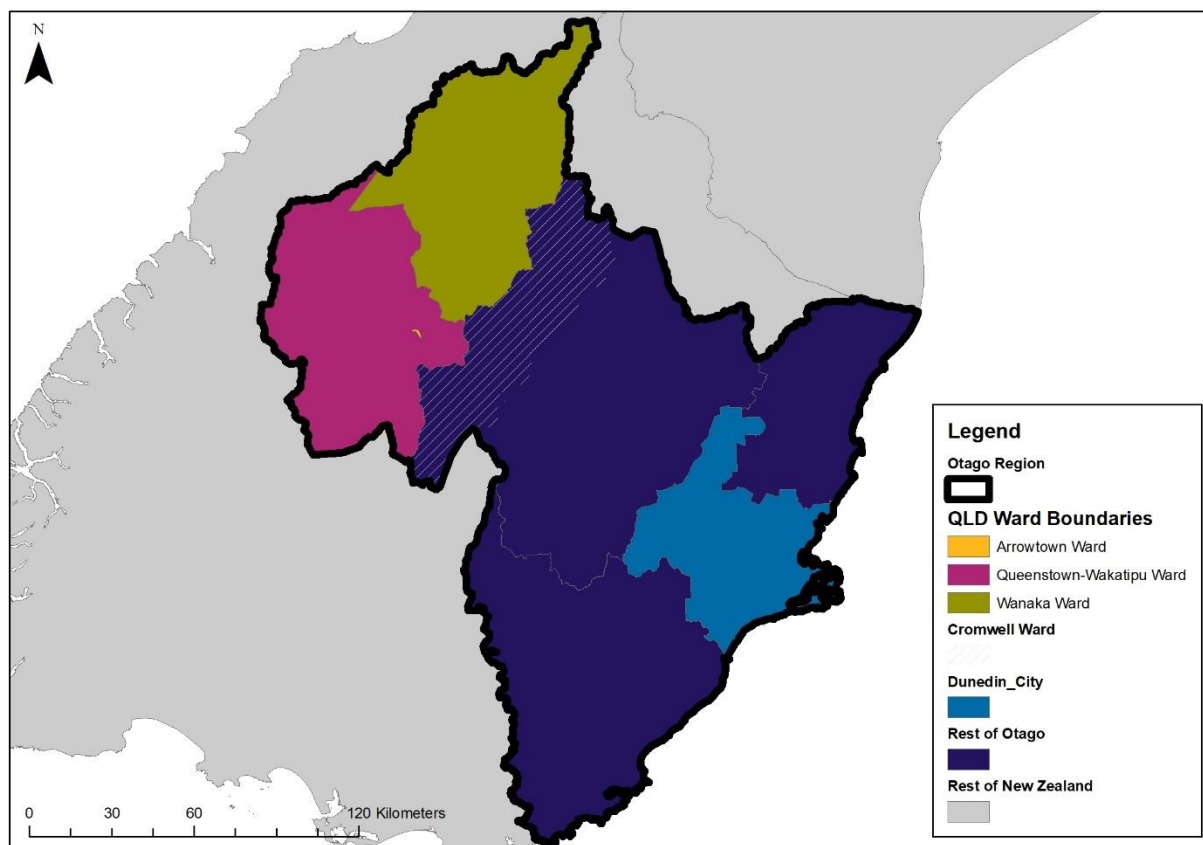
Figure 2.9 summarises the count of businesses in the QLD industrial economy that are located in each ward. Further detail of business counts by 6-Digit ANZSIC is also included later in this section. In total, the small Arrowtown Ward contains 133 businesses (2017) that fall within QLD's industrial economy. This is nearly 7% of the total industrial economy businesses in QLD (6% of the study area total). Within that ward, the industrial economy accounts for an above average share of all businesses (nearly 29%). This is due to the limited other business enabled zones in the ward, with the Town Centre zone being the main commercial centre. The Construction Division dominates the industrial economy in Arrowtown Ward (94 businesses or approximately 20% of total ward businesses). Manufacturing includes 13 businesses (nearly 3% of total ward businesses).

The Queenstown Ward contains nearly 1,060 businesses (2017) that fall within QLD's industrial economy. This is a significant 55% share of the total QLD industrial economy businesses (45% of the study area total). Within the Queenstown ward, the industrial economy accounts for a below average share of all businesses (just over 22%). The Construction Division dominates the industrial economy in Queenstown Ward (619 businesses or approximately 13% of total ward businesses). 53% of all Construction businesses in QLD are

¹¹ Approximately 54km between Wanaka and Cromwell, 60km between Queenstown and Cromwell and 67km between Wanaka and Queenstown.

located in Queenstown ward. Manufacturing includes 124 businesses (Just under 3% of total ward businesses).

Figure 2.8 – Map of Ward Boundaries in Study Area and Other Relevant Catchments



The Wanaka Ward contains nearly 740 businesses (2017) that fall within QLD’s industrial economy. This is a 34% share of the total QLD industrial economy businesses (31% of the study area total). Within the Wanaka ward, the industrial economy accounts for an above average share of all businesses (nearly 30%), so has a more significant local role than in Queenstown. The Construction Division dominates the industrial economy in Wanaka Ward (455 businesses or approximately 18% of total ward businesses). 39% of all Construction businesses in QLD are located in the Wanaka ward. Manufacturing includes 88 businesses (just under 4% of total ward businesses).

The Cromwell Ward contains just over 430 businesses (2017) that fall within QLD’s industrial economy description¹². This is an 18% share of the total industrial economy businesses in the wider QLD-Cromwell study area. This shows that while anecdotally Cromwell is known for its industrial hub, from a business count perspective (across the industries included in QLD’s industrial economy description) it is about 58% of the size of Wanaka’s industrial economy and 40% of the size of Queenstown ward’s industrial economy.

Within the Cromwell ward, the industrial economy accounts for an above average share of all businesses (nearly 34% compared to an average of 25% for total QLD). The Construction Division dominates the

¹² Refer earlier comment about comparability of QLD’s industrial economy with areas outside the district. This analysis does not necessarily represent Cromwell’s or COD’s industrial economy if approached in the same way.

industrial economy in Cromwell Ward (204 businesses or approximately 16% of total ward businesses). 15% of all Construction businesses in the study area are located in the Cromwell ward. Manufacturing includes 77 businesses (just under 6% of total ward businesses).

Figure 2.9 – Summary of Industrial Economy and Other Business by Ward 2017

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD	Cromwell	Total Study Area
A	Selected Ag/Forestry/Fishing Support Services	5	21	24	50	25	76
C	Manufacturing	13	124	88	225	77	302
D	Waste Services Group Only	-	9	6	15	1	16
E	Construction	94	619	455	1,168	204	1,372
F	Wholesale Trade	3	83	68	154	56	211
I	Selected Transport, Postal and Warehousing	4	56	25	85	33	117
L	Selected Rental and Hiring Services	6	86	36	128	12	140
S	Selected Other Services	9	60	34	102	23	125
QLD Industrial Economy		133	1,059	736	1,928	431	2,359
Rest of QLD Economy (all other ANZSICs)		328	3,716	1,738	5,782	842	6,624
Total QLD Economy		462	4,775	2,474	7,710	1,272	8,982
Division Share of Each Ward							
A	Selected Ag/Forestry/Fishing Support Services	1.1%	0.4%	1.0%	0.7%	2.0%	0.8%
C	Manufacturing	2.9%	2.6%	3.6%	2.9%	6.0%	3.4%
D	Waste Services Group Only	0.0%	0.2%	0.2%	0.2%	0.1%	0.2%
E	Construction	20.4%	13.0%	18.4%	15.2%	16.0%	15.3%
F	Wholesale Trade	0.6%	1.7%	2.8%	2.0%	4.4%	2.3%
I	Selected Transport, Postal and Warehousing	0.8%	1.2%	1.0%	1.1%	2.6%	1.3%
L	Selected Rental and Hiring Services	1.3%	1.8%	1.4%	1.7%	0.9%	1.6%
S	Selected Other Services	1.9%	1.3%	1.4%	1.3%	1.8%	1.4%
QLD Industrial Economy		28.9%	22.2%	29.8%	25.0%	33.8%	26.3%
Rest of QLD Economy (all other ANZSICs)		71.1%	77.8%	70.2%	75.0%	66.2%	73.7%
Total QLD Economy		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Ward Share of Each Division							
A	Selected Ag/Forestry/Fishing Support Services	9.8%	42.6%	47.6%	100.0%		
C	Manufacturing	5.9%	54.9%	39.2%	100.0%		
D	Waste Services Group Only	0.0%	58.5%	41.5%	100.0%		
E	Construction	8.0%	53.0%	39.0%	100.0%		
F	Wholesale Trade	1.7%	54.1%	44.2%	100.0%		
I	Selected Transport, Postal and Warehousing	4.1%	66.3%	29.6%	100.0%		
L	Selected Rental and Hiring Services	4.7%	67.4%	27.9%	100.0%		
S	Selected Other Services	8.6%	58.5%	32.9%	100.0%		
QLD Industrial Economy		6.9%	54.9%	38.2%	100.0%		
Rest of QLD Economy (all other ANZSICs)		5.7%	64.3%	30.0%	100.0%		
Total QLD Economy		6.0%	61.9%	32.1%	100.0%		

Source: M.E, Statistics NZ Business Frame 2017

Figure 2.10 compares industrial economy employment by ward across the study area. It includes average business size by Division. Compared to the business count summary, the key features are:

- The same two Divisions dominate – Construction followed by Manufacturing. However, in the Cromwell ward, employment in Selected Agricultural Support Services is a close second to Manufacturing, indicating these are large employers.
- The share of total ward employment that falls within the industrial economy is greater relative the business count share in both Arrowtown and Cromwell, again indicating a mix of larger businesses relative to the rest of the economy. In Arrowtown, industrial economy employment

makes up 31.5% of total ward employment (2017) and in Cromwell it is a significant 39.7%. This is an average business size of 3.1 and 5.4 respectively.

Figure 2.10 – Summary of Industrial Economy and Other Employment by Ward

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD	Cromwell	Total Study Area
A	Selected Ag/Forestry/Fishing Support Services	16	63	51	130	454	584
C	Manufacturing	41	549	272	862	469	1,331
D	Waste Services Group Only	-	35	68	103	6	109
E	Construction	284	2,121	1,060	3,465	726	4,191
F	Wholesale Trade	18	375	181	573	390	963
I	Selected Transport, Postal and Warehousing	4	244	64	312	202	514
L	Selected Rental and Hiring Services	25	294	51	371	22	393
S	Selected Other Services	29	280	126	434	64	498
QLD Industrial Economy		416	3,959	1,873	6,249	2,334	8,582
Rest of QLD Economy (all other ANZSICs)		906	15,409	5,237	21,551	3,548	25,099
Total QLD Economy		1,322	19,368	7,110	27,800	5,882	33,682
Division Share of Each Ward							
A	Selected Ag/Forestry/Fishing Support Services	1.2%	0.3%	0.7%	0.5%	7.7%	1.7%
C	Manufacturing	3.1%	2.8%	3.8%	3.1%	8.0%	4.0%
D	Waste Services Group Only	0.0%	0.2%	1.0%	0.4%	0.1%	0.3%
E	Construction	21.5%	11.0%	14.9%	12.5%	12.3%	12.4%
F	Wholesale Trade	1.3%	1.9%	2.5%	2.1%	6.6%	2.9%
I	Selected Transport, Postal and Warehousing	0.3%	1.3%	0.9%	1.1%	3.4%	1.5%
L	Selected Rental and Hiring Services	1.9%	1.5%	0.7%	1.3%	0.4%	1.2%
S	Selected Other Services	2.2%	1.4%	1.8%	1.6%	1.1%	1.5%
QLD Industrial Economy		31.5%	20.4%	26.3%	22.5%	39.7%	25.5%
Rest of QLD Economy (all other ANZSICs)		68.5%	79.6%	73.7%	77.5%	60.3%	74.5%
Total QLD Economy		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Ward Share of Each Division							
A	Selected Ag/Forestry/Fishing Support Services	12.4%	48.5%	39.0%	100.0%		
C	Manufacturing	4.8%	63.7%	31.6%	100.0%		
D	Waste Services Group Only	0.0%	33.9%	66.1%	100.0%		
E	Construction	8.2%	61.2%	30.6%	100.0%		
F	Wholesale Trade	3.1%	65.3%	31.6%	100.0%		
I	Selected Transport, Postal and Warehousing	1.2%	78.2%	20.5%	100.0%		
L	Selected Rental and Hiring Services	6.8%	79.4%	13.9%	100.0%		
S	Selected Other Services	6.6%	64.4%	29.0%	100.0%		
QLD Industrial Economy		6.7%	63.4%	30.0%	100.0%		
Rest of QLD Economy (all other ANZSICs)		4.2%	71.5%	24.3%	100.0%		
Total QLD Economy		4.8%	69.7%	25.6%	100.0%		
Ward Average Business Size (MECs)							
A	Selected Ag/Forestry/Fishing Support Services	3.3	2.9	2.1	2.6	17.9	7.7
C	Manufacturing	3.1	4.4	3.1	3.8	6.1	4.4
D	Waste Services Group Only	-	4.0	11.1	7.0	4.9	6.8
E	Construction	3.0	3.4	2.3	3.0	3.6	3.1
F	Wholesale Trade	6.6	4.5	2.7	3.7	6.9	4.6
I	Selected Transport, Postal and Warehousing	1.1	4.3	2.5	3.7	6.2	4.4
L	Selected Rental and Hiring Services	4.2	3.4	1.4	2.9	1.9	2.8
S	Selected Other Services	3.3	4.7	3.7	4.2	2.8	4.0
QLD Industrial Economy		3.1	3.7	2.5	3.2	5.4	3.6
Rest of QLD Economy (all other ANZSICs)		2.8	4.1	3.0	3.7	4.2	3.8
Total QLD Economy		2.9	4.1	2.9	3.6	4.6	3.7

Source: M.E, Statistics NZ Business Frame 2017

- In contrast, in Wanaka and Queenstown wards, the employment share in the industrial economy is less than the business share due to a large number of small businesses relative to other sectors.

For example, in Queenstown, the average size of industrial economy businesses is 3.7 compared to an average of 4.1 in the rest of the economy.

- A significant 61% of Construction employment in QLD is located in Queenstown ward (compared to 53% of Construction businesses). The average size is 3.4 workers compared to 2.3 in Wanaka.
- Nearly 64% of Manufacturing employment in QLD is located in the Queenstown ward (compared to nearly 55% of Manufacturing businesses). The average size is 4.4 workers compared to 3.1 in Wanaka.
- However, the average size of Manufacturing businesses in Cromwell ward is bigger again at 6.1. Similarly, the average size of construction firms is also larger than in Queenstown – 3.6 compared to 3.4.

2.5 Ward Specialisation vs Duplication

We have calculated location quotients based on employment in the industrial economy to help identify specialisation within each of the wards of QLD. Figure 2.11 shows that relative to the district overall, Selected Agricultural Support Services plays a greater role in Arrowtown and a moderate role in Wanaka, but is underrepresented in Queenstown Ward. In Arrowtown, the industrial economy is also more focussed on Construction, Rental and Hiring Services and Selected Other Services than elsewhere in the district. Wholesale Trade and Transport and Warehousing is not a focus for Arrowtown but is a focus for Queenstown. In the Wanaka ward, the industrial economy employment is more focussed on Waste Services (with Waste Busters likely to be the key player here), Construction and Manufacturing. Rental and Hiring Services is not a focus (relative to Queenstown), but this would be expected to change if commercial flights were to start at Wanaka Airport – so a change in structure of the industrial economy would be expected under that outcome.

Figure 2.11 QLD Location Quotients (Employment Based 2017) – Specialisation by Ward

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD
A	Selected Ag/Forestry/Fishing Support Services	2.6	0.7	1.5	1.0
C	Manufacturing	1.0	0.9	1.2	1.0
D	Waste Services Group Only	-	0.5	2.6	1.0
E	Construction	1.7	0.9	1.2	1.0
F	Wholesale Trade	0.6	0.9	1.2	1.0
I	Selected Transport, Postal and Warehousing	0.3	1.1	0.8	1.0
L	Selected Rental and Hiring Services	1.4	1.1	0.5	1.0
S	Selected Other Services	1.4	0.9	1.1	1.0
QLD Industrial Economy		1.4	0.9	1.2	1.0
Rest of QLD Economy (all other ANZSICs)		0.9	1.0	1.0	1.0
Total QLD Economy		1.0	1.0	1.0	1.0

Source: M.E, Statistics NZ Business Frame 2017.

Figure 2.12 includes Cromwell in the employment location quotient to examine relative specialisation across the study area. When viewed this way, we see that Cromwell is much more focussed on Agricultural

Support Services, Manufacturing, Wholesale Trade and Selected Transport, Postal and Warehousing compared to any of the areas within QLD (or QLD overall).

This indicates that Cromwell is a more attractive location for businesses in these Divisions. This is logical given the strategic location of Cromwell to both Wanaka and Queenstown (i.e. it is a central hub) and the benefit of this for Transport, Postal/Courier, Manufacturing, Warehousing and Wholesaling (which have a big focus on freight movements and distribution). Cromwell is also closer to Dunedin and the route to Christchurch. The specialisation in Agricultural Services is logically linked to the horticultural activities in Cromwell. These locational attributes mean that Queenstown and Wanaka are not likely to compete with Cromwell for larger businesses in these key sectors but may still support some smaller scale operations that have a more local operating focus.

Figure 2.12 – Study Area Location Quotients (Employment Based 2017) – Specialisation by Ward

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD	Cromwell *	Total Study Area
A	Selected Ag/Forestry/Fishing Support Services	0.7	0.2	0.4	0.3	4.5	1.0
C	Manufacturing	0.8	0.7	1.0	0.8	2.0	1.0
D	Waste Services Group Only	-	0.6	2.9	1.1	0.3	1.0
E	Construction	1.7	0.9	1.2	1.0	1.0	1.0
F	Wholesale Trade	0.5	0.7	0.9	0.7	2.3	1.0
I	Selected Transport, Postal and Warehousing	0.2	0.8	0.6	0.7	2.3	1.0
L	Selected Rental and Hiring Services	1.6	1.3	0.6	1.1	0.3	1.0
S	Selected Other Services	1.5	1.0	1.2	1.1	0.7	1.0
QLD Industrial Economy		1.2	0.8	1.0	0.9	1.6	1.0
Rest of QLD Economy (all other ANZSICs)		0.9	1.1	1.0	1.0	0.8	1.0
Total QLD Economy		1.0	1.0	1.0	1.0	1.0	1.0

Source: M.E, Statistics NZ Business Frame 2017. * Assesses Cromwell in the context of QLD's defined industrial economy. This does not fully represent Cromwell Ward's own industrial economy, or that of COD.

Taking a more detailed look at the comparative mix of activities in the industrial economy of each ward in the study area, the following table highlights not only the degree of overlap or duplication between ward businesses (by 6-Digit ANZSIC) but also the uniqueness of each Ward in terms of supply. This is another way of identifying specialisation of wards within the study area's industrial economy. It also contributes to an understanding on how dependent or independent each ward is of the others. This is relevant to the question on how much Queenstown's industrial economy "serves" Wanaka, and vice versa, and how much Cromwell "serves" QLD.

Key findings from Figure 2.13:

- There are just three ANZSICs in which Arrowtown Ward has the only businesses in QLD (i.e. those businesses are unique to Arrowtown). These include Milk and Cream Processing, Other Ceramic Product Manufacturing and Steel Pipe and Tube Manufacturing. All other industrial economy businesses are replicated in either Wanaka Ward, Queenstown Ward, or both (notwithstanding unique offerings of those businesses within each ANZSIC classification).
- There are 18 ANZSICs in which Wanaka Ward has the only businesses in QLD (i.e. those businesses are unique to Wanaka). In one of those ANZSICs (Pharmaceutical and Toiletry



Goods Wholesaling) there are 4 businesses¹³. In three of these ANZSICs there are two Wanaka businesses each. These include Human Pharmaceutical and Medicinal Product Manufacturing (very similar to Pharmaceutical and Toiletry Goods Wholesaling, potentially bringing that type of industry to 6 in total and suggesting that Wanaka attracts these types of businesses), Ice Cream Manufacturing and Book and Magazine Wholesaling. The remaining 14 unique ANZSICs contain one business each. All other industrial economy businesses are replicated in either Arrowtown Ward, Queenstown Ward, or both (notwithstanding unique offerings of those businesses within each ANZSIC classification).

- c) There are 20 ANZSICs in which Queenstown Ward has the only businesses in QLD (i.e. those businesses are unique to Queenstown). In three of those ANZSICs (Clothing Manufacturing, Printing and Fire and Security Alarm Installation Services) there are between 5 and 7 businesses each – suggesting that Queenstown attracts (or sustains) these types of businesses. In three of these ANZSICs there are between 3 and 4 businesses each. These include Interurban and Rural Bus Transport¹⁴, Timber Wholesaling and Computer and Computer Peripherals Wholesaling. In four of the unique ANZSICs in Queenstown Ward, there are 2 businesses each. The remaining 10 unique ANZSICs contain one business each. All other industrial economy businesses are replicated in either Arrowtown Ward, Wanaka Ward, or both (notwithstanding unique offerings of those businesses within each ANZSIC classification).
- d) Relative to the total QLD industrial economy, Cromwell Ward has a total of 16 unique manufacturing businesses, spread across 13 different manufacturing ANZSICs – several of which may be considered more heavy industrial activities (i.e. Tyre Manufacturing, Prefabricated Metal Building Manufacturing, Metal Furniture Manufacturing, Leather Tanning and Fur Processing and Log Sawmilling). Cromwell Ward also contains two unique wholesaling ANZSICs (Wool Wholesaling and Plumbing Goods Wholesaling) that are not present in QLD according to Statistics NZ. All other industrial economy businesses are replicated in QLD (notwithstanding unique offerings of those businesses within each ANZSIC classification).
- e) QLD has a large number of ANZSICs that are not present in Cromwell Ward. Several of which reflect the important tourism role that QLD has (and linked to the regional airport also in Queenstown). In some respects, Cromwell can be considered a satellite tourism destination relative to the Queenstown hub. Due to this, several industries supporting the tourism sector are likely to service demand in Cromwell from Queenstown. This may include, for example, Laundry and Dry Cleaning Services (10 in total in QLD and none in Cromwell Ward) and Interurban and Rural Bus Transport (4 in QLD). Care is needed as we have not considered the total COD and Alexandra is slightly larger than Cromwell. The proximity of Alexandra to Cromwell will influence what industrial land use activities are present in Cromwell, just as the proximity of both Wanaka and Queenstown will influence the mix of activities that can be sustained.

¹³ This will include businesses that wholesale cosmetics, medicine, perfume, toiletries, and veterinary medicines.

¹⁴ This is consistent with Queenstown having the only public bus transport within the district. Wanaka does not yet sustain public transport.

Figure 2.13 – Count of Businesses (2017) in QLD's Industrial Economy by Study Area Ward

Industry	ANZSIC06	Division	Arrowtown	Queenstown	Wanaka	Total QLD	Cromwell	Total Study Area
Industrial - House Construction	E301100	E	37	194	161	392	55	447
Industrial - Electrical Services	E323200	E	6	37	34	78	14	92
Industrial - Painting and Decorating Services	E324400	E	4	44	28	76	11	87
Industrial - Other Residential Building Construction	E301900	E	4	40	24	68	21	89
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	L	4	42	18	64	3	67
Industrial - Land Development and Subdivision	E321100	E	-	34	27	61	5	65
Industrial - Plastering and Ceiling Services	E324100	E	4	30	19	54	8	61
Industrial - Other Automotive Repair and Maintenance	S941900	S	5	31	16	52	8	60
Industrial - Other Agriculture and Fishing Support Services	A052900	A	5	21	24	50	25	76
Industrial - Plumbing Services	E323100	E	7	21	22	50	16	66
Industrial - Landscape Construction Services	E329100	E	1	25	21	47	16	63
Industrial - Tiling and Carpeting Services	E324300	E	3	26	17	46	4	50
Industrial - Site Preparation Services	E321200	E	5	24	17	46	6	52
Industrial - Bricklaying Services	E322200	E	6	20	14	40	6	46
Industrial - Passenger Car Rental and Hiring	L661100	L	2	27	10	39	-	39
Industrial - Carpentry Services	E324200	E	2	25	8	35	3	38
Industrial - Other Construction Services n.e.c.	E329900	E	1	14	19	33	7	41
Industrial - Road Freight Transport	I461000	I	-	19	11	30	18	48
Industrial - Other Heavy and Civil Engineering Construction	E310900	E	4	15	7	26	8	34
Industrial - Non-Residential Building Construction	E302000	E	2	17	6	25	4	29
Industrial - Courier Pick-up and Delivery Services	I510200	I	-	18	4	22	14	35
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	L	-	15	5	21	7	27
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	C	-	13	7	20	19	40
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	C	-	11	8	20	4	24
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	C	2	12	6	20	5	24
Industrial - Automotive Body, Paint and Interior Repair	S941200	S	1	12	7	19	6	26
Industrial - Roofing Services	E322300	E	-	8	9	17	4	22
Industrial - Concreting Services	E322100	E	1	10	6	17	5	22
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	F	-	11	7	17	3	20
Industrial - Air Conditioning and Heating Services	E323300	E	5	7	4	17	2	19
Industrial - Aircraft Manufacturing and Repair Services	C239400	C	-	6	10	16	1	17
Industrial - Road and Bridge Construction	E310100	E	-	11	4	15	3	18
Industrial - Commission Based Wholesaling	F380000	F	-	5	10	14	4	18
Industrial - Other Grocery Wholesaling	F360900	F	2	8	5	14	4	18
Industrial - Other Goods Wholesaling n.e.c.	F373900	F	-	8	6	14	2	16
Industrial - Liquor and Tobacco Product Wholesaling	F360600	F	-	7	4	11	4	15
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	C	1	6	3	10	3	13
Industrial - Laundry and Dry-Cleaning Services	S953100	S	1	6	3	10	-	10
Industrial - Other Agricultural Product Wholesaling	F331900	F	-	6	4	9	3	13
Industrial - Urban Bus Transport (Including Tramway)	I462200	I	-	7	2	9	-	9
Industrial - Other Building Installation Services	E323900	E	1	6	2	9	1	10
Industrial - Other Hardware Goods Wholesaling	F333900	F	-	6	3	9	7	16
Industrial - Other Warehousing and Storage Services	I530900	I	2	4	3	9	1	10
Industrial - Electronic (except Domestic Appliance) and Precision Equipment	S942200	S	-	3	5	8	-	8
Industrial - Clothing and Footwear Wholesaling	F371200	F	-	5	3	8	-	8
Industrial - Other Manufacturing n.e.c.	C259900	C	1	5	1	8	1	9
Industrial - Clothing Manufacturing	C135100	C	-	7	-	7	2	9
Industrial - Beer Manufacturing	C121200	C	-	5	2	7	1	8
Industrial - Solid Waste Collection Services	D291100	D	-	4	3	7	-	7
Industrial - Printing	C161100	C	-	6	-	6	-	6
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	C	-	2	4	6	-	6
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	C	-	4	2	6	4	10
Industrial - Other Transport Support Services n.e.c.	I529900	I	1	2	3	6	-	6
Industrial - Glazing Services	E324500	E	-	3	3	6	1	7
Industrial - Medical and Surgical Equipment Manufacturing	C241200	C	1	2	2	5	-	5
Industrial - Confectionery Manufacturing	C118200	C	-	3	2	5	-	5
Industrial - Iron Smelting and Steel Manufacturing	C211000	C	1	1	3	5	-	5
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	C	1	2	2	5	2	7
Industrial - Fire and Security Alarm Installation Services	E323400	E	-	5	-	5	-	5
Industrial - Hire of Construction Machinery with Operator	E329200	E	-	3	2	5	3	8
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	S	1	3	1	5	3	8
Industrial - Petroleum Product Wholesaling	F332100	F	-	2	3	5	-	5
Industrial - Toy and Sporting Goods Wholesaling	F373400	F	-	1	4	5	1	6
Industrial - Waste Treatment and Disposal Services	D292100	D	-	4	1	5	1	6
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	C	-	2	2	5	2	7
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	C	1	2	1	4	-	4
Industrial - Dairy Produce Wholesaling	F360300	F	1	2	1	4	-	4
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	C	-	2	2	4	1	5
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	L	-	2	2	4	2	6
Industrial - Motor Vehicle New Part Wholesaling	F350400	F	-	3	1	4	1	5
Industrial - Automotive Electrical Services	S941100	S	-	3	1	4	5	9
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	C	-	2	2	4	-	4
Industrial - Other Food Products Manufacturing n.e.c.	C119900	C	-	1	3	4	3	7

Figure 2.14 - Count of Businesses (2017) in QLD's Industrial Economy by Ward Continued...

Industry	ANZSIC06	Division	Arrowtown	Queenstown	Wanaka	Total QLD	Cromwell	Total Study Area
Industrial - Pharmaceutical and Toiletry Goods Wholesaling	F372000	F	-	-	4	4	-	4
Industrial - Interurban and Rural Bus Transport	I462100	I	-	4	-	4	-	4
Industrial - Other Water Transport Support Services	I521900	I	1	1	2	4	-	4
Industrial - Domestic Appliance Repair and Maintenance	S942100	S	1	2	1	4	1	5
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	C	-	2	2	4	2	6
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	F	-	2	2	4	8	12
Industrial - Concrete Product Manufacturing	C203400	C	-	3	1	4	1	5
Industrial - Jewellery and Silverware Manufacturing	C259100	C	1	2	-	3	1	4
Industrial - Cosmetic and Toiletry Preparation Manufacturing	C185200	C	-	2	1	3	-	3
Industrial - Ready-Mixed Concrete Manufacturing	C203300	C	-	2	1	3	3	6
Industrial - Fish and Seafood Wholesaling	F360400	F	-	2	1	3	-	3
Industrial - Furniture and Floor Coverings Wholesaling	F373100	F	-	1	2	3	-	3
Industrial - Timber Wholesaling	F333100	F	-	3	-	3	2	5
Industrial - Computer and Computer Peripherals Wholesaling	F349200	F	-	3	-	3	-	3
Industrial - Fruit and Vegetable Processing	C114000	C	-	2	1	3	1	4
Industrial - Structural Steel Fabricating	C222100	C	-	1	1	2	-	2
Industrial - Other Specialised Industrial Machinery and Equipment Wholesaling	F341900	F	-	1	1	2	3	6
Industrial - Other Machinery and Equipment Wholesaling n	F349900	F	-	2	-	2	-	2
Industrial - Boatbuilding and Repair Services	C239200	C	-	1	1	2	-	2
Industrial - Industrial and Agricultural Chemical Product Wholesaling	F332300	F	-	1	1	2	4	6
Industrial - Human Pharmaceutical and Medicinal Product Manufacturing	C184100	C	-	-	2	2	-	2
Industrial - Ice Cream Manufacturing	C113200	C	-	-	2	2	-	2
Industrial - Other Furniture Manufacturing	C251900	C	-	1	1	2	-	2
Industrial - Soft Drink, Cordial and Syrup Manufacturing	C121100	C	-	2	-	2	-	2
Industrial - Spirit Manufacturing	C121300	C	-	1	1	2	-	2
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	C	-	1	1	2	-	2
Industrial - Waste Remediation and Materials Recovery Services	D292200	D	-	1	1	2	-	2
Industrial - Structural Steel Erection Services	E322400	E	-	1	1	2	-	2
Industrial - Book and Magazine Wholesaling	F373500	F	-	-	2	2	-	2
Industrial - Car Wholesaling	F350100	F	-	1	1	2	1	3
Industrial - Kitchen and Dining Ware Wholesaling	F373300	F	-	1	1	2	-	2
Industrial - Textile Product Wholesaling	F371100	F	-	1	1	2	-	2
Industrial - Metal and Mineral Wholesaling	F332200	F	-	2	-	2	2	4
Industrial - Photographic, Optical and Ophthalmic Equipment Manufacturing	C241100	C	-	2	-	2	-	2
Industrial - Motor Vehicle Dismantling and Used Part Wholesaling	F350500	F	-	1	-	1	2	3
Industrial - Prepared Animal and Bird Feed Manufacturing	C119200	C	-	1	-	1	-	1
Industrial - Fruit and Vegetable Wholesaling	F360500	F	-	-	1	1	3	4
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	C	-	-	1	1	2	3
Industrial - Aluminium Rolling, Drawing, Extruding	C214200	C	-	-	1	1	-	1
Industrial - Architectural Aluminium Product Manufacturing	C222300	C	-	-	1	1	1	2
Industrial - Basic Inorganic Chemical Manufacturing	C181300	C	-	-	1	1	-	1
Industrial - Bread Manufacturing (Factory-based)	C117100	C	-	-	1	1	-	1
Industrial - Cereal, Pasta and Baking Mix Manufacturing	C116200	C	-	-	1	1	-	1
Industrial - Cleaning Compound Manufacturing	C185100	C	-	-	1	1	1	2
Industrial - Cured Meat and Smallgoods Manufacturing	C111300	C	-	1	-	1	-	1
Industrial - Electric Cable and Wire Manufacturing	C243100	C	-	1	-	1	-	1
Industrial - Milk and Cream Processing	C113100	C	1	-	-	1	-	1
Industrial - Mining and Construction Machinery Manufacturing	C246200	C	-	1	-	1	-	1
Industrial - Oil and Fat Manufacturing	C115000	C	-	1	-	1	1	2
Industrial - Other Ceramic Product Manufacturing	C202900	C	1	-	-	1	-	1
Industrial - Other Electrical Equipment Manufacturing	C243900	C	-	-	1	1	-	1
Industrial - Other Sheet Metal Product Manufacturing	C224000	C	-	-	1	1	-	1
Industrial - Other Specialised Machinery and Equipment Manufacturing	C246900	C	-	1	-	1	-	1
Industrial - Other Structural Metal Product Manufacturing	C222900	C	-	-	1	1	-	1
Industrial - Prefabricated Wooden Building Manufacturing	C149100	C	-	1	-	1	-	1
Industrial - Printing Support Services	C161200	C	-	1	-	1	-	1
Industrial - Steel Pipe and Tube Manufacturing	C212200	C	1	-	-	1	-	1
Industrial - Other Waste Collection Services	D291900	D	-	-	1	1	-	1
Industrial - Jewellery and Watch Wholesaling	F373200	F	-	-	1	1	-	1
Industrial - Meat, Poultry and Smallgoods Wholesaling	F360200	F	-	-	1	1	-	1
Industrial - Freight Forwarding Services	I529200	I	-	1	-	1	-	1
Rest of Manufacturing	multiple	C	-	-	-	-	16	16
Rest of Wholesale Trade	multiple	F	-	-	-	-	2	2
Total QLD Industrial Economy			133	1,059	736	1,928	431	2,359

Source: M.E, Statistics NZ Business Frame 2017, QLD and COD district plan zones.

denotes unique industries in that Ward (limited to comparison within QLD)

denotes unique industries in that Ward/District (limited to comparison btw. QLD and Cromwell Ward)

Overall, the Arrowtown industrial economy is only small with a selected range of businesses and is highly linked and dependent on activities located in the Queenstown Ward. For the most part, industrial



businesses are duplicated in both Queenstown and Wanaka. This is not to say that each ward does not have *some* businesses that service customers in the opposing ward, as this is always likely. But for the less specialist industries, it is more likely that the data supports a degree of independence – i.e. the wards are largely self-sufficient. A relatively small share of industrial economy businesses is unique to each ward. This alone is not evidence that these businesses service both wards in terms of customers (i.e. they might just be small businesses selling locally), but equally, it is not evidence that they don't.

This issue is examined further in Section 3 using another approach.



3 Economic Linkages and Relationships

This section further examines the trade relationships between the district's three wards and with the rest of New Zealand. The analysis draws on a detailed multi-regional input-output (MRIO) table developed by M.E and used to develop QLDC's employment growth projections within the Economic Futures Model™. This section also indicates the degree to which QLD's industrial economy services demand from other businesses (i.e. serves intermediate demand) versus final demand (households, government and tourists). This analysis provides an opportunity to verify the presence and strength of industrial economy relationships in the Wanaka-Queenstown-Cromwell triangle, and how this may or may not impact on the way that industrial zones in QLD need to be managed over the medium-term future.

3.1 Approach

Not all local demand for industrial activity will be met from within QLD and not all supply from local industrial activity will be consumed within QLD. QLD's industrial economy is shaped by demand and supply and exists within a wider industrial economy that means that what is supplied locally within QLD is only that which is not more efficiently supplied from elsewhere.

Put another way, not all industrial sectors are in demand in QLD and of those that are in demand, not all are economically viable to operate within the District. QLD relies, to some extent on industrial goods and services supplied from outside the District and is more self-sufficient in some industrial sectors than others. QLD also produces industrial products and services for markets elsewhere. These economic processes are captured in an MRIO table. This table underpins the economic growth projections developed in M.E's *Economic Futures Model (EFM)*, which has been used to develop employment projections for QLDC (specifically utilised in the Business Development Capacity Assessment 2017 report (M.E)).

The MRIO table is a proprietary product of M.E. Its built from an underlying national level Input-Output (IO) table produced by Statistics NZ. Developing sub-national and multi-regional tables from that base data requires a range of other data inputs and mathematical calibrations. Freight flow data for example helps to reconcile the flow of physical goods between regions. A gravity-based model helps calibrate flows of goods and services at a regional, district and sub-district level. This factors in both supply and demand calculations. Areas with an indicative surplus of supply relative to local demand are deemed to 'export' that surplus to areas with an indicative shortfall of supply relative to local demand, using distance decay and scale functions.

The MRIO developed for QLDC's EFM is a matrix showing gross output¹⁵ (\$m₂₀₁₆) by 48 economic sectors within Wanaka Ward, Arrowtown Ward, Queenstown Ward, Dunedin City, Rest of Otago Region and Rest

¹⁵ The measure of total economic activity in the production of new goods and services in an accounting period. Gross output represents, roughly speaking, the total value of sales by producing enterprises (their turnover) in an accounting period (e.g. a quarter or a year), before subtracting the value of intermediate goods used up in production.



of New Zealand. The rows of the matrix show outputs (products and services sold) from each sector in each location and the columns show the inputs (products and services purchased) by each sector in each location.

In simple terms, the matrix shows supply and demand, and balances so that all demand in New Zealand (by sectors as well as by final demand categories of households, local and central government and international exports) is met by total supply, including international imports and inputs to production such as labour (wages and salaries), operating surplus, consumption of fixed capital (stocks and depreciation), subsidies and taxes on products.

It is therefore possible to use the MRIO to trace, for any sector or final demand category, where their inputs (demands) come from, geographically and by supplying sector. This is termed the *upstream supply chain*. It is also possible to trace, for any sector or other factor of production (i.e. imports), where their outputs (products and services supplied) are consumed, geographically and by purchasing sector. This is termed the *downstream supply chain*.

For the purpose of this study, the 48 economic sectors have been broadly matched to the definition of QLD's industrial economy¹⁶. Using the MRIO table summarised in this way – a range of questions can be answered (within the limitations of the MRIO table) as follows:

- How self-sufficient each ward within the district is in terms of demand for industrial goods and services. Conversely, how reliant different wards are on industrial businesses elsewhere. This includes the share of intermediate demand and final demand met from outside the district.
- The degree to which Queenstown's industrial economy services demand in the Wanaka Ward and vice versa. This has been a key issue in the discourse around vacant capacity of industrial zoned land.
- How the industrial economy sustains activity in other sectors of the economy (as a consumer of intermediate goods and services) or as a supplier of intermediate goods and services). This helps illustrate the economic impact of the local industrial economy.
- Provides insights on what sorts of industrial goods and services are viable to supply within the District, versus industrial goods and services that are more efficient to purchase/import from outside the district (including from larger economies).

3.1.1 Limitations

While full calibration is achieved in generating the MRIO for QLD, the resulting structure of the matrix has not been verified by any primary research. This is a limitation of the model. M.E recommend that surveying of local businesses in the industrial economy would be useful to complement this analysis (and sense check the results). Further, the current MRIO does not explicitly isolate Cromwell Ward or even COD. This analysis is limited to 'Rest of Otago Region' which includes COD, parts of Waitaki District and Clutha District. In future the EFM could be expanded to distinguish COD or even Cromwell Ward. Lastly, the MRIO is based

¹⁶ In most cases, an individual sector in the 48-sector structure captures more 6-Digit ANSICS that included in QLD's industrial economy (where a selection has been made). The exception is the Manufacturing and Construction sectors, where all ANZSICs are included in the definition. Where the 6-Digit ANZSIC in the industrial economy definition accounted for minor share of the aggregate sector, the entire sector was excluded so as not to over represent the scale of the industrial economy in the analysis.

on output (\$ millions₂₀₁₆). This means that results are driven by products and services that are traded in large quantities and have high \$ values. The analysis is therefore not able to demonstrate the flow of 'units' (the quantum of products or services irrespective of value). This may under-represent the relationships of small-scale sectors, or sectors with low levels of low-priced outputs.

3.2 Consumption of Industrial Economy Output

Figure 3.1 summarises the destination of QLD's industrial economy gross output by value (2016). It shows that a significant 65% of QLD industrial economy output is consumed (purchased) within the district. In other words, a significant share of output is produced to meet local demand. A further 18% is consumed within the Rest of Otago (which includes, but is not limited to, Cromwell). The Rest of New Zealand (i.e. everywhere outside of Otago Region) consumes 11% of the output and Dunedin consumes 6% of the total.

Figure 3.1 – Destination of QLD Industrial Economy Output Value \$ (2016) – Share of Total

Demand/Consumption of Gross Output	QLD	Dunedin	Rest of Otago	Rest of NZ	Total
Total Business Sectors	38%	3%	11%	7%	59%
Final consumption expenditure - households	3%	1%	1%	1%	6%
Final consumption expenditure - NPISH *	0%	0%	0%	0%	0%
Final consumption expenditure - local government	1%	0%	0%	0%	1%
Final consumption expenditure - central government	0%	0%	0%	0%	1%
International Exports	9%	0%	0%	1%	10%
Gross fixed capital formation	13%	3%	6%	2%	24%
Change in inventories	0%	0%	0%	0%	0%
Total Consumption	65%	6%	18%	11%	100%

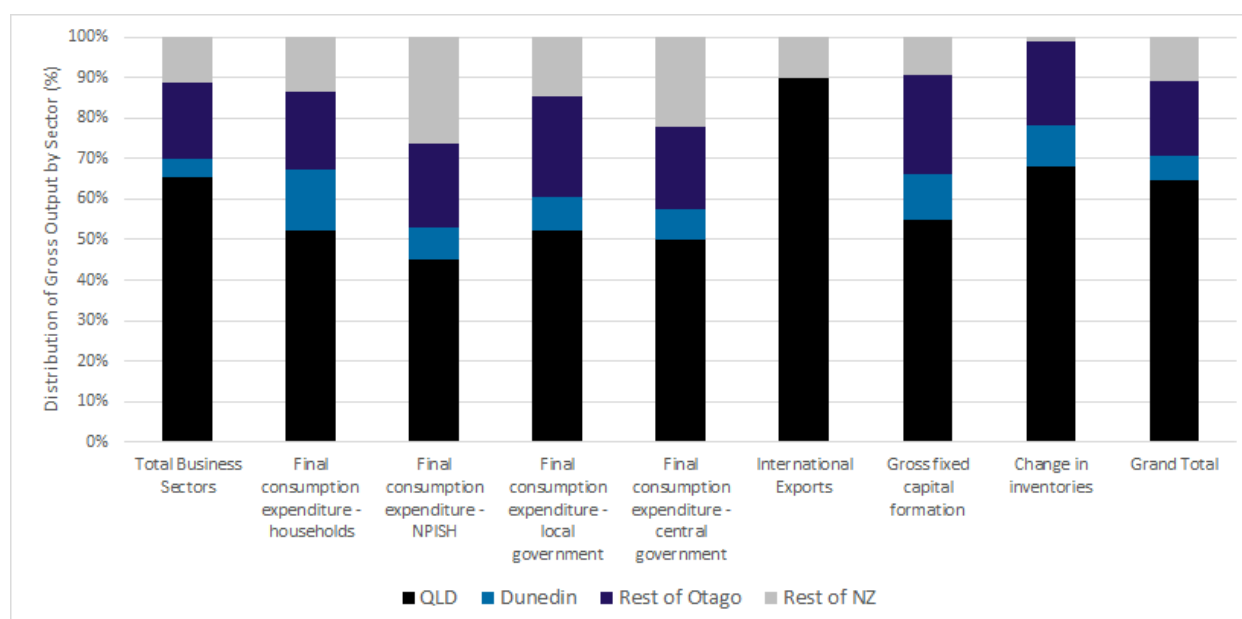
Source: M.E (Queenstown EFM Multi-Regional Input-Output Table) * Not for Profit Institutions Serving Households

Looking at the components of that consumption, in total 59% of the gross output from the QLD industrial economy is supplied to other business sectors (as intermediate inputs to production). An estimated 38% of consumption is to local businesses and 11% is to businesses in the Rest of Otago. Just 6% is supplied directly to households (which includes domestic visitors). In other words, only a small share of businesses in the industrial economy direct sell to the public. Local households make up half of that (3%). International exports (which includes tourists but would also including things like wine exports) take 10% of the output in value terms and the majority of the balance (24%) is directed at gross fixed capital formation (net investment by the producers).¹⁷

Figure 3.2 contains a graph of the same data. QLD consumption of QLD industrial economy output is shown in black. It is clear that the QLD industrial economy is largely (but not exclusively) sustained by local demand.

¹⁷ Gross fixed capital formation includes spending on land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; the construction of roads, railways, private residential dwellings, and commercial and industrial buildings. Disposal of fixed assets is taken away from the total.

Figure 3.2 – Destination of QLD Industrial Economy Output Value \$ (2016) – Share of Sector



To put QLD's industrial economy output consumption patterns in context, Figures 3.3 and 3.4 show the same results for the equivalent industrial economy sectors in Dunedin City¹⁸. It shows that a significant 81% of output is consumed within Dunedin City (compared to 65% for QLD). A further 9% is consumed by the Rest of Otago Region (compared to 18% for QLD). This means in relative terms the Rest of Otago Region is a more important market for QLD's industrial economy than it is to Dunedin's industrial economy. A further 9% of Dunedin's industrial output value is consumed in the Rest of New Zealand – also lower than the QLD share. Demand from QLD consumes 2% of the output from industrial businesses in Dunedin.

Figure 3.3 – Destination of Dunedin Industrial Economy Output Value \$ (2016) – Share of Total

Demand/Consumption of Gross Output	QLD	Dunedin	Rest of Otago	Rest of NZ	Total
Total Business Sectors	1%	38%	6%	5%	49%
Final consumption expenditure - households	0%	10%	1%	1%	12%
Final consumption expenditure - NPISH *	0%	0%	0%	0%	0%
Final consumption expenditure - local government	0%	1%	0%	0%	2%
Final consumption expenditure - central government	0%	1%	0%	0%	1%
International Exports	0%	12%	0%	2%	14%
Gross fixed capital formation	0%	19%	2%	1%	22%
Change in inventories	0%	0%	0%	0%	0%
Total Consumption	2%	81%	9%	9%	100%

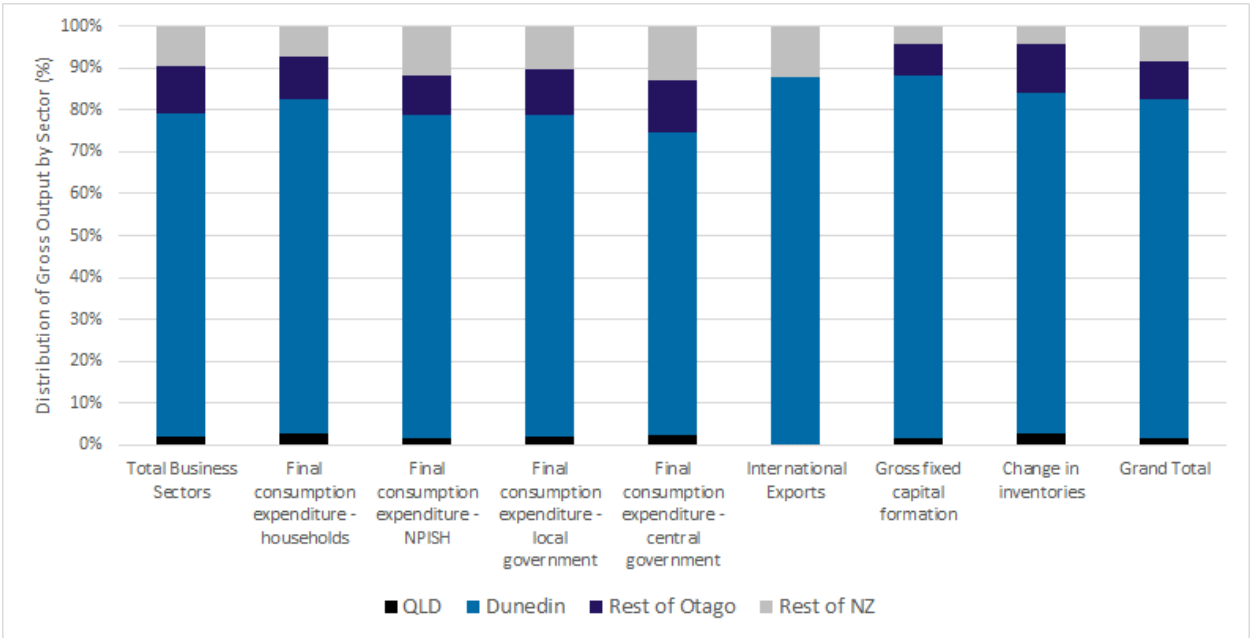
Source: M.E (Queenstown EFM Multi-Regional Input-Output Table) * Not for Profit Institutions Serving Households

Looking at the component of consumption for Dunedin, 49% of output value is consumed by other business sectors (this is much less than in QLD on 69%). A much higher share is direct sold to households (12%) and this is much more localised than in Queenstown. This will in part be driven by different domestic visitor rates. A higher share of Dunedin output goes to international exports (14% compared to 10%). This is likely

¹⁸ Note, this does not necessarily capture Dunedin City's total industrial economy.

to be focussed on international exports via freight (shipping) rather an international tourist component as in QLD. A slightly lower share is invested in fixed capital in Dunedin (22% compared to 24%).

Figure 3.4 – Destination of Dunedin Industrial Economy Output Value \$ (2016) – Share of Sector



In comparison to Dunedin, QLD is not as self-sufficient in terms of meeting its own demand for industrial goods and services. QLD is more reliant on bringing products and services in but is a small economy overall and this is likely to be the case for all districts of QLD’s size. However, QLD’s distance from other larger economies most likely means that QLD is still more self-sufficient than many comparably sized districts that benefit from closer proximity to major cities.

3.3 Upstream and Downstream Linkages

This section examines these patterns at a ward level. Figure 3.5 looks at the upstream and downstream relationships for the industrial economy in **Queenstown Ward**. A more detailed table, that identifies the ‘top 8’ sectors of supply and demand by location is included in Appendix 5.

In terms of where the industrial economy in Queenstown ward gets its inputs to production (upstream supply chain), 48.3% is non-product or service related. I.e. is the labour (measured as compensation to employees, 18.5%), international imports (10.3%), profit (operating surplus, 10.9%) and other. Of the product and service inputs, 30.2% of inputs by value come from other businesses within Queenstown ward (this is the degree to which it is locally self-sufficient). A moderate share (12.8%) comes from the Rest of New Zealand (that is areas outside of Otago). Just under 5% of inputs by value (4.9%) come from Rest of Otago Region (which includes but is not limited to Cromwell). The next largest share comes from suppliers in Dunedin (1.8% of total input value). Just 1.2% of inputs by value come from businesses in the Wanaka Ward.

In terms of the ‘economic triangle’ of Queenstown-Wanaka-Cromwell; Rest of Otago is relatively more important to meeting demand arising from Queenstown’s industrial economy than Wanaka is. Note, this is

not demand arising from the *all* sectors of the economy (including households), just the needs of the businesses in Queenstown's industrial economy to supply their products and services. Put simply, there is more demand related trade flowing between Rest of Otago and Queenstown than there is flowing from Wanaka to Queenstown. The key sectors that Queenstown's industrial economy businesses rely on in Rest of Otago include Construction products/services (0.9% of total input value) and Wood Product Manufacturing (0.6%) (Appendix 5).

Figure 3.5 – Summary of Queenstown Ward Industrial Economy Upstream & Downstream Linkages

Location / Sector	Upstream (Inputs)	Downstream (Outputs)
Wanaka Ward Businesses	1.2%	1.5%
Wanaka Ward Households/Govt		0.4%
Wanaka Ward Other Consumption/Intl. Exports		0.8%
Sub-Total Wanaka Ward	1.2%	2.7%
Arrowtown Ward Businesses	0.7%	1.0%
Arrowtown Ward Households/Govt		0.2%
Arrowtown Ward Other Consumption/Intl. Exports		0.8%
Sub-Total Arrowtown Ward	0.7%	1.9%
Queenstown Ward Businesses	30.2%	37.5%
Queenstown Ward Households/Govt		3.1%
Queenstown Ward Other Consumption/Intl. Exports		22.2%
Sub-Total Queenstown Ward	30.2%	62.8%
Dunedin Businesses	1.8%	2.4%
Dunedin Households/Govt		0.8%
Dunedin Other Consumption/Intl. Exports		2.3%
Sub-Total Dunedin	1.8%	5.6%
Rest of Otago Businesses	4.9%	10.1%
Rest of Otago Households/Govt		1.1%
Rest of Otago Other Consumption/Intl. Exports		5.3%
Sub-Total Rest of Otago	4.9%	16.6%
Rest of New Zealand Businesses	12.8%	6.3%
Rest of New Zealand Households/Govt		1.0%
Rest of New Zealand Other Consumption/Intl. Exports		3.0%
Sub-Total Rest of New Zealand	12.8%	10.4%
Taxes on products	0.9%	
Compensation of Employees	18.5%	
Operating Surplus	10.9%	
Consumption of Fixed Capital	7.2%	
Other Taxes on products	0.7%	
Subsidies	-0.2%	
International Imports	10.3%	
Sub-Total Other	48.3%	0.0%
Total	100.0%	100.0%

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

In terms of downstream relationships of the Queenstown industrial economy, an estimated 62.8% of product and service value is consumed by businesses and final demand sectors within Queenstown. The Construction sector consumes 21.4% of total output value. A moderately significant 16.6% of output value is consumed in the Rest of Otago, again primarily the Construction sector in that catchment. A further 10.4% is consumed by demand arising in the Rest of New Zealand and 5.6% is consumed by demand arising in Dunedin City. Just 2.7% of output by value is destined for Wanaka ward (primarily the construction sector there). Arrowtown consumes 1.9% of output.

We can conclude from this analysis, that most of the output of the Queenstown industrial economy stays local. The Rest of Otago market is more important to Queenstown than the Wanaka market in terms of selling its products and services.

Figure 3.6 looks at the upstream and downstream relationships for the industrial economy in **Wanaka Ward**. A more detailed table, that identifies the 'top 8' sectors of supply and demand by location is included in Appendix 6.

Figure 3.6 – Summary of Wanaka Ward Industrial Economy Upstream & Downstream Linkages

Location / Sector	Upstream (Inputs)	Downstream (Outputs)
Wanaka Ward Businesses	27.8%	32.0%
Wanaka Ward Households/Govt		3.0%
Wanaka Ward Other Consumption/Intl. Exports		18.9%
Sub-Total Wanaka Ward	27.8%	53.9%
Arrowtown Ward Businesses	0.5%	0.7%
Arrowtown Ward Households/Govt		0.3%
Arrowtown Ward Other Consumption/Intl. Exports		0.4%
Sub-Total Arrowtown Ward	0.5%	1.4%
Queenstown Ward Businesses	3.1%	3.4%
Queenstown Ward Households/Govt		1.0%
Queenstown Ward Other Consumption/Intl. Exports		1.0%
Sub-Total Queenstown Ward	3.1%	5.4%
Dunedin Businesses	2.3%	3.1%
Dunedin Households/Govt		1.4%
Dunedin Other Consumption/Intl. Exports		3.1%
Sub-Total Dunedin	2.3%	7.5%
Rest of Otago Businesses	5.8%	12.1%
Rest of Otago Households/Govt		2.3%
Rest of Otago Other Consumption/Intl. Exports		6.4%
Sub-Total Rest of Otago	5.8%	20.8%
Rest of New Zealand Businesses	14.7%	6.6%
Rest of New Zealand Households/Govt		1.0%
Rest of New Zealand Other Consumption/Intl. Exports		3.4%
Sub-Total Rest of New Zealand	14.7%	11.0%
Taxes on products	1.0%	
Compensation of Employees	18.0%	
Operating Surplus	10.5%	
Consumption of Fixed Capital	4.6%	
Other Taxes on products	0.7%	
Subsidies	-0.2%	
International Imports	11.2%	
Sub-Total Other	45.8%	0.0%
Total	100.0%	100.0%

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

In terms of where the industrial economy in Wanaka ward gets its inputs to production (upstream supply chain), 45.8% is non-product or service related. I.e. is the labour, (18.0%), international imports (11.2%), profit (operating surplus, 10.5%) and other. Of the product and service inputs, 27.8% of inputs by value come from other businesses within Wanaka ward (this is the degree to which it is locally self-sufficient, which is much less than in Queenstown). A moderate share (14.7%) comes from the Rest of New Zealand (that is areas outside of Otago). Again, this is higher than for Queenstown. Just under 6% of inputs by value (5.8%) come from Rest of Otago Region (which includes but is not limited to Cromwell). The next largest



share comes from suppliers in Queenstown Ward (3.1% of total input value). Just 2.3% of inputs by value come from businesses in Dunedin City. Arrowtown plays a very minor supply role.

In terms of the 'economic triangle' of Queenstown-Wanaka-Cromwell; Rest of Otago is relatively more important to meeting demand arising from Wanaka's industrial economy than Queenstown is. Note, this is not demand arising from the *all* sectors of the economy (including households), just the needs of the businesses in Wanaka's industrial economy to supply their products and services. Put simply, there is more demand related trade flowing between Rest of Otago and Wanaka than there is flowing from Queenstown to Wanaka. The key sectors that Wanaka's industrial economy businesses rely on in Rest of Otago include Construction products/services (1.2% of total input value) and Wood Product Manufacturing (0.6%) (Appendix 6).

In terms of downstream relationships of the Wanaka industrial economy, an estimated 53.9% of product and service value is consumed by businesses and final demand sectors within Wanaka. The Construction sector consumes 20.6% of total output value. A moderately significant 20.8% of output value is consumed in the Rest of Otago, again primarily the Construction sector in that catchment. A further 11.0% is consumed by demand arising in the Rest of New Zealand and 7.5% is consumed by demand arising in Dunedin City. Just 5.4% of output by value is destined for Queenstown ward (primarily the construction sector there). Arrowtown consumes 1.4% of output.

We can conclude from this analysis, that most of the output of the Wanaka industrial economy stays local. The Rest of Otago market is more important to Wanaka than the Queenstown market in terms of selling its products and services.

Figure 3.7 looks at the upstream and downstream relationships for the industrial economy in **Arrowtown Ward**. A more detailed table, that identifies the 'top 8' sectors of supply and demand by location is included in Appendix 7.

In terms of where the industrial economy in Arrowtown ward gets its inputs to production (upstream supply chain), 44.7% is non-product or service related. I.e. is the labour, (16.9%), international imports (11.5%), profit (operating surplus, 10.1%) and other. Of the product and service inputs, 18.9% of inputs by value come from other businesses within Arrowtown ward (this is the degree to which it is locally self-sufficient, which is much less than in Queenstown or Wanaka – not unexpected given its size). A moderate share (14.5%) comes from the Rest of New Zealand (that is areas outside of Otago). Again, this is higher than for Queenstown but similar to Wanaka. Just under 6% of inputs by value (5.9%) come from Rest of Otago Region (which includes but is not limited to Cromwell). The next largest share comes from suppliers in Queenstown Ward (10.5% of total input value). Just 3.2% of inputs by value come from businesses in Wanaka Ward. Dunedin City plays a more minor supply role.

In terms of the 'economic triangle', and notwithstanding the clearly important relationship Arrowtown has with wider Queenstown; Rest of Otago is relatively more important to meeting demand arising from Arrowtown's industrial economy than Wanaka is. Note, this is not demand arising from the *all* sectors of the economy (including households), just the needs of the businesses in Arrowtown's industrial economy to supply their products and services. Put simply, there is more demand related trade flowing between Rest of Otago and Arrowtown than there is flowing from Wanaka to Arrowtown. The key sectors that Arrowtown's industrial economy businesses rely on in Rest of Otago include (again) Construction products/services (1.3% of total input value) and Wood Product Manufacturing (0.8%) (Appendix 7).

Figure 3.7 – Summary of Arrowtown Ward Industrial Economy Upstream & Downstream Linkages

Location / Sector	Upstream (Inputs)	Downstream (Outputs)
Wanaka Ward Businesses	3.2%	2.1%
Wanaka Ward Households/Govt		0.3%
Wanaka Ward Other Consumption/Intl. Exports		0.9%
Sub-Total Wanaka Ward	3.2%	3.3%
Arrowtown Ward Businesses	18.9%	22.0%
Arrowtown Ward Households/Govt		0.9%
Arrowtown Ward Other Consumption/Intl. Exports		14.6%
Sub-Total Arrowtown Ward	18.9%	37.6%
Queenstown Ward Businesses	10.5%	8.3%
Queenstown Ward Households/Govt		0.8%
Queenstown Ward Other Consumption/Intl. Exports		3.3%
Sub-Total Queenstown Ward	10.5%	12.4%
Dunedin Businesses	2.2%	3.3%
Dunedin Households/Govt		0.4%
Dunedin Other Consumption/Intl. Exports		4.2%
Sub-Total Dunedin	2.2%	7.9%
Rest of Otago Businesses	5.9%	15.0%
Rest of Otago Households/Govt		0.7%
Rest of Otago Other Consumption/Intl. Exports		9.3%
Sub-Total Rest of Otago	5.9%	25.1%
Rest of New Zealand Businesses	14.5%	8.2%
Rest of New Zealand Households/Govt		1.0%
Rest of New Zealand Other Consumption/Intl. Exports		4.6%
Sub-Total Rest of New Zealand	14.5%	13.8%
Taxes on products	1.1%	
Compensation of Employees	16.9%	
Operating Surplus	10.1%	
Consumption of Fixed Capital	4.7%	
Other Taxes on products	0.6%	
Subsidies	-0.3%	
International Imports	11.5%	
Sub-Total Other	44.7%	0.0%
Total	100.0%	100.0%

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

In terms of downstream relationships of the Arrowtown industrial economy, an estimated 37.6% of product and service value is consumed by businesses and final demand sectors within Arrowtown. The Construction sector consumes 17.1% of total output value. A moderately significant 25.1% of output value is consumed in the Rest of Otago, again primarily the Construction sector in that catchment. A further 13.8% is consumed by demand arising in the Rest of New Zealand and 12.4% is consumed by demand arising in Queenstown ward. An estimated 7.9% of output by value is destined for Dunedin City (primarily the construction sector there). Wanaka consumes 3.3% of output.

We can conclude from this analysis, that most of the output of the Arrowtown industrial economy stays local (including Queenstown). The Rest of Otago market is more important to Arrowtown than the Wanaka market in terms of selling its products and services.

Finally, Figure 3.8 looks at the upstream and downstream relationships for the industrial economy in **Rest of Otago**. While this is not specific to Cromwell (the catchment of most interest to QLDC's enquiry), it is the

best information we have to date. A more detailed table, that identifies the ‘top 8’ sectors of supply and demand by location is included in Appendix 8.

Figure 3.8 – Summary of Rest of Otago Industrial Economy Upstream & Downstream Linkages

Location / Sector	Upstream (Inputs)	Downstream (Outputs)
Wanaka Ward Businesses	1.8%	0.8%
Wanaka Ward Households/Govt		0.2%
Wanaka Ward Other Consumption/Intl. Exports		0.4%
Sub-Total Wanaka Ward	1.8%	1.5%
Arrowtown Ward Businesses	0.4%	0.2%
Arrowtown Ward Households/Govt		0.1%
Arrowtown Ward Other Consumption/Intl. Exports		0.1%
Sub-Total Arrowtown Ward	0.4%	0.4%
Queenstown Ward Businesses	2.9%	1.8%
Queenstown Ward Households/Govt		0.5%
Queenstown Ward Other Consumption/Intl. Exports		0.7%
Sub-Total Queenstown Ward	2.9%	3.0%
Dunedin Businesses	7.8%	6.7%
Dunedin Households/Govt		3.5%
Dunedin Other Consumption/Intl. Exports		5.1%
Sub-Total Dunedin	7.8%	15.3%
Rest of Otago Businesses	29.6%	21.2%
Rest of Otago Households/Govt		2.7%
Rest of Otago Other Consumption/Intl. Exports		39.9%
Sub-Total Rest of Otago	29.6%	63.8%
Rest of New Zealand Businesses	20.4%	6.5%
Rest of New Zealand Households/Govt		2.2%
Rest of New Zealand Other Consumption/Intl. Exports		7.3%
Sub-Total Rest of New Zealand	20.4%	16.0%
Taxes on products	0.7%	
Compensation of Employees	18.9%	
Operating Surplus	5.8%	
Consumption of Fixed Capital	4.4%	
Other Taxes on products	0.6%	
Subsidies	-0.4%	
International Imports	7.1%	
Sub-Total Other	37.2%	0.0%
Total	100.0%	100.0%

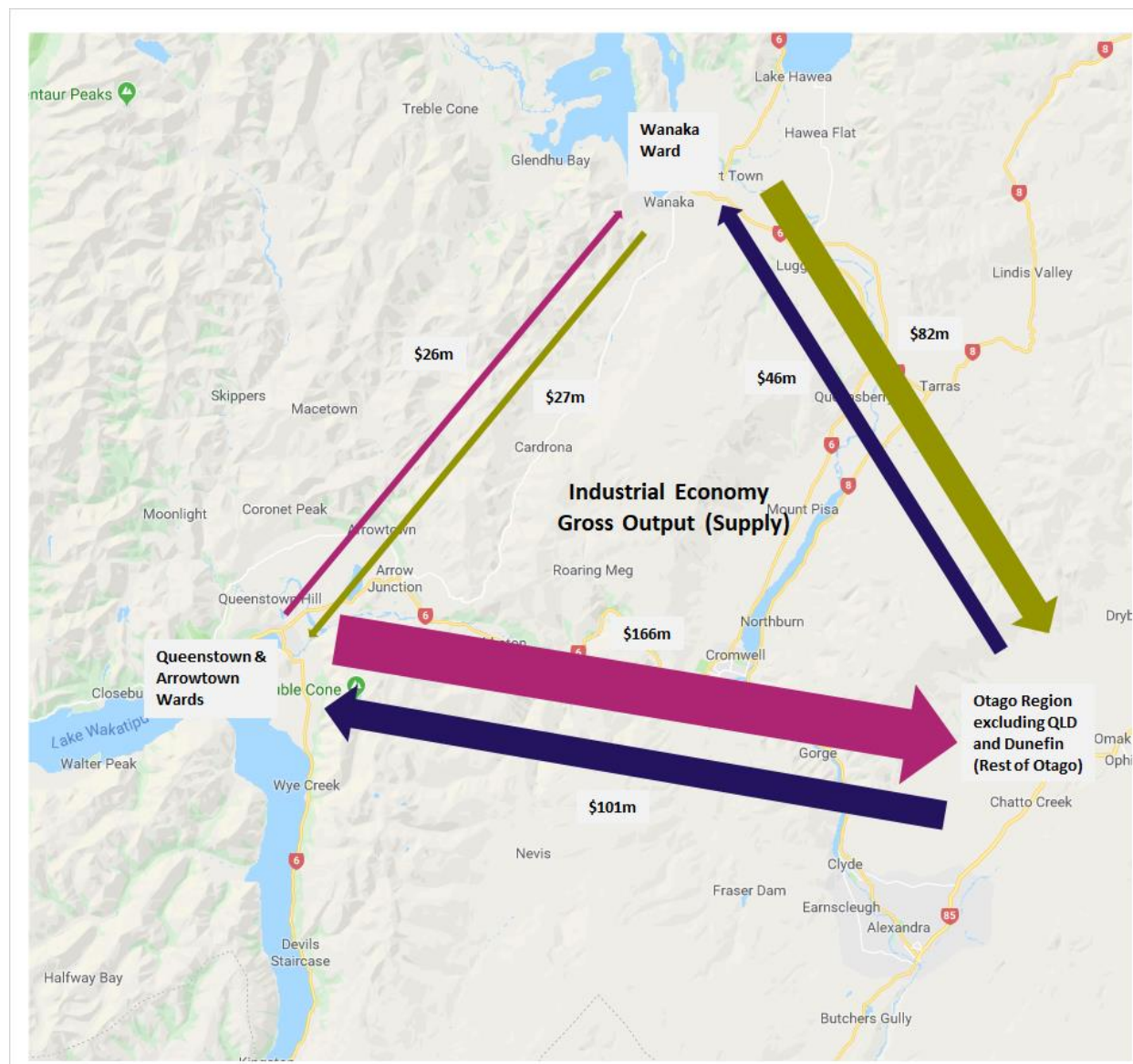
Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

The key thing to note in Figure 3.8 is that the Rest of Otago industrial economy demands more products and services from the Queenstown Ward (in value term) than it does the Wanaka Ward (2.9% compared to 1.8% respectively). This is expected that Queenstown is the bigger of the two economies. In terms of supplying products to QLD, the Rest of Otago industrial economy sends twice as much value to Queenstown Ward as it does to Wanaka Ward, but these shares are low relative to other parts of New Zealand. Again, this is as expected given the relative size of the two markets. Care is needed in inferring a relationship with Cromwell specifically, as the ratios may be quite different than for the catchment as a whole.

Figure 3.9 provides an overview of the Queenstown-Wanaka-Rest of Otago triangle from an industrial economy downstream (supply) perspective. This does not capture upstream flows that contribute to production of outputs. For this summary, Queenstown and Arrowtown have been combined as a single industrial economy for the supply of goods and services (selling) and a single total market for the

consumption of industrial economy goods and services (buying). The results are also expressed in dollar terms of gross output (\$m₂₀₁₆)¹⁹.

Figure 3.9 – Catchment’s Industrial Economy External Supply to Total Catchment Market (\$m)



As discussed above, the Queenstown/Arrowtown industrial economy sells a greater value of products and services to the total Rest of Otago market, than the Rest of Otago industrial economy sells to the total Queenstown/Arrowtown market. *Is some of the intermediate and final demand in Queenstown/Arrowtown for products and services from industrial activities met by businesses located in the Rest of Otago (and possibly Cromwell)?* The answer is: yes (approximately \$100m worth). This is, however, a similar amount to that which is met from further afield (Dunedin and Rest of New Zealand). All this intermediate and final

¹⁹ Given the stated limitations of the MRIO, these dollar figures should be considered indicative only and are used to show the order of magnitude.



demand that is met from outside the district is however small compared to the amount that is met by the local industrial economy.

Finally, the downstream trade from the industrial economy in Wanaka that is consumed in Queenstown/Arrowtown is very similar to the downstream trade from the industrial economy in Queenstown/Arrowtown that is consumed in Wanaka. The flow of industrial products and services sold is minor, at about \$26-27m each way (not including upstream supply flows (inputs to production)). *Does the Wanaka industrial economy help service the needs of the Queenstown/Arrowtown market at present?* The answer to that question is: to a very limited extent. *Would the Wanaka industrial economy be able to play a greater role in meeting the needs of the Queenstown/Arrowtown market in the future?* The answer to that question is: highly unlikely based on current industrial economy supply and demand relationships. For the large part, both catchments are focussed on supplying local demand. They operate as mostly independent markets, although both are dependent on relationships outside the district.



4 QLD Industrial Economy by Zone

This section examines the location of the QLD industrial economy at a zone level. This helps with understanding the land use and locational requirements of businesses included in the industrial economy. It begins with an analysis of what industrial businesses are located in QLD's urban and rural environments, then examines the distribution of businesses and employment across zone types, placing the industrial economy businesses in the context of the overall role of those zones. Further insight is then provided on the industrial/business zones of specific interest for Stage 3 of the District Plan Review.

Not all of the industrial economy exists in the District's industrial zones. The Industrial, Industrial B, Ballantyne Road Mixed Use Zone and Gorge Road Business Zone are only a subset of zones enabling industrial land use. There are a range of zones in the Stage 1 decisions version District Plan that enable or accommodate (through existing use rights or consent) what might be considered industrial land use activities. This includes the Frankton Flats B Special Zones (certain structure plan precincts), Three Parks (business precincts), The Airport zones, the industrial overlay area in Luggate, the Business Mixed Use Zone, Business Zone (Gorge Road), the Rural Zone (with regards to quarries, waste management facilities, Waste Water Treatment Plants, rural based industrial activities etc) and even the incidence of industrial premises in the Township Zone (i.e. Albert Town east of the State Highway). The Coneburn Industrial zone has now also been zoned but is presently a greenfield site.

While these zones are outside the scope of this assessment, any assessment of the QLD industrial economy needs to take into account the full picture. The distribution of industrial land use businesses by zone is an important part of the context for understanding the role of the Industrial, Industrial B and Business (Operative) zones (to the extent to which these are currently occupied).

4.1 Location Drivers

The location of businesses in the industrial economy is driven by the following key drivers:

- **The nature of the business** – As described earlier, M.E has identified a list of business types (6-Digit ANZSICs) that either fall within *typical* 'industrial' definitions (i.e. Manufacturing and Construction), as well as business types that are *typically* understood to require land use and a built form anticipated in industrial zones (warehouses, factories, yards) and businesses currently present in the district that fit within the activities *broadly enabled* in industrial zones (i.e. industrial service activities). A limitation of this approach to describing the industrial economy is that within those businesses there may be range of functional/operational business forms. Simply the name of the 6-Digit ANZSIC description is not always a good enough indicator of the physical form of a business.

Within the identified industrial economy there will be some businesses that are fully office based for example (yet fall within the Construction Division – which is generally defined as 'industrial'). We would expect them to seek a location suited to commercial office space. Other businesses might have their office-based activities in one zone and their manufacturing / storage / yard /



service activities in another zone. This might register the business to the office location in terms of the Business Directory conventions (and this analysis); underestimating the businesses that operate from (or require space within) industrial zones. Others might have a functional need for office space (most businesses do) and this might be on the same site as the physical industrial activities (ancillary office space). Within any one ANZSIC we have included in our 'industrial economy', there will be a spectrum of physical business forms – ranging from offices, warehouses, factories or yards, and combinations of these.

- **The scale of the business** – Not all manufacturing or service industries included in the industrial economy are necessarily large in scale. The scale of operation depends on what space/land requirements are needed for that operation. Within any one ANZSIC that has been included in the description of the industrial economy, there will be very small operations through to much larger operations. It is less likely that very small operations would justify premises or a site in an industrial zone, or any other zone. These businesses can usually be run from people's residences (and may or may not be identified as Home Occupation properties). Builders for example typically register their business to their home address. Therefore, a significant share of the Construction sector is found in Residential Zones.
- **The externality effects of the business** – Some businesses within the identified industrial economy – depending on their nature and scale – may have externality effects that limit the locations where they can operate. This may include noise, dust, glare, odour, unusual hours of operation and visual effects, or effects associated with heavy truck movements or high vehicle trip generation. Such businesses seek locations where these externality effects are anticipated/tolerated and can be managed (including by managing reverse sensitivity effects).
- **A dependence on proximity to physical resources** – Certain businesses have a functional need to be close to resources that are inputs to their business (and in some cases, close to their customers). This is often the case for rural based industrial activities such as quarries, food processing (milk product factories, beverage manufacturing (i.e. vineyards that manufacture wine on site), meat processing), agricultural service industries, sawmills, agricultural machinery manufacturing or servicing, etc. Some industrial businesses also have a functional need for high water or power volumes that cannot be supplied through urban infrastructure.
- **Supply of suitable sites/buildings** - For those industrial economy businesses that do require land or space in an urban business enabled zone, their ultimate location will depend on the availability of sites (to buy or lease, built or vacant) at the appropriate size and price that meets all their business needs and allows them to operate effectively. These 'supply' factors are where district plans have a direct influence, although not total control. It is up to the landowners to determine what they deliver to the market while satisfying the rules/standards of the zone (or alternatively seeking approval when there is non-compliance).

The analysis in this section – the location of the industrial economy by zone – shows the combined impact of all of these key location drivers.

4.2 Rural Urban Split of Industrial Economy

M.E has split QLD according to an urban and rural environment, at the (2013) meshblock level. For consistency, the adopted urban-rural environment matches that used for the Council's Business Development Capacity Assessment 2017 under the NPS – UDC. It is important to note that the rural environment includes areas of urban land use (including the Township Zones of Kingston, Glenorchy and Makarora). It also includes several Special Zones that may be urban in nature (such as resort zones) as well as the Wanaka Airport Zone and ski fields. The urban area generally captures all the zones within the urban growth boundaries, as well as Luggate, the Luggate rural industrial overlay and the small area of Low Density Residential zone adjacent to Lake Hayes.

Figure 4.1 shows the urban/rural split of 2017 businesses (top part of table) and employment (bottom part of table) in QLD's industrial economy, summarised by Division. More detailed tables at the 6-Digit ANZSIC level are included in Appendix 9. Overall, 82% of businesses in the industrial economy are located within the urban environment (1,587 businesses out of a total of 1,928 in 2017). This compares to 80% of all other businesses in the economy located in the urban environment. A total of 341 businesses that fall within the industrial economy description are located in the rural environment.

Figure 4.1 – Summary of QLD Industrial Economy by Urban-Rural Environment (2017)

ANZSIC Division	Industrial Economy Selection	Urban Environment Count	Rural Environment Count	Total QLD Count (2017)	Urban Share of QLD (%)	Rural Share of QLD (%)	Urban Structure of IE (%)	Rural Structure of IE (%)
Business Count (2017)								
A	Selected Ag/Forestry/Fishing Support Services	27	24	50	53%	47%	2%	7%
C	Manufacturing	181	44	225	80%	20%	11%	13%
D	Waste Services Group Only	13	2	15	90%	10%	1%	0%
E	Construction	965	203	1,168	83%	17%	61%	60%
F	Wholesale Trade	135	19	154	88%	12%	9%	6%
I	Selected Transport, Postal and Warehousing	71	14	85	84%	16%	4%	4%
L	Selected Rental and Hiring Services	103	25	128	81%	19%	7%	7%
S	Selected Other Services	92	11	102	89%	11%	6%	3%
QLD Industrial Economy Business Count		1,587	341	1,928	82%	18%	100%	100%
Rest of QLD Economy (all other ANZSICs)		4,625	1,157	5,782	80%	20%		
Total QLD Economy Business Count		6,213	1,498	7,710	81%	19%		
Employment Count (2017)								
A	Selected Ag/Forestry/Fishing Support Services	66	64	130	51%	49%	1%	7%
C	Manufacturing	692	170	862	80%	20%	13%	18%
D	Waste Services Group Only	101	2	103	98%	2%	2%	0%
E	Construction	2,871	594	3,465	83%	17%	54%	63%
F	Wholesale Trade	532	42	573	93%	7%	10%	4%
I	Selected Transport, Postal and Warehousing	273	38	312	88%	12%	5%	4%
L	Selected Rental and Hiring Services	348	23	371	94%	6%	7%	2%
S	Selected Other Services	418	17	434	96%	4%	8%	2%
QLD Industrial Economy Employment Count		5,300	948	6,249	85%	15%	100%	100%
Rest of QLD Economy (all other ANZSICs)		19,024	2,527	21,551	88%	12%		
Total QLD Economy Employment Count		24,325	3,475	27,800	88%	12%		

Source: M.E, Statistics NZ Business Frame 2017, QLD amalgamated district plan zones. Urban Environment includes zones within urban limits plus Luggate, Luggate Rural Industrial Subzone, LDR adjacent to Lake Hayes (as per QLDC BDCA 2017). The Rural Environment includes special zone and townships that are urban in nature and includes Wanaka Airport Zone.

Divisions that have an above average propensity to be in the urban environment include Waste Services (90% urban), Construction (83%), Wholesale Trade (88%), Transport, Postal and Warehousing (84%) and Selected Other Services (89%). Agricultural Support Services has the greatest share of businesses in the Rural Environment (47% or 24 businesses). This is not unexpected.



The split of industrial economy employment (2017) is slightly more oriented to the urban environment (85%). This indicates that urban locations sustain industries that are slightly larger in size (in terms of the average count of workers) than those industries locating in the rural environment. For all Divisions except Agricultural Support Services, the urban share of employment is between 80% and 98%).

Figure 4.1 also shows the structure of the industrial economy in the urban versus rural environment. While the urban industrial economy is clearly significantly larger, the mix of businesses is reasonably similar – both dominated by Construction businesses at about 60-61%. Wholesaling and Selected Other Services play a slightly bigger role in urban areas than in the rural environment. Conversely, Agricultural Support Services (only a small sector) and Manufacturing (QLD’s second largest industrial economy sector) play a slightly bigger role relative to total businesses in the rural environment.

4.3 Urban Industrial Zones versus Other Urban Zones

This section focuses on zones in the QLD urban environment only. As discussed in section 2.1, the accuracy of Business Directory data to inform zone level analysis is limited by the ability to match much coarser (2013) meshblock boundaries to zone boundaries. Some zones have not been able to be specifically identified. Examples include the Remarkables Park Special Zone, Frankton Flats A Special Zone, Frankton Flats B Special Zone and Glenda Drive Industrial Zone. All four zones are captured in a single meshblock (mapped in Appendix 10). However, in this example, by focussing on the businesses that fall within the identified industrial economy, the results should be more weighted towards Glenda Drive Industrial Zone and Frankton Flats B Special Zone.

For the purpose of this summary, Business Mixed Use and the Business (Operative) zones are grouped. Industrial and Industrial B zones excluding Glenda Drive are grouped and also include the Rural Industrial Overlay in Luggate. Further detail of the zone groupings is tabled in Appendix 10.

Figure 4.2 shows the count of urban industrial economy businesses (2017) by zone group. The results are indicative only due to the limitations of defining zones with meshblocks. Overall, the greatest count of urban industrial economy businesses (899) is found in Other zones (which primarily covers residential focussed zones and the visitor accommodation sub-zones in residential areas). This accounts for a significant 57% of all urban industrial economy businesses. This is dominated by 639 Construction businesses – mainly trade workers who run their business from home. In total, 66% of all urban Construction businesses are located in Other zones. In saying that, they do not dominate the count of businesses included in these defined meshblocks. Construction businesses in this zone group account for just 20% of total businesses (although 71% of total industrial economy businesses, Figure 4.3).

The Township zone accounts for a further 9% of urban industrial economy businesses, and as they are effectively residential zones, could be considered with the Other zones group. 10% of all Construction businesses are located in these zones. In saying that, Selected Agricultural Support Services make up an above average share of businesses in this zone – 19% of the 27 urban businesses in this Division. 12% of all urban Manufacturing businesses are also in Township zones. Combined with the 38% in the Other (residential) zones, this confirms that half of all Manufacturing businesses in the urban environment are very small scale and are likely home-based businesses.

Figure 4.2 – QLD Urban Industrial Economy Businesses by Broad Zone Group (2017)

ANZSIC Division	Industrial Economy Selection	Airport (Queenstown)	Business (Mixed Use & Operative)	Industrial, Industrial B, Rural Overlay	Other Commercial & Industrial (Remarkables Park, Frankton A&B, Glenda Drive Industrial)	Other (Residential and Visitor Accommodation)	Other Commercial (Town Centres and Local Shopping Centres)	Township Zones	Total QLD Urban
A	Selected Ag/Forestry/Fishing Support Services	1	-	4	-	14	3	5	27
C	Manufacturing	2	13	16	26	70	34	22	181
D	Waste Services Group Only	-	-	-	1	6	5	1	13
E	Construction	3	29	25	45	639	131	92	965
F	Wholesale Trade	2	16	10	19	53	29	6	135
I	Selected Transport, Postal and Warehousing	-	3	5	10	36	12	4	71
L	Selected Rental and Hiring Services	5	2	1	10	51	31	3	103
S	Selected Other Services	1	20	11	13	30	13	3	92
QLD Urban Industrial Economy		14	84	72	126	899	257	136	1,587
Rest of QLD Urban Economy (all other ANZSICs)		71	140	101	188	2,320	1,606	199	4,625
Total QLD Urban Economy		85	224	173	314	3,219	1,863	335	6,213
Division Share of Each Zone Group									
A	Selected Ag/Forestry/Fishing Support Services	2%	0%	2%	0%	0%	0%	1%	0%
C	Manufacturing	2%	6%	9%	8%	2%	2%	6%	3%
D	Waste Services Group Only	0%	0%	0%	0%	0%	0%	0%	0%
E	Construction	4%	13%	15%	14%	20%	7%	27%	16%
F	Wholesale Trade	3%	7%	6%	6%	2%	2%	2%	2%
I	Selected Transport, Postal and Warehousing	0%	1%	3%	3%	1%	1%	1%	1%
L	Selected Rental and Hiring Services	5%	1%	1%	3%	2%	2%	1%	2%
S	Selected Other Services	1%	9%	6%	4%	1%	1%	1%	1%
QLD Urban Industrial Economy		16%	38%	42%	40%	28%	14%	41%	26%
Rest of QLD Urban Economy (all other ANZSICs)		84%	62%	58%	60%	72%	86%	59%	74%
Total QLD Urban Economy		100%	100%	100%	100%	100%	100%	100%	100%
Zone Group Share of Each Division									
A	Selected Ag/Forestry/Fishing Support Services	5%	0%	14%	0%	52%	10%	19%	100%
C	Manufacturing	1%	7%	9%	14%	38%	19%	12%	100%
D	Waste Services Group Only	0%	0%	0%	8%	45%	38%	8%	100%
E	Construction	0%	3%	3%	5%	66%	14%	10%	100%
F	Wholesale Trade	2%	12%	7%	14%	39%	21%	4%	100%
I	Selected Transport, Postal and Warehousing	0%	5%	8%	15%	51%	17%	6%	100%
L	Selected Rental and Hiring Services	4%	2%	1%	10%	49%	30%	3%	100%
S	Selected Other Services	1%	22%	12%	15%	33%	14%	4%	100%
QLD Urban Industrial Economy		1%	5%	5%	8%	57%	16%	9%	100%
Rest of QLD Urban Economy (all other ANZSICs)		2%	3%	2%	4%	50%	35%	4%	100%
Total QLD Urban Economy		1%	4%	3%	5%	52%	30%	5%	100%

Source: M.E, Statistics NZ Business Frame 2017. Refer Appendix 10 for detail on zones excluded and spatial extent in meshblock terms.

The Other Commercial zones (Town Centres and Local Shopping Centres) account for 257 urban industrial economy businesses in 2017. This is 16% of the total. The industrial economy businesses make up just 14% of total businesses, confirming that the key role of those zones is focussed elsewhere (e.g. commercial, retail, household and personal service, visitor accommodation, etc). The combined Business Zones (Business Mixed Use and Business (Operative)) in Wanaka and Queenstown account for just 5% of all urban industrial economy businesses (84). They do account for a higher share of urban Wholesale businesses included in the urban industrial economy (12%) and 22% of Selected Other Services businesses.

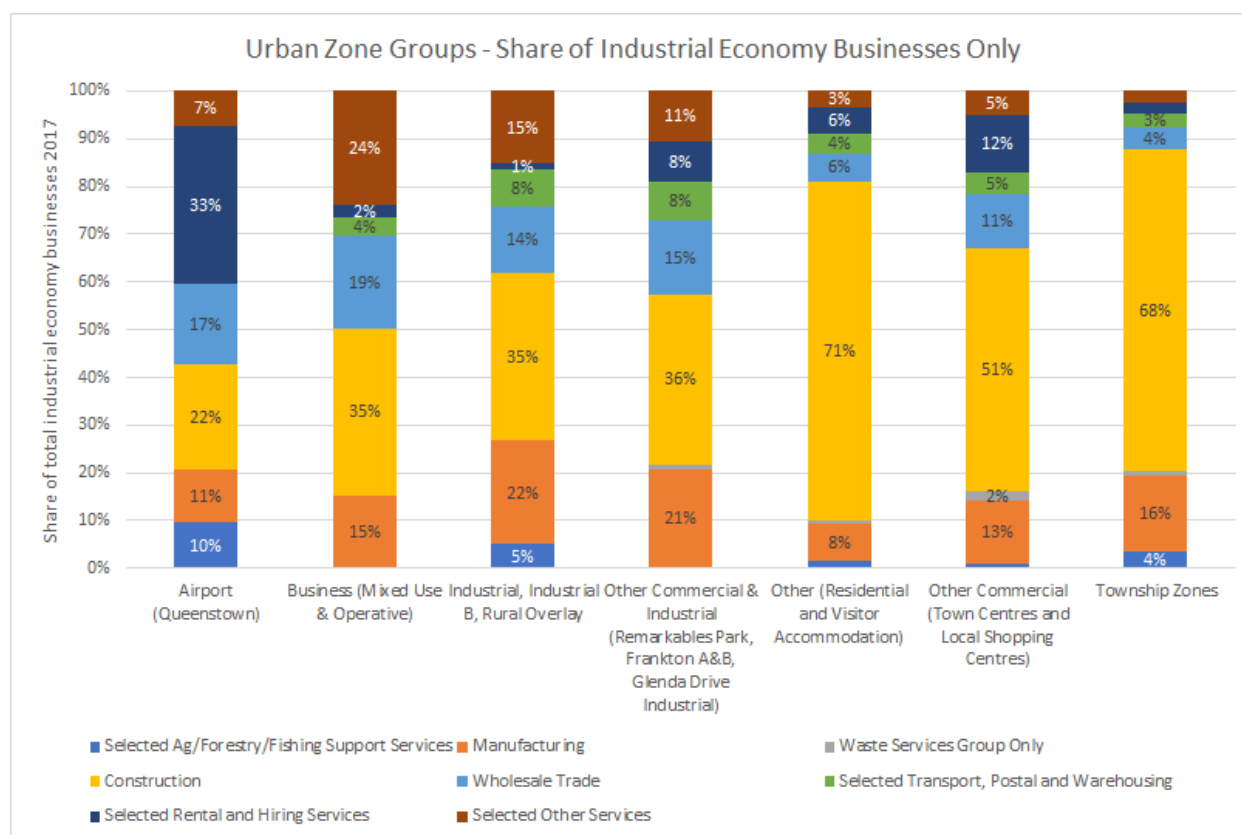
The Industrial group of zones, which includes the Industrial and Industrial B zones with the exception of Glenda Drive (which can't be separated) and includes the small Industrial zone in Luggate, account for just 5% of all urban industrial economy businesses (72). The industrial economy businesses in these meshblock areas account for 42% of all businesses – the highest share of any zone group. This means the role of these zones is more strongly focussed on the industrial economy in relative terms (as is the intent). However, this also means that 58% of businesses in these meshblock (101) areas are not within the industrial economy description (although still may be enabled by the zone provisions).

Similarly, the Other Commercial & Industrial zone group accounts for approximately 8% of all urban industrial economy businesses (126) (mostly expected to capture Frankton Flats B and Glenda Drive Industrial). The share of this zone group that is made up of the industrial economy versus other businesses should not be focussed on, as it includes large commercial areas in Remarkables Park and Frankton Flats generally.

This means that somewhere between approximately 5% and 13% (the exact share is uncertain) of the industrial economy businesses in 2017 fall within Industrial and Industrial B zones²⁰. This appears a small share, but the location patterns are relatively easy to explain when considering the various drivers of industrial economy location decisions. This is the component of the industrial economy that a review of industrial zone provisions needs to focus most strongly on (notwithstanding the opportunity for industrial zones to attract a greater share of industrial economy businesses in the future).

Figure 4.3 compares the mix of just industrial economy businesses in each zone group (with other types of businesses excluded). It shows that the profile (mix) of businesses (at the Division level) is not dissimilar between the Industrial group and the Other Commercial & Industrial group. There is a greater share of Rental and Hiring Services, but all three zones in this group are in close proximity to the airport. Importantly, their Manufacturing and Construction role is very similar.

Figure 4.3 – Share of QLD Urban Industrial Economy Businesses by Broad Zone Group (2017)



²⁰ A very small portion is likely to be attributable to the Luggate Industrial Overlay area included in the urban environment and captured in these zone groups.

By comparison, the dominance of Construction businesses in the Other and Township groups is related to the concentration of residential dwellings (where tradesmen reside). The role of the Other Commercial zone group is still dominated by Construction (potentially more Construction related services or the office activity of Construction businesses). Relative to Industrial zones, the Business zone group excludes Agricultural Support Services activity, and has a greater focus on Wholesale and Other Services activity.

For completeness, Figures 4.4 and 4.5 show the same results for industrial economy employment.

Figure 4.4 – QLD Urban Industrial Economy Employment by Broad Zone Group (2017)

ANZSIC Division	Industrial Economy Selection	Airport (Queenstown)	Business (Mixed Use & Operative)	Industrial, Industrial B, Rural Overlay	Other Commercial & Industrial (Remarkables Park, Frankton A&B, Glenda Drive Industrial)	Other (Residential and Visitor Accommodation)	Other Commercial (Town Centres and Local Shopping Centres)	Township Zones	Total QLD Urban
A	Selected Ag/Forestry/Fishing Support Services	2	-	10	-	47	3	4	66
C	Manufacturing	6	77	57	152	135	232	33	692
D	Waste Services Group Only	-	-	-	19	67	14	1	101
E	Construction	15	174	111	499	1,503	399	171	2,871
F	Wholesale Trade	12	86	49	236	77	61	9	532
I	Selected Transport, Postal and Warehousing	-	36	7	128	75	21	7	273
L	Selected Rental and Hiring Services	79	9	1	115	69	68	8	348
S	Selected Other Services	6	125	53	113	69	48	4	418
QLD Urban Industrial Economy		120	506	288	1,261	2,042	845	238	5,300
Rest of QLD Urban Economy (all other ANZSICs)		972	874	268	1,186	5,421	10,044	260	19,024
Total QLD Urban Economy		1,092	1,380	556	2,447	7,463	10,888	497	24,325
Division Share of Each Zone Group									
A	Selected Ag/Forestry/Fishing Support Services	0%	0%	2%	0%	1%	0%	1%	0%
C	Manufacturing	1%	6%	10%	6%	2%	2%	7%	3%
D	Waste Services Group Only	0%	0%	0%	1%	1%	0%	0%	0%
E	Construction	1%	13%	20%	20%	20%	4%	34%	12%
F	Wholesale Trade	1%	6%	9%	10%	1%	1%	2%	2%
I	Selected Transport, Postal and Warehousing	0%	3%	1%	5%	1%	0%	1%	1%
L	Selected Rental and Hiring Services	7%	1%	0%	5%	1%	1%	2%	1%
S	Selected Other Services	1%	9%	10%	5%	1%	0%	1%	2%
QLD Urban Industrial Economy		11%	37%	52%	52%	27%	8%	48%	22%
Rest of QLD Urban Economy (all other ANZSICs)		89%	63%	48%	48%	73%	92%	52%	78%
Total QLD Urban Economy		100%	100%	100%	100%	100%	100%	100%	100%
Zone Group Share of Each Division									
A	Selected Ag/Forestry/Fishing Support Services	3%	0%	15%	0%	71%	5%	7%	100%
C	Manufacturing	1%	11%	8%	22%	19%	34%	5%	100%
D	Waste Services Group Only	0%	0%	0%	19%	66%	14%	1%	100%
E	Construction	1%	6%	4%	17%	52%	14%	6%	100%
F	Wholesale Trade	2%	16%	9%	44%	15%	11%	2%	100%
I	Selected Transport, Postal and Warehousing	0%	13%	3%	47%	28%	8%	2%	100%
L	Selected Rental and Hiring Services	23%	3%	0%	33%	20%	19%	2%	100%
S	Selected Other Services	1%	30%	13%	27%	17%	11%	1%	100%
QLD Urban Industrial Economy		2%	10%	5%	24%	39%	16%	4%	100%
Rest of QLD Urban Economy (all other ANZSICs)		5%	5%	1%	6%	28%	53%	1%	100%
Total QLD Urban Economy		4%	6%	2%	10%	31%	45%	2%	100%

Source: M.E, Statistics NZ Business Frame 2017. Refer Appendix 10 for detail on zones excluded and spatial extent in meshblock terms.

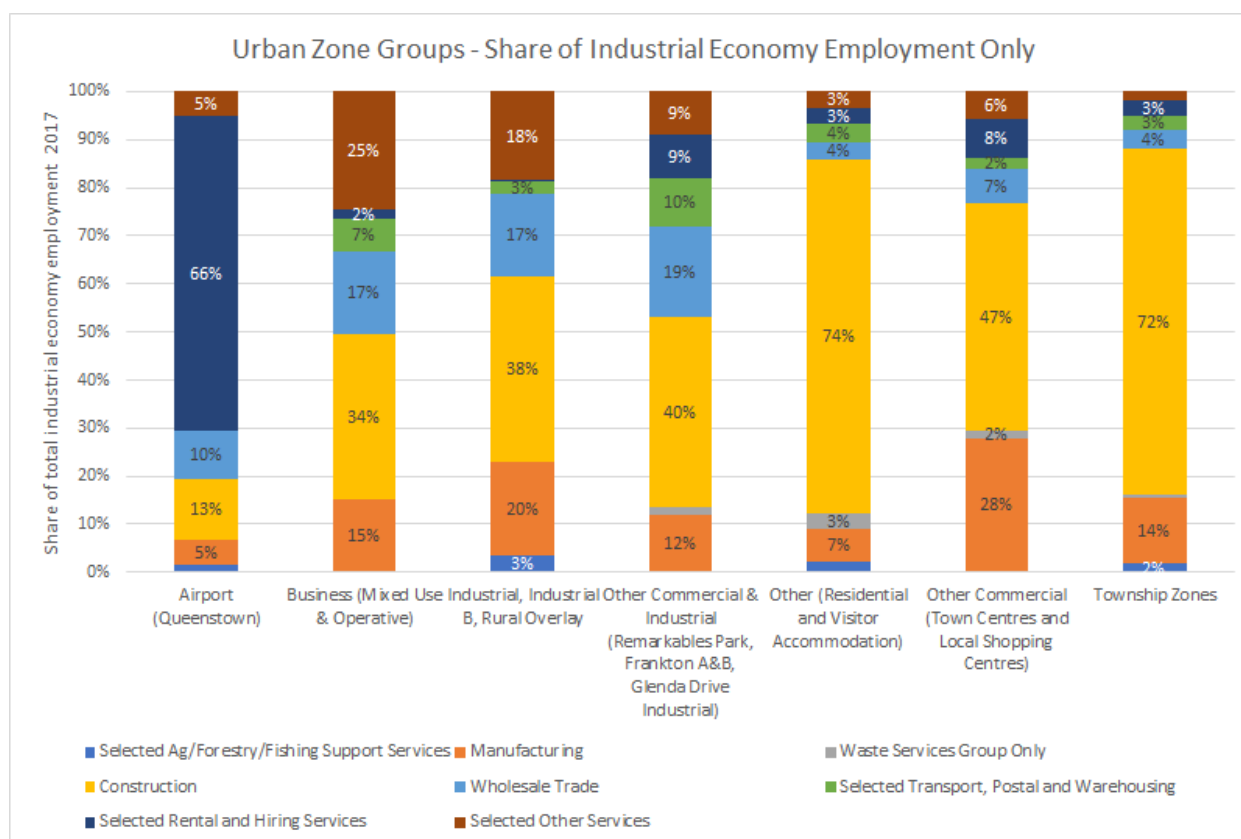
Key features:

- The Other zone group (residential zones) accounts for a much lower share of urban industrial economy employment (39% or approximately 2,040 workers) than it does businesses (57%). This confirms the very small scale of these businesses, including sole traders in the Construction sector. The same applies to the Township zone group (4% of employment compared to 9% of businesses).

- The Business zones group accounts for 10% of urban industrial economy employment (506 workers). This includes 11% of urban Manufacturing employment and 16% of Wholesale employment and 30% of Selected Other Services employment.
- The Industrial zone group captures 5% of urban industrial economy employment, the same share as it captures of industrial economy businesses. This includes 8% of urban Manufacturing employment, 9% of Wholesale Trade employment and 13% of Selected Other Services employment.
- Interestingly, the Other Commercial & Industrial zone group (which includes Glenda Drive and Frankton Flats in addition to Remarkables Park) captures 24% of urban industrial economy employment, compared to just 8% of businesses. This is a total of approximately 1,260 workers. This highlights that these businesses have a larger average size (and compared with other Industrial zones in the district). It is not clear from this Business Directory data, exactly what role the Industrial zone (Glenda Drive) has in this share.

The key features of Figure 4.5, relative to Figure 4.3, are that the profile of employment is broadly similar to the profile of businesses in each zone group. The key exceptions are the Airport Zone in Queenstown. While Rental and Hiring Services makes up 33% of businesses in that zone, it accounts for 66% of employment (meaning the businesses are larger relative to the others in the industrial economy in that area). Also, it is worth pointing out that the share of employment in the Industrial zone group in the Transport, Postal and Warehousing Division is just 3% compared to 8% of businesses. This is driven by storage companies, which have very low levels of staff.

Figure 4.5 – Share of QLD Urban Industrial Economy Employment by Broad Zone Group (2017)



4.3.1 Current Propensity to Locate in an Urban Industrial Zone

We have attempted to categorise ANZSICs within the industrial economy based on their current propensity to choose an Industrial Zone in the urban environment compared to other zones in the urban environment (including non-business zones). These results are indicative only, and may look different if revisited in the future, particularly with the prospect of two greenfield industrial zones coming on stream at some time (Coneburn and the Ballantyne Road Mixed Use Zone).

The purpose of this analysis is to help guide the review process in terms of what ANZSICs most need to be provided for (accepting that the district plan is activity focussed not business classification focussed) because they currently don't appear to locate anywhere else in the urban environment (for various reasons) or have demonstrated a moderate to high preference for industrial zones.

Care is needed as every business is unique in its operation. Within each category (High, Moderate-High and Moderate propensity for an industrial zone location) there are some ANZSICs that have a higher and lower propensity than the category average. Nor should this analysis be used in any way to necessarily exclude any industrial economy business from industrial zones just because they have demonstrated little or no propensity at present. Depending on their scale, some businesses may be beneficial to 'direct' or 'attract' to industrial zones rather than other zones.

Figure 4.6 – Industries Demonstrating a High Preference for Urban Industrial Zones (2017)

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Aluminium Rolling, Drawing, Extruding	C214200	C	High	1	0%
Industrial - Other Sheet Metal Product Manufacturing	C224000	C	High	1	0%
Industrial - Other Specialised Machinery and Equipment Manufacturing	C246900	C	High	1	0%
Industrial - Structural Steel Fabricating	C222100	C	High	2	0%
Industrial - Car Wholesaling	F350100	F	High	1	0%
Industrial - Dairy Produce Wholesaling	F360300	F	High	2	0%
Industrial - Metal and Mineral Wholesaling	F332200	F	High	2	0%
Industrial - Motor Vehicle Dismantling and Used Part Wholesaling	F350500	F	High	1	0%
Industrial - Other Specialised Industrial Machinery and Equipment Wholesaling	F341900	F	High	1	0%
Sub-Total				13	1%

Source: M.E. Statistics NZ Business Directory.

Figure 4.7 – Industries Demonstrating a Moderate-High Preference for Urban Ind. Zones (2017)

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	C	Moderate-High	4	0%
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	C	Moderate-High	3	0%
Industrial - Motor Vehicle New Part Wholesaling	F350400	F	Moderate-High	3	0%
Sub-Total				10	1%

Figure 4.8 – Industries Demonstrating a Moderate Preference for Urban Industrial Zones (2017)

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Boatbuilding and Repair Services	C239200	C	Moderate	2	0%
Industrial - Clothing Manufacturing	C135100	C	Moderate	3	0%
Industrial - Concrete Product Manufacturing	C203400	C	Moderate	4	0%
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	C	Moderate	5	0%
Industrial - Other Furniture Manufacturing	C251900	C	Moderate	2	0%
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	C	Moderate	2	0%
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	C	Moderate	5	0%
Industrial - Industrial and Agricultural Chemical Product Wholesaling	F332300	F	Moderate	2	0%
Industrial - Interurban and Rural Bus Transport	I462100	I	Moderate	2	0%
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	L	Moderate	2	0%
Industrial - Automotive Electrical Services	S941100	S	Moderate	4	0%
Sub-Total				33	2%

Source: M.E, Statistics NZ Business Directory.

Appendix 11 lists the ANZSICs that have a lower propensity to locate in today's urban industrial zones (when considered as a group, not the individual business level). These businesses have not demonstrated a functional or operational need to locate in an industrial zone. They may be office-based businesses for example, that can locate in a range of other urban business zones. They may be service based businesses that can locate in the Business Mixed Use Zone. They may have a functional or operational need to be in an Airport zone. Alternatively, they may be very small-scale and can operate as home-occupation businesses, or simply have no physical premises requirements, such as tradesmen.

4.4 Stage 3 Review Industrial/Business Zones

This section focusses on what data is able to be analysed for the specific zones of interest for the Stage 3 review. These are the Industrial, Industrial B and Business (Operative) zones. While the Ballantyne Road Mixed Use Zone is also of interest, it is currently vacant. The analysis draws on the Business Directory data (as described above) which is limited to whole meshblocks. These limitations are described in more detail for each zone below. Despite the limitations, the conclusions are considered sufficiently reliable for the purpose of comparing the zones against each other as the industrial zones account for major share of industrial economy businesses and employment (which is the key focus). This section also draws on Council's own field data for each zone. Both datasets have different strengths so complement each other.

4.4.1 Arrowtown Industrial Zone

Figure 4.9 – Meshblock Boundaries and District Plan Zone Extent – Arrowtown Industrial

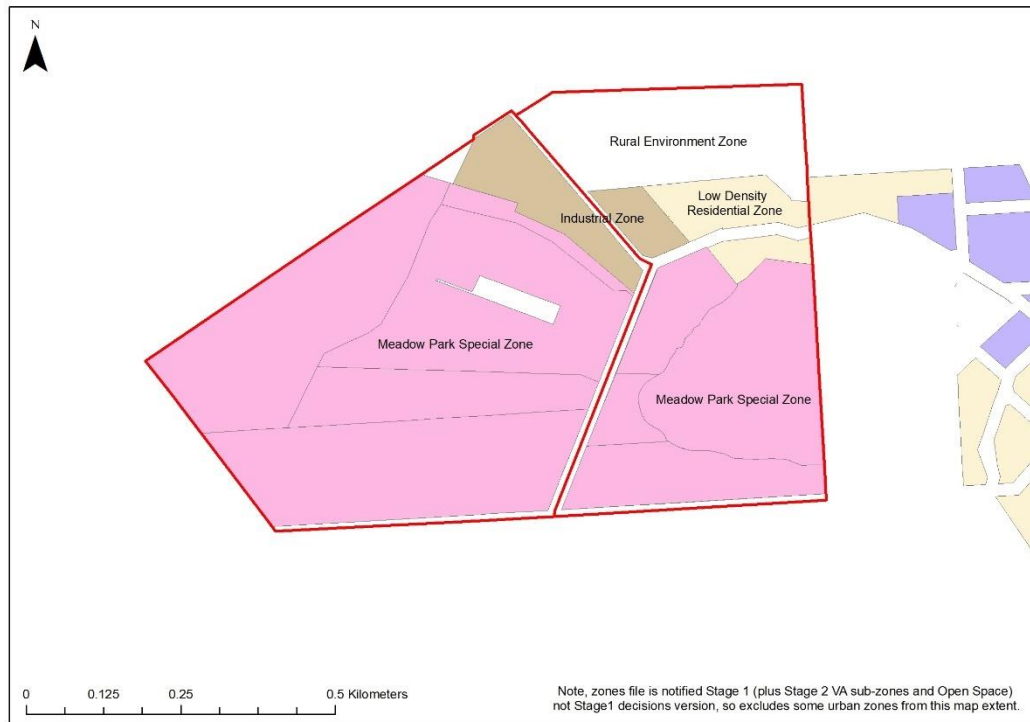


Figure 4.9 shows a map that compares the meshblock extent that has been used to represent economic activity using Business Directory data in the Arrowtown Industrial Zone, relative to underlying zone boundaries. Note, the zoning file is from the notified Stage 1 PDP²¹ and not the Stage 1 decisions version, so some minor variations may exist. In order to capture the Industrial zone, the Business Directory analysis also picks up the Meadow Park Special Zone (residential) and the Low Density Residential Zone. This means that the data will include industrial economy businesses that may be ‘home-based’ and not within the actual Industrial zone.

Figure 4.10 shows that the Arrowtown Industrial zone (and immediate surrounding zone areas) contain 41 businesses (2017) of which 15 are included in the identified industrial economy (spread over 11 different ANZSIC types). The industrial economy share of total businesses in the area captured is therefore 37%. However, the industrial economy share of total employment is 63%, with 54 workers. This gives an average business size for industrial economy businesses of 3.5 (2017).

Construction related businesses account for 30% of total industrial economy businesses and 40% of employment. This is followed by Wholesale Trade businesses (18% of businesses and 33% of employment – these have the biggest average business size at around 6 workers).

²¹ Also includes notified Stage 2 visitor accommodation sub-zones and open space.

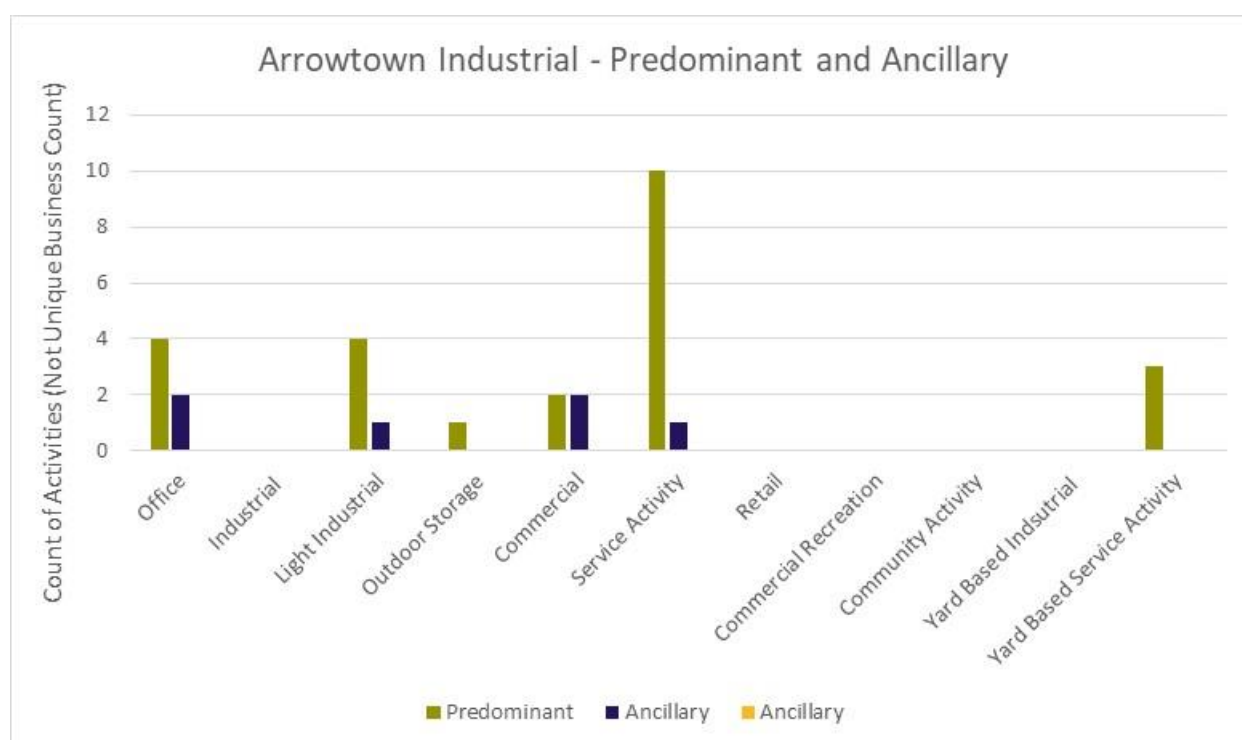
Figure 4.10 – Industrial Economy Activity in Approximate Arrowtown Industrial Zone (2017)

ANZSIC Division	Industrial Economy Selection	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n)	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
A	Selected Ag/Forestry/Fishing Support Services	3	17%	6%	4	7%	4%	1.4
C	Manufacturing	1	8%	3%	3	5%	3%	2.3
D	Waste Services Group Only	-	0%	0%	-	0%	0%	-
E	Construction	5	30%	11%	21	40%	25%	4.7
F	Wholesale Trade	3	18%	7%	18	33%	21%	6.6
I	Selected Transport, Postal and Warehousing	3	17%	6%	3	5%	3%	1.0
L	Selected Rental and Hiring Services	-	0%	0%	-	0%	0%	-
S	Selected Other Services	2	11%	4%	6	10%	7%	3.5
QLD Industrial Economy		15	100%	37%	54	100%	63%	3.5
Rest of QLD Economy (all other ANZSICs)		26		63%	32		37%	1.2
Total QLD Economy		41		100%	86		100%	2.1

Source: M.E, Statistics NZ Business Frame 2017. Meshblock extent includes areas of adjacent district plan zones - data not limited to Industrial A zone.

Figure 4.11 summarises actual counts of all activities within the extent of the Arrowtown Industrial zone (based on Council field survey data). This is not limited to industrial activities. Activities are described according the definitions in the Stage 1 decisions version district plan. The counts shown in the graph do not sum to the total business count, as up to two ancillary activities are also identified, although the predominant activity is representative of total businesses. It shows that the zone includes 24 businesses at present, with 6 of these including an ancillary activity. The most common (predominant) activity is defined as Service Activities. There are 10 of these businesses. Light Industrial, Office, Outdoor Storage, Commercial and Yard Based Service activities are also present.

Figure 4.11 – Activities by District Plan Category (2019) – Arrowtown Industrial Zone



4.4.2 Glenda Drive Industrial

Figure 4.12 shows a map that compares the meshblock extent that has been used to represent economic activity using Business Directory data in the Glenda Drive Industrial Zone, relative to underlying zone boundaries. Unfortunately, in order to capture the Industrial zone, the Business Directory analysis also picks up extensive areas of the Remarkables Park Zone, all of the Frankton Flats A zone and all of the Frankton Flats B Zone (due to 2013 meshblock boundaries). This means that the data will include industrial economy businesses that may be located in any of those zones. On the other hand, Frankton Flats A and Remarkables Park are highly retail and recreation focussed. The Frankton Flats B zone includes some industrial precincts and more flexible mixed commercial/light industrial zones. To the extent that these businesses were present in February 2017 (the snapshot of the Business Directory), Frankton Flats B in particular will be skewing the data.

Figure 4.12 – Meshblock Boundaries and District Plan Zone Extent – Glenda Drive Industrial

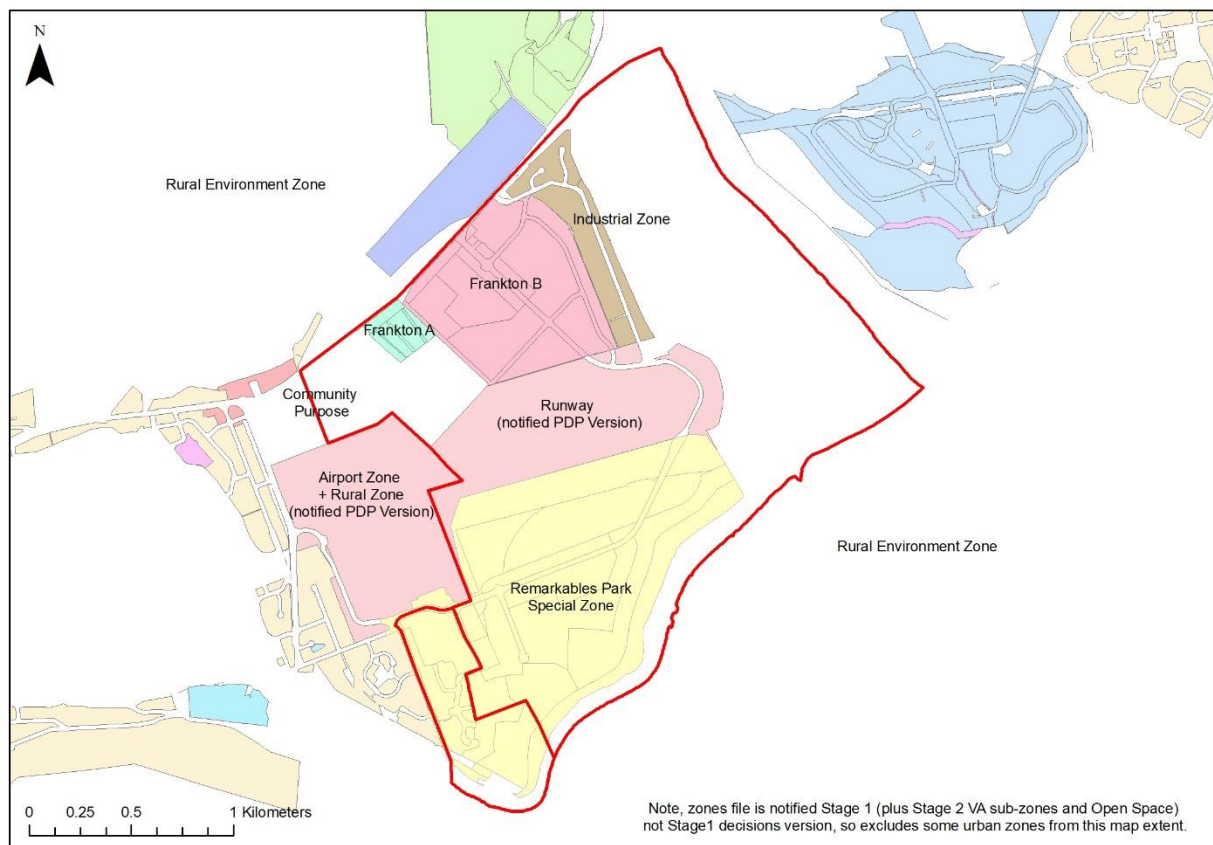


Figure 4.13 shows that the Glenda Drive Industrial zone (and immediate surrounding zone areas) contain 314 businesses (2017) of which 124 are included in the identified industrial economy (spread over 62 different ANZSIC types). The industrial economy share of total businesses in the area captured is therefore 39% but not representative of just the Industrial zone. The industrial economy share of total employment is 52%, with 1,261 workers (again this percentage should be viewed with caution). This gives an average

business size for industrial economy businesses of 10 workers each (2017). This is the highest for any of the zones examined.

Construction related businesses account for 36% of total industrial economy businesses and 40% of employment (these have an average business size of approximately 11 workers each). This is followed by Manufacturing businesses (21% of businesses and 12% of employment). The single Waste Services business has 19 staff according to the Business Directory. Both Wholesaling and Transport, Postal and Warehousing businesses in this area have an average business size of 12 workers each. Overall, the Glenda Drive Industrial Zone (or wider Frankton area) supports the largest businesses in the industrial economy.

Figure 4.13 – Industrial Economy Activity in Approximate Glenda Drive Industrial Zone (2017)

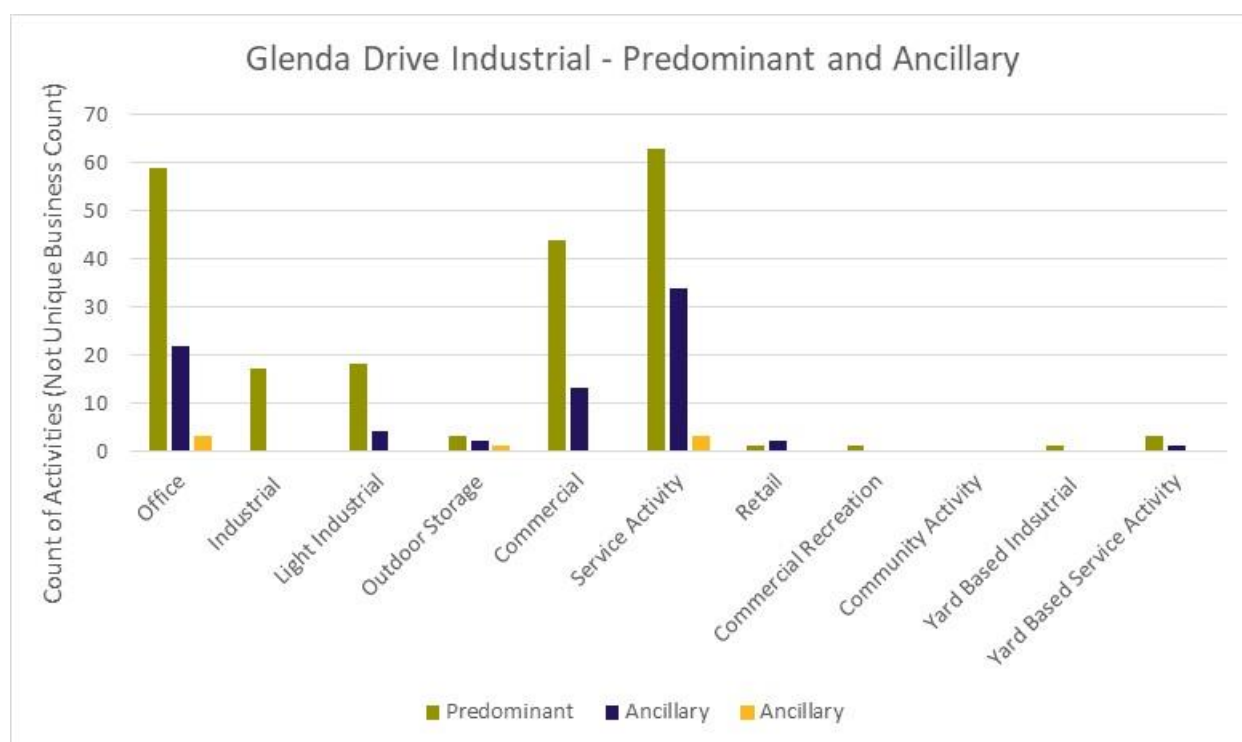
ANZSIC Division	Industrial Economy Selection	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n)	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
A	Selected Ag/Forestry/Fishing Support Services	-	0%	0%	-	0%	0%	-
C	Manufacturing	26	21%	8%	152	12%	6%	5.9
D	Waste Services Group Only	1	1%	0%	19	1%	1%	18.8
E	Construction	45	36%	14%	499	40%	20%	11.1
F	Wholesale Trade	19	15%	6%	236	19%	10%	12.4
I	Selected Transport, Postal and Warehousing	10	8%	3%	128	10%	5%	12.8
L	Selected Rental and Hiring Services	10	8%	3%	115	9%	5%	11.5
S	Selected Other Services	13	10%	4%	113	9%	5%	8.7
QLD Industrial Economy		124	100%	39%	1,261	100%	52%	10.2
Rest of QLD Economy (all other ANZSICs)		190		61%	1,186		48%	6.2
Total QLD Economy		314		100%	2,447		100%	7.8

Source: M.E, Statistics NZ Business Frame 2017. Meshblock extent includes areas of adjacent district plan zones - data not limited to Industrial A zone.

Figure 4.14 summarises actual counts of all activities within the extent of the Glenda Drive Industrial zone (based on Council field survey data). It shows that the zone includes 210 businesses at present, with 78 of these including one ancillary activity and 7 of those containing a second ancillary activity. The most common (predominant) activity is defined as Service Activities. There are 63 of these businesses. The only business types not present in the zone include Yard Based Storage and Community Activities. Commercial activities are common (44 businesses) as are Office activities (59 businesses). Offices are also a significant ancillary activity. For 34 businesses, the Service Activity was the ancillary activity not the predominant role of the business.



Figure 4.14 – Activities by District Plan Category (2019) – Glenda Drive Industrial Zone



4.4.3 Wanaka Industrial

Figure 4.15 shows a map that compares the meshblock extent that has been used to represent economic activity using Business Directory data in the Wanaka Industrial zones, relative to underlying zone boundaries. Unfortunately, in order to capture the Industrial zone, the Business Directory analysis also picks up the Industrial B Zone, so these cannot be analysed separately. It also picks up extensive areas of the Plan Change 46 Zone, Low and Medium Density residential zones, Large Lot A residential zone and the Local Shopping Centre zone. This means that the data will include industrial economy businesses that may be located in any of those zones. However, much of this other zone area is vacant land or residential. The medical centre is the most obvious commercial activity. Any additional industrial economy businesses captured are therefore likely to be home-based businesses.

Figure 4.16 shows that the combined Wanaka Industrial zones (and immediate surrounding zone areas) contain 126 businesses (2017) of which 52 are included in the identified industrial economy (spread over 41 different ANZSIC types). The industrial economy share of total businesses in the area captured is therefore 41% but not representative of just the Industrial zones. The industrial economy share of total employment is 48%, with 218 workers (again this percentage should be viewed with caution). This gives an average business size for industrial economy businesses of 4 workers each (2017).

Figure 4.15 – Meshblock Boundaries and District Plan Zone Extent – Wanaka Ind. and Ind. B

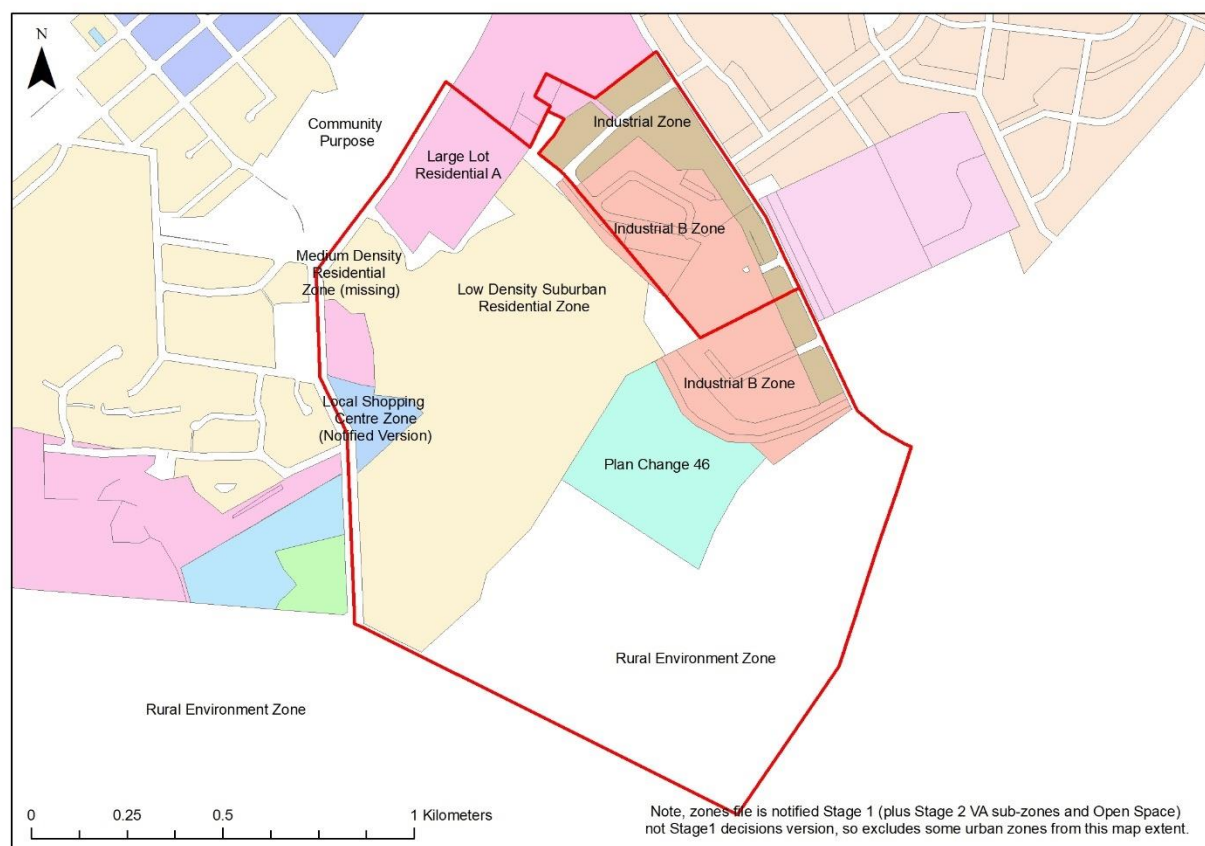


Figure 4.16 – Industrial Economy Activity in Approximate Wanaka Ind. & Ind. B Zone (2017)

ANZSIC Division	Industrial Economy Selection	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n)	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
A	Selected Ag/Forestry/Fishing Support Services	-	0%	0%	-	0%	0%	-
C	Manufacturing	13	25%	10%	48	22%	11%	3.7
D	Waste Services Group Only	-	0%	0%	-	0%	0%	-
E	Construction	20	38%	16%	87	40%	19%	4.3
F	Wholesale Trade	7	13%	6%	32	14%	7%	4.5
I	Selected Transport, Postal and Warehousing	3	6%	2%	5	2%	1%	1.6
L	Selected Rental and Hiring Services	1	2%	1%	1	1%	0%	1.1
S	Selected Other Services	8	15%	6%	46	21%	10%	5.7
QLD Industrial Economy		52	100%	41%	218	100%	48%	4.2
Rest of QLD Economy (all other ANZSICs)		74		59%	235		52%	3.2
Total QLD Economy		126		100%	453		100%	3.6

Source: M.E, Statistics NZ Business Frame 2017. Meshblock extent includes areas of adjacent district plan zones - data not limited to Industrial A and B zone.

Construction related businesses account for 38% of total industrial economy businesses and 40% of employment (these have an average business size of approximately 4 workers each). This is followed by Manufacturing businesses (25% of businesses and 22% of employment). Selected Other Services make up



5% of industrial economy businesses (8 as at 2017) and 21% of employment – giving a slightly above average size of nearly 6 workers each.

Figure 4.17 summarises actual counts of all activities within the extent of the Wanaka Industrial zone (based on Council field survey data). It shows that the zone includes 77 businesses at present, with 28 of these including one ancillary activity and 5 of those containing a second ancillary activity. The most common (predominant) activity is defined as Service Activities. There are 23 of these businesses. The only business types not present in the zone (but enabled) are Service Stations and Yard Based Storage. Commercial and Retail activities are few (6 businesses combined). Office activities are common (16 businesses) as are Light Industrial activities (18 businesses). Offices and Commercial activities are the most common ancillary activities.

Figure 4.17 – Activities by District Plan Category (2019) – Wanaka Industrial Zone

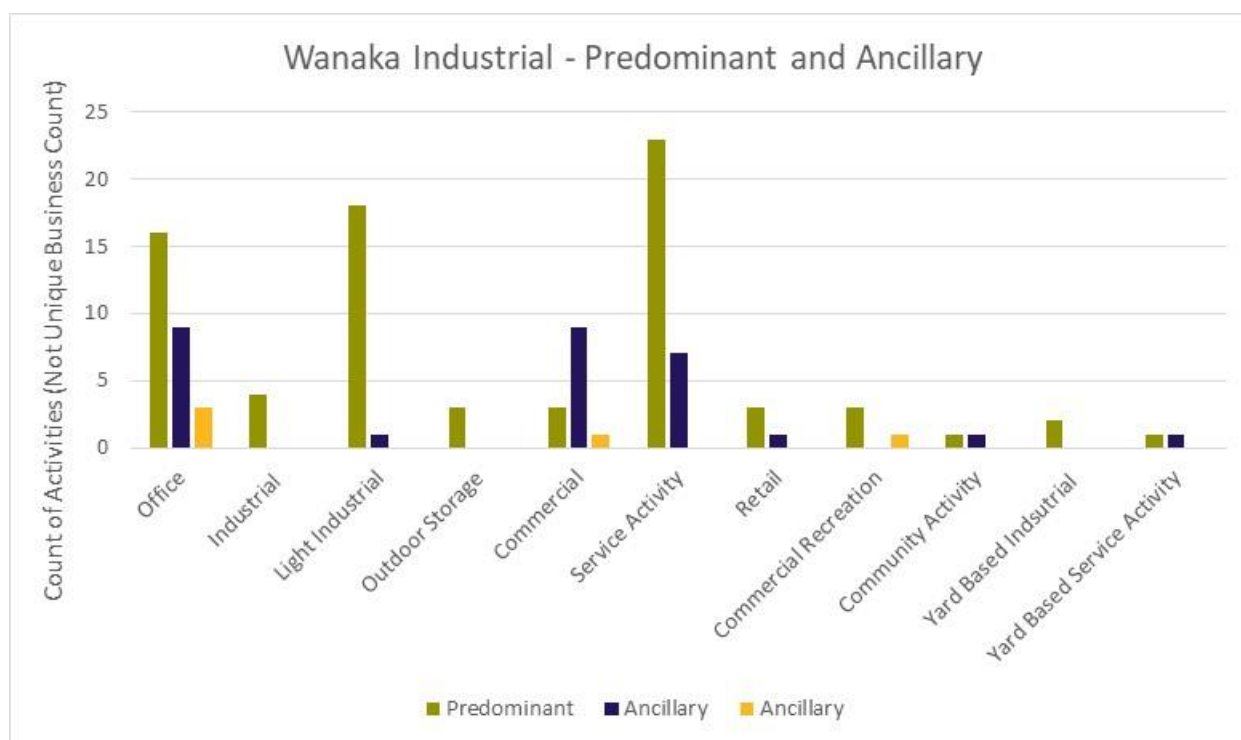
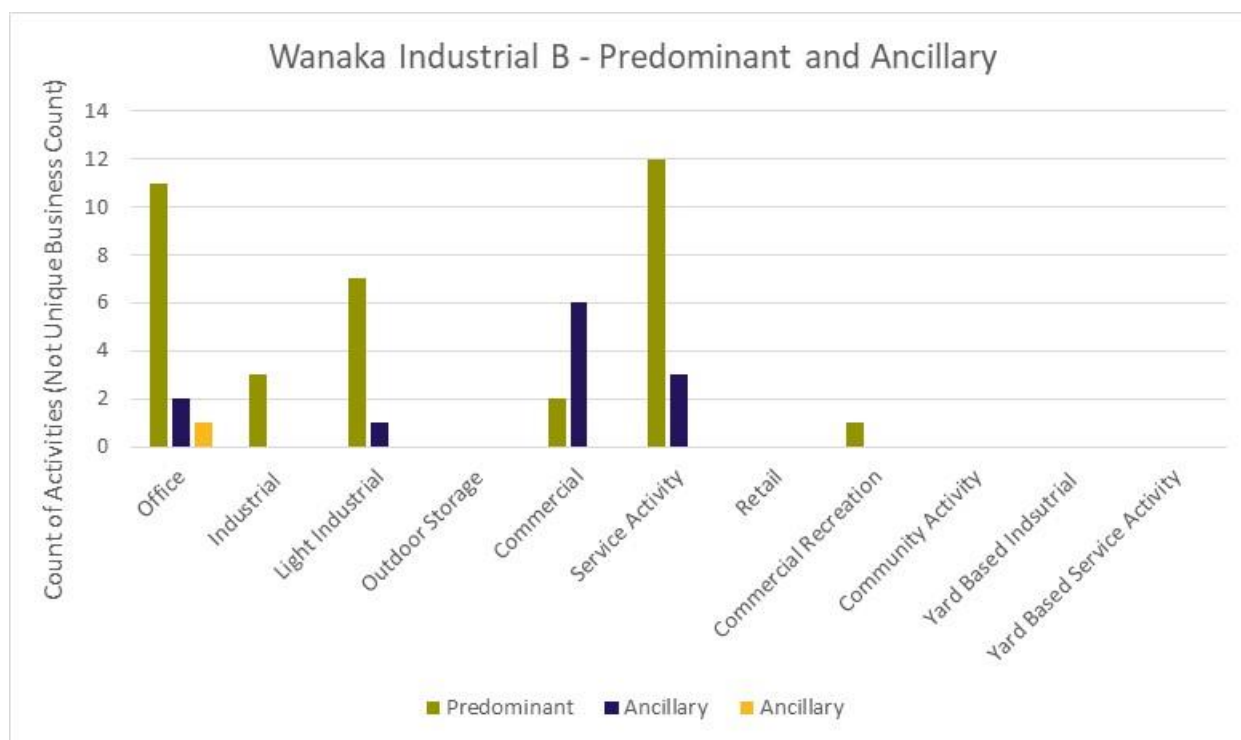


Figure 4.18 summarises actual counts of all activities within the extent of the Wanaka Industrial B zone (based on Council field survey data). For the purpose of this analysis, we have categorised activities according to the categories enabled in the Industrial zone and not those specifically identified for the Industrial B zone (for better comparability). It shows that the zone includes 33 businesses at present, with 12 of these including one ancillary activity and 1 of those containing a second ancillary activity. The most common (predominant) activity is defined as Service Activities and Office activities. There are 11 of these businesses each. There are no yard-based activities or outdoor storage. Retail and Commercial activities have also not occurred. Light Industrial activities are slightly less common (7 businesses). Commercial activities are the most common ancillary activity.



Figure 4.18 – Activities by District Plan Category (2019) – Wanaka Industrial B Zone

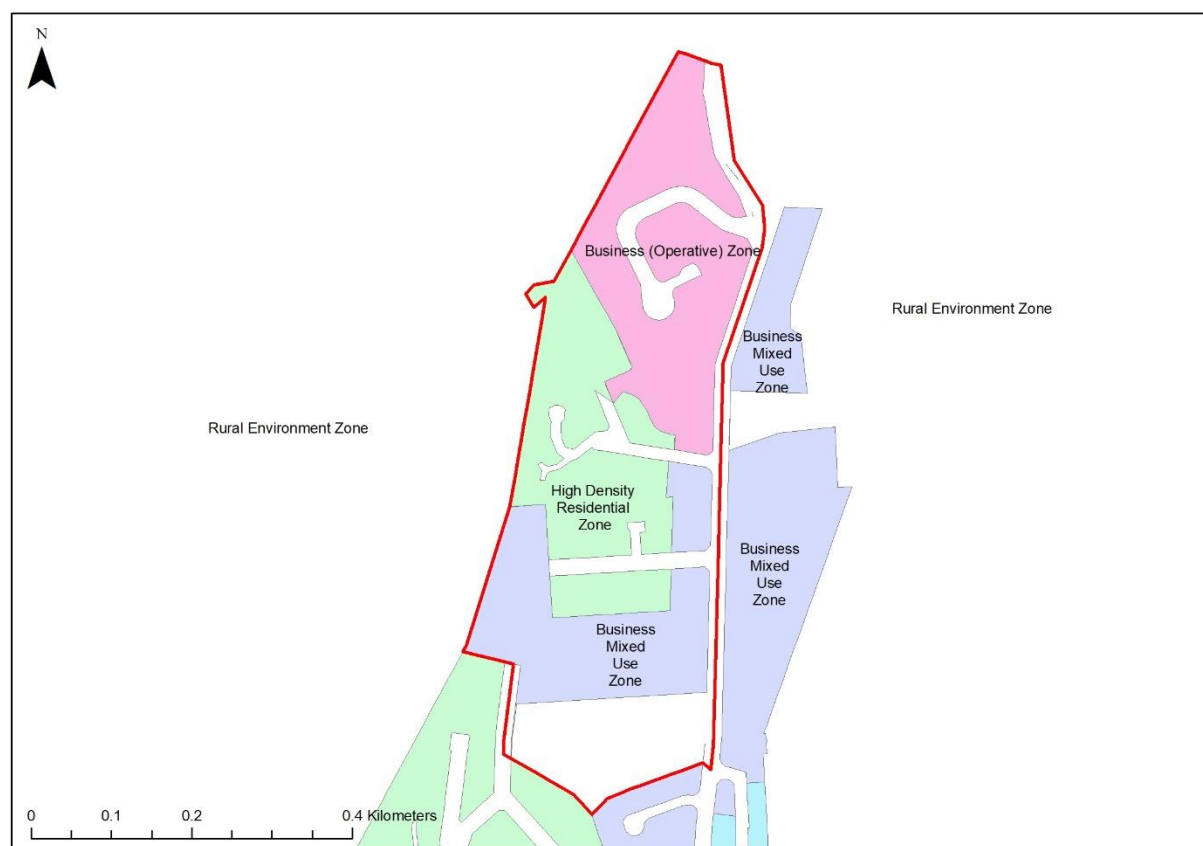


4.4.4 Gorge Road Business (Operative)

Figure 4.19 shows a map that compares the meshblock extent that has been used to represent economic activity using Business Directory data in the Gorge Road Business (Operative) Zone, relative to underlying zone boundaries. In order to capture the Business zone, the Business Directory analysis also picks up the High Density Residential Zone to the south and an area of the Business Mixed Use Zone. This means that the data will include industrial economy businesses that may be 'home-based' or in the Business Mixed Use Zone and not within the actual operative Business zone.

Figure 4.20 shows that the Business (Operative) zone (and immediate surrounding zone areas) contains 89 businesses (2017) of which 38 are included in the identified industrial economy (spread over 22 different ANZSIC types). The industrial economy share of total businesses in the area captured is therefore 43% but not representative of just the Operative Business Zone. The industrial economy share of total employment is 32%, with 204 workers (again this percentage should be viewed with caution). This gives an average business size for industrial economy businesses of 5 workers each (2017).

Figure 4.19 – Meshblock Boundaries and District Plan Zone Extent – Gorge Rd Business



Construction related businesses account for 39% of total industrial economy businesses and 46% of employment (these have an average business size of approximately 6 workers each). This is followed by Selected Other Service businesses (29% of businesses and 31% of employment). Manufacturing make up 16% of industrial economy businesses (6 as at 2017) and 9% of employment – giving a below average size of 3 workers each compared to other Divisions.

Figure 4.20 – Industrial Economy Activity in Approximate Gorge Rd Business Zone (2017)

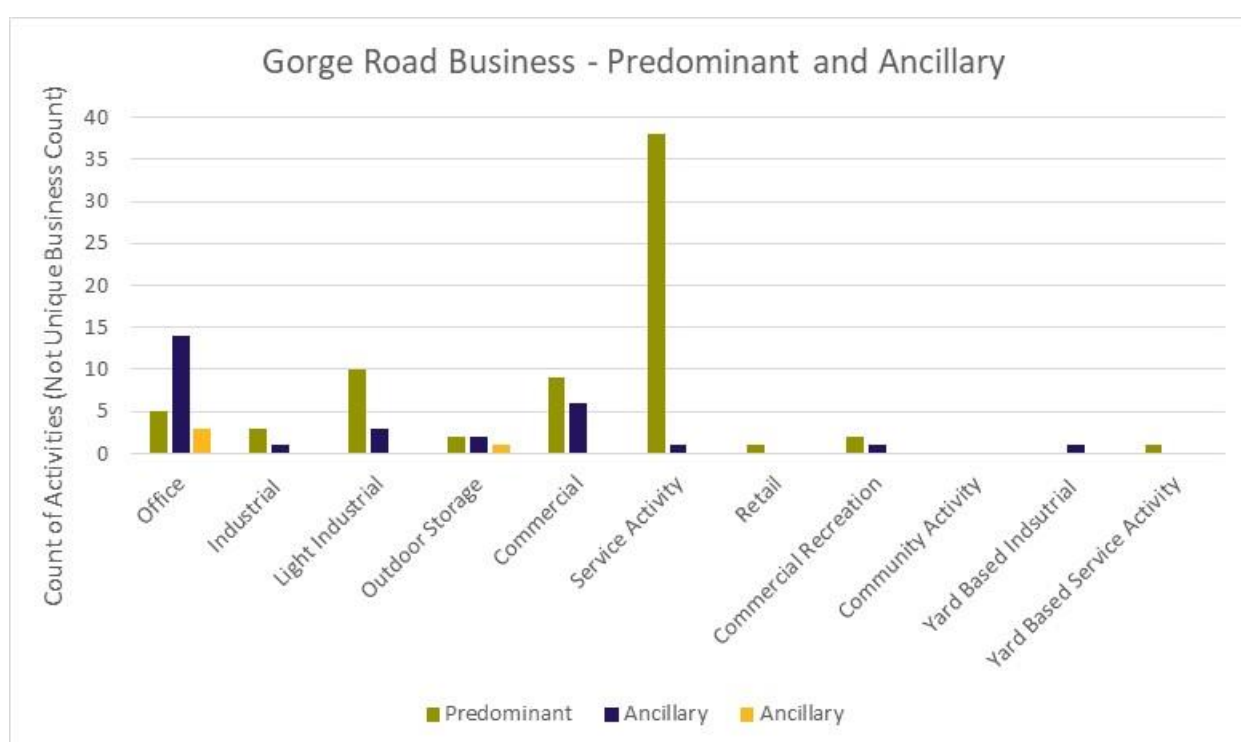
ANZSIC Division	Industrial Economy Selection	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n)	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
A	Selected Ag/Forestry/Fishing Support Services	-	0%	0%	-	0%	0%	-
C	Manufacturing	6	16%	7%	18	9%	3%	3.0
D	Waste Services Group Only	-	0%	0%	-	0%	0%	-
E	Construction	15	39%	17%	94	46%	15%	6.3
F	Wholesale Trade	5	13%	6%	21	11%	3%	4.3
I	Selected Transport, Postal and Warehousing	1	3%	1%	7	3%	1%	6.5
L	Selected Rental and Hiring Services	-	0%	0%	-	0%	0%	-
S	Selected Other Services	11	29%	12%	64	31%	10%	5.8
QLD Industrial Economy		38	100%	43%	204	100%	32%	5.4
Rest of QLD Economy (all other ANZSICs)		51		57%	441		68%	8.6
Total QLD Economy		89		100%	644		100%	7.2

Source: M.E, Statistics NZ Business Frame 2017. Meshblock extent includes areas of adjacent district plan zones - data not limited to Business (Operative) zone.



Figure 4.21 summarises actual counts of all activities within the extent of the Gorge Road Business (Operative) zone (based on Council field survey data). For the purpose of this analysis, activities were categorised according to the categories enabled in the Industrial zone (for comparability). It shows that the zone includes 77 businesses at present, with 29 of these including one ancillary activity and 4 of those containing a second ancillary activity. The most common (predominant) activity is defined as Service Activities. There are 38 of these businesses. There are no yard-based storage activities but there are two outdoor storage businesses and one yard based service activity. Light Industrial activities are the next most common (10 businesses), followed by Commercial activities (9 businesses). Office activities are the most common ancillary activity.

Figure 4.21 – Activities by District Plan Category (2019) – Gorge Road Business Zone



4.5 Industrial Zone Profile Comparison

This section provides a comparison of the five zones using both available datasets. This is relevant to understand what makes the zones similar and what makes them different.

Figures 4.22 and 4.23 compare the zones in terms of the count and share of 2017 businesses included in the description of the industrial economy (not all businesses in the zone). As discussed above, the Business Directory data is not limited just to the zone extents, so is indicative. The data is summarised by ANZSIC Division.

Figure 4.22 highlights the larger number of industrial economy businesses in the Glenda Drive Industrial area (this is likely to overestimate the actual count to some degree). The small size of the Arrowtown Industrial zone is also apparent (and consistent with its relatively small area in hectares). Figure 4.23 provides a more direct comparison of their respective mix of industrial economy (but not all businesses)



businesses using a percentage distribution. Their industrial economy business structure is very similar – especially between the Gorge Road Business zone, combined Wanaka Industrial zones and Glenda Drive Industrial zone. The Arrowtown Industrial zone is more unique in that it has a greater focus on Agricultural Support Services, a lesser focus on Manufacturing and a higher relative focus on Transport, Postal and Warehouse industries. It is relevant to consider though that a physically small zone will struggle to support a diverse range of businesses – had it been able to include more businesses, it's profile might have shifted slightly and would be expected to be closer to the average of other zones.

Figures 4.24 and 4.25 also provide a comparison of total businesses within the specific zone areas using Council's data. This data is more current and shows the total mix of predominant activities using District Plan terminology. As with the Business Directory comparison, Figure 4.24 shows the much larger overall size of the Glenda Drive Industrial zone. It has a considerable count of businesses in both Commercial and Office activities that has not occurred in the other zones, despite the same zoning in both Wanaka and Arrowtown. It also sustains more Industrial activities than seen elsewhere.

Figure 4.25 provides the more direct comparison (in percentage terms), removing the effect of size. As per the Business Directory analysis, it confirms a very similar profile across all zones. The Gorge Road Business zone is slightly more oriented towards Service Activities and slightly less to office and light industrial activities, otherwise is a close match. The Wanaka Industrial and Industrial B zones are also very similar for the main business types when compared using consistent categories. The only main difference in the Arrowtown Industrial zone is the higher share of yard-based service activities. Again, the Commercial component of Glenda Drive also sounds out.



Figure 4.22 – Comparison Using Business Directory Meshblock Data (2017) – IE Business Count

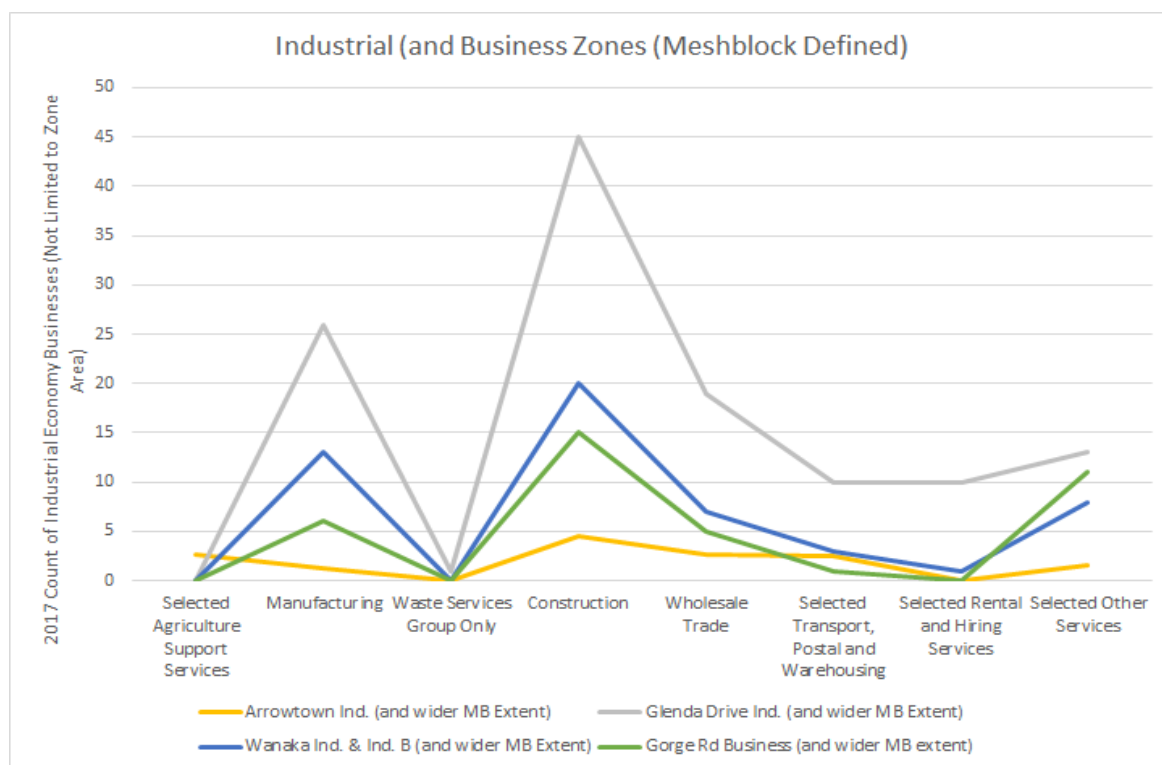


Figure 4.23 – Comparison Using Business Directory Meshblock Data (2017) – IE Business Share

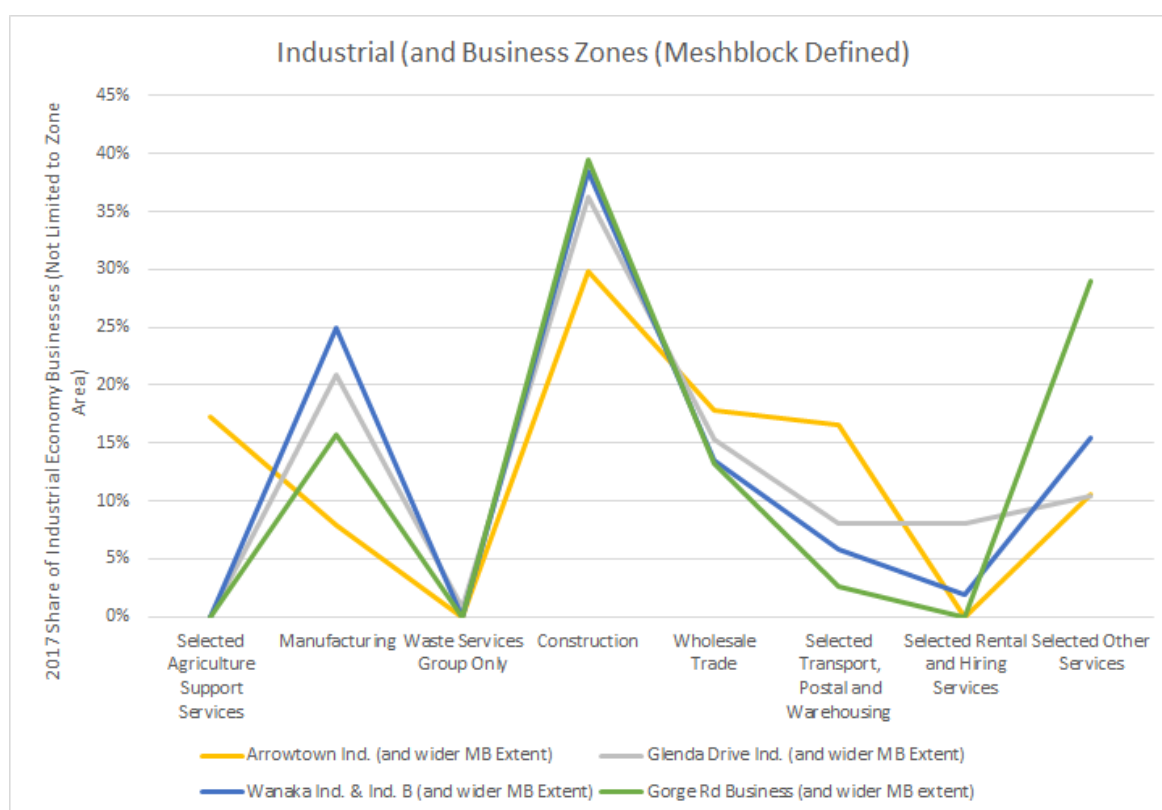




Figure 4.24 – Comparison Using Field Survey Zone Data (2019) – Total Business Count

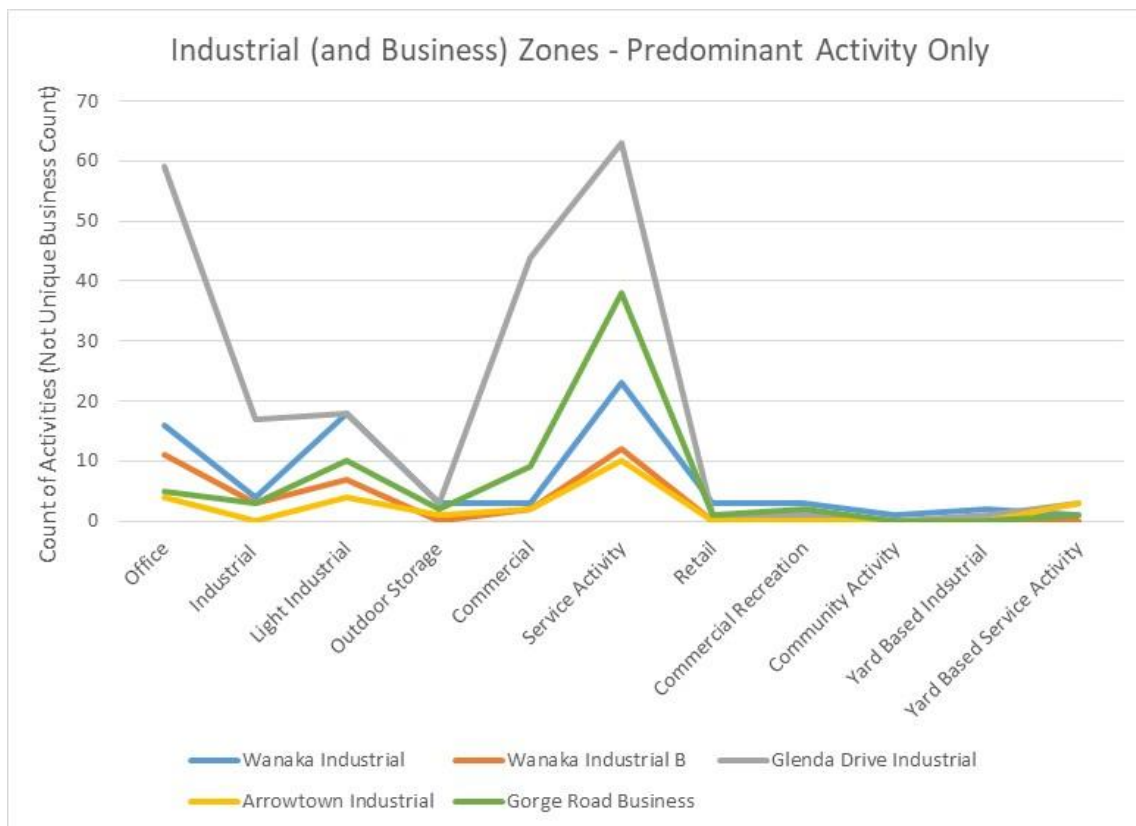
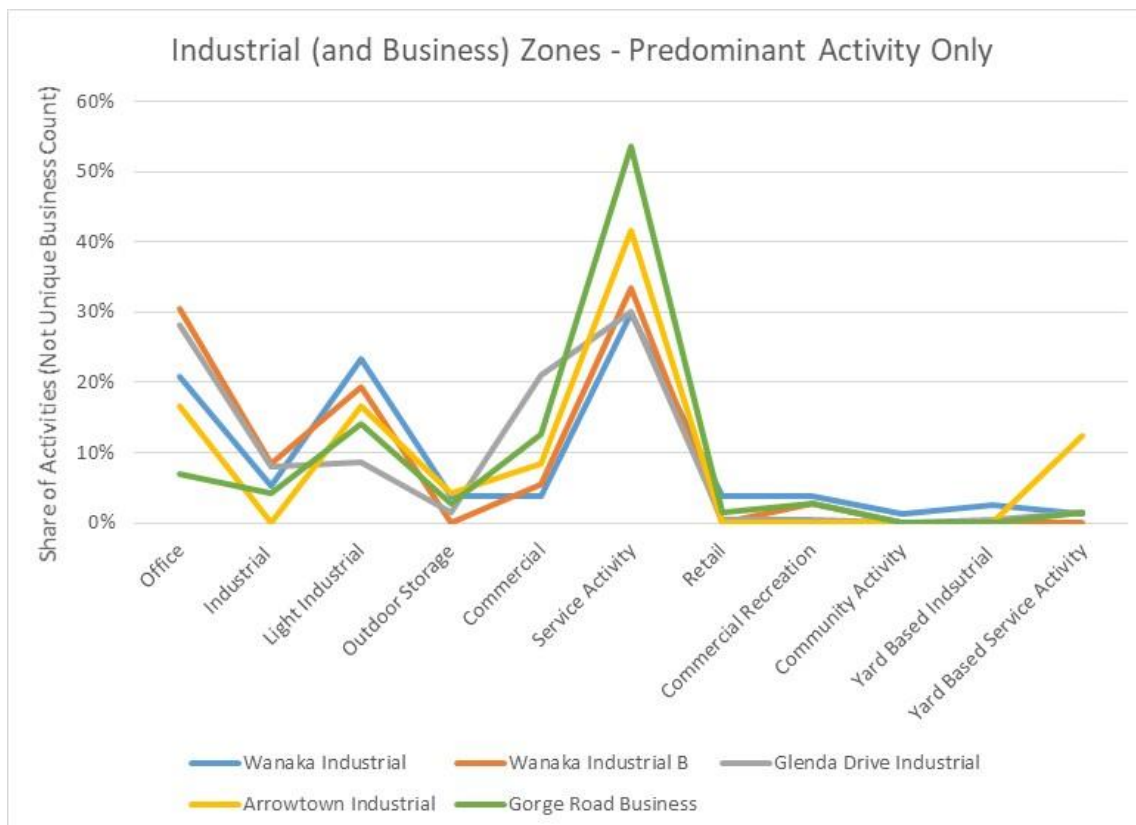


Figure 4.25 – Comparison Using Field Survey Zone Data (2019) – Total Business Share





5 Recent Changes in the Industrial Economy

This section examines how the QLD industrial economy has changed in recent years – not only in terms of its size, but it's structure. This is important because evidence of 'size change' provides clues for the rate of future growth that will need to be met (zone capacity). Evidence of 'structural change' reminds Council's that their industrial zones need to be flexible enough to allow the industrial economy to adapt. Provisions for managing activities and effects in industrial zones in the past, may not be suitable for today's industrial economy. Basing new provisions for managing activities and effects in industrial zones on what we see today, may not be suitable for the future industrial economy. These are all pertinent issues for the District Plan Review.

5.1 Business Growth 2001-2017

Figure 5.1 takes a high-level look at business counts in the QLD industrial economy between 2001 and 2017. A snapshot is provided for 2001, 2006, 2013 and 2017 (being a combination of census years and the latest year available for Statistics NZ Business Directory data). In order to compare the industrial economy over time, M.E has ensured that the approach to identifying the industrial economy is applied in each year – that is, if there were relevant industries that had one or more businesses in the past that are no-longer present in QLD's industrial economy, they were included in the industrial economy at that time.

The analysis shows that in 2001, the QLD industrial economy was just over a third of the size it is today in terms of the count of businesses. There were just 739 businesses. This grew to 1,490 businesses by 2006 (total growth of 751 businesses; 102% or an annual average growth rate of 15%). This rate of growth was faster than the rate of growth for the rest of QLD economy (73% between 2001-2006 or an annual average rate of 12%).

Jumping to 2013, the industrial economy was larger again at 1,626 businesses. This was however total growth of just 9% or 136 businesses between 2006 and 2013 – a significant slow-down (just 1.3% per annum). This is explained by the global financial crisis (GFC, approximately 2008), which took some time to recover from. This highlights that QLD's industrial economy is vulnerable to global and national economic forces. Between 2013 and 2017 growth picked up. The total count of businesses increased by 302 which was total growth of 19% or 4.4% per annum.

Overall, between 2001 and 2017, the number of businesses in QLD's industrial economy has increased by 1,189 to reach 1,928, from a base of 739 in 2001. This is total growth of 161% or an average annual growth rate of 6.2%. This is slightly faster than the growth rate of the rest of the QLD economy (152% total growth or 6.0% per annum (Figure 5.1).

Figure 5.1 – Total QLD Industrial Economy Business Count Growth 2001-2017

ANZSIC Division	Industrial Economy Selection	Businesses 2001	Businesses 2006	Businesses 2013	Businesses 2017
A	Selected Ag/Forestry/Fishing Support Services	24	41	47	50
C	Manufacturing	114	163	168	225
D	Waste Services Group Only	9	11	12	15
E	Construction	401	950	1,042	1,168
F	Wholesale Trade	55	97	106	154
I	Selected Transport, Postal and Warehousing	31	64	63	85
L	Selected Rental and Hiring Services	59	84	104	128
S	Selected Other Services	46	80	84	102
QLD Industrial Economy		739	1,490	1,626	1,928
Rest of QLD Economy (all other ANZSICs)		2,291	3,959	4,890	5,782
Total QLD Economy		3,030	5,449	6,516	7,710
QLD Industrial Economy as Share of Total Economy		24%	27%	25%	25%
Growth by Time Period (n)		Businesses 2001-06	Businesses 2006-13	Businesses 2013-17	Businesses 2001-2017
A	Selected Ag/Forestry/Fishing Support Services	17	6	3	26
C	Manufacturing	49	5	57	111
D	Waste Services Group Only	2	1	3	6
E	Construction	549	92	126	767
F	Wholesale Trade	42	9	48	99
I	Selected Transport, Postal and Warehousing	33	1	22	54
L	Selected Rental and Hiring Services	25	20	24	69
S	Selected Other Services	34	4	18	56
QLD Industrial Economy		751	136	302	1,189
Rest of QLD Economy (all other ANZSICs)		1,668	931	892	3,491
Total QLD Economy		2,419	1,067	1,194	4,680
Growth by Time Period (%)		Businesses 2001-06	Businesses 2006-13	Businesses 2013-17	Businesses 2001-2017
A	Selected Ag/Forestry/Fishing Support Services	71%	15%	7%	109%
C	Manufacturing	43%	3%	34%	98%
D	Waste Services Group Only	22%	9%	23%	63%
E	Construction	137%	10%	12%	191%
F	Wholesale Trade	76%	9%	46%	181%
I	Selected Transport, Postal and Warehousing	106%	-2%	35%	174%
L	Selected Rental and Hiring Services	42%	24%	23%	117%
S	Selected Other Services	74%	5%	22%	122%
QLD Industrial Economy		102%	9%	19%	161%
Rest of QLD Economy (all other ANZSICs)		73%	24%	18%	152%
Total QLD Economy		80%	20%	18%	154%

Source: M.E, Statistics NZ Business Frame

The Division within the industrial economy that has grown most significantly in terms of businesses is the Construction sector. This grew especially strongly between 2001 and 2006 with 549 additional businesses. In the following two time periods, the total increase was just 10% and 12% respectively (a significant slow-down in growth rate, but still a positive increase). Overall since 2001, there has been 767 Construction businesses added to QLD (Figure 5.1).



While Wholesale Trade is a relatively small sector in terms of QLD's total industrial economy, it is notable that its total rate of growth between 2001 and 2017 has been almost as rapid as the Construction sector (181% compared to 191% for Construction in that period). It was the fastest growing sector in the most recent period of 2013-2017; 46% growth compared with an average across the total industrial economy in that period of just 19%. In fact, all Divisions except Selected Agricultural Services grew faster than the construction sector since 2013 in percentage terms. In quantum terms though, the Construction sector still dominates (and accounted for 42% of all industrial economy growth between 2013 and 2017).

This does show that several Divisions within the QLD industrial economy are on the rise.

5.2 Employment Growth 2001-2017

Figure 5.2 tells a similar story from the perspective of industrial economy employment growth between 2001 and 2017. The analysis shows that in 2001, the QLD industrial economy was just over a third of the size it is today in terms of the count of workers (2,258). This grew to 4,344 workers by 2006 (total growth of 2,086 workers; 92% or an annual average growth rate of 14%). This rate of growth was considerably faster than the rate of employment growth for the rest of QLD economy (40% between 2001-2006 or an annual average rate of 7%). As these growth rates are lower than business growth rates, it indicates that in the rapid period of growth between 2001 and 2016, QLD was attracting lots of smaller businesses, particularly in the rest of the economy.

Jumping to 2013, the industrial economy was larger again at 4,426 workers. This was however total growth of just 2% or 82 workers between 2006 and 2013 – a significant slow-down (just 0.3% per annum). This shows that the GFC impacted not only on the number of businesses that the market could sustain, but also shows that a share of businesses survived by drastically reducing staff. This is evidenced by the business growth rate of 9% compared with the 2% growth rate of employment. Between 2013 and 2017 growth picked up. The total count of workers increased by 1,823 which was total growth of 41% or 9% per annum. This was faster than business growth in this period (19%), meaning that either the new businesses were much larger in size, or more likely, existing businesses were building up their staff counts due to better economic times.

Overall, between 2001 and 2017, the number of workers in QLD's industrial economy has increased by roughly 3,990 to reach approximately 6,250, from a base of around 2,260 in 2001. This is total growth of 177% or an average annual growth rate of 6.6%. This is faster than the growth rate of the rest of the QLD economy (115% total growth or 4.9% per annum (Figure 5.2).

The Division within the industrial economy that has grown most significantly in terms of workers is the Construction sector. This grew especially strongly between 2001 and 2006 with 1,475 additional businesses. In the following time period (2006-2013) the total count of Construction workers shrank by 5% (-126), but then grew by another 1,044 workers between 2013 and 2017. Overall since 2001, there has been a net increase of 2,390 odd Construction workers in QLD – growth of 223% and the fastest rate of overall growth across all Divisions of the industrial economy (Figure 5.2).

Figure 5.2 – Total QLD Industrial Economy Employment Count Growth 2001-2017

ANZSIC Division	Industrial Economy Selection	Employment 2001	Employment 2006	Employment 2013	Employment 2017	
A	Selected Ag/Forestry/Fishing Support Services	96	216	98	130	
C	Manufacturing	436	637	658	862	
D	Waste Services Group Only	39	55	63	103	
E	Construction	1,072	2,547	2,421	3,465	
F	Wholesale Trade	180	227	364	573	
I	Selected Transport, Postal and Warehousing	159	228	231	312	
L	Selected Rental and Hiring Services	127	185	302	371	
S	Selected Other Services	150	248	289	434	
QLD Industrial Economy		2,258	4,344	4,426	6,249	
Rest of QLD Economy (all other ANZSICs)		10,031	14,007	16,242	21,551	
Total QLD Economy		12,289	18,351	20,668	27,800	
QLD Industrial Economy as Share of Total Economy		18%	24%	21%	22%	
Growth by Time Period (n)		Employment 2001-06	Employment 2006-13	Employment 2013-17	Employment 2001-2017	
A	Selected Ag/Forestry/Fishing Support Services	120	-	118	32	34
C	Manufacturing	201		21	204	426
D	Waste Services Group Only	16		8	40	64
E	Construction	1,475	-	126	1,044	2,393
F	Wholesale Trade	47		137	209	393
I	Selected Transport, Postal and Warehousing	69		3	80	153
L	Selected Rental and Hiring Services	58		117	69	244
S	Selected Other Services	99		41	145	285
QLD Industrial Economy		2,086	82	1,823	3,991	
Rest of QLD Economy (all other ANZSICs)		3,976	2,235	5,309	11,520	
Total QLD Economy		6,062	2,317	7,132	15,511	
Growth by Time Period (%)		Employment 2001-06	Employment 2006-13	Employment 2013-17	Employment 2001-2017	
A	Selected Ag/Forestry/Fishing Support Services	126%	-55%	33%	35%	
C	Manufacturing	46%	3%	31%	98%	
D	Waste Services Group Only	41%	15%	63%	166%	
E	Construction	138%	-5%	43%	223%	
F	Wholesale Trade	26%	61%	57%	218%	
I	Selected Transport, Postal and Warehousing	44%	1%	35%	96%	
L	Selected Rental and Hiring Services	46%	63%	23%	192%	
S	Selected Other Services	66%	16%	50%	190%	
QLD Industrial Economy		92%	2%	41%	177%	
Rest of QLD Economy (all other ANZSICs)		40%	16%	33%	115%	
Total QLD Economy		49%	13%	35%	126%	

Source: M.E, Statistics NZ Business Frame

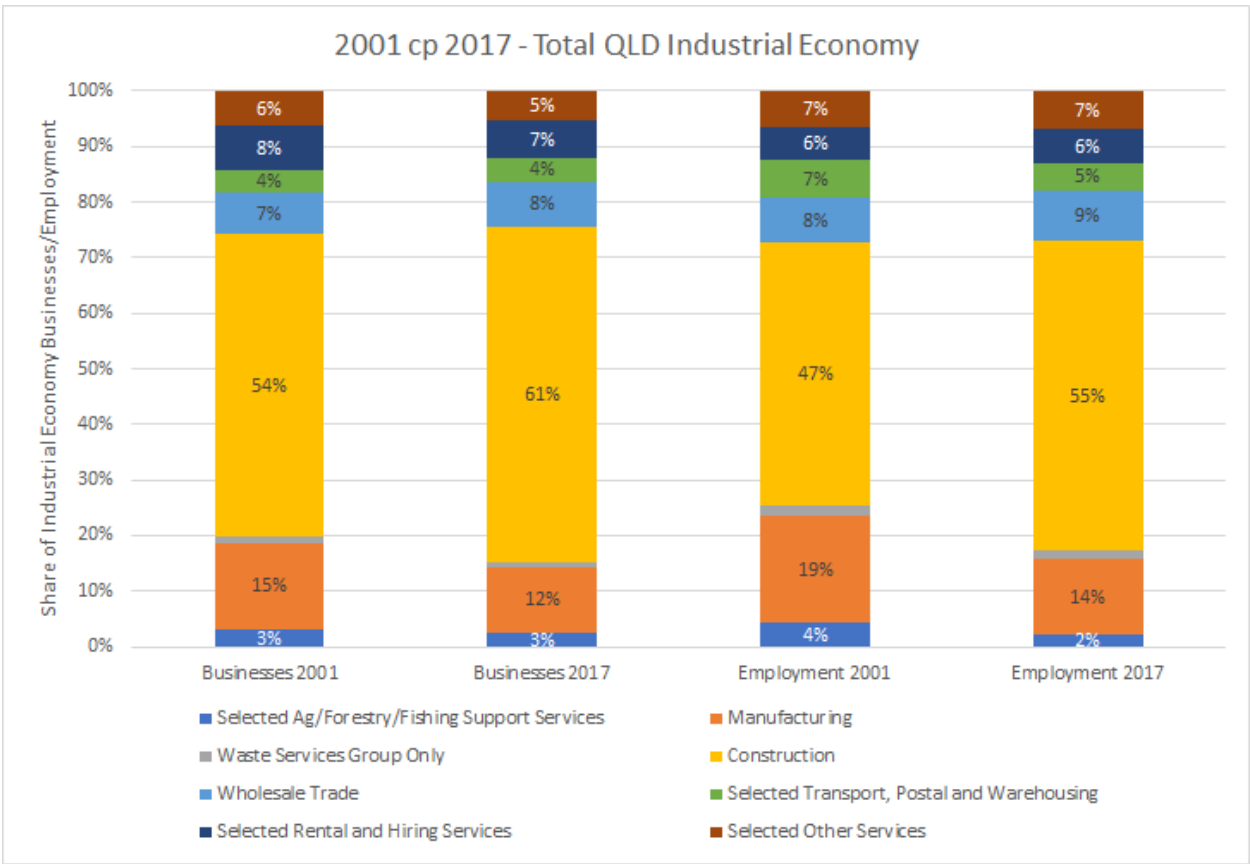
Again, Wholesale Trade is a relatively small Division in terms of QLD's total industrial economy employment, but it is notable that its total rate of growth between 2001 and 2017 has been almost as rapid as the Construction sector (218% compared to 223% for Construction in that period). It was the second fastest growing sector in the most recent period of 2013-2017; 57% growth compared with an average across the total industrial economy in that period of 41%. Waste Services was the fastest growing Division since 2013 (63%). The only other above average growth was by the Selected Other Services Division. In quantum terms

though, the Construction sector still dominates (and accounted for 57% of all industrial economy employment growth between 2013 and 2017).

5.3 Structural Shifts 2001-2017

Figure 5.3 compares the structure of the industrial economy between 2001 and 2017. The structure of businesses is represented by the two left hand bars. The structure of employment is represented in the two right hand bars. The dominance of the Construction Division is clear. It accounted for 54% of industrial economy businesses in 2001 but now accounts for a 61% share. Similarly, in employment terms, Construction has increased from a 47% share to a 55% share. As a result, other industrial economy sectors generally represent a smaller share of the total, with the exception of the Wholesale Trade Division, which has increased by 1 percentage point in both the share of business and employment. While none of the other sectors have declined in absolute terms, their slower growth rates mean that they now play a smaller role in the industrial economy than they did in the past. The industrial economy in QLD is becoming slightly less diverse compared to 2001, but even then, it was dominated by Construction activity.

Figure 5.3 – Share of Industrial Economy in QLD 2001 versus 2017 – Businesses & Employment



It is useful to test whether the recent changes experienced by QLD’s industrial economy have been consistent with changes in the wider industrial economy of New Zealand. Comparing the total Manufacturing and total Construction sector is the most robust way to do this. We have based the comparison on the share that each sector makes up in the total economy over time. Key findings are:



Manufacturing

- We have already established that the Manufacturing Division accounts for a smaller share of the QLD industrial economy (and Construction a larger share) than many other places, and the national average (section 2.4). Therefore, it is relevant to consider the relative shift in share between 2001 and 2017.
- In QLD, the total Manufacturing sector decreased from a 3.8% share to a 2.9% share of total businesses in the economy (2001 to 2017). This is a reduction in share of 22%.
- By comparison, the total Manufacturing sector in New Zealand decreased from a 5.5% share to a 4.0% share. This is a reduction in share of 27% (2001 to 2017). This means that the changing (declining) relative role of Manufacturing in the QLD economy has been only slightly less apparent than the shifts seen nationwide.
- In QLD, the total Manufacturing sector decreased from a 3.5% share to a 3.1% share of total employment in the economy. This is a reduction in share of 13% (2001 to 2017).
- By comparison, the total Manufacturing sector in New Zealand decreased from a 13.3% share of total employment to a 9.7% share. This is a reduction in share of 27% (2001 to 2017). This means that the changing (declining) relative role of Manufacturing employment in the QLD economy has been significantly less (half as) apparent to the shifts seen nationwide.

Construction

- In QLD, the total Construction sector increased from a 13.2% share to a 15.2% share of total businesses in the economy (2001 to 2017). This is an increase in share of 15%.
- By comparison, the total Construction sector in New Zealand increased from a 10.1% share to a 10.8% share. This is an increase in share of 7% (2001 to 2017). This means that the changing (increasing) relative role of Construction in the QLD economy has been significantly more (twice as) apparent than the shifts seen nationwide.
- In QLD, the total Construction sector increased from an 8.7% share to a 12.5% share of total employment in the economy. This is an increase in share of 43% (2001 to 2017).
- By comparison, the total Construction sector in New Zealand increased from a 6.0% share of total employment to an 8.6% share. This is an increase in share of 44% (2001 to 2017). This means that the changing (increasing) relative role of Construction employment in the QLD economy has been very similar to the shifts seen nationwide.

In summary this means that, structurally, the QLD industrial (and total) economy is not changing in the same way as New Zealand's industrial (and total) economy. It is somewhat unique and responding to different drivers of demand and supply compared with the rest of New Zealand. While the relative rise in the role of Construction employment in the economy is similar to that seen nationwide, the nature of that business growth has been different – namely smaller sized Construction business. For example, the Construction sector in QLD supports a greater share of independent builders.

5.4 Moderate-Strong Growth Industries

This section looks at the growth in the industrial economy in more detail (by 6-Digit ANZSIC). Figure 5.4 shows those ANZSICs within the industrial economy that have experienced moderately strong net growth in business counts between 2001 and 2017. These are the industry's most "on the rise". The industries highlighted in darker green are those growth industries that have experienced consistent positive growth in each period analysed and are key sectors to watch in future. The balance has had one period where the size of the industry declined. More often than not, this was in the period containing the GFC, but some have declined more recently – whilst still showing a net increase.

Figure 5.4 – Industries in Industrial Economy with Mod-Strong Net Business Growth 2001-2017

QLD Industrial Economy	ANZSIC	Division	2001-2006	2006-2013	2013-2017	2001-2017	Share of IE Growth 2001-2017 %	Share of IE 2017 (%)
Industrial - House Construction	E301100	E	219	17	10	246	21%	20%
Industrial - Other Residential Building Construction	E301900	E	22	24	20	66	6%	4%
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	L	16	19	20	55	5%	3%
Industrial - Electrical Services	E323200	E	28	11	9	48	4%	4%
Industrial - Painting and Decorating Services	E324400	E	36	-	1	45	4%	4%
Industrial - Land Development and Subdivision	E321100	E	20	9	11	40	3%	3%
Industrial - Landscape Construction Services	E329100	E	32	8	-	37	3%	2%
Industrial - Plastering and Ceiling Services	E324100	E	35	-	10	34	3%	3%
Industrial - Plumbing Services	E323100	E	20	12	-	3	2%	3%
Industrial - Tiling and Carpeting Services	E324300	E	20	-	2	10	2%	2%
Industrial - Other Automotive Repair and Maintenance	S941900	S	13	6	8	27	2%	3%
Industrial - Site Preparation Services	E321200	E	23	-	2	6	2%	2%
Industrial - Other Construction Services n.e.c.	E329900	E	10	14	2	26	2%	2%
Industrial - Other Agriculture and Fishing Support Services	A052900	A	17	6	3	26	2%	3%
Industrial - Carpentry Services	E324200	E	20	-	7	8	2%	2%
Industrial - Other Heavy and Civil Engineering Construction	E310900	E	5	6	10	21	2%	1%
Industrial - Road Freight Transport	I461000	I	11	2	7	20	2%	2%
Industrial - Bricklaying Services	E322200	E	18	9	-	8	1%	2%
Industrial - Courier Pick-up and Delivery Services	I510200	I	3	4	11	18	1%	1%
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	C	4	9	2	15	1%	1%
Industrial - Concreting Services	E322100	E	8	-	7	15	1%	1%
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	C	5	-	10	15	1%	1%
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	L	5	11	-	2	1%	1%
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	F	7	2	5	14	1%	1%
Industrial - Roofing Services	E322300	E	14	-	1	0	1%	1%
Industrial - Air Conditioning and Heating Services	E323300	E	7	2	4	13	1%	1%
Industrial - Passenger Car Rental and Hiring	L661100	L	12	-	7	7	1%	2%
Industrial - Commission Based Wholesaling	F380000	F	3	-	2	11	1%	1%
Industrial - Automotive Body, Paint and Interior Repair	S941200	S	7	-	1	6	1%	1%
Industrial - Non-Residential Building Construction	E302000	E	2	-	1	10	1%	1%
Industrial - Aircraft Manufacturing and Repair Services	C239400	C	3	2	5	10	1%	1%

House Construction was the biggest mover. It currently accounts for 20% of the businesses in the QLD industrial economy but accounted for 21% of the industrial economy growth between 2001-2017. Not all these ANZSICs have a high propensity (functional need) to seek an industrial zone location. But for those that do (section 4.3.1), relatively more weight should be given to considering the degree to which current industrial zone provisions (policies and rules/standards) accommodate the needs of these types of business operations.

5.5 Low-Moderate Growth Industries

Figure 5.5 shows those industries within the industrial economy that have experienced low-moderate net growth in business counts between 2001 and 2017. These are the industry's slowly "on the rise". The ANZSICs highlighted in darker orange are those growth industries that have experienced consistent positive growth in each period analysed and are sectors to watch in future. The balance has had one (or two) period(s) where the size of the industry declined. More often than not, this was in the period containing the GFC, but some have declined more recently – whilst still showing a small net increase.

Figure 5.5 – Industries in Industrial Economy with Low-Moderate Net Business Growth 2001-2017

QLD Industrial Economy	ANZSIC	Division	2001-2006	2006-2013	2013-2017	2001-2017	Share of IE Growth 2001-2017 %	Share of IE 2017 (%)	
Industrial - Other Building Installation Services	E323900	E	-	4	5	9	1%	0%	
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	C	-	1	2	8	9	1%	1%
Industrial - Electronic (except Domestic Appliance) and Precision Equipment	S942200	S	7	-	1	2	8	1%	0%
Industrial - Other Goods Wholesaling n.e.c.	F373900	F	10	-	1	2	8	1%	1%
Industrial - Clothing and Footwear Wholesaling	F371200	F	5	2	-	0	7	1%	0%
Industrial - Liquor and Tobacco Product Wholesaling	F360600	F	4	-	2	4	6	1%	1%
Industrial - Other Agricultural Product Wholesaling	F331900	F	1	-	-	5	6	1%	0%
Industrial - Road and Bridge Construction	E310100	E	-	2	1	7	6	1%	1%
Industrial - Other Warehousing and Storage Services	I530900	I	1	-	-	5	6	0%	0%
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	C	3	-	-	2	5	0%	1%
Industrial - Beer Manufacturing	C121200	C	-	-	1	4	5	0%	0%
Industrial - Iron Smelting and Steel Manufacturing	C211000	C	-	-	3	2	5	0%	0%
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	C	6	-	4	3	5	0%	0%
Industrial - Hire of Construction Machinery with Operator	E329200	E	3	3	-	1	5	0%	0%
Industrial - Other Transport Support Services n.e.c	I529900	I	-	-	2	3	5	0%	0%
Industrial - Laundry and Dry-Cleaning Services	S953100	S	4	-	1	2	5	0%	1%
Industrial - Other Hardware Goods Wholesaling	F333900	F	1	3	1	5	5	0%	0%
Industrial - Other Manufacturing n.e.c.	C259900	C	-	1	1	5	5	0%	0%
Industrial - Medical and Surgical Equipment Manufacturing	C241200	C	-	-	2	2	4	0%	0%
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	C	1	2	1	4	4	0%	0%
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	C	4	1	-	1	4	0%	0%
Industrial - Fire and Security Alarm Installation Services	E323400	E	4	-	2	2	4	0%	0%
Industrial - Other Water Transport Support Services	I521900	I	3	-	1	2	4	0%	0%
Industrial - Other Grocery Wholesaling	F360900	F	1	2	1	4	4	0%	1%
Industrial - Glazing Services	E324500	E	3	-	1	2	4	0%	0%
Industrial - Petroleum Product Wholesaling	F332100	F	2	1	1	4	4	0%	0%
Industrial - Toy and Sporting Goods Wholesaling	F373400	F	-	1	2	3	4	0%	0%
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	C	-	-	1	3	4	0%	0%
Industrial - Concrete Product Manufacturing	C203400	C	2	-	-	2	4	0%	0%
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	C	1	1	1	3	3	0%	0%
Industrial - Dairy Produce Wholesaling	F360300	F	-	-	-	3	3	0%	0%
Industrial - Confectionery Manufacturing	C118200	C	-	-	2	1	3	0%	0%
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	C	-	1	3	1	3	0%	0%
Industrial - Cosmetic and Toiletry Preparation Manufacturing	C185200	C	-	-	-	3	3	0%	0%
Industrial - Other Food Products Manufacturing n.e.c.	C119900	C	1	-	-	2	3	0%	0%
Industrial - Furniture and Floor Coverings Wholesaling	F373100	F	3	-	2	2	3	0%	0%
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	S	1	1	1	3	3	0%	0%
Industrial - Waste Treatment and Disposal Services	D292100	D	3	-	1	1	3	0%	0%
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	F	1	1	1	3	3	0%	0%
Industrial - Fruit and Vegetable Processing	C114000	C	-	-	-	3	3	0%	0%

Other Building Insulation Services was the biggest mover in this group. It currently accounts for less than 1% of the businesses in the QLD industrial economy and accounted for 1% of the industrial economy growth between 2001-2017. Not all these ANZSICs have a high propensity (functional need) to seek an industrial zone location. But for those that do (section 4.3.1), some weight should be given to considering the degree

to which current industrial zone provisions (policies and rules/standards) accommodate the needs of these types of business operations.

5.6 Declining Industries

When reviewing the ‘fit’ of industrial zone provisions to meet the future needs of the industrial economy, consideration should be given to industries that are in decline (in terms of the count of businesses). These industries may be facing decreasing demand from a changing market and/or facing increasing competition from outside the district. Alternatively, they may be undergoing consolidation (fewer businesses catering for a larger market share each). Either way, a decline in recent years *may* suggest continued decline in future years (particularly under a business as usual scenario).

Figure 5.6 shows those ANZSICs within the industrial economy that have experienced a net decrease in business counts between 2001 and 2017. All of them account for a very small share of total industrial economy businesses. These are the industry’s slowly “on the decline”. The ANZSICs highlighted in darker red are those industries that have experienced consistent negative growth in each period analysed and are sectors that may be exiting at some time in the future if these trends continue. The balance have had one (or two) period(s) where the size of the industry increased or stayed the same. We note that in one of these ANZSICs (Wooden Structural Fittings and Components Manufacturing), Cromwell has a number of businesses (and this may be a relevant factor).

Figure 5.6 – Industries in Industrial Economy with Net Business Decline 2001-2017

QLD Industrial Economy	ANZSIC	Division	2001-2006	2006-2013	2013-2017	2001-2017	Share of IE Growth 2001-2017 %	Share of IE 2017 (%)		
Industrial - Boatbuilding and Repair Services	C239200	C	-	1	-	0	1	0%	0%	
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	C	-	-	1	-	1	0%	0%	
Industrial - Other Ceramic Product Manufacturing	C202900	C	2	-	3	-	1	0%	0%	
Industrial - Other Structural Metal Product Manufacturing	C222900	C	3	-	4	-	1	0%	0%	
Industrial - Ready-Mixed Concrete Manufacturing	C203300	C	-	-	-	1	1	0%	0%	
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	C	-	-	1	-	1	0%	0%	
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	C	-	-	1	-	2	0%	0%	
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	C	1	-	3	-	6	8	-1%	0%
Rest of Manufacturing		C	6	-	6	-	9	9	-1%	0%
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	L	-	8	-	3	2	13	-1%	0%

Heavy Machinery and Scaffolding Rental and Hiring was the biggest loser in this group (with the loss of 13 businesses although the rate of decline is less recently compared to 2001-2006). It currently accounts for less than 1% of the businesses in the QLD industrial economy. We note that employment in this ANZSIC has also declined in net terms since 2001. This *suggests* that the decline is not caused by consolidation (where employment levels may be more likely to stay the same), but that conclusion is not certain. Not all these ANZSICs have a high propensity (functional need) to seek an industrial zone location. But for those that do (section 4.3.1), relatively less weight might be given to considering the degree to which current industrial zone provisions (policies and rules/standards) accommodate the needs of these types of business operations. The possible exception might be Ready-Mixed Concrete Manufacturing, which while losing one business to drop from 4 to 3, has increased employment in the same time (by 14). Most of these industries are heavy industrial businesses.



5.7 Lost Industries

This section identifies industrial sectors for which there have been one or more businesses in QLD in the recent past (since 2001) but are no longer present / represented in the industrial economy. These industries are listed below. These are industries that while probably only small or unique have already exited (closed or moved). On the one hand, the loss of these industries might be considered as gaps in the market and an opportunity for new entrants. However, M.E considers it is more likely that QLD will not see these types of ANZSICs again. Most are heavy industries.

- Cheese and other dairy product manufacturing
- Communication equipment manufacturing
- Leather tanning, fur dressing and leather product manufacturing
- Log sawmilling
- Machine tool and parts manufacturing
- Meat processing
- Other electronic equipment manufacturing
- Other motor vehicle parts manufacturing
- Other polymer product manufacturing
- Polymer foam product manufacturing
- Prefabricated metal building manufacturing
- Reconstituted wood product manufacturing
- Reproduction of recorded media
- Toy, sporting and recreational product manufacturing
- Whiteware appliance manufacturing

5.8 Recent Growth by Ward

Figure 5.7 examines recent growth in business counts in the industrial economy by ward. It considers just the 2001 and 2017 snapshots. While the total industrial economy has grown by 161% during that period, Wanaka's industrial economy has increased at a much faster rate. It has increased from 234 businesses in 2001 to 736 in 2017 (growth of 215% or 502 businesses). Wanaka's total economy has also grown faster than the district average, but the industrial economy has increased its share of total businesses from 28% to 30%. Wholesale Trade and Transport, Postal and Warehousing Divisions have had the fastest growth rate, marginally higher than Construction, but in absolute terms, Construction has still experienced the largest increase in business counts.

Figure 5.7 – QLD Industrial Economy Business Count Growth by Ward 2001-2017

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD
Businesses 2001					
A	Selected Ag/Forestry/Fishing Support Services	3	8	13	24
C	Manufacturing	10	63	41	114
D	Waste Services Group Only	-	7	2	9
E	Construction	43	230	128	401
F	Wholesale Trade	2	36	17	55
I	Selected Transport, Postal and Warehousing	4	20	7	31
L	Selected Rental and Hiring Services	4	40	15	59
S	Selected Other Services	4	31	11	46
Industrial Economy		70	435	234	739
Rest of Economy (all other ANZSICs)		115	1,564	612	2,291
Total Economy		185	1,999	846	3,030
Industrial Economy as Share of Total Economy		38%	22%	28%	24%
Businesses 2017					
A	Selected Ag/Forestry/Fishing Support Services	5	21	24	50
C	Manufacturing	13	124	88	225
D	Waste Services Group Only	-	9	6	15
E	Construction	94	619	455	1,168
F	Wholesale Trade	3	83	68	154
I	Selected Transport, Postal and Warehousing	4	56	25	85
L	Selected Rental and Hiring Services	6	86	36	128
S	Selected Other Services	9	60	34	102
Industrial Economy		133	1,059	736	1,928
Rest of Economy (all other ANZSICs)		328	3,716	1,738	5,782
Total Economy		462	4,775	2,474	7,710
Industrial Economy as Share of Total Economy		29%	22%	30%	25%
Net Growth 2001-2017 (n)					
A	Selected Ag/Forestry/Fishing Support Services	2	13	11	26
C	Manufacturing	3	61	47	111
D	Waste Services Group Only	-	2	4	6
E	Construction	51	389	327	767
F	Wholesale Trade	1	47	51	99
I	Selected Transport, Postal and Warehousing	1	36	18	54
L	Selected Rental and Hiring Services	2	46	21	69
S	Selected Other Services	5	29	23	56
Industrial Economy		63	624	502	1,189
Rest of Economy (all other ANZSICs)		213	2,152	1,126	3,491
Total Economy		277	2,776	1,628	4,680
Net Growth 2001-2017 (%)					
A	Selected Ag/Forestry/Fishing Support Services	63%	168%	84%	109%
C	Manufacturing	33%	96%	116%	98%
D	Waste Services Group Only	0%	23%	205%	63%
E	Construction	119%	169%	256%	191%
F	Wholesale Trade	35%	132%	301%	181%
I	Selected Transport, Postal and Warehousing	-13%	181%	259%	174%
L	Selected Rental and Hiring Services	50%	116%	139%	117%
S	Selected Other Services	120%	93%	206%	122%
Industrial Economy		90%	143%	215%	161%
Rest of Economy (all other ANZSICs)		185%	138%	184%	152%
Total Economy		149%	139%	192%	154%

Source: M.E, Statistics NZ Business Frame



The count of industrial economy businesses in the Queenstown ward has grown by 624 between 2001 and 2017. However, this is growth of 143% - below the district average. The industrial economy in Queenstown ward has however grown faster than the rest of the economy (142% compared to 138%). As with Wanaka, the fastest growing sector is Transport, Postal and Warehousing at 181% - not as fast as the increase in Wanaka (259%) but double the growth in quantum (36 new businesses compared to 18 in Wanaka). The Construction sector in Queenstown has grown by 169% between 2001 and 2017 (389 additional businesses). The amount of growth is not that much more than in Wanaka despite the larger size of the market. Wanaka's Construction growth represents a more significant change from the 2001 situation (256% growth compared to 169% in Queenstown).

Figure 5.8 examines recent growth in employment counts in the industrial economy by ward. While total industrial economy employment has grown by 177% during that period, Wanaka's industrial economy employment has increased at a much more significant rate. It has increased from 538 workers in 2001 to 1,873 in 2017 (growth of 248% or 1,335 workers). Wanaka's total economy has also grown faster than the district average, but the industrial economy has increased its share of total employment from 20% to 26%.

Waste Services has had the most rapid growth (829%) but off a very small base in 2001. The actual growth in workers in that sector was 61. Wholesale Trade has had the second fastest employment growth rate (528%) but again, off a small base. While the growth of Transport, Postal and Warehousing businesses has been rapid in percentage terms, the same does not apply to the rate of employment growth in that sector (just 57%). The addition of 18 businesses only translated into growth of 23 workers. On closer investigation, most of the employment growth has been for Bus Transport. The increase in businesses has most likely been linked to Couriers and Other Transport Services (which includes taxis). Construction has still experienced the largest increase in employment counts in Wanaka (818 additional workers).

Total growth in the Queenstown ward's industrial economy employment has been 2,368 (2001-2017). This is 59% of district growth in the industrial economy. Arrowtown ward has increased industrial economy employment by 288 (an increase of 225%). There Construction sector growth accounts for 67% of the total growth (Figure 5.8).

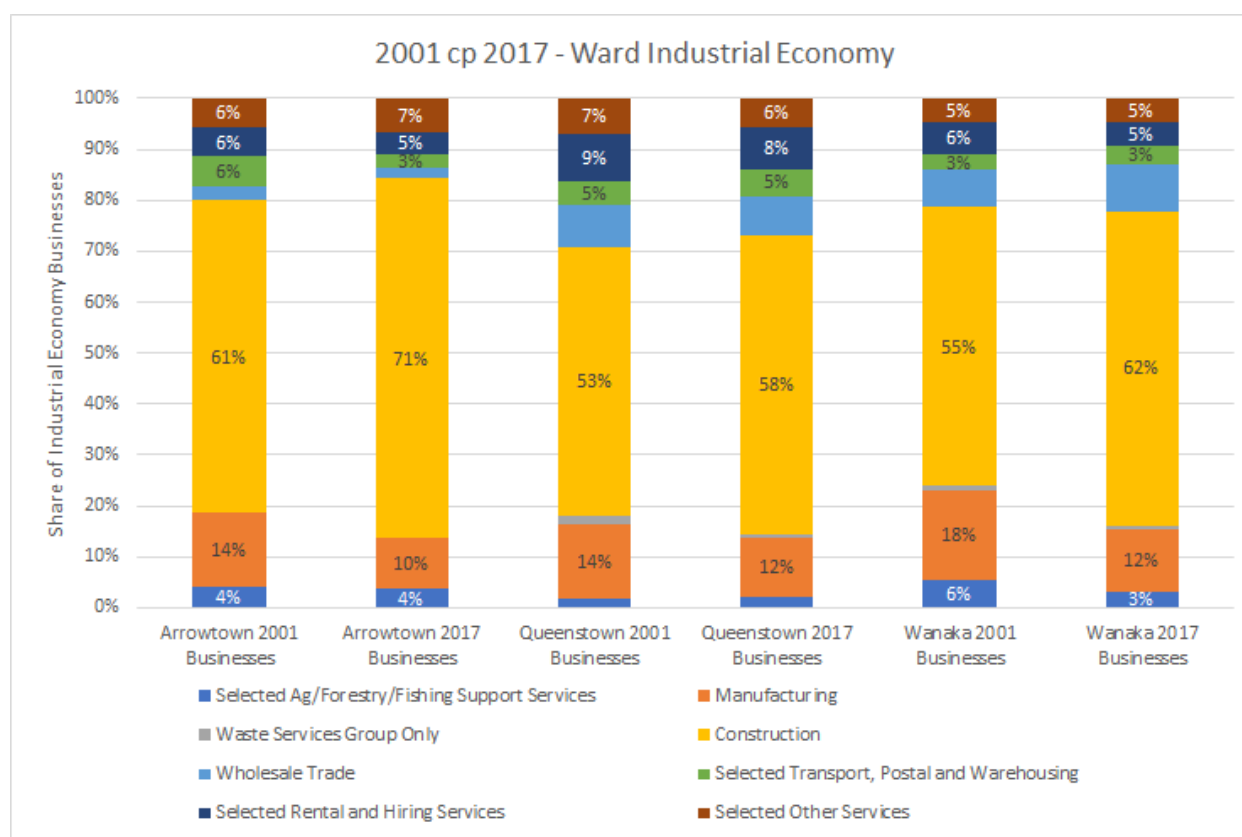
Figure 5.9 illustrates the changing structure of the industrial economy in each ward since 2001. It considers the mix of businesses by Division only. A key feature of this data is that structurally, Queenstown ward's industrial economy has been the most stable. Certainly, the Construction sector has grown in share with other sectors having a relatively smaller role, but this shift has been more moderate compared to in Arrowtown and Wanaka.

Figure 5.8 – QLD Industrial Economy Employment Count Growth by Ward 2001-2017

ANZSIC Division	Industrial Economy Selection	Arrowtown	Queenstown	Wanaka	Total QLD
Employment 2001					
A	Selected Ag/Forestry/Fishing Support Services	3	52	41	96
C	Manufacturing	26	284	126	436
D	Waste Services Group Only	-	31	7	39
E	Construction	90	740	243	1,072
F	Wholesale Trade	1	150	29	180
I	Selected Transport, Postal and Warehousing	3	115	41	159
L	Selected Rental and Hiring Services	1	111	15	127
S	Selected Other Services	4	109	37	150
Industrial Economy		129	1,591	538	2,258
Rest of Economy (all other ANZSICs)		359	7,534	2,139	10,031
Total Economy		487	9,125	2,677	12,289
Industrial Economy as Share of Total Economy		26%	17%	20%	18%
Employment 2017					
A	Selected Ag/Forestry/Fishing Support Services	16	63	51	130
C	Manufacturing	41	549	272	862
D	Waste Services Group Only	-	35	68	103
E	Construction	284	2,121	1,060	3,465
F	Wholesale Trade	18	375	181	573
I	Selected Transport, Postal and Warehousing	4	244	64	312
L	Selected Rental and Hiring Services	25	294	51	371
S	Selected Other Services	29	280	126	434
Industrial Economy		416	3,959	1,873	6,249
Rest of Economy (all other ANZSICs)		906	15,409	5,237	21,551
Total Economy		1,322	19,368	7,110	27,800
Industrial Economy as Share of Total Economy		31%	20%	26%	22%
Net Growth 2001-2017 (n)					
A	Selected Ag/Forestry/Fishing Support Services	13	11	9	34
C	Manufacturing	15	265	146	426
D	Waste Services Group Only	-	4	61	64
E	Construction	194	1,381	818	2,393
F	Wholesale Trade	17	224	152	393
I	Selected Transport, Postal and Warehousing	1	129	23	153
L	Selected Rental and Hiring Services	24	183	37	244
S	Selected Other Services	25	171	89	285
Industrial Economy		288	2,368	1,335	3,991
Rest of Economy (all other ANZSICs)		547	7,875	3,098	11,520
Total Economy		835	10,243	4,433	15,511
Net Growth 2001-2017 (%)					
A	Selected Ag/Forestry/Fishing Support Services	496%	22%	22%	35%
C	Manufacturing	56%	93%	116%	98%
D	Waste Services Group Only	0%	11%	829%	166%
E	Construction	217%	187%	337%	223%
F	Wholesale Trade	1375%	150%	528%	218%
I	Selected Transport, Postal and Warehousing	19%	112%	57%	96%
L	Selected Rental and Hiring Services	1831%	165%	252%	192%
S	Selected Other Services	586%	157%	244%	190%
Industrial Economy		224%	149%	248%	177%
Rest of Economy (all other ANZSICs)		152%	105%	145%	115%
Total Economy		171%	112%	166%	126%

Source: M.E, Statistics NZ Business Frame

Figure 5.9 - Share of Industrial Economy Businesses by Ward 2001 versus 2017



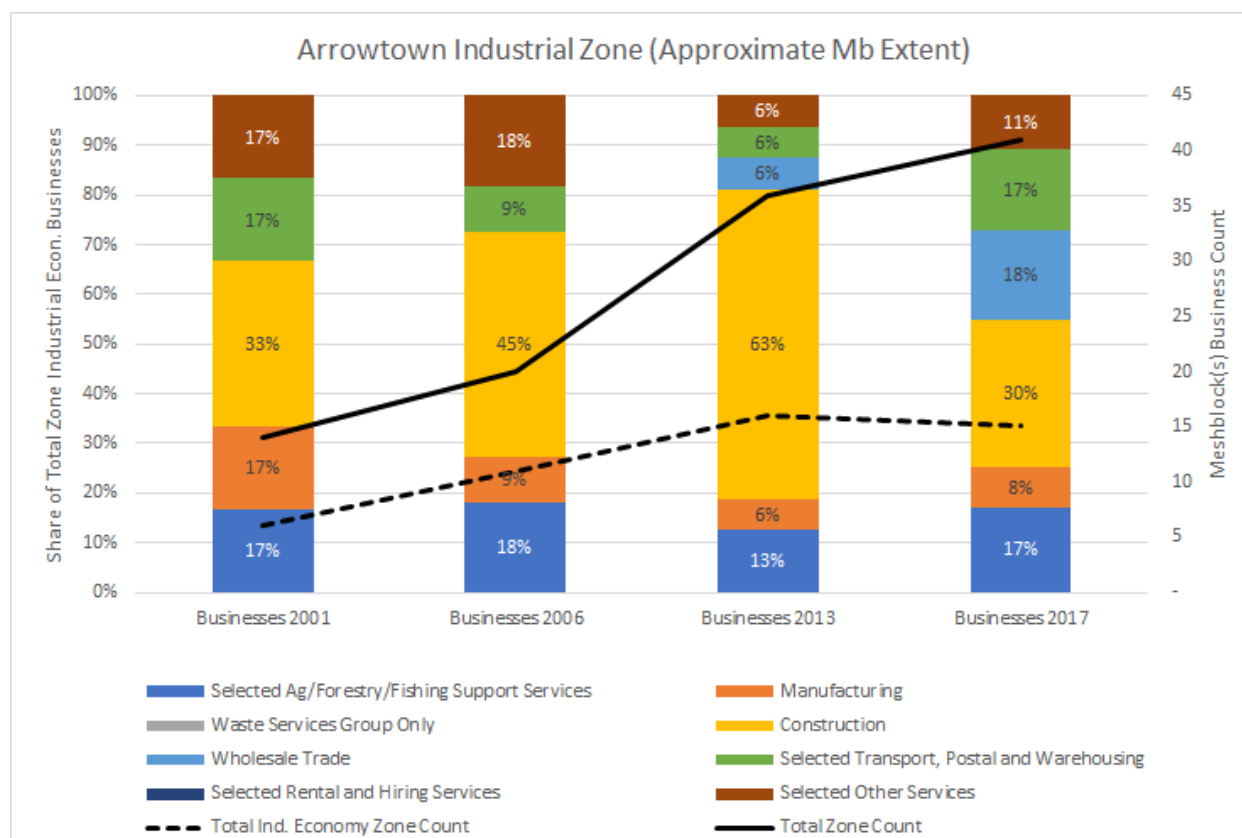
5.9 Recent Changes Stage 3 Review Industrial/Business Zones

This section focusses on what data is able to be analysed for the specific zones of interest for the Stage 3 review (Industrial, Industrial B and Business (Operative) zones). The analysis draws on the Business Directory data which is limited to whole meshblocks, so is not necessarily specific to the zone itself, but the results are considered sufficiently robust for the purpose of this report (to show general trends and the direction of change). As above, we have examined a time series of business and employment data, presenting a snapshot as at 2001, 2016, 2013 and 2017 to examine recent changes in both size and structure. Refer Section 4.4 for maps and explanation of the meshblock extents for this analysis relative to the zone of interest.

5.9.1 Arrowtown Industrial Zone

In the meshblocks containing the Arrowtown Industrial zone, the count of businesses included in the industrial economy definition has increased from 6 in 2001 to 15 in 2017 (growth of 152%). The count of industrial economy businesses peaked in 2013 and is now slightly lower (by one). In the meantime, there has been strong growth in total businesses in and around the zone (most likely attributed to the development of surrounding residential land rather than in the Industrial zone, and these including a range of home-based businesses). Over time, the structure of the industrial economy in these meshblocks has varied significantly. This is attributed to the very small size of the zone – small changes in businesses can have a marked effect on the structure. The Arrowtown industrial zone may continue to demonstrate different mixes of activities in the future (non-stable) as businesses come and go (Figure 5.10).

Figure 5.10 – Recent Changes in Industrial Economy Business Counts – Arrowtown Industrial



Industrial economy employment in the meshblocks containing the Arrowtown Industrial zone has also grown in line with business growth. It has grown from just 11 workers to 54, but also previously peaked in 2013 (77 workers). This is net growth of 42 workers or 370%. As with the structure of businesses, the structure of employment over time has varied significantly. Construction sector employment for example has varied from 73% of total industrial economy meshblock employment in 2006, to just 29% in 2013 and now 40% in 2017.

5.9.2 Glenda Drive Industrial

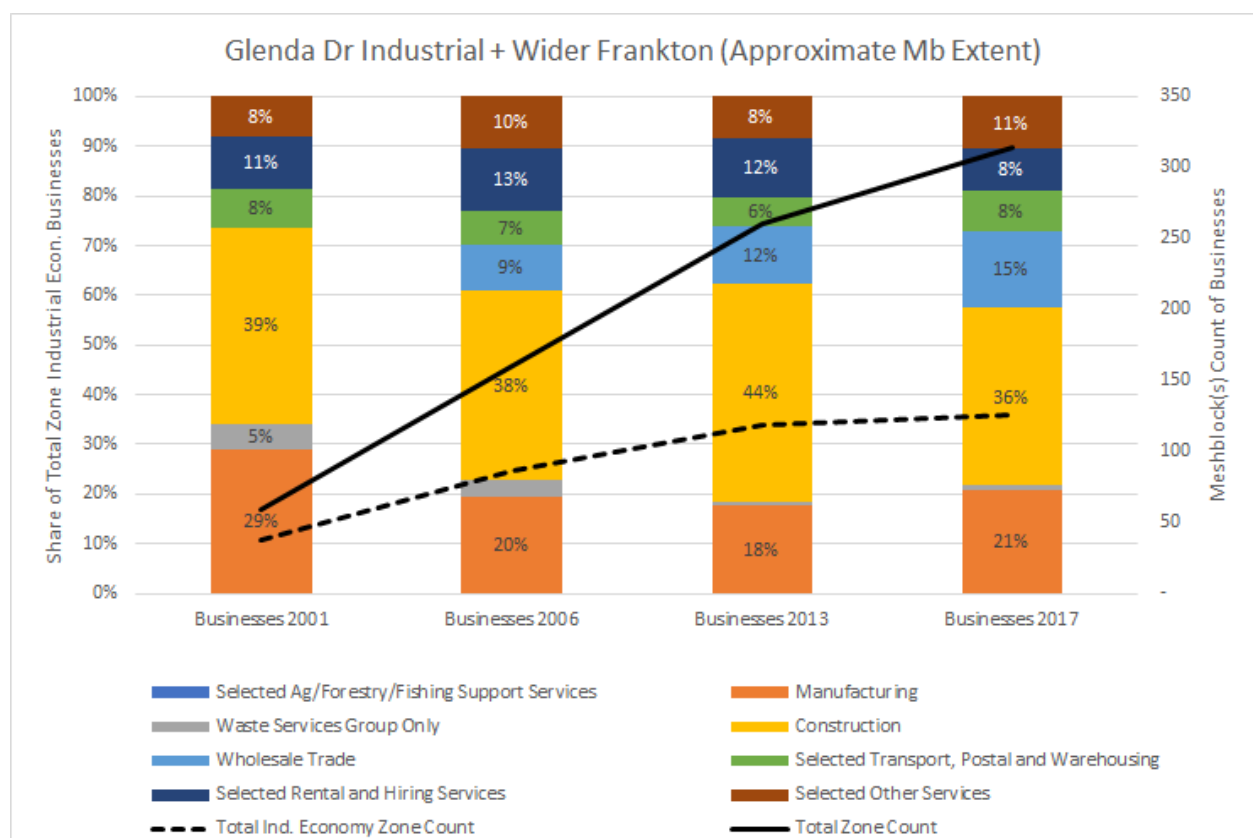
Care is needed with this analysis as the meshblocks containing the Glenda Drive Industrial zone also include all of Remarkables Park, Frankton Flats A and Frankton Flats B zones, although industrial economy employment not expected to feature in Remarkables Park or the Frankton Flats A zones. The count of businesses included in the industrial economy definition has increased from 38 in 2001 to 126 in 2017 (growth of 88 or 231%). The 2017 count of industrial economy businesses is the highest since 2001, indicating a steady rate of growth as this zone ‘filled-up’, albeit that there has been very little change since 2013. This reflects the very limited vacant capacity left in Glenda Drive. It is likely that the count of industrial economy businesses in Glenda Drive will not increase much going forward, although it is possible that it may decline if sites are redeveloped for other activities enabled by the zoning (or through decision making).

At the same time, there has been strong growth in total businesses in and around the zone (attributed to the development of surrounding zones included in the meshblock extent). This highlights that the location in which the industrial zone now finds itself, has changed rapidly. This may have increased potential for

reverse sensitivity issues and has certainly increased the traffic in the general area (with Glenda Drive now connecting to Remarkables Park around the end of the airport runway).

Over time, the structure of the industrial economy in these meshblocks has been relatively consistent. This means that as it grew, the zone attracted more businesses of a similar type. This is an important observation as it indicates that the businesses that enter a new zone early are likely to play a key role in determining what sort of businesses will enter the zone in the years following. It is therefore important that decision making upholds the intent of the zone early on to avoid setting a precedent that cannot be reversed. Going forward, the structure of the zone is expected to stay similar to that in 2017. Price may be one factor that influences this outcome, with demand continuing to rise. When Coneburn Industrial Zone starts selling sites/leases to the market, some compatible industrial businesses in Glenda Drive might consider a shift if the prices were relatively more affordable. (Figure 5.11).

Figure 5.11 – Recent Changes in Industrial Economy Business Counts – Glenda Drive Industrial



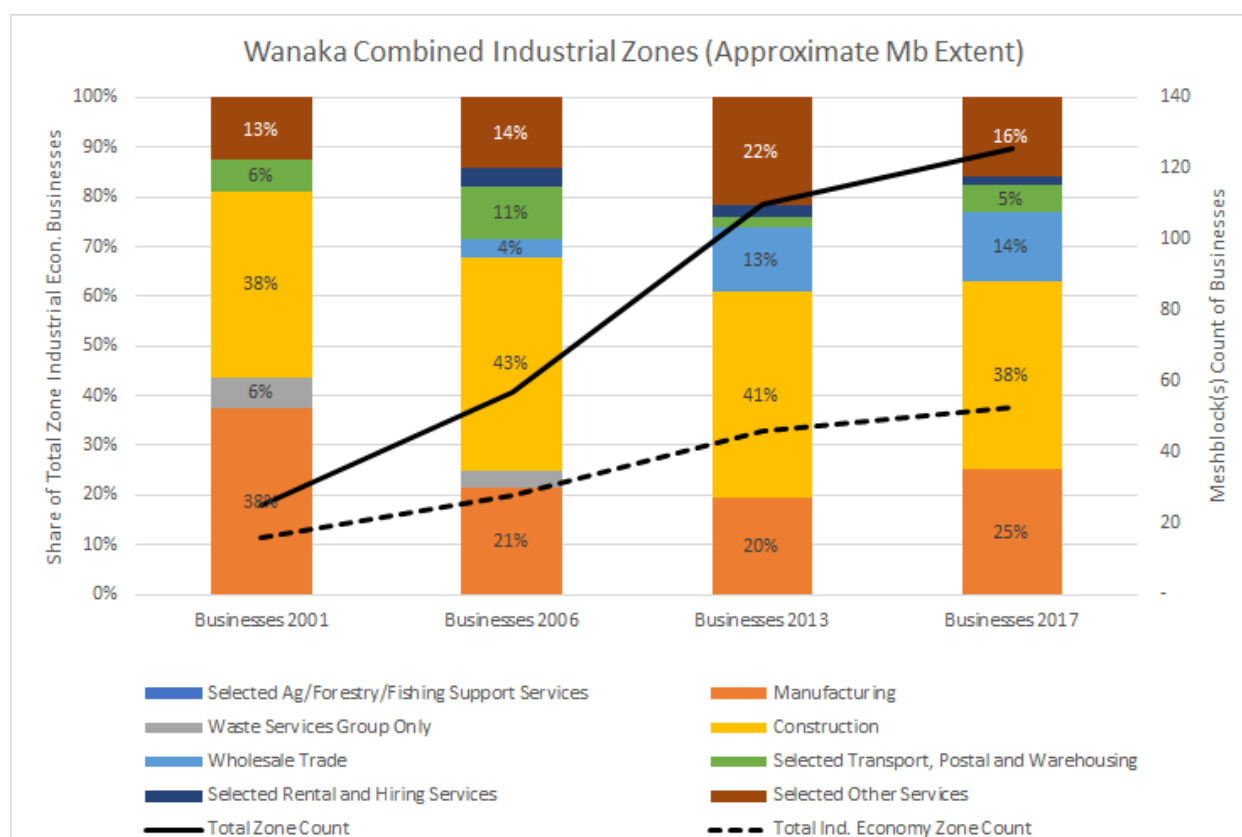
Industrial economy employment in the meshblocks containing the Glenda Drive Industrial zone has also grown more or less in line with business growth. It has grown from 212 workers to 1,261 between 2001 and 2017 (net growth of 1,049 workers or 495%). The structure of employment over time varied significantly between 2001 and 2006 and again to 2013, but the structure since 2013 has remained similar (stable). Construction sector employment for example has varied from 50% of total industrial economy meshblock employment in 2001, to 60% in 2006 and 37-40% since 2013.

5.9.3 Wanaka Industrial

In the meshblocks containing the Wanaka Industrial and Industrial B zones, the count of businesses included in the industrial economy definition has increased from 16 in 2001 to 53 in 2017 (growth of 37 businesses or 230%). 2017 is the current peak, indicating steady growth (particularly to 2013) as these zones have filled up (first the Industrial and now starting with the Industrial B). In the meantime, there has been strong growth in total businesses in and around the zone. Some of this growth will be attributed to the development of surrounding residential land on Golf Course Road and these including a range of home-based businesses. The development of the medical centre is also included in this time period. Growth of non-industrial economy businesses within the zones is also a contributor. There has not yet been a lot of residential development on the boundary of the industrial zones so reverse sensitivity has not been an issue but is something that may change as that adjacent greenfield land is developed.

Over time, the structure of the industrial economy in these meshblocks has been relatively stable since 2006. As with Glenda Drive, growth has attracted a similar mix of businesses. The combined Wanaka Industrial and Industrial B zones may be expected to maintain this structure going forward, subject to any slight variations caused by further occupation of the Industrial B zone which has a slightly different focus. This will influence the average mix more over time as it is currently weighted more towards the Industrial zone business mix. Wholesaling may play a bigger future role for example (Figure 5.12).

Figure 5.12 – Recent Changes in Industrial Economy Business Counts – Wanaka Industrial Zones



Industrial economy employment in the meshblocks containing the Wanaka Industrial and Industrial B zones has also grown more or less in line with business growth, although has been stronger since 2013. It has



grown from just 46 workers to 218 between 2001 and 2017 (net growth of 172 workers or 373%). The structure of employment has been more constant since 2013 but varied prior to that. Construction sector employment for example has varied from 37% of total industrial economy meshblock employment in 2001, to 45% in 2006 and back down to 36% in 2013, rising slightly to 40% in 2017. Wholesale Trade employment was 8% in 2013 (previously just 1% in 2006), and this increased to 14% in 2017, although the number of wholesale businesses only increased by 1. When looking at these employment trends, it seems more likely than not that the average structure could continue to adjust in the years to come – with Wholesaling playing a bigger relative role – as the Wanaka B zone further develops.

5.9.4 Gorge Road Business (Operative)

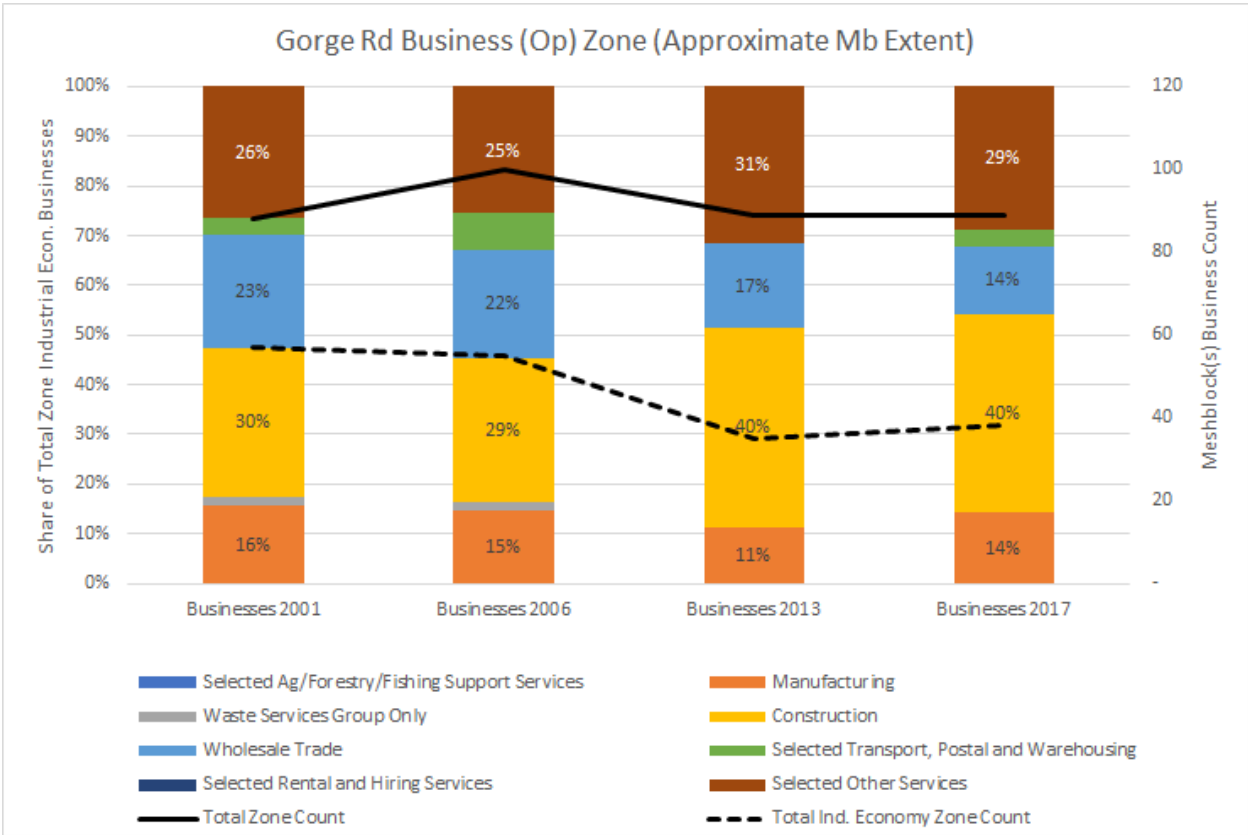
In the meshblock containing the Gorge Road Business (Operative) zone, the count of businesses included in the industrial economy definition has decreased from 57 in 2001 to 38 in 2017 (decline of 19 businesses or -33%). The drop occurred between 2006 and 2013 (loss of 20 businesses), with only 3 additional industrial economy businesses entering between 2013 and 2017. Given that this zone is largely occupied and is expected to have been for a portion of the time period analysed, it is not clear if this drop has been evident within the Business zone itself, or in the Business Mixed Use Zone area which is also captured in the meshblock to the south. It is relevant that while industrial economy businesses were declining between 2006 and 2013, other economy businesses in the meshblock were rising – so potentially this means that industrial businesses have been displaced.

However, since 2013, the count of both industrial economy businesses and total businesses has been steady – indicating that the wider area was more or less fully occupied by 2013.

These changes are reflected in the structure of the meshblock. The meshblock lost some of its diversity when the count of industrial economy businesses dropped after 2006. Specifically, it lost all four businesses in the selected Transport, Postal and Warehousing Division. Since 2013, one business in this Division has entered the meshblock. Overall, M.E expects a very stable mix of industrial economy businesses in this location going forward, due largely to the fact that it is largely occupied/developed and the area surrounding it has also reached a point of stability (Figure 5.13).

Industrial economy employment in the meshblock containing the Gorge Road Business zone has also changed more or less in line with business change (decline and then stability since 2013). In net terms, it has decreased from 313 workers to 204 between 2001 and 2017 (net loss of 127 workers or -38%). Selected Other Services employment has been increasing its share of the total since 2006. It is not clear if this reflects what has occurred specifically inside the business zone, or activity elsewhere in the meshblocks (Business Mixed Use Zone). Construction sector employment has been as high as 52% of total industrial economy employment in 2006, but currently accounts for 46% (down from 47% in 2013).

Figure 5.13 – Recent Changes in Industrial Economy Business Counts – Gorge Rd Business





6 Future Changes to the Industrial Economy

This section considers future changes to the QLD industrial economy. It examines future economic growth projections, trends and drivers at the national level that may impact on what happens locally, and local trends and pressures that may be influencing the location of industrial activity and its ongoing viability/sustainability in industrial zones. We also look at what influence the Council's economic strategy could have and what that might mean for industrial zone planning and provisions.

6.1 Business as Usual Demand Projections

As part of the Business Development Capacity Assessment (BDCA) 2017 project (published 2018), QLDC commissioned customised economic projections for the district at a ward level. The projections were developed using M.E's Economic Futures Model (EFM) – also discussed previously in Section 3. The projections assume a business as usual future and consider a range of growth drivers including population growth, tourism growth, multi factor productivity change and rates of gross fixed capital formation. The employment projections in the EFM underpin the BDCA modelling.

The population and tourism projections used in the EFM at the time were those provided by QLDC – being the Rationale projection developed in 2017. Emphasis was given to the Council's Recommended growth projection, which (for population) sat between the StatisticsNZ medium and high growth series.

At the end of 2018, QLDC commissioned an update of the Rationale growth projections. Rationale have revised their recommended growth outlook to a much higher rate of future growth. This latest projection now sits well above what was the High projection at the time that the EFM was run. This is summarised in Figure 6.1.

The EFM has not been updated to reflect the latest projections and although the EFM included a high growth scenario (including the recommended growth scenario at the time), the change in population growth rate alone would mean that economic projections would be higher again. This section of the report relies on the EFM High (2017) employment projections, but it is important to recognise that these are conservative and will under-represent future employment growth according to current thinking on future growth.

Figure 6.2 shows the projected growth of QLD industrial economy employment for each ward. As 2017 employment data is now available, the EFM growth (n) has been rebased to 2017 actual employment – keeping the quantum of growth the same. The EFM reports employment at the 48-sector level. In order to isolate the industrial economy employment, the current industrial economy share of total employment in each sector (and each ward) in 2017 has been held constant over time. This assumes that the structure of activity within each (48) sector stays the same over time (which is considered reasonable). As some sectors are expected to grow faster than others, the aggregate result is that the industrial economy

employment continues to account for slightly greater share of total employment over time in each ward. This is consistent with historical trends. For example, between 2001 and 2017, the industrial economy’s share of employment in the Queenstown ward increased from 17% to 20%. Out to 2048, the EFM suggests it will increase to a 22% share. Similarly, in Wanaka, the historical share increased from 20% to 26%, and by 2048 the EFM suggests it will account for a 29% share. In other words, under a business as usual future, the industrial economy will play an increasing role relative to total economic activity.

Figure 6.1 – Comparison of QLDC Recommended 2017 and 2018 Population Growth Projections

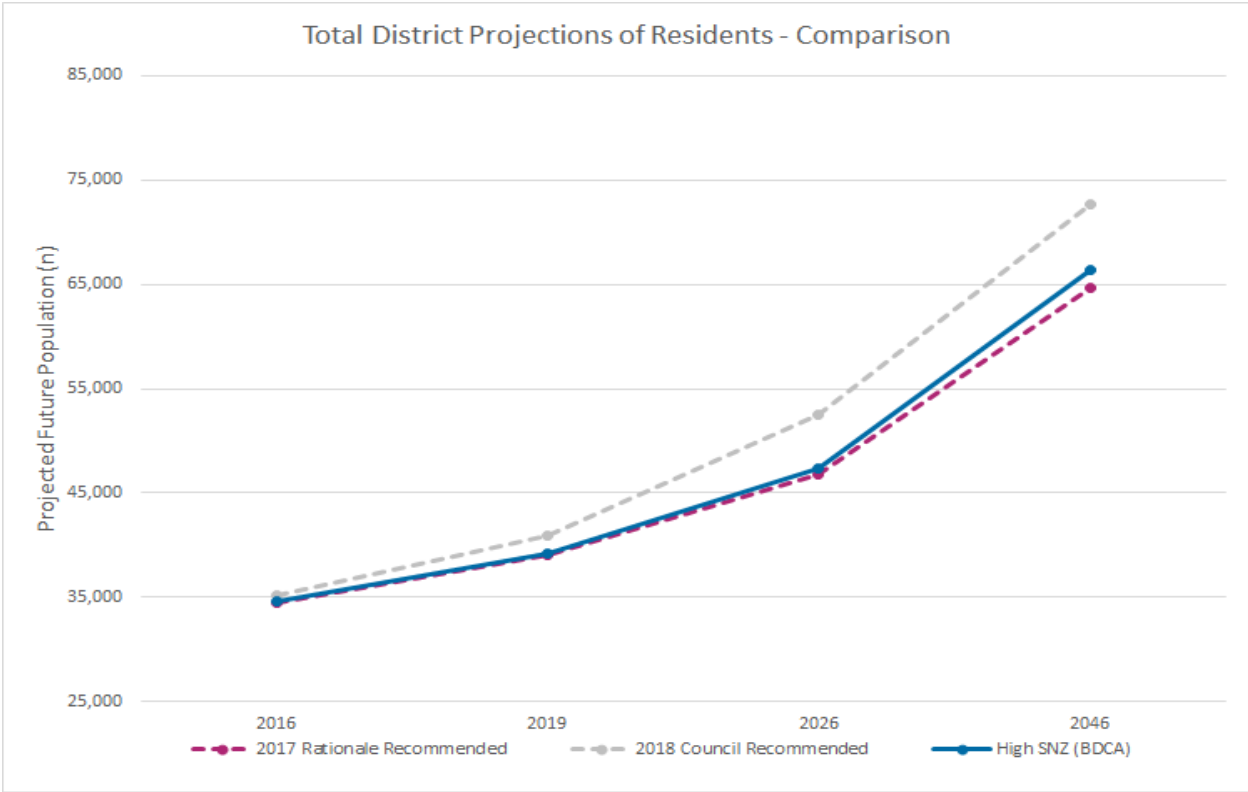
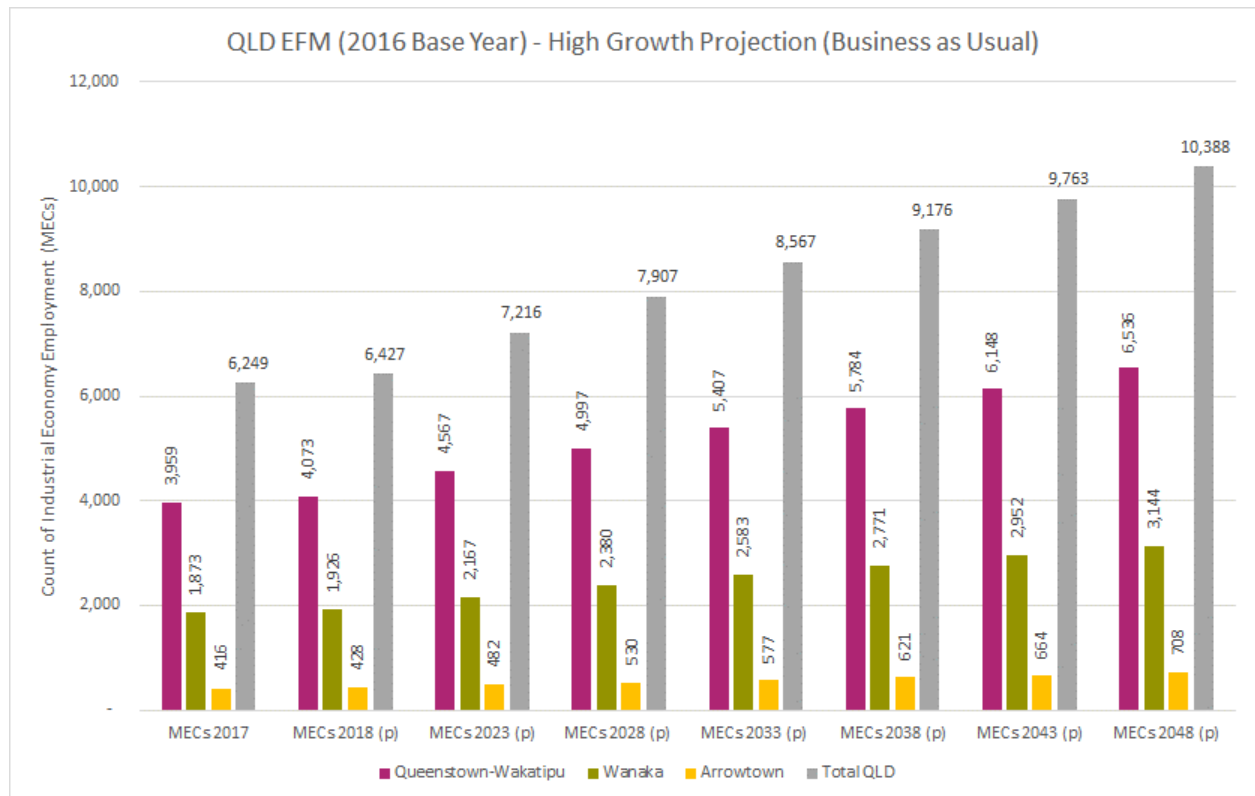


Figure 6.2 shows that between 2018 and 2028 (the medium-term future), industrial economy employment in the Queenstown Ward will increase by an estimated 920 workers (23%) and between 2018 and 2048 (the long-term) it will increase by an estimated 2,460 workers (60%). These results are likely to be conservative. Note that this is total ward industrial economy growth so covers both rural and urban locations and is not limited to the share that may locate (or seek to locate) in an industrial zone.

Between 2018 and 2028 (the medium-term future), industrial economy employment in the Wanaka Ward will increase by an estimated 450 workers (24%) and between 2018 and 2048 (the long-term) it will increase by an estimated 1,220 workers (63%). Again, these results are likely to be conservative. Over the total district, the industrial economy may conservatively be expected to grow 1,480 workers by 2028 and 3,960 workers by 2048.

Figure 6.2 – Estimated Industrial Economy Employment Projections by Ward (EFM High Scenario)



It is of value to consider the projected demand for industrial zone land that is linked specifically to the industrial economy in each ward (as opposed to other sectors which may seek to locate in industrial zones). This is an important question that Council is trying to grapple with. However, this is very difficult to project with any certainty. We note that the BDCA considered demand for industrial category land and floorspace in urban business enabled zones (from all sectors of the urban economy) but did not attempt to direct that demand to specific zones in each ward. With this caution in mind, the analysis below is presented as a loose guide of potential demand growth only in industrial zones.

Figure 6.3 shows the projected growth of industrial economy employment (High EFM growth outlook) in each ward that *may* seek to locate in an industrial zone (or the Business (operative) Zone) in future (i.e. industrial zone demand arising from the industrial economy). This is approximate only and relies on the previously analysed industrial economy employment (2017) in the meshblocks that contain the Industrial (A) zones in Glenda Drive and Arrowtown, the Industrial and Industrial B zones in Wanaka and the Gorge Road Business Zone. There are some limitations to those estimates as the meshblocks are not specific to the zone extents.

On the basis that the current snap shot of the share of industrial economy employment in each ward that falls into these respective zones is representative of the propensity of industrial economy businesses (within each 48 sector) to also seek an industrial zone location in the future, we have held these shares constant (at the sector level). Because some industrial economy sectors are growing faster than others, the aggregate result is that the industrial zone share of industrial economy employment decreases slightly over time in each ward. This indicates that the industrial economy activities that don't tend to seek an industrial zone location are growing faster than the ones that do. This makes sense when considering the



House Building sector as we know that they tend to be based in residential zones (home registered tradesmen) and account for large share of industrial economy employment and growth.

However, this is inconsistent with historical trends. For example, between 2001 and 2017, the industrial zones' share of industrial economy employment in the Wanaka ward increased from 8.6% to 11.7%. Out to 2048, the EFM (and our assumptions) suggests it will decrease to a 10.9% share. Similarly, in Arrowtown, the historical share increased from 8.9% to 12.9%, and by 2048 the EFM (and our assumptions) suggests it will account for a 12.1% share. In other words, under a business as usual future, the industrial zones will play a decreasing role relative to total industrial economy activity.

On the one hand, this might reflect that the zones reach capacity and so cannot keep absorbing an increasing share. On the other hand, it does not account for remaining capacity in the Industrial B zone in particular as well as the Coneburn and Ballantyne Mixed Use Zone and what influence this supply might have when they become available for development. We have also not factored in latent demand for industrial zone locations (which would be most applicable in Queenstown as vacant capacity in Queenstown industrial zones has rapidly diminished). Last, the 2017 shares of industrial economy employment that are located in the industrial zones reflects:

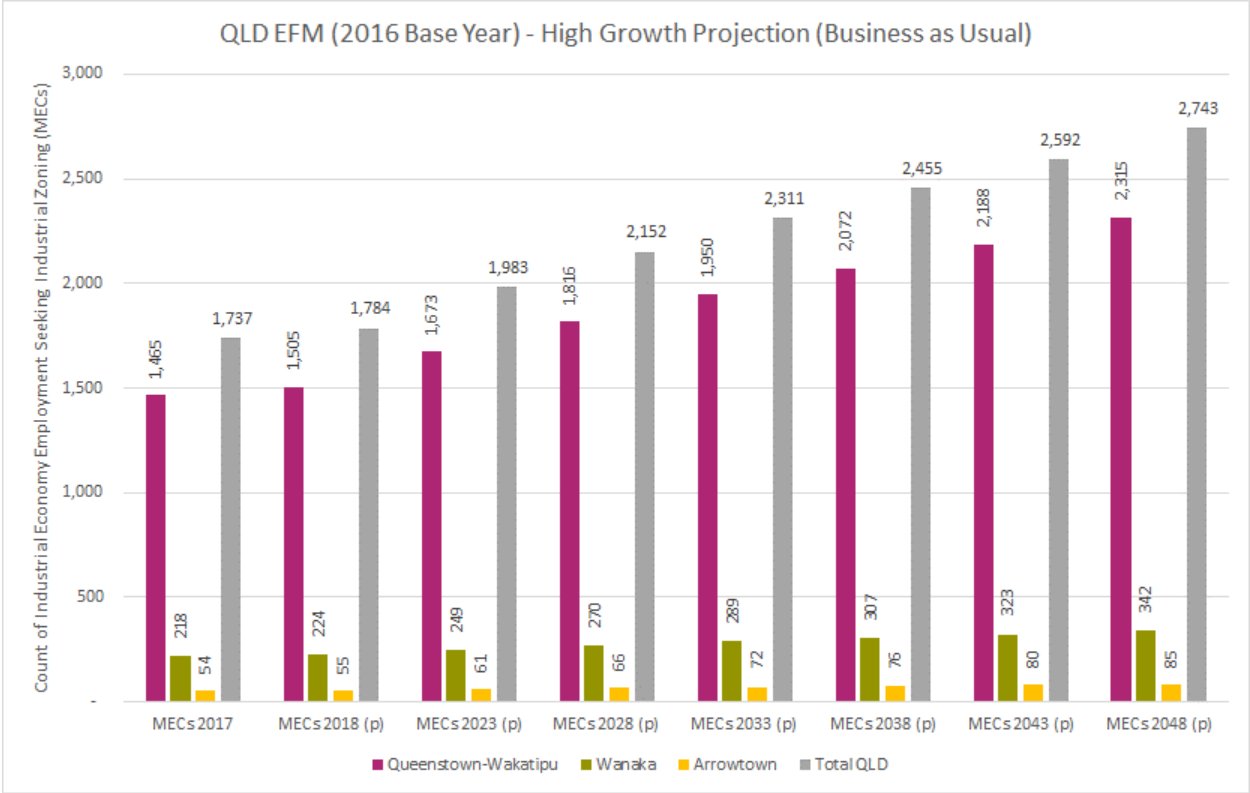
- a) The mix of activities enabled in the relevant industrial zones (which is not limited to the industrial economy activities), and
- b) The ability of industrial economy activities to compete for space in those industrial zones relative to other enabled (or approved) activities.
- c) This is important as the share of industrial economy businesses that are located in industrial zones would be expected to be higher today if the zones were less permissive of a range of activities and there was more capacity available exclusively for industrial economy businesses. Elsewhere in this report, it has been shown that industrial economy business and employment counts are accounting for a decreasing share of total zone activity over time.
- d) Rather than projecting *demand* (which should be unconstrained), we are effectively projecting *supply* (which has been constrained).

Notwithstanding these limitations and assumptions, Figure 6.3 shows that between 2018 and 2028 (the medium-term future), industrial economy industrial zone employment in the Queenstown Ward could increase by an estimated 310 workers (21%) and between 2018 and 2048 (the long-term) it could increase by an estimated 810 workers (54%). These results are likely to be conservative given the new Council growth projections and should be considered as the minimum *demand* (as they imply that industrial economy businesses only take up the same portion of industrial zone capacity as they do today. This would change when Coneburn comes on-line as that zone is less permissive of other activities than the industrial zone).

Between 2018 and 2028 (the medium-term future), industrial economy industrial zone employment demand in the Wanaka Ward could increase by an estimated 50 workers (20%) and between 2018 and 2048 (the long-term) it will increase by an estimated 120 workers (53%). Again, these results are likely to be conservative (because the growth projections are now higher than modelled) and because they more closely reflect projected supply, they should be treated as the minimum *demand*. Over the total district,

the industrial economy industrial zone minimum ‘demand’ may conservatively be expected to grow 370 workers by 2028 and 960 workers by 2048.

Figure 6.3 – Estimated Industrial Economy Employment Projections in Selected Ind. Zones (High)



6.2 Macro-Economic Trends Impacting on the Industrial Economy and Industrial Land

This section considers macro-economic trends that may be expected to influence QLD’s industrial economy in the coming years. This is relevant given that the EFM projections (considered above) reflect a business as usual future, so would not pick up any new industrial sector trends that may be coming QLD’s way (if indeed likely).

Industrial activity forms an important component of New Zealand’s economy. It provides key stages of the value chain in the processing and export of a large share of the output of the economy’s agricultural base.

The share of total activity within the industrial sector has gradually declined through time from a combination of declines within the sector and faster growth within New Zealand’s tertiary sector. These are driving gradual changes in the structure of the national economy to an increasing services-sector base. Despite this, the industrial sector still accounts for a large share of the country’s employment and has strong linkages to activity within other parts of the economy, making it fundamental to the growth in other



key sectors. Industrial activity is a major driver and enabler of exports, which are critical for New Zealand's economic growth²².

There are a number of both exogenous global and international factors and endogenous national conditions that have shaped change within New Zealand's industrial sector through time. These affect the distribution of the sector nationally and the consequent nature and scale of industrial location demand locally.

Global rationalisation of supply chains and manufacturing operations has seen growth in the size of offshore foreign firms serving international markets. This has consequently increased the pressure for New Zealand exporters to sufficiently upscale to competitively serve growing key markets. Growth in international connectedness and the rise of developing economies has also increased scale economies in supply chains driving further price competitiveness. This has acted to increase competitive pressure on New Zealand exporters through their comparative disadvantages of distance from main trading markets.

In response to these global trends, New Zealand exporters, a core part of the industrial sector, are increasingly seeking large sites in the key urban centres of New Zealand. Location within main cities provides firms with crucial access to main international infrastructural connections (ports)²³. It also enables their required upsizing through access to the labour market (including skilled trades workers²⁴) and other firms that provide fundamental inputs. The larger population base of main cities also enables many firms to develop their presence supplying the domestic market, which can then be used as a base platform from which to move into larger offshore markets (MBIE, 2018).

The ability of New Zealand's industrial sector to respond to these exogenous influences is affected by a number of core factors within New Zealand, which further influence the national distribution of the industrial sector. The small size of the domestic market has provided a limited platform from which industry can develop to serve the larger overseas markets. This is compounded by the geographic distribution of urban activity across a number of urban centres that are geographically dispersed and often separated by major geographic features.

A number of more localised conditions also emerge for industry within regional economies that affect the national distribution of industrial activity and its competitiveness. Key amongst these are infrastructure connections which have a significant influence on the efficiency of industry²⁵. International connections have often driven a movement of industry towards larger centres, although identified constraints in infrastructure to support growth may be limiting the performance of industry within these centres (MBIE, 2018). Growth pressures on the affordability of housing within a number of New Zealand's key centres are also emerging as constraints for the industrial labour pool (EMA, 2016-2018).

Increased competitiveness within global markets together with the rise of cheaper suppliers has begun to generate changes to the types of exports produced by New Zealand, which has flow-on effects on the corresponding types of industrial activity. Many manufactured exports are now much cheaper to produce

²² Ministry of Business, Innovation & Employment (MBIE), 2018 *Beyond commodities: Manufacturing into the future*, New Zealand Sectors Report Series.

²³ Rationalisation within international global commodity chain logistical structures further reinforces the need to locate within larger cities as visitation to national economies is concentrated into fewer ports.

²⁴ Sourcing skilled trades workers has been identified as an important labour requirement by New Zealand's industrial sector firms.

²⁵ This is a common theme identified within a number of the EMA submissions to central and local government.



in lower cost labour markets offshore as well as it often being cheaper to import fully manufactured commodities rather than having final assembly stages of the supply chain within New Zealand (e.g. car assembly). National strategies are consequently increasingly calling for a shift toward higher value capture within already established commodity chains as well as the development of higher value products. This reflects a shift away from heavy industry towards light industry.

Recent research has identified large potential for further value capture within New Zealand's core agricultural export chains²⁶. A high share of New Zealand's agricultural exports has low levels of processing, some of which have further processing prior to final consumption occurring within offshore markets. Growth in this area is likely to generate significant demand within New Zealand's industrial sector over the medium to longer-term through the further processing and value-added of these commodities. This is also occurring through the development of new products that have higher levels of final processing (e.g. dairy product-based smoothies).

Growth in value-added products is driving substantial demand within New Zealand's food manufacturing sector²⁷. There have been a number of opportunities identified for further growth in this sector, underpinned by New Zealand's large agricultural base and as a dominant dairy product supplier within the south-east Asian area. Growth in demand is also likely to be felt in other areas of the industrial sector due to the upstream linkages within the sector.

Growth and change in demand within end markets and the diversification of those markets²⁸ are likely to drive much of this growth. Rapid demand growth within markets across much of southeast Asia²⁹ and the maturation of demand within existing markets drive both demand for bulk production of standardised lower value-added products and the development of more specialised higher value-added food products³⁰. This includes the emergence of newer products, particularly focussed around sustainable food production chains^{31,32}.

The type of growth within the food and beverage industrial sector has generated increased demand for research and development (R&D)³³ and ICT inputs to the sector. Both of these inputs further encourage the concentration of activity into larger firms to achieve the necessary scale economies in the application of R&D and ICT resources (and therefore larger centres). Growth in food and beverage manufacturing concurrently facilitates the development of smaller industrial firms through the supply of niche products.

²⁶ Coriolis, 2018 *Emerging Growth Opportunities in New Zealand Food & Beverage*, Final Report, prepared for Ministry of Business, Innovation & Employment, New Zealand Trade & Enterprise and Ministry for Primary Industries.

²⁷ Coriolis, 2012 *Driving growth in the Processed Foods sector*, Final Report, prepared for Ministry of Business, Innovation & Employment, New Zealand Ministry of Foreign Affairs & Trade, Ministry for Primary Industries and New Zealand Trade & Enterprise.

²⁸ New Zealand's agricultural exports are distributed across an increasingly large number of end markets. This compares to historically high levels of concentration to the United Kingdom, Australia and U.S.A. markets.

²⁹ Coriolis, 2015 *Opportunities for New Zealand Dairy Products in South East Asia*, prepared for Ministry of Business, Innovation & Employment, New Zealand Trade & Enterprise, New Zealand Foreign Affairs & Trade and Ministry for Primary Industries.

³⁰ Coriolis, 2018.

³¹ EMA, 2018 *Business Plus*, Issue 161, August 2018.

³² Plant & Food Research, 2018 *The Evolution of Plant Protein: Assessing Consumer Response*, prepared for Ministry for Primary Industries.

³³ ManufacturingNZ, 2017 *ManufacturingNZ Election Manifesto – Snapshot*.



A number of other areas of industrial growth have also been identified at the national level. These include machinery and equipment manufacturing, chemicals and refining manufacturing, fabricated metal product manufacturing, and the screen production sector. With the exception of the latter, these sectors are also significantly influenced by the need for a main city, central location. This is because they are largely driven by and require direct access to overseas markets and large labour pools.

The screen sector has been identified nationally as a high value growth area for New Zealand that is likely to generate demand for industrial activity (in addition to the demand predominantly in the services sectors). The sector is currently small but is being facilitated by central government grants due to the identified high economic returns on investment and future growth potential. Growth in opportunities within this sector are also predominantly export-focussed with the larger economic returns generated by international films³⁴.

The greatest area of demand within the screen sector has been identified within the production and post-production stages³⁵. Many of these activities (e.g. particularly sound stages) are likely to seek an industrial location, particularly larger sites, to undertake the required activities. Nearly all of New Zealand's existing sound stages are located in industrial zones. They typically require large sites containing large warehouse style buildings and yard storage and manoeuvring areas, but with good transport links). Unlike many other industrial growth sectors, the screen sector's location is not predominantly driven by access to major national infrastructure. A core location driver is the area-specific location of filming.

The construction sector is growing strongly at the national level, primarily to meet the need for residential housing. While a large portion of this sector is trade based and not dependent on industrial zone locations, component manufacturing (steel, sheet metal, joinery, trusses etc) are industrial zone focussed. Another emerging trend is the offsite construction of houses (pre-fabrication). This is more apparent in many overseas markets where houses are built in large warehouses/factories, partially disassembled and then reassembled quickly on site. With the construction sector constantly looking at ways to deliver housing more efficiently and cost effectively, this might become a growing feature of New Zealand's construction industry. It has already started to appear with some businesses building kit-set homes, or small (tiny) houses that can be trucked short distances.

So, what is the potential future influence of these national (macro level) trends on QLD's industrial economy?

- Large portions of industrial sector growth will be aimed at large centres, so will not be attracted to districts like QLD.
- Food and beverage sector growth for the export/domestic market may be more relevant and focused on wine production as opposed to the dairy sector. Only off-site wine production/bottling would place demand on industrial zones (with many processing at the vineyard). The craft beer industry is on the rise nationally and internationally and this could be expected to continue growing in QLD (it is currently a niche industry).

³⁴ McWha, V., Niemi, M., Moore, D. and Harley, R., 2018 *Evaluating the New Zealand Screen Production Grant*, prepared for the Ministry of Business, Innovation & Employment and the Ministry for Culture and Heritage, March 2018.

³⁵ Ministry of Economic Development, 2012 *Discussion Paper: Growth and Dynamics of the New Zealand Screen Industry*, April 2012.

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- Film sector infrastructure (sound stage) may be a viable opportunity for QLD given a range of location attributes and a skilled workforce already supporting film activity that takes place in the district. There is evidence of more districts outside of Auckland and Wellington trying to attract or facilitate sound stage development in light of strong demand and insufficient capacity in the main centres – i.e. the Bay of Plenty Region is currently developing a feasibility study/business case for a sound stage.
 - Off-site manufacturing (pre-fabrication) of dwellings (or even self-contained worker accommodation cabins) could emerge in QLD. This could be relevant for infill housing demand or demand on small sites and would be likely to seek an industrial zone location. The demand for bespoke/high end homes is expected to continue to dominate the market.
 - Otherwise, the small scale of the domestic market within QLD combined with limited access to an industrial labour pool and constrained freight and logistics (reliant on road transport at present) means that QLD would not expect to move towards large scale industrial activities. Rather, small scale and niche manufacturing will continue to be more viable. Most likely that manufacturing will continue to be limited to businesses supplying local consumers and service oriented industrial activities, particularly for the construction sector.
 - QLD businesses (and consumers) will continue to be dependent on inter-regional imports for many products.
 - In our view, a business as usual growth outlook is most relevant going forward, but with potential for a few new industries to emerge. These would be limited to very small numbers of businesses so would not greatly influence the overall structure of the industrial economy in the future (but could add to its diversity).

6.3 QLD Economic Development Strategy

M.E has reviewed the QLDC Economic Development Strategy 2015 to assess the degree to which this might impact on or influence future changes in the industrial economy in the district. Key points from that review are as follows:

- The primary objectives of the strategy are to enhance the quality of the natural, business and living environment and facilitate the growth of knowledge-based sector. Knowledge based sectors include education, health, screen and some professional services. These are not industrial businesses per se (i.e. the strategy identifies these as businesses that “electronically deliver their product”, “be in the service sector, that also has comparatively low exposure to transport costs for production inputs,” and “usually operating with limited number of staff” with higher salaries.
- Supporting objectives are to attract high contributing visitors and generate higher levels of expenditure from visitors and develop a long-term, sustainable approach to investing in infrastructure that will enable future growth.
- A more general aim to support a diverse economy. This is one of the community outcomes identified through public consultation. The strategy specifically seeks to move away from a construction and tourism dominated economy.

- Overall, the Economic Development Strategy offers little support for growing or diversifying the industrial economy as identified for the purpose of this report.
- However, consistent with Section 6.2 above, the strategy does identify potential for long term growth of screen production in the district, stating a number of locational advantages offered by the district. This is relevant to the extent that film infrastructure may seek a location in an industrial zone. The following are excerpts on the screen industry opportunity.

Further growth depends critically on marketing and developing relationships across New Zealand and overseas, in order to raise the profile of the District's advantages and to continue to attract productions. Promotion, offshore representation and facilitation are provided by Film Otago Southland, that works closely with other regional film offices and Film New Zealand.

The absence of a screen production studio has been raised as a potential constraint to industry growth, and work has been undertaken on exploring the feasibility of and options for a studio. The need for a studio has not been clearly demonstrated and private investment has not been attracted to date. Other options suggested include a simpler facility to enable indoor shooting in the event of adverse weather or a creative centre to bring together experts from film, IT and other creative industries to encourage innovation and breakthrough ideas.

The District currently supports the film sector through the Council providing \$84,000 of funding support annually for the activities of Film Otago Southland (an independent trust), in partnership with other local authorities in the region. Film Otago Southland puts production companies in touch with local expertise, hosts major industry influencers in the District, represents the screen production industry to the community, liaises with the Department of Conservation and Land Information New Zealand to ensure that productions have access to locations, and promotes the District's capability in New Zealand and overseas. A major part of promotional effort involves networking with other offices in New Zealand and offshore through an international network of film offices. One question for Queenstown Lakes is whether the current regional arrangement provides the best leverage for film promotion efforts in the District, whether more focused attention on the District is required and/or whether more formal partnerships with the other key screen production centres of Wellington and Auckland would be of value.

- Overall, there is no evidence to suggest that attracting investment in a sound stage is imminent or a specific priority. This is not to say that the private sector may not pursue this opportunity, but elsewhere in Auckland and more recently in the Bay of Plenty, Councils have been a key driver (or funder) of this activity (including owning the facility over the short-term).

M.E has also reviewed the "Out Local Economy – A Strategy Update, 2018" for the same purpose. Key points from that review:

- The document provides an update of what has been achieved in the three years following the economic development strategy. It confirms the same objectives and priorities.

- It does identify that two roles have been added to council that are focussed on the film sector and that research has been carried out “into businesses that could be attracted here with NZ Trade and Enterprise”, as well as support provided for “start-up” businesses. Some of these initiatives *could* potentially relate to new business growth in the industrial economy, but further detail is not included.
- The investments made in recent years are focussed on the education, tourism and IT sectors and not the industrial economy.
- Overall, there is nothing concrete that can be gained from this document that suggests that any changes are imminent in the direction and structure of the industrial economy as a result of Council.

This further confirms our view that a business as usual growth outlook is most relevant going forward for QLD’s industrial economy and this should be the focus of the planning framework. This does not preclude the potential for a few new industries to emerge, but they will be the exception, not the norm.

6.4 Micro-Economic Trends Impacting on the Industrial Economy and Industrial Land

The section looks at some local level factors that affect the viability and vulnerability of industrial land use activities within the district’s industrial zones. These can be considered as more micro level trends. They are discussed under a number of (related) themes. Most are issues that can be influenced or managed through the District Plan, although may sit outside of the scope of the Stage 3 review. For clarity, this analysis does not consider site specific factors (such as operative site standards) and how these may be affecting the viability of industrial land use activities.

6.4.1 Specialist versus Generalist Zones

In large urban economies such as Auckland, not only can industrial zones be created in a range of locations and scales (dispersed around the city in the north, south, east and west), but zones specifically for heavy industrial activities and specifically for light industrial activities can be sustained and with little or no need for these zones to enable a mix of non-industrial activities. Further, when there is a relatively large range of industrial zones to choose from, some can begin to specialise in terms of their business mix (key locations for manufacturing, logistics, industrial services etc). The scale of places like Auckland can also sustain specialist business zones like Business Parks which have very uniform developments of large-scale office-developments.

Unlike places such as Auckland, QLD is a small economy. The zoning structure (special zones notwithstanding) is relatively simple with currently one ‘Mixed Business Zone’ and two ‘Industrial Zones’ (although upon comparison, Industrial and Industrial B have a very similar role and function and so may be considered as one). The Airport Zone is distinguished as are local shopping centres from town centres. There are however few instances of each zone type. Just one combined industrial location in Wanaka and just two locations of Industrial zone in Queenstown-Arrowtown. This is typical of districts of comparable size.

At the time that the Industrial zones were formed the industrial economy was much smaller (see analysis on growth since 2001) and the rationale for providing specialist (i.e. less mixed use) industrial zones most likely would have seemed unjustified. This means that if you are going to create one industrial zone, it needs to have a degree of flexibility in terms of what it enables as the market has little or no choice to locate elsewhere. Similarly, if you are going to have one type of business zone, this also needs a degree of flexibility too – hence the ‘mixed use’ zone purpose.

The implications of a broad activity mix in industrial zones is discussed further below. However, it is relevant to note that only recently has Queenstown started to sustain a discourse of more specialist (less mixed use) industrial zones – i.e. Precinct D in the Frankton Flats B Special Zone (yard-based specialty) and now Coneburn Special Zone (primarily industrial).

Looking forward (in a planning sense), it is important to recognise that the district has grown considerably (matured) and the need to provide mixed use or permissive industrial zones (i.e. zones that allow for activities not specifically dependent on an industrial zone location) has reduced and it is now viable to provide for industrial zones that are more strictly focussed on enabling those activities that have a functional need to be in an industrial zone. Avoiding too much flexibility in industrial zones is important to protect the capacity for those industrial activities that have little or no alternative location options.

6.4.2 Room to Grow

The geography of Queenstown has shaped and constrained where urban development can occur. It has been squeezed between the lake edge and rivers and the steep hills behind, on a relatively thin ribbon land, most of it sloping. Finding locations for industrial zones (or any zone) is therefore difficult (particularly now with the identification and protection of ONLs). However, it is relevant to observe where industrial zones have been positioned in the past. As this is a key lesson for where they might be positioned in the future.

Figure 6.4 shows how the Industrial zone in Arrowtown was positioned hard up against the surrounding steep hills (left-hand image) and the Gorge Road Business (Operative Zone) is also positioned hard up against the surrounding steep hills (and a wetland). This is the right-hand image. Similarly, Glenda Drive is hard up against the steep bank that drops to the Shotover River delta. A positive outcome of these locations is that it removes the risk of reverse sensitivity effects by avoiding neighbouring urban land use on one side.

Figure 6.4 – Examples of Inability to Expand Industrial Zones (Arrowtown and Gorge Road)





Until relatively recently, these zones would have been surrounded (on the unconstrained side) by greenfield land, particularly in Glenda Drive and Arrowtown. Over time, adjoining land has been zoned and developed and now the Business (Operative) and Arrowtown Industrial zones are hemmed in, removing any opportunity for these zones to expand.

In Glenda Drive, the Frankton Flats B zone *has* provided for the expansion of industrial activity and that is a positive outcome in terms of agglomeration benefits of a larger, consolidated industrial (or semi-industrial) area.

In Wanaka, the landform is more open and means that urban growth is less constrained. The location of the Industrial zone has no natural barriers, although Ballantyne Road forms a hard edge. This is ideal from an expansion opportunity perspective, although does generate more potential for adverse effects at the boundary. Like in Queenstown and Arrowtown, the surrounding land has been extensively undeveloped (greenfield). This has allowed for one round of expansion – the Industrial B, and a second round of expansion - PC 46.

Wanaka's industrial land is however facing the same fate as Arrowtown. The land to the west is now zoned for Low Density Suburban Residential as well as the residential component of PC 46. The only Rural Zone expansion potential (that is contiguous) is to the south towards Riverbank Road.

The Ballantyne Mixed Use Zone provides an expansion of industrial zoning opposite the Industrial and Industrial B zone. This is largely surrounded by the Three Parks Special Zone, although some adjoining precincts are compatible business zones so will form a contiguous industrial/business area. There may be potential to expand to the south, again to Riverbank Road.

Overall, it appears (from an observation of land use zoning patterns only) that there has been only partial (or inconsistent) consideration given to the future expansion potential of existing industrial zones. Locating industrial zones against natural barriers limits expansion to just the unconstrained sides. Not providing for 'future industrial expansion areas' or deferred industrial zones on that land has resulted in zones that now have little or no expansion potential. The consequence of this is that it places greater onus on finding new locations for industrial growth. This is challenging as industrial zones have more specific location requirements compared to most other zone types (such as residential). They invariably will be located further away from key markets of demand. This has (among other things) adverse effects on transport and infrastructure provision and the efficiency of conducting business in QLD.

On the positive side, finding new locations for industrial zoning (i.e. Coneburn) provides for more location choices for industrial activities (assuming there is vacant capacity across each location, which is not necessarily the case in Queenstown) and may make it easier to create a more specialised (less mixed use) industrial zone (where expansion of an existing zone may be expected to provide or retain the existing mix of activity). Now that Coneburn is zoned, protecting the opportunity for it to expand in future may be prudent. This could/should be considered as part of QLDC's wider strategic planning processes.

6.4.3 Limited Short-Term Feasible Development Capacity

The existing industrial zones in Queenstown and Arrowtown, including the Business (Operative) zone, have very little vacant capacity and are nearly fully occupied³⁶. Wanaka however has comparatively large amounts of vacant industrial capacity. The BDCA 2017 report included a survey of vacant capacity carried out in January 2018. At that time, the results were as follows:

- Gorge Road Business Zone: 3,700sqm vacant developable land area.
- Arrowtown Industrial Zone: 300sqm vacant developable land area.
- Glenda Drive Industrial Zone: 1.18ha vacant developable land area.
- Wanaka Industrial Zone: 1.71ha vacant developable land area.
- Wanaka Industrial B Zone: 12.52ha vacant developable land area (large areas of which did not have titles issued or infrastructure complete).
- Ballantyne Road Mixed Use: 14.9ha of vacant developable land area (not currently feasible capacity³⁷).

This is a sub-total of 15.81ha excluding the Ballantyne Road Mixed Use Zone, and 30.71ha including the Ballantyne Mixed Use Zone.

In addition, there are other zones that enable some industrial land use activities (based on activities defined in the Stage 1 decisions version district plan). These are:

- Frankton Flats B Special Zones (precincts E1, E2 and D): vacant developable capacity estimated at 27.19ha potentially or exclusively available for industrial land use activities.
- The Gorge Road Business Mixed Use Zone: 4.7ha of vacant capacity that enables some forms of industrial activity.
- The Wanaka Business Mixed Use Zone: 4,800sqm of vacant capacity that enables some forms of industrial activity.
- The Three Parks Special Zone (precincts Business and Business Mixed Use): 8.17ha of vacant capacity that enables some forms of industrial activity.

This is an overall maximum³⁸ vacant capacity for industrial land use activities of 70.76ha (January 2018)³⁹. That is 32.99ha in Queenstown and Arrowtown combined and 37.4ha available in the Wanaka ward⁴⁰.

As far as M.E is aware, an update of this vacant capacity using a consistent approach to defining vacant capacity, has not been carried out. Given the fast rate of development occurring in the district, it is expected that a portion of this vacant capacity is now already developed and occupied by business activities

³⁶ Not to be confused with fully 'developed' as some sites are used as yards which have little or no development on them.

³⁷ The zone currently has a building restriction over it.

³⁸ It is considered 'maximum' capacity as some zones containing vacant capacity enable a range of activities (including retail and commercial activities) that are also competing for this space. The land area of plan enabled vacant industrial capacity is therefore greater than the land area of industrial land that the market will supply.

³⁹ This excludes the capacity in the Queenstown Airport Zone.

⁴⁰ This does not account for land ownership or landowner aspirations for vacant land.



and a portion is under construction (or consented for development). What remains vacant today has not been quantified.

Since the BDCA, the following zone capacity has been enabled in the Stage 1 decisions version plan in the Queenstown-Wakatipu ward:

- Business Mixed Use Zone in Frankton: estimated 5.8ha (out of a total of 9.1ha) vacant capacity that enables some forms of industrial activity⁴¹.
- Coneburn Industrial Special Zone: estimated (but not verified) vacant capacity of 19.5ha (out of a total of 71ha) that enables mainly industrial activity.

These two zones, but especially Coneburn, will provide vital additional capacity in the Queenstown ward for growth of the industrial economy. However, the Coneburn land is not serviced with necessary infrastructure and so is not yet feasible development capacity. The timing of when this land will be available for development is not known.

The key adverse effects of having only limited vacant development capacity at any one time include (but are not limited to):

- There are few bare sites available for new industrial businesses to choose from and a greater chance that an appropriate site will not be found. This may force industrial businesses to locate elsewhere. Lost opportunities for growth, employment and competition.
- There are few vacant tenancies (built sites) as high demand and limited supply means that spaces are snapped up as soon as they become available. This limits churn in the market which is important to allow businesses to move to different premises as their needs change. Businesses are more likely to stay put even when their premises are not sustainable physically or financially. This can impact on the efficient operation of businesses and can have flow on effects on staff, customers and the local environment.
- A lack of certainty about future business growth/expansion potential can curb investment and future job opportunities.
- High demand and limited supply drive up prices of land and built space. This limits the types of businesses that can occupy remaining vacant capacity and can price many industrial activities out of the zone/market. It also encourages sites to be developed more intensively, which precludes land extensive activities. Rising prices are discussed further below.

6.4.4 Neighbouring Land Use

The environments surrounding the district's industrial zones have changed considerably in recent years (as discussed above). The changes in Wanaka - where the adjoining residential zone represents feasible development potential – is however still to come, but that uptake is imminent. It is understood that some roads in the industrial zone will directly connect to the residential zone (i.e. Gordon Road).

⁴¹ This zone was confirmed after the BDCA 2017 was completed. Estimates provided for evidence on Stage 1 Appeals (N Hampson, 12th October 2018).



While all zones have a policy framework that helps manage boundary effects and reverse sensitivity, it is likely that the full effect of those policies have not yet been tested. The residential development adjoining the Arrowtown Industrial zone has been in place for a number of years, but the small size of the industrial-residential interface means that this is not representative of the level of effects that may be felt in Frankton and Wanaka. When reviewing the efficacy of operative (boundary and reverse sensitivity) provisions, it is important to recognise that current monitoring data may not reflect the full scale of the issue and that this may be more apparent in the near future.

The other relevant issue is that the development of surrounding land can have a significant impact on traffic and parking demand in industrial zones. Glenda Drive is a good example. For many years, Glenda Drive was a dead-end street surrounded by greenfield land. The traffic and parking in that area was limited to the businesses present in the zone and their customers and staff.

Today, Glenda Drive is a through-road connecting to Remarkables Park and the surrounding land has developed rapidly. The density of employment in the wider Frankton area has increased significantly (and is still rising). There will soon be large numbers of residents and the retail precincts are nearing completion. Combined with population and visitor growth, the immediate environment in which Glenda Drive industrial businesses now operate has changed significantly.

With limited options to relocate, industrial businesses (and all businesses that existed before these significant changes) will have needed to adapt to the following:

- Increased traffic on the immediate road network – this can cause delays in receiving goods and delivering goods/services. Businesses depending on large sized truck movements will be most affected, as would businesses that operate with a fleet of vehicles that come and go regularly from the site (i.e. couriers, waste collection, trade supplies and services). Large trucks that may need to manoeuvre into sites/properties now potentially have a greater impact on traffic flows (i.e. delays where they temporarily block traffic) than they once did and may need to adjust the time at which they arrive to avoid peak traffic flows. All of these factors result in an overall reduction in efficiency.
- Reduced street parking – this may be putting pressure on staff parking or the ability to park work related vehicles on the roadside at times during the day. Staff may need to park further away than they once did. Public transport options are unlikely to be offsetting this at present (and don't apply in Wanaka). An inability to find parking affects the functional amenity of industrial zones as a place of work.

It is possible that the size of sites in the Glenda Drive Industrial zone might have *seemed* more appropriate when Glenda Drive was not as busy. Businesses *may* not feel the same today now that they don't have the benefit of a quieter street with less competition for parking and there is a greater need to internalise parking provision and manoeuvring. This is an area that may warrant further targeted research. The key message is that:

- a) What might seem like a satisfactory provision of on-site parking and manoeuvring today (and particularly in newly developing industrial zones in greenfield locations) may not be satisfactory in the future when those zones and the neighbouring (connecting) land areas are fully developed.

- 
- b) Industrial zones that have (or will have) road connections to other neighbouring land use zones (particularly commercial zones) can expect to face increasing traffic flows and demand for parking. It is therefore more important for sites in these zones to be able to provide for on-site staff parking and manoeuvring.
 - c) Any further research on the appropriateness of site sizes for the purpose of on-site parking and manoeuvring should take into account the stage of development of that zone (developing versus fully developed - and including the stage of development of surrounding land) as this is likely to influence results.
 - d) Encouraging public transport routes that service industrial zones is likely to contribute to the efficient function of those zones by reducing demand for staff parking.

6.4.5 Higher Value Land Uses

A relevant issue in QLD is the impact of higher value land uses in industrial zones. When zones provide for a mix of activities, including activities that are not dependent on an industrial zone location, it provides options for what landowners choose to supply to the market.

On the one hand, industrial zones are intended to provide for land extensive activities (typically yard-based businesses). These are an important component of the industrial economy and are activities highly dependent on an industrial zone location. Figure 6.5 shows several images from Glenda Drive Industrial zone of businesses that require space that is not used intensively but yet is still critical to the operation of those businesses. This includes businesses that store raw materials, provide a depot for machinery and equipment, or need to internalise large volumes of truck/vehicle movements and parking.

Figure 6.5 – Examples of Land Extensive Activities Dependent on Industrial Zone Locations



On the other hand, industrial zones have enabled more intensive land uses (typically office-based activities). Figure 6.6 shows images also from Glenda Drive of multi-storey office buildings, within which a range of business types operate that do not have a functional need to be in an industrial zone. When developed intensively, these sites can sustain multiple businesses and therefore offer greater returns to landowners than a single land-extensive business. The flow on effect of this outcome is that you often end up with office buildings right beside yard-based industrial businesses which increases the potential for reverse sensitivity effects on industrial businesses which may generate noise, dust and heavy vehicle movements (for example).

Figure 6.6 – Examples of Land Intensive Developments Not Dependent on Industrial Zoning



In some cases, the purpose of the industrial zone is blurred through decisions that consider the effects of a single site in isolation and do not consider the aggregate or cumulative effect on the industrial zone. Such



decisions allow activities that were not generally anticipated by the provisions (i.e. non-complying activities) and these can set a precedent effect for future decisions that is not easily combatted. The recent Bunnings decision in Frankton Flats is a key example of these decision-making processes. Judge Jackson asked and answered the following question:

"In particular is it 'inefficient' to use land zoned industrial for some other business activity if the landowner can obtain higher rents for it? It appears not, provided there is zoned capacity elsewhere in the region."⁴²

In our view, this approach does not recognise the purpose of providing for industrial zones in the district plan. Regulation is needed to protect against market failure. In this case, to ensure that land extensive and other industrial activities are provided with suitable land on which to operate despite the fact that there are higher value activities that could utilise that land. The industrial economy sustains a wide range of economic activity and is essential for the efficient operation of the economy and its potential to grow. It is especially important in QLD to help diversify the economy and provide employment opportunities.

Care is therefore needed to consider the wider effects of enabling activities that are not dependent on an industrial zone location, especially on the ground floor. Commercial, office and retail activities have a greater range of zone locations to choose from and are capitalising on the lower land value of industrial zones relative to business and town centre zones. This issue was central to the BDCA 2017 which presented a scenario of industrial zone land *supply* (that captured the competitive nature of higher value land uses) as distinct to industrial zone land *capacity*. Avoiding too much flexibility in industrial zone activities (especially at ground level) is necessary to protect those businesses that have a functional need to be there, now and in the future.

6.4.6 Rising Land Values

Related to the issue above, rising land values are a key feature of the QLD property market due to ongoing strong rates of growth and demand. For those people looking to develop land or individual sites, they are faced with very high purchase prices for the land relative to most places in New Zealand. As a result of these high prices (and financing costs), landowners seek to maximise the returns from development. This is achieved by developing the site to maximum intensity and targeting their development to the highest value use.

⁴² Excerpt of Bunnings Environment Court Decision, taken from Stuff article (April 15 2019)

Figure 6.7 – Average Shift in Land Value 2014 – 2017 (Government Valuations) by Zone

Zone (PDP/ODP)	Estimated Zone Property Area (ha)	Total LV 2014	Average LV 2014	Estimated Average LV 2014 per ha	Total LV 2017	Average LV 2017	Estimated Average LV 2017 per ha	Increase in Average in LV	Average Increase in LV %	Increase in Average in LV/ha	Average Increase in LV/ha %
Town Centre Queenstown	9	\$ 618,018,000	\$ 1,592,830	\$ 67,147,000	\$ 887,373,000	\$ 2,287,044	\$ 96,413,000	\$ 694,214	44%	\$ 29,266,000	44%
High Density Residential	61	\$ 715,028,000	\$ 260,864	\$ 11,651,000	\$ 1,579,555,500	\$ 576,691	\$ 25,737,000	\$ 315,827	121%	\$ 14,086,000	121%
High Density Residential (Operative)	10	\$ 96,894,000	\$ 398,741	\$ 9,337,000	\$ 199,473,000	\$ 820,877	\$ 19,221,000	\$ 422,136	106%	\$ 9,884,000	106%
Town Centre Arrowtown	1	\$ 27,770,000	\$ 1,157,083	\$ 29,389,000	\$ 33,600,000	\$ 1,344,000	\$ 35,559,000	\$ 186,917	16%	\$ 6,170,000	21%
Arrowtown Residential Historic Management Zone	19	\$ 109,216,000	\$ 418,452	\$ 5,882,000	\$ 216,539,000	\$ 829,651	\$ 11,663,000	\$ 411,199	98%	\$ 5,781,000	98%
Town Centre Wanaka	8	\$ 125,370,000	\$ 858,699	\$ 16,342,000	\$ 159,039,000	\$ 1,081,898	\$ 20,731,000	\$ 223,199	26%	\$ 4,389,000	27%
Special Zone - Frankton Flats	45	\$ 117,499,000	\$ 1,780,288	\$ 2,634,000	\$ 282,169,000	\$ 4,408,891	\$ 6,326,000	\$ 2,628,603	148%	\$ 3,692,000	140%
Low Density Residential	997	\$ 2,907,582,200	\$ 305,194	\$ 2,917,000	\$ 5,826,207,000	\$ 611,804	\$ 5,845,000	\$ 306,610	100%	\$ 2,928,000	100%
Industrial A (Operative)	29	\$ 116,059,000	\$ 495,979	\$ 4,026,000	\$ 194,995,000	\$ 833,312	\$ 6,764,000	\$ 337,333	68%	\$ 2,738,000	68%
Local Shopping Centre	7	\$ 24,642,000	\$ 513,375	\$ 3,488,000	\$ 42,029,000	\$ 875,604	\$ 5,949,000	\$ 362,229	71%	\$ 2,461,000	71%
Business Mixed Use	18	\$ 97,242,000	\$ 549,390	\$ 5,391,000	\$ 135,636,000	\$ 766,305	\$ 7,520,000	\$ 216,915	39%	\$ 2,129,000	39%
Penrith park	34	\$ 73,649,000	\$ 640,426	\$ 2,146,000	\$ 135,640,000	\$ 1,179,478	\$ 3,952,000	\$ 539,052	84%	\$ 1,806,000	84%
Medium Density Residential	263	\$ 460,351,000	\$ 425,857	\$ 1,751,000	\$ 883,811,500	\$ 817,587	\$ 3,362,000	\$ 391,730	92%	\$ 1,611,000	92%
Special Zone - Shotover Country	96	\$ 126,615,000	\$ 189,543	\$ 1,314,000	\$ 249,733,000	\$ 373,852	\$ 2,591,000	\$ 184,308	97%	\$ 1,277,000	97%
Township (Operative)	294	\$ 327,453,000	\$ 159,112	\$ 1,116,000	\$ 699,259,500	\$ 339,282	\$ 2,382,000	\$ 180,169	113%	\$ 1,266,000	113%
Business (Operative)	9	\$ 25,841,000	\$ 478,537	\$ 2,799,000	\$ 34,304,000	\$ 635,259	\$ 3,715,000	\$ 156,722	33%	\$ 916,000	33%
Rural Residential (Operative)	26	\$ 17,150,000	\$ 281,148	\$ 660,000	\$ 37,960,000	\$ 622,295	\$ 1,462,000	\$ 341,148	121%	\$ 802,000	122%
Industrial B (Operative)	13	\$ 11,903,000	\$ 297,575	\$ 898,000	\$ 22,515,000	\$ 562,875	\$ 1,699,000	\$ 265,300	89%	\$ 801,000	89%
Special Zone - Quail Rise	73	\$ 68,930,000	\$ 328,238	\$ 944,000	\$ 125,715,000	\$ 598,643	\$ 1,722,000	\$ 270,405	82%	\$ 778,000	82%
Special Zone - Remarkables Park	127	\$ 136,048,000	\$ 657,237	\$ 1,068,000	\$ 225,184,000	\$ 1,093,126	\$ 1,767,000	\$ 435,889	66%	\$ 699,000	65%
Large Lot Residential	419	\$ 314,768,000	\$ 464,260	\$ 752,000	\$ 602,137,000	\$ 888,108	\$ 1,438,000	\$ 423,848	91%	\$ 686,000	91%
Special Zone - Meadow Park	25	\$ 17,556,000	\$ 274,313	\$ 695,000	\$ 32,470,000	\$ 507,344	\$ 1,286,000	\$ 233,031	85%	\$ 591,000	85%
Ferry Hill Rural Residential Sub-Zone	10	\$ 9,240,000	\$ 577,500	\$ 893,000	\$ 13,890,000	\$ 868,125	\$ 1,342,000	\$ 290,625	50%	\$ 449,000	50%
Special Zone - Resort	861	\$ 369,964,000	\$ 364,856	\$ 430,000	\$ 629,964,000	\$ 621,266	\$ 731,000	\$ 256,410	70%	\$ 301,000	70%
Special Zone - Arrowtown South	31	\$ 11,112,500	\$ 1,010,227	\$ 362,000	\$ 19,580,000	\$ 1,958,000	\$ 638,000	\$ 947,773	94%	\$ 276,000	76%
Rural Residential	606	\$ 271,074,000	\$ 410,718	\$ 447,000	\$ 436,755,000	\$ 662,754	\$ 721,000	\$ 252,036	61%	\$ 274,000	61%
Special Zone - Bendemeer	62	\$ 29,650,000	\$ 780,263	\$ 478,000	\$ 43,260,000	\$ 1,138,421	\$ 698,000	\$ 358,158	46%	\$ 220,000	46%
Rural Lifestyle Deferred	4	\$ 1,270,000	\$ 635,000	\$ 335,000	\$ 1,965,000	\$ 982,500	\$ 519,000	\$ 347,500	55%	\$ 184,000	55%
Rural General (Operative)	79	\$ 8,430,000	\$ 4,215,000	\$ 107,000	\$ 20,200,000	\$ 10,100,000	\$ 256,000	\$ 5,885,000	140%	\$ 149,000	139%
Rural Lifestyle	3,263	\$ 479,481,000	\$ 671,542	\$ 147,000	\$ 733,038,000	\$ 1,026,664	\$ 225,000	\$ 355,122	53%	\$ 78,000	53%
Rural Visitor	504	\$ 41,950,000	\$ 270,645	\$ 83,000	\$ 73,828,000	\$ 476,310	\$ 146,000	\$ 205,665	76%	\$ 63,000	76%
Special Zone - Ballantyne Road Mixed Use	20	\$ 2,500,000	\$ 2,500,000	\$ 122,000	\$ 3,760,000	\$ 3,760,000	\$ 184,000	\$ 1,260,000	50%	\$ 62,000	51%
Airport Mixed Use Zone	127	\$ 13,177,000	\$ 1,317,700	\$ 104,000	\$ 20,520,000	\$ 2,052,000	\$ 161,000	\$ 734,300	56%	\$ 57,000	55%
Rural Lifestyle Buffer	21	\$ 2,110,000	\$ 2,110,000	\$ 99,000	\$ 2,950,000	\$ 2,950,000	\$ 138,000	\$ 840,000	40%	\$ 39,000	39%
Gibbston Character Zone	1,103	\$ 70,535,000	\$ 443,616	\$ 64,000	\$ 108,435,000	\$ 681,981	\$ 98,000	\$ 238,365	54%	\$ 34,000	53%
Special Zone - Three Parks	147	\$ 4,530,000	\$ 755,000	\$ 31,000	\$ 7,680,000	\$ 1,280,000	\$ 52,000	\$ 525,000	70%	\$ 21,000	68%
Special Zone - Hanley Downs	616	\$ 17,370,000	\$ 2,481,429	\$ 28,000	\$ 24,715,000	\$ 3,530,714	\$ 40,000	\$ 1,049,286	42%	\$ 12,000	43%
Special Zone - Kingston Village	82	\$ 1,850,000	\$ 1,850,000	\$ 23,000	\$ 2,730,000	\$ 2,730,000	\$ 33,000	\$ 880,000	48%	\$ 10,000	43%
Rural	305,092	\$ 1,585,334,000	\$ 930,907	\$ 5,000	\$ 2,438,511,000	\$ 1,439,499	\$ 8,000	\$ 508,592	55%	\$ 3,000	60%
Total QLD Properties	315,213	\$ 9,455,161,700	\$ 400,513	\$ 30,000	\$ 17,187,125,500	\$ 728,797	\$ 55,000	\$ 328,284	82%	\$ 25,000	83%

Values not adjusted for inflation. Assumes zone area is the same in both time periods. Source: QLDC



This is a key issue for industrial zones which rely on lower land values to support the viability of industrial businesses that use land less extensively – whether yard-based businesses or workshops, factories or warehouses that tend to be single use buildings with no other tenancies on upper floors.

Figure 6.7 summarises the change in government valuations of land value in QLD by zone between the 2014 valuation and the 2017 valuation. Note, these values do not reflect market values which would typically be higher in QLD.

- It shows that in the Industrial zone, the average land value of a property was nearly \$496,000 in 2014 (and average of \$4,026,000/ha). This increased to an average of \$833,000 per property (\$6,764,000/ha) by 2017. This is an increase of 68% or \$2,738,000/ha. In dollar terms, this was the 9th largest increase in value per ha and the 8th most valuable zone in per ha terms (topped only by the three town centres, Frankton Flats Special Zone(s), High Density (Operative) zone and the Low Density Residential Zone.
- It shows that in the Industrial B zone, the average land value of a property was nearly \$298,000 in 2014 (and average of \$898,000/ha). This increased to an average of \$563,000 per property (\$1,699,000/ha) by 2017. This is an increase of 89% or \$801,000/ha. In dollar terms, this was the 18th largest increase in value per ha and the 19th most valuable zone in per ha.
- It shows that in the Business Operative zone, the average land value of a property was nearly \$479,000 in 2014 (and average of \$2,799,000/ha). This increased to an average of \$635,000 per property (\$3,715,000/ha) by 2017. This is an increase of 33% or \$916,000/ha. In dollar terms, this was the 16th largest increase in value per ha and the 13th most valuable zone in per ha terms.

The significant change in value in the Industrial B zone (89%) is potentially driven by the improvements made to the greenfield land over that period (i.e. became more development ready), but also reflects the reduced supply available in the neighbouring Industrial zone.

Overall, the reduction in available capacity in each of these zones has made the land more valuable (i.e. scarcity of resources). This is typical when the amount of available capacity does not keep pace with demand. The addition of Coneburn may not make a material difference on industrial land values as this new capacity is located further out. More central zones remain prime locations. Further, Coneburn's focus on industrial activities will not influence the desirability of Industrial zone sites for other activities that may not be dependent on an industrial zone location.

These high prices make it more important for landowners to maximise the intensity of development to ensure it is commercially feasible (i.e. profitable). This drives the supply of non-industrial land uses, given that office (and to some extent retail/service) businesses can afford to pay higher prices and the industrial zones provide a cheaper but still attractive alternative to the more expensive town centres. These economic processes have significant implications for what portion of remaining industrial zone vacant capacity is made available for the industrial economy and those activities that have a functional need to locate in industrial zones.

6.4.7 Labour Supply and Housing Affordability

The availability of labour is another relevant issue that impacts on the viability and sustainability of industrial economy businesses. Industrial economy businesses typically support a range of occupations



(from management through to unskilled labour). This is valuable in terms of the mix of employment opportunities sustained in the district. However, the ability to attract and retain staff is strongly linked to the ability of those workers to find accommodation (whether rental or to own). While applicants may be able to secure jobs advertised in QLD, anecdotal evidence suggests that once they move to the district, the ability to secure long-term housing (particularly when earning the lower range of incomes) becomes problematic and many are forced to leave again.

The issue of housing affordability and what this means for QLD's economic growth potential for lower wage and salary earners is widely known, so is not expanded on here. The Council is trying to address the issue through a range of statutory and non-statutory functions. This is however expected to be a key constraining factor to growing medium to large industrial economy businesses, including those that typically locate in the industrial zones.



7 Summary and Recommendations

Having analysed QLD's industrial economy in detail, this section provides a concise description of that industrial economy and summarises key findings from throughout the report. The section concludes with a number of recommendations for the review of the operative industrial zones.

7.1 Brief Description of the QLD Industrial Economy

QLD's industrial economy comprises of businesses involved in Manufacturing; Construction; Waste Collection, Treatment and Disposal; Wholesaling; Road Transport; Delivery Services; Storage; Vehicle, Machinery and Equipment (construction related) Hire; Automotive, Appliance, Machinery and Equipment Repair and Maintenance Services; and industrial Dry Cleaning (non-retail component). It is characterised by small scale businesses that serve local level demand.

Industrial economy businesses operate in a range of physical forms including factories, warehouses, workshops, yards and offices. Only a small portion of industrial economy businesses have a function or operational need to locate in an industrial zone. Those that do, tend to be the larger sized businesses (in employment terms) and will often have ancillary office and commercial activities.

A large share of the industrial economy places no demand on zoned capacity (industrial or otherwise) and does not need to be provided for in a district plan sense. These businesses are dominated by tradesman in the Construction sector, or very small-scale home-based manufacturing businesses.

QLD's industrial economy is growing rapidly and has demonstrated growth rates faster than the rest of the district's economy. This can be expected to continue, with the future structure of the industrial economy likely to be very similar to what is here today.

7.2 Key Findings

The key findings of this research include the following:

1. QLD's industrial economy makes up about 25% of all businesses and 22.5% of all employment in the district as at 2017. The relative role of the industrial economy within the wider economy is fairly similar to other areas in New Zealand in terms of the share of businesses, but accounts for a smaller share of employment. This is driven by the fact that industrial economy businesses in QLD tend to be smaller. The economy does not sustain large industrial businesses – these are typically in the large cities.
2. There are currently 1,930 businesses employing 6,250 workers in the district's industrial economy. While the range of ANZSICs included in the description is broad, most ANZSICs have very little depth. Many have only one business or a few businesses.



3. The industrial economy in QLD is heavily dominated by the construction sector (61% of businesses and 56% of employment). This plays a larger role than most other industrial economies in New Zealand. Conversely, QLD does not have a significant manufacturing base. Nor is it well suited for transport and logistics type activities including large warehousing. These sectors are under-represented compared to the national average.
4. The major share of the industrial economy is located in the Queenstown ward. This is consistent with the ward's share of total population and dwellings. The Queenstown ward accounts for 55% of all industrial economy businesses (2017).
5. There is a lot of duplication of business types between Wanaka and Queenstown wards – i.e. they have a very similar mix of activities. The Cromwell ward has a smaller industrial economy than Wanaka, although has slightly larger sized businesses. There is a lot of duplication of industries between QLD and Cromwell. While there is industrial economy trade between the wards, this is small and each ward is largely self-sufficient (but with all areas dependent on inputs from the rest of New Zealand). Wanaka does not generally serve demand in Queenstown and vice versa.
6. In total 65% of gross output from the QLD industrial economy is consumed (demanded) by customers within the district (mostly business to business transactions, with only a small share of demand going directly to households).
7. The industrial economy is predominantly urban based. 82% of businesses and 85% of employment is based in the urban environment. A significant 66% of urban industrial zone activity is located in residential or township zones and has no functional need to locate in a business-oriented zone. This is common throughout New Zealand, but the QLD share is expected to be above average. It reflects the small scale, home-based businesses which are significant in QLD. The construction sector (builders and tradesman) accounts for the majority of this activity.
8. The business zones of the district accommodate an estimated 5% of industrial economy businesses and the industrial zones between 5-13%. This further highlights that the industrial economy is not limited to just that activity present in industrial zones.
9. While QLD does not support much heavy industry per se, it is the 'heavier' industries (in a relative sense) that are highly dependent on an industrial zone location. These include the manufacturing and service businesses that provide inputs to the construction sector. Industrial zones also have an important role for wholesaling, other manufacturing and transport businesses.
10. Those industrial economy activities that have a functional need to locate in an industrial zone also tend to be larger businesses (in employment terms); have a need to store machinery or materials outside; generate higher levels of truck movements; and/or have externalities such as dust and noise. They may support ancillary commercial or office space. The main activities are generally limited to the ground floor, with many businesses requiring high internal building space.

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11. The existing industrial zones (by location) and including the Business (Operative) zone, have a very similar mix of activities. While the zones vary in size (and the number of businesses they can support), they all have a similar structure/role. This is consistent with the finding that Wanaka and Queenstown are largely self-sufficient (i.e. they serve local markets).
 12. The industrial economy is growing strongly and faster than the rest of the QLD economy. Business counts have increased by 161% since 2001 and employment has increased by 177%. Most of the growth has been in the construction sector.
 13. Future growth of the industrial economy is also expected to be strong and largely driven by household growth. There is limited likelihood that industrial sector trends occurring outside the district will have a material impact on what happens to the industrial economy within the district in future. A business as usual outlook is the most appropriate approach to projecting future growth.
 14. There are however a range of local factors that will continue to influence the viability and vulnerability of those industrial economy businesses that have a functional need to locate within industrial zones. These include constraints on the ability to grow activities and move premises as needs change due to limited growth potential of zone areas generally and limited vacant capacity remaining in existing zones (particularly in Queenstown); changing land use around industrial zones impacting on how busy the general areas are in terms of traffic and parking availability; rapidly rising land values which flows through to rising development, lease and rental costs; competition for higher value land uses within zones which is further exacerbated by rising land values; and labour force-housing availability constraints.

7.3 Recommendations for Zone Provisions

This section provides some overall preliminary thoughts and recommendations (based on the analysis contained in this report) that may be relevant when considering options for the Industrial Zone provisions (objectives, policies and rules).

- There is limited vacant capacity in the Industrial Zone and Gorge Road Business (Operative) Zone. This means that any changes to provisions can have only a minor impact on future growth but could have a greater influence on supporting existing activities and any site redevelopment within the zones. On the contrary, there is more significant vacant capacity in the Industrial B Zone and 100% vacant capacity in the Ballantyne Road Mixed Use Zone. This means that any changes to provisions will have a greater impact on future growth of those locations and will therefore need to support the needs of future industrial land use businesses (which will be similar to the needs of current industrial land use businesses).
- Site size – While it is important to provide for *some* larger sites to enable land extensive activities (and larger scale businesses generally, although these are few and far between), the majority of industrial economy businesses seeking industrial zone locations are small-medium sized. It is therefore recommended that individual zones provide for a small share of larger sites as part of the mix of subdivided lots (in appropriate locations with good access), or that specific



zones/precincts are set aside to specifically accommodate those few businesses needing larger sites. Existing large sites in developed industrial zones are likely to provide a good indication of what is an appropriate 'large lot' in the context of QLD given that we can expect more of the same types of businesses in future.

- Multi-unit developments – On the basis that industrial zone land values are already high and unlikely to come down in the foreseeable future, it is important that industrial zones are developed in an efficient way that can help mitigate the costs of construction and the rental/lease costs for tenants. Enabling multi-unit (multi tenancy) industrial buildings on sites is likely to aid in balancing the need for suitable space for businesses with a more affordable cost (relative to occupying their own site). For clarity, these are not multi-unit office buildings, but could include warehouse or workshop type buildings divided by internal walls to create separate tenancies on the ground floor.
- Permissive/flexible zones – While in the past enabling a mix of activities would have helped ensure efficient use and uptake of industrial zones (when demand was lower), the rapid growth of the industrial economy means that it is more important that the needs of the industrial economy (and particularly those activities with a functional need to be industrial zones) are prioritised and the competition for that land from activities that do not have a functional need to locate in industrial zones, is reduced. There is no clear evidence from this study that having mixed use or flexible industrial zones is beneficial (at the aggregate level), but there is evidence of the costs associated with that outcome. It is recommended that going forward, more stringent planning frameworks are needed that avoid too much flexibility in industrial zones so that industrial activities that have a functional need to locate in those zones are protected. Ideally, industrial zones should be clearly distinguishable from the Business Mixed Use zones.
- Relatedly, it is recommended that purely office-based activities should be discouraged from industrial zones. One adverse effect of this activity is that they create high demand for parking. Rules are needed to limit the intensity that sites can be developed so that multi-storey office developments such as those seen in Glenda Drive are avoided. Such activities can locate in town centres and Business Mixed Use zones (and are more efficient in those locations and are better serviced by public transport).
- Ancillary activities – nearly all industrial businesses require some office-based functions and for most it will be efficient to have these on-site. Providing for ancillary office space is therefore essential to support industrial (and industrial yard and service) activities in industrial zones. Providing for ancillary retail is also likely to support the viability of some industrial businesses, as the alternative is to have the retail activity in one zone and the manufacturing/servicing in another (this is likely to be less efficient). It is also important to recognise that the manufacturing/servicing component is unlikely to be enabled in a centre zone, which means that industrial or mixed business zones are the only options if the business needs to keep these activities combined.
- Do we need to manage differences between zones? There may be benefits in simplifying the Industrial and Industrial B zone structure to have a single zone. Given the similar structure/profile of each of the zones examined, there are not anticipated to be any significant costs of doing this (and the marginal effect is limited to sites that have not yet been developed or any



redevelopment activity). The Ballantyne Mixed Use Zone is likely to provide for over-flow demand once the Industrial B zone is full (assuming it is development ready at that time). As such, there may be some logic in also including this in the same unified zone type, providing that the opportunity for some yard-based activity is not diminished when doing so. Given that Coneburn is focussed more strictly on industrial activities, there is benefit in retaining that 'industrial only' zone in the Queenstown market. We also see no cost associated with including the Business (Operative) Zone in a unified industrial zone approach, if that is up for consideration. There would be a marginal effect on that zone given that it is largely occupied. Otherwise, there seems little need to retain or create industrial zones that have a particular niche role within the industrial economy (such as heavy industry or light industry specifically). The market is not big enough to support that now or in the foreseeable future.

- When considering subdivision plans for new areas of industrial zone, thought should be given to the road network, particularly any connecting roads through to other neighbouring land uses and the implication this has on future traffic flows and parking demand. Where industrial zones are expected to be influenced by activity in surrounding areas, the need for onsite parking and manoeuvring will be relatively more important.
- While outside of the scope of the Stage 3 review, it is relevant to note that providing for future expansion of industrial zones (at the time of zoning) is the most efficient way to manage industrial zone capacity and growth. This could be managed through deferred or future urban zones, or by ensuring that any new zoning (or setting aside of land) provides for long-term demand as required under the NPS-UDC. There are costs associated with dispersing industrial activity across many small locations (and these will likely outweigh the benefits of providing for a range of location choices for industrial activity). Losing the opportunity to expand places a greater burden on finding and zoning new locations. There are a range of opportunities outside the district plan where these considerations can be more strategically addressed (including in the Future Development Strategy).
- Where feasible, providing public transport for industrial zones will help mitigate the need for onsite staff parking and will allow sites to be developed more intensively.

Appendix 1 – QLD Industrial Economy Breakdown

Division Code *	Division Name	Sub-Division Code	Sub-Division Name	Class (6-Digit) Code	Class (6-Digit) Name
A	Agriculture, Forestry and Fishing	5	Agriculture, Forestry and Fishing Support Services	A052900	Other Agriculture and Fishing Support Services
C	Manufacturing	11	Food Product Manufacturing	C111300	Cured Meat and Smallgoods Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C113100	Milk and Cream Processing
C	Manufacturing	11	Food Product Manufacturing	C113200	Ice Cream Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C114000	Fruit and Vegetable Processing
C	Manufacturing	11	Food Product Manufacturing	C115000	Oil and Fat Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C116200	Cereal, Pasta and Baking Mix Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C117100	Bread Manufacturing (Factory-based)
C	Manufacturing	11	Food Product Manufacturing	C117200	Cake and Pastry Manufacturing (Factory-based)
C	Manufacturing	11	Food Product Manufacturing	C117400	Bakery Product Manufacturing (Non-factory-based)
C	Manufacturing	11	Food Product Manufacturing	C118200	Confectionery Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C119200	Prepared Animal and Bird Feed Manufacturing
C	Manufacturing	11	Food Product Manufacturing	C119900	Other Food Products Manufacturing n.e.c.
C	Manufacturing	12	Beverage and Tobacco Product Manufacturing	C121100	Soft Drink, Cordial and Syrup Manufacturing
C	Manufacturing	12	Beverage and Tobacco Product Manufacturing	C121200	Beer Manufacturing
C	Manufacturing	12	Beverage and Tobacco Product Manufacturing	C121300	Spirit Manufacturing
C	Manufacturing	12	Beverage and Tobacco Product Manufacturing	C121400	Wine and Other Alcoholic Beverage Manufacturing
C	Manufacturing	13	Textile, Leather, Clothing and Footwear Manufacturing	C133300	Cut and Sewn Textile Product Manufacturing
C	Manufacturing	13	Textile, Leather, Clothing and Footwear Manufacturing	C133400	Textile Finishing and Other Textile Product Manufacturing
C	Manufacturing	13	Textile, Leather, Clothing and Footwear Manufacturing	C135100	Clothing Manufacturing
C	Manufacturing	14	Wood Product Manufacturing	C149100	Prefabricated Wooden Building Manufacturing
C	Manufacturing	14	Wood Product Manufacturing	C149200	Wooden Structural Fittings and Components Manufacturing
C	Manufacturing	14	Wood Product Manufacturing	C149900	Other Wood Product Manufacturing n.e.c.
C	Manufacturing	16	Printing	C161100	Printing
C	Manufacturing	16	Printing	C161200	Printing Support Services
C	Manufacturing	18	Basic Chemical and Chemical Product Manufacturing	C181300	Basic Inorganic Chemical Manufacturing
C	Manufacturing	18	Basic Chemical and Chemical Product Manufacturing	C184100	Human Pharmaceutical and Medicinal Product Manufacturing
C	Manufacturing	18	Basic Chemical and Chemical Product Manufacturing	C185100	Cleaning Compound Manufacturing
C	Manufacturing	18	Basic Chemical and Chemical Product Manufacturing	C185200	Cosmetic and Toiletry Preparation Manufacturing
C	Manufacturing	20	Non-Metallic Mineral Product Manufacturing	C202900	Other Ceramic Product Manufacturing
C	Manufacturing	20	Non-Metallic Mineral Product Manufacturing	C203300	Ready-Mixed Concrete Manufacturing
C	Manufacturing	20	Non-Metallic Mineral Product Manufacturing	C203400	Concrete Product Manufacturing
C	Manufacturing	20	Non-Metallic Mineral Product Manufacturing	C209000	Other Non-Metallic Mineral Product Manufacturing
C	Manufacturing	21	Primary Metal and Metal Product Manufacturing	C211000	Iron Smelting and Steel Manufacturing
C	Manufacturing	21	Primary Metal and Metal Product Manufacturing	C212200	Steel Pipe and Tube Manufacturing
C	Manufacturing	21	Primary Metal and Metal Product Manufacturing	C214200	Aluminium Rolling, Drawing, Extruding
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C222100	Structural Steel Fabricating
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C222300	Architectural Aluminium Product Manufacturing
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C222400	Metal Roof and Guttering Manufacturing (except Aluminium)
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C222900	Other Structural Metal Product Manufacturing
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C224000	Other Sheet Metal Product Manufacturing
C	Manufacturing	22	Fabricated Metal Product Manufacturing	C229900	Other Fabricated Metal Product Manufacturing n.e.c.
C	Manufacturing	23	Transport Equipment Manufacturing	C231200	Motor Vehicle Body and Trailer Manufacturing
C	Manufacturing	23	Transport Equipment Manufacturing	C239200	Boatbuilding and Repair Services
C	Manufacturing	23	Transport Equipment Manufacturing	C239400	Aircraft Manufacturing and Repair Services

Division Code *	Division Name	Sub-Division Code	Sub-Division Name	Class (6-Digit) Code	Class (6-Digit) Name
C	Manufacturing	24	Machinery and Equipment Manufacturing	C241100	Photographic, Optical and Ophthalmic Equipment Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C241200	Medical and Surgical Equipment Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C243100	Electric Cable and Wire Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C243900	Other Electrical Equipment Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C246100	Agricultural Machinery and Equipment Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C246200	Mining and Construction Machinery Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C246900	Other Specialised Machinery and Equipment Manufacturing
C	Manufacturing	24	Machinery and Equipment Manufacturing	C249900	Other Machinery and Equipment Manufacturing n.e.c.
C	Manufacturing	25	Furniture and Other Manufacturing	C251100	Wooden Furniture and Upholstered Seat Manufacturing
C	Manufacturing	25	Furniture and Other Manufacturing	C251900	Other Furniture Manufacturing
C	Manufacturing	25	Furniture and Other Manufacturing	C259100	Jewellery and Silverware Manufacturing
C	Manufacturing	25	Furniture and Other Manufacturing	C259900	Other Manufacturing n.e.c.
D	Electricity, Gas, Water and Waste Services	29	Waste Collection, Treatment and Disposal Services	D291100	Solid Waste Collection Services
D	Electricity, Gas, Water and Waste Services	29	Waste Collection, Treatment and Disposal Services	D291900	Other Waste Collection Services
D	Electricity, Gas, Water and Waste Services	29	Waste Collection, Treatment and Disposal Services	D292100	Waste Treatment and Disposal Services
D	Electricity, Gas, Water and Waste Services	29	Waste Collection, Treatment and Disposal Services	D292200	Waste Remediation and Materials Recovery Services
E	Construction	30	Building Construction	E301100	House Construction
E	Construction	30	Building Construction	E301900	Other Residential Building Construction
E	Construction	30	Building Construction	E302000	Non-Residential Building Construction
E	Construction	31	Heavy and Civil Engineering Construction	E310100	Road and Bridge Construction
E	Construction	31	Heavy and Civil Engineering Construction	E310900	Other Heavy and Civil Engineering Construction
E	Construction	32	Construction Services	E321100	Land Development and Subdivision
E	Construction	32	Construction Services	E321200	Site Preparation Services
E	Construction	32	Construction Services	E322100	Concreting Services
E	Construction	32	Construction Services	E322200	Bricklaying Services
E	Construction	32	Construction Services	E322300	Roofing Services
E	Construction	32	Construction Services	E322400	Structural Steel Erection Services
E	Construction	32	Construction Services	E323100	Plumbing Services
E	Construction	32	Construction Services	E323200	Electrical Services
E	Construction	32	Construction Services	E323300	Air Conditioning and Heating Services
E	Construction	32	Construction Services	E323400	Fire and Security Alarm Installation Services
E	Construction	32	Construction Services	E323900	Other Building Installation Services
E	Construction	32	Construction Services	E324100	Plastering and Ceiling Services
E	Construction	32	Construction Services	E324200	Carpentry Services
E	Construction	32	Construction Services	E324300	Tiling and Carpeting Services
E	Construction	32	Construction Services	E324400	Painting and Decorating Services
E	Construction	32	Construction Services	E324500	Glazing Services
E	Construction	32	Construction Services	E329100	Landscape Construction Services
E	Construction	32	Construction Services	E329200	Hire of Construction Machinery with Operator
E	Construction	32	Construction Services	E329900	Other Construction Services n.e.c.
F	Wholesale Trade	33	Basic Material Wholesaling	F331900	Other Agricultural Product Wholesaling
F	Wholesale Trade	33	Basic Material Wholesaling	F332100	Petroleum Product Wholesaling
F	Wholesale Trade	33	Basic Material Wholesaling	F332200	Metal and Mineral Wholesaling
F	Wholesale Trade	33	Basic Material Wholesaling	F332300	Industrial and Agricultural Chemical Product Wholesaling
F	Wholesale Trade	33	Basic Material Wholesaling	F333100	Timber Wholesaling
F	Wholesale Trade	33	Basic Material Wholesaling	F333900	Other Hardware Goods Wholesaling

Division Code *	Division Name	Sub-Division Code	Sub-Division Name	Class (6-Digit) Code	Class (6-Digit) Name
F	Wholesale Trade	34	Machinery and Equipment Wholesaling	F341100	Agricultural and Construction Machinery Wholesaling
F	Wholesale Trade	34	Machinery and Equipment Wholesaling	F341900	Other Specialised Industrial Machinery and Equipment Wholesaling
F	Wholesale Trade	34	Machinery and Equipment Wholesaling	F349200	Computer and Computer Peripherals Wholesaling
F	Wholesale Trade	34	Machinery and Equipment Wholesaling	F349400	Other Electrical and Electronic Goods Wholesaling
F	Wholesale Trade	34	Machinery and Equipment Wholesaling	F349900	Other Machinery and Equipment Wholesaling n
F	Wholesale Trade	35	Motor Vehicle and Motor Vehicle Parts Wholesaling	F350100	Car Wholesaling
F	Wholesale Trade	35	Motor Vehicle and Motor Vehicle Parts Wholesaling	F350400	Motor Vehicle New Part Wholesaling
F	Wholesale Trade	35	Motor Vehicle and Motor Vehicle Parts Wholesaling	F350500	Motor Vehicle Dismantling and Used Part Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360200	Meat, Poultry and Smallgoods Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360300	Dairy Produce Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360400	Fish and Seafood Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360500	Fruit and Vegetable Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360600	Liquor and Tobacco Product Wholesaling
F	Wholesale Trade	36	Grocery, Liquor and Tobacco Product Wholesaling	F360900	Other Grocery Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F371100	Textile Product Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F371200	Clothing and Footwear Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F372000	Pharmaceutical and Toiletry Goods Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373100	Furniture and Floor Coverings Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373200	Jewellery and Watch Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373300	Kitchen and Dining Ware Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373400	Toy and Sporting Goods Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373500	Book and Magazine Wholesaling
F	Wholesale Trade	37	Other Goods Wholesaling	F373900	Other Goods Wholesaling n.e.c.
F	Wholesale Trade	38	Commission Based Wholesaling	F380000	Commission Based Wholesaling
I	Transport, Postal and Warehousing	46	Road Transport	I461000	Road Freight Transport
I	Transport, Postal and Warehousing	46	Road Transport	I462100	Interurban and Rural Bus Transport
I	Transport, Postal and Warehousing	46	Road Transport	I462200	Urban Bus Transport (Including Tramway)
I	Transport, Postal and Warehousing	51	Postal and Courier Pick-up and Delivery Services	I510200	Courier Pick-up and Delivery Services
I	Transport, Postal and Warehousing	52	Transport Support Services	I521900	Other Water Transport Support Services
I	Transport, Postal and Warehousing	52	Transport Support Services	I529200	Freight Forwarding Services
I	Transport, Postal and Warehousing	52	Transport Support Services	I529900	Other Transport Support Services n.e.c.
I	Transport, Postal and Warehousing	53	Warehousing and Storage Services	I530900	Other Warehousing and Storage Services
L	Rental, Hiring and Real Estate Services	66	Rental and Hiring Services (except Real Estate)	L661100	Passenger Car Rental and Hiring
L	Rental, Hiring and Real Estate Services	66	Rental and Hiring Services (except Real Estate)	L661900	Other Motor Vehicle and Transport Equipment Rental and Hiring
L	Rental, Hiring and Real Estate Services	66	Rental and Hiring Services (except Real Estate)	L663100	Heavy Machinery and Scaffolding Rental and Hiring
L	Rental, Hiring and Real Estate Services	66	Rental and Hiring Services (except Real Estate)	L663900	Other Goods and Equipment Rental and Hiring n.e.c.
S	Other Services	94	Repair and Maintenance	S941100	Automotive Electrical Services
S	Other Services	94	Repair and Maintenance	S941200	Automotive Body, Paint and Interior Repair
S	Other Services	94	Repair and Maintenance	S941900	Other Automotive Repair and Maintenance
S	Other Services	94	Repair and Maintenance	S942100	Domestic Appliance Repair and Maintenance
S	Other Services	94	Repair and Maintenance	S942200	Electronic (except Domestic Appliance) and Precision Equipment Repair and Maintenance
S	Other Services	94	Repair and Maintenance	S942900	Other Machinery and Equipment Repair and Maintenance
S	Other Services	95	Personal and Other Services	S953100	Laundry and Dry-Cleaning Services

* By default, all other Manufacturing industries (6-Digit ANZSICs) fall within this construct of QLD's industrial economy - they are not listed as there were no local businesses in those industries in QLD as at 2017.

Source: Australia New Zealand Standard Industrial Classification, 2006. M.E.

Appendix 2 – Structure of QLD Industrial Economy 2017

Industry	ANZSIC06	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n) *	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
Industrial - House Construction	E301100	392	20.3%	5.1%	1,030	16.5%	3.7%	3
Industrial - Electrical Services	E323200	78	4.0%	1.0%	279	4.5%	1.0%	4
Industrial - Painting and Decorating Services	E324400	76	3.9%	1.0%	200	3.2%	0.7%	3
Industrial - Other Residential Building Construction	E301900	68	3.5%	0.9%	83	1.3%	0.3%	1
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	64	3.3%	0.8%	147	2.4%	0.5%	2
Industrial - Land Development and Subdivision	E321100	61	3.2%	0.8%	31	0.5%	0.1%	1
Industrial - Plastering and Ceiling Services	E324100	54	2.8%	0.7%	163	2.6%	0.6%	3
Industrial - Other Automotive Repair and Maintenance	S941900	52	2.7%	0.7%	191	3.1%	0.7%	4
Industrial - Other Agriculture and Fishing Support Services	A052900	50	2.6%	0.7%	130	2.1%	0.5%	3
Industrial - Plumbing Services	E323100	50	2.6%	0.6%	181	2.9%	0.7%	4
Industrial - Landscape Construction Services	E329100	47	2.5%	0.6%	136	2.2%	0.5%	3
Industrial - Tiling and Carpeting Services	E324300	46	2.4%	0.6%	99	1.6%	0.4%	2
Industrial - Site Preparation Services	E321200	46	2.4%	0.6%	295	4.7%	1.1%	6
Industrial - Bricklaying Services	E322200	40	2.1%	0.5%	88	1.4%	0.3%	2
Industrial - Passenger Car Rental and Hiring	L661100	39	2.0%	0.5%	200	3.2%	0.7%	5
Industrial - Carpentry Services	E324200	35	1.8%	0.5%	58	0.9%	0.2%	2
Industrial - Other Construction Services n.e.c.	E329900	33	1.7%	0.4%	134	2.1%	0.5%	4
Industrial - Road Freight Transport	I461000	30	1.6%	0.4%	83	1.3%	0.3%	3
Industrial - Other Heavy and Civil Engineering Construction	E310900	26	1.3%	0.3%	136	2.2%	0.5%	5
Industrial - Non-Residential Building Construction	E302000	25	1.3%	0.3%	174	2.8%	0.6%	7
Industrial - Courier Pick-up and Delivery Services	I510200	22	1.1%	0.3%	40	0.6%	0.1%	2
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	21	1.1%	0.3%	21	0.3%	0.1%	1
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	20	1.0%	0.3%	58	0.9%	0.2%	3
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	20	1.0%	0.3%	41	0.6%	0.1%	2
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	20	1.0%	0.3%	60	1.0%	0.2%	3
Industrial - Automotive Body, Paint and Interior Repair	S941200	19	1.0%	0.2%	108	1.7%	0.4%	6
Industrial - Roofing Services	E322300	17	0.9%	0.2%	64	1.0%	0.2%	4
Industrial - Concreting Services	E322100	17	0.9%	0.2%	51	0.8%	0.2%	3
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	17	0.9%	0.2%	74	1.2%	0.3%	4
Industrial - Air Conditioning and Heating Services	E323300	17	0.9%	0.2%	75	1.2%	0.3%	4
Industrial - Aircraft Manufacturing and Repair Services	C239400	16	0.8%	0.2%	73	1.2%	0.3%	5
Industrial - Road and Bridge Construction	E310100	15	0.8%	0.2%	119	1.9%	0.4%	8
Industrial - Commission Based Wholesaling	F380000	14	0.7%	0.2%	15	0.2%	0.1%	1
Industrial - Other Grocery Wholesaling	F360900	14	0.7%	0.2%	169	2.7%	0.6%	12
Industrial - Other Goods Wholesaling n.e.c.	F373900	14	0.7%	0.2%	22	0.3%	0.1%	2
Industrial - Liquor and Tobacco Product Wholesaling	F360600	11	0.6%	0.1%	22	0.3%	0.1%	2
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	10	0.5%	0.1%	119	1.9%	0.4%	12
Industrial - Laundry and Dry-Cleaning Services	S953100	10	0.5%	0.1%	92	1.5%	0.3%	9
Industrial - Other Agricultural Product Wholesaling	F331900	9	0.5%	0.1%	21	0.3%	0.1%	2
Industrial - Urban Bus Transport (Including Tramway)	I462200	9	0.5%	0.1%	126	2.0%	0.5%	14
Industrial - Other Building Installation Services	E323900	9	0.5%	0.1%	12	0.2%	0.0%	1
Industrial - Other Hardware Goods Wholesaling	F333900	9	0.5%	0.1%	35	0.6%	0.1%	4
Industrial - Other Warehousing and Storage Services	I530900	9	0.4%	0.1%	7	0.1%	0.0%	1
Industrial - Electronic (except Domestic Appliance) and Precision Equipment	S942200	8	0.4%	0.1%	13	0.2%	0.0%	2
Industrial - Clothing and Footwear Wholesaling	F371200	8	0.4%	0.1%	42	0.7%	0.1%	5
Industrial - Other Manufacturing n.e.c.	C259900	8	0.4%	0.1%	20	0.3%	0.1%	3
Industrial - Clothing Manufacturing	C135100	7	0.4%	0.1%	17	0.3%	0.1%	2
Industrial - Beer Manufacturing	C121200	7	0.4%	0.1%	8	0.1%	0.0%	1
Industrial - Solid Waste Collection Services	D291100	7	0.4%	0.1%	63	1.0%	0.2%	9
Industrial - Printing	C161100	6	0.3%	0.1%	47	0.7%	0.2%	8
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	6	0.3%	0.1%	14	0.2%	0.0%	2
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	6	0.3%	0.1%	14	0.2%	0.0%	2
Industrial - Other Transport Support Services n.e.c.	I529900	6	0.3%	0.1%	9	0.1%	0.0%	2
Industrial - Glazing Services	E324500	6	0.3%	0.1%	23	0.4%	0.1%	4
Industrial - Medical and Surgical Equipment Manufacturing	C241200	5	0.3%	0.1%	8	0.1%	0.0%	2
Industrial - Confectionery Manufacturing	C118200	5	0.3%	0.1%	73	1.2%	0.3%	15
Industrial - Iron Smelting and Steel Manufacturing	C211000	5	0.3%	0.1%	5	0.1%	0.0%	1
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	5	0.3%	0.1%	13	0.2%	0.0%	3
Industrial - Fire and Security Alarm Installation Services	E323400	5	0.3%	0.1%	13	0.2%	0.0%	3
Industrial - Hire of Construction Machinery with Operator	E329200	5	0.3%	0.1%	17	0.3%	0.1%	3
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	5	0.3%	0.1%	14	0.2%	0.0%	3
Industrial - Petroleum Product Wholesaling	F332100	5	0.2%	0.1%	18	0.3%	0.1%	4
Industrial - Toy and Sporting Goods Wholesaling	F373400	5	0.2%	0.1%	4	0.1%	0.0%	1
Industrial - Waste Treatment and Disposal Services	D292100	5	0.2%	0.1%	27	0.4%	0.1%	5
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	5	0.2%	0.1%	29	0.5%	0.1%	6
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	4	0.2%	0.1%	4	0.1%	0.0%	1
Industrial - Dairy Produce Wholesaling	F360300	4	0.2%	0.1%	15	0.2%	0.1%	4
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	4	0.2%	0.1%	13	0.2%	0.0%	3
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	4	0.2%	0.1%	3	0.0%	0.0%	1
Industrial - Motor Vehicle New Part Wholesaling	F350400	4	0.2%	0.1%	11	0.2%	0.0%	3
Industrial - Automotive Electrical Services	S941100	4	0.2%	0.1%	11	0.2%	0.0%	3
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	4	0.2%	0.1%	6	0.1%	0.0%	2
Industrial - Other Food Products Manufacturing n.e.c.	C119900	4	0.2%	0.1%	4	0.1%	0.0%	1

Industry	ANZSIC06	Business Count (n)	Share of IE Businesses (%)	Share of All Businesses (%)	Employment Count (n) *	Share of IE Employment (%)	Share of All Employment (%)	Average Business Size (MECs)
Industrial - Pharmaceutical and Toiletry Goods Wholesaling	F372000	4	0.2%	0.1%	11	0.2%	0.0%	3
Industrial - Interurban and Rural Bus Transport	I462100	4	0.2%	0.1%	41	0.6%	0.1%	10
Industrial - Other Water Transport Support Services	I521900	4	0.2%	0.1%	4	0.1%	0.0%	1
Industrial - Domestic Appliance Repair and Maintenance	S942100	4	0.2%	0.1%	7	0.1%	0.0%	2
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	4	0.2%	0.0%	47	0.7%	0.2%	12
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	4	0.2%	0.0%	8	0.1%	0.0%	2
Industrial - Concrete Product Manufacturing	C203400	4	0.2%	0.0%	8	0.1%	0.0%	2
Industrial - Jewellery and Silverware Manufacturing	C259100	3	0.2%	0.0%	6	0.1%	0.0%	2
Industrial - Cosmetic and Toiletry Preparation Manufacturing	C185200	3	0.2%	0.0%	4	0.1%	0.0%	1
Industrial - Ready-Mixed Concrete Manufacturing	C203300	3	0.2%	0.0%	27	0.4%	0.1%	9
Industrial - Fish and Seafood Wholesaling	F360400	3	0.2%	0.0%	13	0.2%	0.0%	4
Industrial - Furniture and Floor Coverings Wholesaling	F373100	3	0.2%	0.0%	4	0.1%	0.0%	1
Industrial - Timber Wholesaling	F333100	3	0.2%	0.0%	4	0.1%	0.0%	1
Industrial - Computer and Computer Peripherals Wholesaling	F349200	3	0.1%	0.0%	18	0.3%	0.1%	6
Industrial - Fruit and Vegetable Processing	C114000	3	0.1%	0.0%	3	0.0%	0.0%	1
Industrial - Structural Steel Fabricating	C222100	2	0.1%	0.0%	19	0.3%	0.1%	10
Industrial - Other Specialised Industrial Machinery and Equipment Wholesaling	F341900	2	0.1%	0.0%	8	0.1%	0.0%	4
Industrial - Other Machinery and Equipment Wholesaling n	F349900	2	0.1%	0.0%	7	0.1%	0.0%	4
Industrial - Boatbuilding and Repair Services	C239200	2	0.1%	0.0%	3	0.1%	0.0%	2
Industrial - Industrial and Agricultural Chemical Product Wholesaling	F332300	2	0.1%	0.0%	9	0.1%	0.0%	5
Industrial - Human Pharmaceutical and Medicinal Product Manufacturing	C184100	2	0.1%	0.0%	16	0.3%	0.1%	8
Industrial - Ice Cream Manufacturing	C113200	2	0.1%	0.0%	14	0.2%	0.1%	7
Industrial - Other Furniture Manufacturing	C251900	2	0.1%	0.0%	3	0.1%	0.0%	2
Industrial - Soft Drink, Cordial and Syrup Manufacturing	C121100	2	0.1%	0.0%	2	0.0%	0.0%	1
Industrial - Spirit Manufacturing	C121300	2	0.1%	0.0%	12	0.2%	0.0%	6
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	2	0.1%	0.0%	3	0.1%	0.0%	2
Industrial - Waste Remediation and Materials Recovery Services	D292200	2	0.1%	0.0%	6	0.1%	0.0%	3
Industrial - Structural Steel Erection Services	E322400	2	0.1%	0.0%	6	0.1%	0.0%	3
Industrial - Book and Magazine Wholesaling	F373500	2	0.1%	0.0%	2	0.0%	0.0%	1
Industrial - Car Wholesaling	F350100	2	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Kitchen and Dining Ware Wholesaling	F373300	2	0.1%	0.0%	12	0.2%	0.0%	6
Industrial - Textile Product Wholesaling	F371100	2	0.1%	0.0%	3	0.0%	0.0%	2
Industrial - Metal and Mineral Wholesaling	F332200	1.80	0.1%	0.0%	18	0.3%	0.1%	9
Industrial - Photographic, Optical and Ophthalmic Equipment Manufacturing	C241100	2	0.1%	0.0%	27	0.4%	0.1%	14
Industrial - Motor Vehicle Dismantling and Used Part Wholesaling	F350500	1	0.1%	0.0%	3	0.1%	0.0%	3
Industrial - Prepared Animal and Bird Feed Manufacturing	C119200	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Fruit and Vegetable Wholesaling	F360500	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Aluminium Rolling, Drawing, Extruding	C214200	1	0.1%	0.0%	7	0.1%	0.0%	7
Industrial - Architectural Aluminium Product Manufacturing	C222300	1	0.1%	0.0%	3	0.0%	0.0%	3
Industrial - Basic Inorganic Chemical Manufacturing	C181300	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Bread Manufacturing (Factory-based)	C117100	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Cereal, Pasta and Baking Mix Manufacturing	C116200	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Cleaning Compound Manufacturing	C185100	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Cured Meat and Smallgoods Manufacturing	C111300	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Electric Cable and Wire Manufacturing	C243100	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Milk and Cream Processing	C113100	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Mining and Construction Machinery Manufacturing	C246200	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Oil and Fat Manufacturing	C115000	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Other Ceramic Product Manufacturing	C202900	1	0.1%	0.0%	3	0.0%	0.0%	3
Industrial - Other Electrical Equipment Manufacturing	C243900	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Other Sheet Metal Product Manufacturing	C224000	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Other Specialised Machinery and Equipment Manufacturing	C246900	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Other Structural Metal Product Manufacturing	C222900	1	0.1%	0.0%	5	0.1%	0.0%	5
Industrial - Prefabricated Wooden Building Manufacturing	C149100	1	0.1%	0.0%	3	0.0%	0.0%	3
Industrial - Printing Support Services	C161200	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Steel Pipe and Tube Manufacturing	C212200	1	0.1%	0.0%	2	0.0%	0.0%	2
Industrial - Other Waste Collection Services	D291900	1	0.1%	0.0%	6	0.1%	0.0%	6
Industrial - Jewellery and Watch Wholesaling	F373200	1	0.1%	0.0%	1	0.0%	0.0%	1
Industrial - Meat, Poultry and Smallgoods Wholesaling	F360200	1	0.1%	0.0%	3	0.1%	0.0%	3
Industrial - Freight Forwarding Services	I529200	1	0.1%	0.0%	1	0.0%	0.0%	1
Rest of Manufacturing	multiple	-	0.0%	0.0%	-	0.0%	0.0%	na
Rest of Wholesale Trade	multiple	-	0.0%	0.0%	-	0.0%	0.0%	na
Total QLD Industrial Economy		1,928	100.0%	25.0%	6,249	100.0%	22.5%	3

Source: M.E, Statistics NZ Business Frame 2017, QLD and COD district plan zones.

Appendix 3 – TA/Region QLD IE Comparison

Businesses 2017 – According to QLD Identified Industrial Economy

ANZSIC Division	Industrial Economy Selection	Queenstown-Lakes District	Taupo District	Upper Hutt City	Wanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
A	Selected Ag/Forestry/Fishing Support Services	50	82	8	55	88	87	490	402	6,116
C	Manufacturing	225	200	147	203	137	477	8,037	994	22,773
D	Waste Services Group Only	15	3	14	10	15	19	287	46	987
E	Construction	1,168	576	532	399	353	1,183	21,500	3,164	60,625
F	Wholesale Trade	154	120	79	129	69	384	9,962	750	21,000
I	Selected Transport, Postal and Warehousing	85	119	84	54	69	238	3,705	475	10,312
L	Selected Rental and Hiring Services	128	57	19	37	28	95	1,503	271	4,401
S	Selected Other Services	102	114	69	104	83	241	3,779	488	11,026
QLD Industrial Economy		1,928	1,270	952	991	842	2,724	49,263	6,589	137,240
Rest of Economy (all other ANZSICs)		5,782	3,649	2,155	3,192	3,307	9,181	141,573	22,372	426,048
Total Economy		7,710	4,919	3,106	4,183	4,149	11,905	190,835	28,962	563,287
Division Share of Each Area										
A	Selected Ag/Forestry/Fishing Support Services	0.7%	1.7%	0.2%	1.3%	2.1%	0.7%	0.3%	1.4%	1.1%
C	Manufacturing	2.9%	4.1%	4.7%	4.9%	3.3%	4.0%	4.2%	3.4%	4.0%
D	Waste Services Group Only	0.2%	0.1%	0.5%	0.2%	0.4%	0.2%	0.2%	0.2%	0.2%
E	Construction	15.2%	11.7%	17.1%	9.5%	8.5%	9.9%	11.3%	10.9%	10.8%
F	Wholesale Trade	2.0%	2.4%	2.5%	3.1%	1.7%	3.2%	5.2%	2.6%	3.7%
I	Selected Transport, Postal and Warehousing	1.1%	2.4%	2.7%	1.3%	1.7%	2.0%	1.9%	1.6%	1.8%
L	Selected Rental and Hiring Services	1.7%	1.2%	0.6%	0.9%	0.7%	0.8%	0.8%	0.9%	0.8%
S	Selected Other Services	1.3%	2.3%	2.2%	2.5%	2.0%	2.0%	2.0%	1.7%	2.0%
QLD Industrial Economy		25.0%	25.8%	30.6%	23.7%	20.3%	22.9%	25.8%	22.8%	24.4%
Rest of Economy (all other ANZSICs)		75.0%	74.2%	69.4%	76.3%	79.7%	77.1%	74.2%	77.2%	75.6%
Total Economy		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: M.E. Statistics NZ Business Frame 2017. Assesses each location in the context of QLD's defined industrial economy. This does not necessarily represent the industrial economy of each location. Industries that may form part each other areas industrial economy are captured in 'Rest of Economy'.

Employment 2017 – According to QLD Identified Industrial Economy

ANZSIC Division	Industrial Economy Selection	Queenstown-Lakes District	Taupo District	Upper Hutt City	Wanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
A	Selected Ag/Forestry/Fishing Support Services	130	242	17	130	356	175	846	1,259	22,553
C	Manufacturing	862	1,226	964	2,805	1,101	4,020	80,603	9,649	239,580
D	Waste Services Group Only	103	18	87	56	60	123	2,351	282	6,378
E	Construction	3,465	1,661	1,385	1,602	1,146	5,033	70,005	11,737	212,472
F	Wholesale Trade	573	385	409	551	279	2,474	60,547	4,053	118,966
I	Selected Transport, Postal and Warehousing	312	497	219	725	437	1,420	24,990	2,586	65,227
L	Selected Rental and Hiring Services	371	119	17	49	69	254	5,129	741	12,049
S	Selected Other Services	434	360	188	314	242	975	12,848	1,888	38,510
QLD Industrial Economy		6,249	4,507	3,285	6,232	3,689	14,476	257,319	32,194	715,735
Rest of Economy (all other ANZSICs)		21,551	13,581	9,299	13,546	11,334	48,046	603,206	94,048	1,748,333
Total Economy		27,800	18,089	12,584	19,779	15,024	62,522	860,525	126,242	2,464,068
Division Share of Each Area										
A	Selected Ag/Forestry/Fishing Support Services	0.5%	1.3%	0.1%	0.7%	2.4%	0.3%	0.1%	1.0%	0.9%
C	Manufacturing	3.1%	6.8%	7.7%	14.2%	7.3%	6.4%	9.4%	7.6%	9.7%
D	Waste Services Group Only	0.4%	0.1%	0.7%	0.3%	0.4%	0.2%	0.3%	0.2%	0.3%
E	Construction	12.5%	9.2%	11.0%	8.1%	7.6%	8.1%	8.1%	9.3%	8.6%
F	Wholesale Trade	2.1%	2.1%	3.2%	2.8%	1.9%	4.0%	7.0%	3.2%	4.8%
I	Selected Transport, Postal and Warehousing	1.1%	2.7%	1.7%	3.7%	2.9%	2.3%	2.9%	2.0%	2.6%
L	Selected Rental and Hiring Services	1.3%	0.7%	0.1%	0.2%	0.5%	0.4%	0.6%	0.6%	0.5%
S	Selected Other Services	1.6%	2.0%	1.5%	1.6%	1.6%	1.6%	1.5%	1.5%	1.6%
QLD Industrial Economy		22.5%	24.9%	26.1%	31.5%	24.6%	23.2%	29.9%	25.5%	29.0%
Rest of Economy (all other ANZSICs)		77.5%	75.1%	73.9%	68.5%	75.4%	76.8%	70.1%	74.5%	71.0%
Total Economy		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Average Business Size (MECs)

A	Selected Ag/Forestry/Fishing Support Services	3	3	2	2	4	2	2	3	4
C	Manufacturing	4	6	7	14	8	8	10	10	11
D	Waste Services Group Only	7	6	6	6	4	6	8	6	6
E	Construction	3	3	3	4	3	4	3	4	4
F	Wholesale Trade	4	3	5	4	4	6	6	5	6
I	Selected Transport, Postal and Warehousing	4	4	3	13	6	6	7	5	6
L	Selected Rental and Hiring Services	3	2	1	1	2	3	3	3	3
S	Selected Other Services	4	3	3	3	3	4	3	4	3
QLD Industrial Economy		3	4	3	6	4	5	5	5	5
Rest of Economy (all other ANZSICs)		4	4	4	4	3	5	4	4	4
Total Economy		4	4	4	5	4	5	5	4	4

Source: M.E. Statistics NZ Business Frame 2017. Assesses each location in the context of QLD's defined industrial economy. This does not necessarily represent the industrial economy of each location. Industries that may form part each other areas industrial economy are captured in 'Rest of Economy'.

Appendix 4 – TA/Region Manufacturing Comparison

Businesses 2017 – According to Manufacturing Sector Sub-Divisions

Manufacturing Sub-Division	Queenstown-Lakes District	Taupo District	Upper Hutt City	Wanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
Food Product Manufacturing	34	22	12	29	23	72	1,204	144	3,367
Beverage and Tobacco Product Manufacturing	31	1	5	1	4	10	206	76	768
Textile, Leather, Clothing and Footwear Manufacturing	15	14	7	14	7	29	644	59	1,508
Wood Product Manufacturing	10	23	20	26	14	33	418	83	1,795
Pulp, Paper and Converted Paper Product Manufacturing	-	-	-	-	1	2	52	3	120
Printing	8	3	7	11	6	24	663	38	1,305
Petroleum and Coal Product Manufacturing	-	-	-	-	-	2	17	2	57
Basic Chemical and Chemical Product Manufacturing	7	3	2	5	1	16	257	32	632
Polymer Product and Rubber Product Manufacturing	-	2	11	6	2	20	322	26	724
Non-Metallic Mineral Product Manufacturing	13	10	4	9	5	17	300	56	972
Primary Metal and Metal Product Manufacturing	7	1	2	3	2	6	86	15	240
Fabricated Metal Product Manufacturing	15	38	26	27	22	69	1,010	125	2,988
Transport Equipment Manufacturing	23	20	6	8	8	36	590	72	1,597
Machinery and Equipment Manufacturing	32	43	30	41	28	93	1,330	164	4,190
Furniture and Other Manufacturing	33	21	14	22	15	46	940	99	2,511
Total Manufacturing Sector	225	200	147	203	137	477	8,037	994	22,773
Sub-Division Share of Each Area									
Food Product Manufacturing	14.9%	11.1%	8.1%	14.5%	16.5%	15.1%	15.0%	14.5%	14.8%
Beverage and Tobacco Product Manufacturing	13.8%	0.5%	3.5%	0.5%	2.9%	2.1%	2.6%	7.6%	3.4%
Textile, Leather, Clothing and Footwear Manufacturing	6.7%	6.9%	4.8%	6.9%	5.3%	6.0%	8.0%	6.0%	6.6%
Wood Product Manufacturing	4.3%	11.5%	13.5%	12.9%	10.1%	7.0%	5.2%	8.4%	7.9%
Pulp, Paper and Converted Paper Product Manufacturing	0.0%	0.0%	0.0%	0.0%	0.7%	0.5%	0.6%	0.3%	0.5%
Printing	3.3%	1.7%	5.0%	5.5%	4.4%	5.1%	8.2%	3.8%	5.7%
Petroleum and Coal Product Manufacturing	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.2%	0.3%
Basic Chemical and Chemical Product Manufacturing	3.1%	1.5%	1.4%	2.5%	0.7%	3.4%	3.2%	3.2%	2.8%
Polymer Product and Rubber Product Manufacturing	0.0%	1.1%	7.7%	3.1%	1.5%	4.2%	4.0%	2.6%	3.2%
Non-Metallic Mineral Product Manufacturing	5.5%	4.8%	2.7%	4.4%	3.6%	3.5%	3.7%	5.7%	4.3%
Primary Metal and Metal Product Manufacturing	3.1%	0.5%	1.4%	1.5%	1.1%	1.3%	1.1%	1.5%	1.1%
Fabricated Metal Product Manufacturing	6.7%	18.8%	17.4%	13.2%	16.0%	14.6%	12.6%	12.5%	13.1%
Transport Equipment Manufacturing	10.0%	9.9%	4.3%	3.9%	6.1%	7.5%	7.3%	7.2%	7.0%
Machinery and Equipment Manufacturing	14.0%	21.4%	20.4%	20.3%	20.1%	19.6%	16.6%	16.5%	18.4%
Furniture and Other Manufacturing	14.5%	10.4%	9.8%	10.8%	10.9%	9.7%	11.7%	10.0%	11.0%
Total Manufacturing Sector	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: M.E, Statistics NZ Business Frame 2017.

Employment 2017 – According to Manufacturing Sector Sub-Divisions

Manufacturing Sub-Division	Queenstown-Lakes District	Taupo District	Upper Hutt City	Wanganui District	Whakatane District	Dunedin City	Auckland Region	Otago Region	New Zealand
Food Product Manufacturing	228	191	83	1,168	326	1,058	16,341	4,434	75,873
Beverage and Tobacco Product Manufacturing	80	2	29	3	38	112	3,064	413	7,311
Textile, Leather, Clothing and Footwear Manufacturing	34	31	19	434	16	196	4,565	383	10,693
Wood Product Manufacturing	45	477	86	166	58	254	3,119	617	18,292
Pulp, Paper and Converted Paper Product Manufacturing	-	-	-	-	215	32	1,846	33	4,817
Printing	48	18	11	58	69	144	4,232	369	8,543
Petroleum and Coal Product Manufacturing	-	-	-	-	-	13	116	13	1,043
Basic Chemical and Chemical Product Manufacturing	23	5	111	28	1	131	3,775	173	7,491
Polymer Product and Rubber Product Manufacturing	-	3	94	112	5	101	6,131	123	11,696
Non-Metallic Mineral Product Manufacturing	52	36	16	69	34	119	3,452	293	8,821
Primary Metal and Metal Product Manufacturing	13	3	7	8	1	67	1,911	83	4,213
Fabricated Metal Product Manufacturing	88	181	156	276	111	663	10,080	1,030	26,645
Transport Equipment Manufacturing	81	61	13	103	103	278	4,783	413	13,079
Machinery and Equipment Manufacturing	100	165	297	187	92	619	12,603	920	30,646
Furniture and Other Manufacturing	70	55	43	195	33	233	4,583	351	10,416
Total Manufacturing Sector	862	1,226	964	2,805	1,101	4,020	80,603	9,649	239,580
Sub-Division Share of Each Area									
Food Product Manufacturing	26.5%	15.6%	8.6%	41.6%	29.6%	26.3%	20.3%	45.9%	31.7%
Beverage and Tobacco Product Manufacturing	9.3%	0.1%	3.0%	0.1%	3.5%	2.8%	3.8%	4.3%	3.1%
Textile, Leather, Clothing and Footwear Manufacturing	3.9%	2.5%	1.9%	15.5%	1.4%	4.9%	5.7%	4.0%	4.5%
Wood Product Manufacturing	5.2%	38.9%	8.9%	5.9%	5.3%	6.3%	3.9%	6.4%	7.6%
Pulp, Paper and Converted Paper Product Manufacturing	0.0%	0.0%	0.0%	0.0%	19.5%	0.8%	2.3%	0.3%	2.0%
Printing	5.6%	1.4%	1.2%	2.1%	6.2%	3.6%	5.3%	3.8%	3.6%
Petroleum and Coal Product Manufacturing	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%	0.4%
Basic Chemical and Chemical Product Manufacturing	2.6%	0.4%	11.5%	1.0%	0.1%	3.3%	4.7%	1.8%	3.1%
Polymer Product and Rubber Product Manufacturing	0.0%	0.2%	9.8%	4.0%	0.4%	2.5%	7.6%	1.3%	4.9%
Non-Metallic Mineral Product Manufacturing	6.0%	2.9%	1.7%	2.5%	3.1%	3.0%	4.3%	3.0%	3.7%
Primary Metal and Metal Product Manufacturing	1.5%	0.2%	0.7%	0.3%	0.1%	1.7%	2.4%	0.9%	1.8%
Fabricated Metal Product Manufacturing	10.2%	14.8%	16.1%	9.8%	10.1%	16.5%	12.5%	10.7%	11.1%
Transport Equipment Manufacturing	9.4%	5.0%	1.4%	3.7%	9.3%	6.9%	5.9%	4.3%	5.5%
Machinery and Equipment Manufacturing	11.6%	13.5%	30.8%	6.7%	8.4%	15.4%	15.6%	9.5%	12.8%
Furniture and Other Manufacturing	8.1%	4.5%	4.4%	6.9%	3.0%	5.8%	5.7%	3.6%	4.3%
Total Manufacturing Sector	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average Business Size (MECs)									
Food Product Manufacturing	7	9	7	40	14	15	14	31	23
Beverage and Tobacco Product Manufacturing	3	2	6	3	10	11	15	5	10
Textile, Leather, Clothing and Footwear Manufacturing	2	2	3	31	2	7	7	6	7
Wood Product Manufacturing	5	21	4	6	4	8	7	7	10
Pulp, Paper and Converted Paper Product Manufacturing	-	-	-	-	215	14	36	10	40
Printing	6	5	2	5	11	6	6	10	7
Petroleum and Coal Product Manufacturing	-	-	-	-	-	5	7	5	18
Basic Chemical and Chemical Product Manufacturing	3	2	56	6	1	8	15	5	12
Polymer Product and Rubber Product Manufacturing	-	1	8	18	2	5	19	5	16
Non-Metallic Mineral Product Manufacturing	4	4	4	8	7	7	12	5	9
Primary Metal and Metal Product Manufacturing	2	3	3	3	1	11	22	6	18
Fabricated Metal Product Manufacturing	6	5	6	10	5	10	10	8	9
Transport Equipment Manufacturing	4	3	2	13	12	8	8	6	8
Machinery and Equipment Manufacturing	3	4	10	5	3	7	9	6	7
Furniture and Other Manufacturing	2	3	3	9	2	5	5	4	4
Total Manufacturing Sector	4	6	7	14	8	8	10	10	11

Source: M.E, Statistics NZ Business Frame 2017.

Appendix 5 – Economic Linkages Queenstown Ward

Upstream Linkages (Inputs) - Sums to 100%											
Wanaka Ward Inputs by Sector		Arrowtown Ward Inputs by Sector		Queenstown-Wakatipu Inputs by Sector		Dunedin Inputs by Sector		Rest of Otago Region Inputs by Sector		Rest of New Zealand Inputs by Sector	
Construction	0.3%	Construction	0.4%	Construction	19.8%	Wholesale trade	0.3%	Construction	0.9%	Fabricated metal product manufacturing	2.7%
Water, sewerage, drainage and waste services	0.2%	Professional, scientific, technical, administrative and support services	0.1%	Professional, scientific, technical, administrative and support services	2.6%	Professional, scientific, technical, administrative and support services	0.2%	Wood product manufacturing	0.6%	Petroleum and coal product manufacturing	1.6%
Professional, scientific, technical, administrative and support services	0.2%	Rental, hiring and real estate services	0.0%	Rental, hiring and real estate services	1.8%	Fabricated metal product manufacturing	0.2%	Mining, quarrying, exploration and other mining support services	0.4%	Wholesale trade	1.2%
Rental, hiring and real estate services	0.1%	Machinery and equipment manufacturing	0.0%	Other transport, postal, courier, transport support and warehousing services	0.9%	Other transport, postal, courier, transport support and warehousing services	0.1%	Electricity generation and supply	0.4%	Non-metallic mineral product manufacturing	1.2%
Non-metallic mineral product manufacturing	0.1%	Personal and other services	0.0%	Personal and other services	0.7%	Construction	0.1%	Wholesale trade	0.3%	Chemical, polymer and rubber product manufacturing	0.7%
Wholesale trade	0.1%	Non-metallic mineral product manufacturing	0.0%	Wholesale trade	0.6%	Machinery and equipment manufacturing	0.1%	Rental, hiring and real estate services	0.3%	Road transport	0.6%
Other transport, postal, courier, transport support and warehousing services	0.0%	Other transport, postal, courier, transport support and warehousing services	0.0%	Finance	0.6%	Road transport	0.1%	Non-metallic mineral product manufacturing	0.3%	Rental, hiring and real estate services	0.5%
Fabricated metal product manufacturing	0.0%	Road transport	0.0%	Retail Trade	0.4%	Rental, hiring and real estate services	0.1%	Professional, scientific, technical, administrative and support services	0.3%	Wood product manufacturing	0.5%
Other Sectors	0.2%	Other Sectors	0.1%	Other Sectors	2.9%	Other Sectors	0.6%	Other Sectors	1.4%	Other Sectors	3.8%
Total Wanaka	1.2%	Total Arrowtown	0.7%	Total Queenstown	30.2%	Total Dunedin	1.8%	Total Rest of Otago	4.9%	Total Rest of NZ	12.8%
Industrial Economy Queenstown-Wakatipu Ward											
Wanaka Ward Outputs by Sector		Arrowtown Ward Outputs by Sector		Queenstown-Wakatipu Ward Outputs by Sector		Dunedin Outputs by Sector		Rest of Otago Region Outputs by Sector		Rest of New Zealand Outputs by Sector	
Construction	0.6%	Construction	0.7%	Construction	21.4%	Construction	0.9%	Construction	4.6%	Construction	1.6%
Rental, hiring and real estate services	0.2%	Rental, hiring and real estate services	0.1%	Rental, hiring and real estate services	3.2%	Rental, hiring and real estate services	0.3%	Ownership of owner-occupied dwellings	0.6%	Wholesale trade	0.4%
Accommodation and food services	0.1%	Accommodation and food services	0.1%	Accommodation and food services	2.3%	Education and training	0.1%	Rental, hiring and real estate services	0.6%	Rental, hiring and real estate services	0.4%
Professional, scientific, technical, administrative and support services	0.1%	Professional, scientific, technical, administrative and support services	0.0%	Ownership of owner-occupied dwellings	1.7%	Accommodation and food services	0.1%	Sheep, beef cattle and grain farming	0.5%	Professional, scientific, technical, administrative and support services	0.3%
Retail Trade	0.0%	Ownership of owner-occupied dwellings	0.0%	Air and space transport	1.7%	Professional, scientific, technical, administrative and support services	0.1%	Mining, quarrying, exploration and other mining support services	0.5%	Road transport	0.3%
Water, sewerage, drainage and waste services	0.0%	Retail Trade	0.0%	Other transport, postal, courier, transport support and warehousing services	1.5%	Other transport, postal, courier, transport support and warehousing services	0.1%	Meat and meat product manufacturing	0.5%	Air and space transport	0.3%
Sheep, beef cattle and grain farming	0.0%	Road transport	0.0%	Professional, scientific, technical, administrative and support services	1.3%	Wholesale trade	0.1%	Dairy product manufacturing	0.3%	Meat and meat product manufacturing	0.3%
Other transport, postal, courier, transport support and warehousing services	0.0%	Other transport, postal, courier, transport support and warehousing services	0.0%	Arts and recreation services	0.9%	Road transport	0.1%	Road transport	0.2%	Other transport, postal, courier, transport support and warehousing services	0.2%
Other Sectors	0.4%	Other Sectors	0.1%	Other Sectors	3.6%	Other Sectors	0.7%	Other Sectors	2.3%	Other Sectors	2.5%
Total Wanaka	1.5%	Total Arrowtown	1.0%	Total Queenstown	37.5%	Total Dunedin	2.4%	Total Rest of Otago	10.1%	Total Rest of NZ	6.3%
Wanaka Ward Final Demand		Arrowtown Ward Final Demand		Queenstown-Wakatipu Ward Final Demand		Dunedin Final Demand		Rest of Otago Region Final Demand		Rest of New Zealand Final Demand	
Hholds/Govt/NPISH	0.4%	Hholds/Govt/NPISH	0.2%	Hholds/Govt/NPISH	3.1%	Hholds/Govt/NPISH	0.8%	Hholds/Govt/NPISH	1.1%	Hholds/Govt/NPISH	1.0%
Wanaka Ward Other Consumption		Arrowtown Ward Other Consumption		Queenstown-Wakatipu Ward Other Consumption		Dunedin Other Consumption		Rest of Otago Other Consumption		Rest of New Zealand Other Consumption	
GFCF, Change in Inventories, International Exports	0.8%	GFCF, Change in Inventories, International Exports	0.8%	GFCF, Change in Inventories, International Exports	22.2%	GFCF, Change in Inventories, International Exports	2.3%	GFCF, Change in Inventories, International Exports	5.3%	GFCF, Change in Inventories, International Exports	3.0%
Downstream Linkages (Outputs) - Sums to 100%											

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

Appendix 6 – Economic Linkages Wanaka Ward

Upstream Linkages (Inputs) - Sums to 100%													
Wanaka Ward Inputs by Sector		Arrowtown Ward Inputs by Sector		Queenstown-Wakatipu Inputs by Sector		Dunedin Inputs by Sector		Rest of Otago Region Inputs by Sector		Rest of New Zealand Inputs by Sector		Other Inputs	
Construction	19%	Construction	0.2%	Construction	1.1%	Construction	0.3%	Construction	1.2%	Fabricated metal product manufacturing	2.6%	Taxes on products	1.0%
Professional, scientific, technical, administrative and support services	2%	Professional, scientific, technical, administrative and support services	0.1%	Professional, scientific, technical, administrative and support services	0.6%	Wholesale trade	0.3%	Wood product manufacturing	0.6%	Wholesale trade	1.5%	Compensation of Employees	18.0%
Personal and other services	1%	Rental, hiring and real estate services	0.0%	Rental, hiring and real estate services	0.3%	Professional, scientific, technical, administrative and support services	0.3%	Electricity generation and supply	0.6%	Petroleum and coal product manufacturing	1.4%	Operating Surplus	10.5%
Rental, hiring and real estate services	1%	Machinery and equipment manufacturing	0.0%	Other transport, postal, courier, transport support and warehousing services	0.2%	Machinery and equipment manufacturing	0.2%	Professional, scientific, technical, administrative and support services	0.4%	Non-metallic mineral product manufacturing	1.2%	Consumption of Fixed Capital	4.6%
Non-metallic mineral product manufacturing	0%	Non-metallic mineral product manufacturing	0.0%	Wholesale trade	0.2%	Other transport, postal, courier, transport support and warehousing services	0.2%	Wholesale trade	0.4%	Chemical, polymer and rubber product manufacturing	0.9%	Other Taxes on products	0.7%
Wholesale trade	0%	Road transport	0.0%	Non-metallic mineral product manufacturing	0.1%	Road transport	0.1%	Mining, quarrying, exploration and other mining support services	0.4%	Road transport	0.8%	Subsidies	-0.2%
Other transport, postal, courier, transport support and warehousing services	0%	Other transport, postal, courier, transport support and warehousing services	0.0%	Retail Trade	0.1%	Fabricated metal product manufacturing	0.1%	Rental, hiring and real estate services	0.3%	Machinery and equipment manufacturing	0.6%	International Imports	11.2%
Retail Trade	0%	Wholesale trade	0.0%	Road transport	0.1%	Information media and telecommunications	0.1%	Road transport	0.3%	Wood product manufacturing	0.6%		
Other Sectors	2.5%	Other Sectors	0.0%	Other Sectors	0.5%	Other Sectors	0.7%	Other Sectors	1.7%	Other Sectors	5.3%		
Total Wanaka	27.8%	Total Arrowtown	0.5%	Total Queenstown	3.1%	Total Dunedin	2.3%	Total Rest of Otago	5.8%	Total Rest of NZ	14.7%		
Industrial Economy Wanaka Ward													
Wanaka Ward Outputs by Sector		Arrowtown Ward Outputs by Sector		Queenstown-Wakatipu Ward Outputs by Sector		Dunedin Outputs by Sector		Rest of Otago Region Outputs by Sector		Rest of New Zealand Outputs by Sector		Intermediate inputs	
Construction	20.6%	Construction	0.5%	Construction	1.5%	Construction	1.3%	Construction	6.0%	Construction	2.5%		
Rental, hiring and real estate services	2.5%	Accommodation and food services	0.1%	Accommodation and food services	0.5%	Rental, hiring and real estate services	0.3%	Sheep, beef cattle and grain farming	0.7%	Rental, hiring and real estate services	0.3%		
Ownership of owner-occupied dwellings	2.0%	Professional, scientific, technical, administrative and support services	0.0%	Arts and recreation services	0.2%	Health care and social assistance	0.2%	Ownership of owner-occupied dwellings	0.7%	Wholesale trade	0.3%		
Accommodation and food services	1.1%	Rental, hiring and real estate services	0.0%	Rental, hiring and real estate services	0.2%	Accommodation and food services	0.1%	Rental, hiring and real estate services	0.6%	Professional, scientific, technical, administrative and support services	0.2%		
Water, sewerage, drainage and waste services	0.8%	Ownership of owner-occupied dwellings	0.0%	Professional, scientific, technical, administrative and support services	0.1%	Education and training	0.1%	Mining, quarrying, exploration and other mining support services	0.5%	Fabricated metal product manufacturing	0.2%		
Professional, scientific, technical, administrative and support services	0.7%	Other transport, postal, courier, transport support and warehousing services	0.0%	Air and space transport	0.1%	Professional, scientific, technical, administrative and support services	0.1%	Meat and meat product manufacturing	0.3%	Ownership of owner-occupied dwellings	0.2%		
Sheep, beef cattle and grain farming	0.4%	Retail Trade	0.0%	Other transport, postal, courier, transport support and warehousing services	0.1%	Wholesale trade	0.1%	Dairy cattle farming	0.3%	Machinery and equipment manufacturing	0.2%		
Transport equipment manufacturing	0.3%	Agriculture, forestry and fishing support services	0.0%	Health care and social assistance	0.1%	Ownership of owner-occupied dwellings	0.1%	Dairy product manufacturing	0.3%	Meat and meat product manufacturing	0.2%		
Other Sectors	3.5%	Other Sectors	0.0%	Other Sectors	0.6%	Other Sectors	0.8%	Other Sectors	2.7%	Other Sectors	2.5%		
Total Wanaka	32.0%	Total Arrowtown	0.7%	Total Queenstown	3.4%	Total Dunedin	3.1%	Total Rest of Otago	12.1%	Total Rest of NZ	6.6%		
Wanaka Ward Final Demand		Arrowtown Ward Final Demand		Queenstown-Wakatipu Ward Final Demand		Dunedin Final Demand		Rest of Otago Region Final Demand		Rest of New Zealand Final Demand		Final Demand	
Hholds/Govt/NPISH	3.0%	Hholds/Govt/NPISH	0.3%	Hholds/Govt/NPISH	1.0%	Hholds/Govt/NPISH	1.4%	Hholds/Govt/NPISH	2.3%	Hholds/Govt/NPISH	1.0%		
Wanaka Ward Other Consumption		Arrowtown Ward Other Consumption		Queenstown-Wakatipu Ward Other Consumption		Dunedin Other Consumption		Rest of Otago Other Consumption		Rest of New Zealand Other Consumption		International Exports / Other	
GFCF, Change in Inventories, International Exports	18.9%	GFCF, Change in Inventories, International Exports	0.4%	GFCF, Change in Inventories, International Exports	1.0%	GFCF, Change in Inventories, International Exports	3.1%	GFCF, Change in Inventories, International Exports	6.4%	GFCF, Change in Inventories, International Exports	3.4%		
Downstream Linkages (Outputs) - Sums to 100%													

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

Appendix 7 – Economic Linkages Arrowtown Ward

Upstream Linkages (Inputs) - Sums to 100%													
Wanaka Ward Inputs by Sector		Arrowtown Ward Inputs by Sector		Queenstown-Wakatipu Inputs by Sector		Dunedin Inputs by Sector		Rest of Otago Region Inputs by Sector		Rest of New Zealand Inputs by Sector		Other Inputs	
Construction	2%	Construction	16.9%	Construction	6.1%	Wholesale trade	0.3%	Construction	1.3%	Fabricated metal product manufacturing	2.8%	Taxes on products	1.1%
Professional, scientific, technical, administrative and support services	0%	Professional, scientific, technical, administrative and support services	0.7%	Professional, scientific, technical, administrative and support services	1.3%	Professional, scientific, technical, administrative and support services	0.3%	Wood product manufacturing	0.8%	Wholesale trade	1.5%	Compensation of Employees	16.9%
Water, sewerage, drainage and waste services	0%	Personal and other services	0.5%	Rental, hiring and real estate services	0.6%	Construction	0.3%	Electricity generation and supply	0.6%	Petroleum and coal product manufacturing	1.5%	Operating Surplus	10.1%
Rental, hiring and real estate services	0%	Rental, hiring and real estate services	0.1%	Other transport, postal, courier, transport support and warehousing services	0.4%	Machinery and equipment manufacturing	0.2%	Wholesale trade	0.4%	Non-metallic mineral product manufacturing	1.3%	Consumption of Fixed Capital	4.7%
Non-metallic mineral product manufacturing	0%	Machinery and equipment manufacturing	0.1%	Wholesale trade	0.3%	Other transport, postal, courier, transport support and warehousing services	0.2%	Professional, scientific, technical, administrative and support services	0.4%	Chemical, polymer and rubber product manufacturing	0.9%	Other Taxes on products	0.6%
Wholesale trade	0%	Other transport, postal, courier, transport support and warehousing services	0.1%	Retail Trade	0.2%	Fabricated metal product manufacturing	0.2%	Mining, quarrying, exploration and other mining support services	0.3%	Wood product manufacturing	0.7%	Subsidies	-0.3%
Retail Trade	0%	Retail Trade	0.1%	Finance	0.2%	Road transport	0.1%	Rental, hiring and real estate services	0.3%	Road transport	0.6%	International Imports	11.5%
Other transport, postal, courier, transport support and warehousing services	0%	Non-metallic mineral product manufacturing	0.1%	Non-metallic mineral product manufacturing	0.2%	Non-metallic mineral product manufacturing	0.1%	Agriculture, forestry and fishing support services	0.3%	Machinery and equipment manufacturing	0.6%		
Other Sectors	0.4%	Other Sectors	0.3%	Other Sectors	1.1%	Other Sectors	0.6%	Other Sectors	1.6%	Other Sectors	4.5%		
Total Wanaka	3.2%	Total Arrowtown	18.9%	Total Queenstown	10.5%	Total Dunedin	2.2%	Total Rest of Otago	5.9%	Total Rest of NZ	14.5%		
Industrial Economy Arrowtown Ward													
Wanaka Ward Outputs by Sector		Arrowtown Ward Outputs by Sector		Queenstown-Wakatipu Ward Outputs by Sector		Dunedin Outputs by Sector		Rest of Otago Region Outputs by Sector		Rest of New Zealand Outputs by Sector		Intermediate Inputs	
Construction	1.1%	Construction	17.1%	Construction	4.3%	Construction	1.6%	Construction	8.0%	Construction	3.0%		
Rental, hiring and real estate services	0.2%	Ownership of owner-occupied dwellings	2.4%	Rental, hiring and real estate services	0.8%	Rental, hiring and real estate services	0.5%	Ownership of owner-occupied dwellings	1.0%	Rental, hiring and real estate services	0.4%		
Accommodation and food services	0.1%	Rental, hiring and real estate services	0.8%	Accommodation and food services	0.6%	Education and training	0.1%	Rental, hiring and real estate services	0.9%	Wholesale trade	0.4%		
Sheep, beef cattle and grain farming	0.1%	Professional, scientific, technical, administrative and support services	0.6%	Air and space transport	0.3%	Professional, scientific, technical, administrative and support services	0.1%	Sheep, beef cattle and grain farming	0.8%	Ownership of owner-occupied dwellings	0.3%		
Horticulture and fruit growing	0.1%	Accommodation and food services	0.2%	Professional, scientific, technical, administrative and support services	0.3%	Wholesale trade	0.1%	Mining, quarrying, exploration and other mining support services	0.7%	Professional, scientific, technical, administrative and support services	0.3%		
Professional, scientific, technical, administrative and support services	0.1%	Agriculture, forestry and fishing support services	0.1%	Arts and recreation services	0.3%	Forestry and logging	0.1%	Meat and meat product manufacturing	0.4%	Fabricated metal product manufacturing	0.3%		
Water, sewerage, drainage and waste services	0.0%	Furniture and other manufacturing	0.1%	Other transport, postal, courier, transport support and warehousing services	0.2%	Health care and social assistance	0.1%	Dairy cattle farming	0.4%	Machinery and equipment manufacturing	0.3%		
Other transport, postal, courier, transport support and warehousing services	0.0%	Retail Trade	0.1%	Horticulture and fruit growing	0.2%	Other transport, postal, courier, transport support and warehousing services	0.1%	Agriculture, forestry and fishing support services	0.4%	Road transport	0.2%		
Other Sectors	0.4%	Other Sectors	0.6%	Other Sectors	1.3%	Other Sectors	0.7%	Other Sectors	2.5%	Other Sectors	2.9%		
Total Wanaka	2.1%	Total Arrowtown	22.0%	Total Queenstown	8.3%	Total Dunedin	3.3%	Total Rest of Otago	15.0%	Total Rest of NZ	8.2%		
Wanaka Ward Final Demand		Arrowtown Ward Final Demand		Queenstown-Wakatipu Ward Final Demand		Dunedin Final Demand		Rest of Otago Region Final Demand		Rest of New Zealand Final Demand		Final Demand	
Hholds/Govt/NPISH	0.3%	Hholds/Govt/NPISH	0.9%	Hholds/Govt/NPISH	0.8%	Hholds/Govt/NPISH	0.4%	Hholds/Govt/NPISH	0.7%	Hholds/Govt/NPISH	1.0%		
Wanaka Ward Other Consumption		Arrowtown Ward Other Consumption		Queenstown-Wakatipu Ward Other Consumption		Dunedin Other Consumption		Rest of Otago Other Consumption		Rest of New Zealand Other Consumption		International Exports / Other	
GFCF, Change in Inventories, International Exports	0.9%	GFCF, Change in Inventories, International Exports	14.6%	GFCF, Change in Inventories, International Exports	3.3%	GFCF, Change in Inventories, International Exports	4.2%	GFCF, Change in Inventories, International Exports	9.3%	GFCF, Change in Inventories, International Exports	4.6%		
Downstream Linkages (Outputs) - Sums to 100%													

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

Appendix 8 - Economic Linkages Rest of Otago

Upstream Linkages (Inputs) - Sums to 100%													
Wanaka Ward Inputs by Sector		Arrowtown Ward Inputs by Sector		Queenstown-Wakatipu Inputs by Sector		Dunedin Inputs by Sector		Rest of Otago Region Inputs by Sector		Rest of New Zealand Inputs by Sector		Other Inputs	
Construction	0.7%	Construction	0.2%	Construction	1.4%	Sheep, beef cattle and grain farming	1.5%	Sheep, beef cattle and grain farming	12.1%	Dairy cattle farming	3.6%	Taxes on products	0.7%
Sheep, beef cattle and grain farming	0.4%	Professional, scientific, technical, administrative and support services	0.1%	Professional, scientific, technical, administrative and support services	0.3%	Professional, scientific, technical, administrative and support services	0.8%	Construction	5.7%	Petroleum and coal product manufacturing	1.6%	Compensation of Employees	18.9%
Professional, scientific, technical, administrative and support services	0.1%	Rental, hiring and real estate services	0.0%	Sheep, beef cattle and grain farming	0.2%	Other transport, postal, courier, transport support and warehousing services	0.8%	Dairy product manufacturing	2.2%	Road transport	1.6%	Operating Surplus	5.8%
Poultry, deer and other livestock farming	0.1%	Road transport	0.0%	Rental, hiring and real estate services	0.2%	Construction	0.7%	Agriculture, forestry and fishing support services	1.3%	Fabricated metal product manufacturing	1.3%	Consumption of Fixed Capital	4.4%
Water, sewerage, drainage and waste services	0.1%	Agriculture, forestry and fishing support services	0.0%	Other transport, postal, courier, transport support and warehousing services	0.2%	Road transport	0.6%	Professional, scientific, technical, administrative and support services	1.0%	Wholesale trade	1.3%	Other Taxes on products	0.6%
Rental, hiring and real estate services	0.1%	Retail Trade	0.0%	Retail Trade	0.1%	Poultry, deer and other livestock farming	0.5%	Road transport	0.9%	Dairy product manufacturing	1.1%	Subsidies	-0.4%
Wholesale trade	0.0%	Wholesale trade	0.0%	Wholesale trade	0.1%	Wholesale trade	0.5%	Electricity generation and supply	0.8%	Chemical, polymer and rubber product manufacturing	1.0%	International Imports	7.1%
Retail Trade	0.0%	Other transport, postal, courier, transport support and warehousing services	0.0%	Road transport	0.1%	Rental, hiring and real estate services	0.3%	Wood product manufacturing	0.6%	Professional, scientific, technical, administrative and support services	0.9%		
Other Sectors	0.2%	Other Sectors	0.0%	Other Sectors	0.4%	Other Sectors	2.1%	Other Sectors	5.1%	Other Sectors	7.9%		
Total Wanaka	1.8%	Total Arrowtown	0.4%	Total Queenstown	2.9%	Total Dunedin	7.8%	Total Rest of Otago	29.6%	Total Rest of NZ	20.4%		
Industrial Economy Rest of Otago Region													
Wanaka Ward Outputs by Sector		Arrowtown Ward Outputs by Sector		Queenstown-Wakatipu Ward Outputs by Sector		Dunedin Outputs by Sector		Rest of Otago Region Outputs by Sector		Rest of New Zealand Outputs by Sector		Intermediate Inputs	
Construction	0.3%	Construction	0.1%	Construction	0.7%	Construction	2.2%	Construction	6.2%	Construction	1.2%		
Accommodation and food services	0.1%	Accommodation and food services	0.0%	Accommodation and food services	0.4%	Accommodation and food services	0.5%	Dairy product manufacturing	2.6%	Dairy product manufacturing	0.5%		
Sheep, beef cattle and grain farming	0.1%	Professional, scientific, technical, administrative and support services	0.0%	Arts and recreation services	0.1%	Forestry and logging	0.3%	Sheep, beef cattle and grain farming	2.4%	Wholesale trade	0.5%		
Horticulture and fruit growing	0.0%	Agriculture, forestry and fishing support services	0.0%	Horticulture and fruit growing	0.1%	Wholesale trade	0.3%	Agriculture, forestry and fishing support services	1.1%	Road transport	0.4%		
Retail Trade	0.0%	Ownership of owner-occupied dwellings	0.0%	Professional, scientific, technical, administrative and support services	0.1%	Rental, hiring and real estate services	0.3%	Horticulture and fruit growing	1.0%	Meat and meat product manufacturing	0.3%		
Rental, hiring and real estate services	0.0%	Retail Trade	0.0%	Retail Trade	0.1%	Other food manufacturing	0.2%	Meat and meat product manufacturing	0.9%	Other food manufacturing	0.3%		
Professional, scientific, technical, administrative and support services	0.0%	Rental, hiring and real estate services	0.0%	Rental, hiring and real estate services	0.0%	Education and training	0.2%	Forestry and logging	0.9%	Professional, scientific, technical, administrative and support services	0.2%		
Agriculture, forestry and fishing support services	0.0%	Dairy product manufacturing	0.0%	Wholesale trade	0.0%	Sheep, beef cattle and grain farming	0.2%	Dairy cattle farming	0.8%	Accommodation and food services	0.2%		
Other Sectors	0.2%	Other Sectors	0.0%	Other Sectors	0.4%	Other Sectors	2.5%	Other Sectors	5.3%	Other Sectors	2.9%		
Total Wanaka	0.8%	Total Arrowtown	0.2%	Total Queenstown	1.8%	Total Dunedin	6.7%	Total Rest of Otago	21.2%	Total Rest of NZ	6.5%		
Wanaka Ward Final Demand		Arrowtown Ward Final Demand		Queenstown-Wakatipu Ward Final Demand		Dunedin Final Demand		Rest of Otago Region Final Demand		Rest of New Zealand Final Demand		Final Demand	
Hholds/Govt/NPISH	0.2%	Hholds/Govt/NPISH	0.1%	Hholds/Govt/NPISH	0.5%	Hholds/Govt/NPISH	3.5%	Hholds/Govt/NPISH	2.7%	Hholds/Govt/NPISH	2.2%		
Wanaka Ward Other Consumption		Arrowtown Ward Other Consumption		Queenstown-Wakatipu Ward Other Consumption		Dunedin Other Consumption		Rest of Otago Other Consumption		Rest of New Zealand Other Consumption		International Exports / Other	
GFCF, Change in Inventories, International Exports	0.4%	GFCF, Change in Inventories, International Exports	0.1%	GFCF, Change in Inventories, International Exports	0.7%	GFCF, Change in Inventories, International Exports	5.1%	GFCF, Change in Inventories, International Exports	39.9%	GFCF, Change in Inventories, International Exports	7.3%		
Downstream Linkages (Outputs) - Sums to 100%													

Source: M.E (Queenstown EFM Multi-Regional Input-Output Table)

Appendix 9 – Rural-Urban Industrial Economy

Businesses 2017

Industry	ANZSIC06	Division	Urban Environment Business Count	Rural Environment Business Count	Total QLD Business Count (2017)	Urban Share of QLD (%)	Rural Share of QLD (%)	Total QLD
Industrial - House Construction	E301100	E	330	62	392	84.1%	15.9%	100.0%
Industrial - Electrical Services	E323200	E	70	7	78	90.5%	9.5%	100.0%
Industrial - Painting and Decorating Services	E324400	E	68	8	76	89.2%	10.8%	100.0%
Industrial - Other Residential Building Construction	E301900	E	54	14	68	79.6%	20.4%	100.0%
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	L	54	10	64	83.9%	16.1%	100.0%
Industrial - Land Development and Subdivision	E321100	E	44	17	61	71.7%	28.3%	100.0%
Industrial - Plastering and Ceiling Services	E324100	E	43	10	54	80.7%	19.3%	100.0%
Industrial - Other Automotive Repair and Maintenance	S941900	S	44	8	52	85.0%	15.0%	100.0%
Industrial - Other Agriculture and Fishing Support Services	A052900	A	27	24	50	52.8%	47.2%	100.0%
Industrial - Plumbing Services	E323100	E	39	11	50	78.6%	21.4%	100.0%
Industrial - Landscape Construction Services	E329100	E	30	17	47	63.9%	36.1%	100.0%
Industrial - Tiling and Carpeting Services	E324300	E	41	5	46	89.1%	10.9%	100.0%
Industrial - Site Preparation Services	E321200	E	32	14	46	70.2%	29.8%	100.0%
Industrial - Bricklaying Services	E322200	E	32	8	40	80.8%	19.3%	100.0%
Industrial - Passenger Car Rental and Hiring	L661100	L	32	8	39	80.2%	19.8%	100.0%
Industrial - Carpentry Services	E324200	E	32	3	35	91.4%	8.6%	100.0%
Industrial - Other Construction Services n.e.c.	E329900	E	28	6	33	82.9%	17.1%	100.0%
Industrial - Road Freight Transport	I461000	I	26	4	30	86.5%	13.5%	100.0%
Industrial - Other Heavy and Civil Engineering Construction	E310900	E	19	7	26	74.1%	25.9%	100.0%
Industrial - Non-Residential Building Construction	E302000	E	21	4	25	83.5%	16.5%	100.0%
Industrial - Courier Pick-up and Delivery Services	I510200	I	19	3	22	86.2%	13.8%	100.0%
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	L	16	5	21	77.6%	22.4%	100.0%
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	C	10	10	20	51.5%	48.5%	100.0%
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	C	17	3	20	84.8%	15.2%	100.0%
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	C	13	7	20	67.0%	33.0%	100.0%
Industrial - Automotive Body, Paint and Interior Repair	S941200	S	18	1	19	94.8%	5.2%	100.0%
Industrial - Roofing Services	E322300	E	17	-	17	100.0%	0.0%	100.0%
Industrial - Concreting Services	E322100	E	16	1	17	94.2%	5.8%	100.0%
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	F	15	2	17	86.0%	14.0%	100.0%
Industrial - Air Conditioning and Heating Services	E323300	E	14	3	17	80.8%	19.2%	100.0%
Industrial - Aircraft Manufacturing and Repair Services	C239400	C	15	1	16	93.8%	6.2%	100.0%
Industrial - Road and Bridge Construction	E310100	E	11	4	15	72.2%	27.8%	100.0%
Industrial - Commission Based Wholesaling	F380000	F	14	-	14	100.0%	0.0%	100.0%
Industrial - Other Grocery Wholesaling	F360900	F	12	2	14	86.6%	11.4%	100.0%
Industrial - Other Goods Wholesaling n.e.c.	F373900	F	12	2	14	88.1%	11.9%	100.0%
Industrial - Liquor and Tobacco Product Wholesaling	F360600	F	9	2	11	82.1%	17.9%	100.0%
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	C	10	-	10	100.0%	0.0%	100.0%
Industrial - Laundry and Dry-Cleaning Services	S953100	S	10	-	10	100.0%	0.0%	100.0%
Industrial - Other Agricultural Product Wholesaling	F331900	F	7	3	9	72.8%	27.2%	100.0%
Industrial - Urban Bus Transport (Including Tramway)	I462200	I	7	2	9	78.3%	21.7%	100.0%
Industrial - Other Building Installation Services	E323900	E	8	1	9	88.9%	11.1%	100.0%
Industrial - Other Hardware Goods Wholesaling	F333900	F	9	-	9	100.0%	0.0%	100.0%
Industrial - Other Warehousing and Storage Services	I530900	I	7	2	9	82.4%	17.6%	100.0%
Industrial - Electronic (except Domestic Appliance) and Precision Equipment	S942200	S	7	1	8	87.8%	12.2%	100.0%
Industrial - Clothing and Footwear Wholesaling	F371200	F	6	2	8	81.0%	19.0%	100.0%
Industrial - Other Manufacturing n.e.c.	C259900	C	5	2	8	68.0%	32.0%	100.0%
Industrial - Clothing Manufacturing	C135100	C	3	4	7	43.7%	56.3%	100.0%
Industrial - Beer Manufacturing	C121200	C	5	2	7	71.4%	28.6%	100.0%
Industrial - Solid Waste Collection Services	D291100	D	7	-	7	100.0%	0.0%	100.0%
Industrial - Printing	C161100	C	6	-	6	100.0%	0.0%	100.0%
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	C	6	-	6	100.0%	0.0%	100.0%
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	C	5	1	6	83.3%	16.7%	100.0%
Industrial - Other Transport Support Services n.e.c.	I529900	I	6	-	6	100.0%	0.0%	100.0%
Industrial - Glazing Services	E324500	E	6	-	6	100.0%	0.0%	100.0%
Industrial - Medical and Surgical Equipment Manufacturing	C241200	C	3	2	5	61.5%	38.5%	100.0%
Industrial - Confectionery Manufacturing	C118200	C	4	1	5	80.4%	19.6%	100.0%
Industrial - Iron Smelting and Steel Manufacturing	C211000	C	5	-	5	100.0%	0.0%	100.0%
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	C	4	1	5	80.0%	20.0%	100.0%
Industrial - Fire and Security Alarm Installation Services	E323400	E	5	-	5	100.0%	0.0%	100.0%
Industrial - Hire of Construction Machinery with Operator	E329200	E	4	1	5	80.0%	20.0%	100.0%
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	S	4	1	5	80.0%	20.0%	100.0%
Industrial - Petroleum Product Wholesaling	F332100	F	5	-	5	100.0%	0.0%	100.0%
Industrial - Toy and Sporting Goods Wholesaling	F373400	F	5	-	5	100.0%	0.0%	100.0%
Industrial - Waste Treatment and Disposal Services	D292100	D	3	2	5	68.1%	31.9%	100.0%
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	C	5	-	5	100.0%	0.0%	100.0%
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	C	3	1	4	77.3%	22.7%	100.0%
Industrial - Dairy Produce Wholesaling	F360300	F	2	2	4	47.7%	52.3%	100.0%
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	C	3	1	4	76.7%	23.3%	100.0%
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	L	2	2	4	48.8%	51.2%	100.0%
Industrial - Motor Vehicle New Part Wholesaling	F350400	F	3	1	4	75.6%	24.4%	100.0%
Industrial - Automotive Electrical Services	S941100	S	4	-	4	100.0%	0.0%	100.0%
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	C	3	1	4	75.0%	25.0%	100.0%
Industrial - Other Food Products Manufacturing n.e.c.	C119900	C	4	-	4	100.0%	0.0%	100.0%

Businesses 2017 cont...

Industry	ANZSIC06	Division	Urban Environment Business Count	Rural Environment Business Count	Total QLD Business Count (2017)	Urban Share of QLD (%)	Rural Share of QLD (%)	Total QLD
Industrial - Pharmaceutical and Toilet Goods Wholesaling	F372000	F	4	-	4	100.0%	0.0%	100.0%
Industrial - Interurban and Rural Bus Transport	I462100	I	2	2	4	50.0%	50.0%	100.0%
Industrial - Other Water Transport Support Services	I521900	I	3	1	4	75.0%	25.0%	100.0%
Industrial - Domestic Appliance Repair and Maintenance	S942100	S	4	-	4	100.0%	0.0%	100.0%
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	C	4	-	4	100.0%	0.0%	100.0%
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	F	4	-	4	100.0%	0.0%	100.0%
Industrial - Concrete Product Manufacturing	C203400	C	4	-	4	100.0%	0.0%	100.0%
Industrial - Jewellery and Silverware Manufacturing	C259100	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Cosmetic and Toilet Preparation Manufacturing	C185200	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Ready-Mixed Concrete Manufacturing	C203300	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Fish and Seafood Wholesaling	F360400	F	3	-	3	100.0%	0.0%	100.0%
Industrial - Furniture and Floor Coverings Wholesaling	F373100	F	2	1	3	66.7%	33.3%	100.0%
Industrial - Timber Wholesaling	F333100	F	3	-	3	100.0%	0.0%	100.0%
Industrial - Computer and Computer Peripherals Wholesaling	F349200	F	3	-	3	100.0%	0.0%	100.0%
Industrial - Fruit and Vegetable Processing	C114000	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Structural Steel Fabricating	C222100	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Other Specialised Industrial Machinery and Equipment Wholesaling	F341900	F	1	1	2	58.3%	41.7%	100.0%
Industrial - Other Machinery and Equipment Wholesaling n	F349900	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Boatbuilding and Repair Services	C239200	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Industrial and Agricultural Chemical Product Wholesaling	F332300	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Human Pharmaceutical and Medicinal Product Manufacturing	C184100	C	1	1	2	50.0%	50.0%	100.0%
Industrial - Ice Cream Manufacturing	C113200	C	1	1	2	50.0%	50.0%	100.0%
Industrial - Other Furniture Manufacturing	C251900	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Soft Drink, Cordial and Syrup Manufacturing	C121100	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Spirit Manufacturing	C121300	C	1	1	2	50.0%	50.0%	100.0%
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Waste Remediation and Materials Recovery Services	D292200	D	2	-	2	100.0%	0.0%	100.0%
Industrial - Structural Steel Erection Services	E322400	E	2	-	2	100.0%	0.0%	100.0%
Industrial - Book and Magazine Wholesaling	F373500	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Car Wholesaling	F350100	F	1	1	2	50.0%	50.0%	100.0%
Industrial - Kitchen and Dining Ware Wholesaling	F373300	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Textile Product Wholesaling	F371100	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Metal and Mineral Wholesaling	F332200	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Photographic, Optical and Ophthalmic Equipment Manufacturing	C241100	C	-	2	2	0.0%	100.0%	100.0%
Industrial - Motor Vehicle Dismantling and Used Part Wholesaling	F350500	F	1	-	1	100.0%	0.0%	100.0%
Industrial - Prepared Animal and Bird Feed Manufacturing	C119200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Fruit and Vegetable Wholesaling	F360500	F	1	-	1	100.0%	0.0%	100.0%
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	C	-	1	1	0.0%	100.0%	100.0%
Industrial - Aluminium Rolling, Drawing, Extruding	C214200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Architectural Aluminium Product Manufacturing	C222300	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Basic Inorganic Chemical Manufacturing	C181300	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Bread Manufacturing (Factory-based)	C117100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Cereal, Pasta and Baking Mix Manufacturing	C116200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Cleaning Compound Manufacturing	C185100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Cured Meat and Smallgoods Manufacturing	C111300	C	-	1	1	0.0%	100.0%	100.0%
Industrial - Electric Cable and Wire Manufacturing	C243100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Milk and Cream Processing	C113100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Mining and Construction Machinery Manufacturing	C246200	C	-	1	1	0.0%	100.0%	100.0%
Industrial - Oil and Fat Manufacturing	C115000	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Ceramic Product Manufacturing	C202900	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Electrical Equipment Manufacturing	C243900	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Sheet Metal Product Manufacturing	C224000	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Specialised Machinery and Equipment Manufacturing	C246900	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Structural Metal Product Manufacturing	C222900	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Prefabricated Wooden Building Manufacturing	C149100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Printing Support Services	C161200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Steel Pipe and Tube Manufacturing	C212200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Waste Collection Services	D291900	D	1	-	1	100.0%	0.0%	100.0%
Industrial - Jewellery and Watch Wholesaling	F373200	F	1	-	1	100.0%	0.0%	100.0%
Industrial - Meat, Poultry and Smallgoods Wholesaling	F360200	F	-	1	1	0.0%	100.0%	100.0%
Industrial - Freight Forwarding Services	I529200	I	1	-	1	100.0%	0.0%	100.0%
Rest of Manufacturing	multiple	C	-	-	-	na	na	na
Rest of Wholesale Trade	multiple	F	-	-	-	na	na	na
Total QLD Industrial Economy			1,587	341	1,928	82.3%	17.7%	100.0%

Source: M.E. Statistics NZ Business Frame 2017, QLD amalgamated district plan zones. Urban Environment includes zones within urban limits plus Luggate, Luggate Rural Industrial Subzone, LDR adjacent to Lake Hayes (as per QLD BCDA 2017). The Rural Environment includes special zone and townships that are urban in nature and includes Wanaka Airport Zone.

Employment 2017

Industry	ANZSIC06	Division	Urban Environment Employment Count	Rural Environment Employment Count	Total QLD Business Employment (2017)	Urban Share of QLD (%)	Rural Share of QLD (%)	Total QLD
Industrial - House Construction	E301100	E	857	173	1,030	83.2%	16.8%	100.0%
Industrial - Electrical Services	E323200	E	257	22	279	92.0%	8.0%	100.0%
Industrial - Painting and Decorating Services	E324400	E	165	35	200	82.6%	17.4%	100.0%
Industrial - Other Residential Building Construction	E301900	E	67	16	83	80.8%	19.2%	100.0%
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	L	135	12	147	91.6%	8.4%	100.0%
Industrial - Land Development and Subdivision	E321100	E	24	7	31	77.0%	23.0%	100.0%
Industrial - Plastering and Ceiling Services	E324100	E	139	24	163	85.2%	14.8%	100.0%
Industrial - Other Automotive Repair and Maintenance	S941900	S	181	10	191	94.9%	5.1%	100.0%
Industrial - Other Agriculture and Fishing Support Services	A052900	A	66	64	130	51.0%	49.0%	100.0%
Industrial - Plumbing Services	E323100	E	160	21	181	88.4%	11.6%	100.0%
Industrial - Landscape Construction Services	E329100	E	91	46	136	66.4%	33.6%	100.0%
Industrial - Tiling and Carpeting Services	E324300	E	90	8	99	91.6%	8.4%	100.0%
Industrial - Site Preparation Services	E321200	E	153	142	295	52.0%	48.0%	100.0%
Industrial - Bricklaying Services	E322200	E	77	10	88	88.1%	11.9%	100.0%
Industrial - Passenger Car Rental and Hiring	L661100	L	194	7	200	96.6%	3.4%	100.0%
Industrial - Carpentry Services	E324200	E	51	6	58	89.1%	10.9%	100.0%
Industrial - Other Construction Services n.e.c.	E329900	E	125	9	134	93.1%	6.9%	100.0%
Industrial - Road Freight Transport	I461000	I	77	6	83	93.3%	6.7%	100.0%
Industrial - Other Heavy and Civil Engineering Construction	E310900	E	120	15	136	88.6%	11.4%	100.0%
Industrial - Non-Residential Building Construction	E302000	E	163	11	174	93.7%	6.3%	100.0%
Industrial - Courier Pick-up and Delivery Services	I510200	I	33	7	40	81.6%	18.4%	100.0%
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	L	18	3	21	85.6%	14.4%	100.0%
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	C	13	46	58	21.6%	78.4%	100.0%
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	C	36	4	41	89.9%	10.1%	100.0%
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	C	51	9	60	85.4%	14.6%	100.0%
Industrial - Automotive Body, Paint and Interior Repair	S941200	S	104	4	108	96.1%	3.9%	100.0%
Industrial - Roofing Services	E322300	E	64	-	64	100.0%	0.0%	100.0%
Industrial - Concreting Services	E322100	E	50	1	51	97.4%	2.6%	100.0%
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	F	72	3	74	96.6%	3.4%	100.0%
Industrial - Air Conditioning and Heating Services	E323300	E	60	15	75	80.5%	19.5%	100.0%
Industrial - Aircraft Manufacturing and Repair Services	C239400	C	46	27	73	62.8%	37.2%	100.0%
Industrial - Road and Bridge Construction	E310100	E	90	29	119	75.5%	24.5%	100.0%
Industrial - Commission Based Wholesaling	F380000	F	15	-	15	100.0%	0.0%	100.0%
Industrial - Other Grocery Wholesaling	F360900	F	167	1	169	99.2%	0.8%	100.0%
Industrial - Other Goods Wholesaling n.e.c.	F373900	F	19	3	22	86.0%	14.0%	100.0%
Industrial - Liquor and Tobacco Product Wholesaling	F360600	F	20	2	22	91.6%	8.4%	100.0%
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	C	119	-	119	100.0%	0.0%	100.0%
Industrial - Laundry and Dry-Cleaning Services	S953100	S	92	-	92	100.0%	0.0%	100.0%
Industrial - Other Agricultural Product Wholesaling	F331900	F	7	14	21	34.3%	65.7%	100.0%
Industrial - Urban Bus Transport (Including Tramway)	I462200	I	123	3	126	97.5%	2.5%	100.0%
Industrial - Other Building Installation Services	E323900	E	11	1	12	89.3%	10.7%	100.0%
Industrial - Other Hardware Goods Wholesaling	F333900	F	35	-	35	100.0%	0.0%	100.0%
Industrial - Other Warehousing and Storage Services	I530900	I	6	1	7	85.5%	14.5%	100.0%
Industrial - Electronic (except Domestic Appliance) and Precision Equipment	S942200	S	11	1	13	89.7%	10.3%	100.0%
Industrial - Clothing and Footwear Wholesaling	F371200	F	33	9	42	79.3%	20.7%	100.0%
Industrial - Other Manufacturing n.e.c.	C259900	C	18	2	20	88.2%	11.8%	100.0%
Industrial - Clothing Manufacturing	C135100	C	9	8	17	53.5%	46.5%	100.0%
Industrial - Beer Manufacturing	C121200	C	5	3	8	61.7%	38.3%	100.0%
Industrial - Solid Waste Collection Services	D291100	D	63	-	63	100.0%	0.0%	100.0%
Industrial - Printing	C161100	C	47	-	47	100.0%	0.0%	100.0%
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	C	14	-	14	100.0%	0.0%	100.0%
Industrial - Other Fabricated Metal Product Manufacturing n.e.c.	C229900	C	12	1	14	91.1%	8.9%	100.0%
Industrial - Other Transport Support Services n.e.c.	I529900	I	9	-	9	100.0%	0.0%	100.0%
Industrial - Glazing Services	E324500	E	23	-	23	100.0%	0.0%	100.0%
Industrial - Medical and Surgical Equipment Manufacturing	C241200	C	5	3	8	66.7%	33.3%	100.0%
Industrial - Confectionery Manufacturing	C118200	C	71	1	73	98.1%	1.9%	100.0%
Industrial - Iron Smelting and Steel Manufacturing	C211000	C	5	-	5	100.0%	0.0%	100.0%
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	C	12	1	13	91.8%	8.2%	100.0%
Industrial - Fire and Security Alarm Installation Services	E323400	E	13	-	13	100.0%	0.0%	100.0%
Industrial - Hire of Construction Machinery with Operator	E329200	E	16	1	17	92.9%	7.1%	100.0%
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	S	12	2	14	88.9%	11.1%	100.0%
Industrial - Petroleum Product Wholesaling	F332100	F	18	-	18	100.0%	0.0%	100.0%
Industrial - Toy and Sporting Goods Wholesaling	F373400	F	4	-	4	100.0%	0.0%	100.0%
Industrial - Waste Treatment and Disposal Services	D292100	D	26	2	27	94.2%	5.8%	100.0%
Industrial - Wooden Structural Fittings and Components Manufacturing	C149200	C	29	-	29	100.0%	0.0%	100.0%
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	C	3	1	4	73.8%	26.2%	100.0%
Industrial - Dairy Produce Wholesaling	F360300	F	12	2	15	84.4%	15.6%	100.0%
Industrial - Other Wood Product Manufacturing n.e.c.	C149900	C	11	2	13	86.6%	13.4%	100.0%
Industrial - Heavy Machinery and Scaffolding Rental and Hiring	L663100	L	2	1	3	57.7%	42.3%	100.0%
Industrial - Motor Vehicle New Part Wholesaling	F350400	F	10	1	11	90.3%	9.7%	100.0%
Industrial - Automotive Electrical Services	S941100	S	11	-	11	100.0%	0.0%	100.0%
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	C	5	1	6	82.5%	17.5%	100.0%
Industrial - Other Food Products Manufacturing n.e.c.	C119900	C	4	-	4	100.0%	0.0%	100.0%

Employment 2017 cont...

Industry	ANZSIC06	Division	Urban Environment Employment Count	Rural Environment Employment Count	Total QLD Business Employment (2017)	Urban Share of QLD (%)	Rural Share of QLD (%)	Total QLD
Industrial - Pharmaceutical and Toilet Goods Wholesaling	F372000	F	11	-	11	100.0%	0.0%	100.0%
Industrial - Interurban and Rural Bus Transport	I462100	I	21	20	41	50.5%	49.5%	100.0%
Industrial - Other Water Transport Support Services	I521900	I	3	1	4	72.1%	27.9%	100.0%
Industrial - Domestic Appliance Repair and Maintenance	S942100	S	7	-	7	100.0%	0.0%	100.0%
Industrial - Metal Roof and Guttering Manufacturing (except Aluminium)	C222400	C	47	-	47	100.0%	0.0%	100.0%
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	F	8	-	8	100.0%	0.0%	100.0%
Industrial - Concrete Product Manufacturing	C203400	C	8	-	8	100.0%	0.0%	100.0%
Industrial - Jewellery and Silverware Manufacturing	C259100	C	6	-	6	100.0%	0.0%	100.0%
Industrial - Cosmetic and Toilet Preparation Manufacturing	C185200	C	4	-	4	100.0%	0.0%	100.0%
Industrial - Ready-Mixed Concrete Manufacturing	C203300	C	27	-	27	100.0%	0.0%	100.0%
Industrial - Fish and Seafood Wholesaling	F360400	F	13	-	13	100.0%	0.0%	100.0%
Industrial - Furniture and Floor Coverings Wholesaling	F373100	F	3	1	4	77.3%	22.7%	100.0%
Industrial - Timber Wholesaling	F333100	F	4	-	4	100.0%	0.0%	100.0%
Industrial - Computer and Computer Peripherals Wholesaling	F349200	F	18	-	18	100.0%	0.0%	100.0%
Industrial - Fruit and Vegetable Processing	C114000	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Structural Steel Fabricating	C222100	C	19	-	19	100.0%	0.0%	100.0%
Industrial - Other Specialised Industrial Machinery and Equipment Wholesaling	F341900	F	6	2	8	76.5%	23.5%	100.0%
Industrial - Other Machinery and Equipment Wholesaling n	F349900	F	7	-	7	100.0%	0.0%	100.0%
Industrial - Boatbuilding and Repair Services	C239200	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Industrial and Agricultural Chemical Product Wholesaling	F332300	F	9	-	9	100.0%	0.0%	100.0%
Industrial - Human Pharmaceutical and Medicinal Product Manufacturing	C184100	C	1	15	16	5.6%	94.4%	100.0%
Industrial - Ice Cream Manufacturing	C113200	C	1	13	14	5.8%	94.2%	100.0%
Industrial - Other Furniture Manufacturing	C251900	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Soft Drink, Cordial and Syrup Manufacturing	C121100	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Spirit Manufacturing	C121300	C	11	1	12	92.5%	7.5%	100.0%
Industrial - Textile Finishing and Other Textile Product Manufacturing	C133400	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Waste Remediation and Materials Recovery Services	D292200	D	6	-	6	100.0%	0.0%	100.0%
Industrial - Structural Steel Erection Services	E322400	E	6	-	6	100.0%	0.0%	100.0%
Industrial - Book and Magazine Wholesaling	F373500	F	2	-	2	100.0%	0.0%	100.0%
Industrial - Car Wholesaling	F350100	F	1	1	2	57.1%	42.9%	100.0%
Industrial - Kitchen and Dining Ware Wholesaling	F373300	F	12	-	12	100.0%	0.0%	100.0%
Industrial - Textile Product Wholesaling	F371100	F	3	-	3	100.0%	0.0%	100.0%
Industrial - Metal and Mineral Wholesaling	F332200	F	18	-	18	100.0%	0.0%	100.0%
Industrial - Photographic, Optical and Ophthalmic Equipment Manufacturing	C241100	C	-	27	27	0.0%	100.0%	100.0%
Industrial - Motor Vehicle Dismantling and Used Part Wholesaling	F350500	F	3	-	3	100.0%	0.0%	100.0%
Industrial - Prepared Animal and Bird Feed Manufacturing	C119200	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Fruit and Vegetable Wholesaling	F360500	F	1	-	1	100.0%	0.0%	100.0%
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	C	-	1	1	0.0%	100.0%	100.0%
Industrial - Aluminium Rolling, Drawing, Extruding	C214200	C	7	-	7	100.0%	0.0%	100.0%
Industrial - Architectural Aluminium Product Manufacturing	C222300	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Basic Inorganic Chemical Manufacturing	C181300	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Bread Manufacturing (Factory-based)	C117100	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Cereal, Pasta and Baking Mix Manufacturing	C116200	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Cleaning Compound Manufacturing	C185100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Cured Meat and Smallgoods Manufacturing	C111300	C	-	2	2	0.0%	100.0%	100.0%
Industrial - Electric Cable and Wire Manufacturing	C243100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Milk and Cream Processing	C113100	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Mining and Construction Machinery Manufacturing	C246200	C	-	1	1	0.0%	100.0%	100.0%
Industrial - Oil and Fat Manufacturing	C115000	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Other Ceramic Product Manufacturing	C202900	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Other Electrical Equipment Manufacturing	C243900	C	1	-	1	100.0%	0.0%	100.0%
Industrial - Other Sheet Metal Product Manufacturing	C224000	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Other Specialised Machinery and Equipment Manufacturing	C246900	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Other Structural Metal Product Manufacturing	C222900	C	5	-	5	100.0%	0.0%	100.0%
Industrial - Prefabricated Wooden Building Manufacturing	C149100	C	3	-	3	100.0%	0.0%	100.0%
Industrial - Printing Support Services	C161200	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Steel Pipe and Tube Manufacturing	C212200	C	2	-	2	100.0%	0.0%	100.0%
Industrial - Other Waste Collection Services	D291900	D	6	-	6	100.0%	0.0%	100.0%
Industrial - Jewellery and Watch Wholesaling	F373200	F	1	-	1	100.0%	0.0%	100.0%
Industrial - Meat, Poultry and Smallgoods Wholesaling	F360200	F	-	3	3	0.0%	100.0%	100.0%
Industrial - Freight Forwarding Services	I529200	I	1	-	1	100.0%	0.0%	100.0%
Rest of Manufacturing	multiple	C	-	-	-	na	na	na
Rest of Wholesale Trade	multiple	F	-	-	-	na	na	na
Total QLD Industrial Economy			5,300	948	6,249	84.8%	15.2%	100.0%

Source: M.E. Statistics NZ Business Frame 2017, QLD amalgamated district plan zones. Urban Environment includes zones within urban limits plus Luggate, Luggate Rural Industrial Subzone, LDR adjacent to Lake Hayes (as per QLDCA BDCA 2017). The Rural Environment includes special zone and townships that are urban in nature and includes Wanaka Airport Zone.

Appendix 10 – Meshblock Zone Maps

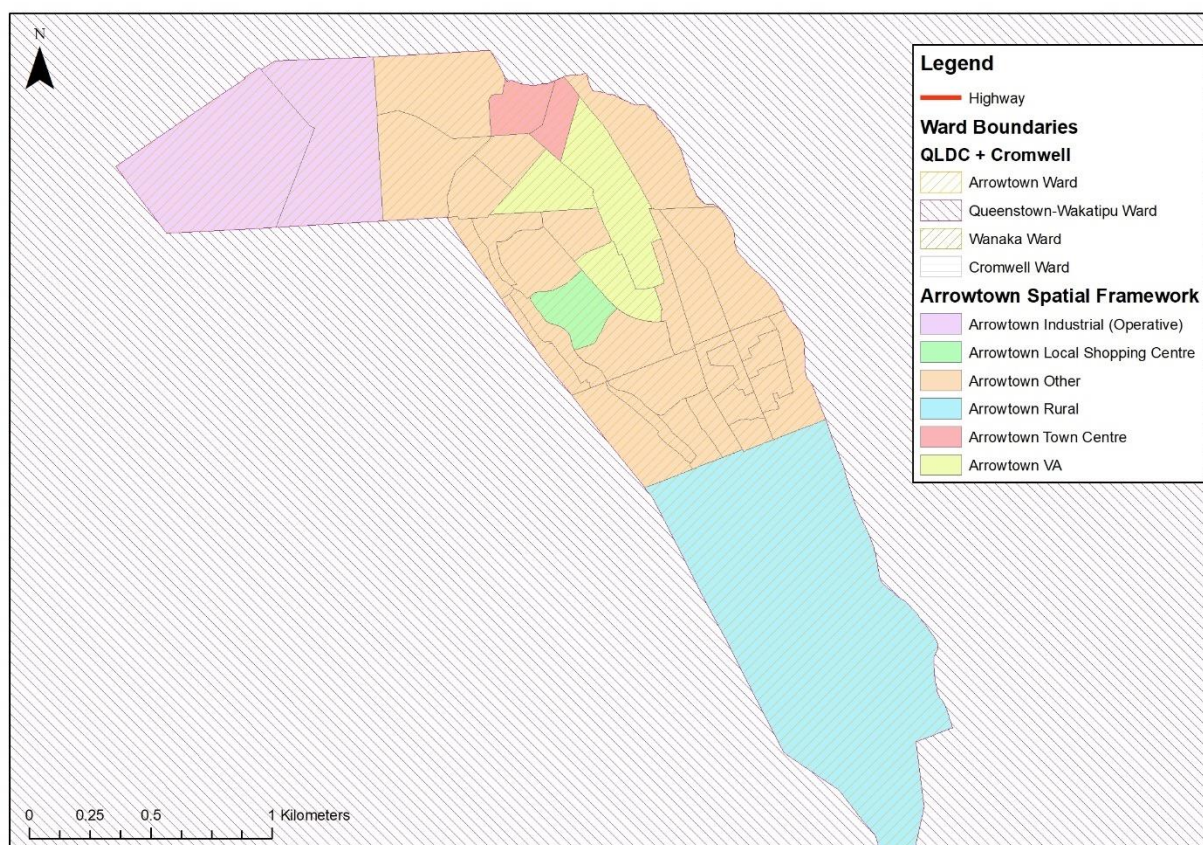
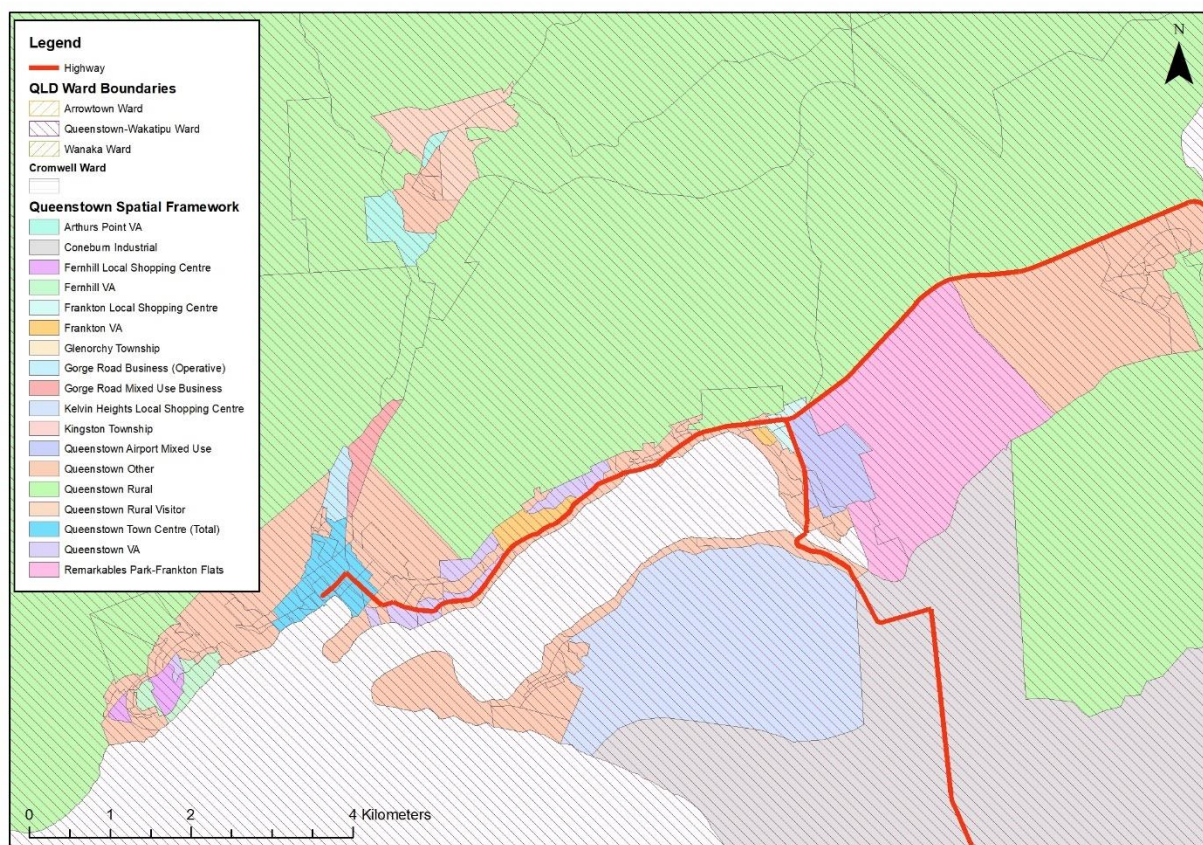
List of zones able to be included in analysis:

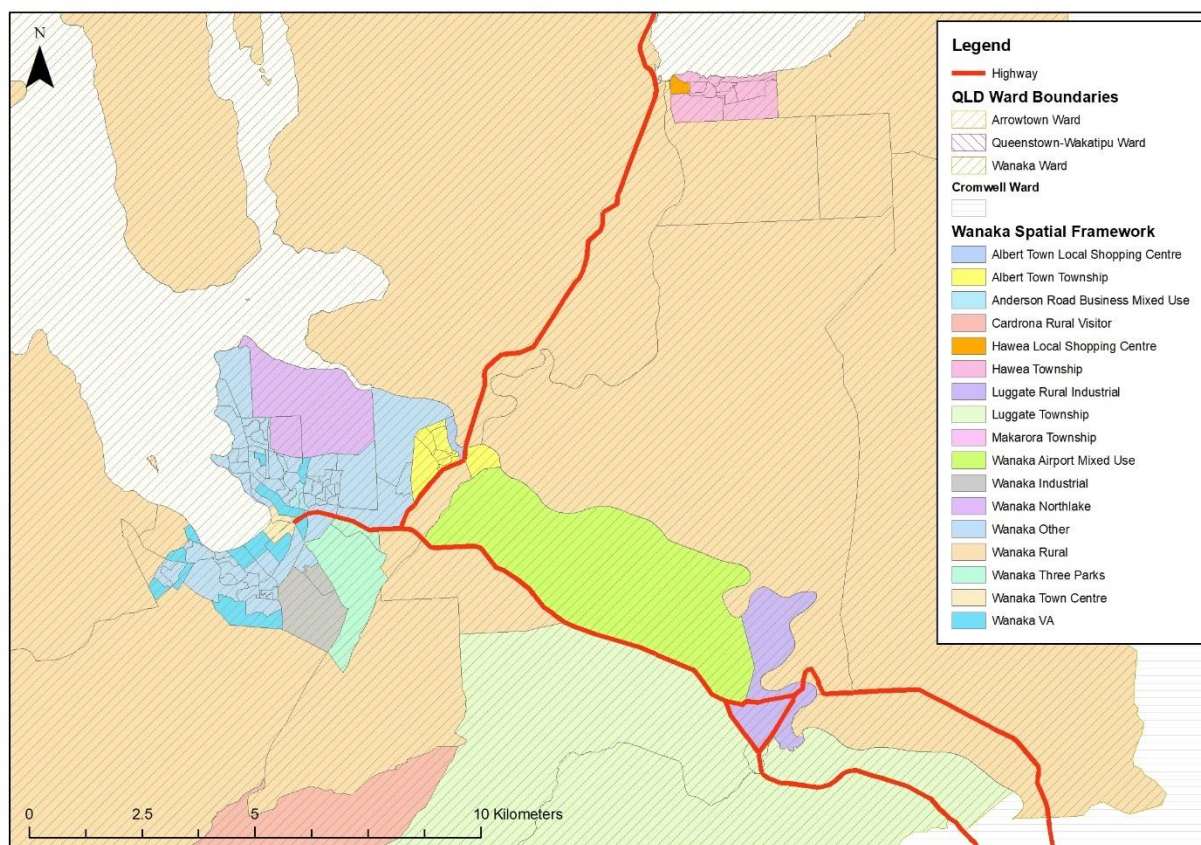
District	Urban / Rural	Ward	Zone - Group	Zone - Detail *
QLD	Urban	Queenstown	Airport	Queenstown Airport Mixed Use
QLD	Urban	Queenstown	Business	Gorge Road Mixed Use Business
QLD	Urban	Queenstown	Business	Gorge Road Business (Operative)
QLD	Urban	Wanaka	Business	Anderson Road Business Mixed Use
QLD	Urban	Arrowtown	Industrial	Arrowtown Industrial (Operative)
QLD	Urban	Wanaka	Industrial	Luggate Rural Industrial
QLD	Urban	Wanaka	Industrial	Wanaka Industrial **
QLD	Urban	Arrowtown	Other (incl VA)	Arrowtown Other
QLD	Urban	Arrowtown	Other (incl VA)	Arrowtown VA
QLD	Urban	Queenstown	Other (incl VA)	Arthurs Point VA
QLD	Urban	Queenstown	Other (incl VA)	Fernhill VA
QLD	Urban	Queenstown	Other (incl VA)	Frankton VA
QLD	Urban	Queenstown	Other (incl VA)	Queenstown Other
QLD	Urban	Queenstown	Other (incl VA)	Queenstown VA
QLD	Urban	Wanaka	Other (incl VA)	Wanaka Northlake
QLD	Urban	Wanaka	Other (incl VA)	Wanaka Other
QLD	Urban	Wanaka	Other (incl VA)	Wanaka VA
QLD	Urban	Arrowtown	Other Commercial	Arrowtown Local Shopping Centre
QLD	Urban	Arrowtown	Other Commercial	Arrowtown Town Centre
QLD	Urban	Queenstown	Other Commercial	Fernhill Local Shopping Centre
QLD	Urban	Queenstown	Other Commercial	Frankton Local Shopping Centre
QLD	Urban	Queenstown	Other Commercial	Kelvin Heights Local Shopping Centre
QLD	Urban	Queenstown	Other Commercial	Queenstown Town Centre (Total)
QLD	Urban	Wanaka	Other Commercial	Albert Town Local Shopping Centre
QLD	Urban	Wanaka	Other Commercial	Hawea Local Shopping Centre
QLD	Urban	Wanaka	Other Commercial	Wanaka Three Parks
QLD	Urban	Wanaka	Other Commercial	Wanaka Town Centre
QLD	Urban	Queenstown	Other Commercial & Industrial	Remarkables Park-Frankton Flats
QLD	Urban	Wanaka	Township	Albert Town Township
QLD	Urban	Wanaka	Township	Hawea Township
QLD	Urban	Wanaka	Township	Luggate Township
QLD	Rural	Wanaka	Airport	Wanaka Airport Mixed Use
QLD	Rural	Arrowtown	Other (incl VA)	Arrowtown Rural
QLD	Rural	Queenstown	Other (incl VA)	Queenstown Rural
QLD	Rural	Queenstown	Other (incl VA)	Queenstown Rural Visitor
QLD	Rural	Wanaka	Other (incl VA)	Cardrona Rural Visitor
QLD	Rural	Wanaka	Other (incl VA)	Wanaka Rural
QLD	Rural	Queenstown	Township	Glenorchy Township
QLD	Rural	Queenstown	Township	Kingston Township
QLD	Rural	Wanaka	Township	Makarora Township

Source: M.E QLD Spatial Framework - 2013 Meshblock Resolution, QLDD District Plan Zones

* Level of detail limited to ability to differential zones with meshblock boundaries.

** Includes both Industrial and Industrial B within meshblocks.





Appendix 11 – Zone Propensity 2017

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Bakery Product Manufacturing (Non-factory-based)	C117400	C	Low-Moderate	10	1%
Industrial - Beer Manufacturing	C121200	C	Low-Moderate	5	0%
Industrial - Confectionery Manufacturing	C118200	C	Low-Moderate	4	0%
Industrial - Iron Smelting and Steel Manufacturing	C211000	C	Low-Moderate	5	0%
Industrial - Medical and Surgical Equipment Manufacturing	C241200	C	Low-Moderate	3	0%
Industrial - Other Machinery and Equipment Manufacturing n.e.c.	C249900	C	Low-Moderate	13	1%
Industrial - Other Manufacturing n.e.c.	C259900	C	Low-Moderate	5	0%
Industrial - Printing	C161100	C	Low-Moderate	6	0%
Industrial - Ready-Mixed Concrete Manufacturing	C203300	C	Low-Moderate	3	0%
Industrial - Wine and Other Alcoholic Beverage Manufacturing	C121400	C	Low-Moderate	10	1%
Industrial - Wooden Furniture and Upholstered Seat Manufacturing	C251100	C	Low-Moderate	17	1%
Industrial - Waste Treatment and Disposal Services	D292100	D	Low-Moderate	3	0%
Industrial - Non-Residential Building Construction	E302000	E	Low-Moderate	21	1%
Industrial - Road and Bridge Construction	E310100	E	Low-Moderate	11	1%
Industrial - Other Heavy and Civil Engineering Construction	E310900	E	Low-Moderate	19	1%
Industrial - Fire and Security Alarm Installation Services	E323400	E	Low-Moderate	5	0%
Industrial - Glazing Services	E324500	E	Low-Moderate	6	0%
Industrial - Hire of Construction Machinery with Operator	E329200	E	Low-Moderate	4	0%
Industrial - Agricultural and Construction Machinery Wholesaling	F341100	F	Low-Moderate	4	0%
Industrial - Computer and Computer Peripherals Wholesaling	F349200	F	Low-Moderate	3	0%
Industrial - Other Electrical and Electronic Goods Wholesaling	F349400	F	Low-Moderate	15	1%
Industrial - Other Grocery Wholesaling	F360900	F	Low-Moderate	12	1%
Industrial - Other Hardware Goods Wholesaling	F333900	F	Low-Moderate	9	1%
Industrial - Courier Pick-up and Delivery Services	I510200	I	Low-Moderate	19	1%
Industrial - Other Warehousing and Storage Services	I530900	I	Low-Moderate	7	0%
Industrial - Other Water Transport Support Services	I521900	I	Low-Moderate	3	0%
Industrial - Automotive Body, Paint and Interior Repair	S941200	S	Low-Moderate	18	1%
Industrial - Domestic Appliance Repair and Maintenance	S942100	S	Low-Moderate	4	0%
Industrial - Laundry and Dry-Cleaning Services	S953100	S	Low-Moderate	10	1%
Industrial - Other Automotive Repair and Maintenance	S941900	S	Low-Moderate	44	3%
Industrial - Other Machinery and Equipment Repair and Maintenance	S942900	S	Low-Moderate	4	0%
Sub-Total				302	19%

Source: M.E, Statistics NZ Business Directory.

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Other Agriculture and Fishing Support Services	A052900	A	Low	27	2%
Industrial - Cut and Sewn Textile Product Manufacturing	C133300	C	Low	6	0%
Industrial - House Construction	E301100	E	Low	330	21%
Industrial - Other Residential Building Construction	E301900	E	Low	54	3%
Industrial - Land Development and Subdivision	E321100	E	Low	44	3%
Industrial - Site Preparation Services	E321200	E	Low	32	2%
Industrial - Concreting Services	E322100	E	Low	16	1%
Industrial - Bricklaying Services	E322200	E	Low	32	2%
Industrial - Roofing Services	E322300	E	Low	17	1%
Industrial - Plumbing Services	E323100	E	Low	39	2%
Industrial - Electrical Services	E323200	E	Low	70	4%
Industrial - Air Conditioning and Heating Services	E323300	E	Low	14	1%
Industrial - Plastering and Ceiling Services	E324100	E	Low	43	3%
Industrial - Carpentry Services	E324200	E	Low	32	2%
Industrial - Tiling and Carpeting Services	E324300	E	Low	41	3%
Industrial - Painting and Decorating Services	E324400	E	Low	68	4%
Industrial - Landscape Construction Services	E329100	E	Low	30	2%
Industrial - Other Construction Services n.e.c.	E329900	E	Low	28	2%
Industrial - Commission Based Wholesaling	F380000	F	Low	14	1%
Industrial - Other Goods Wholesaling n.e.c.	F373900	F	Low	12	1%
Industrial - Road Freight Transport	I461000	I	Low	26	2%
Industrial - Urban Bus Transport (Including Tramway)	I462200	I	Low	7	0%
Industrial - Other Goods and Equipment Rental and Hiring n.e.c.	L663900	L	Low	54	3%
Industrial - Other Motor Vehicle and Transport Equipment Rental and Hiring	L661900	L	Low	16	1%
Industrial - Passenger Car Rental and Hiring	L661100	L	Low	32	2%
Industrial - Electronic (except Domestic Appliance) and Precision Equipment Repair and Maintenance	S942200	S	Low	7	0%
Sub-Total				1,090	69%

Source: M.E, Statistics NZ Business Directory.

QLD Industrial Economy	ANZSIC	Division	Urban Industrial Zone Propensity 2017	Count of Urban Businesses	Share of Urban Businesses
Industrial - Agricultural Machinery and Equipment Manufacturing	C246100	C	None	-	0%
Industrial - Aircraft Manufacturing and Repair Services	C239400	C	None	15	1%
Industrial - Architectural Aluminium Product Manufacturing	C222300	C	None	1	0%
Industrial - Basic Inorganic Chemical Manufacturing	C181300	C	None	1	0%
Industrial - Bread Manufacturing (Factory-based)	C117100	C	None	1	0%
Industrial - Cake and Pastry Manufacturing (Factory-based)	C117200	C	None	3	0%
Industrial - Cereal, Pasta and Baking Mix Manufacturing	C116200	C	None	1	0%
Industrial - Cleaning Compound Manufacturing	C185100	C	None	1	0%
Industrial - Cosmetic and Toiletry Preparation Manufacturing	C185200	C	None	3	0%
Industrial - Cured Meat and Smallgoods Manufacturing	C111300	C	None	-	0%
Industrial - Electric Cable and Wire Manufacturing	C243100	C	None	1	0%
Industrial - Fruit and Vegetable Processing	C114000	C	None	3	0%
Industrial - Human Pharmaceutical and Medicinal Product Manufacturing	C184100	C	None	1	0%
Industrial - Ice Cream Manufacturing	C113200	C	None	1	0%
Industrial - Jewellery and Silverware Manufacturing	C259100	C	None	3	0%
Industrial - Milk and Cream Processing	C113100	C	None	1	0%
Industrial - Mining and Construction Machinery Manufacturing	C246200	C	None	-	0%
Industrial - Motor Vehicle Body and Trailer Manufacturing	C231200	C	None	3	0%
Industrial - Oil and Fat Manufacturing	C115000	C	None	1	0%
Industrial - Other Ceramic Product Manufacturing	C202900	C	None	1	0%
Industrial - Other Electrical Equipment Manufacturing	C243900	C	None	1	0%
Industrial - Other Food Products Manufacturing n.e.c.	C119900	C	None	4	0%
Industrial - Other Non-Metallic Mineral Product Manufacturing	C209000	C	None	4	0%
Industrial - Other Structural Metal Product Manufacturing	C222900	C	None	1	0%
Industrial - Photographic, Optical and Ophthalmic Equipment Manufacturing	C241100	C	None	-	0%
Industrial - Prefabricated Wooden Building Manufacturing	C149100	C	None	1	0%
Industrial - Prepared Animal and Bird Feed Manufacturing	C119200	C	None	1	0%
Industrial - Printing Support Services	C161200	C	None	1	0%
Industrial - Soft Drink, Cordial and Syrup Manufacturing	C121100	C	None	2	0%
Industrial - Spirit Manufacturing	C121300	C	None	1	0%
Industrial - Steel Pipe and Tube Manufacturing	C212200	C	None	1	0%
Industrial - Other Waste Collection Services	D291900	D	None	1	0%
Industrial - Solid Waste Collection Services	D291100	D	None	7	0%
Industrial - Waste Remediation and Materials Recovery Services	D292200	D	None	2	0%
Industrial - Structural Steel Erection Services	E322400	E	None	2	0%
Industrial - Other Building Installation Services	E323900	E	None	8	1%
Industrial - Book and Magazine Wholesaling	F373500	F	None	2	0%
Industrial - Clothing and Footwear Wholesaling	F371200	F	None	6	0%
Industrial - Fish and Seafood Wholesaling	F360400	F	None	3	0%
Industrial - Fruit and Vegetable Wholesaling	F360500	F	None	1	0%
Industrial - Furniture and Floor Coverings Wholesaling	F373100	F	None	2	0%
Industrial - Jewellery and Watch Wholesaling	F373200	F	None	1	0%
Industrial - Kitchen and Dining Ware Wholesaling	F373300	F	None	2	0%
Industrial - Liquor and Tobacco Product Wholesaling	F360600	F	None	9	1%
Industrial - Meat, Poultry and Smallgoods Wholesaling	F360200	F	None	-	0%
Industrial - Other Agricultural Product Wholesaling	F331900	F	None	7	0%
Industrial - Other Machinery and Equipment Wholesaling n	F349900	F	None	2	0%
Industrial - Petroleum Product Wholesaling	F332100	F	None	5	0%
Industrial - Pharmaceutical and Toiletry Goods Wholesaling	F372000	F	None	4	0%
Industrial - Textile Product Wholesaling	F371100	F	None	2	0%
Industrial - Timber Wholesaling	F333100	F	None	3	0%
Industrial - Toy and Sporting Goods Wholesaling	F373400	F	None	5	0%
Industrial - Freight Forwarding Services	I529200	I	None	1	0%
Industrial - Other Transport Support Services n.e.c	I529900	I	None	6	0%
Rest of Manufacturing		C	None	-	0%
Sub-Total				140	9%

Source: M.E, Statistics NZ Business Directory.