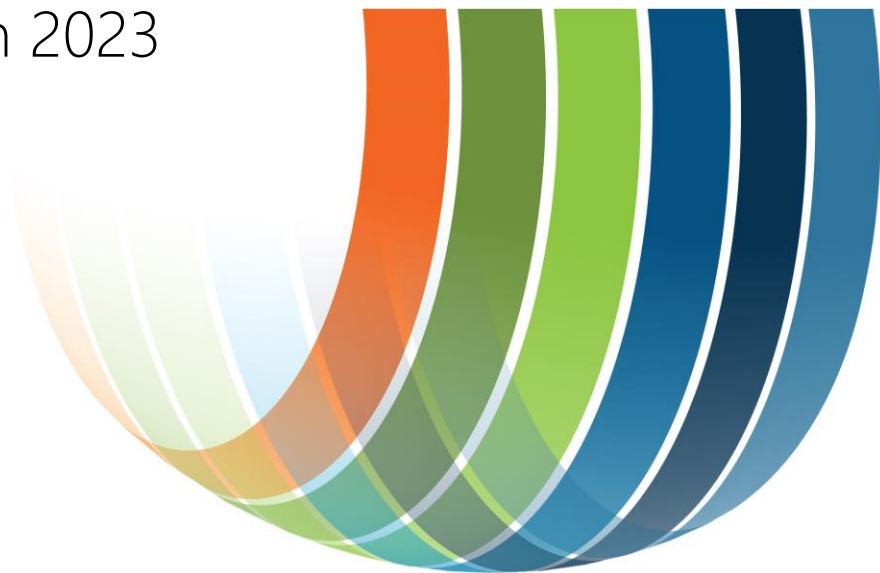


Examining key manufacturing and construction industries in the Whangārei economy **for Whangārei District Council**

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Infometrics

Economics put simply

Authorship

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Overview

Whangārei District Council has commissioned Infometrics to examine and describe the make-up and economic performance of Whangārei District's manufacturing and construction industries in relation to the wider Whangareia economy. The report pays special attention to the importance of key businesses in the area such as the Marsden Point Oil Refinery and Fonterra's Kauri dairy factory, and profiles the composition of the Whangārei manufacturing industry excluding these major players.

This analysis of the Whangārei manufacturing and construction industries forms part of a broader set of analysis commissioned from Infometrics that encompasses business performance benchmarking in the manufacturing and construction industries, and the development of a Business Attractiveness Index for Whangārei District.

The purpose of this broader set of analysis is to enhance Council's understanding of what drives local economic performance and inform better-targeted economic policy that will optimise the performance of existing businesses and attract more high-performing businesses to the area.

Executive Summary

- Manufacturing is Whangārei's largest industry by GDP, contributing \$952m (18%) of total GDP to the Whangārei economy over the year to March 2022.
- There are some major concentrations in Whangārei's manufacturing industry, with the Marsden Point Oil Refinery, Fonterra's Kauri dairy factory, and Golden Bay Cement all representing major single-business manufacturers.
- Excluding these industries, other major components of Whangārei's manufacturing industry include fabricated metal product, machinery and other equipment, wood product, boat and shipbuilding and repair services, and other non-metallic mineral product manufacturing.
- Manufacturing GDP growth in Whangārei has outperformed the national average between 2008 and 2014 but has since been more sluggish. Since 2016, major manufacturers (predominantly the Refinery) have dragged down Whangārei's manufacturing performance.
- The Whangārei boat/shipbuilding industry is important to the wider national industry. Whangārei provides 8.9% of the national boat/shipbuilding industry, compared to just 3.0% of national total manufacturing occurring in Whangārei.
- Construction is Whangārei's third largest industry by GDP, and the industry is a larger part of the Whangārei economy than the national average. Across New Zealand, construction makes up 6.9% of total economic activity, compared to the 8.2% recorded in Whangārei.
- In recent years, Whangārei's construction industry has experienced stronger growth than the national average, due to stronger growth in residential and heavy and civil engineering output.

Whangārei's manufacturing industry

Manufacturing contributed \$952m in GDP to the Whangārei economy over the year to March 2022, making up 18% of total GDP and comprising 4,146 filled jobs. At a high level, manufacturing is Whangārei's largest industry by GDP.

The manufacturing industry in Whangārei is also highly productive, with \$224,048 worth of GDP being added per filled job, almost double the total economy average of \$121,702 in Whangārei.

Marsden Point dominated Whangārei's manufacturing industry

The Marsden Point Oil Refinery dominated Whangārei's manufacturing industry up until mid-2022, with the petroleum and coal product manufacturing industry making up nearly 50% of manufacturing economic activity over the March 2022 year (\$473m GDP).

Marsden Point's closure and the subsequent change in activity (mostly towards wholesaling and transport activity in official economic figures) are not yet recorded in our detailed metrics but will eventually be reflected in our analysis of the Whangārei economy for the year ending March 2023.

Other major players in Whangārei's manufacturing industry include Fonterra's Kauri dairy factory (dairy product manufacturing made up 3.5% of Whangārei's manufacturing GDP), and Golden Bay Cement (cement and lime manufacturing made up 2.5% of Whangārei's manufacturing GDP – see Table 1).

Table 1

Whangarei District manufacturing industry composition, year ending March 2022

	GDP (\$m)		Share of total			
	Whangarei	New Zealand	With major employers		Without major employers	
	Whangarei	New Zealand	Whangarei	New Zealand	Whangarei	New Zealand
Petroleum & Coal Product Manufacturing	472.5	1,255	49.6%	3.9%		
Fabricated Metal Product Manufacturing	81.9	2,838	8.6%	8.8%	19.3%	9.8%
Machinery & Other Equipment Manufacturing	75.4	5,469	7.9%	17.0%	17.8%	18.8%
Wood Product Manufacturing	73.5	1,971	7.7%	6.1%	17.3%	6.8%
Boat & Shipbuilding and Repair Services	45.5	509	4.8%	1.6%	10.7%	1.8%
Other Non-Metallic Mineral Product Manufacturing	34.7	1,519	3.6%	4.7%	8.2%	5.2%
Dairy Product Manufacturing	33.1	1,713	3.5%	5.3%		
Cement and Lime Manufacturing	23.5	51	2.5%	0.2%		
Furniture & Other Manufacturing	18.2	1,047	1.9%	3.3%	4.3%	3.6%
Fruit, Cereal & Other Food Product Manufacturing	18.0	2,573	1.9%	8.0%	4.2%	8.9%
Printing	16.1	706	1.7%	2.2%	3.8%	2.4%
Textile, Leather, Clothing, Footwear Manufacturing	14.6	772	1.5%	2.4%	3.4%	2.7%
Polymer Product & Rubber Product Manufacturing	12.5	1,513	1.3%	4.7%	2.9%	5.2%
Other Transport Equipment Manufacturing	9.3	1,163	1.0%	3.6%	2.2%	4.0%
Other manufacturing	24.2	8,980	2.5%	28.0%	5.7%	30.9%
Total manufacturing	953	32,079	100%	100%	100%	100%

Source: Infometrics

Looking at Whangārei's manufacturing industry another way shows some of the concentrations inherent in the area.

The Marsden Point Oil Refinery operations in Whangārei made up nearly 40% of national petroleum GDP (with the rest being allocated to head office operations elsewhere in New Zealand where value add was also attributed to). And Golden Bay Cement accounts for 47% of national cement and lime manufacturing.

Whangārei manufacturing industry is still reasonably well diversified

Marsden Point Oil Refinery, Fonterra Kauri, and Golden Bay Cement are major, single-business operations which represent a considerable level of manufacturing output and economic activity. Aside from these large employers, Whangārei's manufacturing industry is reasonably well diversified.

Table 1 shows that if we exclude the three major employers, 73% of Whangārei's manufacturing economic activity is found in:

- fabricated metal product manufacturing (19%) (includes significant structural steel fabricating, and architectural aluminium product manufacturing),
- machinery and other equipment manufacturing (18%),
- wood product manufacturing (17%),
- boat and shipbuilding and repair services (11%), and
- other non-metallic mineral product manufacturing (8%) (mainly concrete product manufacturing).

However, Table 1 also shows that despite Whangārei's manufacturing industry being more diversified once large employers are excluded, the Whangārei manufacturing industry is not as diversified as the national manufacturing industry. Leaving out the three major employers, the 73% of manufacturing economic activity in Whangārei in the five manufacturing industries listed above, compares with just 42% of manufacturing activity in these industries nationally.

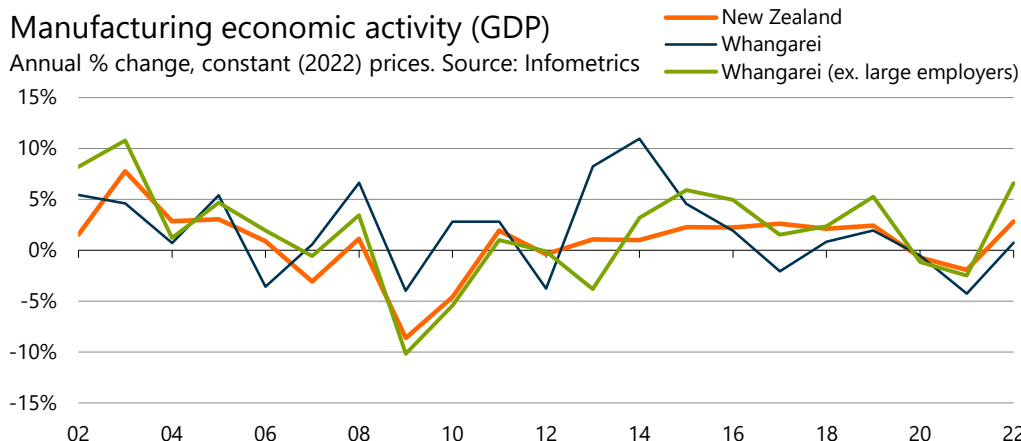
Nevertheless, we would expect the national manufacturing industry to be more diversified than any one region simply because national manufacturing encompasses a much larger number of firms and spans regions with different comparative advantages in different manufacturing industries.

Parts of the Whangārei manufacturing industry are also high tech. For example, NZ Tech includes machinery and equipment manufacturing in its definition of high tech manufacturing (see p12 of the [New Zealand Tech Sector – Key Metrics 2020 Update](#) report). High tech manufacturing generally requires higher skills, is highly productive, and offers higher earnings. Infometrics estimates that average annual earnings in high tech manufacturing was \$76,400 in 2021 compared with average earnings across the total economy of \$65,800.

Whangārei manufacturing outperforms the national average

Looking at annual growth rates of manufacturing GDP in Chart 1, annual growth rates across the whole period from 2000 to 2022 average out much higher in Whangārei (1.8%) than nationally (0.9%).

Chart 1



But more recently, Whangārei manufacturing has under-performed relative to manufacturing nationally.

Comparing Whangārei manufacturing performance with and without the three major employers, Chart 1 shows that since 2016 the three big employers have dragged down Whangārei's manufacturing performance. This lower performance was mainly due to the performance of the Marsden Point Oil Refinery which has struggled to compete with newer, much larger refineries in Asia that benefit from economies of scale and access to cheaper electricity and gas.¹ The onset of COVID-19 also saw demand for petrol plummet as New Zealand went into lockdown.

Whangārei manufacturing annual growth rates across the whole period from 2000 to 2022 average out much the same with the three large employers (1.8%) as they do without the big three (1.9%).

Boat/shipbuilding in Whangārei has recently recovered

The Global Financial Crisis brought about a steep and lengthy contraction in boat/shipbuilding in Whangārei, reflecting a similar decline nationally (see Chart 2). However, the industry recovered and has grown consistently year on year since 2016. The past two years have been particularly busy for boat/shipbuilding in Whangārei with

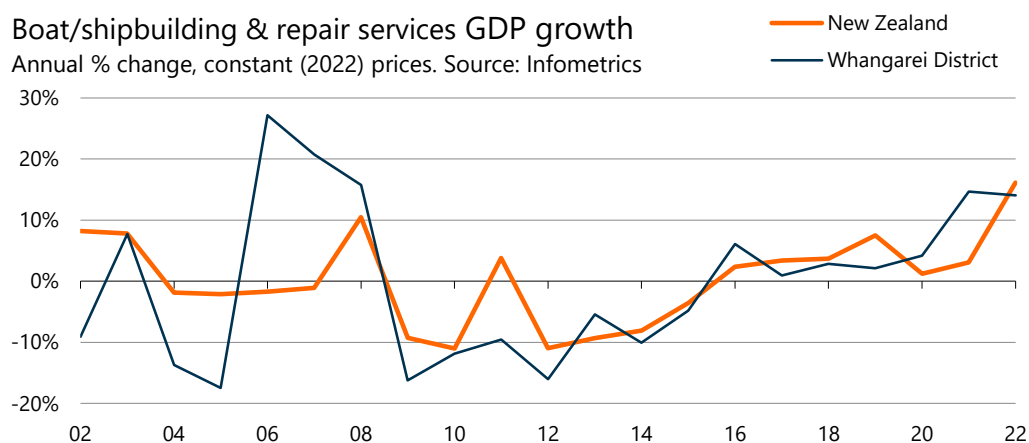
¹ Piper, D. (24 April 2022). *Why is Marsden Point oil refinery closing and should we care?* Stuff. Retrieved from <https://www.stuff.co.nz/national/explained/128390299/why-is-marsden-point-oil-refinery-closing-and-should-we-care> (accessed 17 March 2023).

activity growing 15% over 2021 and a further 14% over 2022. The NZ Marine Industry Association (MIA) points to recent growth in both the domestic market and in exports,² and MIA's Executive Director Peter Busfield points to domestic consumers' loyalty to New Zealand trailer boat manufacturers over imported models.³

Chart 2

Boat/shipbuilding & repair services GDP growth

Annual % change, constant (2022) prices. Source: Infometrics



The Whangārei boat/shipbuilding industry is important to the wider national industry. Whangārei provides 8.9% of the national boat/shipbuilding industry, compared to just 3.0% of national total manufacturing occurring in Whangārei.

² Marine Industry News. (2022). *New survey reveals substantial growth in New Zealand boating market*. Marine Industry News. Retrieved from <https://marineindustrynews.co.uk/new-survey-reveals-substantial-growth-in-new-zealand-boating-market/> (accessed 17 March 2023).

³ Eichelsheim, J. (2022). *Boating industry on a roll*. Boating New Zealand magazine. Retrieved from <https://boatingnz.co.nz/boating-industry-on-a-roll/> (accessed 17 March 2023).

Whangārei's construction industry

The construction industry contributed \$448m in GDP to the Whangārei economy over the year to March 2022, making up 8.2% of total Whangārei GDP and comprising 5,745 filled jobs.

Construction is Whangārei's third largest industry by GDP, and the industry is a larger part of the Whangārei economy than the national average. Across New Zealand, construction makes up 6.9% of total economic activity, compared to the 8.2% recorded in Whangārei.

Whangārei construction dominated by construction services

The make-up of the construction industry in Whangārei closely mirrors the construction industry nationally, with construction services making up around half of all activity (51%), heavy and civil engineering construction making up just over one-quarter of activity (28%), residential construction making up about one-fifth of activity (19%) and the relatively small non-residential construction industry making up the rest (3%) (see Table 2).

Electrical services, plumbing services, painting, and decorating services and site preparation services make up around half of all construction services.

Table 2

Whangarei District construction sector composition, 2022

	GDP (\$m)			
	Whangarei District	New Zealand	Whangarei District	New Zealand
Residential Construction	84	4,582	19%	19%
Non-residential construction	12	958	3%	4%
Heavy & Civil Engineering Construction	125	6,303	28%	26%
Construction services	226	12,714	51%	52%
Of which:				
Electrical Services	39	2,062	9%	8%
Plumbing Services	26	1,412	6%	6%
Painting and Decorating Services	21	1,245	5%	5%
Site Preparation Services	18	1,138	4%	5%
Landscape Construction Services	15	989	3%	4%
Roofing Services	13	463	3%	2%
Air Conditioning and Heating Services	12	616	3%	3%
Other construction services	82	4,790	18%	20%
Total construction	447	24,558	100%	100%

Source: Infometrics

Whangārei construction has recently outperformed the national average

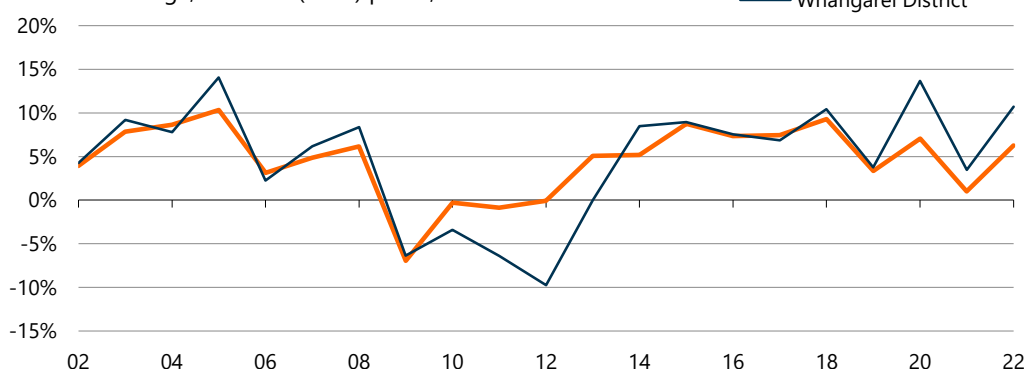
The Whangārei construction industry's performance has largely mirrored that of the national construction industry since 2000, except that construction in Whangārei experienced a much steeper and longer decline following the Global Financial Crisis.

More recently, Whangārei construction experienced stronger growth during the COVID-19 pandemic. Recent growth is on the back of strong population growth of 2.3% in 2020, followed by a 1.5% lift in 2021 and a further 1.2% boost in 2022, as well as both residential and non-residential consents hitting historical highs in 2021 and 2022 respectively, and surging house prices (peaking at 28%pa in December 2021).

Chart 3

Construction GDP growth

Annual % change, constant (2022) prices, source: Infometrics



Both the residential construction and heavy and civil engineering construction industries in Whangārei have consistently outperformed the national average for the past five years. Whangārei's non-residential construction industry has outperformed the national average since 2020, but the Whangārei construction services industry has underperformed the national average for the past five years, with the exception of 2020.

Chart 4

Construction GDP

Average annual % change 2018-22, constant (2022) prices. Source: Infometrics

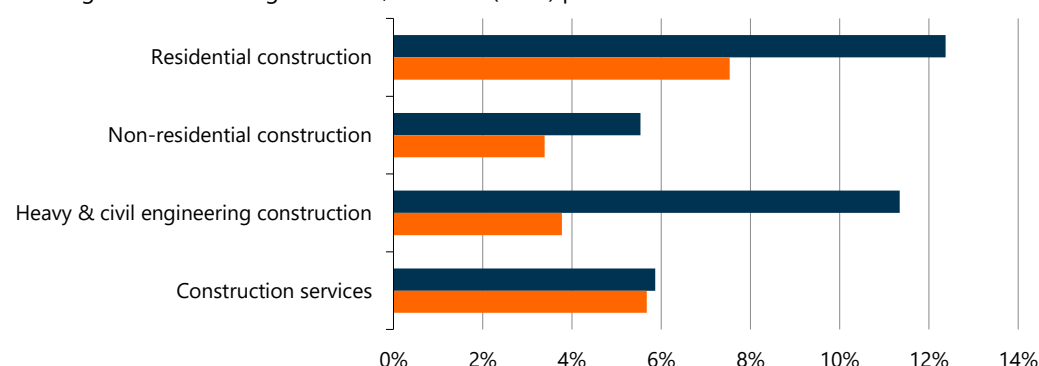


Chart 4 shows annual growth rates averaged over the past five years. Residential construction and heavy and civil engineering construction in Whangārei easily outperform the national average. Non-residential construction is closer to the national average. Construction services in Whangārei almost matches the national average, but only because of exceptionally strong growth in 2020.