



Arts and Creative - Maori

in New Zealand



Economics put simply

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EMPLOYMENT AND ECONOMY

Growth in a sector is typically underpinned by expanding employment and growth in employment and gross domestic product (GDP). This section looks at current and historic trends in GDP in the Arts and Creative - Maori sector in New Zealand as well forecast growth in employment.

How many people work in the sector?

This section looks at the number of people employed in the Arts and Creative - Maori sector and how employment has changed over time. Employment is presented in terms of filled jobs as well as full-time equivalent employment. Forecast employment growth in filled jobs is also provided.

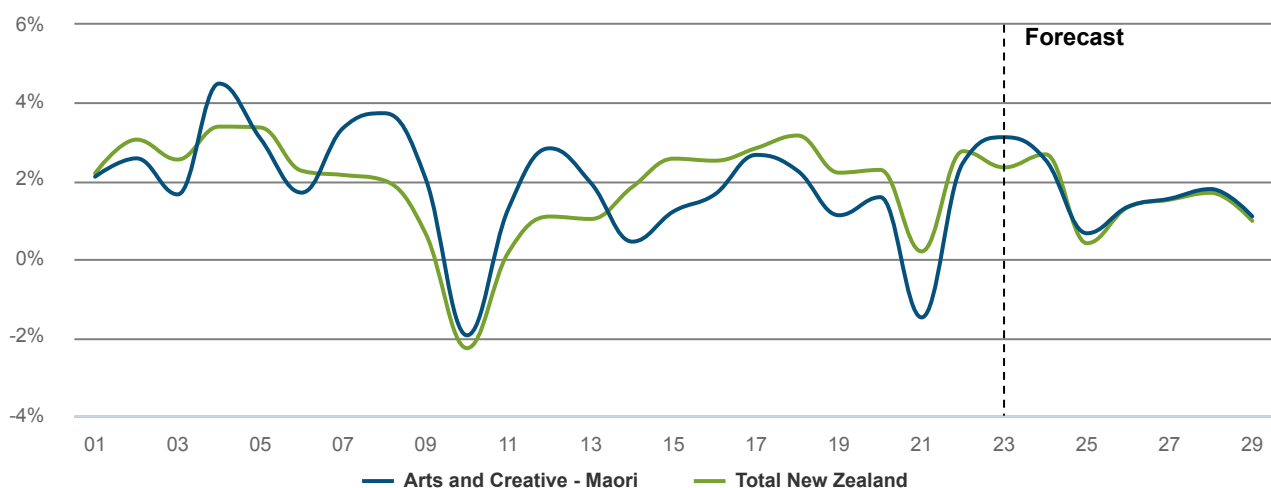
Employment growth

Employment growth in a sector is driven by a range of factors, including the level of confidence businesses have in their activity outlook. For example, positive employment growth shows that businesses in a sector are confident enough in their activity and outlook to expand their workforce.

The number of filled jobs in the Arts and Creative - Maori sector in New Zealand averaged 11,345 in the year to March 2023. The Arts and Creative - Maori sector accounts for 0.4% of overall filled jobs in New Zealand. In terms of historical and forecast trends for the Arts and Creative - Maori sector in New Zealand:

- Employment grew by 3.1% in 2023 compared with overall growth of 2.4% in New Zealand.
- Employment growth averaged 1.5%pa over the past 10 years compared with overall growth of 2.3%pa on New Zealand.
- Employment is forecast to grow by 1.5%pa between 2023 and 2029. Overall employment in New Zealand is forecast to grow by 1.4%pa over the period.

Figure 1: Employment growth in New Zealand



The following table shows filled job employment in the Arts and Creative - Maori in New Zealand for selected historic and forecast years. The Infometrics on-line Arts and Creative - Maori Sector Profile provides a complete time series of annual employment from 2000 onwards.

Table 1: Employment in the Arts and Creative - Maori sector in New Zealand

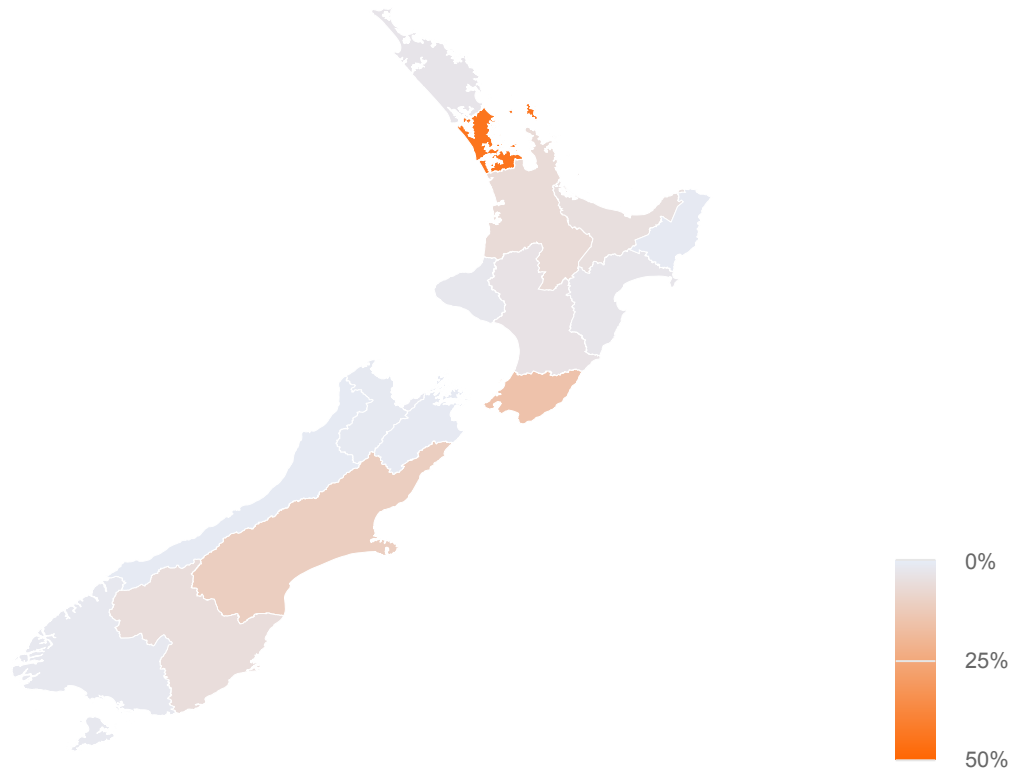
	Arts and Creative - Maori			Total New Zealand	
	Employment	% of total	% change	Employment	% change
2003	7,830	0.4%	1.7%	1,918,202	2.6%
2008	9,198	0.4%	3.7%	2,184,929	2.0%
2013	9,775	0.4%	1.9%	2,198,992	1.0%
2018	10,609	0.4%	2.3%	2,498,984	3.2%
2019	10,729	0.4%	1.1%	2,554,343	2.2%
2020	10,899	0.4%	1.6%	2,612,767	2.3%
2021	10,737	0.4%	-1.5%	2,618,023	0.2%
2022	11,002	0.4%	2.5%	2,690,372	2.8%
2023	11,345	0.4%	3.1%	2,753,601	2.4%
2024 (f)	11,634	0.4%	2.5%	2,827,534	2.7%
2025 (f)	11,711	0.4%	0.7%	2,839,144	0.4%
2026 (f)	11,869	0.4%	1.3%	2,877,059	1.3%
2027 (f)	12,053	0.4%	1.6%	2,920,899	1.5%
2028 (f)	12,269	0.4%	1.8%	2,970,578	1.7%
2029 (f)	12,404	0.4%	1.1%	2,999,710	1.0%

Regional employment

Employment can vary across regions and is largely determined by economic conditions in the area, the makeup of the population and the types of resources available.

This section shows the regional distribution of employment in the Arts and Creative - Maori sector in 2023.

Figure 2: Regional employment in the Arts and Creative - Maori sector, 2023



The following table shows employment in the Arts and Creative - Maori sector by region in 2023.

Table 2: Employment by region in the Arts and Creative - Maori sector, 2023

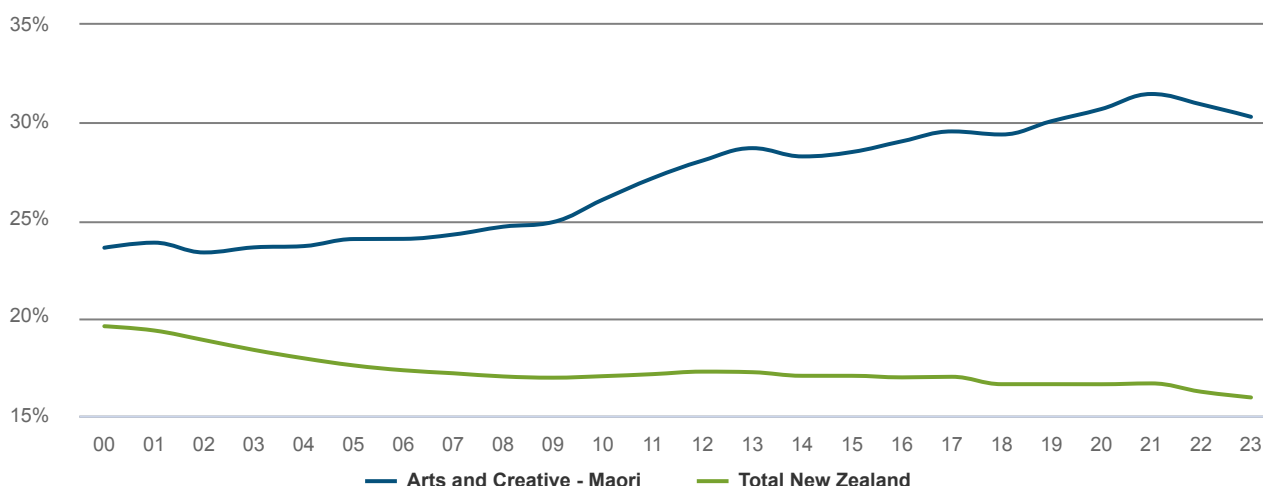
	Arts and Creative - Maori		Total economy	
	Employment	% of NZ	Employment	% of NZ
Auckland	4,987	44.0%	972,299	35.3%
Wellington Region	1,719	15.1%	322,579	11.7%
Canterbury Region	1,217	10.7%	358,948	13.0%
Waikato Region	691	6.1%	244,276	8.9%
Otago Region	594	5.2%	135,536	4.9%
Bay of Plenty Region	521	4.6%	170,833	6.2%
Manawatu-Whanganui Region	360	3.2%	125,521	4.6%
Northland Region	277	2.4%	82,169	3.0%
Hawke's Bay Region	254	2.2%	90,783	3.3%
Taranaki Region	177	1.6%	63,348	2.3%
Southland Region	129	1.1%	56,466	2.1%
Nelson Region	123	1.1%	31,525	1.1%
Tasman Region	88	0.8%	28,533	1.0%
Marlborough Region	81	0.7%	29,149	1.1%
Gisborne Region	75	0.7%	24,770	0.9%
West Coast Region	53	0.5%	16,866	0.6%
New Zealand	11,345		2,753,601	

Self-employment

Approximately one in six people in employment in New Zealand is self-employed. The rate of self-employment varies by sector and is influenced by things such as the types of roles and functions performed by each sector.

In 2023 there were 3,437 people working in the Arts and Creative - Maori sector in New Zealand who were self-employed. This equates to 30.3% of the Arts and Creative - Maori sector workforce and is greater than the overall self-employment rate in New Zealand of 15.9%. The self-employment rate in the Arts and Creative - Maori sector in New Zealand has increased by 5.6 percentage points over the past 15 years compared to overall self-employment rate in New Zealand which has decreased by 1.1 percentage points.

Figure 3: Self-employment rate in New Zealand



The following table shows the level of self-employment in the Arts and Creative - Maori sector in New Zealand for selected years. The Infometrics online Arts and Creative - Maori Sector Profile provides a complete time series of self-employment from 2000 onwards.

Table 3: Self employment in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori			Total New Zealand		
	Self-employed	% change	self-employment rate	Self-employed	% change	self-employment rate
2003	1,849	2.8%	23.6%	352,293	-0.2%	18.4%
2008	2,269	5.5%	24.7%	371,608	1.0%	17.0%
2013	2,804	4.3%	28.7%	378,776	0.9%	17.2%
2018	3,118	1.7%	29.4%	415,133	0.9%	16.6%
2019	3,226	3.5%	30.1%	424,339	2.2%	16.6%
2020	3,345	3.7%	30.7%	433,962	2.3%	16.6%
2021	3,378	1.0%	31.5%	435,951	0.5%	16.7%
2022	3,403	0.7%	30.9%	436,537	0.1%	16.2%
2023	3,437	1.0%	30.3%	438,754	0.5%	15.9%

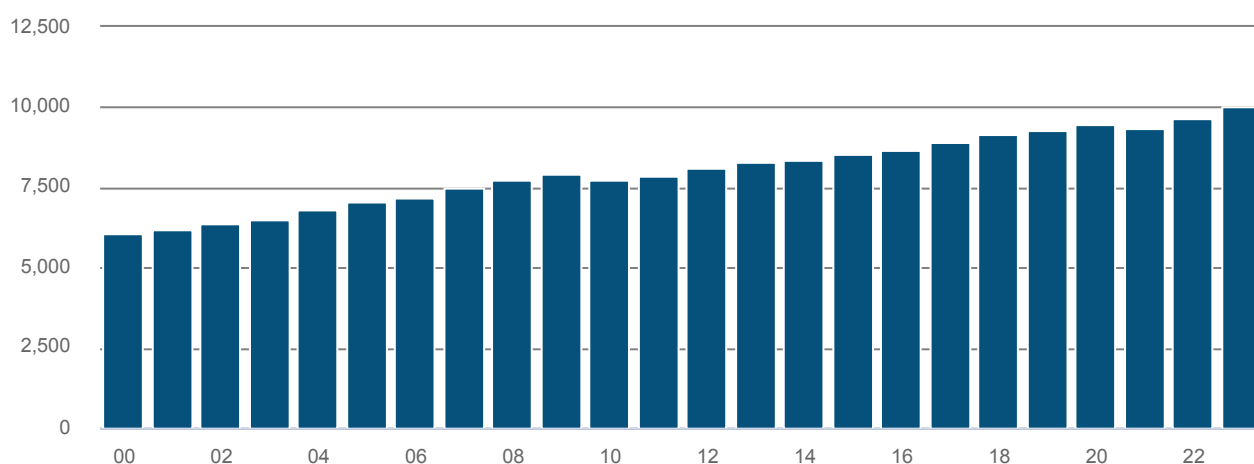
Full-time equivalent employment

Full-time equivalent (FTE) employment provides a way of looking at the number of filled jobs that takes into account the work-load of people into employment. FTE employment uses full and part-time employment to estimate the equivalent number of full-time employees. Two people who are employed part-time are measured as one FTE.

Using FTEs instead of employment to look at change over time can provide a more consistent comparison of labour resources used in employment over time.

In 2023 there were 9,998 FTEs in the Arts and Creative - Maori sector in New Zealand, up 1.7% pa from 15 years ago. Overall FTE employment in New Zealand grew by 1.8%pa over the same period.

Figure 4: FTE employment in the Arts and Creative - Maori sector in New Zealand



The following table shows FTE employment in the Arts and Creative - Maori sector in New Zealand for selected years. The Infometrics online Arts and Creative - Maori Sector Profile provides a complete time series of FTE employment from 2000 onwards.

Table 4: FTE employment in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori			Total New Zealand	
	FTEs	% of total	% change	FTEs	% change
2003	6,494	0.4%	2.0%	1,648,350	2.8%
2008	7,760	0.4%	3.9%	1,901,629	2.2%
2013	8,316	0.4%	2.5%	1,920,629	1.5%
2018	9,128	0.4%	2.5%	2,201,141	3.4%
2019	9,290	0.4%	1.8%	2,263,863	2.8%
2020	9,463	0.4%	1.9%	2,321,579	2.5%
2021	9,353	0.4%	-1.2%	2,329,679	0.3%
2022	9,629	0.4%	2.9%	2,403,991	3.2%
2023	9,998	0.4%	3.8%	2,480,023	3.2%

How many job openings are forecast in the sector?

Job openings typically arise for two key reasons - business expansion or contraction and people leaving their job. This section draws on Infometrics forecasts (revised in April 2020) to look at job openings arising from new job openings and replacement job openings. Both concepts, along with total job openings are discussed below.

New job openings are created when businesses are expanding and are positive about their economic outlook. Conversely job destruction occurs when businesses contract and have a negative perspective of their economic outlook.

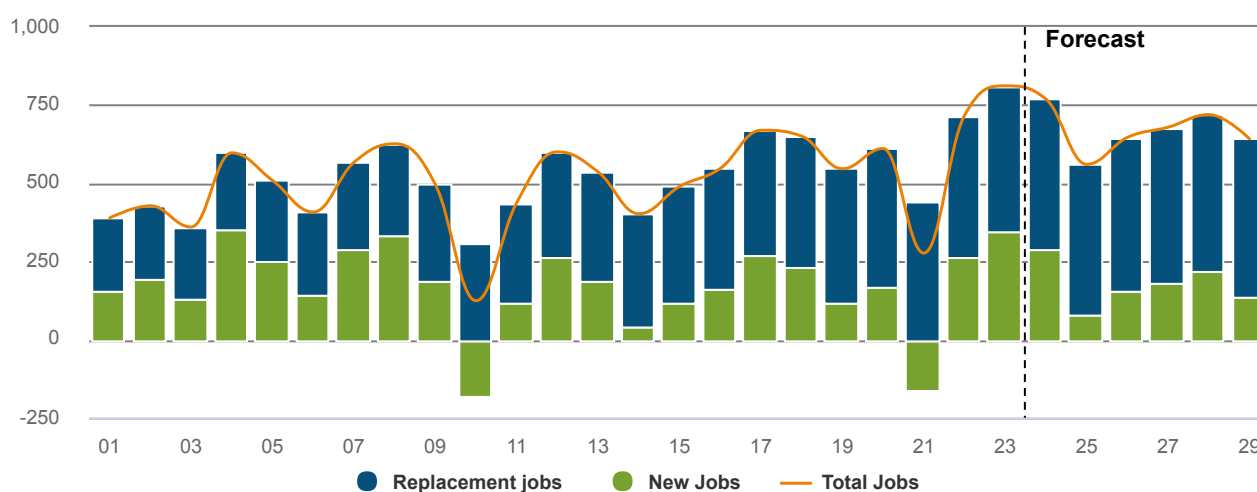
Replacement job openings provide an estimate of the net number of job openings in the sector that arise from individuals leaving an occupation (eg, retirement, or migration), net of jobs taken by individuals entering an occupation (eg, returning to the workforce from parental leave).

Total job openings estimate overall workers required in a sector as a result of job creation and replacement demand. They are the sum of new job openings and replacement job openings in a given year.

Total job openings

Infometrics forecasts show 4,017 total job openings in the Arts and Creative - Maori sector in New Zealand between 2024 and 2029. Of the forecast 4,017 total job openings, 1,059 are forecast to be new job openings while 2,958 are expected to be due to net replacement job openings.

Figure 5: Job openings in the Arts and Creative - Maori sector in New Zealand



The following table shows total job openings in the Arts and Creative - Maori sector in New Zealand for selected years. The Infometrics online Arts and Creative - Maori Sector Profile provides a complete time series of total job openings from 2001 onwards.

Table 5: Job openings in the Arts and Creative - Maori in New Zealand

	Arts and Creative - Maori				Total New Zealand	
	New jobs	Replacement jobs	TotalJobOpenings	% change	TotalJobOpenings	% change
2003	128	232	360	-15.9%	105,236	-6.7%
2008	331	295	626	10.5%	113,844	0.4%
2013	187	349	536	-10.7%	102,043	1.5%
2018	235	416	650	-2.9%	177,613	9.0%
2019	120	427	546	-16.0%	160,422	-9.7%
2020	171	441	611	11.8%	167,811	4.6%
2021	-162	439	277	-54.7%	116,684	-30.5%
2022	265	452	717	159%	187,709	60.9%
2023	344	468	811	13.1%	181,342	-3.4%
2024 (f)	288	481	769	-5.2%	195,036	7.6%
2025 (f)	77	483	561	-27.1%	132,991	-31.8%
2026 (f)	158	489	647	15.3%	160,618	20.8%
2027 (f)	184	495	679	5.0%	168,108	4.7%
2028 (f)	217	503	720	5.9%	175,751	4.5%
2029 (f)	135	507	642	-10.8%	156,126	-11.2%

Job openings by region

Forecast total job opening growth is likely to be stronger in some regions than others. Factors contributing to the variation in job opening growth by region include different economic drivers, population growth and age structures as well as resources available.

Auckland is expected to account for 42% of all total job openings in the Arts and Creative - Maori sector between 2024 and 2029.

Figure 6: Regional forecast job openings in the Arts and Creative - Maori sector, 2024-2029

The following table shows forecast regional total job openings in the Arts and Creative - Maori sector between 2024 and 2029.

Table 6: Forecast job openings by region in the Arts and Creative - Maori sector, 2024-2029

	Arts and Creative - Maori			Total economy		
	New Jobs	Replacement Jobs	Total job openings	New Jobs	Replacement Jobs	Total job openings
Auckland	427	1,262	1,688	88,995	259,892	348,886
Wellington Region	176	456	632	27,350	84,328	111,678
Canterbury Region	101	319	420	34,549	97,703	132,252
Waikato Region	73	184	258	21,275	66,031	87,305
Otago Region	83	163	246	16,622	37,962	54,584
Bay of Plenty Region	53	138	191	17,003	46,671	63,674
Manawatu-Whanganui Region	39	99	139	10,281	34,457	44,739
Northland Region	27	74	101	6,397	22,260	28,657
Hawke's Bay Region	24	69	92	7,579	25,115	32,693
Taranaki Region	12	46	58	2,781	16,515	19,296
Southland Region	9	35	44	3,226	15,532	18,759
Tasman Region	17	25	42	2,917	8,038	10,956
Nelson Region	3	31	35	2,101	8,528	10,629
Marlborough Region	11	23	34	2,962	8,284	11,247
Gisborne Region	3	20	22	1,260	6,699	7,959
West Coast Region	2	15	16	810	4,502	5,311
New Zealand	1,059	2,958	4,017	246,109	742,521	988,630

What is the contribution of the sector to GDP?

Gross Domestic Product (GDP) is a fundamental indicator of a country or sector's economic wellbeing. GDP measures the value added in an industry or sector from the production of goods and services. It essentially measures the value of the land, labour, and capital used in the production process.

Gross Domestic Product

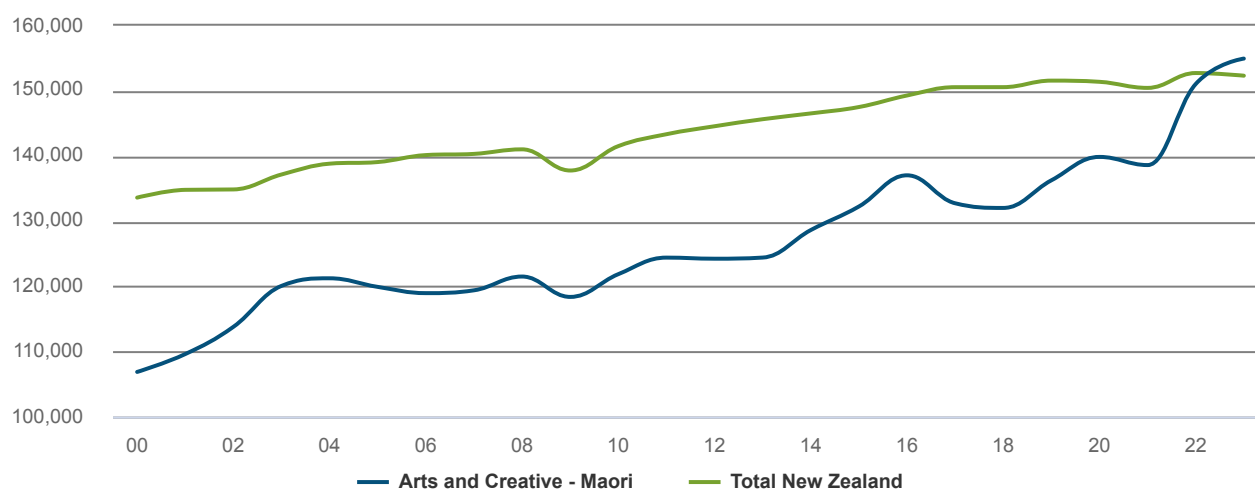
In 2023 the Arts and Creative - Maori sector contributed \$1,549m (in 2023 prices) to GDP in New Zealand. This equates to 0.4% of total New Zealand GDP. Key trends in the Arts and Creative - Maori sector in New Zealand include:

- GDP in 2023 was up 6.5% from a year earlier. Overall New Zealand GDP grew by 2.9% over the period.
- GDP grew by 4.1%pa over the last 10 years compared with overall New Zealand GDP growth of 3.1%pa.

We can express GDP as a proportion of FTE employment in the Arts and Creative - Maori sector to provide an estimate of labour productivity. Growth in labour productivity over time can imply an increase in efficiency and competitiveness.

In 2023 GDP per FTE in the Arts and Creative - Maori sector in New Zealand was \$154,958 compared to \$152,331 in the Total New Zealand. GDP per FTE growth in the Arts and Creative - Maori sector in the past 10 years has been stronger than overall GDP growth in New Zealand.

Figure 7: Productivity (GDP/FTE) in New Zealand



The following table shows GDP (in 2019 prices) and productivity (GDP/FTE) in the Arts and Creative - Maori sector in New Zealand for selected years. The Infometrics on-line Arts and Creative - Maori Sector Profile provides a complete time series of GDP from 2000 onwards.

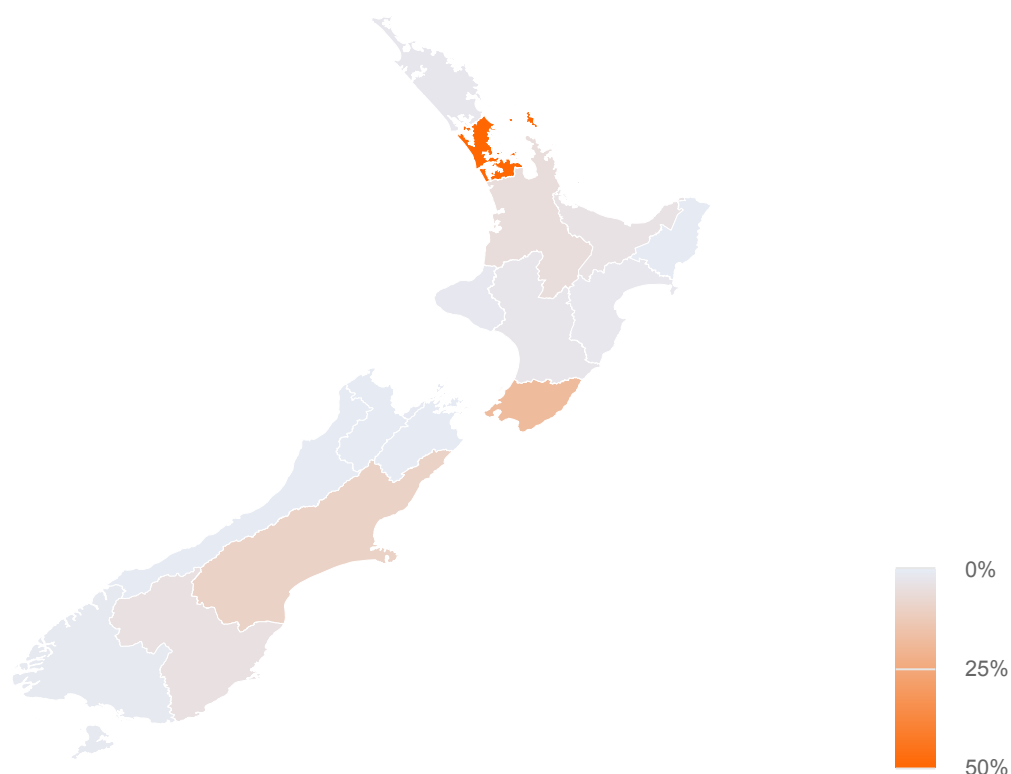
Table 7: GDP in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori			Total New Zealand		
	GDP (\$m)	% change	GDP/FTE	GDP (\$m)	% change	GDP/FTE
2003	\$780m	7.6%	\$120,062	\$226,091m	4.6%	\$137,162
2008	\$943m	5.8%	\$121,499	\$268,176m	2.7%	\$141,024
2013	\$1,035m	2.7%	\$124,412	\$279,741m	2.3%	\$145,651
2018	\$1,205m	1.9%	\$132,031	\$331,432m	3.4%	\$150,573
2019	\$1,266m	5.0%	\$136,272	\$343,143m	3.5%	\$151,574
2020	\$1,324m	4.6%	\$139,863	\$351,465m	2.4%	\$151,390
2021	\$1,296m	-2.0%	\$138,610	\$350,520m	-0.3%	\$150,458
2022	\$1,455m	12.2%	\$151,059	\$367,183m	4.8%	\$152,739
2023	\$1,549m	6.5%	\$154,958	\$377,784m	2.9%	\$152,331

Regional GDP

GDP varies by region due to a number of factors including the size of the workforce, resources available and technology used. In the Arts and Creative - Maori sector, Auckland accounted for 49.3% of overall GDP in 2023.

Figure 8: Regional share of GDP in the Arts and Creative - Maori sector, 2023



The following table shows regional distribution of GDP (in 2023 prices) in the Arts and Creative - Maori sector in 2023.

Table 8: GDP by region in the Arts and Creative - Maori sector, 2023

	Arts and Creative - Maori		Total economy	
	GDP	% of NZ	GDP	% of NZ
Auckland	\$764m	49.3%	\$143,042m	37.9%
Wellington Region	\$278m	17.9%	\$50,174m	13.3%
Canterbury Region	\$146m	9.4%	\$46,698m	12.4%
Waikato Region	\$80.6m	5.2%	\$32,789m	8.7%
Otago Region	\$62.6m	4.0%	\$16,727m	4.4%
Bay of Plenty Region	\$54.1m	3.5%	\$20,597m	5.5%
Manawatu-Whanganui Region	\$37.3m	2.4%	\$14,376m	3.8%
Northland Region	\$26.4m	1.7%	\$9,727m	2.6%
Hawke's Bay Region	\$25.7m	1.7%	\$10,321m	2.7%
Taranaki Region	\$19.8m	1.3%	\$10,174m	2.7%
Southland Region	\$14.3m	0.9%	\$7,619m	2.0%
Nelson Region	\$11.6m	0.7%	\$3,443m	0.9%
Tasman Region	\$8.17m	0.5%	\$3,115m	0.8%
Marlborough Region	\$7.72m	0.5%	\$3,848m	1.0%
Gisborne Region	\$7.28m	0.5%	\$2,541m	0.7%
West Coast Region	\$6.04m	0.4%	\$2,594m	0.7%
New Zealand	\$1,549m		\$377,784m	

How large are businesses in the sector?

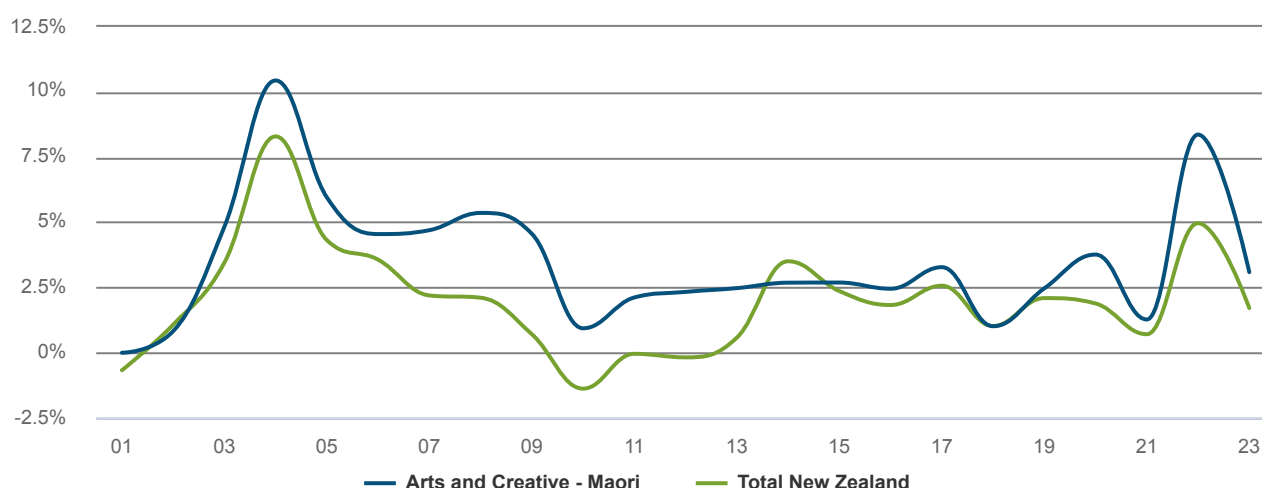
The majority of businesses in New Zealand are small to medium enterprises (SMEs). The number and size of business units in a sector is largely influenced by both the sector's direct economic exposure as well as the typical size of business units within that sector. This section looks the number and size of businesses in the Arts and Creative - Maori sector in New Zealand.

Growth in the number of businesses is an indicator of entrepreneurial activity. It indicates an environment in which entrepreneurs are prepared to take risks to start new ventures. For example, positive growth in the number of businesses in a sector reflects increased entrepreneurial activity and economic activity as entrepreneurs are prepared to take risks and start new ventures. Conversely, a decline in the number of businesses indicates that firms have a pessimistic future outlook.

In 2023 there were 3,467 businesses in the Arts and Creative - Maori sector in New Zealand. Key trends include:

- The number of businesses in the sector grew by 3.1% in 2023 compared with a growth of 1.7% in the total economy.
- Average business growth in the sector over the past 10 years was 3.1%pa. Over the same period the overall number of businesses in New Zealand grew by 2.3%pa.

Figure 9: Business growth in New Zealand



The following table shows the number of businesses in the Arts and Creative - Maori sector in New Zealand for selected years. The Infometrics on-line Arts and Creative - Maori Sector Profile provides a complete time series of businesses from 2000 onwards.

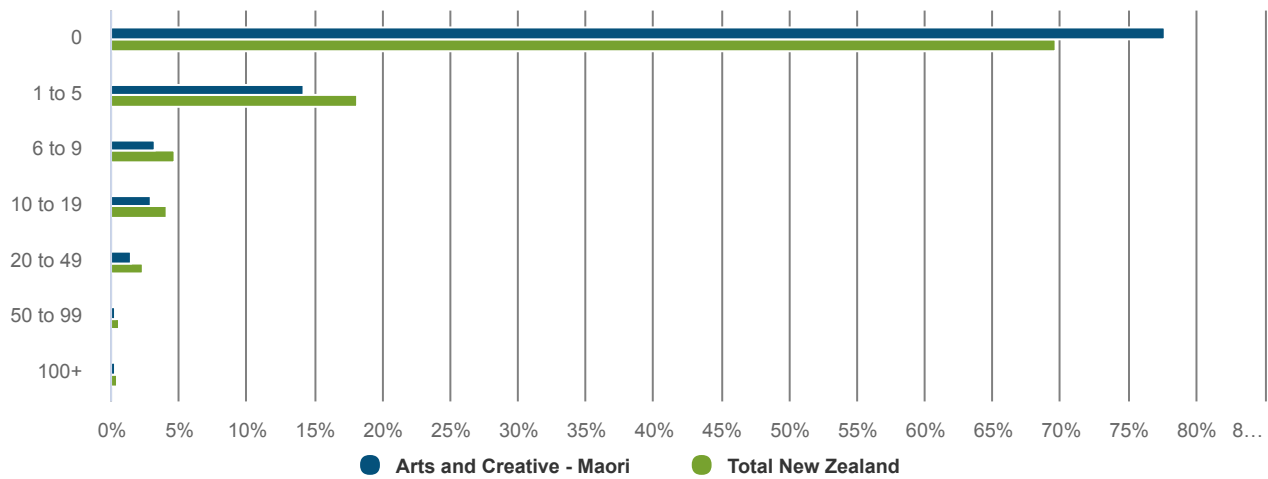
Table 9: Businesses in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori		Total New Zealand	
	Business Units	% change	Business Units	% change
2003	1,677	4.8%	421,848	3.5%
2008	2,264	5.4%	515,010	2.1%
2013	2,558	2.5%	513,225	0.6%
2018	2,883	1.0%	573,681	1.0%
2019	2,954	2.5%	585,678	2.1%
2020	3,065	3.8%	596,715	1.9%
2021	3,104	1.3%	600,924	0.7%
2022	3,364	8.4%	630,765	5.0%
2023	3,467	3.1%	641,529	1.7%

As well as being a contributor to the economic performance of a sector, the size of businesses is also considered to be an indicator of innovation with larger firms having the capacity and structures to better support innovation.

In 2023 SMEs accounted for 98.0% of all employment in the Arts and Creative - Maori sector in New Zealand.

Figure 10: Businesses by number of employees in New Zealand, 2023



Further detailed information about business size is available in the Infometrics online Arts and Creative - Maori Sector Profile.

OCCUPATIONS AND SKILLS

Occupations are a set of jobs whose main tasks are characterised by a high degree of similarity. Occupations provide the basis for understanding the broad skill level of the workforce. In this section we examine the current, historical and future occupation and skill makeup of workers in the Arts and Creative - Maori sector in New Zealand. To do this we draw on the Australian and New Zealand Standard Classification of Occupations (ANZSCO). An outline of ANZSCO is provided at the end of this report.

What is the broad occupational makeup of workers in the sector?

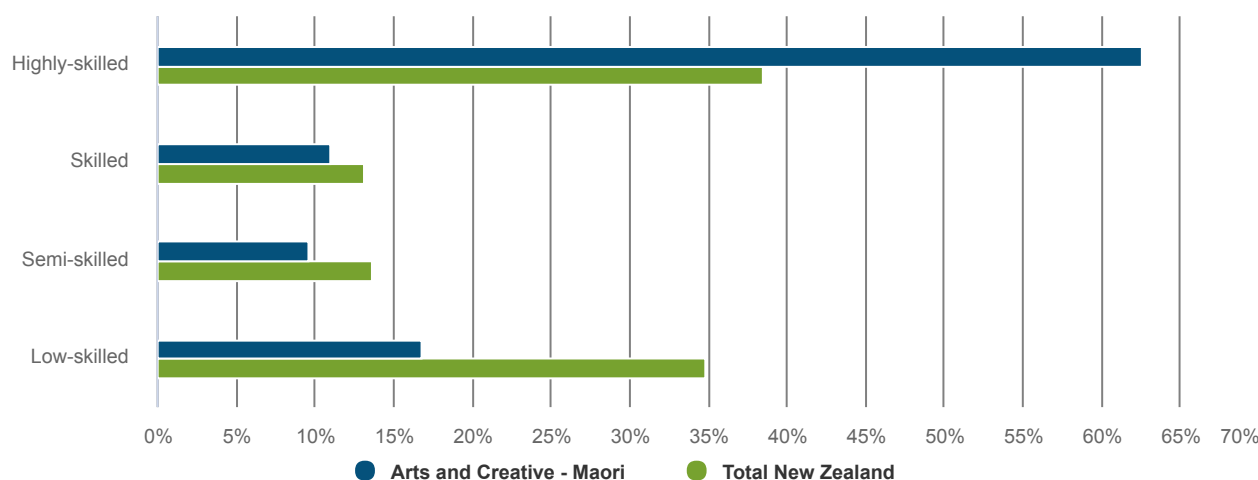
Within a sector, people can perform a diverse range of tasks as part of their job. Occupation categories group the main tasks associated with similar jobs to enable analysis, and can provide a good indication of the broad skill level required to perform these tasks.

Employment by skill level

Each occupation classification has an ideal skill level that industry have identified as desirable for people to competently carry out the tasks in their role. Grouping occupational classifications by desired skill level provides a high level overview of the the skills required across different sectors.

Approximately 62.6% of the Arts and Creative - Maori sector workforce in New Zealand were employed in Highly-skilled occupations in 2023. This is higher than for all occupations in New Zealand (38.4%).

Figure 11: Employment by skill level in New Zealand, 2023



The following table shows how Highly-skilled employment in the Arts and Creative - Maori sector in New Zealand has changed over time. The Infometrics online Arts and Creative - Maori Sector Profile provides a complete time series of employment by all broad skill levels from 2000 onwards.

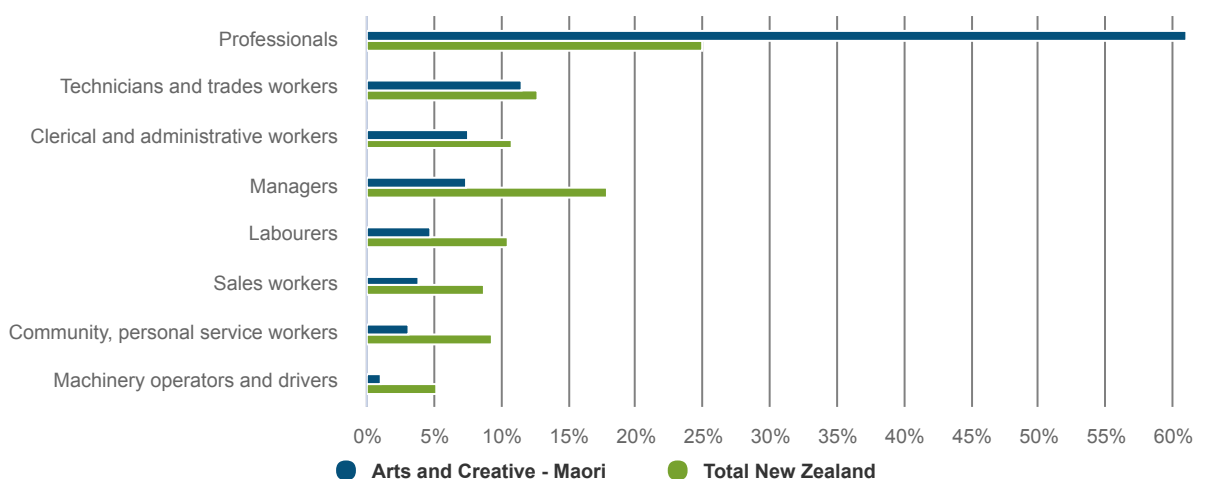
Table 10: Highly-skilled employment in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori			Total New Zealand		
	Employment	% change	% of total	Employment	% change	% of total
2003	4,091	3.0%	52.2%	627,758	4.0%	32.7%
2008	5,085	4.7%	55.3%	761,164	2.7%	34.8%
2013	5,707	3.2%	58.4%	816,244	2.1%	37.1%
2018	6,458	3.0%	60.9%	938,073	3.5%	37.5%
2019	6,584	2.0%	61.4%	962,006	2.6%	37.7%
2020	6,730	2.2%	61.7%	988,069	2.7%	37.8%
2021	6,703	-0.4%	62.4%	998,567	1.1%	38.1%
2022	6,895	2.9%	62.7%	1,031,121	3.3%	38.3%
2023	7,103	3.0%	62.6%	1,058,756	2.7%	38.4%

Employment by broad occupation

The ANZSCO classification of occupations is broken into five levels. The one-digit occupation classification groups employment into eight broad occupations. The largest broad (one-digit) occupation in the Arts and Creative - Maori sector in New Zealand in 2023 was Professionals, with 6,924 jobs (61.0% of all employment in the sector). In 2023 the Arts and Creative - Maori sector accounted for 24.9% of all Professionals employed in New Zealand.

Figure 12: Employment by broad occupation in New Zealand, 2023



There are 43 two-digit occupations in occupational classifications. The following table looks at employment in the key two-digit occupations in the Arts and Creative - Maori sector in 2023. Further details and timeseries data can be found in the Infometrics online Arts and Creative - Maori Sector Profile.

Table 11: Employment by 2-digit occupation in the Arts and Creative - Maori sector in New Zealand, 2023

	Arts and Creative - Maori		Total New Zealand	
	Employment	% of total	Employment	% of total
Arts & Media Professionals	2,911	25.7%	25,161	0.9%
Design, Engineering, Science Professionals	1,983	17.5%	99,510	3.6%
Business, HR & Marketing Professionals	1,113	9.8%	151,635	5.5%
Other Technicians & Trades Workers	843	7.4%	41,934	1.5%
Education Professionals	663	5.8%	154,132	5.6%
All Others	3,833	33.8%	2,281,229	82.8%
Total	11,345	100%	2,753,601	100%

What are the top detailed occupations in the sector?

At the most detailed level there are around 1,000 occupational classifications. These classifications capture the specific roles undertaken in the economy. Understanding the detailed occupational makeup of a sector provides valuable insights into the key roles and activities performed.

The top five occupations in the Arts and Creative - Maori sector in New Zealand accounted for 21.5% of overall employment in the sector in 2023. Employment in all five of the top five occupations grew between 2018 and 2023.

The following table provides a breakdown of occupational employment in the Arts and Creative - Maori sector in New Zealand in 2023. The Infometrics online Arts and Creative - Maori Sector Profile provides a complete time series of employment by detailed occupation from 2000 onwards.

Table 12: Employment by 6-digit occupation in the Arts and Creative - Maori sector in New Zealand, 2023

	Arts and Creative - Maori		Total New Zealand	
	Employment	% of total	Employment	% of total
Graphic Designer	680	6.0%	8,208	0.3%
Librarian	633	5.6%	5,946	0.2%
Architect	470	4.1%	7,722	0.3%
Painter (Visual Arts)	366	3.2%	3,385	0.1%
Library Assistant	286	2.5%	2,655	0.10%
All Others	8,910	78.5%	2,725,685	99.0%
Total	11,345	100%	2,753,601	100%

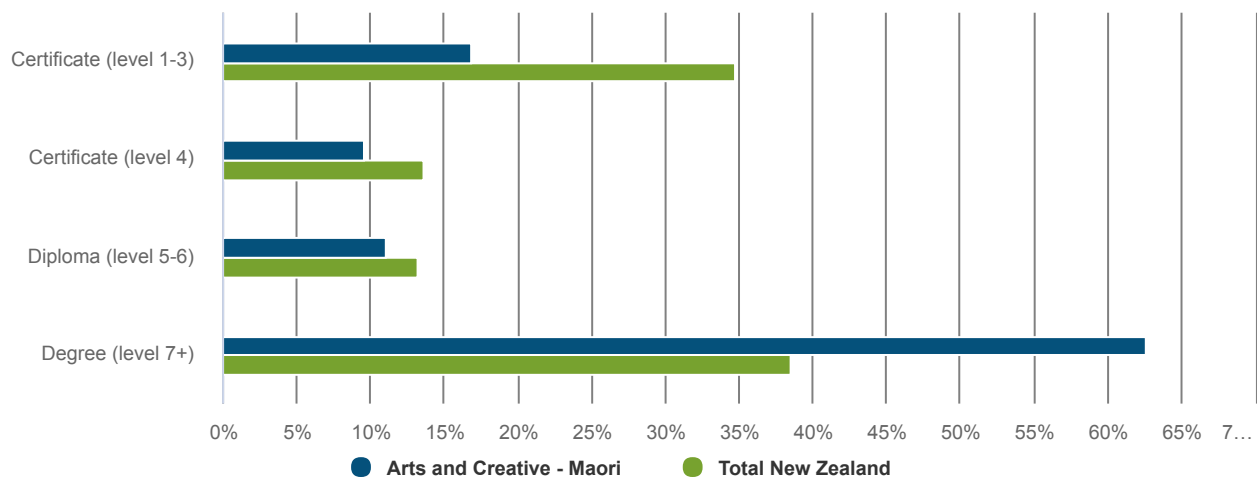
What qualifications do workers entering the sector need?

Gaining insights into the types of qualifications in demand in a sector and how they relate to skill levels can be useful in identifying and addressing skills gaps.

The Infometrics estimates of qualifications are derived from our occupational estimates by using information by industry (via occupational classifications) about the types of qualifications that are ideally required in each occupation. Our estimates therefore do not describe the educational profile of the sector's actual workforce and instead highlight the type of qualifications that are ideally required. For information about the qualification makeup of workers in the Arts and Creative - Maori sector refer to the Demographics section of this report.

Employers in the Arts and Creative - Maori in New Zealand ideally require people with a Degree (level 7+).

Figure 13: Qualifications of workers in New Zealand, 2023



The following table shows the ideal qualification level and field of study of workers in the Arts and Creative - Maori sector in New Zealand in 2023 is a Degree (level 7+) in Creative Arts. A full timeseries of the data in the table back to 2000 is available in the Infometrics online Arts and Creative - Maori Sector Profile.

Table 13: Employment by qualification required and field of study in the Arts and Creative - Maori sector in New Zealand, 2023

	Arts and Creative - Maori					Total New Zealand				
	Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total	Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total
Natural and Physical Sciences	20	7	16	317	360	17,277	2,287	10,259	82,854	112,676
Information Technology	116	6	21	187	331	43,870	2,511	10,677	41,360	98,418
Engineering and Related Technologies	200	306	170	334	1,010	155,989	141,825	44,338	109,602	451,754
Architecture and Building	68	253	272	591	1,184	52,531	79,136	19,040	28,459	179,166
Agriculture, Environmental and Related Studies	81	38	15	50	184	74,785	19,276	7,546	28,222	129,828
Health	156	21	80	162	420	66,808	12,486	37,208	149,105	265,606
Education	103	23	50	475	651	40,675	15,995	18,736	139,415	214,822
Management and Commerce	597	67	226	739	1,629	230,409	36,923	115,307	237,217	619,855
Society and Culture	219	34	79	1,571	1,904	110,421	15,561	41,006	179,279	346,268
Creative Arts	98	210	284	2,667	3,259	31,931	8,706	24,528	62,043	127,208
Food, Hospitality and Personal Services	251	122	31	10	413	132,682	40,149	33,969	1,199	207,999
Total	1,909	1,088	1,246	7,103	11,345	957,378	374,855	362,613	1,058,756	2,753,601

What jobs are forecast in the sector between 2024 and 2029?

Job openings typically arise for two key reasons - business expansion or contraction and people leaving their job. This section draws on Infometrics forecasts (revised in April 2020) to look at job openings arising from new job openings and replacement job openings. Both concepts, along with total job openings are discussed below.

New job openings are created when businesses are expanding and are positive about their economic outlook. Conversely job destruction occurs when businesses contract and have a negative perspective of their economic outlook.

Replacement job openings provide an estimate of the net number of job openings in the sector that arise from individuals leaving an occupation (eg, retirement, or migration), net of jobs taken by individuals entering an occupation (eg, returning to the workforce from parental leave).

Total job openings estimate overall workers required in a sector as a result of job creation and replacement demand. They are the sum of new job openings and replacement job openings in a given year.

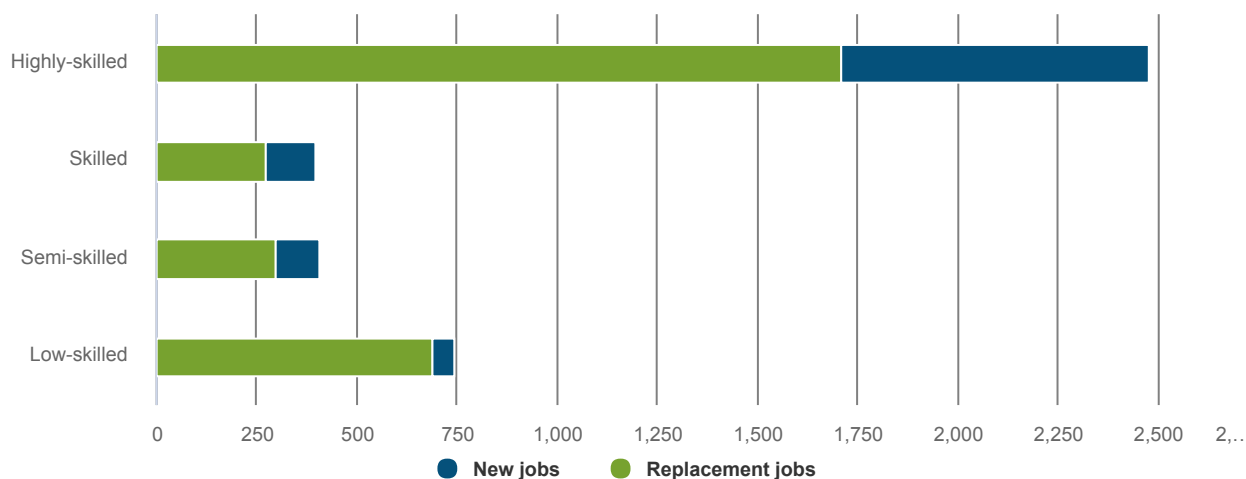
Infometrics estimates there will be 4,017 total job openings in the Arts and Creative - Maori sector between 2024 and 2029. Of these job openings:

- 26.4% are likely to be due to new job growth
- 73.6% are likely to be due to net replace demand.

Forecast job openings

Of the estimated 4,017 job openings between 2024 and 2029, Infometrics estimates that 61.6% are likely to be Highly-skilled jobs.

Figure 14: Forecast job openings by skill level in the Arts and Creative - Maori sector in New Zealand, 2024-2029

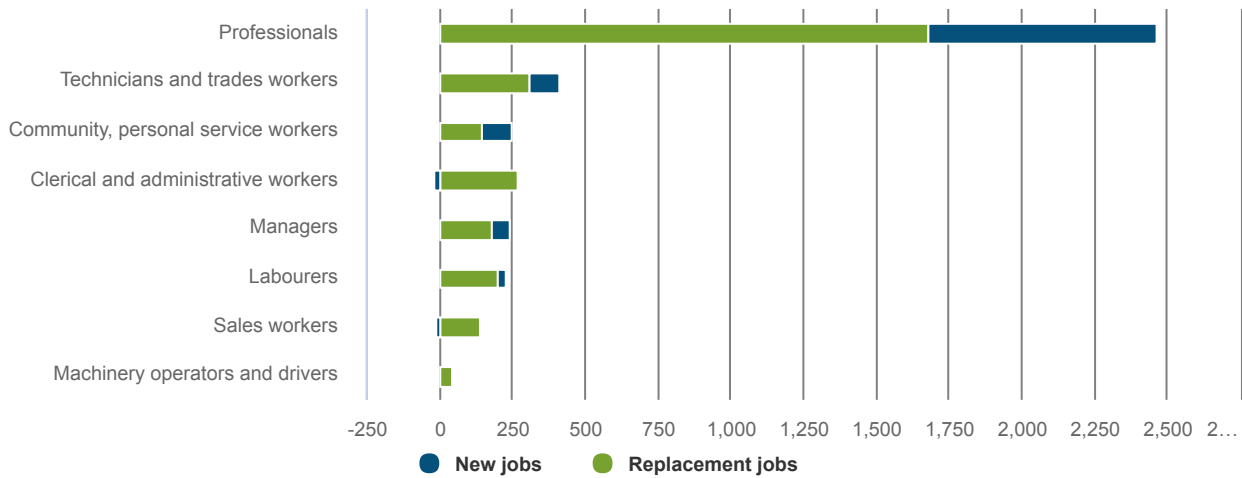


Job openings by broad occupation

The largest broad (level 1) occupation with job openings in the Arts and Creative - Maori sector between 2024 and 2029 is likely to be Professionals, accounting for 61.3% of job openings in the sector. The majority (68.2% of Professionals job openings are expected to be replacement job openings.

A detailed breakdown of annual forecast job openings by broad occupation in the Arts and Creative - Maori sector in New Zealand can be found in the Infometrics online Arts and Creative - Maori Sector Profile.

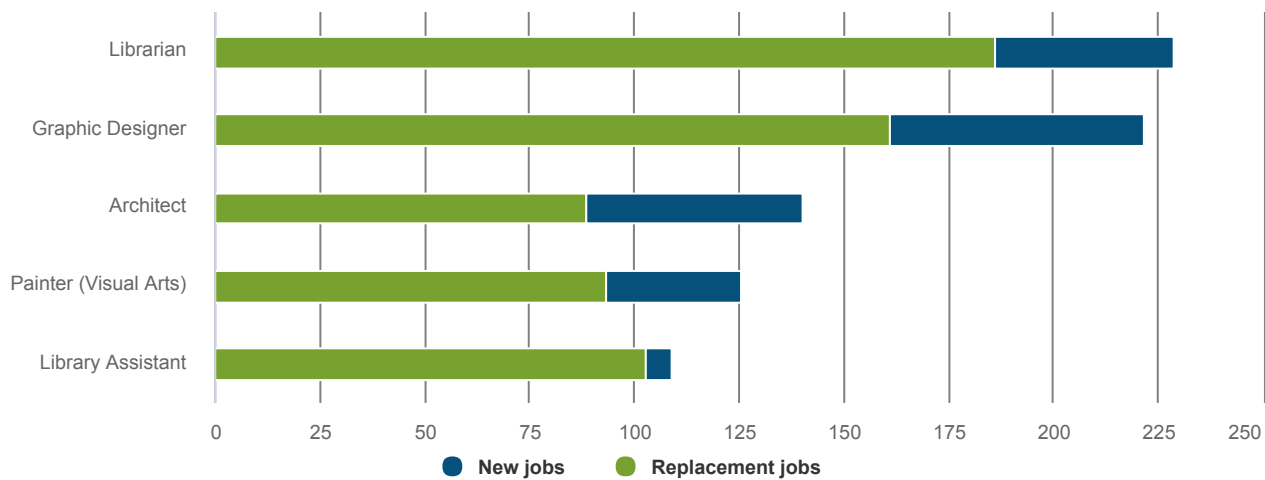
Figure 15: Forecast job openings by broad occupation in the Arts and Creative - Maori sector in New Zealand, 2024-2029



Forecast job openings by detailed occupation

The top five detailed occupations in the Arts and Creative - Maori sector in New Zealand are expected to account for 20.5% of all job openings between 2024 and 2029. Replacement job openings for these are expected to make up 15.7% of overall job openings in this sector.

Figure 16: Forecast job openings by detailed occupation in the Arts and Creative - Maori sector in New Zealand, 2024-2029



The following table shows forecast total job openings by detailed occupation in the Arts and Creative - Maori sector in New Zealand between 2024 and 2029. A detailed breakdown of annual forecast job openings by detailed occupation can be found in the Infometrics online Arts and Creative - Maori Sector Profile.

Table 14: Forecast employment and job openings in the Arts and Creative - Maori sector in New Zealand by detailed occupation, 2024-2029

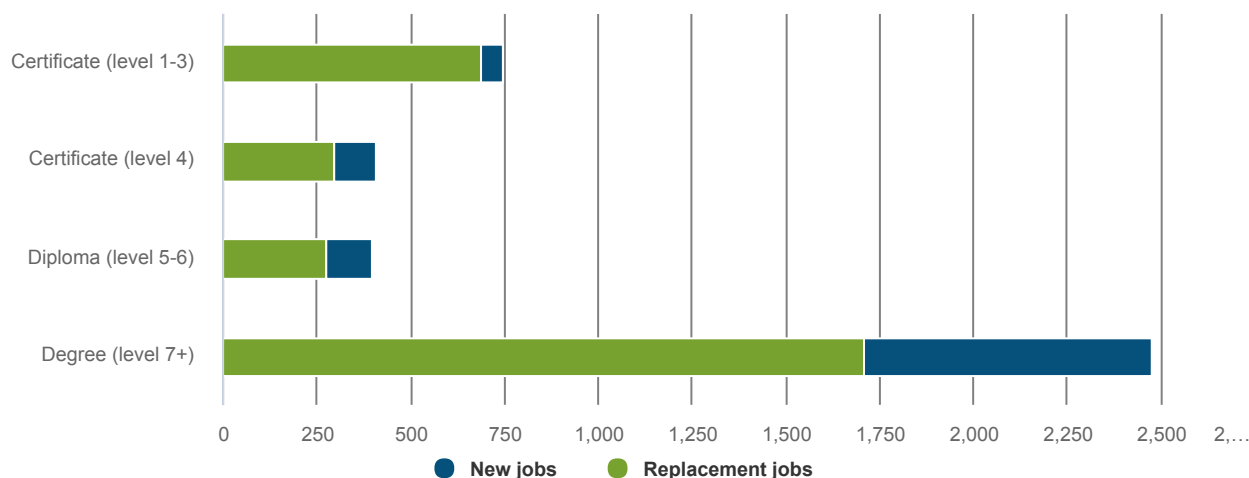
	Arts and Creative - Maori				Total New Zealand	
	Employment 2023	Employment 2029	New jobs	Replacement jobs	Total job openings	Total job openings
Graphic Designer	680	740	60	161	221	2,593
Librarian	633	676	42	186	229	2,088
Architect	470	522	52	88	140	2,312
Painter (Visual Arts)	366	398	32	93	125	1,185
Library Assistant	286	292	6	103	109	990
All others	8,910	9,776	866	2,332	3,198	876,849

What qualifications are workers in the sector likely to require in the future?

It is useful for learners, prospective employees and employers to know about the types of qualifications that are going to be in demand through job openings in their area of interest.

In the Arts and Creative - Maori sector in New Zealand there are likely to be 2,476 Degree (level 7+) between 2024 and 2029. Job openings at Degree (level 7+) account for 61.6% of all job openings in the sector over the period. Most of these job openings are expected to be replacement job openings (1,709 jobs).

Figure 17: Forecast job openings by qualification level in the Arts and Creative - Maori sector in New Zealand, 2024-2029



The following table shows the ideal qualifications and fields of study that employers are likely to require in the Arts and Creative - Maori sector in New Zealand between 2024 and 2029.

Table 15: Job openings by qualification required and field of study in the Arts and Creative - Maori sector in New Zealand, 2024-2029

	Arts and Creative - Maori					Total New Zealand				
	Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total	Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total
Natural and Physical Sciences	1	1	1	40	43	1,155	189	1,091	9,121	11,556
Information Technology	1	1	1	24	27	2,483	148	1,052	6,009	9,692
Engineering and Related Technologies	4	28	12	36	80	9,167	9,591	5,049	12,832	36,639
Architecture and Building	5	18	28	60	111	2,885	206	2,236	1,098	6,425
Agriculture, Environmental and Related Studies	4	4	1	6	15	4,334	1,490	819	1,416	8,059
Health	9	5	9	25	48	7,359	1,532	4,574	22,811	36,276
Education	2	7	4	64	78	2,811	2,247	1,918	14,834	21,811
Management and Commerce	1	12	21	58	92	10,944	3,023	10,714	21,167	45,849
Society and Culture	9	7	11	166	193	11,662	1,949	5,776	20,105	39,492
Creative Arts	1	8	32	287	329	1,895	412	2,662	6,001	10,969
Food, Hospitality and Personal Services	19	20	3	1	43	9,224	5,523	4,515	80	19,342
Total	58	110	123	767	1,059	63,919	26,310	40,406	115,473	246,109

DEMOGRAPHIC PROFILE OF WORKERS

A workforce that has a diverse makeup, experience, and opinions is likely to have the ability to make higher quality decisions. This section looks at diversity in the the Arts and Creative - Maori sector in New Zealand by examining the demographic makeup of the workforce in terms of age, ethnicity, gender, country of birth, hours worked and highest qualifications.

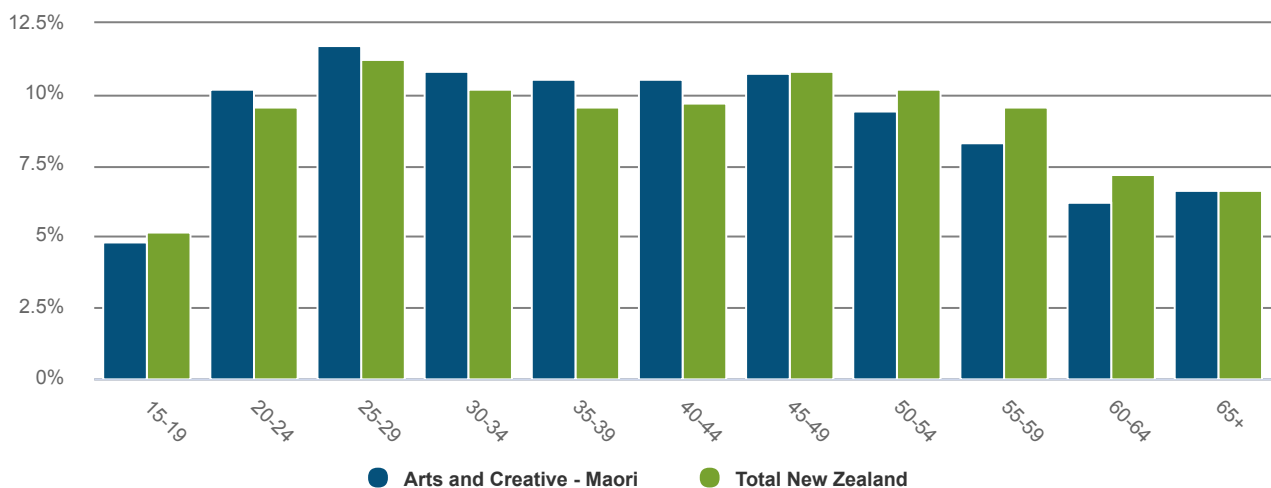
What is the age profile of workers in the sector?

The age profile of a sector can provide valuable insights into the current and future skill needs of a sector.

For example, a sector with an older age profile can indicate that the workforce is more likely to have fewer formal qualifications and more on-job experience than a sector with a more youthful age profile. An older age profile could also indicate a more immediate need to replace workers who may retire or are more likely to leave the workforce in the coming years.

Workers in the Arts and Creative - Maori sector in New Zealand have a slightly younger average age profile than all workers in New Zealand. In 2018 the average of Arts and Creative - Maori workers was 41.7 years, compared with 42.4 years for all workers in New Zealand.

Figure 18: Age of workers in New Zealand, 2018



The average age of workers in the Arts and Creative - Maori sector in New Zealand fell by 0.0 years between 2013 and 2018. Over the same period the overall average age of workers in New Zealand fell by 0.6 years.

The following table shows the age profile of workers in the Arts and Creative - Maori sector in New Zealand in 2013 and 2018.

Table 16: Employment by age in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori				Total New Zealand	
	Employment		Share Of Total		Share Of Total	
	2013	2018	2013	2018	2013	2018
15-19 Years	471	509	4.8%	4.8%	4.7%	5.1%
20-24 Years	992	1,085	10.2%	10.2%	9.0%	9.6%
25-29 Years	1,000	1,242	10.2%	11.7%	9.1%	11.2%
30-34 Years	1,037	1,149	10.6%	10.8%	9.2%	10.2%
35-39 Years	1,095	1,122	11.2%	10.6%	9.9%	9.6%
40-44 Years	1,176	1,121	12.0%	10.6%	11.8%	9.7%
45-49 Years	1,071	1,139	11.0%	10.7%	11.8%	10.8%
50-54 Years	973	997	10.0%	9.4%	11.7%	10.2%
55-59 Years	791	885	8.1%	8.3%	9.6%	9.6%
60-64 Years	622	656	6.4%	6.2%	7.4%	7.2%
65 years and over	546	704	5.6%	6.6%	5.8%	6.6%

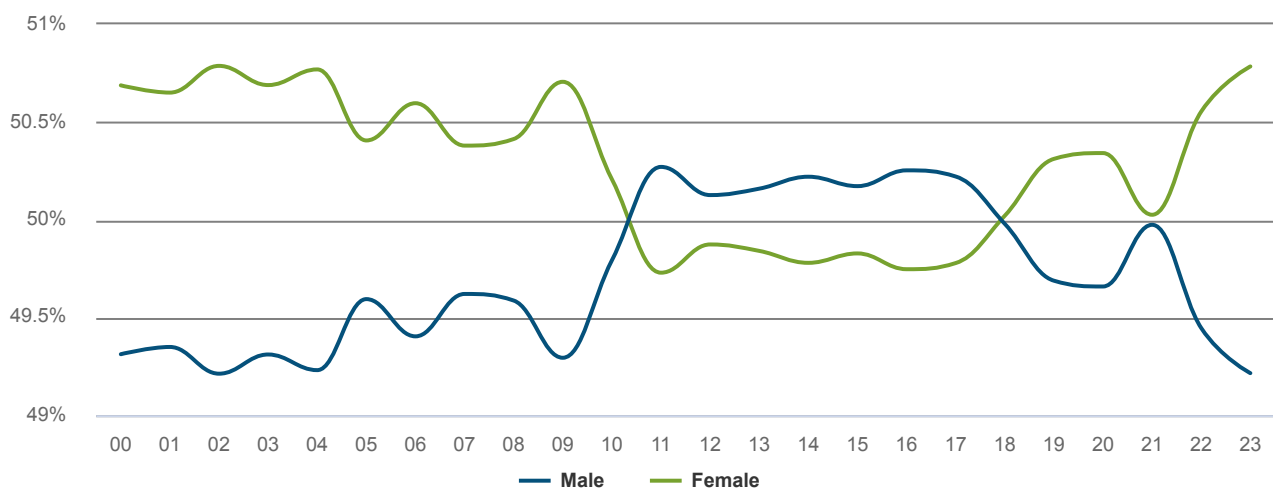
What is the gender balance of the sector?

Males and females can bring different approaches and insights to the workforce.

Share of employment by gender

This section looks at how the gender profile of the Arts and Creative - Maori sector in New Zealand has changed over time. The share of female employment in the Arts and Creative - Maori sector in New Zealand increased from 50.4% in 2008 to 50.8% in 2023.

Figure 19: Employment by gender in the Arts and Creative - Maori sector in New Zealand



The following table shows the gender makeup of workers in the Arts and Creative - Maori sector in New Zealand for selected years. A full timeseries of employment by gender in the Arts and Creative - Maori sector from 2000 is available in the Infometrics online Arts and Creative - Maori Sector Profile.

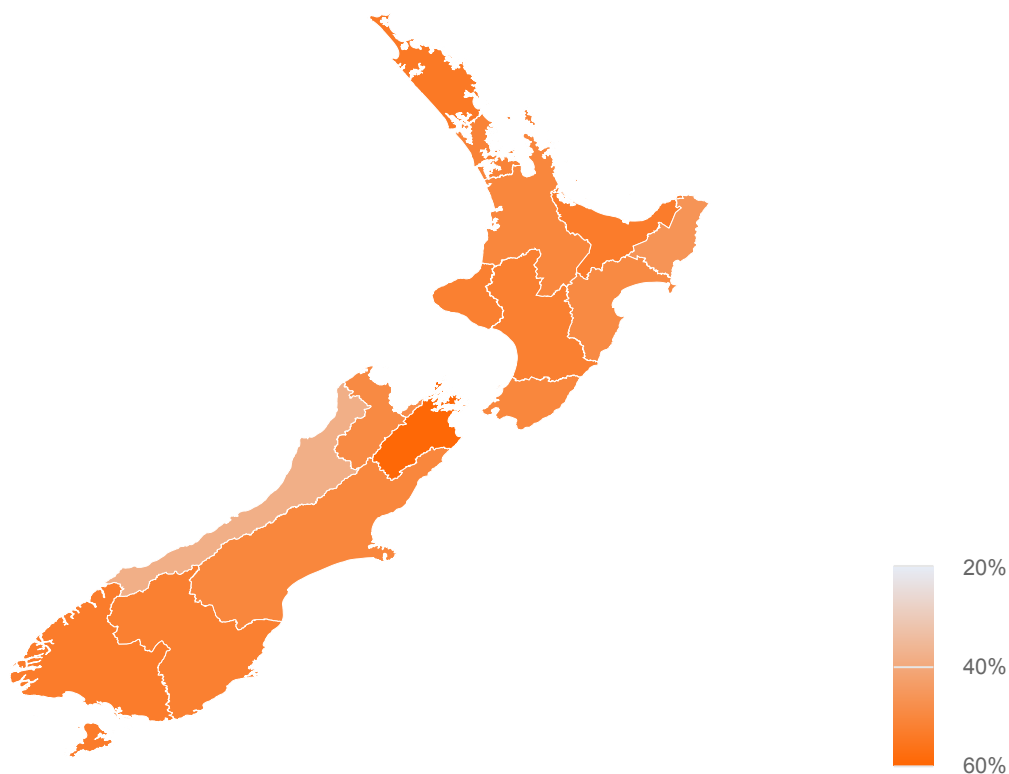
Table 17: Change in employment by gender in the Arts and Creative - Maori sector in New Zealand

	Arts and Creative - Maori				Total New Zealand	
	Employment		% share		% share	
	Male	Female	Male	Female	Male	Female
2003	3,861	3,969	49.3%	50.7%	54.0%	46.0%
2008	4,561	4,637	49.6%	50.4%	53.2%	46.8%
2013	4,903	4,872	50.2%	49.8%	52.3%	47.7%
2018	5,302	5,307	50.0%	50.0%	53.0%	47.0%
2019	5,331	5,398	49.7%	50.3%	52.7%	47.3%
2020	5,412	5,487	49.7%	50.3%	52.7%	47.3%
2021	5,366	5,371	50.0%	50.0%	52.9%	47.1%
2022	5,440	5,562	49.4%	50.6%	52.4%	47.6%
2023	5,584	5,762	49.2%	50.8%	52.2%	47.8%

Regional employment by gender

Female employment in the Arts and Creative - Maori sector is highest in Auckland. The following map shows how the percentage of female workers in the Arts and Creative - Maori sector varies by region.

Figure 20: Female share of employment in the Arts and Creative - Maori sector, 2023



The following table provides supporting information on the gender balance of workers in the Arts and Creative - Maori sector in 2023. Data showing the regional gender makeup of workers in the Arts and Creative - Maori sector from 2000 is available in the Infometrics online Arts and Creative - Maori Sector Profile.

Table 18: Regional employment by gender in the Arts and Creative - Maori sector, 2023

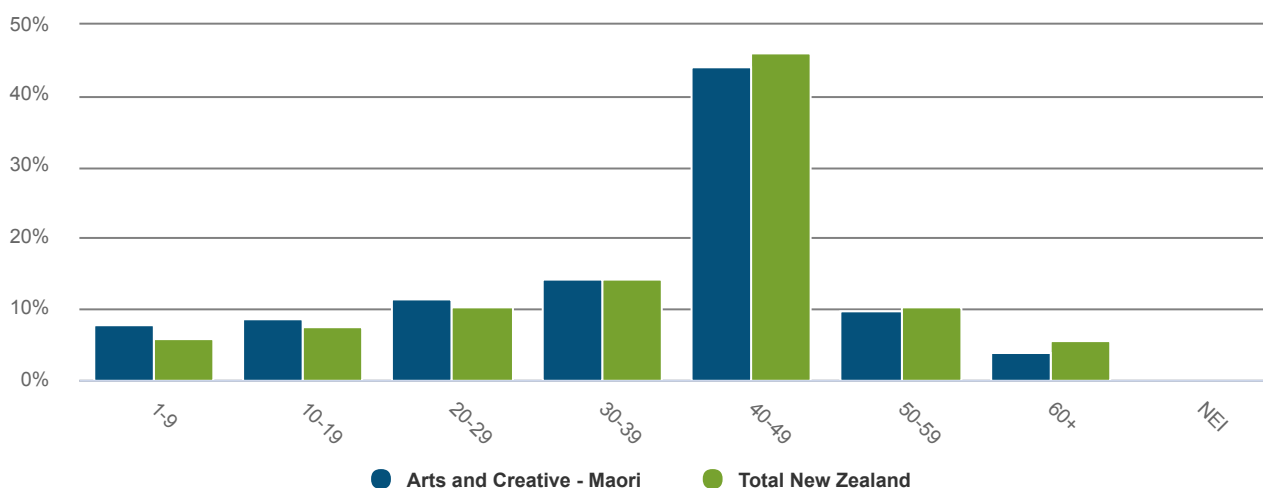
	Arts and Creative - Maori				Total economy	
	Employment		% share		% share	
	Male	Female	Male	Female	Male	Female
Auckland	2,456	2,531	49.0%	51.0%	52.0%	48.0%
Bay of Plenty Region	245	277	47.0%	53.0%	52.0%	48.0%
Canterbury Region	606	611	50.0%	50.0%	53.0%	47.0%
Gisborne Region	40	34	54.0%	46.0%	53.0%	47.0%
Hawke's Bay Region	131	124	51.0%	49.0%	52.0%	48.0%
Manawatu-Whanganui Region	172	189	48.0%	52.0%	53.0%	47.0%
Marlborough Region	33	48	41.0%	59.0%	54.0%	46.0%
Nelson Region	63	59	52.0%	48.0%	51.0%	49.0%
Northland Region	126	151	46.0%	54.0%	52.0%	48.0%
Otago Region	282	312	48.0%	52.0%	52.0%	48.0%
Southland Region	61	69	47.0%	53.0%	53.0%	47.0%
Taranaki Region	84	93	48.0%	52.0%	54.0%	46.0%
Tasman Region	45	43	51.0%	49.0%	54.0%	46.0%
Waikato Region	347	344	50.0%	50.0%	54.0%	46.0%
Wellington Region	862	857	50.0%	50.0%	51.0%	49.0%
West Coast Region	33	20	62.0%	38.0%	57.0%	43.0%

How many hours do people work in the sector?

The number of hours worked in a sector can be an indicator of worker attachment to the sector. Hours worked in a sector can provide an indication of how much employers could meet growth by utilising their existing workforce without taking on additional labour, and can also highlight how likely people in employment are likely to undertake training.

People may have more than one job, though in New Zealand most people have only one. Here we look at people whose main job is in the Arts and Creative - Maori sector.

Figure 21: Hours worked (main job) in New Zealand, 2018

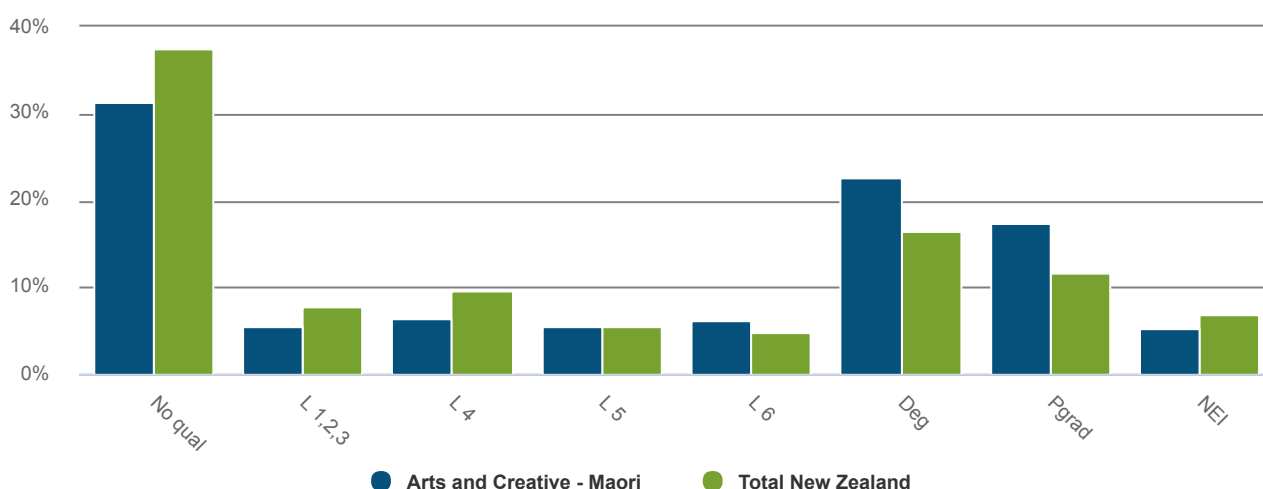


The Infometrics online Arts and Creative - Maori Sector Profile provides more information on hours worked in the sector for both main jobs and all jobs.

How qualified are workers in the sector?

Higher educational attainment, in terms of recognised qualifications, is associated with a range of positive outcomes, including better income and workplace productivity.

Figure 22: Highest qualification (post school) of workers in New Zealand, 2018



The Infometrics online Arts and Creative - Maori Sector Profile provides more information on school and post-school qualifications of workers in the sector.

DATA NOTES

Broad skill level

Highly-skilled occupations typically require a bachelor degree or higher qualification and include professionals such as accountants, teachers, and engineers, as well as most managers such as chief executives. This category is consistent with skill level one of the Australia New Zealand Standard Classification of Occupations (ANZSCO).

Skilled occupations typically require a level 5-6 Certificate or Diploma on the New Zealand Qualifications Framework (NZQF). The category includes some managers (such as retail managers) and technicians (such as architectural draftspersons, ICT support technicians and dental hygienists). This category is consistent with skill level two of the ANZSCO classification.

Semi-skilled occupations typically require an Level 4 qualification on the NZQF. The category includes tradespersons (such as motor mechanics), skilled service workers (such as firefighters), as well as skilled clerical and sales workers (such as legal secretaries and estate agents). This category is consistent with skill level three of the ANZSCO classification.

Low-skilled occupations typically require a Level 3 qualification or lower on the NZQF. The category includes a range of lower skilled occupations from general clerks, caregivers, and sales assistants, through to cleaners and labourers. This category is consistent with skill level three and four of the ANZSCO classification.

Businesses

Data on the number of businesses is sourced from the Business Demography statistics from Statistics New Zealand. Businesses are measured by geographic units, which represent a business location engaged in one, or predominantly one, kind of economic activity at a single physical site or base (eg. a factory, a farm, a shop, an office, etc). All non-trading or dormant enterprises, as well as enterprises outside of New Zealand, are excluded from business demography statistics.

A significant number of enterprises are recorded as having zero employment. Enterprises in the zero employee count size category may have:

- working owners who don't draw a wage from their business
- labour provided by other businesses or contractors
- business activity that requires no labour (eg. holding company).

Only businesses that are economically significant enterprises are included. To be regarded as economically significant they must meet at least one of the following criteria:

- annual expenses or sales subject to GST of more than \$30,000
- 12-month rolling mean employee count of greater than three
- part of a group of enterprises
- registered for GST and involved in agriculture or forestry
- over \$40,000 of income recorded in the IR10 annual tax return (this includes some units in residential property leasing and rental).

Demographic characteristics of people in employment

The demographic characteristics of workers in each sector are sourced from recent Stats NZ Population Censuses.

Employment in each sector is defined in terms of both industries and occupations using an industry-occupation employment matrix. After defining the sector on the matrix we sum employment across all occupations in each industry. We measure the demographic characteristics of employees in individual industries using data from recent Population Censuses and aggregate across industries to arrive at an estimate for the sector as a whole.

Employment

Industry employment numbers are from Infometrics' Regional Industry Occupation Employment Model (RIOEM). The model draws heavily on quarterly and annual Linked Employer Employee Data (LEED) published by Stats NZ. RIEM differs from Stats NZ's Business Demography data in that it is a quarterly series (BD is annual), and LEED includes both employees and the self-employed (BD only includes employees).

Employment is measured as an average of the four quarters making up each year. The unit of measurement is filled jobs.

Forecasts

The employment forecasts in this profile have been generated from the Infometrics Industry Model. This model produces forecasts of employment for 54 industries using a mix of principal component and regression techniques to link macroeconomic key indicators (eg inflation, interest rates, unemployment, the exchange rate, business profitability etc.) to prospects for each industry. A key aspect of this approach is that it produces an outlook for an industry that takes into account the recent performance of that industry, the impact of key influences on business performance in that industry, and is also constrained to ensure that the sum of production in all industries equals our forecasts of overall economic activity. That is, an industry can only grow faster than overall economic growth if past industrial performance and business conditions indicate that it will increase its share of national output.

Infometrics then decomposes these forecasts to a detailed industry level and uses industry-occupation employment matrices for New Zealand in order to measure total employment in a defined sector.

Full-time equivalent

Full-time equivalent (FTE) employment is a way of looking at employment that takes into account the work-load of people into employment. FTE employment is the sum of all full-time jobs plus half the number of part-time jobs. Two people who are employed part-time are measured as one FTE.

GDP

Gross domestic product (GDP) presented in this sector is estimated by Infometrics. GDP is measured in constant 2023 prices. GDP presented in constant prices is sometimes referred to as real GDP. By using constant prices we remove the distractionary effect of inflation, which enables us to meaningfully compare GDP from one year to the next.

GDP estimates are calculated by using earning and employment from Linked Employer Employee Data (LEED) to break down national production-based GDP published by Stats NZ.

A top down approach approach is used to break Statistics New Zealand National Production based GDP.

Job openings

New job openings are created when businesses are expanding and are positive about their economic outlook. Conversely job destruction occurs when businesses contract and have a negative perspective of their economic outlook.

Replacement job openings provides an estimate of the net number of job openings in the sector that arise from individuals leaving an occupation (eg, retirement, or migration), net of jobs taken by individuals entering an occupation (eg, returning to the workforce from parental leave).

Total job openings estimate overall workers required in a sector as a result of job creation and replacement demand. They are the sum of new job openings and replacement job openings in a given year.

Occupation definitions

Infometrics uses the Australian and New Zealand Standard Classification of Occupations (ANZSCO), which provides a basis for the standardised collection, analysis and dissemination of occupation data for Australia and New Zealand.

ANZSCO identifies a set of occupations covering all jobs in the labour market, defines these occupations according to their attributes and groups them based on their similarity into successively broader categories for statistical and other types of analysis. The individual objects classified in ANZSCO are jobs. In ANZSCO, occupations are organised into progressively larger groups based on their similarities in terms of both skill level and skill specialisation.

ANZSCO is structured into five hierarchical levels. These are around 1,000 occupations at "level 5" of the hierarchy, where occupations are defined in terms of sets of jobs which involve the performance of a common set of tasks. These occupations can be progressively grouped up through the classification hierarchy to come up with eight "level 1" occupations that are based on combinations of skill level and skill specialisation.

More information is available from ABS and Stats NZ: <https://www.abs.govt.nz/ANZSCO>.

Occupational employment

Occupation employment numbers are from Infometrics' Regional Industry Occupation Employment Model (RIOEM). Employment in each industry is converted to occupational employment using the relationship between industry and occupational employment observed in various Population Censuses. Population Censuses measure the occupational composition of employment in each industry and how this changes over time. Occupations conform to the categories used in the Australian New Zealand Standard Classification of Occupations (ANZSCO).

Self-employment

Self-employment rates are from Annual Linked Employer Employee Data (LEED).