

# Media and Broadcasting

in New Zealand



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## Infometrics

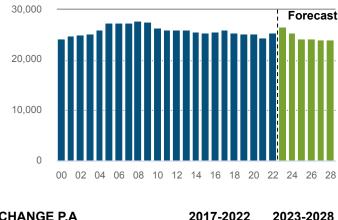
## Media and Broadcasting

#### **NEW ZEALAND**

#### How many people worked in the sector in 2022?

# **25,398** filled jobs

0.9% of 2,693,301 in New Zealand

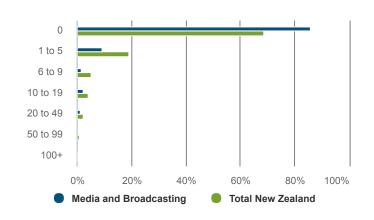


CHANGE P.A	2017-2022	2023-2028
Media and Broadcasting	-0.4%	-2.1%
Total New Zealand	2.1%	1.3%

# What regions do people work in?

#### How many businesses were in the sector in 2022?

#### **7,886 DUSINESS UNITS** 1.3% of 628,932 in New Zealand



#### What were the top 5 occupations in 2022?

# **6,903 jobs: top 5 occupations** 27.2% of total Media and Broadcasting in New

27.2% of total Media and Broadcasting in New Zealand

OCCUPATION	LEVEL 2022		ANGE 23-28 (F)
Newspaper or Periodical Editor	2,929	-0.06%	0.4%
Media Producer (excluding Video)	1,448	3.2%	-1.0%
Leaflet or Newspaper Deliverer	988	-6.9%	-5.1%
Camera Operator (Film, Television or Video)	900	2.9%	-1.1%
Journalists and Other Writers nec	639	0.2%	1.3%

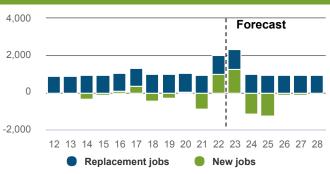
#### How many people are likely to be in new roles in the sector between now and 2028?

#### **4,487** Total job openings Total New Zealand: 953,314

#### Total job openings (2023-2028) consists of:

- New jobs: -1,373
- Net Replacement job openings: 5,860

New job openings come from growth in total employment. Replacement job openings estimate individuals leaving an occupation (eg, retirement), net of individuals entering an occupation (eg, returning from parental leave).





## **Media and Broadcasting**

#### NEW ZEALAND

#### How many people were self-employed in 2022?

# 11,336 Self-employed

Workers in the Media and Broadcasting are more likely to be self-employed than workers in New Zealand as a whole.

#### 44.6% self-employment rate Total New Zealand: 16.2%

How productive was the sector in 2022?

# **\$4,199m** GDP

1.2% of New Zealand GDP

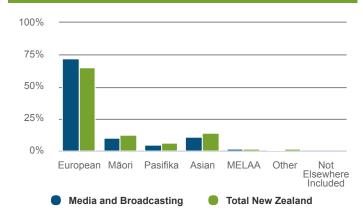
CHANGE P.A	2017-2022	2012-2022
Media and Broadcasting	5.3%	5.1%
Total New Zealand	2.9%	3.0%

# \$185,219 GDP/FTE

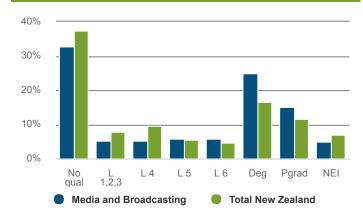
Total New Zealand: \$148,629

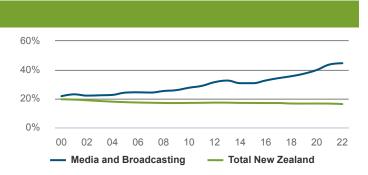
**5.3%** P.A. change from 2017-2022. Total New Zealand: 0.4%.

#### What was the ethnicity of workers in 2018?



#### What were the workers highest (post school) quals in 2018?



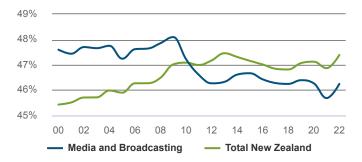


#### 15% 10% 5% 0% 15-19 25-29 35-39 45-49 55-59 65+ 0 Media and Broadcasting • Total New Zealand

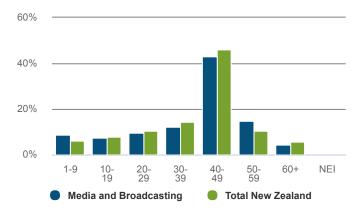
#### How many workers were female in 2022?

# **46.2%** female

#### Total New Zealand: 47.4%



How many hours were spent working in 2018?



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#### What was the age profile of workers in 2018?

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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 Media and Broadcasting sector in New Zealand as well forecast growth in employment.

# How many people work in the sector?

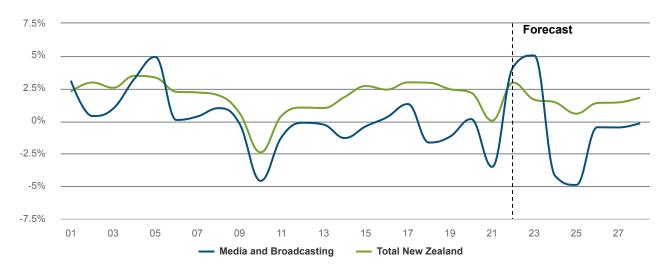
This section looks at the number of people employed in the Media and Broadcasting sector and how employment has changed over time. Employment is presented in terms of filled jobs as well as full-time equivalent employment. Forecast employment growth in filled jobs is also provided.

# **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 Media and Broadcasting sector in New Zealand averaged 25,398 in the year to March 2022. The Media and Broadcasting sector accounts for 0.9% of overall filled jobs in New Zealand. In terms of historical and forecast trends for the Media and Broadcasting sector in New Zealand:

- Employment grew by 4.1% in 2022 compared with overall growth of 3.0% in New Zealand.
- Employment growth averaged -0.3%pa over the past 10 years compared with overall growth of 2.1%pa on New Zealand.
- Employment is forecast to grow by -0.9%pa between 2022 and 2028. 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 Media and Broadcasting in New Zealand for selected historic and forecast years. The Infometrics on-line Media and Broadcasting Sector Profile provides a complete time series of annual employment from 2000 onwards.

#### Table 1: Employment in the Media and Broadcasting sector in New Zealand

	Media and Broadcasting			Total New Zealand		
	Employment	% of total	% change	Employment	% change	
2002	25,016	1.3%	0.4%	1,870,235	3.0%	
2007	27,477	1.3%	0.4%	2,143,285	2.2%	
2012	26,068	1.2%	-0.1%	2,177,782	1.0%	
2017	25,968	1.1%	1.3%	2,426,508	3.0%	
2018	25,540	1.0%	-1.6%	2,497,954	2.9%	
2019	25,235	1.0%	-1.2%	2,559,165	2.5%	
2020	25,275	1.0%	0.2%	2,615,079	2.2%	
2021	24,387	0.9%	-3.5%	2,615,922	0%	
2022	25,398	0.9%	4.1%	2,693,301	3.0%	
2023 (f)	26,678	1.0%	5.0%	2,737,655	1.6%	
2024 (f)	25,553	0.9%	-4.2%	2,776,887	1.4%	
2025 (f)	24,301	0.9%	-4.9%	2,792,754	0.6%	
2026 (f)	24,187	0.9%	-0.5%	2,831,423	1.4%	
2027 (f)	24,068	0.8%	-0.5%	2,871,953	1.4%	
2028 (f)	24,025	0.8%	-0.2%	2,923,375	1.8%	

# **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 Media and Broadcasting sector in 2022.

Figure 2: Regional employment in the Media and Broadcasting sector, 2022



0%

25%

50%

75%

The following table shows employment in the Media and Broadcasting sector by region in 2022.

#### Table 2: Employment by region in the Media and Broadcasting sector, 2022

	Media and Broad	casting	Total econo	my
	Employment	% of NZ	Employment	% of NZ
Auckland	13,103	51.6%	949,891	35.3%
Wellington Region	4,569	18.0%	313,066	11.6%
Canterbury Region	1,799	7.1%	348,920	13.0%
Otago Region	1,395	5.5%	132,014	4.9%
Waikato Region	974	3.8%	239,066	8.9%
Bay of Plenty Region	884	3.5%	168,041	6.2%
Manawatu-Whanganui Region	658	2.6%	125,270	4.7%
Northland Region	453	1.8%	80,874	3.0%
Hawke's Bay Region	350	1.4%	89,232	3.3%
Taranaki Region	239	0.9%	62,533	2.3%
Nelson Region	205	0.8%	30,886	1.1%
Gisborne Region	200	0.8%	24,650	0.9%
Southland Region	196	0.8%	55,624	2.1%
West Coast Region	138	0.5%	16,647	0.6%
Marlborough Region	122	0.5%	28,856	1.1%
Tasman Region	112	0.4%	27,732	1.0%
New Zealand	25,398		2,693,301	

## Self-employment

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

In 2022 there were 11,336 people working in the Media and Broadcasting sector in New Zealand who were self-employed. This equates to 44.6% of the Media and Broadcasting sector workforce and is greater than the overall self-employment rate in New Zealand of 16.2%. The self-employment rate in the Media and Broadcasting sector in New Zealand has increased by 20.4 percentage points over the past 15 years compared to overall self-employment rate in New Zealand which has decreased by 0.9 percentage points.

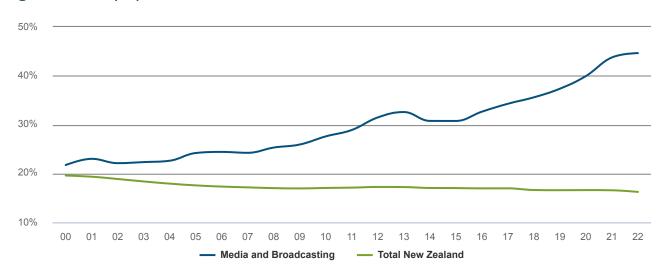


Figure 3: Self-employment rate in New Zealand

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

#### Table 3: Self employment in the Media and Broadcasting sector in New Zealand

	Media and Broadcasting			Total New Zealand		
	Self-employed	% change	self-employment rate	Self-employed	% change	self-employment rate
2002	5,532	-3.5%	22.1%	352,944	0.5%	18.9%
2007	6,658	-0.4%	24.2%	367,754	1.2%	17.2%
2012	8,206	8.7%	31.5%	375,547	1.9%	17.2%
2017	8,900	6.3%	34.3%	411,557	3.0%	17.0%
2018	9,090	2.1%	35.6%	415,133	0.9%	16.6%
2019	9,427	3.7%	37.4%	424,339	2.2%	16.6%
2020	10,097	7.1%	39.9%	434,070	2.3%	16.6%
2021	10,670	5.7%	43.8%	433,221	-0.2%	16.6%
2022	11,336	6.2%	44.6%	437,093	0.9%	16.2%

# 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 2022 there were 22,668 FTEs in the Media and Broadcasting sector in New Zealand, down 0.2% pa from 15 years ago. Overall FTE employment in New Zealand grew by 1.7%pa over the same period.

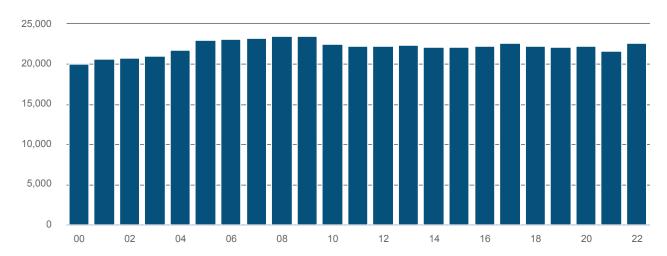


Figure 4: FTE employment in the Media and Broadcasting sector in New Zealand

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

#### Table 4: FTE employment in the Media and Broadcasting sector in New Zealand

	Media and Broadcasting			Total New Zealand		
	FTEs	% of total	% change	FTEs	% change	
2002	20,809	1.3%	0.7%	1,602,510	3.3%	
2007	23,259	1.2%	0.8%	1,862,697	2.6%	
2012	22,306	1.2%	0.3%	1,893,335	1.2%	
2017	22,587	1.1%	1.3%	2,132,808	2.8%	
2018	22,285	1.0%	-1.3%	2,200,247	3.2%	
2019	22,198	1.0%	-0.4%	2,268,122	3.1%	
2020	22,327	1.0%	0.6%	2,323,664	2.4%	
2021	21,677	0.9%	-2.9%	2,327,823	0.2%	
2022	22,668	0.9%	4.6%	2,406,727	3.4%	

# 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.

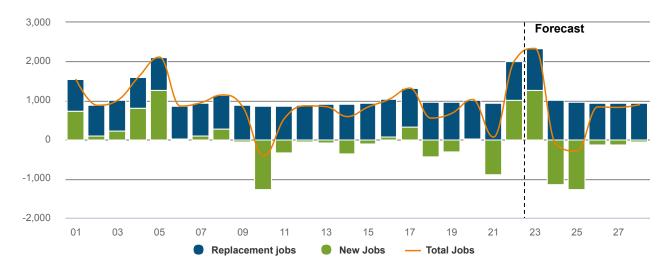
**New job openings** are created when businesses are expanding and are positive about their economic outlook. Conversely job destruction occurs when businesses contract and have a negative perspective of their economic outlook.

**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 4,487 total job openings in the Media and Broadcasting sector in New Zealand between 2023 and 2028. Of the forecast 4,487 total job openings, -1,373 are forecast to be new job openings while 5,860 are expected to be due to net replacement job openings.



#### Figure 5: Job openings in the Media and Broadcasting sector in New Zealand

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

## Table 5: Job openings in the Media and Broadcasting in New Zealand

		Media and Br		Total New Zeala	and	
	New jobs	Replacement jobs	TotalJobOpenings	% change	TotalJobOpenings	% change
2002	97	786	882	-42.8%	111,026	14.5%
2007	97	852	949	10.3%	114,234	2.3%
2012	-33	900	867	56.5%	99,390	19.5%
2017	335	985	1,320	27.8%	166,131	13.0%
2018	-428	981	553	-58.1%	172,328	3.7%
2019	-304	979	674	21.8%	166,462	-3.4%
2020	39	990	1,029	52.6%	165,395	-0.6%
2021	-888	956	68	-93.4%	112,186	-32.2%
2022	1,012	1,001	2,013	2,866%	192,832	71.9%
2023 (f)	1,280	1,054	2,334	16.0%	161,711	-16.1%
2024 (f)	-1,125	1,010	-115	-105%	158,170	-2.2%
2025 (f)	-1,252	960	-292	153%	135,337	-14.4%
2026 (f)	-115	952	838	-387%	159,557	17.9%
2027 (f)	-118	944	826	-1.4%	162,871	2.1%
2028 (f)	-43	939	897	8.5%	175,669	7.9%

# 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 70% of all total job openings in the Media and Broadcasting sector between 2023 and 2028.

Figure 6: Regional forecast job openings in the Media and Broadcasting sector, 2023-2028



The following table shows shows forecast regional total job openings in the Media and Broadcasting sector between 2023 and 2028.

#### Table 6: Forecast job openings by region in the Media and Broadcasting sector, 2023-2028

	Media and Broadcasting			Total economy		
	New Jobs	Replacement Jobs	Total job openings	New Jobs	Replacement Jobs	Total job openings
Auckland	104	3,053	3,157	80,663	252,929	333,591
Wellington Region	-337	1,057	720	28,506	82,109	110,616
Canterbury Region	-224	414	190	34,115	94,631	128,746
Otago Region	-177	330	154	16,491	37,006	53,497
Waikato Region	-105	217	112	17,892	63,874	81,765
Bay of Plenty Region	-110	205	95	16,456	45,900	62,357
Manawatu-Whanganui Region	-103	149	46	9,249	34,076	43,325
Hawke's Bay Region	-43	80	37	6,736	24,404	31,140
Northland Region	-73	97	23	5,397	21,620	27,017
Taranaki Region	-47	50	4	2,581	16,266	18,847
Tasman Region	-20	23	3	2,139	7,659	9,798
Gisborne Region	-45	46	1	1,545	6,709	8,254
Nelson Region	-49	43	-5	2,101	8,274	10,375
Marlborough Region	-32	26	-6	2,508	8,091	10,599
Southland Region	-54	41	-13	2,957	15,258	18,214
West Coast Region	-59	29	-31	738	4,435	5,173
New Zealand	-1,373	5,860	4,487	230,074	723,241	953,314

# 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.

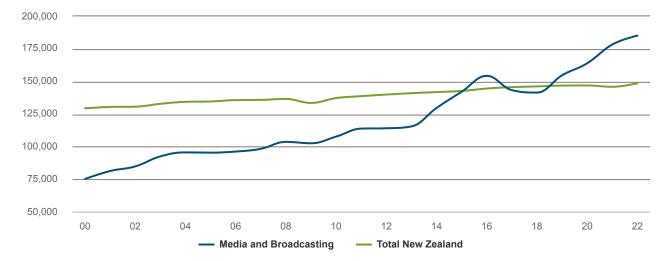
## **Gross Domestic Product**

In 2022 the Media and Broadcasting sector contributed \$4,199m (in 2022 prices) to GDP in New Zealand. This equates to 1.2% of total New Zealand GDP. Key trends in the Media and Broadcasting sector in New Zealand include:

- GDP in 2022 was up 8.6% from a year earlier. Overall New Zealand GDP grew by 5.3% over the period.
- GDP grew by 5.1%pa over the last 10 years compared with overall New Zealand GDP growth of 3.0%pa.

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

In 2022 GDP per FTE in the Media and Broadcasting sector in New Zealand was \$185,219 compared to \$148,629 in the Total New Zealand. GDP per FTE growth in the Media and Broadcasting 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 Media and Broadcasting sector in New Zealand for selected years. The Infometrics on-line Media and Broadcasting Sector Profile provides a complete time series of GDP from 2000 onwards.

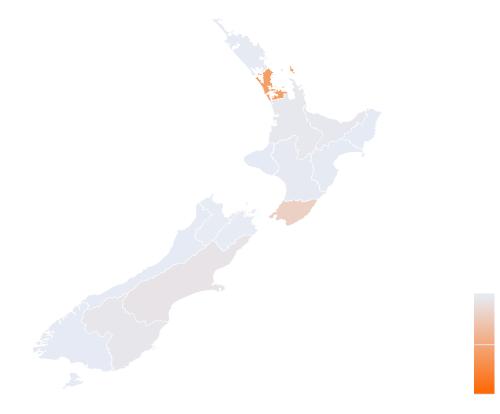
	Media and Broadcasting			Total New Zealand		
	GDP (\$m)	% change	GDP/FTE	GDP (\$m)	% change	GDP/FTE
2002	\$1,766m	5.0%	\$84,855	\$209,421m	3.5%	\$130,683
2007	\$2,287m	3.0%	\$98,332	\$253,115m	2.7%	\$135,886
2012	\$2,545m	0.5%	\$114,108	\$265,038m	2.1%	\$139,985
2017	\$3,239m	-5.9%	\$143,385	\$310,729m	3.6%	\$145,690
2018	\$3,153m	-2.6%	\$141,507	\$321,755m	3.5%	\$146,236
2019	\$3,436m	9.0%	\$154,780	\$333,151m	3.5%	\$146,884
2020	\$3,662m	6.6%	\$164,007	\$341,493m	2.5%	\$146,963
2021	\$3,867m	5.6%	\$178,410	\$339,713m	-0.5%	\$145,936
2022	\$4,199m	8.6%	\$185,219	\$357,710m	5.3%	\$148,629

#### Table 7: GDP in the Media and Broadcasting sector in New Zealand

# **Regional GDP**

GDP by varies by region due to a number of factors including the size of the workforce, resources available and technology used. In the Media and Broadcasting sector, Auckland accounted for 57.5% of overall GDP in 2022.

#### Figure 8: Regional share of GDP in the Media and Broadcasting sector, 2022



0%

50%

100%

The following table shows regional distribution of GDP (in 2022 prices) in the Media and Broadcasting sector in 2022.

#### Table 8: GDP by region in the Media and Broadcasting sector, 2022

	Media and Br	oadcasting	Total econ	omy
	GDP	% of NZ	GDP	% of NZ
Auckland	\$2,416m	57.5%	\$133,749m	37.4%
Wellington Region	\$860m	20.5%	\$47,950m	13.4%
Canterbury Region	\$246m	5.9%	\$44,220m	12.4%
Otago Region	\$164m	3.9%	\$15,901m	4.4%
Waikato Region	\$123m	2.9%	\$31,004m	8.7%
Bay of Plenty Region	\$97.0m	2.3%	\$19,590m	5.5%
Manawatu-Whanganui Region	\$75.9m	1.8%	\$13,988m	3.9%
Northland Region	\$46.9m	1.1%	\$9,485m	2.7%
Hawke's Bay Region	\$36.6m	0.9%	\$9,819m	2.7%
Taranaki Region	\$25.4m	0.6%	\$9,984m	2.8%
Southland Region	\$24.8m	0.6%	\$7,319m	2.0%
Gisborne Region	\$21.6m	0.5%	\$2,461m	0.7%
Nelson Region	\$20.6m	0.5%	\$3,234m	0.9%
West Coast Region	\$16.2m	0.4%	\$2,373m	0.7%
Marlborough Region	\$12.8m	0.3%	\$3,708m	1.0%
Tasman Region	\$11.1m	0.3%	\$2,925m	0.8%
New Zealand	\$4,199m		\$357,710m	

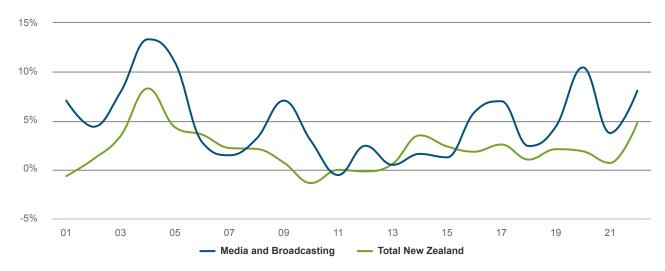
# How large are businesses in the sector?

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 Media and Broadcasting 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 2022 there were 7,886 businesses in the Media and Broadcasting sector in New Zealand. Key trends include:

- The number of businesses in the sector grew by 8.1% in 2022 compared with a growth of 4.8% in the total economy.
- Average business growth in the sector over the past 10 years was 4.5%pa. Over the same period the overall number of businesses in New Zealand grew by 2.1%pa.



#### Figure 9: Business growth in New Zealand

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

#### Table 9: Businesses in the Media and Broadcasting sector in New Zealand

	Media and Broadcasti	ng	Total New Zealand				
	<b>Business Units</b>	% change	<b>Business Units</b>	% change			
2002	3,108	4.4%	407,742	1.1%			
2007	4,398	1.5%	504,372	2.2%			
2012	5,092	2.4%	510,243	-0.2%			
2017	5,959	7.0%	567,786	2.6%			
2018	6,102	2.4%	573,564	1.0%			
2019	6,370	4.4%	585,480	2.1%			
2020	7,035	10.4%	596,385	1.9%			
2021	7,298	3.7%	600,396	0.7%			
2022	7,886	8.1%	628,932	4.8%			

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 2022 SMEs accounted for 98.6% of all employment in the Media and Broadcasting sector in New Zealand.

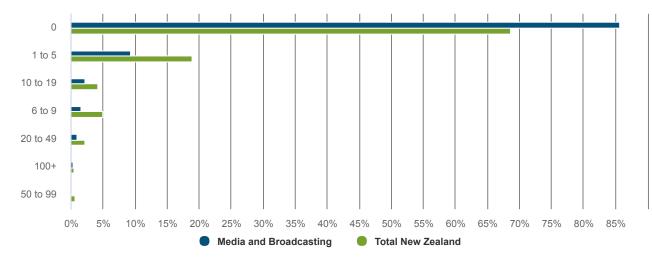


Figure 10: Businesses by number of employees in New Zealand, 2022

Further detailed information about business size is available in the Infometrics online Media and Broadcasting 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 Media and Broadcasting 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.

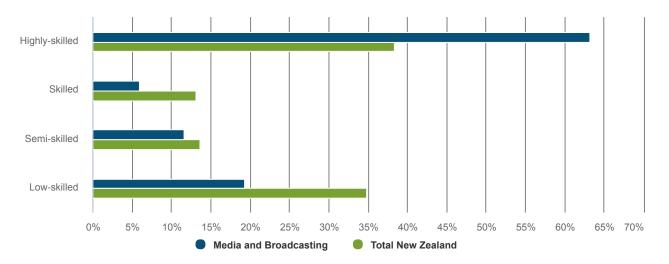
# What is the broad occupational makeup of workers in the sector?

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 63.2% of the Media and Broadcasting sector workforce in New Zealand were employed in Highly-skilled occupations in 2022. This is higher than for all occupations in New Zealand (38.4%).



#### Figure 11: Employment by skill level in New Zealand, 2022

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

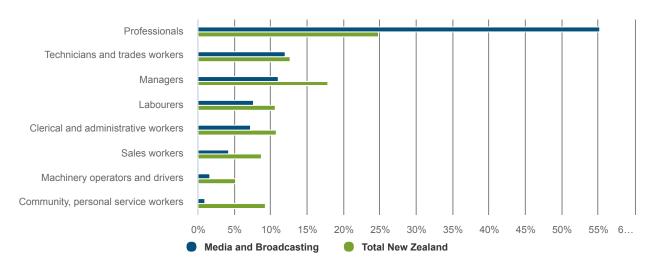
#### Table 10: Highly-skilled employment in the Media and Broadcasting sector in New Zealand

	Media and	d Broadcasting		Total New Zealand			
	Employment	% change	% of total	Employment	% change	% of total	
2002	13,020	2.2%	52.0%	603,016	5.0%	32.2%	
2007	15,500	1.3%	56.4%	741,366	3.2%	34.6%	
2012	15,283	1.1%	58.6%	800,405	2.0%	36.8%	
2017	15,671	1.7%	60.3%	908,525	3.0%	37.4%	
2018	15,478	-1.2%	60.6%	937,587	3.2%	37.5%	
2019	15,454	-0.2%	61.2%	964,075	2.8%	37.7%	
2020	15,602	1.0%	61.7%	989,244	2.6%	37.8%	
2021	15,374	-1.5%	63.0%	997,763	0.9%	38.1%	
2022	16,045	4.4%	63.2%	1,033,711	3.6%	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 Media and Broadcasting sector in New Zealand in 2022 was Professionals, with 14,033 jobs (55.3% of all employment in the sector). In 2022 the Media and Broadcasting sector accounted for 24.8% of all Professionals employed in New Zealand.

#### Figure 12: Employment by broad occupation in New Zealand, 2022



There are 43 two-digit occupations in occupational classifications. The following table looks at employment in the key two-digit occupations in the Media and Broadcasting sector in 2022. Further details and timeseries data can be found in the Infometrics online Media and Broadcasting Sector Profile.

#### Table 11: Employment by 2-digit occupation in the Media and Broadcasting sector in New Zealand, 2022

	Media and Broa	dcasting	Total New Zealand		
	Employment	% of total	Employment	% of total	
Arts & Media Professionals	10,044	39.5%	24,594	0.9%	
Other Technicians & Trades Workers	2,364	9.3%	41,691	1.5%	
Other Labourers	1,742	6.9%	71,259	2.6%	
Specialist Managers	1,454	5.7%	227,218	8.4%	
Design, Engineering, Science Professionals	1,444	5.7%	95,062	3.5%	
All Others	8,350	32.9%	2,233,477	82.9%	
Total	25,398	100%	2,693,301	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 Media and Broadcasting sector in New Zealand accounted for 27.2% of overall employment in the sector in 2022. Employment in four of the top five occupations grew between 2017 and 2022.

The following table provides a breakdown of occupational employment in the Media and Broadcasting sector in New Zealand in 2022. The Infometrics online Media and Broadcasting Sector Profile provides a complete time series of employment by detailed occupation from 2000 onwards.

#### Table 12: Employment by 6-digit occupation in the Media and Broadcasting sector in New Zealand, 2022

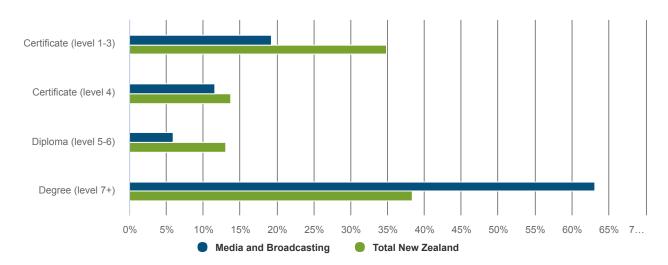
	Media and Broa	dcasting	Total New Zealand		
	Employment	% of total	Employment	% of total	
Newspaper or Periodical Editor	2,929	11.5%	2,929	0.1%	
Media Producer (excluding Video)	1,448	5.7%	1,448	0.05%	
Leaflet or Newspaper Deliverer	988	3.9%	2,881	0.1%	
Camera Operator (Film, Television or Video)	900	3.5%	900	0%	
Journalists and Other Writers nec	639	2.5%	639	0%	
All Others	18,495	72.8%	2,684,505	99.7%	
Total	25,398	100%	2,693,301	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 Media and Broadcasting sector refer to the Demographics section of this report.

Employers in the Media and Broadcasting in New Zealand ideally require people with a Degree (level 7+).



#### Figure 13: Qualifications of workers in New Zealand, 2022

The following table shows the ideal qualification level and field of study of workers in the Media and Broadcasting sector in New Zealand in 2022 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 Media and Broadcasting Sector Profile.

# Table 13: Employment by qualification required and field of study in the Media and Broadcasting sector in New Zealand, 2022

		Media and	Broadcas	ting			Total	New Zeal	and	
	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	44	11	19	945	1,020	16,971	2,238	9,922	80,535	109,666
Information Technology	300	7	50	590	947	43,019	2,461	10,388	39,745	95,614
Engineering and Related Technologies	588	1,065	228	965	2,847	152,935	138,717	42,928	105,554	440,133
Architecture and Building	110	377	74	172	732	51,440	77,798	18,345	27,543	175,127
Agriculture, Environmental and Related Studies	190	153	19	127	489	73,585	18,921	7,309	27,992	127,807
Health	459	44	119	383	1,005	65,489	12,200	36,471	145,663	259,823
Education	258	14	67	780	1,119	39,722	15,897	18,244	139,137	213,000
Management and Commerce	1,615	121	442	2,434	4,611	226,033	36,060	112,200	230,949	605,242
Society and Culture	430	129	119	3,760	4,439	108,251	15,319	39,947	174,697	338,215
Creative Arts	314	846	317	5,872	7,349	31,287	8,570	23,836	60,718	124,413
Food, Hospitality and Personal Services	580	177	66	17	841	130,125	39,900	33,060	1,177	204,262
Total	4,889	2,944	1,520	16,045	25,398	938,857	368,081	352,652	1,033,711	2,693,301

# What jobs are forecast in the sector between 2023 and 2028?

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.

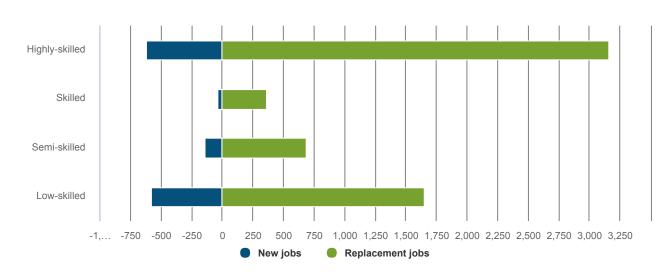
Infometrics estimates there will be 4,487 total job openings in the Media and Broadcasting sector between 2023 and 2028. Of these job openings:

- 30.6% are likely to be due to new job growth
- 130.6% are likely to be due to net replace demand.

# Forecast job openings

Of the estimated 4,487 job openings between 2023 and 2028, Infometrics estimates that 56.7% are likely to be Highly-skilled jobs.

# Figure 14: Forecast job openings by skill level in the Media and Broadcasting sector in New Zealand, 2023-2028

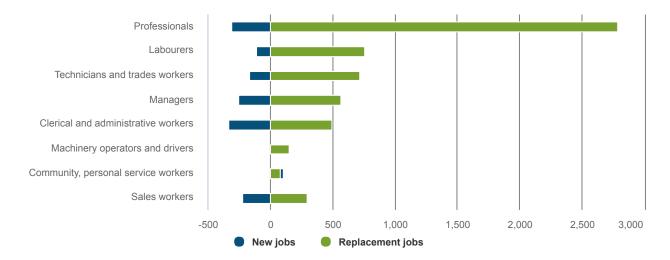


# Job openings by broad occupation

The largest broad (level 1) occupation with job openings in the Media and Broadcasting sector between 2023 and 2028 is likely to be Professionals, accounting for 55.2% of job openings in the sector. The majority (112.6% of Professionals job openings are expected to be replacement job openings.

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

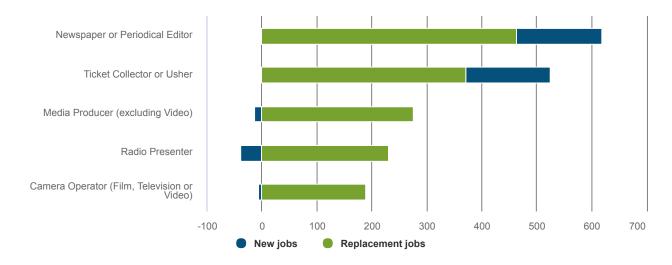
Figure 15: Forecast job openings by broad occupation in the Media and Broadcasting sector in New Zealand, 2023-2028



# Forecast job openings by detailed occupation

The top five detailed occupations in the Media and Broadcasting sector in New Zealand are expected to account for 28.2% of all job openings between 2023 and 2028. Replacement job openings for these are expected to make up 29.0% of overall job openings in this sector.

# Figure 16: Forecast job openings by detailed occupation in the Media and Broadcasting sector in New Zealand, 2023-2028



#### 26 Media and Broadcasting Sector Profile 2022

The following table shows forecast total job openings by detailed occupation in the Media and Broadcasting sector in New Zealand between 2023 and 2028. A detailed breakdown of annual forecast job openings by detailed occupation can be found in the Infometrics online Media and Broadcasting Sector Profile.

# Table 14: Forecast employment and job openings in the Media and Broadcasting sector in New Zealand by detailed occupation, 2023-2028

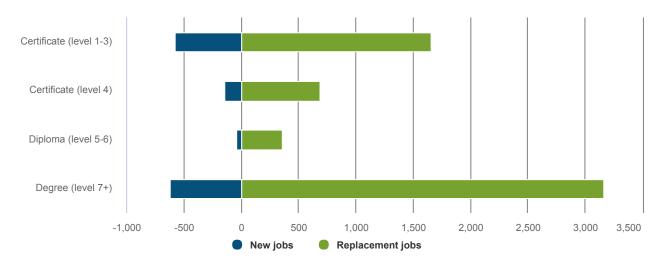
		М	ıg	Total New Zealand		
	Emplo 2022	oyment 2028	New jobs	Replacement jobs	Total job openings	Total job openings
Newspaper or Periodical Editor	2,929	3,084	155	463	618	618
Media Producer (excluding Video)	1,448	1,434	-13	276	262	262
Leaflet or Newspaper Deliverer	988	737	-251	298	47	932
Camera Operator (Film, Television or Video)	900	894	-6	189	184	184
Journalists and Other Writers nec	639	717	78	74	152	152
All others	18,495	17,159	-1,336	4,560	3,224	671,076

# 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 Media and Broadcasting sector in New Zealand there are likely to be 319 Diploma (level 5-6) between 2023 and 2028. Job openings at Diploma (level 5-6) account for 7.1% of all job openings in the sector over the period. Most of these job openings are expected to be replacement job openings (358 jobs).

Figure 17: Forecast job openings by qualification level in the Media and Broadcasting sector in New Zealand, 2023-2028



The following table shows the ideal qualifications and fields of study that employers are likely to require in the Media and Broadcasting sector in New Zealand between 2023 and 2028.

Table 15: Job openings by qualification required and field of study in the Media and Broadcasting sectorin New Zealand, 2023-2028

		Media and	Broadcas	ting			Total N	ew Zealar	nd	
	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	-7	-1	-3	-20	-30	1,171	178	989	8,952	11,290
Information Technology	-36	0	-8	-31	-75	2,615	147	996	5,847	9,605
Engineering and Related Technologies	-108	-97	-13	-53	-270	10,309	10,938	5,140	13,047	39,434
Architecture and Building	-12	-23	-1	-11	-46	3,413	1,939	2,417	1,746	9,515
Agriculture, Environmental and Related Studies	-28	-6	-2	-4	-40	4,431	1,382	872	1,379	8,064
Health	12	-1	-2	-6	3	6,100	1,245	3,854	17,775	28,973
Education	-25	-1	-4	-15	-44	2,795	1,560	1,877	7,268	13,499
Management and Commerce	-234	-2	-7	-208	-452	11,227	3,421	10,252	20,992	45,893
Society and Culture	-52	-1	0	-57	-110	10,746	1,634	5,795	18,745	36,921
Creative Arts	-34	7	-3	-210	-240	1,832	286	2,568	5,198	9,885
Food, Hospitality and Personal Services	-53	-18	4	-1	-68	8,973	3,729	4,214	78	16,995
Total	-577	-141	-39	-616	-1,373	63,613	26,459	38,973	101,028	230,074

# DEMOGRAPHIC PROFILE OF WORKERS

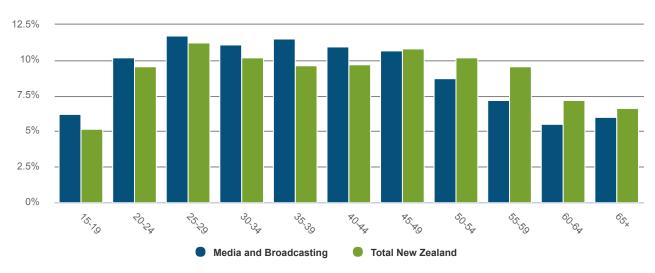
A workforce that has a diverse makeup, experience, and opinions is likely to have the ability to make higher quality decisions. This section looks at diversity in the the Media and Broadcasting sector in New Zealand by examining the demographic makeup of the workforce in terms of age, ethnicity, gender, 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 Media and Broadcasting sector in New Zealand have a slightly younger average age profile than all workers in New Zealand. In 2018 the average of Media and Broadcasting workers was 40.7 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 Media and Broadcasting sector in New Zealand grew by 0.6 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 Media and Broadcasting sector in New Zealand in 2013 and 2018.

#### Table 16: Employment by age in the Media and Broadcasting sector in New Zealand

		Media and E	Broadcasting		Total New	/ Zealand
	Em	Employment		are Of Total		Share Of Total
	2013	2018	2013	2018	2013	2018
15-19 Years	1,801	1,595	6.9%	6.2%	4.7%	5.1%
20-24 Years	2,718	2,605	10.5%	10.2%	9.0%	9.6%
25-29 Years	2,861	2,997	11.0%	11.7%	9.1%	11.2%
30-34 Years	3,007	2,840	11.6%	11.1%	9.2%	10.2%
35-39 Years	3,125	2,940	12.0%	11.5%	9.9%	9.6%
40-44 Years	3,084	2,802	11.9%	11.0%	11.8%	9.7%
45-49 Years	2,697	2,735	10.4%	10.7%	11.8%	10.8%
50-54 Years	2,237	2,236	8.6%	8.8%	11.7%	10.2%
55-59 Years	1,843	1,840	7.1%	7.2%	9.6%	9.6%
60-64 Years	1,357	1,404	5.2%	5.5%	7.4%	7.2%
65 years and over	1,270	1,526	4.9%	6.0%	5.8%	6.6%

# What is the ethnic makeup of workers in the sector?

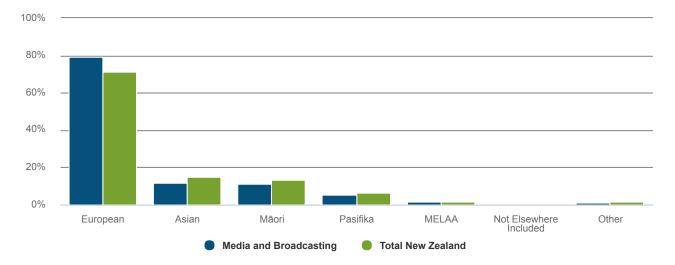
Understanding the ethnic composition of a workforce can be important in terms of improving innovation and productivity levels.

Different ethnic groups can bring diverse perspectives to employment, which when supported, can help support innovation. Similarly, workers from different ethnicities may require different types of in-work support to achieve their productive potential.

In 2018, workers in the Media and Broadcasting sector in New Zealand were:

- · less likely to be Maori than workers overall
- · less likely to be Pasifika than workers overall
- · less likely to be Asian than workers overall

#### Figure 19: Ethnicity of workers in New Zealand, 2018



The share of European ethnicity in the Media and Broadcasting sector in New Zealand fell from 83.2% in 2013 to 79.5% in 2018. The following table shows the broad ethnicity of workers in the Media and Broadcasting sector in New Zealand in 2013 and 2018.

#### Table 17: Employment by ethnicity in the Media and Broadcasting sector in New Zealand

	N	ledia and B	roadcasting	ļ	Total New Zealand		
	Em	Employment		re Of Total		Share Of Total	
	2013	2018	2013	2018	2013	2018	
European	21,636	20,302	83.2%	79.5%	77.2%	71.4%	
Asian	2,131	3,016	8.2%	11.8%	11.0%	15.1%	
Māori	2,599	2,863	10.0%	11.2%	11.1%	13.5%	
Pasifika	1,170	1,335	4.5%	5.2%	4.9%	6.5%	
MELAA	230	404	0.9%	1.6%	1.0%	1.4%	
Not Elsewhere Included	86	0	0.3%	0%	0.4%	0%	
Other	449	317	1.7%	1.2%	2.0%	1.4%	

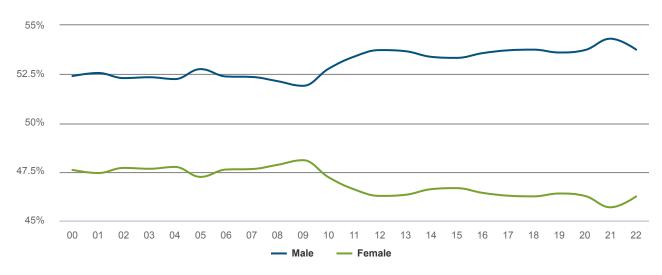
# What is the gender balance of the sector?

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 Media and Broadcasting sector in New Zealand has changed over time. The share of female employment in the Media and Broadcasting sector in New Zealand decreased from 47.6% in 2007 to 46.2% in 2022.

#### Figure 20: Employment by gender in the Media and Broadcasting sector in New Zealand



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

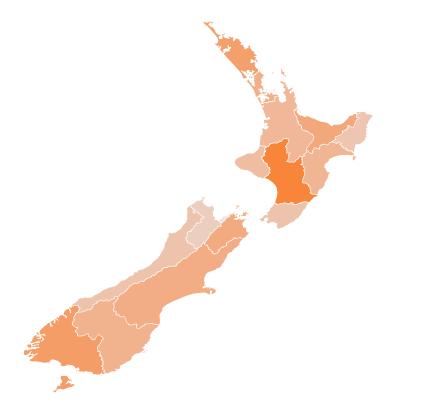
#### Table 18: Change in employment by gender in the Media and Broadcasting sector in New Zealand

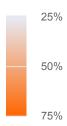
		Media and Broa	dcasting		Total New Zea	and
	E	Employment		% share		% share
	Male	Female	Male	Female	Male	Female
2002	13,083	11,933	52.3%	47.7%	54.3%	45.7%
2007	14,386	13,091	52.4%	47.6%	53.7%	46.3%
2012	14,007	12,062	53.7%	46.3%	52.8%	47.2%
2017	13,950	12,018	53.7%	46.3%	53.2%	46.8%
2018	13,729	11,811	53.8%	46.2%	53.2%	46.8%
2019	13,528	11,707	53.6%	46.4%	52.9%	47.1%
2020	13,580	11,694	53.7%	46.3%	52.9%	47.1%
2021	13,245	11,141	54.3%	45.7%	53.1%	46.9%
2022	13,653	11,746	53.8%	46.2%	52.6%	47.4%

# Regional employment by gender

Female employment in the Media and Broadcasting sector is highest in Auckland. The following map shows how the percentage of female workers in the Media and Broadcasting sector varies by region.

Figure 21: Female share of employment in the Media and Broadcasting sector, 2022





#### 32 Media and Broadcasting Sector Profile 2022

The following table provides supporting information on the gender balance of workers in the Media and Broadcasting sector in 2022. Data showing the regional gender makeup of workers in the Media and Broadcasting sector from 2000 is available in the Infometrics online Media and Broadcasting Sector Profile.

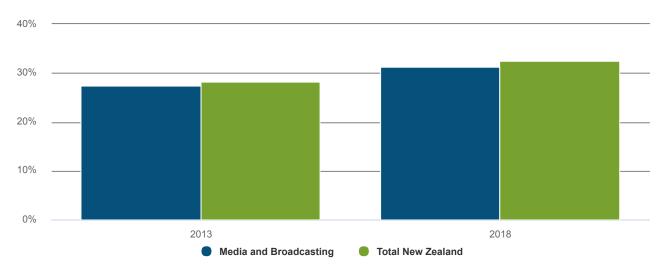
#### Table 19: Regional employment by gender in the Media and Broadcasting sector, 2022

		Media and Bi	roadcasting	g	Total eco	onomy
	Er	nployment		% share		% share
	Male	Female	Male	Female	Male	Female
Auckland	6,885	6,218	53.0%	47.0%	53.0%	47.0%
Bay of Plenty Region	442	442	50.0%	50.0%	52.0%	48.0%
Canterbury Region	930	869	52.0%	48.0%	53.0%	47.0%
Gisborne Region	122	79	61.0%	39.0%	54.0%	46.0%
Hawke's Bay Region	191	159	55.0%	45.0%	52.0%	48.0%
Manawatu-Whanganui Region	241	418	37.0%	63.0%	53.0%	47.0%
Marlborough Region	62	59	51.0%	49.0%	54.0%	46.0%
Nelson Region	150	56	73.0%	27.0%	51.0%	49.0%
Northland Region	212	240	47.0%	53.0%	52.0%	48.0%
Otago Region	751	644	54.0%	46.0%	52.0%	48.0%
Southland Region	90	106	46.0%	54.0%	54.0%	46.0%
Taranaki Region	138	101	58.0%	42.0%	54.0%	46.0%
Tasman Region	72	40	64.0%	36.0%	54.0%	46.0%
Waikato Region	549	425	56.0%	44.0%	54.0%	46.0%
Wellington Region	2,752	1,817	60.0%	40.0%	51.0%	49.0%
West Coast Region	83	55	60.0%	40.0%	57.0%	43.0%

# Where were workers in the sector born?

Migrant workers can bring valuable skills and experience to a sector. Additionally, migrant workers may also require additional levels of support in the workplace including literacy training and cultural integration. Improved support can help advance migrants' feelings of self-worth and belonging as well improve productivity. This can also have an impact on the likelihood of migrants remaining in the sector.

Census data shows that the migrant Media and Broadcasting sector workforce in New Zealand comprises 31.3% of workers. This compares to 32.5% of all workers in New Zealand. The share of Media and Broadcasting sector workers born overseas increased from 27.4% to 31.3% between 2013 and 2018. The share of all workers born overseas in New Zealand increased 4.2% over the period.



#### Figure 22: Share of workers in New Zealand born abroad

The most common origin for workers in the Media and Broadcasting sector outside New Zealand is Europe. The following table shows the country of birth of workers in the Media and Broadcasting sector in New Zealand from recent censuses.

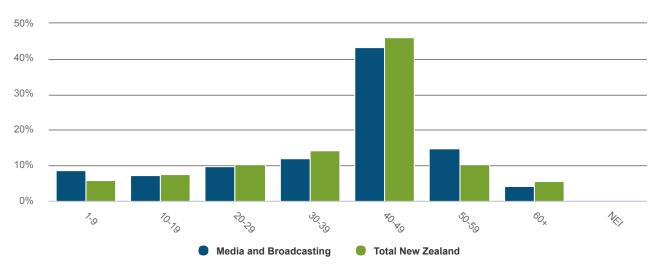
#### Table 20: Employment by country of birth in the Media and Broadcasting sector in New Zealand

	Me	Media and Broadcasting				Total New Zealand		
	Emp	Employment		e Of Total	Sha	are Of Total		
	2013	2018	2013	2018	2013	2018		
New Zealand	18,881	17,541	72.6%	68.7%	71.7%	67.5%		
Europe	2,941	2,976	11.3%	11.7%	9.5%	8.8%		
Asia	1,480	2,148	5.7%	8.4%	8.5%	12.0%		
Rest of Oceania	600	593	2.3%	2.3%	3.8%	4.2%		
Northern America	578	581	2.2%	2.3%	0.9%	1.0%		
Sub-Saharan Africa	544	550	2.1%	2.2%	2.4%	2.5%		
Australia	618	544	2.4%	2.1%	1.6%	1.6%		
Not Elsewhere Included	172	254	0.7%	1.0%	0.9%	1.2%		
North Africa and the Middle East	94	89	0.4%	0.3%	0.4%	0.4%		
Other	105	190	0.4%	0.7%	0.4%	0.7%		

# 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 Media and Broadcasting sector.

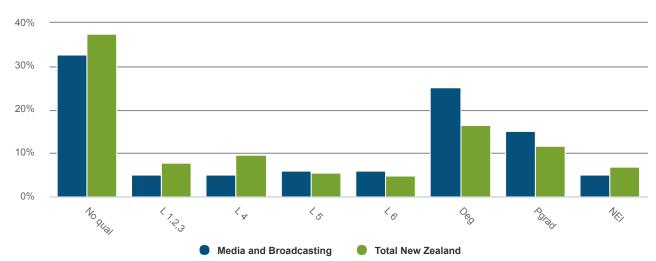


#### Figure 23: Hours worked (main job) in New Zealand, 2018

The Infometrics online Media and Broadcasting 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 24: Highest qualification (post school) of workers in New Zealand, 2018

The Infometrics online Media and Broadcasting 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 industryoccupation 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 2022 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).