

## **Chapter 6 Our People**

- a) Annual Economic Profile 2021 Auckland (@Copyright 2022 Infometrics)
- b) 2021 Sector Profile Total Economy in Tamaki Makaurau (@Copyright 2022 Infometrics)
- c) Auckland Population and Structure (@Copyright 2022 Infometrics)
- d) Auckland at a Glance 2021 ((@Copyright 2022 Infometrics)
- e) AJ Pouoa Pacific Case Study





# Auckland



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# ECONOMY

## The New Zealand economy in 2021

The New Zealand economy contracted 1.2% in the March 2021 year, following revised 2.2%pa growth in the year 2020 year. The March 2021 year captures the initial turmoil of COVID-19 in New Zealand, including the vast majority of the Level 4 lockdown in April 2020. The period also includes the August 2020 Auckland outbreak and resulting Level 3 restrictions, as well as further Auckland restrictions in February and March 2021.

The 1.2% fall in economic activity in the 2021 year was slightly less of an economic blow than the 1.3% fall experienced in 2009 as the Global Financial Crisis (GFC) hit. New Zealand's economic response to COVID-19 has been different, with substantial fiscal spending support and incredibly accommodative monetary policy with record-low interest rates.

A need to expand the public sector to support New Zealand through COVID-19 has seen the public administration and safety industry as the largest positive contributor to growth in 2021. Expanded work with MIQ, administering the Wage Subsidy, and more work across government has contributed to this growth. Retail trade also helped limit the economic blow, with higher spending on groceries and more spending on goods in New Zealand as households direct their holiday funds into other areas. Unsurprisingly for a health crisis, the health care and social assistance sector also helped bolster activity.

However, 11 out of 19 headline sectors experienced a contraction in activity. The collapse of international tourism hit the transport sector particularly hard, with a 20% collapse in activity. Administrative and support services also fell, as travel agency work plummeted.

The fall in economic activity is many sectors of the economy was largely due to the restrictions on activity at higher Alert Levels. For example, the contraction in construction output was due to the inability to build at higher Alert Levels, with workers having to stay home.

Employment activity held up better, with a limited 0.1% increase in the number of filled jobs across New Zealand. The Wage Subsidy enabled businesses to keep more workers employed than otherwise. Some sectors have seen considerable increases in their workforce, and others have seen large drops, as resources are reallocated across New Zealand.

The economy showed stronger signs towards the end of the 2021 year, with expectations for better activity to be reported for the 2022 year.

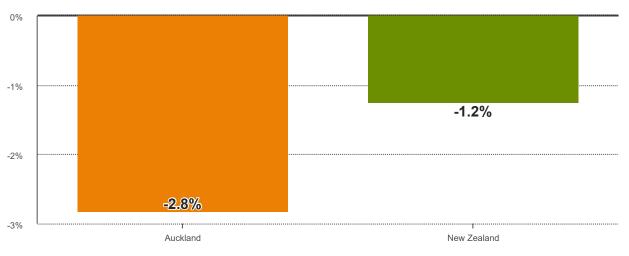




## How fast has Auckland's economy grown?

This section measures economic performance in Auckland during the year to March 2021 and previous years. All GDP estimates are measured in constant 2021 prices.

- GDP in Auckland measured \$122,454m in the year to March 2021, down -2.8% from a year earlier. New Zealand's GDP decreased by -1.2% over the same period.
- Economic growth in Auckland averaged 3.2%pa over the last 10 years compared with an average of 2.6%pa in the national economy.
- Growth in Auckland reached a high of 5.5% in 2003 and a low of -2.8% in 2021.
- Auckland accounted for 37.5% of national GDP in 2021.

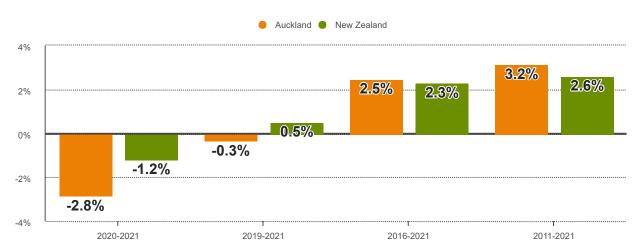


#### Figure 1: GDP growth, year to Mar 2021

#### Figure 2: Annual average GDP growth, 2001-2021







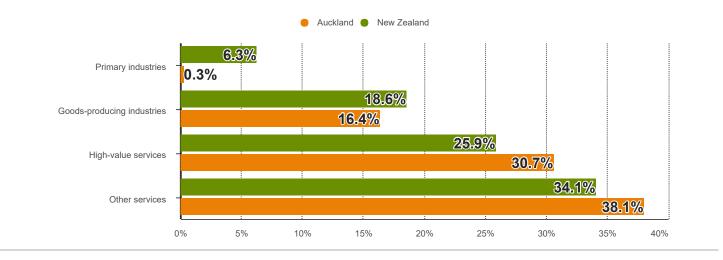
## What is the industrial structure of Auckland's economy?

This section describes the structure of the economy in terms of the broad sectors of primary industries, goods-producing industries, high-values services and other services. Primary industries make direct use of natural resources. They extract or harvest products from the earth. Goods-producing industries produce manufactured and other processed goods. High-value services include the higher value-adding, knowledge-based service industries. More detail of the sectors is given in the technical appendix.



#### Figure 4: Share of total GDP, 2021

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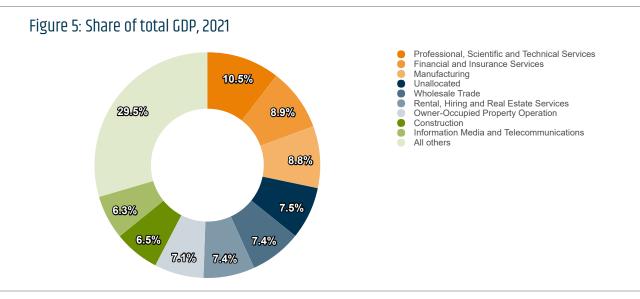
- Primary industries accounted for the smallest proportion in Auckland: 0.3% compared with 6.3% in the national economy.
- Goods-producing industries accounted for 16.4% compared with 18.6% in the national economy.
- Other services accounted for the largest proportion of GDP (38.1%) in Auckland, which is higher than in the national economy (34.1%).
- High-value services accounted for 30.7% compared with 25.9% in the national economy.

#### Table 1: GDP by ANZSIC 1-digit industry, 2021

	Au	ckland	New	Zealand
Indus	stry Level	Share of total	Level	Share of total
Professional, Scientific and Technical Services	\$12,837m	10.5%	\$28,779m	8.8%
Financial and Insurance Services	\$10,957m	8.9%	\$18,745m	5.7%
Manufacturing	\$10,834m	8.8%	\$30,248m	9.3%
Wholesale Trade	\$9,050m	7.4%	\$16,581m	5.1%
Rental, Hiring and Real Estate Services	\$9,002m	7.4%	\$21,591m	6.6%
Construction	\$8,009m	6.5%	\$21,578m	6.6%
Information Media and Telecommunications	\$7,715m	6.3%	\$12,158m	3.7%
Health Care and Social Assistance	\$6,802m	5.6%	\$20,217m	6.2%
Retail Trade	\$6,637m	5.4%	\$17,105m	5.2%
Transport, Postal and Warehousing	\$4,877m	4.0%	\$11,507m	3.5%
Education and Training	\$4,394m	3.6%	\$11,730m	3.6%
Public Administration and Safety	\$3,652m	3.0%	\$15,570m	4.8%
Administrative and Support Services	\$2,391m	2.0%	\$5,577m	1.7%
Other Services	\$2,371m	1.9%	\$5,615m	1.7%
Accommodation and Food Services	\$2,017m	1.6%	\$6,405m	2.0%
Arts and Recreation Services	\$1,471m	1.2%	\$3,984m	1.2%
Electricity, Gas, Water and Waste Services	\$1,184m	1.0%	\$8,804m	2.7%
Agriculture, Forestry and Fishing	\$329m	0.3%	\$17,030m	5.2%
Mining	\$39.0m	0.0%	\$3,378m	1.0%
Owner-Occupied Property Operation	\$8,661m	7.1%	\$25,112m	7.7%
Unallocated	\$9,225m	7.5%	\$24,586m	7.5%
Total	\$122,454m	100%	\$326,300m	100%



- Among broad industries Professional, Scientific and Technical Services was the largest in Auckland in 2021 accounting for 10.5% of total.
- The second largest was Financial and Insurance Services (8.9%) followed by Manufacturing (8.8%)



The table on the following page shows 54 industries ranked according to their contribution to GDP. These industry categories are used by Statistics New Zealand in the national accounts. They are a mix of various levels of industries on the ANZSIC-06 classification. Further information about the industrial classification is given in the Technical Notes at the end of the document.

- Among detailed industries Professional, Scientific & Tech Services was the largest in Auckland in 2021 accounting for 10.5% of total.
- The second largest was Wholesale Trade (7.4%) followed by Property Operators & Real Estate Services (6.1%)



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### Table 2: GDP by 54 industries, 2021

		Auck	land	New Z	ealand
	Industry	Level	Share of total	Level	Share of total
Professional, Scientific & Tech Services		\$12,837m	10.5%	\$28,779m	8.8%
Wholesale Trade		\$9,050m	7.4%	\$16,581m	5.1%
Property Operators & Real Estate Services		\$7,413m	6.1%	\$18,164m	5.6%
Finance		\$7,122m	5.8%	\$12,476m	3.8%
Health Care & Social Assistance		\$6,802m	5.6%	\$20,217m	6.2%
Telecomms, Internet & Library Services		\$5,740m	4.7%	\$8,801m	2.7%
Education & Training		\$4,394m	3.6%	\$11,730m	3.6%
Construction Services		\$4,138m	3.4%	\$11,036m	3.4%
Other Store & Non Store Retailing		\$4,092m	3.3%	\$9,631m	3.0%
Central Gov Admin, Defence & Safety		\$3,169m	2.6%	\$13,720m	4.2%
Postal, Courier & Warehousing Services		\$2,795m	2.3%	\$5,882m	1.8%
Administrative & Support Services		\$2,391m	2.0%	\$5,577m	1.7%
Other Services		\$2,371m	1.9%	\$5,615m	1.7%
Heavy & Civil Engineering Construction		\$2,060m	1.7%	\$5,815m	1.8%
Accommodation & Food Services		\$2,017m	1.6%	\$6,405m	2.0%
Information Media Services		\$1,975m	1.6%	\$3,356m	1.0%
Insurance & Superannuation Funds		\$1,974m	1.6%	\$2,855m	0.9%
Machinery & Other Equipment Manu		\$1,946m	1.6%	\$4,270m	1.3%
Auxiliary Finance & Insurance Services		\$1,861m	1.5%	\$3,415m	1.0%
Building Construction		\$1,811m	1.5%	\$4,727m	1.4%
Supermarket & Specialised Food Retailing		\$1,756m	1.4%	\$5,098m	1.6%
Road Transport		\$1,597m	1.3%	\$4,621m	1.4%
Rental & Hiring Services		\$1,589m	1.3%	\$3,427m	1.1%
Arts & Recreation Services		\$1,471m	1.2%	\$3,984m	1.2%
Fabricated Metal Product Manufacturing		\$1,088m	0.9%	\$2,555m	0.8%
Fruit, Cereal & Other Food Product Manu		\$1,055m	0.9%	\$2,604m	0.8%
Beverage & Tobacco Product Manu		\$972m	0.8%	\$2,640m	0.8%
Basic Chemical & Chemical Product Manu		\$911m	0.7%	\$1,818m	0.6%
Electricity & Gas Supply		\$821m	0.7%	\$7,272m	2.2%
Motor Vehicle, Parts & Fuel Retailing		\$789m	0.6%	\$2,376m	0.7%
Polymer Product & Rubber Product Manu		\$764m	0.6%	\$1,562m	0.5%
Transport Equipment Manufacturing		\$645m	0.5%	\$1,571m	0.5%
Non-Metallic Mineral Product Manu		\$584m	0.5%	\$1,386m	0.4%
Rail, Water, Air & Other Transport		\$485m	0.4%	\$1,004m	0.3%
Local Government Administration		\$484m	0.4%	\$1,849m	0.6%
Furniture & Other Manufacturing		\$436m	0.4%	\$950m	0.3%
Pulp & Paper Product Manufacturing		\$397m	0.3%	\$952m	0.3%
Water, Sewerage & Waste Services		\$363m	0.3%	\$1,532m	0.5%
Printing		\$361m	0.3%	\$661m	0.2%
Primary Metal & Metal Product Manu		\$358m	0.3%	\$727m	0.2%
Wood Product Manufacturing		\$345m	0.3%	\$1,762m	0.5%
Textile, Leather, Clothing, Footwear Manu		\$327m	0.3%	\$703m	0.2%
Meat & Meat Product Manufacturing		\$279m	0.2%	\$2,365m	0.7%
Petroleum & Coal Product Manufacturing		\$151m	0.1%	\$1,421m	0.4%
Dairy Product Manufacturing		\$132m	0.1%	\$1,800m	0.6%
Horticulture & Fruit Growing		\$87.2m	0.1%	\$1,638m	0.5%
Seafood Processing		\$82.1m	0.1%	\$501m	0.2%
Forestry & Logging		\$64.6m	0.1%	\$2,039m	0.6%
Dairy Cattle Farming		\$51.3m	0.0%	\$6,461m	2.0%
Sheep, Beef Cattle & Grain Farming		\$48.2m	0.0%	\$3,315m	1.0%
Mining		\$39.0m	0.0%	\$3,378m	1.0%
Agric Support Services & Hunting		\$35.1m	0.0%	\$2,616m	0.8%
Fishing & Aquaculture		\$23.8m	0.0%	\$500m	0.2%
Poultry, Deer & Other Livestock Farming		\$18.8m	0.0%	\$462m	0.1%
Owner-Occupied Property Operation		\$8,661m	7.1%	\$25,112m	7.7%
Unallocated		\$9,225m	7.5%	\$24,586m	7.5%
Total		\$122,454m	100%	\$326,300m	100%

## Which broad industries made the largest contribution to economic growth?

Although an industry may be growing rapidly, if it is small relative to a region's total economy its contribution to overall GDP growth may also be small. This section therefore investigates which broad industries made the largest contribution to the overall growth of Auckland's economy taking into account their relative sizes.

- Retail Trade made the largest contribution to overall growth in Auckland between 2020 and 2021. The industry grew by 4.9% over the year and contributed 0.25 percentage points to the district's total growth of -2.8%.
- The next largest contributor was health care and social assistance (0.12 percentage points) followed by public administration and safety (0.10 percentage points).
- The largest detractor from growth over the year was Transport, Postal and Warehousing which declined by 24.3% and contributed -1.24 percentage points to the total growth of -2.8%. Administrative and Support Services (-0.52 percentage points) was the next largest detractor.

#### Table 3: ANZSIC 1-digit industries ranked by % point contribution to GDP growth, 2020-2021

	Industry	2020	2021	% point contribution to growth	Annual Growth
Retail Trade		6,327	6,637	0.25%	4.9%
Health Care and Social Assistance		6,656	6,802	0.12%	2.2%
Public Administration and Safety		3,532	3,652	0.10%	3.4%
Information Media and Telecommunications		7,641	7,715	0.06%	1.0%
Rental, Hiring and Real Estate Services		8,938	9,002	0.05%	0.7%
Agriculture, Forestry and Fishing		325	329	0.00%	1.3%
Mining		38	39	0.00%	3.8%
Electricity, Gas, Water and Waste Services		1,184	1,184	0.00%	0.0%
Professional, Scientific and Technical Services		12,841	12,837	0.00%	0.0%
Wholesale Trade		9,078	9,050	-0.02%	-0.3%
Other Services		2,458	2,371	-0.07%	-3.6%
Financial and Insurance Services		11,151	10,957	-0.15%	-1.7%
Accommodation and Food Services		2,221	2,017	-0.16%	-9.2%
Construction		8,259	8,009	-0.20%	-3.0%
Education and Training		4,651	4,394	-0.20%	-5.5%
Arts and Recreation Services		1,813	1,471	-0.27%	-18.9%
Manufacturing		11,256	10,834	-0.33%	-3.8%
Administrative and Support Services		3,042	2,391	-0.52%	-21.4%
Transport, Postal and Warehousing		6,444	4,877	-1.24%	-24.3%
Owner-Occupied Property Operation		8,443.4	8,661.5	0.17%	2.6%
Unallocated		9,713.4	9,224.7	-0.39%	-5.0%
Total		126,011	122,454	-2.8%	-2.8%



# Which detailed industries made the largest contribution to economic growth?

The following table shows a ranking of the detailed industries by their contribution to economic growth over the past year.

- Other Store & Non Store Retailing made the largest contribution to overall growth in Auckland between 2020 and 2021. The industry grew by 5.3% over the year and contributed 0.16 percentage points to the district's total growth of -2.8%.
- The next largest contributor was property operators & real estate services (0.13 percentage points) followed by health care & social assistance (0.12 percentage points).
- The largest detractor from growth over the year was Rail, Water, Air & Other Transport which declined by 71.4% and contributed -0.96 percentage points to the total growth of -2.8%. Administrative & Support Services (-0.52 percentage points) was the next largest detractor.



## Table 4: 54 industries ranked by percentage point contribution to growth, 2020-2021

	Industry	2020	2021	% point contribution to growth	Annual Growth
Other Store & Non Store Retailing		3,887	4,092	0.16%	5.3%
Property Operators & Real Estate Services		7,249	7,413	0.13%	2.3%
Health Care & Social Assistance		6.656	6,802	0.12%	2.2%
Central Gov Admin, Defence & Safety		3,047	3,169	0.10%	4.0%
Supermarket & Specialised Food Retailing		1,646	1,756	0.09%	6.7%
Telecomms, Internet & Library Services		5,646	5,740	0.08%	1.7%
Auxiliary Finance & Insurance Services		1.778	1,861	0.07%	4.7%
Machinery & Other Equipment Manu		1,871	1,946	0.06%	4.0%
Petroleum & Coal Product Manufacturing		116	151	0.03%	30.1%
Electricity & Gas Supply		796	821	0.02%	3.1%
Meat & Meat Product Manufacturing		260	279	0.02%	7.7%
Furniture & Other Manufacturing		429	436	0.01%	1.5%
Agric Support Services & Hunting		32	35	0.00%	9.9%
Dairy Cattle Farming		48	51	0.00%	6.2%
Pulp & Paper Product Manufacturing		394	397	0.00%	0.7%
Mining		38	39	0.00%	3.8%
Wood Product Manufacturing		344	345	0.00%	0.3%
Horticulture & Fruit Growing		87	87	0.00%	0.7%
Sheep, Beef Cattle & Grain Farming		48	48	0.00%	0.1%
Fishing & Aquaculture		24	24	0.00%	-1.9%
Local Government Administration		484	484	0.00%	-0.1%
Forestry & Logging		66	65	0.00%	-1.5%
Poultry, Deer & Other Livestock Farming		20	19	0.00%	-5.3%
Seafood Processing		84	82	0.00%	-2.7%
Fruit, Cereal & Other Food Product Manu		1,058	1,055	0.00%	-0.3%
Motor Vehicle, Parts & Fuel Retailing		793	789	0.00%	-0.5%
Professional, Scientific & Tech Services		12,841	12,837	0.00%	0.0%
Dairy Product Manufacturing		144	132	-0.01%	-8.3%
Building Construction		1,823	1,811	-0.01%	-0.7%
Information Media Services		1,995	1,975	-0.02%	-1.0%
Textile, Leather, Clothing, Footwear Manu		349	327	-0.02%	-6.2%
Primary Metal & Metal Product Manu		380	358	-0.02%	-5.9%
Water, Sewerage & Waste Services		387	363	-0.02%	-6.4%
Wholesale Trade		9,078	9,050	-0.02%	-0.3%
Non-Metallic Mineral Product Manu		622	584	-0.02 %	-6.2%
Printing		417	361	-0.03%	-13.2%
Heavy & Civil Engineering Construction		2,121	2,060	-0.04 %	-2.9%
Transport Equipment Manufacturing		711	645	-0.05%	-9.2%
Basic Chemical & Chemical Product Manu		983	911	-0.05%	-7.3%
Finance		7,203	7,122	-0.06%	-1.1%
Beverage & Tobacco Product Manu			972		-8.2%
Other Services		1,058 2,458	2,371	-0.07% -0.07%	-3.6%
Fabricated Metal Product Manufacturing		1,178	1,088	-0.07%	-7.6%
Polymer Product & Rubber Product Manu		858	764	-0.07%	-11.0%
			1,589	-0.07%	-5.9%
Rental & Hiring Services Road Transport		1,689			
Construction Services		1,745 4,315	1,597 4,138	-0.12% -0.14%	-8.5% -4.1%
					-4.1%
Insurance & Superannuation Funds Accommodation & Food Services		2,170 2,221	1,974 2,017	-0.16% -0.16%	-9.1%
Postal, Courier & Warehousing Services		3,002	2,795	-0.16%	-6.9%
Education & Training		4,651	4,394	-0.20%	-5.5%
Arts & Recreation Services		1,813	1,471	-0.27%	-18.9%
Administrative & Support Services		3,042	2,391	-0.52%	-21.4%
Rail, Water, Air & Other Transport		1,697	485	-0.96%	-71.4%
Owner-Occupied Property Operation		8,443.4	8,661.5	0.17%	2.6%
		9,713.4	9,224.7	-0.39%	-5.0%
Total		126,011	122,454	-2.8%	-2.8%

## In which industries does Auckland have a comparative advantage?

A high concentration of certain industries in a region may be indicative of that region having a comparative advantage in those industries. This may be due to its natural endowments, location, skills of its labour force or other reasons. The location quotient indicates in which industries a region has comparative advantage. A region has a location quotient larger (smaller) than one when the share of that industry in the regional economy is greater (less) than the share of the same industry in the national economy.

The following table shows a ranking of 54 industries by their location quotients.

• The industries in which Auckland has the largest comparative advantages are Insurance & Superannuation Funds (location quotient = 1.8), Telecomms, Internet & Library Services (1.7), and Information Media Services (1.6).



## Table 5: Location Quotient, 2021

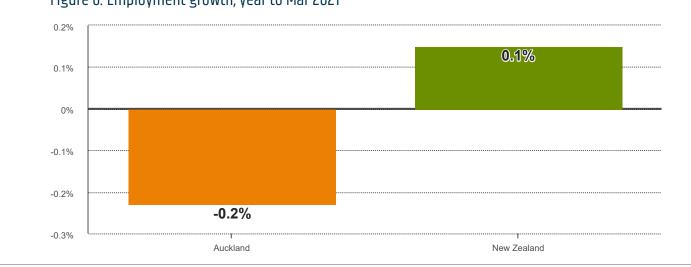
	Auckland		New Zealand		
Industry	Location Quotient	Share of total GDP	Share of total GDP		
Insurance & Superannuation Funds	1.8	1.6%	0.9%		
Telecomms, Internet & Library Services	1.7	4.7%	2.7%		
Information Media Services	1.6	1.6%	1.0%		
Finance	1.5	5.8%	3.8%		
Printing	1.5	0.3%	0.2%		
Wholesale Trade	1.5	7.4%	5.1%		
Auxiliary Finance & Insurance Services	1.5	1.5%	1.0%		
Basic Chemical & Chemical Product Manu	1.3	0.7%	0.6%		
Primary Metal & Metal Product Manu	1.3	0.3%	0.2%		
Polymer Product & Rubber Product Manu	1.3	0.6%	0.5%		
Rail, Water, Air & Other Transport	1.3	0.4%	0.3%		
Postal, Courier & Warehousing Services	1.3	2.3%	1.8%		
Textile, Leather, Clothing, Footwear Manu	1.2	0.3%	0.2%		
Rental & Hiring Services	1.2	1.3%	1.1%		
Furniture & Other Manufacturing	1.2	0.4%	0.3%		
Machinery & Other Equipment Manu	1.2	1.6%	1.3%		
Professional, Scientific & Tech Services	1.2	10.5%	8.8%		
Administrative & Support Services	1.1	2.0%	1.7%		
Fabricated Metal Product Manufacturing	1.1	0.9%	0.8%		
Other Store & Non Store Retailing	1.1	3.3%	3.0%		
Other Services	1.1	1.9%	1.7%		
Non-Metallic Mineral Product Manu	1.1	0.5%	0.4%		
	1.1	0.3%	0.3%		
Pulp & Paper Product Manufacturing					
Transport Equipment Manufacturing	1.1	0.5%	0.5%		
Property Operators & Real Estate Services	1.1	6.1%	5.6%		
Fruit, Cereal & Other Food Product Manu	1.1	0.9%	0.8%		
Building Construction	1.0	1.5%	1.4%		
Construction Services	1.0	3.4%	3.4%		
Education & Training	1.0	3.6%	3.6%		
Arts & Recreation Services	1.0	1.2%	1.2%		
Beverage & Tobacco Product Manu	1.0	0.8%	0.8%		
Heavy & Civil Engineering Construction	0.9	1.7%	1.8%		
Road Transport	0.9	1.3%	1.4%		
Supermarket & Specialised Food Retailing	0.9	1.4%	1.6%		
Health Care & Social Assistance	0.9	5.6%	6.2%		
Motor Vehicle, Parts & Fuel Retailing	0.9	0.6%	0.7%		
Accommodation & Food Services	0.8	1.6%	2.0%		
Local Government Administration	0.7	0.4%	0.6%		
Water, Sewerage & Waste Services	0.6	0.3%	0.5%		
Central Gov Admin, Defence & Safety	0.6	2.6%	4.2%		
Wood Product Manufacturing	0.5	0.3%	0.5%		
Seafood Processing	0.4	0.1%	0.2%		
Meat & Meat Product Manufacturing	0.3	0.2%	0.7%		
Electricity & Gas Supply	0.3	0.7%	2.2%		
Petroleum & Coal Product Manufacturing	0.3	0.1%	0.4%		
Dairy Product Manufacturing	0.2	0.1%	0.6%		
Horticulture & Fruit Growing	0.1	0.1%	0.5%		
Fishing & Aquaculture	0.1	0.0%	0.2%		
Poultry, Deer & Other Livestock Farming	0.1	0.0%	0.1%		
Forestry & Logging	0.1	0.0%	0.1%		
Sheep, Beef Cattle & Grain Farming	0.1	0.1%	1.0%		
	0.0				
Agric Support Services & Hunting		0.0%	0.8%		
Mining	0.0	0.0%	1.0%		
Dairy Cattle Farming	0.0	0.0%	2.0%		



# **EMPLOYMENT**

## How fast has employment grown in Auckland?

Employment growth provides new opportunities for the region's population to earn income and contribute to the region's economy. This section contrasts Auckland's recent performance in creating jobs with other regions in the country.



### Figure 6: Employment growth, year to Mar 2021

- Total employment in Auckland averaged 921,182 in the year to March 2021, down 0.2% from a year earlier. Employment in New Zealand increased by 0.1% over the same period.
- Employment growth in Auckland averaged 2.6%pa over the last 10 years compared with 1.9%pa in the national economy.
- Employment growth in Auckland reached a high of 4.5% in 2004 and a low of -3.0% in 2010.







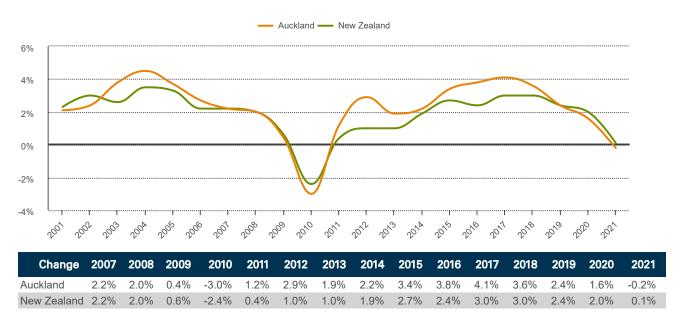
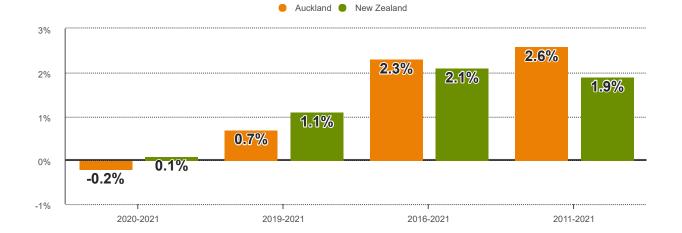


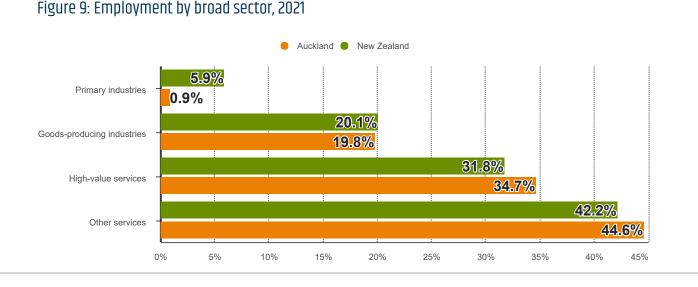
Figure 8: Employment growth over the last 1, 2, 5 & 10 years





## What is the industrial structure of employment in Auckland?

This section describes the structure of the labour market in terms of the broad sectors of primary industries, goods-producing industries, high-values services and other services. Primary industries make direct use of natural resources. They extract or harvest products from the earth. Goods-producing industries produce manufactured and other processed goods. High-value services include the higher value-adding, knowledge-based service industries. More detail of the sectors is given in the technical appendix.



- Primary industries accounted for 0.9% in Auckland compared with 5.9% in New Zealand.
- Goods-producing industries accounted for 19.8% in Auckland compared with 20.1% in New Zealand.
- Other services industries accounted for the largest proportion of employment (44.6%) in Auckland, which is higher than in New Zealand (42.2%).
- High-value services accounted for 34.7% in Auckland compared with 31.8% in New Zealand.



## Which are the largest employing industries in Auckland?

This section identifies the broad industries that make the largest contribution to employment in Auckland.

#### Table 6: ANZSIC 1-digit industries ranked by size of employment, 2021

	Auckland			New Zealar	
li li	ndustry	Level	Share of total	Level	Share of total
Professional, Scientific and Technical Services		113,063	12.3%	252,284	9.7%
Construction		94,271	10.2%	264,339	10.1%
Health Care and Social Assistance		82,151	8.9%	262,664	10.1%
Manufacturing		82,073	8.9%	242,053	9.3%
Retail Trade		79,918	8.7%	230,256	8.8%
Education and Training		66,886	7.3%	199,597	7.6%
Wholesale Trade		63,406	6.9%	124,512	4.8%
Accommodation and Food Services		56,698	6.2%	165,223	6.3%
Administrative and Support Services		55,650	6.0%	130,569	5.0%
Transport, Postal and Warehousing		42,451	4.6%	103,968	4.0%
Financial and Insurance Services		37,070	4.0%	70,182	2.7%
Public Administration and Safety		36,290	3.9%	139,448	5.3%
Other Services		34,216	3.7%	101,262	3.9%
Rental, Hiring and Real Estate Services		24,989	2.7%	63,943	2.4%
Information Media and Telecommunications		22,439	2.4%	41,212	1.6%
Arts and Recreation Services		15,719	1.7%	47,872	1.8%
Agriculture, Forestry and Fishing		7,869	0.9%	148,313	5.7%
Electricity, Gas, Water and Waste Services		5,591	0.6%	19,188	0.7%
Mining		435	0.0%	5,818	0.2%
Total		921,182	100%	2,612,700	100%

- Among broad industries Professional, Scientific and Technical Services was the largest in Auckland in 2021 accounting for 12.3% of total.
- The second largest was Construction (10.2%) followed by Health Care and Social Assistance (8.9%)

The table on the following page shows the 50 detailed industries among the approximately 500 7-digit ANZSIC industry categories which employ the highest number of people in Auckland.

- Cafes and Restaurants was the largest 7-digit industry in Auckland in 2021 employing 29,321 persons and accounting for 3.2% of total employment in the district. By contrast this industry accounted for 2.9% of total employment in New Zealand.
- The second largest employing industries were hospitals (except psychiatric hospitals) (26,503) followed by computer systems design and related services (23,631).



## Table 7: 50 largest employing ANZSIC 7-digit industries, 2021

		Auckland			New Zealand
Rank		Industry	Jobs	% of total	% of total
1	Cafes and Restaurants		29,321	3.2%	2.9%
2	Hospitals (except Psychiatric Hospitals)		26,503	2.9%	3.0%
3	Computer Systems Design and Related Services		23,631	2.6%	1.8%
4	House Construction		19,375	2.1%	2.1%
5	Management Advice and Other Consulting Services		19,206	2.1%	1.7%
6	Supermarket and Grocery Stores		17,550	1.9%	2.4%
7	Primary Education		17,382	1.9%	2.2%
8	Corporate Head Office Management Services		14,409	1.6%	1.0%
9	Labour Supply Services		14,222	1.5%	1.2%
10	Engineering Design and Engineering Consulting Services		13,979	1.5%	1.2%
11	Higher Education		13,046	1.4%	1.4%
12	Buildings Cleaning Services		12,935	1.4%	1.1%
13	Takeaway Food Services		12,495	1.4%	1.2%
14	Banking		11,921	1.3%	1.0%
15	Secondary Education		11,445	1.2%	1.4%
16	Other Allied Health Services		11,421	1.2%	1.4%
17	Real Estate Services		10,277	1.1%	0.9%
18	Road Freight Transport		9,840	1.1%	1.3%
19	Accounting Services		9,775	1.1%	1.0%
20	Preschool Education		9,508	1.0%	1.1%
21	Employment Placement and Recruitment Services		9,068	1.0%	0.7%
22	Aged Care Residential Services		8,968	1.0%	1.4%
23	Central Government Administration		8,603	0.9%	1.8%
24	Electrical Services		8,435	0.9%	0.9%
25	Other Heavy and Civil Engineering Construction		8,332	0.9%	0.8%
26	Legal Services		8,211	0.9%	0.8%
27	Other Social Assistance Services		6,953	0.8%	0.9%
28	Hardware and Building Supplies Retailing		6,833	0.7%	0.8%
29	Local Government Administration		6,780	0.7%	0.9%
30	Clothing Retailing		6,642	0.7%	0.6%
31	Hairdressing and Beauty Services		6,608	0.7%	0.7%
32	Other Auxiliary Finance and Investment Services		6,324	0.7%	0.4%
33	Department Stores		6,289	0.7%	0.6%
34	Air and Space Transport		6,154	0.7%	0.4%
35	Other Electrical and Electronic Goods Wholesaling		6,085	0.7%	0.4%
36	Child Care Services		6,042	0.7%	0.6%
37	Accommodation		6,001	0.7%	1.1%
38	Financial Asset Investing		5,776	0.6%	0.3%
39	Non-Residential Building Construction		5,642	0.6%	0.5%
40	Other Construction Services n.e.c.		5,630	0.6%	0.5%
41	Investigation and Security Services		5,606	0.6%	0.5%
42	Plumbing Services		5,551	0.6%	0.6%
43	Other Grocery Wholesaling		5,461	0.6%	0.4%
44	Other Goods Wholesaling n.e.c.		5,299	0.6%	0.3%
45	Other Automotive Repair and Maintenance		5,061	0.5%	0.7%
46	Other Hardware Goods Wholesaling		4,947	0.5%	0.3%
47	Painting and Decorating Services		4,935	0.5%	0.6%
48	Road and Bridge Construction		4,878	0.5%	0.7%
49	General Practice Medical Services		4,871	0.5%	0.6%
50	Other Administrative Services n.e.c.		4,773	0.5%	0.4%
	All other industries total Total		422,180 921,182	45.8% 100%	48.3% 100%

## Which industries have created the most jobs?

The section investigates which industries have created and lost the most number of jobs in Auckland. The employment numbers differ from those published in Business Demography by Statistics New Zealand. The reasons for these differences are explained in the technical appendix.

#### Table 8: ANZSIC 1-digit industries ranked by number of jobs created, 2020-2021

	Industry	2020	2021	Change	Annual Growth
Construction		90,403	94,271	3,868	4.3%
Health Care and Social Assistance		80,022	82,151	2,128	2.7%
Public Administration and Safety		35,142	36,290	1,148	3.3%
Professional, Scientific and Technical Services		111,989	113,063	1,074	1.0%
Retail Trade		79,183	79,918	735	0.9%
Financial and Insurance Services		36,341	37,070	729	2.0%
Other Services		33,705	34,216	511	1.5%
Rental, Hiring and Real Estate Services		24,505	24,989	484	2.0%
Electricity, Gas, Water and Waste Services		5,254	5,591	337	6.4%
Mining		405	435	30	7.5%
Agriculture, Forestry and Fishing		7,920	7,869	-51	-0.6%
Wholesale Trade		63,865	63,406	-459	-0.7%
Information Media and Telecommunications		22,931	22,439	-492	-2.1%
Arts and Recreation Services		16,356	15,719	-637	-3.9%
Education and Training		68,302	66,886	-1,416	-2.1%
Manufacturing		83,726	82,073	-1,654	-2.0%
Transport, Postal and Warehousing		44,828	42,451	-2,378	-5.3%
Administrative and Support Services		58,646	55,650	-2,996	-5.1%
Accommodation and Food Services		59,815	56,698	-3,117	-5.2%
Total		923,336	921,182	-2,154	-0.2%

- Construction made the largest contribution to employment growth in Auckland between 2020 and 2021 with the industry adding 3,868 jobs.
- The next largest contributor was Health Care and Social Assistance (2,128 jobs) followed by Public Administration and Safety (1,148 jobs).
- The largest detractor from growth over the year was Accommodation and Food Services in which employment declined by 3,117.

The table on the next page shows the 20 industries (out of a total of approximately 500 industries of the ANZSIC 2006 industry classification1) that created the most number of jobs over the past year. Table 15 shows the 20 detailed industries that made the lowest contribution to job creation over the same period.

- Residential Building Construction was the largest creator of jobs in Auckland between 2020 and 2021, generating an additional 1,828 positions.
- This was followed by Hospitals, which added 1,309 jobs over the same period.
- Employment Services was the largest detractor of jobs in Auckland between 2020 and 2021, losing 1,763 positions.
- This was followed by Cafes, Restaurants and Takeaway Food Services, which lost 1,684 jobs over the same period.



### Table 9: The 20 ANZSIC 4-digit industries that created the most jobs, 2020-2021

		Jobs		Change	
Rank	Indu	stry 2020	2021	2020 - 2021	% of total 2021
1	Residential Building Construction	20,066	21,894	1,828	2.4%
2	Hospitals	25,305	26,614	1,309	2.9%
3	Computer Systems Design and Related Services	22,777	23,631	854	2.6%
4	Building Cleaning, Pest Control and Gardening Services	15,477	16,329	852	1.8%
5	Auxiliary Finance and Investment Services	6,041	6,842	800	0.7%
6	Central Government Administration	7,832	8,603	771	0.9%
7	Professional and Scientific Equipment Manufacturing	3,425	4,095	670	0.4%
8	Building Installation Services	20,323	20,964	641	2.3%
9	Allied Health Services	17,140	17,702	563	1.9%
10	Property Operators	7,392	7,954	562	0.9%
11	Architectural, Engineering and Technical Services	24,662	25,197	534	2.7%
12	Personal Care Services	6,128	6,639	510	0.7%
13	Heavy and Civil Engineering Construction	12,720	13,209	489	1.4%
14	Building Completion Services	12,326	12,796	470	1.4%
15	Public Order and Safety Services	13,737	14,189	452	1.5%
16	Depository Financial Intermediation	11,724	12,079	355	1.3%
17	Domestic Appliance Manufacturing	1,187	1,526	339	0.2%
18	Other Construction Services	10,106	10,434	328	1.1%
19	Postal and Courier Pick-up and Delivery Services	5,606	5,914	308	0.6%
20	Electrical and Electronic Goods Retailing	4,117	4,421	304	0.5%
	All other industries	675,246	660,152	-15,094	71.7%
	Total	923,336	921,182	-2,154	100%

### Table 10: The 20 ANZSIC 4-digit industries that lost the most jobs, 2020-2021

		Jo		os	Change	
Rank	Ind	ustry	2020	2021	2020 - 2021	% of total 2021
1	Employment Services		25,053	23,289	-1,763	2.5%
2	Cafes, Restaurants and Takeaway Food Services		47,575	45,890	-1,684	5.0%
3	Air and Space Transport		7,751	6,154	-1,597	0.7%
4	Travel Agency Services		4,696	3,311	-1,385	0.4%
5	Accommodation		7,239	6,001	-1,238	0.7%
6	Tertiary Education		16,901	15,881	-1,019	1.7%
7	Other Administrative Services		12,000	11,416	-584	1.2%
8	Gambling Activities		2,216	1,782	-433	0.2%
9	Other Personal Services		4,837	4,405	-431	0.5%
10	Road Passenger Transport		6,203	5,791	-412	0.6%
11	Newspaper, Periodical, Book and Directory Publishing		2,561	2,156	-405	0.2%
12	Polymer Product Manufacturing		5,657	5,271	-385	0.6%
13	Printing		4,013	3,635	-377	0.4%
14	Air Transport Support Services		1,571	1,216	-355	0.1%
15	Management and Other Consulting Services		33,964	33,615	-349	3.6%
16	Other Transport Equipment Manufacturing		3,825	3,481	-344	0.4%
17	Health and General Insurance		4,818	4,482	-336	0.5%
18	Adult, Community and Other Education		7,410	7,081	-329	0.8%
19	Motor Vehicle and Transport Equipment Rental and Hiring		2,245	1,930	-315	0.2%
20	Local Government Administration		7,046	6,780	-266	0.7%
	All other industries		715,759	727,613	11,854	79.0%
	Total		923,336	921,182	-2,154	100%

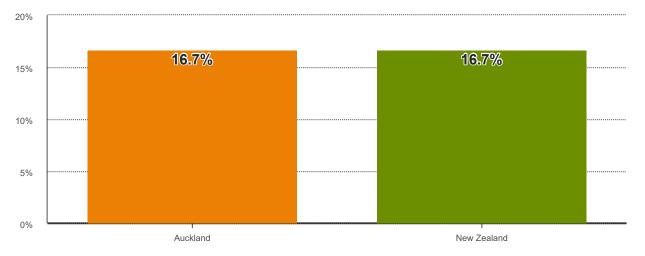




## What proportion of the workforce is self-employed in Auckland?

Self-employment makes up a sizeable proportion of total employment in New Zealand although it declined through the economic boom years and stabilised since the recession. This section contrasts self-employment in Auckland with the national economy.

#### Figure 10: Self employment rate, 2021



- Self-employed workers accounted for 16.7% of the workforce in Auckland in 2021, which was a lower rate than in the national economy (16.7%)
- A total of 153,873 workers were self-employed in Auckland in 2021.



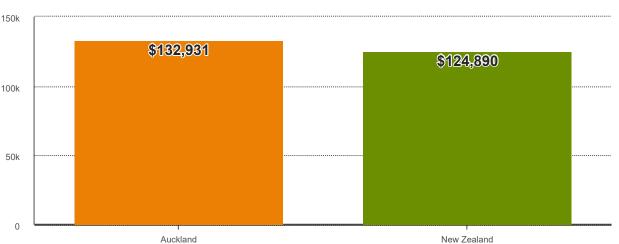
#### Figure 11: Self employment rate, 2000-2021

## Infometrics

# PRODUCTIVITY

Productivity is a way of describing the efficiency of production. In this section, we investigate GDP per employee to determine how much economic activity is generated on average by each employee. When looking at this indicator, one needs to consider that labour is only one input into production. As a result, a comparison of a region's labour productivity growth to its own history or to other districts, implicitly assumes that each worker has the same access to machinery, technology, and land.

This section describes Auckland's productivity level during the year to March 2021 and previous years. Productivity is measured by GDP per employee (in constant 2021 prices).



#### Figure 12: Productivity, 2021

- GDP per employee in Auckland measured \$132,931 in the year to March 2021, which was 6.4% higher than in New Zealand.
- Productivity in Auckland decreased by 2.6% from a year earlier compared with an decrease of 1.4% in New Zealand).
- Productivity growth in Auckland averaged 0.6%pa over the last ten years compared with an average of 0.7%pa in New Zealand.



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### Figure 13: Productivity growth, 2001-2021



## Infometrics

## What are the most productive industries in Auckland?

This section ranks industries according to their level of GDP per employee in Auckland. The level of GDP per employee may differ between industries because of the skill levels of workers and their inherent efficiency, as well as due to different amounts of machinery, technology, and land being used as production inputs. Table 11 below ranks broad industries by GDP per employee in Auckland and shows the corresponding GDP per employee in the national economy. Since the capital intensity of industries is often a significant explainer of productivity we also show the capital intensity of each industry in the table. Capital intensity is measured as the share of GDP which is attributable to capital. Industries with a high proportion are thus highly capital intensive.

#### Table 11: ANZSIC 1-digit industries ranked by productivity, 2021

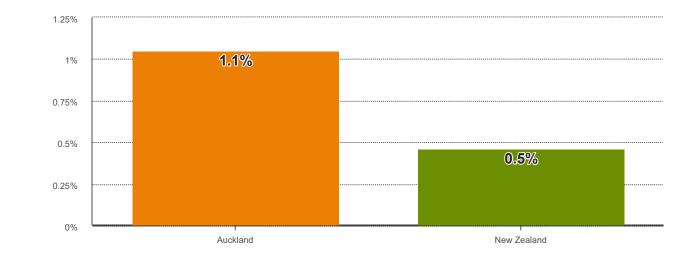
		Productivity		Capital intensity
	Industry	Auckland	New Zealand	New Zealand
Rental, Hiring and Real Estate Services		360,238	337,663	0.82
Information Media and Telecommunications		343,837	295,003	0.58
Financial and Insurance Services		295,585	267,096	0.56
Electricity, Gas, Water and Waste Services		211,797	458,851	0.77
Wholesale Trade		142,727	133,172	0.41
Manufacturing		132,003	124,965	0.43
Transport, Postal and Warehousing		114,892	110,675	0.42
Professional, Scientific and Technical Services		113,538	114,072	0.23
Public Administration and Safety		100,638	111,653	0.20
Arts and Recreation Services		93,567	83,219	0.36
Mining		89,716	580,531	0.76
Construction		84,953	81,631	0.26
Retail Trade		83,051	74,285	0.32
Health Care and Social Assistance		82,799	76,971	0.12
Other Services		69,286	55,446	0.19
Education and Training		65,697	58,771	0.26
Administrative and Support Services		42,964	42,716	0.20
Agriculture, Forestry and Fishing		41,810	114,827	0.60
Accommodation and Food Services		35,567	38,765	0.25
Total		132,931	124,890	



# **BUSINESS GROWTH**

## How fast did the number of business units grow in Auckland?

Growth in the number of business units is an indicator of entrepreneurial activity. It indicates an environment in which entrepreneurs are prepared to take risks to start new ventures. This section contrasts Auckland's recent performance in business unit growth with other regions in the country.



### Figure 14: Business unit growth, year to Mar 2021

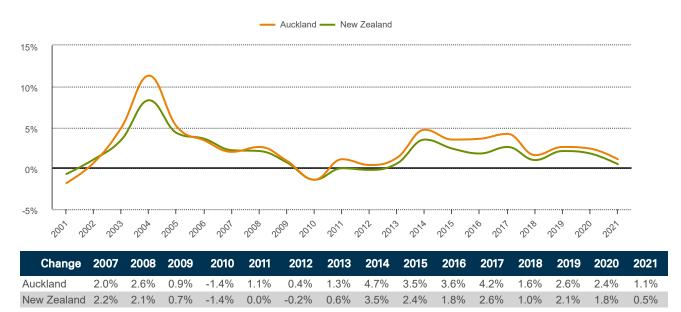
- A total of 208,893 business units were recorded in Auckland in 2021, up 1.1% from a year earlier.
- The number of business units in New Zealand increased by 0.5% over the same period.
- Growth in the number of business units in Auckland averaged 2.5%pa over the past 10 years compared with 1.6%pa in the national economy.
- Business unit growth in Auckland varied from a high of 11.3% in 2004 to a low of -1.8% in 2001.





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### Figure 15: Annual average business unit growth, 2001-2021



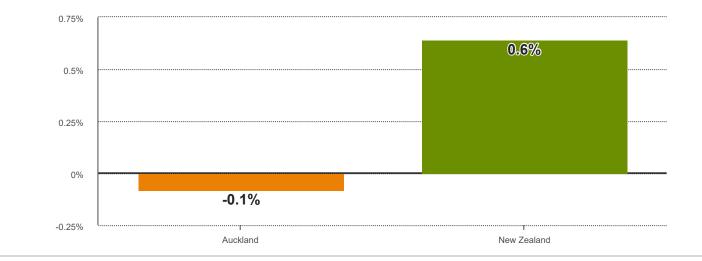
Infometrics

# **POPULATION GROWTH**

## How fast has Auckland's population grown?

Population growth is an indicator of a region's attractiveness as a place to live and work. A strong regional economy with plentiful job opportunities will help a region retain its population and attract new residents from other regions and abroad. This section contrasts Auckland's recent population growth with other districts and the country as a whole.

#### Figure 16: Population growth, year to Jun 2021



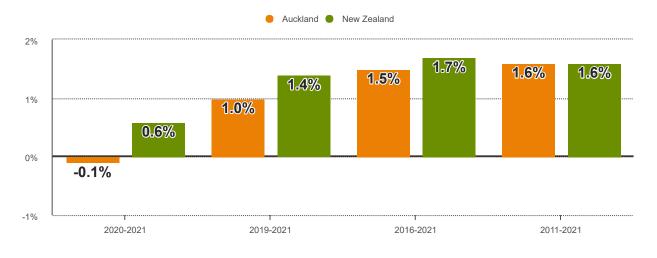
- Auckland's population was 1,715,600 in 2021, down 0.08% from a year earlier. New Zealand's total population grew by 0.6% over the same period.
- Population growth in Auckland averaged 1.5%pa over the last 5 years compared with 1.7%pa in New Zealand.
- Since 1996 growth in Auckland reached a high of 3.3%pa in 2003 and a low of -0.1%pa in 2021.



### Figure 17: Annual population growth, 1997-2021





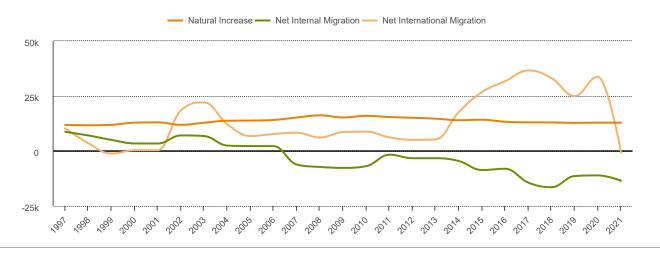


## What is the source of Auckland's population growth?

A region's population can grow through natural growth (births less deaths), net internal migration, and net international migration. This section describes the relative contributions of these two sources to population growth in Auckland.

 Auckland's population decreased by 1,300 people in the year to June 2021. This net decrease was made up of an internal net migration of -13,500, an international net migration of -670, and natural increase of 12,900.

#### Figure 19: Population source of Auckland, 1997-2021

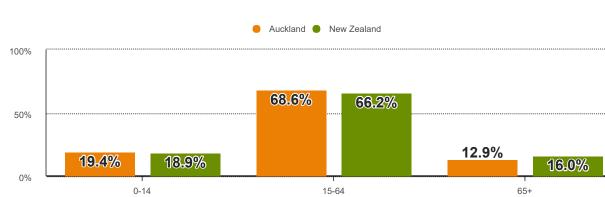


• The relative contribution of total net migration to natrual growth in Auckland was higher than New Zealand in 2021.



## What is the age structure of Auckland's population?

- In 2021, 68.6% of Auckland's population was of working age (15-64). This was significantly higher than the proportion of the national population (66.2%).
- Auckland had a slightly higher proportion (19.4%) of young people (0-14) than the country as a whole (18.9%) and a significantly lower proportion (12.9%) of people 65 years and older compared with New Zealand (16.0%).
- Overall the dependency ratio in Auckland (45.8%) was lower than in the national economy (51.1%). The dependency ratio expresses the number of persons outside of the working age as a proportion of the number of persons of working age (15 to 64 years).



#### Figure 20: Age composition of the population, year to June 2021

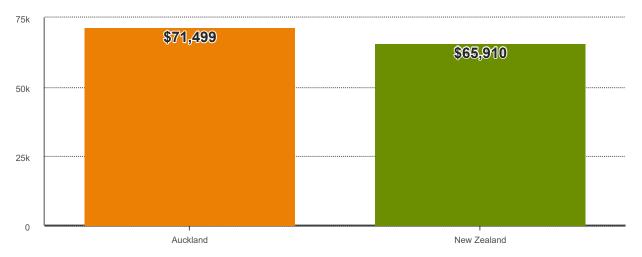
## **STANDARD OF LIVING**

This section describes a few indicators of economic standard of living. It investigates average earnings, house prices and housing affordability.

## What are the mean earnings in Auckland?

**Income earned** in employment is an important source of household income, well-being and choices available. Average earnings in an area are determined by a number of factors including the industries in the area, the skills required in these industries and the ability of employers to find appropriately skilled labour.

This section looks at how average annual earnings in the Auckland has changed over time and how this compares against annual average earnings nationally.

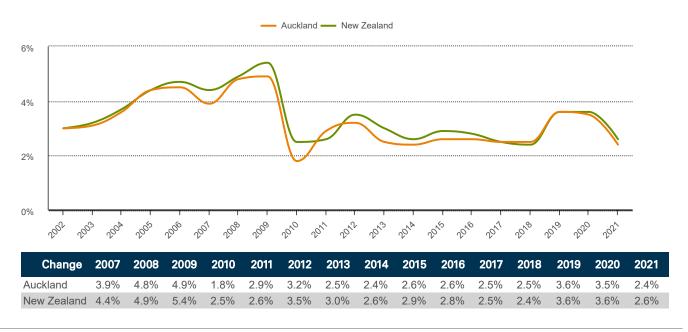


#### Figure 21: Earnings, 2021

- Mean annual earnings in Auckland was \$71,499 in the year to March 2021, which was higher than the New Zealand mean of \$65,910.
- Mean earnings in Auckland increased by 2.4% over the year to March 2021 compared with an increase of 2.6% in New Zealand.
- Over the last ten years earnings growth in Auckland reached a maximum of 4.9% in 2009 and a minimum of 1.8% in 2010.



#### Figure 22: Annual earnings growth, 2002-2021

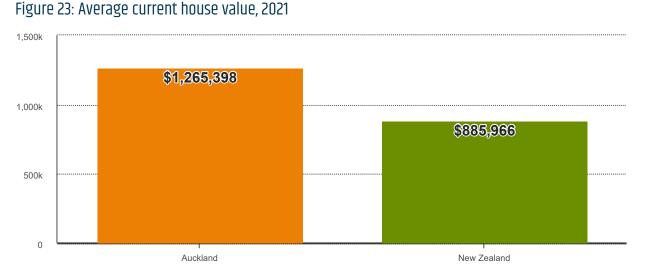


- Mean annual earnings in Auckland was \$71,499 in the year to March 2021, which was higher than the New Zealand mean of \$65,910.
- Mean earnings in Auckland increased by 2.4% over the year to March 2021 compared with an increase of 2.6% in New Zealand.
- Over the last ten years earnings growth in Auckland reached a maximum of 4.9% in 2009 and a minimum of 1.8% in 2010.

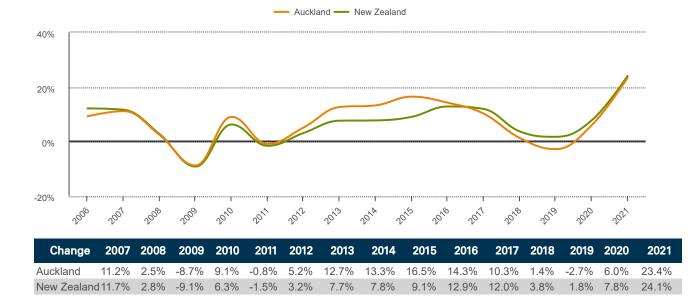


## How do house prices in Auckland compare?

The cost of housing is a major component of household spending. This section describes the cost of housing in Auckland relative to the rest of the country.



- The Average current house value in Auckland was \$1,265,398 in 2021, which was higher than the New Zealand median of \$885,966.
- House price growth in Auckland was 23.4% for the year to March 2021. Growth was weaker that in New Zealand (24.1%).



#### Figure 24: Annual Average current house value growth, 2006-2021



## How affordable is housing in Auckland?

This section investigates the affordability of housing by comparing average current house values with average earnings. We have estimated a housing affordability index which is the ratio of the average current house value to annual average earnings measured in the Linked Employer Employee Data. A higher ratio therefore indicates lower housing affordability.

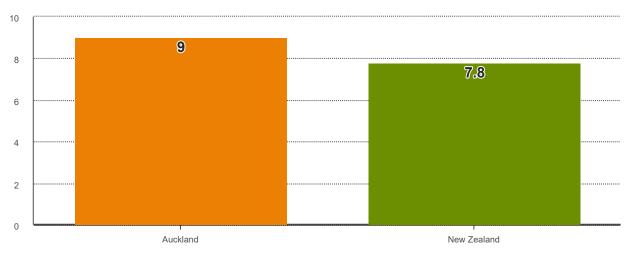
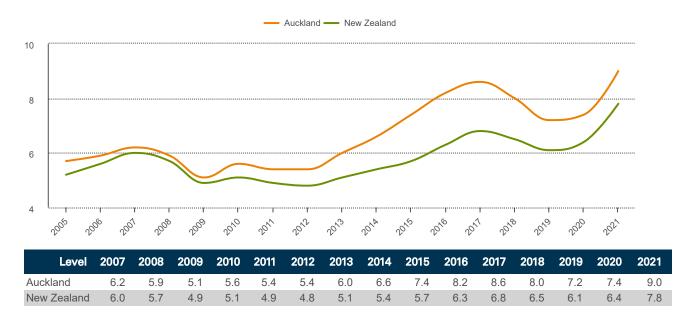


Figure 25: Housing affordibility index, 2021

• The housing affordability index in Auckland was 9.0 in the year to March 2021, which was higher than New Zealand's index of 7.8. This means that housing is less affordable in Auckland than in New Zealand.



#### Figure 26: Housing affordibility, 2005-2021



# **WORKFORCE AND SKILLS**

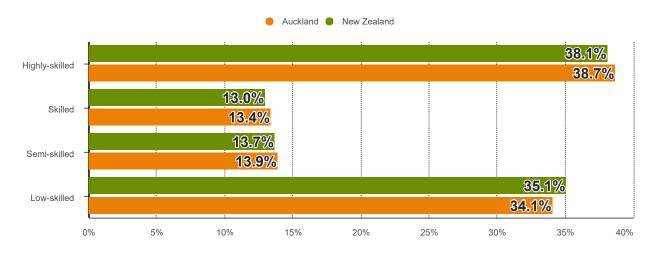
## How do skill levels in Auckland compare with New Zealand?

A region that can offer high skilled jobs can generally offer a higher standard of living to its residents. It is also has a better chance of retaining its residents and attracting new skills. This section contrasts the skill levels required by jobs in Auckland with those required in the national economy. The broad skill categories used are defined in the technical section at the end of the report.

#### Table 12: Employment by broad skill level, 2021

Skill level	Auckland		New Zealand	
	Jobs	% of total	Jobs	% of total
Highly-skilled	356,099	38.7%	996,628	38.1%
Skilled	123,419	13.4%	340,170	13.0%
Semi-skilled	127,867	13.9%	357,739	13.7%
Low-skilled	313,797	34.1%	918,163	35.1%
Total	921,182	100%	2,612,700	100%

- Approximately 38.7% of Auckland's workforce was employed in highly skilled occupations in 2021. This is higher than in New Zealand (38.1%).
- Approximately 34.1% of Auckland's workforce was employed in low-skilled occupations in 2021. This is lower than in New Zealand 35.1%.



### Figure 27: Employment by broad skill level, 2021



### What is the occupational structure of employment in Auckland?

This section describes the types of occupations that are employed in Auckland. The following graph shows the distribution of employment across broad occupational categories (1-digit occupations).

- Professionals accounted for the largest share of employment (25.9%) in Auckland, which is higher than New Zealand (24.5%).
- Managers accounted for the second largest share of employment (17.4%) in Auckland, which is lower than New Zealand (18.0%).
- Machinery operators and drivers accounted for the lowest share of employment (5.1%) in Auckland, which is lower than New Zealand (5.3%).

#### Figure 28: Employment by broad occupation, 2021

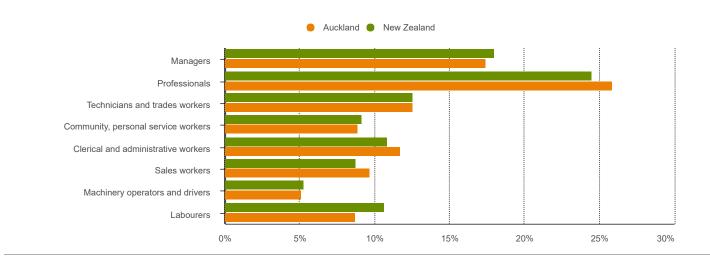


Table 13 shows a ranking of employment by 2-digit occupations.

- Specialist Managers is the largest 2-digit occupation in Auckland, accounting for 9.3% of employment. By comparison 8.4% of the national workforce are employed as specialist managers.
- The next largest 2-digit occupations in Auckland are business, hr & marketing professionals (6.1%) and education professionals (5.5%).



### Table 13: Employment by ANZSIC 2-digit occupation, 2021

	Aucklan	d	New Zeala	and
Occupation	Employment	% of total	Employment	% of total
Specialist Managers	85,424	9.3%	218,782	8.4%
Business, HR & Marketing Professionals	56,613	6.1%	140,704	5.4%
Education Professionals	50,332	5.5%	150,560	5.8%
Sales Assistants & Salespersons	46,179	5.0%	123,248	4.7%
Health Professionals	36,821	4.0%	111,200	4.3%
Chief Execs, General Managers, Legislators	35,115	3.8%	90,847	3.5%
Design, Engineering, Science Professionals	34,386	3.7%	91,036	3.5%
Hospitality, Retail & Service Managers	33,661	3.7%	93,433	3.6%
Sales Representatives & Agents	33,038	3.6%	78,823	3.0%
ICT Professionals	29,089	3.2%	63,965	2.4%
Carers & Aides	28,399	3.1%	88,965	3.4%
Office Managers & Program Administrators	24,772	2.7%	68,183	2.6%
Construction Trades Workers	23,930	2.6%	68,004	2.6%
Other Labourers	22,339	2.4%	69,606	2.7%
Automotive & Engineering Trades Workers	21,688	2.4%	64,308	2.5%
Legal, Social & Welfare Professionals	20,548	2.2%	60,031	2.3%
Cleaners & Laundry Workers	19,996	2.2%	55,327	2.1%
Numerical Clerks	19,340	2.1%	46,823	1.8%
Engineering, ICT & Science Technicians	18,914	2.1%	51,671	2.0%
Road & Rail Drivers	18,820	2.0%	54,751	2.1%
Hospitality Workers	17,681	1.9%	49,266	1.9%
General Clerical Workers	17,561	1.9%	48,454	1.9%
Other Clerical & Administrative Workers	17,418	1.9%	45,059	1.7%
Other Technicians & Trades Workers	15,809	1.7%	39,944	1.5%
Sports & Personal Service Workers	15,433	1.7%	40,815	1.6%
Food Trades Workers	15,346	1.7%	43,742	1.7%
Inquiry Clerks & Receptionists	13,074	1.4%	35,844	1.4%
Factory Process Workers	13,020	1.4%	49,974	1.9%
Machine & Stationary Plant Operators	12,324	1.3%	34,680	1.3%
Electrotech & Telecoms Trades Workers	12,292	1.3%	33,277	1.3%
Protective Service Workers	11,863	1.3%	35,385	1.4%
Arts & Media Professionals	10,664	1.2%	23,725	0.9%
Sales Support Workers	10,320	1.1%	28,492	1.1%
Construction & Mining Labourers	10,166	1.1%	28,821	1.1%
Storepersons	10,029	1.1%	23,595	0.9%
Health & Welfare Support Workers	8,434	0.9%	26,843	1.0%
Personal Assistants & Secretaries	8,011	0.9%	21,677	0.8%
Skilled Animal & Horticultural Workers	7,943	0.9%	27,535	1.1%
Farm, Forestry & Garden Workers	7,791	0.8%	55,966	2.1%
Clerical & Office Support Workers	7,387	0.8%	18,305	0.7%
Food Preparation Assistants	7,255	0.8%	20,242	0.8%
Farmers & Farm Managers	6,003	0.7%	66,622	2.5%
Mobile Plant Operators	5,954	0.6%	24,166	0.9%
Total employment	921,182	100%	2,612,700	100%

### Employment in knowledge intensive industries in Auckland

Knowledge intensive industries are those in which the generation and exploitation of knowledge play the predominant part in the creation of wealth. These sectors represent an increasing share of the New Zealand economy's output and employment, and will most likely be the source of future productivity growth.

An industry is defined as knowledge-intensive if it meets two criteria: at least 25 per cent of the workforce is gualified to degree level and at least 30 per cent of the workforce is in professional, managerial and scientific and technical occupations. Further details of the definition are providing in the technical notes at the end of the report.

This section describes employment in knowledge intensive industries in Auckland.

#### Table 14: Employment in knowledge intensive industries, 2021

	Employment in Kl industries 2021	KI employment as share of total employment 2021	Annual growth in Kl employment 2021	Annual average grwoth in Kl employment 2011-2021
Auckland	329,083	35.7%	0.9%	2.6%
New Zealand	848,044	32.5%	1.6%	2.2%

- During 2021, there were 329,083 jobs in Auckland's knowledge intensive industries. At 35.7% of total employment, this was higher than in New Zealand (32.5%).
- During the year to March 2021, growth in employment in knowledge intensive industries was 0.9%, compared with a change of 1.6% in New Zealand.

#### Figure 29: Employment in knowledge intensive industries, 2000-2021







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### What are the top knowledge intensive industries in Auckland?

### Table 15: Top 30 knowledge intensive industries in Auckland, 2021

		Auck	dand	New Z	ealand
Rank	Industry	Employment	% of total employment	Employment	% of total employment
1	Hospitals (except Psychiatric Hospitals)	26,503	2.9%	78,971	3.0%
2	Computer Systems Design and Related Services	23,631	2.6%	47,488	1.8%
3	Management Advice and Other Consulting Services	19,206	2.1%	43,541	1.7%
4	Primary Education	17,382	1.9%	56,607	2.2%
5	Corporate Head Office Management Services	14,409	1.6%	25,190	1.0%
6	Engineering Design and Engineering Consulting Services	13,979	1.5%	31,602	1.2%
7	Higher Education	13,046	1.4%	35,451	1.4%
8	Secondary Education	11,445	1.2%	36,224	1.4%
9	Other Allied Health Services	11,421	1.2%	37,115	1.4%
10	Accounting Services	9,775	1.1%	25,460	1.0%
11	Employment Placement and Recruitment Services	9,068	1.0%	19,021	0.7%
12	Central Government Administration	8,603	0.9%	47,039	1.8%
13	Legal Services	8,211	0.9%	20,099	0.8%
14	Local Government Administration	6,780	0.7%	24,809	0.9%
15	Other Auxiliary Finance and Investment Services	6,324	0.7%	11,489	0.4%
16	Financial Asset Investing	5,776	0.6%	8,271	0.3%
17	General Practice Medical Services	4,871	0.5%	16,702	0.6%
18	Other Administrative Services n.e.c.	4,773	0.5%	10,023	0.4%
19	Advertising Services	4,757	0.5%	6,880	0.3%
20	Architectural Services	4,742	0.5%	10,552	0.4%
21	Other Interest Group Services n.e.c.	4,615	0.5%	14,344	0.5%
22	Adult, Community and Other Education n.e.c.	4,498	0.5%	11,810	0.5%
23	Pharmaceutical, Cosmetic and Toiletry Goods Retailing	4,333	0.5%	11,855	0.5%
24	Motion Picture and Video Production	4,284	0.5%	6,707	0.3%
25	Religious Services	3,837	0.4%	9,885	0.4%
26	Pharmaceutical and Toiletry Goods Wholesaling	3,754	0.4%	5,297	0.2%
27	Wired Telecommunications Network Operation	3,576	0.4%	6,176	0.2%
28	Medical and Surgical Equipment Manufacturing	3,461	0.4%	4,500	0.2%
29	Dental Services	2,923	0.3%	8,222	0.3%
30	Technical and Vocational Education and Training	2,835	0.3%	9,785	0.4%



### Which qualifications are in demand in Auckland?

This section examines the types of qualifications, in terms of NZQA level and field of study, that are in demand in Auckland. The demand for qualifications is derived from our estimates of the demand for occupations by using assumptions about the types of qualifications which are ideally required for each occupation. Thus our estimates do not describe the educational profile of the region's workforce but rather the type of qualifications that are ideally required in the region. Further details are provided in the technical notes at the end.

#### Table 16: Employment by level of qualification and field of study in Auckland, 2021

Field of study	Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total
Number					
Natural and Physical Sciences	14,087	2,665	5,999	20,432	43,183
Information Technology	13,495	1,432	4,122	18,290	37,338
Engineering and Related Technologies	58,348	46,782	18,682	43,709	167,521
Architecture and Building	20,030	36,522	6,571	12,082	75,206
Agriculture, Environmental and Related Studies	14,393	6,065	2,315	6,007	28,781
Health	24,323	4,904	9,590	44,501	83,318
Education	17,281	2,520	4,594	39,273	63,668
Management and Commerce	77,476	13,709	26,449	73,587	191,221
Society and Culture	45,030	9,027	15,562	51,612	121,231
Creative Arts	23,546	5,477	5,564	21,949	56,535
Food, Hospitality and Personal Services	26,664	16,995	5,603	3,918	53,180
Totals	334,673	146,099	105,051	335,360	921,182
% of total					
Natural and Physical Sciences	1.5%	0.3%	0.7%	2.2%	4.7%
Information Technology	1.5%	0.2%	0.4%	2.0%	4.1%
Engineering and Related Technologies	6.3%	5.1%	2.0%	4.7%	18.2%
Architecture and Building	2.2%	4.0%	0.7%	1.3%	8.2%
Agriculture, Environmental and Related Studies	1.6%	0.7%	0.3%	0.7%	3.1%
Health	2.6%	0.5%	1.0%	4.8%	9.0%
Education	1.9%	0.3%	0.5%	4.3%	6.9%
Management and Commerce	8.4%	1.5%	2.9%	8.0%	20.8%
Society and Culture	4.9%	1.0%	1.7%	5.6%	13.2%
Creative Arts	2.6%	0.6%	0.6%	2.4%	6.1%
Food, Hospitality and Personal Services	2.9%	1.8%	0.6%	0.4%	5.8%
Totals	36.3%	15.9%	11.4%	36.4%	100%

• The greatest demand in Auckland in 2021 was for qualifications at the level of Degree (level 7+). Approximately 36.4% of all positions in Auckland required this level of qualification.

• By field of study, the highest demand was for Management and Commerce. Approximately 20.8% of all positions in Auckland required this field of study.



#### Table 17: Change in employment by level of qualification and field of study in Auckland, 2011-2021

Field of stu	dy Certificate (level 1-3)	Certificate (level 4)	Diploma (level 5-6)	Degree (level 7+)	Total
Absolute change					
Natural and Physical Sciences	2,103	533	1,310	5,029	8,976
Information Technology	2,139	283	978	6,381	9,781
Engineering and Related Technologies	11,292	8,439	4,434	12,323	36,489
Architecture and Building	4,791	14,311	2,288	3,603	24,994
Agriculture, Environmental and Related Studies	2,760	1,385	590	1,386	6,120
Health	4,274	960	2,626	12,197	20,057
Education	2,982	419	1,337	8,173	12,911
Management and Commerce	10,399	2,226	7,155	17,934	37,714
Society and Culture	7,466	1,730	4,362	11,593	25,150
Creative Arts	3,661	913	1,361	4,987	10,922
Food, Hospitality and Personal Services	5,205	5,040	1,380	938	12,563
Totals	57,072	36,240	27,820	84,544	205,677
annual average % change					
Natural and Physical Sciences	1.6%	2.3%	2.5%	2.9%	2.4%
Information Technology	1.7%	2.2%	2.7%	4.4%	3.1%
Engineering and Related Technologies	2.2%	2.0%	2.7%	3.4%	2.5%
Architecture and Building	2.8%	5.1%	4.4%	3.6%	4.1%
Agriculture, Environmental and Related Studies	2.2%	2.6%	3.0%	2.7%	2.4%
Health	2.0%	2.2%	3.3%	3.3%	2.8%
Education	1.9%	1.8%	3.5%	2.4%	2.3%
Management and Commerce	1.5%	1.8%	3.2%	2.8%	2.2%
Society and Culture	1.8%	2.1%	3.3%	2.6%	2.4%
Creative Arts	1.7%	1.8%	2.8%	2.6%	2.2%
Food, Hospitality and Personal Services	2.2%	3.6%	2.9%	2.8%	2.7%
Totals	1.9%	2.9%	3.1%	2.9%	100%

• The number of positions in Auckland requiring a Degree (level 7+) increased by 84,544 between 2011 and 2021, ranking it as the qualification level with the largest absolute increase in demand.

• By field of study, Management and Commerce experienced the highest increase in demand between 2011 and 2021. The number of positions requiring this field of study increased by 37,714 over the 10 year period.



# TOURISM

Tourism has grown rapidly in New Zealand since 2000. Not only has the number of overseas tourist arrivals increased substantially, but the level of domestic tourism has also expanded rapidly as spending on leisure by New Zealand residents increased. This section describes the contribution of tourism to Auckland's economy.

### **Tourism GDP**

#### Table 18: Tourism GDP, 2001-2021

Auckland			New Zealand	
Year	Level	Change	Level	Change
2000	\$932m		\$3,343m	
2001	\$1,000m	7.2%	\$3,595m	7.5%
2002	\$1,146m	14.7%	\$4,074m	13.3%
2003	\$1,352m	17.9%	\$4,700m	15.4%
2004	\$1,450m	7.3%	\$5,141m	9.4%
2005	\$1,585m	9.3%	\$5,626m	9.4%
2006	\$1,688m	6.5%	\$5,985m	6.4%
2007	\$1,788m	5.9%	\$6,368m	6.4%
2008	\$2,059m	15.2%	\$7,227m	13.5%
2009	\$1,998m	-3.0%	\$6,932m	-4.1%
2010	\$2,083m	4.2%	\$7,379m	6.4%
2011	\$2,158m	3.6%	\$7,698m	4.3%
2012	\$2,480m	14.9%	\$8,120m	5.5%
2013	\$2,483m	0.1%	\$8,289m	2.1%
2014	\$2,703m	8.9%	\$9,191m	10.9%
2015	\$3,315m	22.6%	\$10,710m	16.5%
2016	\$4,014m	21.1%	\$12,508m	16.8%
2017	\$4,066m	1.3%	\$12,809m	2.4%
2018	\$4,511m	10.9%	\$14,235m	11.1%
2019	\$4,621m	2.4%	\$14,937m	4.9%
2020	\$5,052m	9.3%	\$15,948m	6.8%
2021	\$1,862m	-63.1%	\$8,547m	-46.4%

#### Figure 30: Annual average tourism GDP growth, 2001-2021





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- The tourism industry contributed \$1,862m towards GDP in Auckland in 2021. This amounted to 1.5% of the Auckland's economic output in 2021, down from 2.4% ten years ago.
- Economic output in Auckland's tourism industry declined by -63.1% in 2021, compared with a -46.4% decline in New Zealand.
- Growth in the industry in Auckland has averaged -1.5% over the last ten years, compared with 1.1% in New Zealand.

### **Tourism Employment**

#### Table 19: Tourism employment, 2001-2021

Auckland			New Zealand	
Year	Level	Change	Level	Change
2000	43,169		152,610	
2001	44,138	2.2%	157,389	3.1%
2002	45,414	2.9%	162,042	3.0%
2003	48,541	6.9%	169,965	4.9%
2004	50,015	3.0%	177,861	4.6%
2005	51,300	2.6%	184,761	3.9%
2006	53,179	3.7%	190,890	3.3%
2007	54,638	2.7%	197,028	3.2%
2008	55,246	1.1%	198,219	0.6%
2009	56,166	1.7%	198,555	0.2%
2010	51,704	-7.9%	187,083	-5.8%
2011	50,229	-2.9%	181,881	-2.8%
2012	53,859	7.2%	175,866	-3.3%
2013	52,981	-1.6%	173,721	-1.2%
2014	52,321	-1.2%	175,023	0.7%
2015	60,053	14.8%	191,796	9.6%
2016	67,352	12.2%	210,126	9.6%
2017	65,768	-2.4%	208,923	-0.6%
2018	69,601	5.8%	222,129	6.3%
2019	66,710	-4.2%	220,875	-0.6%
2020	67,021	0.5%	218,580	-1.0%
2021	29,394	-56.1%	146,295	-33.1%

#### Figure 31: Annual average tourism employment growth, 2001-2021



- The tourism industry employed an average of 29,394 people in Auckland in 2021. This amounted to 3.2% of the Auckland's total employment in 2021, down from 7.0% in 2011.
- Employment growth in the industry in Auckland has averaged -5.2% over the last ten years, compared with -2.2% in New Zealand.
- Employment in the tourism industry declined by -56.1% in 2021, compared with a -33.1% decline in New Zealand.



# **TECHNICAL NOTES**

#### Time period

This economic profile reports on March years (eg 2021 refers to the 12 months to March 2021) for all indicators except population (as at June) and dairy sector statistics (May year) and business units (snapshot as at February).

#### **Broad economic sectors**

Primary industries extract or harvest products from the earth and include agriculture, forestry, fishing, and mining. Goods-producing industries produce manufactured and other processed goods and include manufacturing, electricity, gas and water, and construction. High-value services include **knowledge intensive** service industries. Other services include all service industries that are not knowledge intensive, such as retail trade, and food and accommodation services. 'Other' includes owner occupied property operation and **unallocated** activity.

#### **Broad skill levels**

*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).

*Medium-high skilled* occupations typically require an NZ Register Diploma, an Associate Degree or Advanced Diploma. 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.

*Medium skilled* occupations typically require an NZ Register Level 4 qualification. 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 an NZ Register Level 3 qualification or lower. It 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 four and five of the ANZSCO classification.

#### **Business units**

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.

The number of business units is based on a snapshot as at February each year.

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

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



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Only business units 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).

#### **Dependency** ratio

The dependency ratio is the number of under 15 year olds and over 65 year olds as a ratio of the rest of the population (working age).

#### Earnings

Earnings data comes from the quarterly Linked Employer Employee Data published by Statistics New Zealand. LEED publishes the mean earnings of full quarter jobs for each quarter. Full quarter jobs may include full time and part time jobs. Earnings include overtime and lump sum payments. We sum the mean earnings for the four quarters making up the year to arrive at an estimate of average annual earnings.

#### Employment by industry

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

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

#### Employment by occupation

Employment in each industry is converted to occupational employment using the relationship between industry and occupational employment observed in various Population Censuses. The Population Census measures the occupational composition of employment in each industry and how this changes over time. Occupations confirm to the categories used in the Australian New Zealand Standard Classification of Occupations (ANZSCO).

#### Employment by qualification and field of study

Employment by occupation is converted to employment by qualification using the unique matching between occupation and **the five qualification or skill levels used** in the Australian New Zealand Standard Classification of Occupations (ANZSCO). Fields of study for each combination of occupation and skill are obtained from Population Census. Shares of employment in a particular occupation and skill combination for each field of study can, thus, be aggregated into demand for labour by skill/qualification.



#### **Gross Domestic Product**

Gross Domestic Product (GDP) measures the value economic units add to their inputs. It should not be confused with revenue or turnover.

Total GDP is calculated by summing the value added to all goods and services for final consumption – ie it does not include the value added to goods and services used as intermediate inputs for the production of other goods as this would result in double counting. As a result, GDP estimates should not be confused with revenue/turnover/gross output.

In this profile Gross Domestic Product for each region and territorial authority (TA) is estimated by Infometrics. A top-down approach breaks national production-based GDP for each industry (published by Statistics New Zealand) down to territorial authority level by applying TA shares to the national total. Each TA's share of industry output is based on the share of employment measured in the Linked Employer Employee Data (LEED), which is, in turn, based on taxation data. Our estimates are benchmarked on regional GDP published by Statistics New Zealand which ensures we capture differences in regional industry productivity and changes in productivity over time. In the 2021 GDP estimates we incorporate Infometrics' estimates of the proportions of industries in each territorial authority which were able to operate under each COVID-19 alert level to capture the economic impacts of the pandemic.

GDP is measured in constant 2021 prices.

#### Household income

The Infometrics household income series is a comprehensive estimate of average household incomes within each region or territorial authority area. The series captures labour market earnings (wages, salaries and self-employment) as well as allowances (e.g. Disability Allowance), benefits (e.g. Jobseeker Support) and superannuation. Investment income is excluded.

Infometrics models the series with a top-down approach, first measuring all incomes received by households in New Zealand, then apportioning them to smaller areas using various sources of administrative data. As there is a time lag in the availability of administrative data we use contemporary indicators to project our estimates to the most recent quarter. Infometrics estimates of the number of occupied private households are used to translate total income in each area into a per household mean.

The Infometrics household income series tends to be slightly higher than Census measures. Census tends to underestimate household incomes because individuals often fail to recall all their income when completing their Census form.

#### **House values**

House values (dollar value) are sourced from QVNZ. The levels used are average current values. An average current value is the average (mean) value of all developed residential properties in the area based on the latest house value index from QVNZ. It is not an average or median sales price, as both of those figures only measure what happens to have sold in the period. These average current values are affected by the underlying value of houses (including those not on the market) and are quality adjusted based on the growth in each house's price between sales.

#### **Industrial classification**

This profile uses industry categories from the 2006 Australia New Zealand Standard Industrial Classification (ANZSIC). The ANZSIC is a hierarchical classification with four levels, namely divisions (the broadest level also referred to as 1-digit categories), subdivisions (3-digit), groups (4-digit) and classes (7-digit). There are approximately 500 7-digit industries.

This profile also uses a grouping of 54 industries. These are the industries used by Statistics New Zealand in the national accounts.



#### Knowledge intensive employment

Knowledge intensive employment is measured as employment in industries (measured at the 7-digit industry level) which are defined as **knowledge intensive**.

#### Knowledge intensive industries

Knowledge-intensive industries are industries that satisfy two basic criteria: At least 25 per cent of the workforce must be qualified to degree level and at least 30 per cent of the workforce must be employed in professional, managerial, as well as scientific and technical occupations.

#### Māori industry and occupational employment

Infometrics models Māori industry and occupational employment data by drawing on detailed data from the Census, Household Labour Force Survey (HLFS) as well as the Infometrics Regional Employment Industry Model (REIM) and the Infometrics Regional Industry-Occupational matrix. Employment is measured at the place of work.

#### **Population**

The population numbers presented in this profile are based on Statistics New Zealand's Estimated Resident Population (ERP). The ERP is an estimate of all people who usually live in an area at a given date. Visitors from elsewhere in New Zealand or from overseas are excluded.

The ERP is not directly comparable with the census usually resident population count because of a number of adjustments. The ERP at 30 June 2018 is based on the 2018 census usually resident population count, adjusted for:

- net census undercount (based on the 2018 Post-enumeration Survey)
- residents temporarily overseas on census night
- births, deaths, and net migration between census night and the date of the estimate
- reconciliation with demographic estimates at ages 0–9 years.

#### Prices

In this profile, we present all GDP estimates in constant 2021 prices. GDP presented in constant prices is sometimes referred to as real GDP. By using constant prices we remove the distractionary effect of inflation. It enables us to meaningfully compare GDP from one year to the next.

#### Productivity

Productivity measures the efficiency of production. In this profile, we measure productivity as GDP per filled job (ie the amount of economic activity generated on average by each filled job). Labour is only one input into production. The output of each employee may differ across industries in a region due to differing access to machinery, technology, and land. Therefore, productivity comparisons should only be made in circumstances where it is reasonable to assume that capital intensity will be broadly the same – for example, when looking at productivity within an industry over a limited-time period, or when comparing productivity of a particular industry with that same industry in another region.



#### Self-employment

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

#### **Tourism employment**

Our estimates of tourism employment leverage off our tourism GDP estimates. We are able to use our understanding of the proportion of output in each industry in a territorial authority that is associated with tourism and apply this proportion to underlying employment levels in that industry. Summing up tourism employment by industry gives us an indication of the total number of jobs in a region that are attributable to the tourism industry.

#### **Tourism GDP**

Our estimates of tourism GDP are measured in 2021 **prices** and make use of the Tourism Satellite Accounts (TSA) published by Statistics New Zealand, in conjunction with data on guest nights, visitor expenditure data from MBIE, and Infometrics' regional GDP model. The TSA estimates the contribution of the tourism industry to GDP nationally. For the years 2009-2013, we have apportioned tourism GDP from the TSA to each territorial authority (TA) using constrained shares of visitor expenditure from MBIE's visitor expenditure data.

For the years before 2009, we have calculated growth rates in each TA's tourism GDP, by adjusting TSA industry ratios (that summarise the proportion each industry's output associated with tourism) and applying these adjusted ratios to our estimates of the TA's GDP. Our adjustment takes into consideration each TA's relative exposures to industries and guest night shares compared to the national economy. The estimates for each TA are then benchmarked on the national total from the TSA.

#### Unallocated

Unallocated items include taxes levied on the purchaser rather than the producing industry (such as GST, import duties, and taxes on capital transactions), and items that cannot easily be allocated to a specific industry (such as the seasonal adjustment balancing item). A seasonal adjustment balancing item is necessary to ensure that the sum of all seasonally adjusted industries can be reconciled with total GDP.





# Total economy

in Tāmaki Makaurau



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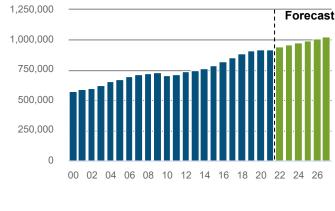
### Total economy

#### TĀMAKI MAKAURAU

#### How many people worked in the sector in 2021?

### **921,182** filled jobs

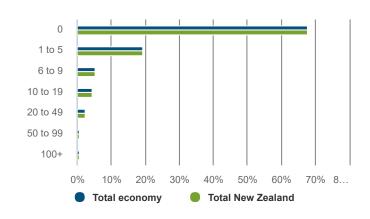
100% of 921,182 in Tāmaki Makaurau



CHANGE P.A	2016-2021	2022-2027
Total economy	2.3%	1.7%
Total Tāmaki Makaurau	2.3%	1.7%

#### How many businesses were in the sector in 2021?

#### 598,416 business units 100% of 598,416 in New Zealand



### What regions do people work in? Auckland 921,182 Waikato 231,277 Wellington 303,919 Canterbury 337,427 Rest of North Island 370,431 Rest of South Island 285,877

#### What were the top 5 occupations in 2021?

# 114,396 jobs: top 5 occupations

12.4% of total Total economy in Tāmaki Makaurau

OCCUPATION	LEVEL 2021		ANGE 22-27 (F)
Sales Assistant (General)	40,581	1.3%	0.9%
Sales Representatives nec	22,277	1.0%	0.9%
Chief Executive or Managing Director	19,289	1.8%	0.9%
Sales and Marketing Manager	16,712	1.7%	1.7%
Corporate General Manager	15,537	1.8%	1.4%

#### How many people are likely to be in new roles in the sector between now and 2027?

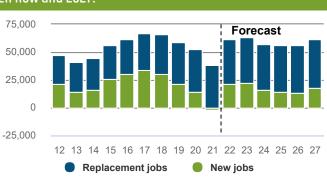
## 355,435 Total job openings

Total Tāmaki Makaurau: 355,435

#### Total job openings (2022-2027) consists of:

- New jobs: 105,699
- Net Replacement job openings: 249,736

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).





### Total economy

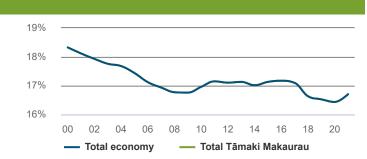
#### TĀMAKI MAKAURAU

#### How many people were self-employed in 2021?

### 153,873 Self-employed

Workers in the Total economy are less likely to be selfemployed than workers in Tāmaki Makaurau as a whole.

#### 16.7% self-employment rate Total Tāmaki Makaurau: 16.7%



#### How productive was the sector in 2021?

### **\$122,454m** GDP

100% of Tāmaki Makaurau GDP

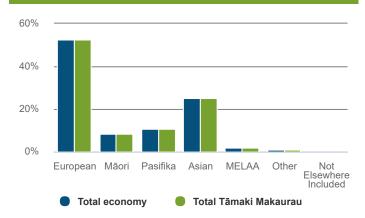
CHANGE P.A	2016-2021	2011-2021
Total economy	2.5%	3.2%
Total Tāmaki Makaurau	2.5%	3.2%

### \$149,109 GDP/FTE

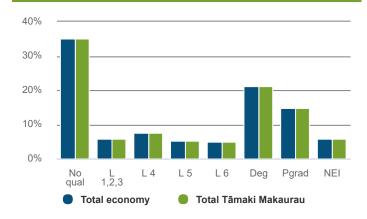
Total Tāmaki Makaurau: \$149,109

**0%** P.A. change from 2016-2021. Total Tāmaki Makaurau: 0%.

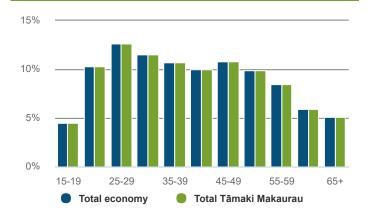
#### What was the ethnicity of workers in 2018?



#### What were the workers highest quals in 2018?



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



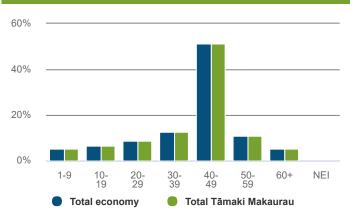
#### How many workers were female in 2021?

### 46.9% female

#### Total Tāmaki Makaurau: 46.9%



#### How many hours were spent working 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 Total economy sector in Tāmaki Makaurau as well forecast growth in employment.

### How many people work in the sector?

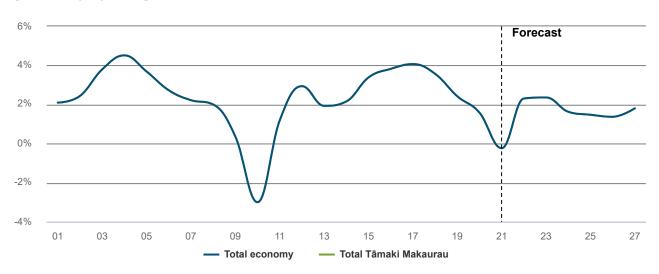
This section looks at the number of people employed in the Total economy sector and how employment has changed over time. Employment is presented in terms of filled jobs as well as full-time equivalent employment. Forecast employment growth in filled jobs is also provided.

### **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 Total economy sector in Tāmaki Makaurau averaged 921,182 in the year to March 2021. The Total economy sector accounts for 100% of overall filled jobs in Tāmaki Makaurau. In terms of historical and forecast trends for the Total economy sector in Tāmaki Makaurau:

- Employment grew by -0.2% in 2021 compared with overall growth of -0.2% in Tāmaki Makaurau.
- Employment growth averaged 2.6%pa over the past 10 years compared with overall growth of 2.6%pa on Tāmaki Makaurau.
- Employment is forecast to grow by 1.8%pa between 2021 and 2027. Overall employment in Tāmaki Makaurau is forecast to grow by 1.8%pa over the period.



#### Figure 1: Employment growth in Tāmaki Makaurau

The following table shows filled job employment in the Total economy in Tāmaki Makaurau for selected historic and forecast years. The Infometrics on-line Total economy Sector Profile provides a complete time series of annual employment from 2000 onwards.

#### Table 1: Employment in the Total economy sector in Tāmaki Makaurau

	Total economy			Total Tāmaki N	lakaurau
	Employment	% of total	% change	Employment	% change
2001	588,353	100%	2.1%	588,353	2.1%
2006	696,527	100%	2.7%	696,527	2.7%
2011	715,505	100%	1.2%	715,505	1.2%
2016	823,324	100%	3.8%	823,324	3.8%
2017	856,833	100%	4.1%	856,833	4.1%
2018	887,443	100%	3.6%	887,443	3.6%
2019	908,945	100%	2.4%	908,945	2.4%
2020	923,336	100%	1.6%	923,336	1.6%
2021	921,182	100%	-0.2%	921,182	-0.2%
2022 (f)	942,467	100%	2.3%	942,467	2.3%
2023 (f)	964,733	100%	2.4%	964,733	2.4%
2024 (f)	980,468	100%	1.6%	980,468	1.6%
2025 (f)	994,959	100%	1.5%	994,959	1.5%
2026 (f)	1,008,626	100%	1.4%	1,008,626	1.4%
2027 (f)	1,026,881	100%	1.8%	1,026,881	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 Total economy sector in 2021.

#### Figure 2: Regional employment in the Total economy sector, 2021

map

The following table shows employment in the Total economy sector by region in 2021.

#### Table 2: Employment by region in the Total economy sector, 2021

	Total econor	Total economy		у
	Employment	% of NZ	Employment	% of NZ
Auckland	921,182	35.3%	921,182	35.3%
Canterbury Region	337,427	12.9%	337,427	12.9%
Wellington Region	303,919	11.6%	303,919	11.6%
Waikato Region	231,277	8.9%	231,277	8.9%
Bay of Plenty Region	162,587	6.2%	162,587	6.2%
Otago Region	129,203	4.9%	129,203	4.9%
Manawatu-Whanganui Region	120,390	4.6%	120,390	4.6%
Hawke's Bay Region	87,405	3.3%	87,405	3.3%
Northland Region	78,060	3.0%	78,060	3.0%
Taranaki Region	60,666	2.3%	60,666	2.3%
Southland Region	54,577	2.1%	54,577	2.1%
Nelson Region	30,199	1.2%	30,199	1.2%
Marlborough Region	28,587	1.1%	28,587	1.1%
Tasman Region	26,815	1.0%	26,815	1.0%
Gisborne Region	23,910	0.9%	23,910	0.9%
West Coast Region	16,495	0.6%	16,495	0.6%
New Zealand	2,612,700		2,612,700	

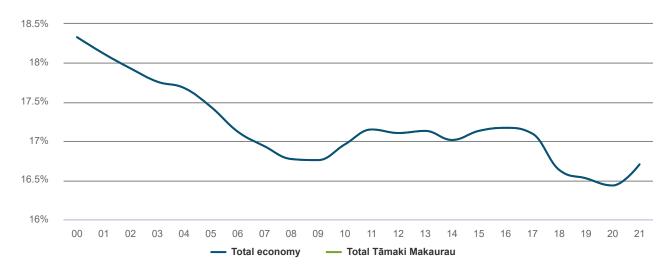
### Self-employment

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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 2021 there were 153,873 people working in the Total economy sector in Tāmaki Makaurau who were self-employed. This equates to 16.7% of the Total economy sector workforce and is greater than the overall self-employment rate in Tāmaki Makaurau of 16.7%. The self-employment rate in the Total economy sector in Tāmaki Makaurau has decreased by 0.4 percentage points over the past 15 years compared to overall self-employment rate in Tāmaki Makaurau makaurau which has decreased by 0.4 percentage points.





The following table shows the level of self-employment in the Total economy sector in Tāmaki Makaurau for selected years. The Infometrics online Total economy Sector Profile provides a complete time series of self-employment from 2000 onwards.

#### Table 3: Self employment in the Total economy sector in Tāmaki Makaurau

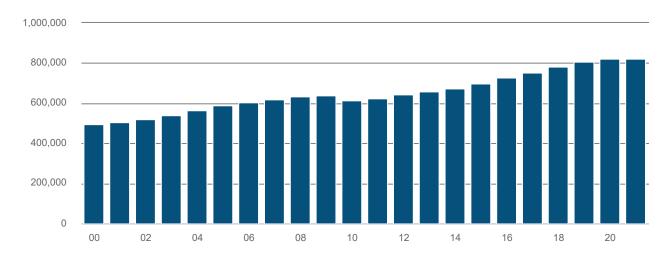
	Total economy		Total Tāmaki Makaurau			
	Self-employed	% change	self-employment rate	Self-employed	% change	self-employment rate
2001	106,603	0.9%	18.1%	106,603	0.9%	18.1%
2006	119,258	0.9%	17.1%	119,258	0.9%	17.1%
2011	122,706	2.3%	17.1%	122,706	2.3%	17.1%
2016	141,370	4.1%	17.2%	141,370	4.1%	17.2%
2017	146,486	3.6%	17.1%	146,486	3.6%	17.1%
2018	147,603	0.8%	16.6%	147,603	0.8%	16.6%
2019	150,202	1.8%	16.5%	150,202	1.8%	16.5%
2020	151,735	1.0%	16.4%	151,735	1.0%	16.4%
2021	153,873	1.4%	16.7%	153,873	1.4%	16.7%

### 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 2021 there were 821,237 FTEs in the Total economy sector in Tāmaki Makaurau, up 2.1% pa from 15 years ago. Overall FTE employment in Tāmaki Makaurau grew by 2.1%pa over the same period.



#### Figure 4: FTE employment in the Total economy sector in Tāmaki Makaurau

The following table shows FTE employment in the Total economy sector in Tāmaki Makaurau for selected years. The Infometrics online Total economy Sector Profile provides a complete time series of FTE employment from 2000 onwards.

#### Table 4: FTE employment in the Total economy sector in Tāmaki Makaurau

		Total economy		Total Tāmaki Mal	kaurau
	FTEs	% of total	% change	FTEs	% change
2001	504,675	100%	1.7%	504,675	1.7%
2006	605,117	100%	3.0%	605,117	3.0%
2011	622,963	100%	1.2%	622,963	1.2%
2016	725,885	100%	3.8%	725,885	3.8%
2017	754,384	100%	3.9%	754,384	3.9%
2018	783,112	100%	3.8%	783,112	3.8%
2019	807,166	100%	3.1%	807,166	3.1%
2020	821,922	100%	1.8%	821,922	1.8%
2021	821,237	100%	-0.08%	821,237	-0.08%

### 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.

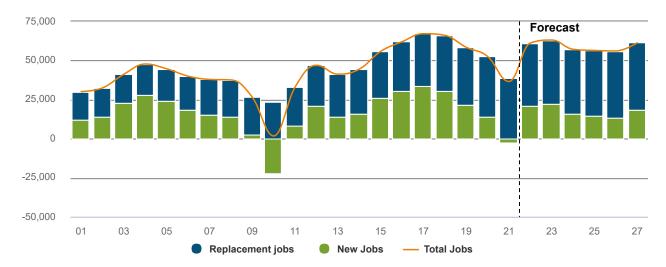
**New job openings** are created when businesses are expanding and are positive about their economic outlook. Conversely job destruction occurs when businesses contract and have a negative perspective of their economic outlook.

**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 355,435 total job openings in the Total economy sector in Tāmaki Makaurau between 2022 and 2027. Of the forecast 355,435 total job openings, 105,699 are forecast to be new job openings while 249,736 are expected to be due to net replacement job openings.



#### Figure 5: Job openings in the Total economy sector in Tāmaki Makaurau

The following table shows total job openings in the Total economy sector in Tāmaki Makaurau for selected years. The Infometrics online Total economy Sector Profile provides a complete time series of total job openings from 2001 onwards.

#### Table 5: Job openings in the Total economy in Tāmaki Makaurau

		Total eco	Total Tāmaki Makaurau			
	New jobs	Replacement jobs	TotalJobOpenings	% change	TotalJobOpenings	% change
2001	12,093	18,062	30,154		30,154	
2006	18,516	21,505	40,021	-10.5%	40,021	-10.5%
2011	8,440	24,585	33,024	1,747%	33,024	1,747%
2016	30,343	31,684	62,027	11.1%	62,027	11.1%
2017	33,508	33,660	67,168	8.3%	67,168	8.3%
2018	30,610	35,508	66,118	-1.6%	66,118	-1.6%
2019	21,502	36,985	58,487	-11.5%	58,487	-11.5%
2020	14,391	38,239	52,630	-10.0%	52,630	-10.0%
2021	-2,154	38,751	36,597	-30.5%	36,597	-30.5%
2022 (f)	21,284	39,899	61,183	67.2%	61,183	67.2%
2023 (f)	22,266	40,839	63,105	3.1%	63,105	3.1%
2024 (f)	15,735	41,452	57,186	-9.4%	57,186	-9.4%
2025 (f)	14,491	41,978	56,469	-1.3%	56,469	-1.3%
2026 (f)	13,668	42,457	56,125	-0.6%	56,125	-0.6%
2027 (f)	18,255	43,111	61,366	9.3%	61,366	9.3%

### 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 100% of all total job openings in the Total economy sector between 2022 and 2027.

Figure 6: Regional forecast job openings in the Total economy sector, 2022-2027

map

The following table shows shows forecast regional total job openings in the Total economy sector between 2022 and 2027.

#### Table 6: Forecast job openings by region in the Total economy sector, 2022-2027

		Total economy			Total economy			
	New Jobs	Replacement Jobs	Total job openings	New Jobs	Replacement Jobs	Total job openings		
Auckland	105,699	249,736	355,435	105,699	249,736	355,435		
Canterbury Region	40,126	92,547	132,673	40,126	92,547	132,673		
Wellington Region	39,008	81,572	120,581	39,008	81,572	120,581		
Waikato Region	22,376	62,951	85,327	22,376	62,951	85,327		
Bay of Plenty Region	20,227	45,069	65,295	20,227	45,069	65,295		
Otago Region	15,665	36,183	51,848	15,665	36,183	51,848		
Manawatu-Whanganui Region	12,868	33,624	46,493	12,868	33,624	46,493		
Hawke's Bay Region	10,026	24,658	34,684	10,026	24,658	34,684		
Northland Region	6,378	21,114	27,492	6,378	21,114	27,492		
Taranaki Region	5,658	16,354	22,011	5,658	16,354	22,011		
Southland Region	3,032	15,024	18,056	3,032	15,024	18,056		
Nelson Region	3,333	8,278	11,611	3,333	8,278	11,611		
Tasman Region	2,578	7,521	10,100	2,578	7,521	10,100		
Marlborough Region	1,563	8,059	9,622	1,563	8,059	9,622		
Gisborne Region	2,150	6,631	8,781	2,150	6,631	8,781		
West Coast Region	1,383	4,454	5,836	1,383	4,454	5,836		
New Zealand	292,069	713,776	1,005,846	292,069	713,776	1,005,846		

### 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**

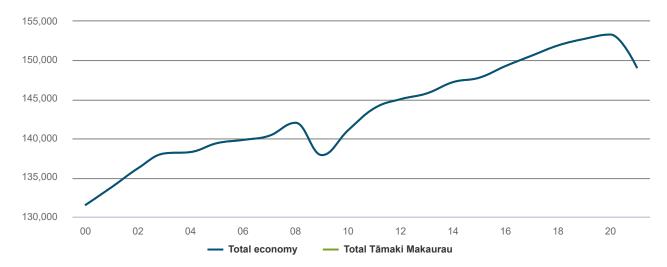
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In 2021 the Total economy sector contributed \$122,454m (in 2021 prices) to GDP in Tāmaki Makaurau. This equates to 100.0% of total Tāmaki Makaurau GDP. Key trends in the Total economy sector in Tāmaki Makaurau include:

- GDP in 2021 was down -2.8% from a year earlier. Overall Tāmaki Makaurau GDP fell by -2.8% over the period.
- GDP grew by 3.2%pa over the last 10 years compared with overall Tāmaki Makaurau GDP growth of 3.2%pa.

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

In 2021 GDP per FTE in the Total economy sector in Tāmaki Makaurau was \$149,109 compared to \$149,109 in the Total Tāmaki Makaurau. GDP per FTE growth in the Total economy sector in the past 10 years has been stronger than overall GDP growth in Tāmaki Makaurau.



#### Figure 7: Productivity (GDP/FTE) in Tāmaki Makaurau

The following table shows GDP (in 2019 prices) and productivity (GDP/FTE) in the Total economy sector in Tāmaki Makaurau for selected years. The Infometrics on-line Total economy Sector Profile provides a complete time series of GDP from 2000 onwards.

Table 7: GDP in the Total economy sector in Tāmaki Makaurau
---

	Total economy			Total Tāmaki Makaurau		
	GDP (\$m)	% change	GDP/FTE	GDP (\$m)	% change	GDP/FTE
2001	\$67,532m	3.5%	\$133,813	\$67,532m	3.5%	\$133,813
2006	\$84,616m	3.3%	\$139,835	\$84,616m	3.3%	\$139,835
2011	\$89,641m	3.2%	\$143,895	\$89,641m	3.2%	\$143,895
2016	\$108,368m	4.8%	\$149,290	\$108,368m	4.8%	\$149,290
2017	\$113,626m	4.9%	\$150,620	\$113,626m	4.9%	\$150,620
2018	\$118,973m	4.7%	\$151,924	\$118,973m	4.7%	\$151,924
2019	\$123,300m	3.6%	\$152,757	\$123,300m	3.6%	\$152,757
2020	\$126,011m	2.2%	\$153,313	\$126,011m	2.2%	\$153,313
2021	\$122,454m	-2.8%	\$149,109	\$122,454m	-2.8%	\$149,109

### **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 Total economy sector, Auckland accounted for 37.5% of overall GDP in 2021.

Figure 8: Regional share of GDP in the Total economy sector, 2021

map

The following table shows regional distribution of GDP (in 2021 prices) in the Total economy sector in 2021.

#### Table 8: GDP by region in the Total economy sector, 2021

	Total econ	Total economy		omy
	GDP	% of NZ	GDP	% of NZ
Auckland	\$122,454m	37.5%	\$122,454m	37.5%
Wellington Region	\$43,623m	13.4%	\$43,623m	13.4%
Canterbury Region	\$39,603m	12.1%	\$39,603m	12.1%
Waikato Region	\$28,416m	8.7%	\$28,416m	8.7%
Bay of Plenty Region	\$17,552m	5.4%	\$17,552m	5.4%
Otago Region	\$14,517m	4.4%	\$14,517m	4.4%
Manawatu-Whanganui Region	\$12,687m	3.9%	\$12,687m	3.9%
Taranaki Region	\$9,530m	2.9%	\$9,530m	2.9%
Hawke's Bay Region	\$8,851m	2.7%	\$8,851m	2.7%
Northland Region	\$8,818m	2.7%	\$8,818m	2.7%
Southland Region	\$6,888m	2.1%	\$6,888m	2.1%
Marlborough Region	\$3,426m	1.0%	\$3,426m	1.0%
Nelson Region	\$2,925m	0.9%	\$2,925m	0.9%
Tasman Region	\$2,599m	0.8%	\$2,599m	0.8%
Gisborne Region	\$2,241m	0.7%	\$2,241m	0.7%
West Coast Region	\$2,170m	0.7%	\$2,170m	0.7%
New Zealand	\$326,300m		\$326,300m	

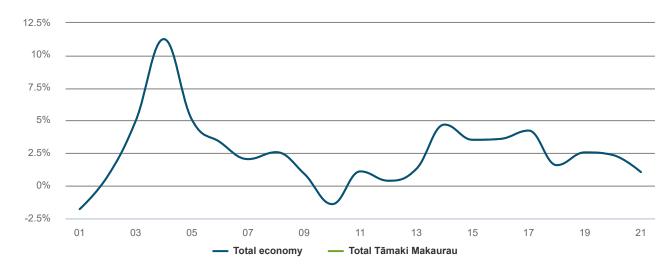
### How large are businesses in the sector?

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 Total economy sector in Tāmaki Makaurau.

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 2021 there were 208,893 businesses in the Total economy sector in Tāmaki Makaurau. Key trends include:

- The number of businesses in the sector grew by 1.1% in 2021 compared with a growth of 1.1% in the total economy.
- Average business growth in the sector over the past 10 years was 2.5%pa. Over the same period the overall number of businesses in Tāmaki Makaurau grew by 2.5%pa.



#### Figure 9: Business growth in Tāmaki Makaurau

The following table shows the number of businesses in the Total economy sector in Tāmaki Makaurau for selected years. The Infometrics on-line Total economy Sector Profile provides a complete time series of businesses from 2000 onwards.

#### Table 9: Businesses in the Total economy sector in Tāmaki Makaurau

	Total economy		Total Tāmaki Makaura	L
	<b>Business Units</b>	% change	<b>Business Units</b>	% change
2001	120,954	-1.8%	120,954	-1.8%
2006	154,596	3.4%	154,596	3.4%
2011	162,819	1.1%	162,819	1.1%
2016	185,949	3.6%	185,949	3.6%
2017	193,830	4.2%	193,830	4.2%
2018	196,902	1.6%	196,902	1.6%
2019	201,951	2.6%	201,951	2.6%
2020	206,721	2.4%	206,721	2.4%
2021	208,893	1.1%	208,893	1.1%

#### 18 Total economy Sector Profile 2021

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 2021 SMEs accounted for 96.6% of all employment in the Total economy sector in New Zealand.

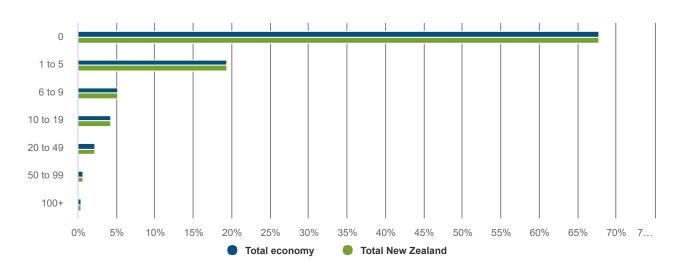


Figure 10: Businesses by number of employees in New Zealand, 2021

Further detailed information about business size is available in the Infometrics online Total economy 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 Total economy sector in Tāmaki Makaurau. 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.

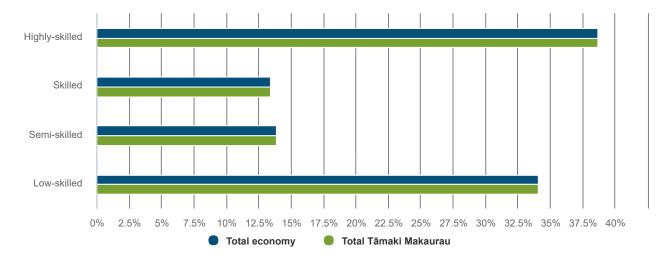
### What is the broad occupational makeup of workers in the sector?

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 38.7% of the Total economy sector workforce in Tāmaki Makaurau were employed in Highly-skilled occupations in 2021. This is higher than for all occupations in Tāmaki Makaurau (38.7%).



#### Figure 11: Employment by skill level in Tāmaki Makaurau, 2021

The following table shows how Highly-skilled employment in the Total economy sector in Tāmaki Makaurau has changed over time. The Infometrics online Total economy Sector Profile provides a complete time series of employment by all broad skill levels from 2000 onwards.

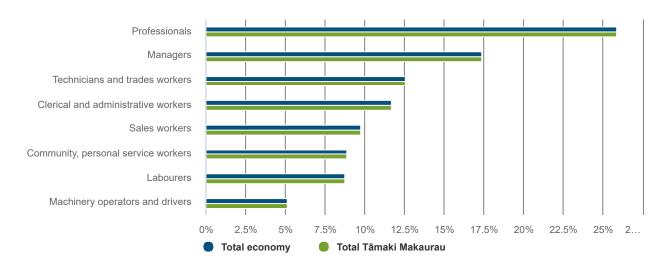
	Total economy			Total Tāmaki Makaurau		
	Employment	% change	% of total	Employment	% change	% of total
2001	179,741	2.5%	30.5%	179,741	2.5%	30.5%
2006	239,361	5.3%	34.4%	239,361	5.3%	34.4%
2011	263,323	2.4%	36.8%	263,323	2.4%	36.8%
2016	313,164	3.7%	38.0%	313,164	3.7%	38.0%
2017	325,556	4.0%	38.0%	325,556	4.0%	38.0%
2018	337,889	3.8%	38.1%	337,889	3.8%	38.1%
2019	348,026	3.0%	38.3%	348,026	3.0%	38.3%
2020	354,086	1.7%	38.3%	354,086	1.7%	38.3%
2021	356,099	0.6%	38.7%	356,099	0.6%	38.7%

#### Table 10: Highly-skilled employment in the Total economy sector in Tāmaki Makaurau

### 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 Total economy sector in Tāmaki Makaurau in 2021 was Professionals, with 238,454 jobs (25.9% of all employment in the sector). In 2021 the Total economy sector accounted for 25.9% of all Professionals employed in Tāmaki Makaurau.

#### Figure 12: Employment by broad occupation in Tāmaki Makaurau, 2021



There are 43 two-digit occupations in occupational classifications. The following table looks at employment in the key two-digit occupations in the Total economy sector in 2021. Further details and timeseries data can be found in the Infometrics online Total economy Sector Profile.

#### Table 11: Employment by 2-digit occupation in the Total economy sector in Tāmaki Makaurau, 2021

	Total econ	Total economy		akaurau
	Employment	% of total	Employment	% of total
Specialist Managers	85,424	9.3%	85,424	9.3%
Business, HR & Marketing Professionals	56,613	6.1%	56,613	6.1%
Education Professionals	50,332	5.5%	50,332	5.5%
Sales Assistants & Salespersons	46,179	5.0%	46,179	5.0%
Health Professionals	36,821	4.0%	36,821	4.0%
All Others	645,813	70.1%	645,813	70.1%
Total	921,182	100%	921,182	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 Total economy sector in Tāmaki Makaurau accounted for 12.4% of overall employment in the sector in 2021. Employment in none of the top five occupations grew between 2016 and 2021.

The following table provides a breakdown of occupational employment in the Total economy sector in Tāmaki Makaurau in 2021. The Infometrics online Total economy Sector Profile provides a complete time series of employment by detailed occupation from 2000 onwards.

#### Table 12: Employment by 6-digit occupation in the Total economy sector in Tāmaki Makaurau, 2021

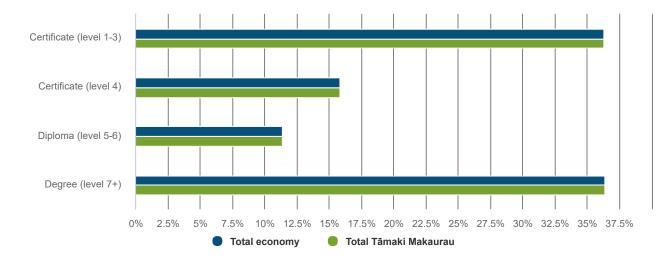
	Total econ	omy	Total Tāmaki Ma	akaurau
	Employment	% of total	Employment	% of total
Sales Assistant (General)	40,581	4.4%	40,581	4.4%
Sales Representatives nec	22,277	2.4%	22,277	2.4%
Chief Executive or Managing Director	19,289	2.1%	19,289	2.1%
Sales and Marketing Manager	16,712	1.8%	16,712	1.8%
Corporate General Manager	15,537	1.7%	15,537	1.7%
All Others	806,787	87.6%	806,787	87.6%
Total	921,182	100%	921,182	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 Total economy sector refer to the Demographics section of this report.

Employers in the Total economy in Tāmaki Makaurau ideally require people with a Degree (level 7+).



#### Figure 13: Qualifications of workers in Tāmaki Makaurau, 2021

The following table shows the ideal qualification level and field of study of workers in the Total economy sector in Tāmaki Makaurau in 2021 is a Certificate (level 1-3) in Management and Commerce. A full timeseries of the data in the table back to 2000 is available in the Infometrics online Total economy Sector Profile.

## Table 13: Employment by qualification required and field of study in the Total economy sector in Tāmaki Makaurau, 2021

	Total economy				Total Tāmaki Makaurau					
	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	14,087	2,665	5,999	20,432	43,183	14,087	2,665	5,999	20,432	43,183
Information Technology	13,495	1,432	4,122	18,290	37,338	13,495	1,432	4,122	18,290	37,338
Engineering and Related Technologies	58,348	46,782	18,682	43,709	167,521	58,348	46,782	18,682	43,709	167,521
Architecture and Building	20,030	36,522	6,571	12,082	75,206	20,030	36,522	6,571	12,082	75,206
Agriculture, Environmental and Related Studies	14,393	6,065	2,315	6,007	28,781	14,393	6,065	2,315	6,007	28,781
Health	24,323	4,904	9,590	44,501	83,318	24,323	4,904	9,590	44,501	83,318
Education	17,281	2,520	4,594	39,273	63,668	17,281	2,520	4,594	39,273	63,668
Management and Commerce	77,476	13,709	26,449	73,587	191,221	77,476	13,709	26,449	73,587	191,221
Society and Culture	45,030	9,027	15,562	51,612	121,231	45,030	9,027	15,562	51,612	121,231
Creative Arts	23,546	5,477	5,564	21,949	56,535	23,546	5,477	5,564	21,949	56,535
Food, Hospitality and Personal Services	26,664	16,995	5,603	3,918	53,180	26,664	16,995	5,603	3,918	53,180
Total	334,673	146,099	105,051	335,360	921,182	334,673	146,099	105,051	335,360	921,182

## What jobs are forecast in the sector between 2022 and 2027?

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.

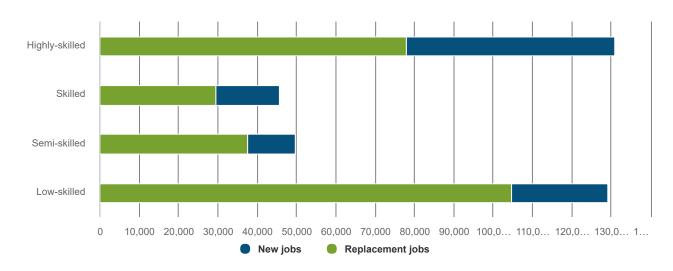
Infometrics estimates there will be 355,435 total job openings in the Total economy sector between 2022 and 2027. Of these job openings:

- 29.7% are likely to be due to new job growth
- 70.3% are likely to be due to net replace demand.

### Forecast job openings

Of the estimated 355,435 job openings between 2022 and 2027, Infometrics estimates that 36.8% are likely to be Highly-skilled jobs.

#### Figure 14: Forecast job openings by skill level in the Total economy sector in Tāmaki Makaurau, 2022-2027

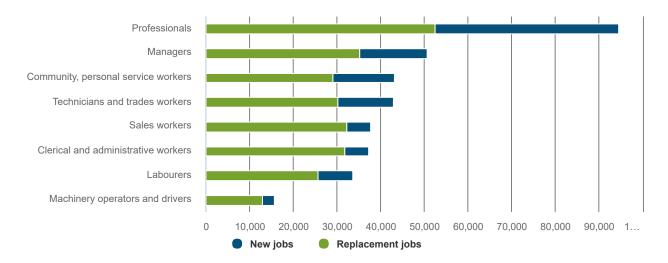


### Job openings by broad occupation

The largest broad (level 1) occupation with job openings in the Total economy sector between 2022 and 2027 is likely to be Professionals, accounting for 26.6% of job openings in the sector. The majority (55.4% of Professionals job openings are expected to be replacement job openings.

A detailed breakdown of annual forecast job openings by broad occupation in the Total economy sector in Tāmaki Makaurau can be found in the Infometrics online Total economy Sector Profile.

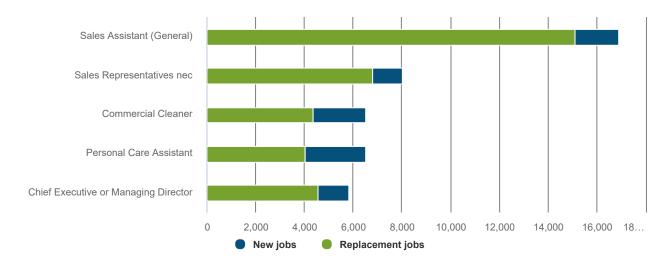
Figure 15: Forecast job openings by broad occupation in the Total economy sector in Tāmaki Makaurau, 2022-2027



## Forecast job openings by detailed occupation

The top five detailed occupations in the Total economy sector in Tāmaki Makaurau are expected to account for 11.3% of all job openings between 2022 and 2027. Replacement job openings for these are expected to make up 9.2% of overall job openings in this sector.

#### Figure 16: Forecast job openings by detailed occupation in the Total economy sector in Tāmaki Makaurau, 2022-2027



The following table shows forecast total job openings by detailed occupation in the Total economy sector in Tāmaki Makaurau between 2022 and 2027. A detailed breakdown of annual forecast job openings by detailed occupation can be found in the Infometrics online Total economy Sector Profile.

## Table 14: Forecast employment and job openings in the Total economy sector in Tāmaki Makaurau by detailed occupation, 2022-2027

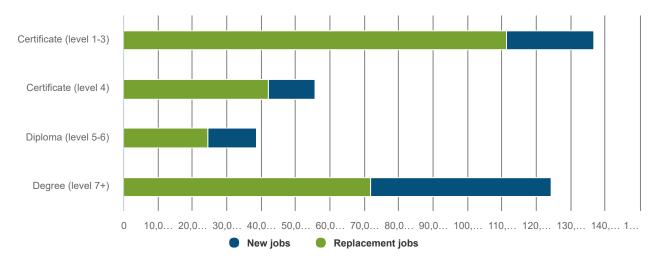
			Total Tāmaki Makaurau			
	Empl	Employment		Replacement	Total	Total
	2021	2027	jobs	jobs	job openings	job openings
Sales Assistant (General)	40,581	42,368	1,787	15,120	16,908	16,908
Sales Representatives nec	22,277	23,527	1,250	6,786	8,037	8,037
Chief Executive or Managing Director	19,289	20,540	1,250	4,575	5,825	5,825
Sales and Marketing Manager	16,712	18,498	1,786	3,098	4,884	4,884
Corporate General Manager	15,537	16,958	1,421	3,152	4,573	4,573
All others	806,787	904,990	98,204	217,005	315,208	315,208

# 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 Total economy sector in Tāmaki Makaurau there are likely to be 124,367 Degree (level 7+) between 2022 and 2027. Job openings at Degree (level 7+) account for 35.0% of all job openings in the sector over the period. Most of these job openings are expected to be replacement job openings (71,924 jobs).

Figure 17: Forecast job openings by qualification level in the Total economy sector in Tāmaki Makaurau, 2022-2027



The following table shows the ideal qualifications and fields of study that employers are likely to require in the Total economy sector in Tāmaki Makaurau between 2022 and 2027.

#### Table 15: Job openings by qualification required and field of study in the Total economy sector in

#### Tāmaki Makaurau, 2022-2027

	Total economy					Total Tāmaki Makaurau				
	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	956	261	814	3,680	5,711	956	261	814	3,680	5,711
Information Technology	943	130	482	3,925	5,480	943	130	482	3,925	5,480
Engineering and Related Technologies	4,513	4,291	2,283	7,128	18,216	4,513	4,291	2,283	7,128	18,216
Architecture and Building	1,612	1,858	998	1,833	6,301	1,612	1,858	998	1,833	6,301
Agriculture, Environmental and Related Studies	1,207	588	316	825	2,935	1,207	588	316	825	2,935
Health	2,407	589	1,380	7,899	12,275	2,407	589	1,380	7,899	12,275
Education	1,479	218	708	4,586	6,991	1,479	218	708	4,586	6,991
Management and Commerce	4,451	1,177	3,327	10,157	19,111	4,451	1,177	3,327	10,157	19,111
Society and Culture	3,780	1,026	2,522	8,703	16,030	3,780	1,026	2,522	8,703	16,030
Creative Arts	1,666	448	696	3,197	6,008	1,666	448	696	3,197	6,008
Food, Hospitality and Personal Services	2,402	3,044	684	510	6,640	2,402	3,044	684	510	6,640
Total	25,415	13,630	14,210	52,443	105,699	25,415	13,630	14,210	52,443	105,699

## **DEMOGRAPHIC PROFILE OF WORKERS**

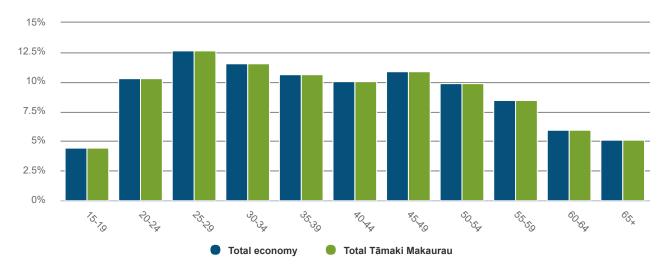
A workforce that has a diverse makeup, experience, and opinions is likely to have the ability to make higher quality decisions. This section looks at diversity in the the Total economy sector in Tāmaki Makaurau by examining the demographic makeup of the workforce in terms of age, ethnicity, gender, country 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 Total economy sector in Tāmaki Makaurau have a slightly older average age profile than all workers in Tāmaki Makaurau. In 2018 the average of Total economy workers was 41.2 years, compared with 41.2 years for all workers in Tāmaki Makaurau.



#### Figure 18: Age of workers in Tāmaki Makaurau, 2018

The average age of workers in the Total economy sector in Tāmaki Makaurau fell by 0.7 years between 2013 and 2018. Over the same period the overall average age of workers in Tāmaki Makaurau fell by 0.7 years.

The following table shows the age profile of workers in the Total economy sector in Tāmaki Makaurau in 2013 and 2018.

#### Table 16: Employment by age in the Total economy sector in Tāmaki Makaurau

		Total economy				Total Tāmaki Makaurau		
	En	Employment		e Of Total		Share Of Total		
	2013	2018	2013	2018	2013	2018		
15-19 Years	29,574	39,600	3.9%	4.5%	3.9%	4.5%		
20-24 Years	72,448	91,354	9.6%	10.3%	9.6%	10.3%		
25-29 Years	79,597	112,074	10.6%	12.6%	10.6%	12.6%		
30-34 Years	80,796	102,551	10.8%	11.6%	10.8%	11.6%		
35-39 Years	80,123	94,771	10.7%	10.7%	10.7%	10.7%		
40-44 Years	91,669	88,982	12.2%	10.0%	12.2%	10.0%		
45-49 Years	89,869	96,313	12.0%	10.9%	12.0%	10.9%		
50-54 Years	81,530	87,856	10.9%	9.9%	10.9%	9.9%		
55-59 Years	62,940	75,447	8.4%	8.5%	8.4%	8.5%		
60-64 Years	46,611	52,870	6.2%	6.0%	6.2%	6.0%		
65 years and over	35,787	45,715	4.8%	5.2%	4.8%	5.2%		

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

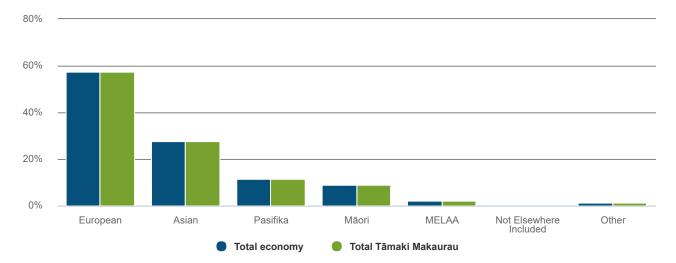
Understanding the ethnic composition of a workforce can be important in terms of improving innovation and productivity levels.

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 Total economy sector in Tāmaki Makaurau were:

- more likely to be Maori than workers overall
- more likely to be Pasifika than workers overall
- more likely to be Asian than workers overall

#### Figure 19: Ethnicity of workers in Tāmaki Makaurau, 2018



The share of European ethnicity in the Total economy sector in Tāmaki Makaurau grew from 65.6% in 2013 to 57.3% in 2018. The following table shows the broad ethnicity of workers in the Total economy sector in Tāmaki Makaurau in 2013 and 2018.

#### Table 17: Employment by ethnicity in the Total economy sector in Tāmaki Makaurau

		Total ecor	iomy		Total Tāmaki Makaurau		
	En	Employment		of Total		Share Of Total	
	2013	2018	2013	2018	2013	2018	
European	492,195	508,652	65.6%	57.3%	65.6%	57.3%	
Asian	159,429	244,033	21.2%	27.5%	21.2%	27.5%	
Pasifika	69,291	103,216	9.2%	11.6%	9.2%	11.6%	
Māori	61,149	79,780	8.1%	9.0%	8.1%	9.0%	
MELAA	11,020	18,063	1.5%	2.0%	1.5%	2.0%	
Not Elsewhere Included	2,424	0	0.3%	0%	0.3%	0%	
Other	10,318	10,286	1.4%	1.2%	1.4%	1.2%	

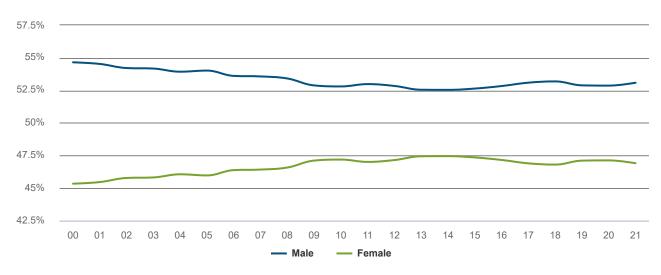
## What is the gender balance of the sector?

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 Total economy sector in Tāmaki Makaurau has changed over time. The share of female employment in the Total economy sector in Tāmaki Makaurau increased from 46.4% in 2006 to 46.9% in 2021.

#### Figure 20: Employment by gender in the Total economy sector in Tāmaki Makaurau



The following table shows the gender makeup of workers in the Total economy sector in Tāmaki Makaurau for selected years. A full timeseries of employment by gender in the Total economy sector from 2000 is available in the Infometrics online Total economy Sector Profile.

#### Table 18: Change in employment by gender in the Total economy sector in Tāmaki Makaurau

		Total econo	my		Total Tāmaki Maka	urau
	E	Employment		% share		% share
	Male	Female	Male	Female	Male	Female
2001	320,850	267,503	54.5%	45.5%	54.5%	45.5%
2006	373,452	323,075	53.6%	46.4%	53.6%	46.4%
2011	379,114	336,391	53.0%	47.0%	53.0%	47.0%
2016	435,024	388,301	52.8%	47.2%	52.8%	47.2%
2017	454,941	401,891	53.1%	46.9%	53.1%	46.9%
2018	472,048	415,395	53.2%	46.8%	53.2%	46.8%
2019	480,741	428,204	52.9%	47.1%	52.9%	47.1%
2020	488,166	435,171	52.9%	47.1%	52.9%	47.1%
2021	489,067	432,116	53.1%	46.9%	53.1%	46.9%

### Regional employment by gender

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

Figure 21: Female share of employment in the Total economy sector, 2021

map

The following table provides supporting information on the gender balance of workers in the Total economy sector in 2021. Data showing the regional gender makeup of workers in the Total economy sector from 2000 is available in the Infometrics online Total economy Sector Profile.

#### Table 19: Regional employment by gender in the Total economy sector, 2021

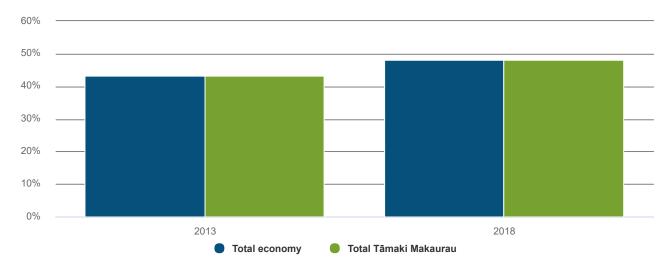
		Total ecor	iomy		Total ec	onomy
	E	mployment		% share		% share
	Male	Female	Male	Female	Male	Female
Auckland	489,067	432,116	53.0%	47.0%	53.0%	47.0%
Bay of Plenty Region	86,090	76,497	53.0%	47.0%	53.0%	47.0%
Canterbury Region	180,598	156,829	54.0%	46.0%	54.0%	46.0%
Gisborne Region	12,932	10,977	54.0%	46.0%	54.0%	46.0%
Hawke's Bay Region	46,187	41,218	53.0%	47.0%	53.0%	47.0%
Manawatu-Whanganui Region	64,552	55,838	54.0%	46.0%	54.0%	46.0%
Marlborough Region	15,631	12,956	55.0%	45.0%	55.0%	45.0%
Nelson Region	15,555	14,644	52.0%	48.0%	52.0%	48.0%
Northland Region	41,033	37,027	53.0%	47.0%	53.0%	47.0%
Otago Region	68,088	61,115	53.0%	47.0%	53.0%	47.0%
Southland Region	29,607	24,970	54.0%	46.0%	54.0%	46.0%
Taranaki Region	32,870	27,797	54.0%	46.0%	54.0%	46.0%
Tasman Region	14,737	12,078	55.0%	45.0%	55.0%	45.0%
Waikato Region	124,983	106,293	54.0%	46.0%	54.0%	46.0%
Wellington Region	157,087	146,833	52.0%	48.0%	52.0%	48.0%
West Coast Region	9,448	7,047	57.0%	43.0%	57.0%	43.0%

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### 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 Total economy sector workforce in Tāmaki Makaurau comprises 48.1% of workers. This compares to 48.1% of all workers in Tāmaki Makaurau. The share of Total economy sector workers born overseas increased from 43.3% to 48.1% between 2013 and 2018. The share of all workers born overseas in Tāmaki Makaurau increased 4.8% over the period.



#### Figure 22: Share of workers in Tāmaki Makaurau born abroad

The most common origin for workers in the Total economy sector outside New Zealand is Asia. The following table shows the country of birth of workers in the Total economy sector in Tāmaki Makaurau from recent censuses.

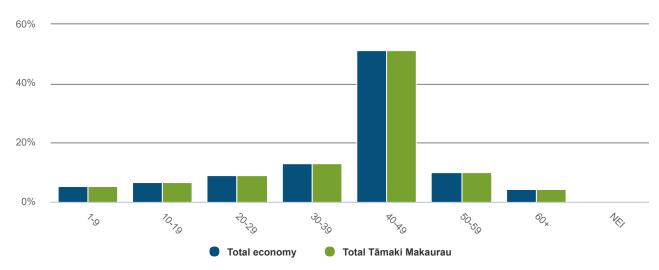
#### Table 20: Employment by country of birth in the Total economy sector in Tāmaki Makaurau

		Total eco	nomy		Total Tāmak	ki Makaurau
	Em	Employment		Of Total		Share Of Total
	2013	2018	2013	2018	2013	2018
New Zealand	425,775	460,473	56.7%	51.9%	56.7%	51.9%
Asia	121,237	191,286	16.1%	21.6%	16.1%	21.6%
Europe	80,914	83,336	10.8%	9.4%	10.8%	9.4%
Rest of Oceania	58,387	73,956	7.8%	8.3%	7.8%	8.3%
Sub-Saharan Africa	29,973	35,310	4.0%	4.0%	4.0%	4.0%
Australia	11,867	12,861	1.6%	1.4%	1.6%	1.4%
Northern America	7,330	8,327	1.0%	0.9%	1.0%	0.9%
North Africa and the Middle East	5,080	6,800	0.7%	0.8%	0.7%	0.8%
Not Elsewhere Included	6,053	4,509	0.8%	0.5%	0.8%	0.5%
Other	3,954	7,156	0.5%	0.8%	0.5%	0.8%

## 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 Total economy sector.

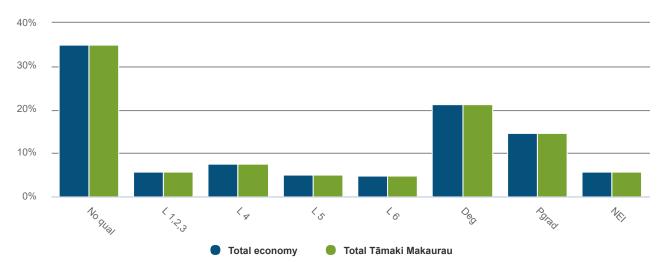


#### Figure 23: Hours worked (main job) in Tāmaki Makaurau, 2018

The Infometrics online Total economy 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 Tāmaki Makaurau, 2018

The Infometrics online Total economy 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 2021 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).

## **AUCKLAND'S RANK IN NZ**

## 10-year performance indicators, 2011-2021

Local Area	New Zealand	Low Auckland's rank against 66 territorial authorities High	
2.5%	1.6%	Business units growth	Annual % growth in business units in 10 years to March 2021
1.5%	1.0%	GDP per capita growth	Annual % growth in GDP per resident in 10 years to March 2021
2.6%	1.9%	Employment growth	Annual % growth in jobs in 10 years to March 2021
3.2%	2.6%	GDP growth	Annual % growth in resident population in 10 years to March 2021
1.6%	1.6%	Population growth	Annual % growth in resident population in 10 years to June 2021
0.6%	0.7%	Productivity growth	Annual % growth in productivity in 10 years to March 2021
2.8%	3.0%	Earnings growth	Annual % growth in median earnings in 10 years to March 2021

## Size indicators, 2021

\$122,454m	\$326,300m	GDP	Total GDP (\$ million) in 2021 prices, year to March 2021
1,715,600	5,122,600	Population	Total resident population in June 2021
921,182	2,612,700	Employment	Average number of filled jobs in year to March 2021

## Structural indicators, 2021

\$71,499	\$65,910	Median annual earnings	Median annual earnings in year to March 2021 in current prices
47.7%	53.6%	Dependency ratio	Ratio of persons 65+ and persons 0-14 to persons of working age (15-64) 2021
35.7%	32.5%	Knowledge intensive employment	Proportion of the workforce employed in knowledge intensive industries 2021
\$71,377	\$63,698	GDP per capita	GDP in 2021 prices divided by number of normally resident persons 2021
\$132,931	\$124,890	Productivity (GDP per employee)	GDP in 2021 prices divided by number of employed persons 2021
33.2	22.8	Industrial diversity	HHI index of industrial diversity 2021. Closer to 0 is more diverse.
16.7%	16.7%	Self employment	Proportion of workforce that is self-employed 2021.
9.1	7.8	Housing affordability	Average current house value divided by median annual earnings 2021.
\$1,495,377	\$1,035,216	Average current house value	Median sale prices for year to March 2022. Higher prices = Iower rank.

## **AUCKLAND AT A GLANCE**

## **ECONOMY**

Gross domestic product, 2021

**\$122,454** 

37.5%

million in 2021 prices

of national total

Economic growth, 2011-2021 Annual average % change

	2021	Last 10 years
AUCKLAND	-2.8%	3.2%
NEW ZEALAND	-1.2%	2.6%

#### Economic growth, 2001-2021



## labour market

Total employment, 2021

921,182

35.3%

Filled Jobs

of national total

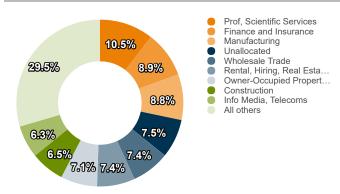
Employment growth, 2011-2021 Annual average % change

	2021	Last 10 years
AUCKLAND	-0.2%	2.6%
NEW ZEALAND	0.1%	1.9%

#### Employment growth, 2001-2021



#### Industry proportion of GDP, 2021



#### Biggest contributors to economic growth, 2011-2021

Professional, Scientific and Technical Services	\$4,244m
Construction	\$3,665m
Financial and Insurance Services	\$3,569m
Information Media and Telecommunications	\$3,362m
Retail Trade	\$2,769m
All other industries	\$15,203m
Total increase in GDP	\$32,812m

#### Industries which created most jobs, 2011-2021

Construction	42,563
Professional, Scientific and Technical Services	28,696
Health Care and Social Assistance	19,364
Accommodation and Food Services	16,055
Administrative and Support Services	15,208
All other industries	83,792
Total increase in employment	205,677

#### Self employment rate, 2021



## productivity

#### GDP per filled job, 2021

\$132,931

\$124,890

GDP per employee

New Zealand

Productivity growth,	2011-2021	Annual average % change
----------------------	-----------	-------------------------

	2021	Last 10 years
AUCKLAND	-2.6%	0.6%
NEW ZEALAND	-1.4%	0.7%

#### Productivity growth, 2001-2021



## population

#### Total population, 2021

1,715,600

33.5%

Estimated resident population

of national total

Population growth, 2011-2021 Annual average % change

	2021	Last 10 years
AUCKLAND	-0.1%	1.6%
NEW ZEALAND	0.6%	1.6%

#### Population growth, 1997-2021



## business units

#### No. of business units, 2021

208,893



Business units

of national total

#### Growth in business units, 2011-2021 Annual average % change

	2021	Last 10 years
AUCKLAND	1.1%	2.5%
NEW ZEALAND	0.5%	1.6%

### Growth in business units, 2001-2021



## standard of living

#### Mean annual earnings 2021

\$71,499

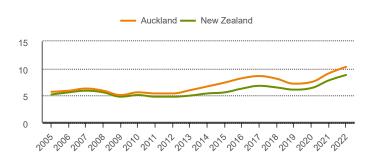
\$65,910

Auckland

Annual earnings growth, 2011-2021 Annual average % change

	2021	Last 10 years
AUCKLAND	2.4%	2.8%
NEW ZEALAND	2.6%	3.0%

#### Housing affordability, 2005-2022 Higher is less affordable





#### AJ Pouoa – Pacific Business Owners story

As a Pacific Disabled Business Woman, it has been really tough trying to sustain a small business in the Fitness Industry. I found there was very little support for our Tagata Sa'ilimālō (people with disabilities) community in small business. From what I could gather from other Tagata Sa'ilimālō business owners it was difficult to access community funding or funding to continue or further progress their businesses and our fitness programs to the next level.

I had a lot of discussions with potential funders only to find we didn't fit the criteria. I did not understand how funds that are allocated especially for Tagata Sa'ilimālō, for social inclusion, diversity and community were not prioritised, although these were values that were stated by the funders. I was able to connect with other organisations to help with other business needs and they did help, however, it did not help with advice for the continuation of our programs for our clients who are all Tagata Sa'ilimālō due to lack of knowledge about our community.

The dream is to have a team of staff that are all Tagata Sa'ilimālō, however what I found was that there was a lack of qualified Tagata Sa'ilimālō who were experienced in our field. As a SCI T-3 Asia A paraplegic, I had to be carried by fellow classmates up and down stairs to be able to study to get my qualification. Not the most dignified way to study but it had to be done for me to reach my goal. So in short, my whole journey going into starting a business in the fitness industry for our Tagata Sa'ilimālō, had the odds stacked against me from the very start. I've had to learn by making a lot of costly mistakes and here I am today in my 3rd year of being a business owner, still fighting to keep our little community together to reach a higher goal or purpose.

\*Tagata Sa'ilimalo (tagata = people or person, sa'ilimalo = pursuit of success) is a new vision of Pacific disability in Aotearoa New Zealand and also a term of identity to replace "Pacific disabled people, their families, and carers/supporters."

Tagata Sa'ilimalo is an aspirational vision of the pursuit of success underpinned by sheer determination and sustained by the collective vitality of Pacific peoples.