

Auckland and Industry Training

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Foreword

The Industry Training Federation's mission is to champion industry training in ways including:

- Leading the development and implementation of policy that enhances the performance of industry training;
- Engaging in and disseminating research and evaluation that enhances efficiency, effectiveness and innovation; and
- Leading the development of good practice to support members.

This report supports that mission with an investigation into where Auckland is expected to go over the medium term and what this means for Industry Training Organisations.



Darel Hall
Executive Director

Executive Summary

- The Auckland region's population is forecast to reach 1.55-1.76 million by 2021. Maori, Pacific and Asian peoples, and new migrants will be increasingly important to Auckland's labour force. This may require greater tailoring of training and the maintenance or expansion of foundation-level training.
- White collar work is likely to continue to become more prominent in the Auckland labour force, with a strong focus on services. The largest sectors of employment will be Retail Trade, Business Services, Construction, Health and Community Services, Wholesale Trade and Education. Some of these have limited ITO coverage, suggesting a need to expand the Industry Training network. The strength of service sectors may mean more part-time and casual employment in future.
- Employment will grow fastest in the Metal Products Manufacturing; Accommodation, Cafes and Restaurants; Construction; Business Services, and Wood and Paper Product Manufacturing sectors and will decline in Communication Services, Textiles and Apparel Manufacturing, and Finance and Insurance sectors.
- The Communication Services, Cultural and Recreational Services, Personal and Other Community Services, Transport and Storage and Non-Metal Mineral Products Manufacturing sectors will be the fastest growing in terms of economic value. Communications Services will become Auckland's biggest sector in a little over 10 years, although its number of employees will fall.
- Larger firms will continue to play an important part in Auckland's future employment. However, the average size of firms in the six big employment sectors currently covered by Industry Training is relatively small. This may constrain future growth in training.
- Auckland has a lower level of Industry Training penetration (i.e. proportion of employed who are in training) than New Zealand as a whole, but this probably reflects the nature of business in urban areas (e.g. higher rates of professionals, lower primary sector presence).
- Auckland enterprises are more likely to be dissatisfied with Industry Training than firms in other areas. Part of this could be due to lower knowledge of ITOs in the region. This suggests a need for more marketing.
- Economic development strategies in place throughout Auckland may create further training opportunities for some ITOs.

Key Issues and Implications

Population

- Auckland's population has grown at more than twice the rate of New Zealand's. It is predicted that the total region will reach 1.55-1.76 million by 2021, increasing Auckland's share of the total population from 31% in 2001 to 37%.
- Auckland is the nation's most ethnically diverse region. This will increase significantly in future.
- Maori, Pacific and Asian peoples, and new migrants will be increasingly important to the region's labour force. This growing diversity may require greater tailoring of training programmes and delivery.
- Unless Maori and Pacific secondary school achievement begins to improve, ITOs wishing to meet Auckland's skills needs may need to maintain or expand foundation-level training in the medium-term.

Employment

- In terms of employment, Auckland is primarily a service and manufacturing-focused region. Primary industries have a negligible presence, and this is not expected to change. White collar (i.e. managerial, professional, administrative, non-manual) work is likely to continue to become more prominent in the Auckland labour force.
- Over half of all employment in the Auckland region over the next 25 years will remain in the 6 big sectors – retail trade, business services, construction, health and community services, wholesale trade and education.
- It is notable that several of these sectors have limited ITO coverage. This suggests that the Industry Training network will need to expand, if it is to make the most of Auckland opportunities.
- Employment – and potential training opportunities – in the Auckland region will grow fastest in metal products manufacturing; accommodation, cafes and restaurants; construction, business services, and wood and paper product manufacturing.
- Employment is predicted to decline in the communication services, textiles and apparel manufacturing, and finance and insurance sectors.
- Part-time employment may increase, due to growth in the Accommodation, Cafes and Restaurants sector and the continued strong position of Retail Trade and Health and Community Services. Self-employment may also

become more prominent, because of the predicted fast growth of Construction and Business Services. This may require changes to Industry Training funding policies.

Economic activity/GDP

- A little under half of Auckland's economic activity is concentrated in five main sectors (in order of value): Wholesale Trade, Business Services, Finance and Insurance, Communication Services, and Transport and Storage.
- The sectors that are expected to experience the fastest growth in value are (in order): Communication Services, Cultural and Recreational Services, Personal and Other Community Services, Transport and Storage and Non-Metal Mineral Products Manufacturing.
- Since the number of employees is expected to decline in Communication Services and only grow slowly in Personal and Other Community Services and Non-Metal Mineral Products Manufacturing, this suggests that economic growth will have to be based in part upon greater productivity per worker.
- The Communications Services sector is expected to become Auckland's biggest sector (in terms of economic value) in a little over 10 years.

Size of firms

- Auckland has a large number of Small and Medium Enterprises (SMEs), but – as in other urban areas – most of the workforce is employed in larger firms.
- The strength of manufacturing in Auckland, and the nature of urban areas, means that larger firms will probably continue to play an important part in Auckland's future employment.
- However, manufacturing's overall share of employment is predicted to decline. In addition, the average size of firms in the six big employment sectors currently covered by Industry Training is relatively small. This may imply barriers to future growth in training within the region.

Training behaviour

- Auckland industries train at similar rates to those in other parts of the country, and also appear to use Industry Training Organisations to meet their skill needs at average rates.
- Auckland has a lower level of Industry Training penetration (i.e. proportion of employed people who are in training) than New Zealand as a whole, but this probably reflects the nature of business in urban areas (e.g. higher rates of professionals, lower primary sector presence).

- Auckland enterprises are also less likely to be satisfied with the contribution made by Industry Training to business. This could be due to poorer knowledge of ITOs by Auckland firms.
- ITOs thinking of entering or expanding their activity in Auckland may need to consider investing in marketing to raise their presence.

Regional development strategies

- Economic development strategies in place throughout the Auckland region may provide additional opportunities for some ITOs.

Introduction

Auckland has been the subject of considerable official attention over the past two to three years. The Tertiary Education Commission has part-funded research to forecast the city's tertiary education needs over the coming 20 years. The Government has provided several billion dollars in transport funding to Auckland, and the Treasury recently set up shop in the city, in recognition of its national significance.

Auckland is New Zealand's largest and fastest growing city, and increasingly central to national economic growth. What does this mean for Industry Training Organisations (ITOs)? Much research and public attention on future education needs in the region has focused on tertiary institutions (and particularly on the supposed need for more campuses¹) or macro-level strategy.

This report provides a summary of where Auckland is expected to go over the medium term and in doing so, highlight key issues and implications for Industry Training Organisations.

¹ For example, see "New Manukau tertiary institution draws closer" in *New Zealand Education Review*, Vol 9, No.25 (June 30-July 6 2004)

Future Trends

Population and workforce - ethnicity

Now

Auckland is the fastest growing region in the country, with its population increasing by an average of 1.5% per annum (compared to 0.6% for New Zealand as a whole). Auckland is also the nation's most ethnically diverse region:

Ethnicity (total responses) for the census usually resident population, 2001

	Auckland region	Wellington region	Canterbury region	New Zealand
European	68.5%	80.9%	91.8%	80.1%
Maori	11.6%	12.5%	6.8%	14.7%
Pacific Peoples	14.0%	7.9%	1.8%	6.5%
Asian	13.8%	6.8%	4.1%	6.6%
Other	1.2%	0.9%	0.5%	0.7%

Source: Statistics New Zealand, Census 2001

The future

The population growth trend is expected to continue into the future, with the region's population predicted to reach 1.55-1.76 million by 2021. Based on these projections, the region's share of New Zealand's total population will grow from 31% in 2001 to about 37%.² The Asian population is expected to grow at the fastest rate (up by 62.1% in 2021), followed by Pacific (46.3% larger) and Maori (37.3% larger) communities. By comparison, the European/Pakeha population will grow by 17.2%.³

Although the ethnic make-up of other regions will also change over the next 10-20 years, Auckland's population will shift more dramatically than others and will be far more diverse:

² Statistics New Zealand, *Projected Population of Regional Councils, 2001-21*

³ Market Economics (2002), *AREDS Targets: Evaluation Framework and Scenarios*, p.14

Projected Ethnic Populations

	2001	2006	2011	2016
Auckland region				
European	67%	61%	58%	54%
Maori	12%	11%	12%	12%
Asian	14%	21%	23%	25%
Pacific	14%	15%	15%	16%
Waikato				
European	81%	79%	78%	76%
Maori	22%	22%	23%	24%
Asian	4%	5%	6%	6%
Pacific	3%	3%	4%	4%
Canterbury				
European	91%	89%	88%	87%
Maori	7%	7%	8%	8%
Asian	4%	5%	5%	5%
Pacific	2%	2%	2%	2%
New Zealand				
European	79%	76%	74%	71%
Maori	15%	15%	16%	16%
Asian	7%	10%	12%	13%
Pacific	7%	7%	8%	8%

Source: Statistics New Zealand, *Projected Population of Regional Councils, 2001-21*. **Note:** Percentages often do not add to 100, because people can and do identify with more than one ethnicity

Similarly, Auckland's labour force has been projected to reach 828,000 by 2021 (an increase of 189,000 or 29.8% from 2001.) Maori, Pacific people, people of Asian descent and new migrants "will provide the engine for employment growth".⁴ They will provide the majority of new jobs created in Auckland over the next 20 years, due to the aging of the Pakeha workforce and the fact the Pakeha population is growing at a slower rate than other groups:

⁴ Keestra and Co. Ltd, *Strategic Framework for assessing Auckland's Tertiary Education Needs over the Next 20 Years* (Auckland: TEC/AREDS/LEK Consulting: 2003), p.6

Table 3.2. Summary of Auckland Region Labour Force (2001-21)

Year	Sex	Ethnicity				TOTAL
		European	Asian	Maori	Pacific Island	
2001	Female	202,600	30,100	31,400	30,800	295,000
	Male	236,300	36,300	35,800	34,400	343,000
	Total	438,900	66,400	67,100	65,200	638,000
2021	Female	241,900	43,600	44,200	50,500	380,000
	Male	280,700	56,700	51,600	58,600	447,000
	Total	522,700	100,200	95,900	109,100	828,000
Increase	Female	39,300	13,500	12,800	19,700	85,000
	Male	44,400	20,400	15,800	24,200	104,000
	Total	83,700	33,900	28,600	43,900	189,000
2001-21 %	Female	19.4%	44.9%	40.8%	64.0%	28.8%
	Male	18.8%	56.2%	44.1%	70.3%	30.3%
	Total	19.1%	50.9%	42.9%	67.3%	29.8%
Share %	Female	46%	16%	15%	23%	100%
	Male	43%	20%	15%	23%	100%
	Total	44%	18%	15%	23%	100%

Source: Market Economics (2002), AREDS Targets: Evaluation Framework and Scenarios

Increasing diversity in the workforce may require greater tailoring of training programmes and delivery. As a recent Tertiary Education Commission (TEC)-Auckland Regional Economic Development Strategy (AREDS) analysis noted, Maori, Pacific people, people of Asian descent currently have lower employment rates and/or lower workforce participation rates than Pakeha.⁵ In addition, Maori and Pacific students tend to achieve lower levels of qualifications at school than Pakeha or the population as a whole, and these levels have not noticeably improved over the past decade (although the recent introduction of the NCEA may change this).

Highest Attainment of Maori and Non-Maori School Leavers 1993-2001⁶

	1993		1995		1997		1999		2001	
	Maori	Non-Maori	Maori	Non-Maori	Maori	Non-Maori	Maori	Non-Maori	Maori	Non-Maori
Uni. Bursary	5.2%	22.6%	4%	22.8%	4.6%	24.6%	4.5%	23.1%	4%	21.6%
Entrance	2.3%	6.2%	3.5%	7.9%	3.6%	9.4%	4%	8.6%	3.4%	8.6%
Higher School Cert	8.8%	13.1%	7.4%	11.3%	9.6%	13.6%	9.5%	12.5%	8.4%	11.6%
6 th Form Cert.	25.5%	28.6%	24.6%	27.3%	22.4%	24.3%	25%	26.9%	24.8%	26.3%
School Cert.	24.7%	17.2%	25.1%	16.5%	22.2%	15.1%	22%	15.8%	25.9%	17.7%

⁵ Ibid

⁶ From 1996, 'University Bursary' includes National Certificate Level 3, 'Entrance' includes at least 40 credits at NC Level 3, 'Higher School Cert' includes 12-39 credits at NC Level 3, '6th Form Cert' includes at least 12 credits at NC Level 2, 'School Cert' includes at least 12 credits at NC level 1, and 'No Qual' includes less than 12 credits at NC Level 1.

No Qual	33.5%	12.3%	35.4%	14.1%	37.7%	13.1%	35%	13.2%	33.4%	13.3%
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Source: Ministry of Education, *School Leavers Statistics 2001*

Highest Attainment of Pacific and Non-Pacific School Leavers, 1993-2001

	1993		1995		1997		1999		2001	
	Pacific	Non-Pacif	Pacific	Non-Pacif	Pacific	Non-Pacif	Pacific	Non-Pacif	Pacific	Non-Pacif
Uni. Bursary Entrance	4.9%	20.7%	5.6%	20.3%	4.9%	22.1%	4.2%	20.9%	4.7%	19.4%
Higher School Cert	4.2%	5.6%	5.5%	7.2%	5.4%	8.6%	4.9%	7.9%	5.1%	7.8%
6 th Form Cert.	14.4%	12.2%	12.7%	10.4%	16.2%	12.6%	14.8%	11.7%	14.3%	10.7%
School Cert.	28%	28.1%	30.6%	26.5%	28.8%	23.6%	29.9%	26.3%	30.6%	26.4%
No Qual	23.7%	18.1%	21.5%	17.9%	18.5%	16.2%	19.5%	16.7%	20.6%	19.4%
	24.8%	15.3%	24.3%	17.7%	26.2%	17%	26.7%	16.5%	24.8%	16.4%

Source: Ministry of Education, *School Leavers Statistics 2001*

Therefore, although Maori are now 'overrepresented' in provider-based tertiary education, if secondary school performance does not improve, it is likely that a significant portion of the future workforce will continue to leave school with low or no qualifications. ITOs wishing to meet Auckland's skills needs in the future may need to maintain or expand foundation-level training.

Employment – by industry sector and occupation

Now

About half of all employment in Auckland is currently concentrated in manufacturing, wholesale and retail trade, and property and business services:

Share of total employees by industry for the employed census usually resident population in the Auckland region aged 15 years and over, 2001

Industry Sector	Total employees	Share
Agriculture, Forestry and Fishing	9,849	1.8%
Mining	471	0.1%
Manufacturing	73,887	13.8%
Electricity, Gas and Water Supply	1,446	0.3%
Construction	33,837	6.3%
Wholesale Trade	44,553	8.4%
Retail Trade	62,697	11.7%
Accommodation, Cafes and Restaurants	21,150	4.0%
Transport and Storage	24,033	4.5%
Communication Services	9,210	1.7%
Finance and Insurance	21,133	4.0%
Property and Business Services	77,955	14.6%
Government Administration and Defence	13,689	2.6%
Education	37,554	7.0%

Health and Community Services	37,626	7.1%
Cultural and Recreational Services	14,722	2.8%
Personal and Other Services	19,752	3.7%
Not Elsewhere Included	29,688	5.6%

Source: Statistics New Zealand, Census 2001

Manufacturing, retail trade and property and business services are also significant sectors of employment in Wellington and Christchurch (see tables A and B in Appendix 1). However, the features of employment in Auckland that are significantly different from other urbanised areas are the strength of the wholesale trade sector, and the insignificance of agriculture, forestry and fishing (see table C). To give a sense of Auckland's labour market, note that 48.4% of all FTE wholesale trade staff in New Zealand and 43.3% of all finance and are based in Auckland. By comparison, a bare 2.3% of all FTE staff in government administration and defence is in Auckland, and 6.5% of total agriculture, forestry and fishing FTEs.⁷

In line with the predominant service and business focus of the Auckland economy, the region's workforce has a higher than average proportion of managers, office clerks, business, financial and legal workers. The occupational structure of the Auckland labour force broadly mirrors that of Wellington, although trade workers and machine operators are slightly more prominent in Auckland.

⁷ Charles Crothers, *Employment and Firms in the Auckland Region: A Report Prepared for the Auckland Regional Economic Development Strategy*, p.22

Occupational make-up of Auckland, Wellington, Canterbury and New Zealand labour markets 2001

Occupation groups	% of total regional workforce			
	Auckland	Wellington	Canterbury	New Zealand
Legislators and Senior Administrators	1	1	1	1
Managers	15	14	12	13
Scientists, Analysts and Researchers	1	3	2	2
ICT Workers	3	4	1	2
Engineers	3	3	2	2
Health Workers	5	6	7	6
Protective Workers	3	3	3	3
Teachers and Advisers	6	6	5	6
Business, Financial and Legal Workers	6	7	3	4
Media and Entertainment Workers	2	3	2	2
Sales Workers	12	11	11	11
Hospitality and Customer Service Workers	8	8	8	7
Office Clerks	12	12	9	10
Agriculture, Forestry and Fishery Workers	2	3	8	8
Trade Workers	10	8	9	9
Machine Operators	5	3	7	5
Drivers	2	2	3	3
Labourers	6	5	7	6

Source: Department of Labour, workINSIGHT

Finally, 13 percent of Auckland's workforce is self-employed.⁸

The future

The industry sectors that are predicted to grow the fastest in terms of employment over the next 20 years are (in order): metal products manufacturing; accommodation, cafes and restaurants; construction; business services; and wood and paper products manufacturing. Employment in communication services, textiles and apparel manufacturing, and finance and insurance is projected to decline at the fastest rate:

⁸ NZIER, *Auckland Regional Economic Development Strategy: Measures and Benchmarking* (Wellington: NZIER, 2002), pp.11-2

Projected change in Auckland regional employment by sector, March 2004-29

Sector	% change 2004-14	% change 2004-24	% change 2004-29
Agriculture	1.9%	-3.8%	-7.6%
Fishing	⁹ -	-	-
Forestry and Logging	-	-	-
Mining and Quarrying	-	-	-
Food, Beverage and Tobacco Manufacturing	13.9%	25%	29.2%
Textiles and Apparel Manufacturing	-11.4%	-19.3%	-22.7%
Wood and Paper Products Manufacturing	22.7%	39.8%	45.5%
Printing, Publishing and Recorded Media	3.5%	8.9%	12.4%
Petroleum, Chemical, Plastics and Rubber Products Manufacturing	-2.8%	-11%	-15.6%
Non-Metal Mineral Products Manufacturing	8.8%	8.8%	5.9%
Metal Products Manufacturing	32.2%	61.4%	74.3%
Machinery and Equipment Manufacturing	10.4%	17.3%	19.7%
Furniture and other Manufacturing	17.4%	32.6%	39.5%
Electricity, Gas and Water Supply	-3.3%	-10%	-10%
Construction	28.2%	50.4%	58.8%
Wholesale Trade	10%	11.8%	10.5%
Retail Trade (incl. motor vehicle repairs)	18.7%	31.7%	36.2%
Accommodation, Cafes and Restaurants	27.2%	51%	61.2%
Transport and Storage	16.4%	21.3%	20.2%
Communication Services	-0.6%	-22.1%	-34.4%
Finance and Insurance	-5%	-16.1%	-22.7%
Property Services	7%	14%	16.8%
Business Services	26%	45.6%	52.9%
Government, Administration and Defence	14.6%	31.6%	39.8%
Education	11.9%	21%	24.2%
Health and Community Services	12.8%	16.8%	15.7%
Cultural and Recreational Services	17.1%	17.7%	14%
Personal and other Community Services	9%	6.4%	2.7%
All	15.5%	24.8%	27.5%

Source: New Zealand Institute of Economic Research (2001), *Auckland Economic Projection Model: Report to the Auckland Regional Council*

Half of the Auckland regional workforce will continue to be employed within the six major sectors over the next 25 years, although the relative importance of these sectors will change, with retail trade becoming the largest by 2024:

Largest sectors by share of total projected employment in the Auckland region, 2014, 2024 and 2029

	2014	2024	2029
1.	Retail Trade (13.8%)	Business Services (14.24%)	Business Services (14.6%)
2.	Business Services (13.3%)	Retail Trade (14.18%)	Retail Trade (14.4%)
3.	Construction (8.2%)	Construction (8.9%)	Construction (9.2%)
4.	Health and Community Services (6.51%)	Health and Community Services (6.2%)	Health and Community Services (6.1%)

⁹ NZIER had insufficient data with which to make projections for fishing, forestry and logging, and mining and quarrying, so these were set at zero

5.	Wholesale Trade (6.5%)	Wholesale Trade (6.1%)	Education (5.98%)
6.	Education (5.95%)	Education (5.96%)	Wholesale Trade (5.9%)

Source: NZIER (2001)

It is notable that several of these sectors currently have limited ITO coverage. This suggests that the Industry Training network will need to expand, if it is to make the most of Auckland opportunities.

The ability to grow training opportunities may be limited in some sectors. For example, the expansion of employment in the Accommodation, Cafes and Restaurants sector, and the continued strong position of the Retail Trade and Health and Community Services Sectors also imply a growth in casual or part-time employment. And two of the fastest growing sectors in terms of employment (Construction and Business Services) have relatively high levels of self-employment. This may pose challenges for some ITOs, given the current policy limitations on the use of public Industry Training subsidies for the training of self-employed or for programmes of less than 20 NQF credits.

While little work has been conducted on the future movement in Auckland occupational structures, some educated guesses can be made. 'White collar' (i.e. managerial, professional, administrative, non-manual) occupations will gradually increase their share of the total workforce, reflecting past behaviour,¹⁰ the predicted expansion of employment in 'professional' industry sectors, and national trends.¹¹ Occupational groups which are likely to experience notable growth include Sales Workers, Business, Financial and Legal Workers, and Hospitality and Customer Service Workers.

It should be noted that regional development strategies may affect the future employment patterns discussed above.

Economic activity

Now

Auckland accounts for about 35% of the country's GDP. A little under half of Auckland's economic activity is concentrated in five main sectors (in order of size): Wholesale Trade, Business Services, Finance and Insurance, Communication Services, and Transport and Storage.

Manufacturing, Wholesale Trade and Transport and Communication are more prominent in the economic activity of the Auckland region than at a national level, whereas Agriculture, Fishing, Forestry and Mining make up a marginal share of Auckland's GDP:

¹⁰ In 1991, 62.7% of jobs in the Auckland region were 'white collar', and this proportion grew to 64.3% in 1996 (Catherine Syme, *The Auckland Region's Economy: A Stocktake Report*, p.38)

¹¹ Department of Labour, *Workforce 2010*, p.27

Proportion of Auckland regional and national GDP produced by sector, 2001

	Auckland	New Zealand
Agriculture	0.75%	5.26%
Fishing, Forestry and Mining	0.06%	2.85%
Manufacturing	18.81%	15.65%
Electricity, Gas and Water	2.47%	2.19%
Construction	4.21%	3.94%
Wholesale Trade	12.22%	8.42%
Retail, Accommodation and Restaurants	7.70%	7.29%
Transport and Communications	13.18%	9.81%
Finance, Insurance and Business Services	26.30%	24.64%
Government Administration and Defence	2.89%	4.04%
Personal and Community Services	11.41%	12.05%

Source: Statistics New Zealand, NZIER

Future

The sectors that are expected to grow fastest in value are (in order): communication services, cultural and recreational services, personal and other community services, transport and storage and non-metal mineral products manufacturing:

Projected change in Auckland regional GDP by sector, March 2004-29

Sector	% change 2004-14	% change 2004-24	% change 2004-29
Agriculture	21.0%	36.6%	43.2%
Fishing	¹² -	-	-
Forestry and Logging	-	-	-
Mining and Quarrying	-	-	-
Food, Beverage and Tobacco Manufacturing	27.2%	55.5%	69.6%
Textiles and Apparel Manufacturing	4.7%	11.9%	78.3%
Wood and Paper Products Manufacturing	39.3%	78.3%	97.6%
Printing, Publishing and Recorded Media	6.6%	14.6%	18.7%
Petroleum, Chemical, Plastics and Rubber Products Manufacturing	28.2%	54.1%	66.4%
Non-Metal Mineral Products Manufacturing	43.0%	83.9%	103.4%
Metal Products Manufacturing	35.6%	68.6%	84.3%
Machinery and Equipment Manufacturing	21.2%	40.9%	50.1%
Furniture and other Manufacturing	20.4%	39.4%	48.4%
Electricity, Gas and Water Supply	7.6%	15.6%	19.7%
Construction	38.6%	73.9%	90.5%
Wholesale Trade	33.3%	62.7%	76.2%
Retail Trade (incl. motor vehicle repairs)	30.2%	57.5%	70.3%
Accommodation, Cafes and Restaurants	30.6%	58.5%	71.5%
Transport and Storage	45.7%	88.3%	108.5%
Communication Services	100.8%	216.0%	276.3%
Finance and Insurance	31.0%	58.2%	70.7%
Property Services	9.9%	19.2%	23.6%

¹² NZIER had insufficient data with which to make projections for fishing, forestry and logging, and mining and quarrying, so these were set at zero

Business Services	36.1%	68.4%	83.5%
Government, Administration and Defence	12.0%	24.3%	30.5%
Education	21.6%	41.4%	50.8%
Health and Community Services	39.1%	75.7%	93.1%
Cultural and Recreational Services	61.5%	122.7%	152.6%
Personal and other Community Services	46.4%	91.1%	112.6%

Source: New Zealand Institute of Economic Research (2001), *Auckland Economic Projection Model: Report to the Auckland Regional Council*.

Interestingly, the number of employees is expected to decline in Communication Services and only grow slowly in Personal and Other Community Services and Non-Metal Mineral Products Manufacturing. This suggests that the growth in the value of these sectors will be based in part upon improvements in the productivity of workers.

In line with these growth paths, the Communications Services sector is expected to become the biggest sector in terms of economic value in a little over 10 years:

Largest sectors by share of total projected regional GDP in the Auckland region, 2014, 2024 and 2029

	2014	2024	2029
1.	Wholesale Trade (11.9%)	Communication Services (14.6%)	Communication Services (15.8%)
2.	Communication Services (11.7%)	Wholesale Trade (11.6%)	Wholesale Trade (11.4%)
3.	Business Services (10.3%)	Business Services (10.2%)	Business Services (10.1%)
4.	Finance and Insurance (8.5%)	Finance and Insurance (8.2%)	Finance and Insurance (8.0%)
5.	Transport and Storage (7.1%)	Transport and Storage (7.3%)	Transport and Storage (7.3%)

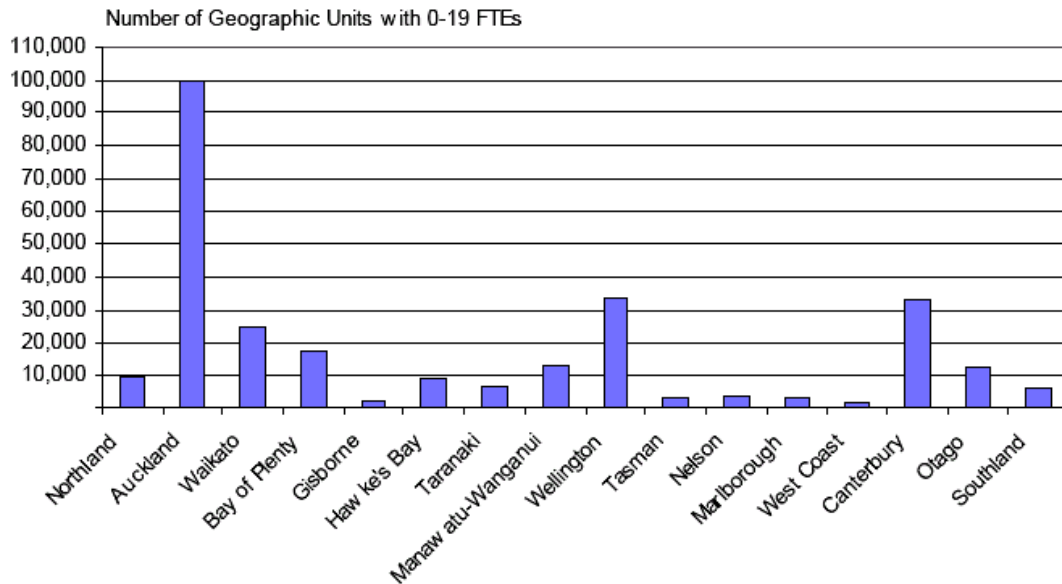
Source: NZIER (2001)

Size of firms

Now

Auckland has the highest proportion and number of SMEs in the country:

Figure 10. Number of Geographic Units with 0-19 FTEs by Regional Council Area



Source: Ministry of Economic Development

82% of businesses in the Auckland region employ fewer than 6 people, and the trend since the 1980s has been for firm size to decline. For example, in 1996 the average firm size in the region was 5.6 FTE employees. By 1999, the equivalent figure was 4.7 FTEs,¹³ compared to a national average of 5.3 FTEs per enterprise.¹⁴ Almost all of the employment growth is occurring in firms of less than 20 people.¹⁵

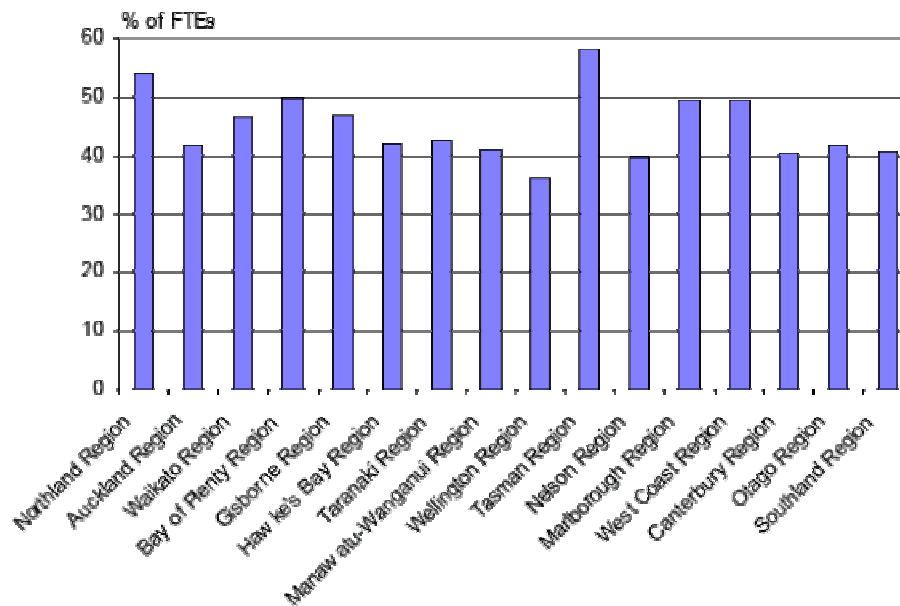
However, as in other urbanised regions, the majority of FTE staff in Auckland is employed in larger firms:

¹³ Catherine Syme, *The Auckland Region's Economy: A Stock-Take Report: prepared for the Auckland Regional Economic Development Group*, p.21

¹⁴ Statistics New Zealand, *Enterprises, Geographic Units and Full-Time Equivalent Persons Engaged by ANZSIC February 1999*

¹⁵ Keestra and Co. Ltd, *Strategic Framework for assessing Auckland's Tertiary Education Needs over the Next 20 Years* (Auckland: TEC/AREDS/LEK Consulting: 2003), p.11

Figure 11. Percentage of FTEs Employed by SMEs by Regional Council Area



Source: Ministry of Economic Development (“SME” is defined by MED as businesses with 0-19 staff)

Auckland “has a slightly above national average representation of firms in the 0-5, 50-99 and 100+ employee size ranges, a slightly below average representation of firms with 10-49 employees, and a more noticeable below representation of firms in the 6-9 employee size range.”¹⁶

Industry sectors in Auckland with the smallest firms on average are property and business services (1.69 employees per firm), agriculture, forestry and fishing (2.1 employees), finance and insurance (2.6 employees), construction (2.7 employees), cultural and recreational services (2.74 employees) and personal services (3.28 employees). The largest firms on average are found in government, administration and defence (40.31 employees), electricity, gas and water supply (19.27 employees), education (13.29 employees) and manufacturing (9.2 employees).¹⁷

The future

Little work has been undertaken on trends in the size of Auckland firms, and a recent overview of research on SMEs for the Auckland Regional Economic

¹⁶ Dr Heather Wilson, *New Zealand Small And Medium-Sized Enterprises (SMES): Annotated Bibliography, Key Findings & Recommendations For Research & Policy*, (Auckland: University of Auckland for Auckland Regional Economic Development Strategy, 2002), p.9

¹⁷ Crothers, *Employment and Firms in the Auckland Region: A Report Prepared for the Auckland Regional Economic Development Strategy*, p.24

Development Strategy found “very little meaningful information at the regional level.”¹⁸

The strength of manufacturing in Auckland (which tends to have higher numbers of employees per firm), and the tendency for urban areas for SMEs to have a smaller share of employment suggests that larger firms will continue to be important sources of training in the future.

However – as noted above – manufacturing’s share of overall employment has declined recently and this is expected to continue (with some sub-sector exceptions). In addition, with the exception of education and health and community services, the six big employment sectors tend to have smaller firms. Since education is currently outside the coverage of the Industry Training network, this implies that a considerable share of potential future training opportunities in Auckland will be in smaller firms. It may also imply barriers to future growth in training within the region:

Industry sector	Average Size
Property and Business Services	1.69 employees per firm
Construction	2.65 employees per firm
Retail Trade	4.40 employees per firm
Wholesale Trade	4.65 employees per firm
Health and Community Services	7.31 employees per firm
Education	13.29 employees per firm

Source: Charles Crothers, *Employment and Firms in the Auckland Region*, p.24

¹⁸ Wilson, *New Zealand Small And Medium-Sized Enterprises*, p.9

Incidence of training in Auckland, and knowledge of industry training

Auckland businesses participating in the 2003 Business New Zealand/Industry Training Federation Skills and Training Survey showed that Auckland businesses provided training at similar levels to firms in other regions. Auckland enterprises also showed average levels of commitment to training as a business strategy:

Skill development, training & business strategy by Region

% within Region		Is skill development & training key to business strategy?			Total
		Yes	Yes, to some extent	No	
Region	Auckland	52.0%	40.0%	8.0%	105
	Northern (non-Auckland)	55.9%	42.6%	1.5%	71
	Central	58.5%	34.0%	7.5%	55
	Canterbury / Westland	57.6%	35.2%	7.2%	151
	Otago / Southland	34.8%	54.3%	10.9%	49
	Nation-wide	52.2%	39.1%	8.7%	48
Total		53.2%	39.7%	7.1%	479

Source: Business New Zealand/Industry Training Federation, *Report of the Business NZ Skills and Training Survey 2003*

Auckland businesses also appear to use ITOs for training at similar rates to the rest of New Zealand.

Use of providers of skill development and training

Category	Percent of National Firms	Percent of Auckland Firms
In-house training staff	81.5%	78.1%
Training consultants/contractors	56.6%	52.4%
Private training provider	53.2%	54.3%
Industry Training Organisation	53.0%	54.3%
Polytechnic	41.2%	36.2%
University	30.0%	28.6%
Modern Apprenticeship Co-ordinator	14.1%	8.6%
Other	7.2%	6.7%

Source: Business New Zealand/Industry Training Federation

However, Aucklanders undertake Industry Training at a lower rate than the national average:

Industry Training penetration by Territorial Local Authority, 2003

Territorial Local Authority	Employed (Dec 2003 quarter)	No. of trainees at December 2003	% penetration
Northland	58,600	3,705	6.32
Auckland	596,500	20,520	3.44
Waikato	176,300	9,483	5.38
Bay of Plenty	104,500	8,940	8.56
Gisborne/Hawkes Bay	85,800	5,594	6.52
Taranaki-Manawatu-Wanganui	160,200	8,468	5.29
Wellington	244,900	8,861	3.62
Tasman/Nelson/Marlborough/West Coast	81,800	5,670	6.93
Canterbury	297,500	9,284	3.12
Otago-Southland	150,100	9,444	6.29
TOTAL	1,956,200	89,969	4.60

Source: Tertiary Education Commission Industry Training Statistics 2003, Statistics NZ Household Labour Force Survey

The Auckland result mirrors training penetration rates in other urban areas. This urban difference probably reflects the nature of business in those regions (such as higher rates of professionals, lower presence of the primary sectors), as table D in Appendix A indicates.

However, the Business New Zealand-Industry Training Federation survey also revealed comparatively high levels of dissatisfaction amongst Auckland businesses with the contribution made by industry training to business:

Effective contribution of ITO-arranged industry training to industry by Region

% within Region	ITO-arranged industry training makes an effective contribution to meeting the skill development and/or employment needs of my industry				Total
	Strongly Agree	Agree	Disagree	Strongly Disagree	
Auckland	8.9%	23.3%	46.7%	21.1%	100.0%
Northern (non-Auckland)	7.8%	54.7%	29.7%	7.8%	100.0%
Central	4.3%	51.1%	27.7%	17.0%	100.0%
Canterbury / Westland	6.7%	35.1%	38.8%	19.4%	100.0%
Otago / Southland	6.5%	54.3%	30.4%	8.7%	100.0%
Nation-wide	4.8%	50.0%	38.1%	7.1%	100.0%
Total	6.9%	40.9%	36.9%	15.4%	100.0%

Effective contribution of ITO-arranged industry training to enterprise by region

% within Region		ITO-arranged industry training makes an effective contribution to meeting the skill development and/or employment needs of my enterprise				Total
		Strongly Agree	Agree	Disagree	Strongly Disagree	
Region	Auckland	8.5%	22.3%	47.9%	21.3%	100.0%
	Northern (non-Auckland)	15.2%	45.5%	31.8%	7.6%	100.0%
	Central	4.3%	46.8%	36.2%	12.8%	100.0%
	Canterbury / Westland	7.2%	31.2%	39.1%	22.5%	100.0%
	Otago / Southland	4.3%	46.8%	40.4%	8.5%	100.0%
	Nation-wide	9.5%	42.9%	40.5%	7.1%	100.0%
Total		8.3%	35.9%	39.9%	15.9%	100.0%

Source: Business New Zealand/Industry Training Federation

The reasons for this dissatisfaction are not absolutely clear, but probably include poor knowledge of ITOs in the Auckland region. It is notable that the two regions that reported comparatively high levels of dissatisfaction – Auckland and Canterbury/Westland – were also the two regions in which a high proportion of firms did not know of the ITO covering their industry:

Knowledge by firms of ITO covering enterprise or industry by region

% within Region		Known ITO covering enterprise or industry				Total
		Yes	No	Don't Know	Incorrectly identified	
	Auckland	36.9%	32.0%	29.1%	1.9%	100.0%
	Northern (non-Auckland)	64.3%	18.6%	11.4%	5.7%	100.0%
	Central	57.7%	23.1%	17.3%	1.9%	100.0%
	Canterbury / Westland	31.3%	36.1%	26.5%	6.1%	100.0%
	Otago / Southland	46.9%	20.4%	20.4%	12.2%	100.0%
	Nation-wide	28.3%	34.8%	37.0%		100.0%
Total		41.8%	29.3%	24.2%	4.7%	100.0%

Source: Business New Zealand/Industry Training Federation

This suggests that ITOs wishing to enter or expand their business in Auckland should consider investing in marketing to raise their presence.

Regional development strategies

There are a number of education and economic development strategies in place across the Auckland region, which may create opportunities for Industry Training Organisations to enhance or expand their business.

Waitakere City

Waitakere City's Employment and Skills Project aims to reduce the number of young people leaving school with no qualifications, and improve job opportunities within Waitakere through six main strategies:

- Ensuring “accurate knowledge of labour demands informs decisions”;
- “Success is championed”;
- Increasing “employers using structured workplace learning”;
- Making sure that “every student leaves school with a [education or employment] plan”;
- Making certain that “training meets industry needs”; and
- Maximising “the Waitakere talent pool.”

A number of specific actions are planned under each of the six strategies, many of which are of potential relevance to ITOs. See more at:

http://www.enterprisewaitakere.co.nz/content/documents/35/Waitakere_Employment_and_Skills.pdf

The Waitakere City Council has also targeted four main sectors for focus – organic foods, film production, marine industries, and tourism and is investigating support for clusters in other areas, particularly those related to “clean technology” and “creative industries”. See more at: <http://www.waitakere.govt.nz/AbtCnl/pp/pdf/ecodevstrat.pdf>

North Shore City

North Shore City's economic development strategy “indicates a strategic preference for knowledge and creative enterprises”, specifically business and financial services, information and communications technology, health, sport and leisure, education, retail, and niche manufacturing (e.g. publishing, marine & tool making). See more at: www.northshorecity.govt.nz/PDFs/ed-strategy.pdf

Rodney

Rodney District Council also focuses on infrastructure development, and targets five main industry sectors:

- Bio business

- Manufacturing and commerce
- Tourism
- Forestry and Quarrying
- Education and Training

In the case of all of these industry sectors, the Council has identified a role in encouraging skill development and addressing training needs. See more at: http://www.rodney.govt.nz/documents/rodney_economic_dev/economic_strategy.pdf

Franklin

Franklin District's economic development strategy aims to:

- encourage tourism;
- diversify the region's manufacturing base by attracting new businesses;
- develop e-commerce infrastructure to encourage "knowledge-based industries" to settle in Franklin;
- increase the number of "economically active" 16-29 year olds living and working in Franklin, in part through encouraging more vocational training and establishing 'niche tertiary programmes'
- develop clusters around the equine, automotive and horticulture industries.

For more, see:

<http://www.enterprisefranklin.co.nz/economicStrategy/stratHome.htm>

Manukau City

Manukau City's economic development strategy stresses:

- infrastructure development (particularly roading and transport);
- supporting the development clusters in some target sectors (distribution, leisure, automotive industries, airport related industries, education, Polynesian/Maori arts, food processing, appliances and tourism);
- developing the city's economic base by "promoting diversity" (such as targeted education, flora/fauna exhibits, Polynesian/Maori food, and cultural centres); and
- promoting tourism.

See more at:

http://www.manukau.govt.nz/business_investment/local_economy/template2.asp?key=ECODEVSTR

Auckland Regional Economic Development Strategy (AREDS)

AREDS is the overarching economic development strategy for the Auckland region and is based around eight main directions:

- Promoting the Auckland region;
- Encouraging innovation and excellence;
- Developing overseas markets;
- Supporting exports;
- Providing a high-quality living environment;
- Building an entrepreneurial culture;
- Producing a skilled and responsive labour force;
- Delivering a high quality and responsive government.

All of these focus areas have skill elements and some will be of particular relevance to individual ITOs. The areas which have the widest significance to ITOs are ‘Supporting Exports’, ‘Building an Entrepreneurial Culture’ and ‘Producing a Skilled and Responsive Labour Force’:

AREDS Focus Area	AREDS Action point
Supporting Exports	<p>Establish programmes to help SMEs to enter or expand into international markets by:</p> <ul style="list-style-type: none"> • supporting mentoring programmes to deliver targeted, hands-on assistance to firms with potential to grow • supporting programmes that provide firms with access to industry training <p>Establish a key export cluster programme, by:</p> <ul style="list-style-type: none"> • developing detailed export cluster plans in conjunction with key industry and supporting stakeholders aimed at developing global competitiveness • promoting and supporting collaboration between education and skills providers to meet the skills needs of key clusters <p>Establish programmes to assist SMEs subcontracting to Multinational Enterprises (MNEs) by assisting SMEs to adopt ICT and logistics technology to effectively integrate with MNEs.</p>
Building an Entrepreneurial Culture	<p>Support and promote the introduction of concepts of entrepreneurship into the education curriculum.</p>
Producing a Skilled and Responsive Labour Force	<p>Establish and resource an Education Forum in association with the Tertiary Education Commission and other stakeholders focusing on:</p> <ul style="list-style-type: none"> • business facilitation, clusters and industry training • supporting target industries • liaison between secondary schools, tertiary education and training providers, and business • supporting effective research into labour market needs and disseminating this information <p>Utilise migrant skills to meet skills gaps, while also taking long-term advantage of the diverse skills brought into the region by migrants by supporting programmes aimed at enabling migrants to fully utilise their skills.</p>

See more at: <http://www.areds.co.nz/downloads/AREDS-strategy.pdf>

Appendix A: Additional Tables

Table A: Share of total employees by industry for the employed census usually resident population in the Wellington region aged 15 years and over, 2001

Industry Sector	Total employees	Share
Agriculture, Forestry and Fishing	4,998	2.4%
Mining	144	0.1%
Manufacturing	17,343	8.3%
Electricity, Gas and Water Supply	771	0.4%
Construction	11,931	5.7%
Wholesale Trade	10,716	5.1%
Retail Trade	23,427	11.2%
Accommodation, Cafes and Restaurants	9,102	4.4%
Transport and Storage	7,224	3.5%
Communication Services	4,371	2.1%
Finance and Insurance	11,331	5.4%
Property and Business Services	34,161	16.4%
Government Administration and Defence	17,088	8.2%
Education	15,246	7.3%
Health and Community Services	16,284	7.8%
Cultural and Recreational Services	6,594	3.2%
Personal and Other Services	9,681	4.6%
Not Elsewhere Included	8,454	4.1%

Source: Statistics New Zealand, Census 2001

Table B: Share of total employees by industry for the employed census usually resident population in the Canterbury region aged 15 years and over, 2001

Industry Sector	Total employees	Share
Agriculture, Forestry and Fishing	18,378	7.9%
Mining	180	0.1%
Manufacturing	35,823	15.3%
Electricity, Gas and Water Supply	747	0.3%
Construction	13,302	5.7%
Wholesale Trade	12,840	5.5%
Retail Trade	29,508	12.6%
Accommodation, Cafes and Restaurants	12,516	5.3%
Transport and Storage	10,113	4.3%
Communication Services	3,060	1.3%
Finance and Insurance	5,961	2.6%
Property and Business Services	23,046	9.8%
Government Administration and Defence	6,501	2.8%
Education	16,260	6.9%
Health and Community Services	21,114	9.0%
Cultural and Recreational Services	5,235	2.2%
Personal and Other Services	8,415	3.6%
Not Elsewhere Included	11,217	4.8%

Source: Statistics New Zealand, Census 2001

Table C: Share of total employees by industry for the employed census usually resident population (all New Zealand) aged 15 years and over, 2001

Industry Sector	Total employees	Share
Agriculture, Forestry and Fishing	142,758	8.3%
Mining	3,354	0.2%
Manufacturing	223,806	13.0%
Electricity, Gas and Water Supply	5,976	0.4%
Construction	103,911	6.0%
Wholesale Trade	99,447	5.8%
Retail Trade	208,314	12.1%
Accommodation, Cafes and Restaurants	80,355	4.7%
Transport and Storage	66,498	3.9%
Communication Services	23,151	1.3%
Finance and Insurance	51,924	3.0%
Property and Business Services	194,577	11.3%
Government Administration and Defence	59,634	3.5%
Education	126,543	7.3%
Health and Community Services	140,568	8.1%
Cultural and Recreational Services	41,274	2.4%
Personal and Other Services	64,317	3.7%
Not Elsewhere Included	90,864	5.3%

Source: Statistics New Zealand, Census 2001

Table D: Distribution of Industry Trainees in Auckland, Canterbury, Wellington, and New Zealand, as at 31 December 2003

ITO	Auckland ¹⁹	Canterbury	Wellington	New Zealand
Agriculture	0.9%	7.6%	2.4%	6.5%
Ambulance	1.3%	2.7%	0.8%	1.0%
Apparel and Textile	1.9%	2.2%	0.8%	1.2%
Aviation	4.9%	3.8%	1.0%	2.2%
Boating	1.5%	0.3%	0.0%	0.6%
Building	5.3%	7.2%	5.9%	5.5%
Building Services Contractors	0.8%	0.3%	0.2%	0.4%
Community Support	4.9%	5.5%	5.1%	4.3%
Competenz	21.3%	12.9%	17.2%	11.2%
Contracting	1.7%	1.7%	1.3%	1.9%
Electricity Supply	2.8%	3.2%	2.5%	3.2%
Electrotechnology	9.7%	7.5%	13.3%	6.4%
Equine	0.2%	0.4%	0.1%	0.2%
Extractives	1.6%	1.8%	1.8%	2.3%
Fire & Rescue	0.5%	1.2%	1.8%	1.0%
Flooring	0.2%	0.6%	1.0%	1.0%
Forestry	5.0%	4.8%	4.7%	14.1%
Furniture	1.3%	1.1%	0%	0.3%
Hairdressing	1.7%	1.7%	2.5%	1.6%
Horticulture	0.8%	1.6%	2.9%	1.5%
Hospitality	6.2%	4.3%	5.0%	4.3%
Joinery	0.6%	0.7%	0.8%	0.6%
Leather	0.0%	0.2%	0%	0.1%
Local Government	0.5%	0.3%	0.7%	0.4%
Motor	3.6%	3.6%	3.3%	4.0%
NZITO	1.2%	4.6%	0.4%	7.0%
Painting	0.5%	0.8%	0.6%	0.6%
Pharmacy	0%	0%	0.8%	0.1%
Plastics	1.9%	1.0%	0.5%	0.7%
Plumbing	0.9%	1.2%	2.5%	1.1%
Power Crane	1.1%	0.7%	0.8%	0.5%
Printing	0.9%	1.2%	0.9%	0.5%
Public Sector	1.6%	1.0%	2.7%	1.3%
Retail Meat	0.6%	0.7%	0.5%	0.5%
Retail Training	1.6%	1.8%	2.7%	1.4%
Road Transport	3.8%	5.9%	4.9%	4.7%
Seafood	0.7%	1.3%	0.6%	2.0%
Sports, Fitness and Rec	5.4%	2.0%	4.4%	2.7%
Sports Turf	0.6%	0.4%	0.4%	0.4%
Te Kaiawhina Ahumahi	0.2%	0.4%	2.0%	0.7%
TOTAL	100%	100%	100%	100%

Source: Tertiary Education Commission

¹⁹ 'Auckland' = 'Manukau' plus 'Tamaki Matarau'

Bibliography

Business New Zealand/Industry Training Federation, *Report of the Business NZ Skills and Training Survey 2003*

Crothers, Charles. *Employment and Firms in the Auckland Region: A Report Prepared for the Auckland Regional Economic Development Strategy* (Auckland: Auckland University of Technology for Auckland Regional Economic Development Strategy, 2002)

Department of Labour, *WorkInsight* (Wellington: Department of Labour, 2002-)

Department of Labour, *Workforce 2010* (Wellington: Department of Labour 2001)

Department of Labour, *An Overview of New Zealand and International Literature on the Future of Work* (Wellington: Department of Labour, 2002)

Keestra and Co. Ltd, *Strategic Framework for assessing Auckland's Tertiary Education Needs over the Next 20 Years* (Auckland: TEC/AREDS/LEK Consulting: 2003)

Market Economics (2002), *AREDS Targets: Evaluation Framework and Scenarios*

Ministry of Economic Development, *SMEs in New Zealand: Structure and Dynamics* (Wellington: MED, 2003)

Ministry of Education, *School Leaver Statistics 2001* (Wellington: Ministry of Education, 2002)

New Zealand Institute of Economic Research, *Auckland Economic Projection Model: Report to Auckland Regional Council* (Wellington: NZIER, 2001)

New Zealand Institute of Economic Research, *Auckland Regional Economic Development Strategy: Measures and Benchmarking* (Wellington: NZIER, 2002)

Statistics New Zealand, *Census 2001*

Statistics New Zealand, *Enterprises, Geographic Units and Full-Time Equivalent Persons Engaged by ANZSIC February 1999*

Statistics New Zealand, *Projected Population of Regional Councils, 2001-21*

Syme, Catherine. *The Auckland Region's Economy: A Stock-Take Report: prepared for the Auckland Regional Economic Development Group* (Auckland:

Synchro Consulting for Auckland Regional Economic Development Strategy, 2001)

Tertiary Education Commission, *Finalised Trainees by Region and Local Authority 2003* (Wellington: TEC, 2004)

Wilson Dr, Heather. *New Zealand Small and Medium-Sized Enterprises (SMES): Annotated Bibliography, Key Findings & Recommendations For Research & Policy*, (Auckland: University of Auckland for Auckland Regional Economic Development Strategy, 2002)