

Wellington Regional Skills Leadership Group Advice to the Tertiary Education Commission

March 2023

Introduction

Wellington Regional Skills Leadership Group (RSLG) covers an area which includes Wairarapa, Kāpiti, Porirua, Hutt Valley and Wellington. In developing the Wellington Regional Workforce Plan (RWP), the RSLG has considered each part of the region. The plan has five strategic areas of focus – maximising workforce, skills development, building connections, thriving workplaces and support for young people.

Currently our region is experiencing widespread skills and labour shortages. The current unemployment rate is 2.7% with an underutilisation rate of 9.3%¹, and low domestic migration. We need to ensure people all around our region can access skill development that will enable them to fill the widespread shortages the region is experiencing.

Wellington region's first RWP has prioritised seven sectors which are strategically significant to the region with workforce shortages: construction, infrastructure, health (kaiāwhina workforce), digital technologies, manufacturing, visitor and primary sector. (The RSLG has grouped construction and infrastructure for the purpose of this advice). Our advice to TEC for the 2024 year relates to these sectors.

This advice has been developed using information gathered through RSLG activity, engagement with stakeholders, and data analysis. We have engaged with each of the Workforce Development Councils and with the major vocational education and training providers. Our advice aligns with information provided by WDCs. All WDCs have received our draft advice and five WDCs have engaged further to confirm or improve alignment.

Recommendations are provided in the summary table below. Section 2 describes the regional outlook for each sector. Further data is available in Section 3.

¹ Statistics NZ Household Labour Force Survey Dec 2022

Summary – Wellington RSLG Recommendations

Construction and Infrastructure

- Continued investment in the development of trades skills for construction
- Increased investment in skills development for infrastructure development in engineering programmes from L 2 – L 6 especially for water, electrical, civil and roading engineering skills and heavy machinery operations
- Investment in skills for supervision, management, and project management
- Maintain investment in plumbing gas fitting and drain laying apprenticeships and increase investment in support for delivery that accelerates delayed apprenticeships, e.g., block courses and /or workplace assessment
- Increase investment in programmes that enable upskilling and reskilling to support career changers within the industry, including through distance learning
- Increase investment in work-based learning to enable workers, young people, re-entrants and careers changers, to earn while they learn
- Investment in degree-level programmes that develop high level digital and technical skills for building information modelling

Career system specific advice

- Investment in degree-level programmes that develop high level digital and technical skills for building information modelling

Health – kaiāwhina pathways²

- Continued investment in flexible training programmes and work-based learning opportunities for kaiāwhina that enable progression from Level 2 to Level 6 and beyond
- Increased investment in Mātauranga Māori programmes and programmes developed by Māori for Māori
- Investment in programmes that build cultural capability in the kaiāwhina workforce

² These recommendations are consistent with priorities 1 and 5 of the [Kaiāwhina Workforce Plan](#), overseen by the [Kaiāwhina Workforce Taskforce](#).

Manufacturing

- Increased investment in mechanical engineering trades skills for manufacturing, especially welding and fabrication
- Increased investment in pre-trades programmes to support entry into the industry and pathways into work-based learning
- Investment in engineering and digital skills for greater automation in manufacturing

Digital Technologies sector

- Investment in programmes that create points of entry into the sector for diverse learners and build pathways to higher level skills development, including through distance learning
- Investment in programmes which build a foundation of skills in computer science and mathematics, including statistics, calculus, and linear algebra and data analytics
- Investment in the development of a broad range of technical skills and programming languages
- Investment in skills for end-to-end web development
- Investment in the development of skills for cybersecurity
- Investment in work-based learning opportunities

Career system specific advice

- Investment in careers initiatives that attract Māori and Pacific peoples to tertiary training in advanced digital skills

Primary Sector

- Increased investment in NZQF Level 2 programmes and primary industry trades academy positions to build the pathway for new entrants into the primary sector in our region
- Investment in programmes which provide practical skills for the primary sector and those advising the sector
- Continued investment in work-based learning opportunities with increased investment at Level 5
- Investment in Diploma programmes (levels 5-7) in primary sector management, including skills development in leadership and people management
- Investment in programmes that build skills in Mātauranga Māori for land management and environmental solutions

Visitor Sector

- Investment in programmes and work-based learning that develops and recognises the service skills of workers and equips them for further training pathways within and outside the visitor sector
- Investment in training for chefs including work-based learning and programmes with in-work experience

Regional outlook for priority sectors – our regional story

Construction and Infrastructure

Wellington's construction and infrastructure sector continues to grow. Work is beginning on several major housing and infrastructure developments across our region including: a very large housing development in Porirua East (Kainga Ora), RiverLink - a building and roading project in Lower Hutt; Wellington Water projects; aged residential care construction and housing developments in Kāpiti; the Otaki – Levin highway extension; and earthquake strengthening in the metropolitan areas. In Wairarapa, skilled labour is needed for housing developments, Matua Pā and an Iwi-owned energy initiative. \$2.7billion of construction and infrastructure is planned in the next 10 years in Hutt Valley alone. There are other major projects on the horizon – a new ferry terminal, hospital rebuilds and other civic projects. Tenders are currently open for 6 major construction projects in the region. Although residential construction has been slowing, commercial construction has been absorbing the available workforce and demand remains strong. These projects will drive ongoing demand and an initial increase in demand for a broad range of roles in construction and infrastructure.

Job openings are forecast to grow year on year, with a total of 3,069 job openings expected between 2025 and 2028 (inclusive)³. Notably, there is also an important opportunity for skills development and employment among Māori and Pacific peoples who are part of the immediate communities where these developments are located. Broader outcomes have been included in associated procurements to leverage these opportunities, and local Jobs and Skills Hubs have been established in Porirua East and in Hutt Valley to build supply by recruiting and developing the local workforce. Investment in the development of trades skills pathways, which include pre-trades programmes and work-based learning to Level 7 will ensure these efforts are successful.

In construction, there is a growing need for highly skilled university-trained professionals who can apply new technologies to drive productivity gains. Future buildings will be 'built in the cloud' first using use building information modelling. The industry will need tech savvy university graduates with advanced digital and technical skills to apply this and other emerging technologies.

Health – kaiāwhina pathways

Wellington RSLG is focused on the region's kaiāwhina workforce within the health sector to ensure there are locally available training opportunities and training pathways that enable kaiāwhina to move from point of entry into a range of decision-making roles. Currently 10,994 people are employed in the region as 'Health and Welfare Support Workers' or 'Personal Carers and Assistants'. This workforce is forecast to grow to 12,156 in 2028⁴.

³ Source: Infometrics 'Industry Employment' projections for the Wellington region ANZSIC L1, Construction, Electricity, Gas Water and Waste Services

⁴ Infometrics projections for the Wellington region by occupation (ANZSCO L3) accessed 24 February 2023. 'Health and Welfare Support Workers' and 'Personal Carers and Assistants' occupation classifications are most closely aligned to kaiāwhina roles.

The Kaiāwhina Workforce Taskforce has identified [training pathways](#) to enable career progression. Possible pathways include Mātauranga Māori qualifications and qualifications developed by Toitū te Waiora. During the Covid response, Iwi and Māori health providers rapidly established teams of kaiāwhina, with Māori and Pacific peoples making up most of this workforce. These roles contributed to pro-equity outcomes and provided mana enhancing experiences for whānau and communities.

The Wellington region, like many others around Aotearoa, recognise kaiāwhina as a valued part of the region's health workforce. Now there is an opportunity to recognise this interest and do more to grow and support opportunities for Māori and Pacific peoples in the region's health workforce. This will need investment in training that values Māori approaches to health, that is locally accessible and includes 'earn as you learn' options. It will also require wider investment in building the cultural capability of the workforce, to be more inclusive of diverse perspectives in health care.

Manufacturing

There are significant shortages of people with trade skills for manufacturing in the region, yet job openings in manufacturing in the region are forecast to grow year on year. A total of 2,950 job openings are expected between 2025 and 2028 (inclusive), with the greatest number of openings in 'Food Product Manufacturing' (29% of total) and 'Fabricated Metal Product Manufacturing' (14% of total)⁵

Demand is high for welders and fabricators, and associated staff, such as detailers, computerised drawing, supervisors, project managers, quantity surveyors and estimators. Local employers are relying on skilled migrants to fill immediate shortages at all levels, and on outsourcing to third parties in other regions. Some larger businesses are setting up in-house training in partnership with local schools (the Patton Engineering model) to compensate for lack of opportunities to develop skills locally. Pre-trades courses are needed to build the pathway into manufacturing and position people to enter apprenticeships. Demand for these skills will remain strong for the next five or more years to service and supply the large construction and infrastructure projects referred to above.

Robotics and automation are an area of emerging growth. Local manufacturers are already preparing for 'the fourth industrial revolution' ([Industry 4.0](#)), by undertaking audits of their manufacturing processes. These highlight the opportunities to harness converging technologies (data collection, communications technologies, robotics) to lift productivity. This activity is set to drive uptake of new technologies in the manufacturing industry here. Our region needs people equipped with skills in digital technologies and robotics to move away from manual trades towards more digital operation.

Digital Technologies sector

Wellington region's digital technologies sector includes businesses focused on digital products, services or solutions, such as data processing services, computer system design and software publishing, in screen (post-production and digital workshops) interactive media and gaming, financial technology, health technology, digital technology for agriculture, artificial intelligence, Software as a Service (SaaS).

⁵ Infometrics Industry Employment Projections for the Wellington Region Manufacturing ANZSIC Level 2

It is a high value high growth sector of the regional economy and important to New Zealand as whole. Wellington has increasingly become a centre of excellence in the New Zealand's digital technologies sector. We are home to well-known large companies such as Datacom, Xero, Wētā Digital, and a whole ecosystem of lesser known but equally smart and innovative smaller companies and start-ups. In 2023, it is estimated that 17,057⁶ people are employed in digital technology businesses across the region, with the biggest concentration in Wellington City and Hutt Valley. Wellington city has the largest proportion of employment in digital firms – 6 % compared to a NZ average of 1.69%⁷.

In addition, a large number of people with advanced digital skills are employed outside the digital technologies sector, especially in regionally based national organisations, such as government agencies and crown entities, in major education providers and health organisations, and in the finance and insurance sector.

Despite the size of the advanced digital skills workforce, there is a notable lack of diversity with Māori, Pacific peoples and women not well represented. From an iwi perspective this lack of diversity limits the development of culturally responsive technologies.

Currently there are significant shortages of people with advanced digital skills to meet regional demand. This jeopardises this important sector in our economy, with businesses hiring staff who work remotely from other parts of New Zealand or the world, opening offshore offices, or relocating offshore entirely.

The region immediately needs more people with skills in coding, web design, software development, end to end web development and new web applications and interfaces, programming languages and software development platforms, data analysis to analyse and interpret vast amounts of digital data, user experience and design, content management, cloud computing and cloud-based solutions and cyber security.

Two current issues of importance are cyber security and Māori data sovereignty. The region needs cybersecurity professionals who can secure digital systems and networks and integrate best security practices into development processes, applications and all aspects of work. Equally, the region's digital professionals need a good awareness and understanding of issues relating to Māori data sovereignty and the ability to apply this in their work. This is an area for future qualification and programme development.

The region also needs people with skills to engage with major areas of growth and convergence in technologies - augmented reality and virtual reality, artificial intelligence and machine learning Block chain, the Internet of Things (IoT) and to integrate these developments and associated technologies into an array of applications.

⁶ Infometrics 2024 Occupation Employment projections for ANZSCO L3 'Business and Systems Analysts and Programmers', Database and Systems Administrators and ICT Security Specialists', 'ICT and Telecommunications Technicians', 'ICT Managers', and 'ICT Network and Support Professionals', and ANZSCO L4 'Multimedia Designer', 'Web Designer', 'ICT Account Manager', 'ICT Business Development Manager', and 'ICT Sales Representative'.

⁷ [Draft Digital Technologies Industry Transformation Plan](#)

In addition to technical skills, the industry needs people with ‘soft skills’, such as communication, problem-solving, teamwork, cultural competence, creative thinking, and innovation. These skills will help build the capability and capacity of companies to innovate and adapt to changing trends.

Many specialised advanced digital skills can be developed in the workplace as well and through tertiary education providers.

Primary Sector

Wellington’s primary sector is largely land-based and located in Wairarapa, with primary production also occurring in Kāpiti and to a small extent in Upper Hutt. It is characterised by red meat and wool, dairy, and arable farming. It also includes horticulture, viticulture, apiculture, and forestry. Agricultural contracting services also play an important role in the region’s primary sector.

The sector is currently experiencing skilled labour shortages. As a result, it is focused on attraction and retention. To attract new entrants to the sector, investment is needed in pathways from school to work and in the development of the pipeline from farm assistant to farm manager. As a foundation for roles in the primary sector, including advisory roles, there is a need for development of specific practical skills, such as fencing, calf-rearing, chainsaw operation, planting and pruning, quad bike operation and health and safety. Investment in training for better management practices, especially human resource management, is needed to support retention.

The primary sector has been identified in the Wellington Regional Economic Development Plan⁸, as an area of economic growth. Industry forecasts between 2025 and 2028 show Agriculture, Forestry and Fishing (ANZSIC Level 1) will be the largest area of growth in South Wairarapa by job openings, the third largest area in Carterton District, and fourth largest in Masterton District.⁹ By occupation (ANZSCO Level 3 and 4) the industry is forecast to employ 5,384 people in 2028, including Farm, Forestry and Garden Workers, Farmers and Farm Managers, and Shearers¹⁰. 136 job openings are forecast for farmers and farm managers in 2028.

There is an emerging trend towards sustainable land management¹¹, including practices that draw on Mātauranga Māori, and practices that adapt to climate change¹². There is also evidence of changing land use, with many large properties being sold for the establishment of forestry and carbon harvesting, and a possible move towards long-term horticulture. These changes are likely to be accompanied by an increase in farm advisory roles.

⁸ [Wellington Regional Economic Development Plan](#) pp 36 - 40 [The scope of the plan includes food processing](#)

⁹ Infometrics Industry Employment Projections 2025-2028 for ANZSIC L1 ‘Agriculture, Forestry and Fishing’ for Carterton District, Masterton District, and South Wairarapa District.

¹⁰ Infometrics 2028 Occupation Employment projections for ANZSCO L3 ‘Farm, Forestry and Garden Workers’, ‘Farmers and Farm Managers’, and ANZSCO L4 ‘Shearers’

¹¹ See the [Wellington Regional Economic Development Plan](#)

¹² See the [Wairarapa Economic Development Strategy](#) - Land Use Focus

Visitor Sector

The visitor sector focus of the RWP is on the hospitality, food and accommodation sector which is strategically important to the region, creating vibrance and attractiveness as a place to live and as a destination. There are destination management plans in place across our five sub-regions that emphasise the importance of hospitality.

There are ongoing staff shortages in our region that have forced food and accommodation businesses to reduce service, reduce business operating hours, or to close down. There is a need for skilled labour in all aspects of the industry, and a notable shortage of qualified chefs and housekeepers.

Local developments and initiatives around the region are expected to increase demand for skilled labour in the visitor sector for example, Tākina Wellington Convention and Exhibition sector and the Kāpiti Food and Beverage Cluster. The number of forecast job openings in accommodation and food services ranges between 1,324 and 1,519 roles each year between 2025 and 2028 (totalling 5,725 over these four years).¹³

The visitor sector employs large proportions of young and unqualified or low qualified staff.¹⁴ It is relatively easy to enter but is characterised by lower rates of pay and retention. Approximately 50 % of staff move from the visitor sector into other sectors. The [Better Work Action Plan](#), a component of the Tourism Industry transformation Plan, contains actions to meet some of these challenges and improve recruitment and retention of staff.

¹³ Infometrics 2025-2028 Industry Job Openings Projections for the Wellington Region for ANZSIC Level 1 'Accommodation and Food Services'.

Regional Workforce Demand Profile

The high-level industries that will contribute to the Wellington Region's forecasted workforce demand pressures

Industry (ANZSIC L1)	Wellington Region	Sub-regions							
		Wellington City	Porirua City	Kapiti Coast District	Lower Hutt City	Upper Hutt City	Carterton District	Masterton District	South Wairarapa District
Accommodation and Food Services									
Administrative and Support Services									
Agriculture, Forestry and Fishing									
Arts and Recreation Services									
Construction									
Education and Training									
Electricity, Gas, Water and Waste Services									
Financial and Insurance Services									
Health Care and Social Assistance									
Information Media and Telecommunications									
Manufacturing									
Mining									
Other Services (incl. personal, repair, and maintenance services)									
Professional, Scientific and Technical Services									
Public Administration and Safety									
Rental, Hiring and Real Estate Services									
Retail Trade									
Transport, Postal and Warehousing									
Wholesale Trade									

Source: Infometrics Industry Employment Projections for 2028

Key

	Significant regional demand		High regional demand
	Very high regional demand		Notable industry demand