



# C&I SERVICES

*Advice to the Tertiary Education Commission  
for training investment in 2027*

Published November 2025

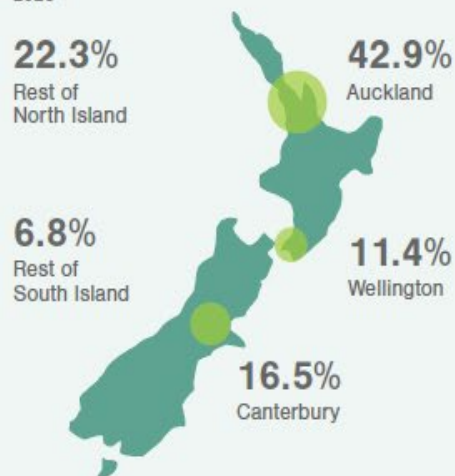


**WAIHANGA ARA RAU**  
Construction and  
Infrastructure  
Workforce Development Council

# STATE OF THE SECTOR

## EMPLOYMENT BY REGION<sup>1</sup>

2023



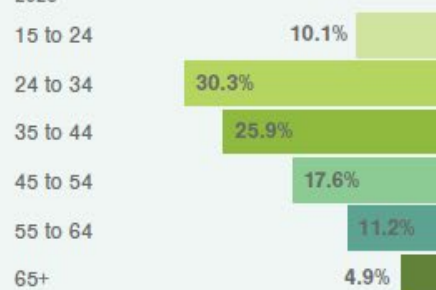
## GENDER<sup>2</sup>

2023

67% Men  
33% Women

## AGE<sup>3</sup>

2023



13,500

TOTAL NUMBER OF BUSINESSES<sup>7</sup>

2023



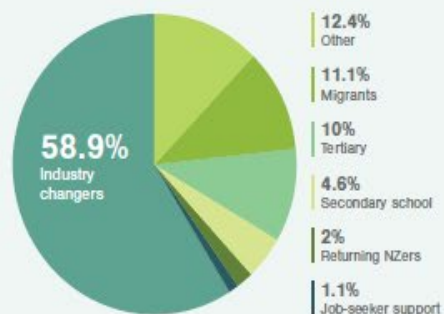
1,158

TOTAL NUMBER OF SOLE TRADERS<sup>8</sup>

2023

## NEWCOMERS BY ORIGIN<sup>4</sup>

2023



18.7% of employees have been in the industry for less than a year.<sup>6</sup>

## ETHNICITY<sup>5</sup>

2023



## BUSINESS OWNERSHIP BY ETHNICITY<sup>9</sup>

2023



This data is extracted from StatsNZ IDI and IRD and displayed in the Workforce Information Platform. Figures are defined by those who work for or own a business with a relevant ANZSIC (industry) code. The infographic can be found at [workforce.nz](https://workforce.nz)

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# CONSTRUCTION & INFRASTRUCTURE SERVICES NARRATIVE

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## The Broader C&I Services Landscape

It was important for the SRG to have visibility of the broader picture of learner activity across the full spectrum of construction and infrastructure services, including training outside Waihanga Ara Rau's coverage.

Although work was undertaken to compile this information, it was difficult to obtain data that fully represented the picture without significant caveats. SRG members noted this as a long-standing issue that the industry has struggled with in the past.

Despite these limitations, the data that was available, combined with the overall advice assumptions underpinning the advice, gave the SRG a sufficient level of confidence to proceed with the 23.8 percent growth assumption.

## Importance of the sector to the health of the economy – project pipeline uncertainty

Recent discussions across the SRG and wider industry have reinforced the importance of the construction and infrastructure sector to New Zealand's economic wellbeing. There's a growing recognition that this sector isn't just about delivering projects, it underpins productivity, employment, and growth across the entire economy.

When infrastructure investment slows, which has been experienced over the past 2 to 3 years, the effects are felt far beyond the sector itself, with other industries increasingly identifying infrastructure constraints as a major barrier to their own development.

The current economic downturn is being driven in part by a sharp drop in infrastructure spending, which has removed a key source of domestic economic activity. Local government is carrying much of the infrastructure burden but lacks the funding to address the deficit, while central government's support has been inconsistent.

A more coordinated approach is needed, one that positions infrastructure as a strategic lever for economic recovery and long-term resilience, not just a capital cost. This includes shifting public and political perceptions of the sector and ensuring investment decisions reflect its broader economic impact.

## Workers are being let go

As noted above, the sector is not immune to broader economic pressures, many businesses have been forced to let staff go, and this has become a common and unwelcome trend. There's a shared view across the industry that recovery will take time, particularly in rebuilding the workforce pipeline. Even with the increased training provisions recommended in this advice, it's expected to take several years before workforce capacity returns to sustainable levels.

The workforce impact has been compounded by a lack of places for school leavers and graduates in the workforce.

## NZDE (New Zealand Diploma in Engineering) Qualification and National Curriculum Review Project

The NZDE (New Zealand Diploma in Engineering) qualification and curriculum are currently under review, with the project running from July 2025 to February 2026. Led by Vocational Engineering Education, this is part of NZQA's regular review cycle, but it's also a chance to take a deeper look at whether the qualification is still meeting industry needs.

Early industry feedback has highlighted the need for a broader qualification with some specialisation, stronger emphasis on practical skills, and more formative assessment approaches, like interviews and presentations, to help build professional capability.

There's also interest in recognising skills learned on the job as part of the qualification. The review is expected to lead to changes in both the qualification and the national curriculum, which could have implications for TEC funding settings in the future.

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# INVESTMENT ADVICE

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## Overarching Narrative

This document should be read alongside the overarching narrative document which provides the introduction and overarching assumptions for Waihanga Ara Rau's 2025 investment advice to the Tertiary Education Commission (TEC), focused on training provision for 2027.

The sector versions outline our approach to qualifications relevant to each sector, regardless of whether they meet TEC's investment threshold. This ensures that all stakeholders, from policymakers to industry leaders, can engage with advice that aligns with their areas of interest.

## 2027 Investment advice baseline year

We're applying a similar approach as we did last year. **The baseline year is 2024**, which provides the most recent full year of training data. All active learners across the 2024 calendar year set the minimum level of provision we expect in 2027, with any recommended growth, reduction, or no change based on that starting point.

## Investment advice threshold (for 2027 delivery)

The threshold is intended to ensure our advice prioritises qualifications that could materially impact current TEC funding. Qualifications below the threshold generally fall within the margins of existing funding activity and therefore do not significantly affect funding availability. It is made explicit throughout that the overall growth percentage should be applied to all relevant qualifications, regardless of whether they meet the threshold. Publishing our approach for all qualifications under our coverage also enables providers to understand the provision landscape.

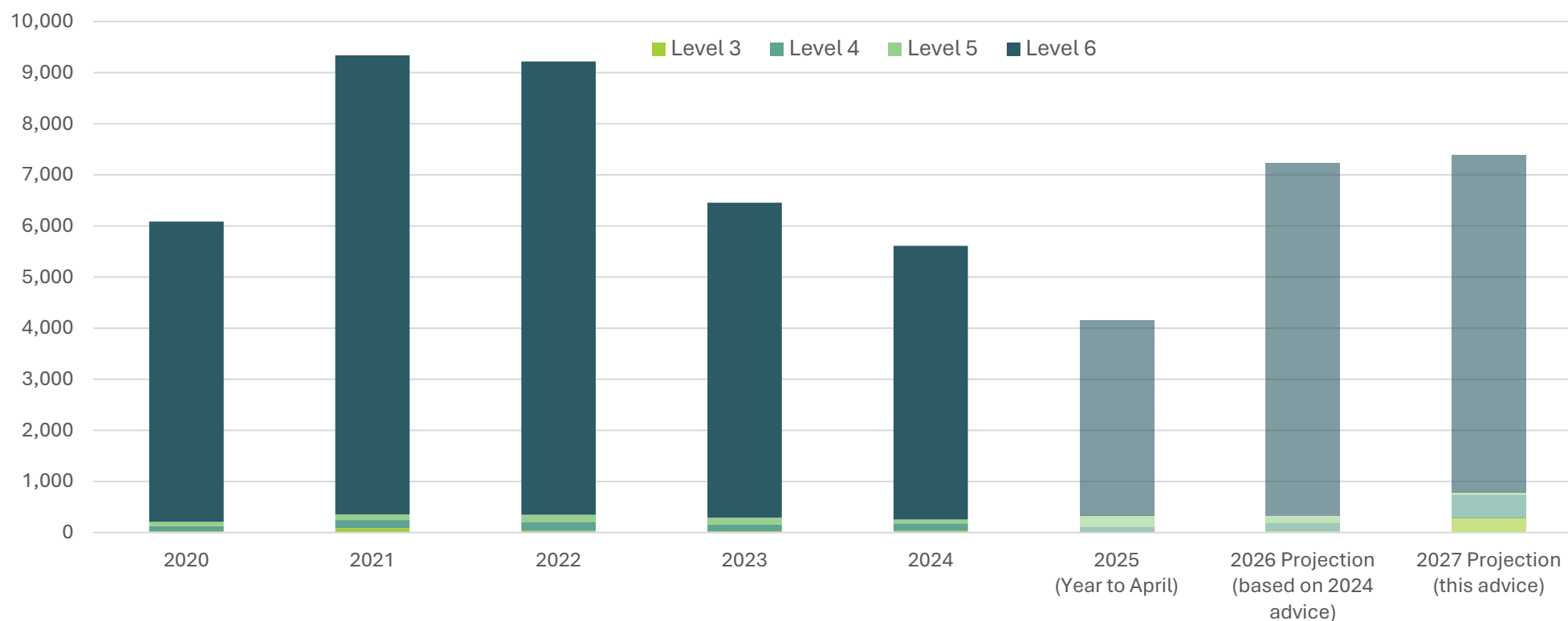
For qualifications within our scope, only those meeting the threshold are included in our formal submission to the Tertiary Education Commission (TEC). The 2027 threshold includes:

- Growth or reduction of more than 20 learners compared to the 2024 baseline.
- Not registered or not TEC-funded learners in 2024 but expected activity in 2027.
- Fewer than 20 learners in 2024 with projected growth that more than doubles by 2027.
- Qualifications where specific context and narrative are important to articulate are treated with particular attention.

This advice covers a total of **18 qualifications, programmes, and credentials within Waihanga Ara Rau's C&I Services sector. Together, these show a projected growth of 1,858 learners based on the 2024 baseline.** Of these, 11 qualifications meet the TEC advice threshold and are included in the formal advice document submitted to TEC. These account for 1,807 of the total projected learner growth.

## Learner Trends and Projections (2020-27)

Like many parts of the C&I sector, C&I Services saw a significant increase in learner numbers during 2021–22, largely driven by Government interventions such as Targeted Training and Apprenticeship Fund, First Year Fees Free, and Apprenticeship Boost. With the conclusion of most of these initiatives, aside from Fees Free shifting to final years, learner volumes have returned to more ‘normal’ levels.



### Notes:

- Learner data is sourced from TEC's Ngā Kete as of April 2025. It includes all active TEC-funded learners within a calendar year and excludes non-TEC funded training.
- **2025** data reflects learner numbers as of April. Based on sector conversations, end-of-year figures are expected to be similar to 2024 levels or slightly lower.
- **2026** figures are based on advice provided in 2024, which projected 12% growth on 2023 learner numbers.
- **2027** figures represent projected provision based on this year's advice.



## Context: Investment Advice Table

The general **growth** in provision for qualifications under the C&I Services sector is **23.8%**, unless specifically stated otherwise. The qualifications that meet the threshold are shown below with additional context given to qualifications that sit outside the overall sector growth percentage:

- Micro credentials **5326 & 5327** have recently been approved and we are still working for the provision required.
- **No activity** qualifications either had no learner activity in 2024 or data has been suppressed due to low numbers (less than 5 learners).
- **3180** is being reviewed. There is potential for it to be replaced or complemented by the micro-credentials noted in the new development section. We are confident of existing demand as these are related to existing offerings.
- **4515:** We are holding on our advice provided last year. This qualification is also listed in the Offsite investment table. The suggested provision of 25 learners in 2027 reflects the total number across both sectors, not 25 learners per sector.
- **5105 and Intermediate Structural Detailing (Micro-credential):** These have recently been submitted to NZQA and we are awaiting approval for the second credential at which time a NZQF code will be assigned. These are designed to stack towards [4515 New Zealand Diploma in Structural Detailing]. The provision is based on consultation during the development phase and usage of similar qualifications which we would expect activity to transition to these.
- **5326, and 5327:** These have recently been developed and approved. The demand is based on consultation during the development phase and usage of similar qualifications which we would expect activity to transition to these.

It is worth noting that approximately 88% of active C&I learners in 2024 (5,530) were enrolled in programmes associated with qualifications **2416, 2420, and 2612**. This represents a significant portion of the sector's overall activity. Given the baseline learner numbers for these qualifications, the projected growth in 2027 is substantial by comparison.

There is a significant shortage of skills in these areas, as outlined in the [Engineering NZ Action Plan](#), so the demand is clearly there. To achieve this growth, the sector recognises that several factors need to align and move in the same direction at the same time. At a minimum, we would like to see provision maintained at the 2024 baseline, with the expectation that there must be room for growth based on current assumptions and the demand for these roles.

## Investment Advice Table

Code	NZQA Qualification Title	2027 Total Provision	Growth on 2024 base	Meets threshold
1714	New Zealand Diploma in Engineering Practice (Level 6) with strands in Civil Engineering, Electrical Engineering, and Mechanical Engineering	38	8	No
2416	New Zealand Diploma in Architectural Technology (Level 6)	1,164	224	Yes
2420	New Zealand Diploma in Construction (Level 6) with strands in Construction Management and Quantity Surveying.	2,823	543	Yes
2612	New Zealand Diploma in Engineering (Level 6) with strands in Civil Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, and Fire Engineering	2,093	403	Yes
2957	New Zealand Certificate in Surveying (Level 4)	44	9	No
2958	New Zealand Certificate in Hydrographic Surveying (Level 4)	0	0	No
2959	New Zealand Diploma in Surveying (Level 6)	149	29	Yes
3029	New Zealand Certificate in Building Regulatory Environment (Level 4)	130	25	Yes
3030	New Zealand Diploma in Building Surveying (Level 6)	248	48	Yes
3179	New Zealand Certificate in Infrastructure Procurement Procedures (Level 6)	93	18	No
3180	New Zealand Diploma in Infrastructure Asset Management (Level 6)	25	5	No
4515	New Zealand Diploma in Detailing (Structural) (Level 5) with strands in Light Steel Frame, Steel Reinforcing, Structural Steel, and Precast Concrete	No activity	25	Yes
5105	Introduction to Detailing (Micro-credential)	30	30	New
5326	Foundation Mathematics for Engineering (Micro-Credential)	250	250	New
5327	Introductory Mathematics for Engineering (Micro-Credential)	200	200	New
TBC	Intermediate Structural Detailing (Micro-credential)	30	30	New
-	Programme: Engineering CAD 1 (Level 3)	44	9	No
-	Programme: Engineering CAD 2 (Level 4)	7	2	No
	<b>Total</b>	<b>6,883</b>	<b>1,348</b>	



## Products in Development

Reference	Title	Type	Status	Likely Year
TBC	Structural Detailing MC 2	Micro-credential	Approved for development	TBC
TBC	Asset Management Optimisation and Levels of Service	Micro-credential	Developing Business Case	2026/27
TBC	Building Pathways - Business skills for construction	Micro-credential	Developing Business Case	TBC
TBC	Asset Management Introduction to Asset Management	Micro-credential	Developing Idea	2026/27
TBC	Foundation principles for Asset Management	Micro-credential	Developing Idea	2026/27
TBC	Asset Management Demand Analysis	Micro-credential	Developing Idea	2026/27
TBC	Asset Management The Asset Management Life-Cycle	Micro-credential	Developing Idea	2026/27

### Notes:

- **Building Pathways - Business skills for construction:** This is noted here and in the Onsite Construction advice. It will likely encompass broader skills beyond tool-specific competencies, which are relevant to wider sector discussions. Advice will be provided regardless of where this sits.