INVESTMENT ADVICE

FOR CONSTRUCTION AND INFRASTRUCTURE TRAINING PROVISION IN 2027

Full advice for Tertiary Education Commission

WAIHANGA ARA RAU
Construction and Infrastructure
Workforce Development Council

CONTENTS

OUR SECTORS AT A GLANCE

Workforce and business data is taken from WIP. This data is extracted from StatsNZ IDI and IRD with figures defined by those who work for or own a business with a relevant ANZSIC (industry) code. Learner data is extracted from Ngā Kete as of April 2025.

Sector	2023 Workforce	2023 Businesses	2024 active learners
CONSTRUCTION	258,608	79,672	56,895
INFRASTRUCTURE	70,994	6,446	5,605
C&I SERVICES	52,857	13,500	5,610

INTRODUCTION

This document has been prepared specifically for the Tertiary Education Commission (TEC) and presents **Waihanga Ara Rau's 2025 investment advice, focused on training provision for 2027**. It brings together overarching assumptions, detailed insights, data, and **recommendations for qualifications within our coverage that meet the investment advice threshold**. It also includes key industry narratives from Strategic Reference Groups (SRGs), along with funding priorities identified by Iwi and Pacific SRGs.

Sector-specific advice documents will be published on our corporate website. These outline our approach to qualifications for each sector, regardless of whether they meet TEC's investment threshold.

It's important that industry has an opportunity to review and update this advice in 2026

The growth figures (assumptions) for each sector are based on the best available data and information at the time of submission. The construction, infrastructure, and vocational, education and training (VET) sectors, are undergoing significant change, which may shift learner needs in 2027. If there are significant changes to the context or sector outlook following the plan guidance process, it is important that the advice in this document is revisited. **<u>Where significant changes occur, Industry Skills Boards (ISBs) or Industry (via SRGs or a similar mechanism) must have the opportunity to provide updated advice before final funding decisions are made for 2027 training provision</u>**.

There is a sense of anxiety across the industry, with many viewing this as the final opportunity to give effect to investment advice, given the uncertainty around whether ISBs will retain the same levers and mechanisms in the future as Workforce Development Councils (WDCs).

Some of the changes or 'shocks' that could impact training activity and lead to supplementary advice provided in 2026 include:

- Major construction and infrastructure projects starting earlier than expected, often driven by Government priorities and decisions.
- Changes to work-based learning arrangements.
- Changes once the updated Vocational, Education and Training reform and legislation are enacted, including other Government policies and reforms e.g. NCEA changes, building levy reforms, etc some of which is touched on below.

OVERARCHING INVESTMENT ADVICE ASSUMPTIONS

Foundational Growth Percentage

How is the growth percentage calculated?

To identify growth, we assess national construction and infrastructure activity, project pipelines (Workforce Information Platform (WIP), and Infrastructure Commission), funding, and scheduling. We determine the growth in the pipeline value from 2024 to 2027 and test the assumptions behind forecasted activity to ensure they're realistic for each sector. Once assumptions and growth rates are confirmed, we apply them as proxies to qualifications under Waihanga Ara Rau's coverage, recognising the close link between project activity and training.

What does the foundational growth percentage actually mean?

This means that, unless specifically noted in a sector's section, the relevant growth percentage, based on whether the sector is grouped under construction or infrastructure, will be applied to 2024 learner numbers to form the suggested 2027 provision. The foundational growth percentages are **11.8% for construction and 23.8% for infrastructure.** Further detail on the make-up of these figures is provided below.

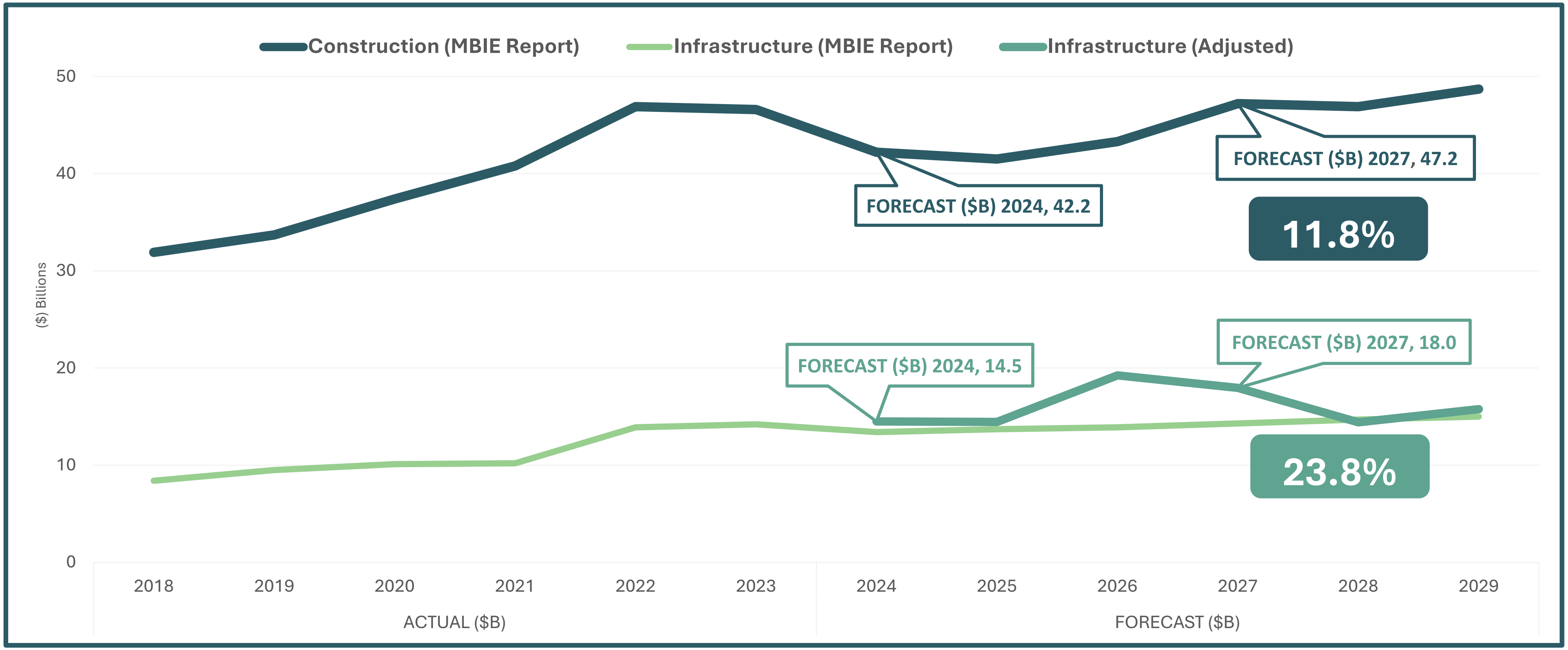
Evidence supporting our investment advice

The supporting evidence underpinning our investment advice is the National Construction Pipeline Report 2024, alongside data from Pacifecon and Te Waihanga, which forecasts a rebound in project activity from 2026 onwards, following a dip in 2025. Despite short-term challenges, the long-term outlook for construction and infrastructure remains strong. The table below summary of MBIE's forecast and known table[1], alongside the adjusted infrastructure pipeline from WIP.

There are however mixed industry views on when projects and funding will actually get underway, which means there's a mix of optimism and caution about what 2027 project activity will look like. As a result, there may be slight differences to the percentage applied for each sector (i.e. percentage applied may differ from the foundational growth percentages above). If this is the case, they will be highlighted under their specific sections.

[1] *Full table of the adjusted data can be found on page 57 of the National Construction Pipeline Report 2024*

Combined Forecasts: National Construction Pipeline 2024, Workforce Information Platform (Pacifecon & Te Waihanga)



	ACTUAL ($B)						FORECAST ($B)					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Construction (MBIE Report)	31.9	33.7	37.4	40.8	46.9	46.6	42.2	41.5	43.3	47.2	46.9	48.7
Infrastructure (MBIE Report)	8.4	9.5	10.1	10.2	13.9	14.2	*13.4*	*13.7*	*13.9*	*14.3*	*14.7*	*15.0*
Infrastructure (Adjusted)							14.5	14.4	19.2	18.0	14.4	15.8
Grand Total (Adjusted)	**40.3**	**43.2**	**47.5**	**51.0**	**60.8**	**60.8**	**56.7**	**55.9**	**62.5**	**65.2**	**61.3**	**64.5**

Construction Project Pipeline Story

Construction is split into residential and non-residential categories. Residential accounts for around 78% of the pipeline, with activity dipping in 2024 before recovering by 2027. Non-residential, mainly commercial, is expected to remain steady leading up to 2027.

The *National Construction Pipeline Report 2024* forecasts short-term pressure on the sector through 2025-26, but projects growth to $47.2 billion by 2027, an **11.8% increase** from the 2024 baseline of $42.2 billion. This growth forms the basis for estimating training provision needs in 2027 for construction related sectors.

For a few of the Strategic Reference Groups (SRGs), the forecast does not fully reflect the current 'on-the-ground' situation, particularly for 2025-26, and potentially flowing on into 2027. The *National Construction Pipeline Report* modelling presents a more optimistic outlook for 2025-26, driven by the inclusion of planned projects and the smoothing of activity over time. While this is expected in longer term modelling, WIP offers a short-term view of activity which is more reflective of the current state. Because of this, **many SRGs have adopted a cautious approach to training growth for 2027**, **ranging from no growth** (supported by WIP data which uses a slightly different modelling approach to the report) **to some alignment with the forecasted 11.8%**.

Although pipeline figures have remained relatively stable since the report's release in late 2024, there appears to be a lag between reported data and actual market sentiment. Infometrics data is understood to reflect more conservative growth, or even decline in some areas, though we do not have direct access to this data. There are however some positives on the horizon:

- Building costs are rising at a more manageable rate, with residential sector inflation at 4.3% in 2023, down from 13% in 2022 and 14% in 2021.
- Overall inflation dropped to 2.7% as of July 2025, now sustainably within the Monetary Policy Committee's 1 to 3 percent target range.
- The official cash rate (OCR) remained at 5.5% for large periods over 2023 and 2024 but the Reserve Bank announced in February 2025 that the OCR has been reduced to 3.75% with further reductions to 3.0% in August and 2.5% in October. Many forecasts, including those informing this advice, anticipated the decrease, alongside expectations that long-term mortgage rates would ease, potentially making borrowing more affordable.

Forecasting for migration impacts

The construction pipeline forecast factors in expected migration trends, with net migration expected to ease from 2023 highs (130,000) toward the long-term average (approximately 30,000). This could ease housing demand but may tighten the construction workforce, as fewer incoming workers are available to fill roles. While the forecasts don't specifically account for the share of construction workers within net migration, there is a sense that workforce gaps could emerge, putting pressure on the sector and requiring action.

Infrastructure Project Pipeline Story

The infrastructure project pipeline data is sourced from the Workforce Information Platform (WIP), which consolidates information from Pacifecon and Infrastructure New Zealand. While the assumptions from the *National Construction Pipeline Report 2024* still apply, project pipeline data has been updated since the report's publication in December 2024, particularly in light of Government's recent infrastructure funding announcements.[2]

The report also acknowledges gaps in its intentions data, largely due to local and central government agencies still finalising future infrastructure investment details at the time of publication. Several major projects remained uncertain as they worked through the impacts of the Local Water Done Well legislation and long-term planning processes. Since then, the draft National Infrastructure Plan has been released, and many councils have submitted their water service delivery plans. These developments provide clearer strategic direction, though they have yet to fully translate into confirmed project commitments. Notably, many of the short-term projects identified across these plans are already reflected in the updated project pipeline used to inform this advice.

A major roading project in the upper North Island will be the biggest roading project in New Zealand's history and the workforce required will be on a scale not previously seen. Consequently, **industry will want to revisit this advice in 2026 as details on this project are made public.**

As of June 2025, the total **infrastructure project pipeline is forecasted to grow by 23.8%**, from $14.5 billion in 2024 (baseline year) to $18 billion in 2027 (advice year). The $14.5 billion is an adjusted figure, given it is historical, and takes the midpoints from the WIP timeseries 2024 data and Infrastructure New Zealand forecast. For the 2027 forecast, this is extracted directly from WIP. This 23.8% increase serves as the foundational growth benchmark for estimating training provision needs in 2027, based on the 2024 baseline.

[2] Infrastructure projects to drive jobs and growth, fast track projects.

The Sectors Current Reality

The Pipeline of work – when is it hitting businesses books?

As mentioned above, there's a mix of optimism and caution across the sectors about what 2027 project activity will look like, and when that activity will begin to show up in businesses' books. While there is clear intent, particularly from Government, to drive forward investment, many in the industry still lack visibility and transparency around the project pipeline, especially given the disruption and uncertainty of the past few years.

This lack of clarity has direct implications for training. As projects begin to come online, it remains uncertain whether businesses will prioritise training or other workforce strategies to rebuild their capacity (e.g. immigration). For many, it's unclear whether investment in training will be the first lever pulled to reestablish workforce numbers.

People are being let go or leaving

It's no secret that the sector has been among the hardest hit by job losses, particularly over the past 18 to 24 months. StatsNZ data shows that in the year to June 2025, the construction industry lost more than 12,000 jobs. This follows a similarly challenging year in 2024, when approximately 10,000 jobs were lost.

Added to this, is the ever-present lure of Australia's strong demand for skilled trades. This has seen a growing number of New Zealand construction workers relocate across the Tasman, a long-standing trend that continues to put pressure on the capacity of the local workforce. These sentiments have been supported in the many conversations with SRGs.

There is a concern that active apprentices are among those affected, highlighting a worrying trend that will disrupt the future pipeline of skilled workforce. It will take time for the sector to rebuild its workforce, which is why it's **important that industry has the opportunity to provide investment advice**. This ensures training is aligned with current needs and supports both immediate recovery and long-term capability.

Employers need support to train

There is a general reluctance within the sector to invest in training during periods of economic uncertainty, which compounds the challenges noted above. While the sector recognises the long-term value of investing in people, more work is needed to reinforce this message. It's also clear that additional support mechanisms are required to enable meaningful investment in training, recent initiatives such as Fees Free, Apprenticeship Boost, and the Targeted Training and Apprenticeship Fund have demonstrated the impact on training numbers these interventions have.

The sector also acknowledges that a visible and reliable pipeline of work is essential to support training investment. Potential mechanisms to support this could include:

- Incentivising training, as has been done in the past, while ensuring initiatives are strategically targeted and informed by lessons learned from previous models. For example, recognising that increase training activity can also lead to higher non-completion rates if not well supported.
- Leveraging procurement levers more intentionally, by embedding training requirements into contracts and ensuring these are meaningfully enforced.

We are aware that early discussions and consultation are underway regarding a **potential widening of the training scope of the building levy**. If progressed, this could have implications for training needs and demand within the construction sector. These conversations are still at a very early stage, and it remains unclear whether this will eventuate. There are mixed views across the sector about the likelihood of this becoming a reality.

NCEA Changes

For the construction and infrastructure sector, the NCEA reforms present both opportunities and challenges. The focus on foundational skills, dual learning models, and stronger industry collaboration has the potential to improve visibility of diverse career pathways, ensure learners gain relevant skills, and attract more people into the sector. However, concerns remain about schools' ability and capacity to deliver vocational content effectively, particularly in under-resourced regions.

- Targeted investment will be essential to support schools, build good industry relationships, and ensure equitable access to vocational education. In a constrained funding environment, it is <u>**critical that investment to support NCEA implementation does not come at the expense of existing vocational education funding streams**</u>.

Additional Narrative

Pastoral Care and People Leadership Deep Dives

As part of our Workforce Development Plan process, we chose to explore deep dive themes instead of creating separate plans for each industry. This shift was a strategic move to better meet the needs of sector groups and to generate insights that apply broadly across the construction and infrastructure sectors. Two key projects, **Investing In People Leadership and Advancing Pastoral Care and Needs-Based Support in the Construction and Infrastructure Sector**, stood out not only in our analysis of workforce plans, but also in conversations across government agencies. Their prominence reflects a shared understanding of how vital leadership and pastoral care are to building a resilient, engaged, and sustainable workforce.

Because these themes are closely aligned with government priorities, it's important that any recommendations from this work are thoughtfully considered when we publish them, expected in late October. These insights could help shape TEC funding decisions and influence wider policy settings.

Regional Insights Report

In June of this year, Waihanga Ara Rau released the Regional Insights report which builds on our 2022 regional deep dives. This report largely focused on updating the project pipeline and workforce gaps information from WIP, while highlighting some of the key regional fast track projects.

While the majority of project value in the pipeline is concentrated in metropolitan centres like Auckland and Wellington, discussions with SRGs suggest a dual economy is emerging. Regional activity appears more stable, supported by private investment and large-scale projects such as the Dunedin Hospital build, Te Kaha Stadium in Christchurch, and East Coast cyclone recovery works. There is a general sentiment that when one or two major projects are underway in a region, larger firms tend to focus on those, creating space for smaller contractors to take on other work without directly competing. While this dynamic offers some balance, the underlying reality remains **businesses across the sector continue to face significant challenges**.

Where there is regional need or specific provision advice, this will be highlighted at the sector level. It is important to note that some of the changes to work-based learning, as part of the broader vocational education reform, will naturally influence training provision at a regional level. These shifts may affect how and where learners access vocational opportunities and will require careful consideration to ensure regional equity and responsiveness to local workforce needs.

What ‘Differs’ From Last Years Investment Advice?

Differences in Ngā Kete extracted data year-on-year

It’s important to note that each year we extract a fresh dataset from Ngā Kete to conduct our learner data analysis. While we apply the same methodology and filters consistently, the results still vary slightly year to year, something TEC may be familiar with. This means historical data, such as for 2023, can differ depending on when it was extracted. For example, the 2023 learner data used in last year’s advice is slightly higher than the updated 2023 data we’ve used to inform this year’s advice.

This context is important when reviewing the analysis below, as it’s based on the most recent 2023 data. It also reinforces why using 2024 as the baseline was a necessary and practical decision.

General analysis of changes in advice from last year by sector groupings

In terms of learner activity, there’s been an overall drop of 10.5% in total learners across the sector from 2023 (last year’s baseline) to 2024 (this round’s baseline). While the decline is sector-wide, the extent varies with some sectors seeing slight decreases, and a handful experiencing small increases.

‘What differs from last year?’- in simple terms, the difference can be calculated as the gap, if any, between the decline in learner activity from 2023 to 2024 and the projected growth in training provision for 2027. At a sector grouping level this is:

- For construction-related sectors, learner activity declined by 10.8% from 2023 to 2024. With a projected 2027 training provision increase of 11.8%, this results in an approximate 1% increase compared to the 2023 baseline used in last year’s advice.
- For infrastructure-related sectors, learner activity declined by 4.7% from 2023 to 2024. If we factor in the 12% increase applied in last year’s advice, along with the projected 2027 provision increase of 23.8%, this results in a total increase of 31.1% on the 2023 baseline.
- For construction and infrastructure services, learner activity dropped by 13.1% from 2023 to 2024. If we factor in the 12% increase applied in last year’s advice, along with the projected 2027 provision increase of 23.8%, this results in a total increase of 22.7% on the 2023 baseline.

However, if we take a broader view, the answer to **“what differs from last year?” is - everything.** That’s why **the shift to the 2024 baseline is so important**. First, it reflects the most up-to-date full-year learner data available. Second, it accounts for the evolving context over the past 12–18 months, both within the industry and across the wider economy, and aligns with updated project pipeline forecasts. These factors are central to our 2027 training provision recommendations and the supporting evidence.

INVESTMENT ADVICE

Sector support of 2027 Investment Advice

Waihanga Ara Rau has Strategic Reference Groups (SRGs) for each industry sector cluster. This advice has been developed in collaboration with and validated by SRGs, with consultation on the advice beginning in March of this year. The scope and members of each group can be found here:

CONSTRUCTION	Access Trades	Electrotechnology	Finishing Trades
	Off Site Construction	On Site Construction	Plumbing Gasfitting & Drainlaying
INFRASTRUCTURE	Civil Infrastructure	Electricity Supply	Gas Infrastructure
	Water Services	Construction & Infrastructure Services	

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)

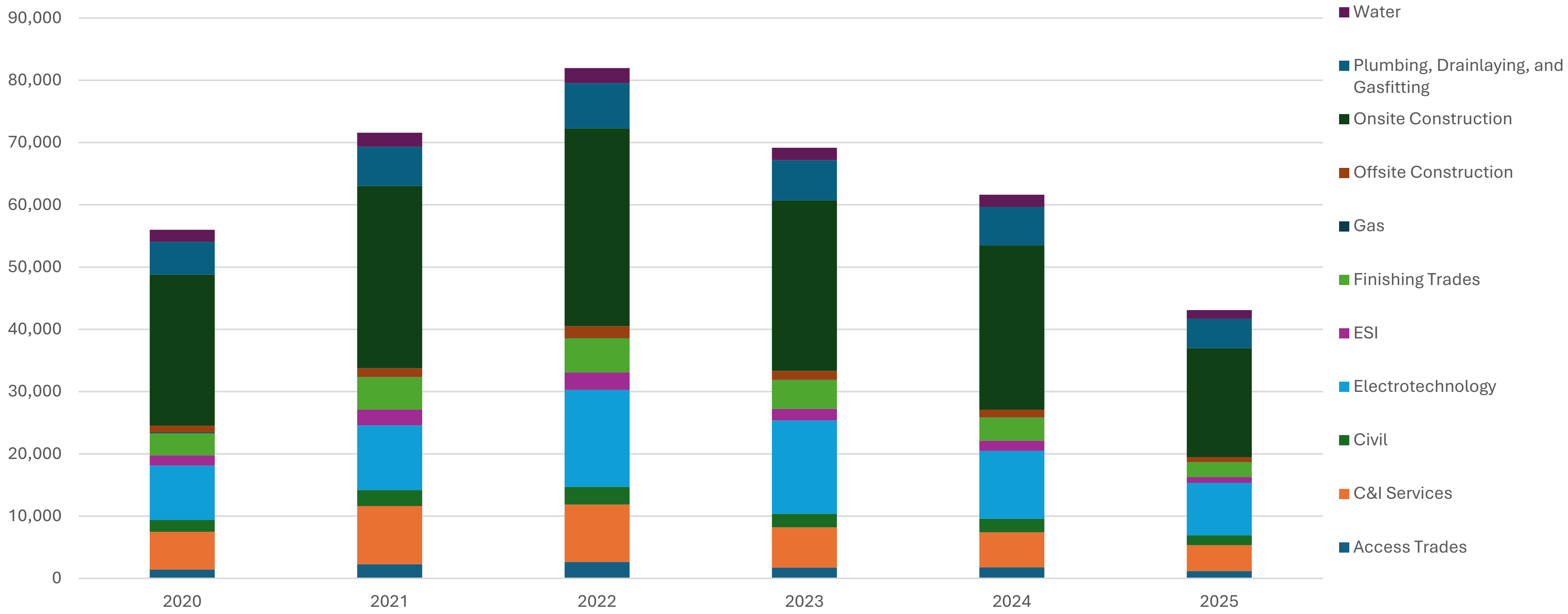
For qualifications within our scope, only those meeting the threshold are included in our formal submission to TEC. The 2027 threshold includes:

- 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.

Learner Trends 2020-2025

The C&I sector 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. The 2025 data reflects learner numbers as of April 2025. Based on sector conversations, in general, end-of-year figures for 2025 are expected to be similar to 2024 levels or slightly lower.



2027 Investment Advice Summary by Sector

Sector	# of Quals / programmes / credentials	Total Learner Growth	# Quals (Threshold)	Growth (Threshold)	# Quals (Non-Threshold)	Growth (Non-Threshold)
Access Trades	16	1,289	11	1,255	5	34
Electrotechnology	24	1,842	14	1,783	10	59
Finishing Trades	18	358	11	331	7	27
Offsite Construction	9	25	1	25	8	0
Onsite Construction	32	1,395	15	1,395	17	0
Plumbing, Drainlaying & Gasfitting	11	345	4	345	7	0
Civil Infrastructure	32	1,884	14	1,774	18	110
Electrical Supply	19	404	13	357	6	47
Gas Infrastructure	6	145	5	140	1	5
Water Services	13	481	5	439	8	42
C&I Services	18	1,858	11	1,807	7	51
TOTAL	**198**	**10,026**	**104**	**9,651**	**94**	**375**

Access Trades

Context: Investment Advice Table (also refer to industry narrative)

As signalled in last year's advice, the Access Trades sector, and subsequently its workforce, has a strong alignment with the infrastructure sector, even though it's grouped under Construction by Waihanga Ara Rau. Given this, the sector has aligned its **growth to the 23.8%** infrastructure growth rate. The qualifications that meet the threshold are shown below with additional context given to qualifications that sit outside the overall sector growth percentage:

- **2356 and 2357:** There's been no activity in 2024 (or 2023), and the provision aligns with the exact same advice we gave last year. These qualifications were reviewed in 2025 and this is expected to support uptake in the qualifications, driven by increased access to local training options and clearer career progression pathways. A large number of Level 3 learners, both current and historical, are expected to transition through to the higher levels.
- **2358, 2359, 2360:** The industry is going through a review of their qualifications which may led to this qualifications being transitioned to micro-credentials. These are noted in products in the development section. Our holding advice remains the same as last year but are signalling that changes are likely.
- **3708**: This qualification is currently being reviewed and will likely result in a newly assigned NZQF Code.
- **3730 & 3731:** The fees for the funded Cranes programme inherited from Skills Group are very high, which has the effect of pushing people towards the casual credit process which is entirely unfunded by TEC. Through this process, learners accumulate individual unit standards over an unregulated period and then seek recognition for the qualification at the end. These qualifications were reviewed during 2024/2025 and this advice is built on the assumption that this will be an opportunity to adjust fees. If adjusted, engagement in these TEC funded programmes will increase.
- **3732**: The group of crane qualifications has been undergoing a review. The focus has been on the Level 3 and 4 qualifications, but once this is complete, it's expected to lead to a pathway into Level 5 by 2027. Up to 10 learners are likely to undertake the programme.
- **5310**: 50 learners is our current holding advice based on industry consultation.
- **Certificate in Construction Pre-Trade (High Work) (Level 3):** This programme was previously offered as a training scheme and is expected to be redeveloped under the current NZQA micro-credential listing rules. It is unlikely to include the scaffolding unit standards that were part of the original version. While there is still some demand for this training, it is expected to remain steady. As a result, no growth is recommended beyond 2024 enrolment levels.
- The development of the **New Zealand Certificate in Exterior Cleaning (Level 3**) has been submitted to NZQA and we are awaiting final confirmation at which time a NZQF code will be assigned. The qualification is largely based on an online certification course delivered by the Exterior Cleaning Industry Association, which has been running since 2024. It is expected that many local councils and other organisations will require this qualification as a condition for undertaking work. Since its inception, the course has **seen 596 workers participate, and the industry anticipates that this level of training will continue once the qualification is approved and programmes begin delivery, potentially as early as 2026**.

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
2356	New Zealand Certificate in Rigging (Level 4) with optional strands in Construction Rigging, and Telecommunications Rigging	150	Yes
2357	New Zealand Certificate in Rigging (Level 5)	100	Yes
2360	New Zealand Certificate in Industrial Rope Access (Level 5)	50	Yes
3708	New Zealand Certificate in Scaffolding (General) (Level 3)	21	No
3710	New Zealand Certificate in Scaffolding (Trade) (Level 4)	208	Yes
3730	New Zealand Certificate in Cranes (Level 3) with strands in Cab-Controlled Overhead Crane, Dogman, Load Lifting Rigging Production, Pendant-Controlled Overhead Crane, Self-Erecting Tower Crane, and Truck Loader Crane	40	No
3731	New Zealand Certificate in Cranes (Level 4) with strands in Advanced Dogman, Crawler Crane, Mini Crane, Mobile Crane, Non-Slewing Articulated Crane, and Tower Crane	30	Yes
3732	New Zealand Certificate in Cranes (Advanced Crane Operation) (Level 5)	10	No
5310	Temporary Edge Protection (Micro-credential)	50	New
5550	New Zealand Certificate in Exterior Cleaning (Level 3)	596	New
-	Certificate in Construction Pre-Trade (High Work) (Level 3)	150	Yes

Electrotechnology

Investment Advice Table Context (also refer to industry narrative)

Electrotechnology hasn't made any adjustments to the foundational **growth assumption of 11.8%**. The qualifications that meet the threshold are shown below with additional context given to qualifications that sit outside the overall sector growth percentage:

- **2387 and 4316:** 2387 expired this year and was replaced by 4316. The learner activity in 2387 has been transferred and included in 4316.
- **2388 and 4204:**
  - 4204 is gradually replacing 2388, which had nearly 7,000 learners in 2024.
  - Learners who undertook the 4204 Electrical Supply strand are included under their advice. For 2388, we are unable to clearly distinguish between strands to the same level and therefore all learners for this qualification have been captured here.
  - The last date for enrolment in 2388 was the end of 2024, but there will still be activity in the programme until the end of 2027 for existing learners. At the same time, enrolments in 4204 are expected to increase. The last date for assessment for 2388 is 31 December 2027, after which it will be discontinued.
  - Both programmes will need to be funded, with a combined total of approximately 8,600 learners, which includes projected growth. The advice provision for this is captured under 4204.
  - We expect to see high uptake of 4204 in 2028 once 2388 expires, though at this stage, it's unclear whether it will match the current combined total.
- **2769:** The programme for this qualification was launched in 2024, so the 15 learners listed in the table represent only year one of a three-year apprenticeship. Assuming all continue on and new learners join the programme each year, that leaves about 60 learners by 2027.
- **3614:** There was no usage in 2024 or at least not TEC funded activities
- **3767**: We expect the level of activity to increase over the next few years, given that it is on the Green List. It's important to note that the baseline provision is based on actual funded activity, as the data may not have fully captured this.
- **3970**: We are holding on our advice from last year.
- **4555**: Now meets the Electrical Workers Registration Board's qualifications requirements so should see an uptake of the credential.
- **4556**: The 2024 numbers are unknown but the credential now meets the Electrical Workers Registration Board's qualifications requirements so should see an uptake of the credential.
- **5057**: The programme was launched at the end of 2024. Consultation with industry on demand for this programme suggests an uptake of 75 each year from 2026.
- **Supervision of Prescribed Electrical Work (Micro-Credential):** Submitted to NZQA and awaiting approval. The provision is based on consultation with industry and the proportion of the electrical workforce who may undertake the programme.
- **Two programmes with '–' in code column:** There are some concerns around the activity as we would expect it to be slighter higher. It's important to note that the **baseline provision is based on actual funded activity in 2024** with the growth then applied to that figure.

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
2387	New Zealand Certificate in Electrical Engineering Theory (Level 3) *– expired and replaced by 4316*	N/A	*No*
2388	New Zealand Certificate in Electrical Engineering Theory and Practice (Trade) (Level 4) - *(Level 4 replaced by 4204 by the end of 2027, last date for entry passed at end of 2024)*	N/A	Yes
2767	New Zealand Certificate in Electrotechnology (Level 3) with strands in Installation, and Service	36	*No*
2769	New Zealand Certificate in Customer Premises Systems (Level 4) with strands in Structured Cabling, Control and Automation, Signal Reception and Distribution, and Wireless Systems	45	Yes
3767	New Zealand Certificate in Telecommunications (Level 3) with strands in Copper Network Maintenance, Optical Fibre Network, and Transmission	10	*No*
3970	New Zealand Certificate in Telecommunications (Level 4)	20	Yes
3990	New Zealand Certificate in Telecommunications (Level 4)	20	Yes
4204	New Zealand Certificate in Electrical Trade (Level 4) with strands in General Electrical, and Electricity Supply *(replacing 2388 fully by the end of 2027)*	884	Yes
4316	New Zealand Certificate in Electrical Pre-Trade (Level 3) *– replacing 2387*	477	Yes
4555	Grid-connected PV Systems, Design and Install (Micro-credential)	25	Yes
4556	Grid-connected Battery Storage Systems, Design and Install (Micro-credential)	150	Yes
5057	New Zealand Certificate in Data Cabling	75	Yes
5459	Supervision of Prescribed Electrical Work (Micro-Credential)	30	*No*
-	Programme: Electrical Competence Programme (Level 4)	29	*No*
-	Programme: Electrical Inspector (Level 5)	2	*No*

Finishing Trades

Context: Investment Advice Table (supported by industry narrative)

The Finishing Trades sector, like many others under the Construction grouping, feels the growth assumption may be optimistic given the current environment. While the dip was expected to recover and begin trending upward from 2026, they believe it may extend longer, even if current data doesn't fully reflect that yet. They acknowledge there is a pipeline of work, but it may not materialise until 2028. Despite this, they recognise the need for growth in provision now to prepare the workforce for the eventual demand and have decided on a **5.9% growth** (or 50% of the growth assumption).

The qualifications that meet the threshold are shown below with additional context given to qualifications that sit outside the overall sector growth percentage:

- **756:** It has expired and replaced by qualifications **4296, 4297, 4298, 4299 and 4300**. The 2024 numbers for 756 have been distributed across these replacement qualifications and allocated according to the qualification strand.
- **2834:** This qualification is covered under Onsite Construction with the learners included here for those who undertook Allied Trades strands. This qualification is currently being reviewed and may have impacts on the delivery of allied trade strands in the future.
- **3221:** The industry anticipate that project activity may recover before 2028, but there may be a delay in when this reflected in training numbers. Added to this, is the fact that many of the 2024 active learners were part of the fees free scheme. The suggested provision of 120 learners (<u>a reduction of 90 learners</u>) reflects the expected end of year 2025 learner activity, with some allowance for growth in 2027.
- **4299:** There was no activity in 2024 as the qualification was not available for enrolment. This qualification includes areas of specialisation that were not available previously. There is some activity in 2025 which supports our projection for modest growth by 2027.
- **5361 & 5362:** Have both recently been approved and based on industry consultation we expect to see <u>at</u> least 50 learners, based on activity in historical but similar programmes, and even more so if providers run a cohort delivery model based on similar programmes.

Investment Advice Table

Code	NZQA Qualification Title	Change (+)	Included last year
3061	New Zealand Certificate in Interior Linings Installation (Level 4) with strands in Fixing, and Finishing (with optional strand in Fibrous Plaster Installation)	26	No
3137	New Zealand Certificate in Trowel Trades (Level 4) with strands in Floor and Wall Tiling, Proprietary Plaster Cladding Systems, Ferro-cement Tank Manufacture, Refractory Installation, and Solid Plastering (with optional strands in Fixing Cavities and Substrates, and Decorative Mouldings)	31	No
3221	New Zealand Diploma in Design (Level 5) with strands in Kitchen Design, and Bathroom Design (with optional strand in Light Commercial Design)	-90	No
3568	New Zealand Certificate in Painting and Decorating (Level 4) with strands in Specialised Spraying, Wallcoverings, and Specialised Coatings	95	No
4296	New Zealand Certificate in Flooring Installation (Level 4) with strands in Bonded Carpet, Conventional Carpet, Commercial Resilient Flooring, and Residential Resilient Flooring	109	Yes
4297	New Zealand Certificate in Flooring Planning and Design (Level 4) with optional strands in Estimation, and Site Assessment	30	Yes
4298	New Zealand Certificate in Resin Flooring Application (Level 4) with strands in Trowel Applied Resin Mortar, and Flow Applied Resin Finishes	2	Yes
4299	New Zealand Certificate in Flooring Surface Preparation (Level 4) with strands in Concrete Polishing, Mechanical Preparation, Moisture Treatment, and Underlayment Systems (with optional strand in Topical Coatings)	20	Yes
4300	New Zealand Certificate in Timber and Composite Flooring (Level 4) with strands in Bonded Installation, and Fine Floor Sand And Finishes	8	Yes
5361	Installing Carpet Tile Flooring Systems (Micro-credential)	50	New
5362	Installing Floating Floor Systems (Micro-credential)	50	New

Offsite Construction

Context: Investment Advice Table (supported by industry narrative)

Offsite has taken a cautious approach to investment advice, for the reasons outlined in this document. This means a **no-growth approach - 2027 provision should match 2024 learner activity**. The qualifications that meet the threshold are shown below with additional context given to qualifications that sit outside the overall sector growth percentage:

- **4515:** For Waihanga Ara Rau, this qualification falls within the coverage of the Construction & Infrastructure Services sector and also supports the Offsite sector. Accordingly, it is included in both the C&I Services and Offsite investment advice tables. Please note that the suggested provision of 25 learners in 2027 reflects the total number across both sectors, not 25 learners per sector.
- **5133:** Developed in 2024, with a provider programme now approved - we are holding on our advice from last year.

Investment Advice Table

Code	NZQA Qualification Title	Change (+)	Included last year
4515	New Zealand Diploma in Detailing (Structural) (Level 5) with strands in Light Steel Frame, Steel Reinforcing, Structural Steel, and Precast Concrete – also included in C&I Services	25	Yes
5133	New Zealand Diploma in Joinery Detailing (Level 5)	25	Yes

Onsite Construction

Context: Investment Advice Table (supported by industry narrative)

Onsite Construction has taken a cautious approach to investment advice, for the reasons outlined in this document. This means a **no-growth approach - 2027 provision should match 2024 learner activity**.

The sector has expressed a desire for particular focus on pre-trade programmes (Level 2 and 3) to ensure a pipeline of learners is established. While the emphasis of this advice is on pre-trade, **there is an expected eventual uptick in Level 4 programmes** as learners progress through the pipeline. This may coincide with a pickup in project activity and serves as an early signal of potential demand. Although we anticipate this demand to emerge in 2028, there is a slight chance it could begin to surface in 2027.

In relation to the below table:

- **4237:** Replaced **2382**. The 10 active learners been included as part of the 2027 provision for 4237.
- **4574:** We are holding on our advice from last year.
- **4842:** Developed in 2024. We are holding on our advice from last year.
- **4971:** There is intention from providers to develop programmes for delivery, we are still assessing numbers but the baseline is to hold on our advice from last year.
- **5058:** Developed in 2024. We are holding on our advice from last year.
- **5347:** Developed in 2025 replacing **2945**, and a related Complex Apprenticeship. We are matching 2027 provision for 5347 to 2024 learner activity for **2945**.
- **5387, 5388, 5453, 5457:** These qualifications and credentials were approved in 2025 and figures provided are based on industry consultation and projected demand identified through our comprehensive qualification development process. For 5387 and 5388, the consultation identified demand of 1,000 learners across the two credentials.
- **Building Pathways: 2738, 2834, 4188-9, 4571-5, 5387-8:** These are part of the Building Pathways Project. Programmes are either already being delivered or there is intent from providers to develop them for delivery. We are still assessing learner numbers, but the baseline is to hold on our advice from last year, where there was no activity in 2024. Otherwise, it follows the general approach of matching 2027 provision to 2024 learner activity.

Investment Advice Table

Code	NZQA Qualification Title	Change (+)	Included last year
2382	New Zealand Certificate in Construction Related Trades (Main Contract Supervision) (Level 5) *- replaced by 4237*	N/A	No
2738	New Zealand Certificate in Carpentry (Level 4) with optional strand in Metal Roof Cladding Installation *– part of Building Pathways project*	0	No
2834	New Zealand Certificate in Construction Trade Skills (Level 3) *– part of Building Pathways project*	0	No
2945	Complex Apprenticeships: New Zealand Certificate in Glazing (Level 4) with strands in Residential Glazing, Commercial Glazing, and Frameless Glazing *– replaced by 5347*	N/A	No
4571	Basic Construction Skills (Micro-credential) *– part of Building Pathways project*	0	No
4574	Introductory Interior Linings and Joinery Skills (Micro-credential) - V1 *– part of Building Pathways project*	20	Yes
4842	Steel Fixing/Reinforcement Installation for Construction and Infrastructure (Entry-Level) (Micro-credential)	50	Yes
4971	Trades Essentials (Micro-credential) (Level 2)	200	Yes
5058	New Zealand Certificate in Demolition (Level 3)	40	Yes
5347	New Zealand Certificate in Glazing *– replaced 2945 with the 2024 numbers captured here.*	230	No
5387	Contribute to sustainable practices in a construction environment (Micro-credential)	500	New
5388	Reduce material waste in a construction environment (Micro-credential)	500	New
5453	New Zealand Certificate in Complex Glazing (Level 5)	25	New
5457	New Zealand Certificate in Swimming Pool Building (Level 4)	60	New

Plumbing, Gasfitting & Drainlaying

Context: Investment Advice Table (supported by industry narrative)

The PGD sector, like many others within the Construction grouping, considers the growth assumption to be optimistic given the current environment facing many businesses. The underpinning assumptions suggested that project activity would begin trending upward from 2026. However, there is a sense across the industry that this may extend into 2027, even if current forecasts do not yet fully reflect this. On this basis, the sector has taken a conservative **approach of assuming no growth, with 2027 provision set at 2024 activity levels**. This advice will be revisited in 2026 should significant changes occur that need to be reflected in 2027 funding decisions.

New Zealand Certificate in Plumbing, Gasfitting and Drainlaying (Level 3) [Ref 2660]

In our 2023 supplementary and in cycle advice we asked TEC to give effect to a freeze on funding at 2023 levels for this qualification. This advice was followed up by further out-of-cycle advice in October 2024 following Ngā Kete data as of September 2024, indicating that 2024 learner activity had exceeded 2023 levels.

The PGD SRG needs TEC to give effect and **actively enforce** previous advice and continue to address provider non-compliance by:

- A **maximum provision of 280 EFTS (Effective full time students) which is approximately 450 learners.**
- Limiting providers to one Level 3 programme per provider, or provider delivery site, per year.
- Ensuring that providers do not receive TEC funding for over-duration apprentices. The perception is that there are currently no funding implications for providers not addressing the over-duration numbers.
- Actively monitoring over-durations and programme completion rates each quarter for PGD programmes, to ensure that apprentices achieve their programmes within the funded programme duration.
  - *We need to see a significant improvement in over-duration rates. If this does not occur, we need TEC to consider further funding reductions and a decreased cap on Level 3 provision.*
- Ensuring training providers improve and / or provide more detailed exam support.
- That apprentices are not charged provider fees post their normal duration.

Level 5 Programmes (3838, 3839, 3840)

Self-certification for plumbing and drainlaying will be introduced in 2026, gasfitting is already a self-certifying trade. The PGD Board will oversee implementation, including eligibility requirements which may involve additional training. This training could be integrated into Level 5 qualifications, recently reviewed to allow industry input into future development.

As highlighted in our 2023 advice, this could **lead to approximately 500 learners per year across the three pathways**. This accounts for the fact that some learners will be undertaking three pathways (Plumbing, Gasfitting, Drainlaying – a separate pathway for each) however **weighted more heavily towards plumbing and drainlaying.**

Investment Advice Table

Reapplying the reduced cap model of one Level 3 programme per provider, or provider delivery site, per year **would translate to 280 EFTS or approximately 450 learners per year**. Based on the final 2024 learner numbers from Ngā Kete of 605, this would be a reduction of 325 learners. Noting in last year's advice it was a reduction of 135 based on 2023 levels.

Code	NZQA Qualification Title	Change (+)	Included last year
2660	New Zealand Certificate in Plumbing, Gasfitting and Drainlaying (Level 3)	-155 learners	Yes
3838	New Zealand Certificate in Plumbing (Level 5)	500	No
3839	New Zealand Certificate in Drainlaying (Level 5)		No
3840	New Zealand Certificate in Gasfitting (Level 5)		No

Civil Infrastructure

Context: Investment Advice Table (supported by industry narrative)

The general growth in provision for qualifications under the **Civil Infrastructure sector is 23.8%**, unless specifically stated otherwise.

As highlighted in both the overall and sector narratives, some components, such as the scale and pace of infrastructure projects, are evolving rapidly. There is a lag between publicly available data and industry conversations, many of which remain commercially sensitive. This delay means current data does not fully reflect actual demand, which will become clearer in the coming months.

An example of this is a major roading project in the upper North Island. This will be the biggest roading project in New Zealand's history and the workforce required will be on a scale not previously seen. Consequently, and as mentioned throughout the advice documents, **<u>industry will want to revisit this advice in 2026 as details on this project are made public.</u>**

- **3234:** No registered 2024 provision in Ngā Kete but we expect to see an uptake in 2027 based on industry consultation.
- **3235:** Growth numbers have been informed by industry and expected learner activity.
- **4190:** Learners typically received this only after completing the relevant casual credits, meaning it was not TEC-funded and has no historical delivery data. Following a recent qualification review, it will expire at the end of 2026. A new, better-suited qualification will be developed, which **may require TEC funding for delivery in 2027 however as this stage can't comment on the levels**.
- There are a number of micro-credentials, all listed below, that have been developed recently and **<u>well supported by the industry</u>**. We provided advice last year on three of these (4922, 4923, and 4924). For **4922 and 4924**,our holding advice remains the same as last year, same level of provision.
- **4923** Temporary Traffic Management Risk Assessment (Micro-Credential) is currently not eligible for TEC funding. The Ngā Kete data suggests that there were 20 learners in 2024.
- **5148** Temporary Traffic Management (TTM): Applying Controls to Low-risk, Low-impact Activities in the Road Reserve (Micro-Credential), **5149** Temporary Traffic Management (TTM): Assist with TTM within the Road Reserve (Micro-Credential), and **5150** Temporary Traffic Management (TTM): Mobile Operations (Micro-Credential) **are currently not eligible for TEC funding**. Although these four micro-credentials are not eligible for TEC funding and are therefore excluded from the investment advice table provided to TEC, it is important to highlight their value to the sector. They play a critical role in ensuring the workforce is equipped with the right skills. While discussions are ongoing regarding funding eligibility, their relevance to sector capability should not be overlooked.

- **5248:** This qualification will replace 2617 by 2027, with a key focus of the recent review being to improve uptake. The projected growth of 345 learners includes the 2024 baseline of 230 learners from the 2617 programmes, plus an additional 115 learners. This growth reflects our advice assumptions, with further uplift based on last year's recommendation to increase provision in leadership-related qualifications, beyond general growth assumptions, recognising the critical role of strong leadership in supporting the pipeline of learners and workers entering the sector.
- The structure of micro-credentials **5285, 5286, and 5287** aligns with the full qualification, which we expect around 1,000 learners to undertake. Learners typically progress in the sequence of 5286, 5285 and then 5287, which informs the differing weightings across the three micro-credentials.
- **5456:** Has been recently developed and approved by NZQA. The development of the qualification was due to demand and need from industry in response to changes to sites that require paving solutions that manage stormwater while remaining durable; porous paving meets both needs. This will recognise paving as a stand-alone trade, supporting industry entrants and specialised skill development.

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
2522	New Zealand Certificate in Infrastructure Works (Level 2)	155	Yes
2617	New Zealand Certificate in Infrastructure Works (Single Site Supervision) (Level 4) *– being replaced by 5248*	N/A	No
2725	New Zealand Certificate in Infrastructure Works (Civil) (Level 4) with strands in Earthworks, Road Construction, and Road Maintenance	77	Yes
3234	New Zealand Certificate in Roadmarking (Level 2) with optional strands in Piloting, and Raised Pavement Markers	30	No
3235	New Zealand Certificate in Roadmarking (Level 3)	15	No
3856	New Zealand Certificate in Infrastructure Works (Level 3) with optional strand in Plant Operation *– being replaced by 4440*	N/A	Yes
4190	New Zealand Certificate in Civil Infrastructure Bituminous Product Manufacturing (Level 4)	N/A	No

4440	New Zealand Certificate in Infrastructure Works (Level 3)	192	Yes
4922	Temporary Traffic Management Design (Micro-Credential)	100	Yes
4924	Underground Utility Location (Micro-credential)	110	Yes
5248	New Zealand Certificate in Infrastructure Site Supervision (Level 4) *– replacing 2617 with those overall figures included.*	345	New
5285	Temporary Traffic Management (TTM) System: Foundation Principles (Micro-Credential)	350	New
5286	Temporary Traffic Management (TTM): Monitoring TTM controls (Micro-Credential)	450	New
5287	Temporary Traffic Management (TTM): Mobile Supervision (Micro-credential)	200	New
5456	New Zealand Certificate in Streetscape Paving (Level 4)	60	New

Electrical Supply

Context: Investment Advice Table (supported by industry narrative)

The general **growth** in provision for qualifications under the Electrical Supply 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:

- **2388 and 4204:**
  - 4204 and 2388 sit under Electrotechnology sectors coverage of qualifications.
  - For 4204, those who undertook the 4204 Electrical strand are included under their advice. The learners who undertook only the Electrical Supply strand are included here. For 2388, we are unable to clearly distinguish between strands to the same level and therefore all learners for this qualification have been captured under Electrotechnology.
  - 4204 is gradually replacing 2388, which had nearly 7,000 learners in 2024. The last date for enrolment in 2388 has now passed, but there will still be activity in the programme until the end of 2027. At the same time, enrolments in 4204 are expected to increase. Both programmes will need to be funded, with a combined total of approximately 8,600 learners, which includes projected growth. The last date for assessment for 2388 is 31 December 2027, after which it will be discontinued.
  - We expect to see high uptake of 4204 in 2028 once 2388 expires, though at this stage, it's unclear whether it will match the current combined total.
- **2705:** This qualification is currently being delivered outside of TEC funding.
- **3793 and 4261** are being reviewed. While there was minimal activity across both of these in 2024 (i.e. likely less than 5 learners), the review may have an impact on learner numbers in 2027. This may include more, or most of the activity, being soaked up by 3793 as it is the entry point for 4261.
- **4281:** There is large proportion of learner activity that is being delivered outside of TEC funding. While we don't have visibility over these numbers, industry has a reasonable expectation that this delivery will be funded in the future.
- **TBD** qualifications either had no learner activity in 2024 or data has been supressed due to low numbers (less than 5 learners). In some cases, we are aware that there is delivery of these qualifications, but this provision is not currently funded by TEC. While we don't have visibility over these numbers, industry has a reasonable expectation that this delivery will be funded in the future.

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
2136	New Zealand Certificate in Electricity Supply (Introductory) (Level 2) with strands in Electrical Works, Telecommunications, and Wind Farm	152	Yes
2197	New Zealand Certificate in Electricity Supply (Line Mechanic Distribution) (Level 4) with optional strand in Live Low Voltage Lines	60	Yes
2227	New Zealand Certificate in Electricity Supply (Cable Jointing High Voltage) (Level 4) with optional strand in 33kV	33	Yes
3586	New Zealand Certificate in Electricity Supply (Fault Response and Switching) (Level 4) with strands in Fault Response, and Network Switching	33	Yes
3793	New Zealand Certificate in Wind Farm Maintenance (Level 4)	TBD	No
4182	New Zealand Certificate in Electricity Supply (Substation Maintenance) (Level 4)	TBD	No
4204	New Zealand Certificate in Electrical Trade (Level 4) with strands in General Electrical, and Electricity Supply	56	Yes
4243	New Zealand Certificate in Electricity Supply (Utility Arboriculture) (Level 3)	21	Yes
4261	New Zealand Certificate in Wind Farm Maintenance (Level 3)	4	Yes
4281	New Zealand Certificate in Electricity Supply (Distribution Live Line Stick) (Level 4)	2	No
4282	New Zealand Certificate in Electricity Supply (Distribution Live Line Glove and Barrier) (Level 5)	TBD	No
4283	New Zealand Certificate in Electricity Supply (Transmission Live Line) (Level 5)	TBD	No
4747	New Zealand Certificate in Electricity Supply (Transmission Operational Switching) (Level 4)	TBD	No
4748	New Zealand Certificate in Electricity Supply (Transmission Operating Sequence Control) (Level 5)	TBD	No

Gas Infrastructure

Context: Investment Advice Table (supported by industry narrative)

The general growth in provision for qualifications under the **Gas Infrastructure sector is 23.8%** which only relates to one qualification [3591] however the growth for this does not meet the threshold. In terms of other advice:

- **3593:** No activity in 2024 but consultation with industry employers indicates that there will definitely activity, possibly as early as 2026.
- **Current and planned micro-credentials:** The micro-credentials listed below did not have any activity in 2024 given they were only recently developed. **Our advice from last year still stands** which is highlighted below. 10 further micro-credentials will be listed during the remainder of 2025.

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
3593	New Zealand Certificate in Reticulated Gas Pipelines (Level 4) with strands in Metering and Pressure Control, and Polyethylene Pipeline Construction	10	No
5063	Gas CoC Protocol: Foundation Skills for Working on Gas Infrastructure (Micro-Credential)	100	Yes
5134	Gas CoC Protocol: Excavation for Work on Gas Infrastructure (Micro-credential)	10	Yes
5135	Gas CoC Protocol: Low-capacity Gas Measurement Systems for Gas Infrastructure (Micro-credential)	10	Yes
5136	Gas CoC Protocol: Safe Practice for Working on Gas Infrastructure (Micro-credential)	10	Yes

Water Services

Context: Investment Advice Table (supported by industry narrative)

The general **growth** in provision for qualifications under the Water Service 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:

- **3856:** This qualification is also covered under Civil Infrastructure. The provision highlighted below are for those who undertook the water specific strands. The qualification is however expiring at the end of 2025 with the numbers transferred to 4440 for 2027 training provision.
- **3858:** This qualification is also covered under Civil Infrastructure. The provision highlighted below are for those who undertook the water specific strands.
- **4440:** This qualification is also covered under Civil Infrastructure. The provision highlighted below are for those who undertook the water specific strands.
- **No activity** qualifications either had no learner activity in 2024 or data has been supressed due to low numbers (less than 5 learners).

Investment Advice Table

Code	NZQA Qualification Title	Change	Included last year
3858	New Zealand Certificate in Infrastructure Works (Pipeline Construction and Maintenance) (Level 4) with strands in Drinking-Water, Stormwater and Wastewater, and Trenchless Technologies	255	Yes
4138	New Zealand Certificate in Drinking-water Treatment (Level 4) with optional strand in Multistage Processes	47	Yes
4142	New Zealand Certificate in Wastewater Treatment (Level 4) with optional strand in Multistage Processes	31	Yes
4143	New Zealand Diploma in Wastewater Treatment (Level 5)	22	No
4440	New Zealand Certificate in Infrastructure Works (Level 3)	78	No

Construction & Infrastructure Services

Context: Investment Advice Table (supported by industry narrative)

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 supressed 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.
- **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	Change	Included last year
2416	New Zealand Diploma in Architectural Technology (Level 6)	224	Yes
2420	New Zealand Diploma in Construction (Level 6) with strands in Construction Management and Quantity Surveying.	543	Yes
2612	New Zealand Diploma in Engineering (Level 6) with strands in Civil Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, and Fire Engineering	403	Yes
2959	New Zealand Diploma in Surveying (Level 6)	29	No
3029	New Zealand Certificate in Building Regulatory Environment (Level 4)	25	No
3030	New Zealand Diploma in Building Surveying (Level 6)	48	Yes
4515	New Zealand Diploma in Detailing (Structural) (Level 5) with strands in Light Steel Frame, Steel Reinforcing, Structural Steel, and Precast Concrete	25	No
5105	Introduction to Detailing (Micro-credential)	30	New
5326	Foundation Mathematics for Engineering (Micro-Credential)	250	New
5327	Introductory Mathematics for Engineering (Micro-Credential)	200	New
TBC	Intermediate Structural Detailing (Micro-credential)	30	New

PRODUCTS IN DEVELOPMENT

Access Trades

Reference	Title	Type	Status	Likely Year
TBC	Cranes Gantry MC	Micro-credential	Approved for development	2026/27
TBC	Access Systems - IRA Level 3 MC 1 - BASIC Industrial Rope Access	Micro-credential	Developing Idea	2026/27
TBC	Access Systems - IRA Level 4 MC 2 - INTERMEDIATE Industrial Rope Access	Micro-credential	Developing Idea	2026/27
TBC	Access Systems - IRA Level 5 MC 3 - ADVANCED Industrial Rope Access	Micro-credential	Developing Idea	2026/27
TBC	Introduction to Crane Operations (Micro-credential)	Micro-credential	In Development	2026/27

Electrotechnology

Reference	Title	Type	Status	Likely Year
TBC	Rail Signalling	TBC	Developing Idea	TBC

Finishing Trades

Reference	Title	Type	Status	Likely Year
TBC	Suspended Ceiling Design credential	TBC	Developing Idea	TBC
TBC	Undertile waterproofing (see industry narrative for context)	TBC	Developing Idea	TBC

Offsite

Reference	Title	Type	Status	Likely Year
TBC	Timber Structure Estimator	TBC	Developing Idea	TBC

Onsite Construction

Reference	Title	Type	Status	Likely Year
TBC	Building Pathways - Longrun roof installation	Micro-credential	Developing Business Case	TBC
TBC	Building Pathways - Steel frame construction	Micro-credential	Developing Business Case	TBC
TBC	Building Pathways - Commercial construction methods	Micro-credential	Developing Business Case	TBC
TBC	Building Pathways - Commercial compliance systems	Micro-credential	Developing Business Case	TBC
TBC	Demolition - High reach	Micro-credential	Developing Idea	TBC
TBC	Demolition - Concrete crushing	Micro-credential	Developing Idea	TBC
TBC	Demolition - Sawing and drilling	Micro-credential	Developing Idea	TBC
TBC	Demolition - Operator (Level 4)	Qualification	Developing Idea	TBC
TBC	Garage Door Installation credential	TBC	Developing Idea	2027

Plumbing, Gasfitting and Drainlaying

Reference	Title	Type	Status	Likely Year
TBC	PGD Solar Water MC	Micro-credential	Developing Business Case	TBC
TBC	Hydrodesign Services L6	TBC	Developing Idea	2027
TBC	PGD Backflow MC	Micro-credential	In Development	2026/27

Civil Infrastructure

Reference	Title	Type	Status	Likely Year
TBC	New Zealand Certificate in Temporary Traffic Management Supervision	Qualification	In Development	2026/27

Gas Infrastructure

Reference	Title	Type	Status	Likely Year
TBC	Gas COC Network Leakage Repair	Micro-credential	In Development	2026/27
TBC	Gas COC Construct PE Mains	Micro-credential	In Development	2026/27
TBC	Gas COC Construct PE Services	Micro-credential	In Development	2026/27
TBC	Gas COC Cathodic Protection Survey	Micro-credential	In Development	2026/27
TBC	Gas COC Disconnect or Reconnect a GMS	Micro-credential	In Development	2026/27
TBC	Gas COC Leakage Response GMS	Micro-credential	In Development	2026/27
TBC	Gas COC Network Leakage Response	Micro-credential	In Development	2026/27
TBC	Gas COC PE Pipelaying	Micro-credential	In Development	2026/27
TBC	Gas COC Replace GMS	Micro-credential	In Development	2026/27
TBC	Gas COC Standard Pressure Control	Micro-credential	In Development	2026/27

Water Services

Reference	Title	Type	Status	Likely Year
TBC	*Water - Level 5 MC Tradewaste Policy Development*	Micro-credential	Developing Idea	2027
TBC	*Water - Level 3 MC Introduction to Water*	Micro-credential	In Development	2027
TBC	*Water - Level 3 MC Sampling and Compliance*	Micro-credential	In Development	2027
TBC	*Water - Level 3 MC Working with small onsite DW supply*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 1 Treatment Process 1*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 2 Treatment Process 2*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 3 Treatment Process 3*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 4 Treatment Process 4*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 5 Treatment Process 5*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 6 Treatment Process 6*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 7 Treatment Process 7*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 8 Treatment Process 8*	Micro-credential	In Development	2027
TBC	*Water - Level 4 MC 9 Treatment Process 9*	Micro-credential	In Development	2027
TBC	*Water - Level 3 New Qual NZC in Water Services w/ strands in DW and WW*	Qualification	In Development	2027
TBC	*Water - Level 4 New Qual NZC in Water Treatment Operations w/ Strands by Treatment Process Type*	Qualification	In Development	2027
TBC	*Water - Level 4 New Qual in NZC in Wastewater Plant Operations w/ Strands by Treatment Process Type*	Qualification	In Development	2027
TBC	*Water - Level 5 New Qual in NZD in Water Services Operations and Management w/ strands in DW, WW, Water Distribution, Water Services*	Qualification	In Development	2027
TBC	*Water - Level 4 New Qual in NZC in Trade Waste (Consent and Compliance)*	Qualification	In Development	2027

Construction and Infrastructure Services

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.
- **Proposed micro-credentials 5105 and Introduction to Detailing, and TBC Intermediate Structural Detailing** are designed to stack towards 4515 New Zealand Diploma in Structural Detailing. We expect these products to be available in 2026/2027.

BROADER FUNDING PRIORITIES

While formal investment advice falls under the scope and endorsement of sector SRGs, it is **essential that we reflect the broader industry voice by incorporating the funding priorities identified by Iwi and Pacific SRGs**.

Iwi Strategic Reference Group

The group was bought together to find areas where they could collaborate to solve common issues or challenges. At the heart of these kōrero is the commitment to tino rangatiratanga, mātauranga Māori, and intergenerational wellbeing.

By 2027, iwi expect to see a tertiary education and training system that fully honours mātauranga Māori, strengthens tino rangatiratanga, and embeds iwi-led solutions as central to Aotearoa’s resilience and prosperity. Funding priorities must move beyond narrow training inputs to empower iwi ownership of education and workforce pathways, while ensuring sustainability, cultural survival, and intergenerational wellbeing remain at the centre of programme design.

Iwi SRG Funding Priorities are:

1) Iwi Ownership and Mātauranga Māori

I. *Establish ring-fenced funding for iwi-led curricula, assessment frameworks, and micro-credentials.*

II. *Recognise iwi mātauranga indicators (e.g., mauri-ometer, rāhui) as valid measures within education and workforce planning.*

III. *Across all programmes, particularly the ones requiring iwi partnerships in C&I. A key focus should be on environmental management, including waterways/the moana, and sustainability including the effects on the Taiao due to extreme weather events.*

An example of an Iwi led programme is: Education Pataka Toa - Te Rūnanga O Toa Rangatira. Iwi are wanting to develop similar programmes across the motu but do not currently have the capability to doing so.

2) Holistic Sustainability

I. *Invest in iwi-led renewable energy, and forestry-to-housing, as both training and employment pathways.*

An example of this are the Ngāti Maniapoto / Tairāwhiti Marae renewable energy projects.

Ngāti Maniapoto have a small trial Solar Farm supplying power directly to the Grid. This generates credits which are used to offset whanau power bills no matter where they are located. The next project is to increase the size of the Solar Farm to support Mill operations. They are also trialling a small hydro unit. Marae from across Tairāwhiti have been funded to install a solar farm to support marae operations with the residual supporting the local community. Many iwi are looking to renewable energy including waste wood.

II. *Support integration of carbon accounting frameworks and climate resilience practices into all TEC-funded programmes.*

Carbon accounting is a relatively new concept so while there are regulations that require some kind of accountability, it's loosely applied, for example, for every tonne of carbon generated on a project, you must plant 1 tree to mitigate the effects. Te Ahu a Turanga (Manawatū Gorge) planted 2.3 million trees.

The Iwi SRG would like TEC and the wider vocational network to consider how this could be implemented into in every programme over time.

3) Leadership and Governance Development

I. *Fund Māori leadership, supervision, and governance capability programmes across operational, managerial, and governance levels*

II. *Resource iwi-led succession planning and procurement-readiness initiatives.*

4) Technology and Future Skills

I. *Create dedicated funding for Māori digital innovation and AI literacy, prioritising iwi control of data and infrastructure.*

II. *Support iwi–Pacific collaborations in emerging industries.*

5) Removing Systemic Barriers

I. *Provide wraparound support for learners - including driver licensing, digital access, pastoral care, and financial literacy - to ensure equitable participation.*

II. *Ensure pathways are flexible and accessible for rangatahi, wāhine, and whānau who have historically been underserved.*

III. *There needs to be scoped to develop assessments and learning resources for kinaesthetic learners.*

IV. *The development and delivery of micro-credentials to acknowledge individual skill sets that can accumulate/stack across sectors to give learners a broader range of experience. Also, micro-credentials are a better fit for creating programmes to compliment a particular project.*

Pacific Strategic Reference Group

The funding priorities align those outlined in our Pacific SRG (PSRG) workplan and summarised below. The PSRG has advocated for its insights to be elevated and strategically positioned, ensuring that priorities are championed and owned by the C&I sector. This approach supports the wider system in delivering the funding and conditions to enable ***a thriving Pacific workforce that is skilled, resilient, and influential in shaping New Zealand's construction and infrastructure future***.

To better support long-term Pacific learner and workforce success, the VET system must:

1) Invest in Pacific talent early through schools, families, and community
2) Embed Pacific leadership at all levels i.e. from classroom to boardroom
3) Align curriculum and support systems with Pacific values rather than expecting ākonga to adapt to dominant models
4) Use data as a tool for empowerment e.g. identifying barriers early and acting fast
5) Resource what works – pilot, scale, and sustain successful Pacific-led initiatives.

INDUSTRY NARRATIVE

Access Trades

Infrastructure Alignment

As noted last year, Access Trades spans both the Construction and Infrastructure sectors. Because of this crossover, it was agreed that infrastructure assumptions and growth should apply, similar to Construction & Infrastructure Services.

Pre-Trade Focus with a View to Future Training Investment

The sector has highlighted the importance of strengthening pre-trade programmes at Levels 2 and 3 to help build a strong pipeline of learners and support economic recovery. The investment advice below outlines the minimum level of growth the sector would like to see in these programmes. However, if there is sufficient demand and provider capacity, TEC is encouraged to consider growth beyond these levels.

It is also important to anticipate a future increase in demand for Level 4 programmes as learners progress through the pipeline. This growth may align with a broader uplift in construction and infrastructure activity. While this demand is expected to emerge around 2028, there is a possibility it could begin as early as 2027. This serves as an early indicator of potential future need.

Administrative Data & Scrapping of Census

As has been highlighted in previous advice rounds to TEC, and other Government agencies the sector has faced ongoing challenges with ANZSIC and ANZSCO classification codes. These do not accurately represent the sector and its industries. For example, the entire sector is assigned a single ANZSIC code. Consequently, administrative data fails to fully reflect the sector's workforce, businesses, and economic contributions - key information used to determine funding and investment.

Waihanga Ara Rau, alongside several industry bodies, submitted feedback to Stats NZ during the National Occupation List (NOL) consultation. That input led to the inclusion of many previously overlooked occupations, a win for the sector. But without a clear timeline or process for how and when the NOL will be implemented, it’s hard to see the upside.

On top of that, the decision to scrap the Census is a setback. For a sector already grappling with patchy admin data, losing the Census means falling even further through the cracks. It was one of the few tools available to help fill critical data gaps.

While the sector recognises issues with current classifications, they've also played a key role in helping businesses access skilled workers through immigration. It's a double-edged sword.

Workforce and Training Pressures

As highlighted throughout this advice, Access Trades is one of the sectors feeling the pinch of the current economic climate. Businesses are letting people go, and many workers are heading across the ditch to Australia.

Across the industry, there's a real sense of hesitation, trying to figure out the right moment to 'jump' back into training investment after a long downturn and ongoing uncertainty about the pipeline of work.

When activity picks up, businesses will likely face tough decisions: bring back skilled workers who left, retrain those with some experience, or start fresh with new entrants. But training won't necessarily happen straight away. The initial demand will require experienced hands, and many businesses may hold off until they've weathered that first wave.

The delay in training is compounded by the cost, which doesn't align with the current realities faced by many businesses, and by providers who are often constrained by existing vocational funding models.

It's further complicated by the ongoing reform across the VET and Education (NCEA) sector. After several years of change, and with more still to come, uncertainty remains a barrier to long-term planning and investment in workforce development.

This feeling isn't consistent across the sector. Some industries still lack adequate, or in some cases, any training options that meet their needs. There's strong appetite and demand for training, especially from those who, due to the absence of formal qualifications, are often classified as unskilled labourers. That label couldn't be further from the truth.

The recognition of some of these occupations in the National Occupation List has been a step forward but now the training needs to follow. This is something ISBs should be exploring more closely.

Regulation Changes

There are early and ongoing discussions around changes to the Working at Height regulations and associated Certificates of Competency. While the outcomes are still unclear, any decisions made will likely have a direct impact on training demand, especially if new requirements lead to upskilling or the need for different competencies.

This could be particularly relevant for industries like Temporary Edge Protection, where even small regulatory shifts can significantly affect how work is carried out and who is qualified to do it. It's an area that needs to be monitored closely, and one that ISBs may need to explore further to ensure training systems can respond quickly and effectively.

Electrotechnology

The Electrotechnology SRG has played a pivotal role in shaping this advice, ensuring it reflects the needs of industry. There was consensus across the SRG to apply the 11.8% growth assumption for construction sectors, even though other SRGs have taken differing positions. Available data supports at least this level of growth by 2027.

Micro-credentials

Two micro-credentials, Grid-connected PV Systems, Design and Install (Level 4) and Grid-connected Battery Storage Systems, Design and Install (Level 4) were recently approved by the Electrical Workers Registration Board and highlighted in our investment advice table. This means that electrical workers registered as electricians, electrical inspectors, and electrical engineers will be able to meet the registration requirements to work on mains parallel generation systems if they have gained the two micro-credentials and been registered for at least two years.

There is also the Supervision of Prescribed Electrical Work (Micro-Credential) which has been submitted to NZQA for approval with intention shown from providers to develop programmes.

Broader Investment and Policy Advice | Transition to ISB and Future Implications

In 2026, the sector will transitioning into a standalone ISB, incorporating electrotechnology, IT, and converging digital/creative industries. The sector plays a major role in New Zealand's economy, valued at $30.7B (7.3% of GDP) with 156,915 workers and approximately 32,660 apprentices/trainees[3]. This means it outpaces many other industries in scale and growth potential. Like many across the C&I sector, it faces urgent workforce pressures, including a shortage of over 6,000 electricians and 20% annual retirement rates, reinforcing the need for immediate investment in qualifications that meet current demand.

The investment advice table outlines specific qualification recommendations for those under the current Electrotechnology coverage. As highlighted in our overall narrative, it is important for industry and/or ISBs to revisit this advice in 2026, prior to final funding and contracting decisions being made, if there are any significant changes. This is even more pressing given the changes that will occur for Electrotechnology in 2026.

[3] Data and information comes from Infometrics which categorises the Electrotechnology sector differently to Waihanga Ara Rau.

The sector also wants to highlight broader funding and policy needs:

1) **Baseline funding uplift:** Ensure that the ISBs are resourced and funded to support the expanded coverage and future qualification pipeline. The shift into the ISB significantly expands the scope and scale of responsibility, requiring new investment in Governance capacity, Qualification development, and Workforce pathways.
2) **Targeted development funding:** While some qualifications are mature and stable (e.g. electrical and HVAC), others are conceptual and require substantial investment, such as degree-level apprenticeships, smart systems, and digital/creative convergence has support. Acknowledging that industry need to also put pressure on providers to prioritise funding towards the development of key industry programmes.
3) **Future-focused alignment:** Recognising that current growth forecasts understate true demand, especially from 2026–27. Even "low growth" forecasts underestimate actual demand, especially as new programmes launch in 2026–27. Without increased TEC investment, the sector risks:
    i. Fragmentation of qualifications across ISBs
    ii. Training lagging 2–5 years behind technology adoption
    iii. Worsening workforce shortages
    iv. Under-representation of emerging industries (AI, renewables, biomedical, creative tech)
4) **Transition funding:** To avoid fragmentation and ensure continuity as WBL providers and regional ITP models evolve.

Sector Readiness and Co-Investment

As part of the most recent VET reform, there is the opportunity for ISBs to explore alternative funding mechanisms to support the core functions of an ISB. The industry is prepared to co-invest through levy and supplier models and has already formed the Electrical Industry Advisory Council (eIAC) and Trade Master to support CPD and training delivery.

Finishing Trades

The Finishing Trades sector, like many parts of construction, has felt the impact of economic headwinds over the past two to three years. It is no secret that there has been, and continues to be, a drop in project activity and therefore corresponding training volumes, particularly in sub-industries such as Kitchen and Bathroom. While recovery timelines remain uncertain, there is cautious optimism across the sector, reflected in the sector applying a balanced approach of **5.9% growth**.

Some areas, like Kitchen and Bathroom, anticipate that training and project activity may not rebound until 2028, though this is difficult to forecast with any level confidence at this stage. The sector's growth assumption reflects a belief in the strength of the future pipeline but also acknowledges the uneven pace of recovery across different sub-industries.

Upskilling the domestic workforce

The industry understands the real value of investing in workforce training. However, during tough economic periods, especially when businesses are forced to downsize and let people go, it's understandable that many owners choose to pause or reduce training investment. This is a rational response to immediate pressures, but it carries long-term risks.

There is a shared view across the sector that more needs to be done to promote the value of training, particularly in demonstrating the cost of not training. Business owners need clearer messaging and evidence around how workforce development supports resilience, productivity, and future growth even during downturns.

While migration can appear to be a short-term solution to fill critical workforce gaps, the sector is conscious that it is not a silver bullet. Migrant workers bring valuable skills and experience, but there is often a delay before they can contribute at full capacity. This is due to the need to contextualise their expertise to the New Zealand environment, including local standards, practices, and cultural nuances.

The sector acknowledges that more support is needed to help migrant workers transition effectively, and that investment in local training remains essential. Migration should complement, not replace, a strong domestic training pipeline. Promoting the value of training, especially during economic downturns, is critical to ensuring long-term workforce resilience.

The sector would like to see more work in promotion diversity and inclusion in their sector which is occurring on an ad-hoc basis currently but more work is needed. This was identified as a priority in their Workforce Development Plan which included overall promotion, targeted support for Māori, Pacific and women. Underlaying this was the importance of improving the wellbeing for all those in or who engage with the sector, particularly mental wellbeing.

Incentivised Training

Interventions such as Fees Free have had both positive and challenging impacts on the sector. The sector would welcome the return of similar interventions but note that these need to be thought out because on the one hand, it leads to an increase in the number of trainees entering the pipeline, which is a welcome outcome. However, a by-product is a higher rate of dropouts, particularly among those who may not have a clear understanding of the sector or a strong commitment to the roles.

It's critical that those entering training do so with a genuine interest and passion for the roles and skills involved across the sector. Over the past few years, active promotion of career pathways has been a key focus for the sector, particularly among SRG members. Continuing this work is vital to ensuring that interventions such as Fees Free are more effective.

When learners are well-informed and motivated, these mechanisms not only increase participation but also improve retention and completion rates. This ensures that investment, from learners, businesses, and industry, delivers long-term value and supports a sustainable workforce pipeline.

Legislative change

MBIE has recently consulted on proposed changes to the regulation of waterproofing in internal wet areas, such as bathrooms and level-entry showers. The consultation focused on introducing a new Acceptable Solution under the New Zealand Building Code. This aims to provide clearer compliance pathways for designers and Building Consent Authorities, reduce uncertainty in the application of waterproofing systems, and address the high rate of building failures linked to internal moisture.

In response to persistent industry concerns, the Government has also announced the introduction of a new waterproofing licence class under the Licensed Building Practitioners (LBP)[4] scheme, expected to be implemented in 2026. This new class will ensure that only qualified professionals undertake waterproofing work in wet areas, improving accountability and lifting competency standards. The move is supported by industry data showing that up to 13% of tiling jobs fail, with 89% of failures attributed to installer error, most commonly due to poor waterproofing practices[5].

It is anticipated that **this will have an impact on learner numbers with the development of a new credential** (see products in developments section) and upskilling of the existing workforce.

[4] Upcoming licensing changes for Licensed Building Practitioners | Licensed Building Practitioners
[5] When tiling and waterproofing fails - PlaceMakers

Offsite and Onsite Construction

For most of the 2025 calendar year, the **Offsite and Onsite Construction Strategic Reference Groups** have operated as a single combined group. While their advice documents remain separate, their perspectives have been captured in a unified narrative.

Initial Pre-Trade Focus with a View to Future Training Investment

The sector has expressed a desire for particular focus on pre-trade programmes (Level 2 and 3) to ensure a pipeline of learners is established. While the emphasis of this advice is on pre-trade, there is an expected eventual uptick in Level 4 programmes as learners progress through the pipeline. This may coincide with a pickup in project activity and serves as an early signal of potential demand. Although we anticipate this demand to emerge in 2028, there is a slight chance it could begin to surface in 2027.

Building Pathways Project

Related the above, we have been working on the Building Pathways project. The project was designed to improve the building qualification pathway for learners and employers. In March 2025, Waihanga Ara Rau produced the ‘Building Pathways’ report outlining insights and proposed solutions including providing micro-credentials alongside existing qualifications and introducing new Carpentry skill standards. Work is ongoing and will progress up until the transition to ISBs.

The outcomes of this project may, over time, have an impact on future provision, particularly for the qualifications covered by the project. It encompasses some of the most widely used vocational qualifications in New Zealand (listed below in the investment advice section).

The SRG has emphasised the importance of recognising and highlighting alternative pathways, particularly in carpentry, where becoming a business owner can be viewed as the natural progression after qualification. For example, there is significant value in roles such as leading hand, where business-related skills, often not covered in a standard apprenticeship, can be developed on the job. Acknowledging these pathways is essential to supporting a diverse and capable workforce. The products in development noted below are expected to provide further pathways recognising advanced and specialised skills. This will also be area Waihanga Ara Rau will be recommending is investigated further by the ISB.

Aligning Policy with Workforce Development Needs

The Skilled Migrant Category Resident Visa is being updated. From mid-2026, two new pathways will support trades and technical roles:

- Skilled Work Experience Pathway: For those with 5+ years of relevant experience (2 in NZ at 1.1x median wage).
- Trades and Technician Pathway: For qualified tradespeople with 4+ years' experience (18 months in NZ at or above median wage).

These changes are particularly relevant to the construction sector, as they recognise practical experience and trade qualifications, making it easier for skilled workers to gain residence. This directly supports businesses across the sector in addressing labour and skills shortages.

However, the sector is also acutely aware that immigration policies must be considered within the broader context of workforce development. Long-term planning is essential to understand sector-level needs, particularly the pipeline of work and upcoming projects. This enables targeted training of the domestic workforce with the right skills for both current and future demands. At the same time, migrant workers should complement the existing workforce by filling critical gaps.

In addition, employers need support to train and upskill their workforce. Initiatives such as Fees Free and Apprenticeship Boost have played a vital role in increasing participation in training over recent years. These programmes are important levers. Together, such efforts contribute to building a resilient and sustainable pipeline of workers who can adapt to changes in the economy and project activity.

To ensure these efforts are targeted and effective, decision-makers would benefit from tools that clearly illustrate their impact. Developing an 'impact matrix' to assess initiatives like these would be valuable for evaluating investment, policy, training, and project needs. Such a tool could forecast the consequences of action or inaction, much like a cost-benefit analysis. For instance, not investing in apprentice training by 2027 could lead to workforce gaps and stalled projects.

Regulation and Legislation Changes

Several legislative and regulatory reviews are currently underway that will shape the construction sector and have significant implications for vocational education and workforce planning. These include updates to construction contract standards, reviews of occupational regulation for building practitioners and architects, amendments to payment and retention practices under the Construction Contracts Act, and ongoing changes to the Building Code, and associated regulations.

It is essential that these discussions are closely aligned with conversations about training and workforce development. Decisions made through these will inevitably influence the skills and qualifications required across the sector. Establishing a formal relationship between MBIE and industry groups, whether through the ISB or another mechanism, is critical, especially following the disestablishment of programmes such as ConCove and the Construction Sector Accord.

Plumbing, Gasfitting and Drainlaying

The recovery of the construction sector has taken longer than expected and this has seen a reduction in the number of apprentices in training across the PGD sector. There has been a 15% decrease in apprentice numbers since 2022, with an expected further decrease by the end of 2025. The industry does expect 2026 to return to a period of growth with an increase in apprentice numbers.

Self-certification for plumbing and drainlaying will be introduced in 2026 following legislative change to reduce the time and cost of residential construction. The PGD Board is responsible for the implementation and monitoring of the self-certifying programme including eligibility requirements which may require additional training. Going forward, additional training to support self-certification could be built into Level 5 qualifications. These qualifications have had a recent high-level review, which allows the industry to determine what future qualifications may or may not be needed to be developed or revised to support the new regime. Please note that gasfitting is already a self-certifying trade.

Due to publicity around the supply of natural gas, the industry is concerned around the potential for the gasfitting qualification numbers to decline significantly over the coming years as apprentices are opting out of the gasfitting qualification.

Training provision

The PGD Strategic Reference Group (PGD SRG) are still concerned that training providers are focusing on Level 3 pre-trade programmes over the Level 4 apprentice programmes.

There has been a slow uptake to the introduction of workplace assessment by the sector. This is an important aspect of the new qualifications to ensure that there is a reduction in the overall number of block courses.

There continue to be concerns around the quality of the training facilities for block course delivery and the lack of equipment and materials during a block course. Waihanga Ara Rau are undertaking an evaluation of all delivery sites during 2025 as part of their moderation function. This will result in recommendations for improvements for block course delivery going forward.

Over-durations are still a concern for the sector, and although the overall numbers have stabilised, the high number is still unacceptable. The PGD Board examinations are one of the requirements for completion of the qualifications and providers need to implement solutions to ensure more of a focus on the exams, including additional support for learners.

The PGD SRG will continue to monitor training providers who are delivering more than they are allocated for Level 3 pre-trade programmes and may look to reduce learner numbers further.

Civil Infrastructure

Civil infrastructure contractors are essential partners in delivering the core services that underpin New Zealand's economic productivity and quality of life. They are responsible for building and maintaining the transport networks that connect our cities, towns, and regions, supporting efficient freight movement and daily travel. These contractors also install and maintain critical water infrastructure, ensuring the reliable delivery of clean water to households and the safe conveyance of wastewater to treatment plants. Additionally, they play a key role in enabling digital connectivity by laying the physical networks that support internet access across urban and regional communities. Their work directly supports national infrastructure priorities, contributes to public health and safety, and underpins the services that New Zealanders rely on every day. Continued investment and partnership with this sector are essential to sustaining a resilient, connected, and competitive economy.

Key insights from the Waihanga Ara Rau Civil Infrastructure Strategic Reference Group (SRG)

The Civil Infrastructure Strategic Reference Group[6] welcomes the opportunity to once again provide the Tertiary Education Commission (TEC) with recommendations they believe will enhance the learning and development needs of the nation's civil infrastructure workforce. SRG group members have met formally six times in 2025 to support the various Waihanga Ara Rau workstreams and to progress their Workforce Development Plan[7], which centres on two key goals:

1. Growing a domestically sourced workforce
2. Strategic use of immigration levers to support sector workforce needs

SRG group members believe that by 2027 the current economic headwinds of the past two years, which have included delays in projects coming to market will have abated and a significant upswing in the training needs of the civil workforce will be well underway. Hiring and retaining key staff in the right locations will be key to delivering the 9,200 projects, which are listed in the National Infrastructure Pipeline[8] (as at June 2025) as either underway or planned. What remains unknown right now are the projects that will be stood up as part of the Water Service Delivery Plans[9] which were submitted to DIA in September. These Plans are expected to result in a significant water infrastructure spend across the country over the next 10 years, work that will be carried out by civil infrastructure contractors.

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[6] https://www.waihangaararau.nz/strategic-reference-groups/civil-infrastructure-srg/
[7] https://www.workforce.nz/civil-infrastructure
[8] Infrastructure Pipeline continues to grow | Beehive.govt.nz
[9] https://www.dia.govt.nz/Water-Services-Policy-Water-Services-Delivery-Plans

The Civil Contractors NZ 2025 Construction Industry Survey[10] (August 2025) provides current employer views regarding workforce development. The skillsets most needed by civil infrastructure businesses are machine operators (excavator, roller, bulldozer etc), supervisors/team leaders and experienced field workers (traffic control, site safety, and staff with at least some industry experience). Several machine operator roles are included in the Green List[11]. However, while industry appreciates the opportunities the Green List provides, SRG group members' preference is to grow the domestic workforce. To support this goal the SRG asks the TEC to consider the following priority areas for training investment:

1) **Flexible funding models that encourage collaboration and innovation in training delivery:**

    i. The SRG would like to see incentives to encourage collaboration between schools, industry and training providers with delivery models that blend on-job training with structured delivery. Industry requires innovative delivery models that ~~will~~ provide industry the opportunity to scale up.

    ii. The SRG recommends increased investment and support for foundation training in the infrastructure sector. Successful models have been piloted in partnership with CCNZ, MBIE, MSD and education partners. For there to be an adequate pipeline of new talent into the sector to build the infrastructure projects and contribute to NZ INC greater investment is required in schools. Additionally, securing an early trained pipeline of new talent supports succession planning in an industry that has many highly skilled people close to retirement. Capturing those skills in new talent is critical for sector productivity.

    iii. The SRG views the proposed vocational pathways and NCEA changes as positive for the sector and industry is keen to support pathways through exposure to work experience, bringing industry into the classroom and having more visibility and input into longer term education sector strategies and investment.

    iv. Training providers will need to be agile to match their programmes with workforce needs as projects come to market. For example, there are likely to be significant water infrastructure projects as Council water service delivery plans[12], which are designed to support growth and urban development come to market, along with Roads of National and Regional Significance. In March, this year Watercare announced a $13.8 billion infrastructure investment plan for the next decade, with the focus on reliability, environmental protection, and Auckland's growth[13].

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[10] https://civilcontractors.co.nz/member-survey-hope-on-the-horizon-for-hardhit-civil-construction-industry/10912-127a20af-0853-4855-9a3e-11a492ceb5c7/
[11] https://www.immigration.govt.nz/work/requirements-for-work-visas/green-list-occupations-qualifications-and-skills/green-list-roles-jobs-we-need-people-for-in-new-zealand/?page=1&filter_0=Civil+machinery+operators
[12] https://www.dia.govt.nz/Water-Services-Policy-Water-Services-Delivery-Plans
[13] https://www.watercare.co.nz/home/about-us/latest-news-and-media/we-unveil-a-13-8-billion-plan-to-ensure-reliable-water-services

v. Prime Minister Christopher Luxon in his keynote presentation at the Civil Contractors NZ (CCNZ) Conference in Tauranga in July said that "analysis from the Infrastructure Commission suggests that every billion dollars of infrastructure investment ... generates about 4,500 jobs ... we are potentially looking at tens of thousands of new construction jobs... 97,000 people will be needed in the sector within the next three decades ... and it's not just the quantity of workers, it's also the quality.[14]

vi. The civil sector needs a funding model that can flex to meet this demand. Employers will not employ people in advance of the work unless there are funded training support structures in place.

2) Funding support for leadership, trainer the trainer and management programmes

i. Team leaders, foremen/women and supervisors are the enablers of new entrants to industry and their ability to effectively lead individuals and teams are key drivers of efficiency, quality, and productivity.

ii. Re-work is a significant cost to industry.

iii. Team leaders who understand the business drivers within a project, i.e. commercial acumen are also in high demand[15].

iv. Continued investment in adult and tertiary teaching qualifications, for example zero fees programmes[16]

3) Funding support for multiple training pathways including bolstered Gateway programmes

i. The sector needs multiple pathways for training delivery, including work-based learning, e-learning, off-job regionally delivered block courses and increased opportunities to explore blended delivery models.

ii. Bolstered Gateway programmes are key to supporting young people to make a seamless transition from school to work with Level 2 credentials that employers understand and respect and teachers and parents value, e.g. NZC in Infrastructure Works Level 2[17].

iii. Funding support for training providers who include driver licensing (DL) pathways into their programmes, especially for young people who significantly improve their chances of securing a job when they have a full licence. The driving of work vehicles is a core part of every infrastructure role. A new entrant to industry who holds a DL is a more valuable employee because they can take plant and equipment to and from site and/or collect materials from a supplier. A DL is a core and transferable skill.

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[14] https://www.youtube.com/watch?v=vFnn7g6syTA
[15] https://www.waihangaararau.nz/infrastructure-site-supervision-qualification-reviewed-to-address-industry-recommendations/
[16] https://learningworks.co.nz/new-zealand-certificate-in-adult-tertiary-teaching-level-4/
[17] https://www.nzqa.govt.nz/nzqf/search/viewQualification.do?selectedItemKey=2522&_gl=1*91p1ke*_ga*MTE0MTUzMDAyMC4xNjk4MzU5MTMw*_ga_TFQQ681L2E*czE3NTc1NjA2MzIkbzQ4MiRnMSR0MTc1NzU2MDY0NiRqNDYkbDAkaDA.

4) **Funding support for a recognition of current competency process for civil infrastructure staff with more than 10 years' experience.**

   i. The Civil suite of Apprenticeships (bitumen surfacing construction, road construction, road maintenance, earthworks, piling, forestry earthworks and pipe-line construction and maintenance, pipe installation) were only introduced to the sector in 2015. Consequently, there are a significant number of workers across the country who are currently competent, skilled, and experienced but not yet qualified and many of them are in leadership positions.

   ii. A dedicated funding pool for these candidates would recognise their contribution to the sector, which through no fault of their own excluded them from taking up apprenticeships during the early years of their career. Holding a specified Level 4 qualification is also the only way to progress to Civil Trade Certificate, which was developed by CCNZ in consultation with industry, to better recognise and encourage skill development within the industry and put the civil infrastructure workforce on an even footing with other trades.[18]

5) **Apprenticeship Boost (AB) must be re-instated for the Civil sector**

   i. Employers with Civil and Water sector apprentices were excluded from AB payments from 1 January 2025[19] despite these programmes providing a clear and valued career pathway, which is understood and valued by industry. Currently Connexis (work-based learning division of Te Pukenga) delivers more than 90% of the training for the civil sector on-job with the employer providing the on-job training, task specific verification and in many cases on-job assessment.

   ii. Civil employers believe their efforts to induct, on-board and up-skill new and existing staff remain unseen and undervalued. AB must be reinstated for the Civil and Water sector.

6) **Funding support to improve workforce capability for the Temporary Traffic Management (TTM) sector**

   i. Over 50,000[20] workers in New Zealand hold some form of TTM authorisation and are active across road maintenance and construction projects, utility services, emergency response, public events, and private developments. There is growing demand for upskilling due to the shift from a compliance-based training model anchored in the Code of Practice for Temporary Traffic Management (CoPTTM), which was owned and managed by NZTA Waka Kotahi to an industry designed Credentials Framework[21] made up of NZQA assessment standards and micro-credentials.

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[18] https://civiltrades.co.nz/
[19] https://www.connexis.org.nz/news/changes-to-apprenticeship-boost-2025/
[20] https://www.parallaxx.co.nz/nzs-history-of-temporary-traffic-management-ttm/
[21] https://www.ttm-isg.org/resource-library/training-and-competency

ii. In response to this changing training landscape several new (PTEs) have been stood up to respond to the ‘risk-based’ learning and development needs of the nation’s TTM workforce. Programme delivery is supported by the Waihanga Ara Rau TTM Programme Guidance[22] document, which reflects industry expectations and NZQA requirements about the skills, knowledge and industry standards that should be incorporated into programme delivery.

iii. The BECA report[23] (commissioned by ConCOVE in 2023) identified seven recommendations for the consideration of industry, training providers, and Waihanga Ara Rau. These recommendations include more practical application of knowledge, use of a wider range of training tools, targeted language support for learners, the embedding of literacy, numeracy and digital skills into all delivery, provision of digital devices to support the learner journey and that learner achievement is recognised and celebrated with colleagues and whanau.

iv. The sector needs funding support to improve workforce capability.

7) An expectation that providers embed workplace culture into programme delivery

i. Embedding workplace culture into programme delivery is vital for preparing learners, whether school leavers or new arrivals to Aotearoa for success in the New Zealand workforce for these many upcoming infrastructure projects. A well-rounded programme should integrate key cultural pillars such as Health, Safety, and Wellbeing**,** which are foundational to New Zealand’s workplace standards and duty of care.

ii. Emphasising a strong work ethic and commitment to quality helps instil professional pride and accountability, while fostering inclusion ensures that diverse backgrounds and perspectives are respected and valued. Embedding these elements not only equips learners with practical skills but also nurtures the attitudes and behaviours that contribute to safe, productive, and culturally aware workplaces across the motu.

[22] https://www.waihangaararau.nz/qualifications-and-programme-endorsements/programme-guidance-documents-for-providers-developing-programmes/
[23] https://www.concove.ac.nz/concove-projects/temporary-traffic-management-credentials-framework/

Electrical Supply

Workforce Modelling Project

In previous advice rounds we have mentioned the lack of clear workforce and industry data for the sector.

As a result, we have worked with industry to develop a workforce forecasting model to support strategic planning in the electricity supply industry. The model estimates the current workforce using a bottom-up approach, drawing on firm-level data across generation, transmission, distribution, and retail segments. This first part helps project future workforce needs based on historical employment trends and electricity demand forecasts. The model has been refined over time but there is general expectation based on current modelling that by 2035, the core workforce is expected to grow from 8,579 to over 12,000.

It is hoped that the final outcome of the modelling can be situated within the current WIP (Workforce Information Platform) platform. Following this, it is expected the project will be transitioned to Energy Efficiency and Conservation Authority to continue the follow-on work.

Training activity outside of TEC funding

In the ESI sector, a portion of learner activity is delivered without TEC funding, through formal programmes and in-house training. This provision is fully funded by the industry. In 2024, this accounted for at least 440 learners. When combined with the 1,670 TEC-funded learners, this represents around 20% of total sector learners. This is likely a slight underestimate due to limited visibility over all training delivery.

In future the provider network may wish to consider an Investment Plan with TEC supported by industry. This approach would help reduce costs for industry and improve the visibility and recognition of training across the sector. As part of the industry-led review of what work-based training should look like for the sector, this could see an increase in the level of funding required for 2027.

Network of Work-based Learning

The SRG, supported by Waihanga Ara Rau, wants to ensure the future of work-based learning in the electricity sector is sustainable and fit for purpose. With the transition of Connexis WBL into the Infrastructure ISB by January 2026, the group is keen to reduce confusion and ensure the sector's voice is clearly heard in TEC's planning.

For 2026, the ESI-SRG supports continued funding for Connexis WBL based on current and projected learner numbers, and backs a funding application from MITA Consulting, which is now training more unfunded apprentices than those contracted through Connexis. The group also wants to be consulted before any new providers are funded for ESI training. Looking ahead, they've outlined key principles for the future network like stronger alignment of skills across the sector, investment in quality training assets, and a sustainable operating model that supports high-value, low-volume training. They're open to further discussions with TEC to shape what provision looks like from 2027 onwards.

Gas Infrastructure

Government Policy Shifts

The industry is **highly sensitive to shifts in government policy**, particularly those that signal long-term changes in the viability of natural gas as a fuel source. While the offshore oil and gas ban was a pivotal moment, the broader impact stems from the signal it sent about the future investability of the sector. This uncertainty has been compounded by ongoing policy language that often conflates natural gas with renewable gas, further undermining investor confidence.

More recently, there is an emerging factor: the Government is considering underwriting Liquefied Natural Gas (LNG) import facilities, which has the potential to reshape the landscape of gas supply.

Flow-on impacts on workforce

The resulting hesitation in development and investment affects all companies in the sector and has significant flow-on impacts for workers and learners. At the same time, the sector is experiencing layoffs and an aging workforce, leading to a loss of experience. Together, **these factors are diminishing the prospects of a viable career in the gas industry and weakens the sector's ability to attract and retain staff**.

In light of these, skills mapping, and career pathways into and across the transmission, distribution, and upstream sectors need to be undertaken to identify gaps and opportunities.

Training

Despite typically low levels of formal training, the **gas infrastructure industry is highly complex and high-risk**. The sector has limited qualifications, with recent developments including micro-credentials to support the voluntary Certificate of Competence (CoC) framework. However, these micro-credentials are competing with one another, and the industry must determine what future work-based delivery framework will best support its needs. The CoC framework is 'owned' by GasNZ on behalf of the sector and administered by a PTE.

Currently, the sector relies on a single main Work-Based Learning (WBL) provider for qualifications and micro-credentials aligned to its needs. Due to low training volumes, the industry has invested significantly in developing training and assessment resources, which have been gifted to the WBL provider. This has contributed to extended timeframes for bringing new programmes to market, with only one of the three main qualifications currently available.

Water Services

The Water Services SRG[24] welcomes the opportunity to once again provide the TEC with recommendations they believe will enhance the learning and development needs of the nation's water services workforce. SRG group members have met formally four times in 2025 to support various Waihanga Ara Rau workstreams and to progress projects that sit within the SRG's workforce development plan[25]. This has included SRG members contributing to the Waihanga Ara Rau led comprehensive review of water services qualifications and standards to ensure qualifications are fit for purpose, graduates can meet future industry requirements, and real and/or perceived risks in development and proposed delivery are monitored. The Waihanga Ara Rau findings[26] from a May 2024 survey undertaken at the Water Industry Operations Group Conference showed that 40% of respondents said the *Level 4 New Zealand Certificate in Drinking Water Treatment with optional strand in Multistage Processes* was not meeting their needs. The Waihanga Ara Rau newly developed pathways are currently out for public consultation[27].

The impact of Water Reforms on future workforce requirements

2024 (which has been used as the learner data baseline year for this Advice) was a year of reduced investment in water infrastructure due to uncertainty with the future timing of water reform following the repeal of the previous Government's Three Waters reforms[28] and the beginning of Local Water Done Well. These levels of uncertainty were referenced in the WaterNZ Pulse Surveys conducted in 2024 and 2025[29]. For example, the November 2024 Pulse Survey stated that "nearly 40 percent of respondents' contracts were either paused, deferred or cancelled." Consequently, it was no surprise that during this period Councils and contractors showed a reluctance to invest in infrastructure and formal workforce training. However, Local Water Done Well is expected to deliver "much-needed investment nationally in water services infrastructure while providing local council decision-makers the options that suit the communities they serve."[30]

The Local Government (Water Services) Act 2025[31] requires Councils to choose either an in house, single, or joint Council Controlled Organisation (CCO) and submit their water service delivery plans to the Department of Internal Affairs by 3 September 2025. There are also expectations for central Government owned suppliers, privately-owned and commercial suppliers to continue to build their ability to manage risks to drinking water

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[24] https://www.waihangaararau.nz/strategic-reference-groups/water-services-srg/
[25] https://www.workforce.nz/water-services
[26] https://www.waihangaararau.nz/wp-content/uploads/2024/11/Waihanga-Ara-Rau-Water-Review-Stage1-Report.pdf
[27] https://www.waihangaararau.nz/for-industry/qualifications-work-in-progress/water-review/
[28] https://www.beehive.govt.nz/release/labour%E2%80%99s-three-waters-legislation-repealed
[29] https://www.waternz.org.nz/PulseSurvey
[30] https://www.beehive.govt.nz/release/local-water-done-well-delivering-kiwis
[31] Local Government (Water Services) Act 2025 No 42, Public Act Contents – New Zealand Legislation

safety. Section 69 of the Water Services Act 2021[32] (Version as at 27 August 2025) states that a person must not certify, assess, test, design, operate, or carry out an activity relating to maintaining, repairing, upgrading, or renewing a drinking water supply, a wastewater network if they do not have the “prescribed skills, qualifications, or experience in respect of drinking water supply or wastewater network”. These requirements known as ‘authorisations’ (including licences, certifications, registrations, and permits) have been put back from 2026 to 2031.

There are expected to be 42 water services providers (CCO water service organisations and Council in-house business units) and by 2027/2028 Council suppliers will need to be fully compliant with the Water Services Authority Taumata Arowai (The Authority) Drinking Water Quality Assurance Rules[33] or by way of the adoption of an acceptable solution as an alternative compliance pathway. This includes a requirement that “All work (planned or unplanned) on a water supply must be completed by suitably trained or experienced personnel.” However, the definition of suitably trained has been debated and until authorisations come into force there is no clear indication that this means that people must be trained. It is expected that the authorisation framework will reference training and minimum training requirements for those working on a supply. Through both the Water Services Act and The Authority there will need to be an increase in suitably authorised personnel in the next five years. However, this changing regulatory landscape has led to uncertainty about who needs to be trained and to what level which has had a dampening impact on Councils commitment and their service contract providers to engage in formal training.

While drinking water is often the focus of the regulatory discussions, The Authority in an April 2025 publication[34] said, “upgrading and renewing New Zealand’s aging public wastewater treatment systems (which serve just over 4 million people) is one of the biggest infrastructure challenges facing our country ... and the proposed national wastewater environmental performance standards would streamline the process for future consents...”. The SRG believes these proposed standards will also nudge wastewater service providers into prioritising formal training for their workforce.

Lifting sector capability

The Authority’s 2024 Drinking Water Regulation Report[35] provides examples of the main cause of notifications that drinking water is, or may be, unsafe. These include maintenance or equipment failure, process control issues, human error, environmental, poor sampling techniques, and lack of appropriate infrastructure. Gillian Blythe, Chief Executive of Water NZ (and SRG member) believes many of these examples point to the need for appropriately trained staff and the Report states that sector capability was a likely contributing factor or cause of drinking water safety incidents. The Authority is working with the support of others in the sector to address sector capability gaps. The Report highlights the need for

[32] Water Services Act 2021 No 36 (as at 27 August 2025), Public Act 69 Requirement for prescribed skills, qualifications, or experience in respect of drinking water supply or wastewater network – New Zealand Legislation
[33] Compliance-Monitoring-and-Enforcement-Strategy-2025-28-Water-Services-Authority-Taumata-Arowai.pdf
[34] Help shape New Zealand’s wastewater future - Taumata Arowai - Citizen Space
[35] Drinking-Water-Regulation-Report-2024.pdf

"appropriate training, experience and/or supervision that enables staff to perform effectively … staffing deficiency can impact on delivered water quality by reducing the ability of staff to undertake proactive improvements, respond quickly to incidents and events, and provide adequate oversight or supervision." Indeed, in the 2025-2028 compliance monitoring enforcement strategy, The Authority specifies they will be focussing on ensuring that drinking water suppliers will have the right processes in place, including having trained people, by 2028. As work begins on this and as water entities begin to join into CCO's and other groupings, training will need to be benchmarked and standardised which will mean the need for formal training pathways will likely increase.

Training provision in 2027

With the combination of all these factors, SRG group members believe that by 2027 there will be increased demand for formal training, including micro-credentials to support workforce mobility and standardisation across water service providers. The scale of these future workforce requirements was outlined in the opening session of the Water NZ Conference, on 29 September in Christchurch, by Lori Hand, Executive Director, Water Services Reform Programme at the Department of Internal Affairs (DIA). Ms Hand's comments included that there will be:

- $47.9 billion in new water infrastructure projects over the next 10 years and $16 billion in growth-related projects
- Upgraded infrastructure will create jobs and stimulate local economies
- Apprentice and structured training programs are a key part to creating this new workforce
- About 9,000 additional jobs in the water industry"[36] and subsequent advice emailed to Gillian Blythe (CE Water NZ) from DIA indicates Council WSDP capex is expected to be a 19% increase on LTP figures for the FY26/27 and FY27/28 (unable to provide data for 2027 calendar year).

Voice of industry

The SRG is considering how to ensure the voice of industry is retained in the transition from Waihanga Ara Rau (WDC) to the Infrastructure Industry Skills Board (ISB). How the transition of Connexis (work based learning division) from Te Pukenga to the newly formed ISB and then into a private training establishment structure happens will require industry input. The water services industry expects to be consulted on the future structure of work-based learning.

[36] https://www.waternz.org.nz/Article?Action=View&Article_id=3352

Priority areas for training investment

To support the Government's water reforms and current and future workforce needs the SRG asks the TEC to consider the following priority areas for training investment:

1) **Work-based learning across** the country with block courses (as applicable) available and in more than one region. The SRG supports learning that occurs mainly in the workplace, and which may include block courses, supported self-directed learning and/or e-learning. The SRG expects learners to be supported in their training by both the training provider and their employer.

2) **Delivery of the new micro-credentials and qualifications** (once approved) which are under development by Waihanga Ara Rau. The SRG expects to see a Programme Guidance Document produced to guide training providers in their planning and delivery, so programmes meet industry expectations and are in line with NZQA requirements. Key features of the proposed changes include:
    - A shift to a base qualification at Level 4 for drinking water treatment and wastewater plant operations that meets apprenticeship requirements.
    - The addition of treatment process-specific strands to increase flexibility in the Level 4 apprenticeship qualifications, allowing learners to tailor training to their specific treatment processes.
    - New direct-entry Level 4 micro-credentials aligning with the treatment process strands to facilitate upskilling in treatment-specific processes and technologies
    - New entry-level Level 3 qualification designed for entry-level learners or those beginning their water sector journey. This pre-trade qualification facilitates a pathway into the water services industry.
    - Updated Level 5 Diploma pathways for management and operational leadership roles across the water services industry.
    - A specific new Level 4 qualification supporting Trade Waste compliance management and the interface with wastewater operations.

3) **Apprenticeship Boost (AB)** must be re-instated for the Water sector

    Employers with Water sector apprentices were excluded from AB payments from 1 January 2025[37] despite these programmes providing a clear and valued career pathway, which is understood and valued by industry. Water sector employers believe their efforts to induct, on-board and up-skill new and existing staff remain unseen and undervalued. AB must be reinstated.

[37] Changes to Apprenticeship Boost 2025 » Connexis | Infrastructure Training

Construction and Infrastructure Services

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 to3 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.

Iwi Strategic Reference Group

The Iwi Strategic Reference Group (Iwi SRG) was bought together to find areas where they could collaborate to solve common issues or challenges. The group has met throughout 2025 to identify aspirations and priorities for iwi education, workforce, and development pathways.

At the heart of these kōrero is the commitment to tino rangatiratanga, mātauranga Māori, and intergenerational wellbeing.

The group has acknowledged that there is no 'natural place' to sit within an ISB structure and advocating as such, is not one of their priorities. Options are being explored to place them within a wānanga.

The group have outlined key themes and funding priorities, reflecting iwi-led visions for education, training, and workforce development that strengthen whānau, hapu and iwi capability, protect mātauranga Māori, and contribute to Aotearoa's collective future.

By 2027, iwi expect to see a tertiary education and training system that fully honours mātauranga Māori, strengthens tino rangatiratanga, and embeds iwi-led solutions as central to Aotearoa's resilience and prosperity.

Funding priorities must move beyond narrow training inputs to empower iwi ownership of education and workforce pathways, while ensuring sustainability, cultural survival, and intergenerational wellbeing remain at the centre of programme design.

Key Themes

The key role that we played with this group, namely led by our Poumatua and Te Pane Taketake team, was to act in an advocacy and facilitator role and add value to the work they do. This includes:

Mātauranga Māori & Iwi-Led Education

Leading the development of the Mātauranga Māori Accreditation Framework with MoE and NZQA. This framework allows iwi to align their knowledge of tikanga, the environment, history etc., to sit alongside C&I qualifications but be owned and delivered by individual iwi. Suggestions include:

- **Iwi-led, iwi-owned education systems** designed "by iwi, for iwi," embedding tikanga, kawa, and mātauranga Māori into curricula, assessment, and micro-credentials.
- Protection of **intellectual property** and recognition of iwi systems of knowledge alongside NZQA frameworks.
- Development of bespoke education and employment pathways, particularly focused on rangatahi and the kura-to-career transition.

Mana Motuhake & Governance

Facilitated presentation and discussion on indigenous procurement with CEO of Downer while also exploring iwi partnerships with a Tier 1 company. Suggestions include:

- Commitment to iwi self-determination in shaping education and workforce development, reducing dependence on Crown-led solutions.
- Support for succession planning, governance frameworks, and intergenerational leadership.
- Advocacy for procurement reform to ensure equitable access for iwi and Māori businesses.

Sustainability & Te Taiao

Facilitation of discussions with Environmental and Civil Engineer to inform iwi on what they should be asking when sitting at a planning and design meeting for major roading and construction projects relating to Carbon Accountability and mitigations to offset carbons emitted from the project.

It is worth noting that these projects run end-to-end and are not standalone programmes. For example:

- renewable energy includes the construction and maintenance of ground-mounted solar farms. These are in mainly rural areas to ensure marae and small communities have power during extreme weather events. Iwi want to provide foundation skills training from schools offer their people careers choices and opportunities.
- Forest to Whare starts with school programmes and pre-employment training delivered by local providers. We've developed a complete framework out to 2032 when their first relocatable home is completed. In-between there is the building of residential accommodation, a training facility, a Mill, and an offsite construction area.

Suggestions include:

- A holistic approach to sustainability - encompassing cultural, social, economic, and environmental wellbeing.
- Investment in iwi-led initiatives such as **renewable energy projects, forestry-to-whare projects, and food sovereignty programmes.**
- Integration of **carbon accounting and climate resilience** into construction and infrastructure training.

Innovation & Technology

- Interest in digital futures, AI, and Māori data sovereignty, with iwi-led governance and tikanga-based ethical frameworks.
- Emphasis on Indigenous innovation, global Indigenous collaboration, and cross-cultural partnerships with Pacific communities.

Pacific Strategic Reference Group

The narratives outlined below have been critical talanoa priorities described in the Pacific SRG workplan over the last quarter.

However, in light of the transition to the ISBs, the PSRG advocated to see these insights elevated and lifted to be more strategically aligned and facing to ensure priorities will be championed and owned by the construction and infrastructure sector, going forward.

Introducing Industry LEO Strategy

Opening Word

Shaped and amplified by diverse sector voice (leo[38]) of Pacific in the construction and infrastructure sector, this strategy outlines a blueprint to grow, support, and elevate the Pacific workforce in New Zealand's construction and infrastructure sector.

It is collectively designed to align with Waihanga Ara Rau WDC's (workforce development council) transition to the developing Industry Skill Boards (ISBs[39]), and other relevant entities, and governance frameworks to ensure Pacific peoples are fully included, equipped, and empowered to lead and thrive in the changing vocational educational training (VET) landscape.

Moreover, this document serves as a strategic reference for industry leadership, decision-makers, governance, SRG (strategic reference groups), Human Resources, policy influencers, professional associations, provider educators, and other influential bodies.

Vision

A thriving Pacific workforce that is skilled, resilient, and influential in shaping New Zealand's construction and infrastructure future.

We do this by empowering and amplifying Industry LEO to create the critical systems shifts, conditions and responsive leadership to enable Pacific learners and workforce to thrive in the construction and infrastructure, anchored in equity, innovation, and transformation.

Rationale

To meet construction and infrastructure demands, while cultivating an environment where the Pacific workforce and enterprises are valued, respected and thriving.

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[38] *LEO means or represents the voice of Pacific.*
[39] *ISBS (Industry Skill Boards) – Construction, Infrastructure, Electrotechnology*

The landscape

The construction sector in New Zealand is experiencing significant growth, with a notable focus on supporting the Pacific workforce through targeted initiatives and development plans. Despite the growth, the construction sector faces challenges, including a lack of long-term planning and skill shortages. Addressing these issues is critical for sustaining workforce growth and ensuring that Pacific workers can thrive in the industry. The increasing diversity within the workforce, with a notable representation of Māori, Pacific, and Asian ethnicities, reflects the sector's evolving demographic landscape.

What will success and excellence look like for Pacific?

We embed the Mana Moana Outcomes framework[40] to provide Pacific-focussed skills leadership, qualifications, and quality assurance to drive the realisation of our vision based on Pacific values[41].

What makes the Industry LEO strategy distinct in its purpose is that it is grounded in cultural values and drivers from the Mana Moana Outcomes framework, and proverbs from the Pacific to anchor its core priorities.

1. Culturally Responsive Education and Training

- Embed Pacific values, culture, and identity into vocational education environments.
- Promote Pacific success stories to shift perceptions and inspire participation.
- Support cultural capability initiatives within training providers and workplaces.

2. Activating Leadership Pathways

To increase cultural responsiveness in the sector, Pacific leadership must be fostered at all levels from learners-tutors-institutional governance.

- Pacific academic and Leadership pipelines e.g. create talent development programmes for Pacific staff to progress from tutor to senior academic or leadership roles
- Mentoring and fellowship opportunities e.g. partner with Ako Aotearoa or TEC to support Pacific-focused educational fellowships and mentoring networks
- Pasifika Leadership Networks e.g. establish internal Pasifika staff caucuses that feed into governance and strategy, supported with paid time and decision-making access.

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[40] Mana Moana Outcomes Framework – designed to support WDC's functions to lift excellence for Pacific
[41] Mana Moana Outcomes Framework values have been articulated by WDC Pacific staff and are aligned with the values in the All-of-Government Pacific Wellbeing strategy, Lalanga Fou.

- Showcasing Pacific Leadership Models e.g. use case studies of Pacific collective leadership (e.g., Vā, talanoa-based leadership) in staff development.

3. Targeted Training

- Embedded in Programmes e.g. allocate pastoral care staff (Pacific navigators or learning advisors) directly into construction and trades programmes to support ākonga (learners) from day one
- Cultural Competency Training for all staff/kaimahi e.g. deliver Pasifika-led training that includes key cultural concepts, pronunciation, protocols, and inclusive pedagogy
- Culturally Affirming Curriculum Design e.g. embed Pasifika narratives, values (e.g., respect, reciprocity, service), and Pacific guest speakers into course content
- Use of TEC Ōritetanga Dashboard for early intervention e.g. regularly review Pacific learner data (retention, progression, engagement) at the programme level to drive early outreach
- -*Successfully achieved with Pacific Parity data to inform BEST Practice (Assurance) on the Industry LEO webpage.
- Equitable Access to resources e.g. provide Pacific learners with transport subsidies, kai, study packs, and digital devices through targeted hardship funds.
- Expand micro-credentials and flexible learning formats tailored to Pacific learners.
- Ensure pastoral care and assessment practices are culturally responsive and adaptable.
- Invest in career pathway visibility through campaigns and community engagement.

4. Creating and Resourcing Pathways

- Pacific learners often face systemic barriers in accessing tertiary education, including financial strain, digital divide, cultural disconnection, and curriculum misalignment.
- Well-resourced and culturally appropriate pathways are essential to Pacific learner retention and success.

5. Pacific Business and Enterprise Development

- Support Pacific-owned businesses through procurement opportunities and business directories.
- Provide platforms for business support and mentoring, especially for sole traders.
- Enhance access to tendering and social procurement initiatives for Pacific enterprises.

6. Systemic Representation and Leadership

- Increase Pacific representation in governance, advisory boards, and decision-making bodies.

- Collaborate with Pacific strategic reference groups across industry to align TEC's investment plans with Pacific aspirations e.g. ConCove, BECCA.
- Monitor Pacific learner outcomes to inform continuous improvement and accountability.

7. Workforce Development and Skills Alignment

- Invest in upskilling for emerging technologies, sustainability practices, and digital tools.
- Support industry-led training ecosystems that merge formal education with real-world experience.
- Address demographic challenges by attracting and retaining young Pacific talent through clear career pathways.

8. Infrastructure Investment with Pacific Inclusion

- Leverage the $6 billion infrastructure package to create jobs and business opportunities for Pacific communities.
- Ensure Pacific participation across all roles, from trades to engineering, finance, and project management.
- Maintain a consistent infrastructure pipeline to avoid workforce instability and migration.

"The infrastructure sector's been struggling. There'll be a lot of Pasifika people with jobs, businesses, who are in and around infrastructure across the sector. When we talk about infrastructure, we're not just talking people on the tools," Nick Leggett, Chief Executive of Infrastructure New Zealand.

9. Strengthen Pacific Pipelines

- Culturally responsive and long-term workforce development planning

Challenge[42]

While Pacific peoples now represent 6% of the construction sector workforce (up from 4% in 2018), Pacific [43]ākonga (learner) remain under-represented in high-growth and trades-related tertiary programmes. With nearly 200,000 new homes forecast over the next six years, the tertiary sector must act now to increase Pacific learner participation and progression in construction, engineering, and related fields.

[42] Advancing Pasifika Success in Tertiary Education, Weltec – Whitireia