

ConstrucTrend 2025 Survey findings

November 2025



Acknowledgments

We extend our gratitude to the survey participants who generously shared their time and insights with us. We also wish to thank the sector stakeholders who made time to speak with us and the advisory group members for their thoughtful insights and support.

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November 2025

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1. Introduction

1.1. Context for ConstrucTrend

ConCOVE commissioned ConstrucTrend as a survey of the carpentry, plumbing and electrical workforces within the Construction and Infrastructure sectors.

ConCOVE

The Centre of Vocational Excellence for Construction & Infrastructure (ConCOVE) is hosted by Manukau Institute of Technology (MIT). It was launched in 2020 as a national centre of vocational excellence and is tasked to engage with the New Zealand construction and infrastructure sector to understand workforce needs and to reimagine vocational education and training in these sectors.

1.2. Why was ConstrucTrend developed?

Good quality, up to-date information about construction industry workforce skill requirements is needed to respond to workforce challenges in construction and inform planning of educational programmes and policies.

The construction workforce is aging,¹ and it is essential to ensure the sector has the right people with the right skills at the right time to meet

¹ Ministry of Business, Innovation and Employment (2024). Building and Construction Sector Trends – Annual Report 2023.

² Jenkin, G., Donnan, L., Bowden, C., & Hoskin, A. (2024). Jenkin, G., Donnan, L., Bowden, C., & Hoskin, A. (2024). Workplace psychosocial stressors in the

demand. Construction employers report difficulty accessing skilled workers¹. Some stakeholders are concerned that gaps in business and core skills may be contributing to workplace stressors² and relatively high rates of business failure and impacting the quality of workplace-based training of apprentices³.

Digital and green technologies are likely to become increasingly important but it is unclear if skill development and education among tradespeople is keeping up with the pace of technological change. To ensure New Zealand can benefit from new technology it is important to understand the extent to which the current workforce is geared to use and install some of these new technological developments.

Workforce shortages in the construction sector have implications for the New Zealand population's access to housing and facilities.

1.3. ConstrucTrend aims

Currently there is no existing mechanism for understanding if there are skill gaps and how widespread skill gaps are within the sector or specific trades in New Zealand.

construction industry: Perspectives of construction industry stakeholders. External Research Report ER93. BRANZ.

³ E.g. Waihangā Ara Rau. (May 2025). Draft Onsite Construction Workforce Development Plan. Waihangā Ara Rau.

ConstrucTrend aims to inform understandings about the sector by collecting systematic data directly from trades people and their employers about:

- The current skill levels and skill gaps in the carpentry, plumbing and electrical workforces, including for new and emerging technologies
- How the above differ by profession.

The findings are intended to inform the development and refinement of the Level 4 qualifications and subsequent training opportunities and educational offerings associated with these trades.

Future repeats of ConstrucTrend can also explore how skill levels change over time.

1.4. Survey design and distribution

1.4.1. Review of existing information

We reviewed information currently available or being collected by other organisations to identify where stakeholder interests were already addressed through other sources. A list of existing workforce data and recent surveys is provided in Section 9.5.

1.4.2. Sector consultation

We consulted widely through a two-stage process:

- **Individual consultation.** The intention of the engagements was to ascertain information interests, identify where those interests overlapped with the scope of ConstrucTrend, seek advice on

specific skills to focus on and explore methods of survey distribution.

- **Advisory group discussions.** Discussions reviewed potential options for the survey and informed decisions about content and distribution. The Stakeholder Advisory group included senior representative/s from: Master Plumbers, Master Electricians, Industry connection for excellence / Skills, New Zealand Certified Builders, Waihangā Ara Rau, Manukau Institute of Technology, Te Pūkenga work-based learning trading as BCITO, Waihangā Ara Rau/ ConCOVE Māori Advisory Group and ConCOVE.

1.4.3. Design of the questionnaire

Questionnaire design focused on the topics and information needs aligned to the aims of the survey, and topics stakeholders prioritised during consultation. The survey design drew on existing questions where possible, including the BeLongEng survey in Australasia and the CEDEFOP ESJS approach in Europe. We were unable to identify questions that asked about skills that had been previously tested formally for validity and reliability. Where we developed novel questions we employed principles of good question design, including reducing ambiguity as well as avoiding lengthy and/or double-barrelled questions, double-negatives and leading questions.

1.4.4. Survey questionnaire

The survey questionnaire contained separate question-sets for employers, trade qualified individuals and recently graduated apprenticeships. Both sets of questions were contained within the same link to minimise

complexity for people completing the survey as well as stakeholders distributing the survey.

The choice of survey questions reflected trade-offs between questions with different strengths and weaknesses, and a balance of survey length, stakeholder interests and the original business case objectives for the survey. Interest in aligning with an international survey meant that the wording was more cumbersome than we would typically have used in a survey for a trade audience.

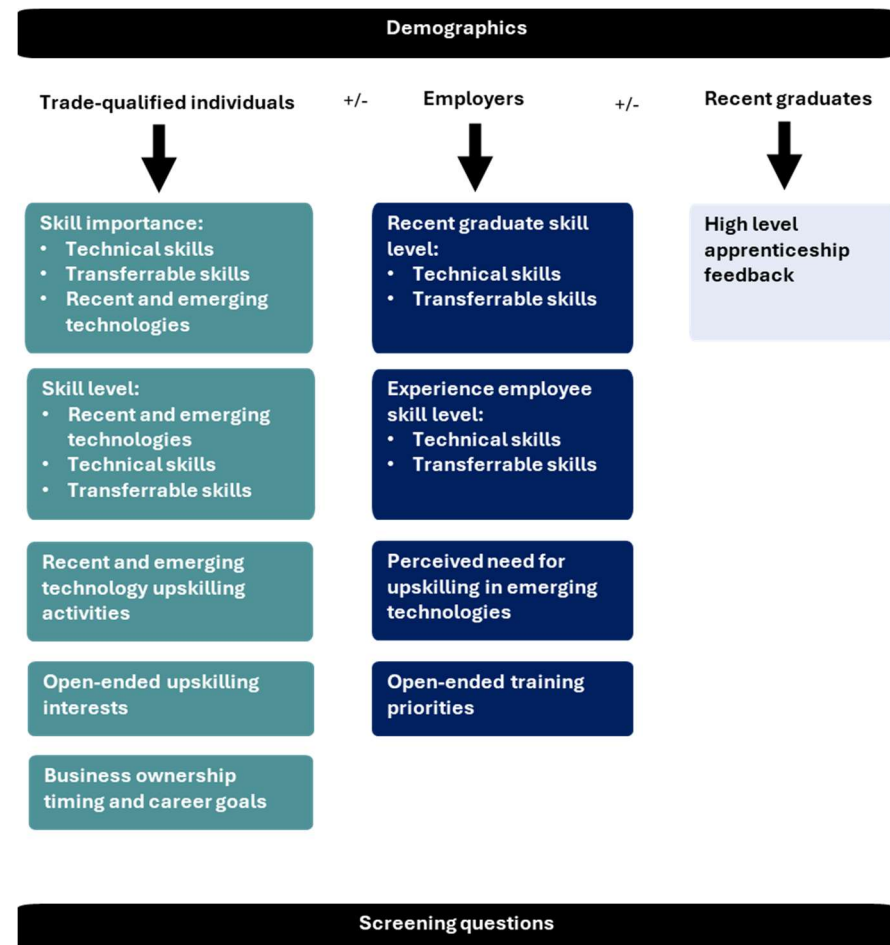
Most questions were sliding scales on a scale from zero to ten, or multi-choice boxes.

Demographic, open-ended and general technical skills questions were the same across trades. A unique set of recent and emerging technologies questions were developed for each trade.

We tested the survey for understanding with nine individuals, including at least two from each trade. The timeframe for the project precluded a full pilot of the survey prior to release.

A copy of the survey questionnaire is available in Section 1.

Figure 1. Components of the ConstrucTrend survey



1.4.5. Survey eligibility

ConstrucTrend was open to two groups of people living in New Zealand:

- Qualified carpenters, electricians and plumbers with a level 4 qualification regardless of the sector where they worked
- People who employed qualified tradespeople.

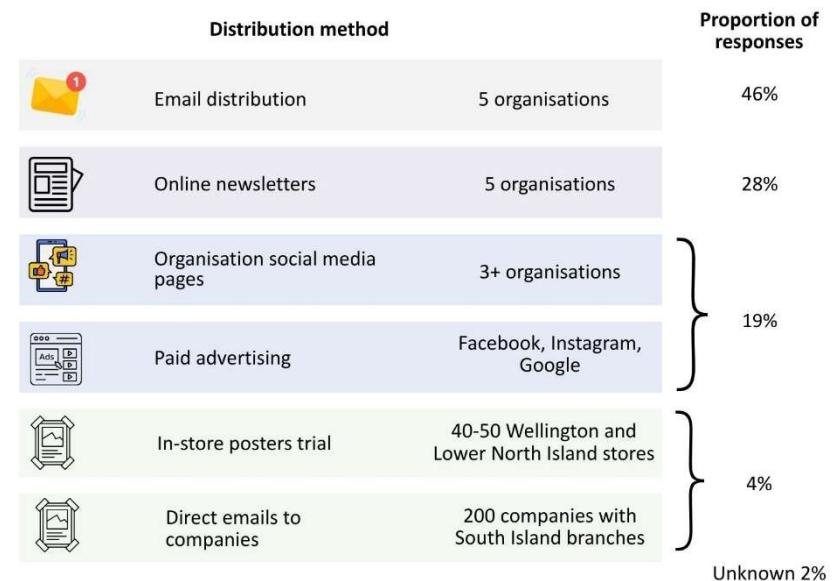
1.4.6. Survey distribution

The questionnaire was administered online from August to October 2025. Distribution relied on requests to organisations to share the survey with their contacts or newsletters. Eleven organisations supported this task however buy-in was limited by the large number of concurrent surveys happening at the same time.

The survey was distributed via email, online newsletters from industry bodies, social media advertisement and communication, in-store recruitment and direct emails to tradespeople (Figure 2).

We also explored text message recruitment but did not secure support from organisations to send messages to their members. Text distribution for future surveys is likely to increase response numbers.

Figure 2. Methods of distribution for the survey, with approximate percentage of responses



1.4.7. Ethics review

The project was reviewed through the Independent Human Ethics Review Committee and approval was granted for the study for up to three years (# 2025 IHREC 02).

1.5. Analysis

Quantitative data analysis focused on describing survey results overall, for tradespeople and employers, and by trade.

Several questions were answered using sliding scales ranging from 0 to 10. We categorised these responses into three groups to support the

interpretation of the findings. Scores below the midpoint (0-4) were classified as low skills or limited importance, scores from 5-7 were classified as matched skills or moderately important and scores from 8-10 were classified as high skills or highly important.

The survey received fewer responses than we had hoped for (see next section). The low number of responses and non-representative survey sample meant that:

- Weighting and statistical comparisons of differences between groups was not appropriate
- Percentages provide a picture of skill gaps within the sample but may not be representative of the workforce as a whole.

Further details are included in the Technical Appendix.

1.6. Who responded to the survey?

In total 357 people responded to the survey - 223 (62%) of these employed someone from a relevant trade. Most (321, 90%) had an electrical, plumbing, gasfitting, drainlaying or carpentry⁴ qualification.⁵

Qualified respondents were well-spread across the three trades: 36% carpentry; 25% plumbing (gasfitting or drainlaying) and 39% electricians.

⁴ We included carpenters with equivalent experience because it is possible to become licenced in carpentry without a recognised qualification if a person can demonstrate repeated competency in a range of carpentry competencies. See [Licensed Building Practitioners carpentry license factsheet](#) for more information.

⁵ Some employers of people in these trades did not hold a Level 4 qualification in these trades themselves.

While there are no good existing statistics on the Level 4 qualified workforce across all three trades⁶, broader information available about the construction workforce suggests our sample is likely to over-represent New Zealand Europeans and those who have been in the workforce for many years

7 out of 10 trained more than 10 years ago



9 out of 10 respondents were European



9 out of 10 respondents were male



6 out of 10 respondents employed others



Appendix Two contains more detailed demographic breakdowns of respondents.

⁶ The Workforce Information Platform includes demographic information about the workforce, but there is no way to filter this to Level 4 qualified tradespeople, and we would expect that labourers and other roles in the construction industry may have a different demographic profile. MBIE do not hold demographic statistics on electricians or licenced building practitioners. The plumbing, gasfitting and drainlaying board does collate some demographics on the plumbing workforce.

1.6.1. Interpreting results in the context of low response numbers

The margin of error gives an indication about how certain we can be that a given result reflects the true result for the workforce overall. It defines upper and lower ranges for each result that the true value can be expected to fall between, assuming the survey sample is random. When the differences between groups are bigger than the margins of error, they probably reflect real differences rather than chance. For example, questions with 200 responses when the real-world population is 50,000 and a result of 30% indicate the true result is likely to be between 23.7% and 36.3% (see Table 1).

Questions answered by only one of the three trades or by other sub-groups had smaller numbers of responses and therefore wider margins of error. This has meant that some of the sub-group analysis initially planned was not undertaken and additional caution should be taken where analysis with small numbers were included.

Table 1. Margins of error at a 95% confidence interval

N value	Population size ⁷	Margin of error ⁸
200 responses	50,000	6.34%
150 responses	50,000	7.32%
100 responses	50,000	8.97%
50 responses	20,000	12.69%
20 responses	20,000	20.07%

⁷ 2023 estimates of the number of carpenters, plumbers and electricians (via the Workforce Information Platform dashboard wip.org.nz); Carpenters 19,621; Plumbers 10,110; Electricians 23,925.

1.7. Strengths and limitations

The survey addressed a gap in the data available about skill needs and skill levels in carpenters, plumbers and electricians.

1.7.1. Strengths

- The survey model could be applied across trades including the three covered by ConstrucTrend and others.
- Triangulation of data on skill gaps by employers and tradespeople, who had different knowledge to bring to ratings.
- The inclusion of open-ended questions on specific skills allowed people to identify training needs not covered in the quantitative survey questions.
- Skills examined quantitatively in the survey were informed by scoping discussions, documentation on other sector consultations and O*NET⁹ task categories.

1.7.2. Limitations

- A higher number of responses would have strengthened the survey. Low numbers limited sub-group analyses.
- The low number of responses means conclusions should be interpreted with caution, particularly where differences are small.
- Good data are not available on the composition of the workforce in the three trades covered by ConstrucTrend so we do not know

⁸ Margin of error assuming a 30% population proportion. The margin of error may be around .5% to 2% higher for population proportions of 50%.

⁹ O*NET is an occupational database of skills, occupations, worker attributes and job characteristics developed in the US.

how well the respondent group and therefore the results match the workforce as a whole.

- Emails and newsletters were the main survey distribution channels. Over-representation of senior tradespeople and employers in the survey may reflect that people in these roles are more likely to look at emails and newsletters as part of their role. This issue is mitigated to some extent by the ratings by employers which also collect feedback of their recent graduates and more experienced staff.
- Keeping the questionnaire to a reasonable length meant we had to prioritise which skills were explored in the survey.

1.7.3. Glossary of roles

The table below lists the groups of respondents referred to in the report, how they are identified and the number of respondents within each.

Table 2. Glossary of workforce groups referred to in the results

Workforce group	Definition	Number of respondents
Trade-qualified individuals	Someone with an apprenticeship (Level 4) qualification in carpentry ¹⁰ , electrical or plumbing. This may include people now in management, education or other related roles. We do not include people here who may have other qualifications.	321

Carpenters	Respondents with an apprenticeship (Level 4) qualification in carpentry, or equivalent experience.	116
Electricians	Respondents with an apprenticeship (Level 4) qualification in electrical trade or engineering	124
Plumbers	Respondents with an apprenticeship (Level 4) qualification in plumbing, gasfitting or drainlaying.	81
Business owners	People who own a trade-related business. This may include sole-traders or those who employ others. These people may or may not still be working on the tools.	172
Employers	Employers of qualified tradespeople	223
Recent graduates	People with a Level qualification and less than two years of post-qualification experience.	175 employers of recent graduates 25 recent graduates
Experienced trade-qualified individuals	People with a relevant Level 4 qualification and more than two years of post-qualification experience.	177 employers of experienced trade-qualified individuals 296 experienced trade-qualified individuals

¹⁰ For carpentry someone with equivalent experience to a Level 4 qualification may also be included.

2. Skills for specific and general technical tasks

Findings summary

- **Trade-specific technical skills** were rated as important by nearly all trade-qualified individuals. Both employers and individuals agreed that experienced tradespeople generally possessed the required technical skills. However 15% of employers reported that recent graduates fell short of expectations.
- **Compliance with laws, regulations, and standards** was considered highly important across nearly all roles. Around 20% of employers identified compliance as a gap for both recent graduates and experienced workers. Comments suggested that establishing habits around checking and keeping up to date with new changes were challenges.
- **Estimating the time, costs and resources** was important to 91% of trade-qualified individuals. Employers identified this as a skill gap for recent graduates (56%) and experienced tradespeople (38%).
- **Organising and planning** was important to 89% of trade-qualified individuals, yet 34% of employers reported gaps among recent graduates and 19% among experienced tradespeople.
- **Using applications or computer software** was important for 87% of trade-qualified individuals roles. Skill gaps were more common among experienced tradespeople (28%) than recent graduates (15%).
- Comments about upskilling interests reflected the areas identified above, as well as topics such as documentation, project management and a diverse range of trade-specific technical skills.

2.1. Included skills

We sought to understand which skills were important and in which areas there were currently skill gaps, for both recent graduates and experienced tradespeople. For the purposes of this report we define general technical skills as technical skills that are useful across multiple trades and trade-specific skills as those that are specific to a trade.

Questions covered the following general technical skills:

- Estimating the time, costs and resources for a project
- Compliance with laws, regulations and standards
- Using applications (apps) or computer software
- Organising and planning.

Questions explored how important people thought these were for their roles, self-rated skill level, and the skill level of any recent graduates or experienced tradespeople they employed. We present skill level ratings from employers below.

As each trade requires a broad range of technical skills we included a single trade-specific skills question, with the option for people to identify specific skills in their open-ended comments.

2.2. Trade-specific as well as general technical skills were important for most

Almost all trade-qualified individuals reported that trade-specific technical tasks were at least moderately important to their roles, and most identified these to be of high importance (Figure 3).

People recognised the role the laws and regulations play in their industry: compliance with laws and regulations were of high importance to almost all trade-qualified individuals' current roles.

The vast majority also identified that using apps and software, and costing and quoting were important for their roles. These skills were important to tradespeople and business owners alike.

2.2.1. Half of employers identified costing and quoting as a skill gap among their recent graduates

Half (56%) of employers identified costing and quoting as a skill gap among their recent graduates. Costing and quoting was deemed as not important to the roles of recent graduates by 18% who in turn did not rate skills of those graduates. This differed slightly between trades; with 22% of plumbers, 16% of electricians and 9% of carpenters identifying costing and quoting as not relevant to the roles of recent graduates they employed.

Some employers identified documentation and general administration in their comments about upskilling needs for recent graduates. For example: *"the importance of the admin and documentation side of the job, not just the technical on the job skills."*

While employers identified fewer skill gaps for experienced tradespeople, gaps in costing and quoting and apps and software remained common.

Figure 3. Importance of trade-specific and more general technical skills, % of trade-qualified individuals (n = 203-215)

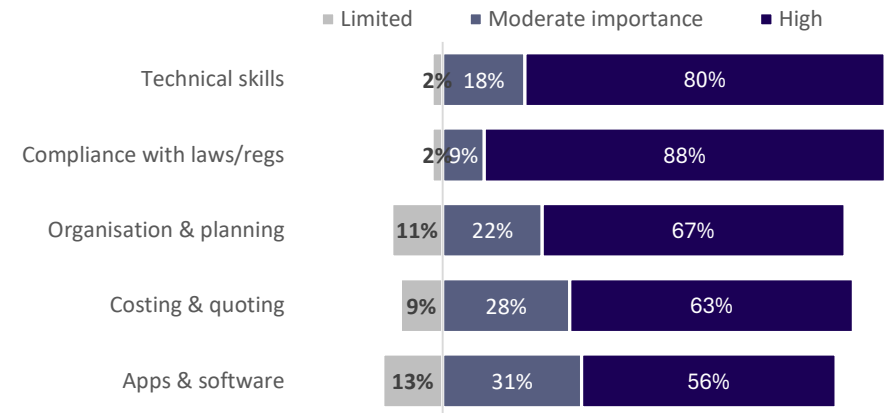
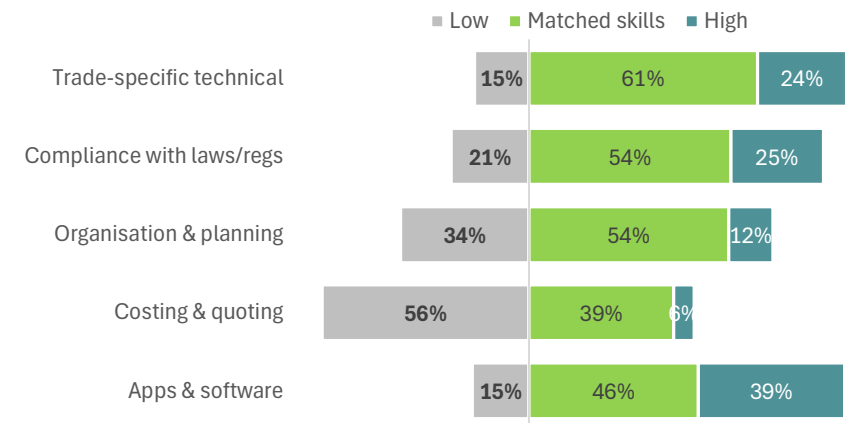


Figure 4. Recent graduate technical skill level, as rated by employers (n = 126-171)



Employers noted costing and quoting was a gap for more than one-third (38%) of the experienced tradespeople they employed. Using applications and computer software was also identified as a skill gap amongst experienced tradespeople, largely driven by gaps for plumbers. Skill gaps could present a barrier to installing and working with new smart technologies.

Gaps in skills about compliance with laws and regulations were noted by nearly one in five employers. Qualitative responses often referred to the habits of checking and keeping up to date with new laws and regulations rather than specific skills.

2.2.2. Patterns of technical skill gaps were relatively similar across trades

The pattern of areas of skill gaps is relatively similar across trades (Figure 6). Employer-rated gaps in trade-specific technical skills, compliance with laws and regulations and apps and software were relatively common for plumbers.

Figure 5. Experienced tradespeople skill level, as rated by employers (n = 131-172)

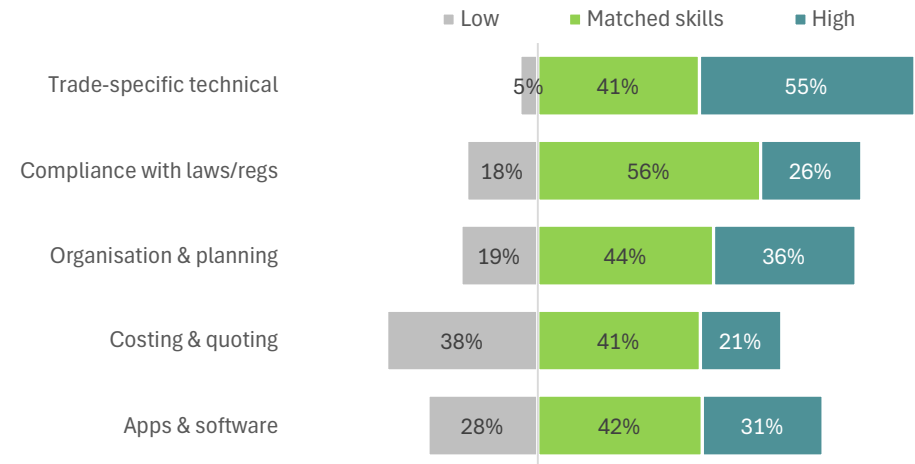
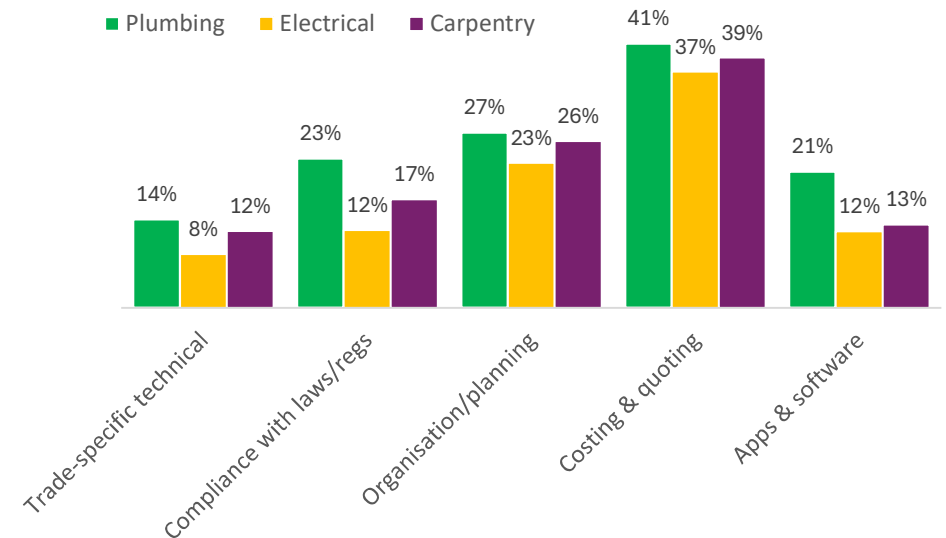


Figure 6. Percentage with low technical skills, as identified by employers, by trade (n = 70-148-137)



2.3. Technical upskilling interests

Trade-qualified individuals identified areas of upskilling interest for themselves in their current role and for a future role they wanted to move into (if any). Employers did the same for any recent graduates or experienced tradespeople they employed.

Open-ended comments included many of the same skill gaps as the quantitative findings. Regulations were commonly mentioned as a priority for upskilling by both employers and trade-qualified individuals. Keeping up to date with regulations may be as much about time, habits and accessibility of information as it is about skills. One respondent noted that *“compliance is hard at times with how the information is given out”* and another emphasised the importance of habitually checking against regulations.

Respondents commonly mentioned organisation as an upskilling area for themselves or their employees. Examples included project management, time management, and documentation, self-organisation skills like thinking ahead, general organisation skills and planning jobs and daily activities.

Trade-qualified employers of experienced tradespeople identified a need for upskilling in computer skills, consistent with earlier findings. One person commented *“younger members run rings around [our more qualified people] IT wise”*. Respondents also mentioned AI as an area for upskilling.

Some employers identified estimating and pricing as an upskilling area for more experienced trade-qualified individuals or as an area for self-development.

Many trade-specific technical skills were identified in the open-ended comments. Examples included air conditioning, machine operations, fault finding, surveying, testing and inspection, automation, welding, hazardous electrical, PLC programming, as well as some of the newer technologies discussed in Sections 5, 1 and 7.

Employers identified the following technical upskilling needs for their recent graduates:

- Fault finding (4)
- Testing and inspection (2)
- General electrical skills (2)
- Air conditioning (1)
- Installation practices (1).

2.3.1. Other feedback around training

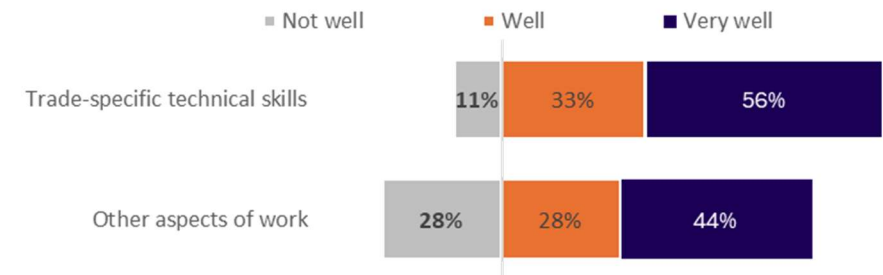
Comments on training raised the importance of diversity of work during apprenticeships, on the tool experience, and quality of apprenticeship training. People also mentioned the need for more practical assessments, advanced qualifications following on from trade qualifications and the challenges of maintaining skills that are seldomly needed due to technology changes. Some employers also highlighted the importance of regular refresher courses for more experienced tradespeople.

2.3.2. Apprenticeship feedback

We also asked recent graduates how well their apprenticeship had prepared them for specific technical skills and other aspects of their role. Very few recent graduates responded to the survey so these results should be interpreted cautiously. If repeated, distributing the ConstrucTrend survey to a wider pool of recent graduates would be useful for identifying whether these results were representative.

Overall, most recent graduates indicated their apprenticeship prepared them well or very well for their role, particularly in the area of technical-trade skills. Some recent graduates wanted a greater variety of work during their apprenticeship to support learning across all relevant areas. Others wanted more learning about the business side of their trade, more focus on dealing with quotes, working efficiently, job planning or product knowledge. More hands-on learning, more information on modern systems and knowing how to fill out the workbooks correctly were also mentioned.

Figure 7. Ratings of how well apprenticeships prepared recent graduate respondents with for trade specific technical tasks and for other aspects of their role (N = 18)¹



3. Core transferrable interpersonal skills



Findings summary

- **Core interpersonal tasks** were highly important for most trade-qualified roles, regardless of whether individuals were business owners or not.
- **Developing constructive working relationships** was important for all trade-qualified individuals. This was a skill gap for a small percentage of recent graduates, and less commonly a skill gap for experienced tradespeople.
- **Training and teaching others** were important for almost all trade-qualified individuals but was a relatively common skill gap, particularly among recent graduates.
- **Developing teams with trust, respect and cooperation** was important for almost all respondents. Developing teams and relationship development skill gaps may be more common among plumbers, but our survey did not have the numbers to confirm this.
- **Coordinating others' work** was also important for almost all trade-qualified individuals. This was an identified skill gap, particularly among recent graduates.
- Overall leadership and people management, and communication (both internal and customer-facing) were potential areas for upskilling noted within free text comments.

3.1. Included skills

The 2025 ConstrucTrend survey asked about the following core transferrable interpersonal tasks:

- Developing constructive working relationships
- Training and teaching others
- Developing teams with trust, respect and cooperation
- Coordinating others' work.

Questions explored how important people thought these were for their roles, self-rated skill level, and the skill level of any recent graduates or experienced tradespeople they employed. We present skill level ratings from employers below.

People could also identify interpersonal skills in the open-ended comments about upskilling needs for themselves or their employees.

3.2. All interpersonal skills included in the survey were rated as highly important for most trade-qualified individuals

Coordinating others, developing relationships, teams, training and teaching were important for almost all respondents (Figure 8).

Although one in four employers identified that recent graduates had skill gaps in coordinating others and training and teaching, these were not common skill gaps among more experienced tradespeople. More than one-quarter of employers identified their recent graduates as having skill gaps around coordinating others (28%) and training others (28%) (Figure 9).

Skill ratings were relatively consistent across trades (Figure 10). Leadership and people management were commonly mentioned areas for upskilling. Specific areas included people management, supervising others, team leadership and site management. One employer described wanting his employees to know *“How to get the best out of labourers and apprentices, dealing with different personalities etc.”*

Small numbers also mentioned training others, communication and more specific interpersonal skills. Some communication upskilling comments focused on customer communication, and others specified internal communication with others in other parts of the business.

Figure 8. Importance of interpersonal skills, self-ratings (n = 207-217)

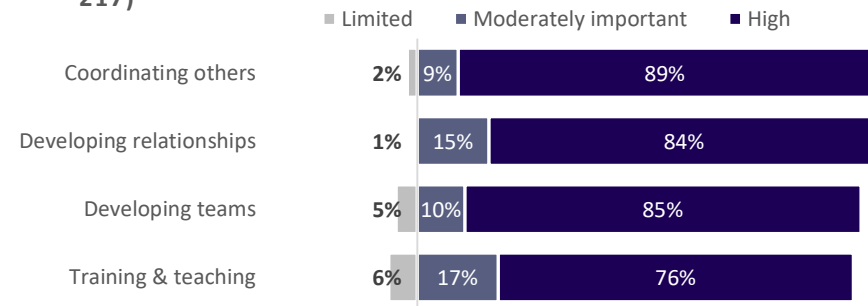


Figure 9. Recent graduate interpersonal skill level, as rated by employers (n = 148-168)

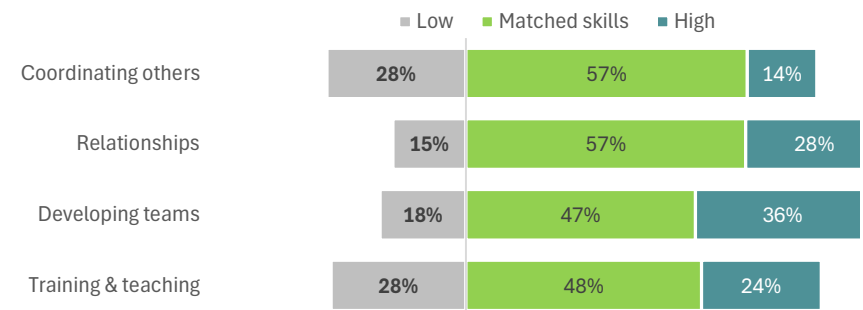
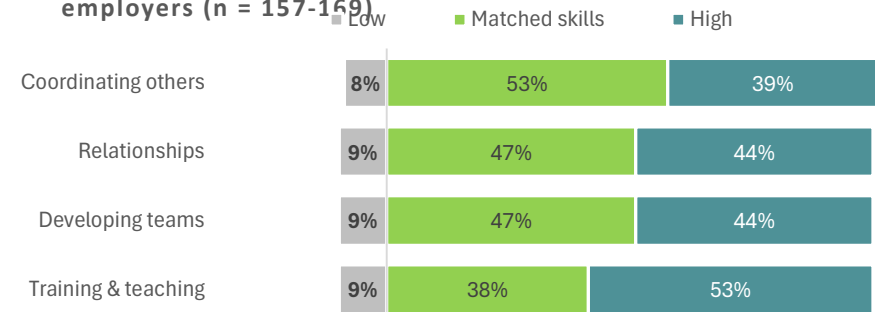


Figure 10. Experienced tradespeople skill level, as rated by employers (n = 157-169)



4. Transferrable accounts and business marketing skills



Findings summary

- **Managing financial accounts, budgets and cashflow** were important to business owners, and were also important to around 60% of tradespeople who were not business owners. Employers identified these as a common skill gap among both their recent graduates (56%) and more experienced tradespeople (33%). Self-rated skill gaps in managing financial accounts appeared to be more common among non-business owners (23%) compared to business owners (13%).
- **Business marketing** was important to over half (60%) of individuals who did not own a business. Around one in five business owners (possibly those who often sub-contract to larger companies) identified business marketing as of limited importance for their role.
- **Employers identified business marketing** as a common skill gap among both their recent graduates (60%) and more experienced tradespeople (38%). Business marketing appeared to be a less common skill gap among carpenters.

4.1. Included skills

The 2025 ConstrucTrend survey asked about the following core transferrable business and accounting tasks:

- Managing financial accounts, budgets and cashflow
- Business marketing.

Questions explored how important people thought these were for their roles, self-rated skill level, and the skill level of any recent graduates or experienced tradespeople they employed. We present skill level ratings from employers below.

The survey also explored, among business owners, how many years after completing their apprenticeship they started a business.

4.2. Accounting and business marketing were important for most business owners, and more than half of non-business owners

Accounts and budgets, and business marketing were important for most trade-qualified respondents, albeit for less people than other skills mentioned. However, it is important to note the seniority-bias of people responding to the survey likely inflates these numbers

Accounts and budgets, and business marketing were also important for more than half of trade-qualified respondents who did not own a business (Figure 11) indicating that some training in these skills may be important regardless of whether people want to go on to become business owners.

Accounts and budgets was important for almost all business owners, and business marketing was important for four out of five business owners (Figure 12). Those that did not identify business marketing as important may be sole traders who primarily acquire work through sub-contracting.

4.3. Skill gaps in accounting and business marketing

Accounts and budgets, and business marketing were common skill gaps among recent graduates (Figure 13) and to a lesser extent experienced trade qualified individuals (Figure 14, next page).

There did not appear to be large differences in financial accounts and business marketing skill gaps between trades (Figure 15).

Figure 11. Importance of accounting and business tasks, all self-ratings (n = 179-195)

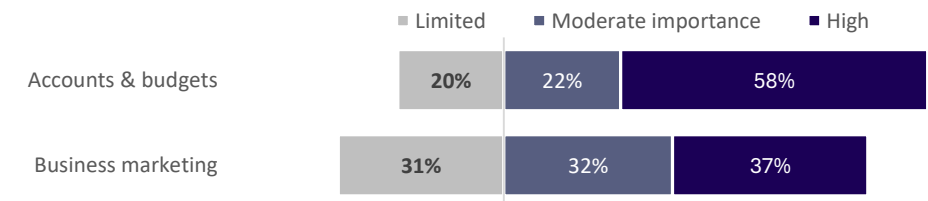


Figure 12. Importance of accounting and business tasks for business owners (n = 85-89) and for trade-qualified individuals who did not own a business (n = 94-106).

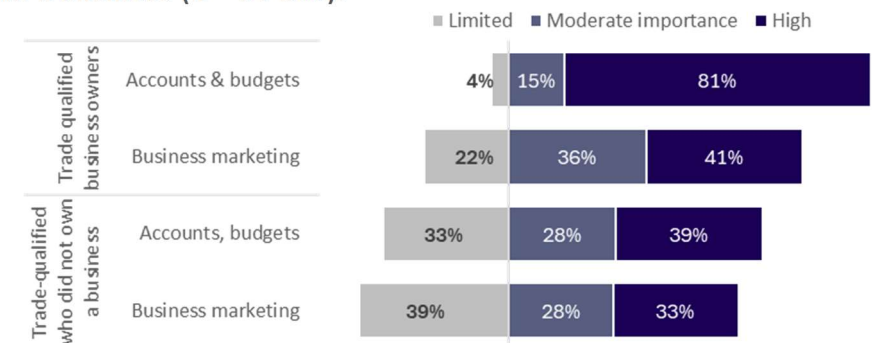
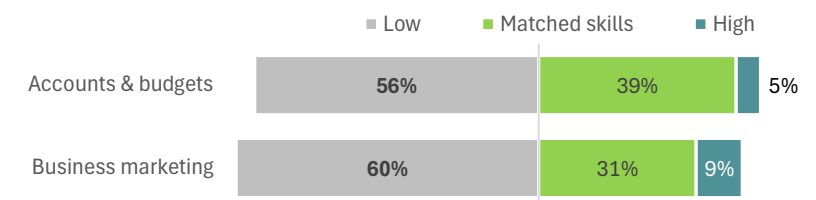


Figure 13. Recent graduate accounting and business marketing skill level, as rated by employers (n = 77-82)



Comments indicated that business skills were often an area people were interested in upskilling for themselves, or for their more experienced tradespeople or recent graduates. Some employers also identified 'cost management or 'commercial understanding' as an area of interest for upskilling staff. Pathways to leadership/ownership was also mentioned.

Comments around accounts and budget upskilling areas for recent graduates included budgets, and back costing. While few recent graduates would be expected to manage the financial accounts of the organisation, a qualitative comment about upskilling noted general budgets and back-costing as an area where they wanted to see their recent graduates upskill. Commercial understanding was a related need for upskilling for recent graduates.

Figure 14. Experienced tradespeople accounting and business marketing skill level, as rated by employers (n = 81-94)

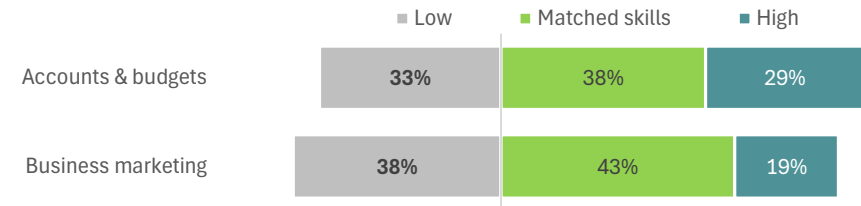
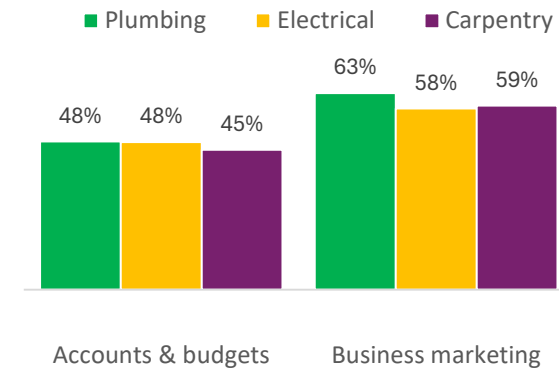


Figure 15. Accounting and business marketing skill-gaps identified by employers, for recent graduates and experienced tradespeople combined, by trade (n = 41-84)



4.3.1. Many tradespeople start a business relatively early in their careers

Around 24% of business owners started a business within two years of finishing their level 4 qualification (Figure 16). Another 22% started their business between three and five years after receiving their qualification.

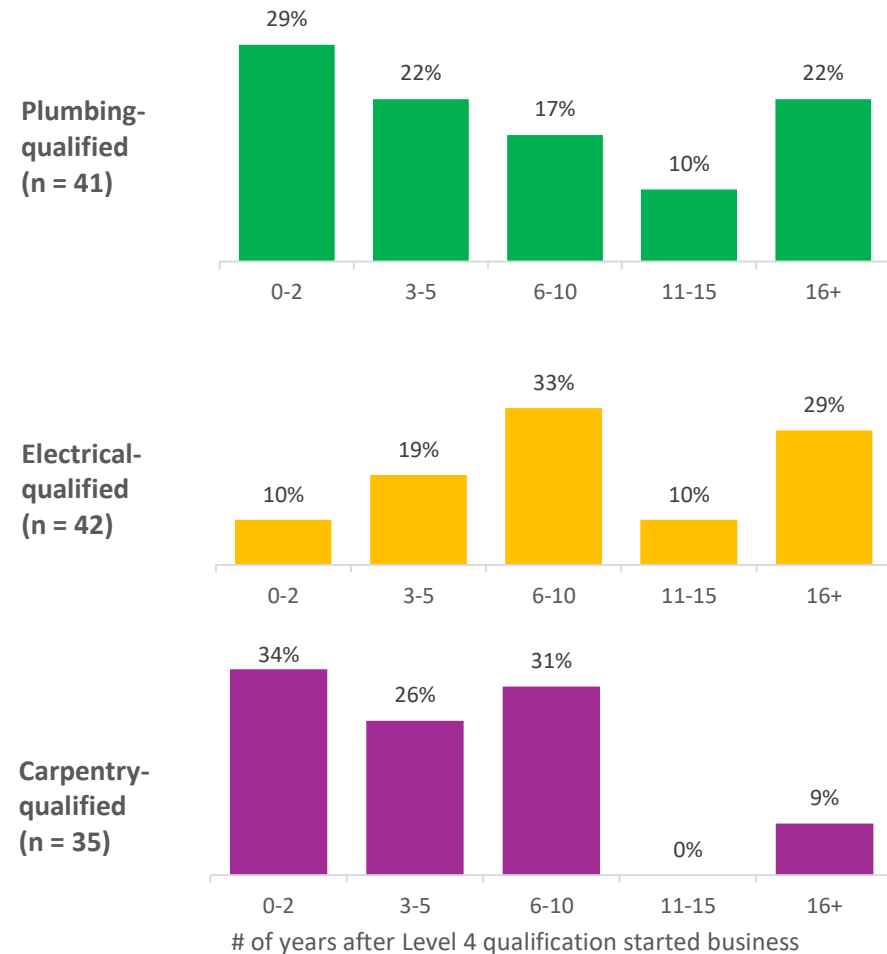
While the numbers of business owners from each trade responding to the survey were small, there appeared to be a distinction between electricians and the other trades, with carpenters and plumbers who started a business being more likely to do so soon after completing their apprenticeships (Figure 17). There are a number of reasons for these apparent differences between trades that could be explored further.

These statistics do not necessarily capture all business owners; those who start a business that fails and subsequently leave the sector will not be reflected in these figures.

Figure 16. Number of years after receiving a Level 4 qualification business owning respondents started a business



Figure 17. Number of years after receiving a Level 4 qualification started a business, by trade.



5. Electrical emerging technology skills

Findings summary

- Many of the electrical technologies in the survey were specialised in different parts of the workforce. Most of the included technology areas were currently important for just over half of the electricians who responded to this survey.¹¹
- Skill gaps and low importance of these technology appeared to more common among those did not work in domestic/residential electrical sector (except for EV charging).
- **EV charging infrastructure** installation was currently important for just over half of respondents. More than one-quarter of people who said EV charging infrastructure installation was moderately or highly important for their roles had skill gaps in this area.
- **Solar panel system installation and repair, renewable energy integration and storage and smart-home systems installation and repair and using AI** presented a similar picture of skill gaps for over a quarter of those who identified the task as at least moderately important for their role.
- **HVAC / Energy retrofits installation and repair** skill gaps were relatively uncommon among electricians who identified HVAC / Energy retrofits as important.
- Responses confirmed a strong interest in technology upskilling among electricians and their employers.
- Most employers were interested in staff upskilling in EV charging, solar panel installation, renewable energy and using AI in the next five years. Around one third of employers wanted their electricians to upskill in smart-home system and HVAC energy retrofits in the next five years.
- Two thirds (68%) of responding electricians had upskilled in one or more of these recent and emerging technology areas in the last 12 months.

¹¹ Smart home systems were important for just under half of the electricians who responded.

¹² ConCOVE. (2025). Future workforce skills for Māori and Pasifika owned businesses in construction. Retrieved from: <https://www.concove.ac.nz/assets/Final-report/Future->

5.2. Included skills

The 2025 ConstrucTrend survey asked about the following electrical emerging technology tasks drawing on recent reports¹² and discussion with stakeholders (professional trade organisations and Waihangā Ara Rau):

- EV charging infrastructure installation
- Solar panel system installation and repair
- Smart-home systems installation and repair
- HVAC / Energy retrofits installation and repair
- Renewable energy integration and storage
- Using AI to improve work productivity.

Questions explored how important people thought these were for their roles and self-rated skill level.¹³ We also asked whether people had done upskilling in the last 12 months, and how they had upskilled. We also asked about employer about their interest in their employees upskilling in each area over the next five years.

The small numbers of electricians responding to the survey mean that these findings should be interpreted as a rough indication of gaps and trends, rather than exact estimates of the prevalence of skill gaps.

[focussed-skills-/Future-focussed-skills-ConCOVE-Amotai-and-Poutama-Trust-Research-Report-2025-FINAL156.pdf](#)

¹³ We did not ask employers to rate skill level as we were concerned about the accuracy of these ratings if they had not observed their employees using these technologies at work.

5.3. Importance of emerging technology

The importance of new and emerging technology skills to current roles varied substantially between electricians responding to the survey. Each technology task was important for around 50-60% of respondents (Figure 18).

5.4. Skill gaps in specific technologies

A substantial group of electricians who said these were technologies were important for their role indicated that they had low skill levels in these technologies (Figure 19). AI for productivity, renewable energy, EV charging, solar panel and smart home systems were the most common areas identified as skill gaps. Skill gaps were more common in those who did not work domestically, though the number of responses was limited.

These numbers may overestimate the actual numbers of people skilled in each area. around half of respondents rated these technologies as not required for their roles and were not asked to rate their skill-level in these technologies.

Further research focussing specifically on these topics across the wider electrical workforce is necessary to fully assess skills and skill gaps.

Figure 18. Importance of new and emerging technology for electrical respondents' roles (n = 36-44).

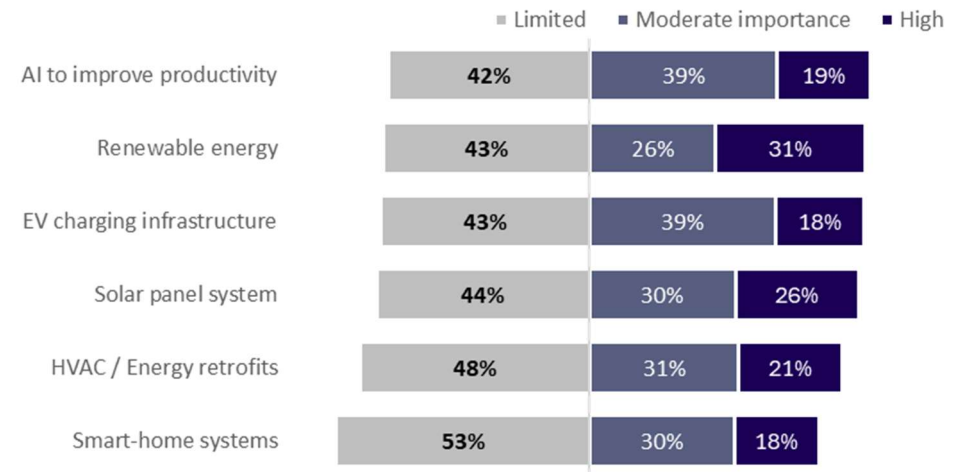
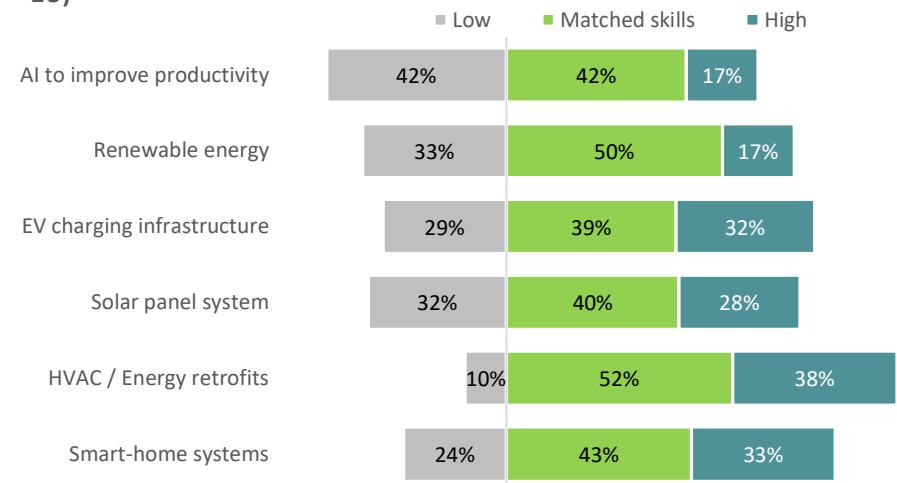


Figure 19. Technology skill self-ratings by electricians who indicated these technologies were important for their roles (n = 21-28)



5.5. The importance of different technology and skill gaps for electricians who worked in the domestic sector

The percentage of electricians identifying most of the technologies in the survey as moderately or highly important appeared greater for those who worked in domestic and residential work than those who did not (Figure 20).

An exception was EV charging infrastructure. Similar proportions of electricians who did and did not work domestically rated this as important.

Skill gaps in all the technological skills (among respondents who said the technology was relevant to their role) appeared to be typically higher among those who did not work in residential or domestic electrical sector (Figure 21). This was also true of EV charging infrastructure.

Figure 20. Importance of emerging electrical technology areas, for those who did and did not do domestic electrical work (n = 10-22)

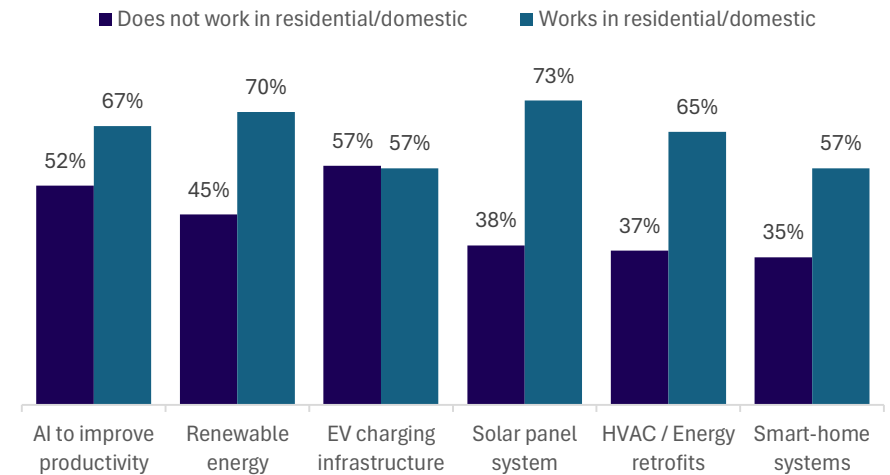
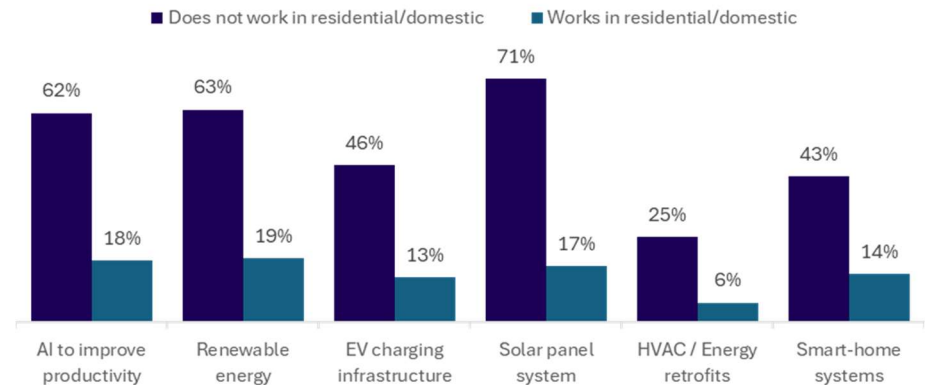


Figure 21. Skill gaps in emerging electrical technology areas, for those who did and did not do domestic electrical work and who said each technology was important for their role (n = 4-18)



5.6. Upskilling interest of employers and upskilling behaviour of electricians

One in every two employers wanted to see staff upskilling in EV charging, solar panel system installation and repair, renewable energy integration and/or using AI in the next five years (Figure 22).

Smart home system installation and repair and HVAC/Energy retrofit installation and repair was important for around one in three employers.

EV charging infrastructure upskilling was common among trade-qualified individuals.

Upskilling interest and behaviour differed between those who worked in domestic/residential electrical, and those who did not (Table 3).

Figure 22. Employer (n = 77) interest in upskilling and percentage of respondents who upskilled in the last 12 months (n = 65).

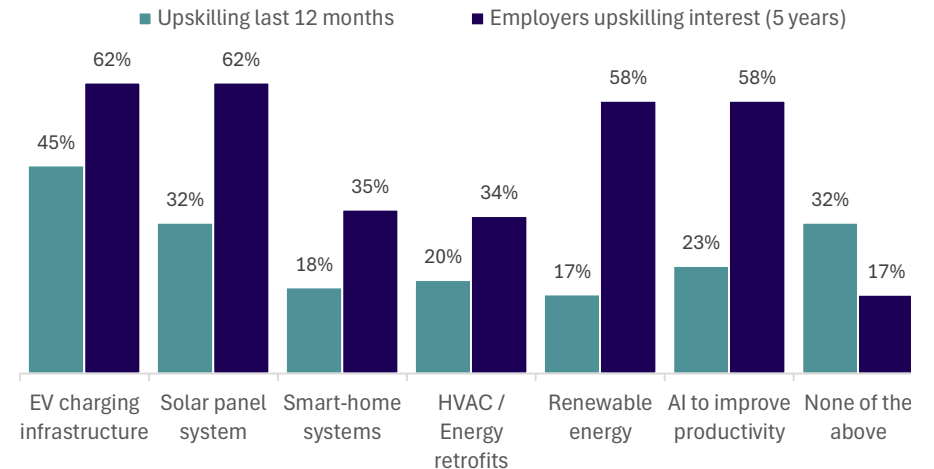


Table 3. Comparison between domestic and non-domestic employer interest in upskilling and respondent upskilling in the last 12 months.

	Upskilled last 12 months		Employers want upskilling	
	Non-domestic	Domestic	Non-domestic	Domestic
n	30	31	44	31
EV charging infrastructure	32%	50%	52%	74%
Solar panel system	23%	40%	50%	77%
Smart-home systems	10%	23%	18%	55%
HVAC / Energy retrofits	3%	33%	23%	45%
Renewable energy	10%	23%	55%	61%
AI	29%	17%	64%	48%
None of the above	39%	30%	20%	13%

5.7. Electricians were upskilling via a variety of mechanisms

Many electricians were self-directing their own learning about recent technologies and learning from colleagues at work. Training courses by product manufacturers and training courses at work were also common sources of upskilling around recent technologies (Figure 23).

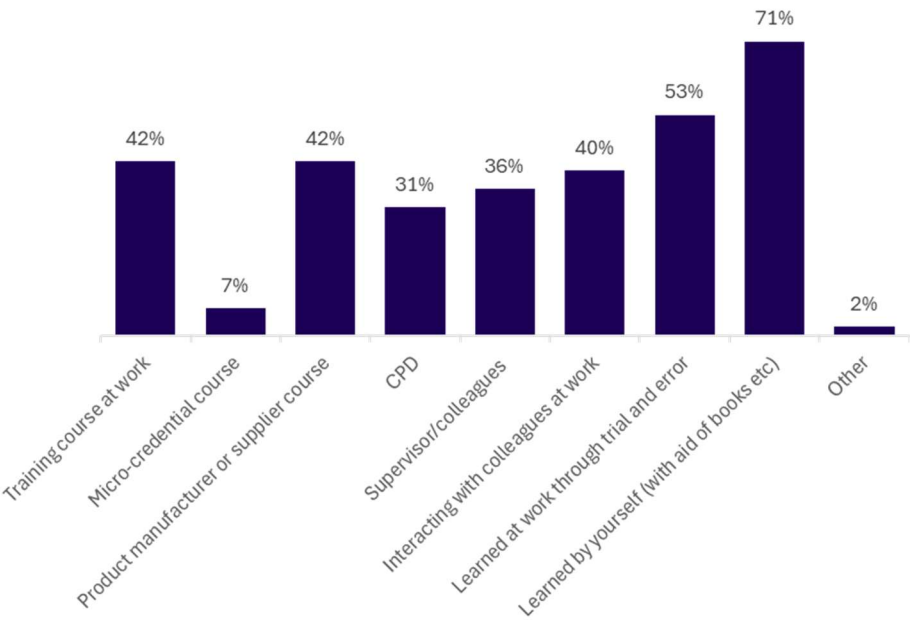
5.8. Comments about upskilling in new and emerging electrical technology

Specific electrical technical skills for personal upskilling included: solar (10), EV (3), HVAC (2), renewable energies (1) and broad comments about the need to upskill around new technologies (2). People also noted other specific electrical technical skills for upskilling; Programmable Logic Controller (PLC) programming (2), testing and inspection (2), hazardous electrical (1), high voltage, mechanical and inspector regulations.

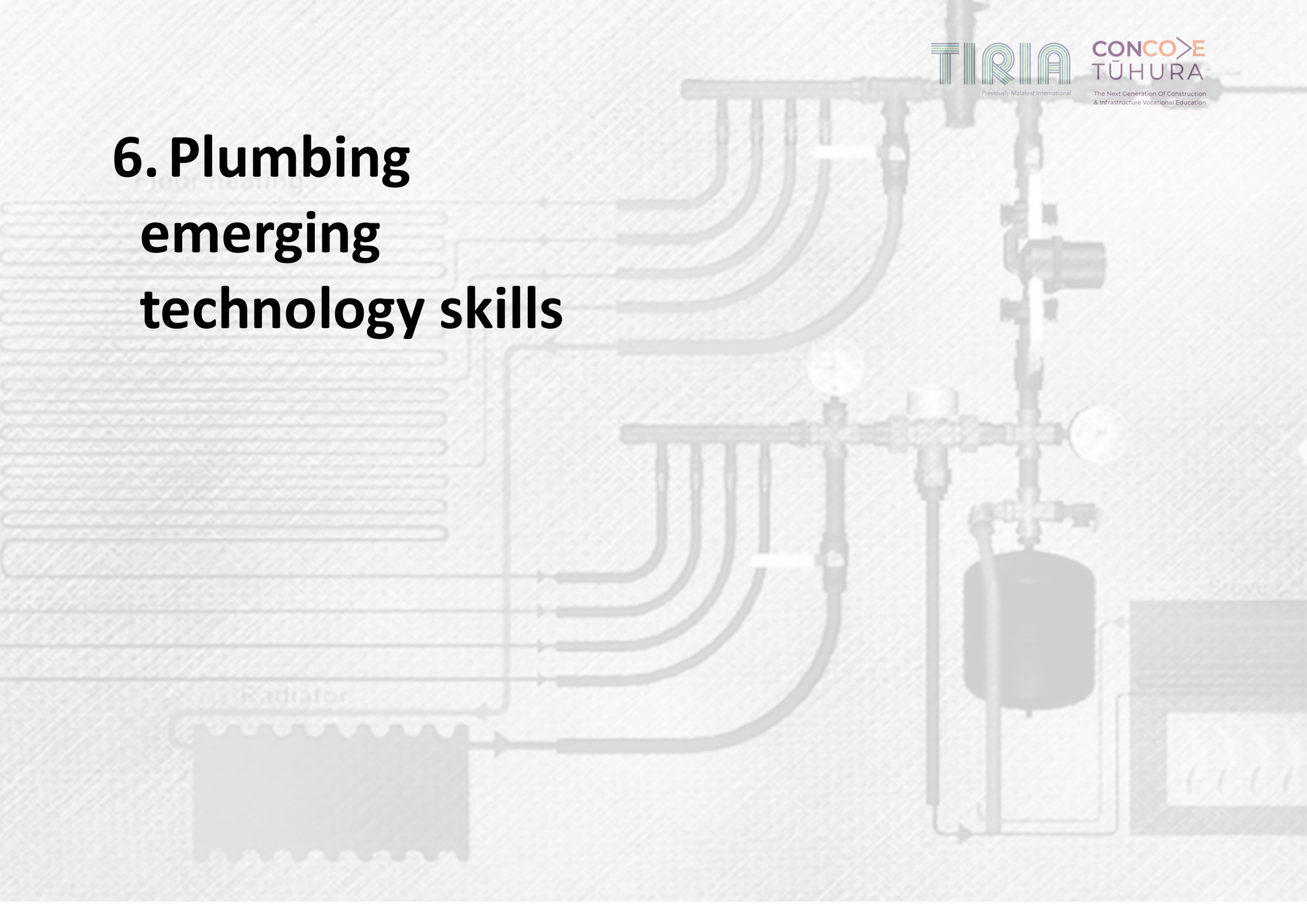
Employers of experienced tradespeople identified the need to upskill in new technology in general, but specific new or emerging technologies were seldomly mentioned. Specific technical skills mentioned included; hazardous electrical (1), electrical technical skills in general (1), new equipment (1), advanced technical skills (1), Electrical endorsements (1) and new applications (apps) (1).

For recent graduates, employers listed more traditional technical skills, rather than new technology were areas for upskilling. One person identified solar energy as a priority for their recent graduates.

Figure 23. Methods of upskilling in the new technologies listed (n = 40)



6. Plumbing emerging technology skills



Findings summary

- Most plumbers identified hot water system installation and repair, grey water management and water conservation and management as important for their roles. Most plumbers also identified they had the skills they needed in these areas. Skill match was particularly common among those who said the skill was important for their role.
- Using AI to improve work productivity, 'Smart' plumbing systems and Hydronic heating systems and commercial gases appeared to be important to fewer plumbers' roles. Around one in every five or six plumbers who said these areas were important for their role also identified that their skills were not currently matched.
- Around half of employers had an interest in their plumbing employees upskilling in each plumbing technology area. More than two thirds of plumbers indicated they had upskilled in at least one of the listed plumbing technology areas in the last year. Upskilling about hot water systems was particularly common.
- Plumbers were upskilling in these areas through a range of mechanisms, most commonly work training courses, product manufacturer courses, and self-teaching or CPD. Fifteen percent of responding plumbers indicated they had completed a micro-credential to upskill in these technology areas in the last 12 months.

6.1. Included skills

The 2025 ConstrucTrend survey asked about the following plumbing emerging technology tasks:

- Hot water system installation and repair
- Using AI to improve work productivity
- Grey water management
- Water conservation and management
- 'Smart' plumbing systems
- Hydronic heating systems
- Commercial gases.

These technologies were selected by drawing on recent reports¹⁴ and discussion with stakeholders (professional trade organisations and Waihanga Ara Rau). While we labelled these as 'recent or emerging technologies', some of these such as water conservation and grey water management have been around for many years.

Questions explored how important people thought these were for their roles and self-rated skill level.¹⁵ We also asked whether people had upskilled in the last 12 months, and how they had upskilled. We also asked employers about their interest in their employees upskilling in each area over the next five years.

¹⁴ E.g. ConCOVE. (2025). Future workforce skills for Māori and Pasifika owned businesses in construction. Retrieved from: <https://www.concove.ac.nz/assets/Final-report/Future-focussed-skills-/Future-focussed-skills-ConCOVE-Amotai-and-Poutama-Trust-Research-Report-2025-FINAL156.pdf>

¹⁵ We did not ask employers to rate skill level as we were concerned about the accuracy of these ratings if they had not observed their employees using these technologies at work.

6.2. Current importance of various emerging technology plumbing tasks

The relative importance of new and emerging technology varied substantially between plumbers responding to the survey.

Most plumbers rated hot water system installation and repair, grey water management and water conservation and management as important to their current role (Figure 24).

Just over half of plumbers rated commercial gases, smart plumbing systems and using AI to improve work productivity as important for their current role.

6.3. Skill gaps in new and emerging plumbing, gasfitting and drainlaying technologies

Skill gaps were relatively uncommon for responding plumbers who identified each area as relevant for their role (Figure 25). Only around one in five of those who identified that AI and commercial gases were important for their roles also had skill gaps in these.

A small number who identified that hydronic heating systems or smart plumbing systems were relevant for their role had skill gaps in these.

Figure 24. Plumbing recent technology importance (n = 38-56).

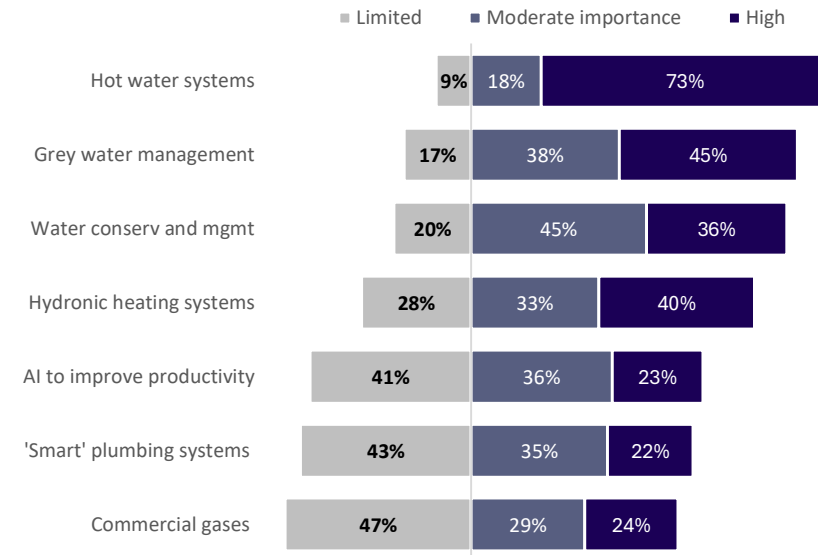
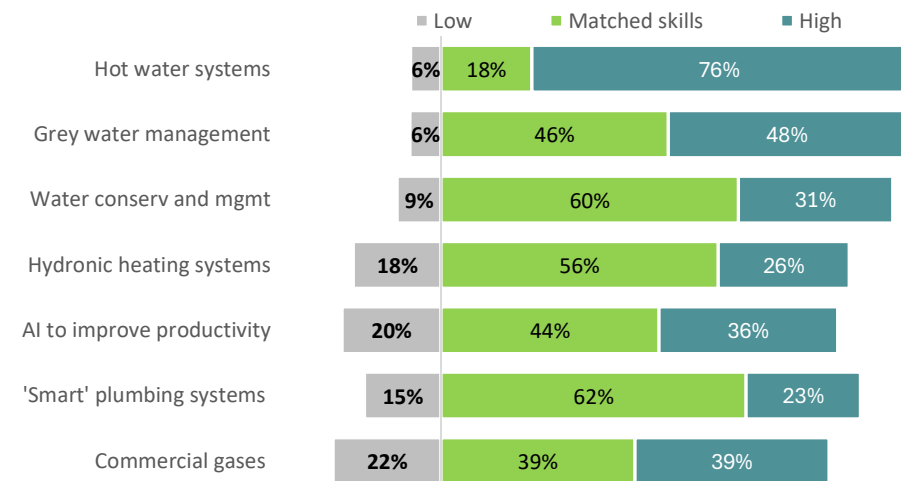


Figure 25. Technology skill ratings for plumbers who indicated these technologies were important for their roles (n = 23-49)



6.4. Upskilling interest of employers and upskilling behaviour of plumbers

Around half of responding plumbers had upskilled in each of the emerging technologies included in the survey (Figure 26).

Around two out of three employers wanted to see their plumbing, gasfitting or drainlaying employees upskill in at least one of the listed technologies in the next five years. One in two wanted to see upskilling around hot water systems.

6.4.1. Multiple methods of upskilling

Plumbers were acquiring skills in these new technologies from a variety of sources. Common sources were work training courses, produce manufacturer courses, CPD, interacting with colleagues, learning at work and learning by themselves. Some had also undertaken micro-credentials in at least one of the plumbing technologies listed (Figure 27).

6.4.2. Comments about upskilling interests on plumbing technology areas

Some open-ended comments touched on new or growing technology areas; new technical equipment (1), hot water technology (2), new technology (1), hydrogen (1) and plumbing natural fibre products (1) and pumped systems (1). Other technical skill areas mentioned were more traditional such as welding (2), gas-fitting (4), installation (1) and appliance services (1).

Figure 26. Upskilling interest of plumbing employers (n = 46) and actual upskilling by plumbers in the last 12 months (n = 69).

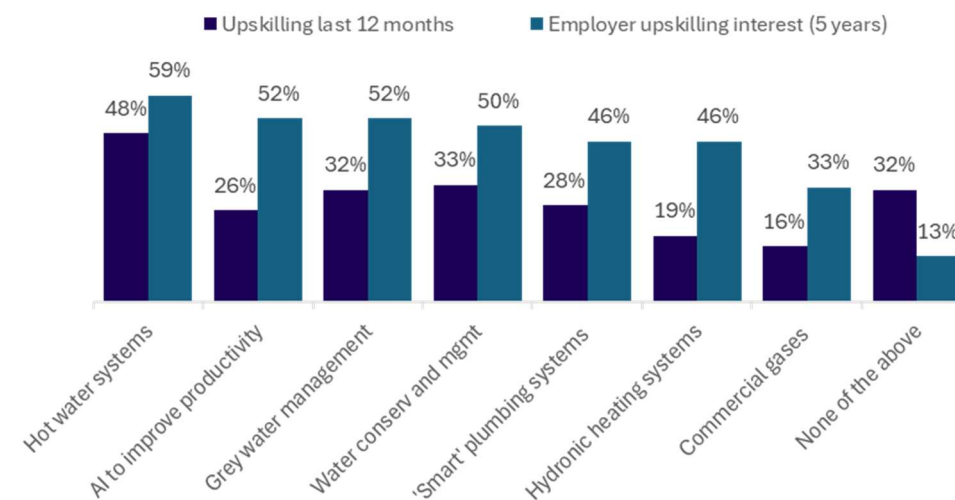
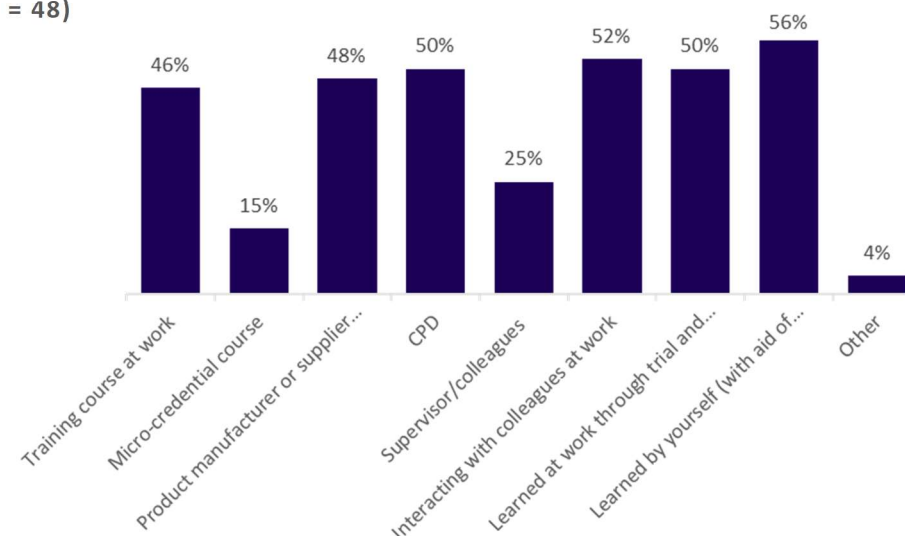
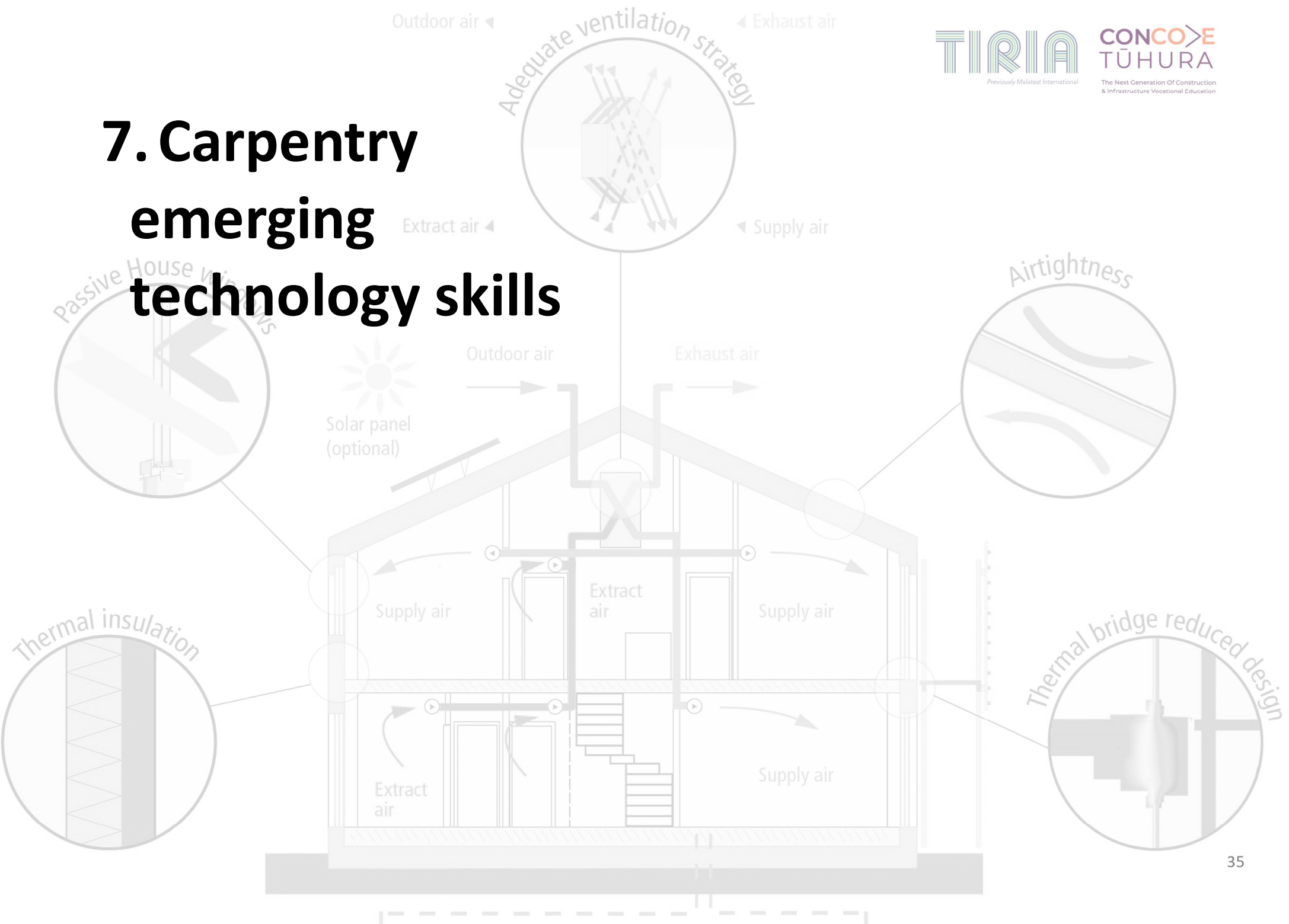


Figure 27. How plumbers had upskilled in the new technologies listed (n = 48)



7. Carpentry emerging technology skills



Findings summary

- Biodegradable and reclaimed materials were important to less than 40% of carpentry respondents roles. On-site modular assembly and passive house building methods were important for nearly two-thirds of carpenters.
- Carpenters who identified a technology area as important for their role typically had skills that matched the requirements of their role. The exceptions were biodegradable and reclaimed materials and AI use. For these areas one in three people who said these skills were currently important also reported low skills.
- The small numbers of carpenters responding to the survey mean that these findings should be interpreted only as an indication of skills gaps.

7.1. Included skills

The 2025 ConstrucTrend survey asked about the following carpentry emerging technology tasks:

- Reading building information models (BIMs)
- Passive house building methods (e.g. airtight construction)
- Assembling modular building components on site

- Offsite manufacturing (creating prefab and modular components)
- Steel frame installation
- Building with biodegradable/reclaimed materials
- Using AI to improve work productivity.

These tasks were selected drawing on recent reports¹⁶ and discussions with stakeholders (professional trade organisations and Waihangā Ara Rau) as areas of interest because they were relatively new, or demand for skills in these areas was expected to increase.

Questions explored how important people thought these were for their roles and self-rated skill level.¹⁷ We also asked whether people had done upskilling in the last 12 months, and how they had upskilled. We also asked about employer about their interest in their employees upskilling in each area over the next five years.

The relatively small number of responses by trade, and high proportion of senior tradespeople in the sample means that the results provide an indication of likely importance and skill gaps but the percentages obtained in this survey are unlikely to be precise.

¹⁶ ConCOVE. (2025). Future workforce skills for Māori and Pasifika owned businesses in construction. Retrieved from: <https://www.concove.ac.nz/assets/Final-report/Future-focussed-skills-/Future-focussed-skills-ConCOVE-Amotai-and-Poutama-Trust-Research-Report-2025-FINAL156.pdf>

¹⁷ We did not ask employers to rate skill level as we were concerned about the accuracy of these ratings if they had not observed their employees using these technologies at work.

7.2. Importance of new building methods and carpentry technology

Reading digital building information models (BIMs) was at least of moderate importance to most carpenters' roles.

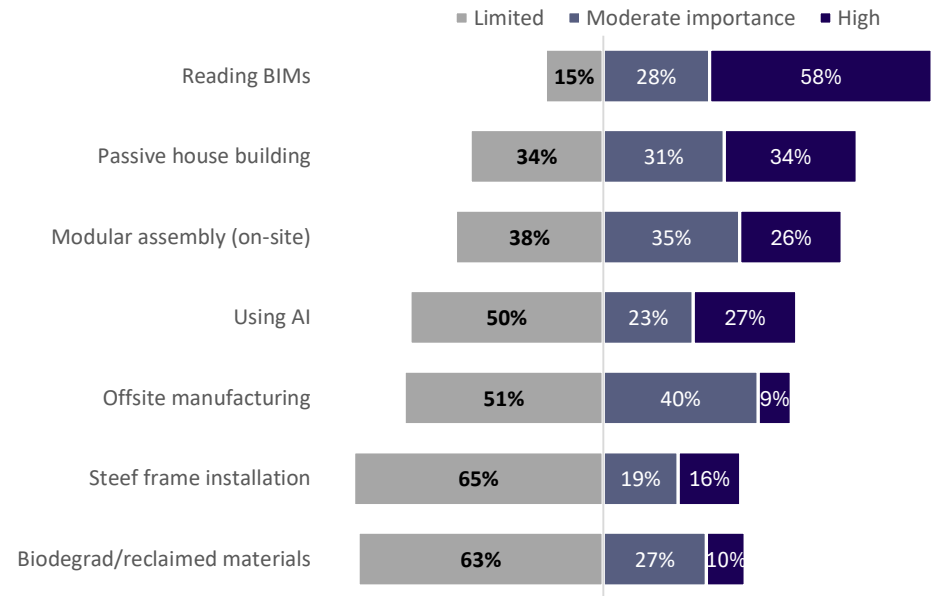
Passive house building methods were important to around two-thirds of roles. While there are few fully passive house builds in New Zealand, this finding indicates many carpenters may be incorporating or wanting to incorporate passive building methods into their work.

Onsite modular assembly was important to the roles of about 60% of responding carpenters. Offsite manufacturing was important for half of these carpenters, however for some this may be because their role depends on this work, rather than because they work in this space.

Biodegradable and reclaimed materials were important for less than 40% of responding carpenters. Steel frame installation was also of limited relevance to most carpenters.

AI was seen as of moderate or high relevance to about half of carpenters.

Figure 28. Importance of emerging carpentry technologies for current role (n = 30-40).



7.3. Working with biodegradable and reclaimed materials and using AI were relatively common skill gaps

Almost everyone who said that passive house building methods were important for their role identified matched skills in this area, with around one in five reporting high skills (Figure 29).

The vast majority of those for whom steel frame installation and modular assembly were important also had matched or high skills.

Skills gaps appeared to be more common for biodegradable and reclaimed materials and AI use. For these areas around a third of people who said these were important to their roles identified their skills as lower than needed.

Skill gaps were more common among the wider group of carpenters that include those for whom these technologies currently were not currently important.

7.4. Many employers were interested in seeing carpenters upskill in AI, reading BIMs and new building methods

Four out of five employers were keen to see their staff upskill in at least one of the listed technology areas in the next five years (Figure 30).

Figure 29. Technology skill ratings for carpenters who indicated these technologies were important for their role (n = 14-31)

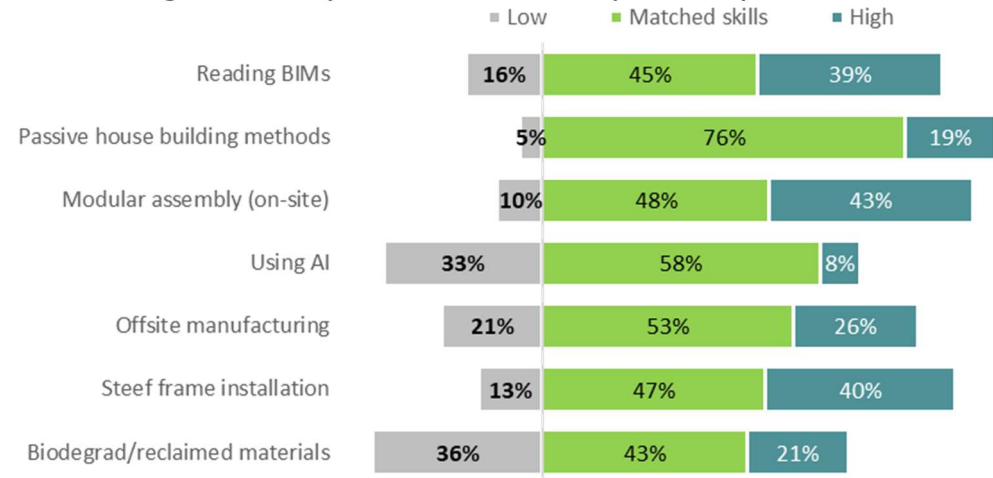
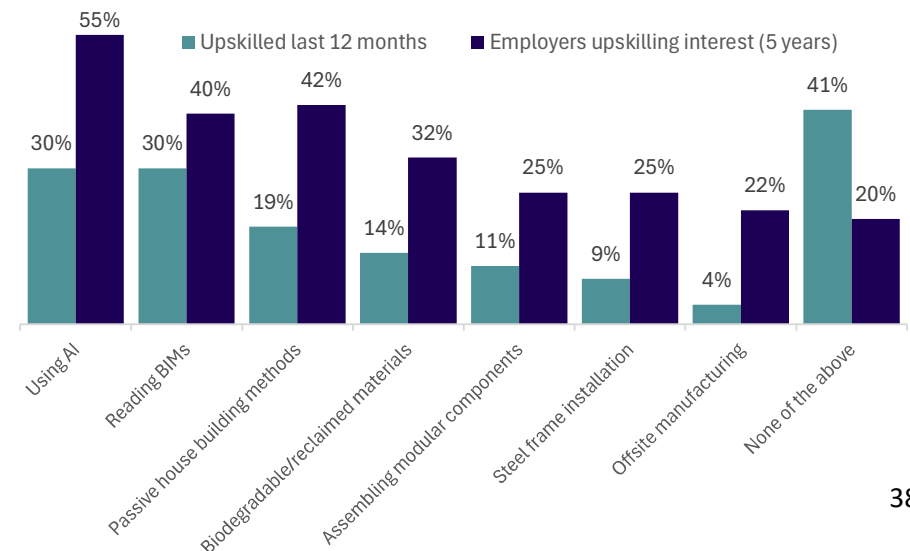


Figure 30. Employer-identified carpentry technology upskilling interests (n = 81) and actual upskilling by responding carpenters in the last 12 months (n =60).

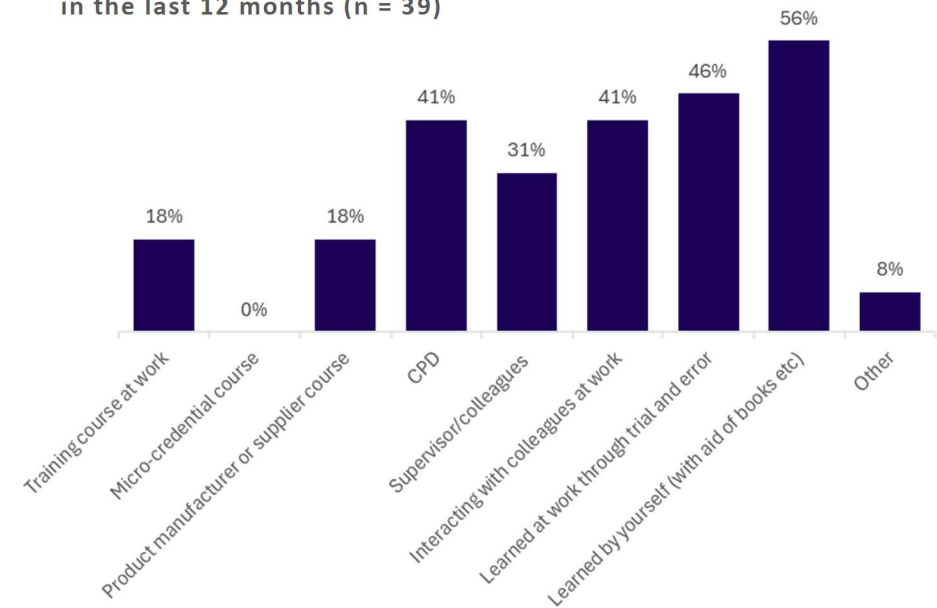


Most carpenters who learnt about the technology areas listed did so by themselves, at work through trial and error, through supervisors or continuing professional development (Figure 31). A small group learnt about at least one of these technologies through a training course at work or a course organised by a product manufacturer or supplier.

7.5. Comments about upskilling interests on carpentry technology areas

Open-ended comments about new technology areas for themselves or carpenters they employed included sustainable building (2), new techniques (2), new technology products (1), new materials (1), modular housing (1), passive housing (1). CAD/BIM (1), surveying (1) and reading plans (2) were also mentioned as technical areas for upskilling.

Figure 31. Methods of upskilling in the emerging technologies listed in the last 12 months (n = 39)



8. Summary of survey findings and implications

8.1. Summary of survey findings

8.1.1. Identified skill gaps

The survey findings provided an encouraging picture of the workforce's technical skills. Employers reported experienced tradespeople generally possessed the required technical skills. Tradespeople continued to develop these skills in the workforce. While around 15% of employers reported recent graduates had technical skill gaps, this reduced to 5% for more experienced tradespeople. No single technical area stood out in comments about specific upskilling interests.

Similarly, results provided a relatively positive picture of interpersonal skills in the workforce. Most employers reported experienced tradespeople had the interpersonal skills they needed for their roles. For some recent graduates, coordinating others and training were areas for development. Communication skills may also be another important area of upskilling. Although the survey did not explicitly ask about communication it was mentioned in comments.

Compliance with legislation and regulations was a relatively common upskilling need with around 20% of employers identifying this as gap among employees. Other challenges highlighted by survey participants included maintaining habits to stay current and finding and interpreting updates easily.

The ability to estimate time, costs, and resources was highly important to most trade-qualified roles, yet employers identified this as a gap for 56% of recent graduates and 38% of experienced tradespeople. While difficulty making accurate time and resource estimates is not specific to tradespeople,¹⁸ incorrect estimation has financial and viability implications for construction businesses. Studies in other sectors suggest techniques like encouraging people to base their predictions on similar past projects can help to reduce underestimation biases.¹⁸

Organising and planning were also ongoing skill gaps, particularly among more experienced tradespeople. This may reflect insufficient training in organising and planning, but it may also reflect likely higher-than-average levels of neurodiversity in the construction workforce¹⁹. Developing or promoting mechanisms for organising and planning that work well for people with neurodiversity may help to address this gap.

Coordinating others and teaching and training were areas for development among around a quarter of recent graduates but were less common skill gaps for experienced tradespeople. While people appear to be developing skills over time, the skills nonetheless appear

¹⁸ Buehler, R., Griffin, D., & Ross, M. (1994). Exploring the "planning fallacy": Why people underestimate their task completion times. *Journal of Personality and Social Psychology*, 67(3), 366–381.

¹⁹ While NZ-specific prevalence information is not available UK research found high prevalence of neurodiversity, particularly ADHD among construction workers. National Federation of Builders. (2023). Neurodiversity in Construction. National Federation of Builders. Available from: <https://builders.org.uk/wp-content/uploads/2023/08/FINAL-NFB-Neurodiversity-Report-JUNE2023.pdf>

to be important in the early years following an apprenticeship and thus warrant consideration within apprenticeships.²⁰

8.1.2. New technologies

Digital and green technologies are likely to become increasingly important, and the ability of New Zealand and construction businesses to harness this technology depends on the workforce having the requisite skills. Ratings of importance indicate that many of these technologies are currently specialised in a portion of the workforce (e.g. solar panels and steel frame installation).

For carpenters, biodegradable and renewable materials appeared to be the most common skill gap. For electricians, renewable energy, electrical vehicle charging infrastructure, solar panel system and smart home systems were common skill gaps particularly for those working domestically. HVAC energy retrofits had similar rates of skill gaps, but not amongst those who indicated these were important for their roles. Among plumbers, hydronic heat systems, smart plumbing systems and commercial gases were the more common skills gaps.

Upskilling options should consider both likely future demand for their skills and viability of different upskilling approaches.

Both interest and skill gaps in using AI to improve productivity were common across the trades. AI is relatively new and evolving technology across sectors in 2025. It has the potential to support tradespeople in areas such as budgeting, invoicing, customer communication, project management and potentially costing, quoting and estimating the time

²⁰ 5-6% of employers identified that these were not relevant to recent graduate roles.

and costs needed for a project. In doing so it offers the potential for increasing productivity and making businesses more economically viable.

8.1.3. Preparation for progression into business ownership

Nearly half of trade-related business owners established their businesses within their first five years after completing their apprenticeships. Accounting and marketing skills were still important for about half of trade-qualified individuals who weren't business owners. These findings highlight the importance of early exposure to business and financial management training. The proportion of early business owners was especially high among carpenters and plumbers responding to the survey. While high rates of early business ownership among carpenters makes sense in the context of the large volume of subcontracting work that require people to be sole traders, the higher-than-expected rate of plumbers starting businesses soon after Level 4 qualification may warrant further research.

Some desirable upskilling areas, such as leadership and management, may fall outside the current scope of what can be included in trade qualifications under existing legislation. However, formal training is not the only solution to addressing skill gaps. Other approaches include self-directed and peer learning, targeted recruitment of individuals with complementary skills, and increased use of technology or external expertise such as accounting services.

8.1.4. Approaches to upskilling

The number of recent graduates completing the survey was too small to draw conclusions about current training. However, the wide range of ratings about how well apprenticeships had prepared them with the skills they needed for their role, indicated people had very different apprenticeship experiences. These experiences may have implications for early employment and potentially later careers.

Skill gaps were more common among recent graduates than among experienced tradespeople. This suggests that individuals develop these skills over time, or those lacking them may leave the industry.

Responses confirmed a strong interest among employers of electricians, plumbers and carpenters for their employees to upskill in many of the areas of recent or emerging technology listed in the survey. At least two-thirds of electricians and plumbers indicated they had upskilled in one of the technology areas included in the survey the last 12 months. Upskilling may have been slightly less common among carpenters, but this may also reflect fewer carpenters reporting skill gaps in most of the technologies listed.

The current specialisation of electrical technologies and certain carpentry and plumbing technologies indicate that it will not be possible for all tradespeople to learn these skills through on-the-job apprenticeship learning. Many employers will not have the skills to teach others so micro-credentials (and/or online learning) are important for these technologies until these skills become more widespread in the workforce. Many participants reported learning about recent technology through self-directed study or by sharing knowledge with colleagues, rather than through formal training.

Advisory group members noted that this trend aligns with low attendance at in-person courses and feedback indicating that tradespeople prefer quick, accessible learning options. Further the wide variety of upskilling interests revealed in the survey speaks to the challenges of addressing skill gaps through course models such as in-house training of staff or in-location training courses which rely on multiple individuals in a location wanting to upskill in the same topic.

While self-directed and peer learning offer flexibility and minimal time commitment, approaches are necessary to ensure quality, consistency and provide formal recognition of training completed.

Formal and informal training is not the only way to address skill gaps. This is noted in the proportion of people self-directing their own learning about new technology and/or learning from other colleagues. Other mechanisms for addressing skills gaps in the workforce include recruitment practices (e.g. encouraging people with existing organisation skills to join the trade) or supplementing skill gaps with technology or external technical expertise such as accountants.

8.1.5. Future research

An analysis of the future demand for these skills is required to translate the analyses into workforce development actions.²¹ In particular, understanding likely future levels of consumer demand for new technology areas is important for identifying whether the percentage of the workforce currently skilled in each area is sufficient, or reflects that substantial further upskilling is required.

NZQA requires training providers to survey apprentices and employers after training; these surveys could be valuable for tracking apprenticeship quality over time. However, the usefulness of these surveys for qualifications development is limited by the lack of standardised questions and centralised data collection. Developing a

set of standardised questions and greater sharing of feedback would be valuable in informing training and qualification development.

The survey results indicate that electricians typically establish their own businesses later in their careers compared to plumbers and carpenters. Further research is recommended to determine whether this trend is consistent across the broader workforce and to identify the factors influencing patterns of business establishment.

Although survey participation was low, this is a common challenge for surveys of these roles. Many organisations reported similar difficulties in gathering survey responses. Lessons from this first ConstrucTrend survey can inform improvements for future rounds.

²¹ The Chartered Institute of Personnel and Development 2025,
<https://www.cipd.org/uk/knowledge/factsheets/workforce-planning-factsheet/>

9. Technical information about the survey

9.1. Appendix One: Detailed methods description

9.1.1. Sector consultation

We engaged stakeholders in survey design through:

Individual discussions: Meetings were held with representatives from each organisation listed below to understand their specific needs and context. ConCOVE supported consultation with an information sheet with us copied in is an introduction.

- Waihangā Ara Rau (9)
- Registered Master Builders Association
- Earn and Learn, Apprenticeship Training Trust, Industry Connect
- Māori and Pasifika Trades Training
- Large construction company (Fletcher Construction)
- National Association of Women in Construction (NAWIC)
- Tertiary Education Commission Tahatū website team
- MBIE
- Plumbers, Gasfitters and Drainlayers Board.

Advisory group: We worked with ConCOVE to identify key stakeholders and invite them to an advisory group. and then two group workshops

were run to inform the design of the survey. One-two subsequent meetings will be held to discuss the survey findings and reporting.

The Stakeholder Advisory group included senior representative/s from: Master Plumbers, Master Electricians, Industry connection for excellence / Skills, New Zealand Certified Builders, Waihangā Ara Rau (Construction WDC), Manukau Institute of Technology, Te Pūkenga work based learning trading as BCITO, Waihangā Ara Rau/ ConCOVE Māori Advisory Group and ConCOVE.

Within these engagements we sought representation from Māori, Pacific and women and to understand the different overlapping work programmes underway at Waihangā Ara Rau.

9.1.2. Questionnaire design

Questionnaire design focused on the prioritised topics and information needs identified in the review of existing surveys and data sources, existing documents, stakeholder discussions and the original project business case.

We reviewed information currently available or being collected by other organisations to identify where stakeholder interests were already being addressed through other sources. We drew on existing validated questions where these exist and are relevant, including the BeLongEng²² survey in Australasia and the CEDEFOP European skills and jobs survey (ESJS)²³ approach in Europe. See the data dictionary for a full description.

²² See <https://www.belongeng.org/>

²³ See <https://www.cedefop.europa.eu/en/projects/european-skills-and-jobs-survey-esjs>

Table 4. Questions adopted from other surveys

Source	Topic	Original wording	ConstructTrend wording
ESJS	Skill importance	On a scale from 0 to 10, where 0 means not at all important, 5 means moderately important and 10 means essential, how important are the following for doing your job? Respond scale: 0 Not at all important 5 Moderately important 10 Essential 99. Don't know	How important are the following for doing your current job? Response scale: 0 Not important – 5 moderately important - 10 essential, Don't know tickbox.
ESJS	Skill level	How would you best describe your skills in relation to what is required to do your job? Please use a scale of 0 to 10 where 0 means your level of skill is a lot lower than required, 5 means your level of skill is matched to what is required and 10 means your level of skill is a lot higher than required. Response scale: 0. My level of skill is a lot lower than required 5 My level of skill is matched to what is required 6. My level of skill is a lot higher than required 99. Don't know	How would you best describe your skills in relation to what is required to do your job? Response scale: 0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox.

ESJS	Upskilling questions	<p>Since you started your job with your current employer, have you done any of the following to improve or acquire new skills?</p> <p>1. You attended training courses (work-based, classroom based and online) 2. Your supervisor taught you on-the-job 3. You learned by interacting with colleagues at work 4. You learned at work through trial and error 5. You learned by yourself (e.g. with the aid of manuals, books, videos or on-line materials) 88. Not applicable 99. Don't know</p>	<p>What activities did you do to develop the skills you selected in the previous question?</p> <p>Response scale:</p> <p><input type="checkbox"/> A training course at work</p> <p><input type="checkbox"/> A formal micro-credential course (short NZQA accredited course)</p> <p><input type="checkbox"/> A training course run by a product manufacturer or supplier</p> <p><input type="checkbox"/> Continuing professional development (CPD)</p> <p><input type="checkbox"/> Your supervisor or colleagues taught you on-the-job</p> <p><input type="checkbox"/> Learned by interacting with colleagues at work</p> <p><input type="checkbox"/> Learned at work through trial and error</p> <p><input type="checkbox"/> Learned by yourself (e.g. with the aid of manuals, books, videos or on-line materials)</p> <p><input type="checkbox"/> Other - Please state</p>
BeLongEng	Apprenticeship feedback	<p>Overall, how well did this engineering qualification prepare you for...</p> <p>...your career?</p> <p>...technical aspects in engineering?</p> <p>...social issues in engineering?</p> <p>...human aspects in engineering?</p> <p>Response scale:</p> <p>1 = Not at all well 2 = Slightly well 3 = Moderately well 4 = Very well 5 = Extremely well</p>	<p>Overall, how well did your level 4 qualification/apprenticeship prepare you for technical aspects of your trade? (e.g. installing, repairing, constructing)</p> <p>Response scale:</p> <p>0 Not at all well, 5 moderately well, 10 extremely well</p> <p>Overall, how well did your level 4 qualification/apprenticeship prepare you for other aspects of your work? (e.g. communication, collaboration, project and time management)</p> <p>Response scale:</p> <p>0 Not at all well, 5 moderately well, 10 extremely well</p>

Where we developed novel questions we employed principles of good question design, including reducing ambiguity as well as avoiding

lengthy and/or double-barrelled questions, double-negatives and leading questions.

9.1.3. Identifying skills to focus on in the survey

Many competency models have very large competency sets that are not possible to test in a survey.

O*NET generalised work tasks where they had listed these for relevant roles: Electrician, Carpenter, Modular home installer, Plumber/gasfitter, Drainlayer, Construction managers, First line supervisors of construction workers, Solar energy installation, Salesperson.

From the O*NET task lists we developed a matrix of the work activities that were relevant across many of these roles. We reviewed this list with gaps identified in Waihanga Ara Rau Workforce Development plan discussions, and earlier stakeholder consultation and sought feedback on the list from the advisory groups. By exploring these skills through the survey we sought to identify how prevalent perceived skill gaps were in the workforce.

Ten task-areas were identified. We also included an item around trade-specific technical skills.

We opted to focus on tasks, rather than specifying specific skills that were important for these skills. Multiple skills may be needed to perform each task e.g. for teaching and training others communication skills, listening skills and planning skills may be required. We chose to ask about tasks rather than individual skills that sit behind these based on learnings from qualification consultations where people found it much easier to consider skills in the context of tasks.

Stakeholders were also interested in identifying the importance of, and potential skill gaps in relation to new, recent or growing technology areas, and within the Waihanga Ara Rau 2025 workplan consultations.

Lists of potential new, recent or growing technologies were prioritised and refined with input from key industry bodies on the advisory group and Waihanga Ara Rau.

9.1.4. Cognitive testing

We tested the survey with nine individuals, including at least two from each trade. This led to additional instructional text and formatting and examples being added to some of the answer categories to aid interpretation and enabling multi-select on additional survey questions to aid interpretation of the questionnaire,. The interest in using the same wording as an existing survey precluded changes being made to many of the survey questions.

9.1.5. Ethics

Ethics approval for the survey was granted for the study for up to three years by the Independent Human Ethics Review Committee (# 2025 IHREC 02).

Ethics included the request to include a data sharing agreement with any future administrators of the survey to utilise the data collected in the 2025 ConstrucTrend survey. Ethics was also granted to ask people if they were happy to be contacted again for the purposes of a future survey and if so, to supply their contact email.

9.1.6. Survey distribution

The questionnaire was administered online using the survey software Alchemer. The survey was open between 31 July and 10 October 2025.

Distribution relied on requests to organisations to share the survey with their contacts or newsletters.

The survey was distributed via:

- Information in five newsletters: Master Plumbers newsletter, Licenced Building Practitioner newsletter, National Association of Women in Construction newsletter, Plumbers Gasfitters and Drainlayers newsletter and the New Zealand Certified Builders newsletter.
- Five organisations shared direct emails with relevant stakeholders they had lists for; BCITO (with carpentry apprentice employers), Earn and Learn (graduates and employers, ConCOVE (sector contacts), Waihanga Ara Rau (sector contacts), Māori and Pacific Trades Training Trust (apprenticeship employers).
- Social media pages: Skills Group, ConCOVE, New Zealand Certified Builders and others.
- Direct emails to around 200 tradespeople identified through website pages.

The survey was promoted via Facebook advertisements, Google advertising and QR code posters in trade-relevant hardware stores in the wider Wellington region.

We explored text message options but did not secure support from organisations to distribute texts. Text distribution for future surveys is likely to increase response numbers.

Distribution relied on requests to organisations to share the survey with their contacts or newsletters. A number of organisations supported this task however buy-in was limited by the large number of concurrent surveys happening at the same time.

9.1.7. Survey prize draw

Respondents could opt to go in the draw to win one of five \$500 Prezzy Card vouchers by completing their details on a separate form at the conclusion of the survey. A random number generator in excel was used to select the five winners who were notified by text and email.

9.1.8. Additional context for low response numbers

Several stakeholders who may have otherwise supported survey distribution were either being disestablished, were focused on other issues, or were being asked to distributed other surveys more directly related to pressing economic issues or Vocational Education sector reforms. Some of the other surveys underway during the ConstrucTrend survey administration are listed in Appendix Two.

9.1.9. Opportunities to improve the ConstrucTrend survey

Increasing response numbers:

- Association with a well-known brand may help to build trust in the survey among those who see advertisements about the survey.
- Schedule the survey for the first half of the calendar year. August is a busy time for sector surveys (particularly in 2025 due to additional surveys related to sector changes).
- Broaden the distribution channels to generate a more representative survey of the workforce. This could include approaching training organisations, albeit some do not retain contact lists of apprenticeships once they complete their course.
- Enable the use of text messages.

Survey content:

- Additional topics that may be useful for future surveys include self-certification skills needed to safely implement new changes in legislation. The legislation and skills required were not sufficiently defined to include in the 2025 survey.
- The 2025 version of the survey asked about technology upskilling methods for the short-listed set of emerging technologies covered in the survey. It would be more comprehensive to ask about upskilling methods for any technologies, not just those listed, however a change would reduce comparability with the current survey.

9.2. Data analysis

9.2.1. Data cleaning

We examined in-survey algorithms to check for ‘straightlining’ in which individuals tick a single response option for most of a survey. None were identified. We also examined the fastest 7% of responses. Checking the content of these responses did not indicate they were computer completed or completed without reading the questions. Most of the 7% of fastest responders completed only the screening questions and were otherwise excluded from the survey. We removed answers from any individuals presented with questions not relevant to their role

We excluded partial responses if the individual only completed the screening questions, and/or did not complete more than 20% of any at least one of the main question sets. Other partial responses were included.

9.2.2. Categorisation of responses

We categorised the 0-10 skill and interest responses into three groups. The categorisations were informed by a review of the response distributions and interpretation of the questions in the cognitive testing phase.

‘Other’ categories for trade qualifications, roles and demographics (region, ethnicity) were re-categorised into relevant categories.

Figure 32. Distribution for employer-ratings of recently qualified employees - Skills for using apps or computer software

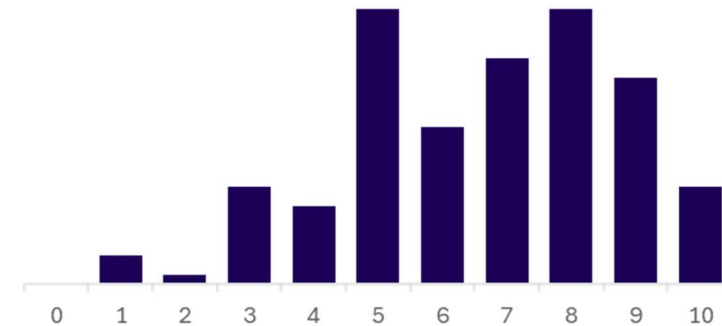


Figure 33. Self-rated skills for estimating the time, costs and resources for a project

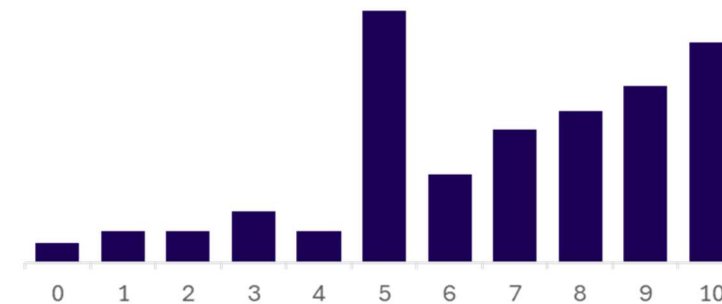
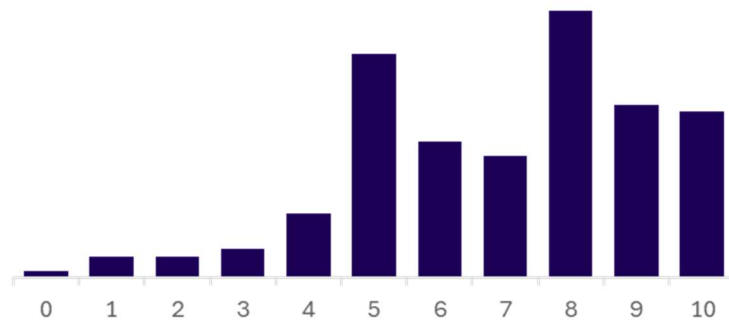


Figure 34. Employer-rated experienced tradespeople skills for estimating the time, costs and resources for a project



9.2.3. Inability to weight responses

We had initially intended to weight survey responses to correct for potential biases in the survey results. However, the lack of availability of demographic information on people in these trades made it difficult to assess what the response demographics were in the population to use as a basis for corrections.

The inability to correct for the over-representation of senior tradespeople in the survey is mitigated to some extent by the inclusion of employer-ratings of both recent graduates and more experienced tradespeople.

9.2.4. Focus on descriptive statistics

The low response rates and uncertainty over the extent findings could be extrapolated meant the data did not meet the assumptions needed for inferential statistics to identify where apparent differences between groups or skills were statistically significant.

9.3. Appendix Two: Detailed respondent demographics

Table 5. Number of respondents by qualification group

Level 4 qualification	n respondents	% respondents
Completed to end of survey	291	81.5%
Stopped part-way through the survey	66	18.5%
Total answering question	357	

Table 6. Number of respondents by qualification group

Level 4 qualification	n respondents	% respondents
Carpentry	116	32%
Plumbing	81	23%
Electrical	124	35%
None	34	10%
Total answering question	357	

Table 7. Number of respondents by specific qualification type

Qualification	n respondents	% of respondents
Carpentry	96	27%
Carpentry (equivalent experience)	33	9%
Electrical	124	35%
Plumbing	67	19%
Gasfitting	49	14%
Drainlaying	57	16%
Other	13	4%
None	34	10%
Total answering question	357	

Table 8. Trades employed by respondents

Employers o	n respondents	% of respondents
Carpenters	83	23%
Electricians	100	28%
Plumbers	50	14%
Gasfitters	40	11%
Drainlayers	49	14%
None	134	38%
Total answering question	357	

Table 9. Time since qualification (n = 298)

Time since qualification	n respondents	% of respondents
Less than two years ago	25	8%
2-5 years ago	34	11%
6-10 years ago	34	11%
10+ years ago	205	69%
Total answering question	298	

Table 10. Respondents by role group²⁴

Role	n respondents	% of respondents
Tradesperson	123	34%
Business owner	140	39%
Business owner (not working on tools)	32	9%
Manager	70	20%
Site supervisor or foreman	30	8%
Other	28	8%
Total answering question	357	

Table 11. Carpentry respondents by industry (n = 160)

Industry	n respondents	% of respondents
Residential	97	61%
Commercial	57	36%
Offsite construction	13	8%
Other	33	21%
Total answering question	160	

Table 12. Electrician respondents by industry (n = 107)

Industry	n respondents	% of respondents
Residential/Domestic	52	49%
Commercial	44	41%
Industrial	50	47%
Other	14	13%
Total answering question	107	

Table 13. Plumbing respondents by industry (n = 64)

Industry	n respondents	% of respondents
Residential/Domestic	52	81%
Commercial	25	39%
Industrial	13	20%
Other	1	2%
Total answering question	64	

Table 14. Ethnicity of respondents (n = 278)

Ethnicity (group)	n respondents	% of respondents
European	38	91.7%
Māori	11	13.7%
Pacific	8	4.0%
Asian	1	2.9%
Middle East, Latin America, and Africa (MELLA)	4	0.4%
Total answering question	282	

²⁴ Common 'other' roles were administrators, educators and specific types of managers.

Table 15. Gender of respondents (n = 286)

Gender	n respondents	% of respondents
Male	255	89%
Female	29	10%
Another gender	2	0.7%
Total answering question	286	

Table 16. Respondents by region (n = 286)

Region	n respondents	% of respondents
NZ/multi-region	4	1%
Northland Te Tai Tokerau	15	5%
Auckland Tāmaki Makaurau	50	17%
Waikato	26	9%
Bay of Plenty Te Moana-a-Toi	19	7%
Gisborne Te Tairāwhiti	3	1%
Hawkes Bay Te Matau-a-Māui	13	5%
Taranaki	11	4%
Manawatū-Whanganui	9	3%
Wellington Te Whanganui-a-Tara	60	21%
Tasman Te Tai-o-Aorere	5	2%
Nelson Whakatū	3	1%
Marlborough Te Taihu-o-te-waka	4	1%
West Coast Te Tai Poutini	4	1%
Canterbury Waitaha	35	12%
Otago Ōtākou	18	6%
Southland Murihiku	7	2%
Total answering question	286	

9.4. Appendix Three: Other data and interest areas

9.5. Existing workforce data and programmes

A range of existing projects collect information on the construction sector workforce to inform workforce development activities.

Waihanga Ara Rau: Workforce Information Platform (WIP)

- The workforce information platform includes information about the construction and infrastructure workforce. It is organised by industry group (construction, infrastructure and services) and by strategic group (access trade, onsite construction, offsite construction, electrotechnology (mostly made up of electricians), plumbing, gasfitting and drainlaying, and finishing trade).
- Data includes estimates of workforce supply and surplus by regions, numbers of new entrants, anticipated work, workforce labour supply, pathways in and out of the sector, qualification levels, retention, tenure, etc.
- To estimate workforce demand the WIP takes information about approved construction projects across New Zealand each month and applies a formula for the number of workers that would be required to deliver on projects to estimate workforce demand.

Tertiary Education Commission shared data platform

- The Shared Data platform converts the Tertiary Education Commission (TEC) learner data into a learner dashboard,

covering learners across all the Workforce Development Councils. It includes demographics, completion rates and trends over time, by industry group, specific qualification, region etc. It also houses information about the workforce and industry, albeit for construction the WIP is more comprehensive. It can be accessed here:

9.5.1. Various sector surveys

Other surveys in Construction at a similar time in 2025 include:

- Consultation on changes to the vocational education sector
- Consultation on changes to qualifications in construction
- The Mates bi-annual survey of wellbeing in the construction sector
- A survey of discrimination and harassment, cofounded by ConCOVE and BRANZ.
- Training provider collect information from graduates and employers regularly as part of ongoing NZQA accreditation, however the information is not collected consistently, or shared with the organisations responsible for standards setting.

9.6. Topics of interest to stakeholders not included in the 2025 survey

The below table includes a list of topics considered for the survey that were not included in the final version. The main reasons for non-inclusion were scope, time-constraints relative to interest levels, length

of questions needed to cover the topics with any validity and overlap with other projects. This list will be kept and added to as part of the documentation for this project.

Topic	Description
Wellbeing	Wellbeing is covered well by bi-annual Mates in Construction survey. https://mates.net.nz/research/
Workplace culture, harassment, bullying	Culture concerns mentioned in discussions are covered by the discrimination and harassment run by Axon consulting, BranZ and ConCOVE in 2025. https://www.branz.co.nz/social-economics-industry-research/how-work/
Retention activities/business practices	The NZ Business Operations survey tracks supports for workers, including support for wellbeing and flexible working. Data is collated and tracked by industry, allowing users to see how construction compares to other industries. https://www.stats.govt.nz/information-releases/business-operations-survey-2023/
Pastoral care of apprentices	Waihangā Ara Rau is currently working on a project about what good pastoral care should look like. Once defined this could be a topic area for a future survey.

Skills needed for self-certification	Government self-certification plans will generate the need for new skills and knowledge, however the specifics haven't been determined yet. This is a potential topic for future surveys.
Information provided by career advisors about trades	Outside scope for this survey as a different audience would need to be surveyed to understand this topic.
Methods for assessing competency	Outside of scope. Further, competency assessment and hours are heavily determined by the framework and legal definitions surrounding apprenticeships which would require a much larger piece of work to assess.
Knowledge of available career development options	Outside scope for this survey as a different audience would need to be surveyed to understand this topic.
Ethical behaviours among the workforce (MBIE)	Outside of scope. Further, strong self-report and social desirability bias means feedback from customers would provide a more accurate reflection of these behaviours.

9.7. Appendix Four: Reference list

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9.8. Appendix Five: Survey materials

9.8.1. 2025 ConstrucTrend Questionnaire

Kia ora! Welcome to ConstrucTrend!

ConstrucTrend is a survey of qualified carpenters, electricians, plumbers, gasfitters, drainlayers and people who employ them. This ten-minute survey will ask about:

your role and your skills

skills and training needs of your employees (if applicable).

Your feedback is important because it helps training providers and policy makers understand how skill needs are changing. The information will help shape training for tradespeople in New Zealand.

At the end you can enter a prize draw for one of five \$500 prezzy cards.

The survey is voluntary:

You should only do the survey if you want to.

You can skip questions or stop at any time.

Your answers to the survey will be kept safe and confidential. You can find more information [here](#). You can email Jen on info@tiria.nz if you want to ask any questions. The project is funded by the Construction and Infrastructure Centre of Vocational Excellence (ConCOVE), hosted by MIT Te Pūkenga and run by the research organisation TIRIA.

If you consent to taking part in the survey, please click the 'Next' button or arrow below.

Tell us about your role

Page exit logic: Skip / Disqualify LogicIF: ((#2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Other - Write In", "None of the above") AND #4 Question "Do you employ any qualified:" is one of the following answers ("I do not employ people in any of these trades")) OR #5 Question "Do you currently live in New Zealand?" is one of the following answers ("No")) **THEN:** Disqualify and display: "Sorry, based on your responses you do not qualify to take this survey. We appreciate your interest."

Page exit logic: Skip / Disqualify LogicIF: #4 Question "Do you employ any qualified:" is not one of the following answers ("Carpenters", "Electricians", "Plumbers", "Gasfitters", "Drainlayers") **THEN:** Jump to [page 10 - Tasks important for your role](#)

1) Which title best describes your current role?*

☐ Tradesperson (e.g. Carpenter, Electrician, Plumber)

☐ Business owner and tradesperson

☐ Business owner (not working on the tools)

☐ Manager

☐ Site supervisor or foreman

☐ Other - Write In (Required):

*

Logic: Show/hide trigger exists.

2) Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?*

☐ Carpentry

☐ Carpentry experience equivalent to a Level 4 carpentry qualification

☐ Electrical trade or engineering

☐ Plumbing

☐ Gasfitting

☐ Drainlaying

☐ Other - Write In: _____

☐ None of the above

Logic: Show/hide trigger exists. Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Carpentry", "Electrical trade or engineering", "Plumbing", "Gasfitting", "Drainlaying")

3) How many years ago did you complete your Level 4 qualification/apprenticeship?

Think about your first relevant apprenticeship if you have more than one.

☐ Less than two years ago

☐ 2-5 years ago

☐ 6-10 years ago

☐ 10+ years ago

Logic: Show/hide trigger exists.

4) Do you employ any qualified:*

☐ Carpenters

☐ Electricians

☐ Plumbers

☐ Gasfitters

☐ Drainlayers

☐ I do not employ people in any of these trades

5) Do you currently live in New Zealand?*

☐ Yes

☐ No

Page exit logic: Skip / Disqualify LogicIF: #6 Question " Do you have any recently trade-qualified (less than 2 years post apprenticeship) carpenters, electricians, plumbers, gasfitters or drainlayers working for you? " is one of the following answers ("No") **THEN:** Jump to [page 6 - \(untitled\)](#)

Logic: Hidden unless: #4 Question "Do you employ any qualified:" is one of the following answers

("Carpenters", "Electricians", "Plumbers", "Gasfitters", "Drainlayers")

6) Do you have any recently trade-qualified (less than 2 years post apprenticeship) carpenters, electricians, plumbers, gasfitters or drainlayers working for you?

() Yes

() No

7) Thinking about these recently trade-qualified staff, how would you rate their skills in the following areas? *Please rate their skills relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Trade-specific technical tasks (e.g. installing, repairing, constructing) 0 _____ [] _____ 10 [] Not applicable to their roles

Developing constructive working relationships 0 _____ [] _____ 10 [] Not applicable to their roles

Training and teaching others 0 _____ [] _____ 10 [] Not applicable to their roles

Developing teams with trust, respect and cooperation 0 _____ [] _____ 10 [] Not applicable to their roles

8) Thinking about your recently trade-qualified staff, how would you rate their skills in the following areas? *Please rate their skills relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Coordinating others work 0 _____ [] _____ 10 [] Not applicable to their roles

Organising, planning and prioritising work 0 _____ [] _____ 10 [] Not applicable to their roles

Estimating the time, costs and resources for a project 0 _____ [] _____ 10 [] Not applicable to their roles

9) Thinking about your recently trade-qualified staff, how would you rate their skills in the following areas? *Please rate their skills relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Compliance with laws, regulations and standards	0 _____ [<input type="checkbox"/>] _____ 10 [<input type="checkbox"/>] Not applicable to their roles	
Using apps or computer software	0 _____ [<input type="checkbox"/>] _____ 10 [<input type="checkbox"/>] Not applicable to their roles	
Managing financial accounts, budgets and cashflow	0 _____ [<input type="checkbox"/>] _____ 10 [<input type="checkbox"/>] Not applicable to their roles	
Business marketing	0 _____ [<input type="checkbox"/>] _____ 10 [<input type="checkbox"/>] Not applicable to their roles	

10) Are there any areas that you've noticed recently qualified tradespeople need further upskilling or retraining in? If so, what are they?

11) Approximately how many recently trade-qualified people do you employ in the following roles? (up to two years post qualification)

Carpenters: _____

Electricians: _____

Plumbers, gasfitters and/or drainlayers: _____

Page exit logic: Skip / Disqualify LogicIF: #12 Question "Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?" is one of the following answers ("No") **THEN:** Jump to [page 10 - Tasks important for your role](#)

Logic: Show/hide trigger exists. Hidden unless: #4 Question "Do you employ any qualified:" is one of the following answers ("Carpenters", "Electricians", "Plumbers", "Gasfitters", "Drainlayers")

12) Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?

() Yes

() No

Logic: Hidden unless: #12 Question "Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?" is one of the following answers ("Yes")

13) For these experienced trade-qualified staff, how would you rate their skills in the following areas? *Please rate their skill level relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Trade-specific technical tasks (e.g. installing, repairing, constructing)	0 _____ [] _____ 10 [] Not applicable to their roles
Developing constructive working relationships	0 _____ [] _____ 10 [] Not applicable to their roles
Training and teaching others	0 _____ [] _____ 10 [] Not applicable to their roles
Developing teams with trust, respect and cooperation	0 _____ [] _____ 10 [] Not applicable to their roles

Logic: Hidden unless: #12 Question "Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?" is one of the following answers ("Yes")

14) For these experienced trade-qualified staff, how would you rate their skills in the following areas? *Please rate their skill level relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Coordinating others' work	0 _____ [] _____ 10 [] Not applicable to their roles
Organising, planning, and prioritising work	0 _____ [] _____ 10 [] Not applicable to their roles

Estimating the time, costs and resources for a project	0 _____ [] _____ 10 [] Not applicable to their roles
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Logic: Hidden unless: #12 Question "Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?" is one of the following answers ("Yes")

15) For these experienced trade-qualified staff, how would you rate their skills in the following areas *Please rate their skill level relative to what is required to do their jobs.*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Compliance with laws, regulations and standards	0 _____ [] _____ 10 [] Not applicable to their roles
Using apps or computer software	0 _____ [] _____ 10 [] Not applicable to their roles
Managing financial accounts, budgets and cashflow	0 _____ [] _____ 10 [] Not applicable to their roles
Business marketing	0 _____ [] _____ 10 [] Not applicable to their roles

16) Are there any upskilling needs for your experienced trade-qualified staff? If so, what are they?

Logic: Hidden unless: #12 Question "Do you have trade-qualified carpenters, electricians, plumbers, gasfitters or drainlayers with more than 2 years post-apprenticeship experience?" is one of the following answers ("Yes")

17) Approximately how many qualified tradespeople do you employ with more than 2 years of experience post-apprenticeship?

Carpenters: _____

Electricians: _____

Plumbers, gasfitters, drainlayers: _____

Page exit logic: Skip / Disqualify Logic**IF:** #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("None of the above") **THEN:** Jump to [page 16 - Demographics](#)

Logic: Hidden unless: #4 Question "Do you employ any qualified:" is one of the following answers ("Electricians")

18) Do you want to see your electrical staff upskill in any of the following areas in the next five years?

☐ EV charging infrastructure installation

☐ Solar panel system installation and repair

☐ Smart-home systems installation and repair

☐ HVAC / Energy retrofits installation and repair

☐ Renewable energy integration and storage

☐ Using AI to improve work productivity

☐ None of the above

Logic: Hidden unless: #4 Question "Do you employ any qualified:" is one of the following answers ("Carpenters")

19) Do you want to see your carpentry/building staff upskill in any of the following areas in the next five years?

☐ Steel frame installation

☐ Offsite manufacturing (creating prefab. and modular components)

☐ Assembling modular building components on site

☐ Building with biodegradable/reclaimed materials

☐ Read building information models (BIMs)

☐ Add information to building information models

☐ Passive house building methods

☐ Using AI tools to improve work productivity

☐ None of the above

Logic: Hidden unless: #4 Question "Do you employ any qualified:" is one of the following answers ("Plumbers", "Gasfitters", "Drainlayers")

20) Do you want to see your plumbing, gasfitting or drainlaying staff upskill in any of the following areas in the next five years?

☐ Water conservation and management

☐ Grey water management

☐ Hydronic heating systems

☐ Hot water system installation and repair

☐ 'Smart' plumbing systems e.g. app connected systems

☐ Commercial gases (e.g. oxygen, nitrogen, argon, carbon dioxide, hydrogen)

☐ Using AI to improve work productivity

☐ None of the above

Tasks important for your role

21) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

Trade-specific technical tasks
(e.g. installing, repairing, constructing) 0 _____ [] _____ 10 []
 Don't know

Developing constructive working relationships 0 _____ [] _____ 10 []
 Don't know

Training and teaching others 0 _____ [] _____ 10 []
 Don't know

Developing teams with trust, respect and cooperation 0 _____ [] _____ 10 []
 Don't know

22) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

Organising, planning, and prioritising work 0 _____ [] _____ 10 []
 Don't know

Coordinating others work 0 _____ [] _____ 10 []
 Don't know

Estimating the time cost and resources for a project 0 _____ [] _____ 10 []
 Don't know

23) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

Compliance with laws, regulations and standards 0 _____ [] _____ 10 []
 Don't know

Using apps or computer software 0 _____ [] _____ 10 []
Don't know

Managing financial accounts, budgets and cashflow 0 _____ [] _____ 10 []
Don't know

Business marketing 0 _____ [] _____ 10 []
Don't know

Your skillsets

24) For each area, how would you best describe your skills in relation to what is required to do your job?
Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Trade-specific technical tasks (e.g. installing, repairing, constructing) 0 _____ [] _____ 10 [] Not applicable to my role

Developing constructive working relationships 0 _____ [] _____ 10 [] Not applicable to my role

Training and teaching others 0 _____ [] _____ 10 [] Not applicable to my role

Developing teams with trust, respect and cooperation 0 _____ [] _____ 10 [] Not applicable to my role

25) For each area, how would you best describe your skills in relation to what is required to do your job?

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Organising, planning, and prioritising work 0 _____ [] _____ 10 [] Not applicable to my role

Coordinating others work 0 _____ [] _____ 10 [] Not applicable to my role

Estimating the time, costs and resources for a project 0 _____ [] _____ 10 [] Not applicable to my role

26) For each area, how would you best describe your skills in relation to what is required to do your job?

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Compliance with laws, regulations and standards 0 _____ [] _____ 10 [] Not applicable to my role

Using apps or computer software 0 _____ [] _____ 10 [] Not applicable to my role

Managing financial accounts, budgets and cashflow 0 _____ [] _____ 10 [] Not applicable to my role

Business marketing 0 _____ [] _____ 10 [] Not applicable to my role

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Carpentry", "Carpentry experience equivalent to a Level 4 carpentry qualification")

27) In the last twelve months, have you improved or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)

- ☐ Steel frame installation
- ☐ Offsite manufacturing (creating prefab. and modular components)
- ☐ Assembling modular building components on site
- ☐ Building with biodegradable/reclaimed materials
- ☐ Reading building information models (BIMs)
- ☐ Passive house building methods (e.g. airtight construction)
- ☐ Using AI to improve work productivity

☐ None of the above

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Plumbing", "Gasfitting", "Drainlaying")

28) In the last twelve months, have you improved or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)

- ☐ Water conservation and management
- ☐ Grey water management
- ☐ Hydronic heating systems
- ☐ Hot water system installation and repair
- ☐ 'Smart' plumbing systems e.g. app connected systems
- ☐ Commercial gases (e.g. oxygen, nitrogen, argon, carbon dioxide, hydrogen)
- ☐ Using AI to improve work productivity
- ☐ None of the above

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Electrical trade or engineering")

29) In the last twelve months, have you improved or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)

- ☐ EV charging infrastructure installation
- ☐ Solar panel system installation and repair
- ☐ Smart-home systems installation and repair
- ☐ HVAC / Energy retrofits installation and repair
- ☐ Renewable energy integration and storage
- ☐ Using AI to improve work productivity
- ☐ None of the above

Logic: Hidden unless: ((#28 Question "In the last twelve months, have you improved or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)" is one of the following answers ("Water conservation and management", "Grey water management", "Hydronic heating systems", "Hot water system installation and repair", "'Smart' plumbing systems e.g. app connected systems", "Commercial gases (e.g. oxygen, nitrogen, argon, carbon dioxide, hydrogen)", "Using AI to improve work productivity") OR #29 Question "In the last twelve months, have you improved or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)" is one of the following answers ("EV charging infrastructure installation", "Solar panel system installation and repair", "Smart-home systems installation and repair", "HVAC / Energy retrofits installation and repair", "Renewable energy integration and storage", "Using AI to improve work productivity")) OR #27 Question "In the last twelve months, have you improved

or acquired new skills in these areas? (e.g. through formal training, on-job learning, self-directed learning via books, videos, supplier training)" is one of the following answers ("Steel frame installation", "Offsite manufacturing (creating prefab. and modular components)", "Assembling modular building components on site", "Building with biodegradable/reclaimed materials", "Reading building information models (BIMs)", "Passive house building methods (e.g. airtight construction)", "Using AI to improve work productivity"))

30) What activities did you do to develop the skills you selected in the previous question?

- ☐ A training course at work
- ☐ A formal micro-credential course (short NZQA accredited course)
- ☐ A training course run by a product manufacturer or supplier
- ☐ Continuing professional development (CPD)
- ☐ Your supervisor or colleagues taught you on-the-job
- ☐ Learned by interacting with colleagues at work
- ☐ Learned at work through trial and error
- ☐ Learned by yourself (e.g. with the aid of manuals, books, videos or on-line materials)
- ☐ Other - Please state:

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Electrical trade or engineering")

31) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

EV charging infrastructure installation	0 _____ [] _____ 10 [] Don't know
Solar panel system installation and repair	0 _____ [] _____ 10 [] Don't know
Smart-home systems installation and repair	0 _____ [] _____ 10 [] Don't know
HVAC / Energy retrofits installation and repair	0 _____ [] _____ 10 [] Don't know
Renewable energy integration and storage	0 _____ [] _____ 10 [] Don't know
Using AI to improve work productivity	0 _____ [] _____ 10 [] Don't know

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Electrical trade or engineering")

32) How would you best describe your skills in relation to what is required to do your job? *You can select "not applicable" if the task isn't required in your role*
Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

EV charging infrastructure installation	0 _____ [] _____ 10 [] Not applicable to my role
Solar panel system installation and repair	0 _____ [] _____ 10 [] Not applicable to my role
Smart-home systems installation and repair	0 _____ [] _____ 10 [] Not applicable to my role
HVAC / Energy retrofits installation and repair	0 _____ [] _____ 10 [] Not applicable to my role
Renewable energy integration and storage	0 _____ [] _____ 10 [] Not applicable to my role
Using AI to improve work productivity	0 _____ [] _____ 10 [] Not applicable to my role

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Carpentry", "Carpentry experience equivalent to a Level 4 carpentry qualification")

33) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

Steel frame installation	0 _____ [] _____ 10 []
	Don't know
Offsite manufacturing (creating prefab. and modular components)	0 _____ [] _____ 10 []
	Don't know
Assembling modular building components on site	0 _____ [] _____ 10 []
	Don't know
Building with biodegradable/reclaimed materials	0 _____ [] _____ 10 []
	Don't know
Reading building information models	0 _____ [] _____ 10 []
	Don't know
Passive house building methods (e.g. airtight construction)	0 _____ [] _____ 10 []
	Don't know
Using AI to improve work productivity	0 _____ [] _____ 10 []
	Don't know

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Carpentry", "Carpentry experience equivalent to a Level 4 carpentry qualification")

34) How would you best describe your skills in relation to what is required to do your job? You can select "not applicable" if the task isn't required in your role

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Steel frame installation	0 _____ [] _____ 10 []
	Not applicable to my role
Offsite manufacturing (creating prefab. and modular components)	0 _____ [] _____ 10 []
	Not applicable to my role
Assembling modular building components on site	0 _____ [] _____ 10 []
	Not applicable to my role
Building with biodegradable/reclaimed materials	0 _____ [] _____ 10 []
	Not applicable to my role
Reading building information models (BIMs)	0 _____ [] _____ 10 []
	Not applicable to my role
Passive house building methods (e.g. airtight construction)	0 _____ [] _____ 10 []
	Not applicable to my role
Using AI to improve work productivity	0 _____ [] _____ 10 []
	Not applicable to my role

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Plumbing", "Gasfitting", "Drainlaying")

35) How important are the following for doing your current job?

Response slider: (0 Not important – 5 moderately important - 10 essential, Don't know tickbox)

Water conservation and management	0 _____ [] _____ 10 [] Don't know
Grey water management	0 _____ [] _____ 10 [] Don't know
Hydronic heating systems (using piped water as a heat-transfer system)	0 _____ [] _____ 10 [] Don't know
Hot water systems	0 _____ [] _____ 10 [] Don't know
'Smart' plumbing systems e.g. app connected systems	0 _____ [] _____ 10 [] Don't know
Working with commercial gases (e.g. oxygen, nitrogen, argon, carbon dioxide, hydrogen)	0 _____ [] _____ 10 [] Don't know
Using AI to improve work productivity	0 _____ [] _____ 10 [] Don't know

Logic: Hidden unless: #2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Plumbing", "Gasfitting", "Drainlaying")

36) How would you best describe your skills in relation to what is required to do your job? *You can select "not applicable" if the task isn't required in your role*

Response scale: (0 – a lot lower than required, 5 – matched to what is required, 10 – a lot higher than required, don't know tickbox)

Water conservation and management	0 _____ [] _____ 10 [] Not applicable to my role
Grey water management	0 _____ [] _____ 10 [] Not applicable to my role
Hydronic heating system installation or repair	0 _____ [] _____ 10 [] Not applicable to my role
Hot water system installation and repair	0 _____ [] _____ 10 [] Not applicable to my role
'Smart' plumbing systems e.g. app connected systems	0 _____ [] _____ 10 [] Not applicable to my role
Working with commercial gases (e.g. oxygen, nitrogen, argon, carbon dioxide, hydrogen)	0 _____ [] _____ 10 [] Not applicable to my role

Using AI to improve work productivity 0 _____ [] _____ 10 []
 Not applicable to my role

Skill development

37) What skills would you like to develop or improve on to help you in your current role?

Logic: Show/hide trigger exists.

38) Are you aiming to move into a different role in the next five years?

[] None of the below, I am happy in my current role

[] Business owner

[] Manager

[] Site supervisor or foreman

[] Training supervisor

[] Project manager

[] Product sales person

[] Specialist in an area of trade (please state):

[] Other - (please state):

Logic: Hidden unless: #38 Question "Are you aiming to move into a different role in the next five years?" is one of the following answers ("Business owner", "Manager", "Site supervisor or foreman", "Training supervisor", "Project manager", "Product sales person", "Specialist in an area of trade (please state)", "Other - (please state)")

39) What skills would you like to develop or improve on to help you to be ready for that role?

Logic: Hidden unless: #3 Question "How many years ago did you complete your Level 4 qualification/apprenticeship?"

***Think about your first relevant apprenticeship if you have more than one."* is one of the following answers ("Less than two years ago")**

40) Overall, how well did your level 4 qualification/apprenticeship prepare you for technical aspects of your trade? (e.g. installing, repairing, constructing)

0 _____ [] _____ 10

[] Don't know

Logic: Hidden unless: #3 Question "How many years ago did you complete your Level 4 qualification/apprenticeship?"

***Think about your first relevant apprenticeship if you have more than one."* is one of the following answers ("Less than two years ago")**

41) Overall, how well did your level 4 qualification/apprenticeship prepare you for other aspects of your work? (e.g. communication, collaboration, project and time management)

0 _____ [] _____ 10

[] Don't know

Comments:

Logic: Hidden unless: #3 Question "How many years ago did you complete your Level 4 qualification/apprenticeship?"

***Think about your first relevant apprenticeship if you have more than one.* " is one of the following answers ("Less than two years ago")**

42) What else would it have been helpful to learn more about during your apprenticeship?

Logic: Show/hide trigger exists.

43) Do you or have you even owned a trade-related business?

☐ No

☐ Yes, and I still own the trade-related business

☐ Yes, I previously owned a trade-related business

Logic: Hidden unless: #43 Question "Do you or have you even owned a trade-related business?" is one of the following answers ("Yes, and I still own the trade-related business", "Yes, I previously owned a trade-related business")

44) How many years after finishing completing your Level 4 apprenticeship did you start a trade-related business?

Demographics

45) What is the size of the organisation you work in?

☐ Sole trader (0 employees)

☐ 1–5 employees

☐ 6–9 employees

☐ 10–19 employees

☐ 20–49 employees

☐ 50–99 employees

☐ 100 + employees

46) What region do you work in? (If more than one, please choose the region where you work most often)

☐ Northland | Te Tai Tokerau

☐ Auckland | Tāmaki Makaurau

☐ Waikato

☐ Bay of Plenty | Te Moana-a-Toi

☐ Gisborne | Te Tairāwhiti

☐ Hawke's Bay | Te Matau-a-Māui

- ☐ Taranaki
- ☐ Manawatū-Whanganui
- ☐ Wellington | Te Whanganui-a-Tara
- ☐ Tasman | Te Tai-o-Aorere
- ☐ Nelson | Whakatū
- ☐ Marlborough | Te Taihu-o-te-waka
- ☐ West Coast | Te Tai Poutini
- ☐ Canterbury | Waitaha
- ☐ Otago | Ōtākou
- ☐ Southland | Murihiku
- ☐ Other - Please state:
-

Logic: Hidden unless: (#2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Carpentry", "Carpentry experience equivalent to a Level 4 carpentry qualification") OR #4 Question "Do you employ any qualified:" is one of the following answers ("Carpenters"))

47) Which sector best describes your main area of work?

- ☐ Residential onsite construction and masonry
- ☐ Commercial onsite construction and masonry
- ☐ Offsite construction

☐ Other - Please state

Logic: Hidden unless: (#2 Question "Do you have an apprenticeship, Level 4 qualification or equivalent experience in carpentry, electrical, plumbing, drainlaying or gasfitting?" is one of the following answers ("Electrical trade or engineering", "Plumbing", "Gasfitting", "Drainlaying") OR #4 Question "Do you employ any qualified:" is one of the following answers ("Electricians", "Plumbers", "Gasfitters", "Drainlayers"))

48) Which sector best describes your main area of work?

- ☐ Domestic/residential
- ☐ Commercial
- ☐ Industrial
- ☐ Other - Please state:
-

*

49) Which ethnic group do you belong to? Mark the option or options which apply to you.

- ☐ New Zealand European
- ☐ Māori
- ☐ Samoan
- ☐ Cook Islands Māori
- ☐ Tongan
- ☐ Niuean

☐ Chinese

☐ Indian

☐ Other - Please state:

50) What is your gender?

☐ Male

☐ Female

☐ Another gender (please state)

Help us understand how work and skills are changing

51) The survey might be repeated in a couple of years to see how skillsets change over time. We may want to contact you then to see if you're happy to take part.

If you are happy to be contacted later:

Your email will be used for the next ConstrucTrend survey. It won't be used for any other purpose.

Your email will be linked to your results so researchers can compare them over time.

Your information will still be stored securely and confidentially.

Are you happy for us to contact you about a future survey?

☐ Yes

☐ No

Logic: Hidden unless: #51 Question " Are you happy for us to contact you about a future survey?" is one of the following answers ("Yes")

52) What is your personal email address? (this makes it easier to contact you if you have moved jobs)

9.8.2. Detailed information sheet

ConstrucTrend Survey

Introduction

We (TIRIA) are a research and evaluation company. We have been contracted by ConCOVE to develop a survey about skill needs in the construction workforce. The project is funded by the Construction and Infrastructure Centre of Vocational Excellence (ConCOVE), hosted by MIT Te Pūkenga.

The survey aims to provide qualifications and training developers with better information about skill needs in different roles and skills gaps across the workforce.

This first survey is for qualified carpenters, electricians, plumbers, gasfitters and drainlayers and people who employ them.

Your feedback is important because it helps training providers and policy makers understand how they can support the workforce. The more people we hear from the more confident training providers will be about what skills to focus on in future training.

What the survey will ask?

The survey takes approximately 10 minutes to complete. This survey will ask about:

your role and your skills

your career aspirations

The survey is voluntary

If you employ qualified carpenters, electricians, plumbers, gasfitters and drainlayers the survey will also ask about their skills and any areas you like them to upskill in.

At the end you can enter a prize draw for one of five \$500 prezzy cards.

The survey is voluntary:

You should only do the survey if you want to.

You can skip questions or stop at any time.

The survey might be repeated

You may request to withdraw your data from the study up to four weeks after you complete the survey. Withdrawing your data will only be possible if you have provided your contact information. If data is submitted anonymously, this information will be unable to be withdrawn.

Training providers and policy makers would like to understand how skills and work requirements are changing over time.

If future finding for this project is secured, this survey may be repeated in 2-3 years' time. Within the survey we will ask if you are happy to be contacted about a future survey, and to provide your email if you are happy to be contacted. If you do so:

Your email will be used for the next ConstrucTrend survey. It won't be used for any other purpose.

Your email will be linked to your results so researchers can compare them over time.

Your information will still be stored securely and confidentially

We will keep your information safe

Your answers to the survey will be kept safe and confidential. All answers will be combined in reporting so that they cannot be linked to a specific individual.

We will write reports summarising how the survey responses. For example, what percentage of people report each skill as being important for their role and what percentage of people report they are very competent in different skills. The report will explore how skill needs and gaps differ for different roles, regions and professions.

The report will not contain any information that could be linked back to you.

Data will be stored securely on restricted access folders. Any contact details and open-ended responses you supply will be kept for a maximum of six years. De-identified quantitative data will be stored longer to support an analysis of change in skill gaps over time. De-identified quantitative data may be stored for a maximum of six years after the final ConstrucTrend survey.

What happens if a different organisation manages this survey in the future?

If the survey is repeated, the current researchers at TIRIA may be asked to run the survey, or researchers from a different organisation may be asked to run the survey.

If a different organisation runs the survey, we will share the 2025 survey responses with that organisation to allow them to explore how skill needs and levels are changing over time. We will set up a data sharing agreement with that organisation so that they are required to store survey responses securely and only use them for the purposes of analysing training needs and skill trends over time.

Questions?

You can call Jen on 0800 002 577 if you want to ask any questions.

This study has been reviewed and approved by the Independent Human Research Ethics Committee. If you have ethical concerns, contact the Chair of the Independent Human Research Ethics Committee (IHREC) at info@ihrec.nz.

Approved by the Independent Human Research Ethics Committee (IHREC) on 7 July 2025 for three years. Reference number 25 IHREC 02.