ACT Government

ACT BUILDING AND CONSTRUCTION INDUSTRY TRAINING FUND AUTHORITY



ACT BUILDING AND CONSTRUCTION INDUSTRY TRAINING FUND AUTHORITY RESEARCH REPORT

JULY 2026

CITC CONSTRUCTION INDUSTRY TRAINING COUNCIL

EE-AB



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The Research Project

The ACT Building and Construction Industry Training Fund Authority commissioned this research to identify current and emerging training and development needs across the ACT building and construction industry. The findings will inform the TFA's 2027 Training Plan and support workforce development priorities that respond to changing industry demand.

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Executive Summary

Aim of the Report

This report documents current and emerging training and workforce needs across the ACT building and construction industry, including commercial, residential, civil, specialist subcontractor, building services, electrotechnology and renewable-energy sectors. It identifies current gaps and future capability needs to inform the Building and Construction Industry Training Fund Authority's 2027 Training Plan.

Building on the 2026 Report

The report builds on the 2026 Industry Needs Research Report. Themes and findings from the 2026 report were converted into 65 testable items and assessed against current labour-market, training, policy, industry and technology evidence. 82% of last year's findings were supported or supported with qualification. This study identified six areas not separately addressed in 2026: battery storage, electric-vehicle charging, grid connection and Virtual Power Plant capability, remote renewable-system management, apprenticeship completion and retention, and Modern Methods of Construction. [7]

Evidence

Evidence was collected from wide-ranging desktop research, 30 stakeholder interviews conducted over 55 hours, a detailed survey with 39 respondents representing the ACT building industry and a facilitated industry forum. Participants included employers, subcontractors, industry bodies, unions, RTOs, GTOs, regulators and government, with most holding senior management, supervisory, training, business-owner or representative roles. Consultation addressed the 2026 participation gaps across commercial, residential, civil, electrical and electrotechnology sectors. Evidence was obtained to test and refine the 2026 findings, identify current and emerging skill needs, examine training access and delivery issues, and clarify how priorities vary by sector, trade, project type and business size. [10][11][12]

Major Finding

ACT industry faces two linked challenges: persistent trade shortages and the need for workers who are fully job ready. Core and specialist shortages continue in plumbing, electrical, carpentry, tiling, plastering, painting, roof plumbing, concreting, mechanical services, waterproofing, civil plant and heavy vehicle work. [2][7][9] Employers across the industry need job-ready workers who can apply practical skills, work safely, meet licence and compliance requirements, use tools correctly and work with limited supervision. Foundational literacy and numeracy are part of this, supporting the interpretation of plans, measurements, technical documents and assessment requirements.

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ACT Industry Context

ACT workforce needs require local understanding and consultation. Workers move freely across the ACT-New South Wales border, and the Territory's small, diverse and subcontractor-intensive market creates different pressures by sector, trade and project type. This shaped the study in two ways. First, national shortage data could not be read directly onto the ACT, so the study used local consultation to test published findings and, where possible, adjust them to ACT conditions before drawing conclusions. Second, as workforce pressures vary across the ACT, findings are reported by sector and trade where possible, rather than as a single ACT-wide position. [1][10][11]

Current Training Gaps Identified

The strongest reported training gaps were apprenticeship completion and retention, and foundational practical skills, each rated critical or significant by 95% of respondents. Work health and safety capability was rated at 86%, National Construction Code and Australian Standards knowledge at 83%, financial and business literacy at 82%, and supervisory, project-management and leadership capability at 81%. [11] The priority is therefore to strengthen the workforce pipeline and job-ready capability by attracting and retaining apprentices, building trade competence, and supporting progression into supervisory and management roles.

Training Availability and Effectiveness

62% of respondents said suitable local training was only partly available. Training barriers identified were employer release time and cost, course cost, language, literacy and numeracy barriers, rebate adequacy and limited RTO capacity. Industry preferred practical delivery: blended learning (87%), face-to-face delivery (77%), on-site training (54%) and mentoring (51%). [11]

Future Skills Requirements

Future skills are not only about replacing workers who leave. Workers increasingly need the capability to use digital systems, install and work with energy-efficient products and integrated building services, apply new materials and methods, and meet changing compliance requirements. The priority future skills identified were project, risk and data management; Building Information Modelling (BIM) and digital twins; cybersecurity; Modern Methods of Construction; artificial intelligence (AI), robotics and automation awareness; and solar, battery and electric-vehicle infrastructure. [11]

Electrification, renewable energy, building performance, digital construction, Modern Methods of Construction and automation are targeted emerging priorities. Support should be based on ACT demand and available training, using pilots, industry engagement and annual evidence before broader funding changes.

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Strategic Recommendations

As required by the Authority, the report recommends priority training, qualifications and delivery methods, including workforce diversity, sustainability and technology capability. It provides guidance on alignment with industry and ACT Government workforce priorities. The recommendations set out Authority actions, emerging responses, shared responsibilities and monitoring, focusing investment where funding, rebates, promotion and program design can make a practical difference.

Roles and Responsibilities

The Authority cannot resolve every workforce issue through funding alone. Employers need to release workers for training, provide supervision and mentoring, and support apprentice retention. RTOs and GTOs are central to course availability, delivery quality, trainer capability and apprentice support. Industry bodies, regulators and government identify demand, promote pathways, and shape the licensing, safety, policy and procurement settings that drive workforce needs.



ACT workers (Image supplied: ACT Construction Industry Training Council)

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Summary of Recommendations

Implementation principle: the Authority should fund and promote training where it can make a practical difference; use partnerships where responsibility is shared; and monitor or refer matters outside its direct remit.

See further details at 7.3 Priority Findings and Recommended Response.

Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
1. Priority trades, apprenticeship completion and retention	Core and specialist trade shortages remain evident. Apprentice recruitment, completion and retention were among the strongest survey priorities, with completion and retention rated critical or significant by 95% of respondents. Consultation also supported reviewing apprenticeship support so that direct employers and GTOs can access appropriate assistance, while retaining the additional services GTOs may provide. [2][7][9][10][11]	**Immediate**	Maintain support for priority trade pathways and strengthen practical measures that help apprentices complete and progress to competent trade practice. Review apprenticeship funding arrangements so direct employers and GTOs can access appropriate support. Retain targeted GTO support where it provides demonstrated additional services, including mentoring, field officer contact, host-employer placement and improved retention rates.	Employers, GTOs, RTOs, industry bodies and government. Track commencements, completions, withdrawals, retention, priority-cohort participation and demand by priority trade across GTO and direct-employer pathways. TFA funding can support training, but apprentice completion, training access and workforce outcomes also depend on employer release time, workplace mentoring, RTO capacity, licensing requirements and other government funding. These constraints cannot always be resolved through rebates alone.
2. Job-ready practical capability, safety and compliance	Industry needs workers who can apply practical skills, use tools safely, work to standard and meet licence, NCC, Australian Standards and WHS requirements. Foundational practical skills were rated critical or significant by 95% of respondents; WHS by 86%; and foundational knowledge, including NCC and Standards, by 83%. [7][10][11]	**Immediate**	Support practical, industry-current training, high-risk licences and mandatory safety capability within eligibility settings. Give priority to training that improves site readiness, quality, safe work and practical compliance.	RTOs, employers, industry associations and regulators. Track uptake, course availability, completion and employer feedback on practical relevance and site readiness.

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Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
3. Supervisory, project-management, business and digital capability	Businesses need stronger site supervision, project coordination, communication, risk management, financial literacy and use of current digital systems. Supervisory and project capability was rated critical or significant by 81%; financial and business literacy by 82%; and digital literacy by 78%. [7][10][11]	**Immediate**	Support short, practical post-trade programs for supervisors, small builders and subcontractors. Promote relevant existing courses and work with providers and industry to address material gaps in supervision, project coordination, communication, risk, business and digital capability.	RTOs, employers, industry associations and business-support bodies. Track uptake by occupation, business type and sector, together with employer feedback on practical value.
4. Training access, practical delivery and provider capacity	Training is available but does not consistently meet need. 62% of respondents said suitable ACT training was only partly available. Employer release time and cost, training cost, literacy and numeracy barriers, rebate adequacy and provider capacity were the main constraints. [10][11]	**Immediate and cross-cutting**	Review eligibility, rebate and promotion settings against practical access barriers. Support practical, flexible and blended delivery. Identify unmet demand, course gaps, learner-support needs and local provider-capacity issues for partnership action.	RTOs, GTOs, employers, industry bodies and government. Monitor unmet demand, waiting times, local availability, participation, completion and provider capacity.
5. Electrification, renewable energy and building performance	ACT demand now supports local delivery of post-trade training in solar, batteries, EV charging and related electrical capability. Consultation identified practical gaps in solar and battery compliance, load management, alternate supplies, EV charging, trainer capacity and apprentice readiness. These issues affect safety, compliance, quality and the ability of licensed electricians to support electrification.	**Immediate targeted funding; pilot and monitoring for emerging needs**	Fund defined accredited and non-accredited post-trade programs where local demand, suitable providers and clear regulatory or safety need are established. Prioritise solar and battery compliance, EV charging, load management, alternate supplies, building science, local trainer capability and apprentice readiness assessments. Use pilots for data-centre cooling, industrial automation and electrical-focused psychosocial and WHS programs. Monitor smart-energy systems, IoT, networks, remote diagnostics and emerging Power over Ethernet safety issues before broader funding commitments.	CIT, NECA, GETS and other RTOs; electrical contractors, employers, GTOs, unions, industry bodies, the electrical inspectorate, regulators and energy-sector employers. Delivery depends on verified demand, local provider capability, suitable training products, trainer availability, employer release time and alignment with licensing, safety and technical requirements.

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Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
6. Digital construction, Modern Methods of Construction and automation	Project data, BIM, digital twins, AI, cyber awareness, prefabrication, off-site systems and automation are emerging capability requirements. They are material but do not affect every sector or business equally. [4][6][7][11]	**Targeted development and monitoring**	Support targeted pilots, short courses and industry-led capability development in digital construction, BIM, project data, AI, cyber awareness, Modern Methods of Construction and automation. Monitor demand, technology uptake, practical application and provider capability before making broad changes to funding settings.	Industry, RTOs, technology providers, employers and government. Assess demand, practical use, provider capability, uptake and employer outcomes before wider funding changes.
7. Participation, inclusion and workplace support	Women, Aboriginal and Torres Strait Islander people, disadvantaged workers, mature apprentices and at-risk young people were identified as underrepresented in training. Participation is linked to access, mentoring, workplace culture, learner support and retention, not simply course availability. [10][11]	**Cross-cutting requirement**	Embed learner support, mentoring, flexible delivery and inclusion measures across priority programs. Use targeted promotion and pathway support where practical barriers affect apprentices, new entrants and underrepresented groups.	Employers, GTOs, RTOs, industry bodies, community organisations and government. Monitor participation, completion, retention and progression outcomes for priority cohorts.
8. Keep priorities current through evidence and practical partnerships	TFA funding can support training, but completion, provider capacity and workforce outcomes also depend on employers releasing apprentices, GTO and employer mentoring, RTO course availability, licensing requirements and government funding settings.	**Ongoing**	TFA use partnerships as a strategy to address specific constraints that funding alone cannot resolve work with employers and GTOs on mentoring and release-time barriers; with RTOs on course availability and trainer capacity; with regulators on emerging licence and compliance needs; and with government to avoid duplication and identify funding gaps. Refresh priorities annually using TFA data, provider feedback, labour-market information and targeted consultation.	TFA, employers, GTOs, RTOs, industry bodies, unions, regulators and government. Maintain a simple annual evidence cycle covering demand, course availability, uptake, completions, unmet need and emerging regulatory or workforce issues.

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The 2027 Training Plan roadmap



Source: TFA 2027 Industry Consultation Survey (39 responses), 30 stakeholder interviews and industry forum, 2026.

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1. Purpose, Scope and Methodology

At a Glance

This study brings together current evidence and structured consultation to assess training and workforce needs across the ACT building and construction industry. It identifies existing skills gaps across commercial, residential, civil and subcontractor sectors; groups future skills needs from industry trends, government policy, technology and best practice; and turns the findings into practical recommendations and strategic guidance for the Authority. The study helps the Authority prioritise training needs but does not set final funding priorities or replace its statutory responsibilities. It provides a structured evidence base for the Authority to decide which needs to fund, promote, develop further, refer to partner organisations or monitor.

- **Scope:** ACT building and construction industry, covering commercial, residential, civil, specialist subcontractor, electrotechnology and renewable energy sectors.
- **Starting point:** 2026 research, extended to address participation gaps across some stakeholder groups and sectors.
- **Evidence base:** desktop research, stakeholder interviews, survey responses and industry forum input.
- **Output:** findings, priorities and recommendations forming a single ACT-wide evidence base.

1.1 Purpose

This report documents current and emerging training and workforce needs in the ACT building, construction, electrotechnology and renewable energy industries, to inform the Building and Construction Industry Training Fund Authority's 2027 Training Plan. It captures a practical, evidence-based assessment of:

- training gaps affecting industry capability;
- future skills needs from industry, policy, technology and workforce change;
- the availability, accessibility and effectiveness of training;
- workforce participation, diversity and retention issues; and
- actions the Authority can take directly, promote through partnerships, refer to other bodies or monitor.

The report builds on the 2026 Industry Needs Research Report but does not just restate it. The 2026 research is a baseline, tested against current evidence and broader consultation. This values the earlier work while checking whether its conclusions still hold in a changing ACT industry.

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Table 1 - Study Purpose

Research area	Key question	Intended use by the Authority
Current training gaps	What skills, licences, capabilities or workforce issues are affecting industry now?	Identify immediate funding and delivery priorities
Future skills requirements	What capability will industry need from 2027 onwards?	Support future-focused training and workforce planning
Stakeholder consultation	What do employers, workers, trainers, regulators and industry bodies identify as priorities?	Test desktop evidence and identify ACT-specific issues
Training delivery and access	Is relevant training available, practical, accessible and affordable?	Inform delivery, rebate and promotion settings
Recommendations	What should be funded, promoted, developed, referred or monitored?	Inform the 2027 Training Plan and annual evidence cycle

1.2 Detailed Approach

1.2.1 Study Scope

The study covers the ACT building and construction industry and related electrotechnology and renewable energy activity. It examines current and future training needs across the industry segments below, together with the perspectives of the stakeholder groups consulted. The full consultation register is in the appendices.

Table 2 - Industry and stakeholder coverage

Coverage area	Main focus
Commercial construction	Trade capability, supervision, project management, compliance, digital construction and sustainability
Residential construction	Core trade supply, small-builder capability, quality, compliance, energy efficiency and apprenticeship pathways
Civil construction	Plant, machinery, licences, high-risk work, infrastructure delivery and environmental capability
Specialist subcontractors and finishing trades	Trade shortages, training access, licensing, business capability and practical delivery barriers across trades
Building services	HVAC, plumbing, roofing, data, communications and smart-building capability
Electrotechnology and renewable energy	Electrical workforce supply, licensing, renewables, batteries, EV infrastructure, smart systems and post-trade upskilling
Employers, builders and subcontractors	Workforce demand, current capability gaps, training access, supervision and business constraints
Employer and industry associations	Sector-wide priorities and member feedback, including commercial, residential, civil and trade associations such as Master Builders ACT, HIA, NECA, Master Plumbers and Master Painters

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Coverage area	Main focus
Employee and union representatives	Workforce experience, safety, capability, participation, retention and career-development issues
RTOs, GTOs and pathway providers	Course availability, trainer capacity, apprenticeship pathways, delivery barriers and emerging training needs
ACT Government regulator	ACT policy, licensing, safety, skills and compliance implications, including the ACT education and training system, WorkSafe ACT, occupational regulation and electrical regulation

1.2.2 Research Objectives

The study has five objectives. The first two define what to identify: current gaps and future needs. The third sets how the evidence is gathered. The last two turn findings into advice the Authority can act on. Together they take the study from raw evidence to practical guidance:

- **Identify current training gaps:** across practical, technical, safety, licensing, supervisory, leadership and business capability.
- **Identify future skills needs** from industry demand, policy, sustainability, technology and changing work practices.
- **Gather evidence across stakeholder groups:** employers, workers, unions, training providers, industry bodies, regulators and government.
- **Develop practical recommendations:** on training priorities, delivery methods, participation and future capability.
- **Provide strategic guidance:** to inform the Authority's annual planning, funding and partnerships.

1.2.3 Use of the 2026 Baseline

The 2026 research provides the starting point for this study. It identified core trade shortages, foundational and practical skill gaps, specialised licences, supervisory capability, sustainability and digital skills. The 2027 study tests those findings against current published evidence and consultation rather than assuming they hold unchanged. This separates persistent needs from emerging issues and distinguishes matters within the Authority's remit from those needing broader coordination. Section 2 gives the details and results of the 2026 baseline testing.

1.2.4 Research Design

The study uses a mixed-method approach. Published data provides context and scale; consultation provides ACT-specific practical insight; survey and forum evidence tests the relative importance of issues across sectors. The evidence base comprises:

- **Desktop review and evidence register:** review of published data, policy, industry plans and training information to identify workforce shortages, skills needs, training activity, regulatory requirements and emerging technology trends.

- **2026 baseline review:** mapping previous findings to current evidence.
- **Structured interviews:** using a common framework across the CITC and Energy Skills workstreams.
- **Industry survey and consultation forum:** testing and ranking issues, including sector differences.
- **Evidence synthesis:** identifying agreement, variation, uncertainty and potential action.

1.2.5 Desktop Review

The desktop review combines ACT-specific, national and industry evidence, each source serving a different purpose. Greater weight goes to findings supported by more than one source, especially where published evidence and consultation points to the same conclusion.

1.2.6 Consultation Coverage, Data Quality and Limitations

Consultation coverage. The consultation model addresses known gaps in the 2026 process, including limited participation from unions, residential subcontractors, civil contractors and subcontractor associations. Consultation is not statistically representative of the whole ACT industry. It is structured, attributable evidence weighed alongside published data.

Data quality. Quality controls for this study included:

- a common interview guide across workstreams;
- aligned interview and survey questions;
- stakeholder and sector tagging;
- review of interview transcripts and source material;
- cross-checking consultation themes against published evidence; and
- separating broad consensus from individual or sector-specific views.

Study limitations. The ACT market is small, diverse and tied to the surrounding region. Three things mean national figures do not necessarily transfer straight to the ACT: workers cross the ACT-NSW border for jobs, small subcontractors dominate the market, and government-funded projects shape demand. National figures are therefore a starting point, checked against ACT conditions where possible before drawing conclusions or making recommendations.

Other limitations are practical. Data often lags real conditions. Some ACT occupations have little local data. Skills and training products change fast, so today’s picture dates quickly.

To manage these, each finding is rated for evidence strength, established findings are kept separate from emerging issues, and matters the Authority can act on are marked apart from those needing others to act.

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2. Industry Context and 2026 Baseline

At a Glance

Construction is a major ACT employer, with approximately 18,300 people employed in February 2026. [1] But the ACT workforce is small against larger jurisdictions and closely tied to the surrounding NSW labour market. Because workers move freely across the ACT-NSW border, national shortage figures do not translate directly to the ACT. Industry consultation is used to understand local conditions and, where possible, adjust for them.

The desktop review converted the 2026 report's themes into 65 testable baseline items and assessed them against current evidence. It confirms the baseline remains broadly relevant, with 82% of items supported or supported with qualification, and identifies six new areas not separately addressed in 2026. This report goes further, testing each issue by sector, trade and business type, and whether it reflects a workforce shortage, a capability gap or a training-access constraint, and whether the Authority is the body to respond. [7]

2.1 Purpose

This section sets the ACT industry context, identifies the ACT-specific drivers shaping training demand, and gives the initial desktop assessment of the 2026 baseline. It does not set priorities. It sets out the market and capability factors that shape training need, identifies which 2026 findings remain supported, and flags which require consultation, qualification or monitoring. Later sections cover detailed gaps, future skills and stakeholder views.

2.2 ACT Industry Context

The ACT construction workforce is small: approximately 18,300 in February 2026, against 1.37 million nationally. [1] Training demand must be read in local and regional context, not inferred from national data.

The 2026 desktop review confirms shortage pressure across several construction occupations: carpentry, electrical, plumbing, roof plumbing, tiling, plastering, painting, air-conditioning and refrigeration, and earthmoving plant operation. [2] The ACT Skills Needs List also covers qualifications across construction, civil construction, plumbing, electrotechnology and renewable energy. [3]

Shortage data signals pressure, not the reason behind it. A shortage may reflect workforce supply, project timing, wages, retention, licensing, training availability or business capacity. Stakeholder consultation tested which of these drives each shortage, and how much it matters in practice.

Future needs are not only about filling trade shortages. Even with enough workers, the skills needed in the ACT are changing. Housing demand, decarbonisation, regulation, technology and

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productivity are reshaping what construction workers must be able to do. [4] The same pressures affect electrical, HVAC, energy and renewable-energy occupations: electrification, clean energy, batteries, EVs and system capacity. [5] Digital systems, data, automation and technology adoption are also emerging capability issues. [6]

Table 3 - ACT industry context and training implications

Context factor	Training and workforce implication	Main source(s)
ACT construction workforce of approximately 18,300 people	A small workforce requires local interpretation of data and attention to worker and trainer availability.	Jobs and Skills Australia / ABS [1]
ACT occupation shortages	Supports continued focus on trade pipelines, specialist capability and training access.	Jobs and Skills Australia; ACT Skills Needs List [2][3]
Small business and subcontractor market	Training needs to be practical, accessible and able to be undertaken without undue time or cash-flow pressure.	Desktop review; consultation evidence [7]
Housing, commercial and civil activity	Workforce pressures and training needs may differ by sector, occupation and project type.	BuildSkills; ACT evidence; consultation [3][4]
Safety, licensing and compliance requirements	Some needs concern mandatory tickets, high-risk work, supervision and regulatory capability.	TFA documents; ACT Skills Needs List; regulatory sources [3][8]
Sustainability, electrification and digital change	Future capability will increasingly include energy efficiency, renewable energy, digital systems and modern construction methods.	BuildSkills; Powering Skills; Nextbuild [4][5][6]
Shared delivery responsibility	Authority funding is one part of the response; providers, GTOs, employers, regulators, government and industry bodies also have roles.	TFA documents; desktop review [7][8]

2.3 The 2026 Baseline

The 2026 Industry Needs Research Report identified shortages in core trades (plumbing, electrical, carpentry, tiling, plastering, painting, roof plumbing and concreting) and in specialised areas (heavy vehicle driving, arboriculture, mechanical plumbing, waterproofing and duct installation). Beyond trade supply, it found gaps in foundational and practical skills, supervisory and project-management capability, and access to high-risk work licences. It also identified future needs in sustainability, energy efficiency, digital capability, emerging trade technologies and civil construction. [9]

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2.4 Desktop Review

Process and results. The desktop review converted the 2026 report's broad themes into 65 testable baseline items and assessed them against current labour-market, training, policy, industry and technology evidence. It also identified six areas not addressed as distinct issues in 2026, added after reviewing updated construction, energy, technology and apprenticeship evidence. These areas matter because they reflect changing demand, new technical requirements and risks to the future workforce pipeline:

- battery and energy-storage systems;
- Charging EV infrastructure;
- grid connection and Virtual Power Plant capability;
- remote management of renewable-energy systems;
- apprenticeship completion and retention; and
- Modern Methods of Construction, including prefabrication and off-site systems. [7]

Together, these areas extend the 2026 baseline beyond established trade shortages and capability gaps. They capture emerging energy and technology requirements, the need to retain apprentices through to completion, and changes in how construction work may be designed, manufactured and delivered.

Evidence. The desktop review drew on the 2026 research and current Authority program data, together with ACT and national labour-market, training, policy and industry evidence (see Table 5). These sources cover current shortages, training demand, workforce pathways, licensing and safety requirements, emerging technology and the energy transition. They also help classify which issues the Authority can address through training funding, and which need action from government, regulators or others.

Conclusion. The desktop review confirms the 65 baseline items remain broadly relevant, with 82% supported or supported with qualification. This report goes further, testing which sectors, trades, occupations or business types are affected, whether each issue reflects a workforce shortage, capability gap or training-access constraint, and, where relevant, whether the Authority is best placed to respond.

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Table 4 - Initial desktop assessment of the 2026 baseline

Baseline position	Treatment in this report
Supported / qualified	Carry forward as an evidence-based issue, but specify the relevant sector, occupation, capability or delivery context.
Requires validation	Use consultation to establish practical relevance, urgency and possible Authority response.
Monitor or reframe	Retain as an emerging, contextual or delivery issue, but do not treat as an immediate priority without stronger evidence.



ACT workers (Image supplied: ACT Construction Industry Training Council)

Table 5 - Desktop review evidence sources

Evidence source	Primary use
2026 Industry Needs Research Report	Baseline findings to test, refine or update through current evidence and consultation.
TFA Annual Report 2024-25	Authority funding activity, training places, expenditure, funded categories and current training-demand context.
TFA 2026 Training Plan	Existing Training Plan priorities, program settings and current funding context.
TFA Fact Sheets	Eligibility rules, eligible work, funding conditions and scope boundaries.
Jobs and Skills Australia Occupation Shortage List	Current occupation and trade shortages, including ACT-specific shortages, where available.
Jobs and Skills Australia 2025 shortage commentary and forecasts	National shortage trends, persistence of trade shortages and future workforce context.
Australian Bureau of Statistics	Employment, industry and occupation trends, including ACT workforce movement where available.
NCVER apprentice and trainee outcomes	Apprentice and trainee experience, completion and non-completion factors, and training-pathway context.
NCVER trade completion rates	Trade-apprenticeship completion trends and pipeline context.
ACT Skills Needs List	ACT priority qualifications, occupations and funding context.
ACT Government policy, workforce and diversity sources	ACT workforce, skills, construction, housing, sustainability, participation and policy context.
BuildSkills Australia Workforce Plan	Construction workforce pressures, housing, decarbonisation, regulation, technology and future capability requirements.
Powering Skills Organisation Workforce Plan 2025 and ACT material	Electrical, HVAC, energy and renewable-energy workforce requirements, apprenticeships, system capacity and future skills.
Powering Skills Organisation Foundation for Energy Literacy and Numeracy	Literacy, numeracy and completion issues relevant to energy apprentices and related pathways, where final evidence is available.
Nextbuild Digital Blueprint	Digital construction, emerging technologies, adoption barriers and workforce implications.
WorkSafe ACT, Access Canberra and relevant occupational regulators	High-risk work, licensing, safety, compliance and regulatory capability requirements.
Industry and employer association guidance	Sector priorities, industry practice, emerging capability requirements and member-level issues where supported by documented evidence.

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References used in this section

[1] Jobs and Skills Australia, *Construction Industry Profile*, accessed 5 May 2026; based on Australian Bureau of Statistics, *Labour Force Survey*, 2025 four-quarter-average data.

[2] Jobs and Skills Australia, *Occupation Shortage List*, ACT data, 2025.

[3] ACT Government, *ACT Skills Needs List*, updated 22 July 2025.

[4] BuildSkills Australia, *2025-26 Workforce Plan*.

[5] Powering Skills Organisation, *Workforce Plan 2025*, including ACT and national material.

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

[7] *2026 Desktop Review Results*, including the baseline assessment, desktop-review findings and ACT shortage check.

[8] ACT Building and Construction Industry Training Fund Authority, *Annual Report 2024-25*, *2026 Training Plan* and *Eligibility for Training Rebates Fact Sheets*.

[9] ACT Building and Construction Industry Training Fund Authority, *2026 Industry Needs Research Report*.

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3. Stakeholder Consultation Findings

At a Glance

Stakeholder consultation tested the desktop findings against local industry experience. It included 30 structured interviews, a survey with 39 responses, and an industry consultation forum. [10][11][12] Participants included builders, subcontractors, employer and industry associations, unions, RTOs, GTOs, regulators, government agencies and workforce-development bodies.

The priorities identified by respondents were current trade shortages, and apprentice recruitment and completion, each selected by 74% of respondents. Increasing funding for mandatory licences and safety training was selected by 72%. Future digital skills, and supervision and project management, were each selected by 49%. [11]

Stakeholders consistently reported that workforce and skills issues are not explained by shortages alone. They linked current pressures to apprentice recruitment and retention, practical and foundational capability, supervision, access to licences, training availability, employer time and cost, and local provider capacity.

Training access was a recurring concern. 62% of respondents said suitable local training was available but did not fully meet industry needs. The most commonly identified barriers were employer time and cost (64%), training cost (51%), language, literacy and numeracy barriers (44%), rebate adequacy (41%) and limited RTO capacity (38%). [11]

The consultation confirms the main themes from the desktop review, but shows that severity, cause and the right response differ by sector, occupation and business type. Later sections separate current gaps, future skills, delivery issues and matters requiring action beyond the Authority.

3.1 Purpose

This section summarises stakeholder views and consultation coverage. It does not set final priorities or repeat the detailed analysis in later sections. It shows:

- who was consulted;
- the main areas of agreement and difference;
- where consultation confirms or qualifies the desktop review; and
- which issues require further sector analysis before the Authority determines a response.

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3.2 Consultation Coverage

The consultation was designed to address known gaps in the 2026 research including limited participation from unions, residential subcontractors, civil contractors and industry associations. It combined structured interviews, survey responses and a facilitated industry forum.

The survey allowed respondents to identify more than one sector where they had the necessary insight and experience. Survey percentages therefore show breadth of representation, not separate respondent groups. Commercial construction was the most commonly selected sector, at 41% of respondents, followed by roles spanning all industry (38%), residential construction (26%), electrical and electrotechnology (23%) and civil construction (15%). Respondents also reported working across a range of specialist trades: carpentry, plumbing and roofing, brick and block laying, scaffolding, HVAC, data and communications, painting and plastering, tiling and waterproofing, concreting and glazing. [11]

The consultation is not a statistical sample of the whole ACT industry. It is structured, attributable evidence considered alongside the desktop review. Detailed stakeholder coverage, interview records and survey outputs are in the appendices.

Table 6 - Consultation coverage and contribution

Stakeholder group	Main contribution
Builders, contractors and subcontractors	Workforce demand, trade availability, current capability gaps, project pressures and training constraints
Employer and industry associations	Member feedback, sector priorities, labour-market pressures and industry practice
Employees and union representatives	Workforce experience, safety, capability, retention, participation and career-development issues
RTOs, GTOs and pathway providers	Course availability, trainer capacity, apprenticeship pathways, delivery barriers and emerging demand
Regulators and government agencies	Licensing, compliance, policy, safety and funding implications
Survey respondents and industry forum participants	Comparative evidence on current gaps, future needs, training barriers, participation and Authority priorities

3.3 Stakeholder Responses

Stakeholders broadly confirmed that trade supply remains a current issue but described different pressures by sector and trade. Current trade shortages, and apprentice recruitment and completion, were the highest survey priorities. [11] Interview evidence also showed that many businesses need qualified workers with practical experience, not entry-level labour alone. [10]

Stakeholders raised problems of capability, not just worker numbers. Even where workers are available, many cannot reliably do the job to standard. The gaps included foundational and practical trade skills, knowledge of the National Construction Code and Australian Standards, high-risk licences, supervision, project management, communication and workplace readiness.

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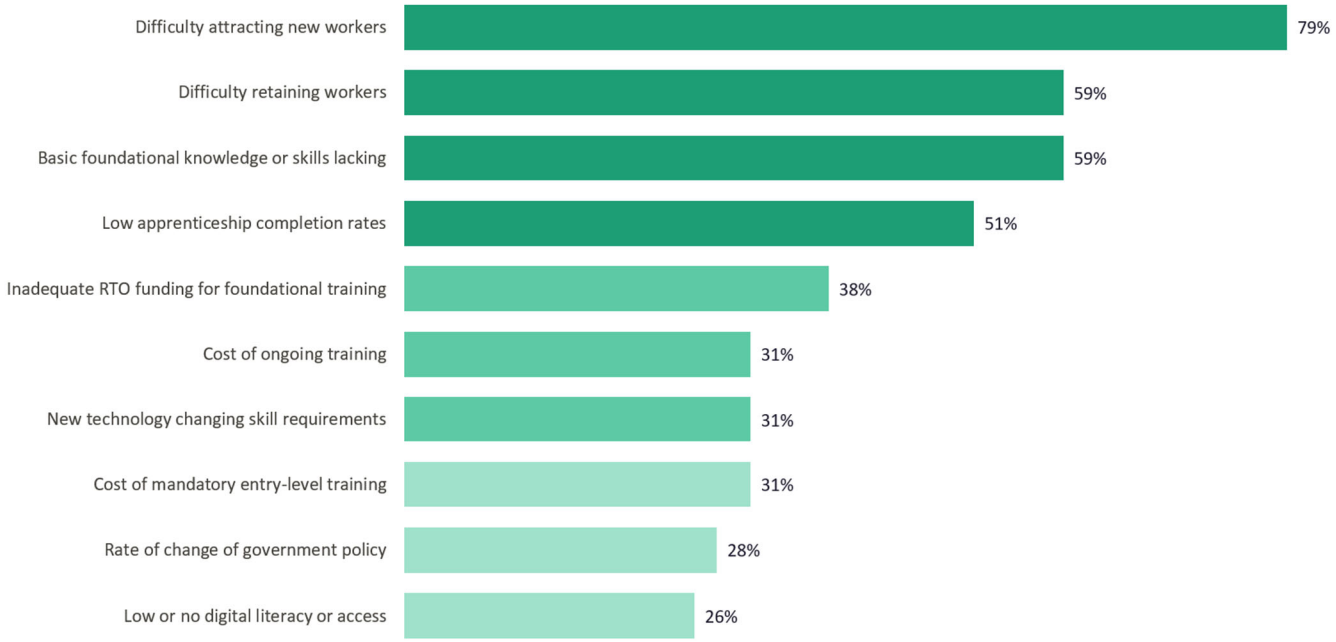
The concern was not whether a worker held a qualification, but whether they could apply skills safely and consistently on site. [10][11]

Apprentice recruitment, completion and retention were recurring themes. Survey respondents linked workforce shortages to difficulty attracting workers (79%), retaining workers (59%), foundational skill gaps (59%) and low apprenticeship completion rates (51%). [11] Interview participants also identified employer capacity, mentoring, practical exposure and workplace support as important to apprentice retention. [10]

Reported reasons for shortages and skills gaps

Percentage of respondents selecting each reason



Source: TFA 2027 Industry Consultation Survey, 39 responses. Appendix C5.

Training access and delivery were another strong theme. Stakeholders commonly described the need for practical, flexible training that reflects site conditions. Blended delivery was selected by 87% of respondents, face-to-face by 77%, on-site by 54%, mentoring by 51% and short courses by 46%. [11] Section 6 considers the implications for provider capacity, course relevance, costs, rebates and delivery models.

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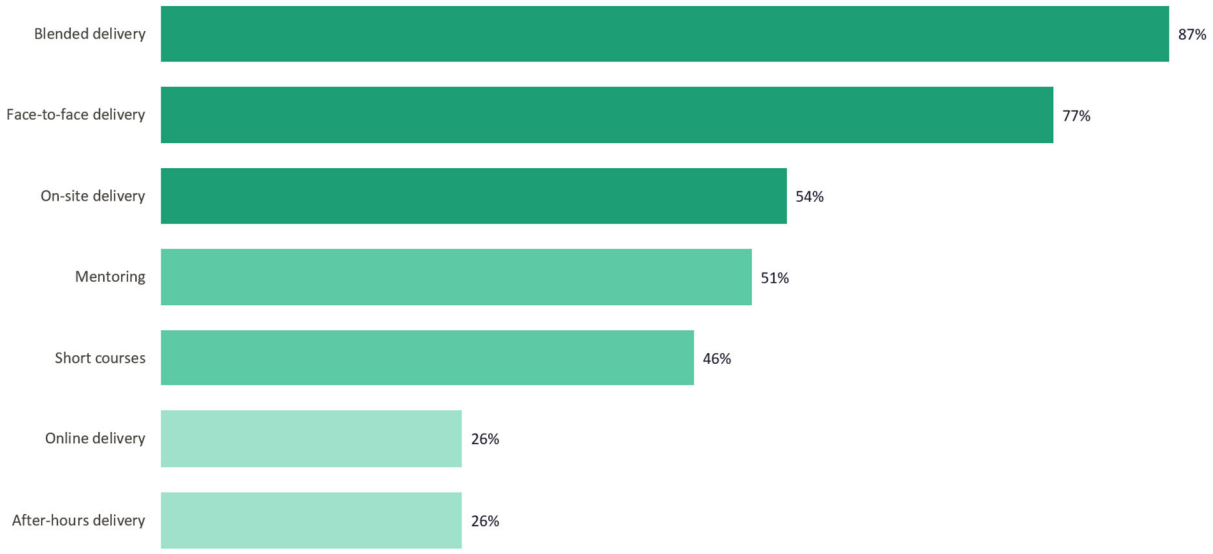
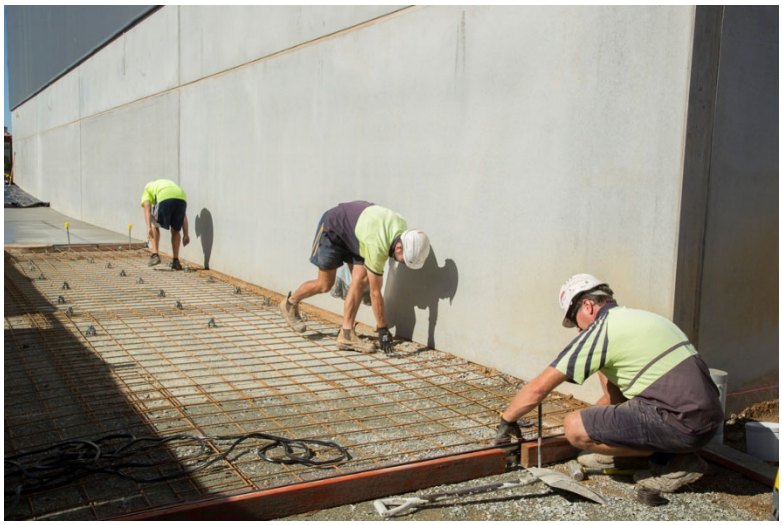
Preferred training delivery methods

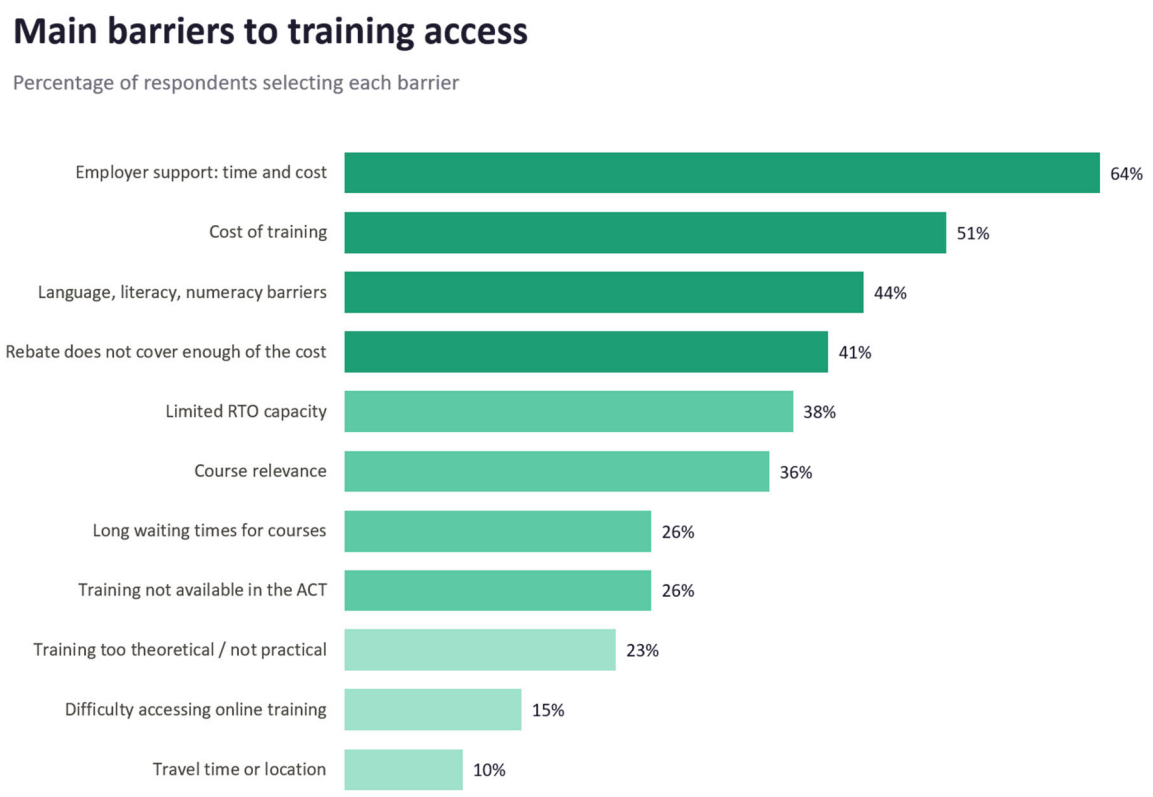
Percentage of respondents selecting each method



Source: TFA 2027 Industry Consultation Survey, 39 responses. Figure 6 / Appendix C10.



Canberra workers: Image supplied CITA



Source: TFA 2027 Industry Consultation Survey, 39 responses. Figure 5 / Appendix C9.

Stakeholders supported future capability development in digital skills, sustainability, energy efficiency, electrification and renewable energy. These needs are not uniform: timing, role ownership and the level of training required vary between trades, supervisors, specialist contractors, building services and energy-related occupations. [10][11]



Image supplied: EEAB

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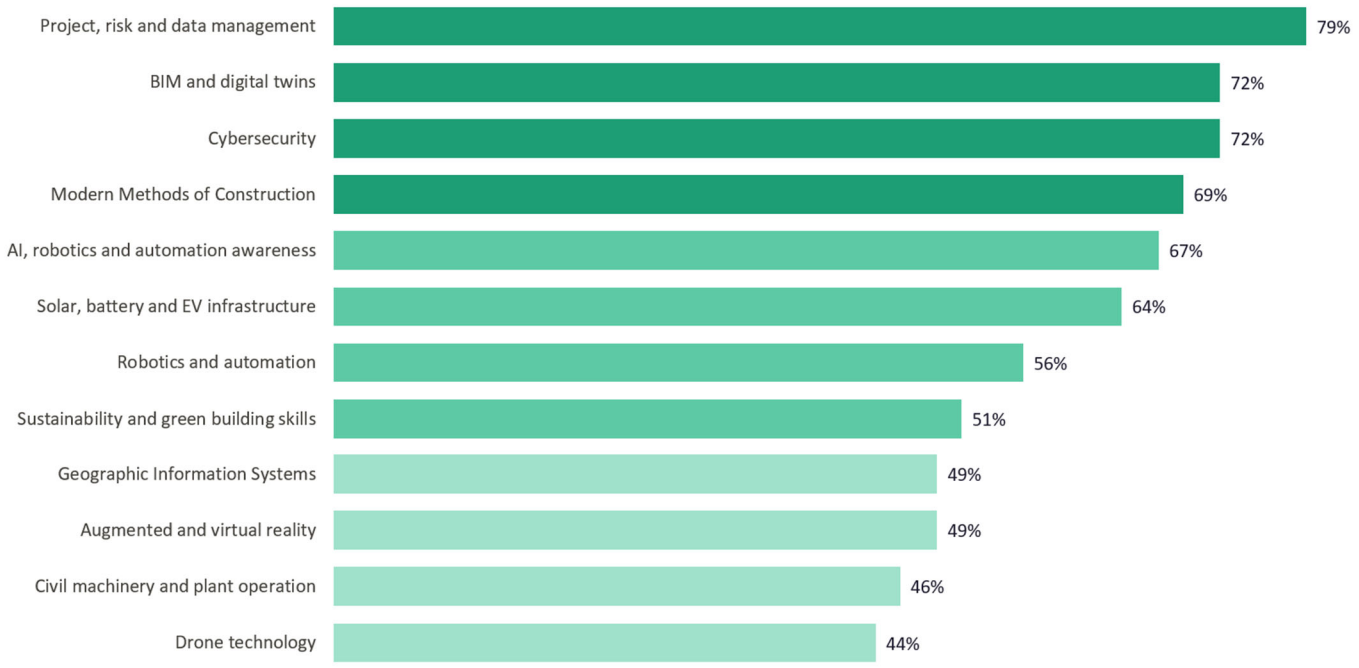
Future skills rated critical or significant

Percentage of respondents rating each skill critical or significant



Source: TFA 2027 Industry Consultation Survey, 39 responses. Figure 3 / Appendix C7.

Workforce participation and culture also emerged as cross-cutting issues. Women in non-traditional vocations were identified by 54% of respondents, Aboriginal and Torres Strait Islander people by 51%, people with disadvantaged backgrounds and mature apprentices by 44%, and at-risk youth by 41%. [11] These issues are considered further in Section 6 because they depend on training relevance, access, employer support, mentoring and workplace conditions.

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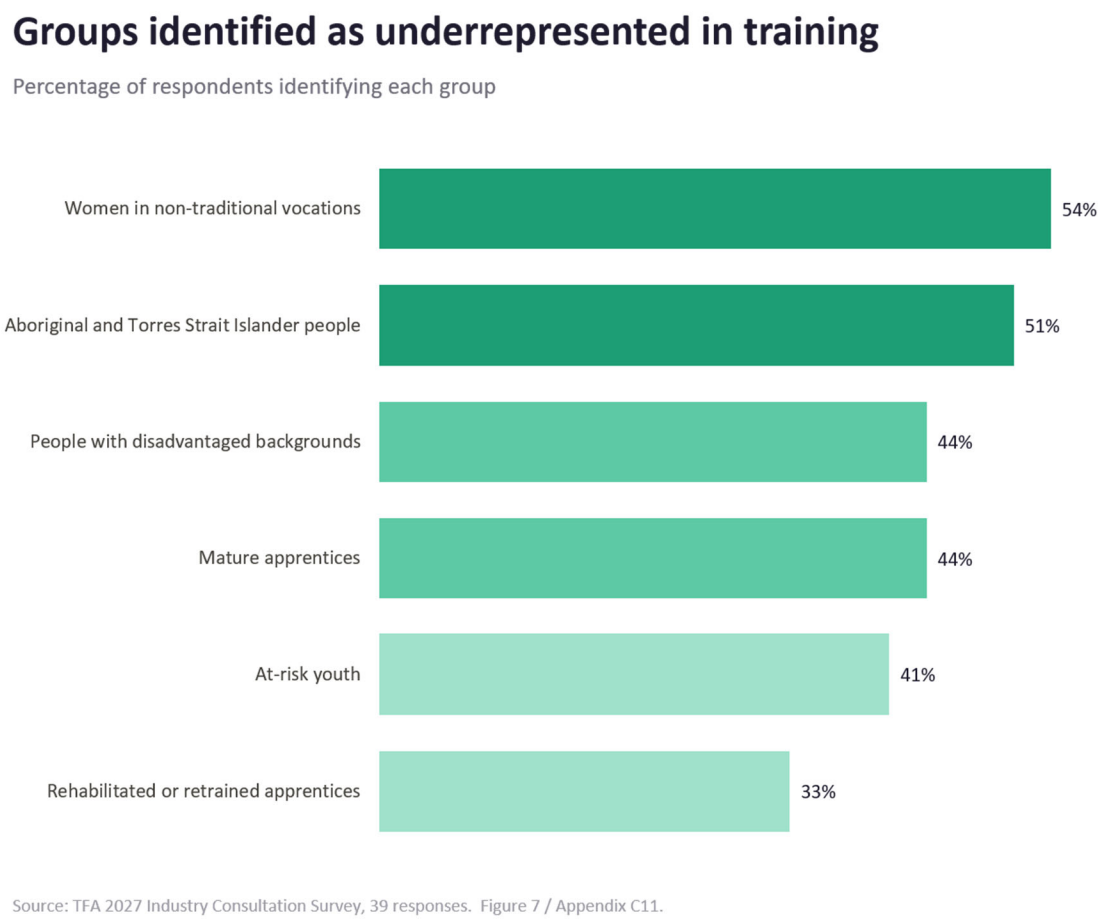

The consultation also showed variation in workforce availability. 64% of respondents rated skilled workers as somewhat available, while 26% said availability depended on the trade or skill. [11] This supports a more granular approach: findings should be tested by occupation, sector, business type and training response rather than treated as a single ACT-wide position.



ACT Project Managers (Image supplied: ACT Construction Industry Training Council)

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References used in this section

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

[12] *Minutes of the TFA 2027 Training Plan Industry Consultation Event*, 9 June 2026.

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4. Current Training Gaps

At a Glance

Current training gaps are not only about worker numbers. Across the ACT industry, the evidence points to a combined problem: trade supply, apprenticeship completion and retention, job-ready capability, safety and licence requirements, and supervisory and business capability.

Survey results show the strongest gaps are apprenticeship completion and retention, and foundational practical skills, both rated critical or significant by 95% of respondents. Work health and safety capability was rated critical or significant by 86%, foundational knowledge including the National Construction Code and Australian Standards by 83%, financial and business literacy by 82%, and supervisory, project-management and leadership capability by 81%. [11]

Trade shortages remain important, particularly in plumbing, electrical, carpentry, tiling, plastering, painting, roof plumbing, concreting and selected specialist areas. [2][7][9] But availability is only part of it: workers also need to be experienced, licensed, able to apply standards, safe to work independently and able to supervise others.

The pattern differs by sector. Residential and specialist trades need qualified workers and stronger practical-quality capability. Civil needs plant, machinery, heavy vehicle and high-risk work capability. Commercial needs experienced trades, supervisors and project capability. Building services and electrotechnology need qualified electrical, HVAC and communications workers, with current licences and practical post-trade capability.

4.1 Purpose

This section identifies the training and workforce capability gaps affecting ACT industry delivery now. It groups the evidence by sector and distinguishes between:

- workforce supply and apprenticeship-pipeline gaps;
- practical, technical and compliance capability gaps;
- safety, licence and high-risk work requirements; and
- supervisory, project-management and business capability.

It does not assess future skills requirements, which are covered in Section 5, or detailed access, delivery and participation issues, which are covered in Section 6.

4.2 Industry-Wide Current Gaps

The evidence supports a continuing focus on core trade supply. The 2026 baseline identified shortages in plumbing, electrical, carpentry, tiling, plastering, painting, roof plumbing and concreting, with specialist shortages in heavy vehicle driving, arboriculture, mechanical

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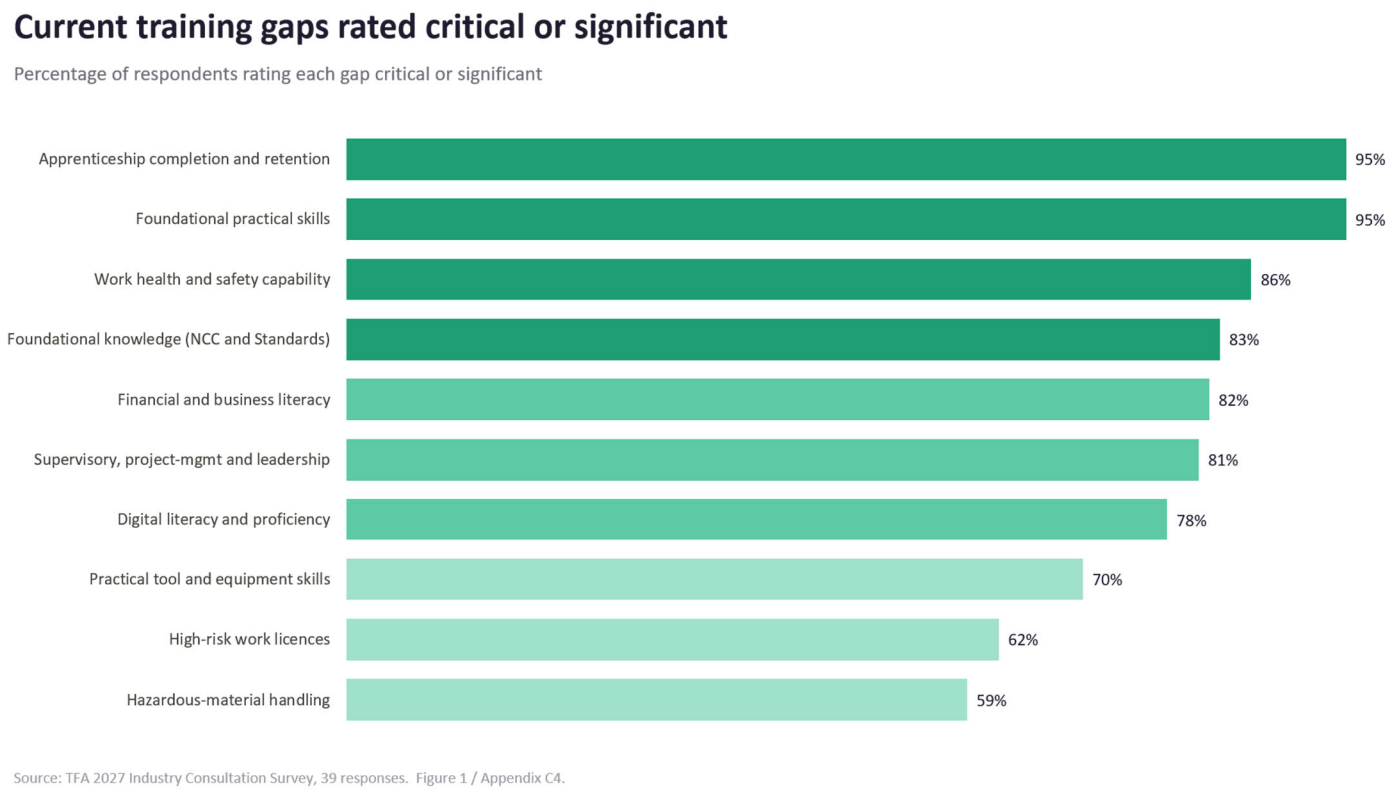
plumbing, waterproofing and duct installation. [9] Current ACT shortage data and stakeholder evidence continue to support these concerns, although severity varies by sector, trade and project type. [2][7][10][11]



Source: TFA 2027 Industry Consultation Survey. Percentage of respondents rating each item critical or significant. Question base ranged from 34 to 37 respondents. [11]

But current gaps are not simply occupation shortages. Businesses need workers who can apply practical skills, interpret the National Construction Code and Australian Standards, use tools and equipment safely, hold relevant licences and work with limited supervision. This is particularly important for apprentices, recently qualified workers, small subcontractors and workers moving into supervisory roles. [7][10][11]

Apprenticeship completion and retention is a current workforce gap across sectors. It affects future supply, but also affects businesses now, because employers cannot rely on a consistent pipeline from entry-level training to competent tradespeople. Survey respondents linked workforce shortages to difficulty attracting workers (79%), retaining workers (59%), foundational skill gaps (59%) and low apprenticeship completion rates (51%). [11]

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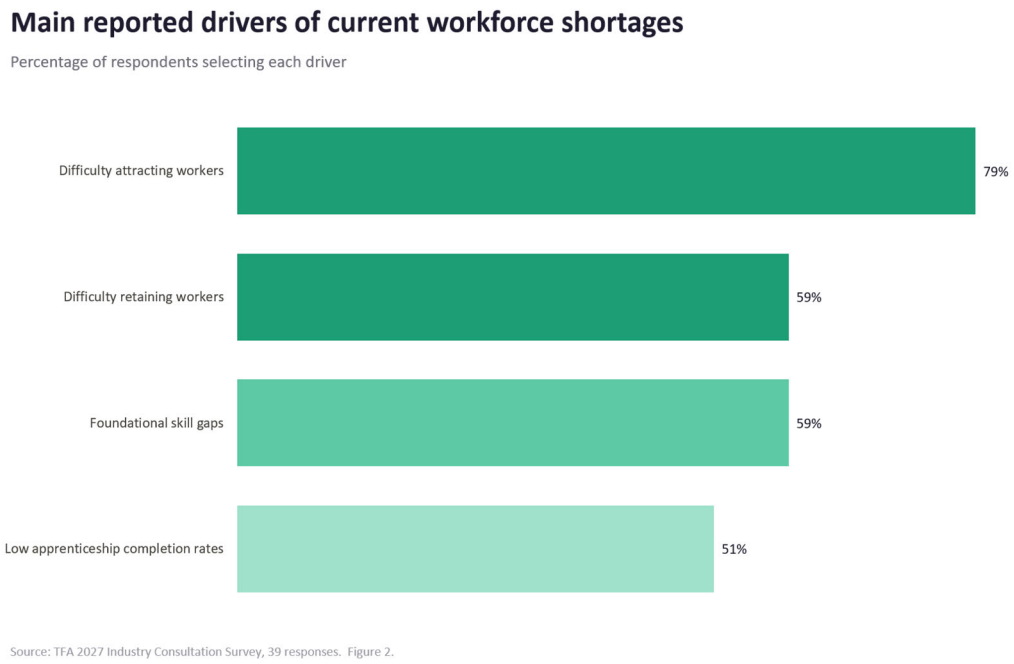

Source: TFA 2027 Industry Consultation Survey, 39 responses. Respondents could select more than one factor. [11]

Foundational practical skills and knowledge are also current gaps: safe work practices, reading plans and measurements, using tools and equipment, applying the National Construction Code and Australian Standards, and understanding how work should be completed on site. The issue is not whether these topics appear in qualifications, but whether workers can apply them consistently in practice. [7][10][11]

Safety, licence and compliance capability remains important. High-risk work licences, work health and safety capability, hazardous-material handling and mandatory safety training are current requirements, particularly in civil, subcontractor, building-services and commercial work. [3][7][11] The detailed availability, cost and delivery of these courses is covered in Section 6.

Supervisory, project-management, financial and business capability are also current gaps. These are especially relevant to small builders and subcontractors, where experienced tradespeople often move quickly into supervision, project coordination or business ownership without structured support. The gaps can affect productivity, compliance, workforce management, apprentice development and the ability to tender for or manage work. [7][10][11]

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Current digital literacy is a related capability issue. Workers and supervisors increasingly need to use project-management systems, electronic documentation, communication platforms and digital tools. This is different from the more advanced technology and future-construction skills covered in Section 5. [6][7][11]

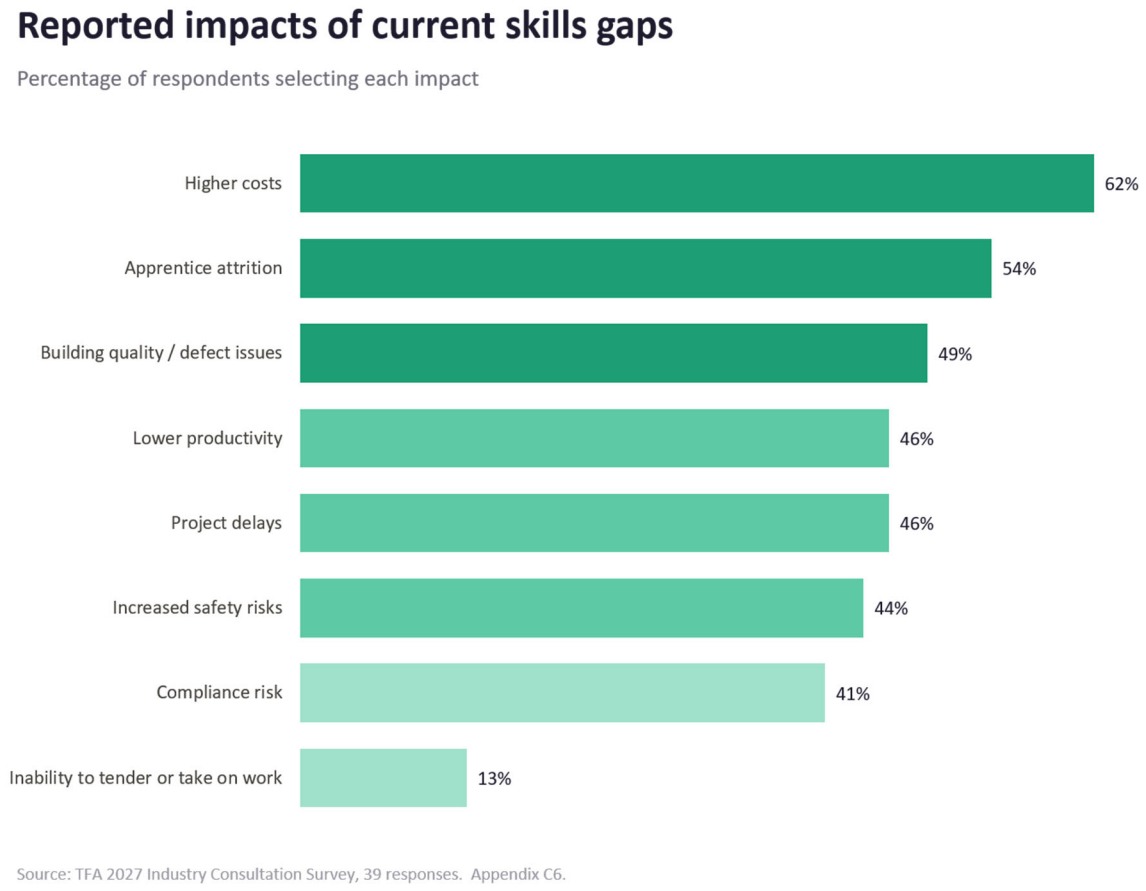

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Table 7 - Current industry-wide gaps and what they mean in practice

Current gap	What it means in practice	Main evidence
Core and specialist trade shortages	Difficulty sourcing qualified workers in priority trades and specialist activities	[2][7][9][10][11]
Apprenticeship completion and retention	Pipeline risk from low completion, weak retention and delayed progression to full capability	[7][10][11]
Foundational practical and technical capability	Workers may hold a qualification but still lack job-ready application of plans, measurements, tools, standards and safe work practices	[7][10][11]
NCC, Standards and compliance knowledge	Capability gaps in applying compliance requirements consistently on site	[7][10][11]
High-risk licences and mandatory safety training	Current operational need in civil, commercial, subcontractor and building-services work	[3][7][11]
Supervisory and project capability	Need for progression of workforce to site supervision, coordination, communication and project control	[7][10][11]
Financial and business literacy	Small-business capability gaps affecting pricing, cash flow, workforce management and training decisions	[7][10][11]
Digital literacy	Need for competent use of current digital tools and project systems	[6][7][11]

Source: desktop review, stakeholder interviews and TFA 2027 Industry Consultation Survey. [2][3][6][7][9][10][11]

4.3 Current Gaps by Sector

Current training gaps vary by sector. Some are shared across the industry; others are shaped by the type of work performed, the business model, the level of supervision available and the licences or practical capability required.

Commercial construction needs experienced trades, supervisors and project-management capability. The evidence points to continuing demand for qualified workers who can operate in more complex project environments, apply standards and coordinate work safely and productively. [2][7][10][11]

Residential construction continues to face shortages in carpentry, electrical, plumbing, roof plumbing, tiling, plastering, painting and concreting. It also has a strong practical-capability and quality focus, including the need for workers who can complete work to standard, reduce defects risk and work with limited supervision. [2][7][9][10][11]

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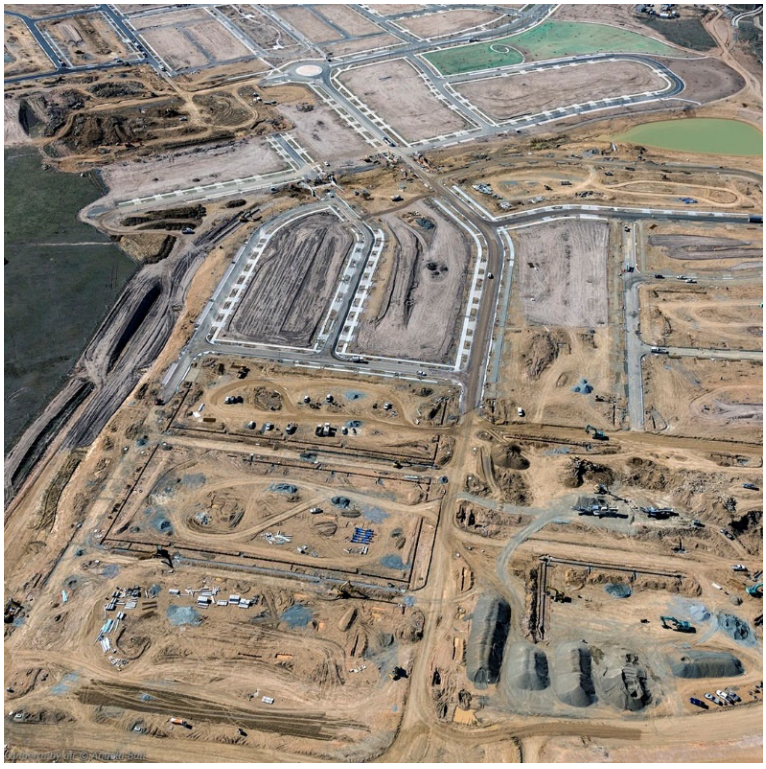
Civil construction has a different current-gap profile. It depends more heavily on plant and machinery operation, heavy vehicle driving, high-risk work licences and practical site capability. The gaps are less about general trade supply and more about licensed, experienced workers who can operate safely in civil environments. [2][3][7][10][11]

Specialist subcontractors and finishing trades continue to face narrower but material shortages, particularly in waterproofing, tiling, plastering, painting, roof plumbing, scaffolding, glazing and concreting. These shortages can affect quality, safety, program timing and the ability of small contractors to take on work. [3][7][9][10][11]

Building services and electrotechnology face current gaps in electrical, mechanical services, HVAC, duct installation, data and communications capability. Current needs include qualified workers, current technical capability and the ability to work across increasingly integrated building systems. [2][3][7][10][11]

The current-gap picture is therefore both trade-specific and cross-sector. It is not enough to say the ACT has shortages. The immediate need is to distinguish between workforce supply, job-ready capability, licensing and safety, and supervisory or business capability. The following sections assess the future skills required beyond these current gaps, and the training-delivery conditions that affect whether the gaps can be addressed.



ACT greenfield site (Image supplied: ACT Construction Industry Training Council)

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Table 8 - Current training gaps by sector

Sector	Main current gaps	What the gap means in practice	Main evidence
Commercial construction	Qualified trades; supervisors; project management; compliance and safety capability	Need for workers who can operate in more complex environments, coordinate trades and apply standards consistently	[2][7][10][11]
Residential construction	Carpentry, electrical, plumbing, roof plumbing, tiling, plastering, painting, concreting; practical quality capability	Need for qualified workers who can complete work to standard, manage defects risk and work with limited supervision	[2][7][9][10][11]
Civil construction	Heavy vehicle driving; plant and machinery operation; high-risk licences; practical site capability	Need for licensed and experienced workers with machinery, safety and site capability	[2][3][7][10][11]
Specialist subcontractors and finishing trades	Waterproofing, tiling, plastering, painting, roof plumbing, scaffolding, glazing, concreting and related specialist capability	Gaps are often narrow but material, affecting quality, safety, timing and the capacity of small contractors	[3][7][9][10][11]
Building services and electrotechnology	Electrical, HVAC, data and communications capability; licences and practical post-trade skills	Need for qualified workers who can work across integrated services and current system requirements	[2][3][7][10][11]
All sectors	Apprenticeship completion and retention; foundational skills; knowledge of NCC and Standards; WHS and high-risk capability; supervision; business capability	Common issue is not only entry to the industry, but progression to competent, productive and supervisory roles	[7][10][11]

Source: desktop review, stakeholder interviews and TFA 2027 Industry Consultation Survey. [2][3][7][9][10][11]

References used in this section

[2] Jobs and Skills Australia, *Occupation Shortage List*, ACT data, 2025.

[3] ACT Government, *ACT Skills Needs List*, updated 22 July 2025.

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

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[7] *2026 Desktop Review Results*, including the baseline assessment, desktop-review findings and ACT shortage check.

[9] ACT Building and Construction Industry Training Fund Authority, *2026 Industry Needs Research Report*.

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

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5. Future Skills Requirements

At a Glance

Future needs are not only about replacing workers as they leave. Trades themselves are changing. Workers increasingly need to use digital systems, work with energy-efficient products and integrated building services, apply new materials and methods, and meet changing compliance. The ACT industry will need stronger capability in digital systems and data, building performance, electrification, renewable energy, Modern Methods of Construction and more productive project delivery.

The highest-rated future need was project, risk and data management (79% critical or significant), followed by BIM and digital twins, and cybersecurity (72% each), Modern Methods of Construction (69%), AI, robotics and automation awareness (67%), and solar, battery and EV infrastructure (64%). [11]

The desktop review identified six areas not covered in 2026. Four come from the energy transition: battery storage, EV charging, grid connection, and remote renewable-system management. The other two are apprenticeship completion and retention, and Modern Methods of Construction. [7] Their relevance varies by sector and timing. Some already affect current work; others need monitoring, targeted capability development or further testing.

5.1 Purpose

This section identifies the skills and capability needed from 2027 onwards as construction methods, energy systems, regulation and technology change. It focuses on:

- sustainability, building performance and energy efficiency;
- electrification, renewable energy and integrated energy systems;
- digital construction, data and cyber capability;
- automation, modern construction methods and productivity;
- civil plant and machinery capability; and
- workforce capability needed to support long-term industry supply.

It does not set final priorities or delivery models. Those are covered in Sections 6, 7 and 8.

5.2 Future Skill Requirements

The strongest future requirement identified through the survey was project, risk and data management. This reflects increasing use of digital project systems, electronic documentation, common data environments and more formal risk and reporting processes. [6][11] The requirement is broader than technical software use. It includes the ability of trades, supervisors

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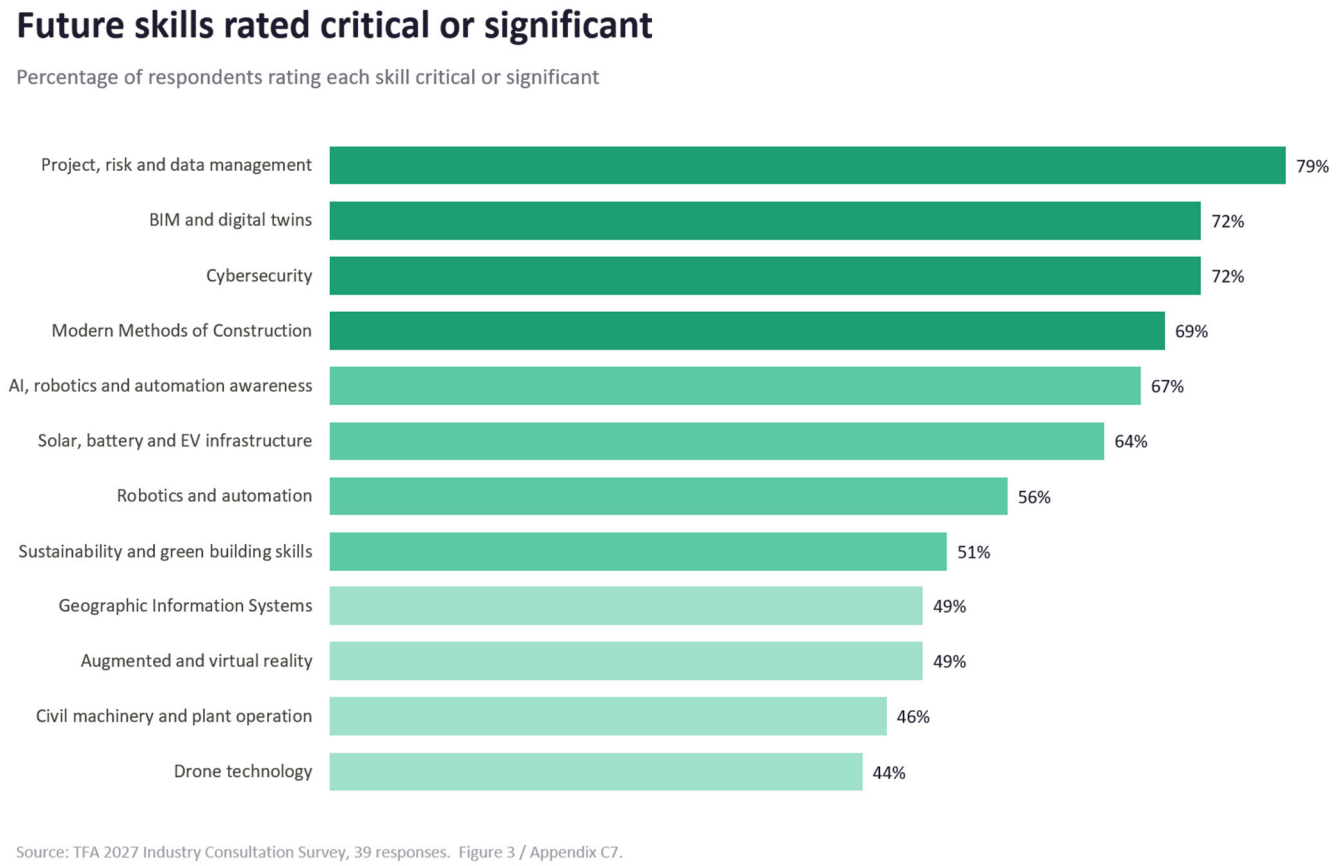
and project staff to use information reliably in planning, coordination, quality control and decision-making.



Source: TFA 2027 Industry Consultation Survey. Percentage of respondents rating each item critical or significant; survey base 39 responses. [11]



ACT worker (Image supplied: ACT Construction Industry Training Council)

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Digital construction capability is the next major theme. BIM and digital twins, cybersecurity, AI and automation awareness, robotics, drones, geographic information systems and augmented or virtual reality were all rated as future needs by a substantial share of respondents. [11] These technologies are not equally relevant across all businesses or projects. Their immediate relevance is greatest in larger commercial, civil, infrastructure and building-services projects, but they are likely to become more common across the wider industry as project systems, compliance and client requirements change. [4][6]

Sustainability and building performance are also becoming core capability requirements. BuildSkills identifies decarbonisation, regulation, technology and productivity as major drivers of construction workforce change. [4] Future needs include energy efficiency, sustainable materials, building performance, low-carbon construction methods and the practical application of changing standards.

Electrification and renewable energy create a related set of future needs. Solar, battery and EV infrastructure was rated critical or significant by 64% of respondents. [11] The desktop review identified further capability areas requiring attention: EV charging infrastructure, battery and energy-storage systems, grid connection, and remote management of renewable-energy systems. [5][7] These needs are most immediate for electrical, HVAC, energy and building-services occupations, but will increasingly affect builders, project managers, designers and supervisors working with integrated building systems.

The ACT's legislated transition to net zero is changing electrotechnology and building services work, and growth in large, automated data centre developments is adding to the shift. [10] Work that was once standard installation now involves complex connected systems. This directly affects unrestricted electrical licenses, HVAC and refrigeration technicians and electrical contractors. Data centre growth also creates a future training demand of its own. Technicians will need to manage automated industrial cooling, high voltage power networks and complex control environments that differ from standard commercial or residential work.

The immediate renewable energy gap is technical depth, not general worker availability. Installers must work across overlapping standards, including AS/NZS 5139 for batteries and AS/NZS 5033 for solar. Consultation reported that national training packages themselves are not deficient regarding testing for AS/NZS 4777.2; rather the issue arises because the Commonwealth program for batteries does not require this inverter grid connection and backup 'island mode' testing to be taught as part of their approval process for installing batteries. This omission has created a significant technical gap on-site, as batteries are commonly added or installed in conjunction with solar PV systems. Consequently, this gap has contributed to a significant increase in the rate of defects identified by the ACT electrical inspectorate during on-site inspections, with Commonwealth and ACT programs actively driving the demand for specialised technical upskilling.[10]

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Practical capability matters as much as technical depth. Modern energy systems operate as digital platforms, so service technicians need Internet of Things (IoT) diagnostic skills and the ability to troubleshoot networks on site. They also need the discipline to read the standards themselves rather than lean on AI tools in place of the published rules. Client skills are part of the picture too. Tradespeople increasingly need to plan whole-home electrification with customers so that early decisions don't force costly switchboard rework later. [10]

Local demand is now sufficient to support ACT-based delivery of this training, including the non-technical pathways. That creates a practical opportunity to transition trades assistants safely and to retain the next generation of Electrotechnology apprentices.

Modern Methods of Construction are another emerging area. Modern Methods of Construction, including prefabrication and off-site systems, was rated critical or significant by 69% of respondents. [11] This reflects the industry’s need to improve productivity, quality, safety and delivery certainty. The capability requirement is not limited to manufacturing or installation. It includes design coordination, procurement, logistics, quality control, digital planning and site integration. [4][6][7]

Civil capability will also continue to change. Future needs include advanced machinery operation, digital plant systems, environmental controls and the ability to work safely with increasingly sophisticated equipment. [3][4][7] These needs are likely to vary by project type and the pace of civil and infrastructure activity.

Apprenticeship completion and retention is not a technical future skill, but it is a future workforce requirement. Without stronger progression from commencement to completion, the ACT will struggle to maintain the qualified workforce needed to meet both current shortages and emerging capability needs. [7][10][11]

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Table 9 - Main future skill requirements

Future capability area	Main requirements	Primary sectors affected	Main evidence
Digital project, risk and data management	Project systems, electronic documentation, common data environments, risk and reporting capability	Commercial, civil, building services, larger residential projects	[6][11]
Digital construction and cyber capability	BIM, digital twins, cybersecurity, AI awareness, automation, drones, GIS and immersive technology	Commercial, civil, building services, specialist contractors	[4][6][11]
Sustainability and building performance	Energy efficiency, sustainable materials, building performance and low-carbon construction practices	Residential, commercial, building services, supervisors and project staff	[4][7][11]
Electrification and renewable energy	Solar, batteries, EV charging, grid connection and remote system management	Electrical, HVAC, building services, renewable energy, construction management	[5][7][11]
Modern Methods of Construction	Prefabrication, off-site systems, design coordination, logistics, installation and quality control	Commercial, residential, manufacturing-linked contractors and specialist trades	[4][6][7][11]
Civil plant and machinery capability	Advanced plant operation, digital systems, environmental controls and safety	Civil, infrastructure and plant-intensive subcontractors	[3][4][7][11]
Workforce pipeline and progression	Apprenticeship completion, retention, mentoring and transition to competent tradesperson	All sectors	[7][10][11]

Source: desktop review, stakeholder interviews and TFA 2027 Industry Consultation Survey. [3][4][5][6][7][10][11]

5.3 Drivers and Sector Implications

Future skills needs are driven by a combination of demand, regulation, policy and technology. Housing demand was selected by 79% of respondents as a driver of future skills needs. ACT regulation and licensing requirements were selected by 74%; the ACT infrastructure pipeline and federal net-zero policy by 69% each; new and emerging technology by 67%; and demand for more efficient and productive work practices by 64%. [11]

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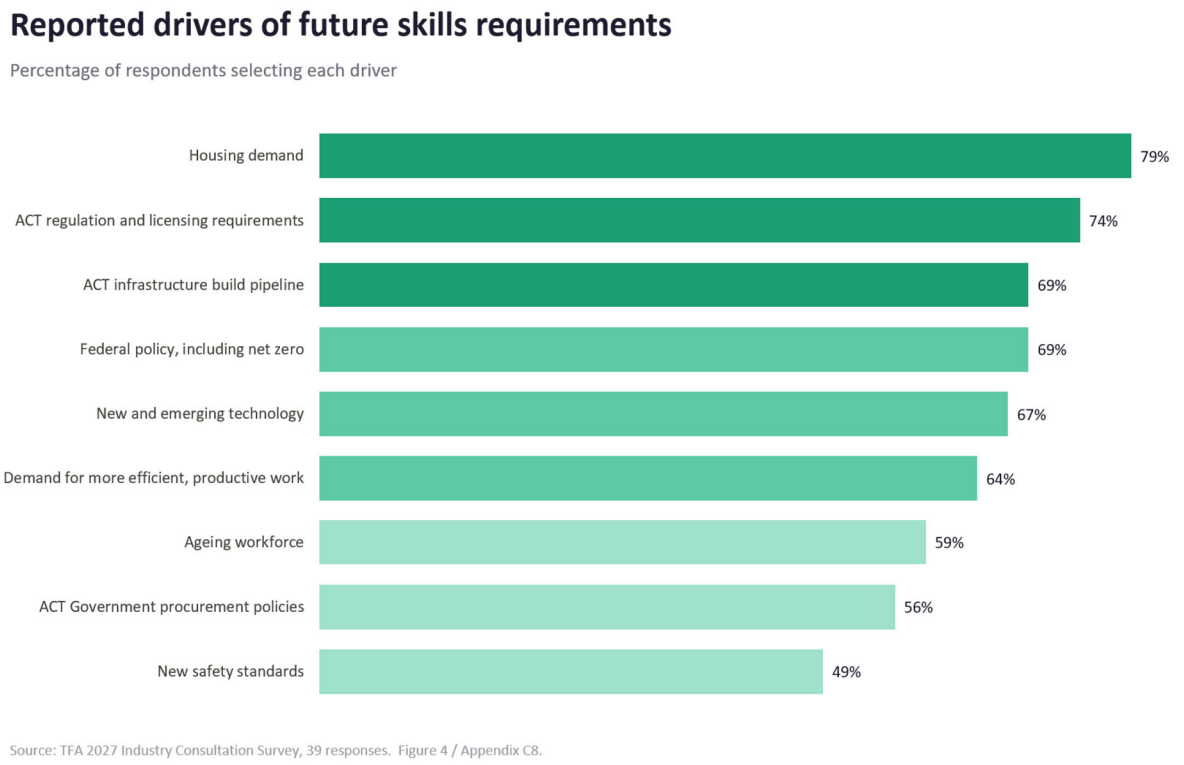

Source: TFA 2027 Industry Consultation Survey, 39 responses. Respondents could select more than one driver. [11]

Future capability implications differ by sector:

- **Commercial construction** will increasingly require digital coordination, project data, BIM, cyber awareness, AI sustainability capability and stronger project-management systems, most likely first on larger and more complex projects.
- **Residential construction** will need stronger building-performance, energy-efficiency and electrification capability, with practical use of prefabrication, off-site systems and integrated building technologies.
- **Civil construction** will need advanced plant and machinery capability, digital plant systems, environmental controls and stronger project, risk and data-management capability.
- **Specialist subcontractors** will need to combine core trade skills with post-trade capability in energy efficiency, digital systems, advanced equipment, product changes and evolving standards.
- **Electrical, HVAC, data and communications occupations** will be central to the ACT legislated electrification, solar, batteries, EV charging, integrated energy systems and smart-building technology, requiring both specialist technical skills and coordination with the wider construction workforce.

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The evidence supports a staged approach to future capability. Some skills are already becoming practical requirements in current work. Others are emerging and require targeted development, industry partnership or continued monitoring before the Authority determines a funding response. Sections 7 and 8 assess these matters alongside current gaps, delivery constraints and the Authority's role.

Table 10 - Future skill requirements by sector

Sector	Main future capability requirements
Commercial construction	BIM, digital twins, AI, project and data management, cybersecurity, sustainability, modern construction methods and coordination of integrated systems
Residential construction	Energy efficiency, building performance, electrification, sustainable materials, prefabrication and practical application of changing requirements
Civil construction	Advanced plant and machinery, digital systems, environmental controls, safety and infrastructure project capability
Specialist subcontractors and finishing trades	Post-trade technical updates, advanced equipment, changing materials and standards, digital systems and quality capability
Building services and electrotechnology	Solar, batteries, EV charging, grid connection, VPPs, remote system management, smart buildings and integrated services
All sectors	Apprenticeship completion and retention, supervisory capability, digital confidence, sustainability awareness and capacity to adapt to changing work practices

Source: desktop review, stakeholder interviews and TFA 2027 Industry Consultation Survey. [3][4][5][6][7][10][11]

References used in this section

[3] ACT Government, *ACT Skills Needs List*, updated 22 July 2025.

[4] BuildSkills Australia, *2025-26 Workforce Plan*.

[5] Powering Skills Organisation, *Workforce Plan 2025*, including ACT and national material.

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

[7] *2026 Desktop Review Results*, including the baseline assessment, desktop-review findings and ACT shortage check.

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

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6. Training Delivery, Access and Participation

At a Glance

Training is available in the ACT, but it does not consistently meet industry needs: 31% of survey respondents said suitable local training was available; 62% said it was available but did not fully meet industry needs; and 8% identified specific areas where training was unavailable locally or only available interstate or online. [11]

The main barriers are practical. Employer time and cost was selected by 64% of respondents, followed by training cost (51%), language, literacy and numeracy barriers (44%), rebate adequacy (41%) and limited RTO capacity (38%). [11]

Industry prefers delivery that helps workers apply learning on site. Blended delivery was selected by 87% of respondents, face-to-face by 77%, on-site by 54%, mentoring by 51% and short courses by 46%. [11]

Access is also shaped by workforce participation. Women in non-traditional vocations were identified as underrepresented in training by 54% of respondents, Aboriginal and Torres Strait Islander people by 51%, people with disadvantaged backgrounds and mature apprentices by 44%, and at-risk youth by 41%. [11]

The evidence points to a practical delivery challenge: training must be available locally, relevant to current work, affordable for employers and workers, and supported by workplace release, mentoring and flexible delivery.

6.1 Purpose

This section considers whether the training identified in Sections 4 and 5 is available, accessible and fit for purpose. It examines:

- availability of suitable local training;
- provider capacity, waiting times and interstate leakage;
- cost, rebates and employer capacity to release workers;
- practical, flexible and industry-led delivery;
- language, literacy, numeracy and digital-access barriers; and
- workforce participation, inclusion and retention.

It does not set final funding priorities or recommendations. These are covered in Sections 7 and 8.

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6.2 Training Access and Delivery

Access to training. The main issue is not the complete absence of training. Most respondents said suitable local training was available, at least in part. However, 62% said available training did not fully meet industry need. [11] The main access barriers are employer release and cost. Construction businesses, particularly smaller employers and subcontractors, must weigh training against project deadlines, labour availability and cash flow. This can make even suitable training difficult to access. [10][11]

Figure 1 - Main barriers to training access

Training access barrier	Survey respondents
Employer support: time and cost	64%
Cost of training	51%
Language, literacy, numeracy or related barriers	44%
Rebate does not cover enough of the cost	41%
Limited RTO capacity	38%
Course relevance	36%
Long waiting times for courses	26%
Training not available in the ACT	26%
Training too theoretical or not practical enough	23%
Difficulty accessing online training or digital systems	15%
Travel time or location	10%

Source: TFA 2027 Industry Consultation Survey, 39 responses. Respondents could select more than one barrier. [11]

Gaps in local training. Individual responses identified specific local gaps in waterproofing, concreting and steel fixing, and noted that some training was available only interstate or online. [11] These examples should be treated as indicators for further testing, not evidence that every course in these areas is unavailable. Course relevance is also important: respondents raised concern that training can be too theoretical, insufficiently practical or not well matched to current site conditions. [11] Stakeholder evidence supports a preference for delivery that helps workers apply skills safely and consistently on the job, rather than only completing a qualification or compliance requirement. [10]

Apprenticeship funding arrangements. Consultation identified support for reviewing how TFA apprenticeship funding is distributed between Group Training Organisations (GTOs) and directly employing businesses. Participants generally recognised that GTOs provide valuable support, including apprentice pastoral care, field officer contact, host-employer placement and continuity of employment. At the same time, several stakeholders suggested that directly employed

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apprentices and their employers should have clearer access to comparable levy-funded support.

One participant supported funding being “spread equitably across all apprentices”. Another said they would “like to see field officer support extended to directly indentured apprentices as well”. A third noted that “equal distribution would encourage more direct employment of apprentices”.

The consultation evidence therefore supported a review of funding arrangements that retains the benefits of the GTO model while considering how equivalent support can be made available more broadly across the apprenticeship system.

Delivery methods. The preferred delivery methods reflect this. Blended delivery was selected by 87% of respondents, followed by face-to-face (77%), on-site (54%), mentoring (51%) and short courses (46%). Online and after-hours delivery were each selected by 26%. [11] This does not mean online learning has no role. It suggests online components work best combined with practical training, workplace application, face-to-face support or mentoring. This is consistent with the Nextbuild Digital Blueprint, which identifies hands-on and blended delivery as particularly important where workers need to apply technology and practical skills. [6]

Table 11 - Availability of suitable local training

Availability of suitable ACT training	Survey respondents	Interpretation
Yes	31%	Suitable training is available locally for the needs identified
Partly available	62%	Training exists but does not fully meet needs because of course content, timing, local availability, capacity or delivery format
Not locally available, or only interstate/online	8%	Specific training gaps or access constraints require further testing

Source: TFA 2027 Industry Consultation Survey, 39 responses. [11]

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Figure 2 - Preferred training delivery methods

Delivery method	Survey respondents
Blended delivery	87%
Face-to-face delivery	77%
On-site delivery	54%
Mentoring	51%
Short courses	46%
Online delivery	26%
After-hours delivery	26%

Source: TFA 2027 Industry Consultation Survey, 39 responses. Respondents could select more than one method. [11]

The evidence points to four practical delivery implications:

Issue	Delivery implication
Employer time and cost	Training needs to be scheduled and structured so employers can release workers with less disruption to projects.
Course relevance and practical application	Delivery should combine accredited content with practical, industry-current application.
Limited local capacity or course availability	The Authority may need to identify unmet demand, promote available courses or work with providers and industry where a local response is viable.
Language, literacy, numeracy and digital access	Learner support needs to be built into delivery, particularly where courses rely on online systems, technical documentation or formal assessment.

Source: stakeholder interviews, survey results and Nextbuild Digital Blueprint. [6][10][11]

6.3 Participation and Inclusion

Participation is not separate from workforce supply. The ACT cannot address persistent shortages if potential workers cannot enter training, complete it or progress to competent employment.

Women in non-traditional vocations were the group most often identified as underrepresented in training, selected by 54% of respondents. Aboriginal and Torres Strait Islander people were selected by 51%; people with disadvantaged backgrounds and mature apprentices by 44%; at-risk youth by 41%; and rehabilitated or retrained apprentices by 33%. [11]

These results do not mean each group faces the same barriers. The issues vary between sectors and individuals. However, stakeholder evidence points to several common factors: training cost, employer release, practical access, mentoring, workplace culture, confidence, foundational skills and the suitability of training pathways for people entering or returning to the industry. [10][11]

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Apprentice retention is particularly important. Training access alone will not improve the workforce pipeline if apprentices do not receive sufficient workplace support, practical exposure and supervision to complete their trade. This requires a combined response from employers, GTOs, RTOs, industry bodies and the Authority. [10][11]

The evidence does not support a single participation solution. Training support needs to be matched to the barrier. In some cases, this may involve flexible delivery, learner support or targeted pathways. In others, the critical factor will be employer practice, mentoring, workplace culture or access to suitable work experience.

The main conclusion is that training quality, access and participation are closely connected. A course may be technically available but still fail to address a skills gap if workers cannot attend, cannot afford it, cannot apply the learning on site, or are not supported to complete their pathway.

Figure 3 - Groups identified as underrepresented in training

Group	Survey respondents
Women in non-traditional vocations	54%
Aboriginal and Torres Strait Islander people	51%
People with disadvantaged backgrounds	44%
Mature apprentices	44%
At-risk youth	41%
Rehabilitated or retrained apprentices	33%

Source: TFA 2027 Industry Consultation Survey, 39 responses. Respondents could select more than one group. [11]

References used in this section

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

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7. Priority Findings for the Authority

At a Glance

The evidence supports four immediate priorities for the 2027 Training Plan:

- maintain the pipeline of qualified workers in priority trades, with stronger focus on apprentice completion and retention;
- improve job-ready practical capability, including safety, compliance, licences and quality;
- build supervisory, project-management, business and digital capability; and
- improve access to practical, flexible training that employers and workers can use.

Two further areas require targeted development rather than broad funding responses: electrification, renewable energy and building performance; and digital construction, Modern Methods of Construction and automation.

The Authority cannot resolve all workforce issues through training funding. Its strongest contribution is where a clear training, rebate, promotion or program-design response exists. Other matters require partnership with employers, RTOs, GTOs, industry bodies, regulators and government, or should be monitored rather than treated as direct funding priorities.

7.1 Purpose

This section converts the evidence in Sections 2-6 into practical priorities and recommended actions for the 2027 Training Plan. It identifies:

- immediate priorities for funding, promotion or program design;
- emerging areas requiring targeted development or monitoring;
- cross-cutting delivery and participation requirements; and
- matters requiring partnership or action outside the Authority's direct remit.

It does not replace annual Authority planning or determine final funding settings. It provides an evidence-based framework for those decisions.

7.2 Priority Assessment

Priority areas have been assessed against four questions:

- **Industry significance:** is the issue affecting workforce supply, current delivery, safety, quality, productivity or future capability?
- **Evidence strength:** is it supported by more than one evidence source, including desktop evidence and consultation?

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- **Practical response:** can the Authority make a meaningful contribution through funding, rebates, promotion, program design or partnership?
- **Timing:** is the issue immediate, emerging or dependent on further market development?

The assessment gives greatest weight to issues that are both material to industry and capable of being addressed through a practical Authority response. It does not treat every reported shortage, technology trend or workforce issue as a separate funding priority.

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7.3 Priority Findings and Recommended Response

Table 12 - Priority findings and recommended Authority response

Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
1. Priority trades and apprenticeship completion	Core and specialist trade shortages remain evident. Apprentice recruitment, completion and retention were among the strongest survey priorities, with completion and retention rated critical or significant by 95% of respondents. Consultation also supported reviewing apprenticeship support so that direct employers and GTOs can access appropriate assistance, while retaining the additional services GTOs may provide. [2][7][9][10][11]	Immediate	Maintain support for priority trade pathways and strengthen practical measures that help apprentices complete and progress to competent trade practice. Review apprenticeship funding arrangements so direct employers and GTOs can access appropriate support. Retain targeted GTO support where it provides demonstrated additional services, including mentoring, field officer contact, host-employer placement and improved retention rates.	Employers, GTOs, RTOs, industry bodies and government. TFA funding can support training, but apprentice completion, training access and workforce outcomes also depend on employer release time, workplace mentoring, RTO capacity, licensing requirements and other government funding. These constraints cannot always be resolved through rebates alone.
2. Job-ready practical capability, safety and compliance	Industry needs workers who can apply practical skills, use tools safely, work to standard and meet licence, NCC, Australian Standards and WHS requirements. Foundational practical skills were rated critical or significant by 95%; WHS by 86%; and foundational knowledge, including NCC and Standards, by 83%. [7][10][11]	Immediate	Support practical, industry-current training, high-risk licences and mandatory safety capability within eligibility settings. Give priority to training that improves site readiness, quality and safe work.	RTOs, employers, industry associations and regulators.

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Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
3. Supervisory, project-management, business and digital capability	Businesses need stronger site supervision, project coordination, communication, risk management, financial literacy and use of current digital systems. Supervisory and project capability was rated critical or significant by 81%; financial and business literacy by 82%; and digital literacy by 78%. [7][10][11]	Immediate	Support short, practical post-trade programs for supervisors, small builders and subcontractors. Promote relevant existing courses and work with providers and industry to address material gaps.	RTOs, employers, industry associations and business support bodies.
4. Training access, practical delivery and provider capacity	Training is available but does not consistently meet need. 62% of respondents said suitable ACT training was only partly available. Employer time and cost, training cost, literacy and numeracy barriers, rebate adequacy and provider capacity were the main constraints. [10][11]	Immediate and cross-cutting	Review eligibility, rebate and promotion settings against practical access barriers. Support practical, flexible and blended delivery. Identify unmet demand, course gaps and local provider-capacity issues for partnership action.	RTOs, GTOs, employers, industry bodies and government.
5. Electrification, renewable energy and building performance	ACT demand now supports local delivery of post-trade training in solar, batteries, EV charging and related electrical capability. Consultation identified practical gaps in solar and battery compliance, load management, alternate supplies, EV charging, trainer capacity and apprentice readiness. These issues affect safety, compliance, quality and the ability of licensed electricians to support electrification.	**Immediate targeted funding:** solar and battery compliance, EV charging, load management, alternate supplies, building science, local trainer capability and apprentice readiness assessments. **Pilot or partnership:** data-centre cooling, industrial automation and electrical-focused psychosocial and WHS programs. **Monitor:** smart-energy systems, IoT, networks, remote diagnostics and emerging Power over Ethernet safety issues.	Fund defined accredited and non-accredited post-trade programs where local demand, suitable providers and clear regulatory or safety need are established. Support ACT-based RTO capability, including trainer development where this is a constraint. Consider targeted support for apprentice entry diagnostics and readiness assessments to identify foundational literacy, numeracy and mechanical-reasoning needs early. Use pilots, provider mapping, demand testing, uptake data and regulator feedback before broader funding commitments.	CIT, NECA, GETS and other RTOs; electrical contractors, employers, GTOs, unions, industry bodies, the electrical inspectorate, regulators and energy-sector employers. Delivery depends on verified demand, local provider capability, suitable training products, trainer availability, employer release time and clear alignment with relevant licensing, safety and technical requirements.

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Priority area	Why it matters	Priority status	Recommended Authority response	Delivery partners and dependencies
6. Digital construction, Modern Methods of Construction and automation	Project data, BIM, digital twins, AI, cyber awareness, prefabrication, off-site systems and automation are emerging capability requirements. They are material but do not affect every sector or business equally. [4][6][7][11]	Targeted development and monitoring	Support targeted pilots, short courses and industry-led capability development. Monitor demand, technology uptake and provider capability before making broad changes to funding settings.	Industry, RTOs, technology providers, employers and government.
7. Participation, inclusion and workplace support	Women, Aboriginal and Torres Strait Islander people, disadvantaged workers, mature apprentices and at-risk youth were identified as underrepresented in training. Participation is linked to access, mentoring, workplace culture and retention, not simply course availability. [10][11]	Cross-cutting requirement	Embed learner support, mentoring and inclusion measures across priority programs. Where appropriate, use targeted promotion and pathway support for underrepresented groups.	Employers, GTOs, RTOs, industry bodies, community organisations and government.
8. Keep priorities current through evidence and practical partnerships	Maintain an annual evidence cycle covering demand, local course availability, uptake, completions, retention, unmet need, trainer capacity and emerging regulatory or workforce issues.	Ongoing	Use partnerships to address identified delivery constraints: work with employers and GTOs on mentoring, workplace support and release-time barriers; with RTOs on local course availability, trainer capacity and delivery gaps; with regulators on emerging licensing, safety and compliance needs; and with government to identify funding gaps and avoid duplication. Refresh priorities annually using Authority data, provider feedback, labour-market information and targeted consultation.	Employers, GTOs, RTOs, industry bodies, unions, regulators and government.

Source: desktop review, stakeholder interviews, TFA 2027 Industry Consultation Survey and 2026 Industry Needs Research Report. [2][4][5][6][7][9][10][11]

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On the energy transition, the recommended approach for the Authority is targeted rather than broad. The evidence supports funding defined post-trade specialist training in electrification, solar, batteries and EV charging where ACT demand and suitable local delivery are established, while using demand testing, provider mapping and uptake data before any broad funding commitment.

ACT demand is now strong enough to support local delivery of both technical and non-technical programs through providers including the Canberra Institute of Technology (CIT), the National Electrical and Communications Association (NECA) and Global Energy Training Solutions (GETS). Workers no longer need to travel interstate for this licensing and upskilling.

To address immediate safety and compliance gaps, the recommended electrotechnology funding and promotion priorities are:

- **Fund RTOs to deliver accredited and non-accredited solar and battery compliance courses.** This can include accredited post-trade courses in batteries and solar consistent with Solar Accreditation Australia requirements, or non-accredited specialist compliance courses. The funding responds to the reported technical gap where the Commonwealth program for batteries does not require AS/NZS 4777.2 inverter grid connection and back up island mode testing to be taught as part of their battery installation approval process. Because batteries are commonly added or installed alongside solar PV systems, this misalignment has contributed to an increase in defects identified by the ACT electrical inspectorate during onsite inspections, with Commonwealth and ACT programs driving the demand for this targeted compliance training. It should also support the upskilling and recruitment of local electrical trainers, including Certificate IV in Training and Assessment support and mentor shadowing, to resolve local trainer scarcity.

- **Fund existing courses and support development of post-trade courses in EV sizing, dynamic load management, alternate supplies and building science.** Work with RTOs and industry to support the ACT electrification target. Competencies should cover calculating and reserving spare switchboard capacity so households can move from gas to electric heating, EV charging and induction cooking without rework, managing EV charger phase imbalance in commercial and apartment car parks through dynamic phase loading, load shedding and smart grid balancing, safe isolation practice for switchboards back-fed at the same time by grid power, rooftop solar and battery storage, and the building science fundamentals that protect the building envelope and sarking during retrofits and prevent the material incompatibilities identified in Section 5.2.

- **Fund apprentice entry diagnostics and readiness assessments.** Establish a rebate or direct funding pathway for non-accredited aptitude and readiness assessments for prospective Certificate II and Certificate III Electrotechnology students. Identifying maths, reading and mechanical reasoning gaps before sign-up lets employers and providers target support early and reduce early-stage attrition.

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Some emerging priorities suit a partnership or pilot approach so demand can be tested before broad funding commitments:

- **Data centre cooling and industrial automation.** Partner with industry to monitor data infrastructure growth and support employer-subsidised pilots for electrical and HVAC technicians.
- **Psychosocial safety and modern WHS programs.** Partner with GTOs and unions as they complete co-development of electrical-focused safety packages, then support targeted pilots once these are operational. This includes GTO-led coordination of WHS and psychosocial safety communication between field officers, host employers and apprentices.

Other matters should be monitored rather than funded now:

- **Smart home energy systems, IoT and remote diagnostics.** Monitor local uptake while supporting vendor-neutral, non-accredited short courses in digital network literacy.
- **Power over Ethernet voltage creep.** Monitor the safety risk as PoE voltages move from extra low voltage toward low voltage shock hazard levels, to determine future upskilling needs for data and communications technicians.

7.4 Authority Role and Boundaries

The Authority can make the strongest direct contribution where a clear training or program response exists. This includes:

- funding or promoting priority qualifications, licences, short courses and post-trade capability;
- reviewing rebate, eligibility and promotion settings;
- identifying unmet local training demand and material course gaps;
- supporting practical, flexible and industry-current delivery; and
- using annual evidence to test changes in industry demand.

Several priorities require partnership rather than funding alone. Apprentice completion and retention, mentoring, provider capacity, workplace readiness, participation pathways and emerging technology depend on coordinated action by employers, RTOs, GTOs, industry bodies, regulators and government.

Some matters should be monitored or referred rather than treated as direct priorities: broader labour-market conditions, wages, project timing, business viability, procurement settings, licensing policy and wider regulatory reform. These shape training demand but cannot be resolved through training funding alone.

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7.5 Implementation Priorities

The practical objective is not to fund every reported need. It is to focus investment where it can improve workforce capability, training access and industry readiness, while using partnerships and monitoring issues outside the Authority's direct control. The recommended sequence for the 2027 Training Plan is:

- **Confirm immediate funding priorities:** confirm priority qualifications, licences, safety training and practical post-trade capability programs against the evidence in this report.
- **Review access and delivery settings:** test rebate, eligibility and promotion settings against employer time and cost, course relevance, local availability, provider capacity and learner-support barriers.
- **Develop targeted partnerships:** establish or strengthen partnerships on apprentice completion and retention, practical delivery, emerging energy capability, provider capacity and participation pathways.
- **Test emerging capability needs before broad funding changes:** use targeted pilots, industry engagement and evidence collection for electrification, renewable energy, digital construction, MMC and automation.
- **Maintain an annual evidence cycle:** update the priority assessment each year using Authority program data, current labour-market evidence, provider feedback and targeted industry consultation.

References used in this section

[2] Jobs and Skills Australia, *Occupation Shortage List*, ACT data, 2025.

[4] BuildSkills Australia, *2025-26 Workforce Plan*.

[5] Powering Skills Organisation, *Workforce Plan 2025*, including ACT and national material.

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

[7] *2026 Desktop Review Results*, including the baseline assessment, desktop-review findings and ACT shortage check.

[9] ACT Building and Construction Industry Training Fund Authority, *2026 Industry Needs Research Report*.

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

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8. Strategic Guidance and Implementation

At a Glance

The 2027 Training Plan should focus Authority investment on the training needs it can influence directly: priority trade pathways, practical job-ready capability, licences and safety, supervision and business capability, and access to suitable training.

The Authority should use partnership where outcomes depend on employers, RTOs, GTOs, industry bodies, regulators or government. This is particularly important for apprentice completion and retention, provider capacity, workforce participation and emerging technology.

Emerging needs should be tested before broad funding changes. Electrification, renewable energy, digital construction, Modern Methods of Construction and automation should be supported where demand is clear and suitable training is available, while the Authority continues to monitor uptake and industry need.

8.1 Purpose

This section provides guidance on how the Authority can use the findings and recommendations in Section 7 to inform the 2027 Training Plan, annual funding decisions and ongoing industry engagement. It focuses on:

- directing funding and program activity toward the highest-value training responses;
- using partnerships where responsibility sits outside the Authority's direct remit;
- testing emerging needs before changing funding settings broadly; and
- maintaining a practical annual evidence cycle.

8.2 Strategic Guidance

The Authority should retain a clear distinction between immediate training needs, partnership priorities and broader market issues.

Immediate priorities should guide eligible training, rebates, promotion and course visibility: priority trade pathways, apprentice completion and retention support, practical capability, licences and safety, supervision, project management, business capability and access to suitable training.

Partnership priorities require the Authority to work with others rather than fund a response in isolation: employer mentoring and workplace support, RTO and GTO capacity, learner support, participation pathways, emerging energy capability and the practical adoption of new technology.

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Broader market and regulatory matters should be monitored or referred: wages, project timing, business viability, procurement settings, licensing policy and regulatory reform. These affect industry demand but cannot be resolved through training funding alone.

The Authority should also avoid treating every emerging technology as an immediate funding priority. A technology-led response is most appropriate where there is clear ACT demand, a defined workforce need, suitable training available or able to be developed, and industry ready to use it.

8.3 Implementation Priorities

Table 13 - Strategic guidance and implementation actions

Implementation area	Recommended action	Practical output
1. Confirm priority investment areas	Aligning 2027 funding, rebate and promotion settings with the immediate priorities in Section 7.	Clear list of priority qualifications, licences, short courses and post-trade capability programs.
2. Improve practical access to training	Review whether existing settings respond to employer time and cost, course relevance, local availability, provider capacity and learner-support barriers.	Targeted adjustments to eligibility, rebates, promotion or course information where evidence supports change.
3. Strengthen apprentice progression	Work with employers, GTOs, RTOs and industry bodies to identify practical supports for completion, mentoring, workplace readiness and retention.	Partnership activity focused on progression from commencement to completion and competent trade practice.
4. Build supervisor and small-business capability	Promote and support practical post-trade training in supervision, project management, communication, financial management, risk and digital systems.	Increased visibility and uptake of relevant short courses and capability programs.
5. Test emerging capability needs	Use targeted industry engagement, pilots or short-course responses for energy transition, digital construction, MMC and automation.	Evidence on demand, training availability, uptake and whether broader funding support is justified.
6. Address participation barriers	Embed learner support, mentoring, flexible delivery and targeted promotion in relevant programs.	Improved access for underrepresented groups and stronger support for apprentices and new entrants.
7. Maintain an annual evidence cycle	Refresh the priority assessment using Authority program data, provider feedback, current labour-market evidence and targeted consultation.	Updated annual priorities and early identification of material changes in demand.

8.4 Partnership Approach

Partnerships should be used where Authority funding alone will not address the underlying issue. For example, employers have a central role in releasing workers for training, providing supervision, mentoring apprentices and creating workplace conditions that support retention. RTOs and GTOs are responsible for course availability, delivery quality, trainer capability and apprenticeship support. Industry bodies can identify sector demand, promote pathways and help

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test emerging needs. Regulators and government agencies retain responsibility for licensing, safety, policy, procurement and broader workforce settings. The Authority’s role is to use its funding, program design and industry position to connect these.

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Appendices

Appendix A - Research Methodology

This study used a mixed-method approach combining desktop research with structured stakeholder consultation. Published data provided context and scale; consultation provided ACT-specific practical insight; and survey and forum evidence tested the relative importance of issues across sectors.

Desktop review. The review combined ACT-specific, national and industry evidence (see Table 5 in Section 2 for the full source list). It converted the 2026 report's themes into 65 testable baseline items and assessed each against current labour-market, training, policy, industry and technology evidence. Each item was classified as supported, supported with qualification, requiring validation, or for monitoring or reframing. Greater weight was given to findings supported by more than one source.

Structured interviews. 30 interviews, totalling about 55 hours, were conducted across employers, subcontractors, industry bodies, unions, RTOs, GTOs, regulators and government, using a common interview guide aligned to the survey questions. Interview records were tagged by stakeholder type and sector and mapped against the baseline findings.

Industry survey. A detailed online survey gathered 39 responses across the industry. Respondents could select more than one role and sector, so reported percentages show breadth of representation, not discrete groups. The survey covered current skills gaps, drivers of shortages, training availability and access, preferred delivery, future skills, drivers of future need, and workforce participation.

Industry forum. A facilitated consultation forum tested and prioritised emerging themes with industry participants.

Quality controls. A common interview guide and aligned survey questions were used across workstreams; responses were tagged by stakeholder and sector; transcripts and source material were reviewed; consultation themes were cross-checked against published evidence; and broad consensus was separated from individual or sector-specific views.

Limitations. Consultation is not a statistically representative sample of the whole ACT industry. It is structured, attributable evidence weighed alongside published data and Authority program information. National figures are treated as a starting point and checked against ACT conditions. Some ACT occupations have limited local data, and skills and training products change quickly. To manage these limits, each finding is rated for evidence strength, established findings are separated from emerging issues, and matters within the Authority's remit are marked apart from those requiring others to act.

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Appendix B - Stakeholder Consultation Coverage

Consultation was designed to address known participation gaps in the 2026 research, particularly limited input from unions, residential subcontractors, civil contractors and subcontractor associations. The table below summarises coverage by stakeholder type. The full interview register, with mapped interview records of 30 stakeholder interviews conducted over 55 hours, is held separately and referenced at [10].

Table B1 - Interview coverage by stakeholder type

Stakeholder type	Coverage
Employers, builders and subcontractors	Commercial, residential, civil and specialist trade businesses, including small and subcontractor operations
Employer and industry associations	Cross-sector and trade associations representing commercial, residential, civil and specialist trades
Employee and union representatives	Workforce, safety, retention and participation perspectives
RTOs and GTOs	Training providers and group training organisations across trade and post-trade delivery
Regulators and government agencies	Licensing, safety, skills and policy bodies, including the ACT education and training system and WorkSafe ACT
Energy and renewable-energy stakeholders	Electrotechnology and renewable-energy workforce and training input via the EEAB workstream

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Appendix C - Survey Results Summary

The survey received 39 responses. Respondents could select more than one option for most questions, so percentages within a question can sum to more than 100%. Question bases ranged from 34 to 39 responses.

Table C1 - Respondents by role in the industry

Role in the industry	Responses
Industry association	11
Registered Training Organisation	10
Employer	8
Employee / worker	5
Group Training Organisation	4
Regulator or government	3
Industry body	1
Industry training advisory body	1
Union representative	1

Table C2 - Respondents by sector (multiple selection)

Sector	Responses
Commercial	16
All industry	15
Residential	10
Electrical / electrotechnology	9
Civil	6
Carpentry	4
Plumbing / roofing	4
Renewable energy	3
Brick and block laying	3
Scaffolding	2
HVAC	2
Data and communications	2
Painting / plastering	2
Glazing	1
Tiling / waterproofing	1
Concreting	1
Roof tiling	1

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Table C3 - Respondents by current role or position (multiple selection)

Position	Responses
Manager / supervisor	18
Trainer / assessor	8
Association representative	7
Owner / director	4
Consultant / adviser	4
Regulator / government	3
Tradesperson	2
Apprentice / trainee	1
Human resources	1
Union organiser	1
State construction manager	1

Table C4 - Current training gaps rated critical or significant

Training gap	Critical or significant
Apprenticeship completion and retention	95%
Foundational practical skills	95%
Work health and safety capability	86%
Foundational knowledge, including NCC and Standards	83%
Financial and business literacy	82%
Supervisory, project-management and leadership capability	81%
Digital literacy and proficiency	78%
Practical tool and equipment skills	70%
High-risk work licences	62%
Hazardous-material handling	59%

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Table C5 - Reported reasons for shortages and skills gaps

Reason	Survey respondents
Difficulty attracting new workers	79%
Difficulty retaining workers	59%
Basic foundational knowledge or skills lacking	59%
Low apprenticeship completion rates	51%
Inadequate RTO funding for foundational knowledge training	38%
Cost of ongoing training	31%
New technology changing skill requirements	31%
Cost of mandatory entry-level training	31%
Rate of change of government policy	28%
Low or no digital literacy or access	26%

Table C6 - Reported impacts of current skills gaps

Impact	Survey respondents
Higher costs	62%
Apprentice attrition	54%
Building quality / defect issues	49%
Lower productivity	46%
Project delays	46%
Increased safety risks	44%
Compliance risk	41%
Inability to tender or take on work	13%

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Table C7 - Future skills rated critical or significant

Future skill	Critical or significant
Project, risk and data management	79%
BIM and digital twins	72%
Cybersecurity	72%
Modern Methods of Construction	69%
AI, robotics and automation awareness	67%
Solar, battery and EV infrastructure	64%
Robotics and automation	56%
Sustainability and green building skills	51%
Geographic Information Systems	49%
Augmented and virtual reality	49%
Civil machinery and plant operation	46%
Drone technology	44%

Table C8 - Drivers of future skills needs

Driver	Survey respondents
Housing demand	79%
ACT regulation and licensing requirements	74%
ACT infrastructure build pipeline	69%
Federal policy, including net zero	69%
New and emerging technology	67%
Demand for more efficient, productive work	64%
Ageing workforce	59%
ACT Government procurement policies	56%
New safety standards	49%

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Table C9 - Training access barriers

Barrier	Survey respondents
Employer support: time and cost	64%
Cost of training	51%
Language, literacy, numeracy or related barriers	44%
Rebate does not cover enough of the cost	41%
Limited RTO capacity	38%
Course relevance	36%
Long waiting times for courses	26%
Training not available in the ACT	26%
Training too theoretical or not practical enough	23%
Difficulty accessing online training or digital systems	15%
Travel time or location	10%

Table C10 - Preferred delivery methods

Method	Survey respondents
Blended delivery	87%
Face-to-face delivery	77%
On-site delivery	54%
Mentoring	51%
Short courses	46%
Online delivery	26%
After-hours delivery	26%

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Table C11 - Groups identified as underrepresented in training

Group	Survey respondents
Women in non-traditional vocations	54%
Aboriginal and Torres Strait Islander people	51%
People with disadvantaged backgrounds	44%
Mature apprentices	44%
At-risk youth	41%
Rehabilitated or retrained apprentices	33%

Source for all tables in this appendix: TFA 2027 Industry Consultation Survey, 39 responses, June 2026. [11]

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Appendix D - Consolidated References

[1] Jobs and Skills Australia, *Construction Industry Profile*, accessed 5 May 2026; based on Australian Bureau of Statistics, *Labour Force Survey*, 2025 four-quarter-average data.

[2] Jobs and Skills Australia, *Occupation Shortage List*, ACT data, 2025.

[3] ACT Government, *ACT Skills Needs List*, updated 22 July 2025.

[4] BuildSkills Australia, *2025-26 Workforce Plan*.

[5] Powering Skills Organisation, *Workforce Plan 2025*, including ACT and national material.

[6] Construction Industry Training Council, *Nextbuild Digital Blueprint*.

[7] *2026 Desktop Review Results*, including the baseline assessment, desktop-review findings and ACT shortage check.

[8] ACT Building and Construction Industry Training Fund Authority, *Annual Report 2024-25*, *2026 Training Plan* and *Eligibility for Training Rebates Fact Sheets*.

[9] ACT Building and Construction Industry Training Fund Authority, *2026 Industry Needs Research Report*.

[10] *Map Interviews to 2026 and Desktop Findings*, stakeholder interview register and mapped interview records, May-June 2026.

[11] *TFA 2027 Industry Consultation Survey Results*, 39 responses, June 2026.

[12] *Minutes of the TFA 2027 Training Plan Industry Consultation Event*, 9 June 2026.

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Appendix E – Glossary

Term	Meaning
ABS	Australian Bureau of Statistics
AI	Artificial intelligence
BIM	Building Information Modelling
CITC	Construction Industry Training Council
EV	Electric vehicle
GTO	Group Training Organisation
HVAC	Heating, ventilation and air conditioning
IoT	Internet of Things
JSA	Jobs and Skills Australia
MMC	Modern Methods of Construction
NCC	National Construction Code
NCVER	National Centre for Vocational Education Research
PSO	Powering Skills Organisation
RTO	Registered Training Organisation
TFA / the Authority	ACT Building and Construction Industry Training Fund Authority
VPP	Virtual Power Plant
WHS	Work health and safety

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