LANCASHIRE & CUMBRIA INSTITUTE OF TECHNOLOGY

SKILLS BAROMETER 2026

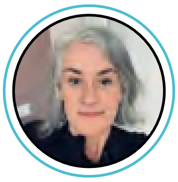
Competitiveness Index

Find out more at
landciot.ac.uk

SKILLS
BAROMETER
REPORT
2026

CONTENTS

THE TALENT GAP IS REAL, BUT IT IS SOLVABLE



Linda Dean,
Managing Director
Lancashire & Cumbria Institute of Technology

For three years, this Skills Barometer has measured the skills challenge facing Lancashire and Cumbria. This year, we have done something different. We have put a price on it.

Lancashire and Cumbria are regions that makes things, builds things, cares for its communities and, increasingly, helps power the country's move to clean energy. There is real ambition here. But behind almost every growing business sits the same quiet question, one I hear from employers constantly: where will the skilled people come from next?

This is the third edition of our Skills Barometer. Earlier editions mapped where the gaps sit. This year we go further and put a number on them, and it is a sobering one. Once lost productivity, delays and cover are taken into account, every unfilled specialist technical role now costs an employer in our region an average of more than £47,000. Seen one vacancy at a time, that is a headache. Seen across a sector, it is a serious drag on growth.

What the evidence makes clear is that this is not simply a shortage of people. It is a mismatch - too few workers with the higher-level technical and supervisory skills employers actually need, in a labour market that is already close to full. In conditions this tight, the open market cannot supply our way out. Recruitment alone has stopped working.

The businesses in these pages have reached the same conclusion from very different starting points. Across engineering, construction, healthcare, digital and clean energy, the most reliable route to a workforce that can deliver is to build capability from within - developing the people you already have, and growing the next generation through skills, training and clear progression. It is more stable, it is better value, and the people you invest in tend to stay.

That is precisely what the Lancashire & Cumbria Institute of Technology exists to help you do. We are currently a partnership of eight colleges and three university research partners, working across six sectors and designing our training with employers, not for them - shaped around real operational needs and delivered locally.

The employers we work with most closely do more than send people on courses. They help shape what we teach, set real challenges for our students, and open their doors for placements. It costs little, it requires less than you might think, and it puts your business at the front of the queue for the talent coming through.

So if this report leaves you with one thought, let it be this: the gap is real, but it is solvable. You do not have to wait for talent to arrive. You can help build it - and we would like to help you do exactly that. The pages that follow show how.


LANCASHIRE & CUMBRIA
INSTITUTE OF

THE £47,000+ GAP: THE REAL COST OF EVERY UNFILLED TECHNICAL ROLE IN LANCASHIRE AND CUMBRIA

This report sets out the real price of every unfilled technical role, and tests one question: when the open labour market can no longer supply the mid-tier and supervisory talent employers need, what is the alternative?

Drawing on national data and the voices of Lancashire and Cumbria employers, the evidence that follows points consistently to one answer. Building capability inside your existing team is now the most reliable route to a workforce that can deliver.

3 critical regional pressures across all industries:

Three pressures, in particular, drive the cost of every unfilled role. Each is significant on its own; together, they explain why recruiting your way out of the gap is becoming both harder and more expensive.

Time-to-fill trap

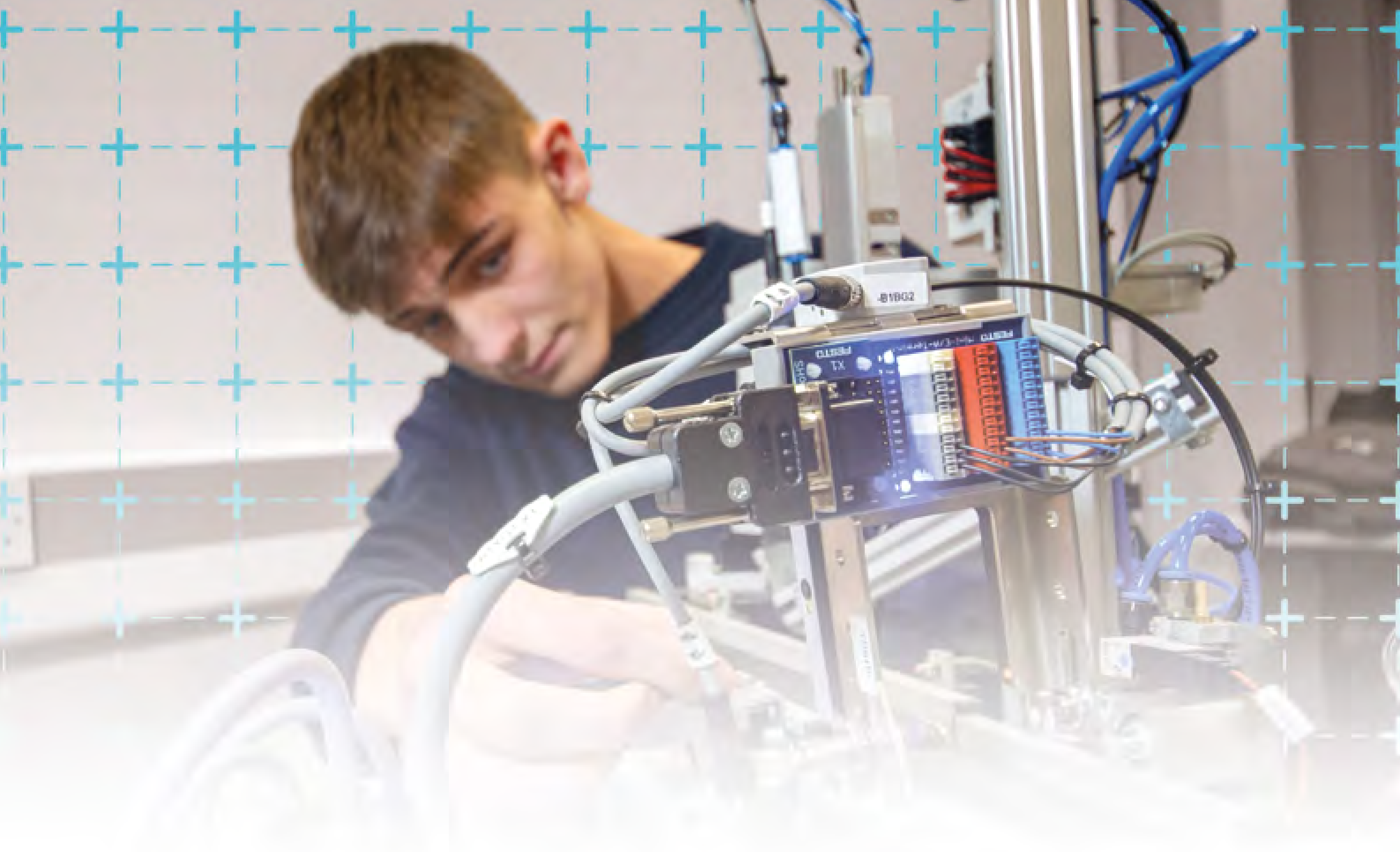
The Chartered Institute of Personnel and Development (CIPD) estimates an average direct recruitment cost of £6,125 per hire. However, this is only a fraction of the true financial burden. Once lost productivity, project delays, and required overtime are factored in, an unfilled specialist technical vacancy costs employers across Lancashire and Cumbria an average of £47,000 per role.

Productivity loss

Commercial estimates suggest an unfilled specialist technical vacancy can cost UK employers up to and often far beyond £40k per role depending on the sector, driven by lost productivity, project delays and the cost of covering gaps. The figure is based on the value generated by the role over the average five-month vacancy period (taken from the average "time-to-fill" for specialist technical and engineering roles, based on benchmarks from Make UK and the Construction Industry Training Board (CITB)), coupled with additional costs such as overtime, contractor cover, recruitment time and onboarding delays.

£47,000+

THE COST OF EVERY UNFILLED TECHNICAL ROLE IN LANCASHIRE AND CUMBRIA



Crucial skills gap

Higher-level skills shortages continue to hold back recruitment. Both Lancashire and Cumbria have a lower number of residents qualified to Level 4 or above than both the regional and national averages, limiting the availability of candidates for technical, professional and specialist roles.

While Lancashire sits at 42.7%, Cumbria falls further to just 40.2% (compared to a Great Britain average of 48.6%), according to Nomis Labour Market Profiles for Lancashire and Cumbria. This skills gap is driven by a recognised shortage of higher technical skills and degrees at Levels 4 and 5, and it fuels hiring struggles and creates severe recruitment pressures across key sectors.

For context, a Level 4 or 5 qualification sits in the space between an A Level (Level 3) and a full Bachelor's Degree (Level 6), making a Level 4 equivalent to a Certificate of Higher Education, Higher National Certificate (HNC) and Level 4 Higher Apprenticeship. A Level 5 is equivalent to a Higher National Diploma (HND), Foundation Degree (FdA) and Level 5 Higher Apprenticeship.

Taken together, these pressures point to something more specific than a simple shortage of people. The region's real challenge is one of mismatch: enough workers, but too few with the higher-level technical and supervisory skills that employers now need. That distinction matters, because a mismatch cannot be solved by recruitment alone.

> "Yes, there is a skills gap in the Lancashire economy, but the evidence shows it is more accurately a skills mismatch created by uneven higher level skills, changing demand and relatively low employer investment in people."

Mehmood Mulla
Skills & Economic Intelligence Manager, Lancashire Skills & Employment Hub

COMPETITIVENESS DASHBOARD

LANCASHIRE AND CUMBRIA BENCHMARKS VS UK NATIONAL AVERAGE

The dashboard below sets the region against the national picture. Where Lancashire or Cumbria specific data exists, we have used it; where it does not, we have said so and drawn on UK benchmarks tested against the employers we interviewed. Read together, these figures describe a labour market with very little slack left to recruit from. Across every measure, the regional labour market is tighter than the national picture.

METRIC	UK AVERAGE (NATIONAL BASELINE)	LANCASHIRE	CUMBRIA
Employment Rate (actively working population)	75%	74.7% ▼	78.7% ▲ *
Economic Inactivity (% of population who are not seeking work)	21%	22.5% ▲	19.2% ▼ **
Skill levels (NVQ4+) (employees with advanced qualifications)	48.6%	42.7% ▼	40.2% ▼
Labour tightness *** (candidates v available jobs)	2.5 unemployed per vacancy	70,000 person gap ▼	Static supply

* The local population is already working at near capacity, meaning there is virtually no active hire pool left to recruit from.

** 48% of these inactive adults suffer from long-term illness, and nearly 75% do not want jobs, creating a recruitment deadlock.

*** Due to differences in how vacancy data is collected locally and nationally, the 'unemployed per vacancy' ratio is not directly comparable across all three areas. The UK figure uses the official ONS ratio (2.5), Lancashire shows the estimated workforce shortfall needed to meet demand (70,000), and Cumbria reflects a static labour supply caused by high employment alongside high long-term inactivity.

Employment rates are high (Lancashire 74.7%, Cumbria 78.7% against a UK average of 75.0%), but in this context high is a warning rather than a strength: it means almost everyone is already working and there is little active hiring pool left, a point that is especially acute in Cumbria.

Economic inactivity compounds this challenge. In Lancashire, 22.5% of working-age adults are economically inactive, above the national average of 21.0%. Cumbria appears to perform better at 19.2%, but that figure is misleading. Around half of economically inactive adults in Cumbria are living with a long-term illness, and nearly three-quarters are not seeking work at all.

That three-quarters does not represent a hidden pool of workers waiting to enter the labour market. Most are unable to work because they are living with a long-term illness, providing full-time care, or have already retired.

Higher-level skills are also in short supply, with both areas trailing the UK on NVQ Level 4+ qualifications (Lancashire 42.7%, Cumbria 40.2%, against 48.6% nationally).

The result is a labour market under acute strain, with just 2.5 unemployed people for every vacancy, leaving upskilling and workforce development as the only reliable route to growth. This report focuses on five priority sectors: engineering and manufacturing, construction, health and science, digital and cyber, and clean energy and sustainability – where evidence shows persistent higher technical skills gaps. However, these are not the only sectors facing workforce challenges.

Industries including logistics and supply chain, and professional and technical services are also experiencing growing demand for higher-level skills. The findings should therefore be viewed as indicative of a broader regional skills challenge.

What Level 4/5 actually means

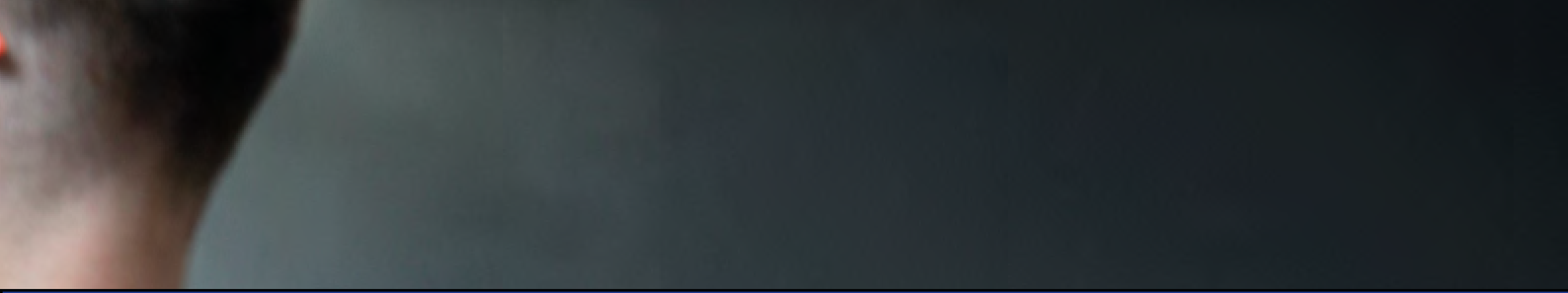
In practical terms, Levels 4 and 5 are the qualifications that sit above Level 3 qualifications such as A Levels, BTECs and T Levels, but below a full degree. They cover the technical and supervisory ground most employers struggle to fill: the team leader, the shift supervisor, the senior technician, the person who can run a process rather than just work within it.

Progression into Level 4 and 5 qualifications remains inconsistent. Barriers include low awareness of available pathways, limited progression opportunities from Level 3, and a lack of flexible learning options that fit around work. In some sectors, lower attainment in maths and English also weakens the pipeline of people able to progress into higher technical roles.

A Level 4 qualification broadly equates to the first year of a degree, Certificate of Higher Education, or a Higher National Certificate (HNC); a Level 5 qualification equates to the second year, a foundation degree or a Higher National Diploma (HND).

They are usually delivered part-time around the job, often over 12-18 months, so the employee keeps working while they train. For most businesses, this is the layer where capability is thinnest and where the open market is least able to help, which is exactly why developing it from within tends to pay back.

The case for building Level 4 and 5 capability is not theoretical. As of March 2026, the Lancashire & Cumbria IoT partnership has a suite of Higher Technical Qualifications (HTQs) approved by Skills England, delivered locally across four of the region's priority sectors. They range from an HND in Advanced Manufacturing Engineering and HNDs in Sustainable Construction, to foundation degrees in Adult Health and Social Care and Applied Science, and Level 4 provision in Computer Studies and Cyber Security. These are the qualifications that build exactly the supervisory and senior-technical layer this report identifies as hardest to recruit and most worth growing from within.



What's in it for your business?

The core benefit is that Level 4 and 5 builds the layer of the workforce that actually holds operations together: the people who can supervise, solve problems, make decisions and run a process without needing a manager standing over them. That has knock-on effects an owner or finance director will recognise.

To support this internal development, the forthcoming Lifelong Learning Entitlement (LLE) will allow people to develop new skills and gain Level 4 and 5 qualifications at a time that is right for them. By offering access to flexible funding for short courses and modules, the LLE provides vital flexibility for both the learner and the employer to upskill without the rigid time commitments of traditional degrees.

+ **It reduces dependency on key individuals**. Most small and mid-sized firms have one or two people who quietly keep everything working. If they leave or are off sick, delivery suffers. Building capability in others spreads that knowledge and takes the business off a single point of failure.

+ **It cuts the cost and risk of buying talent in**. External hires are slow to land, expensive, and nearly half have gone within 18 months. Developing someone you already employ avoids most of that, and they stay far longer.

+ **It lifts productivity and quality**. A more capable team makes fewer errors, needs less rework, and can take on more complex or higher-value work, which is the difference between competing on price and competing on capability. In regulated sectors, such as health, science and engineering, it also helps meet compliance and standard expectations.

+ **It improves retention and engagement**. People who can see a progression path are more likely to stay and to be more invested. Offering development is one of the cheaper, more durable retention tools available, especially when wage competition is fierce.

+ **It future-proofs the business**. Levels 4 and 5 are where new technical and digital skills get absorbed (automation, low-carbon, data, cyber). Growing them internally means the workforce evolves with the technology rather than the business having to go back to a thin external market every time demand shifts.

These pressures play out differently in every sector. The Government's Modern Industrial Strategy establishes a place and sector-based approach to prioritising economic growth through eight key sectors (IS8). Aligning with this national mission, the following pages examine five of these priority sectors that matter most to the Lancashire and Cumbria economy: engineering and manufacturing, construction, health and science, digital and cyber, and clean energy and sustainability.

ENGINEERING AND MANUFACTURING: A PERCEPTION PROBLEM FOR THE NEW GENERATION

In Lancashire, manufacturing is the third-largest employment sector, accounting for 12.5% of all employment in Lancashire, and contributes around £6.4bn to Lancashire's £40bn economy - around 18.7% GVA.

Nationally, 75% of manufacturers cite skills shortages as the single biggest barrier to growth (Make UK Industrial Strategy Skills Commission Report 2025), and 39% of companies feel that the current education system cannot deliver the skills industry needed, risking a complete recruitment pipeline collapse.

Manufacturing also faces a critical bottleneck in engineering roles. Electronics design vacancies sit at 43%, systems engineering at 39%. This means that a regional engineering firm trying to hire a senior designer could face a 5-month vacancy and £47k+ in costs before finding anyone.

But worryingly, just 4% of 16-24 year-olds would choose a career in manufacturing, according to the latest Nestlé Gen Z Manufacturing Perception Study. With a significant percentage of the workforce approaching retirement age, upskilling is an urgent necessity over external recruitment.

"In Lancashire, recruiting skilled mechanical and electrical/ instrumentation maintenance engineers has become one of our biggest challenges. The shortage of qualified professionals has created a significant skills gap in the business.

This deficiency in manpower delays critical maintenance work, impacts operational efficiency and increases the risk of equipment failures and costly downtime. Upskilling existing employees should be part of the solution, but with training standards being removed from Apprenticeship Levy funding, it is becoming increasingly difficult for businesses to invest in workforce development when budgets are already stretched."

Adrian Cawtherley
Learning & Development Specialist
Catalyst Technologies UK, Johnson Matthey

Best options for closing skills gaps

The obvious solution of external recruitment delivers speed, but at high cost and low stability. With five months being the average time-to-fill for vacancies, businesses face lengthy productivity gaps. Job retention sits at just 50-60% after 18 months, meaning nearly half of new hires may not stay. Combined with direct recruitment costs of over £6,100 per hire, and an overall financial drain averaging £47,000 per unfilled technical role, this approach is increasingly unsustainable in already tight labour markets like Lancashire and Cumbria, where competition for scarce skills drives costs even higher.

Placing weight on internal upskilling to the required NVQ Level 4/5 offers a more stable and cost-effective alternative. It bridges critical gaps between entry-level and degree-qualified roles, enabling faster development of supervisory and technical capability. Retention also improves significantly to 80-95%, strengthening workforce continuity. The unused Apprenticeship Levy funding represents a missed regional opportunity if not fully leveraged to build mid-level technical capacity.

But looking towards apprenticeship pipeline development, we can see this offers the most strategic long-term solution. Apprenticeship starts have fallen by 42% since the Levy was introduced. The move to a broader Growth and Skills Levy is intended to make that money easier for employers to deploy. The opportunity has not gone; much of it is simply being left unclaimed.

Strong employer-led pipelines achieve strong retention and supported progression into skilled roles. For Lancashire and Cumbria, this is a workforce renewal strategy - reducing reliance on external recruitment and strengthening long-term regional resilience.

GETTING THE NEXT GENERATION ON BOARD TO KEEP BLACKPOOL MOVING

James Clough
Finance Commercial Director
Blackpool Transport

Ensuring people get from A to B is a lot more complex than you might think, requiring various skills and jobs to keep things running. It's an area of immense opportunity for the next generation to secure high-quality jobs from engineering to HR and project management. But finding the skills and people required is proving a complex challenge in itself.

Blackpool Transport currently employs over 600 staff, from operators and engineers through to maintenance staff and administrative roles. It operates one of the last remaining first-generation tramways in the UK, as well as 15 local bus routes connecting people to towns such as Fleetwood, Lytham St Annes, Cleveleys and Preston. The network is the backbone that supports the region's economy and helps draw three to four million visitors during peaks like the Blackpool Illuminations every year.

Blackpool Transport is one of the founding partners of the Lancashire & Cumbria IoT – and is in discussions with them to ensure they can create a thriving local job market for high-quality specialist engineers in the years to come.

James Clough has been with Blackpool Transport for eight years, the last three as finance commercial director. He came in as a business analyst, leading major transformation projects – converting ticket machines to contactless, and bringing richer data into the company. That hands-on background shapes how he thinks about the challenge now sitting in front of the company: how do you transfer knowledge to a new workforce when the majority is approaching retirement age?

He said: "We've got people that we know are going to retire in the next five years, and the difficulty is transferring that knowledge."

More than 60% of Blackpool Transport's workforce is over 50-years-old, with an estimated 30% of its managerial positions needing replacing within five years. With only eight employees under the age of 20, work needs to happen to inspire the next generation – and get them trained.

Skills

Engineering sits at the sharpest end of that pressure. Blackpool Transport runs 72 buses and 13 trams, requiring around 40 engineers across both fleets. Bus and tram engineering are among the hardest roles to recruit into – partly because the industry skews heavily towards truck maintenance, leaving a gap for operators like Blackpool Transport who need engineers trained on different vehicle types. Tram engineering is even more specialist.

"We just have to find them an apprenticeship course that's as closely matched as possible," James said, "and then rely on knowledge transfer between engineers." With a largely senior engineering workforce, that knowledge transfer is the pipeline – but it won't be available indefinitely.

"If you've seen what's happening with bus franchising," James said, "the demand for engineering skills for both diesel and electric buses is becoming high across the entire industry. It's not just us."

Conversations are now taking place to see how the IoT can support Blackpool Transport to ensure it is on track for the future.

Blackpool Transport has been an anchor employer partner with the Lancashire & Cumbria IoT since its inception. Jane Cole, the previous Managing Director, chaired the IoT board and was involved in the original Department for Education bid that established the IoT in the region.

James has now been invited to join the IoT board himself, stepping into the relationship at a moment when the conversation between the business and the IoT is becoming more urgent. Getting the right leaders in place is critical to deliver projects and Blackpool Transport's wider business goals. But, having people who can lead with confidence at scale has also proved a challenge for the organisation.

Several managers at Blackpool Transport have been put through a Level 5 Chartered Manager (CMI) management qualification via Blackpool and The Fylde College, the IoT's lead partner. The business currently has apprentices in both bus and tram engineering.

Data and AI literacy

James identifies data literacy, management confidence and AI capability as areas where the workforce also needs development - and where the IoT could help bridge the gap between what people currently know and what the job now requires.

"It's not just your IT technicians - data skills are now required for managers."

For Blackpool Transport, the relationship with the IoT is at an important juncture. The workforce data tells a story that can't be ignored - and the question of where the next generation of engineers, managers and skilled staff will come from is one the business is already working to answer, with the IoT as a key part of that plan.

The manufacturing industry is demonstrating what happens when an ageing workforce meets a shrinking pool of new entrants: the numbers simply do not add up to recruitment alone. The same arithmetic is now catching up with construction, where the retirement cliff is steeper still.

RETIREMENT IS RESHAPING CONSTRUCTION

The construction industry's labour market is facing a dual structural challenge driven by an ageing workforce and a weakened training pipeline. Around 35% of the workforce is now aged over 50, with an estimated 750,000 workers expected to retire by 2036, creating a significant replacement demand over the coming decade.

Additionally, the Construction Industry Training Board (CITB) predicts that 239,300 extra workers will need to be recruited nationally by 2029.

Across Lancashire and Cumbria, this shortage will hit harder than the national average due to a severe demographic cliff-edge. For example, 38% of Cumbria's working-age population is already aged 50 to 64, compared to an England average of just 30%. This means the region faces a disproportionate and accelerated loss of experienced tradespeople to retirement, exacerbating the already rising costs of transport and materials.

> "It's difficult to predict exactly how many colleagues will retire in the next five years, as many choose to work beyond the traditional retirement age. However, around 11% of our workforce will be 65 or over within that period, giving us a sense of the potential impact."
>
> **Nicola Parkinson**
> Group Head of People
> Eric Wright Group Ltd

The demand for skilled workers has never been higher. Each year, an estimated 47,860 new entrants are needed simply to replace those retiring - and there's a real opportunity for the next generation to step in. Apprenticeships offer a direct, earn-as-you-learn route into secure, in-demand careers, giving employers the skilled people they're actively looking for.

External recruitment vs. internal upskilling

Relying on the open labour market for external hires presents a significant and escalating financial risk for construction firms across Lancashire and Cumbria. Ongoing shortages in key roles - in particular, site supervisors, construction managers and skilled trades - means that vacancies often remain unfilled for long periods, contributing to delayed infrastructure delivery and, in some cases, stalled or cancelled projects.

Industry evidence from CITB highlights that skills shortages are already increasing costs and slowing delivery across the region. This regional reality aligns with our £47k national benchmark; in Cumbria specifically, a construction vacancy left unfilled beyond 90 days costs around £45k+ in delays and overtime. Alongside this, external recruitment offers limited return on investment, with only 50-60% of hires typically staying beyond 18 months, leaving businesses exposed to repeated recruitment cycles, rising tender prices and continued instability.

In contrast, internal upskilling at Level 4/5 offers a more resilient and cost-effective route to addressing supervisory gaps across Lancashire and Cumbria. This is particularly relevant given that the Lancashire Local Skills Improvement Plan (LSIP) and wider regional evidence identify site supervisors and construction managers as persistent shortage roles, driven by limited progression pathways and a weak pipeline of new entrants. Developing existing staff into these roles strengthens retention significantly, while improving operational continuity.

Crucially, this approach is also financially supported through the unused Levy funding described earlier, allowing employers to reduce training costs while turning a critical skills gap into a funded investment in long-term workforce stability.

The construction industry's struggle with a static labour supply and an approaching cliff edge of retirements highlights an economy-wide problem: 'buying' external talent is an increasingly costly and unreliable risk.

Eric Wright Group

Nicola Parkinson
Group Head of People
Eric Wright Group

Eric Wright Group Ltd is a highly regarded construction and civil engineering firm based in Bamber Bridge, Preston. The company operates as an employer of choice in the local area, typically receiving a strong volume of applications and boasting a positive employment brand.

Challenge

Despite high applicant interest, the business faces a critical capability gap.

Nicola says: "The roles proving most difficult to fill are those requiring highly specialised technical expertise and end-to-end ownership. In particular, estimators who can work from first principles and price entire jobs independently remain in very short supply. We're also seeing significant challenges in securing project managers with specific utilities experience, especially those who can navigate the unique regulatory, design and delivery demands of the sector. In addition, design-focused roles, such as design engineers with strong utilities backgrounds, are consistently hard to source, as the market for experienced candidates with this niche skill set is extremely competitive."

The limited Lancashire talent pool is further squeezed by fierce competition from Tier 1 and Tier 2 contractors. Compounding this recruitment challenge is an impending demographic shift: around 11% of the workforce will be aged 65 or over within the next five years, presenting a risk of losing essential knowledge and operational skills.

Nicola says: "For our most specialised technical roles, the hiring timeline can be significantly longer than average. In some extreme cases, it can take up to 12 months to secure the right candidate, particularly where deep industry experience and end-to-end capability are required. Even under more typical circumstances, these positions take around 3–6 months to fill, which is still considerably longer than the recruitment cycle for most other roles across the organisation."

Strategy

Realising that the open market lacks candidates with the full breadth of experience required for these complex, process-driven roles, Eric Wright Group took a balanced but decisive approach. To secure sustainable, long-term capability, they heavily prioritised internal succession planning and early-talent pipelines, whilst strategically supplementing with external hires only when timing requires immediate capability.

Results

The group is currently investing heavily in around 70 apprentices to ensure a steady flow of new talent. By implementing structured development, mentoring, and knowledge-transfer activities, they are actively mitigating the risk of veteran retirements. This strategic focus on internal upskilling has led to numerous success stories, successfully developing highly capable technical specialists and leaders from within the organisation.

Future scope

As leadership expectations become increasingly complex and people-centred, the company is pivoting to prioritise a comprehensive health and wellbeing offer to maintain engagement, resilience, and retention across the workforce. Looking ahead, Nicola confirms that the company would fully support an IoT pilot to close key workforce gaps with a single employee, provided the approach aligns with fair cost implications and consistency across the organisation.

In construction, an unfilled role delays a project. In health and science, it affects the care people receive, which is why the same workforce squeeze carries far higher stakes in the sector that follows.

A NATIONAL HEALTH EMERGENCY

The NHS is under constant and severe pressure, with 100,165 national vacancies. In Lancashire and South Cumbria, vacancy rates sit at around 3,600 - 9% - which is significantly higher than the 6.7% average across England.

High levels of burnout and sickness absence is a problem, which in the North West sits at around 6.0-6.9% - higher than the national average of 5.6-6.0%. This places pressure on the remaining staff and driving further demand for agency cover, in a cycle that is increasingly hard to break.

Under pressure: people, pay and provision

In Lancashire, the NHS is facing a combination of workforce and financial pressures that are placing increasing strain on service delivery. Around 20% of NHS staff in the county - approximately 8,000 people - are over the age of 55 and approaching retirement, creating a significant replacement challenge in the coming years. At the same time, the system is becoming increasingly reliant on expensive agency staff, as organisations struggle to fill persistent labour gaps.

Alongside the NHS pressures, external healthcare providers such as community pharmacies operating under rigid NHS dispensing contracts are also experiencing significant financial strain. With very limited margin left after core dispensing activity, many are struggling to cover essential overheads, systems, staffing, and ongoing training costs, leaving little flexibility to absorb rising operational pressure.

Closing the NHS workforce gap

For the NHS, prioritising external hire and agency use for recruitment is becoming increasingly unviable. While relying on agency or bank staff may plug immediate gaps, it leaves care delivery heavily exposed to the ongoing pressure of 100,165 national NHS vacancies (NHS Vacancy Statistics England, December 2025). This approach has become a financial drain, with the NHS currently on track to spend £8.3 billion on temporary staffing cover. Additionally, retention remains highly volatile. Currently, 33% of existing NHS staff often consider leaving due to severe burnout and workload pressures.

A highly cost-effective alternative to expensive agency costs is by training staff in-house through upskilling (Level 4 and 5) to counter the immediate challenges. By upskilling support workers into team leaders via Level 4 Health & Social Care pathways, employers can actively target the critical supervisory gap. A typical retention rate for internally trained and developed staff is 80-95%. Financially, upskilling offers a funded solution that can be financed by tapping into the unused Levy funding.

Future-proofing the apprenticeship pipeline should focus on addressing the projected shortfall of 260,000 to 360,000 NHS staff by 2036-37. This level of structural investment is essential to meet future demand, particularly given that the over-85s population is expected to grow by 55% by 2037. Establishing long-term workforce stability through these pipelines will be critical to mitigating the imminent demographic cliff edge, with 21% of current NHS staff aged 55 and over, approaching retirement.

O'Briens Pharmacy Group

Lisa Cottam
Operations Lead
and Superintendent Pharmacist
O'Briens Pharmacy Group

O'Briens is the honest reality of upskilling in a stretched sector: the willingness is there, but foundational skills and funding gaps can stall progress before it starts, which is precisely where the right support makes the difference.

O'Briens Pharmacy Group is a family-run community pharmacy provider serving communities across Lancashire, Merseyside and the wider North West for more than 50 years. The business provides dispensing services, healthcare advice and a growing range of clinical services, including blood pressure checks, NHS health checks, vaccinations, travel health services, contraception support and treatment for common conditions.

The workforce employed by O'Briens are diverse, from pharmacists, pharmacy technicians, dispensers, healthcare assistants, to delivery drivers and support staff, all working together to provide accessible healthcare within local communities. The group is overseen by Operations Lead and Superintendent Pharmacist, Lisa Cottam.

Challenges

The UK pharmaceutical industry is facing a recruitment and retention crisis across all levels, exacerbated by recent national minimum wage increases that their NHS contracts do not allow them to match. This has eroded the pay gaps between tiered roles, making progression less attractive.

For entry-level roles like dispensers or delivery drivers, they may receive 50 to 60 applications, but very few candidates are suitable once they experience the demanding pace of the job. Retention is highly volatile; for example, a retired police officer hired as a delivery driver left after just eight weeks due to the abuse from patients frustrated by national medicine shortages. At the higher end, it takes up to six months to recruit qualified pharmacists.

"Retention is our biggest concern. We can train people up, but many do not stay, because the salary and working conditions are outside our control. Most of the pressure comes from funding constraints, not from a lack of willingness to train or develop people.

We also need to recruit younger people with the right mindset, but that is difficult in areas like this. If we could offer more competitive pay, we would be more attractive and more likely to keep people for longer."

Lisa Cottam
Operations Lead and Superintendent Pharmacist
O'Briens Pharmacy Group

Cost

Lisa described the costs of recruitment and hiring of a registered pharmacist as a "major investment". Pharmacists are Master's degree-educated, and typically get paid between £45,000 and £65,000+ per year, with higher salaries for management, specialist clinical, or ownership roles.

Between agency fees, interview time, induction and training, the cost of a single hire could easily exceed £10,000-£15,000 before the pharmacist is fully established in the role.

Lisa added: "What those figures don't capture is the knock-on effect of a vacancy on customer service, prescription volumes and the pressure it places on the rest of the team.

"For independent pharmacies operating on very tight margins, those costs can be difficult to absorb, particularly when further professional training and development may also be required."

Strategy

To bypass the difficult external market, the pharmacy attempted to focus on internal progression and apprenticeships, hoping to upskill existing entry-level staff into registered, clinical pharmacy technicians.

Results

The pivot exposed a stark basic skills bottleneck within the local talent pool. Out of a workforce of around 70 staff, only a couple of employees possessed the basic maths and English qualifications required to even begin technician training. English and maths skills are fundamental for community pharmacy operations. Pharmacy teams are increasingly delivering more clinical services - such as vaccinations and blood pressure monitoring - helping to ease pressure on GPs. Being responsible for accurate information recording and communications is essential. Even minor errors can have significant consequences for patient safety.

Future Scope

Lisa stresses that while the willingness to train and develop staff is there, long-term retention remains a critical vulnerability unless funding models change to allow for competitive pay.

She says: "We can train people up, but many do not stay, because the salary and working conditions are outside our control. Most of the pressure comes from funding constraints, not from a lack of willingness to train or develop people."

Moving forward, the business is open to piloting practical, targeted solutions to solve their entry-level skills bottlenecks and build a more resilient workforce.

The pharmacy sector faces significant financial and workforce pressures. Greater investment in workforce development, more flexible training pathways and improved funding models would help pharmacies to expand their clinical role within local healthcare systems.

The industry also needs to attract more young people into pharmacy careers and create clearer progression routes to address ongoing recruitment and retention challenges.

Healthcare is short of people the market cannot supply. Digital and cyber face the mirror image: the people exist, but every employer is competing for them at once, and a regional mega-project is about to sharpen that contest.

DIGITAL DANGER ZONE

The digital skills shortage represents a £27.6 billion projected loss to the UK economy by 2030. In Lancashire, a 'talent war' will be accelerated by the National Cyber Force (NCF) in Samlesbury, expected to create 2,000 new jobs by 2030, plus an additional 3,120 supported roles.

Demand for AI, automation, data analytics and cyber security skills is rising rapidly across all sectors. Increasingly, digital capability is becoming a core expectation for Level 4 and 5 roles, not just within digital industries but across manufacturing, healthcare and professional services.

Although capability pressures are a UK-wide problem and beyond, regional mega-projects – such as BAE Systems in Warton and Samlesbury, and the incoming National Cyber Force in Samlesbury - are problematic for an already-tight labour market, attracting digital talent away from businesses, and creating hiring and retention voids.

While the national deficit is severe, with 49% of businesses (approximately 699,000) lacking basic cyber skills, applying this benchmark to our region reveals a critical vulnerability for local supply chains. Micro-businesses form the backbone of the local economy, accounting for 88.0% of all enterprises in Lancashire (47,800 businesses) and 89.1% of enterprises in Cumbria (19,615 businesses).

If the national 49% skills gap is applied to this combined landscape of 67,415 local micro-businesses, it indicates that over 33,000 micro-enterprises across Lancashire and Cumbria are currently operating without basic cyber hygiene.

As these smaller firms attempt to integrate into the region's advanced manufacturing, defence, and clean energy supply chains, this lack of basic cyber skills leaves both the individual businesses and the wider regional infrastructure highly vulnerable. This specific regional vulnerability is already being recognised by local industry leaders.

> "One of the biggest challenges is reskilling the current workforce as AI presents new opportunities for efficiency and productivity. Existing staff need to develop new skills quickly and appropriately to keep pace with these changes. At the same time, we continue to face talent attraction and retention challenges, with genuinely experienced personnel often being drawn into other organisations and roles."

Ram Gupta
Managing Director
Nybble

Strategic future-proofing options.

Hiring on the open market means competing directly against the 80% of manufacturers who are fighting for the exact same digital skills. Compounding this risk is a risky return on investment, as external hires typically see only a 50-60% retention rate at the 18-month mark across sectors.

Through internal upskilling, businesses can directly target the critical shortage of technical roles by bridging the gap between basic apprenticeships and degree-level roles. Developing your existing staff internally offers significantly better stability and retention.

Future-proofing via the apprenticeship pipeline is an essential strategic necessity. Investing in this pipeline offers high long-term stability, which is crucial for remaining competitive on a global scale - especially as the UK currently trails Australia, Canada, France, Germany, and the US in tech job posting recovery. Ultimately, focusing on apprenticeships acts as a strategic investment that maximises your long-term training ROI, allowing businesses to build sustainable talent pipelines rather than engaging in unsustainable salary competitions.

Citation Cyber

Zain Javed
Co-founder
& Chief Technology Officer
Citation Cyber

Citation Cyber, based at Lancaster University for over a decade, is a leader in preventative cyber security. As a CHECK provider to the government - one of only 20 to 30 companies in the UK - they deliver ethical hacking and classified system pressure testing for banks and critical national infrastructure clients. They are part of the larger Citation group, servicing more than 120,000 customers.

Zain Javed is the Co-founder & Chief Technology Officer at Citation Cyber, along with Co-Founder and Chair of the Lancashire Cyber Alliance, and Board Member of the Lancashire & Cumbria Institute of Technology.

Strategy

Faced with salaries that were up to three times higher from city and Silicon Valley firms, Citation Cyber pivoted to a "grow-your-own" strategy. They created an internal academy to transition junior staff into specialists, under one roof. Recent hires include two junior analysts from IT support backgrounds, rather than cyber security. However, Citation Cyber invested in a comprehensive six-month upskilling programme, including the specific training and exams required to qualify them as full cyber security auditors.

Results

The results speak for themselves. This approach has led to:

+ **100% certification**: Both junior analysts passed their exams and qualified as auditors.
+ **Salary growth**: The upskilled staff saw a two-fold salary increase within six months, reflecting their increased market value.
+ **Operational stability**: Citation now delivers client needs without relying on a changeable external senior market, or expensive external agencies.

"We've done a huge amount of work on upskilling lately, because we found that it's not only cost-efficient, but it means that we're able to train people with the right type of accreditations, and provide - or enrol them - on external training courses. This means that they're certified and ready to deliver for client needs."

Zain Javed
Co-founder & Chief Technology Officer
Citation Cyber

Future scope

With the National Cyber Force bringing 2,000+ roles to Samlesbury, Citation Cyber views the arrival as a long-term opportunity.

Zain said: "While there are concerns that it could draw from the same limited talent pool, there will be long-term benefits for the region as a whole. As thousands of roles are created, graduates and early-career professionals will enter the sector, gain experience, and work through the necessary security clearances and specialist training.

"Over time, this will help build a larger, more skilled and security-cleared workforce within the Lancashire and Cumbria regions."

In digital and cyber, the talent exists but every employer is fighting for it at once. Clean energy and sustainability faces the same contest with an added twist: the work, the investment and the jobs are arriving faster than the region can train the people to deliver them.

CLEAN ENERGY AND SUSTAINABILITY: BUILDING THE WORKFORCE FOR THE TRANSITION

Clean energy and sustainability is now one of the fastest-growing parts of the regional economy. Net-zero businesses are worth £1.16bn to Lancashire and support 13,421 jobs, part of a North West clean energy economy worth £9.7bn and 111,800 jobs. Nationally, the net-zero economy supports 1.1 million jobs and pays an average wage of £43,142, around 11% above the national average. The work is here, it is well paid, and it is growing. The skilled people to do it are not.

The region sits at the centre of the UK's energy transition. Offshore wind off the Fylde and Cumbrian coasts, new nuclear in West Cumbria and Barrow, grid reinforcement, and the national drive to retrofit homes to low-carbon heating all converge on Lancashire and Cumbria at once. Each depends on the same narrow band of technical skill, and each is competing for it against every other employer in the sector.

The bottleneck sits in a familiar place. Employers report acute shortages of high-voltage and grid engineers, renewable energy and battery storage engineers, heat-pump and solar PV installers, wind turbine operations-and-maintenance technicians, and the retrofit coordinators and SCADA technicians who hold those systems together. These are not entry-level roles; they are the supervisory and senior-technical layer the open market is least able to supply. A specialist clean energy vacancy carries the same arithmetic set out earlier in this report: roughly five months to fill, and around £47,000 in lost productivity, cover and delay before anyone starts.

The pressure is sharpened by who is leaving. Around a fifth of the traditional oil and gas workforce is expected to retire by 2030, draining experienced engineering talent at the very moment renewables need it. The result is a widening gap between the skills employers need and the people the market can offer - the same mismatch this report has traced across every other sector.

> "I think being involved with the Institute of Technology is important, because we need that direct education-to-employment pipeline. We need to be able to create those proof points that regional SMEs can deliver university-level careers, and develop the employees of the future."
>
> **Michael Dugdale**
> Managing Director,
> Trident Utilities

External recruitment vs. internal upskilling

Competing for scarce clean energy talent on the open market is expensive and unstable. With only 50-60% of external hires still in post after 18 months, and salaries in the sector rising fast as employers bid against one another, buying capability in offers a poor and shrinking return.

Internal upskilling to Level 4 and 5 is the more durable route. This is the tier where retrofit coordinators working to PAS 2035, wind farm operations supervisors, grid operations managers and high-voltage technicians sit - the mid-level capability that turns engineering plans into delivery on site. Developing existing staff into these roles lifts retention to 80-95%, builds capability the region can keep, and can be funded through the same underused Apprenticeship Levy, now broadening into the Growth and Skills Levy, described earlier. With a £12m specialist facility at Blackpool and The Fylde College's Lancashire Energy HQ, and dedicated nuclear and renewables provision across the IoT partnership, the training infrastructure to do this already exists on the region's doorstep.

Michael Dugdale
Managing Director
Trident Utilities

trident
Your partner in planet-first energy

Based in Blackpool, Trident Utilities is celebrating its 25th anniversary as a specialist energy and sustainability consultancy, priding themselves on putting the planet first and being a partner for businesses to tackle energy costs, carbon emissions, and compliance. Operating with a current workforce of 62 people, the business is aiming to grow to 78 staff over the next three years, with a goal of doubling its revenue and profit.

Michael Dugdale is the Managing Director at Trident, and is a proven leader in energy and sustainability.

Challenge

Finding the right talent on the open market for specific technical roles is proving exceptionally difficult, even when offering remote and hybrid working options. For their business generation team, they urgently need “consultant-led sales people” who deeply understand greenhouse gas protocols and risk management, rather than traditional salespeople seeking quick commissions.

As a prime example of the stalled external market, a head of sales role left vacant in February only reached the first-interview stage by June due to the poor quality of available candidates. The business also faces workforce pressures in securing software developers (such as Python coders). While the Fylde Coast historically had a strong energy sector candidate pool, this has severely thinned out over time.

Strategy

To bypass the lack of “ready-made” net zero analysts and consultants on the open market, Trident heavily prioritises internal upskilling and early-careers training. They consistently maintain an apprenticeship rate of around 10% across their workforce. By bringing talent in early, they ensure new hires are deeply aligned with Trident’s specific values and vision. Because their workforce is notably young - the business has an average age of around 30 - they have also had to pivot their management style, investing heavily in employee wellbeing and clear career progression pathways to maintain high retention.

Results

This “grow-your-own” strategy has built a highly capable and loyal team. Trident currently has approximately 625 years of combined experience across its workforce, and is entirely avoiding the retirement cliff-edge that is currently threatening many other infrastructure and energy firms.

A standout example of this internal success is a 26-year-old Senior Account Manager who already holds 10 years of sector experience, having joined the business straight from school as an apprentice. Furthermore, their strategic focus on their employee care has seen them officially recognised as a ‘Great Place to Work’ for 2026/2027, including specific awards for wellbeing and career development.

Forward scope

Looking ahead, Michael says one of the biggest concerns is the rapid pace of technological change, specifically AI, and ensuring their workforce embraces it to drive productivity.

> “It’s a challenge and opportunity for Lancashire businesses to really embrace AI; embrace the pace of technology, so that we can be a leading light... a county that has all of the best candidates around and the most forward-thinking employees of the future.”

To help bridge the widening gap between academic curriculums and the fast-paced reality of the net zero and AI sectors, Trident actively sits on the advisory board for the IoT. They remain highly committed to piloting new solutions with education providers; having previously taken on a Master’s student for a placement year, they are now exploring a Knowledge Transfer Partnership (KTP) with Lancaster University to bring an associate into the business to help innovate their carbon accounting applications.

Five sectors, five different starting points, one shared conclusion. Where the external market has run dry, the businesses that pull ahead will be the ones that build capability rather than buy it.

LANCASHIRE & CUMBRIA INSTITUTE OF TECHNOLOGY

YOUR MOVE

Every business reading this faces a different pressure. Some need people now. Some need to deepen technical capability. Others are planning for technology that has not fully arrived yet. Wherever you sit, there is a low-risk way to begin.

The Lancashire & Cumbria Institute of Technology works with employers across the region to tackle these challenges together.

Our education partners include:

Our research partners include:

Created in June 2026

HOW WE CAN WORK TOGETHER:

Upskill / reskill your team

If you have one or more employees who would benefit from upskilling via a Level 4 or 5 course, get in touch and we will advise you which qualification and course is the best for your business needs. Not a brochure – a business conversation.

The Lancashire & Cumbria IoT is currently a partnership of eight colleges and three university research partners with access to specialist facilities, delivering advanced technical skills across the region. Designed with employers. Delivered locally.

We specialise in STEM subjects including engineering and manufacturing, construction, digital and cyber, health and science, clean energy and sustainability and professional services with a wide range of courses delivered across Lancashire and Cumbria.

We will advise you on funding available, timetables, and how we can make it work for your business.

Join the conversation

We are continually looking for businesses to join our employer advisory board to help shape curriculum based on your skills needs. The advisory board meets quarterly in person or online and this enables the IoT collaborate with those businesses at the coal face to ensure students are taught the skills employers need.

Get involved

To give students real life skills and experience, we welcome live briefs, and guest speakers from those in industry.

If you have a challenge you'd like our students to tackle, or would like to share experiences from your role with the next generation of talent get in touch.

To find out more email **employer@landciot.ac.uk** or scan the QR code.

For more information on how the Lancashire & Cumbria Institute of Technology can help your business, visit

www.landciot.ac.uk

Follow our social channels by searching for

'Lancashire and Cumbria Institute of Technology'

LANCASHIRE & CUMBRIA INSTITUTE OF TECHNOLOGY

Find out more at
landciot.ac.uk