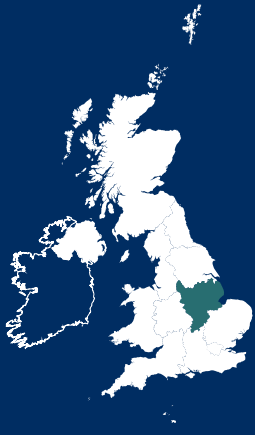


CONSTRUCTION SKILLS NETWORK

The skills construction needs



East Midlands
Five Year Outlook 2023-2027



EAST MIDLANDS

The volume of construction work in the East Midlands will grow, slightly ahead of the UK forecast of 1.5% by an annual average rate of

↑ **1.6%**

Fastest sector rate of growth expected for

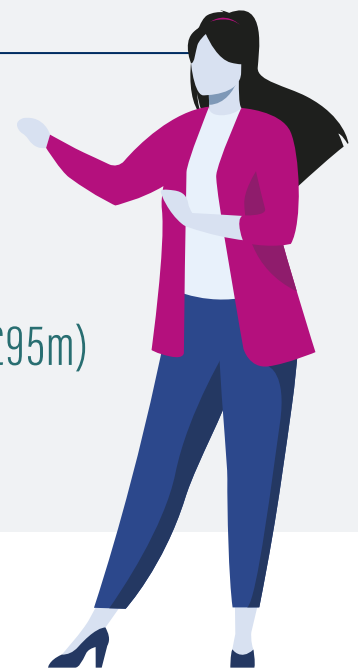
↑ **Private housing**
Industrial
Infrastructure

The occupations with the strongest additional recruitment requirement levels:

↑ **Other construction process managers** (990 per year)
Wood trades and interior fit out (420 per year)
Painters and decorators (400 per year)

Major projects in the East Midlands include:

+ **Midlands Main Line**
railway upgrade (£1.5bn)
Viking Link interconnector (£1.8bn)
Forterra brick production capacity (£95m)



Key facts and figures

2022

2023

2024

2025

2026

2027

2028

2029

The annual recruitment requirement in the East Midlands of 2.1% per year is above the UK average of 1.7% and means an extra 17,500 workers will be needed from 2023 to 2027.



UK Macroeconomic backdrop

Having bounced-back in 2021, with an annual increase in gross domestic product (GDP) of 7.5%, the UK's economic growth in 2022 slowed in the first half of the year, before declining by -0.2% in Q3. November's monthly data release points to the UK entering a recession by the end of 2022, when, as forecast, there will have been two consecutive quarters of declines in GDP.

The economic challenges were highlighted by monthly GDP at the end of September 2022 being 0.2% below its pre-pandemic level (February 2020), and in real terms, the UK is the only G7 economy where a shortfall relative to its pre-pandemic level exists. The S&P Global/CIPS Purchasing Managers Indices (PMI) shows business activity declining for three consecutive months as the UK composite index fell to 47.2 in October from 49.1 in September and 49.6 in August, with a reading of less than 50 indicating a decline.

Inflationary pressure on household budgets continues to drive up Consumer Price Index (CPI) inflation, which hit a 41-year high of 11.1% annually in October 2022. Inflation is expected to remain high well into the first half of 2023 and tackling this, while keeping mortgage rises down, is a priority for Government. However, as set out in the 2022 Autumn Statement, this requires difficult decisions to address Government debt and deficit through a combination of tax rises and controlling public sector spending.

The prevailing view of independent forecasters, the Bank of England (BoE), the Office for Budget Responsibility (OBR) and the UK's Chancellor when delivering his Autumn Statement in parliament, is that the UK is set to face a period of recession with GDP declines

through 2023 and possibly into 2024, before the economy then begins to pick up. However, the suggestion is that it will be a shallower recession when compared to the recent falls seen during 2020 and 2008.

While the UK economic conditions in 2022 were challenging, construction output held up better than expected. When GDP declined by -0.2% in Q3, construction output increased by 0.6% and is on track to show an annual increase of over 4% by the end of 2022, with new housing and repair and maintenance sectors being key contributors. However, growth has increasingly been driven by the backlog of work as new orders have fallen and are now at their weakest since June 2020.

It's unlikely that construction output will continue to outperform the economy, which is why we are expecting a decline in output during 2023 that picks up in 2024. The commercial, infrastructure and industrial sectors look set to weather this slightly better than new housing or housing repair and maintenance. Housing repair and maintenance work is likely to be squeezed as households reprioritise their spending, and there are signs of a slowdown in the housing market with fewer new buyer enquiries and a reduction in mortgage approvals.

We still see the construction industry having a long-term challenge when it comes to recruiting workers. Vacancy levels remained high throughout 2022, unemployment rates are low, inactivity due to ill health is rising, and construction will be competing against other industries to attract and retain the workers it needs.

Although the next five years will see a period of recession followed by slow growth, the UK construction industry will still account for at least 6% of UK GDP, have an annual output value of over £170bn and a workforce of over 2.6m. Recruiting and developing the workforce for the future will help to ensure that the industry is able to contribute to growth opportunities such as building the volume of homes the country needs, the infrastructure for energy and transport, and retrofitting the built environment to meet net zero targets.

**THE UK IS THE ONLY
G7 ECONOMY WHERE A
SHORTFALL RELATIVE
TO ITS PRE-PANDEMIC
LEVEL EXISTS.**

Structure

The construction industry in the **East Midlands** has some significant differences to the UK structure.

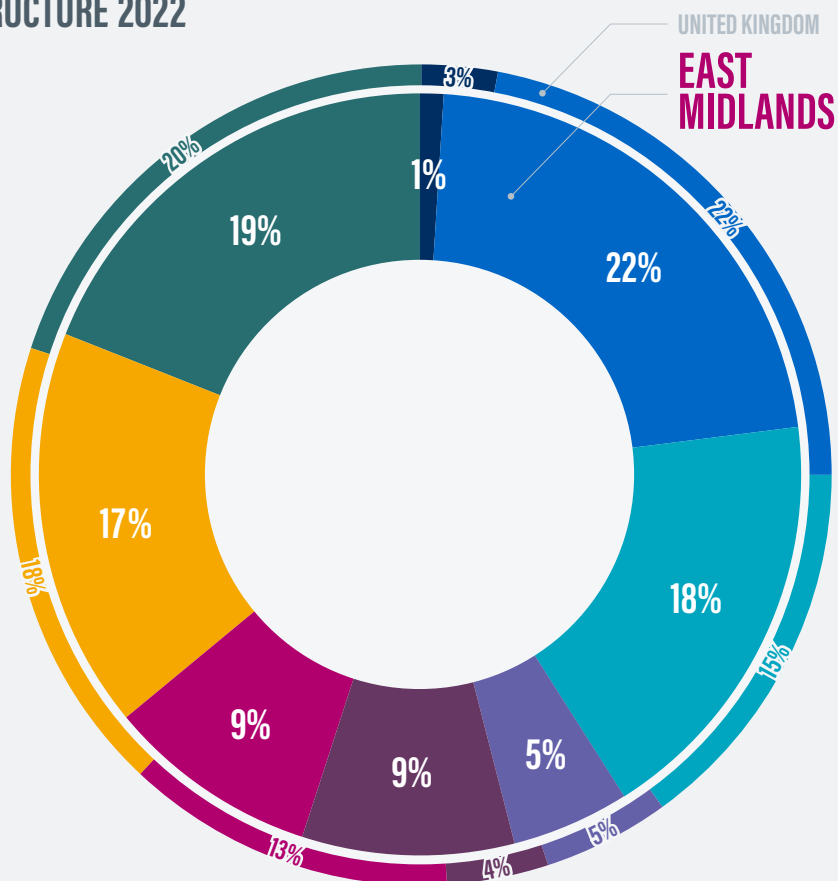
The construction industry in East Midlands has 13,720 businesses¹ with more than one employee, which is 13% of all employers in the region. In 2022 the industry is estimated to have total output of over £11.3bn which is structured as shown in the chart. The East Midlands has a higher percentage share of infrastructure work compared

to the UK at 18% compared to 15% for the UK. This is also true for the industrial sector which makes up a 9% of the East Midlands construction industry and only 4% of the UK's. In contrast the East Midlands has smaller shares of public housing, commercial, housing R&M and non-housing R&M work compared to the UK.

While private housing makes up the biggest share of the East Midlands construction industry (22%), non-housing R&M (19%), infrastructure (18%) and housing R&M (17%) aren't far behind which gives the East Midlands a fairly balanced structure.

CONSTRUCTION INDUSTRY STRUCTURE 2022 EAST MIDLANDS VS UK

- Public housing
- Private housing
- Infrastructure
- Public non-housing
- Industrial
- Commercial
- Housing R&M
- Non-housing R&M



Private housing output

22%

2022 view

Total annual output 2022

£11.3bn

Total estimated output 2023

£11.3bn



In 2022, construction output in the East Midlands is estimated to have increased by nearly 5%, slightly ahead of the UK.

2022 view

A good performance during a challenging year.

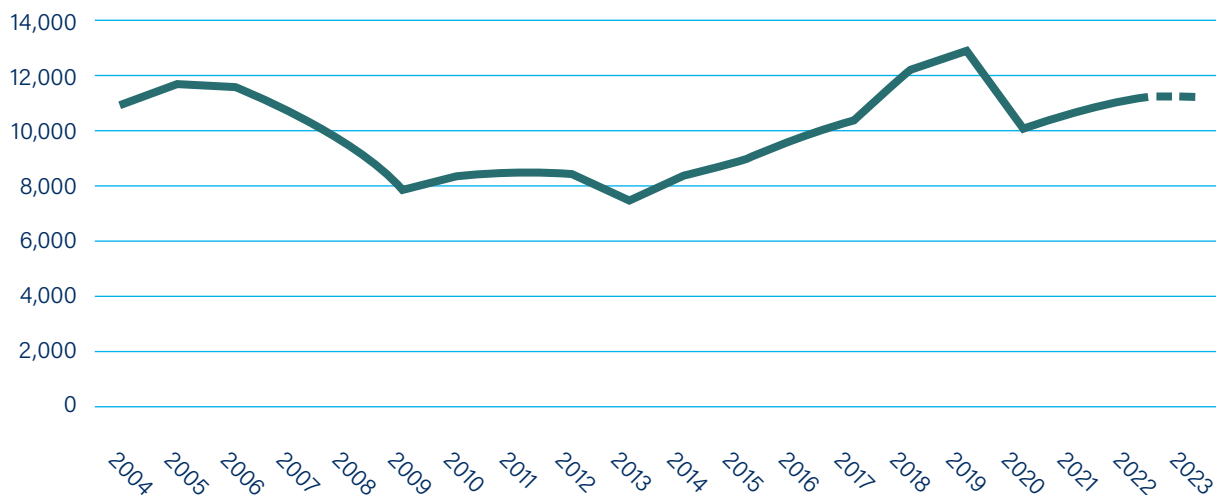
The main sectors driving the increase in output were private housing and industrial, with the other sectors staying steady. However, output will still be lower than 2019's pre-covid levels, when there was very strong performance in the infrastructure sector in the region, and also below what seen in 2005/2006.

Looking forward into 2023, we're forecasting a slight drop in construction output due to the expected recession the UK and East Midlands are facing.

CONSTRUCTION OUTPUT 2004 - 2023 EAST MIDLANDS

Source: ONS
Ref: CSN explained, Section 4: Note 1

£m, constant 2019 prices



OUTPUT FORECAST 2023 - 2027

In the East Midlands the volume of work will grow by an average annual of 1.6%, which is slightly ahead of the UK at an average annual growth rate of 1.5%. Across the period, new work will perform better than R&M and nearly all sectors will see an increase in output, with the exception being housing R&M, where we're expecting a very marginal drop. With a recession in 2023, we're forecasting a drop in output of -0.2% followed by slow growth in 2024 and strengthens through the later years.

The industrial sector has the highest output growth rates across the period at 3.8%, however, it is important to note that compared to other sectors, it represents a relatively small share of total output at 9%. The private housing sector will still be key to growth in the East Midlands with a total increase in output of £245m over the forecast, with the industrial, infrastructure and commercial sectors each having gains in the region of £170m - £200m.

Average growth rate
for the East Midlands

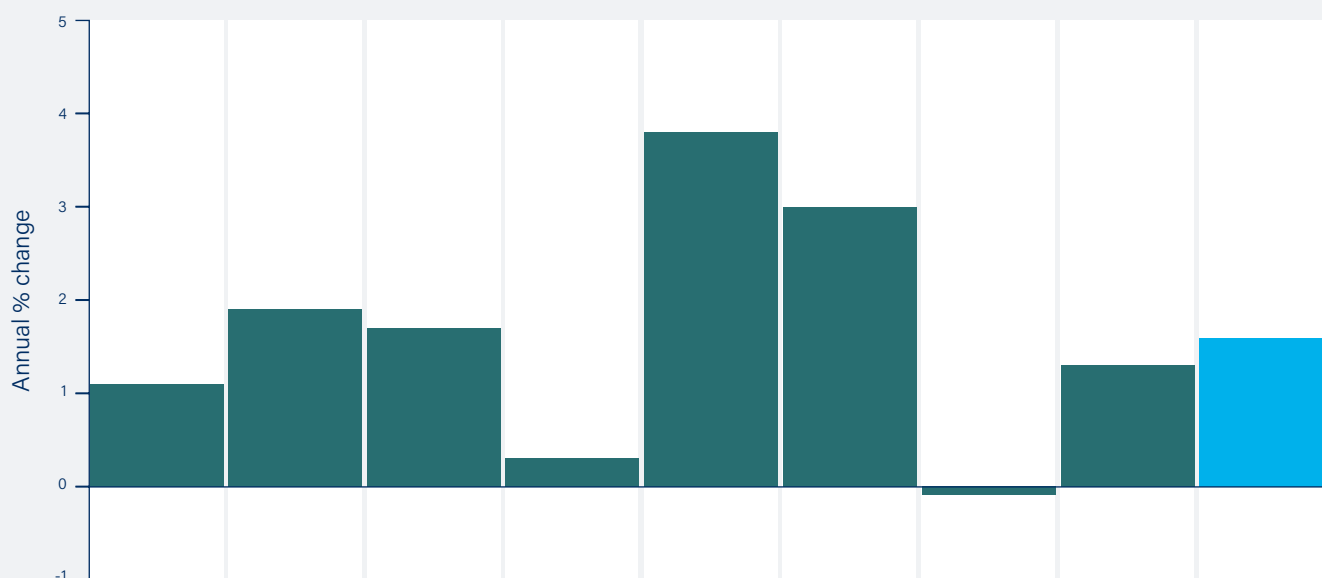
1.6%

Forecast

ANNUAL AVERAGE OUTPUT GROWTH BY SECTOR 2023-2027 EAST MIDLANDS

Source: Experian
Ref: CSN Explained, Section 4, Note 2

Public housing	Private housing	Infrastructure	Public non-housing	Industrial	Commercial	Housing R&M	Non-housing R&M	Total work
1.1%	1.9%	1.7%	0.3%	3.8%	3.0%	-0.1%	1.3%	1.6%



CONSTRUCTION OUTPUT - EAST MIDLANDS (£ MILLION, 2019 PRICES)

Source: Experian
Ref: CSN Explained, Section 4, Note 2

	Estimate	Forecast (Annual % change, real terms)					Annual average
	2022	2023	2024	2025	2026	2027	2023-2027
Public housing	139	-5.0%	2.1%	2.7%	3.0%	3.1%	1.1%
Private housing	2,519	0.1%	1.7%	2.4%	2.5%	2.6%	1.9%
Infrastructure	2,020	1.0%	1.2%	2.6%	1.8%	1.7%	1.7%
Public non-housing	612	-3.6%	0.6%	1.0%	1.7%	1.9%	0.3%
Industrial	980	5.3%	4.8%	2.4%	3.1%	3.1%	3.8%
Commercial	1,056	1.6%	2.5%	3.6%	3.6%	3.6%	3.0%
New work	7,326	0.9%	2.1%	2.5%	2.5%	2.6%	2.1%
Housing R&M	1,876	-4.4%	-0.3%	0.8%	1.5%	1.7%	-0.1%
Non-housing R&M	2,105	-0.1%	0.3%	2.5%	1.9%	2.0%	1.3%
Total R&M	3,981	-2.1%	0.0%	1.7%	1.7%	1.9%	0.6%
Total work	11,306	-0.2%	1.4%	2.2%	2.3%	2.3%	1.6%

The annual average growth rate is the rate of growth between the end of 2022 and the end of 2027, i.e., a five-year period.

In the East Midlands there are significant developments that will deliver growth.

While the East Midlands may not have high profile major projects that are driving growth in other areas of the UK, there are still significant programmes of work. The next phase of Network Rail's Midland Main Line railway upgrade has begun. The work looks to electrify the Midland main line between London and Leicestershire. In this phase of work the aim is to drive steel columns 7m into the ground before installing overhead line equipment needed to power electric and bi-mode trains in the future.

The industrial sector should benefit from a few logistics and warehouse projects. Brick producer Forterra is moving ahead with its £95m project to double production capacity at its Desford plant in Leicestershire. The first bricks are expected to be produced this year and will produce enough bricks to build 24,000 average sized family homes which will equate to an overall production capacity increase of 16%.

An infrastructure project set for Boston, looks to provide a 1400MV high voltage direct current electricity link between the British and Danish transmission systems. Converter sites will be constructed and onshore and offshore cables in each country will be installed. The project, named Viking Link, will enable a more effective use of renewable energy, access to sustainable electricity generation and improved security of electricity supplies.

Other projects taking place in the East Midlands include the £200m Aston Martin project that looks to provide new headquarters to Aston Martin's Cognizant Formula One Team, as well as a new prison opening in 2023 in Leicestershire which will be run by private operator Serco and is estimated to cost around £286m. The prison, named Fosse Way, is part of the Government's ambitious programme to build 20,000 extra prison places in England and Wales.

 **Aston Martin Formula One Team headquarters**

£200m

 **Desford plant expansion**

£95m

Workforce¹ forecast

During 2023 we are expecting to see a marginal decrease in workforce numbers dipping to 166,300 compared to 167,200 in 2022.

Across the forecast, by 2027 we expect that the workforce will pick back up to 167,000 workers, which is still marginally lower than 2022. This is essentially a stable workforce over the next five years with 0% workforce growth and the UK isn't much different with only a 0.1% increase in workforce numbers over the forecast.

We are anticipating that some occupations may see a slight drop in workforce numbers, such as plumbing and HVAC trades with a drop of 500 workers between 2022 and 2023 then a further fall of 100 workers by 2027. While slight dips in workforce numbers look to be mainly in skilled trade occupations, the dips are very marginal and there is also a slight increase in demand for some of the technical and professional occupations.

TOTAL WORKFORCE BY OCCUPATION - EAST MIDLANDS

	Actual	Estimate	Forecast	
	2021	2022	2023	2027
Senior, executive, and business process managers	10,700	10,500	10,500	10,900
Construction project managers	2,700	2,700	2,600	2,600
Other construction process managers	14,800	14,100	13,900	14,800
Non-construction professional, technical, IT, and other office-based staff	22,300	22,000	21,800	22,300
Construction trades supervisors	1,600	1,500	1,400	1,700
Wood trades and interior fit-out	15,100	14,600	14,600	14,000
Bricklayers	5,200	5,300	5,400	5,000
Building envelope specialists	5,700	5,900	6,100	6,000
Painters and decorators	5,900	6,000	6,000	5,700
Plasterers	5,500	5,400	5,300	4,600
Roofers	1,500	1,500	1,400	1,500
Floorers	1,300	1,300	1,300	1,200
Glaziers	3,500	3,500	3,500	3,200
Specialist building operatives nec*	5,900	5,800	5,600	5,000
Scaffolders	600	500	500	500
Plant operatives	4,000	4,400	4,300	4,800
Plant mechanics/fitters	3,800	3,900	4,000	3,900
Steel erectors/structural fabrication	1,700	1,800	1,800	1,800
Labourers nec*	5,900	6,200	6,200	6,400
Electrical trades and installation	13,100	13,400	13,400	13,500
Plumbing and HVAC Trades	11,500	11,000	10,500	10,400
Logistics	2,100	2,100	2,200	2,200
Civil engineering operatives nec*	1,400	1,500	1,500	1,600
Non-construction operatives	2,900	3,000	3,000	3,200
Total (SIC 41-43)	148,400	147,600	146,600	146,700
Civil engineers	3,800	4,100	4,000	4,300
Other construction professionals and technical staff	9,500	9,600	9,700	10,100
Architects	900	1,000	1,000	1,000
Surveyors	5,000	5,000	5,000	5,000
Total (SIC 41-43, 71.1, 74.9)	167,500	167,200	166,300	167,000

Source: ONS, CSN, Experian
Ref: CSN Explained, Section 4, Notes 5 and 6

Annual Recruitment Requirement (ARR)

While the workforce levels are remaining static, there is still a need for the construction industry in the East Midlands to increase the recruitment of new workers. In a typical year, the region's construction industry would recruit between 10,000 – 13,500 workers, the usual the movement of people into and out of the industry or workforce churn. When looking at the future recruitment demand, we recognise that a level of churn will always take place and take this into account to producing the ARR figure.

The average annual recruitment requirement in the East Midlands is set to average 2.1% per year, based on 2022 workforce levels, which is above the UK figure of 1.7%. This means the construction industry would have to increase current recruitment by 3,500 new workers each year to deliver the expected work between the start of 2023 and end of 2027.

The following occupations have some of the strongest recruitment requirements values:

- Other construction process managers (990 per year)
- Wood trades and interior fit-out (420 per year)
- Painters and decorators (400 per year).

ARR BY OCCUPATION - EAST MIDLANDS

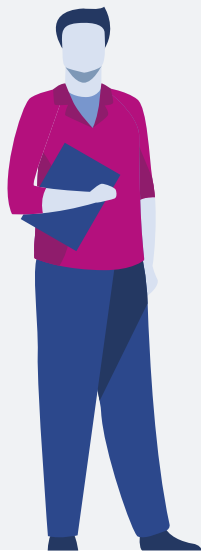
	ARR as % of 2022 workforce	ARR value per year
Senior, executive, and business process managers	-	-
Construction project managers	-	-
Other construction process managers	7.0%	990
Non-construction professional, technical, IT, and other office-based staff	1.3%	280
Construction trades supervisors	9.7%	140
Wood trades and interior fit-out	2.9%	420
Bricklayers	2.3%	120
Building envelope specialists	-	<50
Painters and decorators	6.7%	400
Plasterers	-	-
Roofers	4.1%	60
Floorers	-	-
Glaziers	-	-
Specialist building operatives nec*	-	-
Scaffolders	-	-
Plant operatives	8.5%	370
Plant mechanics/fitters	8.1%	310
Steel erectors/structural fabrication	-	-
Labourers nec*	0.8%	50
Electrical trades and installation	-	-
Plumbing and HVAC Trades	-	-
Logistics	6.2%	130
Civil engineering operatives nec*	-	-
Total (SIC 41-43)		3,270
Civil engineers	-	-
Other construction professionals and technical staff	-	-
Architects	10.2%	100
Surveyors	2.6%	130
Total (SIC 41-43, 71.1, 74.9)	2.1%	3,500

Source: ONS, CSN, Experian
Ref: CSN Explained, Section 4, Notes 5 and 6

However, it is also important to mention the pressure that construction trade supervisors, plant operatives and plant mechanics/fitters will face where the ARR value isn't particularly high, but the ARR makes up a large % of the total workforce. For occupations that have no ARR value on the table, indication is that recent levels of recruitment will be able to meet future need if they are maintained.

When looking at the workforce and ARR forecast it is important to note that in 2022, the cost-of-living crisis is having a significant effect on the economy and growth forecasts, particularly for 2023 and 2024. This is reflected in the ARR figure in the 2023-2027 outlook being lower than the 2022-2026 view, which is due to lower construction output growth.

However, despite the lower growth forecast, there is a requirement to recruit extra workers as there is still a relatively high level of vacancies in the East Midlands that need filling going into 2023.



To fill vacancies and recruit new staff, construction companies can look at several routes such as:

Attracting skilled workers who are already working elsewhere in the construction industry, although this obviously moves existing workers around rather than meet overall industry need

Attracting skilled workers who have left the industry back into construction. This would be either those who have left to work in other industries or those that have become unemployed/inactive

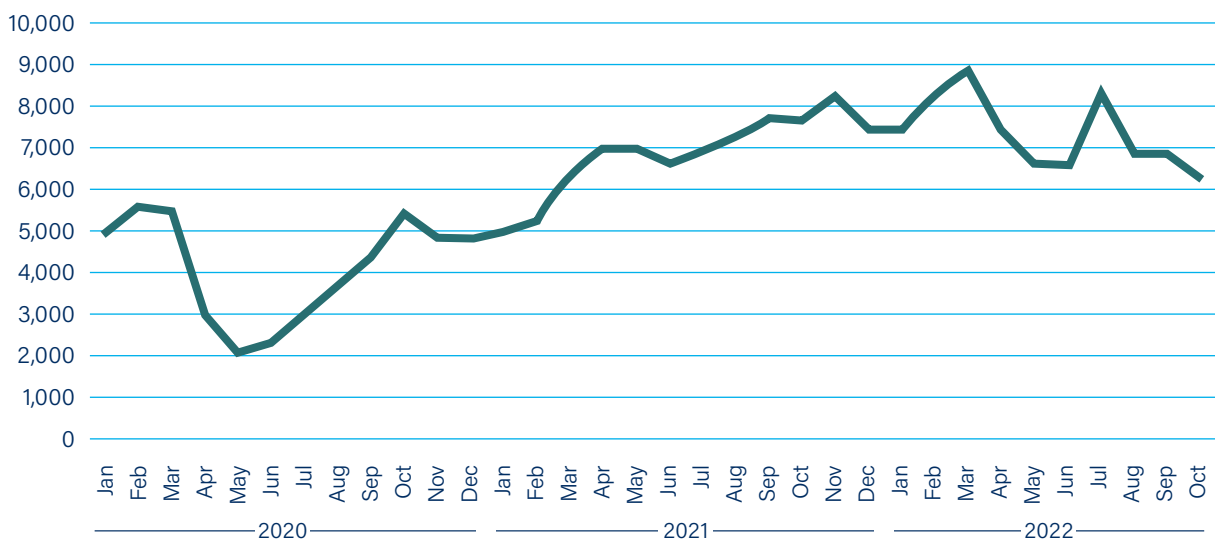
Recruiting and training new entrants into construction from those leaving school, further education, higher education or migration

Improving the retention of workers within the industry

Looking at **how productivity can be improved.**

MONTHLY UNIQUE ONLINE JOB POSTINGS - EAST MIDLANDS

Source: Lightcast, selected construction occupations, East Midlands



Responding to a skills shortage is likely to be a mix of these options, as the continued strength of the jobs market, and relatively low levels of unemployment means competition for workers.

Companies that are able to understand and meet what workers value the most are the ones that are more likely to be successful at attracting and retaining

new staff. That could range from being able to offer long-term career opportunities with support to help development, through to good levels of pay, flexible working to have a positive work/life balance and creating a culture of fairness, inclusion and respect.

There are also recent trends in training to consider as the GB wide drop in employer training, which was expected with the impact of Covid-19, had started to pick-up in 2021, although there is a slightly mixed picture.

Construction apprenticeship starts in England have increased in 2021/22, and in the East Midlands, they have picked up

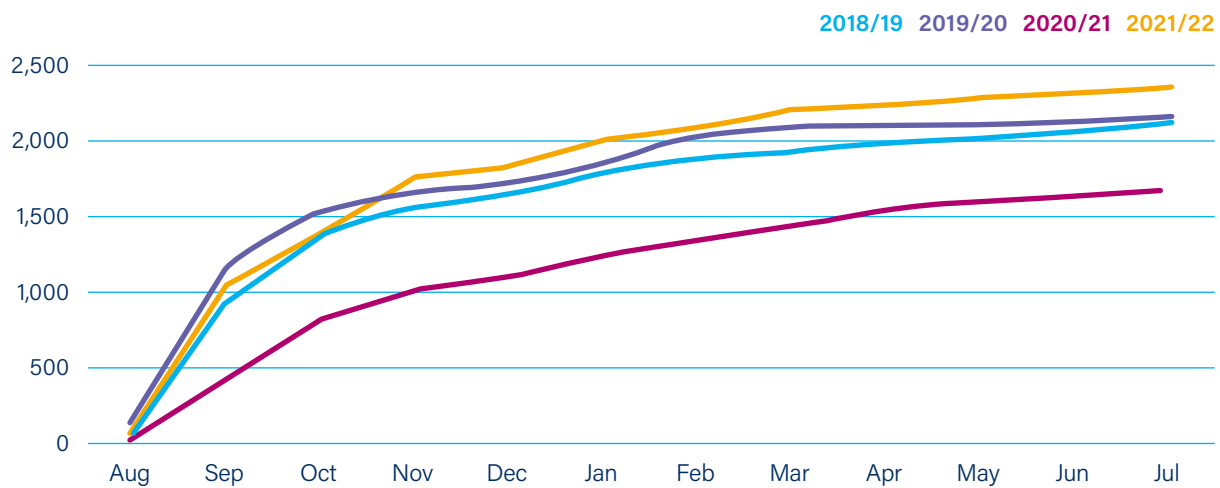
strongly, ending the 2021/22 academic year nearly 40% up on 2020/21, and above figures from earlier years.

However, looking over the wider range of construction training delivered across England there isn't the same level of qualification achievements, with numbers in 2022 down compared to 2021 and 2019.

This points to a slightly different position between apprenticeships and other training, indicating that the construction industry has work to do to get overall training numbers back to pre-covid levels and then increase to meet current and future demand.

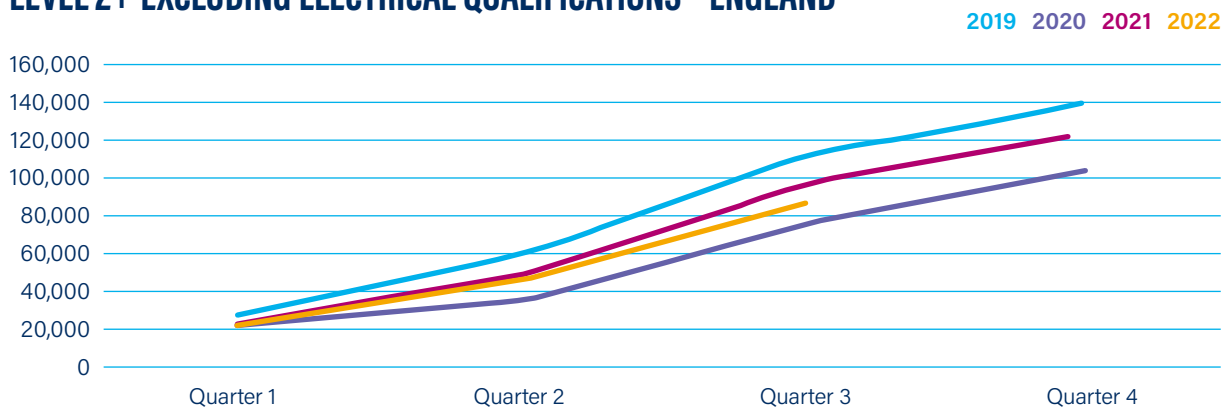
EAST MIDLANDS CUMULATIVE APPRENTICESHIP STARTS FOR CONSTRUCTION, PLANNING AND THE BUILT ENVIRONMENT SECTOR

Source: Department for Education



CONSTRUCTION SECTOR QUALIFICATION CERTIFICATES ISSUED LEVEL 2+ EXCLUDING ELECTRICAL QUALIFICATIONS - ENGLAND

Source: Ofqual



CITB support to the construction industry in the East Midlands

CITB England will continue to support industry through various ongoing initiatives.

CITB is looking at a range of actions that will help to support construction companies to invest in training such as helping to protect apprenticeships; using targeted funding for skills priorities; helping businesses to identify training needs and ensuring that standards are in place for the required training. In 2022 CITB launched the [Apprenticeship Toolkit](#) to provide information that helps companies to know about the process of hiring an apprentice, and how CITB can help; and the [Onsite Experience](#) hubs, designed to provide a one-stop recruitment solution for construction employers. There are now nine hubs across England creating a talent pipeline to meet the needs of local construction employers and to support construction career opportunities for people from local communities. The programme will result in 7,780 people becoming employment and site-ready with 3,350 people securing sustained employment within the next three years.

In the East Midlands, CITB work with employers, training groups, providers and stakeholders to deliver informative sessions on grants, funding and CITB support. CITB Engagement Teams continue to work closely with Apprenticeship providers and employers

in the region to support apprenticeship recruitment. A New Entrant Support Team provides dedicated apprenticeship support for employers, making the apprenticeship journey simpler and supporting employers with their needs from recruitment through to completion.

Employers and FE Providers are being encouraged to use the Talentview Construction portal with employers posting apprenticeship vacancies as well as work experience opportunities. Providers are encouraging students to register onto the portal so that they can be matched to job opportunities.

CITB has offered support to ERBs (Employer Representative Bodies) in support of the Local Skills Improvement Plans (LSIP), to help inform and develop the plans through:

- Harnessing CITB Industry Insight & Forecasting Evidence Based Research;
- Creating Guidance that identifies themes and offers practical recommendations for ERBs to help solve construction skills issues in their community through LSIPs
- Connectivity with local employers to assist in gaining insight on skills and training needs.

Overcoming skills shortages by supporting training and recruitment in a more competitive labour market at a time when the economy will be in a recession requires combined action from CITB, construction companies and government. Having a workforce that is competent and trained to make the most of the future opportunities is vital to ensuring the East Midlands has the volume of energy efficient homes it needs, the infrastructure to ensure the economy thrives, and to tackle the retrofit of the built environment to meet net zero targets. As the report sets out, over the next five years the construction industry will continue to support 167,000 workers and contribute around £12bn worth of output each year from an industry that accounts for 13% of all business that employ people in the East Midlands.

The construction industry will continue to contribute over

£12bn

Regional breakdown within England

North East

North West

Yorkshire & the Humber

East Midlands

West Midlands

East of England

Greater London

South West

South East

East Midlands

Amber Valley

Ashfield

Bassetlaw

Blaby

Bolsover

Boston

Broxtowe

Charnwood

Chesterfield

Derby

Derbyshire Dales

East Lindsey

Erewash

Gedling

Harborough

High Peak

Hinckley and Bosworth

Leicester

Lincoln

Mansfield

Melton

Newark and Sherwood

North East Derbyshire

North Kesteven

North Northamptonshire

North West Leicestershire

Nottingham

Oadby and Wigston

Rushcliffe

Rutland

South Derbyshire

South Holland

South Kesteven

West Lindsey

West Northamptonshire

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