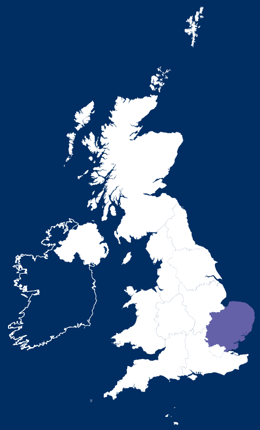
CONSTRUCTION SKILLS NETWORK

The skills construction needs

East of England

Five Year Outlook 2023–2027



EAST OF ENGLAND

Key facts and figures

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

2.2%

Fastest sector rate of growth expected for

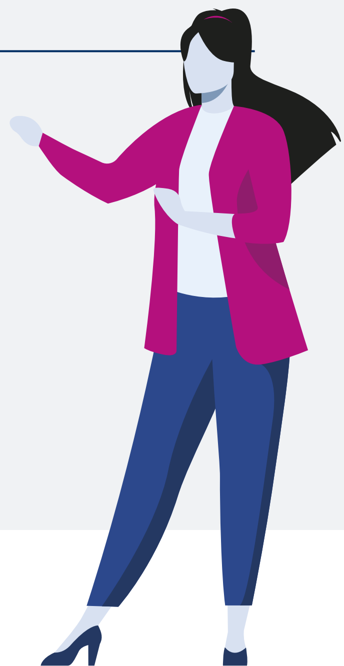
- **Infrastructure**
- **Housing**
- **Commercial**

The occupations with the strongest additional recruitment requirement levels:

- **Non-construction professional, technical, IT and other office-based staff** (1,620 per year)
- **Wood trades and interior fit-out** (660 per year)
- **Civil engineers** (340 per year)

Major projects in the East of England include a number of very large scale/long term developments such as:

- **Sizewell C** (£18-20bn)
- **Lower Thames Crossing project** (£6.4-8.2bn)
- **Lovells housing project** (£700m)



2022

The annual recruitment requirement in the East of England of 1.5% per year is marginally below the UK average of 1.7% and means an extra 19,050 workers will be needed from 2023 to 2027.

2023

2024

2025

2026

2027

2028

2029

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.

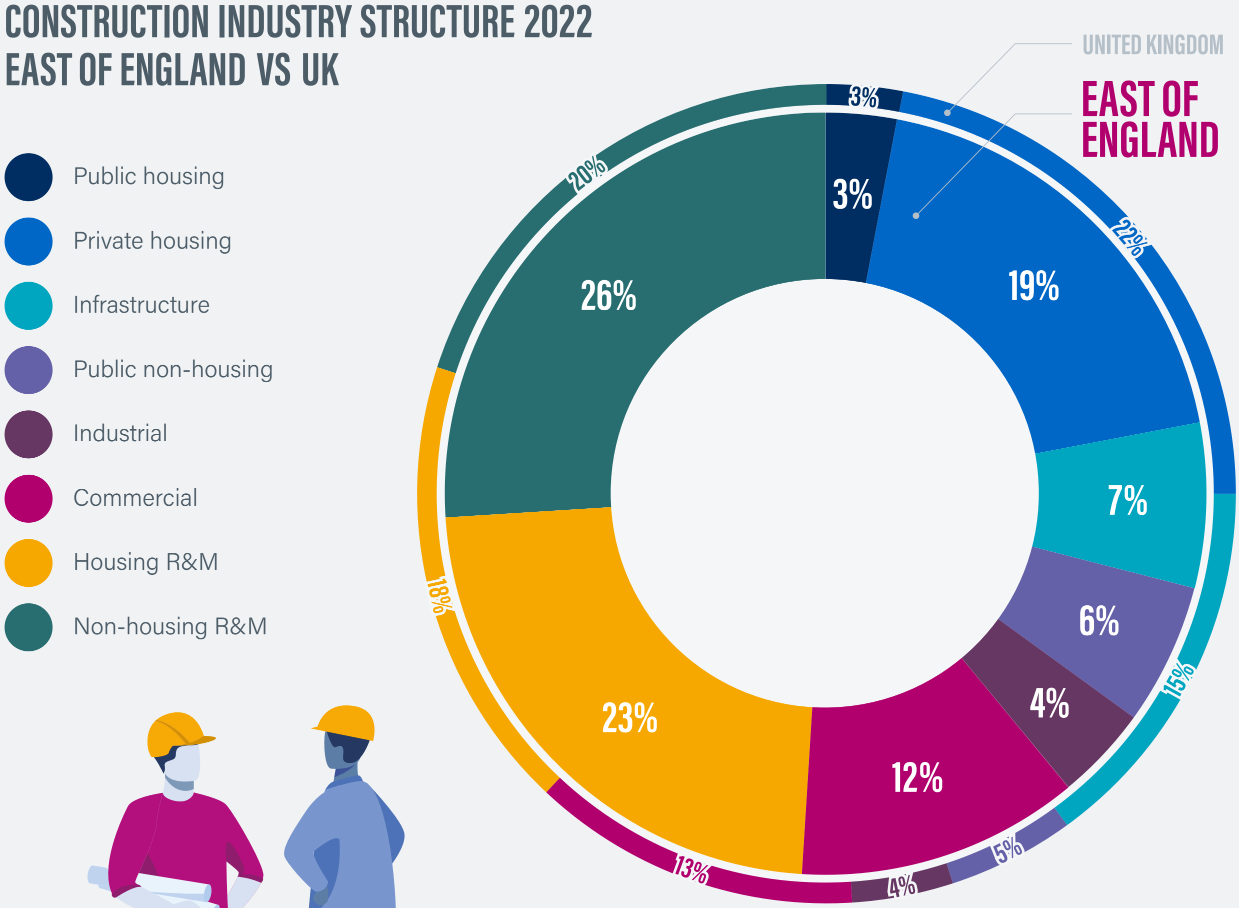
Structure

The construction industry in the East of England has some significant differences to the UK structure.

The construction industry in the East of England has 23,200 businesses[1] with more than one employee, which is over 16% of all employers in the region. In 2022 the industry is estimated to have total output of nearly £18bn which is structured as shown in the chart. Non-housing R&M makes up 26% of the East of England's construction output structure compared to only 20% for the UK. The East of England also has a higher share of housing R&M work compared to the UK by 5%. When we combine both the R&M sectors for the region we see that they make up 49% of the construction structure compared to only 38% for the UK.

In contrast, the East of England has had a much smaller infrastructure sector in recent years at 7%, compared to 15% for the UK. Whilst this sector hasn't seen the same level of work in the East of England when compared to the UK, looking ahead at the 2023-2027 forecast, this sector is set to see the highest growth rate in the region.

CONSTRUCTION INDUSTRY STRUCTURE 2022
EAST OF ENGLAND VS UK



Non-housing R&M output

26%

[1] Department for Business, Energy & Industrial Strategy (Oct 2022); Business Population Estimates for the UK and Regions.
Source: ONS, Experian

2022 view

Total annual output 2022

£18bn

Total estimated output 2023

£18bn

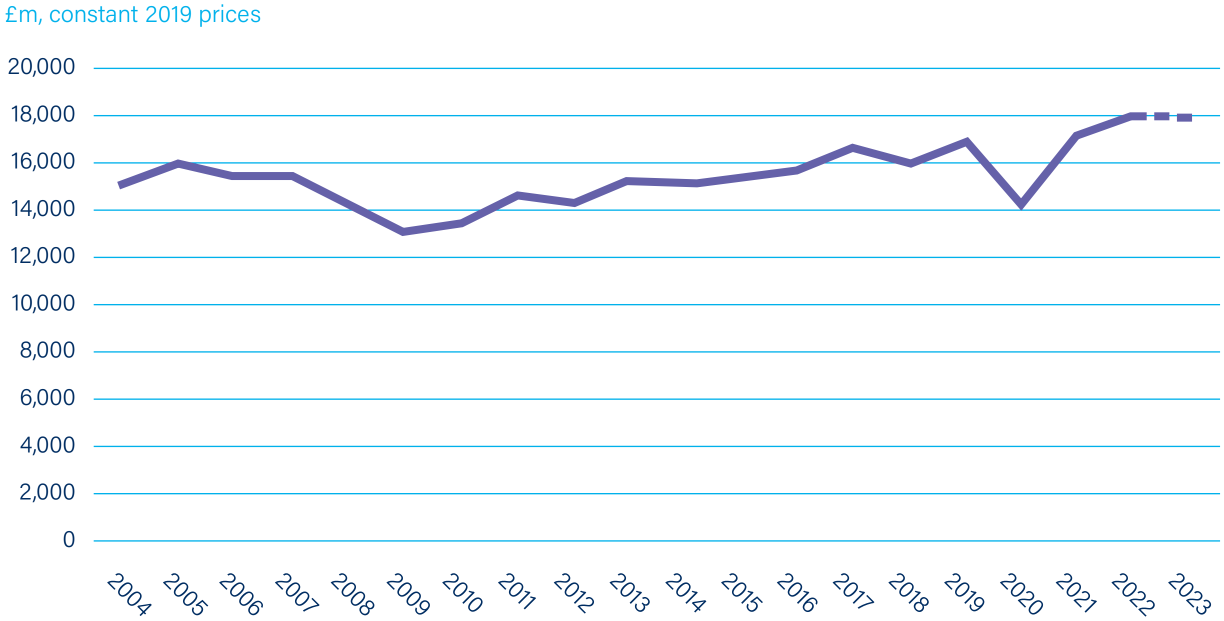
For 2022 we are anticipating output in the East of England growing by 4.8% which is slightly ahead of UK output growth for 2022 at 4.1%.

2022 view

2022 saw an increase in construction output in the East of England of 4.8%, which is similar to the UK level, however, in 2023 we expect to see a slight drop in output for the first time since the pandemic in 2020, with output forecast to decline by -0.4%. This is very similar to the decrease we are forecasting across the UK in 2023 at -0.5%. The fall in output does represent a much smaller drop than seen in previous recessions in 2008 and 2020.

CONSTRUCTION OUTPUT 2004 – 2023 EAST OF ENGLAND

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



OUTPUT FORECAST 2023 – 2027

Across the next five years, the volume of work in the East of England is forecast to grow by an annual average rate of 2.2%, which is above the UK rate of 1.5%. All sectors will see growth over the forecast, with the infrastructure sector seeing particularly strong growth at an annual average rate of 13.1%. This is partly due to work picking up from the drop seen between 2018-2020 combined with a strong pipeline of energy infrastructure work. Overall, the region is going to see stronger growth in the new work sector compared to the R&M sector during 2023-27.

The growth in infrastructure means an increase in the sector's output of £1,100m and by the end of 2027, it will almost have doubled its total value in the region. We're also expecting to see gains in private housing, as new homes are still needed to meet demand, and in the commercial sector, as that recovers from a relatively low level of output.

Average growth rate for the East of England

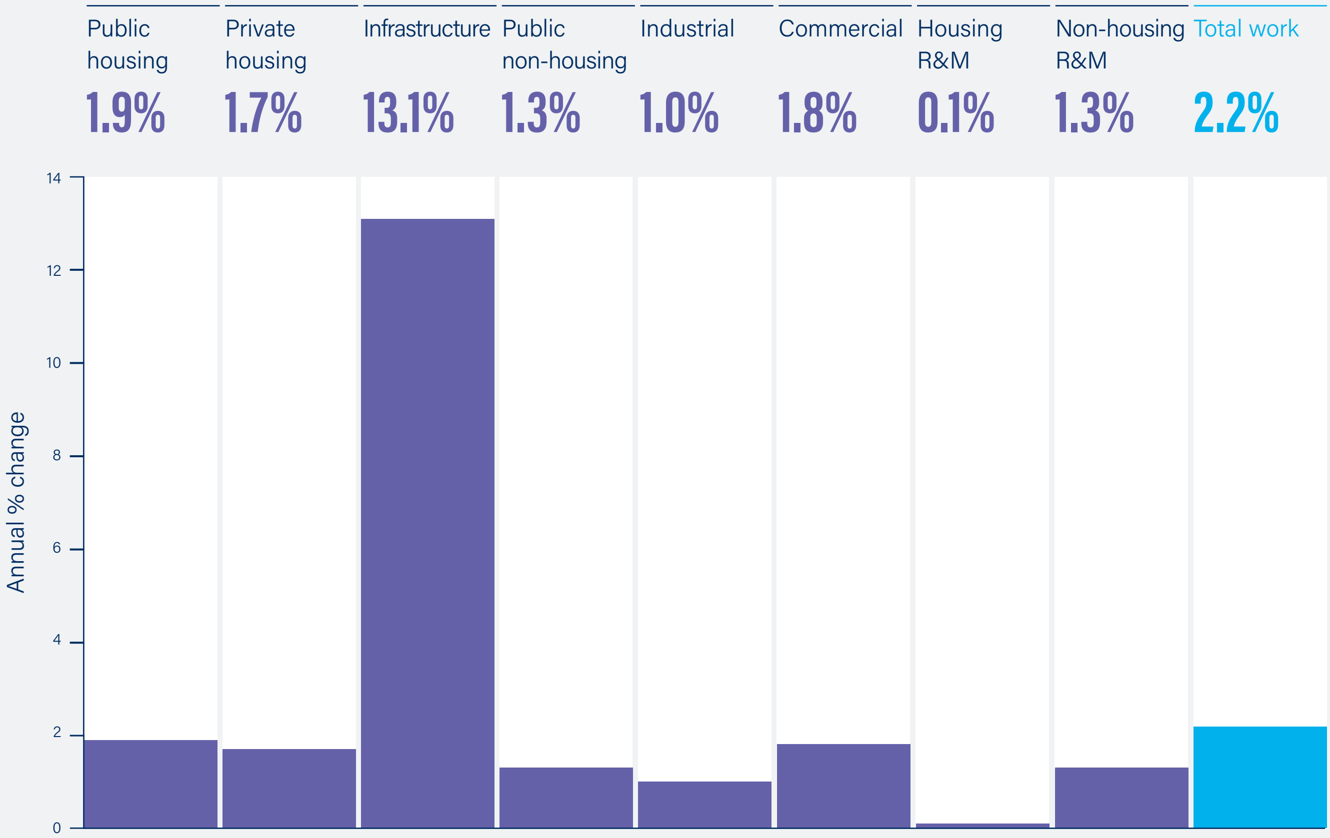
2.2%

[1] 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.

Forecast

ANNUAL AVERAGE OUTPUT GROWTH BY SECTOR 2023-2027 EAST OF ENGLAND

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



CONSTRUCTION OUTPUT – EAST OF ENGLAND (£ 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	491	-2.9%	3.0%	3.0%	3.3%	3.4%	1.9%
Private housing	3,513	-0.8%	1.7%	2.4%	2.5%	2.6%	1.7%
Infrastructure	1,306	7.5%	13.8%	15.4%	14.5%	14.4%	13.1%
Public non-housing	1,006	-2.7%	1.7%	1.9%	2.7%	2.9%	1.3%
Industrial	740	3.3%	1.8%	-0.5%	0.2%	0.2%	1.0%
Commercial	2,105	0.7%	0.6%	2.6%	2.7%	2.6%	1.8%
New work	**9,160**	**0.7%**	**3.4%**	**4.4%**	**4.7%**	**4.9%**	**3.6%**
Housing R&M	4,188	-3.4%	-0.2%	0.8%	1.5%	1.7%	0.1%
Non-housing R&M	4,622	0.0%	0.3%	2.5%	1.9%	2.0%	1.3%
Total R&M	**8,810**	**-1.6%**	**0.1%**	**1.7%**	**1.7%**	**1.9%**	**0.7%**
Total work	**17,970**	**-0.4%**	**1.8%**	**3.1%**	**3.3%**	**3.5%**	**2.2%**

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 of England there are a number of very large scale/long term developments that will deliver output for a number of sectors.

The forecast for the infrastructure sector is strong due to the East Anglia Two and East Anglia One North wind farms, which are due to start construction in 2023 and the new nuclear power station at Sizewell C. Costing around £18-£20bn Sizewell C is said to support 70,000 jobs across the UK, create thousands of local jobs and bring about £4bn to the regional economy.

There is also the Lower Thames Crossing project, a road link between Kent and Essex, which was opened for tender by Highways England, with the £6.4-8.2bn package including the design and construction of twin-road tunnels.

For the private housing sector there a number of projects underway in the region such as the Stevenage regeneration project which will provide over 1,800 flats and commercial units with a value of over £500m; Lovells £700m homes deal with Suffolk Council, looking to build nearly 3,000 homes; and the £300m 2,000-home Brightwell Lakes development in Martlesham Heath in Suffolk.

Over the near-term, public non-residential output should benefit from the West Suffolk NHS Foundation Trust, which has submitted plans to build a major new hospital in Bury St Edmunds. There is also the Avanti Grange Secondary School in Bishop's Stortford in Hertfordshire will provide 1,200 pupil places and serve the new Stortford Fields and St Michael's Hurst communities.

Sizewell C nuclear power station

£20bn

Lower Thames Crossing Project

£6.4-8.2bn

Lovells housing project with Suffolk Council

£700m

Workforce[2] forecast

In 2022 for the East of England we are anticipating a slight increase in the workforce, rising to 260,400 from 259,300 in 2021.

With output dipping in 2023, we're forecasting the workforce numbers to also drop slightly to 258,800 before increasing to reach 264,600 by the end of 2027. Over the forecast this represents an average annual workforce growth rate of 0.3% for the region which is a higher increase than that expected for the UK at a 0.1% increase.

Across the range of occupations there is expected to be an increase in engineering type roles such as civil engineering operatives and civil engineers. At the same time a very slight decrease in workforce numbers for some of the trade roles such as roofers, floorers and glaziers.

TOTAL WORKFORCE BY OCCUPATION – EAST OF ENGLAND	Actual	Estimate	Forecast	
	2021	2022	2023	2027
Senior, executive, and business process managers	18,500	17,900	17,300	18,300
Construction project managers	3,600	3,600	3,500	3,600
Other construction process managers	20,000	20,400	20,100	21,000
Non-construction professional, technical, IT, and other office-based staff	41,600	40,700	39,900	40,000
Construction trades supervisors	4,200	4,100	4,100	4,400
Wood trades and interior fit-out	23,900	23,900	23,800	23,000
Bricklayers	7,800	8,100	8,200	8,400
Building envelope specialists	9,600	10,000	10,300	10,800
Painters and decorators	8,900	8,900	9,000	8,800
Plasterers	5,000	5,200	5,300	5,300
Roofers	4,600	4,500	4,400	4,100
Floorers	3,100	3,100	3,100	2,900
Glaziers	2,700	2,600	2,600	2,400
Specialist building operatives nec*	4,100	4,000	3,900	3,800
Scaffolders	2,700	2,600	2,400	2,700
Plant operatives	3,000	3,200	3,200	3,600
Plant mechanics/fitters	2,700	2,800	3,000	2,900
Steel erectors/structural fabrication	1,600	1,700	1,700	1,900
Labourers nec*	14,500	14,800	14,700	15,100
Electrical trades and installation	18,400	18,500	18,500	18,700
Plumbing and HVAC Trades	17,400	17,100	16,600	16,900
Logistics	2,900	3,000	3,000	3,000
Civil engineering operatives nec*	1,000	1,100	1,100	1,300
Non–construction operatives	2,400	2,500	2,500	2,700
Total (SIC 41-43)	**224,200**	**224,100**	**222,100**	**225,700**
Civil engineers	7,400	7,800	7,700	8,400
Other construction professionals and technical staff	18,800	19,300	19,500	20,300
Architects	4,000	4,300	4,400	4,900
Surveyors	4,900	5,100	5,100	5,300
Total (SIC 41-43, 71.1, 74.9)	**259,300**	**260,400**	**258,800**	**264,600**

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

[2] Workforce covers construction contracting, SIC 41, 42 & 43 along with supporting technical and professional workers in SIC 71 and 74.9.

Annual Recruitment Requirement (ARR)

While the workforce levels are remaining static, there is still a need for the construction industry in the East of England to increase the recruitment of new workers. In a typical year, the region's construction industry would recruit between 15,500 – 21,000 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 of England is set to average 1.5% per year, based on 2022 workforce levels, which is slightly lower than the UK figure of 1.7%. This means the construction industry would have to increase current recruitment by 3,810 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:

- Non-construction professional, technical, IT, and other office-based staff (1,620 per year)
- Wood trades and interior fit-out (660 per year)
- Civil Engineers (340 per year).

ARR BY OCCUPATION – EAST OF ENGLAND

	ARR as % of 2022 workforce	ARR value per year
Senior, executive, and business process managers	-	-
Construction project managers	-	-
Other construction process managers	-	-
Non-construction professional, technical, IT, and other office-based staff	4.0%	1,620
Construction trades supervisors	-	-
Wood trades and interior fit-out	2.8%	660
Bricklayers	-	-
Building envelope specialists	2.6%	260
Painters and decorators	-	-
Plasterers	6.2%	320
Roofers	-	-
Floorers	-	-
Glaziers	-	-
Specialist building operatives nec*	-	-
Scaffolders	-	-
Plant operatives	-	<50
Plant mechanics/fitters	-	-
Steel erectors/structural fabrication	9.9%	170
Labourers nec*	-	-
Electrical trades and installation	-	-
Plumbing and HVAC Trades	-	-
Logistics	-	-
Civil engineering operatives nec*	-	<50
Total (SIC 41-43)		**3,030**
Civil engineers	4.4%	340
Other construction professionals and technical staff	1.2%	240
Architects	4.7%	200
Surveyors	-	-
Total (SIC 41-43, 71.1, 74.9)	**1.5%**	**3,810**

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

Note: figures may not sum to totals due to rounding

However, there will be pressure on occupations such as steel erectors/structural fabrication (9.9%); plasterers (6.2%); architects (4.7%) and civil engineers (4.4%) where demand is high compared to their workforce level. 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 of England 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

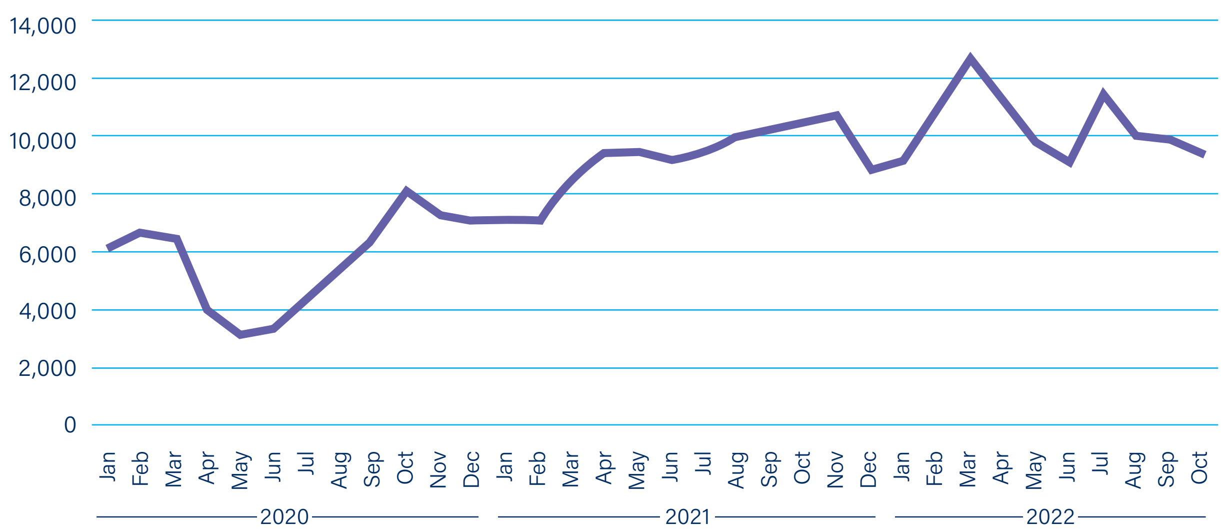
Recruiting and training new entrants into construction from those leaving school, further education, higher education or migration

Improving the retention of workers within the industry

Looking at how productivity can be improved.

MONTHLY UNIQUE ONLINE JOB POSTINGS – EAST OF ENGLAND

Source: Lightcast, unique vacancy postings for range of construction occupations, East of England



Responding to a skills shortage is likely to be a mix of 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.

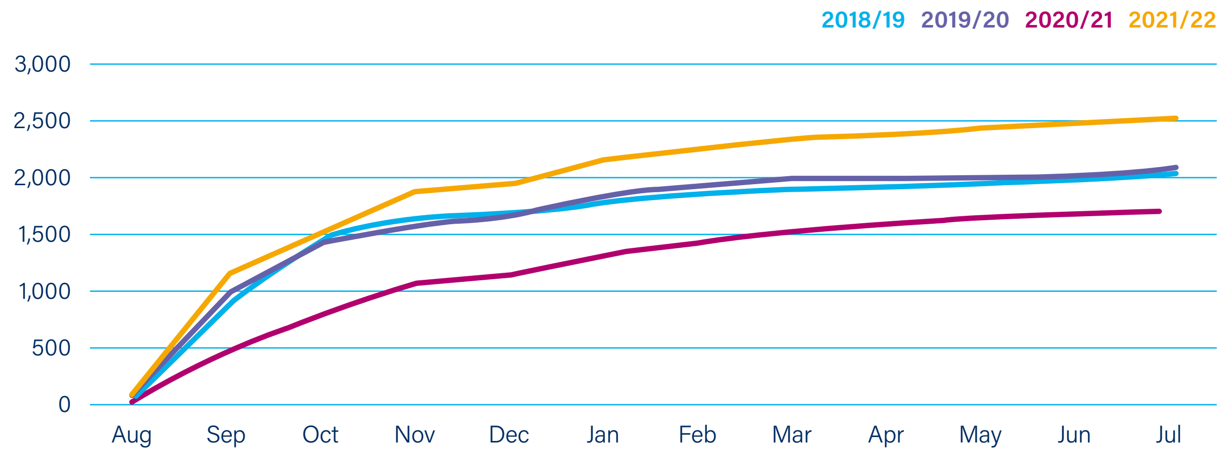
Construction apprenticeship starts in England have increased in 2021/22, and in the East of England, they have picked up strongly, ending the 2021/22 academic year 47% up on 2020/21, and above figures from earlier years.

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.

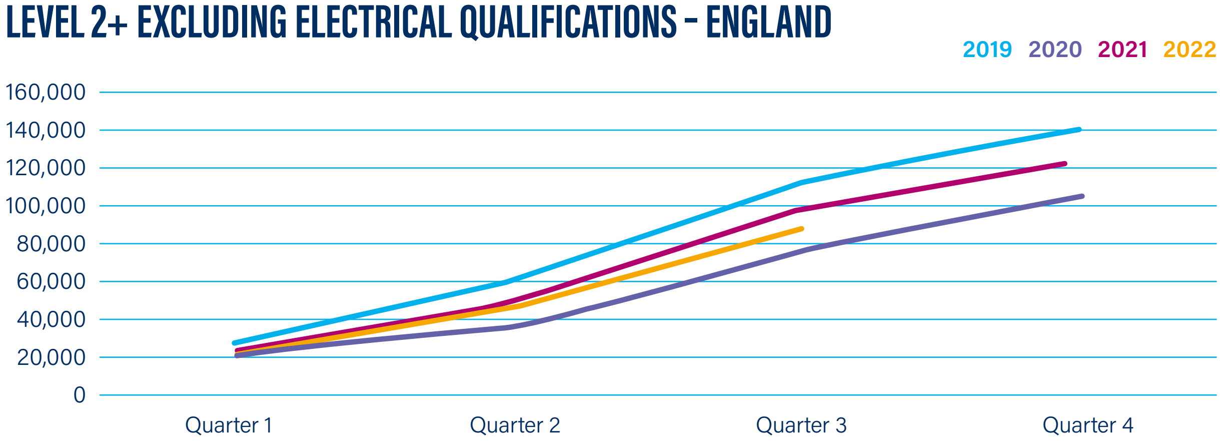
EAST OF ENGLAND CUMULATIVE APPRENTICESHIP STARTS FOR CONSTRUCTION, PLANNING AND THE BUILT ENVIRONMENT SECTOR

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 of England

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 of England, 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:

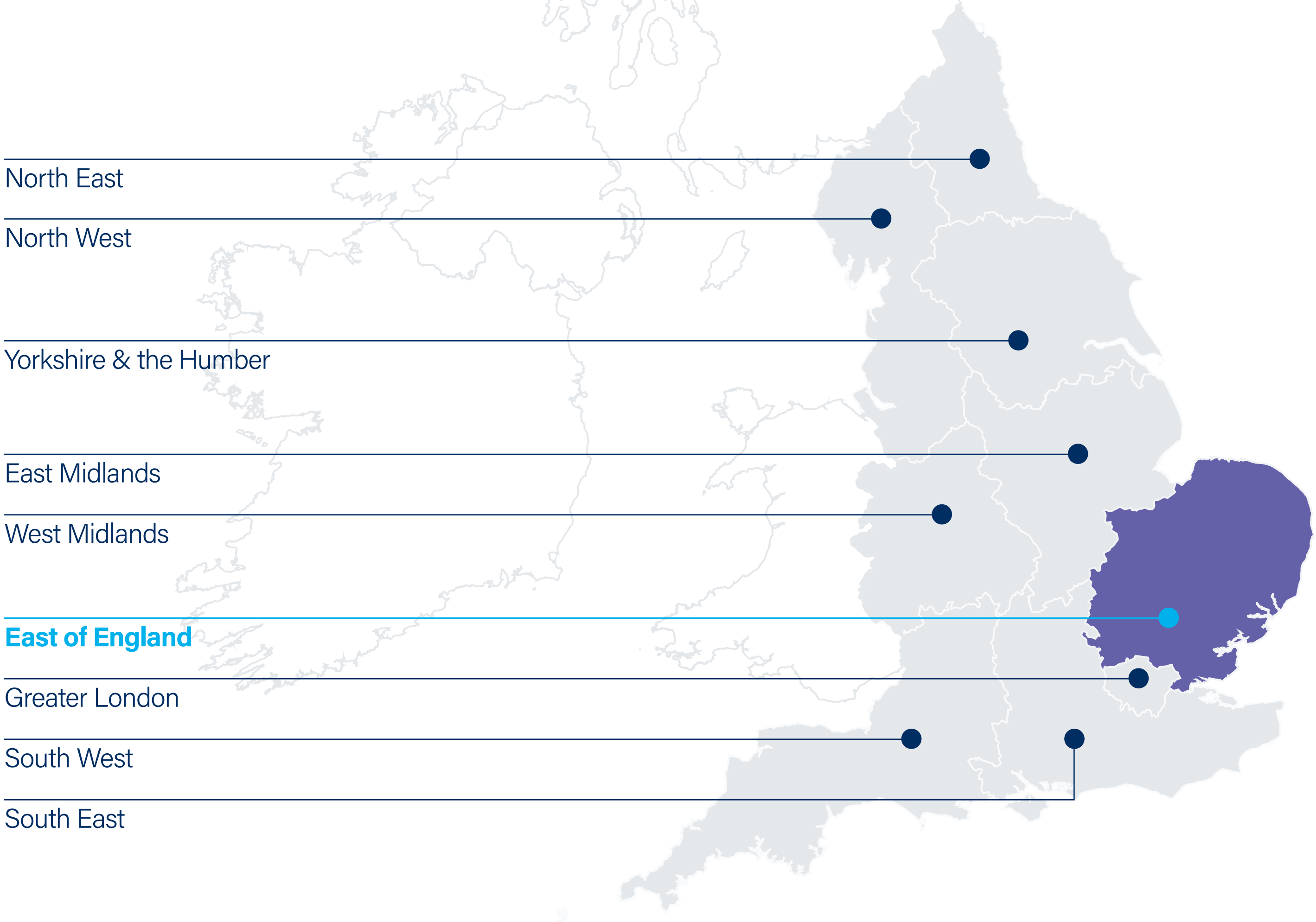
- Harnessing CITB Industry Insight & Forecasting Evidence Based Research;
- Creating Guidance that identifies themes and offers practical recommendations for ERBs to help solve construction skills issues in their community through LSIPs
- Connectivity with local employers to assist in gaining insight 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 region 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 over 260,000 workers and contribute around £19bn worth of output each year from an industry that accounts for 16% of all business that employ people in the East of England.

The construction industry will continue to contribute around

£19bn

Regional breakdown within England



East of England

Babergh
Basildon
Bedford
Braintree
Breckland
Brentwood
Broadland
Broxbourne
Cambridge
Castle Point
Central Bedfordshire
Chelmsford
Colchester
Dacorum
East Cambridgeshire
East Hertfordshire
East Suffolk
Epping Forest
Fenland
Great Yarmouth
Harlow
Hertsmere
Huntingdonshire
Ipswich
King's Lynn and West Norfolk
Luton
Maldon
Mid Suffolk
North Hertfordshire
North Norfolk
Norwich
Peterborough
Rochford
South Cambridgeshire
South Norfolk
Southend-on-Sea
St Albans
Stevenage
Tendring
Three Rivers
Thurrock
Uttlesford
Watford
Welwyn Hatfield
West Suffolk

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