



CIOB

The Chartered
Institute of Building



The Real Face of Construction

April 2023

Disclaimer

Use of the Term Regions

We recognise the unique context of the devolved nations and regions of the UK and Ireland. However, for brevity, the term 'region' is regularly used throughout the report to cover England, Wales, Scotland, Northern Ireland and the Republic of Ireland.

Use of Median Earnings

Currently, available data on women in construction roles is inconsistent across the UK and Ireland. This restricts the analysis of female earnings and the comparison with their male counterparts. Therefore, to avoid painting a false picture and narrative for the sake of drawing direct comparisons between parts of the of the UK and Ireland, only male earnings data has been used and analysed within this report. For those interested in viewing the existing data that is available, we have included it within the earnings table in the regional profile sections.

Any data or analysis from this report must be reported accurately and not used in a misleading context. If using any information from the report, then its source and date of publication must be acknowledged.

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Foreword

I am delighted that CIOB is publishing this report to help continue making the case for this important industry, one that is often overlooked but vital to our economy, our communities and wider society.

The publication of the Real Face of Construction – April 2023, the third iteration of this report, comes at an important time for the Institute as we have recently released our new Corporate Plan. The plan is intended as a global roadmap to 2028, to help us deliver our public benefit remit and the overarching aim of making modern professionalism widely aspired to and an increasingly reality throughout the industry.

It is my ambition that the specific goals in the plan drive delivery on what we all want from our sector: high standards of quality and safety, improvements in sustainability, and closing the skills gap.

Those are the three headline themes in the plan and our areas of focus. However, in order to deliver on those goals, we need to ensure that the construction industry is at the forefront of the minds of policymakers and parliamentarians.

The Real Face of Construction showcases the true value of our industry and the wider built environment sector, outlining the economic contribution, workforce trends and a breakdown of the data by region and nation.

The report presents a picture for each economic region of the United Kingdom and Ireland, highlighting how the construction sector has performed in recent years, against the backdrop of the significant and unrepresented events that have had an impact across the globe.



In addition to these regional and national profiles, we have gathered insights from our members in a range of different built environment sectors to highlight the current challenges they face and some of the potential opportunities.

Additionally, we offer a number of observations on areas where policy makers could focus their attention to deliver benefits for the industry and wider society. It is my hope that this new CIOB report will be seen as an aid to guide policy makers and others attempting to understand this complex but extremely exciting, vibrant and innovative industry.

Caroline Gumble

Chief Executive Officer

The Chartered Institute of Building (CIOB)

Introduction

We face an unprecedented confluence of critical challenges. Pressures from population growth and ageing, climate change, and a fundamental restructuring of societies and economies as they adapt to technological advances will test both our resolution and our ingenuity. This is not just a national issue. It presents challenges for most communities across the globe as they seek to adapt their built environments in the face of huge change. This places construction in a central role locally, regionally, nationally, and globally.

Policy-makers and industry leaders will need to look hard at how best construction can play its role. They will need to consider not just what is needed of construction, but also its capabilities and capacity to meet those needs. This means taking a perspective not just from a national viewpoint but also looking more broadly at the regional and local picture.

In an ideal world, how construction is put to work will dovetail with another major political challenge – the longstanding pressure to spread more evenly wealth creation and life chances across the whole nation. The debate over how to rebalance the UK economy more fairly across the regions[†] and nations has lingered in the political atmosphere for more than a century. Once described as the north-south divide, it is now captured in the phrase “levelling up”.

This report seeks to support these wider debates over how construction can adapt the built environment. The provision of core data and insights on how construction is faring in regions and developed nations is critical to informed debates ahead. Ultimately all construction is local to someone and some community. So local knowledge and understanding will be crucial if the construction sector is to rise to the challenges of climate change, an ageing population, technological disruption to the social and economic fabric, and the fairer spread of wealth and opportunity across the UK and Ireland.

But a wider appreciation of the industry is also needed. In building an understanding of local, regional and national construction markets it helps to have a firm grasp of the scope of the industry. It is often characterised as a simple straightforward industry, backward even. This is to miss the truth. It is one of the most complicated and complex industries, which forms in different ways to adapt to the ever-changing demands it must meet.

It operates from the local level, with plumbers, electricians, carpenters, and small builders who work and live very locally and are part of the community. It also operates nationally and internationally with large multi-national businesses delivering projects like the Hinkley Point nuclear power station in Somerset, or the HS2 which will cut across many regions. Within this spread from global construction giants to local builders and specialist contractors, there are many important similarities to recognise. And there are important differences. Within this diversity of firms, projects and locations, it is easy for politicians, advisors, and industry leaders to forget that for people and communities the impact of construction and changes to the built environment are almost always local.

The nature of investment in the built environment means that the mix of activity, scale, and fortunes of construction vary across the UK and Ireland, over time. Yet the industry shares many common characteristics across the UK and Ireland and indeed globally.

Many of these characteristics derive from its need to be flexible and mobile, partly in response to an ever-changing pattern of work, but also because they must periodically cope with very rapid and large fluctuations in workloads. These common characteristics are often misunderstood or misinterpreted. Understanding some key drivers which create some of these characteristics should be critical to any policy formulation that involves the built environment or the construction sector.

Over recent decades the industry has been highly volatile, exaggerating wider economic fortunes nationally and locally. This has led to an industry that is very fragmented with large numbers of small firms and a high level of self-employment. But there are many obvious and sometimes subtle differences in the structures, activity, and performance of construction across the UK and Ireland that reflect the differences in local needs, fortunes and business cultures.

It is important to note that there are long-term differences in activity between regions and nations if we were to look at the amount of construction work on a per capita basis. This is a point made often in the levelling up debate and has been a regular complaint over the north-south divide.

Look closely and we can recognise at least two factors that create imbalances in construction activity and impact on the long-term levels of activity. These two factors are land values and population growth. The link with population is easy to appreciate. With more people there will inevitably be higher demand, all other things equal.

The link between construction activity and land values is less clear. But if we were to plot on a graph average land value against the level of construction activity per capita for each region we would see a very clear correlation between higher land values and higher levels of construction. London, where land prices are extremely high, would stand out. But even outside London this rule of thumb tends to hold. The value of a construction project is heavily influenced by the value of the land on which it sits. This is very noticeable in home-improvement projects, where greater value from the work done is achieved in a high house-priced area than where homes are much cheaper.

There is clearly circularity at play. In general, the more investment a location receives, particularly in infrastructure, the more attractive it becomes, both to incomers and future investors. The land value inevitably increases as does the population. This virtuous circle is increasingly well recognised and present in the current debate on levelling up.

Ultimately, the national picture plays a big role in determining the fortunes of firms and workers regionally. Simply put, the industry in terms of both its firms and its workforce, is very mobile and flexible in the work it takes on and the locations in which it operates. But the need to understand how the fates and fortunes of construction vary regionally is paramount.

National overview

The national economic and social backdrop is the key to the fortunes of construction firms across the UK and Ireland, as it is for sectors of the economy. Also, like most sectors the impact of changes at a national level will have differing impacts on regional and local economies.

But construction differs in one fundamental way from most production industries and many service industries. Its firms and the workforce move to where the product (buildings or structures) is needed, rather than being sited in a fixed place. Even firms that normally work more locally are impacted by shifts in construction work in other regions of the UK as firms and workforces migrate to find work. So, when it comes to labour markets and measures of value added, there is significant fluidity across borders.

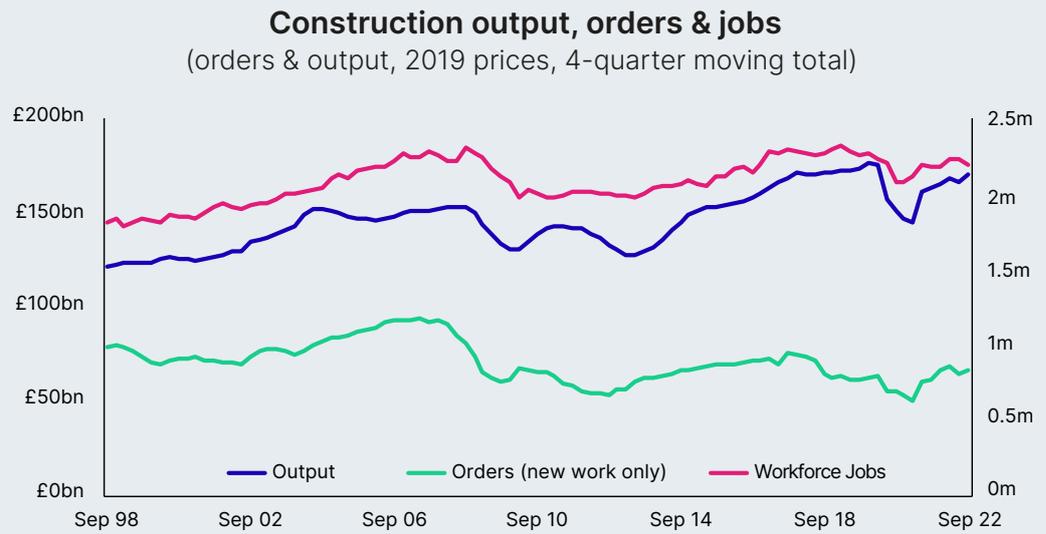


It is important to note that this peripatetic aspect of construction is not seen evenly across the industry. Factors such as size and specialism will influence the geographical reach of construction firms. What a firm sees as its home market will vary depending not only on their volume of work, but also on the nature of their work. A highly specialised firm may take orders from a far wider market geographically than a similar sized firm undertaking more run-of-the-mill work. Naturally firms will seek to work local to their base. This reduces costs and the risks associated with new clients and potentially new supply chains. However, supply, demand, and price differences, which form between regions as the national picture morphs, will tend to stretch and shrink the view each firm takes on what it regards as its home market.

While opportunities in local markets clearly matter hugely to businesses, the impact of UK fortunes play a major role. So how is the construction market faring?

The pattern of all economic activity was put into a spin by the pandemic, the war in Ukraine, and the impact of Brexit. So firstly, it is sensible to get a feel for the performance of construction leading up to the pandemic. There was an upward swing in the economy as it pulled out of the recession prompted by the global financial crisis. In the five years from 2009 and 2014 construction led growth in the economy, with gross value added up 23% compared with 11% across all industries. However, in the five years to the end of 2019 and the emergence of the Covid-19 pandemic, the picture was very different. Construction grew by less than 4% compared with 11.6% growth for all industries. If we look at the individual annual growth rates, it shows construction stalling after hitting a high in 2015.

Chart A

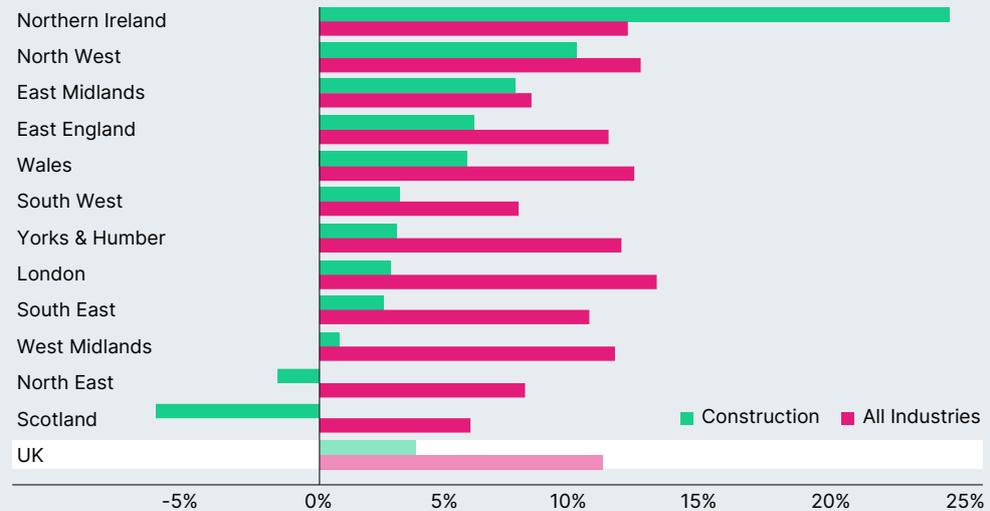


Source: ONS: Construction output, New Orders for Construction, Workforce Jobs (via Nomis)

Chart A looks at a range of metrics, construction output, orders, and workforce jobs. Clearly the industry was stalling well before the pandemic struck. Orders for new work were in decline before the end of 2017, which suggests that the appetite among investors may well have been waning before that.

Chart B

Regional construction GVA growth from 2014 to 2019

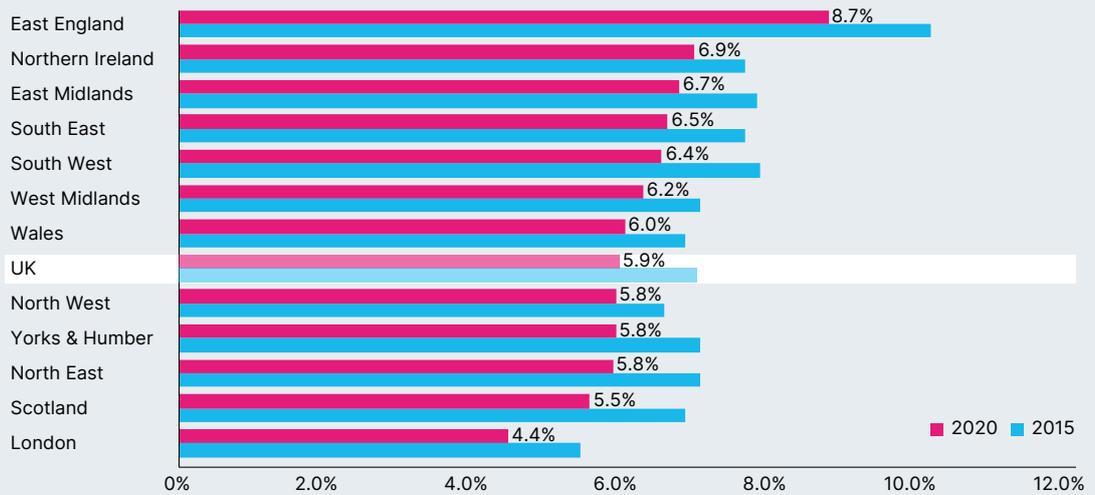


Source: ONS, Regional gross value added (balanced) by industry: all ITL regions

What we see in the data (Chart B) is a shift in economic growth patterns between regions. Leaving Northern Ireland to one side, on the mainland it is the North West, East Midlands, and the East that are driving construction growth as activity in London tempers.

Chart C

Construction's share of regional GVA in 2015 and 2020



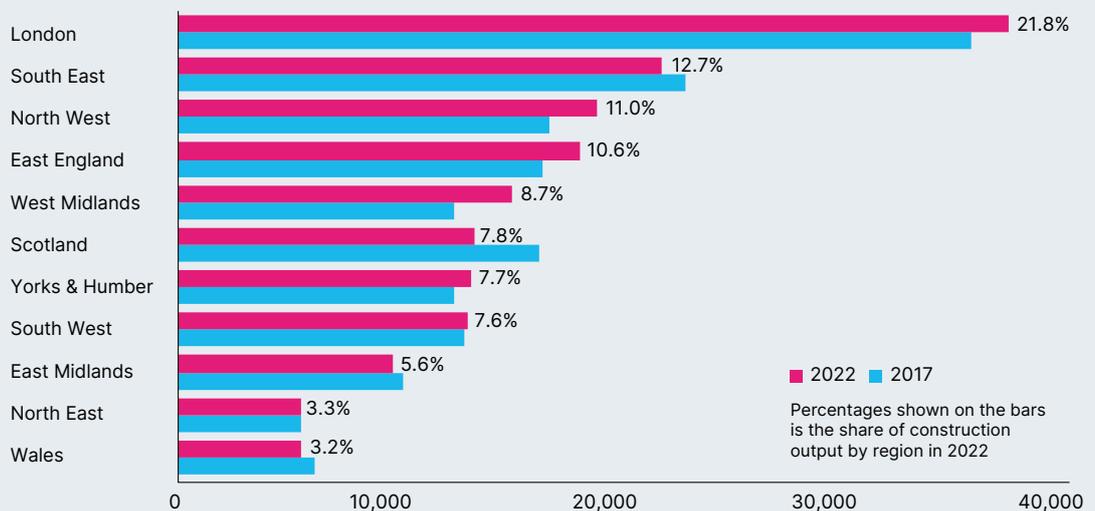
Source: ONS, Regional gross value added (balanced) by industry: all ITL regions

If we look at the latest Gross Value Added (GVA) figures (Chart C) we can see that as a share of the economy the construction sector (note this does not include materials providers, professionals, and most plant providers) shrank between 2015 and 2020 from 6.9% to 5.9%. The South West and East of England saw the biggest falls. However, construction remains a bigger part of the East of England economy than it is elsewhere. This in large part reflects how much work firms in the region pick up in London.

Chart D

Regional distribution of construction output 2017 and 2022

(£m, 2019 prices, with 2022 % share)



Source: ONS Output in the construction industry: sub-national and sub-sector reference tables

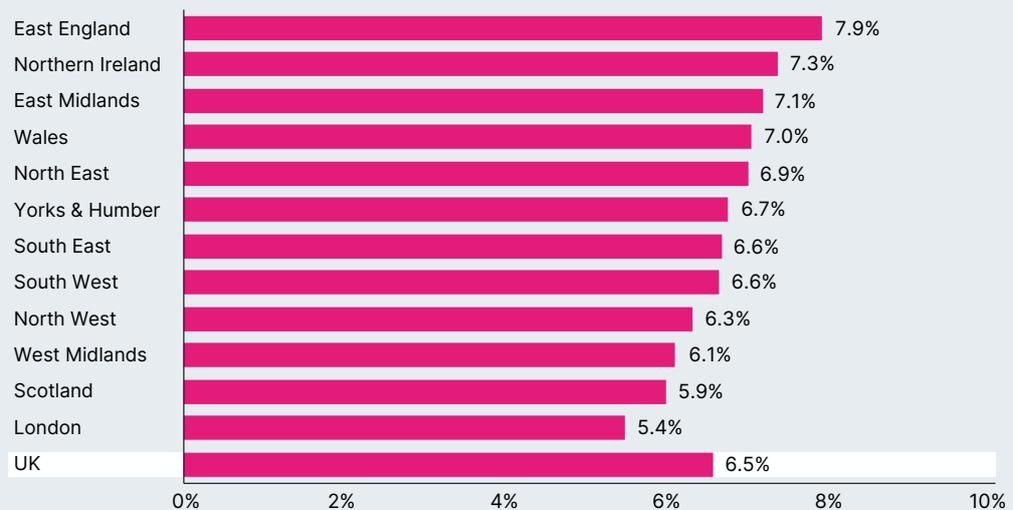
Notes: (1) National deflators for construction output were applied to adjust to 2019 prices

(2) The regional data are modelled and not National Statistics

Turning to Chart D, the figures for construction output seek to map where the work is occurring. This contrasts with GVA figures which are related to where firms doing the work are based rather than where the work is. There may be many miles between the two. The output figures are modelled, so should be treated with caution. Furthermore, to account for inflation national deflators have been used here to provide comparisons at 2019 prices. This may cause some distortion. However, caveats aside, when it comes to site activity, London dominates. Its large appetite draws in firms and workers from its hinterland. Indeed, these figures suggest it was more dominant in 2022 than five years earlier. The figures also point to slumps in workloads in Scotland and Wales.

Chart E

Construction's share of the total employment in each region in 2018



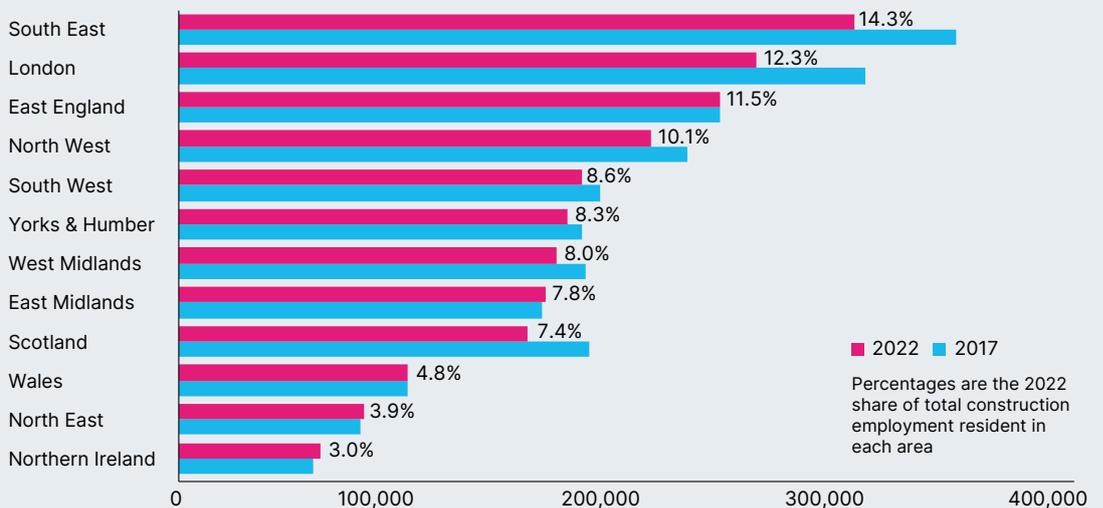
Source: ONS, Annual Population Survey (via Nomis)

Note: The data is residence based, so where people live rather than where they work

But as we know, resources are drawn in from neighbouring regions and sometimes from much further afield. This means that work in one region benefits another, particularly in terms of employment. Compared with other regions, the East of England has the highest proportion of its workforce engaged in the construction sector. At 7.9% in 2022, this compares with 5.4% in neighbouring London (Chart E). But a large cohort of the workers from the East will travel to work on projects in London.

Chart F

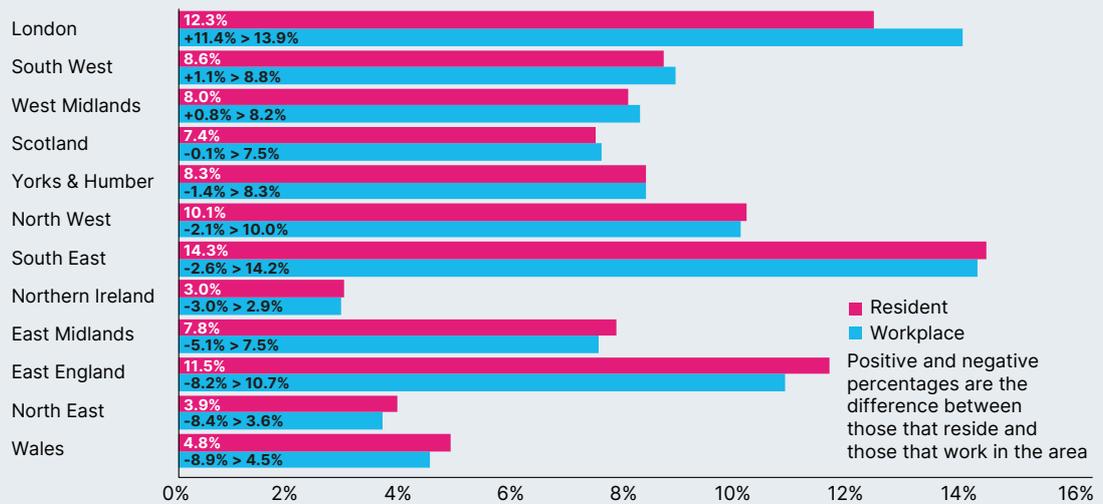
Regional share of UK construction employment in 2017 and 2022



Source: ONS Annual population survey (via Nomis)

Looked at in terms of pure numbers the South East has the largest number of construction workers living in the region as can be seen in Chart F. The region is home to more than 14% of all those working within the sector, which amounts to more than 300,000. There will of course be many thousands more working in other related sectors living in the South East and elsewhere. These related jobs include those working as professionals, such as engineers, architects, and surveyors. There will also be large numbers working with builders' merchants, plant hire firms and materials producers. All will see their job prospects resting on the fortunes of the construction industry. What we can also see from the chart is that, according to the Office for National Statistics (ONS) figures, the workforce is shrinking in many regions across the UK. This is worrying given the persistent difficulties in recruitment.

Share of construction employment by region of residence & workplace, 2018



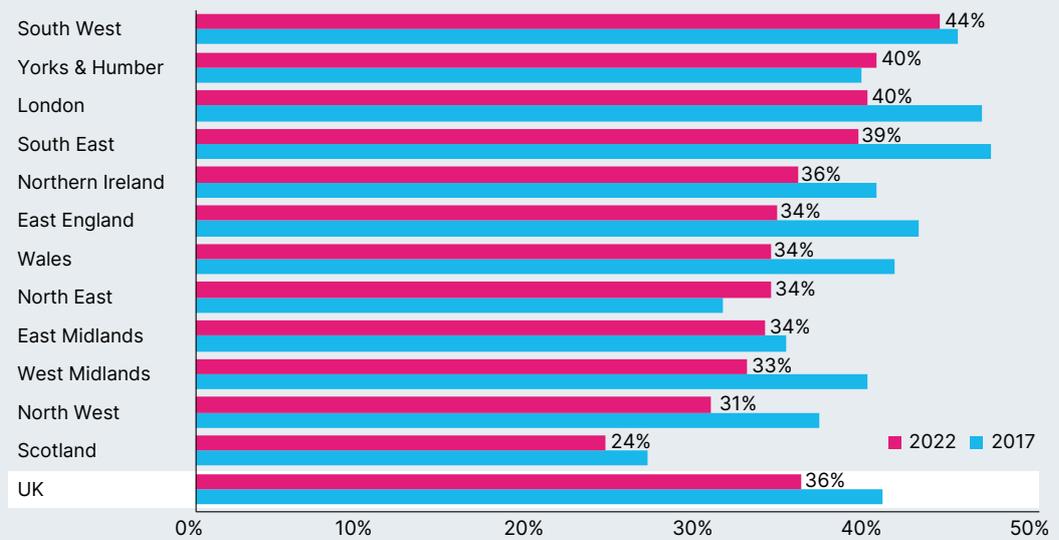
Source: ONS Annual population survey (via Nomis); Annual population survey - workplace analysis (via Nomis)

Chart G shows the differences between the number of construction workers working in a region and those resident in that region. The figures should be treated with caution, but they give an indication of the net flow of construction workers into and out of regions as they seek work. The regions are displayed with the largest share of inflow (London at 11.4%) at the top. The regions currently needing more workers from other regions are London, the South West, and West Midlands. Part of the explanation here may be found in the effects of massive infrastructure projects. London has many, the South West has Hinkley Point C, while huge amounts of HS2-related work is being done in the West Midlands. These types of jobs often require specialists who end up leading relatively peripatetic lives, travelling not just within the UK but also internationally. The broader point is that a proportion of the construction workforce is very mobile and moves as work ebbs and flows in and between locations.

This need to be flexible is also reflected in the high level of self-employment within construction. In the 1970s, major contractors were increasingly shifting away from having large armies of directly employed workers. They increasingly engaged subcontractors and took on a more managerial role. This shift coincided with a rapid rise in the share of self-employed workers. Between 1981 to 1996 overall workforce jobs remained broadly flat. However, the share of self-employment within the jobs rose from 27% to 42% over the 15-year period. Various factors contributed to this arrangement and for years it was more associated with work in the south than the north.

Chart H

Self-employment share (%) of all regional construction employment

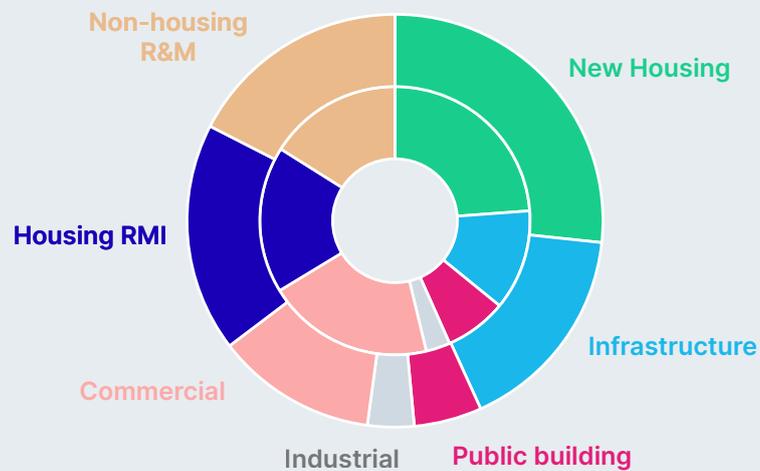


Source: ONS, Annual population survey - workplace analysis, employment by industry (SIC 2007) and flexibility (via Nomis)

The share of self-employment within the construction workforce remains high, at about 36% across the UK in 2022. But, as we can see in Chart H, there are signs that it is decreasing, having expanded in recent years in the north.

Chart I

Great Britain (GB) construction output by sector 2017 (inner) to 2022 (outer)



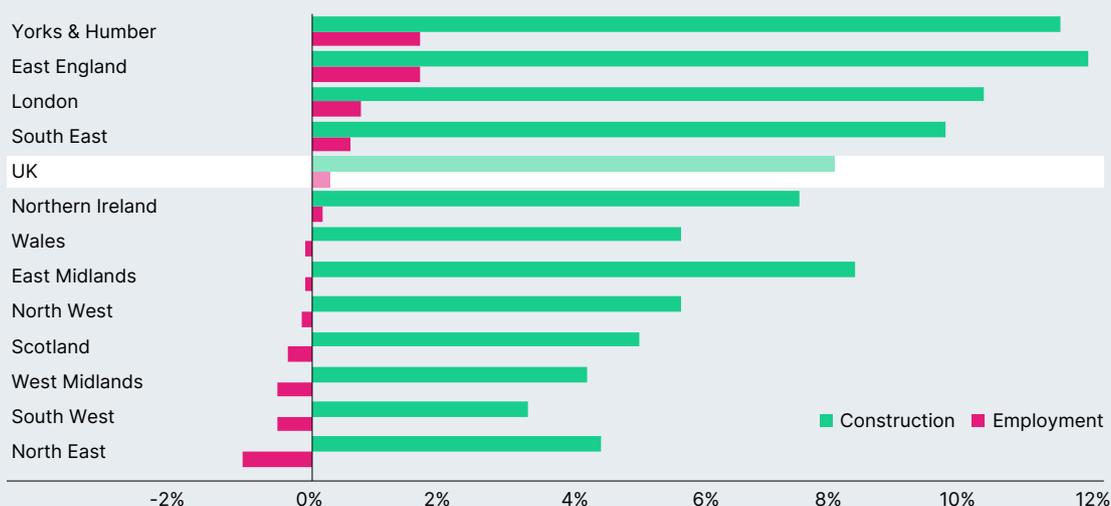
Source: ONS, Output in the Construction Industry: Sub-national and sub-sector data

What we have been seeing in recent years within the construction sector is a shift in the workload mix. This is happening at a national level, as we see in Chart I. But it is happening often more severely at a regional level. Again, this illustrates how the industry needs to be flexible to cope with what can be rapid changes in the work needed to be done. A key point is that infrastructure has expanded greatly. Its share of construction output has risen, from around 12% to closer to 17% over the past five years. New housing work has also risen as has industrial, quite rapidly from a low base. The sector being squeezed is commercial, which has seen a sharp decline. This now seems set, given the impact of increased home working and more online shopping. However, there is huge potential work to be done in repurposing shops and offices.

This leads to the question of where next for construction in and across the UK. The answer to this question is never easy. There are always multiple variables within the economy and multiple choices within government and the business sector over how to respond. However, what makes forecasting more complex currently is that there are major structural changes underway. In part this is reflected in the major shifts we have recently seen in the mix of construction work, such as the move from commercial to infrastructure. Changing working practices, changing shopping habits, a transition from low inflation and borrowing rates are all impacting. And this is happening in the context of, firstly the need to slow climate change and secondly the need to adapt to a rapidly ageing population. The pace of change caused by structural shifts greatly depends on policy actions which can be very impactful but are very hard to predict.

Chart J

Construction output & employment total growth 2022 to 2027



Source: CITB, Construction Skills Network, forecasts 2022 to 2027

The forecast underpinning the CITB's Construction Skills Network (CSN) employment expectations provides a starting point. Chart J outlines the basic forecasts for construction output and the change in the level of employment needed to deliver that workload. The picture painted is a slight dip of about half a percent in 2023 followed by modest, but gathering, growth thereafter. This points to an expanding workforce which will create vacancies that need to be filled along with the new recruits need to fill the shoes of those leaving the industry. Given the age profile of construction, with a bulge of workers closing on retirement, this is likely to be a higher replenishment rate than over previous years. Implicit in the forecast appears to be some expectation of rising productivity and adjustments made to labour demand resulting from different growth rates for different sectors of work. The labour intensity (how much labour is needed for each £1 million of work done) varies sector to sector.

This relatively benign forecast is a downgrade on the previous forecast. This follows a pattern of downgrades seen within most construction forecasts over recent months. The Construction Products Association (CPA) Industry Forecast released in January 2023 paints a darker picture of the future for construction than the CSN forecast. Firstly, its estimate of 2022 output is lower. Secondly, its central forecast expects a fall of 4.7% in 2023 with a slight (0.6%) rise in 2024. Thirdly, the narrative warns of large downside risks, which in its lower scenario could lead to a fall of 8.9% in output in 2023 with a further fall of 2.3% in 2024. Even its upper scenario is bleaker for 2023 than the central forecast used in the CSN employment report. One of the major differences is in the path of new house building, where CSN sees a minor dip while CPA sees a fall of 11% in its main forecast.

No one knows the future, but it seems that the prospects for construction are weakening. This should be taken into account when considering the CSN forecasts for output and employment used in the regional and national reports. There are of course many other notes one should bear in mind when interpreting what is a very fluid period for the construction sector.

The sector has been seeing very high levels of inflation. The impact of higher labour and materials cost will have a disproportionate impact on locations with low land values. This means, in general, that inflation will hit the devolved nations and the North East hardest. The reason is that, by and large, materials and labour represent a larger share of the development cost where land values and property prices are low.

Slowing growth and a proportionate increase in infrastructure work in 2023 should reduce pressures caused by labour shortages, all other things being equal. However, the dip in work may also reduce the flow of new recruits into the sector. Given the ageing construction labour force, retirements from the industry are and are likely to be high for a while. The combined impact is likely to exacerbate skills shortages in the future. This would follow the pattern of past recessions. Indeed, skills shortages were a recurring theme in the roundtable discussions that CIOB hosted across the UK and Ireland, summarised in the regional and national observations on page 40. The industry increasingly recognises the need to change culture and increase diversity to improve recruitment and retention, supported by the CIOB working with other stakeholders and institutions.

Population growth is a long-term driver of construction activity, for obvious reasons. East Midlands, the South West, and West Midlands collectively represent about a quarter of the national population. They are however projected to absorb about 40% of the expansion in Britain's population over the next 20 years. This points to a growing share of construction activity.

Taking a longer-term perspective, the underlying need for construction is increasing. The need to transform the built environment is, arguably, greater than it has been for a generation or two. The need to accommodate an older population, the need to decarbonise the economy, and the need to reconfigure the building stock to address massive changes in working and shopping habits are all very pressing.

The question is less what we need to do, but more how can we achieve so much in a short period and more about how to raise the funds to deliver the much-needed change. And, in line with longstanding desires for a more equitable spread of investment and opportunities, there is the question of where we should be directing these funds.

Regional and National Profiles



North East

The North East is the smallest construction market in England and so tends to be more volatile than other regions. Its construction output is estimated to be above £5.6 billion in 2022, representing about 3.3% of the total across Great Britain (GB).

The region accounts for 4.1% of the population, which means its per capita share of construction activity is below par. This is to be expected as the region saw the slowest population growth regionally over the past two decades and experienced the slowest economic growth in the decade to 2019. Continued slow population growth may be a restraint on activity.

The North East economy performed worse than most UK regions over the five years before the pandemic, continuing its long run relative decline. Significant uncertainty exists, but the signs and forecasts suggest that the region's lag in growth seen relative to the UK average should shrink over the next decade or so, with optimism based on more than the mantra of levelling up.

The number of construction workers living in the North East is more than those working in the region. About 8% find work elsewhere, so will bring economic benefits from construction elsewhere to the North East when their earnings are spent locally. This regional oversupply of labour partly explains the low proportion of non-UK born construction workers at below 3% compared with the UK average of 14%.

The impact of slow population growth can be seen in the share of commercial activity within the mix of projects. In 2017 commercial accounted for 16% of construction output compared with 20% nationally. The 2022 figures are 10% against a national figure of 13%. One effect is that infrastructure provides a larger share of the regional activity.

The recovery in the region's construction sector since the low of 2013 has been broadly sustained over recent years. Indeed, looking at the past two years the growth in orders has been higher in the North East than in most regions. A spate of large contracts has buoyed order books in the region, particularly in the infrastructure and industrial sectors. The region's construction sector is expected to benefit from the green transformation, although the collapse of Britishvolt's Gigafactory plans is a blow.

The latest CITB's Construction Skills Network (CSN) forecast, released in January 2023, points to a 1% fall in workloads in 2023 followed by modest annual growth below 1.5% over the following four years. The prospects for the region benefiting from "green growth" have weakened but optimism remains. CSN still sees industrial as the region's brightest construction sector, with average annual growth above 3%.

The forecast suggests a fall of about 1,000, 1%, in construction jobs between 2022 and 2027. In 2022 the number of jobs was estimated to be almost 96,000*. Despite the fall, there will need to be recruitment to replace those leaving the industry. CSN estimates the annual recruitment requirement at almost 1,600 people.

Median earnings among full-time male*** construction employees in the North East at £33,000 in 2022 are, along with Wales, the lowest for construction across Great Britain. However, while ten years ago median male construction pay was less than the median across all industries, higher wage rises mean that in the region in 2022 median earnings were better in construction than the average across all industries.

Major Projects

Construction in the North East is benefitting from the transformation to renewable energy. One of the three planned converter stations for the multibillion-pound Dogger Bank offshore wind farm will be sited in Teesside. In July 2022 work started on SeAH Wind's £400 million offshore wind monopile manufacturing facility at Teesworks. This is one of many projects planned for the freeport site. Work also started late in 2022 on Envision AESC's £450 million Gigafactory that will supply the Nissan plant. The collapse of Britishvolt's £2.6 billion planned Blyth Gigafactory was a blow, but hope remains that it will re-emerge as a viable project. More positively Tees Valley Lithium was in late 2022 given the go-ahead for a £200 million plant at Redcar. Away from energy, Newcastle University has outlined a £500 million 10-year plan to transform the old General Hospital on Westgate Road into a Campus for Ageing and Vitality. And there are plans for Skertingham garden village a new settlement eventually of 4,500 new homes.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	10,020	9,135	8,715	All non-residential	89,620	83,490
Micro (0 to 9)	9,240	8,410	8,005	Shops	23,430	23,460
Small (10 to 49)	685	625	620	Offices	17,430	15,700
Medium-sized (50 to 249)	85	85	85	Industrial & warehousing	23,000	20,970
Large (250+)	5	15	10	Other buildings	25,760	23,360
				Homes (latest 2021)	1,254,229	1,216,994

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs

(orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	41,100	3.5%	31,000	2.6%	-10,100
Manufacturing	124,300	10.5%	130,900	11.1%	6,600
Construction	79,000	6.7%	82,500	7.0%	3,500
Wholesale & retail	165,800	14.0%	148,000	12.5%	-17,800
Transport & communication	87,600	7.4%	85,300	7.2%	-2,300
Accommodation & food service	65,500	5.5%	67,400	5.7%	1,900
Finance & real estate	39,500	3.3%	46,600	3.9%	7,100
Professional & technical	66,100	5.6%	66,800	5.6%	700
Admin & support	60,100	5.1%	56,900	4.8%	-3,200
Public admin, defence, education & health	391,300	33.1%	406,000	34.3%	14,700
Other	61,900	5.2%	62,100	5.2%	200

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	-500
Recruits needed annually	1,580
Employment growth 2022-27	-1.0%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	33,004	34,143	24,763	28,410	33.3%	20.2%
All industries	31,606	36,145	25,745	30,176	22.8%	19.8%
Difference	4.4%	-5.5%	-3.8%	-5.9%	-	-
(Full-time female)						
Construction	x	34,312	x	x	-	-
All industries	26,801	31,227	21,426	24,695	25.1%	26.5%
Difference	-	9.9%	-	-	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

North West

The North West has in many ways been the powerhouse of the north, seeing the strongest economic growth as measured by gross value added in the UK outside of London. Its construction output is estimated to be above £18.8 billion in 2022, representing about 11% of the GB total.

The region accounts for 11.4% of the population. So, on a per capita basis, its share of construction activity is close to average, although high compared with its northern neighbours. This in many ways reflects the recent dynamism of the region, especially in the Greater Manchester area over the past decade. The population projections suggest growth close to the UK average.

Pre-pandemic the region was enjoying strong economic growth and some of the fastest growth in construction in the UK. Although the pace may well ease, the surge in investment in buildings and infrastructure will help reverse some effects associated with industrial decline in the North. The region is increasingly better placed to attract higher-paid workers, such as those drawn to Manchester's Media City.

The workforce in the North West does outnumber those who work in the region by about 2%. But solid growth in workloads in the region the level of non-UK born construction workers at above 8% is relatively high compared with other northern regions.

The vibrancy of the North West is reflected in the higher share of its construction devoted to new housing, more than 30% of total output in 2022, compared with less than 27% nationally. The share of housing RMI is below the GB average, which may reflect relatively lower house prices. Meanwhile infrastructure work has shrunk as a share at a time when it is expanding elsewhere.

The North West has enjoyed strong growth in recent years. This growth looks set to temper as orders flag and the mix of work in the pipeline shift. Over the past two years the share of infrastructure in the orders mix has dropped, with the focus falling more on housing and industrial. Interestingly there still appears to be momentum in the commercial sector, which may be building on recent vibrancy in the region.

CITB's Construction Skills Network (CSN) forecast, released in January 2023, points to a fall in workloads of just under 1% in 2023 with annual growth rates between 1% and 2% over the next four years. CSN expects the most vibrant sectors will be industrial, growing at an annual rate of 3.2%, and commercial, which it expects to grow at an average annual rate of 2.2%.

The forecast suggests the number of construction workers needed will be roughly flat through the forecast period, with a slight fall of about 500 jobs between 2022 and 2027. The number of jobs in 2022 was estimated to be about 272,000*. However, recruitment will be needed to replace those retiring, and CSN estimates an annual recruitment requirement at slightly above 5,000.

The median earnings in the North West among full-time male**† construction employees at £37,600 in 2022 are above the UK average for construction and well above the £33,600 across all sectors in the region. Over the past ten years the earnings of the median male construction worker have risen by 31% compared with 24% across the whole economy.

Major Projects

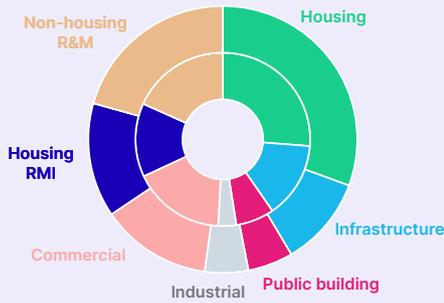
The region will benefit both in terms of construction work and future investment from various rail projects. A Bill has started its journey through Parliament to enable the Crewe to Manchester section of HS2 which should see work start in a few years. Meanwhile, the ongoing multibillion-pound Transpennine Route Upgrade that will better connect passengers in the North between Manchester, Huddersfield, Leeds, and York will support the infrastructure sector. Manchester's Victoria North, pegged as the biggest urban regeneration programme in the north of England is underway. The aim is to deliver, among other amenities and transport links, 15,000 new homes over the next 20 years. There are plans costed at £600 million to transform North Manchester General Hospital into a 'healthy living campus'. On roads, National Highways is keen to deliver the £1.3 billion A66 Northern Trans-Pennine upgrade project between Penrith and Scotch Corner with a start date in 2024. Everton football club is also progressing with its new £500 million stadium and Liverpool's Metro Mayor is backing plans for a Mersey Tidal Power Project.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	33,700	31,110	29,125	All non-residential	286,360	266,100
Micro (0 to 9)	31,480	29,015	27,100	Shops	72,610	73,270
Small (10 to 49)	1,925	1,800	1,760	Offices	54,580	49,350
Medium-sized (50 to 249)	270	260	230	Industrial & warehousing	76,920	67,200
Large (250+)	30	30	30	Other buildings	82,250	76,280
				Homes (latest 2021)	3,361,893	3,244,011

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	89,500	2.7%	93,800	2.8%	4,300
Manufacturing	357,700	10.7%	322,800	9.5%	-34,900
Construction	230,700	6.9%	210,600	6.2%	-20,100
Wholesale & retail	482,000	14.4%	395,600	11.7%	-86,400
Transport & communication	277,500	8.3%	284,600	8.4%	7,100
Accommodation & food service	191,900	5.7%	174,300	5.1%	-17,600
Finance & real estate	153,500	4.6%	160,900	4.7%	7,400
Professional & technical	185,500	5.5%	254,400	7.5%	68,900
Admin & support	151,000	4.5%	150,400	4.4%	-600
Public admin, defence, education & health	1,041,800	31.0%	1,164,000	34.3%	122,200
Other	194,800	5.8%	179,300	5.3%	-15,500

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	900
Recruits needed annually	5,080
Employment growth 2022-27	-0.2%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	37,556	40,992	28,674	32,097	31.0%	27.7%
All industries	33,130	38,917	26,732	31,626	23.9%	23.1%
Difference	13.4%	5.3%	7.3%	1.5%	-	-
(Full-time female)						
Construction	31,984	34,501	21,267	25,359	50.4%	36.1%
All industries	27,745	31,465	21,680	25,183	28.0%	24.9%
Difference	15.3%	9.6%	-1.9%	0.7%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

West Midlands

The West Midlands construction sector has benefited much of late from work related to HS2. This helped to boost infrastructure work. Overall, its construction output is estimated to be above £14.9 billion in 2022, representing about 8.7% of the GB total.

The share of construction output is little short of the region's 9.1% share of the GB population, which has grown faster than the UK average. This is part of a longer trend which is expected to see East Midlands, the South West, and West Midlands absorb about 40% of the expansion in Britain's population over the next 20 years. Today, collectively, they account for about a quarter of the national population. This points to a growing share of construction activity.

In the five years before the pandemic economic growth in the region was above the UK average, as measured by gross value added. Intriguingly, on this measure the construction sector performance looks weak which contrasts with growth in construction output. This may be due to the region's high levels of infrastructure work drawing in far more specialist businesses and materials from outside the region.

The workforce living in the region is broadly balanced with those employed within it. The level of non-UK born construction workers is around 13% which is the highest outside of London and the East of England. This is to be expected given the region's status as the most ethnically diverse outside London.

The West Midlands construction mix was transformed between 2017 and 2022. Two big switches dominated. Infrastructure rose from just over 6% of activity to 23%. Meanwhile, the share of commercial work fell 22% to 8%. Against this background, housing both new and RMI increased their shares of the mix. Bucking the national trend, the share of industrial fell slightly.

The West Midlands saw orders grow well above the national average over the past two years. But this lift follows a lacklustre period for orders in the wake of HS2 contract lettings. Happily, though, at the start of 2021 orders for housing and industrial grew strongly. This should help balance workloads in the region. Encouragingly, too, there was an upward shift in commercial orders which might soften the downward trend seen in output in recent years.

CITB's Construction Skills Network (CSN) forecast, released in January 2023, sees the West Midlands facing the worst of the construction recession. It points to activity falling in both 2023 and 2024 before annual growth builds from 1.3% in 2025 to 1.8% in 2027. It sees activity dragged down as high levels of infrastructure work fade and other sectors weaken. Rising levels of private housing, industrial, and commercial work in later years will struggle to offset the losses, leaving activity in 2027 just marginally up on the 2022 levels.

The forecast suggests a slight fall of about 1,200 in construction jobs between 2022 and 2027. In 2022 the number of jobs was estimated to be almost 225,000*. Despite fewer jobs, there will need to be recruitment to replace those leaving the construction industry. CSN estimates the annual recruitment requirement at 5,070.

The median earnings in the West Midlands among full-time male** construction employees at £35,300 in 2022 are below the UK average for construction. However, they are above equivalent figures for all sectors in the region of £34,500. Over the past ten years the earnings of the median male construction worker have risen by 28%, slower than the 31% rise in male median earnings across the whole economy.

Major Projects

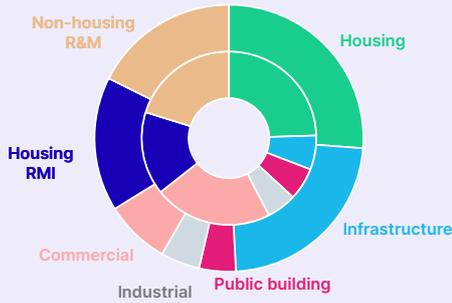
One of the biggest potential developments in the region is the £3 billion Arden Cross scheme set to cover 346 acres near the NEC. It envisages 3,000 new homes and 6 million sq. ft. of commercial space wrapped around the new HS2 Interchange station. It has local and central government backing and strong commercial partners. Meanwhile, Legal & General announced a £4 billion investment commitment to regeneration work in partnership with the combined authority (WMCA) over seven years covering multiple projects. Major city centre schemes in the pipeline include the £500 million Birmingham Smithfield project, the phased redevelopment of the former Typhoo Tea Factory, potentially worth £2 billion, and the £450 million Coventry City Centre Regeneration, set for start on site in summer 2023. The region will also see significant infrastructure work, such as upgrades to rail infrastructure and continued work on HS2-related projects.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	28,630	25,530	24,040	All non-residential	205,860	197,680
Micro (0 to 9)	27,015	24,045	22,600	Shops	50,110	49,400
Small (10 to 49)	1,445	1,325	1,295	Offices	36,490	33,320
Medium-sized (50 to 249)	145	135	125	Industrial & warehousing	60,100	57,450
Large (250+)	25	25	25	Other buildings	59,160	57,510
				Homes (latest 2021)	2,555,993	2,465,375

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	71,400	2.7%	64,000	2.3%	-7,400
Manufacturing	331,800	12.4%	353,300	12.7%	21,500
Construction	182,400	6.8%	165,200	6.0%	-17,200
Wholesale & retail	367,500	13.8%	327,300	11.8%	-40,200
Transport & communication	246,900	9.2%	254,100	9.2%	7,200
Accommodation & food service	143,700	5.4%	123,100	4.4%	-20,600
Finance & real estate	109,500	4.1%	119,500	4.3%	10,000
Professional & technical	163,500	6.1%	186,900	6.7%	23,400
Admin & support	122,500	4.6%	122,200	4.4%	-300
Public admin, defence, education & health	792,000	29.6%	902,500	32.6%	110,500
Other	140,600	5.3%	152,800	5.5%	12,200

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	-
Recruits needed annually	5,070
Employment growth 2022-27	-0.5%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	35,299	38,565	27,611	32,567	27.8%	18.4%
All industries	34,531	39,923	26,470	31,599	30.5%	26.3%
Difference	2.2%	-3.4%	4.3%	3.1%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	29,952	35,784	21,133	24,152	41.7%	48.2%
All industries	27,649	31,883	21,294	24,573	29.8%	29.7%
Difference	8.3%	12.2%	-0.8%	-1.7%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

East Midlands

The East Midlands is a region that holds significant promise for construction given its location and transport links. Its construction output is estimated to be above £9.6 billion in 2022, representing about 5.6% of the GB total.

The region accounts for 7.5% of the population. So, on a per capita basis, its share of construction is lower than might be expected, especially as it has seen some of the fastest population growth since 2000. Its population is expected to keep expanding more rapidly than the UK average. This should boost growth in construction activity, particularly as the region accommodates much of the “Oxford-Cambridge Arc”, an area of rapid economic expansion.

So, despite weaker than average economic growth over the five years up to the pandemic, the East Midlands saw the strongest construction growth outside the North West. While activity weakened post-pandemic, the region is the focus of high levels of investment in the built environment for various reasons, notably as an area earmarked to absorb the expanding population and an ideal location for logistics hubs. It should also benefit from its proximity to areas of rapid economic growth.

Data suggest about 5% of construction workers living in the region work elsewhere. This is to be expected. Many will be drawn to London. This means that a slice of the earnings generated from work outside the region will be captured in more spending power. Recent data suggest 10% of the construction workforce, a greater proportion of the workforce than average, were also born outside the UK.

Housing, new and RMI, accounts for about half the region’s construction work, driven by population growth. But much of the region’s construction story lies in the industrial sector. From 2017 to 2022 it expanded from about 7% to about 11%, well above the UK average. This reflects the region’s strategic role in distribution plus rapid expansion within the “Oxford-Cambridge Arc”.

The data suggest that orders in the East Midlands are picking up after a slight slump, with growth over the past two years roughly in line with the national average. Given the trajectory of construction in the region, it is perhaps unsurprising that the orders point to a further shift in the mix towards housing, infrastructure, and industrial.

CITB’s Construction Skills Network (CSN) forecast, released in January 2023, points to a slight dip in workloads in 2023 followed by modest annual growth ranging from 1.4% to 2.3% over the following four years. The most vibrant sectors are expected to be industrial, growing at an annual rate of 3.8%, and commercial, expected to grow at an average annual rate of 3%. Housing RMI is the only sector pegged to shrink over the period, and then only slightly.

The forecast suggests construction employment will remain flat between 2022 and 2027. In 2022 the number of jobs was estimated to be just above 167,000*. But there will need to be recruitment to replace those leaving the industry. CSN estimates the annual recruitment requirement to be 3,500.

The median earnings in the East Midlands among full-time male**† construction employees at £38,200 in 2022 are above the UK average for construction and well above the median across all sectors in the region of £32,800. Over the past ten years the earnings of the median male construction worker have risen by 28% compared with 22% across the whole economy.

Major Projects

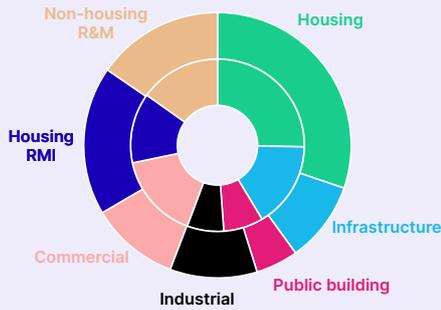
To meet the expansion in the region’s population, new housing schemes are likely to feature prominently in the construction mix for some while. One such scheme is the masterplan for Hanwood Park, near Kettering. It aims to create a new community with up to 5,500 new homes and associated facilities over the coming years through multiple house builders. Looking longer term, Anglian Water is proposing a new reservoir in Lincolnshire to meet the demand rising population is bringing. The region can expect to see continued activity in logistics and warehousing developments. Harworth Group, already very active in the region, signed an option agreement for a 168-acre site south of the Junction 15 of the M1, eager to meet the strong demand for industrial and logistics space. Meanwhile work on the Midlands Main Line railway upgrade continues. The region also sees this year the completion of a new £200 million Aston Martin Cognizant Formula One Team facility.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	25,770	23,130	21,755	All non-residential	159,800	148,500
Micro (0 to 9)	24,295	21,750	20,440	Shops	37,740	37,270
Small (10 to 49)	1,325	1,220	1,165	Offices	27,240	24,760
Medium-sized (50 to 249)	130	140	130	Industrial & warehousing	51,650	45,990
Large (250+)	20	25	20	Other buildings	43,180	40,470
				Homes (latest 2021)	2,144,253	2,059,344

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	69,100	3.1%	59,200	2.6%	-9,900
Manufacturing	301,100	13.4%	279,100	12.1%	-22,000
Construction	164,100	7.3%	163,000	7.1%	-1,100
Wholesale & retail	331,000	14.8%	306,100	13.3%	-24,900
Transport & communication	202,600	9.0%	221,000	9.6%	18,400
Accommodation & food service	109,600	4.9%	102,100	4.4%	-7,500
Finance & real estate	64,200	2.9%	75,800	3.3%	11,600
Professional & technical	125,300	5.6%	152,600	6.6%	27,300
Admin & support	110,600	4.9%	91,400	4.0%	-19,200
Public admin, defence, education & health	641,600	28.6%	739,600	32.1%	98,000
Other	122,500	5.5%	111,400	4.8%	-11,100

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	700
Recruits needed annually	3,500
Employment growth 2022-27	-0.1%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	38,201	46,361	29,947	34,438	27.6%	34.6%
All industries	32,796	37,984	26,942	31,916	21.7%	19.0%
Difference	16.5%	22.1%	11.2%	7.9%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	X	35,994	X	23,700	-	51.9%
All industries	26,501	30,533	20,548	23,931	29.0%	27.6%
Difference	-	17.9%	-	-1.0%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

East of England

The East of England has been among the strongest markets for construction over recent years, benefiting from the drift east of activity in London. Its construction output is estimated to be above £18 billion in 2022, representing about 10.6% of the GB total.

The region accounts for 9.7% of the population. So, on a per capita basis, its share of construction is above par. The East of England has, however, seen the fastest regional growth in its population over the past decade. This will have lifted activity relative to other regions. The projections for population suggest it will see the fastest growth outside the Midlands and the South West.

In the five years to the pandemic regional growth in the economy, as measured by gross value added, was marginally above the UK average. Growth in construction on this measure was, however, well above the average, suggesting firms in the region were doing well possibly benefitting from work elsewhere. With rapid growth in the population within and to the west of the region, the prospects look relatively strong.

Almost 10% of construction workers living in the region work elsewhere. That amounts to more than 20,000 of the resident workforce. Many will work in London and benefit from higher earnings, boosting their spending power and therefore economic activity in the East of England. Unsurprisingly there is a high non-UK born contingent within the resident workforce. At 15% this is the largest share outside London.

The changes in the mix of construction over the past five years have been less extreme in the East of England than in some regions. The main shift has been a sharp fall in the share of commercial work from 20% to below 12%. New housing and infrastructure have been among the main growth sectors, with industrial following enjoying similar growth seen across the UK.

London aside, the East of England remains the most consistent growth area for construction. While the increase in orders over the past two years may have been below the national average, the increase builds on very solid growth in previous years. However, the mix is changing. Infrastructure work is expanding while commercial work shrinks. New housing's share is down but remains substantial. Meanwhile, industrial work is expanding. Not measured in the orders data, but high house prices put the region among the stronger for housing RMI.

CITB's Construction Skills Network (CSN) forecast, released in January 2023, suggests that the East of England will see the strongest growth across the UK. Workloads are expected to fall by less than under 1% in 2023, but after that growth should pick up, with annual growth above 3% by 2025 and 3.5% by 2027. Infrastructure is seen as the biggest driver, with growth rates in double digits over the forecast period. Growth in most sectors of building will be relatively slow.

Along with Yorkshire and the Humber, the East of England is expected to see the fastest expansion in construction jobs. Rising activity is forecast to generate more than 4,000 new jobs in the region between 2022 and 2027, increasing the workforce by about 1.6%. The number of jobs was estimated in 2022 to be just above 260,000*. To meet this expansion and replace those leaving the industry, CSN estimates the annual recruitment requirement at almost 3,800.

Median earnings among full-time male*** construction workers in the East of England were £38,400 in 2022, above the equivalent UK average for construction and almost 10% above the male-median earnings across all sectors in the region. Over the past ten years, the median pay rate for construction has risen slower, at 23%, than the 27% UK average for construction, but broadly in line with the rise across all sectors across the region.

Major Projects

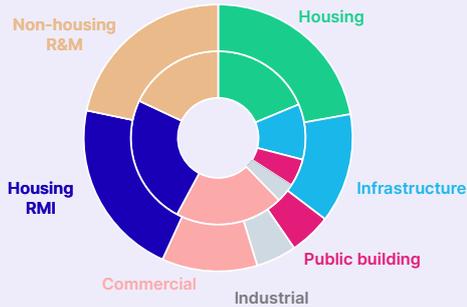
In any region a project like the new nuclear plant at Sizewell C, potentially costing £20 billion to build, would dominate the orders. It does. It puts another massive infrastructure project, the Lower Thames Crossing, estimated to cost up to £8.2 billion, slightly in the shade. It will, of course, span between the East of England and the South East. The population expansion and the relatively drier weather in the East of England has prompted Anglia Water to propose two new reservoirs with a potential joint cost of more than £3 billion. With a series of planned offshore wind farm projects, other energy projects and improvements to the road network, the potential for infrastructure work looks healthy. Housing is also a strong suit for the region. Examples include Hill Group and L&Q Estates planning to transform the hamlet of Six Mile Bottom in Cambridgeshire into an 8,500 new town. Meanwhile, Taylor Wimpey has put in plans for 3,850 homes north of Rackheath, Norfolk and Broadway Malyan have plans for a 2,000-home new community on the outskirts of Ipswich. In keeping with the region's thriving science community, £900 million is being invested in a new life sciences campus in Stevenage.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	46,265	42,465	38,980	All non-residential	212,810	200,190
Micro (0 to 9)	44,155	40,375	37,040	Shops	44,390	43,820
Small (10 to 49)	1,855	1,840	1,715	Offices	39,300	36,410
Medium-sized (50 to 249)	220	210	195	Industrial & warehousing	59,330	55,320
Large (250+)	35	40	35	Other buildings	69,800	64,630
				Homes (latest 2021)	2,759,088	2,650,183

ONS: UK business counts (via Nomis)

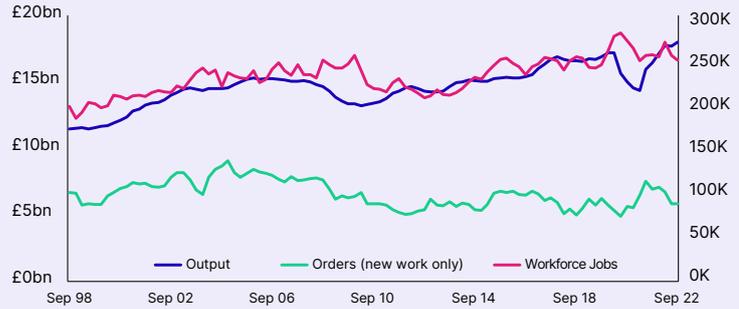
Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	83,100	2.8%	82,500	2.7%	-600
Manufacturing	271,800	9.1%	249,000	8.1%	-22,800
Construction	236,500	7.9%	244,400	8.0%	7,900
Wholesale & retail	403,000	13.4%	375,600	12.2%	-27,400
Transport & communication	268,400	8.9%	282,600	9.2%	14,200
Accommodation & food service	152,700	5.1%	140,300	4.6%	-12,400
Finance & real estate	164,300	5.5%	191,500	6.2%	27,200
Professional & technical	227,200	7.6%	272,600	8.9%	45,400
Admin & support	151,600	5.0%	127,000	4.1%	-24,600
Public admin, defence, education & health	862,100	28.7%	915,900	29.8%	53,800
Other	182,500	6.1%	191,400	6.2%	8,900

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	5,000
Recruits needed annually	4,560
Employment growth 2022-27	0.7%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	38,366	45,845	31,089	35,025	23.4%	30.9%
All industries	35,000	41,605	28,526	33,966	22.7%	22.5%
Difference	9.6%	10.2%	9.0%	3.1%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	28,259	36,016	x	26,608	-	35.4%
All industries	28,701	32,839	22,283	25,636	28.8%	28.1%
Difference	-1.5%	9.7%	-	3.8%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

South West

The South West is a longstanding favourite spot for downshifters and retirees. This supports the housing market, brings wealth, but less in the way of economic vibrancy. This may change as younger families migrate, with breadwinners freer to work from home. The region's construction output is estimated to be above £12.9 billion in 2022, representing about 7.6% of the GB total.

The region accounts for 8.8% of the population. So, on per capita basis, its share of construction activity is slightly underweight, particularly as its population growth was second only to East England over the past decade. However, much of this growth has been among older people. The region has the highest proportion of over 65s, above 22% compared with a UK average below 19%.

Over the five years pre-pandemic the South West's economic growth was the slowest outside of Scotland. Construction activity performed relatively better, but still below the national average. The impact of the pandemic appears no worse in the region than elsewhere. Looking ahead, with the region forecast to absorb more than its share of the UK's population expansion, the prospects for longer-term construction growth seem positive.

The regional construction workforce is broadly balanced between the numbers resident and working in the region, although slightly more people travel into the South West to work than actually live there (1%). However, there is likely to be a west to east knock-on impact from workers coming from Wales and other regions, notably to work on the massive Hinkley Point nuclear power project. This will see many workers living in the South West travelling elsewhere for work, mainly eastward. The share of non-UK-born workers in the region is about 7%.

The increasing share of infrastructure work, shifting from below 10% in 2017 towards 14% in 2022 reflects Hinkley Point C kicking in. Commercial work has been the laggard, falling from about 15% towards 10% over the past five years. There has been a small expansion in housing, but its share fell from 28% to 24%. However, in line with the impact of the pandemic housing RMI surged from 22% of the region's construction mix to almost 29%.

The South West has seen orders rise faster than in most regions over the past two years. But the rise followed a big drop in the previous two years. This drop may currently be stunting growth in output which has yet to reach its pre-pandemic level. The biggest boost in orders has come from industrial and infrastructure, with a positive showing from commercial. While orders for new housing have risen in cash terms, once inflation is accounted for the outcome for volume is a likely fall.

The South West looks set to feel the worst of the slowdown in construction, according to the latest CITB's

Construction Skills Network (CSN) forecast, released in January 2023. A 2% fall in workloads is penned in for 2023 followed by pallid growth rising from 0.4% in 2024 to 1.8% in 2027. Declining infrastructure work is seen as the primary cause of the pain. Industrial is expected to see the fastest growth, but slower than the national average rate. Most sectors outside private new housing are expected to be lacklustre.

The forecast suggests the regional labour force will dip by about 1,300 between 2022 and 2027. That amounts to a fall of about 0.5% from the 2022 estimate of almost 238,000* construction jobs in the South West. Employers in the sector will still need to recruit heavily to replace those leaving the industry. CSN puts the annual recruitment requirement at 7,640, suggesting high levels of churn in a region that will see some of the worst in terms of growth.

Median pay among full-time male*** construction employees in the South West at £34,100 in 2022 is about 8% below the average across UK construction. The pay is marginally higher than earnings across all sectors in the region, having been lower ten years ago. But regionally construction pay has risen faster over the period, up about 30% compared with 26% across all sectors of the region's economy.

Major Projects

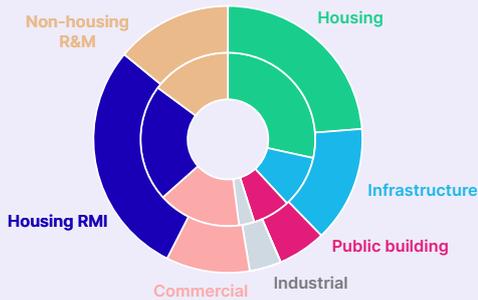
The massive £25 billion Hinkley Point C project on the Somerset coast will dominate construction activity in the region for some years yet. But there are major projects, active and emergent, across the range of construction sectors as the region seeks to lift economic performance and accommodate both a rising and ageing population. To improve transport, work is underway on the £330 million A30 Chiverton to Carland Cross project in Cornwall and work is due to start on the A417 Missing Link in Gloucestershire, costing up to £500 million, which will complete the dualling of the road between Brockworth and Cowley. And the long planned £1.3 billion Stonehenge Tunnel on the A303 remains in the sights of National Highways with contractors at the ready. Panattoni, which develops industrial and logistics facilities, bought the Swindon Honda plant site and is looking to invest £700 million to attract new businesses to the location. Last year the firm began construction on its £280 million development, Panattoni Park Avonmouth. In Bristol, there are plans priced at £550 million to redevelop The Galleries shopping centre and plans continue with how to revitalise Bristol Temple Quarter which has been an active area for development around the main railway station. Huge plans are in the offing for developing a major site butting up against Cheltenham. The Golden Valley Garden Village masterplan outlines a project, overall priced at around £2 billion, that will deliver up to 3,000 homes with commercial for hi-tech business and leisure. Meanwhile, near Truro in Cornwall, outline plans have been approved for the Langarth Garden Village project which will eventually lead to up to 3,800 homes, 200 extra-care units, and student accommodation along with an array of other facilities.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	34,655	31,900	30,100	All non-residential	231,780	211,180
Micro (0 to 9)	32,710	30,065	28,275	Shops	47,780	47,640
Small (10 to 49)	1,755	1,640	1,640	Offices	35,160	32,350
Medium-sized (50 to 249)	165	170	165	Industrial & warehousing	61,100	56,470
Large (250+)	25	25	20	Other buildings	87,740	74,710
				Homes (latest 2021)	2,626,844	2,526,006

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	106,000	3.9%	88,100	3.2%	-17,900
Manufacturing	250,000	9.2%	254,700	9.2%	4,700
Construction	183,400	6.7%	180,700	6.5%	-2,700
Wholesale & retail	364,300	13.4%	338,300	12.3%	-26,000
Transport & communication	208,300	7.7%	221,000	8.0%	12,700
Accommodation & food service	184,700	6.8%	163,200	5.9%	-21,500
Finance & real estate	125,300	4.6%	120,800	4.4%	-4,500
Professional & technical	195,100	7.2%	219,100	7.9%	24,000
Admin & support	127,500	4.7%	115,300	4.2%	-12,200
Public admin, defence, education & health	830,100	30.5%	911,800	33.0%	81,700
Other	145,300	5.3%	147,900	5.4%	2,600

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	-
Recruits needed annually	7,640
Employment growth 2022-27	-0.5%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	34,137	39,216	26,217	31,342	30.2%	25.1%
All industries	33,726	38,429	26,787	31,473	25.9%	22.1%
Difference	1.2%	2.0%	-2.1%	-0.4%	-	-
(Full-time female)						
Construction	26,512	33,572	21,331	23,505	24.3%	42.8%
All industries	27,747	31,508	21,141	24,865	31.2%	26.7%
Difference	-4.5%	6.6%	0.9%	-5.5%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

South East

The South East, as the most populated region, has been a solid market for construction over many decades. Its affluence and large existing building stock means it is particularly strong for construction firms operating in repair, maintenance, and improvement work. Its construction output is estimated to be above £21.7 billion in 2022, representing about 12.7% of the GB total.

The region accounts for more than 14% of the population and, on a per capita basis, sees more construction activity than most other regions. This larger per capita share is partly explained by its faster growing population, but it is also a feature of the relative affluence compared with other regions.

In the South East, pre-pandemic growth in the economy broadly matched the UK average when measured by gross value added. However, growth in construction was well below the national average, measured both by output and gross value added. And activity continued to underperform the national average more recently.

More than 2% of construction workers living in the South East work elsewhere, equating to almost 10,000 people. Many of these will live in what are seen as London suburbs. However, the effect will be to bring money into the region as the community workforce spends locally.

The changing mix of work in the South East over the past five years is broadly in line with the national pattern except for infrastructure, where workloads are down rather than up. The region is strong for housing RMI, which accounts for about a quarter of construction. This reflects the high house prices in the region. Recently the share of new housing has been on the rise.

The South East has seen growth in orders over the past two years in both cash and volume terms. But this follows a relatively barren patch. At the start of 2021 the value of orders began to rise, with commercial and infrastructure work driving the growth. It should be noted that orders do not include RMI work. This currently represents about 46% of total construction in the South East, a larger share than in any other region. Across Great Britain the share is about 35%.

CITB's Construction Skills Network (CSN) forecast, released in January 2023, suggests the South East will see a slight fall of 0.3% in 2023 with annual growth rising steadily from 1.3% in 2024 to 2.9% in 2027. Across the construction sectors, infrastructure is the only one expected to decline over the forecast period, with the region enjoying the fastest growth in new housing, industrial, and commercial work.

The CSN forecast suggests the construction labour force in the region will rise by 2,000 between 2022 and 2027. This is well below 1% given that in 2022 the estimated number of jobs was about 381,000*. The industry will however still need to recruit, with CSN estimating the annual recruitment requirement at 3,560 over the period.

The median earnings for full-time male*** construction employees in the South East at £42,600 in 2022 are 14% above the UK average for construction and 15% above the £37,100 median across all sectors in the South East. Over the past ten years the earnings of the median male construction worker have risen by 31% compared with 19% across the whole economy.

Major Projects

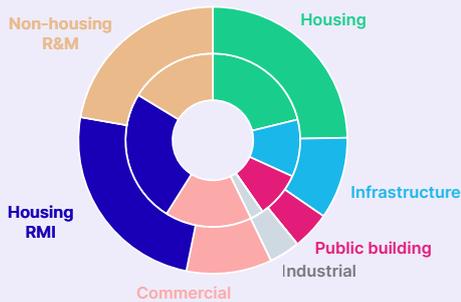
Two major priorities for the South East economy are to create more homes and improve connectivity and these are reflected in the region's profile of projects, both planned and envisioned. The Lower Thames Crossing, estimated to cost up to £8.2 billion, will improve links between the East of England and the South East and open up areas of Kent. Meanwhile the East-West Rail project priced at around £5 billion aims to improve connections between Oxford and Cambridge and beyond. This is critical infrastructure underpinning the notion of the Oxford-Cambridge Arc. On the homes front, work on creating Ebbsfleet Garden City is progressing. Meanwhile, there is a series of billion-pound major housing projects in the region's pipeline. Near Sittingbourne, Kent, the Highsted Park development aims to create three new villages with 8,400 homes along with schools and public facilities. Within the Oxford-Cambridge Arc, the Milton Keynes East expansion was granted outline permission in 2022 for between 4,000 and 4,600 homes along with community facilities and logistics space. And at the Hoo Peninsula between the Thames and Medway rivers in east Kent, there is a mixed development masterplan including up to 10,000 homes. Meanwhile consultation continues on a northern runway at Gatwick and there are plans to reopen Manston Airport which would involve heavy investment.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	61,355	56,640	52,955	All non-residential	295,040	275,400
Micro (0 to 9)	58,560	53,960	50,325	Shops	68,080	67,890
Small (10 to 49)	2,495	2,365	2,335	Offices	62,830	56,680
Medium-sized (50 to 249)	255	270	255	Industrial & warehousing	75,550	70,860
Large (250+)	45	45	40	Other buildings	88,580	79,970
				Homes (latest 2021)	4,023,442	3,862,704

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	109,300	2.4%	93,600	2.1%	-15,700
Manufacturing	358,900	8.0%	341,900	7.5%	-17,000
Construction	354,200	7.9%	296,600	6.5%	-57,600
Wholesale & retail	567,000	12.6%	479,000	10.5%	-88,000
Transport & communication	479,000	10.6%	536,200	11.8%	57,200
Accommodation & food service	197,300	4.4%	205,000	4.5%	7,700
Finance & real estate	230,000	5.1%	281,700	6.2%	51,700
Professional & technical	366,600	8.1%	424,800	9.3%	58,200
Admin & support	220,500	4.9%	204,300	4.5%	-16,200
Public admin, defence, education & health	1,327,900	29.5%	1,428,900	31.3%	101,000
Other	292,000	6.5%	269,200	5.9%	-22,800

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	4,100
Recruits needed annually	3,560
Employment growth 2022-27	0.6%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	42,554	51,564	32,453	39,265	31.1%	31.3%
All industries	37,055	43,726	31,201	38,296	18.8%	14.2%
Difference	14.8%	17.9%	4.0%	2.5%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	30,621	40,745	24,699	32,821	24.0%	24.1%
All industries	30,228	34,920	23,996	27,944	26.0%	25.0%
Difference	1.3%	16.7%	2.9%	17.5%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

London

To some it may seem ironic, but since the financial crisis London has become an increasingly important market for construction. Over the two decades before 2008 its share of GB construction output was about 16%. This share has steadily grown. Its construction output is estimated to be above £37.3 billion in 2022, representing about 21.8% of the GB total.

The region accounts for 13.5% of the population. So, on a per capita basis, London sees a disproportionate share of construction activity. However, not only has it seen the fastest regional growth in population over recent decades, but it is also the nation's major employment hub. Its working population expands greatly as commuters travel in from other regions.

Pre-pandemic London was seeing the strongest economic growth of any region, in line with recent history. Construction output grew solidly. However, when we look at construction activity measured by gross value added, growth is far weaker. This suggests London drew heavily on firms in other regions to deliver its rising output. Predicting London's future is tough. The effects of Brexit, the shift to working from home, and other structural changes within the economy present huge uncertainties for the capital.

London is a magnet for construction workers, partly because of high accommodation costs. About 12% of its workforce live outside the capital, while about 45% of those living in London were born abroad, of which about half are from the EU. To some extent the regions around London benefit from the money earned by those commuting into the city.

Commercial work in London has held up better than in most regions and better than many feared, despite its share of the construction mix falling from 29% to 21% over the past five years. Meanwhile, rising infrastructure and new housing has helped fill the gap left by the slide in commercial work. The figures suggest that new housing accounted for almost a third of construction work in 2022.

In cash terms, orders for work in London may be up comparing the past two years (2021 and 2022) with the previous two. But when inflation is factored in the volume of work won is down. The sector enjoying most growth has been industrial. But it is a small sector. Importantly, there are signs growth in orders for both housing and commercial. However, orders for the substantial infrastructure sector are coming off after a period of sustained high investment.

Construction workloads in London are expected to remain broadly flat in 2023. The following four years are then expected to see annual growth rising from 1.9% in 2024 to 2.7% in 2027, according to CITB's Construction Skills Network (CSN) forecast, released in January 2023. Growth will be spread fairly evenly across the sectors, with private housing and commercial building the most buoyant, with average annual growth rates between 2.6% and 2.7% respectively.

The forecast suggests a rise of about 3,000 in construction jobs between 2022 and 2027, up less than 1%. In 2022 the number of jobs was estimated to be almost 411,000*. To cover for the slight rise and to replace those leaving the industry, CSN estimates the region will need to recruitment 4,560 new workers into the industry in each of the next five years.

Median earnings among full-time male*** construction employees in London at £47,700 in 2022 are 28% above the UK average and well ahead of any other region. A decade ago, median construction pay, on this measure, lagged behind the equivalent for all sectors in the capital. But pay growth of 28% across the period against an average of 19% has put construction above the average in a high-income region.

Major Projects

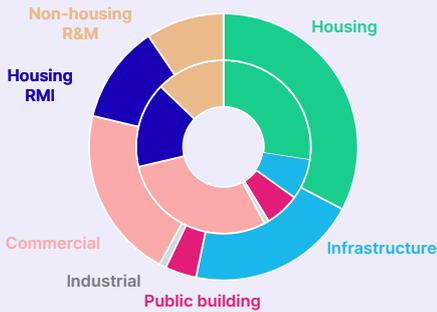
London has seen huge infrastructure investment, but this is set to slow. Meanwhile, a slew of major housing and community related projects has emerged. There is Meridian Water, Enfield Council's £6 billion 25-year regeneration project to create 10,000 homes. Newham council has a £1 billion outline masterplan for the Carpenters Estate, East London, which aims to deliver 2,152 new homes. At the massive Thamesmead estate in South East London there are major redevelopment plans which involve upgrading existing stock and building nearly 2,000 new homes. In north west London, huge sums are being invested to create a new neighbourhood, Brent Cross Town, from the muddled development of the past. The development value is put at £8 billion which it hopes will provide 6,700 homes, workspace for 25,000 people along with other facilities including green space. Meanwhile, four miles away towards central London, demolition work at the former St John's Wood Barracks site is making way for an upmarket residential-led regeneration. This is expected to cost more than £1 billion. Major infrastructure works continue to flow. And, at the seat of power, work is expected to ramp on the Houses of Parliament refurbishment, where essential works are priced at £7 billion to £13 billion.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	61,495	55,615	49,465	All non-residential	324,310	306,590
Micro (0 to 9)	59,265	53,620	47,470	Shops	91,980	91,350
Small (10 to 49)	1,995	1,745	1,755	Offices	109,770	93,470
Medium-sized (50 to 249)	195	200	190	Industrial & warehousing	50,780	48,850
Large (250+)	40	50	45	Other buildings	71,790	72,920
				Homes (latest 2021)	3,670,832	3,524,438

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	36,300	0.8%	37,800	0.8%	1,500
Manufacturing	164,600	3.7%	145,200	3.0%	-19,400
Construction	309,400	6.9%	267,600	5.6%	-41,800
Wholesale & retail	479,900	10.7%	426,100	8.9%	-53,800
Transport & communication	571,600	12.7%	641,500	13.4%	69,900
Accommodation & food service	231,000	5.1%	247,200	5.2%	16,200
Finance & real estate	377,600	8.4%	437,200	9.1%	59,600
Professional & technical	532,600	11.9%	637,500	13.3%	104,900
Admin & support	256,800	5.7%	224,800	4.7%	-32,000
Public admin, defence, education & health	1,212,100	27.0%	1,392,800	29.1%	180,700
Other	314,700	7.0%	336,100	7.0%	21,400

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	5,000
Recruits needed annually	4,560
Employment growth 2022-27	0.7%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	47,681	53,991	37,198	45,395	28.2%	18.9%
All industries	45,150	63,715	37,999	55,401	18.8%	15.0%
Difference	5.6%	-15.3%	-2.1%	-18.1%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	40,000	x	31,812	39,618	25.7%	-
All industries	38,336	48,838	31,231	37,765	22.7%	29.3%
Difference	4.3%	-	1.9%	4.9%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

Scotland

Scotland's geography has been more heavily weighted to infrastructure than elsewhere in Britain. Its construction output is estimated to be above £13.3 billion in 2022, representing about 7.8% of the GB total.

The nation accounts for 8.4% of the population. So, on a per capita basis, its share of construction is slightly below the average for Great Britain. But given its relatively slow population growth for decades, this is understandable. Furthermore, the population projections suggest Scotland will see the slowest growth in numbers of any part of the UK.

For many decades, Scotland's construction activity, and to some degree its economy, has pivoted on the price of oil. So, the economic position relative to the rest of the UK and the fall in construction in the five years ahead of the pandemic should come as little surprise. This fits with the slump in oil prices. Slow population growth also reduces the drivers of construction. However, the surge in oil prices and growth in offshore wind energy should provide a fillip.

The construction workforce in Scotland is broadly balanced between those who live in the nation and those that work in it. But Scotland's construction industry does rely on a relatively high share of workers born outside the UK. At 9%, the non-UK born contingent in Scotland is above the UK average and higher than what is seen across northern England.

Within the overall construction mix, the share of housing rose from 18% to above 22% in the period 2017 to 2022, while infrastructure expanded its share from 21% to 23%. RMI work across all sectors saw a rise in the share of overall construction work.

Over the past two years Scotland saw the biggest fall in construction new orders in Great Britain, broadly following a path of decline since 2015. Housing and commercial work saw the worst of the decline. Industrial fared best of the major sectors, but it accounts for less than 4% of work. Within the housing sector, public housing did see some growth, but again this is a small sector accounting for less than 4% of output.

The latest CITB's Construction Skills Network (CSN) forecast, released in January 2023, sees Scotland experiencing a deeper than UK average fall in workloads in 2023. And the 1% fall in workloads in 2023, is expected to be followed by modest, but rising, growth rates lifting from 1.1% in 2024 to 1.6% in 2027. Sluggish growth is expected across all sectors over the period, with industrial the strongest performer, although its growth rate is penned as being below the UK average.

The CSN forecast estimates that the Scottish construction workforce will fall by about 900 between 2022 and 2027. That is about 0.4% of the estimated 2022 workforce of 231,000*. However, to cover for churn in the workforce, it suggests substantial recruitment will still have to take place. The number it thinks is required annually is 3,910 people.

Median earnings for full-time male*** construction employees in Scotland were £34,500, about 7% below the UK average. Scotland is the only part of Great Britain where, on this measure, construction workers earn less than the average across all industry sectors. Pay increases over the past ten years ago have broadly tracked the average across all economic sectors in the nation.

Major Projects

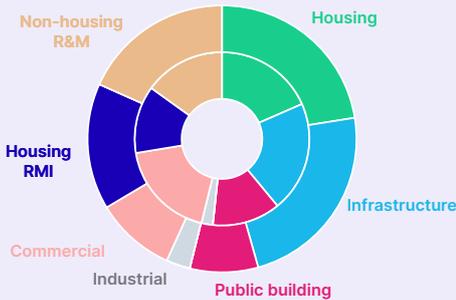
Energy projects, notably wind-power related, dominate the list of Scottish projects. Wind-power projects include SSE Renewables' plans for its 4.1GW Berwick Bank offshore wind farm in the North Sea, Cerulean Winds plans for three 1GW arrays of floating wind turbines west of Shetland, and Macquarie's Green Investment Group lead a group planning a 2GW offshore wind farm west of Orkney. These represent billions of pounds of potential investment over the next decade. Beyond wind, other renewable-power projects include a series of pumped storage hydro schemes costing around £600 million each, such as that at Drax's Cruachan Power Station, about 50 miles northwest of Glasgow. Meanwhile, there are several major redevelopment masterplans with price tags over £1 billion in the pipeline. Orkney Islands Council Harbour Authority has put together phase 1 of a masterplan to transform Orkney's harbours over a 20-year period. There are plans to convert former industrial land at Granton Waterfront, near Edinburgh into a coastal town with up to 3,500 homes. And a former fabrication yard in the Moray Firth at Ardersier, within a site of special scientific interest, is being eyed as a mixed-use development with up to 2,000 homes. In the capital, various regeneration projects are underway or planned, including the £500 million Edinburgh Park South scheme. Meanwhile, the £500 million Monklands Hospital replacement project scheduled to start this year has been delayed but remains in the pipeline. Work is starting on Dunfermline Learning Campus which is part of the Scottish Government's £2 billion Learning Estate Investment Programme.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	21,765	20,680	19,790	All non-residential	259,880	233,386
Micro (0 to 9)	19,775	18,790	17,945	Shops	54,543	53,709
Small (10 to 49)	1,710	1,610	1,560	Offices	44,861	44,061
Medium-sized (50 to 249)	240	235	240	Industrial & warehousing	58,007	49,852
Large (250+)	35	45	40	Other buildings	102,469	85,764
				Homes (latest 2020)	2,645,298	2,585,349

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	140,500	5.4%	150,600	5.7%	10,100
Manufacturing	198,000	7.6%	185,000	7.0%	-13,000
Construction	187,800	7.2%	164,200	6.2%	-23,600
Wholesale & retail	327,300	12.6%	297,200	11.2%	-30,100
Transport & communication	200,500	7.7%	222,700	8.4%	22,200
Accommodation & food service	164,900	6.4%	150,300	5.7%	-14,600
Finance & real estate	128,000	4.9%	154,800	5.9%	26,800
Professional & technical	159,200	6.1%	179,700	6.8%	20,500
Admin & support	120,100	4.6%	112,600	4.3%	-7,500
Public admin, defence, education & health	809,400	31.2%	880,300	33.3%	70,900
Other	160,600	6.2%	146,600	5.5%	-14,000

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	-200
Recruits needed annually	3,910
Employment growth 2022-27	-0.4%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	34,460	38,368	27,102	32,618	27.1%	17.6%
All industries	35,163	40,534	27,819	34,059	26.4%	19.0%
Difference	-2.0%	-5.3%	-2.6%	-4.2%	-	-
(Full-time female)						
Construction	29,589	35,514	23,264	25,739	27.2%	38.0%
All industries	30,933	34,058	22,639	26,145	36.6%	30.3%
Difference	-4.3%	4.3%	2.8%	-1.6%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

Wales

The geography of Wales, with relatively poor access to major UK markets, presents a challenge to economic prospects, particularly since the decline of mining and heavy industry. This has led to sluggish population growth and ageing communities. Its construction output is estimated to be above £5.5 billion in 2022, representing about 3.2% of the GB total.

The nation accounts for 4.8% of the population which means, on a per capita basis, its share of construction is below the average for Great Britain. This can be partly explained by Wales experiencing the slowest population growth in the UK. This slow growth is expected to continue, which will restrain construction activity. As a country, Wales has the highest proportion of over 65s in the UK, with only the South West of England having a higher relative percentage.

Running up to the pandemic the Welsh economy was among the more buoyant, with growth above the UK average, measured by gross value added. Construction GVA was also above average. However, the construction output data paint a less rosy picture, with pre-pandemic growth among the worst. This may suggest Welsh firms were benefitting from work done in other regions.

A balance of about 9% of construction workers living in Wales find work outside the nation. So, they will bring economic benefits from construction into Wales when earnings made in other regions are spent locally. This will be one reason why there are relatively few non-UK born construction workers in Wales, below 2%, compared with the UK average of 14%.

A drop in infrastructure work has played a part in the weakening workloads in Wales. From about 30% of construction output in 2017, its share has fallen to about 13%. With commercial work also dropping significantly from 14% to 9%, there has been an increase in most other sectors, notably new housing and repair maintenance and improvement works across the built environment.

Wales has seen orders rise faster than most English regions over the past two years. But the rise follows a sustained period of weak levels of orders, the effects of which are evident in weakening output since before the pandemic. The biggest boost has come from infrastructure, but most non-housing sectors appear to be seeing growth. Once inflation is accounted for, the new-housing sector has seen orders shrink.

Workloads in Wales are set to fall by about 1.4% in 2023, according to CITB's latest Construction Skills Network (CSN) forecast, released in January 2023. The dip is expected to be followed by modest growth, rising from

1.2% in 2024 to 2% in 2027. In line with the overall UK picture, industrial is seen as the main growth sector, and in Wales growth is expected to be in line with the national average. Most other sectors are expected to grow at or below the UK average.

The level of the workforce in Wales is forecast to remain broadly flat over the period 2022 and 2027, remaining close to the estimated level of around 111,000* construction jobs in 2022. The industry will need to recruit to account for churn in the workforce, which CSN estimates an annual recruitment requirement of 1,820 new recruits.

Median earnings among full-time male**† construction employees in Wales at £33,000 in 2022 are, along with the North East, the lowest across the UK. Ten years ago, the median male construction worker earned less than the median for males across all industries. But the situation has switched with pay in construction rising 35% over the period compared with 26% across all other sectors in the Welsh economy.

Major Projects

Among the more eye-catching projects in Wales is Swansea's new Blue Eden tidal lagoon. Costing around £1.7bn, this project was born from the ashes of the former Swansea Bay Tidal Lagoon. This multi-billion pound project, which in its earlier guise had a development consent order, will have a floating solar farm sitting on top of the lagoon. The aim is for a fully privately-funded project, with the suggestion that work could start within a year.

Swansea council is pursuing its Shaping Swansea initiative to regenerate the city, with schemes amounting to around £1 billion in the package of potential projects. Similarly, Cardiff council in January 2022 released a five-year plan to revitalise its city centre post pandemic. Among the projects embraced by the plan is the Embankment Site on the east bank of the Taff where a £360 million mixed development is planned with 2,500 homes and an array of commercial elements.

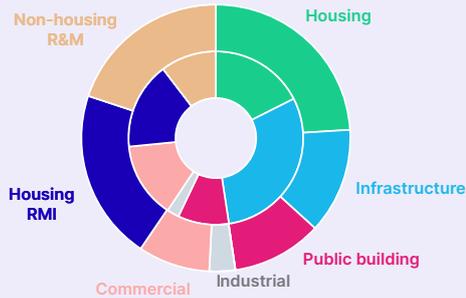
In Deeside, Arup has been appointed to lead the £600 million plan to modernise and revitalise Shotton Paper Mill. Transport projects in the pipeline include the £590 million job to convert the A465 near Merthyr Tydfil from Dowlais Top to Hirwaun to 2 lanes in each direction. Meanwhile, the £300 million Deeside Red A55-A494-A548: Flintshire Corridor project is currently on hold, along with the £400 million third bridge crossing to Anglesey. On the residential front St Modwen are pursuing phase 2 of its Coed Darcy project, near Neath, seeking outline permission for 2,000 homes and commercial space. And among the more intriguing projects is the £150 million scheme to build a Global Centre of Rail Excellence testing facility at the former Nant Helen opencast site north of Neath.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	14,405	13,490	12,570	All non-residential	126,700	113,110
Micro (0 to 9)	13,495	12,570	11,740	Shops	29,630	29,360
Small (10 to 49)	810	825	745	Offices	19,900	17,060
Medium-sized (50 to 249)	90	90	80	Industrial & warehousing	33,770	29,730
Large (250+)	10	5	5	Other buildings	43,400	36,950
				Homes (latest 2020)	1,437,566	1,419,371

ONS: UK business counts (via Nomis)

Source: Valuation Office Agency, Scottish Assessors, DLUHC, Scottish Government, StatsWales

Construction output by sector 2017 (inner) to 2022 (outer)



Source: ONS, Output in the Construction Industry Sub-national and sub-sector data

Regional construction orders, output & jobs (orders & output, 2019 prices, 4-quarter moving total)



Source: ONS, Construction Output, New Orders for Construction, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	58,900	4.2%	52,900	3.6%	-6,000
Manufacturing	151,800	10.8%	134,800	9.2%	-17,000
Construction	101,200	7.2%	100,900	6.9%	-300
Wholesale & retail	191,300	13.6%	163,900	11.2%	-27,400
Transport & communication	91,100	6.5%	104,600	7.2%	13,500
Accommodation & food service	87,900	6.2%	88,100	6.0%	200
Finance & real estate	48,600	3.4%	60,200	4.1%	11,600
Professional & technical	72,300	5.1%	86,200	5.9%	13,900
Admin & support	55,000	3.9%	56,700	3.9%	1,700
Public admin, defence, education & health	478,900	33.9%	527,600	36.1%	48,700
Other	74,000	5.2%	85,500	5.9%	11,500

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	500
Recruits needed annually	1,820
Employment growth 2022-27	-0.1%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
(Full-time male)	Median	Mean	Median	Mean	Median	Mean
Construction	32,990	35,334	24,448	28,023	34.9%	26.1%
All industries	32,229	35,915	25,607	29,165	25.9%	23.1%
Difference	2.4%	-1.6%	-4.5%	-3.9%	-	-
(Full-time female)	Median	Mean	Median	Mean	Median	Mean
Construction	24,582	27,952	19,122	19,497	28.6%	43.4%
All industries	28,257	31,097	20,607	23,736	37.1%	31.0%
Difference	-13.0%	-10.1%	-7.2%	-17.9%	-	-

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

Ireland

Construction activity across the island of Ireland is strong, although below the remarkable levels seen in the boom years before the financial crisis. Much of the growth is fuelled by a combination of a relatively strong economy and rapid population growth in the Republic. The level of activity on a per capita basis in the Republic is comparable with that seen in London. In Northern Ireland construction activity is weaker, indeed the data suggests it is among the weakest in the UK on a per capita basis.

It should be noted that the national divide creates complexity not only in measuring performance but also in assessing the effects of a high level of cross-border activity. Brexit inevitably adds to this complexity. Also, the Common Travel Area, which has existed since 1922, means that UK and Irish citizens have rights to live and work in either jurisdiction. This has created strong interrelationships within the construction industry north and south of the border and also across the Irish Sea.

In the five years before the pandemic, on most measures, the Republic enjoyed stellar economic growth. This has been in large part driven by its attractiveness to foreign businesses, which account for a large and increasing slice of the economic activity in the nation. Over the same period, Northern Ireland saw far slower growth, but its economy expanded faster than the UK average.

The existence of the Common Travel Area and the geography of the island of Ireland would suggest that significant numbers of workers operate across the border. Providing reliable numbers for this cross-border mixing of workers is however tricky. But UK employment figures suggest there are up to 3% more construction workers living in Northern Ireland than work there. This points to a net movement south to the Republic for work. Meanwhile statistics for the Republic show the share of non-Irish construction workers growing rapidly in recent years to around 16%, close to levels seen in the boom years in the 2000s. With earnings data suggesting if UK construction workers are well remunerated in the south, there will be a draw.

In Northern Ireland there has been some shift in the mix of construction work, with growth over the past five years in the shares of infrastructure, both new and RMI work, and new housing. In the Republic, the data show that between mid-2017 and mid-2022 construction volumes increased by more than 15%. But there was a shift in the mix with a fall of around 5% in residential work, growth of around 5% in infrastructure, and a big rise of more than 20% in non-residential building.

The prospects for growth in the Republic are good. The Euroconstruct forecast conference in November 2022

put Ireland top of the growth list for new construction work across Europe and solidly above average for growth in renovation work. Northern Ireland is less promising. CITB's Construction Skills Network (CSN) forecast sees a 1.2% dip in work in 2023 which should be recovered in 2024, with some growth lifting to 2.4% in 2027, with infrastructure the strongest sector.

While the CSN report sees little change in the numbers of construction workers in Northern Ireland, it does see a need to replenish the workforce to make up for those leaving, estimating the annual recruitment rate at 890 people each year. However, many workers in Northern Ireland will inevitably be drawn south given the more promising outlook.

Comparisons can be awkward to make, but based on male earnings only, construction workers in Northern Ireland earn below the UK average, but above the average across all industries in the province. In the Republic construction workers wages are above the UK average, so significantly higher than in the north. But they are lower than average earnings across all sectors of the Irish economy. This suggests an incentive for workers in the north to seek jobs in the south.

Major Projects

The National Children's Hospital in Dublin is currently under construction and due to open in 2024. The cost of the project was estimated last year to have risen to above £1.5bn (€1.7bn). Among the biggest projects in the pipeline is the £8.4bn (€9.5bn) MetroLink project, which will bring a metro to Dublin. Meanwhile in Waterford, there are ambitious plans for a major redevelopment of the North Quays worth £440m (€500m) to provide a compact extension to the City Centre. Road projects are seen as critical in Ireland and among the plans is the N/M20 Cork Limerick motorway scheme (north and south). The scheme was at the design and environmental evaluation stage in early 2023. The intention is for a 50-mile (80km) motorway costing around £880m (€1bn). Revitalising the electricity grid on the island of Ireland to make it compatible with the expanding use of renewables is another priority. In line with this are plans for a North-South Interconnector to connect the electricity grids of Northern Ireland and the Republic of Ireland. Plans are well progressed on the project which is estimated to cost around £310m (€350m).

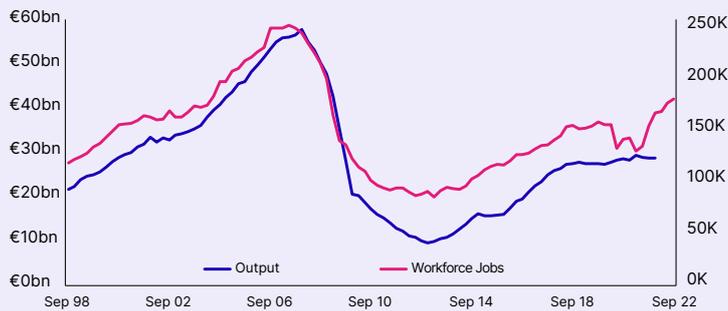
In Northern Ireland there are plans under the heading Tribeca Belfast to invest £500m to regenerate 12 acres of Belfast city centre. Meanwhile, in 2020, the Finance Minister Conor Murphy announced over £700m of new funding for infrastructure, regeneration, and tourism projects for the Belfast Region. Work is underway on the £200m Belfast Transport Hub, which has opened the way for the £300m Weavers Cross regeneration scheme will be built on adjacent land.

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	52,607	50,546	62,664	All non-residential	157,586	171,069
Micro (0 to 9)	51,380	49,192	60,553	Shops	35,084	41,596
Small (10 to 49)	1,128	1,240	1,891	Offices	81,686	85,552
Medium-sized (50 to 249)	88	101	196	Industrial & warehousing	8,049	9,297
Large (250+)	11	13	24	Other buildings	32,767	34,624
				Homes (latest 2021)	2,124,590	2,003,645

ONS: CSO, Business Demography table BRA16

Source: GeoDirectory, Commercial Buildings Report Q2 2022; CSO, Census 2020 and 2016 (note housing stock figure is for 2016)

Republic of Ireland construction output & jobs (output at 2019 prices in Euro)



Source: CSO, Output and Value added ESA2010 (OECD implied deflator applied), Labour Force Survey

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	119,425	5.2%	130,175	6.2%	-10,750
Manufacturing	248,650	10.8%	235,400	11.2%	13,250
Construction	138,600	6.0%	118,350	5.6%	20,250
Wholesale & retail	305,800	13.3%	296,675	14.1%	9,125
Transport & communication	235,350	10.2%	198,250	9.4%	37,100
Accommodation & food service	139,825	6.1%	156,250	7.4%	-16,425
Finance & real estate	131,225	5.7%	108,050	5.1%	23,175
Professional & technical	156,650	6.8%	128,700	6.1%	27,950
Admin & support	93,375	4.0%	89,425	4.3%	3,950
Public admin, defence, education & health	644,000	27.9%	516,850	24.6%	127,150
Other	94,000	4.1%	124,075	5.9%	-30,075

Source: CSO, Labour Force Survey table QES01

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	42,353	49,142	34,873	39,178	21.4%	25.4%
All industries	44,105	56,171	36,860	45,452	19.7%	23.6%
Difference	-4.0%	-12.5%	-5.4%	-13.8%	-	-

ONS: CSO, Earning Analysis using Administrative Data Sources table NSA94

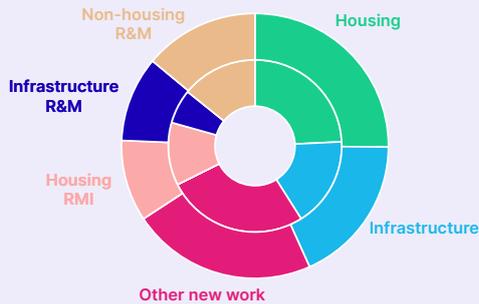
Note: Annual earnings are in Euros(€)

Business counts	2022	2019	2017	Stock of buildings	2022	2017
All	11,195	10,520	9,685	All non-residential	74,879	73,817
Micro (0 to 9)	10,550	9,865	9,030	Shops	n/a	n/a
Small (10 to 49)	550	575	585	Offices	n/a	n/a
Medium-sized (50 to 249)	90	75	65	Industrial & warehousing	n/a	n/a
Large (250+)	5	5	5	Other buildings	n/a	n/a
				Homes (latest 2021)	822,000	783,000

ONS: UK business counts (via Nomis)

Source: Department for Finance, Summary of Valuation lists; Department of Communities, Northern Ireland Housing Statistics 2021-22

Construction output by sector 2017 (inner) to 2022 (outer)



Source: NISRAS, Construction Output Statistics

Regional construction orders, output & jobs

(orders & output, 2019 prices, 4-quarter moving total)



Source: Source: ONS, Construction Output, Workforce Jobs (via Nomis)

Employment by sector	2021	Share	2016	Share	Change
Agriculture, mining, energy & water	34,600	4.5%	35,200	4.1%	600
Manufacturing	84,800	11.0%	76,400	9.0%	-8,400
Construction	60,100	7.8%	63,200	7.4%	3,100
Wholesale & retail	110,600	14.3%	110,300	12.9%	-300
Transport & communication	44,100	5.7%	56,100	6.6%	12,000
Accommodation & food service	44,800	5.8%	38,300	4.5%	-6,500
Finance & real estate	25,700	3.3%	38,200	4.5%	12,500
Professional & technical	44,000	5.7%	54,800	6.4%	10,800
Admin & support	37,800	4.9%	31,600	3.7%	-6,200
Public admin, defence, education & health	236,900	30.7%	298,100	35.0%	61,200
Other	49,300	6.4%	50,800	6.0%	1,500

Source: Annual Population Survey (LFS) (via Nomis)

CITB CSN 2022 to 2027	
Change in employment to 2022-27	300
Recruits needed annually	890
Employment growth 2022-27	0.2%

Source: CITB, Construction Skills Network, forecasts 2022 to 2027

Annual earnings	2022		2012		Change 2012 - 2022	
	Median	Mean	Median	Mean	Median	Mean
(Full-time male)						
Construction	29,550	33,915	20,691	24,684	42.8%	37.4%
All industries	27,211	31,995	21,925	25,971	24.1%	23.2%
Difference	8.6%	6.0%	-5.6%	-5.0%	-	-

ONS: NISRA: ASHE, Annual pay - Gross (£) Male



Regional and National Observations

To understand how the data collated for the regional and national profiles reflected the experiences of CIOB members, a series of roundtables took place to garner further insights from individuals and their businesses.

Methodology

A total of eight roundtables were conducted during February and March 2023 across the UK and Ireland. Each roundtable focused on one specific nation or region in which the CIOB operates in: the North of England, Midlands and Eastern, South West, London and the South East, Scotland, Wales and Ireland.

The roundtables consisted of CIOB members who lived and worked in the area. Members held a mixture of positions, across the width and breadth of the built environment. The sessions lasted approximately 90 minutes and were chaired by a member of CIOB's policy and public affairs team. To ensure there was a consistent approach, attendees were asked the same five questions.

Each of the chairs have written up the findings from the roundtables and identified a key theme that has emerged from discussions.

Overview

There were several consistent themes that came from the roundtables. Most notably, challenges with inflation, the need to engage further with schools to address the ever-growing skills gap, the importance of having a diverse workforce and a culture that helps promote better wellbeing for all.

Over the past two years the UK and Ireland has seen the cost of materials skyrocket, which is creating a knock-on effect to supply chain stability, delaying the tendering process and causing projects to become unviable. The rise in prices appears to be having the greatest impact in the tendering and budgeting process as clients fed back that they are receiving more unrealistic tender responses, whilst sub-contractors feel clients do not understand the current climate and so are being asked to produce budgets well below expected costings.

Laterally, those projects now reaching the development stage are having to be reforecast as approved

suppliers within the supply chain are either collapsing or unable to fulfil orders at prices agreed prior to inflation increases. These issues are causing delays in completion times and the uncertainty over project viability is pushing skilled workers to look elsewhere for jobs that have longevity and therefore provide them with greater financial stability. We see this in the movement of people earlier in the report where construction workers may live in one region but often commute out to other places, such as London, for work.

All members were feeling the effects of the skills shortages and members unanimously agreed that the sector needs to engage with schools and attract children early. Although there is engagement with secondary schools, it was considered by many members that the conversation of working in construction is too late by this point. Young children often have a natural aptitude and interest in construction activities and therefore the industry should seize these moments to inspire children into wanting to work in construction. If we are to inspire the next generation then the industry must improve in communicating the array of roles and routes into the sector.

On the other end of the scale, we need to attract new talent and retain existing workers. All members discussed having the right workplace culture will play its part in attracting and retaining the right people. There is still significant work to be done to retain the women the sector does have, let alone attracting new talent. For example, whilst the industry is keen to demonstrate that construction earnings are higher than many people think, men tend to earn more than women and are far more heavily represented in construction than across the overall workforce. CIOB recognises the need to reduce the gender pay gap and address the challenge of equal pay, career progression and retention. Separately, how can we have inclusive buildings when the workforce who designs and creates these buildings do not reflect the diversity of the community?

Away from these consistent themes, each region had their own unique variation of issues that must be factored into any dialogue on how to address and support the industry and a micro and macro level.

North of England

Tackling a Competitive Market

Written by David Kirby, Policy & Public Affairs Officer – Wales and Daisie Rees-Evans, Policy Development Manager

The roundtable contained members working for Tier 1 contractors, specialised SME firms as well as members who worked in academia with the discussion focusing on the skills pipeline.

This brain drain was cited as the biggest barrier to starting projects, as it often meant that highly skilled workers take up more lucrative offers elsewhere, leaving the less competent staff thrown in at the deep end to complete a project. Through no fault of these staff, quality and workmanship on site has suffered according to most members of the roundtable. This also means the recruitment pool can become shallow. One member, in reference to retail refurbishment projects, said they often struggle to attract and retain staff as many are unwilling to work the required unsociable hours for the pay on offer.

Members stated that this creates a bigger issue around competency of the workforce as those who lack experience and knowledge are the ones more likely to stay and not get poached. More time is therefore spent on training these individuals up to a high-standard so that they can produce high-quality work, but as one member pointed out, once they have been trained-up and have gained experience they move on to a better paid job.

To help improve retention, as well as protect companies, members said it was not uncommon for their companies to implement payback clauses in contracts, whereby if apprentices or students leave the organisation before a set amount of time, they would be responsible for some or all their training costs. By having this in place, it has helped reduce the movement of people, but the issue on retention still stands.

Issues around recruiting and retaining workers are compounded by the current state of the economy, with members highlighting that they were being challenged to do more with less money in today's high-inflation environment. Members noted this made it difficult to create cost certainty for clients. One member noted that as their business only worked on small, short-term projects, they were not feeling this issue compared to the rest in the discussion. This was due to the fast-paced nature of the projects which minimised any mid-project price increases. Therefore, businesses who can take-up small-scale work are doing so in order to help with cashflow and often will buy materials in bulk to help keep costs low in the long-term.

All members noted that for many projects, there is a long lead time between successful tenders and breaking ground. Due to these delays, businesses experience a small drop-off in staff who decide to leave for existing or longer-term projects that provide them with greater financial stability. To try and minimise staff turnover, members agreed that companies in the region are putting a heavy focus on social value and local benefits to attract and retain members of staff. Members were proud of the projects on which they worked. One project in particular, a medical staff training facility, could not only bring new entrants into the construction industry and offer opportunities for apprentices to learn the trade, but also offer the same for the medical field and help recruit medical professionals in the North of England.

Projects like this will be central to improving the employment rate in the North of England. With CITB's Construction Skills Network estimating 1,580 new recruits will be needed in the North East, and 5,080 in the North West every year until 2027, the challenge is apparent. The North of England is facing negative employment growth and members raised the consistent issue in improving the perception of the construction industry with young people, as well as parents and teachers. There is now work being done to attract young people into the industry through members giving careers advice at local schools and working closer with teachers to provide career guidance.

Workplace and wider industry culture will be key to overcoming this employment gap and attracting new talent to the sector. All members agreed they were actively trying to foster more diverse and inclusive organisations, and one member said they had recently started blind recruitment processes, so the best candidate gets the job. Another member stated they have started to work within prisons to attract ex-offenders into the industry where they can earn a good wage and have a good career prospect.

In today's market, organisations must maintain a competitive edge, and members commented that they had started heavily investing in data and innovation. It was noted these are long-term plans, so many have not started reaping the benefits. However, one member said they are working with 'digital twins' to test how market products like heating, ventilation, and air conditioning systems work in practice in a range of domestic properties to better understand shortfalls and how to counter them. This has already saved money on would-be pilot projects and could potentially attract a new generation to the sector who are more interested in digital and technology-based skills.

Midlands and Eastern

The Value of Company Benefits

Written by Daisie Rees-Evans, Policy Development Manager

Employment in construction for the Midlands and Eastern region accounts for 22% which is reflective of the large share of major projects in the area. In addition to major projects such as Sizewell C and HS2, members suggested the majority of the projects in the East Midlands and Eastern region are focused on boosting employment opportunities on a long-term basis rather than the typical boom and bust cycle seen across the UK. The aim is to help keep a consistent flow of people working in construction within that region which can then help reduce the skills shortage.

The rise in the cost of living has had a significant impact on people's livelihoods and companies who are dedicated to looking after their employees have had to inject cash into their workers' pay packets either as a one-off or as an agreed percentage increase to their annual salary. Those who live in the East of England often commute down to London for work due to the large proportion of construction activity and high wages. Therefore, those operating in the East have a need to remain competitive either through salary or through benefits.

In addition to retaining workers, businesses are still finding it difficult to recruit specialists and members suggested that it is very much an employee's job market, with many technical workers demanding higher than usual salaries due to their demand.

Family businesses who have a 'good' company culture are already reaping the rewards when it comes to retention as staff who are treated well, despite salaries being higher in more competitive regions like London, are more likely to stay on. One member mentioned they are now prioritising worker welfare in order to retain their skilled workforce. A few ways in which this has been achieved is through advocating sincerity and like-mindedness between the staff, so they are more inclined to be productive and be there for one another both on and off the job. By adopting this approach, overall, they have seen an increase in quality and a better work environment with a diverse workforce who want to stay and progress their careers with the business.

Whilst on the topic of recruitment, there was a discussion on the need for crucial roles to have more formal training processes and to have clearer routes for progression within the industry to attract new talent into the various sectors and roles. As with any

industry, whilst technology and consumer values have changed, businesses have to adapt and create new roles which were not necessarily there 10-15 years ago. For example, sustainable projects have grown in demand and large companies now need their own dedicated sustainability and social value departments to deliver on these expectations. However, with this sudden growth, the industry has seemed to be slow in creating formal routes to these roles which can create difficulties in recruiting staff with experience and knowledge in this area.

Despite these challenges in the region, businesses are willing to adapt, and many are investing in tools and technology, as well as worker benefits, to set them apart from others in the region.

South West

Adapting to Geographic and Population Challenges

Written by David Barnes, Policy & Public Affairs Manager - UK

The South West of England has the highest proportion of citizens aged 65 or over and this was reflected in the type of projects that were discussed by CIOB members during the South West roundtable.

The Future Hospitals Programme, a long-term programme of change set to transform how care is delivered, is active across Plymouth, Devon and Cornwall through investment in integrated clinical services, digital assets and estates. The Programme includes capital to build new hospitals as well as modernising existing facilities. Members who work on the Programme commented that it could make a positive difference to the community over time, bringing care 'closer to home' and avoid people coming into acute hospitals.

Of course, Hinkley Point C continues to be the main project driving infrastructure across the region and members noted similar situations faced in the Midlands, where larger scale projects are hoovering up resources such as materials and skilled workers.

Attracting and retaining workers was highlighted as a major barrier for starting and completing projects. The South West has one of the lowest median pay among construction employees, about 8% below the average across UK construction. Members suggested the lack of competitive salaries has meant that workers – particularly younger generations without families – are more tempted by London and South East wages. However, those reaching family age are starting to see the wider benefits of living in the South West, rather than chasing salaries.

In addition to the lack of competitive salaries, transport networks were another consistent barrier for starting and completing work. One member mentioned that a specialist sub-contractor they used – from a different geographical region – would regularly refuse travel to Falmouth because of disruption caused by roadworks, road closures and diversions nearby. The issue has become so significant that the sub-contractor felt travelling to the area is simply unaffordable and unviable due to delays and has since declined further work.

All members stated a preference for recruiting locally, where possible, for environmental, geographical and social value reasons. However, the ageing profile of the South West also translates to businesses, where a number of the smaller, more specialist contractors and material suppliers are approaching retirement age. This is presenting a need to look towards other regions for suppliers and is impacting the pledge by many businesses to work with local suppliers where possible. Additionally, with the push towards more energy efficient buildings, members noted there is a lack of local suppliers of modular products, fuelling the need to work with suppliers further afield, which is at odds with the principles of carbon reduction.

Aligned with this, SME representatives highlighted numerous supply chain challenges over the last 18 months, particularly sourcing 'specialist' materials or products which, in the past, came from a single supplier. Inflation has also pushed the price of products up and has meant that some businesses are being forced to buy as much stock as possible when there is availability and ultimately having a negative effect on cashflow.

The South West is clearly in a unique position both from a demographic and geographic point of view. The South West profile points towards a shift to greater levels of housing repair, maintenance and improvement work, perhaps reflecting to the need for homes to support the ageing population. Additionally, the major projects on the regional profile on page 26, indicate work is ongoing to improve transport links.

The construction sector has an opportunity to continue to support the ageing population in the region and further research, training and qualifications could also centre around adaption techniques for buildings, to meet the population changes. However, the barriers and limitations with transportation to certain areas of the South West must be addressed if the construction industry is to truly flourish.

London and the South East

Fostering Future Growth Through Adaptability

Written by David Parry, Parliamentary & Public Affairs Officer

The members participating in the roundtable came from a variety of backgrounds including some who worked for large scale contracting companies, some who own or are employed by smaller SME organisations and some from specific sub-contracting technical disciplines.

A key theme from the discussion was the need for businesses to adapt and diversify to ensure they survive in the currently tough economic climate. Members noted that they had to adapt their business operations to take into account new responsibilities under recent legislation such as the Building Safety Act 2022, including creating new branches of their business to deal with legacy issues in buildings, noting particularly that these legacy works extended to buildings of a variety of types including student accommodation and hotels.

Members in the region stated that they were fairly optimistic about the pipeline of construction work across the London and the South East regions. However, while this paints a positive picture of two of the largest regions for construction in the UK (accounting for a combined 34.5% of construction output in 2022), attendees noted some serious barriers to both London and the South East growing further work. Predominantly, it was highlighted that inconsistencies and uncertainty in the current planning system presented the largest barrier to new work in terms of delays getting applications to committee, delays in validating applications and the inconsistent application of planning laws.

When asked about other barriers to starting or completing construction projects several other concerns were highlighted. Unlike elsewhere in the UK, London and the South East is not experiencing the same levels of difficulty in recruiting construction workers as they represent key economic centres in the UK. Instead, the primary concern has been in recruiting skilled and competent professionals. In particular, recruiting professionals with experience and qualifications in sustainable construction practices was highlighted as a particularly prevalent barrier given the varying geographical typographies and ecological considerations present in many parts of the South East. Members pointed to a study from the Institution of Engineering and Technology to demonstrate the gap between the skills needed and

the actual skills held from a sustainability perspective as the report highlighted that only 7% of engineering companies in the UK said that they had the skills needed to fulfil sustainability strategies.

Further to this, some members added that they are unwilling to upskill new recruits in sustainability practices as many are being poached by larger organisations working on large scale housing or infrastructure projects. If this is the case then SMEs that are paying out of their considerably smaller resource pools to upskill employees and are not reaping these benefits, therefore disincentivising them from providing their employees with the necessary skills to future proof the built environment.

Members consistently noted that these challenges have ushered in a new era of adaptability, with businesses having to act smarter, procure and purchase in more creative ways and work in a more collaborative fashion with their partners. It was also noted that many organisations are diversifying, in some case buying-out sub-contractors, which helps to alleviate issues with the supply chain collapsing. So, while we must be cautious about the prospects of construction going forward, we can at least hold the current circumstances as a positive for the industry.

Scotland

Scotland's Skills Shortages

Written by Jocelyne Fleming, Policy & Public Affairs Officer - Scotland

Much like the other jurisdictions across the UK, Scotland's construction sector continues to face a number of challenges. Frequently raised during our roundtable was the ongoing skills shortage being faced nationally. Not only did members cite a shortage of trained and qualified people in Scotland, but also noted the added complex posed by Scotland's rural and island geography; getting the right people in the right places continues to prove challenging.

Members of the roundtable are actively involved in several infrastructure projects across the country, from creating new housing in island communities to delivering education and healthcare assets across the Highlands. These projects will deliver considerable community benefits as well as provide a boost to local economies and creating local jobs.

There was consensus around the room about the negative impact on rising interest rates on clients, especially in the public sector. In order to deliver projects, local authorities use a combination of central grant resources and borrowed funds, with inflated

interest rates borrowing is more expensive. These inflated costs are coupled with rising prices for labour and materials, which means funds do not stretch as far as initially estimated. An example was provided from a Local Authority representative, who noted that increased interest rates and the related impact on the costs of borrowing could, in their region, mean the difference between delivering two new schools or just one in the region.

CITB's Construction Skills Network data suggests that an estimated 3,910 annual new entrants to the construction industry will be needed in Scotland to address skills gaps and sector-wide churn. Members from across the length and breadth of Scotland, representing both rural and urban regions, identified a shortage of qualified candidates that poses significant risks to recruitment and retention in a range of positions both onsite and off. Members suggested this shortage was fundamentally caused by a lack of available people and too few entrants to the sector. It has also been exacerbated by a lack of loyalty to companies in the current market and loss of Scottish talent to other jurisdictions resulting from the increase in remote working.

When considering the possible means of closing the skills gap, and in conjunction with a discussion about diversity and inclusion, members suggested that increasing the diversity of the workforce was integral. It was noted that this would require a shift in culture to one that is more inclusive if we are to not only attract but retain a diverse workforce. Some of this work was noted to be underway, especially within the public sector and Tier 1 organisations, which were noted to have diversity processes in place or under development.

There is an appetite for innovation in Scotland. However, there were notable challenges in adopting innovative practices, such as research and development for modern methods of construction. Scotland's unique geography, in particular the rural Highlands and islands make the transport of materials difficult. Further, the ongoing skills gap was also problematised in discussing innovation, as members highlighted the difficulty in finding people with the necessary skills to implement these technologies and methods, especially in remote development areas.

Perhaps unsurprisingly, given the mounting pressures facing Scotland's construction sector, members noted that fiscal cutbacks resulting from 'lowest cost' tendering pressures and the shortage of qualified, competent people have perpetuated health and safety shortcuts. Further, time, cost and workload pressures were cited as the main contributors to poor mental

health within the industry. For those struggling with mental health, there was also a noted lack of sufficient support and communication available.

The construction sector is an important component of Scotland's economy and integral to realising the Scottish Government's housing and net zero targets. However, the industry faces considerable financial pressures, exacerbated by an ongoing skills shortage.

Wales

Liability, Legislation and Planning Processes – Why We Need to See Change

Written by David Kirby, Policy & Public Affairs Officer - Wales

The Wales roundtable saw a range of company sizes, including a Tier 1 contractor with projects all over Wales, though most were SMEs. Most members were involved in some way with housing and property maintenance. Some members were also involved in healthcare and education projects with Local Authorities across Wales, primarily focusing on refurbishment and maintenance of these buildings.

Wales has a steady stream of projects mainly due to the high number of publicly procured construction projects, particularly around urban regeneration and affordable housebuilding. With this does come challenges, however. Notably, members agreed that there was a level of "bureaucracy" – particularly around accessing funding and with planning – in Wales that was difficult to navigate, leading to delays and wider issues with recruitment and retention of staff. Legislation such as the Wellbeing of Future Generations Act does create a level of socioeconomic and environmental responsibility that is not as present across the rest of the UK, however, members agreed the Act was broadly positive, and resulted in projects generally having a positive impact once they did get off the ground.

At present, projects have to go through long-winded approval processes before actually starting, in which time budgets need re-forecasting to better reflect the new costs of materials. One member, who builds affordable houses with Welsh Government, said that while there was some back-and-forth, the problems were rarely insurmountable. When reflecting on the differences between public sector projects it was noted that England was less supportive than Wales which can be quite attractive for companies looking for work.

Inflation was also, unsurprisingly, cited as a barrier for projects in the private sector. Members suggested that inflation was the cause for risk being transferred to the contractors, and as such before starting a project there are a number of clarifications that need to be made in contracts, leading to further delays and adjustments for material costs.

In light of the above, one member questioned why anyone would want to start working in Wales. CITB's Construction Skills Network forecasts show employment levels in the sector are due to stay relatively consistent between 2022-2027, meaning significant recruitment of around 1,820 people to the sector will be needed to keep up with expected growth. Members recognise this stark picture, saying that the pool of people to hire was no bigger than the previous year. This is just one of the challenges faced by organisations in Wales, with all members noting that they were facing competition with, and losing staff to, higher-paying Tier 1 Contractors in Welsh cities and across the border in England. Organisations have increased their benefit packages to make them more attractive propositions and started to upskill their existing staff to varying levels of success.

Questions were also raised about why anyone would enter the sector with the increased liability workers now face. One member said that this was particularly true for site managers and raised concerns that "highly qualified" did not always mean "competent", despite their high salary demands. Members noted that increasing diversity of the talent pool and engaging with younger people would be key to solving this issue. One member gave the example of having worked with disadvantaged school children and providing them work experience in their organisation, which often resulted in these people developing a career in construction.

With so many members of the roundtable working in the public sector, it is clear that there are issues around public procurement that must be addressed. By addressing this issue, other concerns such as attracting people to enter the sector will start to be unpicked further as projects can progress quicker and therefore earning potential could increase. This is something we at CIOB are aware of and have been working with the Senedd and UK Government to address.

Ireland

Viability, Policy Consistency, and a Shrinking Pool of Talent

Written by Joseph Kilroy, Policy & Public Affairs Manager – Ireland, Scotland & Wales

The challenges faced by the construction sector in Ireland broadly divide into three categories: recent challenges, such as inflation and supply chain challenges wrought by – among other things - the war in Ukraine; medium term challenges such as attracting staff to fill current vacancies; and long term challenges such as attracting the next generation of employees, diversifying the work force, and improving mental wellbeing. There are also challenges arising due to an unstable policy environment such as restrictions on renewable energy, regulations acting antagonistically to the adoption of Modern Methods of Construction (MMC), and the uncertainty around the new Planning Bill.

The roundtable had members from a variety of sectors. Several members are involved in projects with the Department of Education which, depending on scale, tend to have a significant impact on an area as they are typically providing schools. One member's business is involved in social housing projects across Ireland, some of which involved working with the Land Development Agency. These projects have a significant impact regardless of size due to the shortfall in outside market housing supply.

In the residential sector there has been a massive slowdown due to these viability challenges, particularly apartments, which is the housing typology national policy is trying to incentivise. There is a particular challenge in the commercial property sector, which has dropped off almost entirely in Ireland's cities. Spec offices are no longer being built, and many projects are being mothballed. This is due to a reduced demand in the commercial sector as more people work from home, firms are reducing the number of people they are directly employing, and inflation is causing clients to push back their plans.

In terms of renewables and energy, the recent Irish government announcement that offshore wind projects will be restricted to two specific areas in the country has led to over 50 projects being binned. Nevertheless, there remains a huge opportunity in renewables in Ireland. If the Government takes the opportunity Ireland could be a net generator of energy. The need for energy sobriety means data centres are also stalled, particularly around Dublin.

Attracting staff is a medium-term problem that has been exacerbated by changed work practices post-pandemic. What employees are looking for has changed, and it is no longer all about money according to members. Flexibility and location are now prioritised. The recruitment environment is such that companies are now actively seeking graduates, rather than vice versa. Graduates are being recruited while still in college; often working part-time while studying. Members of the roundtable representing academia claimed that – jobs market-wise - graduates have never had it better. Conversely, industry representatives agreed that it is a challenge finding anyone to fill any roles these days across different skillsets. There was broad agreement that – like the rest of the economy – the sector needs to adapt to homeworking if it is going to attract new staff.

Emigration is also a factor, with many in the sector that left Ireland not returning due to housing and cost of living challenges in Ireland. Members agreed that to make up for this loss of talent, the Government needs to have clear messaging on immigration - we need people!

There is work being done on MMC but there are big barriers - particularly the limited supply chain for MMC materials in Ireland, and the lack of a significant pipeline of activity. Unfortunately, this means it still makes more financial sense to stick to traditional build. There was agreement that industry has to move to MMC but investment from the Government is needed. At the very least there needs to be a modernisation of policy, because as it stands the policy and tax environment act antagonistically to the Government's stated goals for innovation in the sector. For example, fire regulations are not compatible with timber frame construction.

Conclusions

When looking at the quantitative and qualitative data it is clear there are serious issues present in the construction sector at both a macro and micro level. We urge policy makers to take a step back and understand the local context surrounding issues such as the skills gap and materials shortages to avoid ineffective catch-all policies.

Construction, as an industry, is complex due to its structure and volatile nature. If one issue arises then often this will have a knock-on effect felt by the entire supply chain. The materials shortage across the UK, Ireland and in global markets, is creating difficulties for all projects, regardless of size. With many having to re-evaluate or postpone work until outgoing costs plateau. At present, many of the biggest infrastructure projects with large resource pools have the ability to bulk buy materials when they become available. Those smaller, more regionally based businesses are unable to compete and are more reliant on local merchants to supply them with the tools and materials needed to complete work.

The knock-on effect here is the brunt of inflation increases, combined with materials shortages, is being felt by those throughout the supply chain in the guise of constrained budgets. This is causing uncertainty in the construction workforce, and we are seeing a migration of people to large scale, long-term projects and even into other industries which are more stable. We can see the movement of people in the data and in our discussions with members as many opt to live in the region and work on more lucrative projects elsewhere. Some will even move out of the region to places such as London where the pay is higher, and the night-time economy is more active.

To provide an incentive for workers to stay in their geographical area, we continue to call for policymakers to implement long-term policies, such as a national retrofit strategy.

Upgrading the energy efficiency of existing homes through domestic repair, maintenance and improvement, is an example of a long-term socially valuable project that will support the economy and boost the construction workforce while improving the health and wellbeing of residents. This work is labour intensive and grounded in local supply chains, making it ideal to maximise employment within the construction sector, support regional growth and provide opportunities for creating training and retraining paths in low-carbon skills.

We know there is still a consistent demand for construction workers despite economic uncertainty, with the CITB Construction Skills Network report indicating that almost 45,000 extra workers will be needed each year to meet demand between now and 2027. However, the poor image of construction has continued to have a detrimental impact on businesses' ability to recruit and retain people with the right skills and attitudes.

Throughout this report it is clear that each region and nation is facing its own challenges and opportunities in terms of recruiting and retaining construction professionals. We know that having a positive and supportive company culture is becoming more important for Millennials and Gen Z which only has a positive knock-on effect for the existing workforce in terms of retention and for attracting new talent. Many who work in construction often state that they are proud of the work they undertake and the impact this has on their local communities. By having closer ties with the community on projects, local people will have more opportunities to learn and become involved with the industry. In addition to changing current misconceptions on the industry.

Construction has, in the past, heavily relied on a migrant workforce to fill many of its roles. With significant proportions of EU migrants returning home post-Brexit, instability arising from the Covid-19 pandemic and the ongoing conflict in Ukraine, we must focus on addressing the teaching of construction skills to foster the 'home grown' workforce that can push forwards construction as a key marker of economic health.

We have consistently worked alongside other industry bodies to promote access to the construction industry and ensure it is seen as a viable career option. The construction industry offers something for everyone, regardless of the qualifications held. There are some entry-level roles that do not require any qualifications at all and for others, there is a need to complete a relevant college course, degree, or apprenticeship – many of which are supported by companies.

We urge policymakers to work alongside professional bodies, like CIOB, to understand where the current education systems, such as apprenticeships, do not work for the industry and how new innovative education methods such as the built environment GCSE implemented in Wales can introduce a new cohort of professionals into the sector.

Skills and employment support can also be applied through a regional lens and led by local leaders, councils and metro mayors to ensure the complexities

of regional diversity and challenges are understood. A current example is the Local Skills Improvement Plan (LSIP) which is helping to reshape skills training provision to meet the local needs of employers in the area. CIOB has fed into the LSIP to highlight the importance and complexity of training individuals for construction roles.

In early 2022, the UK Government released its long-awaited levelling up strategy which aimed to reduce regional disparities across the country and give everyone the opportunity to flourish, regardless of geographical differences.

We saw from our roundtables that the South West of England is particularly struggling to gain access to construction materials given the difficulties in transport access to the region. As part of the Levelling Up & Regeneration Bill, the UK Government could consider cash injections for hard-to-reach communities for essential repair, maintenance, and improvement projects, such as fixing potholes. These interventions will benefit local communities and improve integration with other regions that make up the UK.

Focus on industry-based training and long-term projects to regions that have historically been neglected due to their geography and lack of inward investment should also be considered as this could unlock economic potential within the regions.

Indeed, even if we look at the Midlands, most construction activity and investment is targeted at the larger cities such as Birmingham. Whereas market towns and other areas within that region have been left-behind due to its poor connectivity and skilled workers moving to seek better paid jobs. Therefore, greater attention is needed at a local level for industries to succeed and deliver on the UK Government's levelling up ambitions.

The potential for the construction industry to provide far more and far better outcomes is clear. But it needs to operate in a more conducive policy environment which understands regional variations, as opposed to one-size-fits-all policy making.

If the challenge for policy makers is to rebalance the economy, then construction is the answer.

Notes & References

- † We recognise the unique context of the devolved nations and regions of the UK and Ireland. However, for brevity, the term 'region' is regularly used throughout the report to cover England, Wales, Scotland, Northern Ireland and the Republic of Ireland.
- * This figure includes those employed in construction related professional services such as civil engineers, surveyors, and architects
- ** This figure is compiled using the construction (section F) standard industrial classification (SIC) code. For construction (section F) this amounts to work done by building (SIC 41), civil engineering (SIC 42) and specialist construction firms (SIC 43) on sites.
- ‡ Full-time male earnings are used here to avoid distortions in comparisons given the exceptional male bias in the construction workforce. Currently, available data on women in construction roles is inconsistent across the UK and Ireland. This restricts the analysis of female earnings and the comparison with their male counterparts. Therefore, to avoid painting a false picture and narrative for the sake of drawing direct comparisons between parts of the of the UK and Ireland, only male earnings data

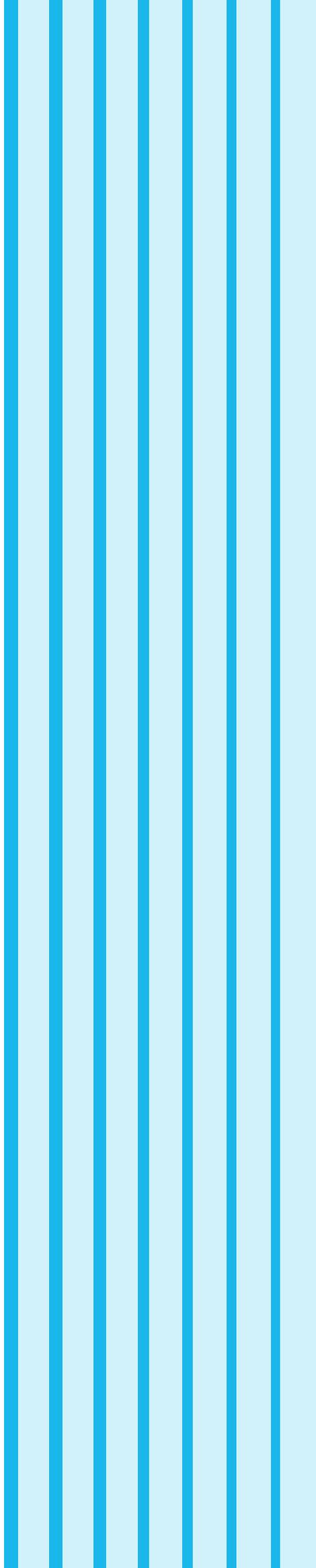
has been used and analysed within this report. Further information about this can be found on our blog 'The true social and economic value of construction – digging deeper into the data' accessible here: <https://www.ciob.org/blog/the-true-social-and-economic-value-of-construction-digging-deeper-into-the-data>

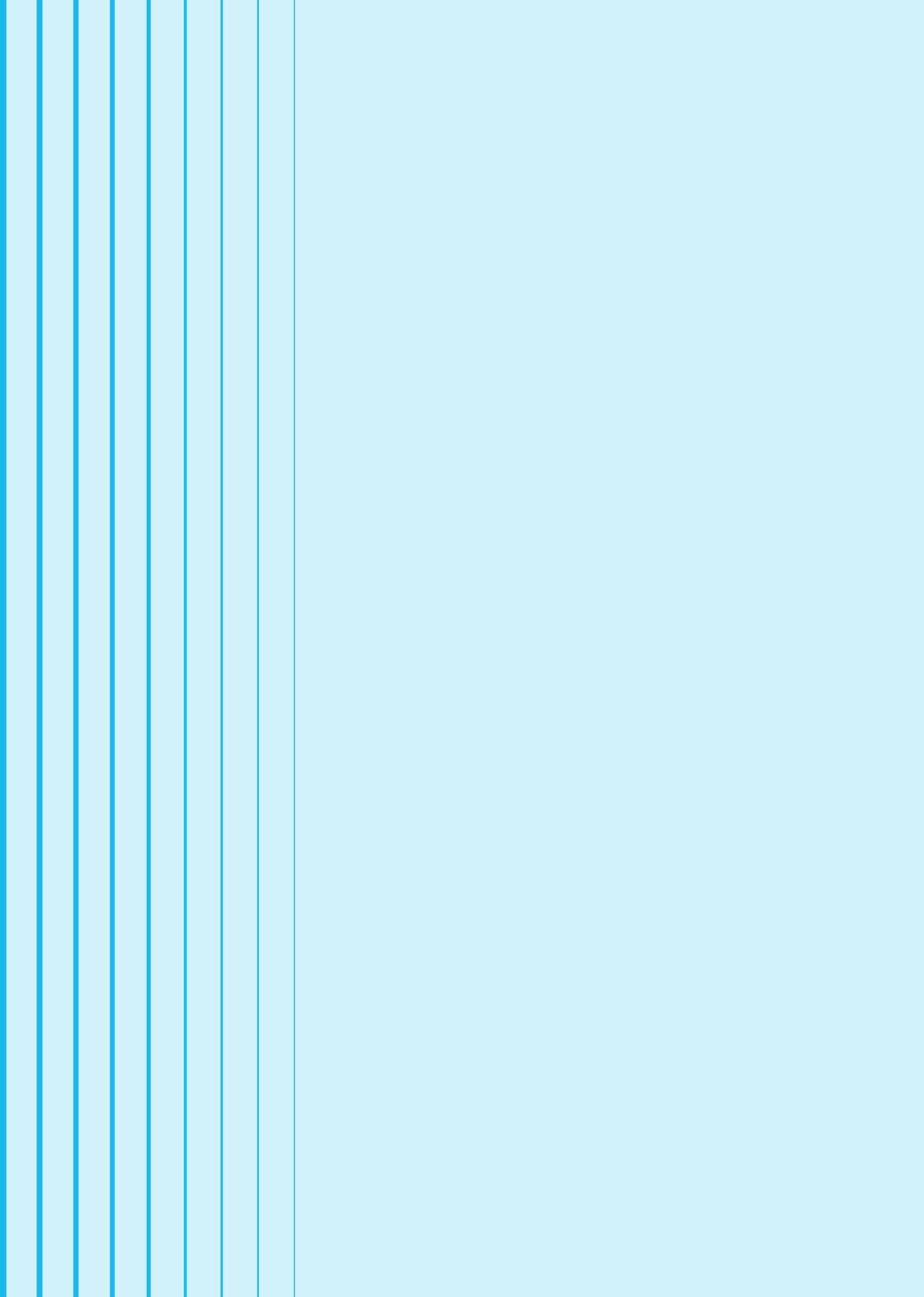
Composition of Data

1. An error was found in the 2022 third quarter orders figures. Corrections have been made.
2. The Office for National Statistics (ONS) regional construction data are not National Statistics. Given the challenge of providing accuracy inherent in allocating work to specific regions and nations, they represent best estimates. These data series are subject to revisions.
3. It should be noted that while work may occur in one region or nation, the influence and economic value this work generates is often spread far wider in terms of materials supply, jobs, and the companies undertaking the works.

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