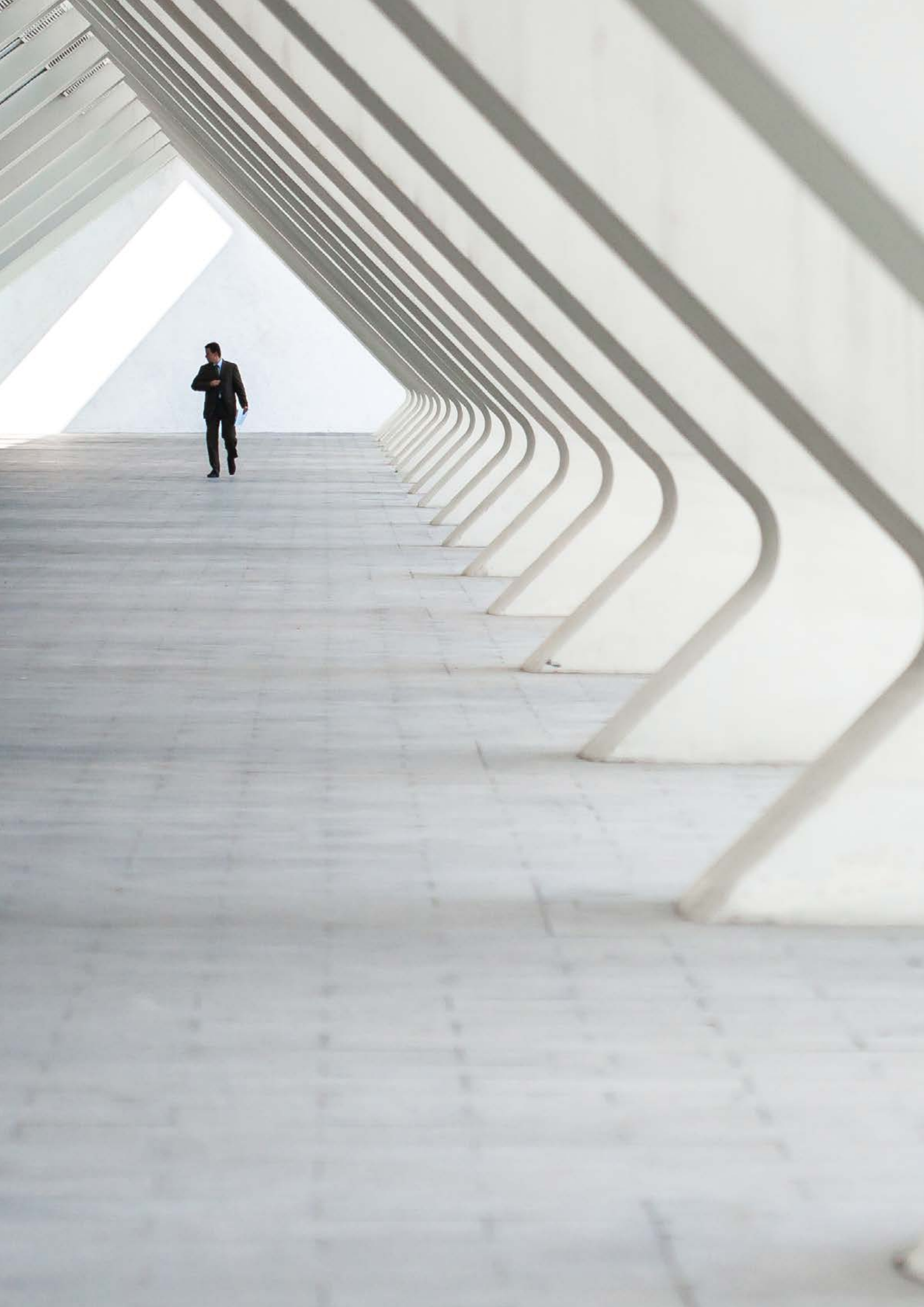


Construction Industry Forecasts 2023-2025

Autumn 2023 Edition - £210





Contents

Overview	4
Upper Scenario	18
Lower Scenario	20
Economy	22
Private Housing	30
Private Housing RM&I	44
Public Housing	52
Public Housing RM&I	58
Public Non-housing	64
Public Non-housing R&M	74
Commercial	78
Private Non-housing R&M	92
Industrial	94
Infrastructure	100
Infrastructure R&M	114

© 2023 Construction Products Association. All rights reserved.

This document is licensed for the exclusive use of Members of the CPA and purchasers of its economic forecasts (£210).

Please do not publicly distribute this document.
Additions to the distribution list can be made by
contacting the CPA at 020 7323 3770.

DISCLAIMER

All construction figures (starts, completions, orders and output) refer to Great Britain.

All output figures are in 2019 constant prices using the historic figures from the Office for National Statistics (ONS) – as at 10 October when the Forecasts were finalised.

All new orders figures are in 2019 constant prices using the historic figures from the Office for National Statistics (ONS).

The information in this booklet has been prepared by Construction Products Association and represents the views of Construction Products Association without liability on the part of the Construction Products Association and its officers.

Overview

Construction output is forecast to fall by 6.8% in 2023, broadly unchanged since the 7.0% forecast three months ago, as activity has largely evolved over the Summer as expected and activity continues to fall away in the two largest construction sectors, private new housing and private housing repair, maintenance and improvement (rm&i). Looking to next year, construction output is now forecast to fall marginally, by 0.3%, which is a revision down from the 0.7% growth forecast in Summer as a slower UK economic growth forecast for next year has led the recovery in private housing new build and rm&i to be pushed back to 2025.

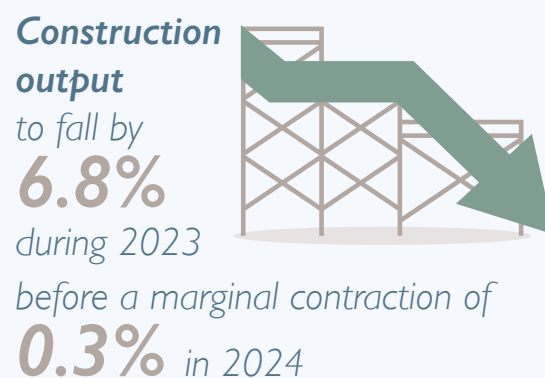
With annual inflation in the UK economy slowing as expected, more than a year on from the peaks in energy, oil and commodity prices in Summer 2022, interest rates appear to be peaking lower than expected in the Summer forecasts, which is positive for the UK economy near-term. However, inflation is likely to be stubborn over the course of the next 12-18 months, particularly after recent oil price rises. As a consequence, interest rates are likely to remain at peak for longer than previously expected and, as a result, this is likely to lead to slower growth in the UK economy next year and a slower recovery in the housing market.

Total construction output is forecast to fall by 6.8% in 2023, which is a marginal upward revision compared with the 7.0% forecast back in July. Output is forecast to fall by 0.3% in 2024, downwardly revised from the 0.7% growth in the Summer forecasts. Within the overall forecast figures for next year, there are mixed fortunes across the different sectors but the key driver of changes to the 2024 forecast for total construction output is a downward revision to both

private housing new build and rm&i from 2.0% to 0.0%.

Risks to the forecasts for both the UK economy and construction continue to remain on the downside but there are also positive risks. As a result, alongside the forecast it is important to note the CPA's [Key Risks](#) and also the [Upper Scenario](#) and [Lower Scenario](#) in addition to the forecast.

Private housing is the largest construction sector worth £40.8 billion per year. Demand in the housing market and private house building sector fell sharply in 2022 Q4, following the government's Mini



Key Points

- Construction output falls by **6.8%** in **2023** and **0.3%** in **2024**
- Private housing output falls by **19.0%** in **2023** and remains flat in **2024**
- Private housing repair, maintenance and improvement to fall by **11.0%** in **2023** before remaining flat in **2024**
- Infrastructure output to fall by **0.5%** in **2023** and fall by **0.1%** in **2024**
- Industrial output to rise by **3.5%** in **2023** before falling by **8.7%** in **2024**

Budget and consequent spikes in mortgage rates. Demand briefly improved from a low point early in 2023 after the government's reversal of its Mini Budget policies but this proved to be short-lived and the persistent inflation and the Bank of England's interest rate rises led to a further sharp fall in housing demand with no further improvement in Summer and early Autumn.

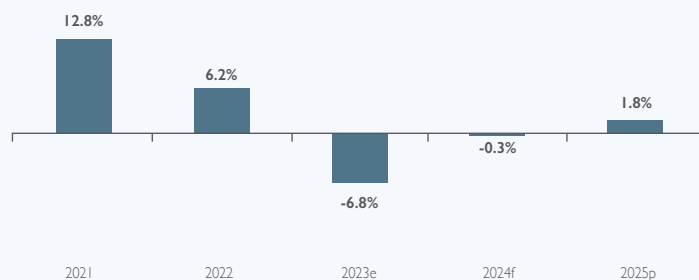
The Bank of England's interest rate is likely to have peaked already at 5.25%, below the previously expected peak

of 5.75% in 2023 Q4. This is likely to lead to small falls in mortgage rates, from a high base as lenders not only price in lower peak rates but also certainty over peak rates earlier than anticipated three months ago. However, much of the damage for 2023 and the first half of 2024 has already been done given that reservation rates and forward sales for some of the major house builders were between 28% and 32% lower than a year earlier in Summer 2023. Smaller house builders are not only affected by the fall in demand but they are also affected by supply side issues such as nutrient and water neutrality that are adding to pre-existing planning issues and adding further cost problems, harming financial viability of building new properties. So, private housing completions and output are likely to fall by 19.0% this year with starts taking a bigger hit and falling by 25.0%, unchanged from Summer. Whilst interest rates are likely to have peaked lower than expected, they are likely to remain at this level for longer than expected. In Summer, the CPA was anticipating that interest rates would begin to fall from a higher peak in 2024 Q2 but now rates are likely to remain at peak throughout 2024 due to stubborn inflation. Consequently, it is difficult to see demand recovering before 2025, unless the housing market and house building sectors see a significant demand stimulus in the Autumn Statement in November. As a result, private housing completions and output are expected to remain flat in 2024 whilst starts are expected to rise by 4.0%, skewed to the second half of the year.

Private housing repair, maintenance and improvement (rm&i) is the second largest construction sector worth £28.7 billion per year after reaching historic high levels during the pandemic boom that peaked in March 2022. Basic repairs and maintenance tends to remain stable as it cannot be delayed indefinitely but smaller, discretionary improvements work fell away

last year. After these falls, it has broadly remained flat so far this year according to firms in the supply chain (merchants and small contractors). Larger improvements projects work, however, was maintained in 2022 with many homeowners having finance available and planning permission, combined with concerns that delaying projects would merely drive the cost up further. As highlighted in previous forecasts, however, according to data from Barbour ABI, planning applications for larger residential improvements

Construction Output (% Growth)



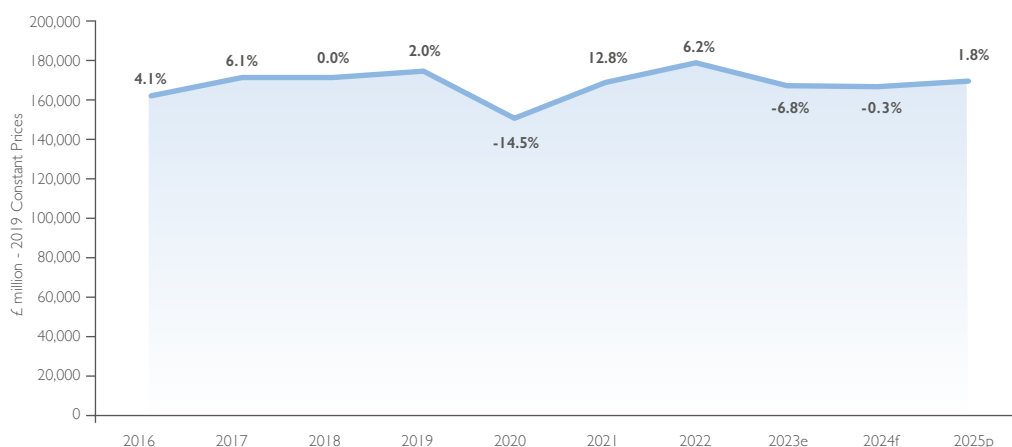
Source: ONS, Construction Products Association

Private housing output
expected to **fall** by
19.0%
in 2023



and **remain flat** in 2024

Construction Output



e = estimate, f = forecast, p = projection

Source: ONS, Construction Products Association

work fell by 19.0% last year and this is currently feeding through to a lack of larger improvements projects this year. This is particularly the case given that fewer property transactions in the general housing market has meant fewer homeowners moving into a home that would then see improvements work within 6-9 months of moving in. Activity on energy-efficiency retrofit, primarily insulation, and solar photovoltaic work, remains strong and this activity shows no signs of abating over the next 12 months. On government programmes to stimulate energy-efficiency, there is little sign of effective delivery of both ECO4 and the Great British Insulation Scheme, formerly ECO+, but the value of vouchers for the Boiler Upgrade Scheme has been increased and this is likely to improve take-up, but from a low level. Cladding remediation, however, continues to provide a steady stream of activity and is likely to do so into the long-term. Overall, private housing rm&i output is expected to fall by 11.0% in 2023 before remaining flat in 2024.

Infrastructure is the third largest construction sector and it is worth £27.8 billion per year. The focus tends to be on the large one-off projects such as Hinkley Point C, the Thames Tideway Tunnel and, in particular, HS2. This is particularly the case in light of the government's announcement in October that HS2 between Birmingham and Manchester would be cancelled although this has little impact over the forecast period. Current workloads on HS2 Phase One

Public & Private Sector Construction Output

£ million	2021	2022	2023	2024	2025
Change on previous year	Actual	Actual	Estimate	Forecast	Projection
Public Sector inc. PFI	41,614	40,943	40,202	40,293	40,942
	9.7%	-1.6%	-1.8%	0.2%	1.6%
Private Sector	128,998	140,303	128,631	128,033	130,391
	13.9%	8.8%	-8.3%	-0.5%	1.8%
Total Construction	170,612	181,246	168,834	168,326	171,333
	12.8%	6.2%	-6.8%	-0.3%	1.8%

Source: ONS, Construction Products Association

between Birmingham and Old Oak Common remain at a high level and the likelihood is that, in the medium-term, work will restart between Old Oak Common and Euston Station, although the latter remains highly dependent on reducing the cost of the project significantly and government's ability to attract private investment to finance the project. In addition, the Prime Minister's announcements of £36 billion of local regional and regional projects around the country will not start until 2029 at the earliest, if the projects occur at all. Greater concerns revolve around the government's announcements in Spring of project delays in the roads sub-sector, which will see many projects

pushed back from RIS2 into RIS3 and more projects appear to be being pushed back or cancelled than anticipated in the forecasts in Summer. Government continues to state that it is focusing on potholes rather than rail projects although there appears little evidence of this in asphalt sales. A positive risk to the infrastructure forecast continues to be water companies' intentions to accelerate delivery on 31 investment schemes between 2023 and 2025 worth £376 million within a total investment of around £1.6 billion between 2025 and 2030 given consumer concern regarding water quality. There remain questions over whether the capacity is there to ramp up activity quickly given skills and products constraints, however. As a result, this is not built into the main forecast for water & sewerage. Overall, infrastructure output is expected to fall by 0.5% in 2023 before remaining broadly flat (-0.1%) in 2024.

The **commercial** sector was the fourth largest construction sector in 2022 but commercial output is still worth £21.8 billion per year. Commercial activity remains buoyant for the fit-out and refurbishment of existing office space. This activity remains considerably higher than pre-pandemic as the demand for grade A office space continues to remain strong. New contract awards for fit-out and refurbishment fell in 2022 Q4. As highlighted in previous forecasts, firms operating in the sector report that this was temporary due to the political and economic uncertainty following the government's Mini Budget in Autumn 2022 and these appear to have now recovered from the temporary blip. The conversions of existing commercial developments into residential or industrial and logistics remains strong as well. In addition, activity on data centres and biotech facilities is also currently robust. The majority of work in the commercial sector, however, has traditionally been on commercial towers. There are a few large projects in the pipeline, certainly more than was the case in 2021 but the number of new towers projects remains lower than pre-pandemic and one-third lower than when the market peaked in 2017. Furthermore, rising financing costs due to interest rate rises both in the UK and globally are likely to act as a hindrance for new, large investment in commercial towers projects. As a result, the future of the sector near-term will be in fit-out and refurbishment as well as conversions. Longer-term, the potential for 'stranded assets' as minimum energy-efficiency standards are introduced for commercial properties will drive fit-out and refurbishment as well as conversions. Overall, commercial output is forecast to fall by 3.4% in 2023 due to a lack of new towers activity offsetting new work on fit-out and refurbishment of existing commercial developments. Next year, output is now forecast to fall by 1.5% due to the impacts of higher interest rates for longer on financing new offices and retail projects whilst projects down on the ground already prevent sector activity from falling further.

Private housing rm&i
anticipated to **decline**
11.0% in 2023
with **no growth** in 2024



Latest Data

Overall, since the CPA's last forecasts three months ago, firms across the supply chain report activity fell away in Summer and in September, more than anticipated.

Within public housing, housing associations still report affordable housing demand has not experienced a noticeable drop off but that they continue to have to move resource away to prioritise dealing with the existing stock; basic living conditions, building safety and decarbonisation. The G15 group of housing associations anticipates that its house building will fall by around 30.0% as a result although this is likely to be partially offset by the strength of the affordable housing demand and major house builders increasingly moving into the affordable housing space given the sustained demand. House builders in private housing remain focused on completions whilst starts and land purchasing are subdued except in some very selected areas. Demand over the Summer was around 25-35% lower than a year earlier, which was a high base prior to the Mini Budget. House builders are anticipating potentially seeing government stimulus to help first-time buyers in the Autumn Statement in November – like Help to Buy – but there are increasingly mixed messages from government. Infrastructure activity remains strong on both major projects and large frameworks according to firms down on the ground despite all the negative noises and mixed messages from government. There remains client hesitancy signing-off on projects plus a rising number of local authorities are switching finance away from projects due to serious financial concerns plus the rising costs of social and health care. In the public non-housing sector, progress has been slow on the School Rebuilding Programme and the New Hospital Programme. Client decision-making is currently delaying new projects in both sub-sectors according to the supply chain although the concerns regarding Reinforced Autoclaved Aerated Concrete (RAAC), which became a high-profile issue at the end of Summer but was referenced 21 times in the CPA's previous forecasts, may lead to an urgent stream of work despite no new, additional funding being available. Industrial demand is still strong by historical standards for warehouses and logistics but new investment has peaked and output is likely to fall away towards the end of the year. Factories activity from investment decisions made in 2021 has largely now finished and activity down on the ground has already been slowing since 2022 Q4. Factories projects that finished last year were not replaced at the same rate as manufacturers' investment decisions in Autumn 2022 were put on hold due to the economic and political uncertainty. Commercial activity is still strong for fit-out and refurbishment whilst conversions to residential in urban centres or industrial and logistics activity on the edge of cities remains high. In addition, activity on data centres and biotech facilities also remains strong but there are pauses for repricing on new commercial towers projects where main work is not already underway. Firms in public housing rm&i reported in recent months that activity is rising significantly in value terms

as housing associations and local authorities focus on basic living conditions, building safety issues and decarbonisation but, given budgetary constraints and cost inflation, the value of work is being eroded so that we may see the value spent but without providing the anticipated growth in volume of workloads. Private housing rm&i activity continues to fall after the declines last year but energy-efficiency retrofit and solar photovoltaic activity remains buoyant and growing. Overall, activity has been volatile so far this year but Summer activity levels remained poor and there was little sign of a significant improvement in September.

Construction output in July 2023 was 0.5% lower than in June but still 2.8% higher than a year ago and 6.1% higher than in January 2020,

Infrastructure activity

set to **fall** by

0.5%

in 2023 &

0.1%

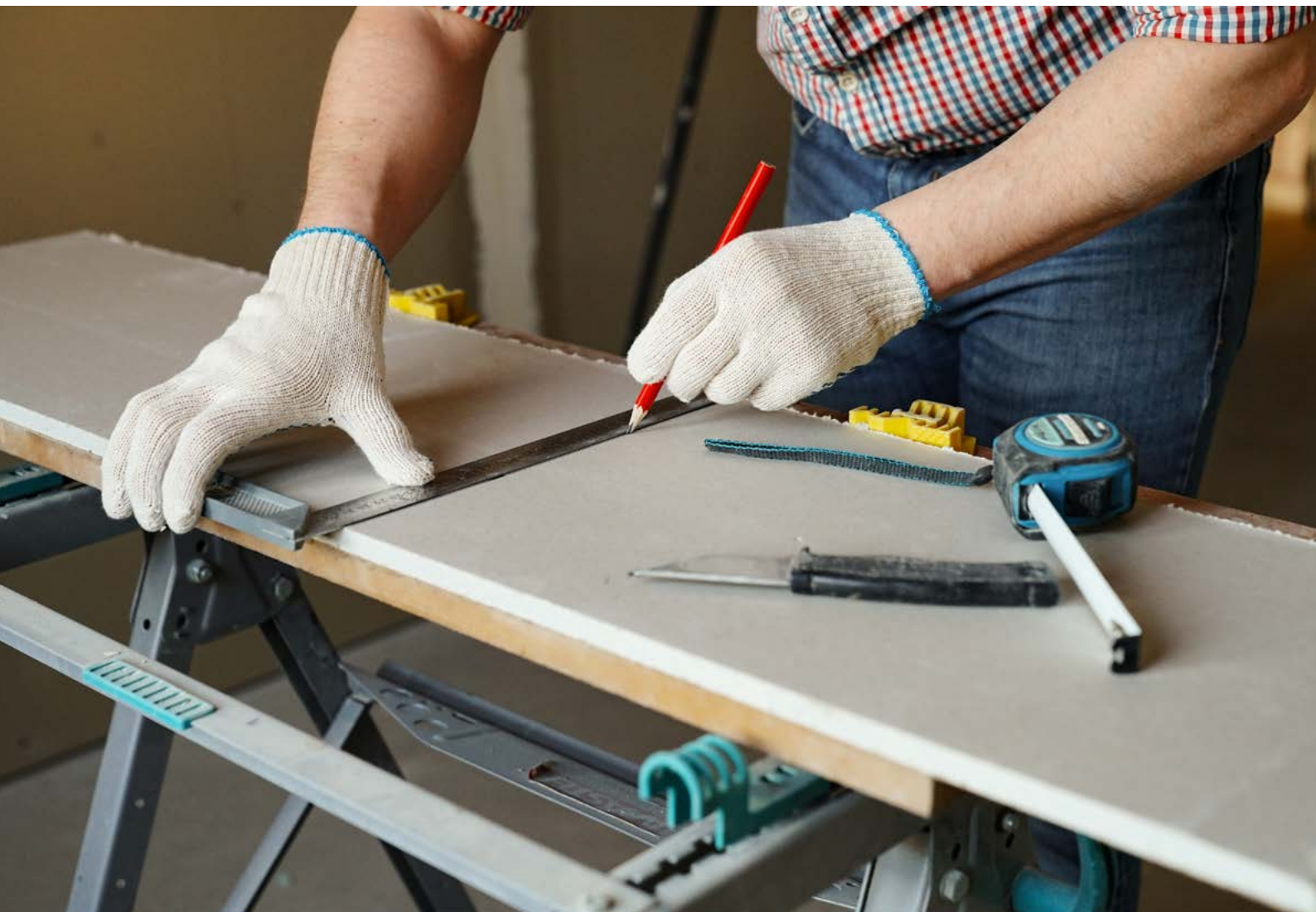
in 2024



pre-pandemic, according to the ONS. The ONS partly attributed this monthly fall to the rain in July and partly to the continued fall in private house building activity.

It is worth noting, however, that the ONS construction output data continues to be inflated by issues in the repair and maintenance data, which particularly affected private housing repair, maintenance and improvement (rm&i) and the CPA has been highlighting this for over one year. According to the ONS, private housing rm&i output in July was 3.9% lower than in June and 0.5% lower than a year ago but it reported that it remained 36.9% higher than in January 2020, pre-pandemic. This is not in line with firms operating in the sector (SME contractors, builders merchants and product manufacturers). As construction inflation slows, this is likely to become less of an issue in terms of the change in private housing rm&i output but it will still leave the output level at an artificially high level.

The issue in the ONS r&m volume of output data appears to occur as the ONS is underestimating price inflation in r&m, which it uses to deflate construction output value and turn it into volume of output. As it is underestimating price inflation, it is overestimating the volume of activity. To illustrate this, construction output price inflation in new housing peaked at 12.2% after the spikes in energy and commodity prices in 2022 according to the ONS (when construction materials price inflation peaked at 26.8%). The ONS, however, estimated that inflation in housing r&m peaked at only 5.9% whilst firms in the sector (SME contractors, merchants and manufacturers) stated to the CPA that inflation in the sector was more than double the ONS estimate. As a result, the ONS has been consistently underestimating price inflation in r&m since Spring 2022 and overestimating the level of r&m output.



Given the ONS data issues for housing r&m, it is more useful to focus on the differing fortunes across the new construction sectors, with a clear contrast between the sectors in which activity is higher than pre-pandemic and sectors in which activity is below pre-pandemic levels. Infrastructure output rose in July 2023 and was 33.3% higher than pre-pandemic whilst industrial output fell away from historic highs earlier this year but remained 14.0% higher than pre-pandemic. Private housing output continued to fall in July 2023 and was 7.9% lower than in January 2020 whilst commercial output in July rose but it remained 25.7% lower than pre-pandemic.

Looking in more detail at recent data for the key sectors, private housing is the largest construction sector and output in July 2023 was 2.2% lower than in June, 12.1% lower than a year ago and 14.1% lower than at the peak last Summer, just before the Mini Budget and the consequent spike in mortgage rates. The fall in private housing demand has been slightly offset by an increase in investor (bulk) purchases and cash buyers plus shifts towards more 'affordable' housing and partnerships for some of the major house builders. This does not help the smaller house builders, however, and even for the majors it is clearly not enough to offset the 20-25% fall in the general housing market and new homebuyer demand so further falls in private housing output are expected over the course of this year.

Clearly, house builders continue to be affected by the fall in homebuyer demand due to higher mortgage rates, which rose sharply in 2022 Q4 before falling back in 2023 Q1 and then once again since May 2023. It is worth noting that even if mortgage rates fall back slightly as interest rates may peak lower than lenders had factored in, they will remain at relatively high rates and affect housing demand medium-term.

Infrastructure output in July 2023 was 0.8% higher than in June and 20.2% higher than a year ago due to projects already on the ground (particularly major projects such as HS2 Phase 1, Hinkley Point C and Thames Tideway) providing double-digit growth. This growth is enough to offset declines in local authority infrastructure due to financial constraints, work stopping at Euston station and the delays/cancellations to roads projects announced by the government earlier this year. There remains client hesitancy in signing off new infrastructure projects due to cost concerns and budget constraints that will affect activity over the next 12-18 months but activity remains at historically high levels currently and existing projects are likely to ensure that output does not fall away significantly near-term.

Industrial output reached its highest ever level in March 2023, due to the long-term structural shift towards online shopping increasing warehouses investment, exacerbated by a short-term spike in online shopping during the pandemic. Plus, factories construction was boosted by capacity-constrained manufacturers who faced strong demand in 2021 and so signed-off new investments in Autumn 2021, which led to activity in 2022 and early 2023. However, warehouses new investment has peaked and factories construction is already falling as it was affected by manufacturers not signing off investment plans in Autumn 2022 due to post-Mini Budget uncertainty. So, as warehouse and factory projects complete, there are fewer new projects to replace them. Industrial output in July was 1.0% lower than in June and 3.4% lower than a year earlier, although output remains 14.0% higher than in January 2020.

Commercial output in July 2023 was 4.3% higher than in June but 0.9% lower than a year ago and it remained 25.7% lower than in January 2020, pre-pandemic. New commercial towers projects dominate the majority of the value in the sector and remain one-third lower than pre-pandemic. This has been only partially offset by the buoyant and growing activity on the refurbishment and fit-out of existing commercial space. In addition, there has also been strong activity and growth in the changing use of existing commercial space into either residential (in city centres) or industrial/logistics (on the outskirts of city centres). Rising interest rates that increase funding costs also mean that it is increasingly difficult to justify new, large, upfront investments in commercial towers, particularly given an excess of existing commercial space that needs to be refurbished or replaced to avoid potential 'stranded assets'.

The volume of construction new orders, which only cover new construction work, in 2023 Q2 were 7.1% lower than in Q1 and 17.7% lower than a year earlier. Construction new orders have been falling for three consecutive quarters since the government's Mini Budget at the end of September 2022 and in 2023 Q2 new orders were 10.6% lower than the average level in 2019 (although note that orders in 2019 were affected by economic and political uncertainty due to the postponed Brexit deadlines and General Election) and 20.2% lower than the average level of orders between 2015 and 2018.

New orders by sector can be volatile on a quarterly basis and distort the forward looking picture given that different sectors have different lags between orders and activity down on the ground. Looking at the four quarter total to 2023 Q2, orders were 7.0% lower than a year earlier with falls across most sectors but the most pronounced were in private housing, where new orders in the year to Q2 were 13.2% lower than a year earlier whilst commercial and industrial orders were 6.8% and 5.7% lower respectively. The only increases in orders were in public housing (1.4%) and public non-housing (1.8%).

More recent survey data for construction is provided by the S&P Global/CIPS [UK Construction Purchasing Managers' Index](#) (PMI), which was 45.0 in September 2023, significantly lower than the 50.8 in August and below the 50.0 = no monthly change level for the first time since June. In addition, activity in September fell at its fastest pace since May 2020, during the initial pandemic lockdown.

All three sectors covered by the PMI recorded declines, with residential work (38.1) unsurprisingly the worst performing sector during September and its fall was the steepest since April 2009, excluding during the initial national lockdown when construction activity was not permitted to take place. Survey respondents reported on cutbacks to house building projects due to rising borrowing costs and weak demand conditions.

Civil engineering activity (45.7) and commercial building (47.7) both declined in September with commercial activity notably falling after solid growth throughout the Summer. Some firms noted that concerns about the economic outlook had dampened client demand and led to a lack of new work to replace completed projects.

New business for construction companies in September declined for the third time in four months and the rate of decline was its steepest since May 2020. Construction companies typically cited poor demand and a fall in new orders from lower workloads in residential building. Lower client demand meant that construction firms slowed their rate of job creation during the latest survey period and sub-contractor usage decreased for the first time since January. A lack of new projects resulted in the steepest rise in sub-contractor availability for over 14 years.

Cost burdens were broadly unchanged in September, contrasting with strong input price inflation on average in the first half of 2023. Respondents noted higher fuel bills and some rises in raw material prices, but this was offset by lower shipping costs and greater price competition among suppliers. The number of construction firms predicting a rise in output over the year ahead (41%) continued to exceed those forecasting a decline (17%). This was linked to long-term business expansion plans and hopes of a turnaround in customer demand. However, the degree of confidence was at its lowest since December 2022 due to concerns about higher borrowing costs and a weaker housing market.

Construction Industry Forecasts - Autumn 2023

	2021	2022	2023	2024	2025
% annual change	Actual	Actual	Estimate	Forecast	Projection
Housing					
Private	37,134	40,795	33,044	33,044	34,035
	16.4%	9.9%	-19.0%	0.0%	3.0%
Public	5,120	5,359	4,555	4,464	4,687
	8.2%	4.7%	-15.0%	-2.0%	5.0%
Total	42,254	46,154	37,599	37,508	38,723
	15.4%	9.2%	-18.5%	-0.2%	3.2%
Other New Work					
Public Non-Housing	9,498	8,615	8,563	8,603	8,679
	-1.2%	-9.3%	-0.6%	0.5%	0.9%
Infrastructure	27,931	27,769	27,635	27,620	28,025
	28.1%	-0.6%	-0.5%	-0.1%	1.5%
Industrial	4,756	6,756	6,995	6,388	6,107
	1.2%	42.1%	3.5%	-8.7%	-4.4%
Commercial	21,939	21,775	21,025	20,719	21,005
	-7.3%	-0.7%	-3.4%	-1.5%	1.4%
Total other new work	64,124	64,915	64,218	63,330	63,816
	7.3%	1.2%	-1.1%	-1.4%	0.8%
Total new work	106,378	111,069	101,817	100,838	102,539
	10.3%	4.4%	-8.3%	-1.0%	1.7%
Repair and Maintenance					
Private Housing RM&I	25,432	28,717	25,558	25,558	26,325
	25.9%	12.9%	-11.0%	0.0%	3.0%
Public Housing RM&I	7,168	7,052	7,334	7,481	7,630
	5.8%	-1.6%	4.0%	2.0%	2.0%
Private Other R&M	14,537	16,384	16,220	16,545	16,875
	16.2%	12.7%	-1.0%	2.0%	2.0%
Public Other R&M	5,767	5,978	5,859	5,859	5,917
	10.9%	3.7%	-2.0%	0.0%	1.0%
Infrastructure R&M	11,330	12,046	12,046	12,046	12,046
	12.0%	6.3%	0.0%	0.0%	0.0%
Total R&M	64,234	70,177	67,017	67,488	68,794
	17.2%	9.3%	-4.5%	0.7%	1.9%
TOTAL ALL WORK	170,612	181,246	168,834	168,326	171,333
	12.8%	6.2%	-6.8%	-0.3%	1.8%

Source: ONS, Construction Products Association



Key Risks

UK Economic Growth and Inflation

UK economic activity continues to be volatile on a monthly basis but it continues to surprise on the upside given that interest rate rises were anticipated to lead UK GDP to fall in the second half of 2023. Households have used savings accumulated during the pandemic to finance spending and to sustain higher mortgage payments. As these savings are decreasing, the concerns are whether households can continue to sustain spending, particularly in 2024 with a weaker labour market and as more mortgage holders come off low fixed-rates onto higher rates.

UK CPI inflation slowed marginally from 6.8% in July to 6.7% in August, compared with macroeconomic forecasters' consensus beforehand of a rise to 7.0%. This is despite the rise in Brent crude oil prices during August. Furthermore, core CPI inflation, which the Bank of England monitors closely to see medium-term inflation prospects, slowed from 6.9% to 6.2% whilst macroeconomic forecasters' consensus beforehand was for no change. The slowdown in inflation points strongly towards the Bank of England already being at peak interest rates but, given that both the Bank and financial markets have been reacting strongly to each monthly inflation data point, further rate rises cannot be ruled out and would adversely affect consumer spending and business investment.

UK General Election

The UK is expected to have a General Election in Summer or Autumn 2024. The CPA does not forecast based on a specific election result or model different political scenarios. Analysis of time series over the past 30 years suggests that general elections do not significantly affect the UK economy. However, the election does provide both potential positive and negative risks.

On the positive side, the spectre of a General Election may lead the current government to announce stimuli for the UK economy in the upcoming Autumn Statement on 22 November, giving the policies between six and twelve months to potentially have an effect before an election. Furthermore, any potential change in government may see a change in the way government views housing and infrastructure that lead to a major investment programme, although it is worth highlighting that the last time this was the case, in 1997, falls in public sector capital investment continued for a further two years until public sector spending cuts were reversed.

On the negative side, a lack of parliamentary time in 2024 or delays in policy decisions and projects to be signed-off before the General Election may lead to a hiatus in public sector projects as current projects finish until the government has been confirmed.

Financial Sector Troubles

A key risk to the UK economy highlighted at the start of the year was whether there would be a banking crisis, given the issues faced by Silicon Valley Bank (SVB) and Credit Suisse. Since these issues were addressed in 2023 Q1, there have been no further major issues so far. In September and October 2023, the UK challenger bank Metro Bank encountered financial issues. This was primarily a one-off issue, however, due to a high proportion of interest-only mortgages and buy-to-let mortgages as well as mortgages in London and the South East, which are highly exposed to interest rate rises. Its issues in the near-term appear to have been addressed in October with additional investment funding of £925 million. Otherwise, no further issues in the financial sector have appeared since the Summer but it remains a risk to the UK economy.

The Availability and Cost of Labour

Given that overall construction materials price inflation is now falling (albeit with materials prices remaining high), the greatest issue facing UK construction industry medium-term will be the skills shortages and the large number of construction workers that have left the industry. UK construction employment in 2023 Q2 was 1.1% higher than in Q1 but 2.4% lower than a year ago and 11.3% lower (274,000 fewer construction workers) than at the recent peak in 2019 Q1. It is worth noting that UK construction still hasn't seen the full impacts of the 20-25% fall in private house building (the largest construction sector) demand on employment as house builders were focused on completions. As a result, the full effect of the sharp decline in starting new private housing developments will affect activity and employment in the second half of 2023 and 2024 H1. The drop in UK construction employment since 2019 Q1 also does not include the effect of government's announcements in Spring of delays, pauses and cancellations to roads and rail projects that will also affect employment over the next 12-18 months.

It is worth highlighting that the largest loss in construction employment since the recent peak in 2019 Q1 has been in self-employment, primarily older age-demographic workers in specialist trades. Self-employment in construction in 2023 Q2 was 0.9% lower than a year ago but 20.9% lower (over 200,000 fewer self-employed UK construction workers) than in 2019 Q1. What this means is that, overall, UK construction lost 274,000 workers between 2019 Q1 and 2023 Q2 whilst apprenticeship starts averaged 31,000 per year in the last five years according to CITB and the dropout rate is over 40%.

As the CPA has consistently been highlighting, the UK construction workforce has an age-demographic problem but, critically, the age-demographic problem has been rapidly accelerating since 2019 Q1 based on the latest detailed breakdown of the construction employment data from the Office for National Statistics (ONS). This is particularly apparent in the UK-born workforce, with a spike in employment in the 50-64 age range that means construction will lose over 500,000 workers (over one-quarter of the workforce) in the next 10-15 years.

The age-demographic problem has accelerated since 2019 Q1 (the recent peak) and 2023 Q2. There has been a loss of over 250,000 workers in just over four years. The UK-born workforce

main losses were between 45 and 59 years old. The EU worker losses have been between 20 and 29 years old and 35 and 39 years old, with EU workers going to home countries or other countries where activity remains strong plus those who return to the EU after projects finish haven't been replaced in the normal churn as employer-sponsored visa requirements make it more difficult, particularly for self-employed workers.

Given the loss of construction workers and as construction apprenticeship starts averaged 31,000 per year in the last five years but with a dropout rate over 40%, new entrants will not address the issue. And, without a skilled construction workforce then 300,000+ homes per year, Levelling Up, transition to Net Zero and £600 billion infrastructure pipelines will be very difficult to achieve.

Materials and Products Prices

UK construction materials price inflation in August 2023 was -2.3% compared with -4.0% in July as the rise in oil prices in August led to an upturn in input costs and slowed the rate of deflation, according to the ONS. Even still, construction materials prices continue to fall on an annual basis over a year on from the spike in energy, commodity and materials prices after Russia's invasion of Ukraine when construction materials inflation peaked at 26.8% in Summer 2022.



Whilst the construction materials inflation rate continues to fall on an annual basis, prices remain at historically high levels and in August 2023 construction materials prices were 41.1% higher than in January 2020, pre-pandemic. This continues to have cost implications for construction projects, in particular smaller sub-contractors that signed up to, or started projects, more than 18 months ago on fixed-price contracts.

Although construction materials prices fell by 2.3% overall in the year to August, the prices of some materials are still rising at double-digit rates whilst the prices of other materials are falling at double-digit rates so how house builders and contractors find the impacts of the current changes in construction materials prices will depend critically on the product-mixes that they primarily use.

The fastest rates of UK construction materials price in the year to August 2023 were in doors & windows, ready-mixed concrete, kitchen furniture, insulation and pre-cast concrete.

Conversely, the sharpest annual price deflation in construction materials in August 2023, with double-digit price falls, were in steel-related products such as fabricated structural steel and rebar plus timber-related products such as imported softwood, plywood and particle board.

It is important to note, however, that the main reason that steel-related and timber-related product prices are falling so quickly is that their prices peaked higher than other construction materials and, in the case of timber, were due to the supply chain issues in 2021 before the energy and commodity price spikes in 2022. So, even though the prices of steel and timber products are falling at double-digit rates, they remain at high levels historically (particularly steel) because they are coming from a high peak.

Contractor Insolvencies

275 construction firms in the UK went out of business in July 2023, which is 21.7% lower than a year ago but still 3.8% higher than in January 2020, pre-pandemic, according to the Government's Insolvency Service. On a monthly basis, the number of insolvencies is volatile but it has now been higher than the pre-pandemic level for 21 consecutive months. It is worth noting that we haven't seen the full impact of the most recent falls in house building or delays to infrastructure on contractor insolvencies yet.



UK construction insolvencies
in the year to June 2023
*were at their **highest level***
since the financial crisis

The largest impacts of the insolvencies remain on smaller, specialist sub-contractors and 59% (156) of the construction firms that went under in July were specialist contractors. As the CPA has previously highlighted, in addition to the recent sharp downturns in private housing and private housing rm&i demand, specialist contractors have had to deal with an array of supply side issues such as materials cost rises, IR35, reverse charge VAT, skills shortages, planning delays and cost issues, which have hit financial viability. It is worth noting that whilst specialist contractors have been the worst hit, main building contractors still accounted for 36% (107) of construction insolvencies in July so they are not immune to the issues.

As insolvencies are volatile on a monthly basis, it is worth highlighting that 4,205 UK construction firms went out of business in the year to July 2023, which is 9.2% higher than a year ago, 32.6% higher than in the year to January 2020, pre-pandemic, and construction insolvencies in the year to July 2023 were at their third highest level since the financial crisis and it was only higher in the previous two months.

The greatest concern is whether there will be further rises in insolvencies towards the end of this year and early next year given that house building is likely to fall further in the second half of this year, some areas of private housing rm&i remain subdued and government's announcements of delays to roads and rail projects likely to feed through, as well as persistent delays on schools and hospital programmes.



Upper Scenario

Assumptions

- UK economic activity rises by 0.6% in 2023 as consumer spending and services growth continues to surprise on the upside
- Unemployment remains flat at historically low rates due to the persistence of skills shortages and growth in consumption
- Interest rates remain at 5.25% in 2023 Q4 before falling to 4.75% by the end of 2024
- House prices fall by less than 4.0% after two years of double-digit growth despite the slowdown in housing demand as the number of properties on the market falls to historic lows and there are few forced sellers
- Consumer spending on non-essential and big-ticket items grows as households utilise savings built up during the pandemic to sustain spending volumes
- Lending to businesses remains strong despite higher interest rates
- Business investment grows 1.0% this year and accelerates next year as stronger economic growth leads to an improvement in medium-term manufacturing prospects



Key Effects

- Total construction output still falls by 3.7% in 2023 due to declines in the two largest construction sectors before output rises by 2.6% in 2024 as stronger economic growth drives private construction activity
- Private housing output falls by 15.0% in 2023 but rises by 4.0% in 2024 as house price falls are muted and the number of forced sellers remains low as demand does not fall as far as anticipated in the forecast with mortgage rates peaking at a lower rate and cash sales accounting for a higher proportion of transactions
- Commercial output rises 1.0% in 2023 before rising by a further 3.0% in 2024 as continued strong fit-out activity offsets delays to new towers projects in the pipeline
- Private housing rm&i output falls by 9.0% in 2023 but rises 2.0% in 2024 as general housing market recovery in 2024 leads to a slight recovery in rm&i activity. In addition, homeowners increasingly focusing on energy prices and security leads to further energy-efficiency retrofit and solar photovoltaic work, boosted by activity from the ECO4 and GBIS scheme

Construction Industry Forecasts - Autumn 2023 - Upper Scenario

	2021	2022	2023	2024	2025
% annual change	Actual	Actual	Scenario	Scenario	Scenario
Housing					
Private	37,134	40,795	34,676	36,063	37,866
	16.4%	9.9%	-15.0%	4.0%	5.0%
Public	5,120	5,359	4,930	4,930	5,177
	8.2%	4.7%	-8.0%	0.0%	5.0%
Total	42,254	46,154	39,606	40,993	43,043
	15.4%	9.2%	-14.2%	3.5%	5.0%
Other New Work					
Public Non-Housing	9,498	8,615	8,787	9,051	9,141
	-1.2%	-9.3%	2.0%	3.0%	1.0%
Infrastructure	27,931	27,769	28,324	29,032	30,194
	28.1%	-0.6%	2.0%	2.5%	4.0%
Industrial	4,756	6,756	7,094	6,739	6,604
	1.2%	42.1%	5.0%	-5.0%	-2.0%
Commercial	21,939	21,775	21,993	22,653	23,785
	-7.3%	-0.7%	1.0%	3.0%	5.0%
Total other new work	64,124	64,915	66,198	67,475	69,725
	7.3%	1.2%	2.0%	1.9%	3.3%
Total new work	106,378	111,069	105,804	108,468	112,767
	10.3%	4.4%	-4.7%	2.5%	4.0%
Repair and Maintenance					
Private Housing RM&I	25,432	28,717	26,132	26,655	27,721
	25.9%	12.9%	-9.0%	2.0%	4.0%
Public Housing RM&I	7,168	7,052	7,616	7,997	8,237
	5.8%	-1.6%	8.0%	5.0%	3.0%
Private Other R&M	14,537	16,384	16,712	17,380	18,075
	16.2%	12.7%	2.0%	4.0%	4.0%
Public Other R&M	5,767	5,978	5,978	6,098	6,281
	10.9%	3.7%	0.0%	2.0%	3.0%
Infrastructure R&M	11,330	12,046	12,286	12,532	12,658
	12.0%	6.3%	2.0%	2.0%	1.0%
Total R&M	64,234	70,177	68,725	70,662	72,972
	17.2%	9.3%	-2.1%	2.8%	3.3%
TOTAL ALL WORK	170,612	181,246	174,529	179,131	185,739
	12.8%	6.2%	-3.7%	2.6%	3.7%

Source: ONS, Construction Products Association

Lower Scenario

Assumptions

- UK GDP contracts in 2023 Q4 and 2024 Q1 as the lagged impact of interest rate rises affect spending
- Interest rates increase to 5.5% as oil price rises in Autumn and energy price rises in Winter lead inflation to remain stubbornly above the target rate
- Unemployment rises above 5.0% in 2024 as slower economic activity leads to increases in job losses in the customer-facing services
- House prices fall by over 10.0% and property transactions fall by 30% peak to trough as the lagged impacts of higher mortgage rates leads to lower demand and an increase in forced sellers
- Consumer spending volume falls in 2023 Q4 and 2024 Q1 as stubborn inflation leads to falls in real household disposable income, confidence and spending
- Lending to businesses falls as lenders increase borrowing rates in response to higher interest rates and concern over further problems in the banking sector
- Business investment falls as firms focus on near-term cost minimisation at the expense of medium-term investment plans



Key Effects

- Construction output falls by 10.3% in 2023 and 2.3% in 2024 as demand, particularly in private housing and private housing rm&i, responds to a decline in the wider UK economy as well as financial constraints for homeowners and potential new home buyers
- Private housing output falls by 24.0% in 2023 and by 2.0% in 2024 as slower housing demand and stronger house price falls lead to a house building recovery only in 2025
- Commercial output falls by 5.0% in 2023 and by 3.0% in 2024 as fit-out activity remains stable at high levels but new towers starts continue to be pushed back in response to investor concerns about rising financing and construction costs
- Private housing rm&i output falls by 16.0% in 2023 and by 2.0% in 2024 as fewer property transactions and rising unemployment leads to declines in rm&i next year

Construction Industry Forecasts - Autumn 2023 - Lower Scenario

	2021	2022	2023	2024	2025
% annual change	Actual	Actual	Scenario	Scenario	Scenario
Housing					
Private	37,134	40,795	31,004	30,384	32,207
	16.4%	9.9%	-24.0%	-2.0%	6.0%
Public	5,120	5,359	4,287	4,116	4,116
	8.2%	4.7%	-20.0%	-4.0%	0.0%
Total	42,254	46,154	35,291	34,500	36,323
	15.4%	9.2%	-23.5%	-2.2%	5.3%
Other New Work					
Public Non-Housing	9,498	8,615	8,357	8,189	7,985
	-1.2%	-9.3%	-3.0%	-2.0%	-2.5%
Infrastructure	27,931	27,769	27,214	26,941	26,672
	28.1%	-0.6%	-2.0%	-1.0%	-1.0%
Industrial	4,756	6,756	6,756	5,810	5,578
	1.2%	42.1%	0.0%	-14.0%	-4.0%
Commercial	21,939	21,775	20,686	20,066	20,066
	-7.3%	-0.7%	-5.0%	-3.0%	0.0%
Total other new work	64,124	64,915	63,012	61,007	60,300
	7.3%	1.2%	-2.9%	-3.2%	-1.2%
Total new work	106,378	111,069	98,304	95,507	96,623
	10.3%	4.4%	-11.5%	-2.8%	1.2%
Repair and Maintenance					
Private Housing RM&I	25,432	28,717	24,122	23,640	24,822
	25.9%	12.9%	-16.0%	-2.0%	5.0%
Public Housing RM&I	7,168	7,052	6,770	6,635	6,502
	5.8%	-1.6%	-4.0%	-2.0%	-2.0%
Private Other R&M	14,537	16,384	15,892	15,892	15,892
	16.2%	12.7%	-3.0%	0.0%	0.0%
Public Other R&M	5,767	5,978	5,739	5,625	5,568
	10.9%	3.7%	-4.0%	-2.0%	-1.0%
Infrastructure R&M	11,330	12,046	11,805	11,569	11,453
	12.0%	6.3%	-2.0%	-2.0%	-1.0%
Total R&M	64,234	70,177	64,329	63,360	64,237
	17.2%	9.3%	-8.3%	-1.5%	1.4%
TOTAL ALL WORK	170,612	181,246	162,632	158,866	160,860
	12.8%	6.2%	-10.3%	-2.3%	1.3%

Source: ONS, Construction Products Association

Economy

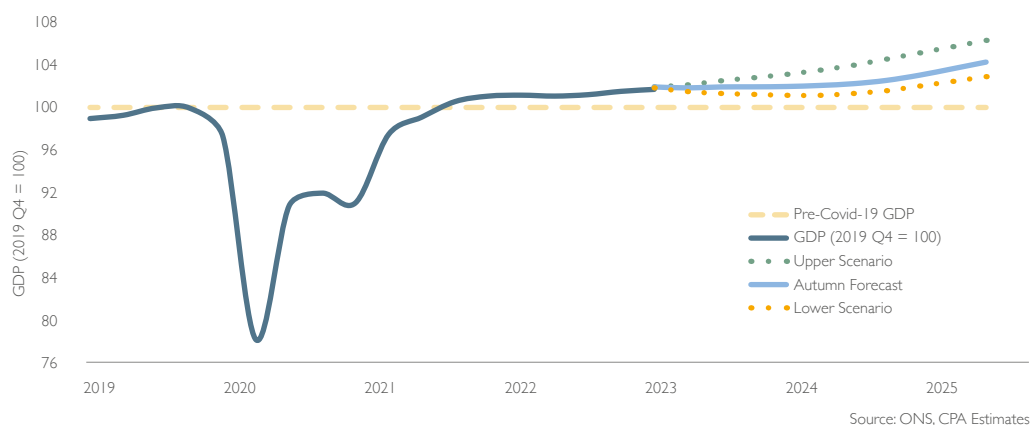
Recent macroeconomic data and upward revisions to official data have provided positive news for the UK economy whilst the Bank of England currently appears to have signalled that interest rates are most likely at peak. However, interest rates are likely to remain at peak for longer and the 'slow burn' effect of higher rates than in the past decade is likely to hinder growth in 2024 and lead to a slight rise in unemployment. As a result, UK GDP is expected to rise by 0.3% in 2023 and 0.2% in 2024. Both positive and negative risks remain. On the positive side, despite rate rises and a constant stream of negative news, consumer confidence has continued to rise so far this year whilst the upcoming Autumn Statement may provide a positive stimulus to the economy given a General Election in 2024. On the negative side, risks revolve around how long interest rates above 5.0% will persist and the extent to which this affects households and businesses in 2024.



UK GDP anticipated to rise by **0.3%** in 2023 and **0.2%** in 2024

The CPA's Summer forecasts were published at a time when stubborn CPI inflation meant that financial markets, the Bank of England and macroeconomic forecasters including the CPA anticipated that interest rates would peak at 5.75% in 2023 Q4. More recent macroeconomic data from the Office for National Statistics (ONS) have been considerably more positive. The latest ONS data highlight that historic UK GDP quarterly data have been revised upward and also that the latest monthly CPI data show a significant slowdown in inflation, as expected, which places less pressure on the Bank of England to raise interest rates further beyond the 5.25% in October 2023.

CPA UK Economic Scenarios (Quarterly UK GDP)



In terms of the historic GDP data, the latest significant ONS revisions published in September mean that by the end of 2021 the UK economy was 0.6% smaller than its pre-pandemic level, rather than 1.2% smaller. Within the overall figures, services' contribution to UK economic growth was revised up whilst manufacturing, construction, agriculture and oil and gas extraction fell. The ONS reported several reasons for the large revisions. Firstly, the ONS reports that companies were producing goods and services, adding to stocks, rather than running them down in 2020. The larger revisions, however, were in 2021, where the ONS looked in detail at each sector's inputs and outputs rather than looking at turnover, which determines GDP in its initial estimates. This is a significant positive for UK GDP but, conversely, it also points towards less room for catch-up going forward.



CPI Inflation
set to **average**
7.5% in 2023
and **slow to**
2.4% in 2024

Thank you for shopping!

In terms of more recent GDP data, on a monthly basis the ONS reported that in July, UK GDP fell by 0.5% compared with the previous month, which offset all the growth seen in June. This is in line with the CPA's view in previous forecasts that UK GDP is broadly flatlining on a quarterly basis but it has been bouncing around on a monthly basis throughout this year due to a number of different distortions. The ONS reported that there was a significant negative impact on the economy in July from strikes, particularly in the health sector, and also a negative impact from persistent, unseasonal rain. The fall in economic activity in July was reflected in poor S&P Global/CIPS Purchasing Managers' Indices (PMI) in July. Furthermore, more recent PMI point towards further monthly volatility in activity. In August 2023, the PMI highlighted services activity falling for the first time since January whilst UK manufacturing hit a 39-month low of 43.0 but construction activity rose slightly in August. In September 2023, the PMI reported that [services activity](#) was at 49.3 in September, which was marginally lower than the 49.5 in August and at its lowest level since January whilst the [manufacturing PMI](#) rose to 44.3 from 43.0 but as 50=no monthly change this still reflects manufacturing output and new orders contracting. [Construction activity](#) was at 45.0 in September, significantly lower than 50.8 in August and

Economic Indicators

	2021	2022	2023	2024	2025
	Actual	Actual	Estimate	Forecast	Projection
GDP	8.7%	4.3%	0.3%	0.2%	1.5%
Fixed Investment	7.4%	7.9%	1.3%	-2.0%	1.4%
Household Consumption	7.5%	4.9%	0.6%	0.3%	1.4%
Real Household Disposable Income	1.1%	-1.9%	-0.7%	-0.2%	1.5%
Government Consumption	14.9%	2.5%	1.2%	1.7%	1.5%
CPI Inflation	2.7%	9.1%	7.5%	2.4%	1.4%
RPI Inflation	4.1%	11.6%	8.9%	2.9%	2.1%
Bank Base Rates - June	0.10%	1.25%	5.00%	5.25%	5.00%
Bank Base Rates - December	0.25%	3.50%	5.25%	5.25%	4.50%

Source: ONS, Construction Products Association

The Bank of England's

base rate is assumed to **peak at**

5.25%
but **remain at this level** throughout 2024



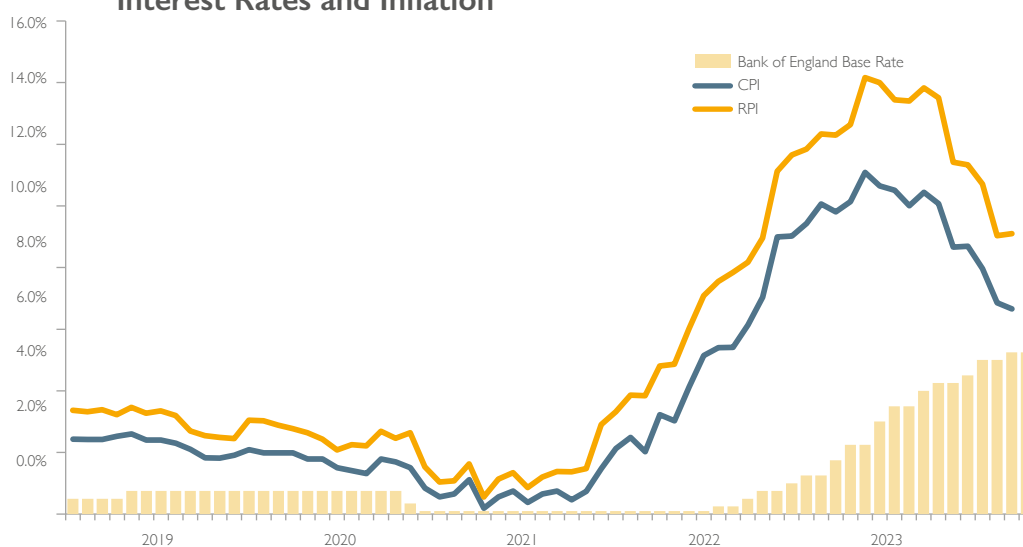
below 50.0 for the first time since June. UK GDP in 2023 Q3 is likely to be boosted compared with Q2, given that the second quarter had one less working day, but GDP is still likely to be flat given the negativity of the business surveys, partially offset by growth in consumer confidence. GDP in Q4 is likely to be marginally positive due to interest rates not rising as much as previously assumed but it still means that, overall in 2023, the CPA forecasts growth of 0.3%, albeit from a higher base given the impact of ONS upward revisions to GDP. Stubborn inflation and the lagged effects of previous interest rate rises are likely to mean that growth remains sluggish next year

and GDP is only forecast to rise by 0.2%.

The HM Treasury [consensus of economic forecasters](#) highlights the most recent forecasts from City and non-City forecasters compiled in September 2023. There is unsurprisingly a relatively low degree of uncertainty reflected in the variation across the forecasters for this year given that we are more than three-quarters of the way through the year. Of the main City and non-City macroeconomic forecasters, the average estimate for GDP growth in 2023 was 0.4%, compared with 0.3% three months ago and 0.1% a year earlier. Within the 0.4% GDP growth average, the most pessimistic forecaster anticipated only 0.2% growth in 2023 whilst the most optimistic forecaster expected 0.6% growth this year.

Conversely, there is a high degree of variation reflected across the forecasters for 2024. Of the main City and non-City macroeconomic forecasters, the average estimate for GDP growth in 2024 was 0.6%, compared with 1.0% three months ago. Within the 0.6% average, the most pessimistic forecaster anticipated a recession and a fall of 0.5% in 2024 whilst the most optimistic forecaster expected 1.9% growth next year.

Interest Rates and Inflation



Source: Bank of England, ONS

This is clearly a wide range of forecasts in the second half of the year but this reflects different assumptions and uncertainty regarding the impacts of interest rate rises and unemployment rises, as well as the extent of inflation at the end of the year and different assumptions regarding the extent to which inflation continues to slow and the rate at which it slows.

UK CPI inflation slowed marginally from 6.8% in July to 6.7% in August, compared with macroeconomic forecasters' consensus beforehand of a rise to 7.0%. The slight slowdown in price growth was primarily driven by restaurant prices in the month and moderate price rises in goods and services related to pets and recorded media. Furthermore, core CPI inflation, which the Bank of England monitors closely to see medium-term inflation prospects, slowed from 6.9% to 6.2% whilst macroeconomic forecasters' consensus beforehand was for no change.

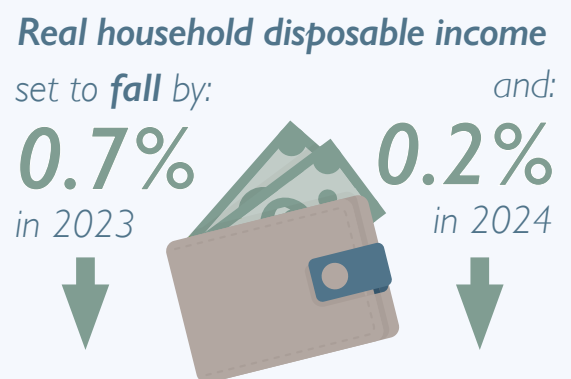
The slowdown in inflation, particularly core CPI inflation, points strongly towards the Bank of England getting close to peak interest rates and it is most likely there already. The Bank of England chose to keep interest rates at 5.25% in September with five members of the Bank's Monetary Policy Committee (MPC) voting for no change whilst four members voted for a further rise so it was close decision.

The latest HM Treasury consensus of economic forecasters highlights the average estimate for CPI inflation in 2023 Q4 is now 4.8% compared with 4.7% three months ago and 4.5% one year ago. Within this the most pessimistic forecaster anticipated CPI inflation of 5.6% in 2023 Q4 whilst the most optimistic forecaster expected 2.5% CPI inflation in the final quarter of this year.

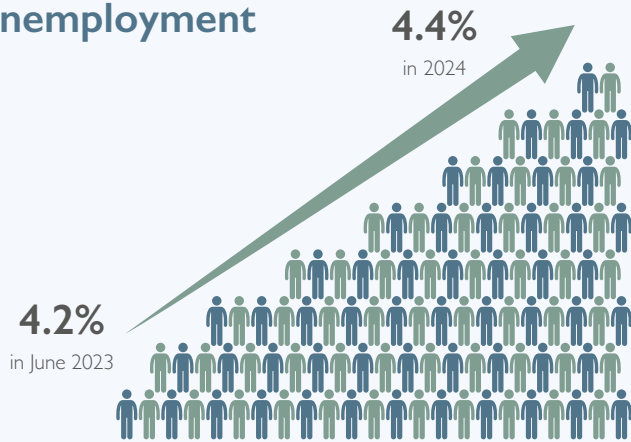
Looking to next year, the average estimate for CPI inflation in 2024 Q4 is now 2.7% compared with 2.8% three months ago. Within this the most pessimistic forecaster anticipated CPI inflation of 3.9% in 2024 Q4 whilst the most optimistic forecaster expected 0.8% CPI inflation in the final quarter of next year.

It is worth noting that both the Bank and financial markets have been reacting strongly to the latest inflation data point so a further rise in rates cannot be entirely ruled out. This is primarily because there have been significant rises in Brent crude oil prices since August, which do not appear to have fully fed through.

Whilst lower energy and commodity prices have so far led to general inflation slowing already, a key risk to this continues to be from oil prices. The peaks in oil prices were in June 2022 following Russia's invasion of Ukraine and Brent Crude oil prices hit \$120.1 per barrel before gradually falling back to \$78.5 per barrel in March 2023, which was below levels seen before Russia's invasion of Ukraine, despite sanctions placed on Russian oil exports by several major nations. The 24 members of Opec+ announced in April, however, that it would be cutting oil production by 1.0 million barrels a day in a deliberate effort to sustain oil prices. Brent Crude oil prices consequently rose to \$84.1 per barrel in April before prices fell once again to \$75.7 per barrel in May and then to \$74.9 per barrel in June due to lower demand from China. As a result, members of OPEC+ announced further cuts in production equivalent to 1.5% of global supply to boost prices in June. In addition, Saudi Arabia announced it would reduce crude oil production by an additional 1.0 million barrels per day in July. In September, it announced that these cuts would be extended through to the end of 2023. The net result of these announcement was to raise the price of Brent Crude to \$86.2 per



Unemployment



Source: ONS, Construction Products Association

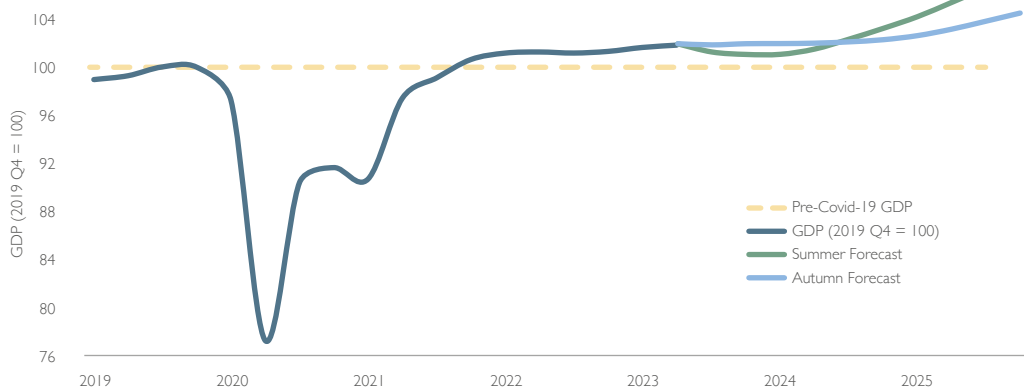
barrel in August and to \$94.0 per barrel in September. This likelihood is that this means Brent Crude is likely to average \$80-\$90 compared with the CPA's previous forecast of oil prices between \$75.0 and \$85.0 per barrel made before the announcements of production cuts.

The key concern in the Summer forecasts was the impact of further rate rises on household finances and the housing market, via higher mortgage rates and payments. Indirectly, there is also the impact on consumer confidence as well as lenders having to price in additional risk and uncertainty as well as the rate rises themselves. The indications are at this point that interest rates have already peaked at 5.25%, which is likely to benefit households and businesses compared with expectations three

months ago when it was expected that interest rates would peak at 5.75% in Q4 and remain at that level until 2024 Q2. However, it is not all good news. Although interest rates are likely to peak lower, they are expected to remain at this rate for longer than previously anticipated. This is likely to mean that the effects on households and businesses are not as acute but that they last longer and have a more 'slow burn' effect on consumer spending, business investment and UK economic growth, as well as unemployment.

The unemployment rate for May to July 2023 increased by 0.5 percentage points on the quarter to 4.3%. The increase in unemployment was largely driven by people unemployed for up to 12 months and the impacts of a flatlining economy on the workforce are starting to come through. The UK employment rate was estimated at 75.5% in May to July 2023, 0.5 percentage points lower than the 76.0% in February to April 2023 although it is worth noting that in February to

CPA UK Economic Scenarios (Quarterly UK GDP)



Source: ONS, CPA Estimates

April the number of people in employment increased to a record high with increases in both the number of employees and self-employed workers so it is compared with a high base and employment remains at a historically strong level. The quarterly decrease in employment was mainly driven by full-time self-employed workers.

The economic inactivity rate increased by 0.1 percentage points on the quarter, to 21.1% in May to July 2023. The increase in economic inactivity during the latest quarter was driven by people aged 16 to 24 years. Those inactive because of long-term sickness increased to another record high. Meanwhile, those inactive because they were looking after family or home decreased to a record low. In June to August 2023, the estimated number of vacancies fell by 64,000 on the quarter to 989,000. Vacancies fell on the quarter for the 14th consecutive period.

Persistent CPI inflation has meant that workers have continued to demand significant nominal wage increases as they strive to minimise real wage falls. This is especially the case in parts of the economy where there are acute skill shortages, which may mean that firms need to increase prices further if there is scope to.

Annual growth in regular pay, which excludes bonuses, was 7.8% in May to July 2023, the same as the previous three months and is the highest regular annual growth rate since comparable records began in 2001. Annual growth in employees' average total pay, which includes bonuses, was 8.5%. It is worth noting, however, that the most recent annual growth rate in earnings has been affected by the NHS and Civil Service one-off payments made in June and July 2023.

Wage inflation in the private sector between May and July was 7.6% compared with 12.2% in the public sector. Nevertheless, this points to stronger wage increases than firms would have pencilled into budgets in 2023 for the year ahead but only marginal real wage growth, which both hits firms that would need to raise prices further and households continuing to have to deal with rising prices.

This is particularly the case for homeowners that have a mortgage with an increase in mortgage costs for 300,000 homeowners per quarter on fixed-rate mortgages that will be remortgaging and the 1.4 million homeowners on variable rate or tracker mortgages. Real household income is expected to fall by 0.7% in 2023 despite an expected slowdown in inflation, primarily because inflation has outpaced wage inflation for the majority of this year so far. A strong positive is that real wages are rising, albeit only slightly, but offsetting this KPMG reported in September that there is a risk that going forward consumption may be harder to finance given that the excess savings accumulated during the pandemic appear to be rapidly diminishing as households struggle to sustain spending. The household saving ratio in 2023 Q2 was 9.1%, which is higher than the 7.9% in Q1 and significantly higher than the 6.2% saving ratio a year earlier, which was immediately before the Mini Budget and consequent increase in economic uncertainty.

GfK's Consumer Confidence Index continues to surprise on the upside despite all the economic uncertainty and headwinds. It reached its nadir in September 2022, the same month as the Government's Mini Budget, at -49. It gradually improved before briefly falling back to -45 in January 2023 due to concern regarding the UK economy. Since, then however, it has risen in each month except for a slight fall in July. UK consumer confidence rose in September 2023 to -21, which is the highest recorded since January 2022. The indices for personal financial situation for the past year and next year registered marginal growth whilst the index for expectations for the UK's wider economy in the next year was more robust. Consumers continue to show resilience despite the rising cost of living, even though inflation is slowing, this merely means that prices are rising less quickly than they were. Furthermore, consumers' confidence has been rising despite increasing numbers of households facing rising housing costs increases due to mortgage rate rises or increases in rents.

Despite the rises in consumer confidence, however, the GfK measures remain negative overall. The index measuring changes in personal finances during the last year was up two points at

-13, which is 15 points better than September 2022. The forecast for personal finances over the next 12 months increased one point to -2, which is 38 points higher than a year earlier. The measure for the general economic situation of the country during the last 12 months was five points higher at -47, which is 25 points higher than in September 2022. Expectations for the general economic situation over the next 12 months increased by six points to -24, which is 44 points better than in September 2022. The Major Purchase Index was four points higher at -20, which is 18 points higher than a year ago. The Savings Index is unchanged in September at +27, which is 16 points higher than the same time last year.

According to the ONS, UK business investment increased by 4.1% in 2023 Q2, revised up from its initial estimate of 3.4% growth. The upward revisions were from transport, intellectual property products, and information and communication technology plus other machinery and equipment. The revisions were due to late survey data. Business investment in 2023 Q2 was 9.2% higher than a year earlier with the main contributor to business investment growth on an annual basis from transport, in turn due to investment in aircraft. It is worth noting that, however, transport investment is particularly volatile due to large one-off orders of high value aircraft.

17% of businesses surveyed by the ONS reported current headwinds to capital expenditure due to uncertainty about demand or business prospects. Given that there is a General Election in 2024, the first half of the year could potentially be affected by uncertainty around the election but, conversely, the period following the election could be affected by increased political certainty, depending on the policy direction and political commitment from government. Overall, business investment is forecast to rise by 2.5% this year before growth slows to 0.5% next year. Given that fixed investment also includes residential investment, the weak outlook for housing is likely to mean that fixed investment falls by 2.0% overall next year after a 1.3% rise this year.



Upper Scenario:

- Economic activity and real wages grow from 2023 H2
- Consumer confidence and spending rise as inflation slows and the labour market remains resilient
- Lending to business increases as better economic growth prospects lead to increased business optimism
- Business investment recovers sharply in response to increased business confidence

The upper scenario envisages that the strong labour market, savings and credit availability sustain consumption despite the effects of double-digit inflation towards the end of 2022 and household spending and confidence recover in 2023 H2. Robust demand boosts manufacturing and services whilst supply chain issues ease for the construction sector and housing demand returns quickly.

Lower Scenario:

- Economic activity contracts significantly in 2023
- Interest rates rise again due to an upward blip in inflation
- Consumer confidence remains subdued and spending falls between 2023 Q2 and 2023 Q4
- Unemployment rises significantly in the light of rising prices and falling spending
- Lending to households and businesses tightens and becomes more expensive due to rate rises and additional risk
- Business investment falls sharply during 2023 and only recovers slowly in 2024 due to uncertainty regarding the sustainability of economic growth

The lower scenario envisages that the UK economy slows from 2023 Q4 as households become more risk averse as unemployment rises and both households and businesses suffer from reductions in the availability of finance and increases in the cost of finance. As a result, the economy falls at the start of next year and there is only a subdued recovery in 2024 H2.

Private Housing

The CPA's forecast for private housing remains broadly unchanged for 2023 as we come towards the end of the year. On the positive side, interest rates are likely to peak lower than previously expected and mortgage rates are likely to benefit from increased certainty as well as a lower peak interest rate. On the negative side, however, rates are likely to remain at peak for longer, which is likely to adversely affect demand throughout next year. As a result, after a 19.0% fall in completions and output this year, completions are forecast to remain flat in 2024 with no growth until 2025. Whilst the balance of risks to private housing clearly remains on the downside, a positive policy stimulus in the Chancellor's Autumn Statement would help demand to start to recover in the second half of next year.

The initial double-digit decline in homebuyer demand in 2022 Q4 after the spike in mortgage rates following the Mini Budget was briefly followed by a recovery in sentiment and as mortgage rates fell in the first quarter of the year once government had gone back on its Mini Budget policies. However, this proved to be short-lived as stubborn inflation and the consequent increases in interest rates from the Bank of England led to sharp increases in financial markets' expectations of peak interest rates. This, in turn, led to sharp rises in mortgage rates given that lenders needed to factor in both the expected peak interest rates and the uncertainty around peak rates. Peak rates appear to have now been reached, lower than expected, and this will lead to slight falls in mortgage rates but they are likely to remain high in comparison to rates over the past decade. In addition, whilst peak interest rates are expected to be lower than three months ago, they are also likely to remain at peak for longer (see [Economy](#)). This is likely to impact demand next year and, as a consequence, the previously expected recovery in starts in 2024 Q2 and completions in H2 has been pushed back so starts are only expected to recover in 2024 H2 whilst completions are expected to recover in 2025.

Private Housing Starts and Completions Great Britain

	2021	2022	2023	2024	2025
	Actual*	Actual*	Estimate	Forecast	Projection
Starts	162,791	164,141	123,106	128,030	135,712
	37.3%	0.8%	-25.0%	4.0%	6.0%
Completions	161,443	165,892	134,372	134,372	138,403
	19.7%	2.8%	-19.0%	0.0%	3.0%
Output (£m)	37,134	40,795	33,044	33,044	34,035
	16.4%	9.9%	-19.0%	0.0%	3.0%
RM&I Output (£m)	25,432	28,717	25,558	25,558	26,325
	25.9%	12.9%	-11.0%	0.0%	3.0%

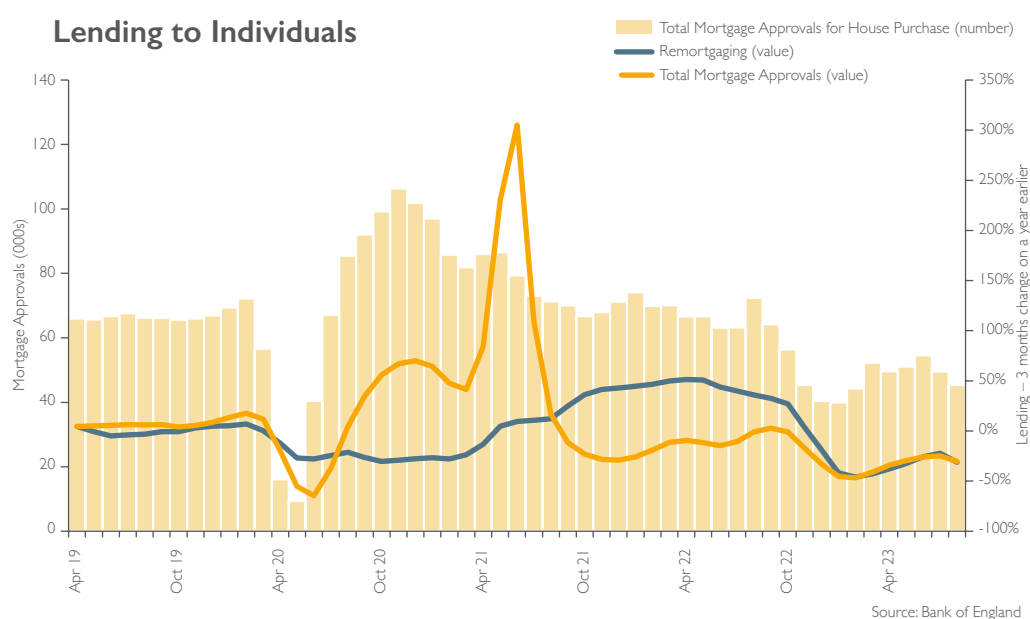
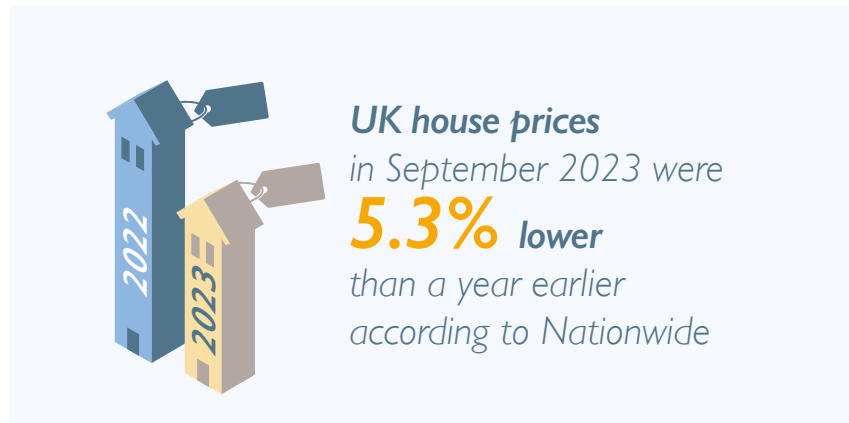
* Data from 2020-2022 for Wales is an estimate

Source: DLUHC, ONS, Construction Products Association

UK homeowners are among the most exposed in Europe due to the combination of higher interest rates than in the EU and the reliance on short-term fixed-rate mortgage offers in addition to some mortgage holders relying on interest-only mortgages. Around 1.4 million households will be affected by much higher mortgage costs this year alone, according to the Office for National Statistics, as previous fixed-rate mortgages end and homeowners move onto higher rates. Over the last twenty years,

since 2003, the proportion of mortgages on a variable rate has fallen from 70.0% to 13.0%. This suggests that the impacts of rate rises are likely to be a long-term, slow burn effect rather than a sharp cliff edge. There are around 800,000 fixed-rate deals ending in the second half of 2023 and around 1.6 million deals are due to end in 2024 according to UK Finance that would need to remortgage at rates two or three times previous rates. The greatest impacts on existing homeowners are for the 702,000 interest-only homeowner mortgages outstanding at the end of 2022, which is 6.9% per cent fewer than in 2021 as borrowers chose to pay ahead of schedule. There were, however, also 222,000 partial interest-only homeowner mortgages outstanding at the end of 2022, 11.9% fewer than in 2021 according to UK Finance. Overall, there are a total of 8,501,000 residential mortgages outstanding, the bulk of which (81%) are fixed rate. There are a total of 2,033,512 buy-to-let mortgages outstanding with the majority (two-thirds) also being on fixed rates. As a result, the majority of issues in the general housing market for mortgage holders are likely to be more of a slow burn issue rather than a cliff edge. Furthermore, most homeowners are likely to reprioritise spending to ensure that mortgage payments are kept up, rather than becoming a forced seller in a slowing market.

The average cost of a three-year fixed-rate UK mortgage rose to 6.01% in August according to the Bank of England, rising above 6.0% for the first time since November 2022, immediately



following the Mini Budget. The most recent statements from the Bank of England and financial markets' current view that interest rates are at peak already have started to have an impact on reducing mortgage rates and in September the five-year fixed-rate had fallen to 5.78% but clearly this contrasts sharply with the 1.12% as recently as October 2021.

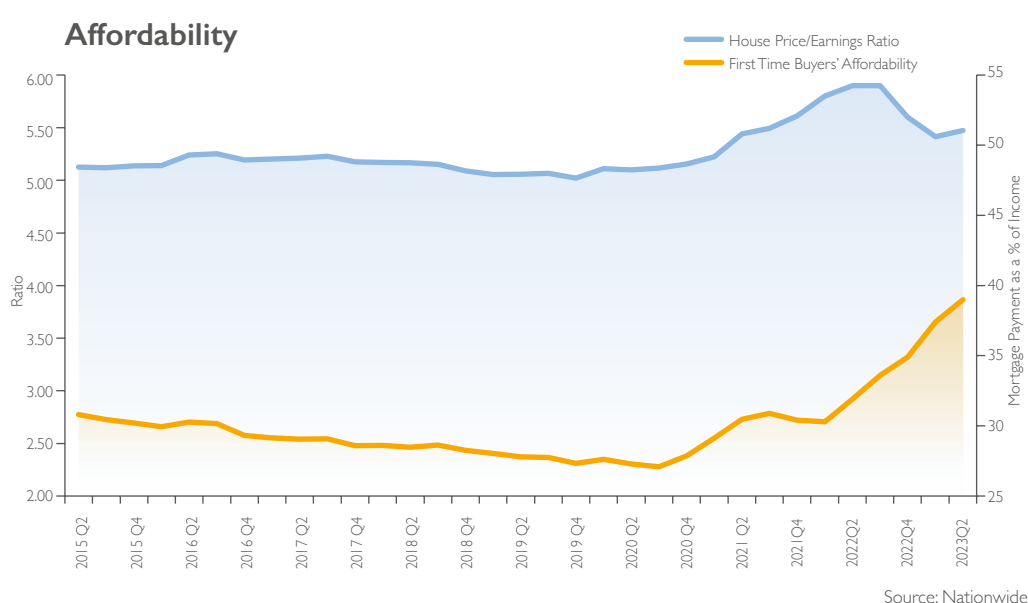
On the buyer side, there were 45,354 mortgage approvals in the UK in August according to the Bank of England, which is 8.4% lower than in July, 37.3% lower than a year ago and 30.7% lower than the 2018 to 2019 average, pre-pandemic (pre-'race for space' and rate rises).

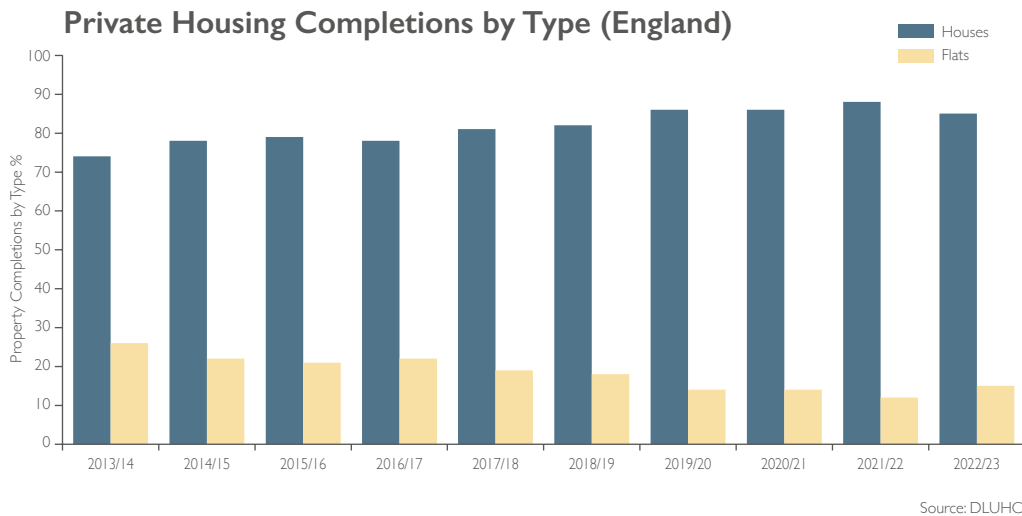
UK mortgage approvals had been on a general upward trend since January 2023 but from a low base (after the collapse in demand in 2022 Q4 following the Mini Budget and spike in mortgage rates) as mortgage rates fell from the October 2022 peak. However, they have started to fall once again as mortgage rates rose this Summer with increases in the Bank of England's base rate and increases in the expected peak of rate rises. UK mortgage approvals appear to be close to reaching the nadir, slightly higher than at the end of last year, as the Bank of England's interest rate appears to have now peaked and mortgage rates are likely to fall slightly. The impacts on property transactions, however, will only be seen towards the end of this year.

There were 87,010 property transactions in the UK in August 2023, which is 1.1% higher than in July but 15.6% lower than a year ago, according to HMRC. The number of property transactions in August was also 9.8% lower than in January 2020, prior to the 'race for space' spike in the housing market demand. It is worth noting that property transactions rising in August were still largely based on mortgages applied for and approved months earlier, prior to the mortgage rate rises in May and June. As a result, based on mortgage approvals in July and August, property transactions are likely to fall further in the rest of the year.

Year-to-date (January to August), there were 695,710 residential property transactions in the UK in 2023, which is 19.0% lower than in 2022 and 11.3% lower than in 2019, pre-pandemic.

It is worth highlighting again that the largest impacts of the fall in demand in the housing market since the government's Mini Budget and consequent spike in mortgage rates as well as the rise in mortgage rates in May and June will be on mortgage approvals. Hopefully, now that interest



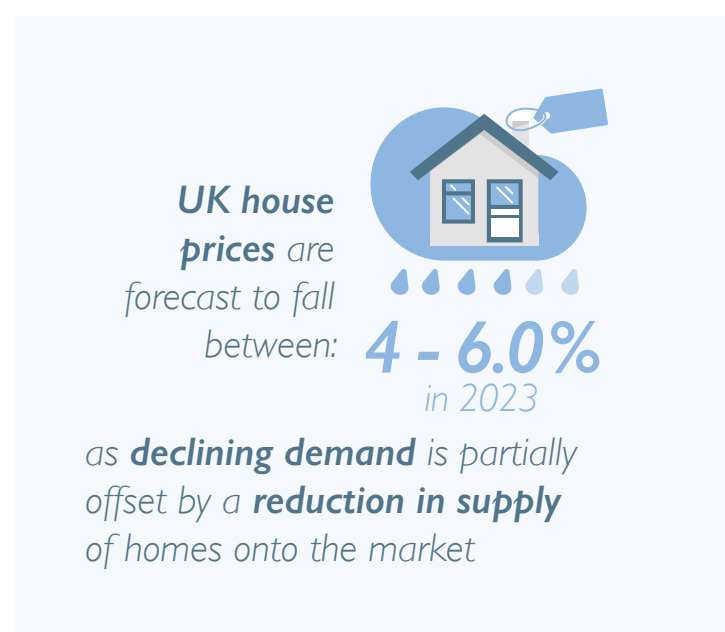


rates appear to have peaked at 5.25%, this will lead to slight falls in mortgage rates as lenders had previously been assuming that the Bank of England would raise interest rates to 5.75% towards the end of the year, which may marginally help demand in the housing market but note that mortgage rates will remain at relatively high levels compared with the low rates seen for most of the last decade.

Mortgage rate rises are so far having a less negative impact on property transactions than on mortgage approvals due to the lag effect (as mortgage offers and approvals between June and August have not fed through yet) and because cash buyers and investors are accounting for a higher proportion of transactions and partially offsetting falls in mortgage-related demand. UK house prices will fall less than approvals and transactions as housing demand falls are partially offset by a low supply of homes, unless there's a sharp rise in unemployment leading to a rise in forced sellers, which is not currently expected in our forecasts given the tightness of the labour market and with UK economic activity broadly flatlining rather than enduring a recession.

The official ONS/Land Registry house prices have only fallen 1.3% since peak so far as sharp falls in demand have been partially matched by falls of homes onto the housing market, which means that the falls in demand are reflected more clearly in mortgage approvals, property transactions. In addition, the latest ONS/Land Registry house price data is, however, based on transactions before the rises in interest rates and mortgage rates in May and June. In addition, the ONS/Land Registry house price data has also been sustained by cash sales and institutional investment unlike the Nationwide and Halifax house price indices.

The average UK house price in July 2023 rose by 0.6% compared with a year earlier, significantly lower than the ONS/Land Registry revised rate of 1.9% in June. House prices in July were also 1.3% lower than at the November peak. The ONS/Land Registry house price index is based on all



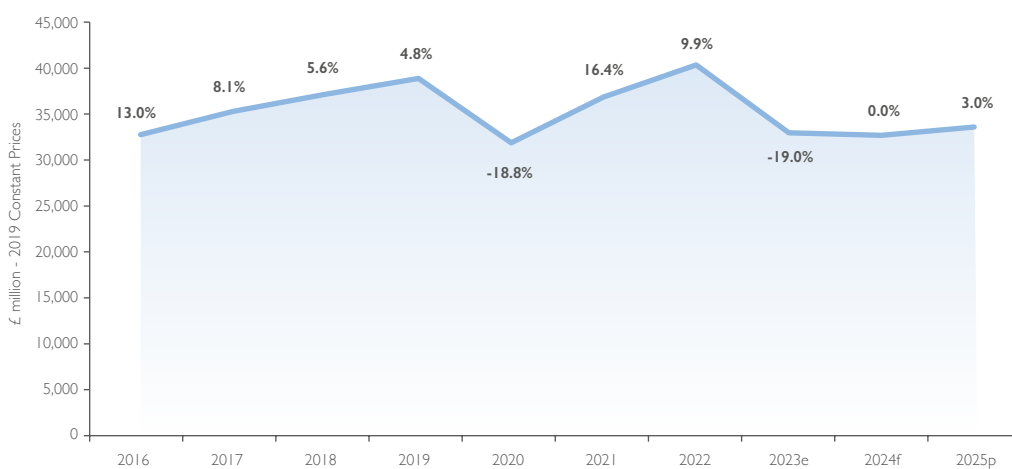


property transactions including cash buyers and investor purchases, unlike the Nationwide and Halifax house price indices, which are based only on their mortgage offers and will have been affected more by the rising interest rates than the ONS/Land Registry house prices. It is worth noting, however, that as the number of mortgage approvals and property transactions has fallen significantly, cash buyers and bulk purchases at the higher end of what is a smaller housing market may skew the ONS/Land Registry average house price. Also, given that the ONS/Land Registry house prices are based on transactions, many of the transactions in July may have been based on mortgages before the most recent spike in mortgage rates, which are likely to feed through to prices later in the year.

Across the regions and nations, the fastest annual house price growth was in the North East (2.7%) and Yorkshire & Humber (2.5%) whilst the slowest house price growth was in South West (-1.0%) and London (-0.8%) according to the ONS/Land Registry.

Since the recent peak of UK house prices in November 2022 (following the government's Mini Budget but before the impacts of the initial spike in mortgage rates on transactions), UK house prices have fallen by 1.3%. So far, the largest falls in house prices since the 2022 peak were in Wales (-3.7%), South West (-2.9%) and London (-2.8%).

Private Housing Output



e = estimate, f = forecast, p = projection

Source: ONS, Construction Products Association

It is worth noting the CPA UK house price forecast was an 8.0%-10.0% fall in 2023 after two consecutive years of double-digit growth although it is more likely that this 8.0%-10.0% fall occurs by the end of 2024 H1 with a fall in 2023 of 4.0-6.0% based on the ONS/Land Registry index. It is worth noting the Nationwide and Halifax house price indices are based on their mortgage lending only so they will not include the impacts of cash sales and investor purchases so they are likely to show greater falls than the official ONS/Land Registry data.

Nationwide reported that annual house price growth based on its own mortgage offers was unchanged at -5.3% in September 2023. House prices were also flat over the month following a 0.8% decline seen in August. According to Nationwide, UK housing market activity remains weak, which is unsurprising given the more challenging picture for housing affordability. A person earning an average income and purchasing the typical first-time buyer home with a 20% deposit would spend 38% of their take home pay on their monthly mortgage payment, which is considerably higher than the long-run average of 29%.

Investors have marked down their expectations for the future path of interest rates in recent months due to underlying inflation pressures in the UK economy easing and with labour market conditions softening. This has lessened the pressure on the Bank of England to raise rates further and led to downward pressure on long-term interest rates, which underpin fixed rate mortgage pricing. If this continues then it may ease pressure slightly on those remortgaging or looking to buy a new home. With the Bank of England's base rate not expected to decline even in the medium-term, however, borrowing costs will not return anywhere near the historic lows seen in the aftermath of the pandemic or even the rates seen in the previous decade. It is more likely that sustained income growth combined with modestly lower house prices and mortgage rates will improve affordability in real terms over time but with housing market activity remaining substantially below the buoyant levels seen during the pandemic 'race for space'.

Nationwide's regional house price indices showed annual price declines in all regions during 2023 Q3. The South West was the weakest performing region, with prices down 6.3% year-on-year, while Northern Ireland remained the best performing region, with a modest 1.8% fall. Wales saw a sharp slowing in the annual rate of change to -5.4% from -1.4% last quarter. Scotland also saw a slowing in annual house price growth to -4.2%, from -1.5% in Q2. Across northern England (which comprises the North, North West, Yorkshire & The Humber, East Midlands and West Midlands), prices were down 3.9% compared with 2022 Q3. The North was the strongest performing northern region, with the annual rate of change improving from -3.3% to -2.0%, whilst the East Midlands was the weakest, with a 5.5% decline.

According to the HM Treasury consensus of economic forecasters published in September 2023, UK house price forecasts made in the last three months averaged -4.9% for the year to 2023 Q4 but with a surprisingly high variance considering that the forecasts were made in the second half of this year. The most optimistic forecaster anticipated house price falls of 0.2% in Q4 compared with a year earlier whilst the most pessimistic forecaster anticipates falls of 7.5% in the year to 2023 Q4. Looking to next year, the uncertainty is unsurprisingly greater amongst the range of macroeconomic forecasters with forecasts differing considerably based upon when the forecasts were determined, which determines what peak interest rate they

UK property transactions are expected to endure a
19.0%
fall in 2023





would have assumed, how long they assume that interest rates will remain at peak and the extent to which they fall. In addition, their house price forecasts will be determined by their assumption of the extent to which unemployment rises and, consequently, the extent of forced sellers. The average forecast for UK house prices in the year to 2024 Q4 is for a fall of 3.4% with the most optimistic forecaster anticipating house prices rise by 5.5% in 2024 Q4 compared with a year earlier whilst the most pessimistic forecaster anticipates falls of 10.7% in the year to 2024 Q4.

However, the future path of house prices is far from certain and will clearly be dependent on both mortgage rate rises and also the number of forced sellers, the latter of which will be heavily influenced by the extent of, or lack of, rises in unemployment. So far, the labour market remains robust with the unemployment rate for May to July 2023 at 4.3%, 0.5 percentage points higher

than in the previous quarter but it remains historically low (see [Economy](#)).

Given that the largest impact on demand is likely to be felt over the next 12-18 months as interest rates are held at peak, the CPA's assumption is that UK house prices are likely to fall 8.0-10.0% peak to trough with the greatest impacts of the fall in demand on mortgage approvals and transactions rather than prices, but this could be lower if transactions take more of the impact and there are fewer forced sellers than expected. Or, house price falls could potentially be lower if government assists first-time buyers in the Autumn Statement, who have been the worst affected by the mortgage rate rises and affordability issues already, in the lead up to a General Election next year through a Help to Buy-type scheme.

Looking at affordability, both the house prices to earnings ratio and mortgage payments as a proportion of income have increased since the end of the initial national lockdown in Spring 2020 according to Nationwide. However, the key changes since Summer 2022 have been the unsurprising fall in the house price to earnings ratio, contrasting sharply with the equally unsurprising rise in mortgage payments as a proportion of income.

A dip in house prices, combined with rising earnings, in the light of economy-wide skills shortages and inflation concerns, has theoretically helped affordability in terms of the house price to earnings ratio, which peaked at house prices 5.9 times higher than average earnings in 2022 Q2 and Q3 before falling to 5.6 times higher than average earnings in Q4, the same as a year earlier, as demand started to fall post-Mini Budget and fell to 5.4 times higher than average earnings in 2023 Q1 before rising, marginally, to 5.5 times higher than average earnings in Q2. It remained, however, significantly higher than 5.0 times higher than average earnings that was the norm prior to the pandemic and even with further falls in house prices expected over the course of this year, it is unlikely that the house price to earnings ratio will fall substantially below 5.0, particularly as wage growth is likely to slow.

Given the sharp rise in mortgage rates in October and November, affordability in terms of mortgage payments as a proportion of income deteriorated for first-time buyers. In 2021 Q4 it was 30.3%, before interest rates began to rise from historic lows but even in 2022 Q2, prior to the Mini Budget, mortgage payments as a proportion of income were still 31.9%. However, post-Mini Budget, it reached 34.9% in 2022 Q4. Since then, further rises in interest rates and increases in peak interest rates as well as lenders having to price in additional risk and

uncertainty, have meant that mortgage payments as a proportion of income for first-time buyers rose once again to 37.4% in 2023 Q1 and to 39.0% in Q2.

Affordability-wise, mortgage repayments had previously kept within affordable levels due to historically low interest rates. However, to sustain this, first-time buyers in a sustained period of rapid house price growth but stagnant or falling real wages have had to take out longer mortgages. In 2005, the average term for a first-time buyer was 25.8 years but by 2022 this had risen to 30 years. The latest data from UK Finance highlights that mortgage terms in excess

of 35 years have become more popular for first-time buyers since the start of last year. In January 2022, around 8% of first-time buyers had a mortgage term longer than 35 years. By December 2022, however, after the average mortgage rate for a five-year fix increased from 1.6% to 5.1%, 17% of first-time buyers had a mortgage term longer than 35 years.

There were 53,530 housing building starts in England in 2023 Q2, which is 86.5% higher than in Q1 and 25.6% higher than a year ago according to DLUHC as major house builders did the minimum necessary to register a start so that they could get ahead of the end of the one-year grace period for the uprated building regulations (Parts F, L, O and S) that add significant cost to building a new home. However, this is an issue we have highlighted in previous CPA forecast publications.

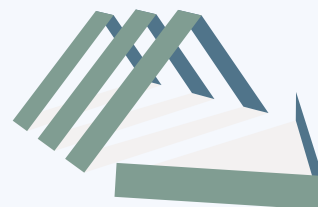
These starts are merely what we refer to as 'technical starts' as they do not reflect the level of house building or even what house builders intend to build going forward near-term. Consequently, product manufacturers feeding into early parts of house building would not have seen sales increase in line with starts given that house builders were solely doing the minimum necessary foundations work to register properties as a start.

Private housing completions in 2023 Q2 were 1.2% higher than in Q1 (as many house builders were finishing properties for their year-end this Summer based on pre-sales last year) but they were 17.1% lower than a year earlier. It is worth noting, however, that the full impact of the sharp fall in new housing demand since the Mini Budget last Autumn is only likely to be seen in private housing completions in the second half of this year and first half of 2024.

This is because some of the major house builders with year-end in Summer 2023 (such as Barratt, Bellway, Redrow) had completions that were 'only' between 2% and 5% lower than a year ago based on pre-sales last year before the Mini Budget but recent reservation rates for these firms were between 28% and 32% lower and will inevitably feed through in the next 6-9 months.

UK brick deliveries are a useful proxy for house building starts given the absence of monthly housing starts data. In addition, given that house builders rushed through what the CPA refers to as 'technical starts' in 2023 Q2, whereby they did the minimum necessary to register a start to get ahead of the uprated building regulations F, L, O and S that add substantial cost, brick deliveries are a clearer indication of intention to build in the nearer-term whilst the starts data in Q2 merely reflects 'technical starts' that may be built out under previous building regulations at any stage of the next 2-3 years dependent on demand. Deliveries in August 2023 were 5.6% lower than in July and 30.2% lower than a year earlier. It is worth noting that August 2022, a year ago, was a high base (prior to the Mini Budget that led to the initial sharp rise in mortgage

Private house building starts
(excluding house builder 'technical'
starts in Q2 to get ahead of the
uprated building regulations)
are expected to **fall**
by **25%** in 2023



rates and a fall in housing demand). Through brick deliveries, we can see that the lagged impact of mortgage rate rises in May and June on not only the housing market but house building starts. Given the low level of homebuyer demand and uncertainty, house builders are unsurprisingly focusing solely on completing existing developments to meet the current level of demand rather than starting new developments.

Year-to-date (January-August), UK brick deliveries in 2023 were 28.3% lower than the strong level in 2022. They were also 28.2% lower than in 2019, pre-pandemic, and only 5.6% higher than in 2020, which was affected by two national lockdowns. It is, however, broadly in line with the 28-32% falls in recent reservations/forward sales from some of the major house builders that reported year-end in Summer 2023.

As another reference point for brick deliveries and house building starts this year, if deliveries continue at August levels for the rest of the year then overall in 2023 deliveries they would be 25.7% lower than in 2022 and 28.0% lower than in 2019, pre-pandemic, but note that this reference point is likely to be on the optimistic side as house building starts tend to fall towards the end of the year as house building slows in Winter and builders focus more on completions for year-end, especially given the current low level of housing demand.

House builder recent trading statements are often a useful guide to the state of house building down on the ground.

Barratt Developments reported its results to the year ending 30 June 2023. It had 17,206 total home completions compared with 17,908 a year earlier, a decline of 3.9%, reflecting a part of the market slowdown from the Mini Budget in Autumn 2022 but the majority of its completions during the year were based on pre-sales prior to the Mini Budget. Its adjusted gross profit was £1,130.4 million compared with £1,308.1 million a year ago and its adjusted gross margin was 21.2% compared with 24.8% a year earlier. The lower profitability reflected the fall in demand, overall house price inflation running below build cost inflation and the operational gearing impact as the market has slowed down. In addition, its Return on Capital Employed (ROCE) declined to 22.2% compared with 30.0% a year ago. Its additional costs associated with legacy properties of £179.2 million compared with £412.5 million in the last financial year. Of this, £118 million related to future commitments to fire safety and external wall systems with £51.5 million relating to remedial works arising from the review of reinforced concrete frames.

Barratt stated that its focus for the financial year will be driving revenue through use of incentives, sales to the private rental and social housing sectors, whilst continuing to manage build activity and controlling the cost base. Its forward sales position at 27 August 2023 was 49% forward sold for private home completions compared with 62% for the equivalent previous year. The net private reservation rate per outlet per average week from 1 July 2023 to 27 August 2023 was 0.42 compared with 0.60 a year earlier, including 0.02 from the private rental sector and additional sales to registered providers of social housing, down from 0.05 a year ago. It continues to target total home completions of between 13,250 and 14,250 in this financial year, representing a fall of between 17.0% and 23.0%.

Persimmon reported for the six months ended 30 June 2023 that it had 4,249 new home completions in H1 compared with 6,652 a year ago, reflecting the lower forward order book coming into the year following the market challenges after last Autumn's Mini Budget. Overall, it highlighted that it is closely matching build rates to sales with build rates in the period running at around 26% lower year-on-year.

Persimmon's private average selling price was £288,327, which was 8% higher year-on-year, partially reflecting a greater proportion of larger homes sold. Overall, the group average selling price was £256,445 up 4% year-on-year.

Its sales rate was 0.59 compared with 0.91 a year earlier with average incentive levels of 3.2% in the period on the Group's private sales compared with 1.5% a year ago. Investor deals accounted for 0.03 of the sales rate in the period.

Looking forward, its current forward sales position (including 5 weeks post-period end) was £1.6 billion, 30% lower year on year compared with £2.2 billion a year ago. Its forward private sales were £875.9 million, up 83% compared to 1 January 2023 of £478.5 million. Its forward private average selling prices were up 0.9% compared to 1 January 2023.

Prevailing build cost inflation was around 5% and it expects it to moderate further in the months ahead. It stated that its 'cost discipline' is focused in four areas of 'smart' savings; a plot-by-plot and site-by-site review to identify areas for cost savings or value enhancement, identifying opportunities to secure savings in specifications that are less important to customers and it believes that this review could identify savings of up to £1,800 per plot, reviewing sub-contractor pricing on a more frequent basis to identify opportunities to secure increased savings and it is actively retendering sites to identify savings plus it stated it was keeping overheads under constant review. A recruitment freeze has seen headcount reduce by nearly 300. Further reviews are on-going and it is targeting £25 million annualised savings.

Within this, a key point to note is that it highlighted that "Just as we absorbed many price increases from sub-contractors in recent years, so we need to share the cost pressures in this new challenging environment", which points towards intense pressure on the supply chain to reduce prices given the sharp fall in demand as it attempts to prevent significant falls in margin.

Bellway reported that it had a period of very challenging trading in the fourth quarter of 2022, when sales rates were impacted by sharp increases in borrowing costs. Whilst in early 2023, mortgage rates began to moderate and it was encouraged by the levels of demand during the Spring selling season, more recently, reservations in June and July 2023 were impacted by borrowing costs which rose to levels similar to those last Autumn. Its overall reservation rate for the year ended 31 July 2023 was 28.4% lower than the prior year at an average of 156 per week compared with 218 in 2022, and the Group has continued with its programme of accelerating the construction of social homes to help mitigate weaker private demand. The average private weekly reservation rate reduced by 35.9% to 109 compared with 170 a year earlier. Its overall cancellation rate for the full year has trended upwards and averaged 18% compared with 13% a year ago.

There was a reduction in the value of its forward order book, which had a value of £1,193.5 million compared with £2,114.3 million a year ago and comprised 4,411 homes compared with 7,223 homes a year earlier. Bellway revenue was around £3.4 billion compared with £3,520.6 million a year ago, a 3% reduction on the prior year. Completions reduced by only 2.3% to 10,945 compared with 11,198 a year earlier. The overall average selling price decreased by over 1% to £310,000 compared with £314,399 a year ago, primarily driven by a lower proportion of private completions, which reduced to 75% of the total compared with 82% a year earlier. In the year ending 31 July 2024, the proportion of its social completions will remain elevated and together with the ongoing disciplined use of incentives, it expects a further moderation in the average selling price.

Its underlying operating margin for the 2023 financial year is expected to be around 16% compared with 18.5%, and the reduction reflects the effect of build cost and overhead inflation, together with extended site durations and the increased use of sales incentives during a more challenging trading period. Since early 2023, build cost inflation has softened slightly from the high single digits reported in the first half of the financial year. Reducing demand for construction materials has also supported an improvement in product availability across the Group. It continues to expect overall cost pressures to moderate in the months ahead.



Redrow reported for the financial year ending 2 July 2023 that its revenue was £2.13 billion, broadly in line with the £2.14 billion reported in the previous year. It also issued guidance for the following financial year that it anticipates revenue falling to between £1.65 billion and £1.7 billion.

It delivered 5,436 homes compared with 5,715 a year ago and stated that the cost of living and mortgage affordability continue to have a negative impact on the market. Reflecting the macroeconomic picture and a tougher sales market, its average private reservation rate per week for the year was 0.46 compared to 0.68 in 2022.

Furthermore, it reported a challenging sales market over the summer that has resulted in a sales per outlet per week of 0.34 for the first 10 weeks of the new financial year compared with 0.61 a year ago.

A key interesting point to note recently was the change in business model of Vistry Group, which is the combination of Bovis Homes and the housebuilding and partnerships divisions of Galliford Try and Countryside Partnerships. Given the downturn in housing demand, it stated in September that it would be focusing on partnerships demand and affordable housing, part-funded by Homes England. Given that housing associations have increasingly reported that affordable demand has not dropped off to the same extent since the rate rises, and partly benefitted from the lack of affordability in the general housing market particularly for shared ownership (see [Public Housing](#)). It is unlikely that the majority of major house builders can do the same, given that it would saturate the market and it does revolve around a substantial change in business model. In addition, it is difficult to know at this stage how profitable it will be compared with the private house building market once demand returns. However, it may be that one or two of the other house builders also shift business model in a similar vein to Vistry.

Demand for new flats in England remains on a downward trend. It historically reached a peak in 2008/09 with flats accounting for 46.0% of total completions according to DLUHC from which it steadily fell to 22.0% between 2014/15 and 2016/17, prior to the Grenfell Tower fire. After this, the proportion of flats fell further to 14.0% in 2020/21 and to 12.0% in 2021/22 before rising back up to 15.0% in 2022/23.

In addition to concerns regarding demand house builders are also facing supply issues. In particular, planning issues that house builders consistently report as problematic have been exacerbated by the issue of nutrient neutrality as highlighted by the CPA in previous forecasts and there appears to be no easy, quick solution near-term. It had appeared in Summer 2023 that the government was easing requirements on water and nutrient neutrality but its legislation was halted in the House of Lords. The Home Builders Federation stated in July that interventions by Natural England are delaying an estimated 180,000 homes over the disputed contributions of housing work to high levels of nutrients in waterways. It also stated that the costs of the growing number of new taxes, regulations and policies are adding at least £20,000 to the cost of building a new home. Although this affects all house builders, the largest impacts

near-term are clearly for smaller house builders given that majors at least have land in different parts of the country already with planning permission that they can build out on near-term whilst they deal with the additional burdens of nutrient and water neutrality.

Looking at planning approvals, there was a downward trend in 2022 and this continued into 2023 Q1. The number of housing projects granted planning permission in Q2 fell by 10.0% to 2,771 compared with the previous quarter and was 20.0% lower than a year ago. The number of approvals during the first six months of 2023 was 20% lower than a year ago. The number of units approved during the second quarter dropped by 14% against the previous three months to total 62,681 units and was 11% lower than during the second quarter of last year. Overall approvals totalled 135,290 units during the first half of 2023, a 17% decline compared with a year ago. Housing schemes of ten or more units during the second quarter accounted for 90% of approved units and fell by 14% compared with the first quarter of 2023 and were 10.0% down on a year ago. At 1,829, the number of private sector housing projects of three or more units securing approval was 10.0% down on the first quarter and was 16.0% lower than a year earlier. The number of units on private sector projects granted planning permission was 13.0% lower than in the first quarter and 8.0% lower than a year ago. Regionally, four parts of the country bucked the overall downward trend in approvals during the second quarter. The North East, East of England, West Midlands and Wales all saw a double-digit increase in approvals against the previous quarter, rising by 26%, 31%, 19% and 26% respectively. All other parts of the country saw a decline against the previous quarter. The sharpest declines were seen in Yorkshire & the Humber, the East Midlands, London and the South West, with falls of 54%, 38%, 25% and 20% respectively.

The Build to Rent sector covers new build developments for private rent that aim to generate a long-term return on investment and is typically financed by institutional investors. Given the long-term nature of the investment and returns institutional investment in Build to Rent has the potential to provide an uplift to house building activity, although despite strong growth in recent years, Build to Rent still only accounts for a small proportion of the 5.0 million privately-rented housing stock in Great Britain. Given the slowdown in demand in the private housing market and house building sector, institutional Build to Rent is likely to be less affected by short-term demand falls given that it is based on longer-term returns on the asset at a higher customer price point and higher quality asset, particularly as rental demand remains strong due to a lack of supply. However, it is not immune to the impacts of the housing market and the wider economy, particularly the rise in interest rates that increase funding costs.

According to the British Property Federation (BPF) and Savills, the total number of Build to Rent homes completed, under construction or in the planning pipeline in the year to 2023 Q2 stands 12.0% higher than in the previous twelve months. Single Family Housing continues to expand strongly with 28,000 units completed or in the pipeline, making up 12.0% of the Build to Rent sector. The number of homes under construction increased by 9.0%, buoyed by major housebuilders agreeing forward funding transactions with investors comprising over 2,000 homes for rent. Meanwhile, the number of new Build to Rent homes in the design and planning phase increased 13.0% to 111,815. However, build cost inflation and wider economic uncertainty looks set to slow down delivery with construction starts totalling 5,549 units in the first half of the year, down 55% on the same period in 2022. In London, where high land values mean schemes are typically larger and more capital intensive, construction starts totalled just 836 units, down 80% year-on-year (from 4,415 in H1 2022).

In London, there were a total of 97,294 units in 2023 Q2, a 10.0% annual rise with 42,033 complete, an 8.0% annual increase, and the number under construction (17,170) rose by 7.0% compared with a year earlier and there were 38,091 in planning, a 13.0% rise compared with a year earlier.

Outside London, there were 156,108 units in 2023 Q2, a 13.0% increase, with 46,067 complete, a 17.0% increase whilst there was a 10.0% annual rise in the number under construction to 36,317. This increasing movement of Build to Rent outside the capital has been notable in the last five years. Initially, developers and investors focused on London. Since 2017, however, there has been a significant movement towards other key cities such as Manchester, Birmingham and Leeds with faster population increases and a growing professional sector. Furthermore, local authorities are also planning for the delivery of Build to Rent homes with 47% of local authorities having Build to Rent in their housing plans during 2022 Q3 compared with 20% in five years earlier.

Whilst growth in the institutional Build to Rent sector is slowing but still positive, the smaller landlord market is likely to be acutely affected by changes in the housing market environment. The greatest impacts are likely to be from landlords with a mortgage, particularly those on interest-only mortgages, who will either need to pass on mortgage payment rises to tenants and risk seeing demand falling or need to take the hit themselves, which increases the probability that they may just sell up. So far, however, buoyant rents have seen renters primarily take the financial burden of this where possible whilst forced sellers remain relatively low. One positive for landlords, however, is that they will not have to deal with short-term costs of from meeting EPC rating C minimum standards for new lettings from 2025 and all lettings from 2028 as the UK government announced in September as part of its revisions to Net Zero transition although there remains little clarity on what the policy for residential energy-efficiency going forward.

Upper Scenario:

- Residential property transactions slow in 2023 H2 but house prices remain broadly flat
- Cost inflation eases
- Strong labour market

Although housing market demand inevitably falls in the light of higher interest rates, house price growth remains broadly flat as transactions bear the brunt of the fall in demand and there is also a fall in supply of homes onto the housing market as potential sellers pull out, concerned about falling demand. The strong labour market means that there are few forced sellers and easing cost inflation means that the slowdown in house price growth is manageable for house builders.

Lower Scenario:

- Housing market hits a tipping point as interest, and mortgage rates, start to rise again
- Continued political and economic instability
- Higher unemployment depresses house prices

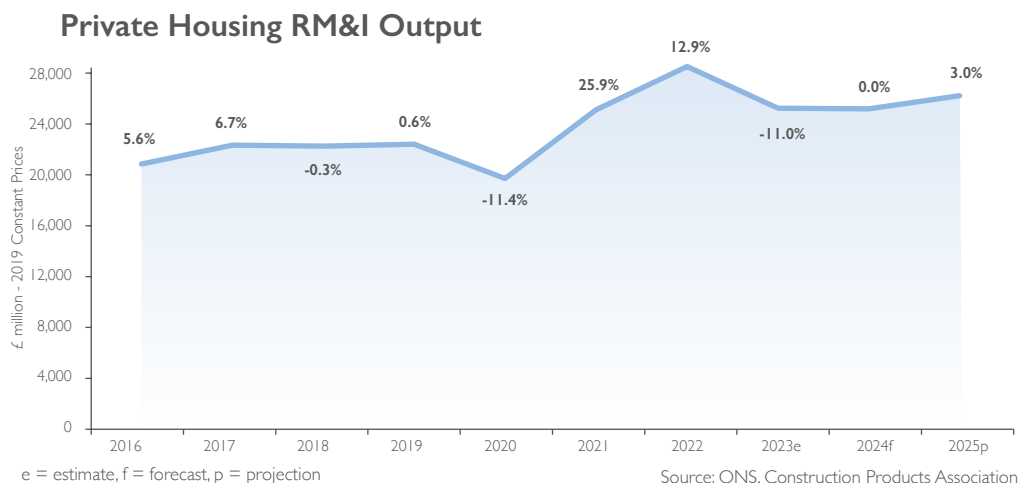
If the UK economy suffers a recession and there are double-digit falls in prices plus higher unemployment, there would be a rise in forced sellers placing further downward pressure on the housing market and sharp falls in house building, particularly on starts, over the next 12-18 months.



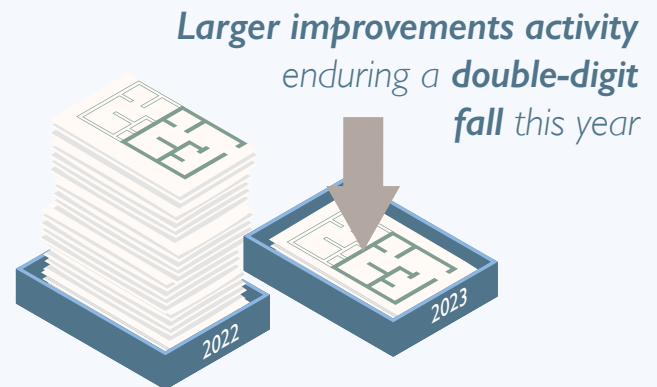
Private Housing RM&I

Private housing repair, maintenance and improvement (rm&i) activity continues to be on a general downward trend after the 'race for space' spike between 2020 and 2022. Output is forecast to fall 11.0% in 2023, unchanged since the Summer forecast, and output is now expected to remain broadly flat in 2024, revised down from 2.0% growth in Summer as medium-term prospects in the general housing market adversely affect transactions-related improvements and private landlords will now be under less pressure from government to meet EPC requirements. Despite this, energy-efficiency retrofit and solar photovoltaic work is still likely to remain strong.

Note that the CPA has major concerns regarding the ONS's historic data on rm&i output. It is worth noting that the ONS construction output data continues to be inflated by issues in the repair and maintenance data, which particularly affected private housing repair, maintenance and improvement (rm&i) and the CPA has been highlighting this for over one year. According to the ONS, private housing rm&i output in July was 3.9% lower than in June and 0.5% lower than a year ago but it reported that it remained 36.9% higher than in January 2020, pre-pandemic. This is not in line with firms operating in the sector (SME contractors, builders merchants and product manufacturers). As construction inflation slows, this is likely to become less of an issue in terms of the change in private housing rm&i output but it will still leave the output level at an artificially high level. The issue in the ONS r&m volume of output data appears to occur as the ONS is underestimating price inflation in r&m, which it uses to deflate construction output value and turn it into volume of output. As it is underestimating price inflation, it is overestimating volume of activity. To illustrate this, inflation in new housing peaked at 12.2% after the spikes in energy and commodity prices in 2022 according to the ONS (when construction materials price inflation peaked at 26.8%). The ONS, however, estimated that inflation in housing r&m peaked at only 5.9% whilst firms in the sector (SME contractors, merchants and manufacturers) stated to the CPA that inflation in the sector was more than double the ONS estimate. As a result, the ONS has been consistently underestimating price inflation in r&m since Spring 2022 and overestimating the level of r&m output. As a result, the CPA is forecasting activity down on the ground to help inform firms regarding what is likely to be upcoming rather than trying to match the ONS figures that will be published later for the forecast period.



The 'race for space' during the pandemic had a two-fold effect benefitting private housing rm&i. Directly, it led to a sharp rise in demand for rm&i work as homeowners, spending more time at home, desired better quality indoor and outdoor space. This is particularly the case given that rm&i is increasingly seen as worth doing, as an investment, when house prices are rising rapidly. In addition, many households that were working from home also spent on better quality home office and storage facilities. Indirectly, the 'race for space' also led many households to move home as they desired more space and did not need to be as close to their offices as previously so they could move to more affordable parts of the country where they could buy a larger home. This increase in property transactions also benefitted rm&i given that many home buyers, purchasing a home, tend to do refurbishments within the first 6-9 months of moving into a new property.



The ONS private housing volume of rm&i output does not appear to reflect it but the indications from small contractors and builders merchants are that private housing rm&i output began to fall in Spring 2022. The cost of living increasingly became an issue and many households' concerns about both their own economic circumstances and the general economic health of the economy rose in the light of rising interest rates, increasing inflation and falling real wages. Households' response to this was often putting on hold and delaying or cancelling small, discretionary, non-urgent rm&i activity and this appears to have been the case throughout 2023. The indications are that after the falls last year, the volume of these smaller rm&i projects has broadly flatlined so far this year with an improvement in February and March having been offset by falls more recently. Larger improvements projects appear to have followed a different trend since the spike in projects during the pandemic. Larger improvements work requiring planning applications continued throughout 2022, primarily as homeowners that could afford the work had pencilled in the finance for it at the start of the year and already had planning with homeowners concerned that delaying projects would only lead to the cost rising further. However, whilst the impacts of the rising cost of living, real wage falls and heightened economic uncertainty did not appear to affect larger improvements work on the ground last year, it did affect new planning applications for larger improvements work, which is likely to affect activity on the ground this year.

Smaller discretionary improvements projects
remain broadly flat in 2023



According to Barbour ABI's Home Improvement Report, published in June 2023, planning applications for larger home improvements in 2022 fell by 19.0% compared with 2021. Unsurprisingly, it was coming from a historic high base level after the 22.0% increase in planning applications in 2021. Given the lag between planning applications for home improvement and the actual activity down on the ground, a backlog in forward orders from 2021 primarily came through in 2022. This suggests that the 19.0% fall in applications is likely to primarily feed through into output this year. On a regional basis, in terms of applications per 1,000 private homes,

all regions saw a sharp drop from the peak in 2021, which range from 26% in the North East to 16% in London. Despite its growth in applications being weaker than elsewhere, however, London fared better overall due to its higher approval rate for home improvement applications and, consequently, London had more approved home improvement applications per 1,000 homes. This is unsurprising given the higher wealth, income, and house prices, which mean that homeowners in the capital are less affected by cost of living increases and have more wealth to sustain them. Furthermore, the higher average house price means that there is a greater incentive for homeowners to invest in their home.

The sharp increase in planning applications for home improvement in 2021 was not expected to be a long-term structural change but primarily a spike in activity. The declines in planning applications for home improvement since then highlight the effects in the homeowner demand for different types of larger rm&i work. Applications for extensions in 2021 rose by 23.7% whilst applications for loft conversions increased by 29.5%. Conversely, in 2022, applications for extensions and loft conversions fell by 21.2% and 14.0% respectively. Similarly, applications for garage improvements, widely used for office or storage facilities, rose by 15.1% in 2021 but subsequently fell by 18.4% in 2022. Home office applications in 2021 unsurprisingly rose by 81.2% but then fell by 25.2% in 2022 from a historic high level. In addition to indoor space, there was also a large rise in applications for garden buildings and works due to an increased homeowner desire for better quality outdoor space. The number of applications for garden buildings and works rose by 27.2% in 2021 but, again, fell back in 2022 by 17.5%.

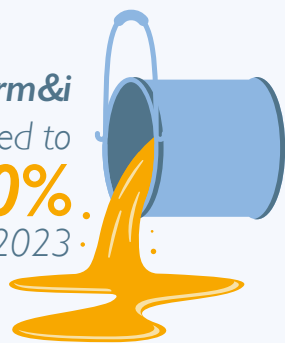
The key area for home improvements that has been sustained throughout and continues to rise is applications for solar panels, which rose by 51.1% in 2021, albeit from a low base, but then rose by a further 67.3% in 2022. Heightened concern over energy security and prices meant that homeowners who had accumulated substantial savings over the pandemic period and felt confident enough to spend, chose to invest in the energy-efficiency of their properties. A total of 130,596 solar panels were installed on UK roofs in 2022, according to the Microgeneration Certification Scheme (MCS), which is around the same as the total number installed in the three previous years, between 2019 and 2021, added together.

Around 60% of private housing rm&i tends to be repairs and maintenance, which provides the general steady level of activity whilst the volatility in the sector tends to occur in improvements. The key factors that generally drive activity in the sector, particularly for the improvements part, are property transactions and consumer spending, in turn dependent on real wages, consumer confidence and unemployment. In addition, housing wealth and household savings enable activity in the sector as they are used as sources of finance for rm&i activity with house price growth providing an incentive to invest in increasing the value of their asset.

One of the key drivers for the improvement element of private housing rm&i in the CPA's model is property transactions. There has historically been a 70% positive correlation between

property transactions with a three-quarter lag and private housing rm&i output. This means that within 6-9 months of purchasing a property, there is often improvements work when the purchased property is an existing property, as opposed to new build, which tends to have little in the way of significant size improvements works when purchased. In addition, the relationship is stronger when the existing property is a house rather than a flat given the average age of the housing stock compared with flats and the amount of refurbishment work that can be conducted on the property. The 'race for space' and government stimulus to boost

Private housing rm&i
is expected to
fall 11.0%
further in 2023.





an already strong housing market during the pandemic meant that not only was there a sharp rise in property transactions between 2020 Q4 and 2022 Q3 but that this demand was skewed towards houses rather than flats and also in areas of greater affordability, generally outside cities.

There were 87,010 property transactions in the UK in August 2023, which is 1.1% higher than in July but 15.6% lower than a year ago, according to HMRC. The number of property transactions in August was also 9.8% lower than in January 2020, prior to the 'race for space' spike in the housing market demand. It is worth noting that property transactions rising in August were still largely based on mortgages applied for and approved months earlier, prior to the mortgage rate rises in May and June. As a result, based on mortgage approvals in July and August, property transactions are likely to fall further in the rest of the year.

Year-to-date (January to August), there were 695,710 residential property transactions in the UK in 2023, which is 19.0% lower than in 2022 and 11.3% lower than in 2019, pre-pandemic.

It is worth highlighting again that the largest impacts of the fall in demand in the housing market since the government's Mini Budget and consequent spike in mortgage rates as well as the rise in mortgage rates in May and June will be on mortgage approvals. Hopefully, now that interest rates appear to have peaked at 5.25%, this will lead to slight falls in mortgage rates as lenders had previously been assuming that the Bank of England would raise interest rates to 5.75% towards the end of the year, which may marginally help demand in the housing market but note that mortgage rates will remain at relatively high levels compared with the low rates seen for most of the last decade.

Mortgage rate rises are so far having a less negative impact on property transactions than on mortgage approvals due to the lag effect (as mortgage offers and approvals between June and August have not fed through yet) and because cash buyers and investors are accounting for a higher proportion of transactions and partially offsetting falls in mortgage-related demand. UK house prices will fall less than approvals and transactions as housing demand falls are partially offset by a low supply of homes, unless there is a sharp rise in unemployment leading to a rise in forced sellers, which is not currently expected in our forecasts given the tightness of the labour market and with UK economic activity broadly flatlining rather than enduring a recession.

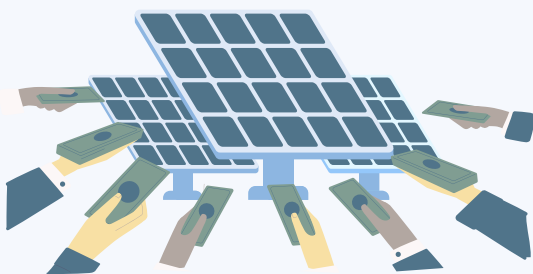
There were 45,354 mortgage approvals in the UK in August according to the Bank of England, which is 8.4% lower than in July, 37.3% lower than a year ago and 30.7% lower than the 2018 to 2019 average, pre-pandemic (pre-'race for space' and rate rises).

UK mortgage approvals had been on a general upward trend since January 2023 but from a low base (after the collapse in demand in 2022 Q4 following Mini Budget and spike in mortgage rates) as mortgage rates fell from the October 2022 peak. However, they have started to fall once again as mortgage rates rose this Summer with increases in the Bank of England's base rate and increases in the expectation of peak interest rates. UK mortgage approvals appear to be close to reaching the nadir, slightly higher than at the end of last year, as the Bank of England's interest rate appears to have now peaked and mortgage rates are likely to fall slightly. The impacts on property transactions, however, will only be seen towards the end of this year.

Although real wages rose in August 2023, they had previously been falling every month since November 2021 due to high and stubborn inflation in the wider economy. Almost two years of falling real wages directly meant less finance directly for non-essential spending and small, discretionary improvements activity as well as a lower likelihood of doing larger improvements activity.

Indirectly, the impact of stubborn inflation in the wider economy has been the Bank of England's reaction in increasing interest rates, which rose to 5.25% in August 2023 and the CPA's assumption was that they would reach 5.75% in 2023 Q4 and remain at that level until 2024 Q2. However, as CPI inflation slowed in August, surprisingly for the financial markets and Bank of England, it appears at this stage as though interest rates have peaked already. This would suggest less pain for households as mortgage payments are not likely to rise as high as expected. It would also imply less of a decline in property transactions and house prices. However, whilst interest rates may not peak as high as previously expected, they are currently expected to remain higher for longer as rising oil prices in 2023 Q3 and rising energy prices in 2023 Q4 and 2024 Q1 feed through the economy.

This is particularly the case for homeowners that have a mortgage with an increase in mortgage costs for 300,000 homeowners per quarter on fixed-rate mortgages that will be remortgaging. Real household income is expected to fall by 0.7% in 2023 despite an expected slowdown in inflation, primarily because inflation has outpaced wage inflation for the majority of this year so far. A strong positive is that real wages are now rising, albeit only slightly, but offsetting this KPMG reported in September that there is a risk that going forward consumption may be harder to finance given that the excess savings accumulated during the pandemic appears to be rapidly diminishing as households struggle to sustain spending. The household saving ratio in 2023 Q1 was 9.1%, which is higher than the 7.9% in Q1 and significantly higher than the 6.2% saving ratio a year earlier, which was immediately before the Mini Budget and consequent increase in economic uncertainty.



*Demand for **energy-efficient retrofit** and **solar/PV** activity remains **strong***

In addition, the incentive for improvements work was boosted by double-digit house price inflation in 2021 and early 2022, given the increased rate of return on the sale of the home by investing in increasing the value of the home, particularly at a time of historic low interest rates. This made it particularly favourable compared with saving or other, riskier investments. However, falling house prices and rising interest rates make this less of an attractive proposition albeit still potentially worthwhile compared with many other investments. The CPA assumes

house price falls of 8.0-10.0% peak to trough between 2022 and 2024 with 4.0-6.0% house price falls in 2023.

Given that house prices experienced double-digit rises in both 2021 and 2022, the house price falls would not return prices back to 2020 levels but that is primarily due to the sharpest downturns in housing market demand expected to be seen in mortgage approvals and property transactions. However, this implies that the house price falls give less of an incentive for investment in rm&i whilst fewer property transactions mean fewer refurbishments within the 6-9 months after moving home.

Despite all the economic uncertainty and headwinds, [GfK's Consumer Confidence Index](#) continues to surprise on the upside, albeit from a low base. It reached its nadir in September 2022, the same month as the government's Mini Budget, at -49. It gradually improved before briefly falling back to -45 in January 2023 due to concern regarding the UK economy. Since, then however, it has risen in each month except for a slight fall in July. UK consumer confidence rose in September 2023 to -21, which is the highest recorded since January 2022. The indices for personal financial situation for the past year and next year registered marginal growth whilst the index for expectations for the UK's wider economy in the next year was more robust. Consumers continue to show resilience despite the rising cost of living, even though inflation is slowing, this merely means that prices are rising less quickly than they were. Furthermore, consumers' confidence has been rising despite increasing numbers of households facing rising housing costs increases due to mortgage rate rises or increases in rents.

Despite the rises in consumer confidence, however, the GfK measures remain negative overall. The index measuring changes in personal finances during the last year was up two points at -13, which is 15 points better than September 2022. The forecast for personal finances over the next 12 months increased one point to -2, which is 38 points higher than a year earlier. The measure for the general economic situation of the country during the last 12 months was five points higher at -47, which is 25 points higher than in September 2022. Expectations for the general economic situation over the next 12 months increased by six points to -24, which is 44 points better than in September 2022. The Major Purchase Index was four points higher at -20, which is 18 points higher than a year ago. The Savings Index is unchanged in September at +27, which is 16 points higher than the same time last year.

Outside of the main drivers of private housing rm&i activity, government funds activity in private sector energy-efficiency retrofit of the private housing stock. The [ECO4 scheme](#), which came into force on 27 July 2022 and covers a four-year period until 31 March 2026 focuses on lower-income households, providing support for improving heating efficiency. However, government announced that ECO4 was late and, as a result, ECO3 interim was put in place until June 2022 with measures under ECO3 interim counting towards ECO4 targets. The government's ECO4 report shows a specific interest in insulating solid walls – aiming to carry out 22,000 solid wall insulation instalments each year. Government states that so far there have been no boiler or electric storage heater repairs through the scheme. Instead of repairing efficient gas boilers, government states that households are replacing them after around three to eight years rather than the end of their expected lifetime of 12 years. ECO4 will incentivise repairing efficient heating systems where possible. Any boiler or electric systems that cannot be repaired will focus on alternative sources such as heat pumps, biomass boilers, solar/photovoltaics (PV) or a District Heat Network. However, according to the Energy Efficiency Infrastructure Group in April 2023, ECO4 is plagued by multiple issues. Firstly, installers and energy suppliers report that they have found that around 90% of qualifying fuel poor households cannot have works delivered as they do not meet the minimum requirements or it would not be financially viable to meet the minimum requirements. Secondly, meeting the minimum SAP requirements is too expensive for most properties. Thirdly, the installation cost assumptions within the ECO4 impact assessment do not reflect current market conditions and the application of a 60% increase in estimated costs for cavity wall and loft insulation in the recent Great British Insulation Scheme (GBIS)

illustrates this. Finally, the high up-front costs and the large amount of bureaucracy limit uptake from installers, who have chosen to work on other private sector work or on public sector housing energy-efficiency schemes. So far, under ECO3 interim and ECO4, 10,000 measures have been delivered each month. This contrasts sharply with 29,687 measures per month installed under ECO3 between January 2020 and March 2022.

Government announced a [Boiler Upgrade Scheme](#) (BUS) in 2021 that began in 2022 with £450 million of funding over three years to 2025 in England and Wales. The government target of the BUS scheme was originally to achieve 30,000 annual installations of heat pumps, to replace boilers, initially using £5,000 vouchers per replacement. However, during the first year of the programme, between 23 May 2022 and 31 March 2023 only 15,768 applications were received for the scheme, almost half of the 30,000 target. Furthermore, only 60% of the applications, 9,869, had vouchers redeemed, with £70.2 million left unspent and returned to HM Treasury as the finance is not carried over to the next year. On the positive side, a key part of the government's Net Zero announcements in September 2023 were that the vouchers in the BUS would be increased to £7,500. Given no additional funding for this year beyond the £150 million for this financial year, it points towards the target effectively reducing to 20,000 although the additional grant is likely to help the financial viability of alternative heat sources and the revised target for this is slightly more realistic. The indications from the Department for Energy Security and Net Zero (DESNZ) in October 2023 were that even the 20,000 target may be optimistic and that there may be room for manoeuvre for the BUS finance to be carried over into next year. In addition, DESNZ highlighted that there may be increasing additional finance after the current BUS scheme if it proves successful with the increased grant given that the government Net Zero transition funding includes £6.0 billion beyond 2025. Current estimates suggest that air source heat pumps cost between £7,000 and £14,000 to purchase and install whilst ground source pumps can cost between £15,000 and £35,000, so the extent to which the voucher changes homeowners' decisions regarding heat pumps and the extent to which government meets its revised target remain uncertain.

In addition, in November 2022 the government announced a £1.0 billion ECO+ scheme. ECO+ came in on 1 April 2023 and was then rebranded as the [Great British Insulation Scheme](#) (GBIS). It currently runs to 31 March 2026. Government is focusing on two key groups; low-income groups that already qualify for existing energy-efficiency retrofit schemes (such as ECO4) and then households in lower council tax bands, which may or may not be able to afford energy-efficiency measures (all homes in Council Tax bands A-D in England, A-E in Scotland and A-C in Wales with an EPC of D or below). However, the target for homes that government expects to be retrofitted under the GBIS is of the scale of just 70,000 over three years with activity focusing on cavity wall installations, which is not the case for ECO4.

So far, the CPA has not factored in any significant uptick in activity as a result of the GBIS but, if this were to occur, it could represent a substantial upside risk to the forecasts and is included in the CPA's Upper Scenario.

Near-term, a larger driver of additional activity continues to be the stream of urgent cladding remediation work on privately-owned residential towers that are taller than 18 metres, which is progressing at a slower rate than for public residential buildings.

At the end of August 2023, the Department for Levelling Up, Housing and Communities (DLUHC) reported that there were 234 private sector buildings with ACM cladding systems that are unlikely to meet current Building Regulations, which is unchanged since January. Work has completed on 164 of these, an increase of four since May, despite the initial deadline of 31 December 2019 over three years ago. This leaves 70 private sector residential buildings yet to be remediated. Of these, 52 have started remediation and one further building is known to be vacant.

Going forward, after cladding remediation issues on private residential blocks, fire safety activity will begin to extend work to buildings above 11 metres with ACM cladding as well as buildings above 18 metres with other types of cladding in addition to addressing other key safety issues such as fire stops and fire doors plus other non-essential general issues discovered during remediation. As a result, addressing fire safety issues will provide a long pipeline of activity in the sector over the next decade. However, as highlighted in previous forecasts, even with finance, skills shortages for essential remediation works as well as availability and cost inflation issues for some products, such as pre-coated aluminium and steel, which will be medium-term, will constrain the rate of growth of activity. At this stage, the extent of work on buildings above 11 metres is unknown. The total number of residential buildings between 11 metres and 18 metres is estimated to be 78,000 but what is unknown is the number of these that have fire safety issues.

Overall, private housing rm&i output is now forecast to fall by 11.0% this year, similar to the forecast three months earlier. In 2024, sector output is expected to remain flat, with no significant growth until the subsequent year. The forecast for next year is a revision downward from the 2.0% growth forecast three months ago. Although interest rates, and consequently, mortgage rates are now expected to peak lower than in the Summer forecast, they are expected to remain at peak for longer due to stubborn inflation. As a result, the forecast of activity recovering from next Summer has been pushed back into 2025.

Upper Scenario:

- Strong labour market
- Inflation eases in 2023 Q4 and 2024
- GBIS and BUS ramp up activity

With a strong labour market, stronger real wage growth than anticipated and with homeowners less affected by energy price rises due to the government's energy bills assistance, the UK economy will strengthen going into 2024 and if house price growth remains positive, wealthier homeowners less affected by inflation issues may continue to invest in their homes, particularly if construction cost inflation eases. Furthermore, if the GBIS starts generating energy-efficiency (insulation) retrofit activity as government states and the increased value of the vouchers for the BUS increases installations then this would benefit the sector at a time when private housing rm&i demand has been easing, albeit insulation demand has not been easing.

Lower Scenario:

- Recession
- Interest rates start to rise again
- Sustained inflation
- Increasing unemployment

If the UK economy experiences a recession with inflation starting to rise again as rising oil prices and energy prices in Winter feed through the economy, then interest rates could rise again and then all but the most essential maintenance could be paused or cancelled as job insecurity, rising homeowner costs and falling real wages would continue to hit consumer confidence and spending power.

Public Housing

House building by housing associations and local authorities is expected to be constrained by a slowdown in the wider housing market, along with rising debt servicing costs and a shift away from new developments to the improvement and maintenance of the existing stock, particularly related to fire safety, decarbonisation and general repairs.

Both housing associations and local authorities now indicate a sharp reduction in near-term development plans as the current deterioration in housing market demand combines with long-running factors that were already limiting appetite for committing to new build projects. The sector has been facing headwinds of strong inflation eroding grant funding, which, in turn, had fallen on a per unit basis since 2010, in addition to lower revenues as a result of the below-inflation rent increases that were implemented in April 2023 across the nations and the rising costs local authorities are experiencing for operational services. As the general housing market began weakening in 2022, demand for affordable tenures initially held up but as interest rates have risen above 5.0% and amidst earlier uncertainty about their peak level, there were signs that demand for affordable ownership tenures started to slow towards the end of Summer. At the same time there has also been a growing focus among housing associations and local authorities to increase spending towards addressing issues on the existing public housing stock, from legacy fire safety measures to basic repairs and maintenance after high-profile cases and the introduction of the Social Housing (Regulation) Act have drawn attention to quality and basic upkeep (see [Public Housing RM&I](#)). This picture of constrained finances for new build public housing, and a lack of additional funding from central government, means that developments may be pushed back into later years, especially as fire safety, basic repairs and maintenance, as well as decarbonisation and energy efficiency improvements, remain the priority for finance and resource. Declines in completions and output are expected in both 2023 and 2024, with growth returning in 2025.

Public Housing Starts and Completions Great Britain

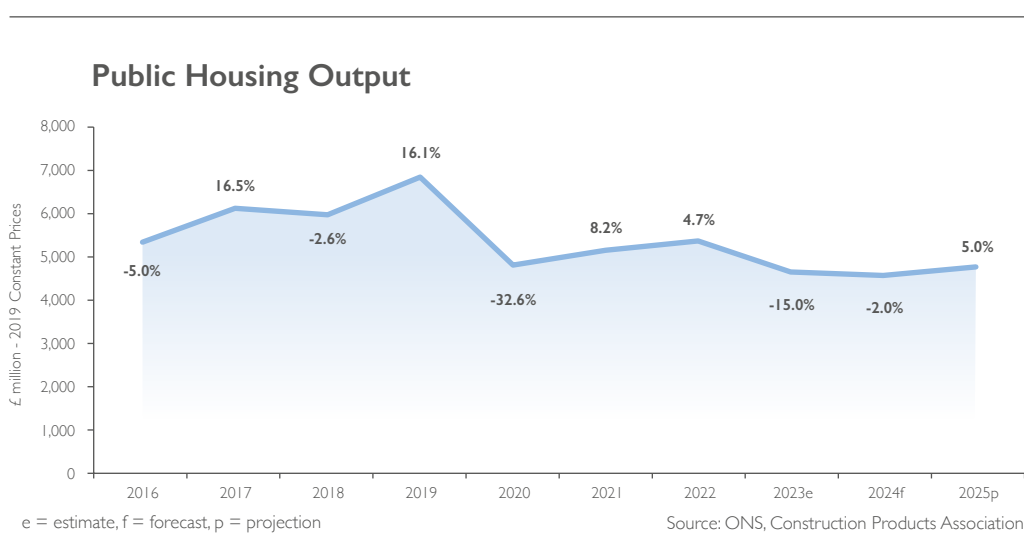
	2021	2022	2023	2024	2025
	Actual*	Actual*	Estimate	Forecast	Projection
Starts	41,998	39,066	33,206	34,202	35,229
	22.8%	-7.0%	-15.0%	3.0%	3.0%
Completions	40,502	42,005	35,704	34,990	36,740
	27.0%	3.7%	-15.0%	-2.0%	5.0%
Output (£m)	5,120	5,359	4,555	4,464	4,687
	8.2%	4.7%	-15.0%	-2.0%	5.0%
RM&I Output (£m)	7,168	7,052	7,334	7,481	7,630
	5.8%	-1.6%	4.0%	2.0%	2.0%

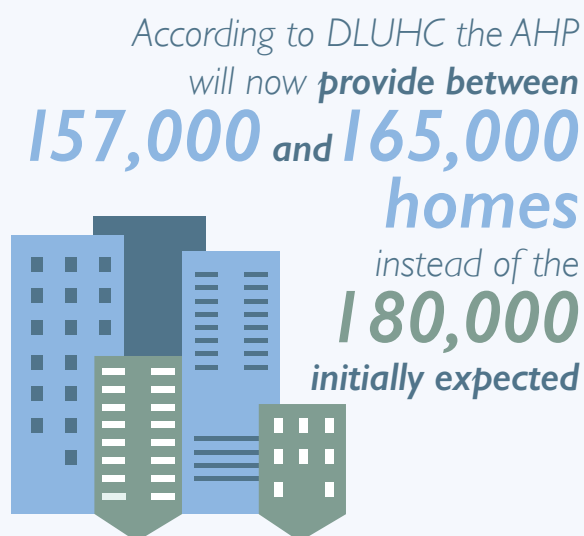
* Data from 2020-2022 for Wales is an estimate

Source: DLUHC, ONS, Construction Products Association

Directly publicly-funded housing activity occurs through the Affordable Homes Programme (AHP), which covers starts until March 2026 and its predecessor, the Shared Ownership and Affordable Homes Programme (SOAHP), which covered starts up to March 2023. A government policy focus on increasing home ownership means that there has been a greater focus on the delivery of housing such as shared ownership and private sale by housing associations and private house builders rather than more traditional affordable and, in particular, social rent homes, which aligns demand more closely with private housing market drivers. Consequently, public housing demand will be susceptible to higher mortgage interest rates, decreasing household incomes and falling house prices that are affecting the general housing market. Throughout 2022 and early 2023, demand for affordable tenures such as shared ownership was reported to have increased whilst market sales decreased, reflecting both the lower deposits and mortgage loans required, as well as a potential redirection of demand to below-market price units after Help to Buy ended. However, in the Regulator of Social Housing (RSH) [survey of social housing providers](#) for Q2, affordable ownership sales had fallen to the lowest level since 2020 Q2, with unsold stock also at a three-year high.

The AHP 2021-2026 provides grant funding of £11.5 billion (£7.5 billion for outside London) and was initially expected to provide 180,000 homes (130,000 outside London and 50,000 in the capital) over the duration of the programme. However, the Department for Levelling Up, Housing and Communities (DLUHC) confirmed a £2.4 billion capital underspend for 2022/23, which was 25% below original plans, and includes £1.0 billion unspent on the Affordable Homes Programme due to economic volatility pausing plans. Of this, £0.9 billion has been reprofiled, with £0.6 billion moved into 2023/24 and £0.3 billion moved into 2024/25. The remaining £0.1 billion was returned to HM Treasury. DLUHC now expects the AHP to provide between 157,000 and 165,000 homes and in June, announced that funding would no longer be restricted to new build but could be used to replace existing homes in disrepair. In 2021/22, the first year of the AHP, there had been 10,773 affordable starts, and 14,853 under the SOAHP. 21.2% of these starts in 2021/22 were for affordable rent, 14.0% for affordable home ownership and 5.7% for social rent. The tenure of the remaining 59.1% was not determined at the starts stage, which suggests a considerable element of uncertainty over the strength of the housing market and the extent to which grant funding can supplement housing associations' own resources in an environment of strong cost inflation and a pressing need for remediation work on the existing stock. Highlighting the increased housing market uncertainty, for 2022/23, the tenure was undecided for 66.4% of the 26,410 affordable starts under the two affordable homes programmes, whilst the number of starts for open market tenures was the lowest since





2013/14. In addition, the RSH surveys in recent quarters have shown development spending has been markedly below forecasts, with providers citing reduced confidence to commit to new schemes in the current economic environment, as well as contractor insolvencies slowing progress on building already started. Construction insolvencies reached a decade high in Q2 (see [Overview](#)) and, therefore, remain a risk as financial constraints linger.

It is also assumed that internal planning processes for high-rise developments will be lengthened to account for the requirement for two staircases in residential towers above 30 metres, in place in London since February and the confirmation that the national policy for England will be for buildings taller than 18 metres. A local authority joint venture in Havering has been paused to reassess the scheme in the light of the new requirements, whilst cost consultant Arcadis assumes a

nine-month delay to high-rise schemes. A higher proportion of housing association completions are flats compared to private sector house builders (29% in 2022/23 compared to 15%), with flats accounting for the highest proportions of housing association completions in the higher-cost regions of London, the South East and East of England. Combined with continued post-pandemic demand for lower density housing this leaves housing associations exposed to wider housing market trends, and typically are not able to respond as quickly as the private sector.

The annual rent-setting agreement for housing associations in England allows an increase of the CPI inflation rate in September plus one percentage point. However, with CPI inflation at 10.1% in September 2022, the implied increase in social rents of 11.1% in April 2023 was reduced to 7.0%, to balance the increase in revenue for providers with the ability to pay from social tenants given that the higher costs of living costs particularly impact on poorer households given that they spend a higher proportion of their incomes on energy, food and rent. Nevertheless, the real terms cut in rental revenue adds to the issues constraining housing associations' ability to invest in new developments, with ratings agencies highlighting that the rising cost of borrowing means additional debt funding is unlikely to plug the shortfall. In Wales, social rents were allowed to increase by a maximum of 6.5%, whilst in Scotland rents rose by an average of 5.1%. This is particularly pertinent for financially-constrained local authorities. Since 2018, 12 section 114 notices have been issued, meaning that a council must pause its spending as forecast income is insufficient to meet its forecast expenditure in the current year's budget. Most recently, in September Birmingham City Council issued a section 114 notice and although its financial difficulties are related to one-off legal compensation payouts, a 28% cut to its housing budget has already been proposed.

In addition to a housing market slowdown, rising interest rates and caps on rent increases, another of the main challenges facing housing associations and local authorities over the next few years will be balancing debt-funded development of new homes with the need to invest in the existing stock. Credit ratings agency Standard & Poor's (S&P) anticipates that housing associations will need to borrow £16 billion for capital expenditure and refinancing over the next two years, leading to a total debt of over £116 billion by the end of 2024/25. S&P previously forecast a £21 billion borrowing requirement, with housing associations now assumed

to redirect development spending instead. The Bank of England's increases in the base rate since 2022 have raised refinancing costs for housing associations, and with annual reports for the 2021/22 financial year already showing a widespread reduction in surpluses and building targets not being met, increased interest payments on existing debt and the prospect of additional rises in interest rates on any new debt funding in 2023 and 2024 will clearly place further constraints on new build activity. The RSH quarterly survey for Q2 showed that interest cover (a registered provider's surplus compared to interest payable) was at 78%, which was the lowest ever recorded and a fall from the previous record-low of 87% in Q1. Respondents forecast interest cover for the next 12 months to remain below 100%, at 83%, due to increases in interest payable from higher interest rates, as well as greater r&m capital expenditure.

The Greater London Authority (GLA) has £4.0 billion of the £11.5 billion funding for the Affordable Homes Programme 2021-2026. In contrast to the requirements for the rest of England, over half of units will be for social rent. The tenure has accounted for a rising proportion of GLA-funded affordable starts, from 22.4% in 2017/18 to 46.3% in 2020/21 and 60.8% in 2022/23. This has been slower to filter through to completions, however. GLA-funded social rent completions as a proportion of affordable home completions were 6.5% in 2017/18 before rising to 24.4% in 2020/21 and 37.3% in 2022/23 so it remains consistently lower than the social housing proportion of starts, which points to significant lags between social rent starts and completions plus units initially designated as social rent shifting towards other tenures as they are built out. As developing for social rent requires a higher grant than for other tenures, it may be impacted more by issues affecting overall affordable housing delivery.

In Scotland, the Scottish Budget allocated £752 million for affordable housing in 2023/24 as part of its target for 110,000 affordable, energy-efficient homes over the next 10 years although this is heavily reliant on leveraging private sector investment and remains unchanged in the light of materials, products and labour cost increases. The funding is also below the £831.6 million figure allocated in 2022/23. Starts by Scottish housing associations and local authorities in 2022 totalled 4,962, which was the lowest since 2015 and in the first half of 2023 were 44.0% lower than a year earlier. Approvals under the Affordable Housing Supply Programme in Q2 were the lowest quarterly level since 2012 Q3 and for the first half of 2023 were 12.1% lower than a year earlier.

In Wales, a five-year rent-setting policy was implemented from April 2020, although it will be limited to below inflation increases in 2023/24. It also announced that a further £35.0 million would be spent over the next three years on the Welsh Government's Land for Housing scheme, which aims to help housing associations buy land. The Welsh government also confirmed in March 2022 that it will spend more than £1.0 billion on building new social housing over the next three years. The Welsh government has an aim to build 20,000 low-carbon social homes by the end of this parliament and confirmed it will spend £330 million on the Social Housing Grant in 2023/24 and £325 million in 2024/25, up from £310 million in 2022/23 and £250 million in 2021/22.

Overall, public housing output is expected to fall by 15.0% in 2023, as high build costs, higher interest rates and slower market-linked demand, including for shared ownership, reduce development appetite and activity on the ground. Output is forecast to fall a further 2.0% in 2024 as these factors continue and significantly higher costs for new borrowing, combined with below-inflation rent caps and elevated construction costs constrain the recovery of new build activity. The slow recovery also reflects the lagged impact of delays to decision-making in 2022 and 2023 and for developments earlier in the planning pipeline that may need to be reassessed for design and viability due to new rules on a second staircase for buildings above 18 metres. Throughout the forecast period, it is assumed that housing associations balance the increasing need to channel finance towards cladding remediation, fire safety measures, basic repairs and decarbonisation by reducing spending on new build.

Joint ventures and partnerships between housing associations and private sector house builders increased from 2019 and such partnerships would be expected to increase in the near-term, as an insurance against the uncertain outlook for the private market. However, given the crossovers between private and public provision, in particular partnerships of this nature and the acquisition of affordable units by housing associations from private developers during the building process, ONS statistical classification of private and public sector activity may also change across starts, output and completions. From April 2020, the methodology for the Department for Levelling Up, Housing and Communities (DLUHC), formerly the Ministry of Housing, Communities and Local Government (MHCLG), house building data was changed to source completions from affordable housing supply data, rather than building control. In April 2020, the ONS also began classifying housing association house building as private sector output. This implies a structural break in the ONS split of housing output data, but given that this also coincides with the sharp declines in output due to the impacts of the social distancing restrictions imposed following the pandemic, the impact of this change is currently unclear. As with all sectors, the CPA is forecasting activity on the ground rather than matching the ONS data.

Upper Scenario:

- Demand for shared ownership recovers as interest rates peak
- Activity to complete at the end of the SOAHP is increased

Continued increases in interest rates and uncertainty over their peak have recently reduced demand for market-linked affordable properties, but as Bank of England rhetoric suggests interest rates have stabilised, the lower deposits and mortgage loans required for affordable housing may see demand pick up again, which buoys housing association confidence to proceed with activity and underpins completions under the current SOAHP and starts under the 2021-2026 programme.

Lower Scenario:

- A significant weakening in the housing market undermines the focus on market-linked products
- Activity to complete at the end of the SOAHP is reduced
- An increase in local authorities declaring financial issues

By contrast, a sharper rise in mortgage interest rates if the Bank of England tightens monetary policy by more than expected or leaves interest rates on hold at their peak for longer and/or a prolonged period of house price falls, would reduce demand for market-linked products already under construction on the current SOAHP, as well as further reduce appetite for development of these tenures on the 2021-2026 programme. An increasing number of local authorities signalling financial difficulties that may require significant cuts in capital spending is also a risk in the lower scenario.



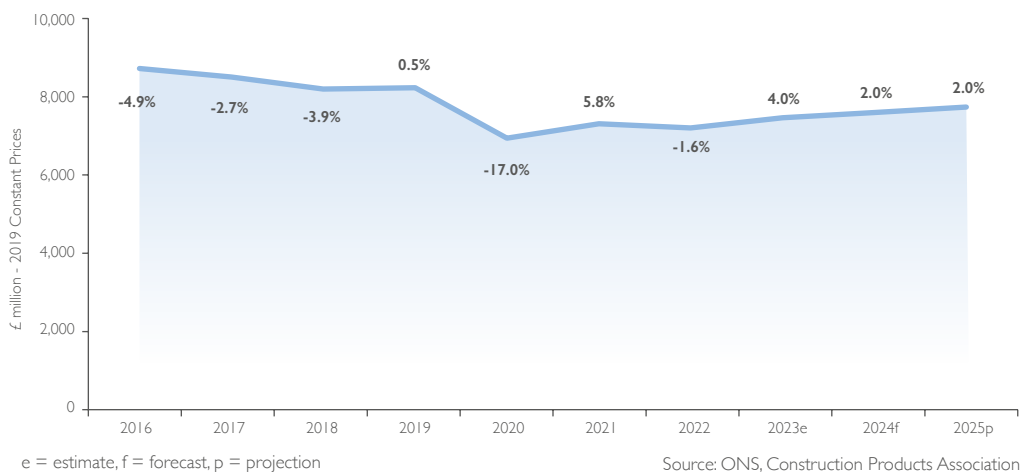
Public Housing RM&I

Social housing providers are increasingly prioritising investment in their existing stock rather than new development, particularly given current housing market weakness, but even with work coming through on government-funded energy efficiency schemes, growth rates will be limited by capacity constraints and higher financing costs.

In the public housing rm&i sector, general maintenance of the social housing stock typically provides a level of activity that tends to be stable on an ongoing basis, whilst work to address legacy issues related to fire safety and energy-efficiency retrofit of social housing, which tends to be larger in value and scale, drive growth rates in the sector. However, in spite of continual, and urgent, cladding remediation, a drive for energy efficiency improvements to the existing social housing, and ongoing general maintenance and improvements, output in 2022 was 22.8% lower than in 2015. The weakness in the sector has been due to a combination of long gaps between announcements of government programmes and funding allocations to specific projects, capacity constraints for skilled labour and two years of strong materials price inflation that have led to delays and reprofiling of workstreams. In addition, rising interest repayment costs continue to weaken financial positions and raise the cost of new finance. With general repairs and maintenance, particularly mould and damp, now also rising up the priority list, social housing providers indicate that higher-priority and higher-value activity has been at the expense of other non-urgent general works on existing properties that can be delayed. As was the case in previous Forecasts, this is expected to underpin activity over the forecast period, although growth rates will be restricted by the factors outlined above.

Over the past six years, the focus for social housing providers has understandably shifted to ensuring fire safety and, more recently, ensuring general standards of upkeep are maintained. According to the Department for Levelling Up, Housing, Communities (DLUHC) Building Safety Programme statistics, remediation work has completed on all but one of the 161 social housing buildings taller than 18 metres that had ACM cladding unlikely to meet current Building Regulations. Social housing providers were able to access the Building Safety Fund that provided

Public Housing RM&I Output



£400 million for the remediation of ACM cladding. However, other types of cladding are more prevalent and as the remit has shifted to wider cladding remediation and the coverage widened to mid-rise buildings above 11 metres in the £5.1 billion Cladding Safety Scheme, funding has been prioritised for the private sector, with social sector funding limited to covering costs that would have been passed on to leaseholders rather than the full cost of replacement, except for social housing providers whose remediation costs are deemed unaffordable or a threat to financial viability. To date, £200 million has been allocated for non-ACM remediation of 165 social sector residential buildings

in England, of which 67 have started and 28 have completed. In contrast, £1.7 billion has been allocated for 1,049 buildings in the private sector.

In Scotland, there are 95 residential blocks that need High Pressure Laminate (HPL) cladding replacement. Combined with HPL cladding remediation required on 271 public sector buildings such as schools, the Scottish government calculates a £900 million shortfall in funding from central government for the work and is now legislating to implement a Building Safety Levy on new development, similar to the one set for introduction in England. Nevertheless, of the £97.1 million allocated for Scottish cladding remediation, only £3.7 million had been spent at the end of June 2023.

In Wales, a total of £375 million in capital spending and £6.5 million in revenue spending has been allocated to building safety. This will pay for a second phase of the Welsh Building Safety Fund, alongside supporting delivery of the Building Safety Passport Scheme. The latter is part of a Welsh government initiative to fund fire safety surveys on all buildings taller than 11 metres in order to produce 'passports' that will set out any remediation work required. To date, 26 social housing buildings have been remediated, with work on 41 underway and a further 38 allocated funding.

Increased scrutiny on fire safety of residential buildings has also spread to questions over the general quality of housing built and maintained by social landlords. High-profile cases, the 'naming and shaming' of 14 social landlords by Secretary of State, Michael Gove, and the newly-implemented Social Housing (Regulation) Act have led to greater awareness and demand from tenants, in turn increasing providers' focus on quality issues such as damp and mould, boiler faults and general disrepair. For example, in August, Newcastle City Council reported that the number of repairs delivered through its repairs service increased from 85,000 in 2019/20 to 123,795 in 2022/23, driven by tenant demand. Given that this is as high-profile an issue as fire safety, housing associations and local authorities are reporting that they are now diverting more spending to basic r&m.

The Regulator of Social Housing (RSH) quarterly surveys, which are based on responses from private registered providers of social housing that own or manage more than 1,000 homes, reported that total repairs and maintenance expenditure in Q2 was £1.8 billion, split between £1.1 billion on revenue expenditure and £0.7 billion on capital expenditure. Total r&m expenditure was £7.2 billion in the 12 months to June 2023, and is forecast to rise to a new high of £8.2 billion over the next 12 months. However, r&m spending has consistently been below forecast over the last 12 months, with work on planned programmes replaced by rectifying damp and mould issues as they arise, as well as difficulties reported with contractor

Half of social housing providers' headline costs in 2022 related to spending on maintenance and major repairs, which averaged

£4,150
per unit



Source: Regulator of Social Housing

availability and price inflation. In Q2, 48% of providers surveyed reported either delays or changes to r&m programmes. In addition, although only one-fifth of social housing providers' loans are at variable interest rates, the rises in interest rates throughout 2022 and 2023 have added to financial pressures and interest rates for new lending will be significantly higher than the loans that financed previous activity. Illustrating the importance placed on improving building safety and living conditions, the RSH found that 27 providers had negotiated loan covenant waivers related to building safety works.

Similarly, 25 loan covenant waivers have been agreed for energy and decarbonisation work, with this also an increasing area of focus for the publicly-owned housing stock. In August, the housing association Stonewater agreed a £200 million loan for energy efficiency retrofit work on its stock of 36,000 properties to bring them up to an EPC rating of C before 2030. It will need to achieve three sustainability-based KPIs agreed with the lender for both its existing stock and new development over the loan period.

Following the failure of the Green Homes Grant (GHG) in providing energy-efficient retrofit in the private sector prior to its cancellation in its first year, the funding was shifted to the Local Authority Delivery (LAD) scheme and the Social Housing Decarbonisation Fund (SHDF). For the former, in the £280 million third phase 17,887 measures have been installed since January 2022, whilst for the latter, the first wave of £179 million in funding was allocated on the optimistic basis of retrofitting 38,000 homes. However, responses to the tender indicated that the cost of retrofitting was almost two times higher than the initial expected cost that the government was expecting and, consequently, it will only see 20,000 homes retrofitted in the first wave. Between March 2022 and June 2023, 12,408 measures had been installed in 7,208 properties. Both programmes are dominated by insulation improvements, which account for half of measures installed under the LAD and 60% under the SHDF, followed by solar/PV measures (40% of measures for the LAD and 11% for the SHDF).

In the second wave of the Social Housing Decarbonisation Fund, £778 million was allocated to 107 projects in March, to fund work between 2023/24 and 2024/25. £1.1 billion of matched funding from housing associations will be used to carry out energy efficiency upgrades on 100,000 properties with an EPC rating below C. However, as with the original Green Homes Grant, all registered installers must be registered with Trustmark and, where applicable, with the Microgeneration Certification Scheme (MCS). In addition, all projects must be compliant with PAS 2035:2019. As a consequence, the constraints on installers may mean that despite the finance available, the lack of eligible installers may hinder progress on projects, in addition to cost inflation. Alongside this, following an initial phase that allocated £150 million, a further £630 million was allocated for the Home Upgrade Grant scheme, which will be used by local authorities to support low-income households to carry out energy-efficiency upgrades on 30,000 properties over the same timeframe to March 2025. Between its start in January 2022 and June 2023, 5,025 measures had been installed at 3,310 properties. Similar to the other retrofit schemes, 44% of measures installed are for insulation and 28% are for solar/PV.

Alongside these schemes, the next iteration of the Energy Company Obligation – ECO4 – will run concurrently, and for one year longer to 2025/26, and will provide funding of £1.0 billion per year for low-income and fuel-poor households. For social housing, eligibility will be limited to homes in EPC band E, F or G and limit eligible measures to insulation, first-time central heating, renewable heating systems and district heating. It has a target of 22,000 solid wall insulation retrofits per year. This is higher than under ECO3 (43,397 installations between October 2018 and March 2022), but lower than the 145,103 measures installed during the four years of ECO1 and 2. Between April 2022 and June 2023, there were 144,670 measures installed in total under ECO4, of which 9,006 were for solid wall insulation measures. The Great British Insulation Scheme, previously known as the ECO+ programme, allocates a further £1.0 billion to energy efficiency measures, distributed as £130 million in 2023/24 and £435 million each in 2024/25 and 2025/26. However, eligibility for social housing is even more

constrained to avoid crossover with existing policies, and will cover insulation measures only, on properties with an EPC rating of E or below.

Cost inflation is likely to have a considerable impact on the sector in the medium-term given that many local authorities are already financially-constrained. Below-inflation social rent increases were implemented in April and providers are facing rising debt repayment costs as interest rates rise. As a result, despite funding being available for cladding remediation and decarbonisation on the local authority and housing association dwelling stock, this finance is not likely to go as far as initially expected so as the CPA has highlighted in previous Forecasts, we may see the value of activity coming through but not the volume. In addition, housing associations are still in the process of determining the scope of fire safety works outside of cladding remediation, particularly given that the more inspections are conducted on their stock, the more issues (such as fire stops and fire doors as well as other general issues) that they are likely to find and finance will need to be devoted to this area.

In the longer-term, a key issue for social housing providers is that it may not be financially viable to undertake energy-efficient retrofit, with Notting Hill Genesis highlighting that 15% of its 44,000 homes are currently Victorian terraces that are around 100 years old and have the lowest EPC rating. Getting such properties up to EPC C may be up to £100,000 per property. Instead, it may be that housing associations need to sell some older properties given the extensive retrofit cost. It may be even more difficult for financially-constrained local authorities. Projected housing r&m expenditure has exceeded budgets by £2 million for Oxford City Council and Selby District Council, for example, leading the latter to suspend all but basic repairs on empty properties, rather than spending on improvements to bring them up to a lettable condition.

Nevertheless, L&Q, one of the largest housing associations that manages 90,000 homes, awarded contracts for its 15-year major works homes upgrade programme, which aims to spend up to £300 million per year (£100 million per year in the earlier years of the programme) on bringing its properties up to an EPC rating of C by 2028, as well as a wider programme of estate and environmental improvements, mechanical and engineering works and internal decorations, including 48,000 new kitchens and 42,000 new bathrooms.

Across the other nations, the Welsh Government Budget will provide £580 million for the decarbonisation of social housing in Wales up to 2024/25, with 7,000 retrofitted to date since 2020. A total of £72 million in general capital will also be used to help accelerate the scale and pace of the decarbonisation of Welsh homes. Of this, £35 million will be used to test the use of new funding models.

In Scotland, the Energy Efficiency Standard for Social Housing 2 (EESH2) in Scotland targets a minimum EPC rating of D for social housing to be let from 2025. Only 7.0% of the 608,000 social sector dwellings in Scotland had an EPC rating below D according to the house condition survey for 2021 so with sufficient finance this may be achievable. It also sets a deadline of December 2032 for all social housing to reach an EPC rating of B, which looks more challenging given that 94% of Scotland's social housing stock is currently below this. The Scottish Government's Budget for 2023/24 announced energy efficiency retrofit under its Home Energy Efficiency Programme (HEEPS) would have funding of £64.0 million for 2023/24, matching the amount allocated for the previous year. The programme provides funding for local authorities to develop and deliver energy efficiency programmes (mainly solid wall insulation) with the aim of reducing fuel poverty.

Activity increased in the first half of 2023 but growth in public housing r&m&i output is expected to remain restricted by capacity constraints for the key areas of demand across cladding remediation, energy-efficiency retrofit and general repairs, with the cost inflation and interest rate rises experienced in 2022 and early 2023, along with any associated delays or finance constraints, adding to the headwinds. The forecast assumes that this work proceeds as

a priority, with further diversions of finance and resource away from new build projects and r&m work that can be postponed. As a result, public housing rm&i is forecast to rise by 4.0% in 2023 and rise by 2.0% in both 2024 and 2025.

Upper Scenario:

- Housing associations severely cut new build programmes to focus on the existing stock

Housing associations have already redirected spending away from new development towards investment in the existing stock and in the upper scenario, a deterioration in demand for tenures linked to the open housing market leads to further cuts in new build programmes and resources shifted further to address issues on the revenue-earning stock such as fire safety, cladding remediation, decarbonisation and general r&m.

Lower Scenario:

- Labour capacity constraints continue to hinder cladding remediation and decarbonisation
- Cost increases reduce volumes of work undertaken
- More local authorities struggle with budgetary constraints

Skills shortages or contractor availability are likely to remain an issue, and given that government funding focuses demand on insulation and solar/PV installations, current areas of strong growth will be the most stretched for additional capacity. In addition, if funding cannot be increased to cover higher costs from two years of strong inflation then volumes of activity may fall, even as output values are maintained. An increasing number of local authorities signalling financial difficulties that may require significant cuts in capital spending is also a risk in the lower scenario.

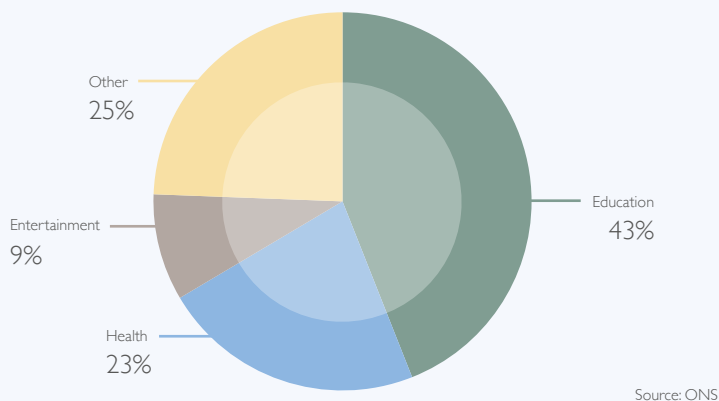


DANGER
HIGH WORKING
OVERHEAD

Public Non-housing

Central government and local authorities face difficult decisions in the public non-housing sub-sectors as spending power is eroded by the recent step-change in delivery costs at a time when the state of public finances is weak. As attention turns to the next General Election, clarity on spending priorities – and realistic funding reappraisals – may not be forthcoming. In the meantime, it is likely that new schemes will continue to grapple with viability issues due to fixed nominal budgets, planning uncertainty and the increasingly urgent need to address legacy issues with RAAC.

Public Non-housing Output by Sub-sector 2022 (%)



Central government and local authorities are in difficult financial positions. Public sector net borrowing (excluding public sector banks) was £69.6 billion in the financial year to August, £19.3 billion more than the same period of 2022, according to ONS data. Public sector net debt is close to 99% of UK GDP and is continuing at levels last seen since the early 1960s.

Capital funding allocations by central government are the primary driver of public non-housing activity. Since 2016 sector output volumes have fallen 29.7% with strong rates of inflation outstripping any increases in nominal departmental budgets.

The funding issues for local government are growing. Settlement funding from central government to local authorities has been decreasing in real terms since 2015/16 in England despite the pandemic, heightened cost pressures and the pressure of demographic change on demand for social care. The National Audit Office estimated in 2018 that local authorities' spending power had fallen by 29% in real terms between 2010/11 and 2017/18. The Institute of Government estimates the fall in spending power at 31% between 2009/10 and 2021/22. Few options are available to local authorities wishing to increase their income beyond raising council tax or seeking a small additional grant from central government. Councils facing financial difficulty can seek permission to use capital funds from the sale of assets or property to top up service spending.

Twelve local authorities have issued section 114 notices since 2018, compared to only one notice that had been issued prior to 2018. Section 114 notices are issued when local authorities cannot meet spending commitments in the current spending period. In some instances, financial difficulty is linked to issues with commercial investments, development projects or litigation but budget deficits are widening and several more local authorities risk issuing section 114 notices in the near future. Against this funding backdrop, non-ringfenced funding streams will be diverted to the most urgent spending needs, such as maintaining adult and child social care provision. Less urgent capital and resource spending will be postponed or shelved.

Across the sub-sectors, prospects are strongest for 'other' due to work building on the Ministry of Justice's capital programmes. Whilst the proposed new super prisons struggle to overcome planning hurdles, smaller projects to deliver new houseblocks and increase bedspaces at existing prisons are progressing quickly. Modest growth is forecast in health as work progresses on some new hospitals but scope for growth will continue to be weak due to the slow pace at which new schemes in the pipeline are coming through. Education will continue to grapple with cost pressures unless further funding is made available to account for the step-change in construction costs encountered since the last spending review.

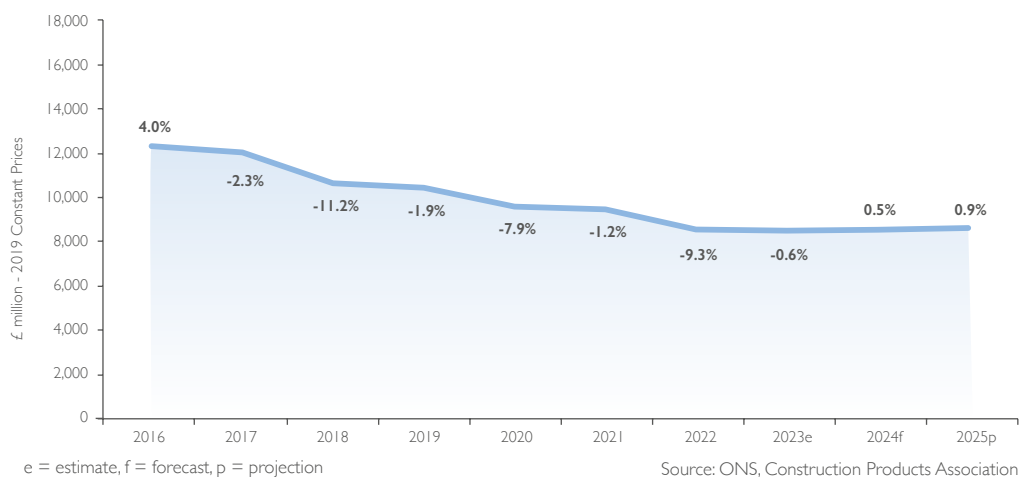
Overall, the outlook for public non-housing activity is lacklustre. A further small decline of 0.6% is expected this year before activity edges up by 0.5% in 2024 and 0.9% in 2025. By the end of 2025, output is set to remain nearly 17% lower than in 2019.

Education, the largest component of public non-housing output, has been beset by problems due to fixed capital budgets and exceptional levels of cost inflation. Programmes are running significantly behind schedule and cost escalation has been a major factor. Contractor appetite for fixed-price contracts has been limited and the funding backdrop provides little scope for negotiation. Consequently, the Department for Education (DfE) has been criticised for failing to spend capital allocations and the condition of the schools estate is deteriorating.

Publicly-funded education work underway is currently being sustained by the completion of construction work under the Priority School Building Programme and the Free Schools Programme, along with work beginning to come through, albeit slowly, under the ten-year School Rebuilding Programme.

The high-profile failure of a RAAC beam at a school in August brought problems with RAAC to the attention of national media although it has frequently been highlighted in previous CPA forecast publications. Previously classified as non-critical following survey work, the unexpected failure of this particular type of beam forced the DfE to issue guidance stating that schools and colleges with confirmed RAAC should not remain open without mitigations in place. Since this announcement was made, the DfE has confirmed that 174 relevant cases of RAAC have been identified in schools and colleges. Work to fortify or replace affected beams has commenced and the government has pledged to spend whatever it takes to ensure safety. However, HM Treasury has confirmed that no new funding is available and that additional capital expenditure on RAAC-related refurbishment works must be funded through existing allocations. Given the

Public Non-housing Output



**Reinforced autoclaved
aerated concrete (RAAC)**
latest estimates from the
Department for Education suggests



174 schools are affected



urgency of addressing these issues, it suggests that RAAC-related work may occur near-term but at the expense of other improvements work.

The School Rebuilding Programme (SRP) began in 2020/21 and, aiming to deliver 500 new or refurbishment projects, it will become the primary programme through which schools capital investment is delivered across England. By December 2022, funding had been allocated to 400 schools but progress has been much slower than anticipated. The last official progress update up to March 2023 reported that only 24 SRP contracts had been awarded against a target of 83. Slower than anticipated progress was attributed to inflationary pressure and limited industry capacity.

Initial concerns that the urgent need to address RAAC problems may lead to a re-distribution or reallocation of funding to some of the 400 schools already named were subsequently quashed and the government has confirmed that all previous announcements will be honoured. Twelve of the 400 confirmed schools are affected by the RAAC issue. It is likely that the final 100 schools to be replaced under this programme will prioritise schools affected by RAAC. This final tranche of schools has yet to be announced and will not be delivered within the current forecast horizon. Further information on the funding approach for these schools may be provided in the next Treasury Spending Review.

Activity in the education sub-sector has been in long-term decline due to insufficient growth in capital funding and strong cost inflation. A recent National Audit Office (NAO) [review of the condition of schools](#) in England concluded that years of underinvestment in rebuilding, maintenance and repair has resulted in 700,000 pupils learning in schools believed to require major rebuilding or refurbishment with negative impacts on learning outcomes and teacher retention. Between 2016/17 and 2022/23, the DfE spent £2.3 billion a year, on average, on rebuilding and maintaining schools, significantly lower than the £5.3 billion the department estimated was needed annually in 2020 to maintain school condition and mitigate the most serious risks of building failure. Around 38% of school buildings in England are beyond their estimated initial design life.

Funding shortfalls will persist throughout the forecast period based on current allocations. The Spring Budget confirmed the DfE's capital expenditure limit was unchanged from that allocated in Spending Review 2021, at £7.0 billion in 2022/23 (an 18.6% increase from 2021/22), before falling to £6.1 billion in 2023/24. The uplift in 2021/22 was almost entirely eroded by cost inflation.

The £1.5 billion Further Education Capital Transformation Programme aims to upgrade and refurbish further education colleges across England between 2020/21 and 2025/26. The first phase allocated £200 million in September 2020 for urgent remedial works at 180 colleges. In April 2021, 16 colleges in the worst condition received funding to support a more comprehensive transformation, although available funding for these works has never been disclosed. In April 2022, the next funding phase allocated £410 million for 75 upgrades at 60 colleges. Projects are scheduled to start in 2023 and complete by December 2024. The final phase of funding will distribute £286 million to 146 colleges for spending in 2023/24 and

2024/25. Recipients of this funding can opt to receive payments in two instalments but money should be spent in the year it is received. The largest allocations in the final funding round were £15 million for the NCG Group, £11.5 million for Havant and South Downs College and £10.4 million for the City of Bristol College.

In November 2022, further education colleges were reclassified as public sector bodies, which means they are now subject to restrictions on commercial loans that were previously a key source of finance for capital spending. Colleges will now be reliant on either direct funding from government or public borrowing at a time when capital budgets are under strain and set to decrease in both nominal and real terms for education in 2023/24. A £150 million capital loans scheme will be made available from Summer until March 2025 but will be restricted to projects – planned or underway – that have been delayed due to financial issues related to the reclassification.

Most recently, contracts have recently been awarded on Bridgend College's new £50 million campus in the town centre, a new £17 million teaching block for South Staffordshire College and a £12.5 million extension of Chichester College's Crawley Campus.

In Wales, schools capital investment is delivered under the Sustainable Communities for Learning programme – the Welsh Government's long-term schools and colleges investment programme. This £2.3 billion programme (previously named the 21st Century Schools and Colleges programme) aims to support an estimated 200 projects to rebuild and refurbish schools and colleges, with funding covering April 2019 to March 2024. Recent contract awards include the £80 million redevelopment of the Cantonian High School in South Glamorgan, a £12 million expansion at Ysgol Bryngwyn Comprehensive School and a £23 million redevelopment at Swansea Valley Primary School.

In Scotland, the £2.0 billion Learning Estate Investment Programme, aiming to rebuild or refurbish schools from 2021 to 2026, is currently underway. The Scottish Government committed funding of between £220 million and £275 million for 11 projects that include the replacement of 26 schools across the country, as part of the first phase of the programme. The projects in this phase are expected to be completed by Summer 2024. For the second phase, £800 million has been announced for the construction or refurbishment of 25 new schools and campuses. Phase three funding allocations were due to be announced at the end of 2022 but this has yet to take place.

Plans to replace the existing Inverkeithing High School in Fife with a new £70 million school, designed to accommodate 1,735 students and 152 staff have been approved. The new school is due to open in 2026.

A new £20 million high school in Edinburgh has also been approved. The 800 capacity Wester Hailes schools will include an on-site sports and community hub.

In September, Audit Scotland confirmed that the Scottish Government no longer expects to have enough money to fully deliver its planned £26 billion investment in public sector infrastructure due to a combination of reduced capital budgets, higher costs and increased

**RAAC work will
be funded out of
existing capital
budgets –
no new capital
funding will be
made available**



maintenance requirements. While this total includes investment across all public buildings and infrastructure, schools capital investment is likely to be impacted.

In Scotland, RAAC has been identified in schools in 16 council areas. Affected councils have confirmed mitigations, compliant with guidance from the Institute of Structural Engineers, are already in place.

Overall, the outlook for education output is weak. Activity is forecast to decline by 6.0% in 2023 and by a further 2.0% in 2024 as contract negotiations remain challenging and inflation continues to reduce the volume of work delivered. By 2025, a return to modest growth is predicted, but the 1.0% uplift anticipated will be insufficient to offset losses in 2023 and 2024 and output is forecast to remain significantly below 2019 levels.

Upper Scenario:

- Activity accelerates under new school building programmes

The main forecast assumes that work on the new school building programmes across Great Britain is slow to progress due to cost rises that cannot be absorbed by fixed budgets. As the pace of inflation slows, contractor appetite for fixed price contracts may increase plus the attractiveness of stable education projects may grow as work in other sectors slows. Negative publicity following the RAAC crisis and NAO criticism about the condition of schools in England may prompt the government to provide additional finance to help offset the increase in build costs.

Lower Scenario:

- Increased costs and a lack of contractor interest delays work under school building programmes

If clients and contractors are reluctant to agree contracts for new school projects out for tender in 2023 due to cost inflation and increased uncertainties, this may push back start dates of planned projects under school building programmes across Great Britain and hinder progress further on delayed capital programmes.

Output in the **health** sub-sector, which covers publicly-funded work on hospitals, health centres and clinics, is forecast to increase by 2.0% in each year of the forecast period. Orders have been strong in the first half of 2023 due to a few large contracts for new hospitals under the New Hospitals Programme (NHP) being agreed. The NHP is the primary driver of activity in this sub-sector. Schemes securing early NHP funding are progressing and will provide output over the next few years. However, the central forecast assumes funding limitations will constrain overall delivery, leading to fewer new or refurbished hospitals being delivered than announced. It is also assumed that output from this programme will ramp up in the second half of this decade, largely beyond the forecast horizon.

Through the NHP the government has pledged to deliver 40 new hospitals by 2030, although these will largely be new wings and departmental buildings rather than entire hospitals. Overall, the government expects the NHP to receive funding totalling £20 billion, subject to future spending decisions. The government's own estimates suggest the cost of delivering the full scope of planned work will be closer to £35 billion – significantly more than currently expected to be made available.

In the first half of 2023, NHP contracts were awarded for a £300 million eye care research and education facility in London bringing together the Moorfields Eye Hospital NHS Foundation Trust, the UCL Institute of Ophthalmology and Moorfields Eye Charity and the £150 million new facility and energy centre at Shotley Bridge in County Durham.

Recently the NHP has been subject to criticism from both the National Audit Office and Public Accounts Committee (PAC). The [NAO reported in July](#) that the NHP has not achieved value for money so far and given that early build targets have already been missed, urged delivery of the second phase of smaller projects to be accelerated. The PAC, meanwhile, raised concern about the core assumption that using modern methods of construction would reduce construction programmes by a fifth and costs by a quarter relative to traditional delivery. The NHP is using a modular design concept called 'Hospital 2.0' for at least 14 schemes. Standardised 2.0 hospital designs will not be complete until next May and the efficacy of the approach and its ability to deliver the time and cost savings assumed have not yet been tested.

Earlier this year, it was announced that investment through the NHP will be reprioritised to target existing hospitals seriously affected by RAAC issues. Two schemes affected by the RAAC issue were already part of the NHP (West Suffolk Hospital in Bury St Edmunds and James Paget Hospital in Norfolk) and in May it was announced that five additional affected schemes would receive priority funding through the programme. The five additional hospitals are Airedale in West Yorkshire, Queen Elizabeth King's Lynn in Norfolk, Hinchingbrooke in Cambridgeshire, Mid Cheshire Leighton in Cheshire and Frimley Park in Surrey. Completion is targeted by 2030, which suggests construction will occur beyond the forecast period.

Due to the reprioritisation of buildings affected by RAAC issues, plus the impact of cost inflation, up to eight schemes that were originally due to be constructed towards the end of the decade will now be completed past 2030. Separately the government has created a £685 million fund to support the removal of RAAC from across the estate.

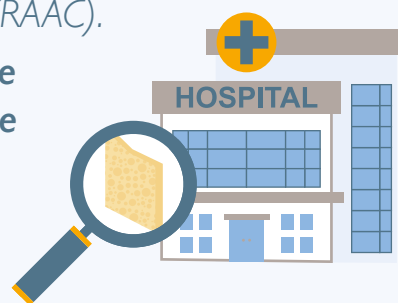
Outside of the NHP and RAAC fund, mental health facilities are being developed in Surrey, Derbyshire and Liverpool through wider capital funding. Work is underway on a 64-bed facility to replace the former Abraham Cowley Unit at St Peter's Hospital for the Surrey and Borders Partnership NHS Foundation Trust. The clinic will cost £35.0 million and is due to complete in spring 2024. Two 54-bed facilities are being developed in Derbyshire – one at Kingsway Hospital in Derby and the other at the Chesterfield Royal Hospital – for £80.0 million, with a further £70.0 million being spent to refurbish the Radbourne Unit at the Royal Derby Hospital. The 54-bed facilities are due to complete in 2024 and the refurbishment in 2025. In Liverpool, work is progressing on the creation of four, 20-bed wards to replace outdated facilities across the city. The consolidated centre is being developed on the site of the former Mossley Hill hospital at a cost of £53.0 million with completion expected in 2024.

The four-year Procure23 (P23) framework for NHS smaller works began in June 2022 and is worth £9.0 billion. P23 supersedes Procure 22 which delivered projects with a total value of £5.0 billion.

The Scottish government's last progress update on major capital projects confirmed that several health capital schemes are progressing far more slowly than anticipated – due in part to the impact of cost overruns and programme delays on schemes under construction over the past 12 months. Several schemes in the pipeline are awaiting final approval or re-evaluation.

*The **New Hospitals Programme** will now prioritise buildings with reinforced autoclaved aerated concrete (RAAC).*

Five schemes have been added to the programme with construction work to start in 2025



Health schemes currently under construction in Scotland include NHS Greater Glasgow and Clyde's North East Hub, a £72 million scheme delivering consolidated healthcare facilities plus the re-provision of the Parkhead community library. Facilities are due to be operational by June 2024. NHS Lothian's upgrades to the Edinburgh Cancer Centre have cost more and taken longer than anticipated. Initially due to be operational in November 2023, the project is now expected to complete 12 months late and cost around £23.3 million compared with an original budget of £20.6 million.

In Wales plans have been resubmitted for a 63-bed, £84.5 million, mental health facility in North Wales. Subject to final approvals being secured, construction is expected to start in summer 2024 with a two-year construction programme.

Upper Scenario:

- Contracts for NHP hospital projects are all let in line with the base programme
- Funding allocations fully support current project design
- Hospital 2.0 standardisation supply chain is quickly mobilised and delivers planned programme savings

Funding detail for the remaining pathfinder projects in the government's New Hospital Programme, as well as final approval for the large-scale projects already in the pipeline and progress on planning approvals for other projects that allows activity to get off the ground quickly, would lead to stronger growth rates over the next three years.

Lower Scenario:

- Cost rises delay health projects
- Schemes under the New Hospital Programme delayed by public funding cuts or limits

Supply constraints and cost increases for products and on-site labour may lead to delays, particularly if rising costs lead to projects being paused to renegotiate contracts. If government funding for the remaining projects in the NHP is lower than expected or if projects are paused for local trusts to review costs, in both instances, delays to publicly-funded schemes would lead to lower activity in the near-term.

Public non-housing **other** covers construction work on publicly-funded facilities such as prisons, defence projects and civil service offices and output growth of 10.0% is forecast for 2023, followed by 3.0% growth in 2024, primarily due to an uplift in output from Ministry of Justice (MoJ) investment across the prison estate in England and Wales.

The £4.0 billion New Prisons Programme (NPP) aims to deliver 18,000 prison places by 2026 across England and Wales, through a combination of building new prisons and the extension and refurbishment of existing prisons. As delivery of two large new prisons in Wellingborough and Leicestershire completes, work on the £400 million HMP Millsike is progressing and the facility is due to be operational in 2025.

Other schemes earmarked for development have stalled due to planning delays. Planning applications for new build prisons in Chorley, Market Harborough and Aylesbury were unanimously rejected in the first half of 2022. Concern about the impact of the proposed facility on traffic at Chorley have prompted the public inquiry to be reopened but a restart date has yet to be set. Similar concerns were raised about the proposed new facilities at Market Harborough and Aylesbury. Decisions from the Secretary of State for Levelling Up, Housing and Communities had been expected in early September 2023 but both have been delayed. No revised timeline has been shared for HMP Market Harborough but the outcome for HMP Aylesbury is now expected in November. These delays will inevitably impact the pipeline of activity in this sub-

sector but the adoption of standardised, modular, design across the NPP may help reduce time taken for construction to start on site if, and when, projects eventually get the go-ahead.

Other MOJ capital investment programmes are progressing more smoothly. Work is progressing under the £500 million Accelerated Houseblock Development Programme.

Work continues on the £125 million expansion at HMP Hindley, a £148 million extension of HMP Highpoint and a £24 million expansion of HMP Wayland and, in recent months, contracts have been awarded to deliver new houseblocks at HMP Birmingham (£20 million), HMP Stocken (£40 million) and HMP Bullingdon (£20 million).

In addition to the Accelerated Houseblock Development Programme, a £225 million contract has been awarded to a trio of contractors to design and build standardised modular cell blocks, providing up to 1,000 new prison places across the UK. Each block will have 60 single-occupancy cells plus kitchen spaces and other facilities. Some will include education and light industrial areas. Construction work is expected to begin in 2024, with houseblocks set to be operational from 2025.

In Scotland, plans to develop new prisons in Glasgow and the Highlands have been delayed due to the government's financial issues. HMP Glasgow, first approved in 2020 and the replacement for Victorian prison HMP Barlinnie, is currently being delayed and anticipated completion has pushed back by 12 months to 2027.

Defence work is currently focused on improving the quality and energy efficiency of accommodation. In May, contracts for 491 bedspaces were awarded under the second wave of the army's Single Living Accommodation (SLA) programme – worth an estimated £1.2 billion over 10 years. Construction is due to commence in Autumn 2023 and complete in early 2025. Beyond accommodation, work continues on the £259 million army vehicle storage and maintenance facility in Gloucestershire which is due to complete in 2027.

The 2021 Spending Review confirmed the MOD's capital budget at £15.6 billion in 2022/23, rising slightly to £15.8 billion this financial year and £16.2 billion in 2024/25.

The MOD has selected a consortium to provide technical services on its Defence Estate Optimisation framework. The Defence Estate Optimisation programme is the biggest change programme across estates, bringing construction, unit and personnel moves and land release under a single, £5.1 billion, umbrella.

The Government Property Agency now controls around 45% of the government's total office portfolio. In 2022/23, it invested £215 million in the estate, including around £76 million on improving the condition of the existing stock. £1.8 billion of capital investment is forecast through to 2028.

Capital work to support the Government Hubs Programme, aiming to reorganise public sector offices into 50 regional hubs by 2030, is progressing. Construction work is underway on new hubs in Croydon and Manchester, with refurbishments ongoing at three existing sites in Bristol, East Kilbride and York. The Programme aims to reorganise public sector offices into 50 regional hubs by 2030. So far, 17 office hubs have been announced, which are on the first phases of the



programme that set out to provide 20 hubs by 2025.

Restoration of Parliament's Victoria Tower is currently underway, with tender submissions for the design and main construction works, worth an estimated £95 million, expected in Autumn. These works are expected to start in late 2024 and are scheduled to last five years.

In entertainment and leisure, plans to relocate the Museum of London to Smithfield Market from its former base near the Barbican are the latest to be affected by programme delays due to cost pressures. From an original budget of £337 million in 2019, costs have increased by 30% to nearly £437 million. The scheme will now be delivered in two phases, with the section located in Smithfield's 19th century General Market Building still due to open on schedule in 2026. The second phase, comprising work inside the Poultry Market, may complete in 2028. The scheme is being largely funded by the City of London Corporation with the mayor of London and the museum both providing £70 million.

Funding through the Public Sector Decarbonisation Scheme will continue to support activity in this sector as phase three projects are delivered, although the nature of some of the energy efficiency works receiving funding may instead be captured in public non-housing r&m. Grants awarded through phase 3 will total £1.4 billion for project delivery in 2023/24 and 2024/25. Phases 3a and 3b account for the majority of this funding and awards totalling just over £1.0 billion have been announced. Phase 3c applications for 2024/25 opened in Autumn 2023 and when combined with funding for 2025/26 will be worth around £400 million. £1.1 billion was allocated in the first two phases for spend up to the end of 2021/22.

Upper Scenario:

- Further detail and contracts for new prisons

Further detail and Secretary of State planning approval for the remaining new prisons that are part of the New Prisons Programme would increase certainty for the sub-sector and, in turn, ensure a pipeline of activity that would improve growth prospects over the next three years.

Lower Scenario:

- Prison and defence projects delayed

Rising costs and a lack of availability of labour slows progress on current new build and/ or redevelopment projects under prison building programmes and large defence projects in England, Wales and Scotland, whilst plans for future prison projects are delayed further in the planning system.



Public Non-housing R&M

Output in the public non-housing r&m sector, covering spend on basic repairs and maintenance carried out on schools, hospitals, prisons, as well as other government and local authority buildings, has grown in real terms over the past two years and at the start of the year was around 5% higher compared with pre-pandemic levels.

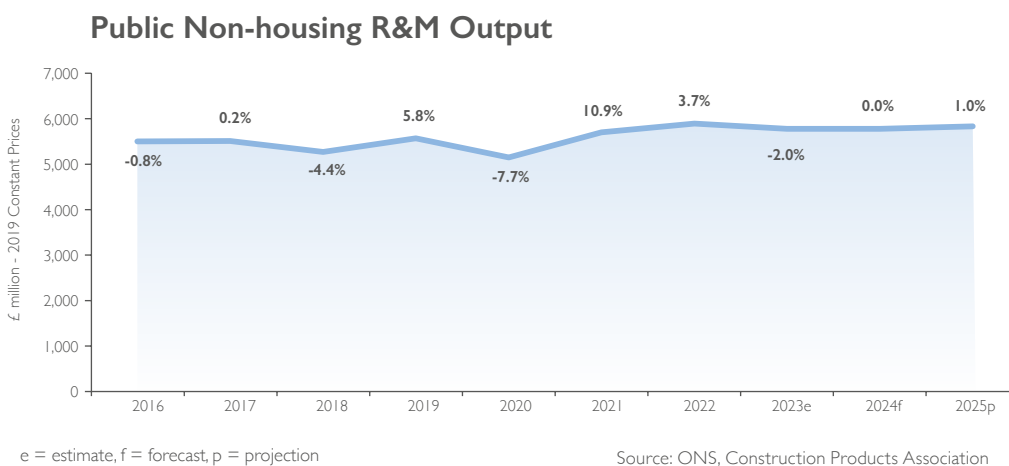
Basic repairs and maintenance is generally easier to rein in than current capital work, particularly if near-term cashflow becomes a concern. This year non-essential activity is likely to have been held back amid cost pressures and budgetary limitations. In addition, projects allocated funding on the Public Sector Decarbonisation Scheme and, in particular, the large-scale reinforced autoclaved aerated concrete (RAAC) remediation projects that involve demolition and rebuild, are likely to be classed as public non-housing new build rather than r&m.

Nevertheless, funding through the Public Sector Decarbonisation Scheme will continue to support activity in this sector as phase three projects are delivered, although the nature of some of the energy efficiency works receiving funding may instead be captured in public non-housing. Grants awarded through phase 3 will total £1.4 billion for project delivery in 2023/24 and 2024/25. Phases 3a and 3b account for the majority of this funding and allocations totalling just over £1.0 billion have been announced.

Applications to secure a share of £230 million in 2024/25 through Phase 3c have opened. This phase will continue in 2025/26. Grant funding for 2025/26 should be confirmed in Autumn but it is assumed funding for both years will be broadly comparable. Phase 3c funding will continue to target fossil fuel reduction as well as making public buildings more comfortable and efficient to warm.

Scotland's Public Sector Heat Decarbonisation Fund was announced in July. Grant funding of £20 million has been made available in 2023/24 to support the installation of heat pumps, the use of district heating networks, retrofitting buildings with insulation and the development of new low-carbon technologies. Details of the application process are still to be released.

Following on from the £1.1 billion in School Condition Allocations announced for local authorities, large multi-academy trusts and large voluntary aided bodies in March, allocations



of £456 million in funding from the Condition Improvement Fund to maintain and improve the condition of 859 smaller academy and sixth form college buildings in England in 2023/24 were announced in May. In a similar vein to the Public Sector Decarbonisation Scheme, it will prioritise projects that replace expired oil and coal boilers with low carbon alternatives. Regionally, the highest value of funding was allocated to schools and colleges in the South East (£106 million) and the lowest value was allocated to projects in the North East (£8.4 million).

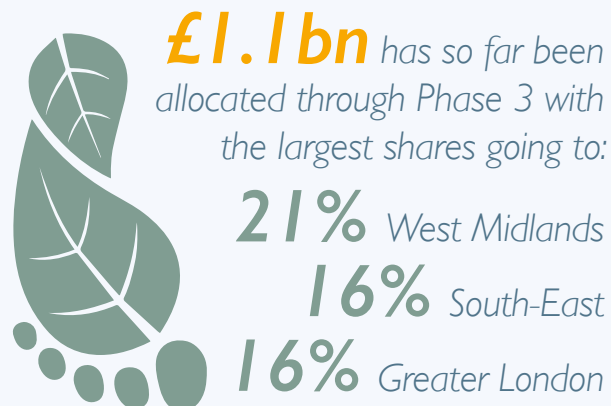
The current Condition of School Buildings Survey, which ran between 2017 and 2019 and covered 22,031 schools across England, revealed that the total cost to repair or replace defective elements in the school estate was £11.4 billion, almost double the £6.7 billion previously estimated by the DfE in 2017. Schools in the South East and West Midlands have the highest condition need, with both regions requiring £1.7 billion, whilst schools in the North East have the lowest total condition need, estimated at below £600 million. The next condition survey is due in 2026. In June, a National Audit Office report found that around 24,000 school buildings (38% of the total) are beyond their estimated initial design life and require more maintenance than newer buildings, but in addition to the backlog of r&m, issues related to RAAC are now a major issue for school buildings.

Survey work is ongoing but the latest update from the DfE confirms 174 cases of RAAC requiring mitigation measures have been identified in schools and colleges. Work to fortify or replace affected beams has commenced and the government has pledged to spend whatever it takes to ensure safety. However, HM Treasury has confirmed that no new funding is available and that additional capital expenditure on RAAC-related refurbishment works must be funded through existing allocations.

In contrast to England, the proportion of schools in Scotland reported as being in good or satisfactory condition rose to 90.4% in 2021/22, from 90.2% in 2020/21 and 81.7% ten years earlier, according to the 2022 School Estate Statistics. The statistics also showed that 54 schools were built or refurbished in 2021/22, up from 42 in 2020/21. Overall, 1,053 schools have been built or substantially refurbished since 2007/08 and further upgrades are set to take place through the Scottish government's £2.0 billion Learning Estate Investment Programme (see [Public Non-Housing](#)). Phase 3 funding allocations for this programme still haven't been announced after a year's delay. A recent parliamentary debate linked this to RAAC issues, indicating that phase 3 spending may target RAAC affected schemes instead. Local authorities have already made some provision to ensure the safety of affected schools. West Lothian council, for example, recently allocated £53 million to deal with RAAC issues in local schools.

RAAC plank construction has been confirmed at 27 NHS sites in England. In most cases, RAAC is only used in limited areas and has already been eradicated from three sites. Where RAAC is used extensively, hospitals will be rebuilt under the NHP before 2030. Structural survey work is ongoing to ensure all existing RAAC is located and included in the remediation programme. The government has pledged to eliminate RAAC from the NHS estate by 2035.

Public Sector Decarbonisation Fund



Trusts in Scotland and Wales are surveying to determine the presence of RAAC in their buildings and clarity on the scale of the challenge faced is expected in late Autumn. In Scotland, NHS Assure has identified that RAAC could be present in up to 254 NHS buildings. The latest update suggests 97 of these have been surveyed to date. NHS Grampian had the most buildings which could potentially contain RAAC, with 53 identified by the health board, followed by NHS Greater Glasgow and Clyde with 44 and NHS Lothian with 35. In Wales, RAAC has so far been identified at two acute hospital sites – Withybush Hospital, in Haverfordwest and Nevill Hall Hospital, in Abergavenny – along with very small amounts of the material at a number of other sites. Six wards are currently closed at Withybush Hospital for mitigation works and the Welsh government has made £12.8 million available for these works which are due to complete by the end of the financial year.

Where RAAC remediation involves demolition and rebuild, projects are likely to be classed as public non-housing new build rather than r&m but smaller, less intrusive mitigation work should be classified as r&m.

More generally for healthcare buildings, the NHS estimated in 2022 that the cost to eradicate its estate maintenance backlog rose to £10.2 billion in 2021/22, from £9.2 billion in 2020/21. A breakdown of the total cost showed that £1.8 billion was classed as high risk and requires immediate attention, which is 14.4% higher than in 2020/21, whilst £3.5 billion has been classified as a significant risk that should be addressed in the short-term, an increase of 15.7% from the previous year. NHS Trusts spent £1.4 billion to reduce the maintenance backlog in 2021/22, a 57.1% increase compared to 2020/21, which is likely to reflect higher costs as well as volumes of work.

The Ministry of Justice's capital budget is set to increase from £1.5 billion in 2022/23 to £2.3 billion in 2023/24, before falling to £1.8 billion in 2024/25 and is largely expected to be driven towards new build, expansion and refurbishment projects on the government's £4.0 billion New Prisons Programme that aims to deliver 18,000 new prison places in England and Wales by the mid-2020s. It is, therefore, unlikely to fully address the backlog of maintenance work within the prison estate, which is estimated to cost £916 million according to the HM Prison & Probation Service (HMPPS).

For the Ministry of Defence estate, the Future Defence Infrastructure Services provides £3.0 billion worth of facilities management contracts over seven years, with the first £1.6 billion allocated in 2021. The contracts cover 31,000 units and will maintain facilities at more than 400 defence sites across the UK.

The Government Property Agency's (GPA) transferred estate increased from 827,000 sq. m. at the end of 2021/22 to 957,000 sq. m. by the end of March 2023 – around 45% of the overall government office portfolio. During 2023/24, the GPA estate is forecast to grow by a further 10%, with plans to transfer approximately 80 buildings, with a combined area of around 200,000 sq. m., progressing. Estate transfers to the GPA will centralise maintenance requirements but the overall maintenance need will lessen as the estate rationalisation programme continues. The Government Hubs Programme aims to reduce the government estate from around 800 buildings to 200 by 2030 by creating shared regional hubs across government departments.

Audit Scotland has concluded that parts of the public estate need significant investment due to inadequate capital maintenance funding in the past and criticised the lack of an overall picture of estate condition across the public sector to inform funding prioritisation. Backlog maintenance in the NHS is at a record high of £1.1 billion in Scotland but its capital budget in 2023/24 is just £578 million. Between 2018 and 2022, capital funding for colleges' life cycle and backlog maintenance has fallen to £321 million, short of the £473 million needed. The Scottish Prison Service has underspent its allocated capital funding due to the impact of the pandemic, inflationary pressures and supply chain challenges. Delays in making repairs to HMP Greenock is an example of the impact of this underspend. Essential repairs have not been undertaken and the Chief Inspector of Prisons is now recommending the facility needs to be rebuilt rather than repaired.

Private Finance Initiative (PFI) contracts, delivering and operating social infrastructure through public private partnerships, have been widely used in the UK since the 1990s. PFI contracts appointed private-sector consortia to build, maintain and operate public sector assets for a period, typically, of 25 to 30 years. From early 2025, these contracts will expire and management responsibility will revert to public sector asset owners. Currently there are more than 700 operational PFI contracts in place across schools, hospitals, roads and other social infrastructure, worth an estimated £57 billion in 2020 prices. The National Audit Office estimates that 10 contracts expired annually in the five years to 2024/25 and this increases to an average of 31 contracts annually in the following five-year period. Responsibility for maintaining for these schemes will transfer from the private sector to the public sector.

Upper Scenario:

- Local authorities shift priorities to focus on r&m work

If new build schemes by local authorities are delayed or cancelled due to cost inflation, local authorities may revise their priorities to refocusing on routine and scheduled non-essential maintenance of existing buildings. Financial constraints and elevated costs will limit the uplift, however.

Lower Scenario:

- Funding and spending of local authorities is reduced
- New build projects overshadow routine r&m

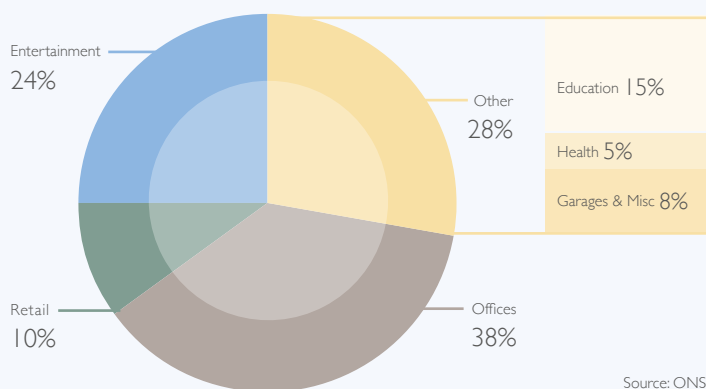
A reduction in local authorities' spending power due to budget tightening or reassignment by councils, cuts in central government funding, and cost inflation reducing volumes of work would result in lower public non-housing r&m output over the forecast period. Routine and scheduled maintenance of existing buildings is also expected to be displaced by increased focus on new build projects coming through the pipeline.



Commercial

Commercial sector activity is expected to be affected by a slower recovery in the UK economy next year, which combines with high interest rates and two years of high construction cost inflation and is likely to add further delays to decision-making for new, large offices, universities and leisure projects.

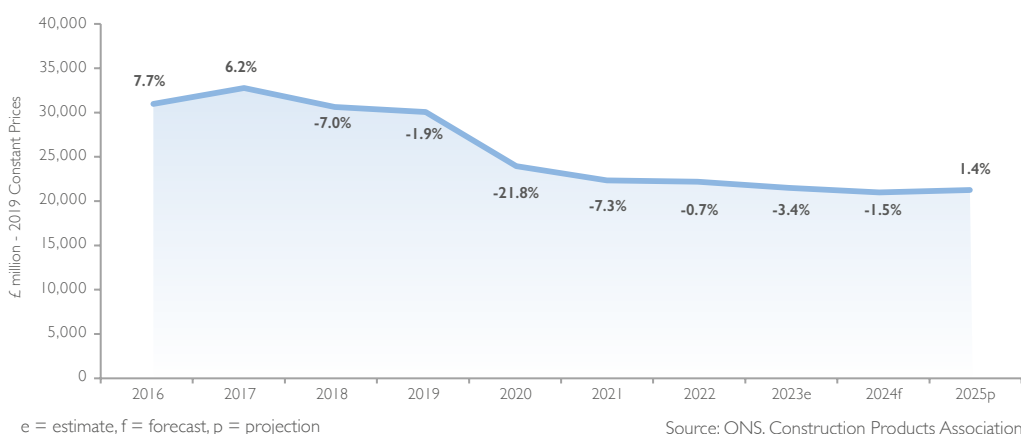
Commercial Output by Sub-sector 2022 (%)



Growth in commercial construction output tends to be driven by large projects such as offices towers, leisure and entertainment venues as well as new build retail premises, all of which, in turn, are strongly linked to macroeconomic performance, through investment and broader business and consumer confidence and spending. Decision-making on large new build projects was already being held back by uncertainty, higher build costs and rising interest rates, and with interest rates now expected to remain at their current level for longer than in the Summer forecasts, slowing

the UK's macroeconomic recovery in 2024, confidence to make these large up-front investments is unlikely to improve. Large projects across the commercial sector remain in 'wait and see' mode until clear signs of improving conditions emerge and this has led to the forecast for sector output in 2024 being downgraded to a 1.5% decline, from a 0.5% fall forecast in Summer. Since 2020, the sector's performance has also been hampered by questions over when the new

Commercial Output



post-pandemic pattern of demand will settle for office space, particularly for large towers, and what will happen to the growing stock of vacant space, which is often of a lower quality and less desirable for tenants. Investor confidence in retail has been repeatedly knocked over the last decade but is currently contending with lower footfall, elevated vacancy rates and the long-term structural shift to online shopping. Within all sub-sectors of commercial, however, refurbishment work, whether it is to re-fit space for new occupiers, undertake energy efficiency improvements or repurpose vacant space, continues apace. Nevertheless, it will be insufficient to offset lower volumes of new build work.

With large new build projects held back by repeated periods of uncertainty since 2016, output from the commercial sector has remained well below its pre-pandemic level. According to the ONS, output in August 2023 was still 26.1% below its level in January 2020. Refurbishment and work to repurpose existing space has provided activity post-pandemic, either to appeal to new tenants taking over vacant units in offices and retail, to adapt workspaces given fewer workers on site simultaneously as working from home continues, or to improve office amenities to encourage workers back to the office. Commercial estate agents report that grade A office space is attracting a notable rental premium, whilst energy efficiency improvements and net zero considerations are also now a key driver for refurbishment projects, given that the proposed Minimum Energy Efficiency Standards (MEES) regulations require commercial property to be rated EPC E but more pertinently, be rated a minimum of EPC C by 2027 and EPC B by 2030. Although MEES targets for residential properties were pushed back by the Prime Minister in September, those for non-domestic properties were not mentioned and are assumed to continue driving activity. As a consequence, demand for refurbishment is expected to remain high, although the higher cost of energy-efficient retrofit and 'back to frame' projects relative to a 'standard' refurbishment will be a limiting factor for some existing buildings, particularly in lower-rent areas. Another key trend in the commercial sector is the conversion of previously retail-led developments, even in prime locations such as Oxford Street, into residential, leisure and warehouses/logistics. However, in an environment of higher interest rates, increased development costs and reduced returns on investment, CPA forecasts for these sub-sectors point to slower activity in these areas or, at least a lengthening in decision-making processes.

Retail activity has been particularly affected, both by prevailing economic conditions in recent years, and the long-term rise in online shopping. However, leisure and entertainment, the second largest commercial sub-sector, has benefited from the move to redevelop existing shopping centres or vacant store premises, in town and city centres into hotel or leisure-led facilities. The redevelopments of retail districts in Leeds, Glasgow and Bolton are set to be led by hotel and leisure facilities, whilst plans for mixed-use developments in Salford's Middlewood Locks, Chamberlain Square, Digbeth cultural quarter and the Central Methodist Hall in Birmingham as well as London King's Cross also incorporate a hotel. Most recently, two multi-storey hotel blocks totalling 900 rooms were approved for the Albert Embankment in London, on a site that previously had been approved for residential and smaller hotel schemes and the £100 million redevelopment of Admiralty Arch on The Mall into a hotel, which was awarded contracts in May. However, developers are still balancing tourist numbers and spending that remain below 2019 levels with longer-term expectations of higher tourist numbers, as well as the impact of inflation and higher interest rates on consumer demand and investment appetite.

Other niche areas of growth exist in commercial new build, but are subject to the same uncertainty and cost constraints. One of these is film and television studios, with main construction work underway on the £300 million expansion of Shepperton Studios and the £174 million Eastbrook studios in east London, the redevelopment and expansion of the Ealing Studios in west London and the £260 million new build studio complex in Bedfordshire that was approved in September. A £450 million film studio is planned in Sunderland but is dependent on both planning approval and financial support from government. A public consultation was launched in June. Plans for the £600 million Hollywood Sunset Studios in Hertfordshire, were, however, paused to reassess the project in the light of higher construction costs and higher

CoStar estimates that there is



**102 million
sq. ft.**
of vacant office space
in the UK

interest rates. The largest project in the pipeline, the £700 million Sunset Waltham Cross Studios project was also paused in September for the same reasons.

Large arena and sports stadia projects are also in the pipeline, although a £100 million rise in the cost of the new Cardiff Arena has delayed the project's start until 2024, whilst the £350 million Gateshead Arena complex has been split into smaller phases to mitigate a rise in construction costs. Contracts were awarded for the £150 million first phase in September for a new build conference centre. Similarly, the £100 million expansion to Aston Villa's stadium was approved in October, after a new build events venue was removed from

the plans to accelerate delivery of the stadium upgrade. Elsewhere, the £505 million stadium for Everton Football Club and groundworks for the expansion of Old Trafford cricket ground are underway, a new £100 million stand for Crystal Palace was approved in 2022, with construction expected to start at the end of the 2023/24 season in May. Manchester City's plans for its £300 million stadium expansion were approved in July, but delays to planning agreements for an expansion of Leicester City's football stadium are likely to delay its completion from Summer 2024 to Summer 2025.

In terms of large leisure schemes, the £300 million Blackpool Central leisure scheme began in late 2022 after receiving £40 million from the Levelling Up Fund to relocate the existing courts buildings from the proposed site, whilst demolition and preparatory works for a £250 million spa resort in Manchester also began in 2022 Q4, with main works beginning in 2024 for two years, after revised design plans were approved in September. The £1.3 billion Olympia regeneration project in West London is also on site and the £200 million expansion of the Excel Centre was awarded contracts in December. Given that these larger new build projects only started entering the pipeline in 2022 and have a strong reliance on consumer confidence and spending, delays on projects yet to start cannot be ruled out as the economic backdrop remains weak in 2024.

Data centres are also an area of growth in the commercial sector. Buildings house IT infrastructure for the processing and storing of data and running IT applications. In Q2, contracts were awarded for a £125 million data centre near Heathrow and in October for a £158 million fit-out and upgrade of a data centre in London Docklands.

Against the overall weak prospects for retail, grocery convenience stores, larger stores in retail parks and multi-use redevelopments of town centres will provide core activity and the £3.8 billion that has been allocated from the £4.8 billion Levelling Up Fund, will also provide a stream of smaller regeneration projects. However, these will provide limited support to the sector, particularly as confidence and new major investment may still be hindered by persistent inflationary pressures for consumers, businesses and contractors. A survey by the District Councils Network in September 2022 found that 40% of respondents said the effects of inflation would force them to delay proposals, or make them financially unviable in their current form. This is also likely to be the case for universities. Institutions across the country are in the midst of multi-year investments in new buildings for teaching and research, as well as university and privately-financed student accommodation projects, balancing favourable demographic trends with rising borrowing and financing costs.

Across the commercial sector, confidence to proceed with projects and financial viability may suffer as construction costs remain elevated and higher borrowing costs are factored into

investment decisions. Both of these combine with the ongoing costs and delays after progress on capital spending programmes has already been slowed by the pandemic. Commercial new orders rose 2.0% in 2022 but fell 18.3% in the first half of 2023. As above, for projects in the pipeline, delays relating to risk and issues around higher construction costs, expectations of a slower recovery in 2024 and the impact of higher interest rates on consumer and business demand, are assumed to lengthen the typical 12-18 month lag between contract award and construction start. As a result, after an estimated contraction of 3.4% in 2023, the forecast for 2024 has been downgraded to a decline of 1.5% in 2024, compared to a fall of 0.5% in Summer. As confidence begins to return in 2025, growth of 1.4% is expected.

The **offices** sub-sector is the most exposed to weak business confidence and investment will be further affected by the consecutive increases in the Bank of England base interest rate that have raised borrowing costs substantially above the low levels that were being factored into investment decisions over the last decade. In addition, decision-making on new office space has been complicated by increased home or hybrid working models post-pandemic meaning that large new build projects in particular have seen investment decisions paused until final demand for office space requirements, amenities and usage patterns throughout the working week become clearer. There is a pipeline of office towers projects at a pre-construction stage and the key question remains when economic conditions will firm up for them to progress to construction and raise growth rates in the sub-sector. The weaker economic outlook for 2024 implies that decisions to go-ahead will be delayed for longer than in the Summer forecast.

In addition to economic uncertainty, delays have also been caused by a prolonged period of elevated inflation in labour costs and key materials. However, even with the fundamental drivers of activity weakened, demand and activity outside of new build towers has remained strong, and notably for refurbishments of existing office space. Energy efficiency, net zero and decarbonisation are rising up the corporate agenda and the increasing scope and value of improvements projects and the need for 'back to frame' energy efficient refurbishments mean that this type of work has now become a key driver of sub-sector activity. A requirement for privately-rented non-domestic buildings in England and Wales to achieve an EPC rating of B by 2030, although now subject to greater uncertainty after the Prime Minister delayed other net zero targets, will continue to underpin demand beyond the forecast period too. Furthermore, with employers more widely implementing hybrid working patterns or full office attendance, improving the quality of space and amenities to encourage workers back to the office or attract new tenants moving from lower-quality vacated space are key considerations for commercial landlords.



The drive to improve both energy efficiency and the quality of facilities is expected to be a key consideration for offices activity, both for new build projects and refurbishments across the forecast period. Since the pandemic investor and tenant preferences for high quality space have been noted by commercial estate agents across the country, with a wide rental premium for grade A offices. In addition, a growing availability and increasing void periods have been reported for lower-quality vacated space as major companies vacate and consolidate space in response to lower and variable occupancy. As well as floor space that may be surplus to new occupancy requirements, upcoming minimum energy efficiency requirements are increasing the role of office refurbishment projects. New commercial property leases, or renewals of existing ones, must currently be above an EPC rating of E, but it is proposed that all non-domestic privately-rented buildings should achieve a minimum B rating by 2030. Although the Prime Minister announced a rollback of minimum energy efficiency standards for residential property in September, there was no mention of changes to the non-domestic targets, which leaves an element of uncertainty over whether they will be introduced as scheduled or delayed.

An analysis by Savills estimated that 1.3% of the existing offices stock in London and 4.9% of the stock in the rest of the UK can no longer be let due to its EPC rating but a further 67.5% of the existing London office stock and 71.8% in the rest of the UK has an EPC rating of C-E, which raises the issue of what will happen to space that is not upgraded in time for the new regulations. The prospect of so-called 'stranded assets' rises in lower rent areas where the higher cost of a full energy efficient refurbishment makes projects unviable. Savills estimates that the cost of upgrading office space is around £40 per sq. ft. higher than typical refurbishment costs, whilst CoStar estimates that there is 102 million sq. ft. of vacant office space in the UK

currently, the highest level since 2014 and 65% higher than the pre-pandemic level. Around one-third of the vacant space is in London. The City of London Corporation is considering a fast-track route for planning permissions for retrofit projects, fewer restrictions on changes of use for office buildings that cannot be upgraded, as well as the potential for a 'retrofit first' policy in its longer-term strategy to 2040. Scotland is yet to introduce an EPC target for non-domestic buildings, but under a policy that mirrors that of England and Wales, Knight Frank found that 29% of Scotland's office stock has an EPC rating of E or below, with only 21% rated B or above.

The Deloitte London Office Crane Survey found that refurbishment schemes accounted for 70% of schemes started in the capital in the six months to March 2023, with a record-high number of refurbishment starts totalling 3.2 million sq. ft. of space across 37 schemes. High-value refurbishment schemes have begun entering the



pipeline, with work underway on schemes including Space House in Covent Garden, Citi Tower in Canary Wharf, the former Goldman Sachs HQ on Fleet Street and the £130 million Woolgate Exchange refurbishment that began in July. Large-scale projects that reached contract award in Q3 include the £200 million refurbishment of the 13-storey One Exchange Square in the City of London, which is targeting a 2024 Q1 start, the £100 million refurbishment of 7 Millbank and the £130 million refurbishment of Portland House in Victoria. A refurbishment and extension of a 35-storey tower at Old Street roundabout received planning approval in September. Highlighting the growing scope of refurbishment projects, it will demolish 40% of the original structure.

Large new build projects have also entered the early pipeline, although lingering uncertainty over demand for office space and the combination of flatlining economic growth and uncertainty over when interest rates will reach a peak are expected to lengthen decision-making and delay start dates. In central London, commercial estate agents have reported that offices transactions are taking longer to progress and remain significantly below the long-term average, with appetite worsening due to falling capital values. According to CBRE, capital values for UK offices and central London offices have continued to fall throughout 2023, after a 12.1% fall in 2022. The CPA forecast assumes that commercial investors and developers continue to delay start dates until returns on investment become less uncertain, and for this to be the case particularly for large offices towers. Canary Wharf appears most affected by weakened confidence, illustrated by HSBC's announcement in June that it was moving to downsized premises in the City of London. In addition, construction remains on hold on the 214,000 sq. ft Frameworks development and the 119,000 sq. ft. Market Building pending a significant pre-let or a decision to proceed speculatively. Knight Frank estimated the offices vacancy rate in Canary Wharf at 16.5% in Q2, which is 7.0 percentage points above the long-term average and considerably higher than the 10.1% London average and 9.3% rate for the UK.

Although investors and developers appear to be in 'wait and see' mode to start large new build projects, there are schemes entering the pipeline with completion dates in 2025 and beyond. In July, a development consisting of 63-storey and 22-storey towers at 55 Bishopsgate was approved, with demolition of the existing building scheduled in 2024, and construction through to 2029. This was followed in August by plans being submitted for a 45-storey tower at 18 Blackfriars Road, forming part of a scheme alongside two residential towers. This adds to approvals over the last 12 months including a £500 million, 23-storey office building on Old Broad Street in the City of London a £500 million twin office block development at Botanic Place in Cambridge, One Medlock Street and Bridge Street in Manchester and a £200 million offices and hotel scheme at Haymarket Yards in Edinburgh. In addition, However, given there is still economic uncertainty and substantially higher financing costs, with these projects yet to begin construction, they remain susceptible to delays.

New orders rose 28.8% in 2021 and 6.9% in 2022 but this reflects a lagged pickup after an extended period of subdued new orders since 2017, when confidence and activity deteriorated sharply after the EU Referendum. In the first half of 2023, new orders were 11.2% lower than a year earlier and the lowest since the first half of 2020. For the large refurbishment projects and the new build towers and large projects entering this pipeline the expected rate of return is over a longer and, consequently, riskier, period meaning that the lag between orders and output is longest. Large projects are now taking much longer than the 12-18 month lag that CPA analysis has previously found between new orders and output given the low economic growth expected in 2023 and 2024, as well as higher build costs and financing costs that need to be taken into account in investment decisions. As a consequence, starts on large office towers projects that were due in 2023 and 2024 are expected to be pushed back for longer than in the Summer forecast leading to two years of contracting output: an estimated 8.0% fall in 2023, followed by a 4.0% fall in 2024. The the next recovery phase is anticipated to begin slowly, with growth of 1.0% forecast for 2025.

Upper Scenario:

- A widespread return to offices
- Broad increase in refurbishment projects

The CPA continues to assume in the forecast that office workers work from home two to three days a week, on average. However, if office workers end up in offices more frequently than this on a consistent basis, it would lead to a higher degree of business confidence in the near-term, with firms more open to committing to refurbished existing space or moving to new premises with larger floor space or better amenities as leases expire in the coming months and years. In addition, increasing awareness of the minimum EPC B rating requirements drives an early pickup in refurbishment activity across offices of all sizes across the UK. The weak economic backdrop would limit the uplift, however.

Lower Scenario:

- Slower recovery prolongs the period of uncertainty and constrained business investment
- Lack of developer interest

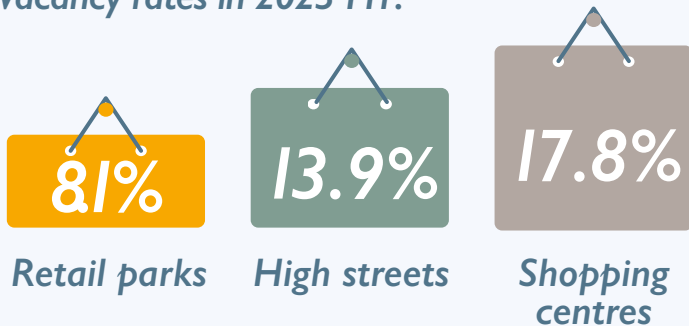
A longer period of weak economic growth, or interest rates moving higher in 2024, stall decision-making for longer than in the main forecast. Along with potential occupiers holding off, increased borrowing costs and falling capital values could also cause developers to abandon projects, rather than delay them.

In the **retail** sub-sector, despite a return to real wage growth and gradually improving consumer confidence, the outlook for construction remains subdued. A decrease in capital values, high vacancy rates, a large increase in the cost of development finance as interest rates have been raised to a 15-year high and, as the CPA has been highlighting over the past decade, the long-term structural shift in demand away from retail premises towards industrial space for operations linked to e-commerce, illustrate the low appeal of new retail units. However, there are areas where demand is strong, at retail parks and within the grocery or discount homewares segments, for example, and being able to acquire existing, vacant units has facilitated expansion plans. Work is, therefore, dominated by refits rather than new build and the redevelopment of less-desired assets such as department stores and shopping centres is increasingly for mixed-use led by leisure, entertainment, offices or residential, thereby diverting output away from the retail sub-sector. Given these factors, output is forecast to decline in each year of the forecast period.

Over the last decade, increases in retail spending online have led to a structural shift for the

sub-sector, with investment redirected away from 'bricks and mortar' retail premises towards warehouse facilities for logistics and storage, and this appears to have been accelerated by the pandemic. The proportion of retail sales spent online peaked at 37.4% in February 2021, mid-pandemic and although this had steadily declined to 26.9% in August 2023, online sales still account for a much higher proportion of total retail than in 2019 (19.2% on average) and ten years earlier (10.4%), which will keep driving demand away from retail premises.

Vacancy rates in 2023 H1:



Source: Local Data Company

Shopping centres and department stores have been particularly affected by these changes and are displaying vacancy rates that are higher than for retail parks and high streets, as well as footfall that is lower than other shopping locations. Following double-digit falls in capital values, commercial estate agents have reported that the volume of shopping centre investment improved in 2021 and 2022 to the highest since 2014. It appears that local authorities, developers and private investors are attempting to capitalise on counter-cyclical buying opportunities, although a slowdown in purchases in Q2, particularly those above £10 million, suggests that higher interest rates and borrowing costs are slowing buying activity. The revaluation of business rates that occurred in April is based on rateable values (the open market annual rental value of a property) on 1 April 2021.



For retail, which has experienced a longer-term fall in rental values since the last revaluation, rateable values have decreased by 10% on average, with further analysis from Savills suggesting a 25% fall for prime high street and shopping centres and a 40% fall for department stores. The consequent reduction in business rates may help lower costs for retailers during a period of high inflation that has increased input costs and, in turn, increase appetite for expansion, although this will continue to be balanced by economic and interest rate uncertainty.

Redevelopment has largely been geared towards repurposing and regeneration that move away from solely retail to mixed-use offices, leisure and residential. Similarly, formerly prime-sited department stores are now being redeveloped into mixed-use space. The Local Data Company found that 20% of former Debenhams stores and 10% of former BHS stores have been repurposed, including into leisure and entertainment venues such as those in Wandsworth, Coventry, Hastings and Colchester, and university buildings, as in Gloucester. However, 40% of former Debenhams stores remain vacant, as do half of ex-Arcadia stores.

In contrast to shopping centres and department stores, retail parks have fared well over the last few years due to the drive-to convenience and the presence of supermarkets and larger floorspaces that can mix in-person and online retail operations such as click-and-collect or click-and-deliver across a range of products. Vacancy rates and footfall have also outperformed other retail settings. Similarly, according to the Local Data Company, retail parks were the only location to record more store openings than closures in the first half of 2023, whilst British Land released an update highlighting that strong demand and limited supply are expected to strengthen rental revenue growth. Take-up has been led by grocery and discounters that have benefited from increased demand during a period of high inflation and falling real incomes. Savills found that supermarkets accounted for 31% of occupied floorspace in retail parks in 2022, up from 18% a decade ago, with the share for discount brands rising to 14% from 8%. In addition, one-third of new openings in 2023 so far have been by value brands.

Discount supermarket chains such as Aldi and Lidl have maintained a focus on physical stores with no, or very limited, online presence for groceries. In February, however, Lidl, the sixth largest supermarket retailer, announced that it would be slowing its store opening programme from 50 per year to 25 per year in order to focus investment on expanding its warehouse capacity. Signalling that demand for out-of-town premises by supermarkets may be waning, other grocery retailers have shifted focus to smaller convenience stores. Asda announced in December 2022 that its expansion over the next three years will focus on grocery convenience



stores rather than its large out-of-town premises, with an aim to add 50 new 'On the Move' stores in 2023 as part of its goal of doubling its existing estate to 300 by the end of 2026, with new stores concentrated in the south of England. Sainsbury's and Waitrose have also announced a focus on convenience stores, whilst Co-op aims to more than treble its number of franchise stores within three years, from 43 to over 130, due to increases in demand in delivery services through Uber Eats, Deliveroo and Amazon. Amazon has paused its own plans to open 'cashierless' grocery stores.

Town and city centre regeneration schemes will also provide small volumes of retail work over the forecast period, with the £4.8 billion Levelling Up Fund and £830 million Future High Streets Fund supporting smaller council-led town centre projects that are part of wider regeneration schemes. However, such projects are following the trend for mixed-use, rather than solely retail developments. Allocations of funding under the Future High Streets Fund were announced in 2021, but given the lags between announcements, approvals and receipt, activity is still coming through, whilst under the Levelling Up Fund £3.8 billion was allocated in two rounds in October 2021 and January 2023. £460 million was allocated to town centre regeneration projects, including new market halls in Bury (£20 million), Barrow-in-Furness (£16 million) and Ellesmere Port (£13 million). Nevertheless, by the time funding is actually received, cost inflation may mean

projects are financially unviable and so may not be able to even get started despite central government finance. Larger regeneration projects will be equally susceptible to delays or scaling back, particularly for those that are moving towards mixed-use led by residential and offices, that are two of the sectors forecast to be most affected by the weak economic outlook. Recent projects of this nature include the redevelopment of the Wigan Galleries centre into residential, a hotel and a market hall building. The latter will be the first phase to begin construction this year, for completion in 2024, as well as the 15-20 year plan to redevelop the St Enoch shopping centre in Glasgow. Nevertheless, plans were approved in June for a £500 million garden village in Broxbourne, Hertfordshire that will be led by 315,000 sq. ft. of retail space.

Given the slower economic recovery expected in 2024, the forecasts for retail construction output have been revised down from Summer. After an 8.0% fall expected in 2023, output is now forecast to fall 4.0% in 2024 and 1.0% in 2025 as consumer and business confidence remains weak amidst a weak economy and rising interest rates.

Upper Scenario:

- Consumer confidence and spending improve quickly in late 2023 and early 2024
- Favourable business rates revaluation firms up confidence for retailer expansions

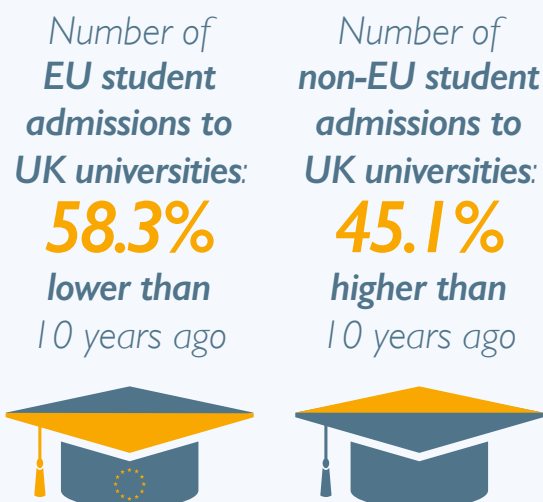
Measures of consumer confidence have improved throughout 2023. Moderating inflation and the Bank of England reaching the end of the monetary tightening cycle mean confidence is assumed to improve quickly at the end of 2023 and early 2024. Retailer and investor confidence for expansion would also be expected to improve. This is likely to be compounded if a reduction in business rates quickly filters through to decisions to expand.

Lower Scenario:

- Strains on disposable incomes restrict household spending throughout 2024
- Rising construction costs lead to delays or cancellations

A slow recovery and further increases in interest rates, on top of higher household bills and payments for mortgages and rents, would see household spending fall in 2024, in turn meaning that investor and developer confidence is likely to worsen, particularly if it affects rental revenues from existing outlets struggling to pay. Elevated construction and borrowing costs also pose a risk to viability and could delay projects or see them cancelled if existing contracts cannot be renegotiated or rising debt repayments won't be covered by lower rents or capital values.

In the **commercial education** sub-sector, large student accommodation towers projects continue to enter the pipeline. Favourable long-term trends in domestic demographics and rising non-EU student numbers have underpinned past and current capital investment plans by UK universities and private accommodation providers, but appetite to invest and growth in construction activity over the forecast period will be tempered by elevated build costs, interest rates that are significantly higher than a few years ago and slow economic growth.



There were 493,940 applicants accepted on to UK university courses for the 2023/24 academic year, according to UCAS, which was 1.7% lower than the previous year. The number of domestic students fell by 1.8%, although this marked a return to pre-pandemic levels. According to the ONS's population projections, the number of 18 year-olds in the UK will increase by 24.5% over the next decade, whilst UCAS forecasts applications to UK higher education institutions will be 30% higher in 2030 compared to 2022. The number of international students from EU countries fell 2.7% from a year earlier, and represented a new low level, which is now 58.3% lower than a decade ago. Acceptances from non-EU students also fell, by 0.8%, but this was still the second-highest level on record. Non-EU student numbers have also risen 45.1% in the last ten years. In addition, since 2017/18 tuition fee income from non-EU students has risen by 70.4%, driving large capital spending programmes at UK universities to build and upgrade teaching and research facilities to attract higher fee-paying overseas students.

New orders in the sub-sector declined in annual terms between 2022 Q2 and 2023 Q1, highlighting a reticence among universities and higher education institutions to proceed with large investment decisions against a backdrop of high inflation, economic uncertainty and rising interest rates. Given a strong Q2, new orders were 24.7% higher than a year earlier in the first half of 2023, but taken on a four-quarter total basis, new orders were largely flat.

One area of the sub-sector that has remained buoyant is the construction and refurbishment of student accommodation. Universities and private providers are investing heavily in purpose-built student accommodation, particularly given the increase in international (non-EU) students in recent years. Student accommodation developer Unite completed a 700-bed scheme in Nottingham in August and has three developments scheduled for completion between 2024 and 2026: a 300-bed scheme in Edinburgh, a 1,000-bed scheme in Stratford, East London, and a 271-bed development in Nottingham. Completion dates are now targeted from 2025, which provides some insulation from near-term volatility and high build cost inflation. Going forward, its strategy will focus on partnerships with high and mid-ranked universities, where demand is viewed to be strongest. In September it announced an 800-bed scheme in Glasgow to be delivered as a partnership, with planning approval expected in 2024 and completion for the 2026/27 year. It will be funded through capital disposals. Empiric has also announced a focus on higher-ranked universities where continued growth in international student numbers is expected, as well as a £44 million refurbishment programme and a £12 million in green initiatives to improve energy consumption and meet Minimum Energy Efficiency Standards. However, the developer has warned that rising costs are threatening viability on its projects and this may keep its Canterbury new build scheme, which was paused post-pandemic, on hold for longer.

Nevertheless, the longer-term pipeline for private sector student accommodation, and particularly large projects, remains strong. Schemes of 500+ beds continue to enter the pipeline, which already includes towers in Nottingham, Leeds and London. In Q3, a 27-storey tower was approved in Salford, whilst plans were submitted for a 20-storey tower in Wembley and a 400-bed tower in Edinburgh. In addition, contracts were awarded for the world's largest purpose-built student accommodation project, a 45-storey tower in Leeds. Requirements for a second staircase in residential buildings above 18 metres may delay progress, if not already factored into designs and viability, however. Projects by universities themselves include the University of Manchester's plans for a 3,300-bed scheme, the University of East London's plans for a 16-storey block at its Stratford campus, a £400 million redevelopment of the Bankside halls of residence for the London School of Economics, subject to finding a joint venture partner, and the University of Chichester's consortium to build accommodation blocks at two of its campuses and refurbish 507 existing bed spaces.

Alongside accommodation work, universities have been driven to make major capital investment in education facilities to help compete at a global level and attract the higher fees paid by international students. In recent years, this has moved towards large-scale, phased redevelopments or new campuses, rather than new departmental buildings. The University

of Oxford plans to redevelop its existing Begbroke building as part of a wider £4.0 billion development partnership with Legal & General and other projects include phased work on the University of Birmingham's £500 million ten-year investment framework, the University of Bristol's new £300 million campus and Sheffield Hallam University's satellite campus in Brent, North London, which will open for the 2025/26 academic year, with further expansion planned by 2030. The University of Portsmouth's £135 million 12-storey faculty building, which was approved in 2021 and was expected to see main construction work start on site in 2022, is still yet to start due to difficulties in sourcing contractors. This highlights the risk for other projects moving from planning approval to contract award and start of works. Projects at these earlier stages include the University of Manchester's £1.5 billion, 15-year science and innovation quarter, which includes both university and commercial, mixed-use facilities, Aston University's plans for a ten-storey landmark building, three new buildings on Sheffield Hallam University's £220 million existing campus and Southampton University's £150 million new campus that was put out to tender in September.

Outside of universities, a £65 million new primary and secondary school campus in Flintshire was awarded contracts in December, followed by the start of works on the redevelopment of three primary schools in Rhondda Cynon Taf, south Wales, in Q1. These are the first projects to be funded through the Welsh mutual investment model of public-private partnership. However, for the former, rising build costs have led to questions over the long-term value-for-money of resulting annual payments that will be required to be paid by the local authority. The mutual investment model framework is planned to provide up to £500 million of capital funding for education projects in Wales.

Construction output volumes this year and next will be dependent on how institutions, student accommodation developers and joint venture partners and contractors can deal with higher build costs and weak economic growth for projects in the near-term pipeline. Output is forecast to fall 4.0% this year and remain flat in 2024 and 2025.

Upper Scenario:

- Stability in student numbers and higher international fee income improves confidence
- Individual landlords exit the market

Higher fee income from international students that increase revenues and early signs that applications for 2024/25 entry show stability in UK and non-EU student numbers shore up confidence to progress student accommodation schemes and university capital expenditure programmes, despite the economic and financial backdrop. A longer-term consideration for student accommodation development is that rising interest rates and mortgage repayments raise costs for individual HMO (houses in multiple occupation) landlords and reduce returns to such an extent that it is not profitable to continue.

Lower Scenario:

- Deterioration in university finances and cost rises hinder the viability of university projects

In recent years, universities have had an increasing reliance on private sector borrowing such as private and public bond issuance to finance work. Appetite for bond issuance will be limited if economic recovery remains weak throughout 2024, which worsens investor risk aversion, with higher interest rates representing another cost for institutions to consider. Questions also remain over the impact of EU student numbers falling to a record-low post-Brexit. In the lower scenario, higher build costs also delay delivery timelines of projects in the pipeline.

Annual output in the **commercial health** sub-sector has averaged £1.1 billion in the last ten years, compared to £2.7 billion per year in the preceding ten years, when PFI was used by government as a means of financing and building new hospitals. Since then, the construction

of new facilities by private healthcare providers or privately-funded redevelopments of NHS hospitals is the sole driver of activity. There has been a notable increase in NHS waiting lists and a lengthening in referral times, particularly post-pandemic that have resulted in private healthcare providers reporting a rise in self-pay and privately-insured patients, whilst a small, but rising, proportion of NHS-funded treatments are being carried out by private providers to try to ease backlogs. However, has not yet translated into expansion plans or new hospitals and continues to be balanced with ongoing pressure on household finances and pressure on operating costs. In August, the US health insurer Centene announced it was selling off its chain of private GP clinics and its Circle private hospitals and exiting the UK market as higher staffing costs eroded profitability.

According to the [Private Healthcare Information Network](#), the number of self-funding private patients peaked at 72,000 in 2021 Q2 and remained close to this, at 71,000 in 2023 Q1. This level is one-third higher than in 2019, pre-pandemic. In addition, the number of private in-patient and day admissions reached the highest since data collection began in 2016, with the proportion of procedures paid for through private medical insurance also reaching a record high. According to the British Medical Association (BMA), a record 7.68 million people were waiting for treatment in July 2023, and 390,000 patients had been waiting over one year for treatment, compared to 1,699 people waiting over a year pre-pandemic in December 2019. So far, increases in investment by private healthcare providers have focused on staff and expanding services at existing facilities, particularly as the NHS backlog increases procedures being diverted to private providers. In 2022, 8.7% of NHS-funded treatments were carried out in private facilities and although only a small increase from 7.7% pre-pandemic, it signals the growing use of facilities due to NHS capacity constraints and the deteriorating condition of the NHS estate (see Public Non-housing R&M).

There are several large projects that are now in the pipeline, replacing the £70 million Royal Marsden Oak Cancer Centre in south London, which opened in June and the £100 million acute care hospital in Harborne, Birmingham, which will complete in early 2024. This was the first large project on the £500 million Private Investment Construction Framework for healthcare began in April 2019, but only two other projects under £10 million each have been procured under the framework. Final planning approval was granted for the £190 million phase 4 of Great Ormond Street's expansion in January and includes the redevelopment of the main entrance and a new cancer centre, with demolition of the existing building to begin at the end of 2023 and main construction to run between 2025 and 2027. Alongside this, a £376 million extension to the Evelina London Children's Hospital was approved in October 2021, although the construction contract was re-tendered during 2022. Construction is set to run until 2027. It will be funded through a combination of public funding and private donations. There are also plans for a new £40 million Veterinary Vaccine Manufacturing and Innovation Centre at the existing Pirbright Institute campus in Surrey. The UK government is set to commit £18.5 million of funding to the project, whilst the Bill & Melinda Gates Foundation will provide £14.5 million. The consultancy contract was awarded in October 2022 and has construction running until 2025. However, work on the £120 million Vaccine Manufacturing and Innovation Centre in Harwell, Oxford has been suspended by the new investors to reduce capital expenditure. Further out, a planning application for a 22-storey life sciences wet lab in Canary Wharf was submitted in December 2022, for expected completion in 2026, 600,000 sq. ft. of purpose-built laboratory space was approved in Cambridge in the same month and work on a £150 million life sciences centre in Euston, London began in April. Moderna has confirmed the Harwell campus as the location for its Innovation and Technology Centre and appointed a contractor in April, but it is yet to receive planning approval. In July, plans were approved for a £900 million biotech campus in Stevenage, which will mix laboratory buildings, offices and manufacturing facilities across a phased development of 15 buildings.

Outside of the large projects that drive sub-sector growth, developer Assura currently has nine developments on site in the UK, totalling £103 million, including a £25 million training academy

in Northumberland and a £31 million cancer diagnostic and treatment centre in Guildford, which will complete by the end of the year, and work has started on a £11 million ambulance hub in Bury St Edmunds. A further five schemes are expected to start on site within the next 12 months and there are 17 enhancement schemes with start dates beyond 12 months. However, it has noted that schemes are delayed by around three months due to managing build cost inflation, whilst appetite to expand has been dented by tighter financial market conditions. Similarly, Private Health Properties will focus on its existing portfolio of properties and has paused new investments until it considers the economic and interest rate outlook has become clearer.

Annual new orders were above £700 million in both 2021 and 2022, marking the first time above this level since 2012. Nevertheless, the construction activity on large projects would be spread over two or three years and so would lead to smaller rises in output and new orders fell sharply from 2022 Q4, which suggests only a temporary uplift. As existing projects reach completion and activity is offset by new work entering the pipeline, growth over the forecast period is expected to be muted. Following the strong recovery in output in 2022, the start of the two major projects in London will maintain output levels in 2023 and drive growth of 2.0% in 2024 and 1.0% in 2025.

Upper Scenario:

- Rising demand for private healthcare translates into new facilities

Hospital backlogs since 2020 have already increased demand for private healthcare and in the upper scenario, this leads to private healthcare providers planning new investments in facilities that open towards the end of the forecast period when it is assumed economic uncertainty has lifted. The easing of travel restrictions is also expected to increase demand from overseas health tourists. Work on the ground would take longer to filter through to activity from 2024, however.

Lower Scenario:

- Uncertainty leads to delays

As demonstrated by recent moves by private healthcare providers to pause new investment decisions or focus on improving existing facilities, uncertainty over the strength of the economic recovery and higher interest rates are likely to constrain new development. Similarly, high cost inflation since plans were approved and contracts awarded for larger new hospitals projects adds a further risk of delay to these projects.



Private Non-housing R&M

Growth in private non-housing repair and maintenance (r&m) activity is expected to be restricted by higher costs and an increasing preference for larger-scale refurbishments and improvements on commercial properties.

Output in the private non-housing r&m sector includes basic repairs and maintenance of offices, retail premises, warehouses, factories and other privately-owned non-residential properties and is dominated by work on offices and retail units. Typically, sector output tends to be less volatile than new build, given the reliance on long-term facilities management contracts, but in recent years, the discretionary, non-essential element that is dependent on macroeconomic fundamentals related to business investment and consumer spending has been more affected by heightened macroeconomic uncertainty. This has been exacerbated by changes to working patterns and office space usage, as well as the increase in lower-quality vacant space, high inflation and the slower UK economy.

Investment in new build retail premises is forecast to remain weak in 2023 (see [Commercial](#)) but, conversely, building owners may shift their focus to r&m of existing buildings, particularly to appeal to new tenants. Whilst this is particularly pertinent in the offices sub-sector, it is unlikely to translate into strong growth in r&m as building owners may be more likely to opt for a larger, higher-cost refurbishment that would be classified as new build commercial work and divert activity away from the r&m sector. This is particularly the case as businesses adapt to post-pandemic requirements for office space considering increased remote and hybrid working and lower, but variable, occupancy rates throughout the working week, as well as a focus on improving the growing stock of vacant office space that is unlikely to be grade A standard, and improving energy efficiency credentials. Furthermore, a prolonged period of high construction cost inflation, associated delays in contracts for new build, and lingering economic weakness throughout 2023 and into 2024 make it more likely that the sector will experience a deterioration in business confidence, a reduction in new investment and potential delays to some non-essential maintenance.

Private Non-housing R&M Output



Remediation of Aluminium Composite Material (ACM) cladding on private non-residential buildings above 18 metres is almost complete, with the Department for Levelling Up, Housing and Communities (DLUHC) monthly statistics from the end of August confirming that works have completed on 54 out of 58 student accommodation towers and 29 out of 31 high-rise hotels. Data on the extent of remediation required outside of ACM cladding is yet to be collected, but the student accommodation provider, Unite, owns 37 buildings with high-pressure laminate (HPL) cladding, with remediation completed on ten of these. It expects to continue remediating 10-15 buildings per year.

Like in the public sector (see [Public Non-housing R&M](#)), reinforced autoclaved aerated concrete (RAAC) is also likely to be an issue for private sector buildings. Nine universities in Scotland, five in England and one in Wales, along with six theatres, have closed buildings following the discovery of RAAC in structures but its wider presence in the private sector is so far undeclared. The scale of remediation that is emerging in the public sector suggests that work is likely to be classed outside of r&m, however.

Outside of routine or urgent r&m that cannot be delayed, discretionary r&m may benefit from any reticence or delays on new build projects that sees building owners focus on maintaining existing properties. However, this will be outweighed by lower volumes of work due to sharp rises in the cost of materials and labour, as well as larger-scale refurbishment and improvements that are classified as new build rather than r&m. Output volumes are expected to fall 1.0% in 2023, before returning to growth of 2.0% in both 2024 and 2025.

Upper Scenario:

- Stronger focus on r&m

Elevated inflation and continued economic weakness into 2024 are likely to lengthen the lag between new orders already confirmed and project starts for new build and lengthen the decision-making process for investment in projects slightly earlier in the pipeline. This may make maintenance of existing assets and facilities a greater focus for building owners and landlords. However, current and planned remediation works on larger-scale r&m projects may be delayed by high costs.

Lower Scenario:

- Priority shifts to new build

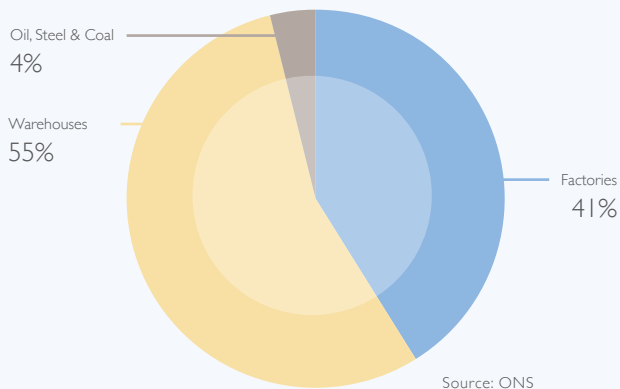
If developers, contractors and investors continue to progress commercial and industrial projects through to starts on site given completion dates scheduled for later in the forecast period when economic growth is expected to be stronger, new build could be prioritised over r&m. Building owners choosing to refurbish rather than maintain the large stock of vacant office space also becomes commonplace in the lower scenario.



Industrial

Over the next two years output in the industrial sector is forecast to fall from its peak in 2023 as higher interest rates and the slower outlook for economic growth reduce confidence to invest in new warehouses and factories.

Industrial Output by Sub-sector 2022 (%)

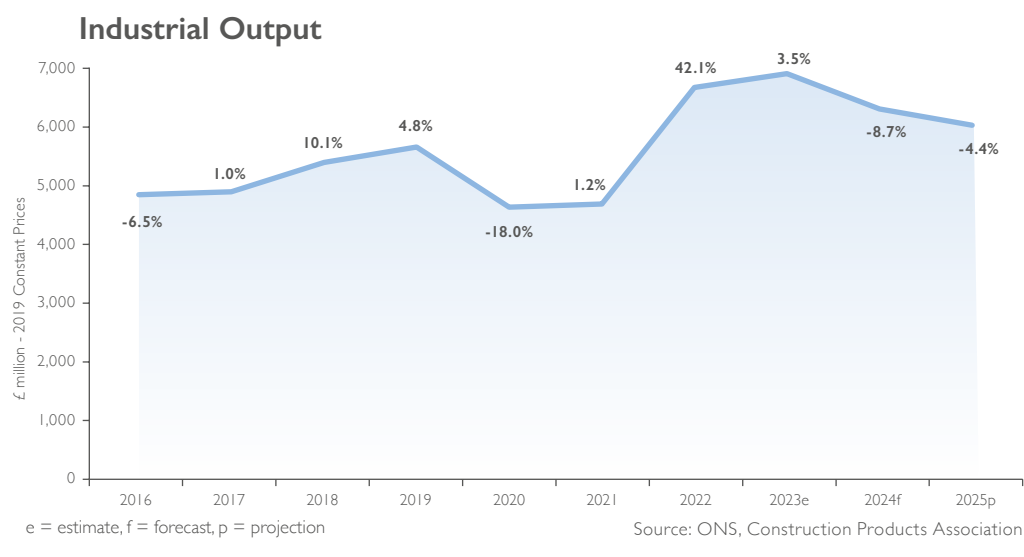


The factories and warehouses sub-sectors dominate industrial output and after displaying strong rates of growth in 2022, the pipeline for new projects has been affected by slower economic growth, an increase in interest rates that means costlier finance for development and construction, as well as renewed uncertainty affecting business confidence for large new investments since the second half of 2022. The smaller pipeline for the factories sub-sector has already seen output slow in Q1 and fall in Q2 and in warehouses, once work completes on current projects, a fall in new orders over the last 12 months suggests a noticeable slowdown in activity from the end of 2023. Demand for warehouses, and particularly the larger 'big sheds' projects, is expected to now be at its peak, with logistics and e-commerce demand from

retailers slowing from the buoyant period of expansion immediately after the pandemic.

In oil, steel and coal, which historically has accounted for less than 3.0% of total sector output, the construction of a pipeline between the Fawley oil refinery in Southampton and London has kept output at a relatively high level for the sub-sector (over £250 million in the first half of 2023). Once this project completes, after confirmation in September that the government will be investing in Tata Steel's new electric arc furnace in Port Talbot, output is forecast to remain at this level. The proposed new £165 million coal mine in Cumbria, which was approved by the Secretary of State in December 2022, is not included in the forecasts as it is still subject to legal challenges.

Output in the **factories** sub-sector slowed sharply in the first half of the year following two years of strong growth in 2021 and 2022. Activity during this period will have been boosted by investment decisions made immediately post-pandemic to ease capacity constraints as demand increased sharply after periods of lockdown. However, the weakening in the economy from late-2022, along with a period of elevated costs and rising interest rates has led firms to hold off on large capital spending commitments as excess capacity is now the key issue for many firms. Sub-sector growth slowed sharply in Q1 and declined in Q2, with the balance in activity tipping away from current work on projects signed off in 2020 and 2021 towards the narrowing pipeline from the ongoing pause in manufacturing investment decisions. This dynamic is expected to continue throughout the remainder of 2023 and early 2024 until clearer signs of momentum in the economic recovery emerge towards the end of next year. After a 2.0% decline in output in 2023, an 8.0% decline is forecast for 2024, before activity remains flat at this level in 2025.



Activity in factories is primarily driven by manufacturing output, which began rising in mid-2023, although this follows annual falls throughout 2022 and the first half of 2023. In addition, survey data from S&P Global/Markit CIPS for September showed that manufacturing output has been contracting for seven consecutive months due to declines in demand domestically and from overseas. Given that the survey is, to a certain extent, reflecting sentiment, the extended run of weakness in the index does not come as a surprise given the weakness and uncertainty in macroeconomic conditions. Nevertheless, forecasts for manufacturing output in 2024 point to continued weakness. In HM Treasury's monthly comparison of independent forecasts from September, the median forecast for manufacturing output growth in 2024 is 0.4%. The Make UK/BDO [manufacturing survey for 2023 Q3](#) showed a continued improvement in investment intentions for the next 12 months, to the strongest since 2022 Q1. However, the question remains over how and when an uptick in sentiment translates into investment decisions being made. The same survey also showed that over half of respondents (54.1%) had withheld investment in the last two years due to uncertainty in the future business environment, despite having the investment capital available. From April 2023, new capital allowances for businesses have allowed firms to reduce their taxable profits by 100% of the cost of their investments in plant and machinery, and will run for three years. This has the potential to boost investment in factories, although it is likely to be overridden by concern over the economic outlook in the near-term and provide more of a support to activity from late-2024 and into 2025.

The slowdown in sub-sector growth apparent in official ONS output data from Q1 reflects the completion or final stages of larger projects in the pipeline, namely Aston Martin's £200 million Formula 1 factory in Northamptonshire, Forterra's £95 million Desford brick factory, Ibstock's Atlas and Aldridge factories, the first phase of the Siemens Mobility £200 million rail

*The proposed **Gigafactory** at Coventry Airport is still seeking an*



factory in Goole and the Siemens Gamesa £186 million expansion to its offshore wind turbine blade factory in Hull. There are still some projects further back in the pipeline, however, such as Aston Martin's wind tunnel and test facility at Silverstone which was awarded contracts in December and will start upon completion of its other factory. Alongside this, Brompton's £100 million headquarters and bicycle factory on a 100-acre wetland site in Kent is awaiting planning approval from December, and SeAH Wind's £300 million monopile manufacturing plant in Teesside began in July 2022. It consists of 1.13 million sq. ft. of space, with completion anticipated in 2024. The £600 million redevelopment of the Shotton Paper Mill in North Wales was approved in 2022 Q4, the £400 million, ten-year project to expand the Sheffield Forgemasters steelworks will see main works on the forging line throughout 2024 and 2025 and in July contracts were awarded for a £150 million sub-sea cable factory in Ayrshire, with construction between 2024 and 2026. In Stevenage, showing the extent of repurposing away from retail (see [Commercial](#)), the redevelopment of The Forum shopping centre was approved in February and will provide 400,000 sq. ft. of new advanced manufacturing space. Adding upside potential later in the forecast period, Rolls Royce is planning three off-site assembly factories for the manufacture of key components for small nuclear reactor (SMR) power stations. The shortlist for the site of its first has been narrowed down to three from six but all are likely to be dependent on the award of government contracts in Summer 2024.

The development of gigafactories to produce batteries to support the transition towards electric vehicles still has the potential to be a driver of sub-sector activity over the medium to long-term, despite the government pushing back its ban on the sale of new petrol and diesel vehicles to 2035 from 2030. The Faraday Institution estimates that ten gigafactories that would each produce 20GWh per annum will be needed in the UK by 2040, up from its estimate of seven factories in its 2020 report. Whilst the UK's first proposed gigafactory, the £2.6 billion factory by Britishvolt in Northumberland now looks unlikely to progress, activity is coming through on Nissan and Envision AESC's £450 million gigafactory in Sunderland which started in December with a planned opening in 2025. After the government confirmed financial backing in July, Jaguar Land Rover has also approved its £4 billion gigafactory in Somerset. Plans to develop a gigafactory at Coventry Airport by 2025 have been given outline planning approval but they have not yet progressed as the joint venture between the airport and local authority is still seeking an investor.

Upper Scenario:

- Domestic and global demand recovers quickly
- Investments in gigafactories progress

The upper scenario assumes that domestic and foreign demand recovers quickly from 2024, ending the hiatus in UK investment decisions on new manufacturing capacity. Clear signs of definitive investment secured for the gigafactory in Coventry would also provide considerable uplift to growth prospects for the sub-sector over the forecast period, although a slowdown from the growth rates of 2021 and 2022 would be unavoidable.

Lower Scenario:

- Manufacturers delay or cancel investment plans again

A slower recovery in 2024 H2, combined with interest rates rising further and remaining at those levels for longer, as well as any further policy uncertainty related to gigafactories would make new investments look less appealing, and in the lower scenario leads to a prolonged hiatus or cancellations of major long-term investment plans.

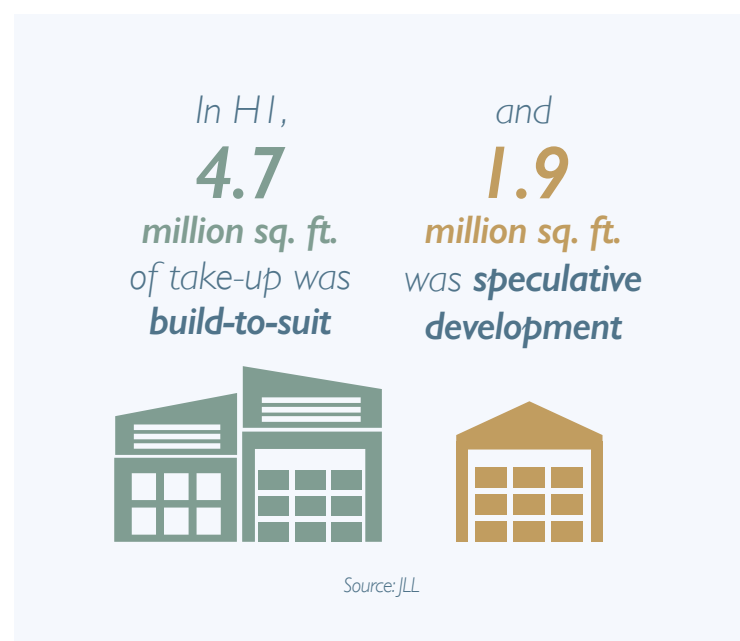
The forecast for the **warehouses** sub-sector remains unchanged from the Summer forecast, with a 10.0% decline expected in 2024, followed by an 8.0% fall in 2025. The build-out of higher-value new orders and large-scale projects placed in 2021 and 2022 will sustain

output growth over the next six months but thereafter, lower demand from retailers who embarked on expansions of warehousing facilities linked to the rise in e-commerce during and immediately after the pandemic, is unlikely to be fully offset by demand from other occupiers such as third-party logistics and manufacturers. The rise in interest rates from historic lows throughout the last decade mean that development finance is now considerably more costly and is expected to reduce investor appetite, particularly for speculative builds, which in recent years have accounted for the majority of new floorspace.

Commercial property agents have noted lower industrial take-up and smaller development pipelines, and rises in vacancy rates registered across most regions of the UK that began in the second half of 2022 as economic growth weakened and the Bank of England has raised its base rate to a 15-year high of 5.25%. Between 2009 and 2022, interest rates did not move above 0.75%, so investors are now facing much higher financing costs than they have been accustomed to. Savills noted that in the first half of 2023, announcements of speculative developments fell by two-thirds compared to the same period of 2022 and were one-third lower than the post-pandemic average, whilst JLL reported that in 2023 H1 4.7 million sq. ft. of 'big box' take-up was for build-to-suit or bespoke projects, out of a total 6.7 million sq. ft., which contrasts with take-up in 2021 and 2022 that was dominated by speculatively developed floorspace.

Looking at the macroeconomic backdrop, data from the ONS shows that retail sales volumes rose 0.3% the three months to August 2023 compared to the previous three months, but were 2.0% lower than a year earlier. Online retail sales have also been on a downward trend since 2021 and the proportion of retail sales online was 26.9% in August compared to a peak of 37.4% in February 2021. The current proportion remains higher than the 19.2% average for 2019, however. Retailers that made decisions to expand capacity as demand and online operations rose sharply during the pandemic are now being forced to reverse warehouse expansions as demand settles at a lower level. This extends beyond retail to sectors such as manufacturing, which saw demand for storage facilities surge after capacity and production were rapidly increased in 2020. Plans for Ocado's two new automated distribution centres that would have opened in 2024 and 2025 have been paused as it now has surplus capacity, whilst Amazon will close three of its existing fulfilment warehouses. In addition, CBRE recorded a 21.0% fall in industrial capital values in 2022 with the largest falls for the largest floor spaces (greater than 300,000 sq. ft.), although recent monthly indicators suggest this stabilised in the first half of 2023, with marginal increases recorded in Q3. Knight Frank has also reported take-up in London and the South East shifting towards smaller units (less than 250,000 sq. ft.). Given the past high levels of activity and strong growth in the sub-sector, there has also been a long-term decrease in industrial land space, with the Centre for London reporting a 24.0% reduction in London in the last 20 years, and a 20.0% reduction in Manchester, due to competition with residential developers.

Nevertheless, the rise in e-commerce remains a long-term trend, which also creates demand for last-mile warehousing and logistics space. Knight Frank expects growth in this segment will be partly driven by the grocery sector, including 'dark stores' for rapid delivery grocers, provided they remain profitable. In addition, the development of gigafactories across the UK that would produce lithium-ion batteries, primarily for electric vehicles (EVs),



will generate an additional 50 million sq. ft. of demand for industrial and warehouses space by 2040, according to Savills, whilst JLL highlights rising demand from film and TV studios and producers (see [Commercial](#)).

There are still large projects in the pipeline, including a £100 million, 48-acre logistics complex in Leicestershire, 660,000 sq. ft. of logistics warehousing in West Yorkshire and a £100 million warehouse complex in County Durham, which was approved in November 2022. A planning application was submitted for a 1.3 million sq. ft. logistics park in Crewe in March and 1.4 million sq. ft. of speculative space was approved for Magna Park in June. As the six-storey, 135,000 sq. ft. warehouse in Brent, London nears completion, British Land received approval in August for a 455,000 sq. ft. multi-level logistics hub, in Enfield and in October, another of its multi-storey schemes was approved in Southwark. Elsewhere, the main contractor was selected for three warehouses across 800,000 sq. ft. at Logicor Park in Daventry. The shorter lead times between project approval, contract award and construction start in the warehouses sub-sector means the majority of work on projects entering the pipeline will be completed by the end of 2024.

New orders in 2022 fell 7.5% from a record high in 2021, and in 2023 H1 were 15.7% lower than a year earlier and 30.0% lower than 2021 H1, which highlights that the peak in activity is likely to have been reached. As projects complete over the remainder of 2023 and 2024, worsening investor sentiment and business confidence that is occurring now, in addition to higher borrowing costs, result in activity falling from 2024. Given the strong growth in previous years, even after two years of contraction, output in 2025 is still expected to be higher than in 2018.

Upper Scenario:

- Consumer spending growth accelerates as inflation eases
- Warehousing and storage requirements related to Brexit and freeports

If consumer spending recovers quickly in 2024 as inflation eases and households gain confidence following the peak in interest rates, retail activity and online spending will post stronger growth rates, particularly if households continue to work from home two or three days a week. Although post-Brexit import checks have been delayed for a fifth time to the end of January 2024, this raises requirements for storage space close to all UK exit and entry points, whilst any progress on the freeports programme would also boost associated warehousing requirements.

Lower Scenario:

- Costlier development finance holds back new projects
- Speculative developments delayed or paused as supply chains are significantly impacted by price rises and economic uncertainties

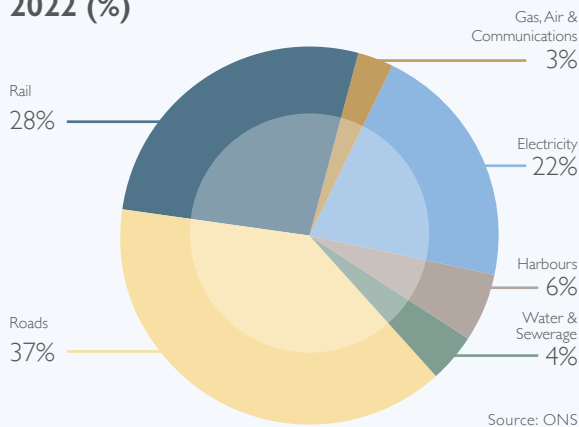
A lengthy period of low interest rates that supported warehouses development ended in 2022 and if borrowing costs rise higher than assumed in the main forecast, or are held at this level for longer, margins, yields and viability will also deteriorate further and lead to lower investment in new projects, both speculative and build-to-suit. An economic recession and lingering inflation will also impact confidence more sharply on the speculative side.



Infrastructure

Delays to major transport infrastructure projects, government financial constraints and the step-change in construction costs that occurred over the past 18 months will weigh on infrastructure activity over the medium-term.

Infrastructure Output by Sub-sector 2022 (%)



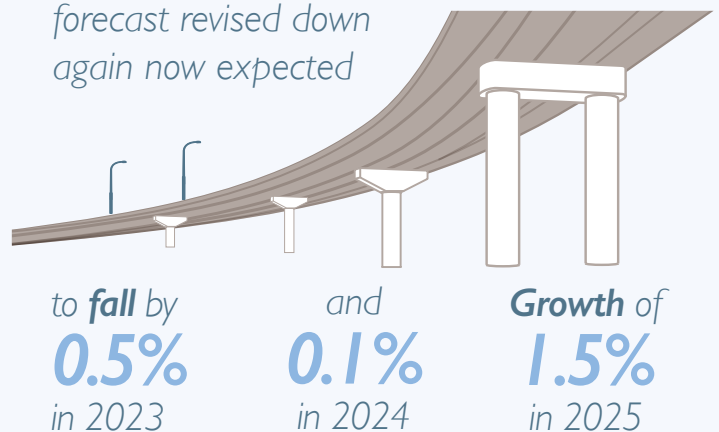
Please note that the Office for National Statistics (ONS) has issues with its measurement of the sub-sectors in infrastructure. Firstly, the ONS's methodology means that although total infrastructure overall may be fine, sub-sector output is determined by the average time between new orders and output in the medium-term, often determined by projects within five-year spending plans in regulated sectors. However, if a new order for a major project in the sub-sector is placed, this may underestimate the time taken for it to provide activity on the ground and overestimate the amount of activity earlier on. An example of this may potentially be the extent of recent growth in water & sewerage due to the Thames Tideway project. Secondly, the ONS only surveys firms that are officially classified as contractors so if the activity is done by an

engineering firm then it will not be covered. This applies to all construction sectors and firms that do construction work but are not technically contractors. However, this issue impacts most upon infrastructure. Therefore, given concerns regarding the ONS's data on infrastructure output, especially at sub-sector level, the forecasts are not purely based on the ONS output data but take into account recent industry surveys and pipeline evidence. This is particularly the case for the roads, rail and electricity sub-sectors. Please refer to the relevant sub-sectors for a more detailed explanation and specific examples.

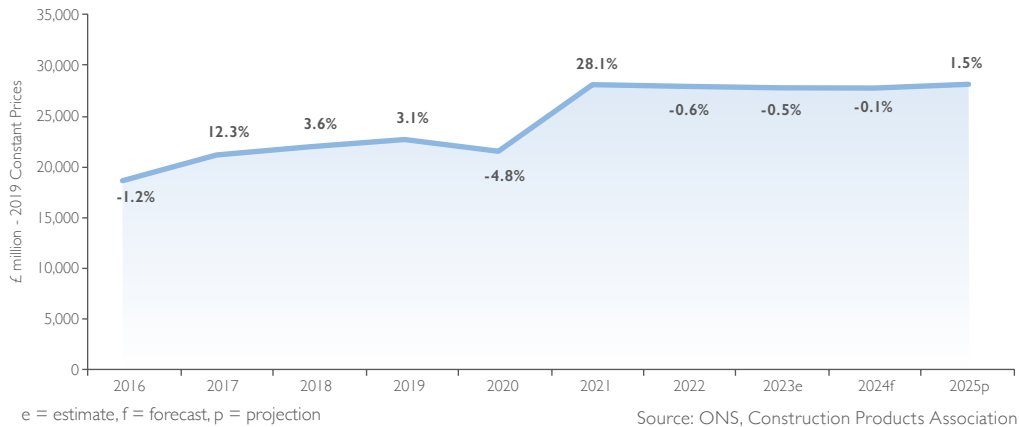
Autumn brings a further downgrade to the outlook for UK infrastructure activity as new projects continue to be delayed due to strong cost escalation and viability concerns and work reaches peak levels on some of the large projects in the sector – namely the first phase of HS2 and Hinkley Point C. Overall infrastructure output is now expected to contract by 0.5% in 2023 and by 0.1% in 2024 before returning to modest growth of 1.5% in 2025.

The government announced in October its decision to cancel HS2 between Birmingham and Manchester. Whilst this decision has significant implications for the sector's outlook over the longer-

Infrastructure activity
forecast revised down
again now expected



Infrastructure Output



term, the impact on the outlook through to 2025 is limited as the majority of this work was planned to occur beyond the forecast period. The forecasts already accounted for the pause of phase 1 work between Old Oak Common and Euston, which will now need private investment to resume.

As part of this announcement, the government has pledged to divert £36 billion of funding earmarked for the cancelled Birmingham to Manchester leg of HS2 to a wide range of infrastructure schemes across the country – with projects in the north of the country attracting the lion's share of funding. However, there is little clarity on whether these are new projects and whether they will actually occur given that government confirmed in October that the list of schemes was merely 'illustrative' of the types of projects that may occur. Furthermore, it is unclear when funding will be made available for the schemes cited in the Prime Minister's speech. Several schemes indicated were already part of current investment programmes that were already factored into infrastructure output forecasts. The forecast assumes that near-term funding will not increase materially as a consequence of recent announcements until further detail is provided in the Autumn Spending Review.

The government's failure to heed warnings from offshore windfarm developers about the extreme impact of cost inflation on project viability resulted in no bids in the 2023 auction for development rights. The decision to set the maximum price for electricity generated only slightly higher than last year proved key. Projects supporting the electrification transformation will still make a significant contribution to overall infrastructure activity but with slightly less clout than previously anticipated. Gas, air and communications is the other sub-sector set to experience growth over the forecast period, particularly as delayed airport expansion projects proposed before the pandemic begin to re-enter the pipeline. News that Bristol and Manston airports will join Manchester in progressing schemes during the forecast period is a positive development, even if it is from a low base.



*Audit Scotland reports that reduced capital budgets, higher costs and increased maintenance requirements mean the **Scottish government can't afford to deliver its public sector infrastructure plan***

Work on phase 1 of HS2 is at its height
– **construction work is underway at
several hundred sites**
between the **West Midlands**



Prospects for the **rail** sub-sector were already substantially downgraded in Spring following the government's decision to postpone HS2 works at Euston station and activity in the rail sub-sector. Summer brought a further small downwards revision due to the impact of exceptional cost inflation on fixed capital budgets. The forecast has been maintained in Autumn and output is expected to rise by only 2.0% this year before contracting by 3.0% in 2024 and a further 1.0% in 2025. Recent confirmation that the second phase of HS2 would be fully cancelled largely impacts activity beyond 2025, barring allowances already made in the Spring forecast.

In the last six-monthly review on project progress to parliament in June, it was confirmed that delivery of HS2

phase one between Birmingham and Old Oak Common continues to build momentum. Early works have been completed and main works are still due to hit peak levels this year before activity stabilises at a high level. Tunnelling work is progressing and excavation of the basement box at Old Oak Common station to make way for subterranean platforms is well underway. Phase one is now expected to cost £40.3 billion (in 2019 prices), with a confidence range set at between £35 and £45 billion. As of March, £22.5 billion (2019 prices) had been spent on the scheme, including land and property acquisitions. The first HS2 services between Birmingham Curzon Street and Old Oak Common are due to run between 2029 and 2033.

In October, the government announced its decision to cancel the Northern leg of HS2 between Birmingham and Manchester, following on from its decision to axe the eastern section of the new network a year ago and the postponement of the Birmingham to Crewe leg and Euston station extension in March of this year. October's announcement confirmed that HS2 will now only run between Birmingham and Old Oak Common initially.

HS2 is still expected to eventually run to Euston but this is dependent on attracting private sector investment to the project. A new development company, separate from HS2 Ltd, will be appointed to manage the delivery of Euston station. The Euston extension involves digging a 4.5-mile tunnel from Old Oak Common and building a new station at Euston next to the existing West Coast Main Line terminus. Prior to the postponement, work at Euston was estimated at £4.8 billion, £2.2 billion over the established budget prompting significant criticism from the National Audit Office. Under the government's new proposal, the Euston development will be scaled back to a six-platform station rather than the 11-platform facility initially planned. If private sector appetite is sufficient to bring the Euston extension back into play, work on the ground is highly unlikely to start within the current forecast period.

Network Rail's five-year Control Period 6 (CP6) ends in March 2024 and CP7, covering April 2024 to March 2029, was published in December 2022. Network Rail committed to a budget of £44.0 billion over the five-year period in England and Wales with £27.5 billion coming from a Network Grant. A direct comparison with CP6 cannot be made because of differences in the way objectives have been included but it broadly points towards similar finance overall and it appears to include a small increase in expenditure on Operations, Maintenance and Renewals (OMR) in real terms. Projects currently in the pipeline towards the end of CP6 are likely to cross

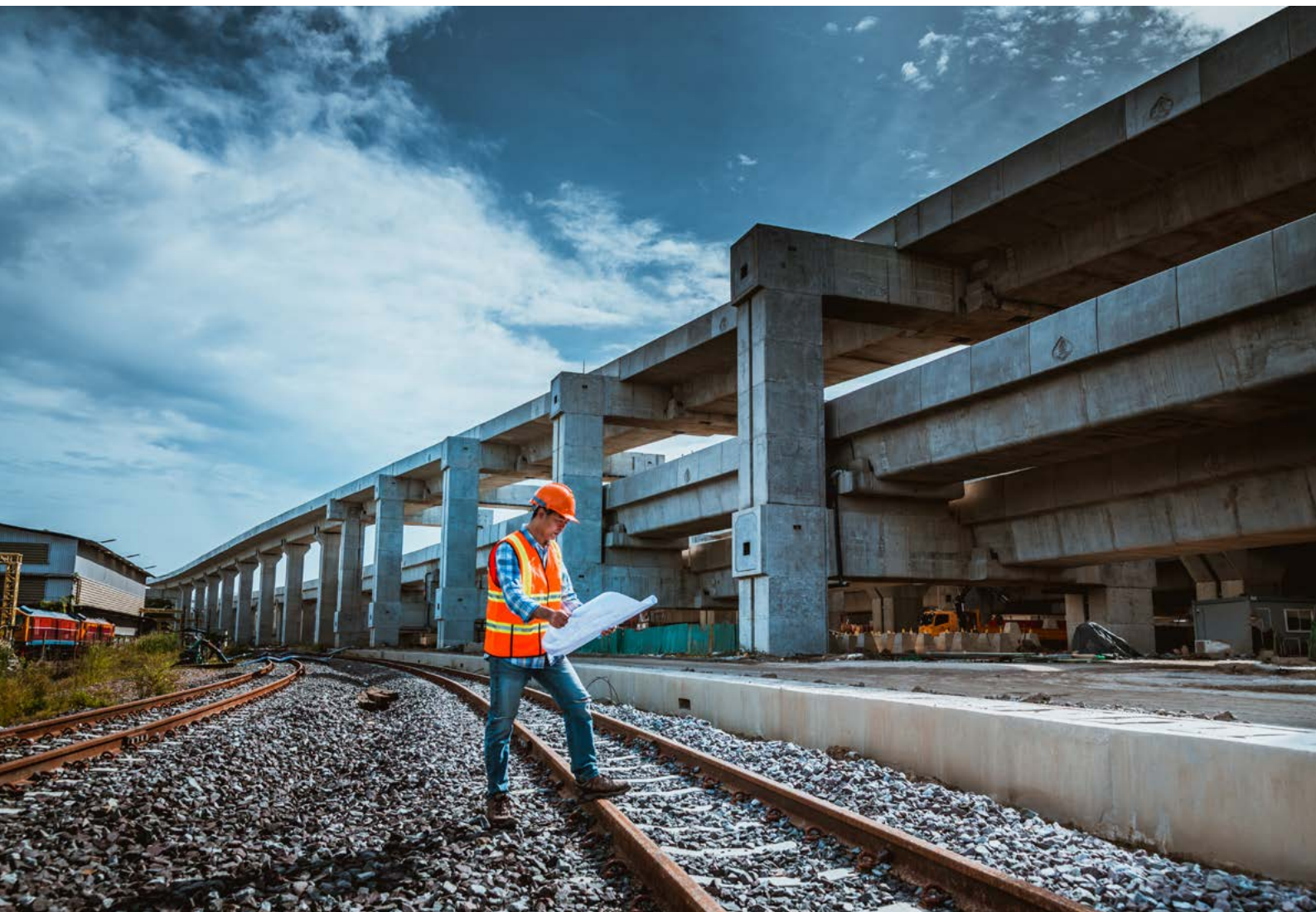
over into CP7 but with the CP7 settlement in place, it is unlikely to lead to a hiatus in activity between the control periods.

Network Rail's annual report confirmed that nominal capital spending rose from £6.1 billion in 2021/22 to £6.5 billion in 2022/23, suggesting a slight decline in the volume of activity after taking inflation into account. Enhancements to increase the capacity of the network have amounted to £2.4 billion, compared with £2.2 billion in 2021/22. This included £1.8 billion of DfT-funded schemes, £0.2 billion funded by Transport Scotland and £0.5 billion of other grant-funded projects. Major schemes included TransPennine improvements, East West Rail, Midland Main Line improvements, East Coast Main Line improvements and in Scotland, improvements relating to the Inverness to Aberdeen and Edinburgh to Glasgow lines.

Major work is also progressing at several stations including a new station a £200 million new station at Cambridge South, the £140 million Darlington redevelopment and the £161 million revamp of Oxford Station.

The Greater London Authority's (GLA) [Capital Spending Plan](#) for 2023/24 was published in February. The plan includes a capital budget for TfL of £2.3 billion, incorporating £725 million for renewals, £47.6 million for Crossrail and £101.6 million to modernise the Circle and District line.

Rail project delivery has been impacted by the financial difficulties impacting capital investment by the Scottish Government. After a recent assessment of planned capital spend and finance availability against existing and proposed commitments, Audit Scotland concluded that plans to spend £26 billion are simply unaffordable and prioritisation is essential. The Scottish Government plans to publish information about revised investment plans alongside the 2024/25 budget.



The Scottish Government anticipates a 7% real terms reduction in the capital block grant it receives from the UK Government between 2023/24 and 2027/28. In addition, based on its understanding of the UK Government's plans, it has no longer budgeted for any financial transactions after 2024/25. Furthermore, a funding gap of 11% between capital funding and planned spending is now expected in 2024/25, rising to 16% in 2025/26. Affected rail projects include the Borders railway decarbonisation project, a £32 million scheme to electrify the Borders railway and rolling stock to facilitate decarbonisation of the line, which has been paused, and amid cost escalation of more than a third, the £100 million East Kilbride Rail Enhancement project is being re-evaluated.

Please note that the ONS historic output figures for rail should be treated with caution given the ONS's mismeasurement of infrastructure sub-sector level data that have been further exacerbated by methodological improvements made in 2018. For example, output in the rail sub-sector increased sharply in 2017 and 2018, even though main works on Europe's largest infrastructure project, HS2, was yet to begin. The main civil engineering contracts for the first phase of the project, worth £6.6 billion were awarded in July 2017 and, as a result, new orders rose to a record high of £9.0 billion in 2017. Rail output rose 58.9% in that year and 39.3% in 2018. The divergence between new orders and output has meant that the levels of output appear inflated in 2017 and 2018, despite CP5 ending. More recently, large falls in output were recorded in 2019 and 2020 even though enabling works on HS2 continued during the pandemic and the formal start of main construction works was announced in September. Given these inconsistencies, the CPA is forecasting growth rates for actual activity on the ground.

Upper Scenario:

- Cost inflation eases
- Euston extension to HS2 swiftly receives private sector-backing and progresses without significant delay

If materials inflation eases, particularly for energy-intensive, heavy side products that would help civils contractors that are delivering on fixed-price contracts. In addition, better management of larger projects would also ensure that government and regulated sector firms get greater volumes for the same capital expenditure.

Lower Scenario:

- Decision-making pauses on new and enhancement rail projects due to uncertainty on costs

HS2 has already been subject to significant delays so far and further delays would hinder infrastructure growth rates. In addition, further cost inflation and hits to revenue from low passenger numbers and strikes may mean that rail spending is reduced in the medium-term as well as the longer-term, hitting spending in 2024.

The **electricity** project pipeline is sizeable and growing but supply chain capacity and skills shortages will constrain delivery. Policy is also problematic – scaling planning hurdles can be challenging and unrealistic supply price agreements, along with windfall taxes, impact appraisal viability. Taking this into account, electricity output is forecast to grow over the forecast period by 4.0% in 2023 and 7.0% in both 2024 and 2025, which also reflects ongoing work on Hinkley Point C, the first new nuclear power station in over two decades, along with further growth in increasing renewable energy capacity.

National Grid invested £7.7 billion in delivering smart energy infrastructure and maintaining its networks in 2022/23. Total investment in the five years to 2025/26 in electricity transmission maintenance and expansion is expected to be close to £9 billion, with a further £6 billion in asset replacement, reinforcement and connections, facilitating the infrastructure for electric vehicles, heat pumps and directly connected generation, to support the distribution network.

The infrastructure owner is seeking partners to deliver the country's largest grid investment programme in generations – the Great Grid Upgrade. Procurement is underway, with consultancy and construction works expected to cost £8.7 billion over eight years. Works, covering new overhead line construction, substation refurbishment and underground cabling works, will focus on nine onshore projects across England and Wales to provide the infrastructure needed to move clean energy from generation to consumption.

A similarly ambitious grid upgrade and expansion programme is planned in Scotland. Scottish and Southern Energy Networks (SSEN) Transmission recently launched its Pathway to 2030 programme which plans to invest £10 billion on new onshore and sub-sea transmission links as part of a wider upgrade of the electricity transmission network.

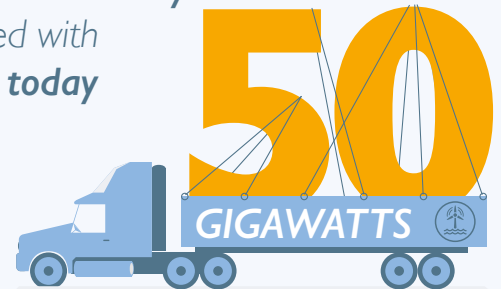
Whether work to enhance the grid will be captured in the construction output statistics will depend on the main function of firms awarded the contracts. If they are officially classified as a construction firm work will be included in the construction output figures but, if their primary workstream is electrical engineering, these works will be classified elsewhere.

A preferred supplier was recently announced to deliver the Eastern Green Link 1 project, a 525kV, 2GW high voltage direct current (HVDC) subsea transmission link from East Lothian in Scotland to County Durham in England. The project is being delivered by a joint venture between National Grid Electricity Transmission (NGET) and SP Transmission, part of SP Energy Networks (SPEN). Subject to planning approval, construction work on the £2.5 billion scheme is expected to begin in 2024. The 190km electricity superhighway will carry enough green electricity to power more than two million homes across the UK.

Earlier this year, NGET and SPEN also agreed to collaborate to deliver Eastern Green Link 2, a planned subsea electricity superhighway linking Peterhead in Scotland to Drax in England. The 436km cable will be the single largest transmission project ever. Subject to Ofgem approval, work is expected to commence in 2024 with a targeted completion date of 2029.

EDF's half-year update to investors maintained its estimate that the cost of delivering Hinkley Point C could hit £32.7 billion, an uplift of over 80% compared to the original 2015 budget. This estimate is based on an inflationary adjustment to a review that took place in May 2022 that did not include a re-assessment of the costs of electromechanical works and of final testing. In recent months, Hinkley Point C has been hit by industrial action with steel erectors, scaffolders and mechanical and electrical workers downing tool in protest at shift patterns, pay and changes to benefits. Pay adjustments have been made in response to workers' demands. With the last available bottom-up cost review now over 18 months old and stronger than expected labour cost pressures, there is a risk that the final cost of delivering this project could vary considerably from the latest cost estimate. In terms of construction progress, around 49% of total concrete has been poured and around 15% of mechanical, electrical, heating ventilation and

Government has pledged to deliver
50 gigawatts (GW)
of offshore wind by 2030
compared with
14 GW today



but no bids were received for new offshore wind project contracts at a recent government auction.

air conditioning equipment has been manufactured. The start of electricity generation is now targeted for June 2027, 15 months later than initially planned.

A legal challenge against the government's decision to build Sizewell C on the Suffolk coast was quashed earlier this year with a ruling that the decision to approve the scheme was lawful. A final investment decision on Sizewell C is expected in 2024.

The government's latest clean energy auction in Autumn proved difficult after no bids were received for the 5 gigawatts (GW) of offshore windfarm development rights on offer. Instead, contracts were only let for 3.7GW of solar power, onshore wind and tidal power projects. Failure to attract bids for offshore opportunities was due to concern that the maximum price, set at similar levels to previous rounds despite a step-change in construction and borrowing costs over the past 18 months, was too low to deliver a reasonable return. In 2022, the maximum price was set at £37.50 per MWh, in 2012 prices, and the starting price for 2023's auction was 17.1% higher at £44 per MWh but with infrastructure cost price inflation having risen by 25.1% since January 2020, pre-pandemic, and materials inflation having risen 44.1% over the same period. Developers state that maximum prices need to be closer to £60 per MWh, in current prices, for developments to work against the prevailing cost backdrop. The result is highly problematic for Britain's 2050 net zero emissions target, which calls for 50GW of offshore wind capacity by 2030 versus around 14 GW now. In the 2022 auction, offshore wind projects were the main recipient of funding, with 7GW awarded.

Delivery cost pressures are also impacting renewables schemes already in the pipeline. Ørsted expects to take a Final investment decision on Hornsea 3, the 2.8GW project worth an estimated £8 billion, this year. In March the developer warned that the project may not go ahead without additional UK government support and a final decision has yet to be made. Back in July, developer Vattenfall took the decision to halt work on the Norfolk Boreas windfarm, designed to provide power to the equivalent of 1.5 million homes, due to the impact of exceptional cost inflation on profitability. The firm won the contract to build this project during last year's bidding round, securing a record low price of £37.50 per MWh for electricity generated.

Additional solar farm and battery storage capacity is being developed around the country. Contracts were recently awarded on the 41MW West House solar farm in County Durham and a decision on JMB Solar Projects 21's plans to develop a 50MW solar farm with battery storage capacity on a 286 acre site between Newent and Gloucester is expected imminently. EDF is poised to submit a planning application for a 50MW solar farm in East Cambridge, following the recent launch of a public consultation on its 50MW Glassthorpe Farm scheme. Other schemes in its pipeline include 50MW solar farms at Tye Lane near Branford and Bloy's Grove in Norfolk.

Recent changes to planning policy in England, driven by a desire to make it easier to secure approval for onshore wind projects, are unlikely to be successful. The policy revision seeks to broaden the ways that suitable locations for onshore windfarms can be identified and to ensure that whole communities have a say in the decision-making process. However, Renewables UK states that changes amount to no more than a 'slight softening' at the edges and that significant hurdles remain in place. In June, the Institute for Public Policy Research (IPPR) called for fundamental planning reform to support the development of onshore wind projects, estimating that at the current rate of development it would take 4,700 years for England to reach the onshore wind capacity called for by the government.

Concern has been raised that the electricity generator levy could curb investment in the renewables sector. The levy, announced in November 2022 and formalised in the Spring Finance Bill, will apply to electricity generated from 1 January 2023 to 31 March 2028. Generators generating more than 50 gigawatt-hours per annum of electricity from nuclear, renewable or biomass sources in any qualifying period will be liable to pay a levy on earnings exceeding the benchmark price which has been set at £75 per MWh. The government expects the levy

will raise over £14 billion in five years. Concerns that the levy may exacerbate issues of raising finance which could impact project viability have been voiced, most recently by the House of Commons Public Accounts Committee.

In the Electric Vehicle Infrastructure Strategy published in March 2022, the government pledged to create 300,000 public electric vehicle (EV) charge points by 2030, backed by £1.6 billion of funding. This funding includes the £450 million Local EV Infrastructure (LEVI) Fund to help local authorities install EV hubs and on-street charge points from 2022 to 2025 and the £950 million Rapid Charging Fund (RCF) supporting the rollout of 6,000 high powered charge points across motorways and major A roads in England by 2035. The launch of the RCF pilot scheme is imminent. Government statistics highlight the enormity of the task to install 300,000 points by 2030. In the year to July 2023, 12,009 new charging devices were installed across the UK, 2,487 of which were rapid charging devices.

It is worth noting that, according to the ONS, EV charging points in the historic construction output data are classified in infrastructure electricity for existing buildings and structures but when they are a part of new buildings and structures then the EV charging points activity will be a part of whichever sub-sector the building or structure is in. For instance, if the EV charging points are a part of a new housing development then they will be classified in housing.

Large projects with long delivery programmes distort official electricity orders and output data. Output in the electricity sub-sector declined 5.7% in 2019 even though main civil engineering works above ground on Hinkley Point C started in September 2019. That fall was followed by growth of 21.1% in 2020 despite the impact of the first national lockdown on workforce numbers and activity on site at Hinkley Point C during the first half of the year and according to the ONS output fell by 19.8% in 2021 despite it comparing with a pandemic-impacted year before. This suggests that the ONS construction output data is not accurately reflecting activity on the ground, and as a result, the CPA is forecasting actual activity growth in the sub-sector rather than distortions in the ONS data.

Upper Scenario:

- Investor confidence improves allowing new energy projects to get off the ground

If investor confidence improves amid a reduction in economic uncertainty and increased cost certainty, it could help large-scale projects to get off the ground, particularly offshore wind farms.

Lower Scenario:

- More offshore wind projects stall in England due to the step-change in cost and restrictive policy environment

If more developers who successfully bid for schemes during the 2022 auction round take the decision to pause schemes as cost pressures erode profitability, activity in this sector could reduce.

In the **water & sewerage** sub-sector investment by water companies continues to fall significantly short of planned spend, limiting growth prospects. A degree of catch-up is anticipated over the next 12 months as cost pressures ease, helping projects stalled due to commercial pressures and uncertainty continue to progress. In 2025, activity is likely to slow due to a hiatus in activity as work completes on AMP7 and before activity on AMP8 ramps up.

AMP7 provides an overall spending allocation of £51 billion in 2017/18 prices, inclusive of £13 billion of infrastructure investment. Ofwat's recent assessment of water companies performance in 2022/23 against targets, and a review of performance in AMP7 to date, found that out of the 17 largest water companies included in the assessment, the majority has failed to deliver their spending commitments on enhancements. Water companies only spent 73% of their forecast

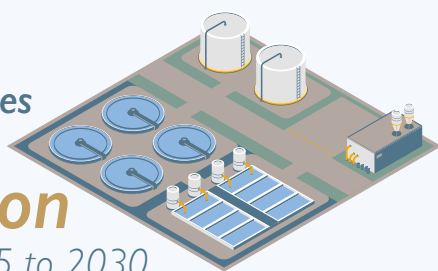
Water companies

plan to invest

£96 billion

in AMP8 – 2025 to 2030.

If approved, funding will focus on **improving water storage capacity and reducing sewage spills into waterways.**



enhancement allowance in the 2020 to 2023 period. Impacts from the pandemic, cost challenges due to high inflation and planning delays were cited as reasons for the underspend. Ofwat's overall assessment of water company performance in AMP7 to date graded seven firms as 'average' while seven were deemed to be 'lagging behind'. No companies made it into the 'leading' category. Expenditure in water activities accounted for 56% of total enhancement expenditure during 2020 to 2023, with enhancements to wastewater facilities accounting for 44%.

Water companies have submitted detailed business plans for investment activity under AMP8 to the regulator. In AMP8, covering investment between 2025 and 2030, spending of £96 billion, in 2022/23 prices, is targeted – the largest ever investment round and a significant uplift on AMP7. Plans include building ten new reservoirs, reducing leakage by a quarter from 2020 levels and installing technology at sewage works to remove more than a million tonnes of phosphorus from rivers. If approved, these ambitious plans would create an estimated 30,000 jobs, increasing sector performance by 50%. Final determinations will be published at the end of next year and several water companies have commenced contractor procurement ahead of AMP8 starting in 2025/26.

Work on the 25km Thames Tideway Tunnel continues to progress. Along with the 2022/23 annual review, published in August, Bazalgette Holdings Limited, the company established to deliver the Thames Tideway Tunnel for Thames Water, provided a brief progress update, stating that the capital cost of the project remains at £4.5 billion, as communicated in April and confirmed the system is still due to be fully operational in 2025. Recent milestones include the completion of primary tunnelling works, completion of a secondary lining of the west and central sections of the tunnel, and completion of shaft cover slabs at five sites. The removal of temporary river structures is underway and worksite system acceptance tests were carried out at three sites in preparation for system commissioning.

Detailed planning is being ironed out for a £325 million new reservoir in Hampshire. The 8,700 million litre capacity facility would be the first large-scale water storage facility to be built in the UK since the 1980s. A contract for main works on the new reservoir was awarded earlier this year and the reservoir is due to be operational in 2029. A planning application for a new pipeline to transport water from the new facility to local pumping stations is expected to be submitted shortly.

Work is underway on the first phase of a new pipeline linking reservoirs with treatment works in Durham. The £150 million project is delivering a new replacement pipeline from Lartington Water Treatment Works to Gainford and a new strategic transfer main between Whorley Hill SR and Shildon SR. Work started in early 2023 and is due to complete mid-2025.

Earlier this year, Ofwat approved 33 infrastructure projects for delivery between 2023 and 2030, with work beginning in the next two financial years. Since first being proposed, the collective cost of these schemes has increased from £1.6 billion to £2.2 billion. Storm overflows schemes,

including work to improve water quality at Ilkley and to provide Lake Windermere greater protection from spills, have secured close to £1.7 billion. Other schemes include smart metering, water supply and water quality schemes.

Output in the water & sewerage sub-sector is forecast to rise by 2.0% this year, in line with the CPA's Summer forecasts as a more stable inflationary environment helps some enhancement work. Gains from AMP7 activity will be offset by activity winding down on the Thames Tideway Tunnel. Activity is forecast to rise a further 2.0% in 2024 before a fall in output in 2025 due to a hiatus as work under AMP7 ends and work on AMP8 starts to build.

Please note that the ONS historic construction output figures for water & sewerage should be treated with caution given the ONS's mismeasurement of sub-sector level data. For example, in 2018, output in the water & sewerage sub-sector fell by 8.7%, despite main construction works occurring on the Thames Tideway Tunnel. Contracts for the project were awarded in February 2015 and, as a result new orders increased fivefold in that year. Output rose 58.8% in 2016 (albeit from a low base), followed by a further 57.7% to a five-year high of £2.4 billion in 2017, even though main tunnelling works on the project were yet to begin. This suggests that the ONS's construction output data is not accurately reflecting activity on the ground and is likely to have been incorporated too early in the data. As a result, the CPA's forecasts for the sub-sector focus on growth rates that are more illustrative of activity on the ground.

Upper Scenario:

- Water companies successfully establish frameworks spanning AMP7 and AMP8

If this occurs quickly, spend under AMP7 could be increased and there would be greater continuity between spending periods.

Lower Scenario:

- Focus switches to AMP8 and attempts to increase spend on AMP7 priorities are not made

AMP8 stands to be the biggest ever investment round and there is a risk resource will be diverted to getting activity underway quickly on AMP8 at the expense of increasing investment under AMP7.

The forecast for **roads** construction output has been downgraded once more, with activity forecast to fall by 6.0% this year and 3.0% in 2024, before stabilising in 2025 due to delays to major roads contracts.

Activity through to 2025 will continue to be driven by National Highways's (NH) Road Investment Strategy 2 (RIS2) but substantial cost overruns and unforeseen planning complexity creates a challenging backdrop. The NH spend on renewals and enhancements in 2022/23 was £3.2 billion, including £1.7 billion on enhancements and £0.9 billion on renewals.

The NH capital budget for 2022/23 was £438 million less than provided for in the 2021 Spending Review, due in part to the government's decision to pause, and ultimately cancel, new smart motorway schemes. NH's annual report states that as of March 2023, construction work was ongoing on 18 schemes, while 20 schemes across the country were in the development phase. 31 schemes are in earlier stages of development and options are being explored.

In March 2023, the government announced that the £320 million A27 Arundel Bypass and the



AMP8 from April 2025
will focus on **efficiency**
and **reducing waste**
rather than new work

A5036 Port of Liverpool access road would be delayed for development in Road Investment Strategy 3 (RIS3) for delivery in the 2025 to 2030 period. Monitoring equipment has subsequently been removed and plans to submit Development Consent Orders to the Planning Inspectorate scrapped. 30 schemes initially intended to be included in RIS3 were also pushed back.

Eleven smart motorways were scrapped and the £9 billion Lower Thames Crossing also slipped from RIS2 into RIS3 when the Secretary of State for Transport announced a two-year delay in March amid concern about value for money as costs escalate. NH has been in competitive dialogue with shortlisted bidders for the £2.3 billion tunnelling contract for what will be the longest road tunnel in the UK and a winner is expected to be announced shortly. Work on the six-year programme will start in 2026 at the earliest.

Planning permission has been granted for the £46 million Long Stratton Bypass in Norfolk. Work on the 2.5 mile stretch of new road is anticipated to start next spring and complete by the end of 2025. Plans for a £200 million bypass near Lincoln have been approved. Construction work is expected to start at the very end of the forecast period in November 2025.

Part of the funding earmarked for the Birmingham to Manchester leg of HS2 will be used to deliver roads schemes across the country. The Prime Minister's announcement suggested the following regional allocations for smaller roads schemes would be made: £300 million for nine schemes in the North West including the A582 South Ribble Distributor and Kendal Northern Access Route; £460 million for schemes including the Blyth Relief Road in the North East; £460 million for schemes such as the Shipley Eastern Bypass in Yorkshire and the Humber; £250 million for the West Midlands for schemes including the Shrewsbury North Western Relief Road; £250 million for schemes including the A509 Isham Bypass near Kettering and the A43 between Northampton and Kettering; £610 million for East Anglia for schemes including the A10 between Ely and Cambridge and £290 million and £140 million for the South East and South West respectively for schemes including the A259 between Bognor Regis and Littlehampton.

Larger National Highways roads schemes that may receive funding diverted from HS2 include a new road linking the M62 and M60 in Manchester; further improvements to the M6 and dualling of the A1 between Morpeth and Ellingham – a decision about the project's future is expected in June 2024 after repeated delays.

These schemes are at varying stages of the development process. Work may get underway on some schemes in the latter part of the forecast period but details of the funding profile are not yet available and no provision has been made in the Autumn forecast.

Beyond 2025, investment in the UK's strategic roads network will focus on renewals and maintenance rather than enhancements in response to the challenges of aging roads infrastructure – it is estimated that over 70% of the National Highways network of roads and bridges will be over 45 years old by 2025. During RIS3 the focus will shift to making the most of the existing network, including greater use of digital technologies and preparing the network for connected and autonomous vehicles. Investment in smaller schemes, valued between £2 million and £25 million, is also likely to increase.

Construction work recently started on the £200 million Carlisle Southern Link Road, connecting junction 42 of the M6 with the A595 at Newby West, the £115 million Melton Mowbray Distributor Road and the first phase of the £1 billion West Midlands Interchange project, with the roads element of works worth an estimated £30 million.

Four local authorities in Scotland, including Glasgow City Council, have launched a £400 million framework covering roads, civis and other core works. The scope of the framework is wide-ranging, covering works such as road resurfacing and reconstruction through to tree clearing services, and the construction value of individual projects will be relatively small.

Boring work on TFL's Silvertown Tunnel, linking Silvertown in Newham with the Greenwich Peninsula, is now complete. The project's budget has increased slightly, rising by a further £2 million to £179 million, and the anticipated completion date has slipped into the second quarter of 2025/26. To date an estimated £117 million has been spent on the project.

Please note that in a similar vein to the water & sewerage and rail sub-sectors, the ONS's mismeasurement of sub-sector level data has meant that historical figures for roads output appear inflated, contradicting other pipeline evidence and industry surveys. Data from the Mineral Products Association (MPA) showed that sales volumes of asphalt sales declined 8.6% in 2020, before rising by 12.5% in 2021. The pace of recovery in 2021 is in stark contrast to the growth reported in the official data of 82.4% that took output to a record high of £10.7 billion even though the delivery of major road projects has been impacted by planning delays. Overall, this suggests that the ONS's construction output data is not accurately reflecting activity on the ground, and as a result, the CPA is forecasting actual activity growth in the sub-sector rather than distortions in the ONS data.

Upper Scenario:

- Road schemes receive go-ahead
- National Highways brings forward road schemes

If contracts and development consents for the remaining major road projects outlined in the National Infrastructure and Construction Pipeline 2021 are awarded and obtained respectively, this would lead to higher activity over the next three years. Activity in the pipeline would also increase if National Highways brings forward road schemes from later years of the second road period.

Lower Scenario:

- Existing road schemes delayed due to funding issues
- Road contracts delayed to assess the impact of the rising labour and products costs
- Delivery of road schemes impacted by planning delays and environmental concerns

If availability and cost issues for products and labour escalate then work on existing and new road schemes may be delayed plus delays in obtaining development consent orders would hinder the delivery of National Highways' second Road Investment Strategy with further projects delayed until RIS3.

Output in the **gas, air and communications** sub-sector is forecast to rise by 5.0% per year throughout the forecast period as work progresses on expanding digital communication infrastructure continues and airport investment recovers after the pandemic-induced hiatus in activity. Growth will be from a low base, with output down by around 50% on pre-pandemic levels, however.

Following the contract award in January, Manchester Airport's £440 million terminal two modernisation programme is progressing. Following the completion of an extension doubling the size of the existing terminal in 2021, phase two of the project will refurbish the existing terminal building, providing new shops, bars and restaurants and constructing a new pier. The refurbished facility is due to open in 2025.

Plans to extend the Norman Foster-designed terminal at London Stansted Airport have been submitted. The proposal aims to extend the terminal building by around a quarter and to deliver new sky walkways to the airport's three satellite terminals. In addition, the expansion would provide increased retail, leisure and baggage capacity and a larger security hall. If the planning application is successful, the three-year programme could start in 2024.

The government's planning inspectorate is considering plans to increase capacity at London Luton Airport from 18 million passenger per year to 32 million. The £1.4 billion investment

plan includes new terminal capacity, earthworks to create an extension to the current airfield platform, new airside and landside facilities, enhancement of the surface access network, plus an extension of the recently completed £295 million Luton Dart shuttle service. Landscaping, ecological and other infrastructure improvements and enhancements complete the operator's ambition to deliver zero-emissions from ground operations by 2040. Planning hearings are currently taking place. If successful, work could start towards the end of the forecast period.

At London Heathrow, £3.6 billion of capital investment is planned over the next five years. Earlier this year, a construction delivery partner was appointed to deliver a range of schemes, including next-generation security scanners and a new baggage system with a collective expected cost of around £1.3 billion.

London Gatwick hopes to bring its existing northern runway into routine use. Part of a £2.2 billion investment plan, general use of the northern runway, currently only used when the main runway is closed, could see passenger traffic double to 75 million. Under the proposals, construction would begin in 2025, with the runway coming into use at the end of the decade. A decision on the application is expected in 2024.

Bristol Airport is investing more than £60 million in creating a public transport hub as part of its capacity expansion plan. The transport hub will provide parking facilities and one of the region's largest bus interchanges. The project will take 18 months to complete. Expansion plans, also including two extensions to the terminal building, a new walkway and pier, will support an increase in passenger numbers from 10 million to 12 million.

Plans to extend London City Airport have stumbled amid concern about the impact of noise pollution on local residents, additional road congestion and carbon impacts. Concerns were raised by the London Assembly's Environment Committee and in July Newham council rejected plans to extend operating hours. Detailed plans have been submitted for a £31.3 million expansion but remain subject to a planning appeal over operating hours.

Plans to reopen Manston Airport on a former RAF base near Ramsgate in Kent have been approved after a challenge was quashed in the High Court. Consent has been given for Manston to reopen as a dedicated airfreight hub, with capacity to support around 10,000 air cargo movements annually.

The provision of 5G and full-fibre broadband will continue to drive digital communications investment. This includes the BT Openreach's £15.0 billion investment programme, which aims to extend its full-fibre network to 25 million premises by December 2026. It reported in March 2023 that rollout of gigabit-capable Fibre-to-the-Premises (FTTP) based broadband ISP technology reached 10 million premises. Virgin Media O2 (VMO2) continues with its £10.0 billion investment in fibre broadband and 5G infrastructure that it announced in 2021 and will continue to 2026. It is also continuing with its plans to upgrade its entire fixed network to full fibre-to-the-premises (FTTP) by 2028, alongside the existing Project Lightning programme that reached 3.2 million premises by the end of 2022 and continues this year. During Q2, VMO2 built 175,500 connections, the majority of which were FTTP. In mobile, VMO2's 5G connectivity expanded to more than 2,800 towns and cities and remains on track to deliver 5G services to more than 50% of the UK population this year.

Project Gigabit is the government's £5 billion programme to deliver reliable broadband to hard-to-reach locations across the country. Since the last update from the Department for Science, Innovation and Technology in February, six new contracts with a combined total of £425 million have been signed in Cambridgeshire, the New Forest, North Shropshire, Norfolk, Suffolk and Hampshire. As of September, procurement was underway on a further 30 schemes. 76% of UK premises are now able to access a gigabit-capable connection according to ThinkBroadband, with a full-fibre network covering over 50%. By the end of 2025, the government is aiming for 85% of the UK to have gigabit-capable connectivity, with nationwide coverage by 2030.

Work to deliver 4G and 5G connectivity across the London Underground network is progressing. Coverage is now available at Camden Town, Oxford Circus and Tottenham Court Road stations and by the end of 2024 around 80% of the network, and the Elizabeth line, is expected to have mobile coverage.

Upper Scenario:

- UK airports bring forward planned capital expenditure amid an improvement in passenger demand
- Planning challenges are unsuccessful

If both business and holiday passenger numbers return to, and surpass, pre-pandemic levels then airports may return to delayed, pre-existing plans of major refurbishments and expansions quickly.

Lower Scenario:

- UK airports focus on enhancements to existing facilities throughout the forecast period rather than long-term expansions or major refurbishments

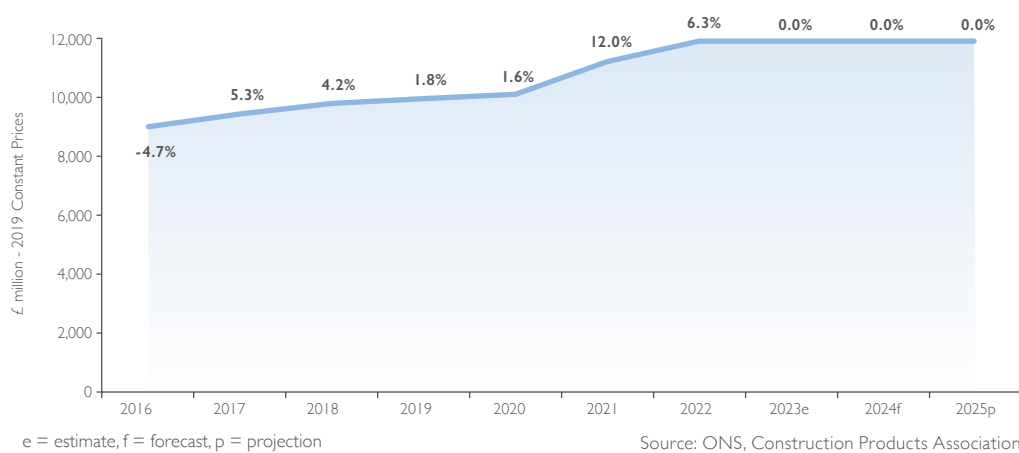
If passenger numbers do not continue to recover and surpass pre-pandemic levels even in the medium-term then long-term plans will not merely be paused but be cancelled.



Infrastructure R&M

Basic repairs to roads, rail and water infrastructure are likely to help sustain infrastructure r&m activity at a high level. Additionally, delays to new infrastructure development, whether due to planning challenges or the impact of cost escalation on project delivery programmes, will force asset owners to take a 'make do and mend' approach in some instances.

Infrastructure R&M Output



Infrastructure repair and maintenance (r&m) includes work on assets owned by utility companies, airports and energy-generating facilities, and publicly-owned assets such as roads and rail, which will help sustain a high level of activity over the next three years.

Local authority budgets are set to remain under pressure for the foreseeable future and the Institute of Government estimates that spending power has already reduced by nearly a third between 2009/10 and 2021/22. Unless additional ring-fenced funding is made available for repairs to local authority roads networks, it is unlikely that anything but the most essential work will take place. However, as the focus of the next National Highways (NH) investment strategy

shifts to renewals and maintenance, rather than enhancements, it is possible that a greater proportion of strategic roads investment will be classified as repair and maintenance activity. It is estimated that 70% of the NH network of roads and bridges will be over 45 years old by 2025 and, therefore, the maintenance requirement is significant.

It has been suggested that funds earmarked for the now-cancelled northern phase of HS2 between Birmingham and Manchester could be diverted to roads maintenance activity. Considerable uncertainty remains about the timing and certainty of investments cited by the Prime Minister but taking the data at face value

Infrastructure r&m expected to flatline as funding is focused on basic repairs and maintenance rather than new projects



suggests additional funding for roads maintenance, including pothole repairs, could total £8.3 billion – 40% of which would be allocated to northern regions, with central regions picking up 26% and southern regions securing 34%. However, at the time of writing, it is unclear how much, if, and when any earmarked funding will be diverted from the second phase of HS2 and so this is excluded from the Autumn forecast.

The Asphalt Industry Alliance's Annual Local Authority Road Maintenance (ALARM) [Survey for 2023](#) found that average highway maintenance budgets across England and Wales increased by 4.5% to £25.8 million per authority in 2022/23 – a small increase in cash terms but a cut in real terms. The survey also found that the total highways maintenance budget across England and Wales is £4.3 billion – including maintenance of surfaces, structures, street lighting and drainage. Spend on carriageway maintenance specifically dropped slightly in cash terms due to competing investment priorities. Road resurfacing now takes place once every hundred years on average. 11% of the local road network across England and Wales is considered to be in poor condition and likely to require maintenance in the next 12 months.

In the rail sub-sector, the focus of Network Rail's Control Period, CP6, running from 2019/20 to 2023/24 will largely be on maintenance and renewals, with fewer new enhancements. Network Rail's five-year Control Period 6 (CP6) ends in March 2024 and CP7, covering April 2024 to March 2029, was published in December 2022. A direct comparison with CP6 cannot be made because of differences in the way objectives have been included but it points towards similar finance overall and it appears to include a small increase in expenditure on Operations, Maintenance and Renewals (OMR) in real terms, which suggests that activity will be marginally higher.

Within water & sewerage, activity will be supported by the five-year Asset Management Plan (AMP7), running from 2020/21 to 2024/25, with the majority of activity occurring during 2023 and 2024. However, simultaneously, the pressure is on water companies to both meet their targets under AMP7 and investment in efficiency and sewage treatment, both of which suggest that the focus is likely to be on new work rather than just basic repairs and maintenance given how far some of the water companies are behind on their investment plans (see Infrastructure – Water & Sewerage).

Upper Scenario:

- Central government increases infrastructure r&m spending

If government is looking for a quick fiscal stimulus to boost economic and industry activity then a large increase in ring-fenced funding to local authorities for transport projects that allows work to get off the ground would provide a boost to infrastructure r&m output in the near-term.

Lower Scenario:

- Financial constraints for local authorities restrict non-essential repairs and maintenance
- Planned r&m work impacted by rising costs
- Infrastructure r&m is likely to be overshadowed by new build activity rather than basic maintenance

Local authorities are likely to prioritise the essential repair and maintenance of critical infrastructure over routine r&m if their finances deteriorate due to rising spending on local health and social care needs. Faced with renewed cost pressures and supply chain disruption, local authorities are also likely to scale back or cancel planned r&m works in the near-term. In this scenario, government's focus on infrastructure spending and delivering large new build projects to stimulate economic recovery would also shift the focus further away from r&m activity, hindering growth prospects for the sub-sector.



The Construction Products Association is the leading organisation that represents and champions construction product manufacturers and suppliers. This vital UK industry defines our built environment, providing the products and materials needed for homes, offices, shops, road, railways, schools and hospitals. Our industry directly provides jobs for 382,500 people across 24,000 companies and has an annual turnover of £62.5 billion.

The CPA produces a range of economic reports that provide its members, policy-makers, and wider industry with a detailed understanding of the construction market to facilitate planning and business development. Members of the Association are entitled to receive these insights at no additional cost. Non-members can make one off purchases or subscribe for a full information package.

To learn more, please contact our Economics team at **020 7323 3770**, visit **www.constructionproducts.org.uk** or follow us on Twitter **@CPA_Tweets**.







ISBN: 978-1-909415-51-5

October 2023

Construction Products Association
26 Store Street
London
WC1E 7BT
Tel: 020 7323 3770
www.constructionproducts.org.uk

cpa | construction
products
association