



Regional overview of construction and mineral products markets in Great Britain

Spring 2023

Extracting Minerals . . . Manufacturing Products . . . Supplying Markets

Overview

Output in the construction sector grew by 5.6% in 2022, although momentum fizzled out at the end of the year as a result of persisting cost pressures, higher interest rates and doubts over the resilience of the UK economy.

Back-to-back annual increases in construction output, which included a 12.8% post-pandemic recovery in 2021, propelled activity up around its highest levels on record (ONS, 2023). The largest expansions over that period have been in infrastructure, private housing repair and maintenance, and industrial work. Yet high cost pressures from energy, materials and labour weighed on construction activity as the year progressed and alongside a weakening macroeconomic backdrop, stifled confidence and new projects going into 2023, especially in house building.

Despite growth in construction activity in 2022, unprecedented cost pressures, unusual weather conditions and looming economic recession all curbed demand for mineral products. Primary aggregates sales volumes dropped by 8.2% on an annual basis, asphalt by 6.5%, and ready-mixed concrete by 3.8%. Mortar was the exception, up 3.5% compared to 2021, driven by robust housing activity (MPA, 2023).

Signs of a slowdown in sales of aggregates, asphalt and ready-mixed concrete first emerged in June 2022, as the construction sector started to accrue vulnerabilities affecting costs and project viability, alongside lower consumer and business confidence. Mineral products are critical in driving the early phases of construction work, suggesting that a slowdown in construction was already at play over the summer.

Construction activity slowed in the second half of 2022, as businesses were hampered by a faltering economy and elevated costs of energy. Sectors most closely linked with households have been most exposed, including new housing and private housing repair & maintenance (R&M). Consumer demand has been constrained by falling real incomes, while tricky market conditions – including the highest interest rates for 15 years – have prompted a sharp reduction in buyer enquiries and agreed sales in housing according to recent RICS surveys (RICS, 2023).

The Construction Products Association forecasts a 4.7% decline in construction output in 2023, followed by a modest 0.6% recovery in 2024 (CPA, 2023). This reflects weak expectations across most major sectors, particularly in housing and private housing repair, maintenance and improvement (RM&I). Private housing output, among the largest components of construction, is forecast to fall 11% this year as tightening financial conditions hit buyer activity and major housebuilders warn of reduced land acquisitions and less site openings. Commercial construction work is also forecast to decline, as investment in new office and retail towers remains weak. By contrast, infrastructure is set to be the main engine of growth, supported by projects in the regulated sectors (water, rail and roads), High Speed 2, Hinkley Point C and a pipeline of renewable energy projects, particularly the rapid expansion of offshore wind farm projects.

The value of new contracts from Barbour ABI rose by 11% in 2022 compared to 2021, and included a 43% jump in the value of contracts awarded in infrastructure. But while the pipeline of future work would appear to be plentiful, the reality is of a growing uncertainty as to whether projects will make it on the ground as planned or be delayed later into 2023 or 2024 due to squeezed budgets and cost inflation.

Prospects for construction demand for mineral products in 2023 are weak, against the unfavourable growth outlook and a steady pipeline of construction projects vulnerable to heightened delivery risks. Cost overruns and delivery delays, on new road schemes for example, are a notable fragility. A sharper tightening of financial conditions after government's "mini-budget" in September 2022 has reined in expectations on housing, with prices forecast to fall by 10% this year (Savills, 2022).

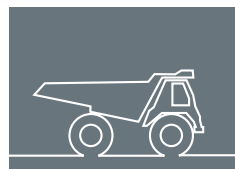
Sales volumes for primary aggregates and ready-mixed concrete in Great Britain are expected to fall at an annual rate of 3% in 2023, with reductions of 4% for asphalt and 8% for mortar. Demand is then expected to recover from 2024, assuming a bounce back in housebuilding and roads after a short-lived blip.

This document has primarily been produced to support Aggregate Working Parties and mineral planning authorities deliver the Managed Aggregate Supply System. As such, the data and accompanying narrative focuses on the role mineral products play supporting the wider construction market. Further information on the role and contribution of wider mineral products can be found in the [Profile of the UK Mineral Products Industry \(2020\)](#).

AN ESSENTIAL SECTOR

- The mineral products industry is the largest producer in the UK economy at 400 million tonnes per year. This is over four times the total volume of energy minerals produced in the UK.
- We are essential to the economy, the operation, development and maintenance of UK infrastructure, as well as the built environment and our quality of life.
- MPA members supply more than three quarters of total market demand in the construction sector for Great Britain. This flow of materials is critical in driving the early stages of construction work and in improving our housing stock, transport networks, commercial and industrial buildings, energy and water infrastructure, schools and hospitals.
- The mineral products industry will have a major role in delivering the UK's 2050 net zero commitment. The Cement and Concrete Industry Roadmap to Beyond Net Zero is an ambitious goal and the industry will continue to be a world leader recycling construction and mineral wastes.
- Mineral products will continue to be crucial in growing the economy over the long term and in efforts to 'level up' communities, regions and nations.

MPA members also supply a wide range of mineral resources and associated products for non-construction use, including industrial sands, industrial clays and industrial lime. These products support a wide variety of commercial activities, from glass manufacture and ceramics, to steel production and the treatment of water and industrial emissions. These various markets are not considered in this analysis.



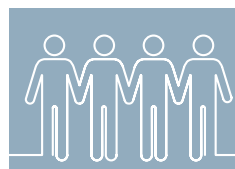
400mt

GB production of aggregates and manufactured mineral products (GB)



4 times

The volume of energy minerals produced in the UK including oil, gas and coal



3.5m

Jobs supported through our supply chain (UK)



£16bn

Annual turnover for the Minerals and Mineral Products industry (UK)

Mineral products in construction

QUARRYING, MINING & PRODUCTION

2,400 UK sites

- Aggregates
- Cement
- Concrete
- Mortar
- Asphalt
- Dimension Stone
- Silica Sand
- Industrial Clay & Lime



QUARRY RESTORATION

- Biodiversity Net Gain
- Nature Reserves
- Country Parks
- Agriculture



RECOVERY, REUSE & RECYCLING

- Construction waste
- Excavation waste
- Commercial waste
- Industrial by-products



81,000 jobs



400 million tonnes produced in UK each year



£5.8 billion contribution to UK economy



Mineral products in manufacturing



Water



Food



Fertiliser



Medicine



Ceramics



Paper



Steel



Glass

UK economy

A sharp slowdown in the second half of 2022 has left the economy on the brink of recession, albeit one that should be relatively shallow and short-lived.

The UK economy expanded by 4.1% last year, as it continued to play catch up after the deep Covid-related loss of output in 2020 (ONS, 2023). By the end of 2022, overall activity across the economy was still 0.5% lower than February 2020 (pre-pandemic); the services and manufacturing sectors were still smaller, in contrast to construction output which was more than 4% higher. Ultimately, momentum was lost in the second half of 2022 as inflation, increasing energy bills and rapidly-rising interest rates sapped household and business confidence. The Bank of England expects the economy to fall into a shallow recession in 2023 (Bank of England, 2023), while the Office for Budget Responsibility (OBR) set out a similar forecast for 2023 but in contrast, anticipates a more rapid rebound in 2024 (Office for Budget Responsibility, 2023).

Double-digit inflation measured by the consumer price index, at its highest mark in 40 years, has brought about the biggest cost of living squeeze in decades. Having averaged 1.7% through 2020 and 2021, inflation peaked at over 11% in October 2022, largely driven by acute rises in food and energy prices (ONS, 2023). In real terms, households' levels of income have been falling, and a bigger proportion of spending taken up by essential goods like food. The price environment is set to cool over the next two years as base year effects unwind and the pass-through impact of higher interest rates acts to gradually ease price pressures. Supported by the recent reduction in wholesale energy prices, the OBR expects inflation to slow to around 3% by the end of 2023. Yet risks remain, with lingering pressures in the services

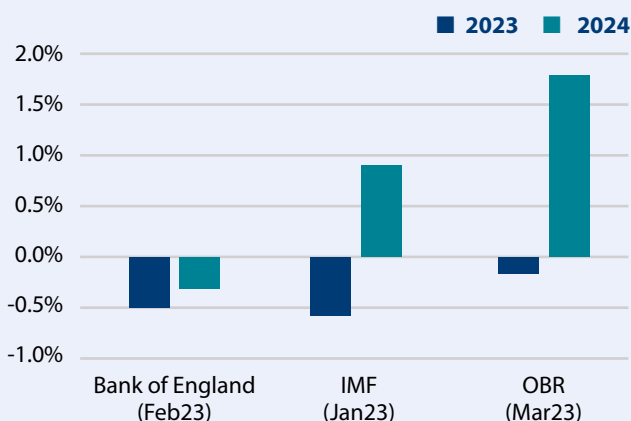
sector a sign that persistent inflation could become embedded in the UK economy, especially with domestic wages running hot due to the resilience of the jobs market.

Borrowing has become far more costly for households and businesses following a period of significant monetary policy tightening, a clear contrast from the sustained period of ultra-low interest rates in the aftermath of the 2008 financial crisis. Further interest rate rises seem increasingly likely to contain inflation, and with rates already above 4% it has lowered the appetite for new business investment, pulled back household consumption and fuelled affordability concerns in the housing market. Higher mortgage rates and lower disposable income have eroded buyer demand amid warnings that transactions and property prices could fall quite noticeably across the year.

The UK economy is seeing other areas of weakness including a feeble rate of productivity growth – essential for boosting living standards – and lacklustre trade. A recent report implied that the crux of the problem was in London, where productivity has trailed other major overseas cities (Centre for Cities, 2023). Trade, meanwhile, has been constrained by increased border checks and bureaucracy with the EU, and concerns over the competitiveness of some sectors like car production which has just emerged from its worst annual production performance in over 60 years (The Society of Motor Manufacturers and Traders (SMMT), 2023). Inadequate funding in public services is also dragging down growth and underlines the longer-term difficulties facing the UK.

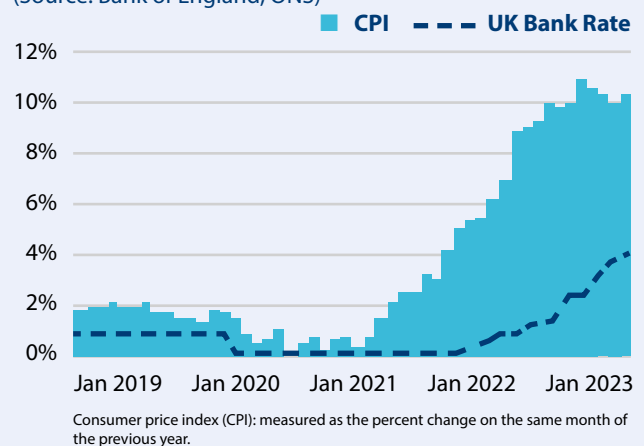
The economy's performance in 2023 will be heavily linked to the future path of inflation – a steady fall back should begin to lift confidence and business activity in the second half of the year. That said, uncertainties over the war in Ukraine, energy supply, and the impact of higher interest rates leave growth vulnerable to both domestic and international headwinds.

2023 and 2024 UK GDP forecasts (%)



Consumer Price Index and UK Bank Rate (%)

(Source: Bank of England, ONS)



Construction



Robust growth in 2021 and 2022 lifted output to record levels, but cost inflation and weaker demand are expected to weigh on activity this year.

Construction firms reported a lack of new projects to replace those coming to an end in the latter part of 2022, with clients hesitant to sign off on new work – particularly large commercial tower projects and infrastructure – due to concerns over a UK economic downturn, cost viability and financing. The largest drags are expected to come from those sectors reliant on households, such as private housing, and offset the pockets of growth in infrastructure and industrial.

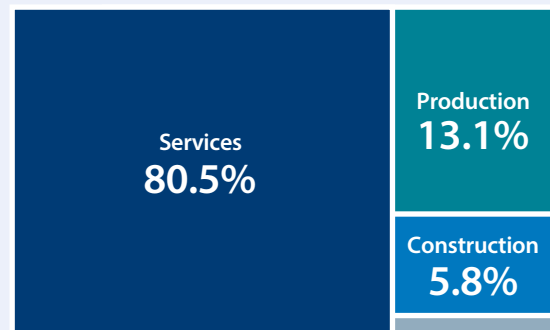
Materials availability has improved noticeably due to earlier stockpiling, slowing demand and post-pandemic adjustment of supply chains, all of which have helped to slow materials price inflation since hitting a peak in June 2022 (BEIS, 2023). With this source of cost uncertainty gradually abating, the main constraints surround the costs of energy and a shortage of workers. Demand for construction workers remains hindered by the availability of skilled labour – there are more than a quarter of a million fewer workers in the construction industry compared to the start of 2019 (ONS, 2023).

The CPA expects a recession in the construction industry in 2023, with output down 4.7% before a modest rebound of 0.6% in 2024. This includes an 11% fall in private housing output, despite the anticipation of a fairly soft landing which envisages a gradual recovery in housing demand from Spring. Infrastructure is benefiting from major projects including HS2 and Hinkley Point C, but output is expected to slow to below 3% in 2023 and 2024 as double-digit inflation leads to cost overruns and delays. Further delays of at least 2 years were announced to phase 2 of HS2 in March (UK Government, 2023), while large road schemes including the Lower Thames Crossing have also been pushed back. Planning issues continue to act as a barrier, especially in roads, where National Highways has experienced significant delays securing development consent orders.

KEY FACTS

- Total construction activity represents just under 6% of total UK economic activity.
- Construction output totalled a record £180.2bn in Great Britain in 2022 and rose 5.6% compared to 2021.
- The CPA forecasts a decline of 4.7% in 2023, followed by 0.6% growth in 2024 (Winter 2022/23 CPA forecast).
- Private housing, which has a 22% share of overall construction output in GB and is a key driver of mineral products demand, is expected to see back-to-back falls of 11% in 2023 and 1% in 2024.
- The commercial sector has continued to be the main laggard, with output around 30% below its 2016 level.
- The value of new contract awards hit a record high in 2022, totalling £80.4 billion according to Barbour ABI, and highlighting a plentiful pipeline of future work.

Sector share of the UK economy Gross value added in 2020 (Source: ONS)

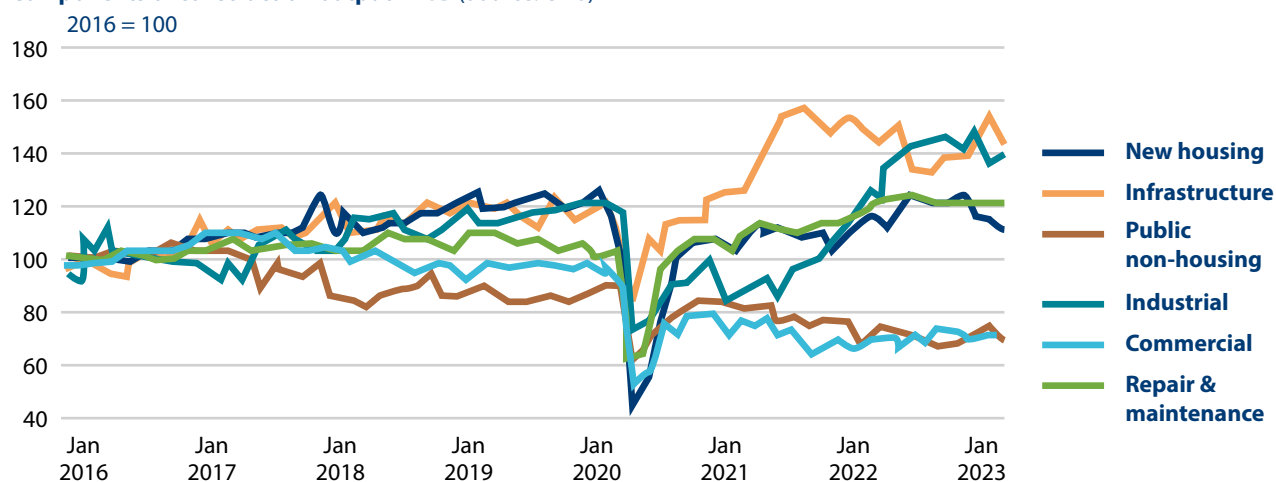


Agriculture and forestry makes up the remaining share of the UK economy.

Construction output in GB, seasonally adjusted Monthly, £ billions (Source: ONS)

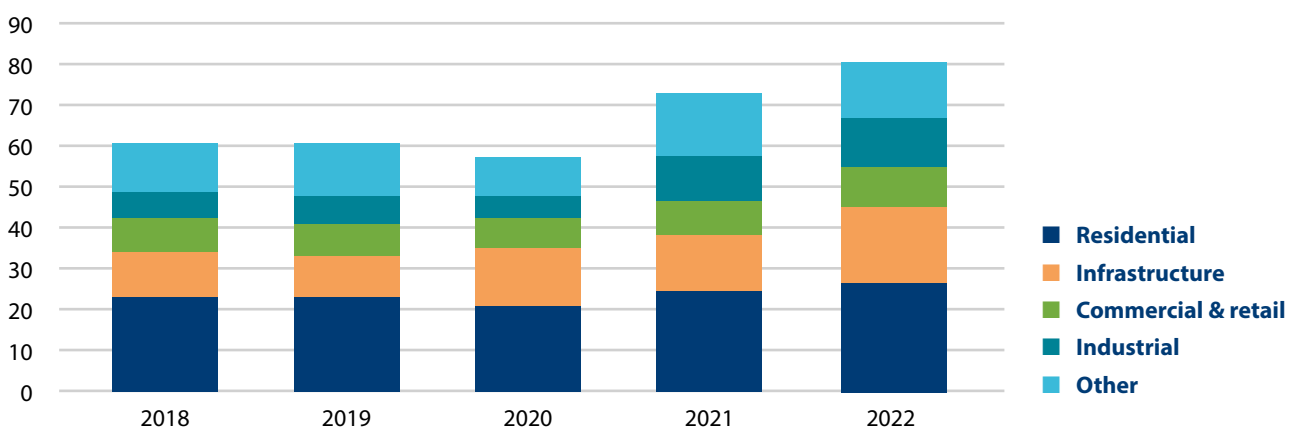


Components of construction output in GB (Source: ONS)



New construction contract awards

in £ billions (Source: Barbour ABI)



Construction Products Association – Winter 2022-23 Forecast (annual percentage change)

| | 2022 | 2023 (f) | 2024 (f) |
|----------------------------------|-------|----------|----------|
| Private housing | 8.9% | -11.0% | -1.0% |
| Public housing | 5.7% | -10.0% | -2.0% |
| Infrastructure | -2.5% | 2.4% | 2.5% |
| Industrial | 42.6% | 2.3% | -4.6% |
| Commercial | -0.2% | -5.4% | 1.3% |
| Public non-housing | -8.7% | -1.7% | 0.3% |
| Housing repair & maintenance | 8.3% | -6.9% | 1.2% |
| Non-housing repair & maintenance | 8.7% | -2.1% | 0.9% |
| All work (Total) | 5.6% | -4.7% | 0.6% |

Mineral products markets supporting construction

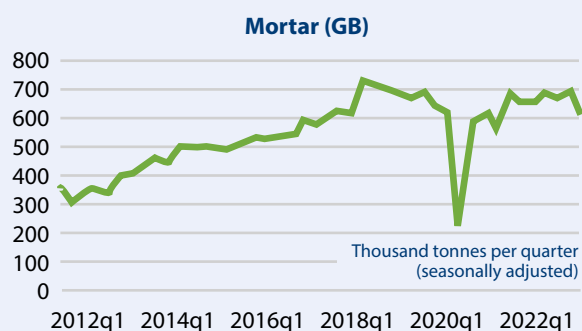
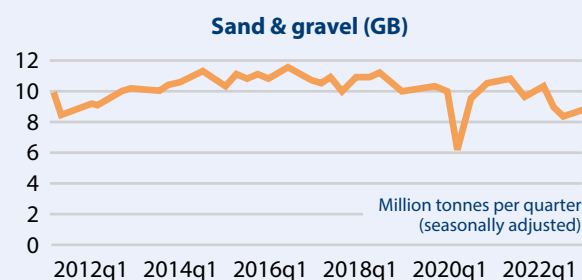
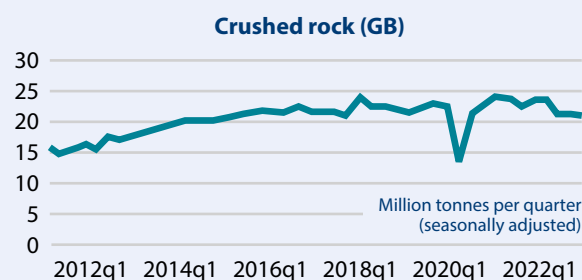
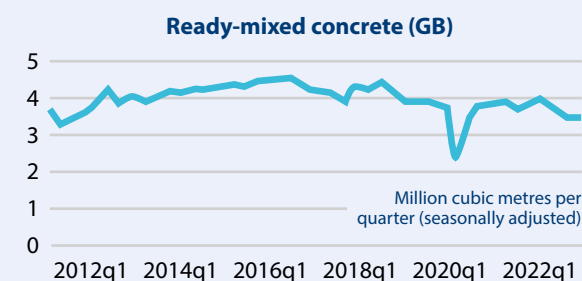
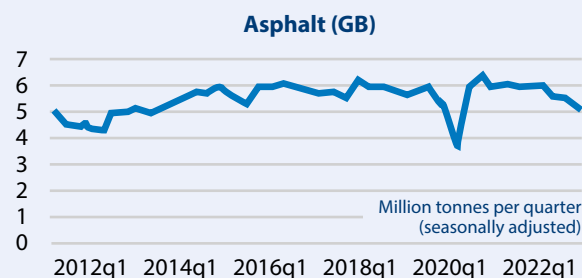
- Construction demand for mineral products in 2022 recorded a gradual loss in momentum as the year progressed on the back of a worsening macroeconomic environment, slowing activity in key segments of construction and the impact of adverse weather conditions.
- Sales volumes for primary aggregates, asphalt and ready-mixed concrete declined for a third consecutive quarter in 2022Q4. Overall in 2022, volumes for primary aggregates fell by 8.2% against the previous year, asphalt by 6.5% and ready-mixed concrete was down 3.8%. Mortar sales, which declined by 13.4% in the final quarter of the year as work on site was impacted by the particularly cold weather in December, still saw a 3.5% gain on average across 2022.
- Asphalt tonnages fell by over 1.5Mt (million tonnes) in 2022 due to large declines in London and Scotland. Yorkshire and the Humber, Wales and South West each saw crushed rock sales drop by more than 1Mt, leading to a total drop of more than 7Mt last year.
- The slowdown in demand has reduced sales volumes below their pre-pandemic level (2019).
- The MPA forecasts an annual contraction in sales volumes in 2023, with a decline of 3% for primary aggregates and ready-mixed concrete, a 4% drop in asphalt and an 8% drop in mortar.
- Modest growth is expected across all markets monitored in 2024, assuming a rebound in private housebuilding and roads. However, downside risks to the forecast include concerns over the economic outlook, and the vulnerability of mineral products demand to project delays and cancellations due to high cost inflation.

Regional performance: % change in sales volumes
2022 vs. 2021, seasonally adjusted

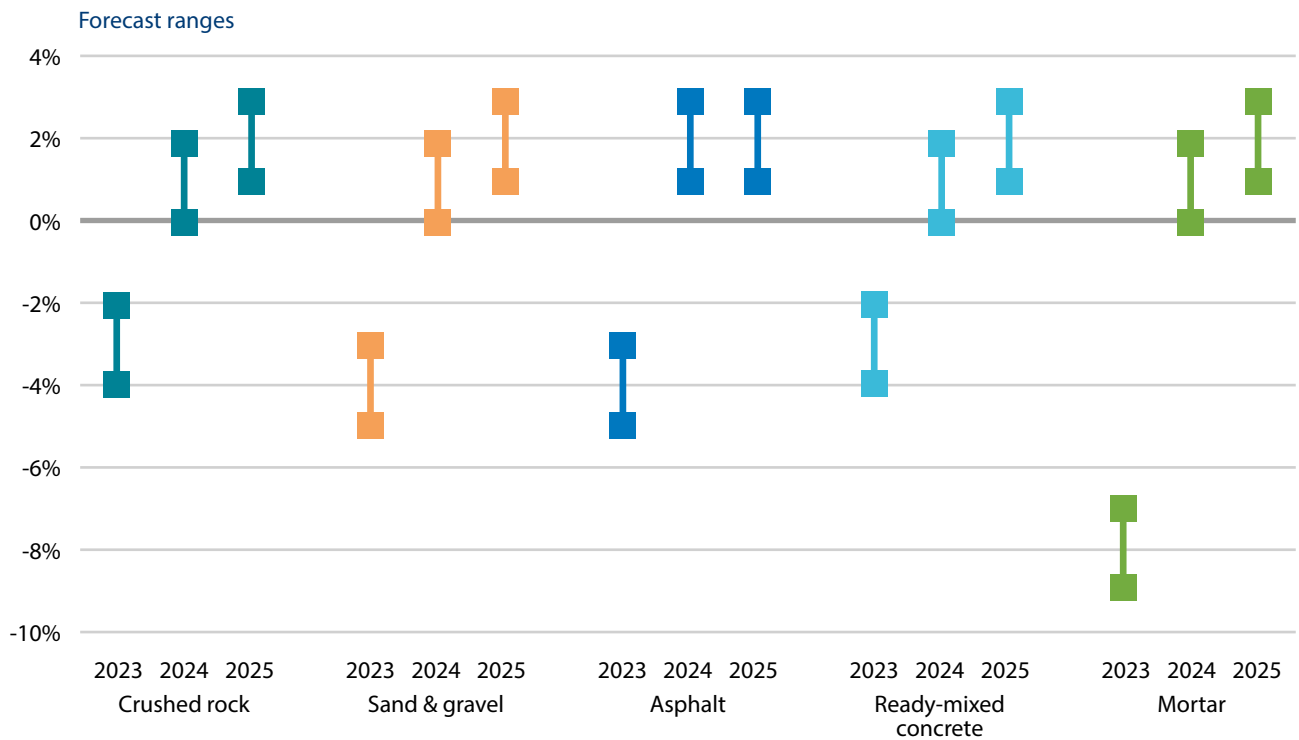
| Regions | Asphalt | RMC ⁽¹⁾ | CR | SG |
|---------|---------|--------------------|----------------|----------------|
| NE | -5.3% | 11% | -8.3% | ⁽²⁾ |
| NW | -4.6% | -4.3% | -11.4% | -12.3% |
| YH | -3.2% | -10.5% | -14.0% | ⁽²⁾ |
| EM | -1.2% | -1.6% | -3.0% | -11.8% |
| WM | -5.2% | 7.2% | -8.8% | -2.9% |
| EE | -5.9% | -14.4% | ⁽²⁾ | -11.7% |
| LN | -12.1% | -0.1% | ⁽²⁾ | ⁽²⁾ |
| SE | -9.0% | -7.3% | ⁽²⁾ | -9.6% |
| SW | -3.3% | -15.8% | -8.6% | -9.6% |
| WA | -13.9% | -8.6% | -10.0% | 1.5% |
| SC | -10.9% | -17.8% | -9.5% | -14.7% |
| GB | -6.5% | -5.5% | -7.7% | -9.3% |

(1) Fixed plants only. Regional information for site plants is excluded for confidentiality reasons. (2) Data cannot be disclosed for confidentiality reasons.

Mineral products markets: 2012Q1-2022Q4
Sales volumes in Great Britain (Source: MPA)

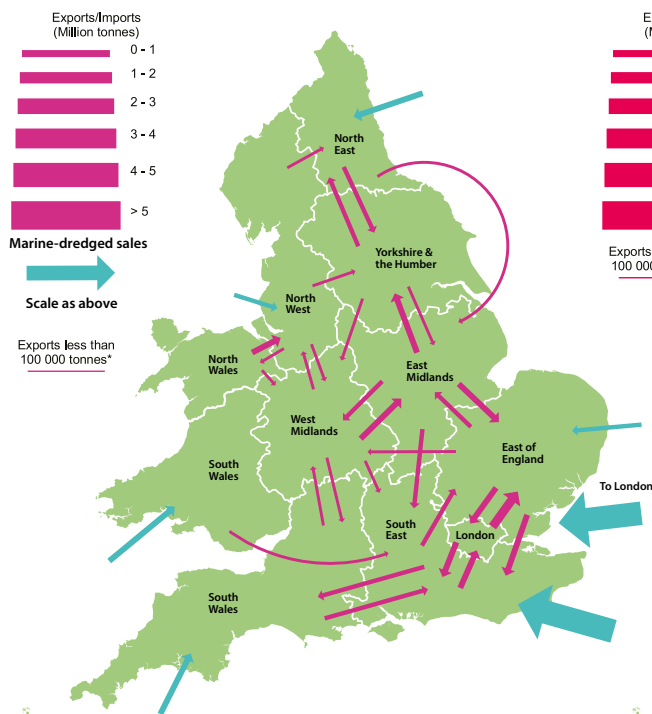


MPA forecast ranges for mineral products sales volumes in Great Britain – February 2023 (Source: MPA)



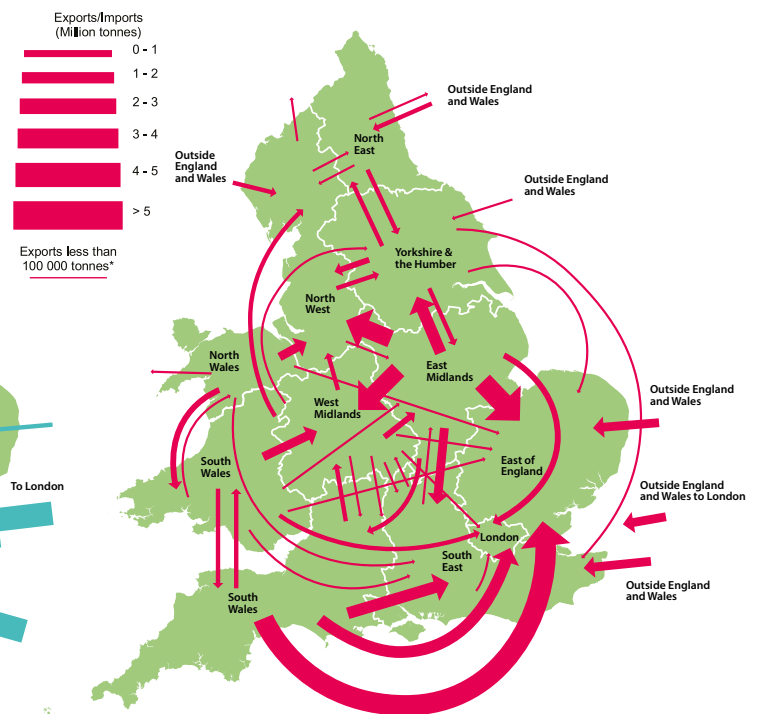
Inter-regional flows of primary aggregates, 2019 (Source: BGS)

Sand & gravel



*For clarity, exports less than 25,000 tonnes are not shown

Crushed rock



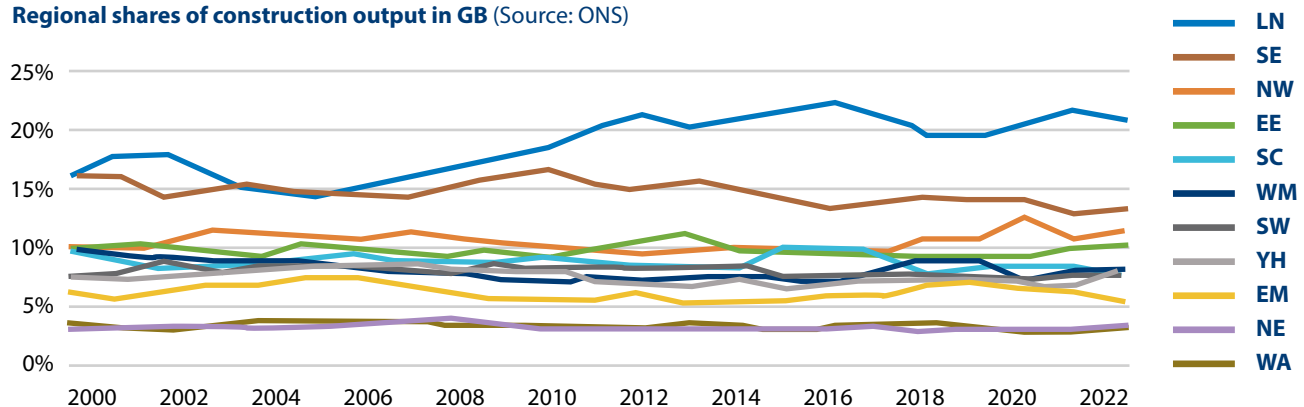
*For clarity, exports less than 25,000 tonnes are not shown

Regional summary

- The North West saw the strongest economic performance in 2017-21 with GDP growth of 1.4% on average per annum. There were minor contractions in the South East and West Midlands over the same period.
- London makes up around 21% of total construction output across Great Britain, with the South East second largest at 14%. The overall market structure has remained stable over the past 5-10 years.
- The East Midlands had the largest share of total asphalt (15%) and crushed rock (30%) sales volumes in GB in 2022. London topped ready-mixed concrete sales (19%) and the East of England narrowly recorded the highest contribution of sales volumes of sand & gravel (19%), with the South East at 18%.
- All regions are forecast to see total construction output rise across the 2023-27 period, with the East of England and Yorkshire and the Humber both expected to see the fastest rate of growth of 2.2%.



Regional shares of construction output in GB (Source: ONS)



Regional Summary Table (Source: ONS, CITB, MPA)

| Region | Population, millions | Largest sector of construction output, by volume | Construction forecast, average % per annum over 2023-27 | Sales volumes of primary aggregates in GB, 2022, Mt* |
|--------------------------|----------------------|--|---|--|
| North East | 2.6 | Infrastructure | 0.9% | 4.1 |
| North West | 7.4 | Private housing | 1.1% | 6.0 |
| Yorkshire and The Humber | 5.5 | Non-housing R&M | 2.2% | 6.8 |
| East Midlands | 4.9 | Private housing | 1.6% | 30.5 |
| West Midlands | 6.0 | Private housing | 0.8% | 10.4 |
| East of England | 6.3 | Housing R&M | 2.2% | 7.0 |
| London | 8.8 | Private housing | 1.9% | n/a |
| South East | 9.3 | Housing R&M | 1.8% | 6.7 |
| South West | 5.7 | Housing R&M | 0.6% | 23.5 |
| Wales | 3.1 | Housing R&M | 1.1% | 10.5 |
| Scotland | 5.5 | Infrastructure | 1.0% | 11.7 |

*Crushed rock data unavailable for the East of England, London and South East, and sand and gravel unavailable for London, the North East and Yorkshire and the Humber for confidentiality reasons.

North East

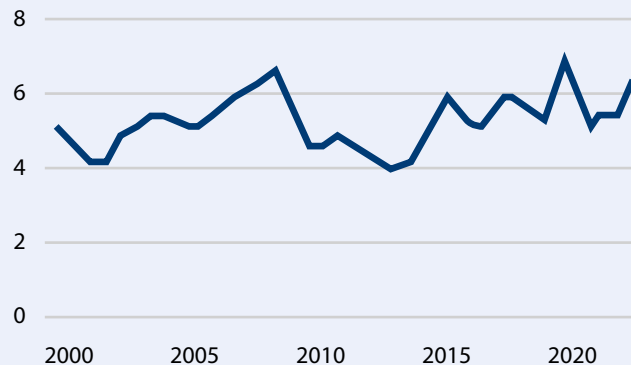


OVERVIEW

| | |
|-------------------------------------|--|
| Population | 2.6m (4% of the GB total) |
| Economy | GDP growth averaged 0.4% per annum between 2017-21 |
| Construction output | Increased by 18.7% in 2022 |
| Regional contribution | 4% (£6.5bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -5.3% Ready-mixed concrete: 11% Crushed rock: -8.3% |
| Construction contract awards - 2022 | £3.8 billion across all sectors, up 17.2% compared to 2021 |

Construction output (2000-2022):

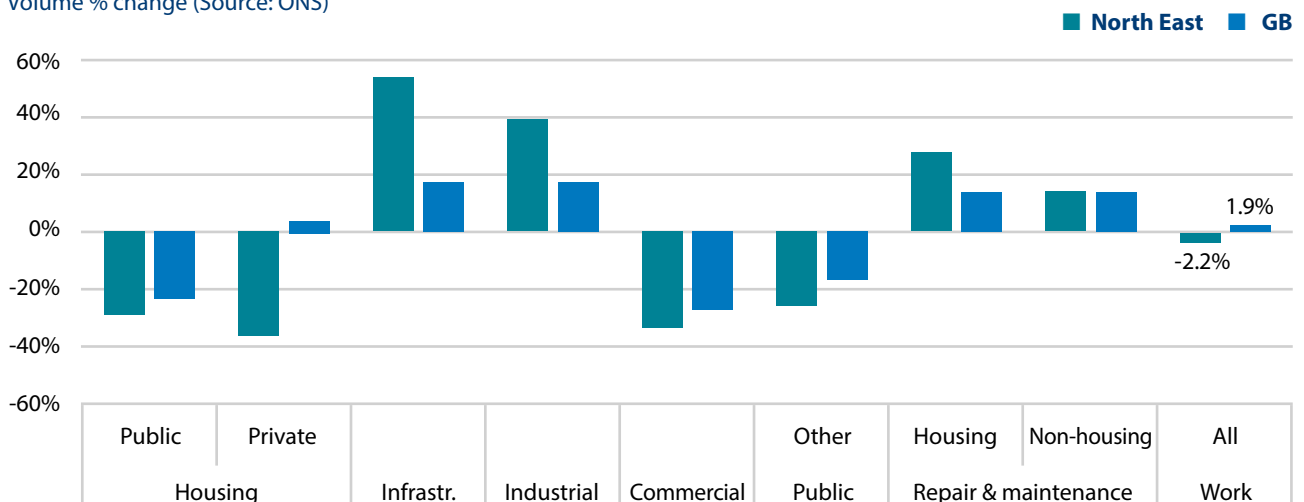
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE NORTH EAST

Construction output by sector: 2022 vs. 2019

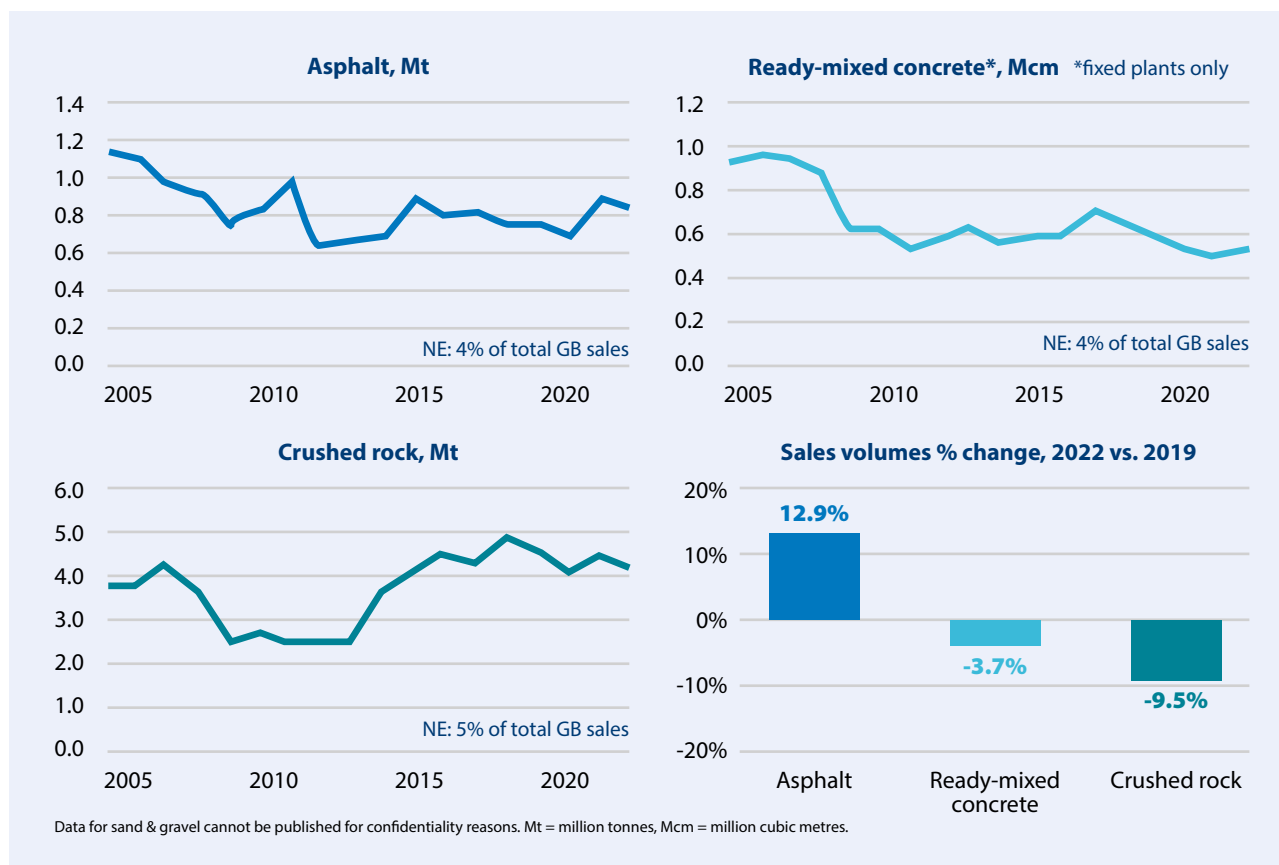
Volume % change (Source: ONS)



Construction sectors – shares of total output (NE vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 5% | 3% | 25% | 15% | 9% | 12% | 12% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 17% | 22% | 6% | 4% | 5% | 5% | 19% | 19% |

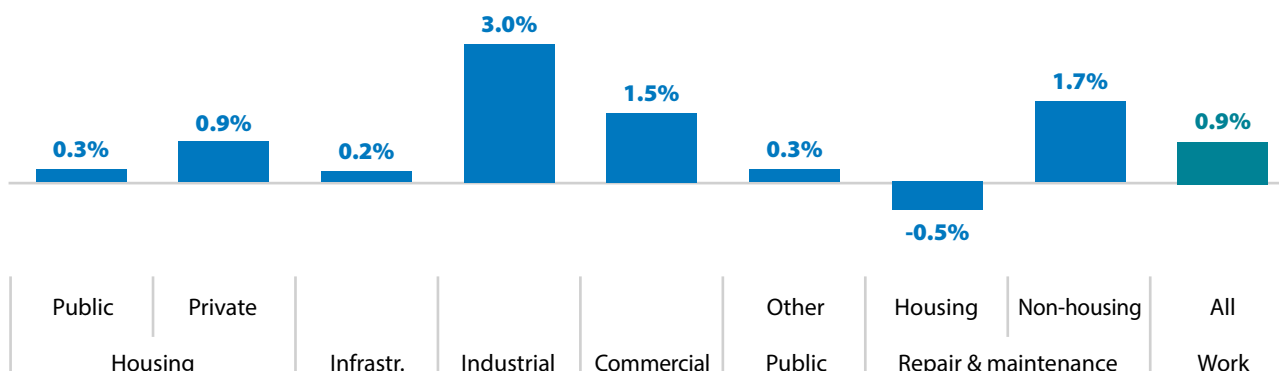
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE NORTH EAST, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE NORTH EAST

- Output in industrial work is expected to see the highest rate of growth of 3% per annum over the 5-year forecast period, with the sector accounting for 6% of overall construction activity in the North East. New developments as part of the Teesworks Freeport project will support growth, but uncertainty surrounds the construction of a gigafactory in Blyth.
- Infrastructure makes up around a quarter of total output in the region, and will benefit from Northumbrian Water's clean water replacement pipeline, with both phases of the project due for completion in 2025. The 1.7GW gas-fired Tees Combined-Cycle Power Plant may start toward the end of the forecast horizon, but average growth between 2023-27 is forecast to be just 0.2%.
- Private housing is expected to see average growth below 1%. New garden villages in Burtree and Skertingham will drive output in the sector. Residential contract awards fell over 40% in volume terms in 2022 compared to a year earlier according to Barbour ABI.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



North West

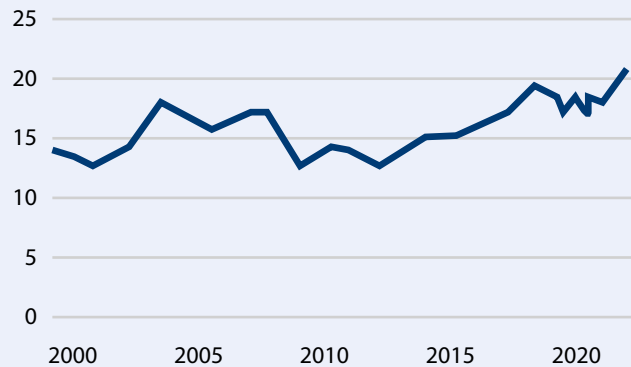


OVERVIEW

| | |
|-------------------------------------|--|
| Population | 7.4m (11% of the GB total) |
| Economy | GDP growth averaged 1.4% per annum between 2017-21 |
| Construction output | Increased by 13.8% in 2022 |
| Regional contribution | 11% (£20.6bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -4.6% Ready-mixed concrete: -4.3% Crushed rock: -11.4% Sand & gravel: -12.3% |
| Construction contract awards - 2022 | £8.8 billion across all sectors, up 2.2% compared to 2021 |

Construction output (2000-2022):

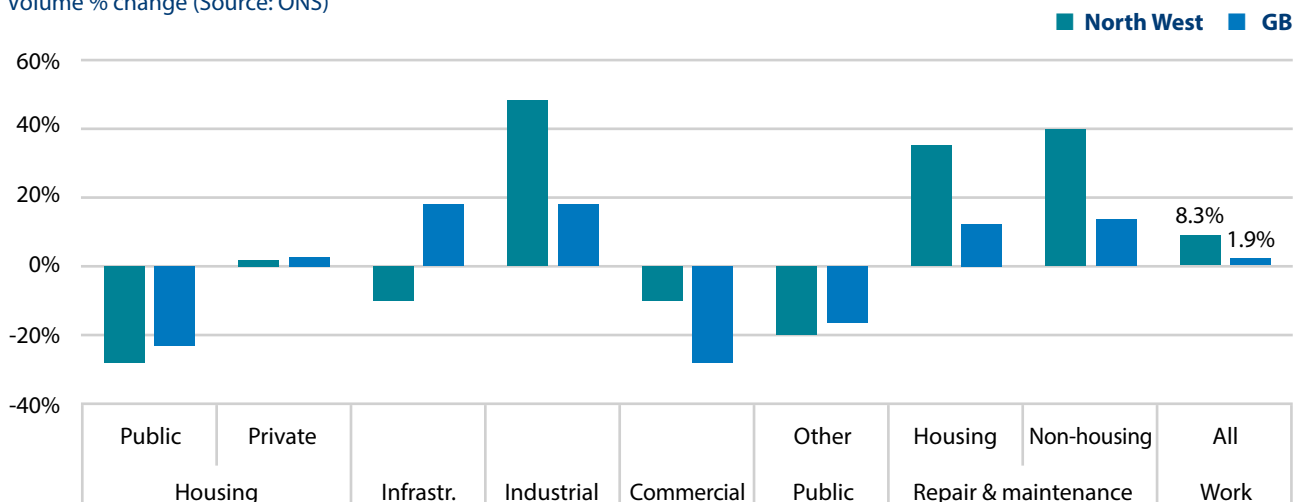
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE NORTH WEST

Construction output by sector: 2022 vs. 2019

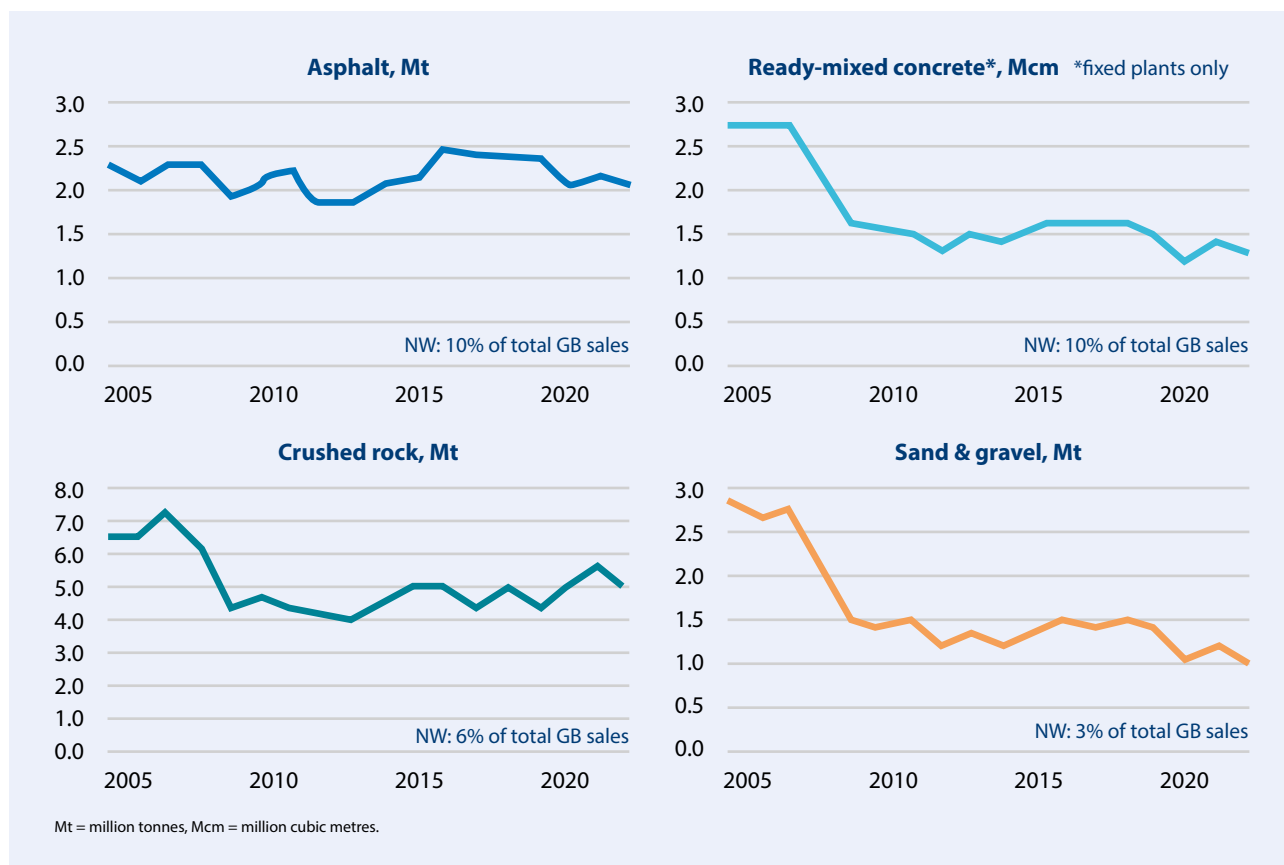
Volume % change (Source: ONS)



Construction sectors – shares of total output (NW vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 11% | 15% | 14% | 12% | 13% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 27% | 22% | 5% | 4% | 5% | 5% | 22% | 19% |

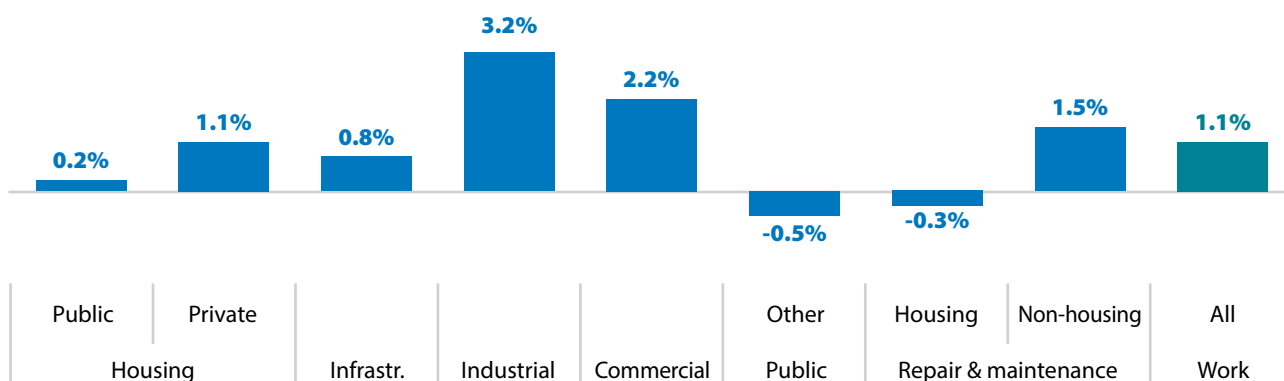
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE NORTH WEST, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE NORTH WEST

- Plans for new Grade A office space and further planned commercial projects in Manchester should boost growth in commercial construction work. Only industrial output is expected to grow at a faster rate, at an average of 3.2% per year, driven by the elevated demand for warehouses.
- Private housing is forecast to rise by 1.1% on average, supported by a planned redevelopment of the former Rochdale Road Gas Works, while the Trinity Islands project has got the green light.
- Infrastructure output in renewable energy could be a strong source of growth, and includes the proposed Mersey Tidal Project and the Wyre Tidal Gateway, alongside the broader Cumbria Clean Energy Strategy. Since the forecast, the government has given its backing to the major HyNet carbon capture project which could move into construction in 2024.
- On average, total new construction work is forecast to increase by 1.1% per annum in 2023-27.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



Yorkshire and The Humber

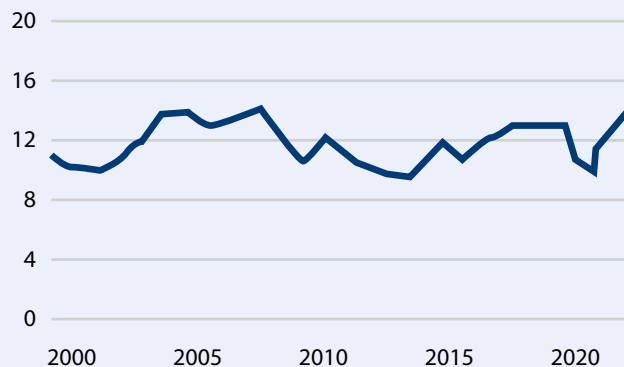


OVERVIEW

| | |
|-------------------------------------|--|
| Population | 5.5m (8% of the GB total) |
| Economy | GDP growth averaged 0.6% per annum between 2017-21 |
| Construction output | Increased by 18.8% in 2022 |
| Regional contribution | 8% (£14.3bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -3.2% Ready-mixed concrete: -10.5% Crushed rock: -14.0% |
| Construction contract awards - 2022 | £5.7 billion across all sectors, up 4.8% compared to 2021 |

Construction output (2000-2022):

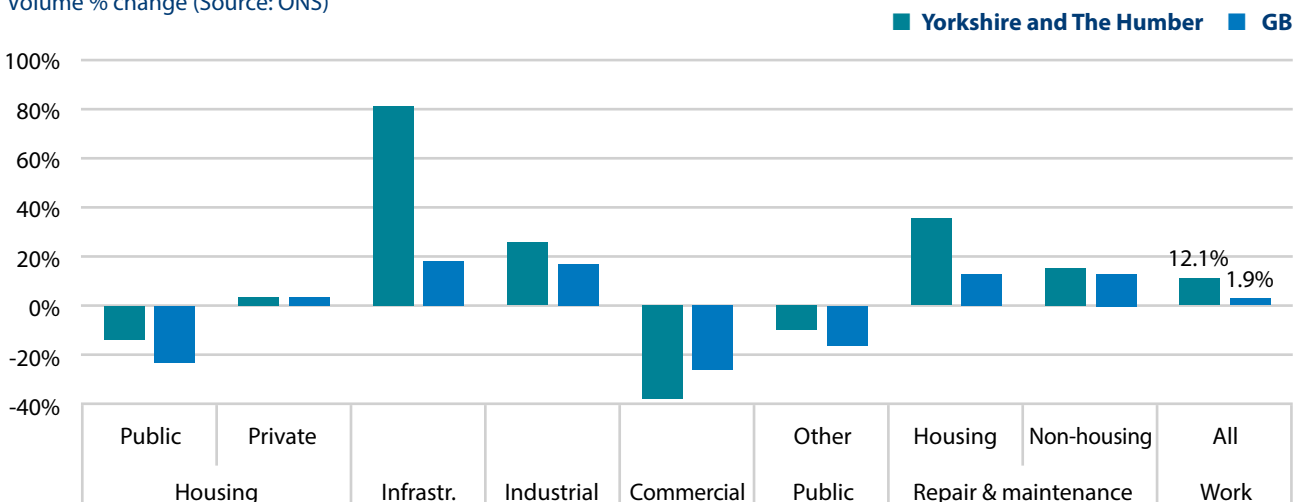
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN YORKSHIRE AND THE HUMBER

Construction output by sector: 2022 vs. 2019

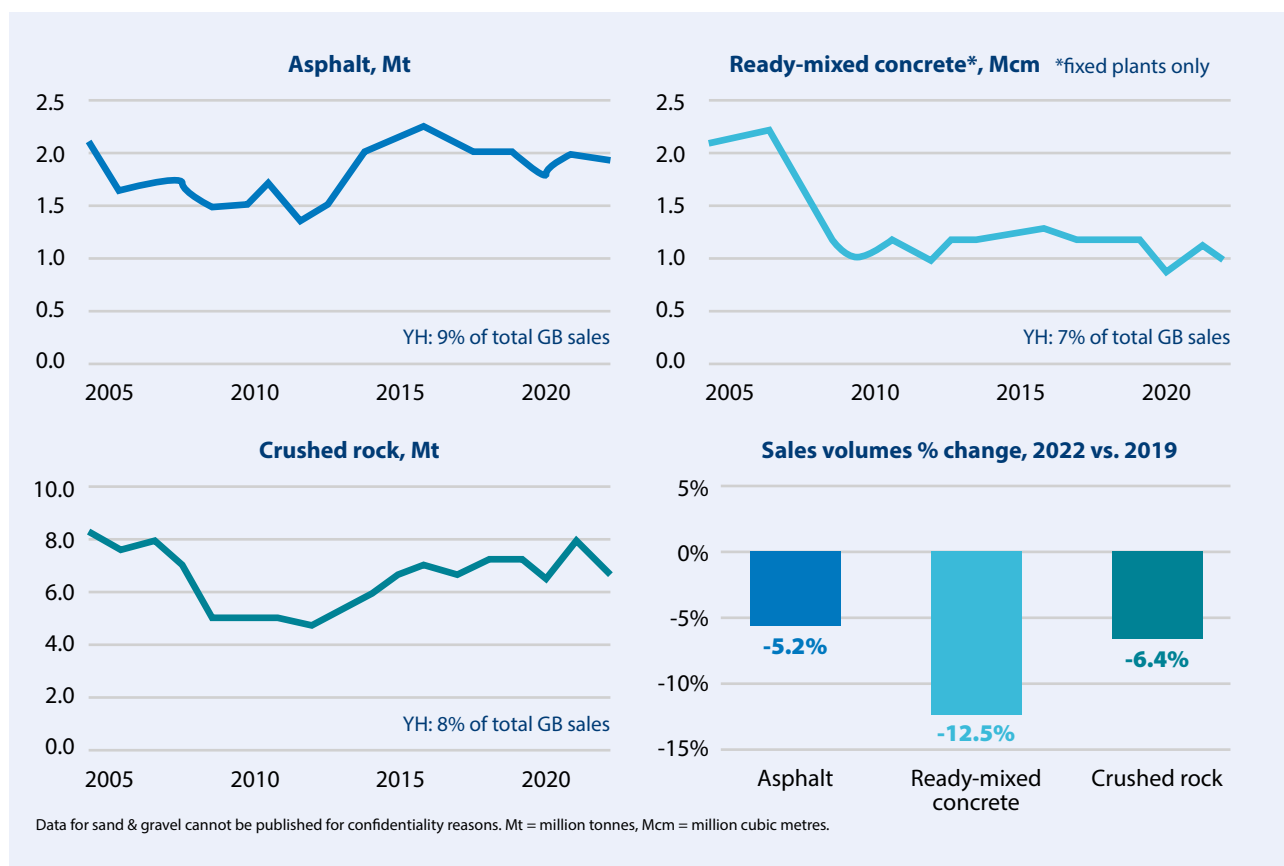
Volume % change (Source: ONS)



Construction sectors – shares of total output (YH vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 16% | 15% | 9% | 12% | 17% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 23% | 22% | 5% | 4% | 4% | 5% | 23% | 19% |

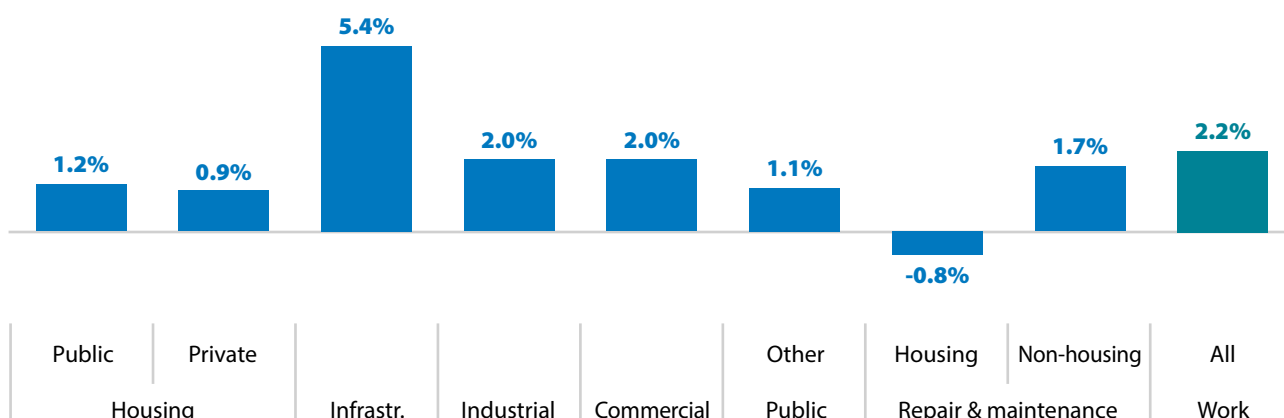
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN YORKSHIRE AND THE HUMBER, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN YORKSHIRE AND THE HUMBER

- The region is home to several major renewable energy projects, including the Dogger Bank Wind Farm which is being built in three phases (Dogger Bank A, B and C). The Keadby 3 Carbon Capture Power Station was granted development consent last year and could be operational by 2027. Alongside growth in transport infrastructure led by the Integrated Rail Plan, the infrastructure sector is estimated to accelerate by more than 5% per annum in 2023-27.
- Output in the industrial sector is being led by the large Konect 62 logistics site in Knottingley, while elsewhere, expansion of Leeds General Infirmary and work on a new prison at Full Sutton will support work in public non-residential output.
- Housing output is forecast to rise at a steady pace of near 1% on average. New residential contracts volumes rose 27% in 2022 according to Barbour ABI data.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



East Midlands

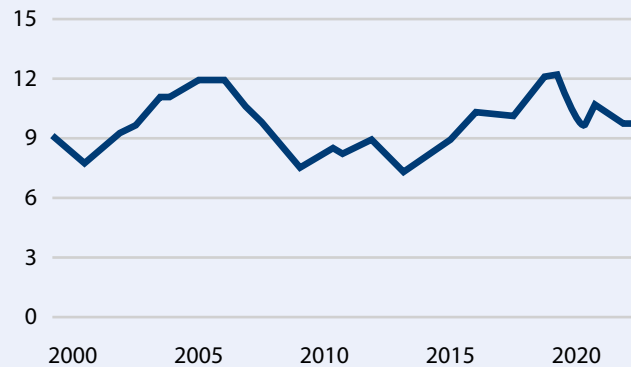


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 4.9m (7% of the GB total) |
| Economy | GDP growth was unchanged (0.0%) between 2017-21 |
| Construction output | Declined by 3.0% in 2022 |
| Regional contribution | 6% (£10.1bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -1.2% Ready-mixed concrete: -1.6% Crushed rock: -3.0% Sand & gravel: -11.8% |
| Construction contract awards - 2022 | £5.3 billion across all sectors, up 6.3% compared to 2021 |

Construction output (2000-2022):

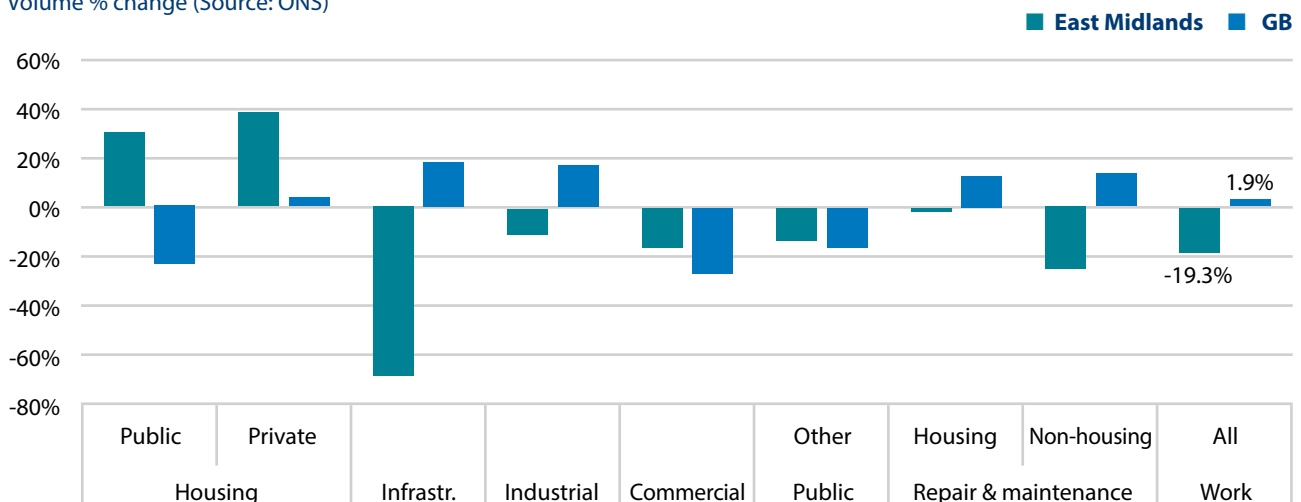
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE EAST MIDLANDS

Construction output by sector: 2022 vs. 2019

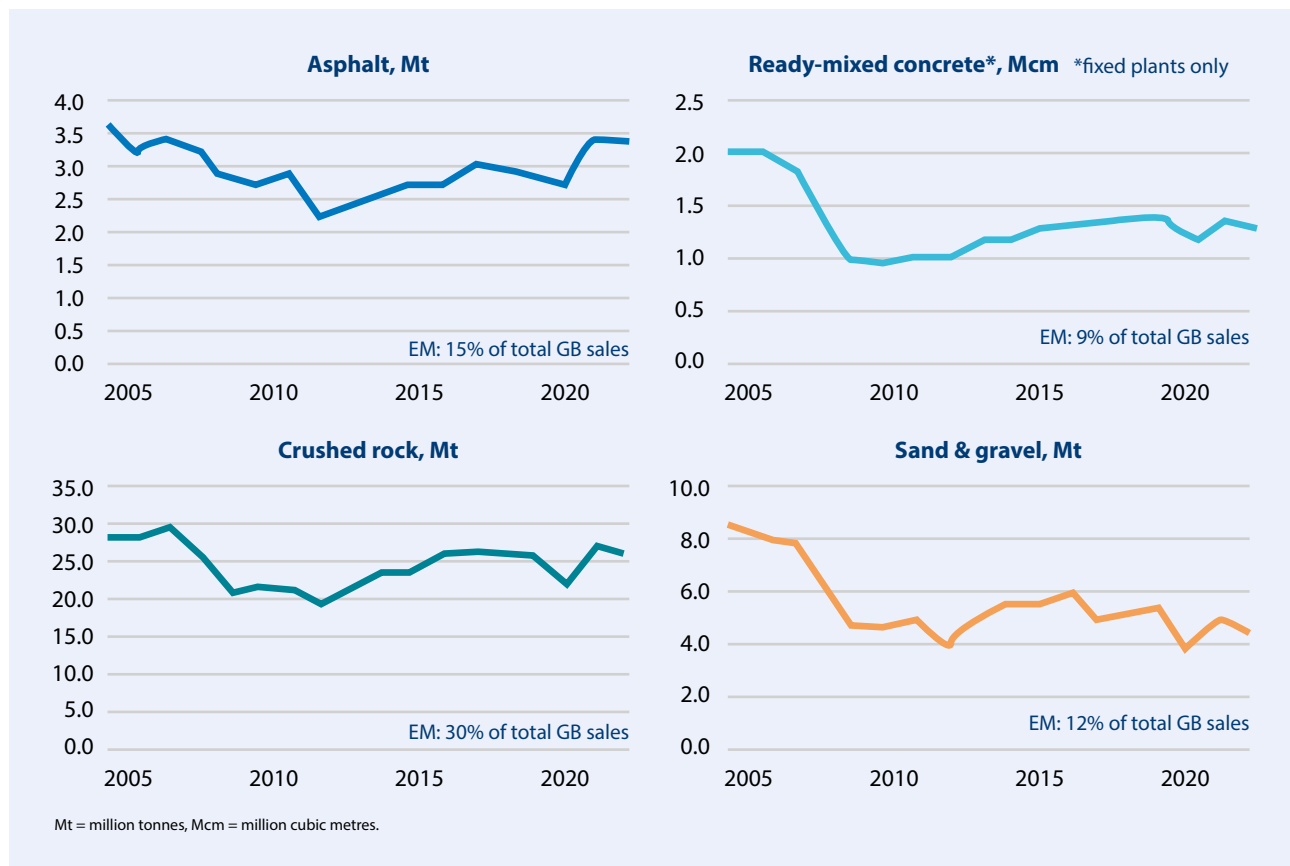
Volume % change (Source: ONS)



Construction sectors – shares of total output (EM vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 3% | 3% | 9% | 15% | 12% | 12% | 18% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 28% | 22% | 11% | 4% | 5% | 5% | 14% | 19% |

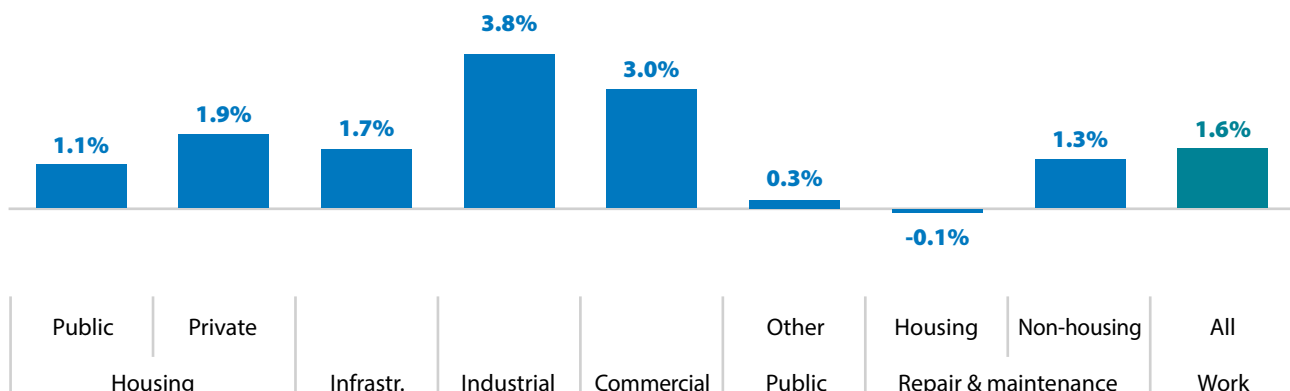
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE EAST MIDLANDS, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE EAST MIDLANDS

- Output growth of almost 4% per year is expected in the industrial sector, with logistics and warehouses developments led by the expansion of the Desford brick plant in Leicestershire which will double its production capacity.
- The electrification of railway lines as part of the Midland Main Line upgrades will support infrastructure, as well as ongoing work on the Viking Link energy project, which will allow the exchange of electricity between Denmark and the UK.
- A new headquarters for the Aston Martin Formula One team at Silverstone will boost commercial activity, which is expected to be the second fastest growing sector over the 2023-27 period. In contrast, R&M work is expected to be sluggish, with a marginal decline overall in housing R&M.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



West Midlands

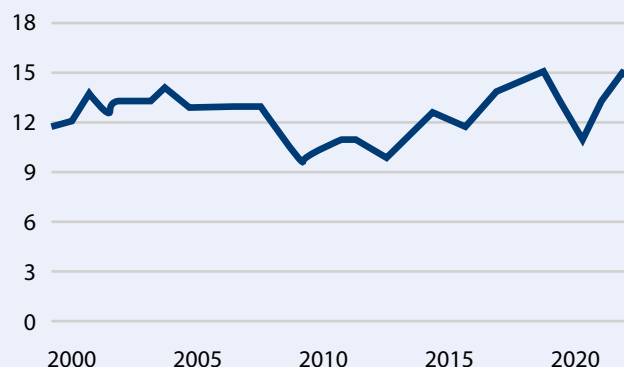


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 6.0m (9% of the GB total) |
| Economy | GDP growth fell on average by 0.1% per annum between 2017-21 |
| Construction output | Increased by 6.4% in 2022 |
| Regional contribution | 8% (£14.6bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -5.2% Ready-mixed concrete: 7.2% Crushed rock: -8.8% Sand & gravel: -2.9% |
| Construction contract awards - 2022 | £5.1 billion across all sectors, down 15.3% compared to 2021 |

Construction output (2000-2022):

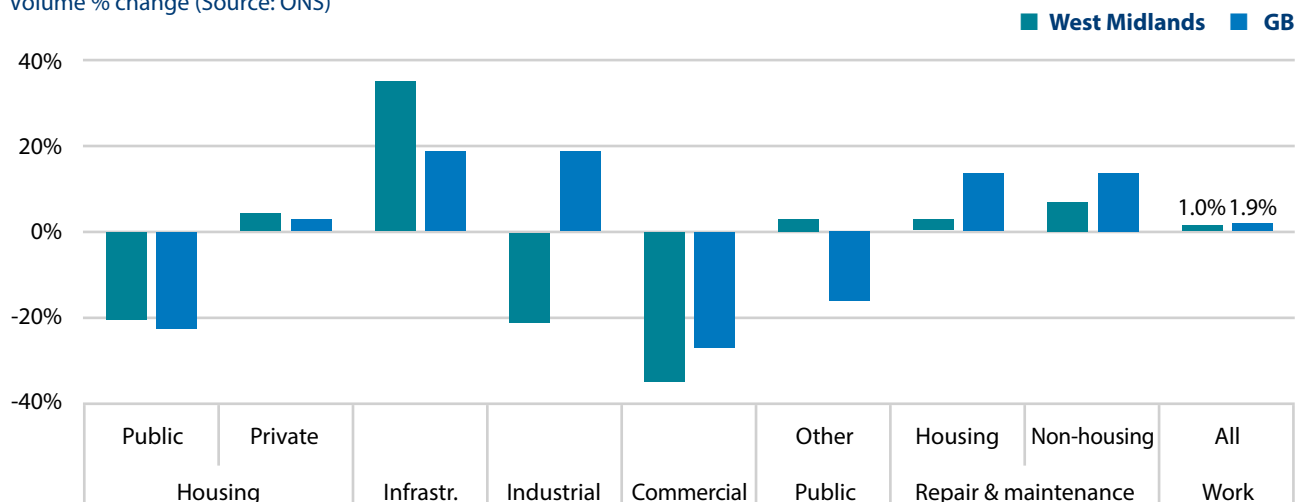
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE WEST MIDLANDS

Construction output by sector: 2022 vs. 2019

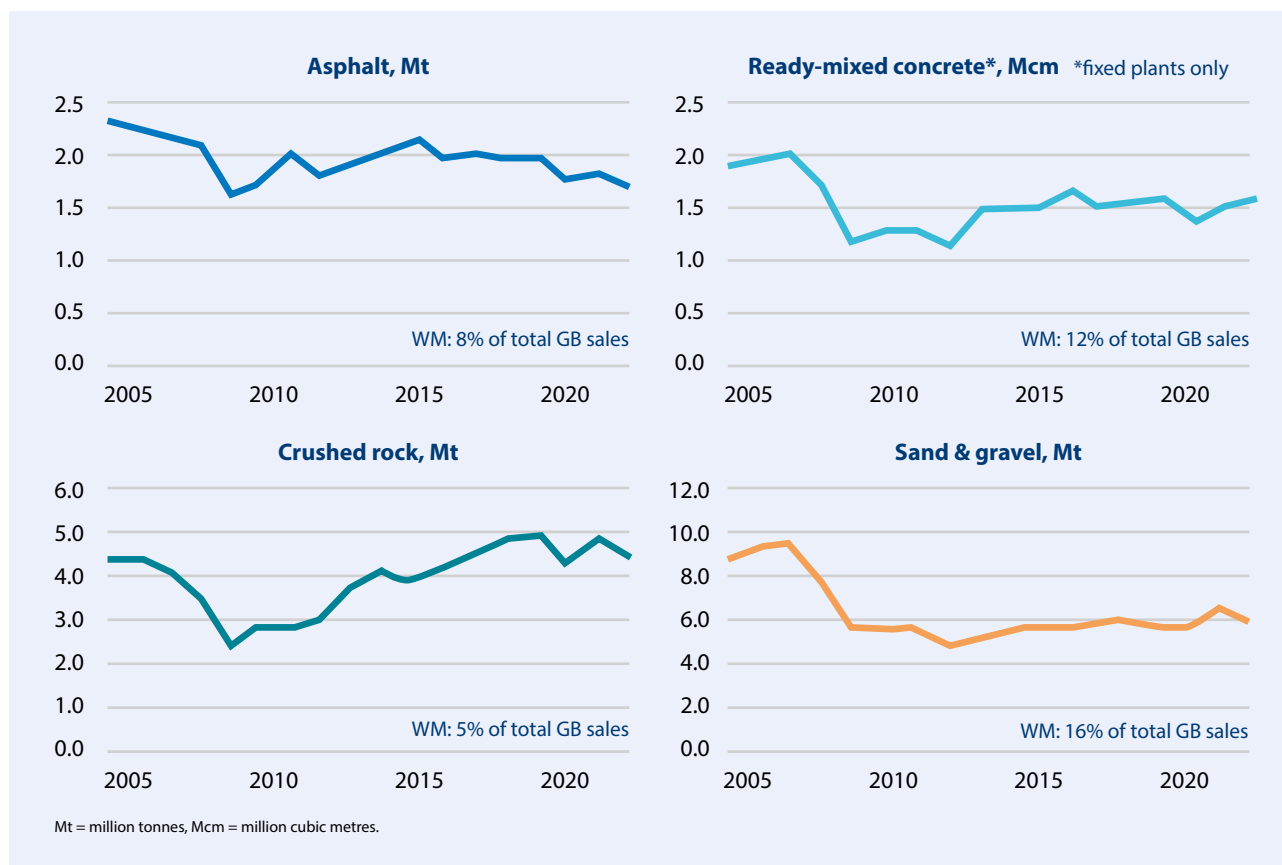
Volume % change (Source: ONS)



Construction sectors – shares of total output (WM vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 17% | 15% | 9% | 12% | 17% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 26% | 22% | 5% | 4% | 5% | 5% | 19% | 19% |

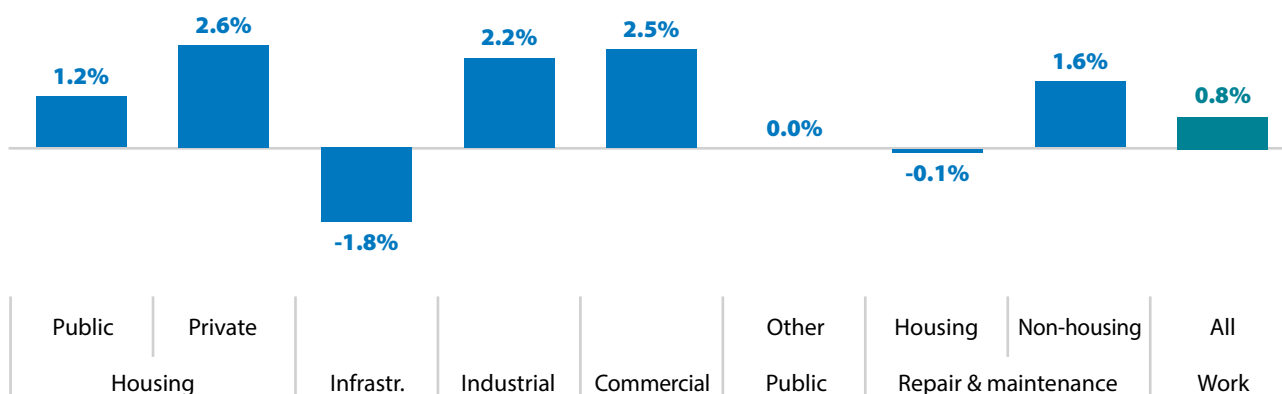
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE WEST MIDLANDS, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE WEST MIDLANDS

- Private housing, the largest sector which makes up 26% of the West Midlands' total output, is expected to be the main driver of construction growth, supported by the regeneration of Coventry city centre and a new mixed-use development in Birmingham Eastside.
- A seven-year £4bn partnership between West Midlands Combined Authority and Legal & General could enhance the economy, jobs and net zero by supporting levelling-up, new housing and commercial units.
- The Integrated Rail Plan will contribute towards new build and upgrading existing rail infrastructure, although overall infrastructure work is set for a modest decline over 2023-27. Housing R&M and public non-residential work are both expected to stagnate over the period.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



East of England

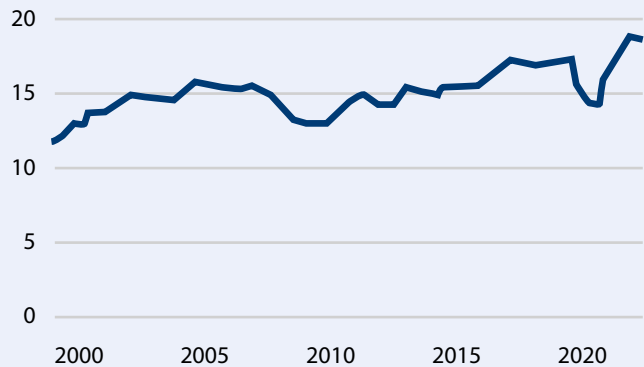


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 6.3m (10% of the GB total) |
| Economy | GDP growth averaged 0.8% per annum between 2017-21 |
| Construction output | Increased by 5.4% in 2022 |
| Regional contribution | 10% (£18.6bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -5.9% Ready-mixed concrete: -14.4% Sand & gravel: -11.7% |
| Construction contract awards - 2022 | £7.2 billion across all sectors, up 12.8% compared to 2021 |

Construction output (2000-2022):

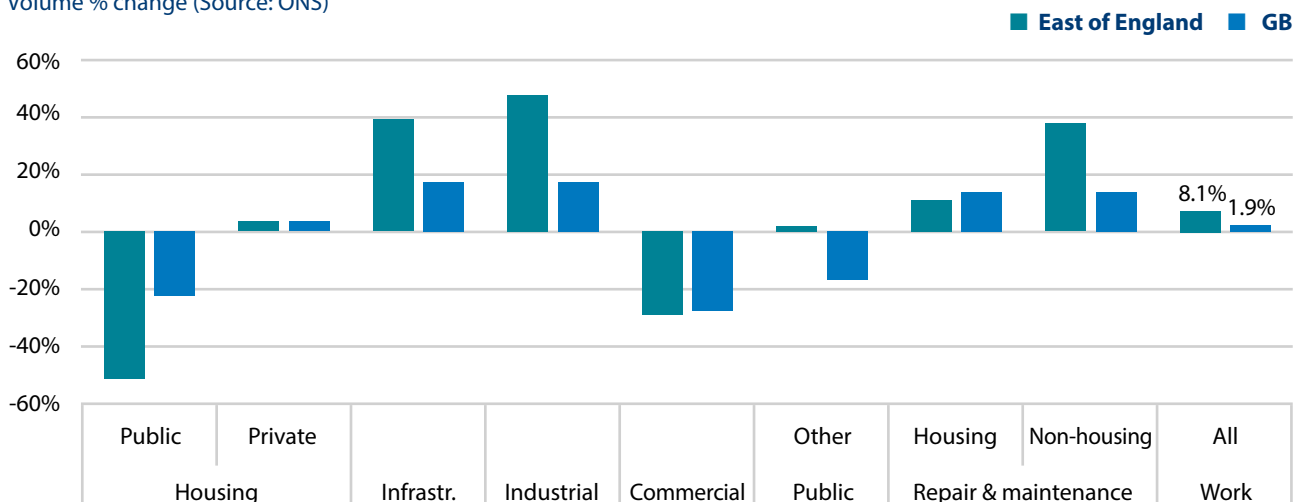
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE EAST OF ENGLAND

Construction output by sector: 2022 vs. 2019

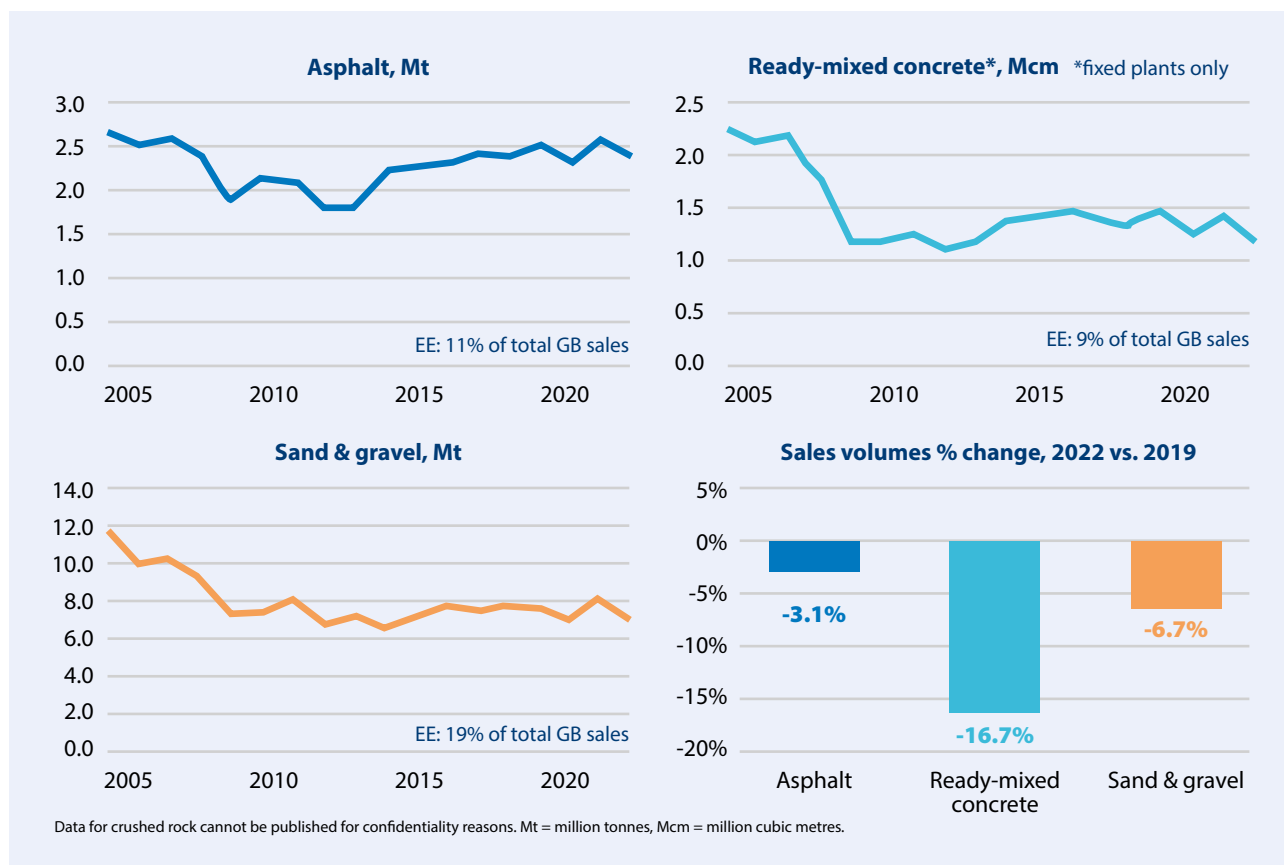
Volume % change (Source: ONS)



Construction sectors – shares of total output (EE vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 13% | 15% | 11% | 12% | 24% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 19% | 22% | 5% | 4% | 5% | 5% | 21% | 19% |

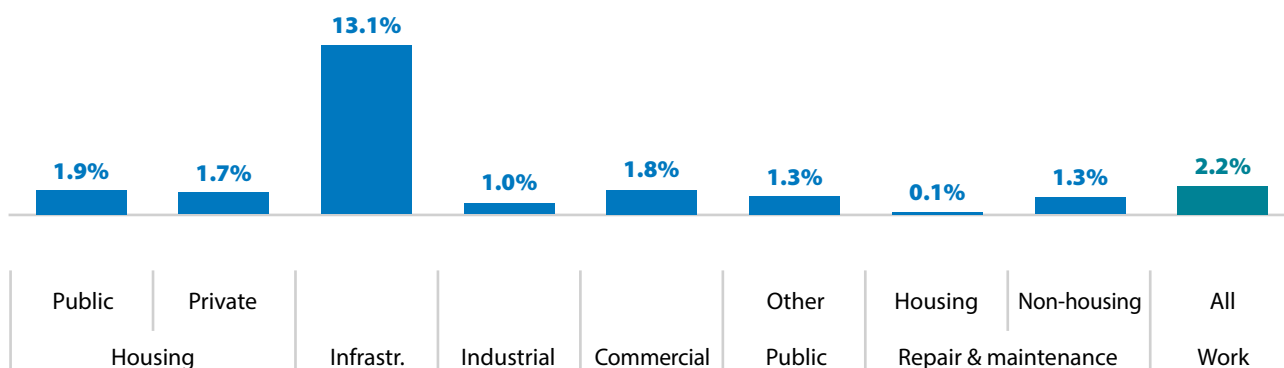
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE EAST OF ENGLAND, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE EAST OF ENGLAND

- Growth is expected across all key construction sectors, with infrastructure the standout, led by major energy infrastructure projects including the East Anglia Two and East Anglia One North wind farms and the Sizewell C nuclear power station. Output growth of 13.1% per annum over 2023-27 may be out of reach given the uncertainty over the Hornsea Three offshore wind farm due to cost inflation, and further delays announced to the Lower Thames Crossing road scheme.
- Private housing is being supported by a number of projects such as the Brightwell Lakes development, a joint venture between housebuilder Lovells and Suffolk County Council, and the Stevenage regeneration project which includes new commercial buildings.
- A new hospital in West Suffolk has been given the go ahead and will boost non-residential public construction, although growth in the sector will slow to an average of 1.3% from 2.2% during 2018-22.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



London

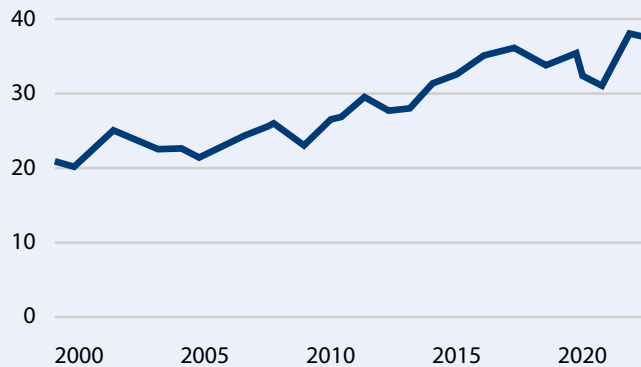


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 8.8m (14% of the GB total) |
| Economy | GDP growth averaged 0.4% per annum between 2017-21 |
| Construction output | Declined by 0.1% in 2022 |
| Regional contribution | 21% (£37.5bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -12.1% Ready-mixed concrete: -0.1% |
| Construction contract awards - 2022 | £18.1 billion across all sectors, up 17.7% compared to 2021 |

Construction output (2000-2022):

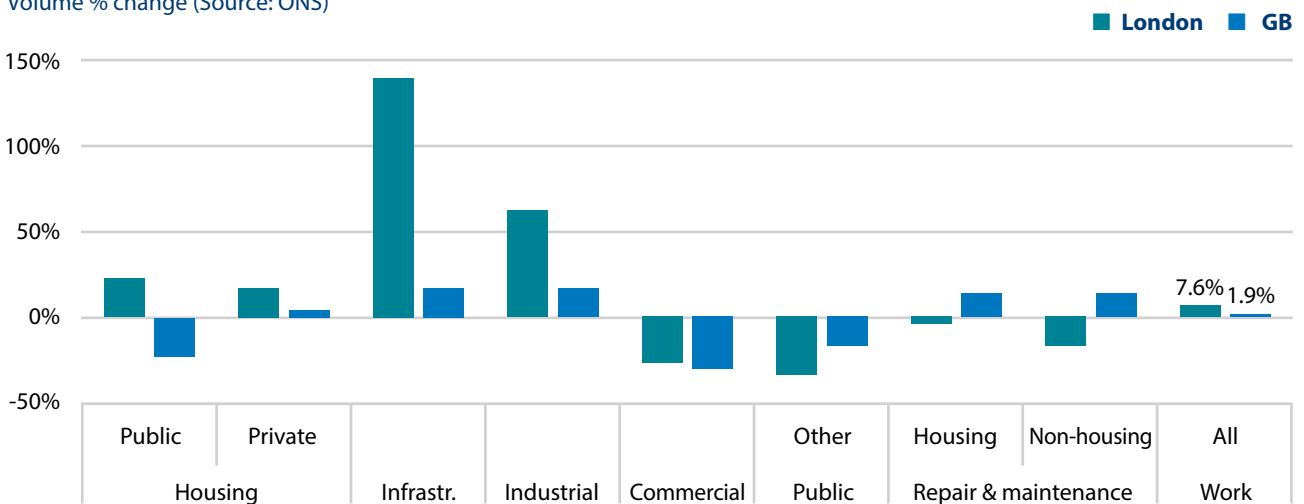
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN LONDON

Construction output by sector: 2022 vs. 2019

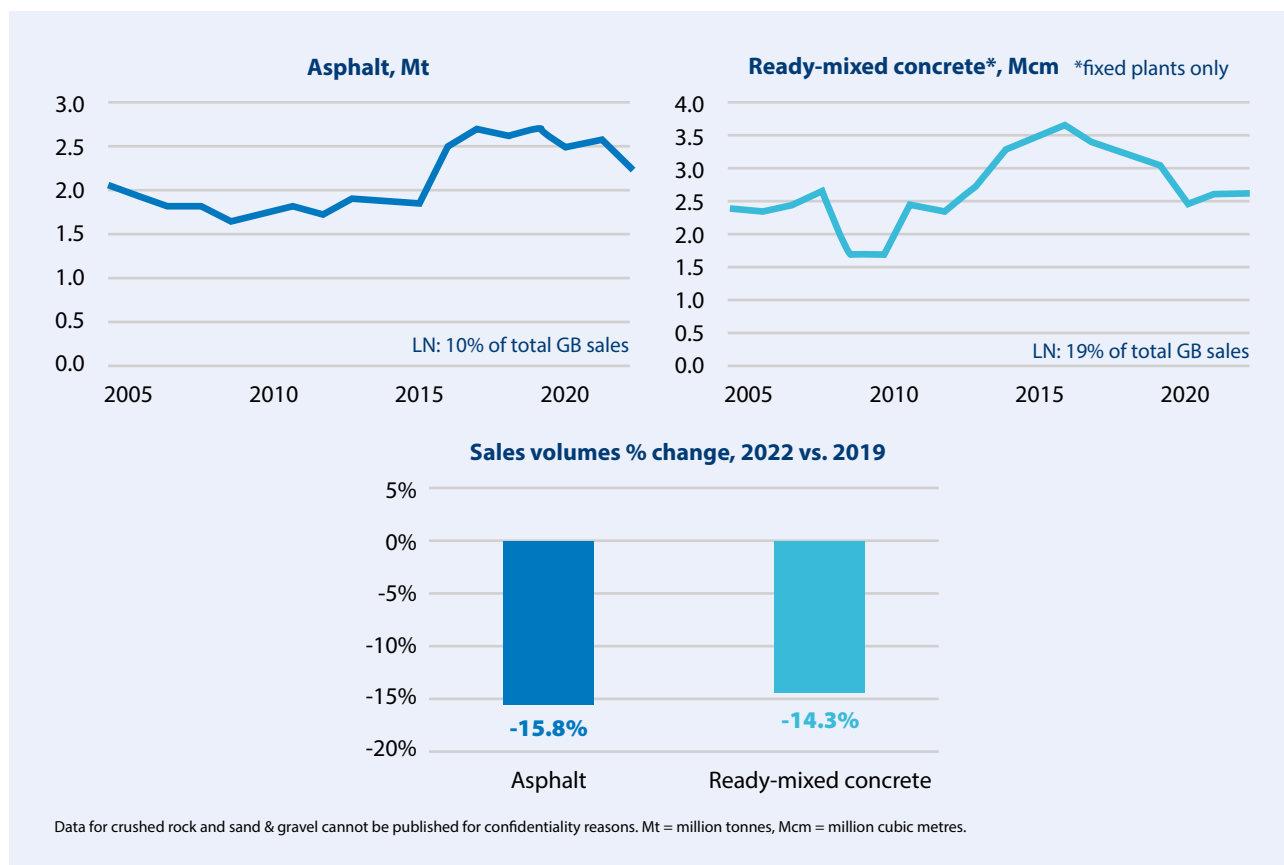
Volume % change (Source: ONS)



Construction sectors – shares of total output (LN vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 5% | 3% | 19% | 15% | 20% | 12% | 14% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 28% | 22% | 1% | 4% | 3% | 5% | 9% | 19% |

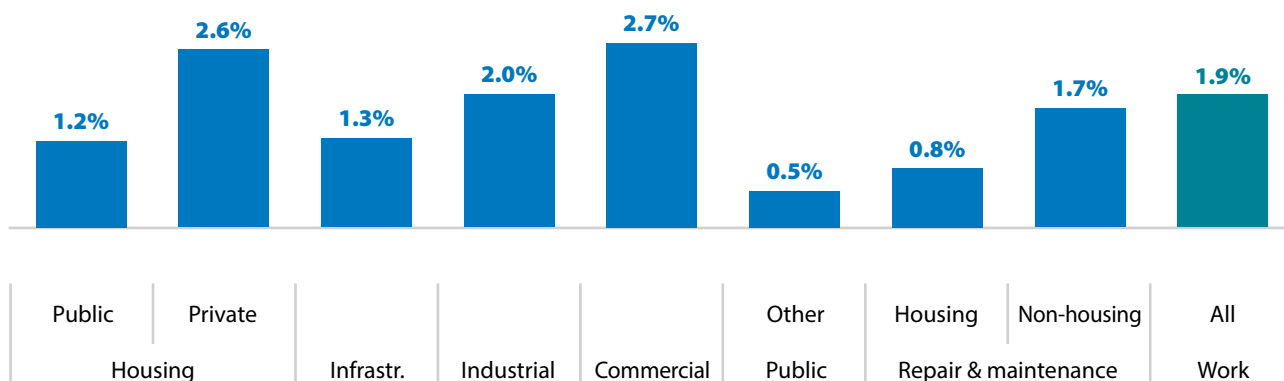
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN LONDON, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN LONDON

- A number of large-scale projects continue to drive up construction work across the capital, including Thamesmead, Brent Cross Town, Queen Elizabeth Olympic Park, Barking Riverside, Meridian Water Regeneration, London Docklands and Silvertown, as well as other long-term developments which will benefit key areas of construction.
- The 2021-26 Affordable Homes Programme will drive output in housing, which makes up a third of total construction activity in the region. New residential contract awards in London rose by 19% in volume terms in 2022 according to data from Barbour ABI.
- The planned restoration of the Houses of Parliament may begin during the latter part of the 2023-27 period, with total construction work across London forecast to grow by an average of 1.9% per annum.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



South East

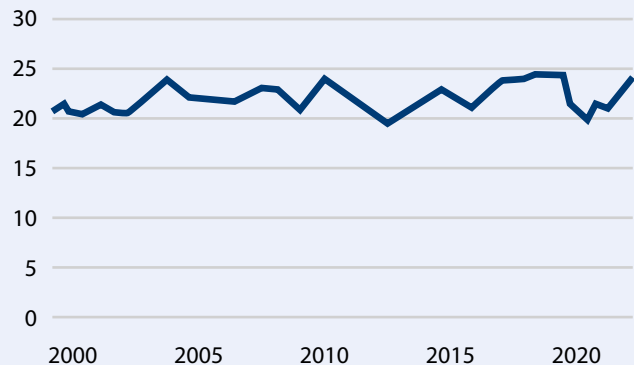


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 9.3m (14% of the GB total) |
| Economy | GDP growth fell on average by 0.5% per annum between 2017-21 |
| Construction output | Increased by 14.4% in 2022 |
| Regional contribution | 14% (£24.4bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -9.0% Ready-mixed concrete: -7.3% Sand & gravel: -9.6% |
| Construction contract awards - 2022 | £10.0 billion across all sectors, up 14.5% compared to 2021 |

Construction output (2000-2022):

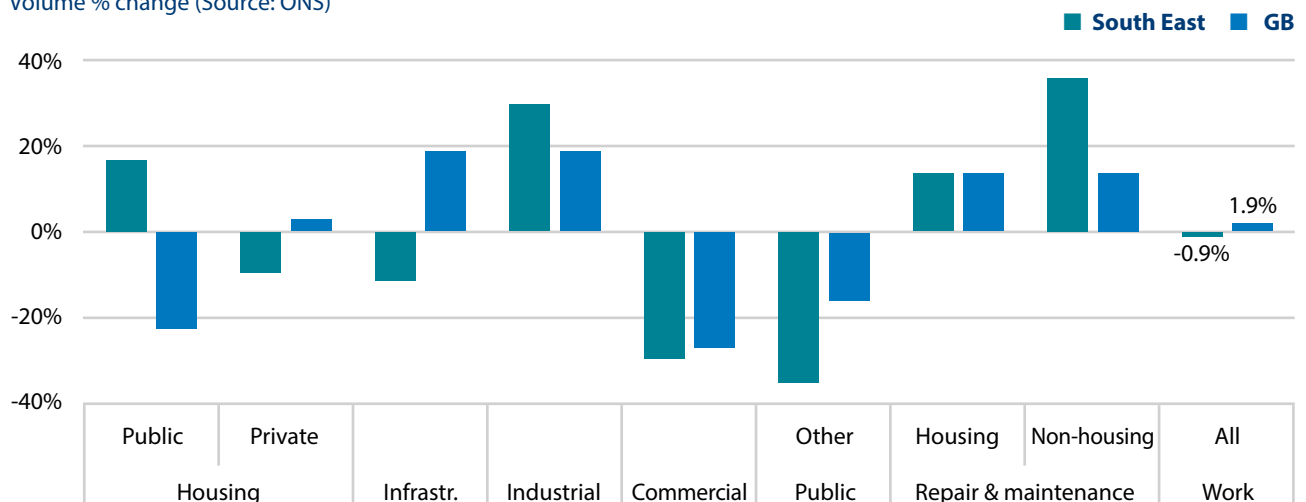
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE SOUTH EAST

Construction output by sector: 2022 vs. 2019

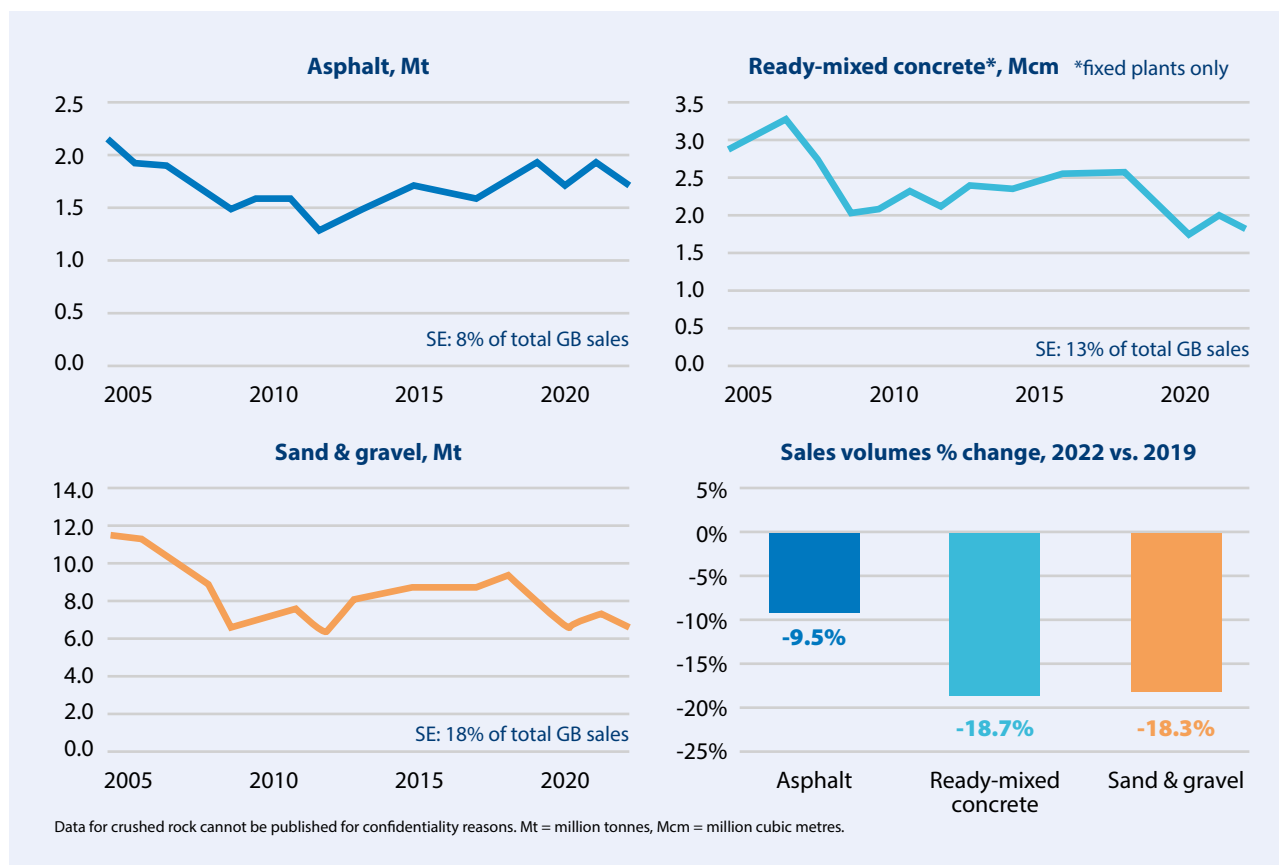
Volume % change (Source: ONS)



Construction sectors – shares of total output (SE vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 10% | 15% | 11% | 12% | 25% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 21% | 22% | 3% | 4% | 4% | 5% | 24% | 19% |

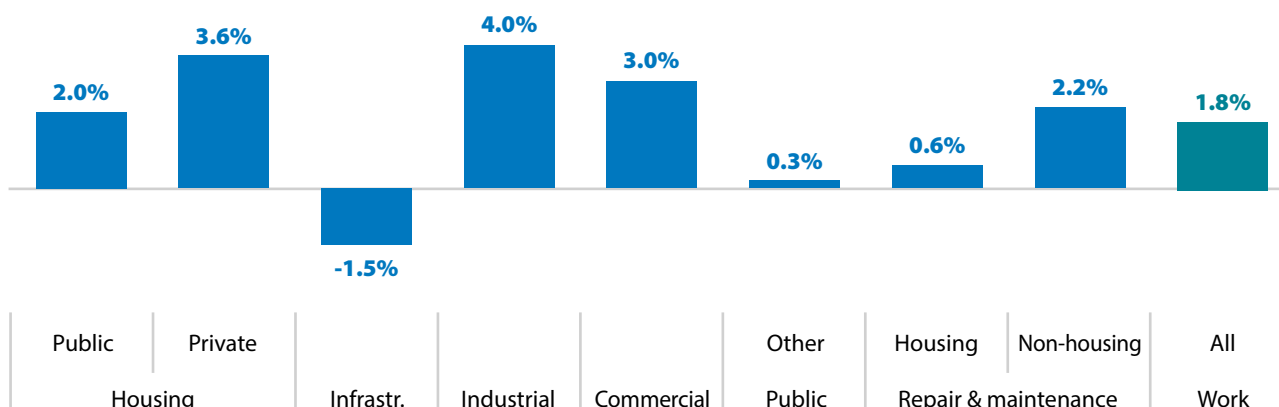
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE SOUTH EAST, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE SOUTH EAST

- Rising at an average of 3.6% per annum during 2023-27, private housing will be the main engine of growth. The Brookleigh housing development in Sussex includes new leisure facilities and schools, while the long-term Hoo Peninsula project includes work in Ebbsfleet Garden City.
- The final warehouse developments at the Panattoni Park site in Aylesford will underpin industrial output in the early part of the forecast period.
- R&M work accounts for almost half of the South East construction industry structure and will also contribute to higher output during 2023-27.
- Infrastructure is the only sector expected to see lower activity, despite work on the reopening and extension of Manston Airport into a dedicated air freight facility. Delays to the Lower Thames Crossing road scheme and the withdrawal of the London Resort project have weakened the outlook.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



South West

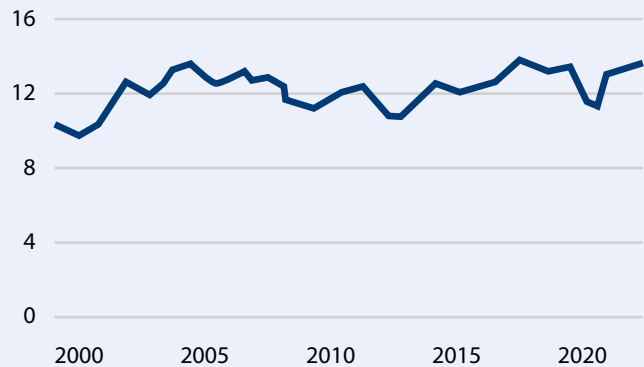


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 5.7m (9% of the GB total) |
| Economy | GDP growth averaged 1.0% per annum between 2017-21 |
| Construction output | Increased by 3.2% in 2022 |
| Regional contribution | 8% (£13.7bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -3.3% Ready-mixed concrete: -15.8% Crushed rock: -8.6% Sand & gravel: -9.6% |
| Construction contract awards - 2022 | £7.8 billion across all sectors, up 31.7% compared to 2021 |

Construction output (2000-2022):

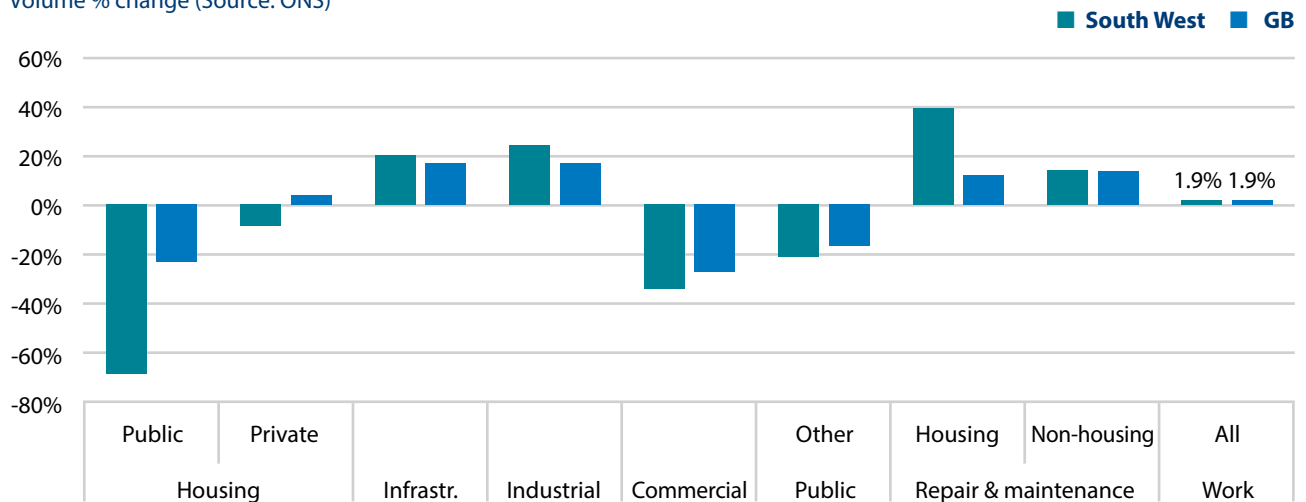
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN THE SOUTH WEST

Construction output by sector: 2022 vs. 2019

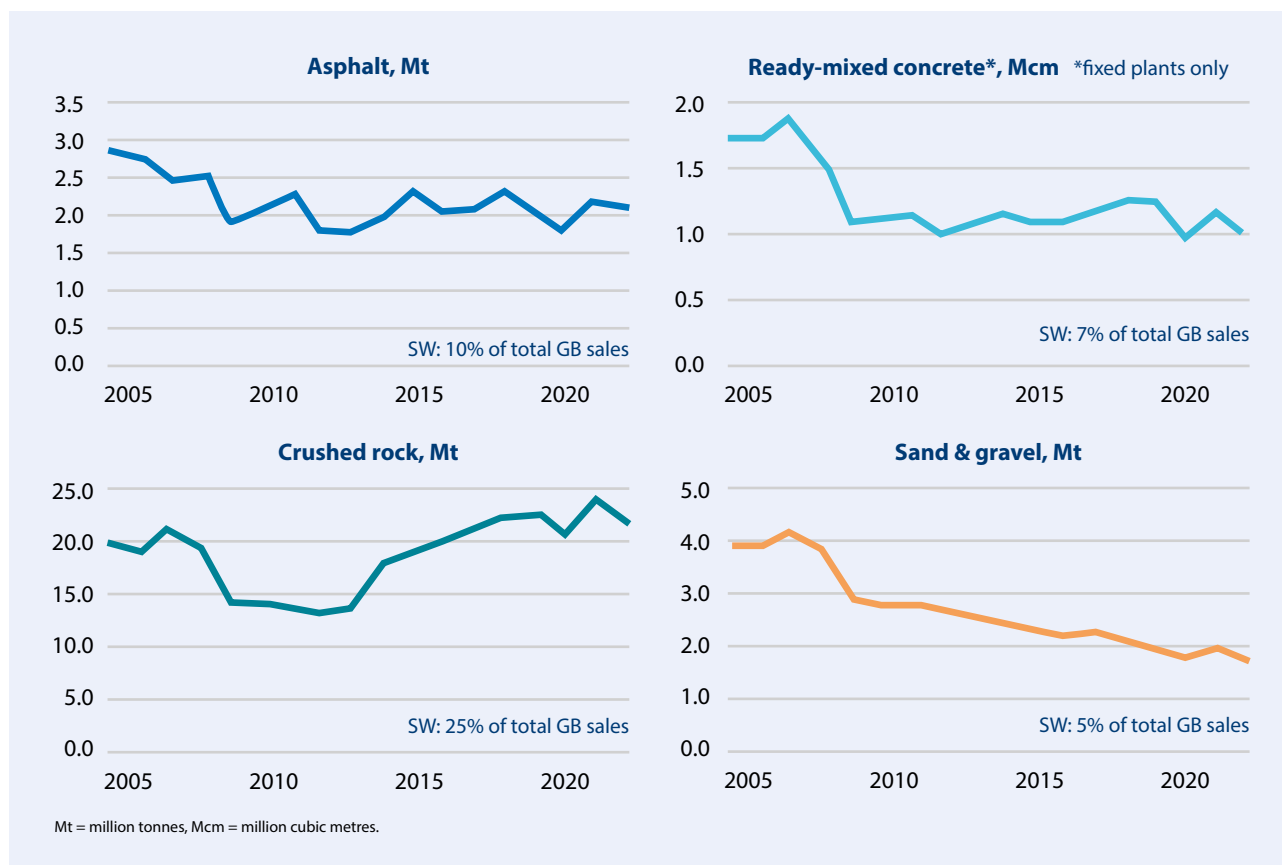
Volume % change (Source: ONS)



Construction sectors – shares of total output (SW vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 2% | 3% | 14% | 15% | 11% | 12% | 29% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 21% | 22% | 4% | 4% | 6% | 5% | 14% | 19% |

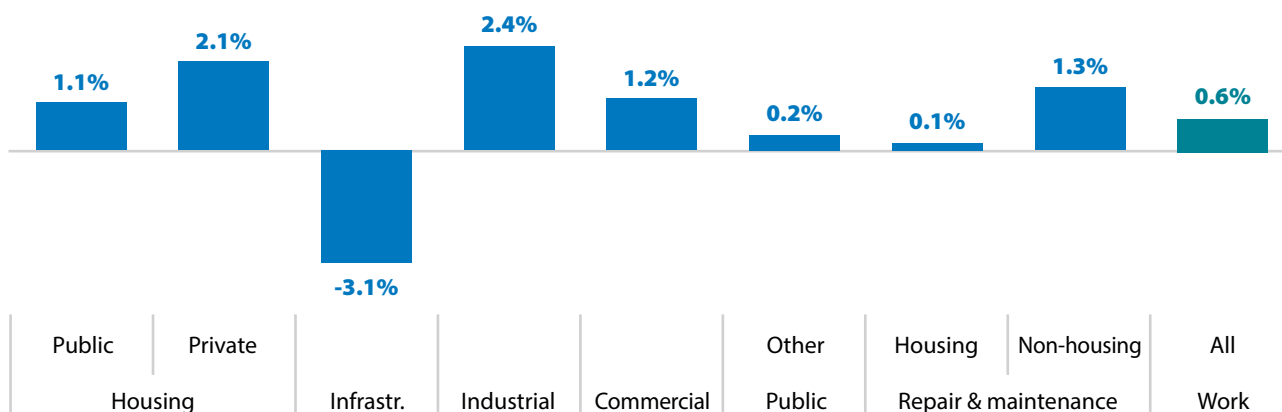
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN THE SOUTH WEST, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN THE SOUTH WEST

- Industrial and private housing output are forecast to see the fastest rates of expansion, with growth averaging more than 2% per year. The former is being strengthened by work in Avonmouth which includes the UK's largest ever speculatively built warehouse. New housing developments include the Goram Homes project and the proposed Golden Valley Development in Cheltenham.
- The demolition and replacement of the Galleries shopping centre with a proposed mixed-use development will include new office space and retail opportunities, boosting commercial activity.
- Hinkley Point C continues to support infrastructure, although a downward correction in output is expected in 2023-27 due in part to the elevated levels of infrastructure work in 2021 and 2022. Large offshore wind projects in the Celtic Sea have been proposed but a timeline has not been established.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



Wales

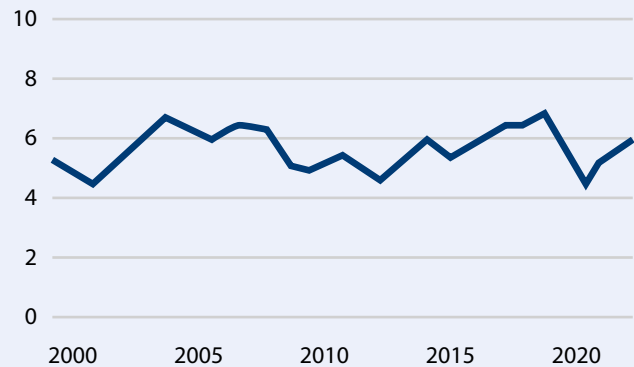


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 3.1m (5% of the GB total) |
| Economy | GDP growth averaged 0.7% per annum between 2017-21 |
| Construction output | Increased by 9.4% in 2022 |
| Regional contribution | 3% (£6.0bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -13.9% Ready-mixed concrete: -8.6% Crushed rock: -10.0% Sand & gravel: 1.5% |
| Construction contract awards - 2022 | £2.9 billion across all sectors, up 24.1% compared to 2021 |

Construction output (2000-2022):

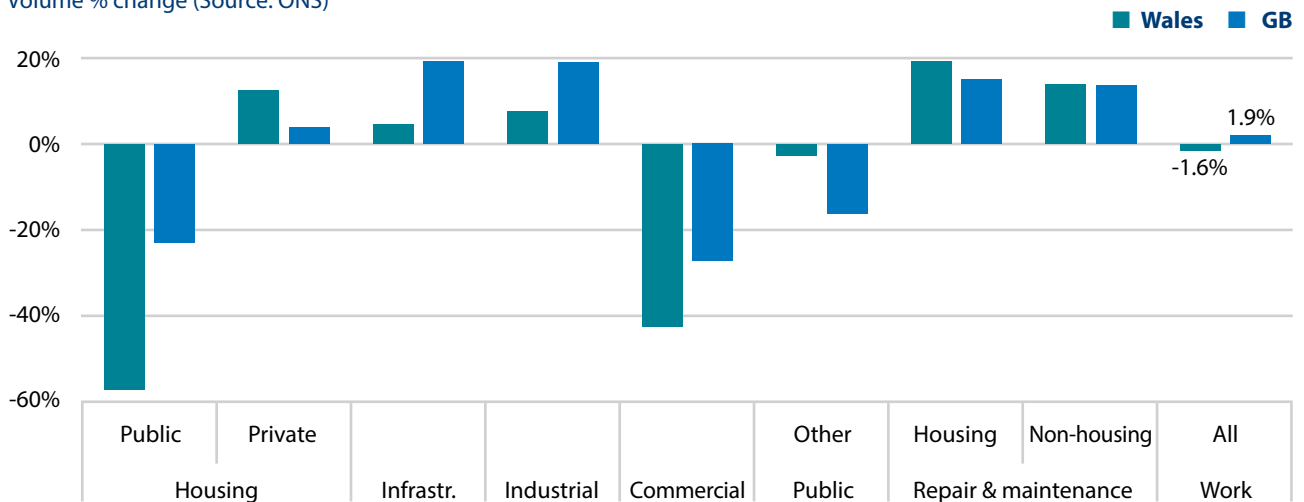
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN WALES

Construction output by sector: 2022 vs. 2019

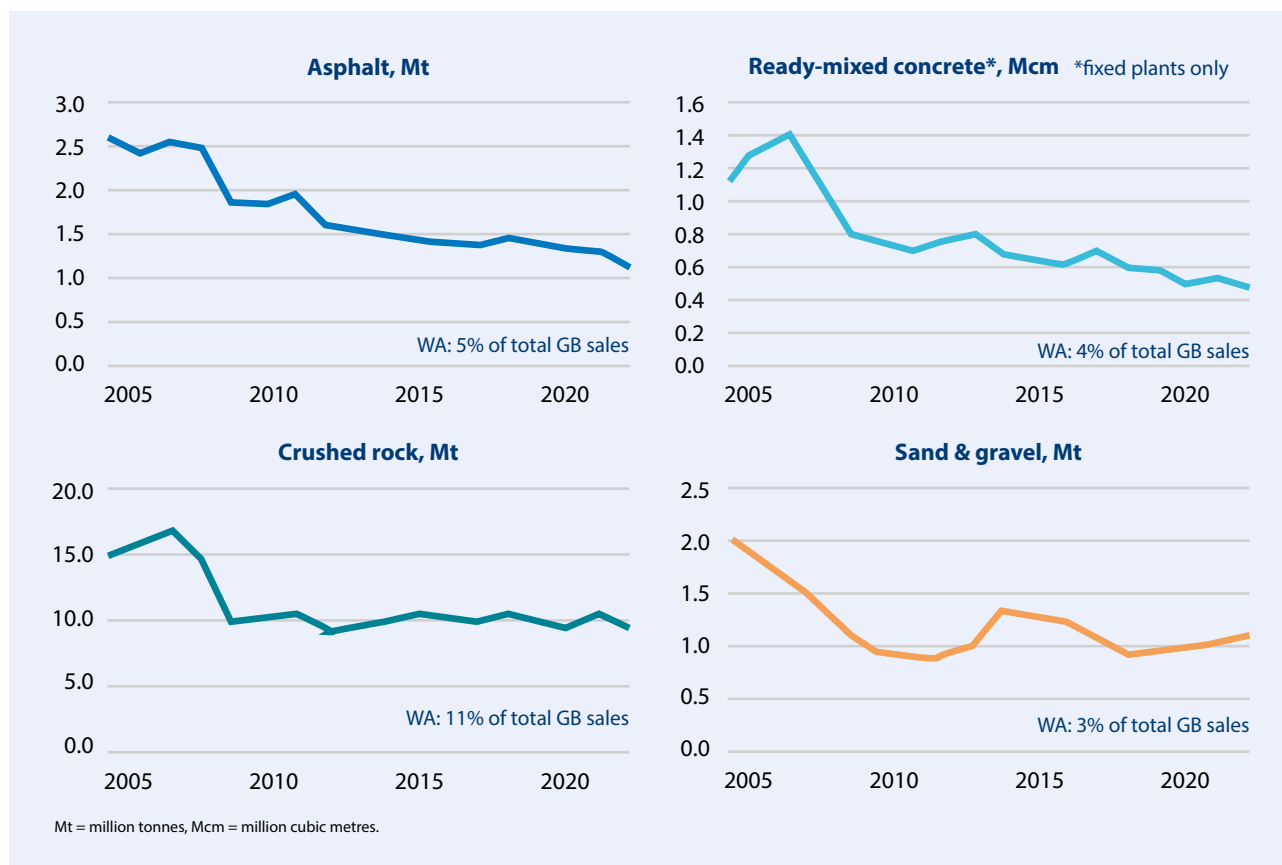
Volume % change (Source: ONS)



Construction sectors – shares of total output (WA vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 3% | 3% | 17% | 15% | 8% | 12% | 21% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 20% | 22% | 3% | 4% | 10% | 5% | 19% | 19% |

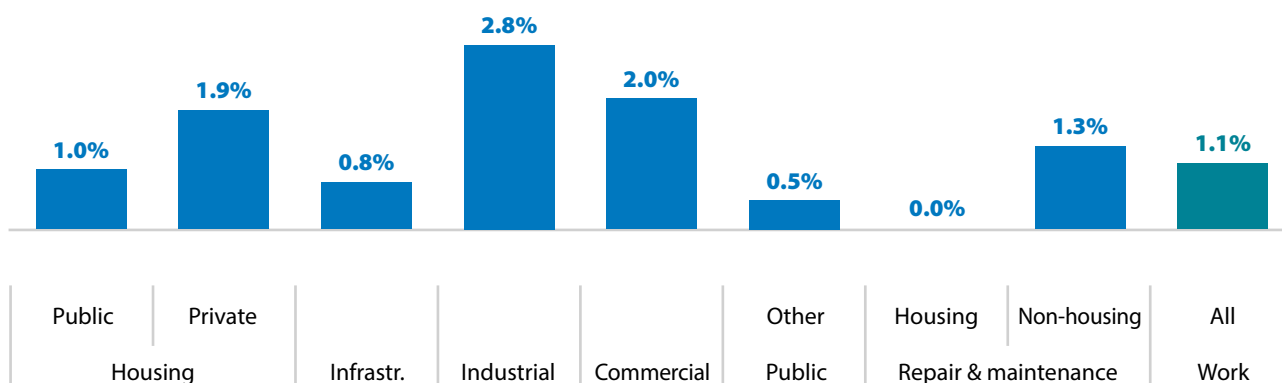
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN WALES, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN WALES

- Total construction work is forecast to rise by 1.1% on average per year, gradually picking up momentum after 2024. Housing R&M is the only sector unlikely to see growth in 2023-27.
- Infrastructure could be weaker than forecast after the Welsh government scrapped a number of road schemes in February 2023. In contrast, potential renewable energy projects including floating offshore wind at Port Talbot and Milford Haven and recently-announced funding for the development of a tidal lagoon project could yet support activity in the latter part of the 5-year period.
- Support for housing and commercial work continues to be fronted by the major Swansea regeneration project which includes new homes, commercial units, and leisure facilities.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



Scotland

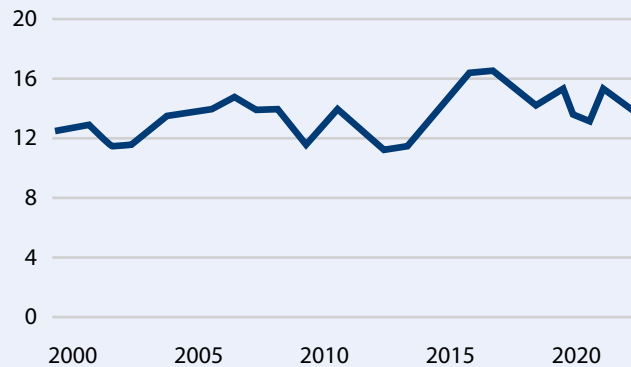


OVERVIEW

| | |
|-------------------------------------|---|
| Population | 5.5m (8% of the GB total) |
| Economy | GDP growth was unchanged (0.0%) on average between 2017-21 |
| Construction output | Decreased by 7.2% in 2022 |
| Regional contribution | 8% (£14.0bn) of the total value of GB construction |
| MPA sales volumes - 2022 vs. 2021 | Asphalt: -10.9% Ready-mixed concrete: -17.8% Crushed rock: -9.5% Sand and gravel: -14.7% |
| Construction contract awards - 2022 | £5.6 billion across all sectors, up 4.2% compared to 2021 |

Construction output (2000-2022):

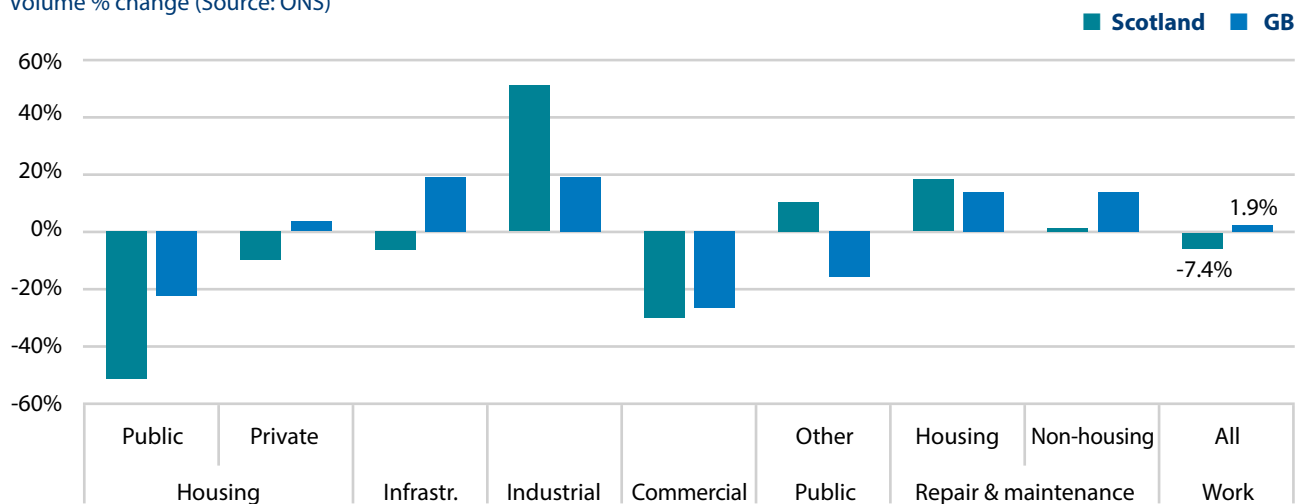
Rolling annual totals in £ billions (Source: ONS)



CONSTRUCTION OUTPUT AND MARKET STRUCTURE IN SCOTLAND

Construction output by sector: 2022 vs. 2019

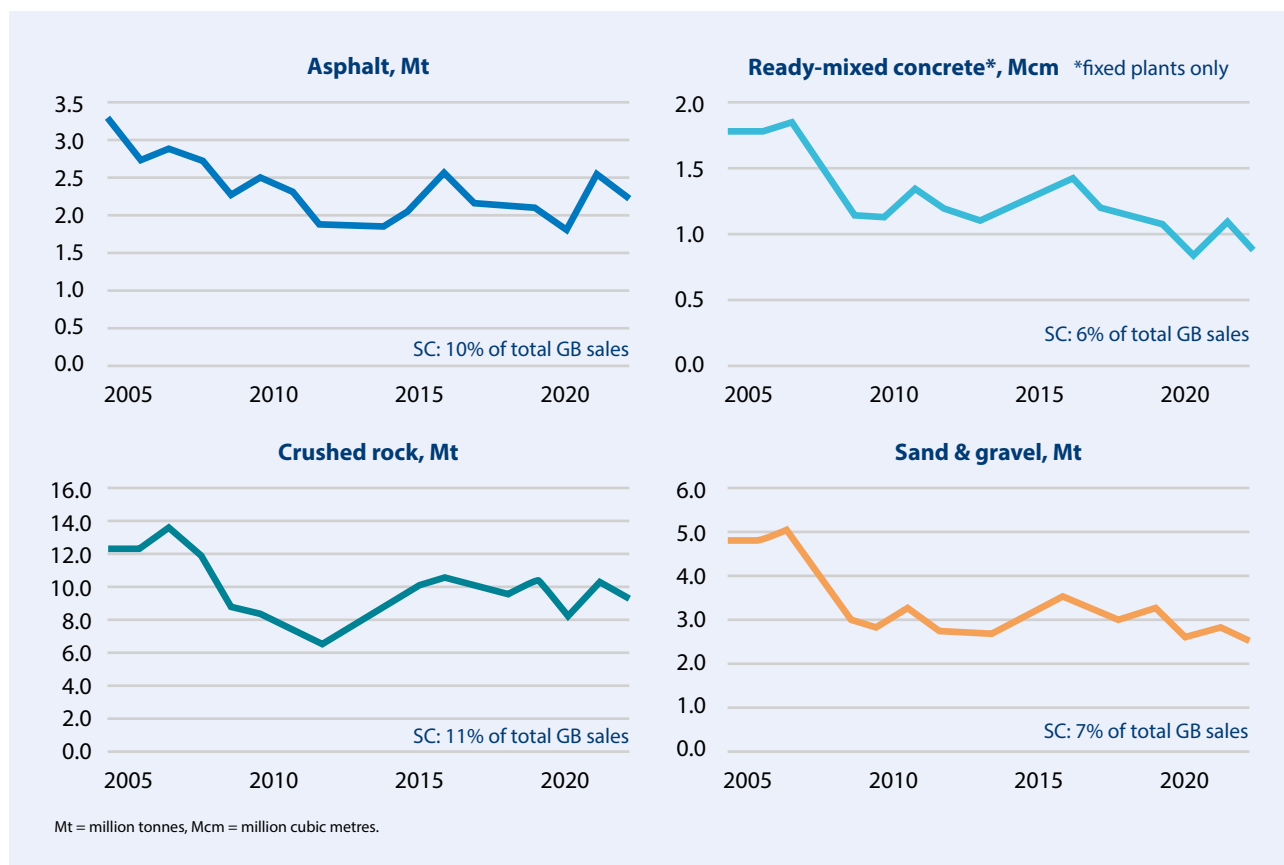
Volume % change (Source: ONS)



Construction sectors – shares of total output (SC vs GB) (Source: ONS)

| Public Housing | | Infrastructure | | Commercial | | Housing R&M | |
|-----------------|-----|----------------|-----|--------------------|-----|-----------------|-----|
| 4% | 3% | 22% | 15% | 10% | 12% | 17% | 20% |
| Private Housing | | Industrial | | Public non-housing | | Non-housing R&M | |
| 18% | 22% | 3% | 4% | 9% | 5% | 18% | 19% |

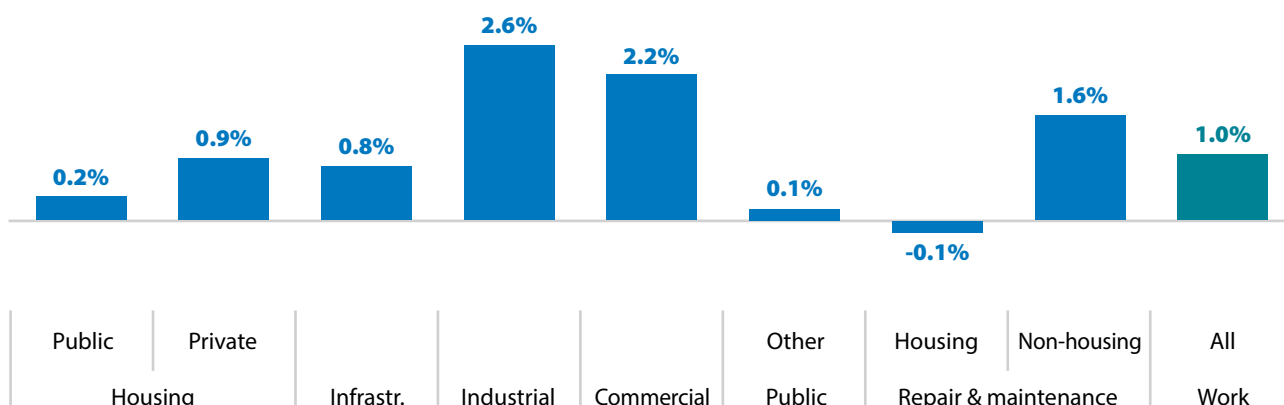
MINERAL PRODUCTS MARKETS: ANNUAL SALES VOLUMES IN SCOTLAND, 2005-2022 (Source: MPA)



CONSTRUCTION OUTLOOK IN SCOTLAND

- Growth is forecast to be uneven across the major sectors of construction, resulting in a moderate 1.0% per annum rise in overall construction output across 2023-27.
- Infrastructure will be a steady source of growth, supported by Scottish Water's £5 billion capital investment plan and the Moray West wind farm. Other renewable energy generation plans such as ScotWind could boost output but these projects are currently in the planning stages.
- New industrial work includes the Hunterston high voltage cable production facility which will produce some of the world's longest subsea power cables to drive the delivery of new renewable energy.
- Public non-housing activity, which makes up 9% of the region's total output (above the 5% average across GB), is forecast to be stable around current levels, as is housing R&M output.

Annual average construction output growth by sector: 2023-27 forecast (Source: CITB)



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The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

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