



CIOB

THE CHARTERED INSTITUTE OF BUILDING



● **TYNE BRIDGE** | NEWCASTLE

● **BEETHAM TOWER** | MANCHESTER

● **BULLRING** | BIRMINGHAM

● **NORWICH CATHEDRAL** | NORWICH

● **GHERKIN** | LONDON

● **PIERHEAD BUILDING** | CARDIFF

● **THE EDEN PROJECT** | CORNWALL

● **TITANIC MUSEUM** | BELFAST

● **SECC** | GLASGOW

CIOB GUIDE TO THE BUILT ENVIRONMENT

**CONSTRUCTION:
ARE YOU IN IT FOR
THE LONG TERM?**

1

AN INTRODUCTION

The quality of our built environment affects every member of society. It influences productivity and wellbeing at home and at work.

PROJECTS LAST LONGER THAN GOVERNMENTS

Major projects such as Crossrail, the Olympic Park, nuclear power stations or HS2 last longer than a five-year Government term. Houses, hospitals and schools are used for generations.

Mistakes can be costly and felt by communities for decades. If we are to create high quality, smarter, more flexible, energy efficient buildings we need to get it right first time.

CIOB represents leaders and managers who work at every stage of the lifecycle of a construction project; the visionaries who shape our towns, cities and infrastructure. We're not just looking at the next five years: we're planning for the next fifty.

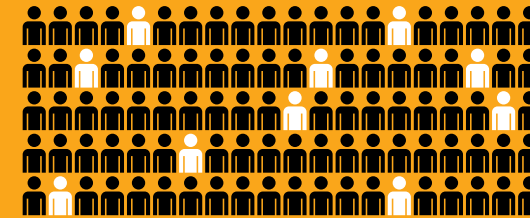
CIOB: CONSTRUCTIVE
DIALOGUE STARTS HERE

“Construction is a powerful industry – mistakes leave deep scars, but successes breed success. In the recent past, the industry has worked hard to rethink its social, economic and environmental responsibilities and reshape its role as an employer.”

CHRIS BLYTHE
CHIEF EXECUTIVE



6.3% OF GDP



2.9M JOBS
10% OF TOTAL
UK EMPLOYMENT

100
BILLION

2020

£100bn OF PUBLIC INVESTMENT IN
INFRASTRUCTURE PROJECTS TO 2020

280,000



COMPANIES IN THE CONSTRUCTION INDUSTRY

2

A LEGACY THAT MATTERS

Whether it's school design, housing regulation, health procurement, airport capacity, or the safety of public spaces, CIOB members grapple with society-wide issues on a daily basis.

New build construction is also only part of the story: 40% of construction work is involved with maintaining, converting or improving the quality of existing buildings.

THE CHALLENGE

- ▶ The Government is committed to reducing greenhouse gas emissions by 80% by 2050 from 1990 levels – the built environment is the single largest contributor and accounts for 45% of the UK's CO₂ emissions
- ▶ Poor buildings and infrastructure burden the economy and reduce our health, wealth and wellbeing
- ▶ At least 70% of the built environment that will exist in 2050 has already been built

TALK TO US ABOUT

- ▶ Leaving a high quality legacy – CIOB members operate around the world and we can disseminate international best practice
- ▶ Our Carbon Action 2050 knowledge hub
- ▶ How to implement a cost-effective retrofit programme

“Improving existing buildings leads to huge benefits. To name but a few, it creates jobs, increases labour force mobility, reduces energy consumption, and alleviates the burden on public services.”

**PROFESSOR GHASSAN AOUAD
CIOB PRESIDENT**

70%

AT LEAST 70% OF THE BUILDINGS YOU CURRENTLY SEE STANDING WILL BE THERE IN THE YEAR 2050.

THERE ARE CURRENTLY 26.7 MILLION HOMES IN THE UK. AND THIS IS WHERE THE REAL CHALLENGE LIES – RETROFITTING THE EXISTING BUILDING STOCK.

3

MEETING HOUSING NEEDS

The UK is heading for a housing shortage of more than one million homes by 2022.

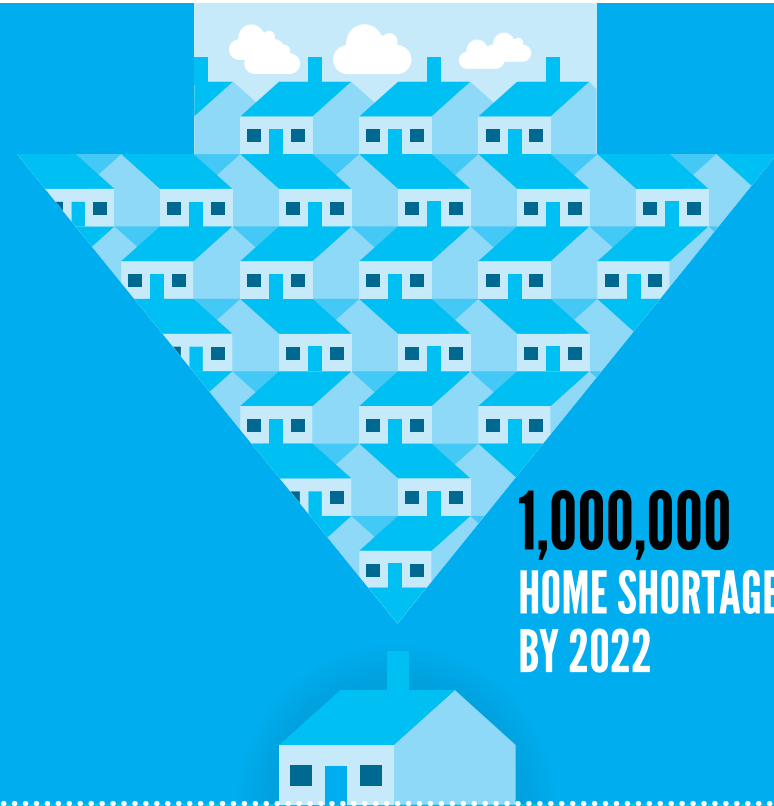
THE CHALLENGE

- ▶ We need to build between 200,000 and 250,000 new homes annually to meet demand
- ▶ Stimulating the market through stripping back well-understood minimum standards will be a retrograde step, leading to a sacrifice of build quality. Smarter regulation that consolidates standards into coherent and robust building regulations is the way forward.

TALK TO US ABOUT

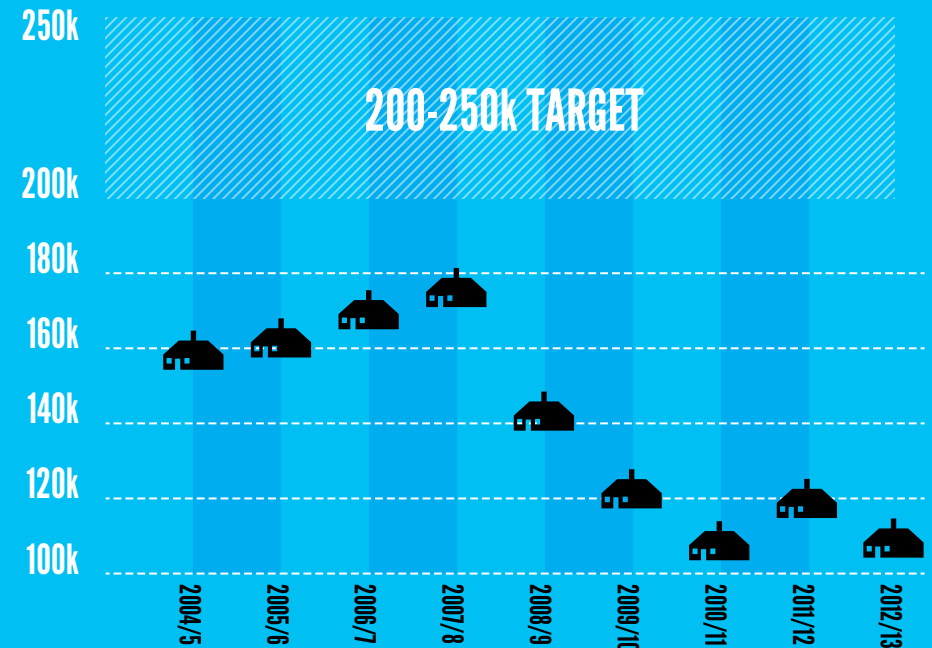
- ▶ The role of technology and off-site manufacturing in meeting housing demand
- ▶ Zero carbon homes strategy
- ▶ Converting buildings or renovating the existing housing stock

PLAN.
DESIGN.
BUILD.
CONSERVE.
MANAGE.
MAINTAIN.



200,000
to 250,000

HOMES NEED TO BE BUILT ANNUALLY TO MEET DEMAND



4

LEADING ON SKILLS

Innovative technologies are transforming the construction sector, revolutionising daily tasks on site and in the office. Companies increasingly need to recruit a new breed of worker, strong in digital and data management skills and able to collaborate across several technical disciplines.

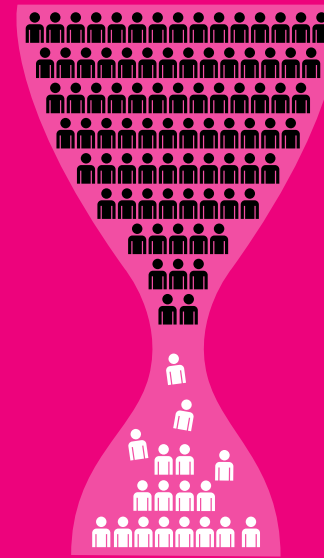
Construction's rapidly modernising image presents a powerful opportunity to attract a more diverse workforce, bringing in expertise from other industries. But many workers left the sector during the recession and the skills gap is widening. An ongoing lack of home grown talent will put UK companies at a disadvantage to international competitors, both at home and abroad. A critical shortage of skilled workers could also slow down projects that are important for economic recovery.

THE CHALLENGE

- ▶ 19% of the construction workforce is set to retire within the next 5 to 10 years
- ▶ Enrolment on undergraduate construction degrees has reduced by 43% since 2008
- ▶ The number of apprenticeships in the sector is declining – currently 33% lower than in 2010
- ▶ And yet there are 182,000 construction jobs to be filled by 2018

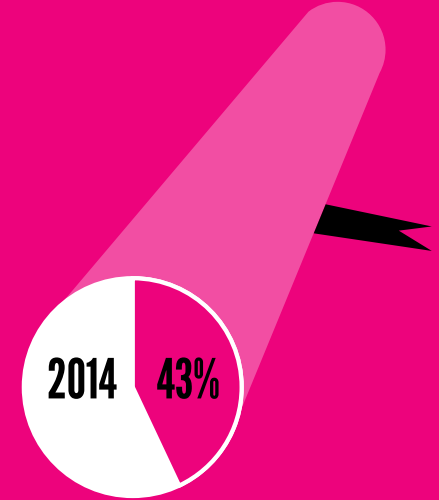
TALK TO US ABOUT

- ▶ Why the professional role of Chartered Construction Manager is essential for modernising both construction itself and academia, ensuring appropriately skilled people enter the industry
- ▶ CIOB's work on youth unemployment and apprenticeships. Our practical recommendations were included in the Parliamentary report *No More Lost Generations*, published February 2014
- ▶ How public procurement policy can be used to create effective training courses for local communities

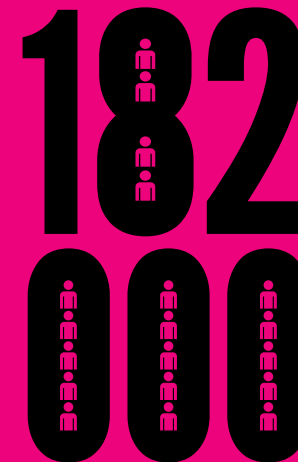


19% RETIRING WITHIN THE NEXT 5 TO 10 YEARS

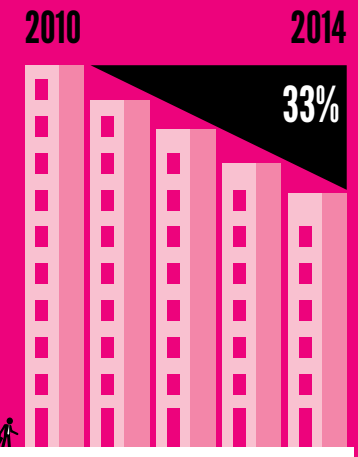
2008



UNDERGRADUATE ENROLMENT HAS REDUCED BY 43% SINCE 2008



182,000 CONSTRUCTION JOBS TO BE FILLED BY 2018



APPRENTICESHIPS FALLEN BY 33% FROM 2010

CONSTRUCTION: A LOCAL, NATIONAL & INTERNATIONAL STORY

The Government invests £45bn annually on construction and has pledged £100bn for infrastructure projects to 2020.

Spending, if carried out wisely, can stimulate local and national economies, support UK manufacturing and improve the quality of life in countless communities. It can also help British companies hone their expertise for export.

THE CHALLENGE

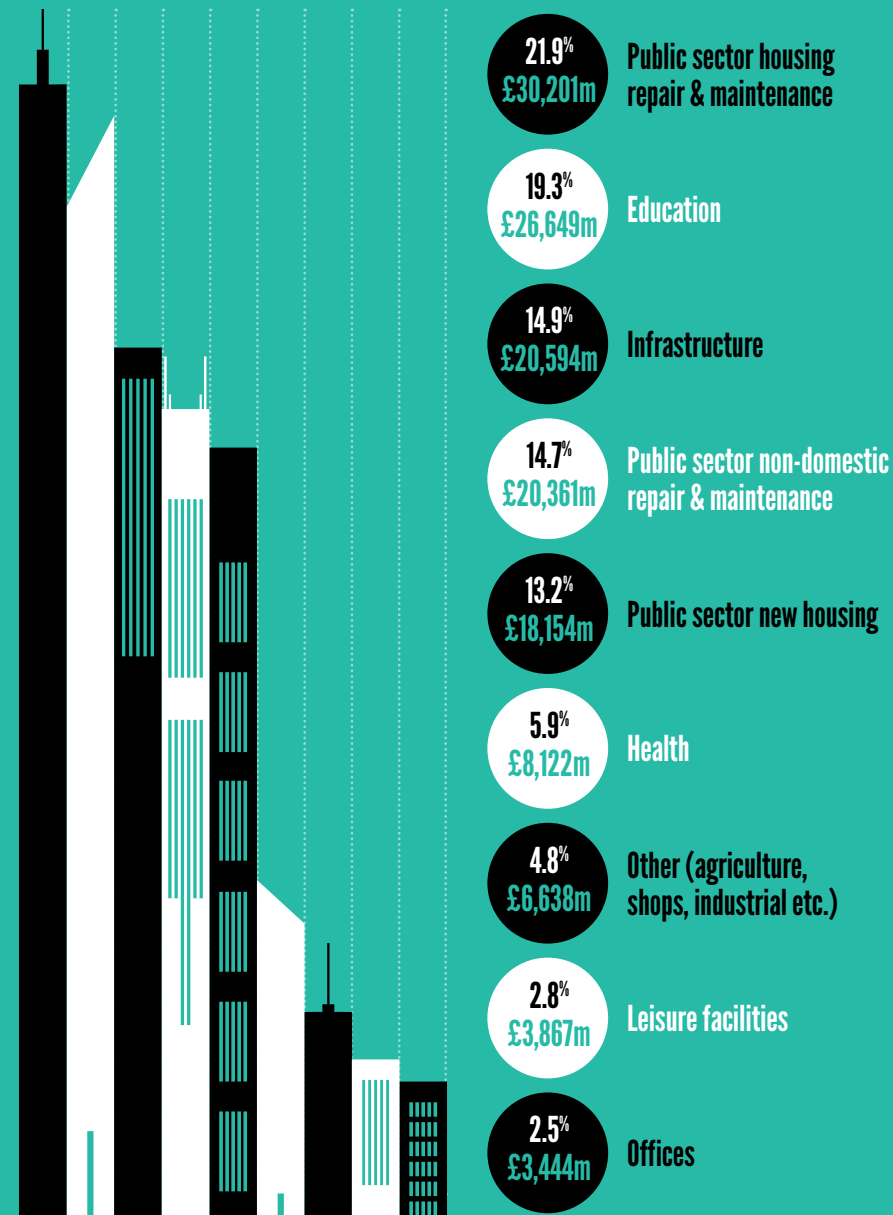
- ▶ Construction is a highly fragmented sector, made up of thousands of SMEs as well as multinationals
- ▶ Knee-jerk policy changes threaten jobs, undermine the manufacturing base and discourage investment. SMEs and start-ups are usually hit hardest
- ▶ The economic benefits of projects must be felt far beyond London, the South East and major cities

TALK TO US ABOUT

- ▶ Why all parties need to guarantee support for the 2025 Industrial Strategy for Construction
- ▶ Why it is vital for Government to retain the position of Chief Construction Advisor
- ▶ How CIOB is supporting the rollout of Building Information Modelling (BIM) to all central Government projects by 2016, and continuing the BIM legacy
- ▶ How to create better dialogue between industry and Government
- ▶ Our socio-economic piece of regional research, *The Real Face of Construction*, which contains recommendations for placing construction front and centre of a rebalanced economy

To encourage a steady pipeline of training, innovation and investment, stable long term policies are essential.

OUTPUT FROM PUBLIC SECTOR CONSTRUCTION BETWEEN 2010 AND 2013 (£138,038 MILLION)



THE CHARTERED INSTITUTE OF BUILDING: THE CONVERSATION STARTS HERE

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A fully referenced version of this document can be found online at www.ciob.org

The Chartered Institute of Building is the world's largest and most influential professional body for construction management and leadership. Our 46,000-strong global membership encompasses decision makers across all built environment disciplines from planning and design to construction, sustainability and facilities management.

Our members have led or taken senior positions on some of the UK's most high profile projects including The Shard, The Glasgow Commonwealth Games, The Olympic Park, Crossrail, Heathrow Terminal 2, as well as thousands of smaller commercial and residential schemes in both the public and private sectors.

In addition to accrediting university degrees and educational courses, we also promote innovative practices and celebrate excellence globally. Through our Royal Charter we are committed to improving the natural and built environment and working towards the betterment of society.

PAST INITIATIVES INCLUDE

- ▶ Laying the foundations for the Considerate Constructor's Scheme in 2003, which improves the image of the industry
- ▶ Setting up the TrustMark scheme, which helps the public find approved tradespeople.

Visit www.ciob.org/insight to see our latest initiatives, research and publications on issues ranging from corruption to BIM, sustainability or youth unemployment.

Or call us on 01344 630700.

We can advise you on issues that affect your own constituency, as well as the national agenda.



**CIOB: AT THE HEART
OF A MANAGEMENT
CAREER IN
CONSTRUCTION**