

# **Construction 2030 and Beyond: The Future of Jobs and Skills in the UK Construction Sector**

## **Executive Summary**





## CONSTRUCTION IS BACK

**1.1** The construction sector is back. Total output is now close to its 2008 level,<sup>(1)</sup> the start of the great financial crash. The number of jobs in the industry has reached 2.1m,<sup>(2)</sup> nearly 100,000 more than two years ago and levels not seen before summer 2010.<sup>(3)</sup>

**1.2** Construction is a cyclical industry. It is, and will remain, susceptible, to the business cycle. What construction needs is financial stability, with macro-economic policy makers pre-empting shocks to the economy where possible and dampening their impact where necessary.

**1.3** Going forward to the end of the present Parliament in 2020 the outlook for construction looks brighter than many a year. Soon the Conservative Government will publish its National Productivity Plan as a forerunner to the Budget on 8th July 2015. Construction is central to boosting UK productivity because investment in capital infrastructure is a key driver of long-term productivity. The industry was at the heart of the Coalition Government's National Infrastructure Plan<sup>(4)</sup> and the Industrial Strategy.<sup>(5)</sup>

**1.4** And, of course, the construction industry makes a significant contribution to the social fabric of each nation of the United Kingdom. New housing output is close to pre-financial crash levels,<sup>(6)</sup> with public housing output 80% higher than in 2007 and private housing only marginally below its 2007 level. Increases in overall housing output should start to feed into higher housing starts. In 2013, just under 150,000 new houses were being built, 100,000 down on the 250,000 most commentators believe is needed, although in the first quarter of 2014 over 45,500 houses were started, up 10,000 compared to the first quarter of 2013.<sup>(7)</sup>

**1.5** Additionally, the construction industry is at epicentre of the growth in population, an ageing population and immigration. The UK population in the middle of 2014 was 64.6m, increasing by 491,000 on the year before.<sup>(8)</sup> About half of the annual increase was caused by an ageing population and half because of net immigration. With 11m citizens aged 65 and over, the pressure on housing is intensifying as older people stay in their own homes longer or seeking to downsize. Net immigration is also increasing demand for housing but although different statistics show net migration is higher from EU rather than non-EU countries, it supplies the construction industry with hard working skilled people.

**1.6** Vacancies in the construction industry were running at 25,000 between March and May 2015, up 6,000 on a year earlier.<sup>(9)</sup> The latest data on redundancies, meanwhile, were 4,000 lower between January and March 2014 compared to a year earlier. The construction industry is in the thick of the immigration debate and recruiting foreign or domestic workers and recruiting trained workers or growing your own.


**1.7** The industry faces immediate challenges but there are also long-term issues to address. As part of the Industrial Strategy, the 2025 vision for construction identified five areas crucial to long-term success:

- **people:** an industry that is known for its talented and diverse workforce
- **smart:** an industry that is efficient and technology advanced
- **sustainable:** an industry that leads the world in low-carbon and green construction exports
- **growth:** an industry that drives growth across the entire economy
- **leadership:** an industry with clear leadership from a Construction Leadership Council

## THE 'SAMI 2030' INQUIRY

### Background

**2.1** With people the first of the areas forming part of the 2025 vision for construction, CITB commissioned SAMI Consulting to consider in greater depth the future of jobs and skills in the construction sector to 2030 and beyond.<sup>(10)</sup>



The aims of SAMI 2030 were to:

- **identify** the key issues and trends which the UK construction sector may encounter in the period to 2030 and beyond;
- **assess** their potential implications for industry employment, skills and training requirement, and
- **identify** opportunities of how CITB may best support future industry needs.

### Long-Term Drivers

**2.2** Ten drivers of long-term change were identified as likely to have the greatest impact on the future of the sector and its training needs (see Box 1).

#### Box 1: Drivers of Long-Term Change

##### **1 Economy**

*The construction industry is sensitive to the level of economic growth and is vulnerable to a cyclical economy. The rate of economic growth and its direction are key to demand within the different subsectors and will determine the demand for the number of trainees and the type of skill required.*

##### **2 Market Sector Conditions**

*The level of activity in each of the main market sectors of the industry – defined for this research as new housing, new building, infrastructure and repair & maintenance – will have a significant impact on training needs as each has its own requirements for skills.*

##### **3 Demography and Migration**

*The population in Britain is growing and changing rapidly, causing demand for infrastructure, homes and public buildings. The population is becoming more diverse. Immigration has recently become important to the construction industry in supplying labour. Migration patterns could provide significant shocks to skills supply.*

##### **4 Sustainability**

*The issues of climate change and carbon mitigation and adaption are important as source of work and employment. They will affect the legislation imposed on the industry and attitudes within it.*

##### **5 Technology and Innovation**

*Changes in technology have the possibility of significantly changing the industry. They are primarily digital technology – notably building information modelling (BIM) – and off-site construction processes.*

##### **6 Relationship with Government**

*Government is construction's largest customer and as a smart customer has the capability to help the industry develop and improve. A good relationship with Government is necessary to ensure that regulation is supportive and appropriate.*

##### **7 Business Model - Direct Employment**

*A significant change within the industry over the past decade has been the shift from direct employment to self-employment and sub-contracting. This has had an impact on training and implications for the relevance of government skills policy.*

##### **8 Business Model - Supply Chain**

*The British legal system and construction's adversarial contracts are considered to be a significant cause of the ills of the industry. Moves toward collaborative contracts have only been moderately successful. A change in the current model would stimulate change within the industry, improving innovation and margins, and demanding new skills.*

##### **9 External Image**

*The external image of the industry is important in recruitment and in relationships with clients and Government. The current image is poor, due to the lack of technology, poor quality, a poor health & safety records, and precarious employment terms.*

##### **10 Internal Attitudes**

*While flexibility and problem solving abound in the industry, its resistance to change, macho image, confrontational attitudes up and down the supply chain, sexism and prejudice are recognised as being deterrents to efficiency, recruitment and diversity.*

Source: From SAMI Consulting (February 2014)



## **Beyond 2025**

**2.3** The SAMI Project envisioned a world where real progress is being made on and beyond the 2025 construction strategy. Construction is seen as a successful and innovative sector that is an important contributor to growth and a balanced economy, attracting investment and highly skilled people. Collaborative attitudes are strong and technology is forging ahead. The relationship between the Government and industry is good. Direct employment levels are on the increase, although employment in the industry has fallen as a result of increased labour productivity. BIM has enabled substantial cost reductions, and all commercial and government buildings now meet zero carbon in operation.

### **From 2025 to 2030**

**2.4** The SAMI project concluded that a 2030 rather than 2025 time horizon was required for the industry to meet and surpass expectations in the Construction Strategy. The project clearly signals the need for current and future government to deliver macro-economic stability until 2030 to allow the industry time to embrace and deliver long-term internally driven change. Equally, collective working, higher levels of technology and greater use of technology are slow-burners in the construction sector.

## **The Employment Mix**

**2.5** The vision painted in SAMI 2030 is one of lower employment levels but higher direct employment rates. Continued investment in infrastructure and housing, and net migration to the UK including from the European Union – depending upon the outcome of the referendum on EU membership by 2017 - could increase employment levels during the 2020s. Similarly, self-employment could remain an important contributor to overall employment levels. Employment levels, the source of labour and the mix of direct-employment to self-employment will shape training and skill needs.

## **A Fragmented Industry**

**2.6** The construction industry is very diverse. Different parts of the industry will grow faster at a specific moment in time – such as housing, infrastructure, and other ‘new work’ delivered by the public sector today – compared to others – such as private and industrial ‘other’ new work, public housing repair and maintenance, and non-housing repair and maintenance today.<sup>(11)</sup> Companies of different sizes will operate in growing and sluggish sub-sectors and the balance between direct-employment and self-employment will vary.

## **A Shock to Instigate Change**

**2.7** The most startling finding of the SAMI project, however, is the view that to achieve the ‘vision for construction in 2025’ a “*shock might possibly be needed to instigate change.*” The point is not that another large scale external shock - such as a second financial crisis - is the order of the day but something more internal to the industry (see Box 2).

### *Box 2: A Shock to Instigate Change*

*A shock might be necessary to stimulate the realisation of the vision for Construction which the leaders of the industry and the Government are seeking through the industrial strategy for construction. It could be that the impact of a few forward thinking contractors moving rapidly ahead in the use of BIM and off-site is enough of a shock to stimulate a few other contractors who have the resources to follow, in time-honoured construction industry fashion.*


*Source: From SAMI Consulting (February 2014)*

## **The ‘People’ Response**

### **A window of opportunity**

**2.8** SAMI 2030 suggests a window of opportunity exists for the industry to change, improve and prosper. If the opportunity for change is grasped and instigated from within the industry, the repercussions for construction education, skills and workforce development are significant. To fully exploit the opportunity before it, the industry needs to appreciate:

- how new business models and new building technologies – including developments in manufacturing construction and off-site construction – will drive-up demand for new and different skills, and
- how better internal attitudes and external image will assist in attracting the right recruits.



A long-term project

**2.9** A step-change in training provision; a workforce that sees good career paths, adapts to change, embrace up-skilling and re-skilling; an improvement in education and training standards and involvement in international and European standards: all this is needed. So too is:

- the ending of stop-go infrastructure investment plans to smooth the demand and supply of skilled workers required by the construction industry;
  - training on ‘new materials’ and ‘carbon mitigation’;
  - a focus on industry knowledge as well as competency skills;
  - increasing the supply of transferable skills;
  - maintaining the portability of qualifications, and
- involvement in the development of international and European qualifications as part of exporting skills abroad as well as gaining an understanding of their relevance if overseas contractors enter the UK market.

**2.10** But SAMI 2030 makes clear, there is no quick fix. “*Industry*”, says the report “*needs to be prepared for this to be a long-term project.*”

CITB Actions

**2.11** SAMI 2030 also identifies three key actions for CITB. The first is to promote activities within ‘Construction 2015’ (which is now underway). The second is to actively seek and provide for new skill demands across the industry. And the third is to ensure that Government funding and rules for training, such as for apprenticeships, ‘*are what the industry wants and needs*’.

## EDUCATION AND SKILLS POLICY ENVIRONMENT

**3.1** As the industry moves forward, the policy environment is by definition short-term – even with a majority UK government in power until May 2020 – and highly complex. The Queen’s Speech,<sup>(12)</sup> the forthcoming Budget in July and the Spending Review due in the summer will set the policy environment within which the construction industry will have to operate.

UK-Level

**3.2** At the UK level, a referendum on UK membership of the European Union will be held by the end of 2017. A key issue is the free movement of labour between member countries. Although net migration from non-EU countries has reduced, this is not been the case with respect to EU member states. It will take time to ‘train our own before significantly reducing the recruitment of migrant skilled workers’ even if benefits to migrant workers are reduced. Additionally, within the UK there remains the question of Scottish independence – with elections to the Scottish Parliament in 2016 – and devo-max in Wales, Northern Ireland as well as Scotland in line with the Smith Commission and beyond. Cuts to departmental and welfare spending are expected which will affect the nations of the UK in different ways but they will significant nonetheless.

England

**3.3** Devolution in England is gathering pace and the *Cities and Local Government Devolution Bill* is already before Parliament. Apprenticeship funding, however, will be devolved to each employer. The recently published *Enterprise Bill* will contain provisions to protect the term ‘apprenticeship’ and place a duty on public employers to recruit apprentices. The forthcoming *Full Employment and Welfare Bill* places a duty on the Government to report on progress towards 3 million new apprenticeship starts by 2020 and seeks to reduce the benefit cap from £26,000 to £23,000, and abolish housing benefit to unemployed 18-21 year olds. The *Immigration Bill* which seeks to reduce the demand for skilled migrant labour and crack down on the exploitation of low skilled workers also proposes a consultation on a *skills levy* on funding apprenticeship schemes for British and EU workers by implementing a new visa levy on business that use foreign labour.

**3.4** Expenditure on apprenticeships in England is about £1.5bn, with 0.7bn for 16-18 year olds from the Department for Education and £0.8bn from the Department for Business, Innovation and Skills for adult apprentices. Apprenticeship funding is a protected area of spending in England within both DfE and BIS. Indeed, additional resources from 2016/17 can be expected from welfare savings (£300m) – cuts in housing benefit and reducing the benefit cap – as well additional resources from the Libor tax (£50m per annum) and funding from the Skills Visa Levy. Although additional resources are expected for apprenticeship funding, employers can expect to have greater control through the introduction of an employer apprenticeship grant model. The cost of training for 16-18 year olds will be fully funded but there remains an expectation that mandatory employer cash contributions will apply to adult apprenticeships. CITB is planning to dove-tail grants from the levy to the new reformed apprenticeships system expected to be in place by April 2017.



**3.5** SAMI 2030 highlighted the degree to which colleagues on the education and training side of the construction industry are acutely aware of how increasing fragmentation and diversity shapes current and future human capital needs of the industry. One-size-fits-all education and training policy responses might be too unsophisticated to meet the needs of our highly diverse sub-sectors. We are working with the Government to ensure the funding and standard reforms meet the long-term needs of

the industry, including the high levels of self-employment. Even so, our horizons must be beyond apprenticeships. The Government has decided to remove the cap on student numbers entering higher education in England. CITB will be working to ensure more entrants on full-time and part-time undergraduate courses choose degrees in 'construction and the built environment'.

#### **References**

**(1)** Table 1A.A, Output in the Construction Industry, ONS, 12th June 2015. **(2)** Table 6, UK Labour Market, Statistical Bulletin, ONS, June 2015. **(3)** Table 6, UK Labour Market, Statistical Bulletin, ONS, June 2012. **(4)** National Infrastructure Plan, HM Government, December 2014. **(5)** Construction 2015 – Industrial Strategy, HM Government, July 2013. **(6)** Ibid, ONS, 12th June 2015. **(7)** Table 211, Permanent Dwellings Started and Completed by Tenure, UK Quarterly, DCLG, May 2015. **(8)** Annual Mid-Year Population Estimates 2014, ONS, 25th June 2015. **(9)** Table 22, Ibid, ONS, 12th June 2015. **(10)** The Future of Jobs and Skills in the UK Construction Sector to 2030 and Beyond, SAMI Consulting, February 2014. **(11)** Ibid. Output in the Construction Industry, ONS, 12th June 2015. **(12)** The Queen's Speech. No.10, 27th May 2015.

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