



Chartered Institution of Highways & Transportation response to The All Party Parliamentary Group for Excellence in the Built Environment inquiry investigating the impact of Brexit on future skills needs in the construction industry and the built environment professions.

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CIHT is a charity, learned society and membership body with over 14,000 members spread across 12 UK regions and a number of international groups. We represent and qualify professionals who plan, design, build, manage and operate transport and infrastructure networks. Part of our vision is to demonstrate transport infrastructure's contribution to a prosperous economy and a healthy and inclusive society. Our values are to be Professional, Inclusive, Collaborative and Progressive.

CIHT will focus its response to the capabilities of the highways and transportation sector.

Introduction

It is common knowledge that, as an industry, transport infrastructure is suffering a severe skills shortage at a time when investment in major projects is increasing and the demand for skilled technicians, planners, designers, engineers and managers is growing. Engineering UK recently found that we need 182,000 new engineers and technicians a year until 2022ⁱ. This does not take account of the other specialised highways and transportation related fields that are required to deliver these projects.

We need to attract more young people from all backgrounds into highways and transportation. To do this, we must make them aware of the interesting and varied job roles and career paths on offer in a way that catches their imagination and encourages them to want to find out more.

There is no 'quick fix' to solving skills shortages – finding, training, retaining and developing the next generation of highways and transportation professionals will take time.

Leaving the EU will undoubtedly create a number of challenges for the transport infrastructure, engineering and construction industry, not least uncertainty. The industry has been faced with enormous pressures since the recession, but it has been the policy of this government since 2010 to use investment in infrastructure as a means to sustain or stimulate the economy. In the light of the Autumn Statement (November 2016), where the Chancellor reinforced the government position that the UK will invest in its infrastructure to help drive the country forward, having the right number of skilled workers to carry out the program of work has never been more pressing.

The UK has a strong reputation internationally for its engineering and transportation professional capabilities, from its worldwide renowned research and development, to its universities and companies and it is important that we seek to improve, highlight and promote these qualities in the light of Brexit. CIHT has been working closely with the Royal Academy of Engineering and other professional bodies and would recommend the APPG to the recent publication 'Engineering a future outside the EU: securing the best outcome for the UK'ⁱⁱ. This evidence based report looked at three themes: People and Skills; Finance and Markets and Standards and Legislation.



Migrant workers

There has perhaps traditionally been an over-reliance on migrant labour from the EU. It is, however, difficult to comment on the effect leaving the EU will have on the skill pool as we are still waiting to hear the type of Brexit that will be imposed and the subsequent negotiations with former trade partners. Migrant workers from the EU play a huge role in the construction/engineering industries and their loss would impact greatly. The Office of National Statistics figures state that nearly 12 per cent of the 2.1 million construction workers come from abroad. It is important that the government considers this in its future negotiations. These workers are often highly skilled and have experience of working on significant infrastructure and construction projects.

Major infrastructure projects rely on an injection of labour at certain times, normally for fixed periods, to complete particular parts of a project. Much of this labour currently comes from EU countries. If Brexit results in curtailment of free movement of people, the UK will lose a reliable pool of labour and this is likely to slow down the delivery of projects, at least in the short-medium term while the UK 'skills up' to cope with demand.

This not just a question of numbers – capability is equally important. Acquiring the necessary skills and knowledge to work on infrastructure projects takes time. Cutting corners in this regard risks jeopardising quality and safety.

Training home grown talent to meet demand

We are experiencing unprecedented investment in our infrastructure whilst at the same time suffering from a reduced level of intake into the industry. The Department for Transport by its own admission in its 'Transport Infrastructure Skill Strategy' report highlighted that we need 55,000 more transport professionals by 2020ⁱⁱⁱ. Transport and Infrastructure is in direct competition with other sectors who are seeking to recruit the best talent. This is not just a UK problem as the request for skills in infrastructure needs to be seen in a global context.

The skills shortage is a serious issue, one that has the potential to undermine the Industry's ability to deliver the key infrastructure projects that are underway or in the pipeline. This is also impacts heavily on the on-going maintenance work required to keep our transport infrastructure fit for purpose. The development of a Transport and Infrastructure Skills Strategy is vital if we are to meet the Government's infrastructure targets and remain competitive in a global market.

The strategy will initially focus on roads and rail and will set out how government will work with its partners, including the supply chain, to make sure we have the right skills in place to deliver the infrastructure and transport services need to drive further economic growth throughout the country.

The strategy sets out how government, its delivery partners and industry will:

- deliver on its ambition for 30,000 apprenticeships in roads and rail over the next five years to 2020, working together with our supply chain partners;
- ensure the right mix of apprenticeships are on offer, including many at higher skills levels with training in new technologies;
- explore upskilling the existing workforce to meet the new challenges;
- encourage greater diversity in the workforce, including getting more women into engineering;
- develop a co-ordinated national network of transport infrastructure skills colleges to train the transport workers of the future.



The Government's push on apprenticeships is welcomed but is not enough to meet the demand on its own and CIHT have developed two recent tools to help the profession.

CIHT Routes to Diversity & Inclusion toolkit

There are already 40,000 people employed in road maintenance and operations. This is an ageing workforce drawn from a too narrow talent pool and industry skills needs are changing. Previous under-investment in skills and training having resulted in a skills shortage. CIHT are seeking to encourage companies to invest in diversity and inclusion, tapping into parts of society that have traditionally not engaged in careers in transport and infrastructure. To do this CIHT have developed a Routes to Diversity and Inclusion toolkit^{iv}

The toolkit offers practical guidance, case studies and links to reliable sources of expert advice for employers to help recruit, retain and develop a more diverse workforce. By doing so, employers will improve their own business performance and increase capacity within the industry.

Opening the sector to a more diverse workforce and taking action to engage, retain and develop the people that work with us is vital to the capacity, capability and future sustainability of the sector taking action in response to skills shortages to attract people who may not have traditionally considered careers in highways and transportation.

There is competition for skilled workers from other sectors of UK industry and from other countries with ambitious infrastructure improvement programmes. To attract more people into construction, the sector needs to change its image to appeal to more diverse groups who have not, traditionally, sought careers in the industry.

There also needs to be a wider recognition of transferable skills which would allow a more flexible approach to labour distribution across construction, for example there is a significant overlap in skills needs across the road and rail sectors which could be utilised.

CIHT Careers Toolkit

Over the last year, CIHT has led a project funded by the Rees Jefferies Road Fund to produce a Highways and Transportation Careers Toolkit^v. The innovative, interactive material is designed to highlight a range of exciting careers in the sector, and is tailored for 3 different educational stages- primary and secondary schools and tertiary education.

The aim of the toolkit is to be a resource for CIHT Ambassadors when visiting primary schools, secondary schools, colleges, universities and careers fairs. The Transport Infrastructure Skills Strategy made clear the importance of engaging young people from an early age; giving them access to the education, training and job opportunities they need to meet their full potential and flourish in their chosen careers.

Recognising that a career in transport needs to be a part of this choice, and the careers toolkit will help to make this a reality. CIHT's Careers Toolkit is designed to help our members inspire young people in schools, colleges and universities to follow their lead and pursue a career in our exciting, multifaceted industry. The toolkit offers practical help to achieve this long-term skills goal.

Consequences of Brexit?

Losing the ability to recruit skilled workers from EU countries could lead to wage inflation, poaching of staff, pressure on the supply chain to deliver, negative impact on customer/end user choices, which projects to complete and which to abandon. It is therefore imperative



that government develops an over-arching skills strategy for the construction, infrastructure and built environment industries that mitigates against the potential fall-out from Brexit.

However, leaving the EU also creates an opportunity to upskill the British workforce. A chance to tap into and invest in people and resources we have perhaps ignored; a chance to improve productivity of the workforce.

The way we leave the EU could have a big effect on labour, research and development funding comes from EU, standards and legislation are driven by Europe. It is vital that standards are maintained. Having different standards to Europe could also cause further inefficiencies and drive up costs.

Introducing transferable skills, mobility between multiple sectors and innovation will all help improve capacity, capability and productivity.

ⁱ <http://www.engineeringuk.com/Research/Engineering-UK-Report-2016/>

ⁱⁱ <http://www.raeng.org.uk/publications/reports/engineering-a-future-outside-the-eu>

ⁱⁱⁱ [Transport Infrastructure Skills Strategy](#)

^{iv} <http://www.ciht.org.uk/en/about-us/diversity-and-inclusion/routes-to-diversity--inclusion-toolkit.cfm>

^v <http://www.ciht.org.uk/en/careers/inspiring-the-next-generation/index.cfm>