
CITB ANALYSIS

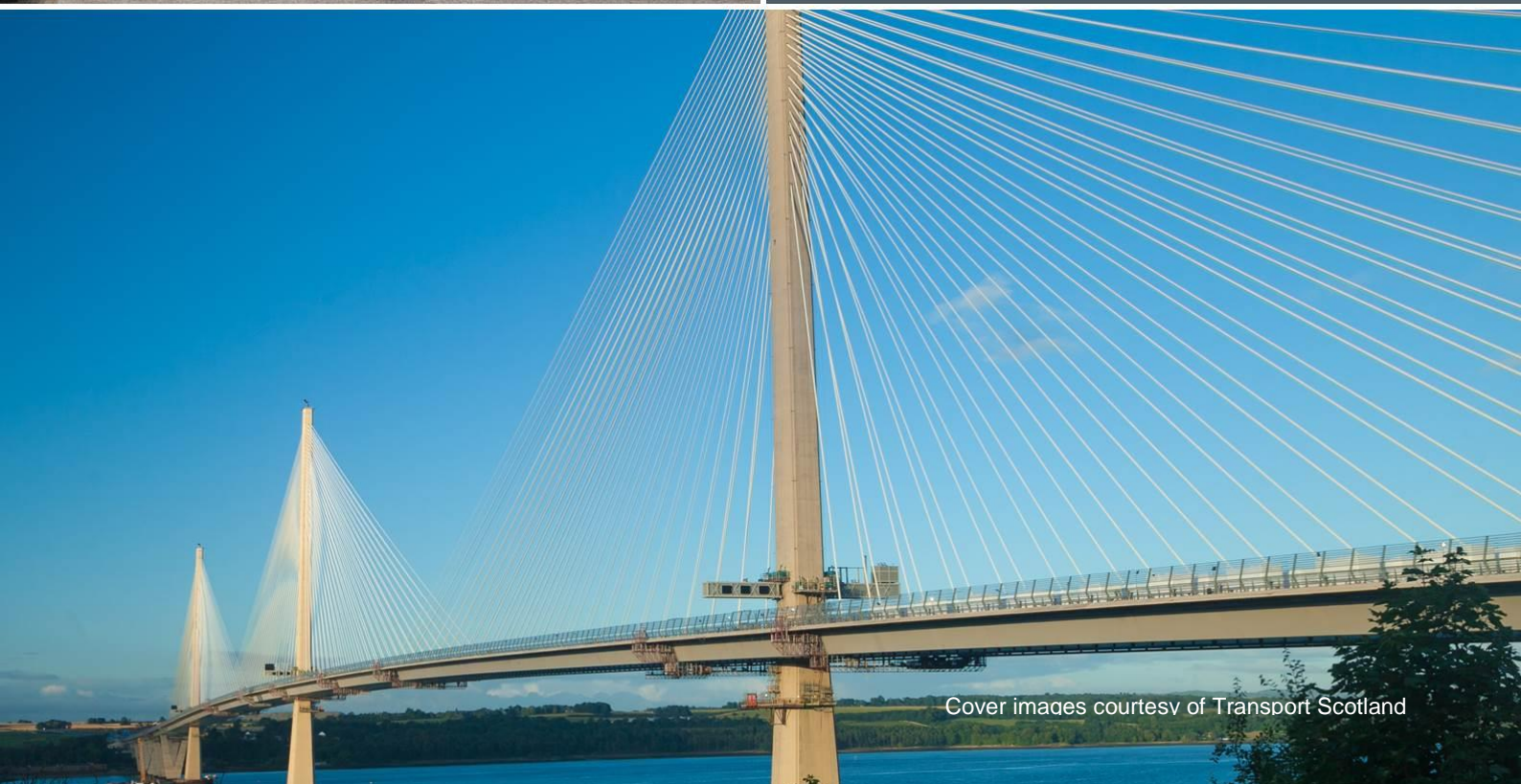
Local Construction Skills Needs for Scotland



EXECUTIVE SUMMARY

An analysis of the opportunities presented by the construction landscape in Scotland

June 2018



“The Local Construction Skills Needs research provides, for the first time, evidence of construction skills gaps on a regional basis across Scotland. This will allow us, in partnership with industry and key stakeholders, to develop regional skills action plans which address existing and emerging occupational shortfalls. We will now be able to benchmark and measure outcomes in relation to how we close these occupational gaps, and in turn increase the flow of skilled workers into the construction industry”.

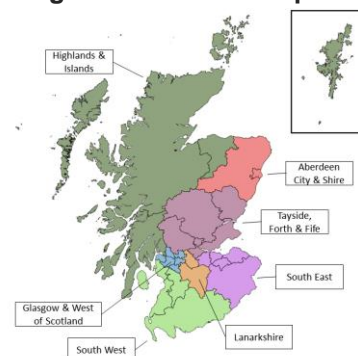
Ian Hughes, CITB Partnership Director for Scotland

EXECUTIVE SUMMARY

This report, for the first time, provides an assessment of demand, supply and emerging skills gaps across seven local Scottish areas over a five year period. It incorporates a wide range of data and analysis as well as the views of Scottish contractors Government stakeholders and Federations who took part in consultation workshops. This report is the first of its kind and is not without limitations, particularly regarding available data, rural challenges and workforce mobility. But the aim is to work together with industry and the education sector to address those challenges, repeating the analysis on an annual basis so we can create a series of **regional skills action plans** that are meaningful and enrich the evidence base for Scotland.

This executive summary provides a concise overview of key messages and complements the more detailed outputs from the study.

There are 32 local authorities in Scotland. For the purposes of this report and to get the best results from the data they have been grouped into seven areas including; Aberdeen City & Shire, Glasgow & West of Scotland, Highlands & Islands, Lanarkshire, South East, South West, and Tayside, Forth & Fife.



Demand Overview

Overall labour demand from construction spend in Scotland is forecasted at 247,400 people in 2018 which includes all work forecast in the project pipeline and estimates of other work including R&M and smaller value projects, which is of considerable importance to local contractors.

During 2018 demand is high across the trade occupations of wood trades and interior fit-out (24,500), electrical trades and installation (19,100) and plumbing, heating, ventilation and air conditioning trades (15,350). Whilst the most labour intensive non-manual occupational group is non-construction professional, technical, IT and other office-based staff with a demand of 33,550 people indicating the need for support functions across the industry.

This ‘pattern of demand’ at occupational level is generally repeated across Scotland and the table below provides a summary of the project value across the seven areas for 2018, estimated labour demand and the current supply, based on the people who mainly work in those areas.

Area	Total project pipeline spend in 2018 (£m)	Total Labour Demand in 2018 (People)	Supply (current workforce 2017)
Aberdeen City & Shire	685	31,350	32,250
Glasgow & West	1,509	51,650	52,500
Highlands & Islands	1,592	35,400	22,450
Lanarkshire	465	13,200	27,800
South East	1,601	54,850	42,750
South West	513	17,600	22,800
Tayside, Forth & Fife	1,668	43,250	42,500
Total for Scotland	8,033	247,400	241,000

Supply Overview

As construction work is project based over varying timespans, the workforce has developed to be adaptable and when required highly mobile. When considering Supply, the existing workforce will be the main basis for meeting demand in 2018 and a geographic breakdown has been produced using data on main location of work within Scotland as indicated by the ONS’s Annual Population Survey & Labour Force Survey.

Construction employment across the seven areas shows three areas consistently accounting for nearly 60% of the total workforce namely Glasgow & West, South East, and Tayside, Forth and Fife.

Supply and Gap Analysis Overview

The report identifies a number of occupations for which there is high demand and a risk of a shortfall – i.e. where potential action is required to boost workers available in the seven geographical areas across Scotland. The table below highlights the occupational groups that are ‘at risk’ in terms of skills gaps.

When viewing the table (particularly the numbers) it should be recognised that the workforce is highly mobile at a regional level- particularly in more rural areas and ‘imported labour’ is commonly used for large projects.

Demand v Supply by Area (Source: CITB & WLC)

Occupational Groups	Aberdeen City & Shire	Glasgow & West	Highlands & Islands	Lanarkshire	South East	South West	Tayside, Forth & Fife	Scotland
Construction Managers and Supervisors	-650	-250	-2,650	2,500	-2,500	700	-600	-3,450
Construction Professional / Technical	2,050	3,300	150	3,650	1,100	2,100	2,750	15,150
Labourers	-50	300	-800	750	-300	250	-100	50
Non-construction trades	150	300	-200	350	100	200	200	1,050
Skilled trades - bricklaying	100	50	0	400	-300	200	150	600
Skilled trades - electrical	50	500	-1,050	1,300	-650	450	100	750
Skilled trades - other occupations	-1,000	-800	-4,200	2,150	-3,000	450	-1,150	-7,550
Skilled trades - painting and decorating	-350	-450	-750	350	-900	50	-450	-2,450
Skilled trades - plumbing & HVAC	-450	-800	-650	400	-1,450	-50	-650	-3,650
Skilled trades - wood occupations	-250	-300	-700	1,250	-1,600	450	-100	-1,250
Support staff - office based	-750	-1,050	-2,100	1,450	-2,600	250	-950	-5,800
Grand Total	-1,150	800	-12,950	14,550	-12,100	5,050	-800	-6,400

Key

Supply is greater than Regional Demand	
Potential shortfall in regional Supply	
Significant shortfall in regional Supply	

Skilled trades – other occupations covers the likes of roofers, floorers, scaffolders and other occupations not identified above. Note: Individual values may not sum up to totals due to rounding of data.*

Key Highlights

With overall demand in 2018 estimated at 247,300 and an existing workforce of nearly 241,000, the overall workforce Gap Analysis across Scotland is estimated at nearly 6,400 workers, which represents a shortfall of 3% on current employment.

Some of the volatility we are seeing in the **gap analysis** can be due to relatively low workforce numbers for particular occupations. The size of the construction market (for example, Highlands & Islands) should also be borne in mind. The occupational groups show some noticeable potential gaps in a number of areas such as:

- Painting and decorating.
- Plumbing & HVAC.
- Office based support staff – office based.
- Skilled trades - other occupations.

The table also highlights the potential regional variation with both the Highland & Islands and the South East areas having shortfalls across a range of occupations, whereas Lanarkshire and the South West are show a surplus of supply.

The analysis also shows:

- There is an underlying element of consistency in the current distribution of businesses, workforce and training that has the capacity to flex to respond to future demand.
- The analysis looks at matching regional demand to the supply of labour; the mobility of construction workers gives a fluid picture, with workers at times travelling longer distances to work.
- However there are particular pressures in some areas such as:
 - Demand in the Highlands & Islands and South East.
 - Training in the Aberdeen City & Shire area.
 - Workforce numbers in the Highlands & Islands.
 - Potential shortage in Painting & Decorating and Plumbing & HVAC skills.
- Evidence shows that there is a range of provision spanning both FE and HE covering all occupations.
- With around 70% of SVQs linked to apprenticeships, this will be a key focus for future workforce development.
- Higher education. The majority of students live, study and work in Scotland, however it is difficult to link regional demand to regional location of HE institutions.
- Qualification infrastructure remains an issue. Training needs to be flexible to meet the workforce needs in Scotland. Realistically the FE infrastructure cannot deliver everything as it needs substantial resource (training areas, assessors, equipment, etc.) and therefore some centralisation of training is pragmatic.
- The **wider study** shows that there are some noticeable variations in particular occupations, such as building envelope specialists; construction project managers and glaziers, which all have high levels of potential demand.
- There is an important ongoing need to replace members of the construction workforce (measure through the CSN Annual Recruitment Requirement).

Survey Data

The analysis of relevant State of Trade data and the gap analysis should be caveated by the fact that the Scottish extract from both the FMB and CECA surveys are based on relatively small survey samples, an average of 18 per quarter over the past three quarters for the FMB's and 26 per quarter for CECA's. In the case of the FMB survey, while some of the results support the conclusions of the gap analysis, others do not, while the very high level breakdowns available in the CECA survey make any meaningful comparison with the gap analysis difficult.

However other survey data from CITB (Employer Panel and Employer Research, 2017) and RICS also points towards a similar view with employers experiencing skills shortages across a range of trades.

Recommendations

The report proposes recommendations that include:

1. **Utilise the evidence base presented to develop regional skills action plans** – take this information, as a starting point and work with all relevant stakeholders to create the seven regional skills action plans. The overall aim of this planning is to maintain the construction workforce at the right level with the right mix of skills, replacing the pipeline of people needed. This local planning approach needs to be informed by local evidence set against the backdrop of national activity. Scotland is delivering construction activity from its

existing workforce so ensuring planning for the right future workforce is vital. An updated view of project demand and supply of labour is vital in ensuring market confidence for industry on a consistent basis.

2. **Discuss and decide how to manage emerging skills gaps at a regional and occupational level- ensuring the right training infrastructure is in place now and for the future** - this report, for the first time provides a view at both geographical and occupational level of potential skills gaps. Notably across skilled trades in Painters & Decorators, Plumbing and HVAC and across a whole range of support staff needed to underpin the supply chain across Scottish construction. At a management level there are concerns around emerging gaps in Construction Managers and Supervisors. The report also highlights the supply of labour differences between geographical areas specifically Lanarkshire, where labour supply appears plentiful and the South East and the Highlands & Islands where the pressure on the labour supply is at its highest, though this has to be viewed in context given the rural nature of the areas and the mobile nature of the workforce- particularly regarding large projects and pressure points in terms of ensuring the right training provision is in place. It is recognised that there is a need to interrogate data even further to uncover the labour reality for the Highlands & Islands and this is addressed in our final recommendation.
3. **Focus on recruitment and retention building on the success of Scottish Apprenticeships** – recruiting and retaining through the available Scottish workforce is crucial to the construction sector. Attracting both young people and mature adults is vital both as apprenticeships and career changers. Offering clear career progression pathways and showcasing construction as an attractive proposition needs to continue at local levels and as an integral part of regional skills action plans.

Building on the value and success of Scottish apprenticeships needs to continue and it is recognised that recruiting and retaining apprenticeships is a challenge across all seven areas, compounded by numeracy and literacy issues. It is also recognised that SME's train many apprentices who then move on to larger companies when qualified. Regional planning needs to work across the education sector and with both CITB and SDS to determine how the optimum outcome can be achieved for Scottish apprentices in a realistic environment through a blend of both physical and immersive learning solutions.

4. **Seek to address issues that are significant for Scotland; specifically upskilling and the challenges of rural locations** – the report highlights specific issues that are a particular challenge for Scotland. The first is upskilling and the absence of any real programme of activity to address the issue.

Linked to this is the challenge of operating in rural pockets where construction workers are required to be highly mobile and multi-skilled. The Highlands & Islands is the clear example but in reality the majority of Scotland is rural. It is recognised through employer feedback that the workforce addresses any peak in demand in rural locations by a reactive and mobile workforce, including imported labour, but that an improved scheduling of projects and forward demand management would enable employers to be more supported in working together and utilising local supply-chains.

5. **Using procurement and funding as a lever for change-** any report of this nature will place significant value on not just the data results but the views of the industry gained through consultation. During this process a strong view was expressed throughout that procurement and funding should be explored across the seven regional areas to determine where levers could be utilised to shape social value & community benefits across Scotland- this includes both aspects of employment and skills planning and enabling timescales that allow local contractors to tender.

6. **Maintain this evidence base annually** – this report delivers analysis of demand, supply and skills gaps for the Scottish construction sector at seven geographical levels. This has not been achieved to date and represents a 'starting point' from which the information should be utilised to inform regional planning.

It is certainly recognised that more work is needed to unpick the information available on training data and that the demand profile needs further work to understand the range of information between larger projects and repair & maintenance. The research exercise has also further exposed the challenges of data available at occupational group level and the need to understand specific drivers in unique areas such as the Highlands & Islands.

Industry needs the confidence to plan then train and develop and at this level. Updated annually this research, will track trends in Scotland and add immense value by providing the underpinning evidence needed to make informed decisions. This can only be achieved through true collaboration with partners.

Next Steps

CITB will continue to work with all industry, education and government partners across the seven regions to develop action plans to address the issues raised in this report and the recommendations above.

AUTHORS

Doug Forbes (WLC)
Ian Hill (CITB)
Sandra Lilley (CITB)

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CITB, Bircham Newton, Norfolk, PE31 6RH
+44 (0)344 994 4400
www.citb.co.uk

CITB is registered in England and Wales
Charity
No 264289 and in Scotland Charity No
SC044875

Whole Life Consultants Limited, Dundee University Incubator,
James Lindsay Place, Dundee, DD1 5JJ
+44 (0)1382 224 304
enquiries@wlcuk.com

Whole Life Consultants Ltd is registered in Scotland as SC259987, VAT
number 852809506 Registered office c/o 14 City Quay, Dundee DD1 3JA