



Shortage occupations in **construction**: A cross-industry research report

January 2019



Summary

This report provides the results of a survey to identify occupations that are experiencing, or may experience shortages of available staff, in the UK construction sector.

The findings of the report are based on the results of a cross-industry survey supported by 276 companies which collectively employ more than 160,000 workers.

Construction & building trades supervisors (SOC Code: 5330) are consistently reported as a shortage occupation. This is true both now, and is forecast by respondents to be the case post-Brexit.

The research also found the following roles are frequently seen as shortage occupations:

- general labourer (SOC Code: 9120)
- quantity surveyors (SOC Code: 2433)
- construction project manager (SOC Code: 2436)
- civil engineer (SOC Code: 5319)
- bricklayer (SOC Code: 5312)
- carpenter (SOC Code: 5315)
- plant and machine operatives (SOC Code: 8229)
- Production managers and directors in construction (SOC Code: 1122)
- chartered surveyor (SOC Code: 2434).

To address these issues, it is recommended that:

- Industry to work with UK Government and other stakeholders to ensure that there are pathways for UK workers to fill the shortage roles.
- Migration Advisory Committee to consider whether to include the above 10 priority roles in future Shortage Occupation lists.
- Industry to carry out immediate further research to define shortage job titles for the above roles, and for those 'Other Occupations' identified in this research.
- Industry to work with Migration Advisory Committee and UK Government to arrange roundtable employer discussions to provide further insight.
- Industry to work with Migration Advisory Committee and UK Government to model the impact of migration policy decisions on UK construction.
- UK Government to consider appropriate transition period to allow UK businesses to adapt to the changing nature of migration, with regular reassessment of shortage expected future skills supply and demand.
- UK Government to maintain commitment to long term pipeline of construction and infrastructure investment to allow companies to attract, develop and retain UK workers for shortage occupations.
- UK Government to provide consistent policy environment in relation to apprenticeships, to ensure businesses can train and develop their staff through their career with confidence the policy environment won't change.
- UK Government to consider potential for temporary short-term workers to train while in the UK to achieve RQF 3, helping the UK to secure employees in key shortage occupations.

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1. Introduction

UK construction had a turnover of around **£370bn** in 2016, adding **£138bn in value** to the economy – nine per cent of the total – while employing around **3.1 million people**.

The industry will face increased demand caused by major infrastructure projects such as HS2 as well as the Government's own housebuilding targets. There is a huge number of projects underway which will act as the backbone of the economy for 100 plus years.

This workforce has an aging demographic which is leading to increased pressures to attract and retain appropriately skilled workers. This has been temporarily filled by EU migrants with the Labour Force survey suggesting that between 1998 and 2016 there has been a significant increase in foreign born employment in the UK construction industry from 4.1% to 12% equating to 252,000 people.

The recently announced Construction Sector Deal should act as a catalyst to change the skills profile of the construction sector but this will take years to actually substantial changes in practice. This short term skills gap is the challenge this report highlights.

This report provides the results of a cross-industry survey to identify occupations that are experiencing, or may experience shortages of available employees, in the sector.

The report has been prepared to support work by industry to deliver the Construction Sector Deal to address these shortages. This may be achieved through recruitment, upskilling of the existing workforce, and potentially through managed migration of individuals with the relevant capabilities. The survey was launched in December 2018, closing in January 2019. It has been supported by members of many of the UK construction sector's leading trade bodies including:

- Association for Consultancy & Engineering
- Build UK and member trade bodies
- Civil Engineering Contractors Association
- Construction Plant-hire Association
- Construction Products Association and member trade bodies
- Federation of Master Builders
- Highways Term Maintenance Association
- National Federation of Builders
- The Chartered Institute of Building.

276 companies that collectively employ more than **160,000 employees** took part in the survey.

2. Survey results

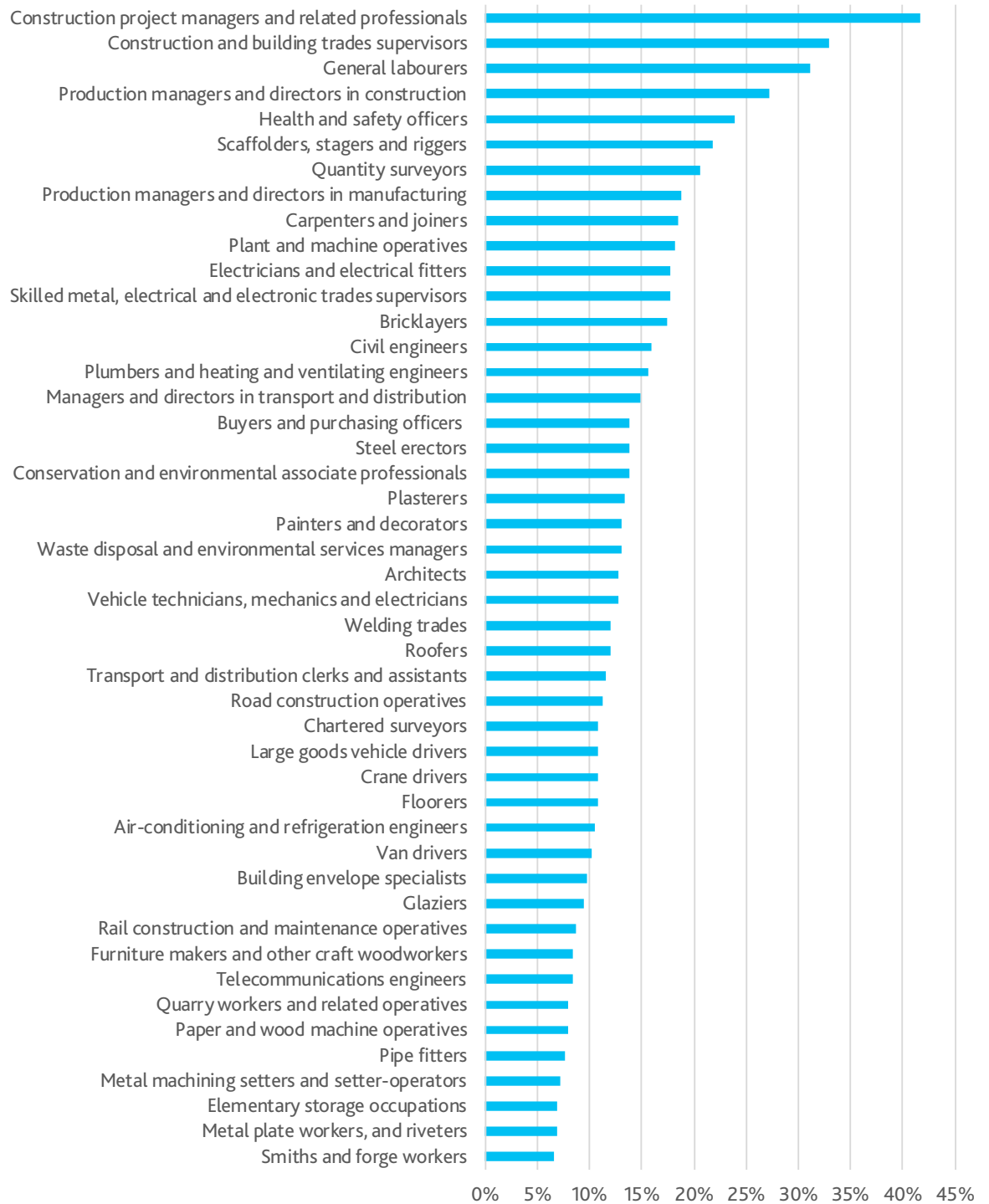
Respondents were asked to identify which occupations they currently experienced:

1. some difficulties recruiting, and
2. severe difficulties recruiting.

Recognising the fact that c. 10 per cent of the UK construction workforce is made up of migrant labour, respondents were also asked to identify those occupations that they expect to see:

3. some difficulty recruiting once the UK has left the European Union and,
4. severe difficulty recruiting for once the UK has left the European Union.

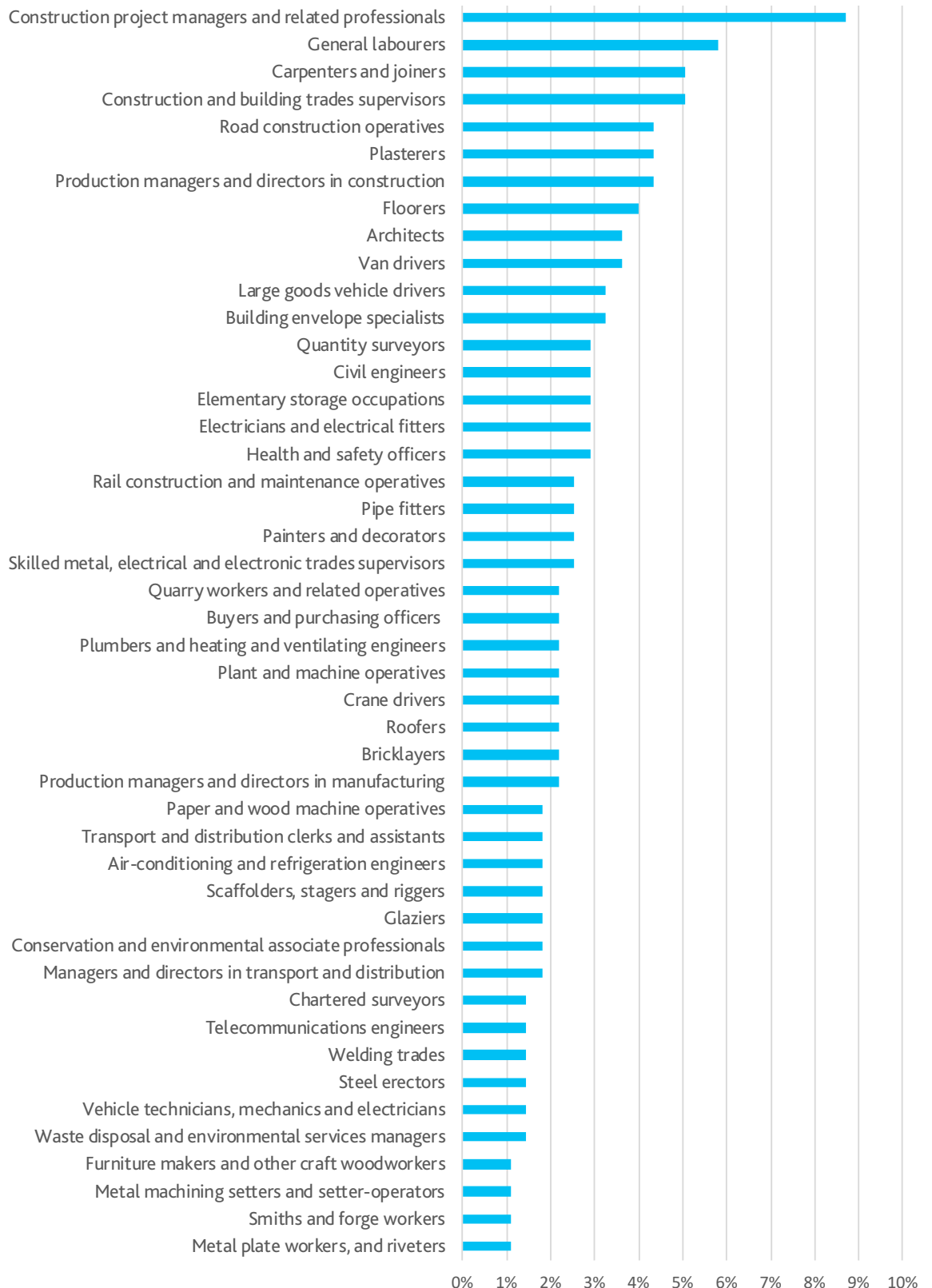
2.1 Some difficulties now



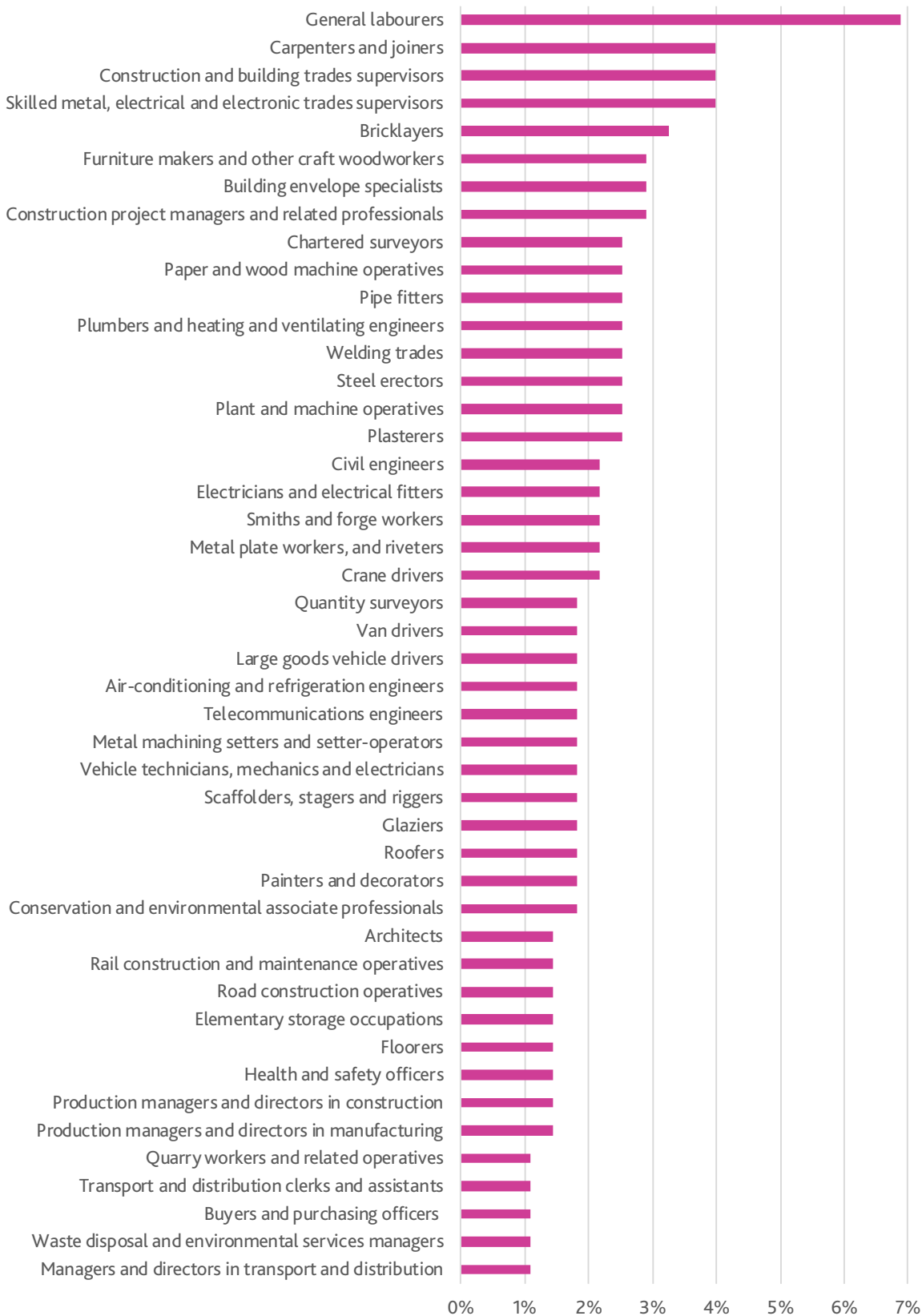
2.2 Severe difficulties now



2.3 Some difficulties post-Brexit

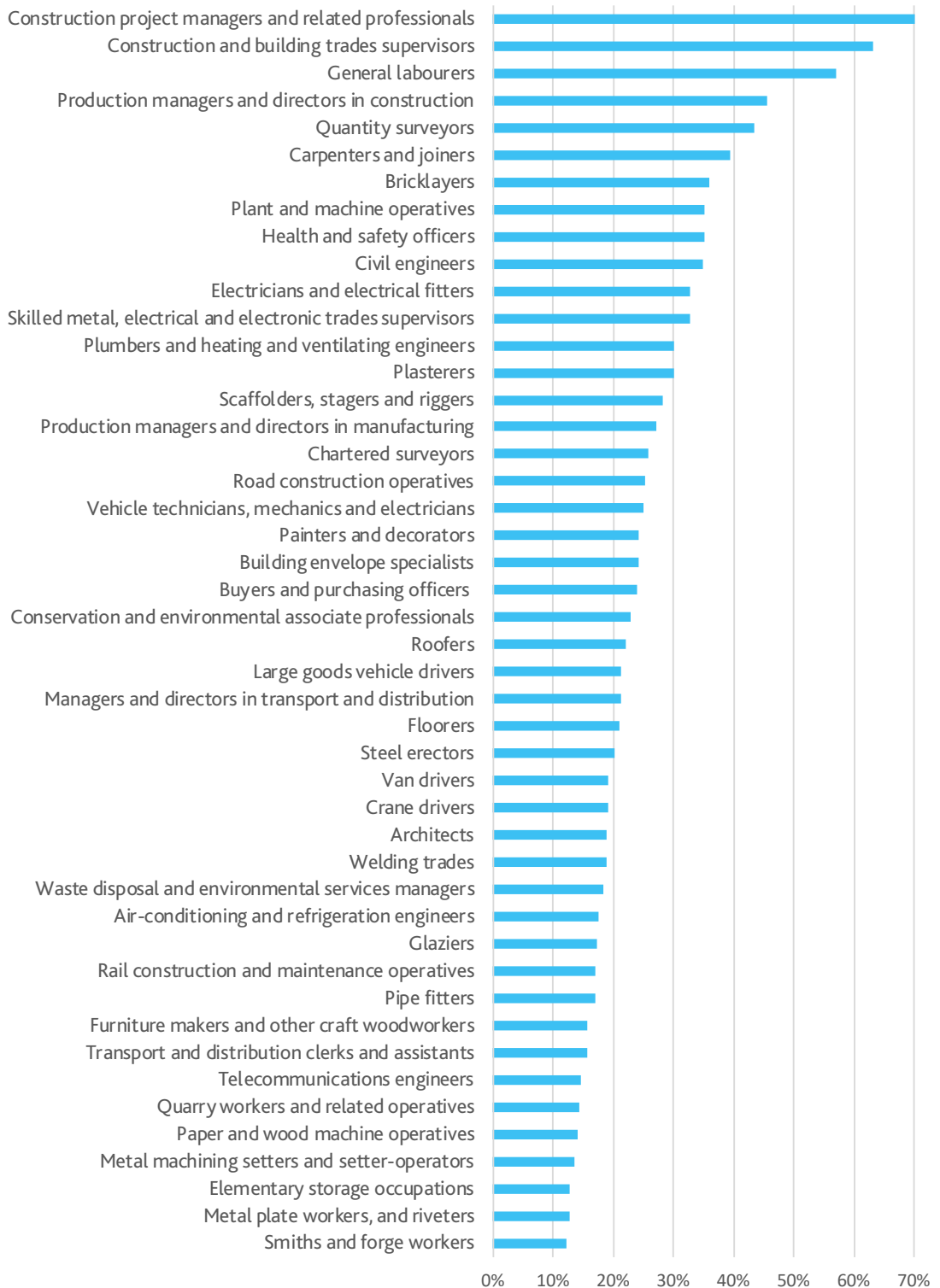


2.4 Severe difficulties post-Brexit

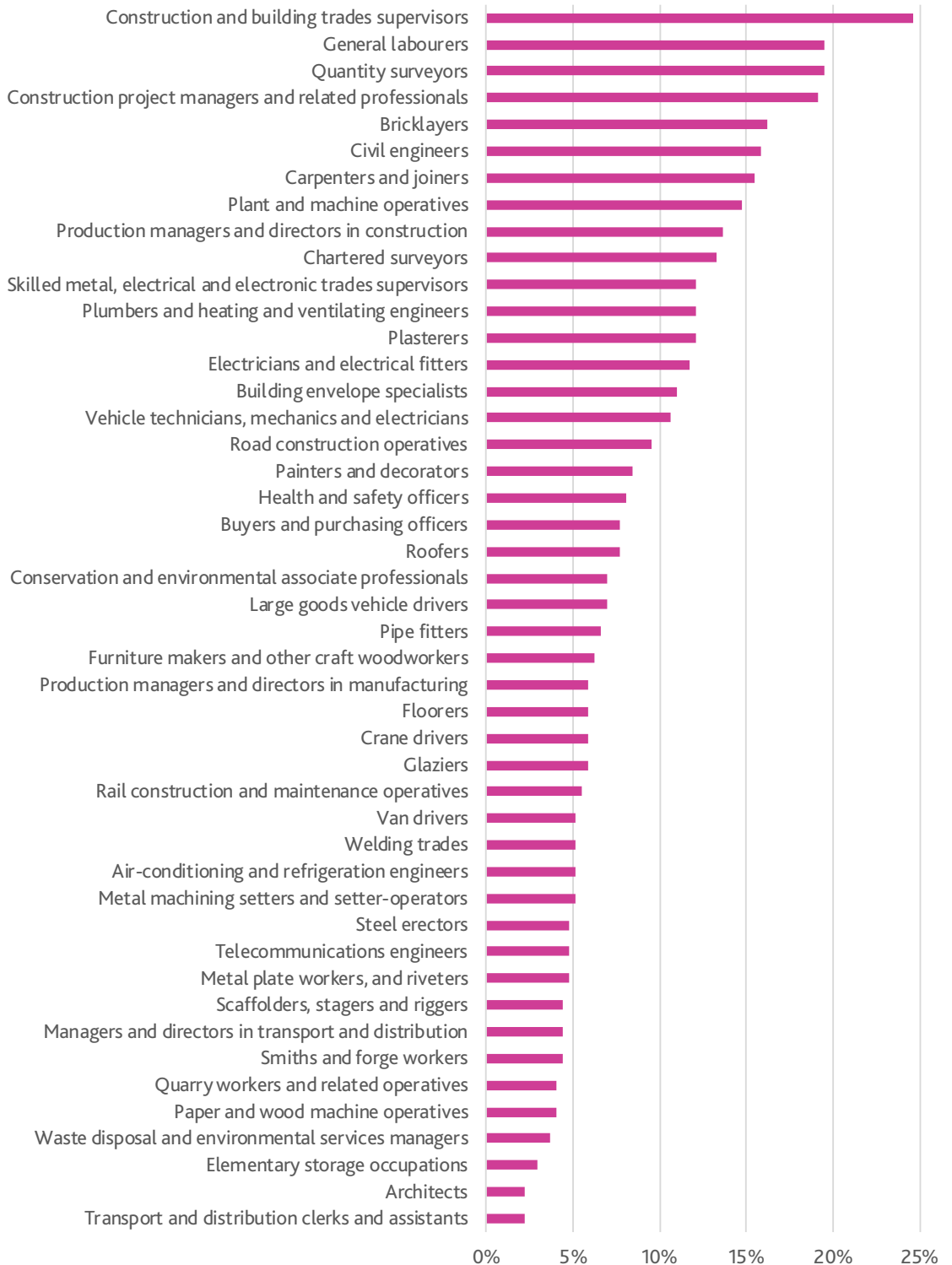


2.5 Combined results - shortage occupations

The following figure shows the combined responses from all respondents who reported any difficulty in recruiting per occupation, both now and post-Brexit.



2.6 Combined results - severe shortages



2.7 Other occupations not covered by the survey

The survey offered 46 occupation codes for respondents to select from. However the UK construction sector is made up of more than 2 million workers, some of whose roles do not map to the Standard Occupation Codes for construction. As such, respondents were also offered the opportunity to submit details of any other roles that they have difficulty in recruiting for.

A wide range of responses were received for this question. In many cases, the responses identified roles that were already covered by the survey. However there were a number of occupations that were sufficiently varied from the SOC codes, and were reported in significant numbers to suggest that shortages are common.

The occupations with the highest level of response in this category were:

- Design engineers (including BIM)
- Dry Liners
- Groundworkers
- Ceiling fixers
- Structural engineers
- Planners
- Mechanical & Electrical engineers
- Acoustic engineers.

3. Links to Migration Advisory Committee Shortage Occupations

Following the publication of the UK Government's Immigration White Paper in December 2018, it is also possible to consider the results of the survey in the light of the UK's likely future migration regime. The White Paper outlines proposals to consider the skill levels and salaries of migrants when assessing their route into the UK. A new single route will apply for EU and non-EU migrants that are skilled to RQF Level 3 (equivalent to A-level or level 3 NVQ).

The Government also plans to take evidence from UK businesses about a salary cap on migration through this route. While no decision has yet been taken, the Migration Advisory Committee has suggested an indicative cap at £30,000 per annum. The following table indicates which of the roles identified in the survey as high priorities would meet these proposed thresholds.

Role	Generally above RQF 3 skills?	Salary typically above £30,000?
Survey occupations		
Construction and building trades supervisors	Y	Y
General labourers	N	N
Quantity surveyors	Y	Y
Construction project managers and related professionals	Y	Y
Bricklayers	N	N
Civil engineers	Y	Y
Carpenters & joiners	N	N
Plant and machine operatives	N	N
Production managers and directors in construction	Y	Y
Chartered surveyors	Y	Y
Other occupations		
Design engineers	Y	Y
Dry Liners	N	N
Groundworkers	N	N
Ceiling fixers	N	N
Structural engineers	Y	Y
Planners	Y	Y
Mechanical & electrical engineers	Y	Y
Acoustic engineers	Y	Y

Data for skill levels is drawn from the CITB Go Construct website (www.goconstruct.org), while salary levels are extracted from the Annual Survey of Hours and Earnings (<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/previousReleases>).

4. Recommendations

Based on the findings of the survey, the trade and representative bodies that have supported this report make the following recommendations:

1. **Industry to work with UK Government and other stakeholders to ensure that there are pathways for UK workers to fill the shortage roles and to match supply against demand for employment to avoid wage inflation and unnecessary cost. This will include delivering the requirements of the Construction Sector Deal to:**
 - a. Significantly raise the number of construction apprenticeships
 - b. Developed structured career pathways including high quality work placements and T-levels (in England)
 - c. Develop programmes to engage and retrain the existing workforce
 - d. Develop a single industry platform for construction careers
 - e. Increase the diversity of candidates coming into the sector.
2. **Migration Advisory Committee to consider whether to include the following roles, which face severe shortages, in future Shortage Occupation lists:**
 - a. Construction and building trades supervisors
 - b. General labourers
 - c. Quantity surveyors
 - d. Construction project managers and related professionals
 - e. Bricklayers
 - f. Civil engineers
 - g. Carpenters & joiners
 - h. Plant and machine operatives
 - i. Production managers and directors in construction
 - j. Chartered surveyors.
3. **Industry to carry out immediate further research to define shortage job titles for the above roles, and for those 'Other Occupations' identified in this research.**
4. **Industry to work with Migration Advisory Committee and UK Government to arrange roundtable employer discussions to provide further insight.**
5. **Industry to work with Migration Advisory Committee and UK Government to model the impact of policy decision on UK construction.**
6. **UK Government to consider appropriate transition period to allow UK businesses to adapt to the changing nature of migration, with regular reassessment of shortage expected future skills supply and demand.**
7. **UK Government to maintain commitment to long term pipeline of construction and infrastructure investment give companies the confidence to invest and to attract, develop and retain UK workers for shortage occupations.**
8. **UK Government to provide consistent policy environment in relation to apprenticeships, to ensure businesses can train and develop their staff through their career with confidence the policy environment won't change.**
9. **UK Government to consider potential for temporary short-term workers to train while in the UK to achieve RQF 3, helping the UK to secure employees in key shortage occupations.**

5. Methodology

This research was carried out to support the continuing efforts by the UK construction industry to understand and manage widely reported skills shortages in the sector.

The timing of the survey was linked to the Migration Advisory Committee's call for evidence of shortage occupations across the wider UK economy. That call for evidence was launched on 9 November 2018, closing on 6 January 2019. The research was undertaken through the circulation of a survey to companies across the UK construction sector.

5.1.1. Questionnaire

The questionnaire for the survey consisted of four elements. These were:

- respondent identification (name, company, email)
- respondent area of activity (based on UK Government regions and nations)
- quantitative questions
- Other occupations not covered by quantitative question.

The occupations provided for the qualitative questions were those included in the construction section of the Standard Occupation Classification (<https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010>). In order to avoid confusion for respondents, the construction list was amended slightly to remove the 'Not Elsewhere Classified' SOC codes. Such roles would be picked up in the Other Occupations question.

5.1.2 Fieldwork

The fieldwork for the survey was carried out between 26 November 2018 and 6 January 2019, using an online survey. The survey was promoted through the supporting trade associations, and via traditional and social media.

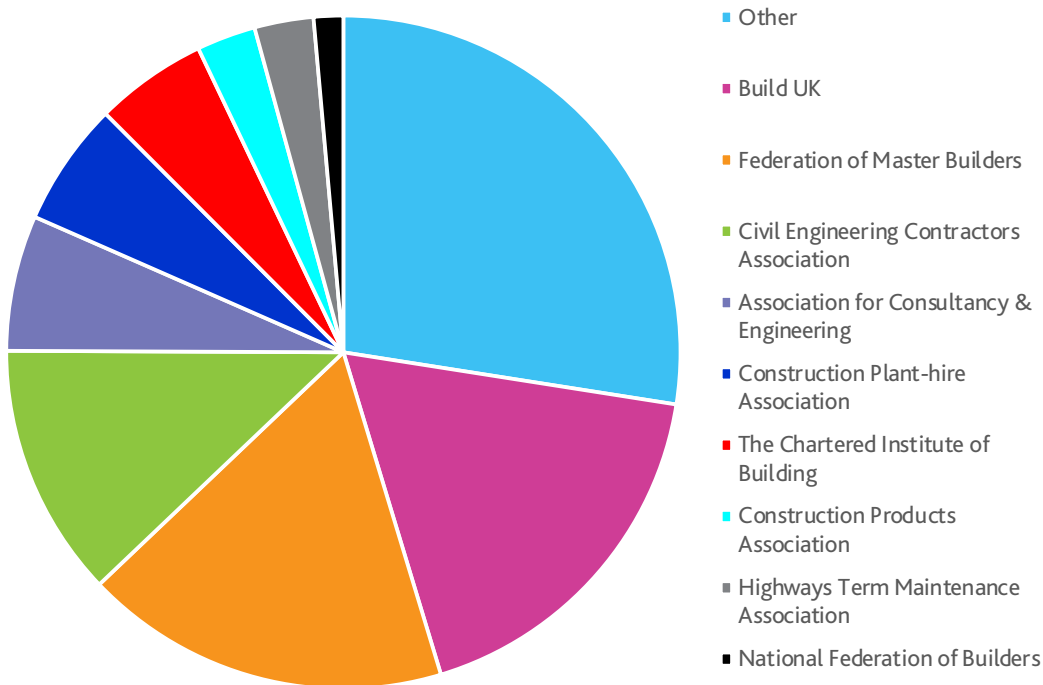
5.1.3 Respondents

276 companies responded to the survey. Overall these companies employed an estimated 160,212 workers. The count of workers is based on levels of employment reported by each company in annual accounts at Companies House. Where employee count is not reported due to the size of company being below the reporting threshold, the employee count is assumed to be 25 (half the potential maximum count for small companies). Where companies reported micro-accounts the number of employees is assumed as 5 (half the maximum for such companies).

Assuming a working population of 3.1 million in construction, this response rate would provide a 6 per cent margin of error at a 95 per cent confidence level.

The fact that respondents for the survey were drawn from the whole construction sector, rather than solely contractors, means that the results may show some variation from previous work carried out to assess shortage occupations in the sector.

The following Figure shows the breakdown of respondents in terms of their trade federation membership, indicating that the survey drew responses from a wide cross-section of industry.



Above: survey responses by trade body