Workforce Mobility and Skills in the UK Construction Sector 2012 Greater London

for

CITB-ConstructionSkills

by

Babcock Research

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1 EXECUTIVE SUMMARY

CITB-ConstructionSkills commissioned Babcock Research to undertake the 2012 Construction Workforce Mobility Survey. The 2012 research builds on previous Mobility surveys conducted in 2005 and 2007.

Face-to-face interviews were conducted with 4,933 construction workers undertaking manual roles on sites across the UK. In Greater London 410 interviews were undertaken.

PROFILE OF THE SAMPLE

As expected, the vast majority of the region's construction workers in manual roles interviewed were male (99%).

The youngest workers (16-24 year olds) account for three in twenty (15%) of the construction workers surveyed in 2012. The lower proportion of under-25s interviewed in 2012 compared with 2007 highlights the impact of the economic downturn on the recruitment of school/college leavers to the sector.

Almost two in five interviewees (37%) were aged between 25 and 34; 24% were aged 35-44 years; 15% were aged 45-54 years, and workers aged 55+ accounted for one in ten (7%) interviewees.

The majority (86%) of construction workers interviewed were of White origins: 59% described themselves as White British; 6% as White Irish, and 21% as 'White other'. Workers of black/minority ethnic (BME) origin made up 11% of the sample: 8% Black, and 3% Asian: a very similar profile to the 2007 survey. BME representation appears to be lowest in the North East, North West and Yorkshire & Humber regions, and highest in the East of England and West Midlands.

The most common occupation of interviewees was general operative/ labourer (a very broad SOC category, encompassing many roles, including groundworkers): more than a fifth (22%) of workers. Other common job roles were carpenter/joiner (15%), electrician (11%) and plumber (7%);

More than a third (38%) are directly employed by a company and over half are self-employed (51%): this shows considerable movement from employment to self-employment since 2007, when the figures were 40% and 55% respectively. The proportion of workers employed by an agency is higher than in 2007 (11% compared with 5%).

WORK HISTORY

Time in the Sector

Three in ten (29%) of workers had no more than 5 years of construction experience, including 10% with less than 2 years' experience. A fifth of workers (20%) had in excess of 20 years' experience working in construction.

Nationally, agency workers tend to have fewer years of construction experience than other workers, but not dramatically so: a fifth (21%) of regional agency workers have at least 20 years of construction experience.

Self-employed workers tend to have a few more years' experience than those employed directly, but 20% of the self-employed have been working in construction for no longer than 5 years.

In Greater London, three quarters (76%) of those surveyed had never worked outside of the construction industry (mostly without periods of unemployment, although 9% said that they had experienced periods out of work).

Previous Non-Construction Jobs

Almost a fifth (18%) started work in another sector immediately after leaving full-time education and before moving into work in construction (significantly lower than the 37% reported in 2007).

Workers employed by a company are the most likely to have started work in another sector: 23% compared with 20% for those employed by an agency, and 14% for the self-employed.

The most common jobs cited by those who had had a job in a different industry after leaving learning before moving into construction were:

- Elementary occupations
- Skilled Trades
- Sales and Customer Service
- Associate Professional & Technical.

Occupational Switching Within the Construction Sector

Overall, 18% of workers had undertaken more than one type of construction occupation, a lower proportion than the UK average (22%).

Interviewees revealed both movement between the occupation groups that might be considered to be progression of skills or sideward movements, and in order to remain in employment, some workers had taken 'backwards' steps into labouring/general operative roles, or returned to a previous trade.

The occupations most likely to have switched roles in the UK industry are:

- Banksman
- Ceiling fixer
- Plant/machine operative
- Dryliner
- Welder
- Plasterer.

QUALIFICATIONS & SKILLS

Skill Cards / Certificates

The vast majority (96%) of construction workers interviewed in the Greater London were clear that they held at least one of the recognised skill cards/certificates. The proportion of construction workers holding a skill card/certificate has increased dramatically since 2007 (72%), suggesting that it is now a prerequisite of employment on most sites.

Construction-Specific Qualifications

Three fifths (60%) of construction workers in Greater London reported holding a construction-specific qualification.

Agency workers are significantly less likely than average to have a construction qualification (23%) compared to both those who are employed (67%) and those who are self-employed (63%): 46.9%; 66.3% and 66.2% respectively for the UK as a whole. Migrant workers in the UK are also less likely than average to hold a construction qualification (33%).

Nationally, plumbers, electricians, carpenters / joiners, and bricklayers and are the occupations that are most likely to report having a construction-specific qualification (89.0%, 88.9%, 85.8% and 80.3% respectively). The lowest incidence in the UK of self-declared construction qualifications was among floorers, banksmen, steel erectors/riggers, roofers and general operative/labourers (all below 58%).

In Greater London in 2012, seven out of ten workers (72%) with a construction-related qualification reported that their main qualification was an NVQ/SVQ: this equates to a third of all construction workers. A further 10% of those with qualifications had a City and Guilds qualification as their main construction qualification.

Two fifths (40%) of construction workers did not have a construction related qualification. A relatively low proportion (5%) of construction workers are qualified to level 1 only. The majority have either a level 2 (27%) or a level 3 (16%) qualification. Around 6% of all manual workers in the region are qualified to level 4.

Basic Skills Needs

Workers' self-assessed need for training in basic skills has remained roughly static between 2007 and 2012, with around a quarter of the regional workforce stating that they require training in one or more basic skill (24% and 26% respectively).

Those with a supervisory/management role are less likely to feel that they require any basic skills training (24%).

Current Study for Qualifications

More than one in ten (12%) workers in Greater London said that they were working towards additional construction qualifications at the time of the interview compared with 15% in 2007. This small reduction may be indicative of a slow-down in recruitment of new workers

A small proportion of interviewees (3%) reported that they were unsure whether or not they were working towards a qualification or not.

A higher than average rate of current learning activity can be seen amongst a range of groups including:

- Workers who are 'new' to the sector: 1-2 years (18%).
- Younger workers: 20-24 years (22%).
- Those who are directly employed by a company (12%).
- Certain trades (UK data): electricians (21.5%), window fitters (20.7%) and scaffolders (19.4%).

Supervisory/Managerial Training

The proportion of construction supervisors/ managers in partially manual roles that had received some sort of formal training for staff supervision had increased dramatically since the previous survey (87% in 2012 compared to 54% in 2007).

In the UK fewer report that the training is in-house with evidence of the sector increasingly investing in external training courses, including those with recognised certification. However, in Greater London, the receipt of in-house training increased from 32% in 2007 to 38% in 2012, and chargehand/team leader training decreased from 11% to 6%.

GEOGRAPHIC MOBILITY

Work History in Greater London

All workers were asked why they were working in the area in which they were interviewed. One fifth (21%) gave an answer relating to family reasons: either that they grew up in the area/had lived there all/most of their lives, or that they have moved to the area to follow family or a partner.

Two in five (41%) said that their employer had sent them there: these were predominantly direct employees, or self-employed workers who worked exclusively for one company as if they were directly employed by them.

Only three in ten (29%) said there were more jobs available in the region than where they had lived/worked in the past. A quarter (23%) cited better pay, and three in twenty (14%) stated that they preferred living in Greater London.

Two in five (37%) had worked in the same region/nation for their entire construction career, a slightly higher proportion than in 2007.

Worker Origins

Workers were asked in which region/nation they were living just before they got their first job in construction in the UK (or whether they moved from outside the UK). One in six (16%) of construction workers in the region were originally from outside the UK. Nationally it appears that the number of migrant workers from beyond the UK and ROI has halved since the last survey in 2007.

Inter-Regional/National Mobility

Two thirds (46%) of workers were interviewed on construction sites in the same region (Greater London) in which they were living when they started working in the construction sector.

Regions/nations with the most stable workforces (i.e. importing the lowest proportions of workers) are Northern Ireland, Wales, the North East, Scotland and Yorkshire & Humber. Regions with the highest levels of construction workers imported from beyond the region are the more buoyant areas of southern England (London, East of England and the South East).

Great variation can be seen between regions/nations in the proportion of construction workers reporting that they were working in the same region/nation in which they acquired their first construction qualification as they were when interviewed, from 97.8% (Northern Ireland) down to 45.5% (South East). Greater London has a close to average proportion of its workforce stating that their first construction qualification was also gained within the region (64% compared with 56% in 2007).

The South East and London regions 'import' the greatest proportion of construction workers (39.4% and 37.4% respectively). However, both import the majority of their workers from neighbouring regions, including each other. The East of England, West Midlands and East Midlands are also significant importers of labour, in each case at least three workers in every ten. Wales, Scotland and Northern Ireland have lower levels of labour inflow.

Travel to Site

One in twenty (5.1%) construction workers in Greater London reported that they were staying in temporary accommodation.

The average (mean) distance from workers' homes to their current site was 30 miles, compared to a median of 17 miles.

When the reduced distance from temporary accommodation to site was taken into account, construction workers were travelling an average (mean) of 25 miles each way, or a median journey of 15 miles.

Around a quarter (24%) of workers live within 19 miles of the site on which they are currently working; 44% live between 20 and 49 miles away; another 23% live between 50 and 99 miles away (often travelling daily) and 11% live 100+ miles from the current site.

Site Duration and Change

When asked about the length of time they expected to remain on site, a fifth (22%) of interviewees in Greater London did not expect to continue to work on site for more than another month, including 6% who expected to change site within the next week, in some cases, the next day. Nearly half (48%) anticipated continuing on the same site during that phase for more than a month, but no more than a year, and 14% expected to remain on the same construction site for another year or longer.

Over one quarter (26%) felt that they could not predict how much longer they would be working on the same site, that their agency or employer could send them elsewhere (or end their contract) at any time.

More than two thirds (65%) of workers were fairly confident that their next site (after the interview location) would be within daily commuting distance. Just 2% said that their next site would most likely require them to use temporary accommodation.

SUB-SECTOR & SECTOR MOBILITY

Sub-Sector Mobility

The majority (62%) of workers have spent significant periods of time on more than one type of construction work. In fact, 7% have worked on all six types of project the survey asked about. The least frequently experienced type of construction was infrastructure projects such as road/rail/aviation or utilities builds. Even so, more than one in three workers had spent time on this type of project.

Leaving the Sector

Those aged 59 years or younger were asked how likely it was that they would still want to work in construction (rather than another sector) in five years' time. One in four (39%) said that they definitely would want to remain in the sector, and a further 25% felt that they were very likely to. Just 5% said that they either definitely would not or would be very unlikely to want to.

2 INTRODUCTION

CITB-ConstructionSkills commissioned Babcock Research to undertake a major UK-wide mobility survey of construction workers, closely mirroring surveys previously conducted in 2007 and 2004. This report presents findings from Greater London, compared with the UK and with itself in 2007.

Results from the 2012 survey have been compared to those from previous research conducted in 2007, where such data is available and comparable.

A separate report is available for the whole of the UK construction workforce. A technical appendix also provides greater methodological detail (including copies of questionnaires and showcards) and national data tables broken down by numerous factors.

2.1 Aims and Objectives

The aim of this survey was to provide a reliable evidence base of the nature of the construction workforce in the UK concerning its qualification levels and the extent of occupational and geographic mobility. The survey findings have the potential to provide a common currency for skills planning, particularly in respect of profiling the existing workforce and offering insight into where gaps might emerge as a result of occupational/geographic movement.

The specific objectives of this research project were to:

- Examine the qualification levels of the construction industry workforce in the UK and analyse what part qualifications have played in career progression.
- Identify, quantify and analyse the extent to which the workforce in each region/geographical area comprises workers originating or living in other parts of the UK (or further afield), and mobility and travel to work.
- Examine the occupations and qualification levels of the mobile workforce / 'imported' workforce.
- Examine the scale and extent of occupational mobility within the construction workforce to see how workers in construction occupations change or keep their occupations over time, both within construction and as they move out of the industry, and related to this the extent to which managers and supervisors have received any training specifically to enhance their managerial skills.
- Contribute to developing better methodologies for understanding and modelling the labour market impacts of workforce mobility.

The focus of the survey is on site-based manual occupations, thus excluded associated clerical and sales occupations and professionals such as architects, surveyors and office-based managers.

2.2 Methodological Overview

The 2012 Construction Workforce Mobility Survey followed a similar methodology to that used in the last wave of this research (2007). 4,800 interviews with construction workers in manual roles across the UK were required, with targets to split the sample equally between the 12 regions/nations of the UK.

2.2.1 Sampling

This sub-section provides an overview of the sampling methodology employed for the 2012 Construction Workforce Mobility Survey: further detail is provided in the technical report that accompanies this analytical report.

Although this survey focuses on the mobility of individual workers, the sampling strategy was to select construction projects (generally referred to in this report as 'sites') with sufficient workers on-site each day to enable a minimum of 10 interviews. This site-based approach was employed to ensure cost-effective face-to-face interviewing, comparable to that used for the 2007 survey.

As in previous surveys, the commercially produced 'Glenigan' database of construction projects was used as the sampling frame: Quarter 4 2011 was used for the pilot sample, and the main-stage sample was extracted from Quarter 1 2012 (produced in January 2012).

Project eligibility criteria:

- Value: £250,000+
- Contact stage : 'start on site'; 'contract awarded' or 'bills called' only
- Site start date / end date: active throughout planned fieldwork period.

120 sampling points (clusters of postcodes) were selected to produce a broadly representative sample of locations across the UK. Within each of the 12 regions/nations of the UK, 10 locations were selected, with the ultimate goal of 400 interviews per region/nation.

For each sampling point, approximately 20 sites were extracted from Glenigan. Sites were numbered within each sampling point to produce a hierarchy for recruitment, rippling out from the 'core' point (postcode sector – e.g. YO9 W). Where possible, recruitment was restricted to the first 10 sites drawn.

Quotas were set for the target number of sites per region/nation, with an allowance for large projects (according to the average number of workers on site) to count as 'double', or exceptionally 'triple' sites.

2.2.2 Telephone-Based Site Recruitment

Babcock Research's telephone research team recruited sites that were eligible and willing to support the research by allowing an interviewer to visit the site to interview at least 10 workers in manual trades/roles. A recruitment questionnaire (reproduced in the technical report) was used to check eligibility of the site, and to collect important operational information that would be required by the interviewer visiting the site. The majority of recruitment was undertaken with individual site managers, but in a number of cases the recruiters also spoke with local, regional or national managers (often dependant upon the size of the company).

2.2.3 Site Visits – Face-to-Face Interviewing

Once permission had been granted for an interviewing visit, the completed recruitment questionnaire was forwarded to the appropriate local field interviewer (from Babcock Research / Swift Research), who contacted the designated site representative to arrange a date and time for the interviewing visit. In the majority of cases, interviewers were allocated space to conduct interviews in the offices or canteen area. However, on some sites interviewers worked 'on-the-hoof' in active parts of the site (with or without a 'chaperone'). All interviewers had completed the CSCS Health & Safety Test for Operatives immediately prior to fieldwork and had a PPE (Personal Protective Equipment) kit to comply with site requirements.

While one-to-one interviewing was preferable, a variety of data collection approaches were used in response to the operational demands of sites. Frequently interviewers were asked to interview pairs or small groups of workers (to reduce down-time for the site). In other situations workers (especially large groups) may have self-completed the questionnaires, either with the interviewer reading out the questions and workers marking their answers, or workers fully self-completing with the interviewer available to clarify the meaning of questions etc as required.

Further details on the on-site interviewing process (and challenges) are provided in the technical report. A copy of the questionnaire is provided as Appendix 1, and the Showcards are provided as Appendix 2.

2.3 Sites Included

The following table shows the distribution of sites and number of interviews achieved in each region. In order to obtain strong bases for regional analysis, a quota of 400 completed questionnaires per region/nation was set. Subsequently, at the analysis stage weighting factors were applied to survey data to ensure that in UK-wide analysis, regions/nations were represented in their correct proportions according to the size of the construction workforce according to the LFS.[1]

Figure 1: Sites, Number of Interviews, and Weights by Region/Nation

	Number of sites	Interviews	Av interviews per site	Construction Workforce†
UK	**293**	**4933**	**16.8**	**100%**
East Midlands	30	408	13.6	6.9%
East of England	30	407	13.6	10.8%
Greater London	**21**	**410**	**19.5**	**11.0%**
North East	26	394	15.2	4.2%
North West	24	442	18.4	10.3%
Northern Ireland	14	406	29.0	2.9%
Scotland	25	409	16.4	8.8%
South East	32	420	13.1	15.5%
South West	24	407	17.0	8.8%
Wales	22	428	19.5	4.7%
West Midlands	16	403	25.2	8.1%
Yorkshire & Humber	29	399	13.8	8.0%

† LFS- see footnote 1 below

When recruiting sites, a minimum of 10 workers expected on site was set. Figure 2 shows that just 5 sites of the minimum size were recruited. Almost half of the sites recruited and visited were expected to have between 11 and 25 workers on site most days (including sub-contractor personnel).

[1] Labour Force Survey, ONS, Four Quarter Average SIC 92 45, Summer 2010 to Spring 2011

Figure 2: Estimated Number of Workers on Site by Number of Interviews (UK)
Base: All sites

	Number of Sites	Average Number of Interviews
10	5	12.2
11 - 25	134	12.7
26 - 50	84	17.1
51 - 99	42	22.7
100 - 200	25	23.8
201+	3	62.3
Total	**293**	**16.8**

Across the UK a total of twenty eight sites were visited that had in excess of 100 workers on site each day, including 3 sites with more than 200 workers per day. Especially on the smaller projects, the interviewing day was arranged to provide the greatest number of available interviewees. In some cases, the estimates provided by managers appeared to relate to peak days or other phases of activity, and hence on some sites, it was not possible to conduct as many interviews as targeted because the number of workers on site fell short of expectations.

Although a target was set of at least 12 interviews per site, where site managers were agreeable and numbers of workers was high enough, it was agreed that the target could be doubled or, in certain cases, tripled. On average 16.8 interviews were achieved at each location in the UK.

Using the estimated number of workers provided by site managers, we calculate that approximately 13,700 construction workers would have been available to invite to participate in the survey. Hence we interviewed approximately 35% of the workforce of the selected sites.

Almost half of sites included in the UK-wide survey were housing related (either new build developments or repair and maintenance programmes for public housing/housing associations) – 143 sites out of 293 visited across the UK. Public non-housing projects accounted for almost a third of the sites visited, and private commercial build sites accounted for around one in ten of the sites included. Relatively few infrastructure projects and private industrial builds were included: 11 and 12 sites respectively.

Figure 3: Construction Sub-Sector of Sites (UK)
Base: All sites

	Number of Sites	Number of Interviews
Housing (inc public repair)	143	2289
Public non-housing	93	1699
Private commercial	34	542
Infrastructure	11	224
Private industrial	12	179
Total	**293**	**4933**

2.4 About this Report

A number of conventions have been employed within this report to assist with the concise presentation of numeric data, and with brevity within text.

The base for statistics is described under each figure (table or graph) heading, with the base counts (unweighted and weighted) on dedicated rows of tables. Where tables include statistics on many different bases, the unweighted bases for 2012 data are shown in brackets.

All tables and graphs present percentages (unless otherwise stated) calculated upon the bases shown. Where 'mean' averages are shown, these are calculated upon the stated base, minus any responses 'not stated' or choosing a 'don't know/not applicable' response.

Tables and graphs are all labelled with a simple sequential 'Figure Number' and title. All tables and graphs have clearly labelled base sizes (for all sub-groups) and textual definitions of bases. The total of percentages shown in a table may vary slightly from 100% due to rounding to the nearest percentage point.

'*' is used to denote a statistic of less than 0.5%.
'-' is used to denote data suppressed from a table due to a small base size.

Analysis by region/nation should be read with caution, particularly those on bases further restricted by the routing out of some respondents. Both unweighted bases and weighted bases (UK-wide only) are shown throughout for guidance. Consistent with previous Construction Mobility surveys, the minimum sub-group size shown in their report is findings based on 15 workers. However, we recommend caution is used when interpreting findings based on fewer than 70 workers, due to the greater risk of these figures being unrepresentative of the population in question.

Glossary of Terms

ACE card	Assuring Competence in Engineering Construction (administered by the Engineering Construction Industry Training Board)
CISRS	Construction Industry Scaffolders Record Scheme
CPCS	Construction Plant Competence Scheme
CSCS	Construction Skills Certification Scheme (Great Britain)
CSR	Construction Skills Register (Northern Ireland)
CTA	Certificate of Training Achievement (plant operators)
Direct employment	Employed by the company/organisation, on payroll at the location
IPAF PAL card	International Powered Access Federation - Powered Access Licence
LFS	Labour Force Survey
Gas Safe Register	Gas Safe Register replaced CORGI as the gas registration body in Great Britain and Isle of Man on 1 April 2009 and Northern Ireland and Guernsey on 1 April 2010.
National Qualifications Framework	The National Qualifications Framework sets out the level at which a qualification can be recognised in England, Wales and Northern Ireland
NVQ	National Vocational Qualification
PASMA	Prefabricated Access Suppliers' and Manufacturers' Association
PPE	Personal Protective Equipment
ROI	Republic of Ireland
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification
SVQ	Scottish Vocational Qualification

Region Names and Abbreviations

EE – East of England

EM – East Midlands

GL – Greater London

NE – North East

NI – Northern Ireland

NW – North West

SC / Scot – Scotland

SE – South East

SW – South West

WA – Wales

WM – West Midlands

Y&H – Yorkshire and Humber

3 PROFILE OF CONSTRUCTION SITE WORKERS

This section will provide a profile of the construction site workers interviewed.

- Personal demographics: age, ethnicity and gender
- Current occupation
- Employment status: employed by a company; self-employed; agency
- Employment contract basis: permanent or temporary/fixed term.

The section then moves on to examine career histories:

- Number of years in the construction industry
- First industrial sector of employment
- Pre-construction sector employment histories
- Occupational switching and progression within construction.

3.1 Personal Demographics

As expected, the vast majority of construction workers in manual roles interviewed in Greater London were male (99%). Male dominance is greater in the survey sample (UK – 99.3%) than in the UK construction workforce as a whole (89.6% male)[2], as this survey does not include those in office-based roles within the construction industry (either administrative or professional, where the incidence of female workers is higher) and interviews were conducted on relatively large construction sites (valued at £250,000+, with at least 10 workers), thereby excluding female construction workers on small building sites and maintenance and repair (especially for residential properties). The UK workforce as a whole (across all sectors) has a more equal gender split with 53.5% of the workforce being male and 46.5% being female.

Figures 4 & 5 detail the demographic profile (age and ethnicity) of the 2012 sample of construction workers in Greater London, presenting comparative data from the 2007 survey and the UK construction workforce. Further UK-wide breakdowns are presented in Appendix Tables 1 & 2.

Figure 4: Age Profile of the Sample
Base: All respondents

	GL 2012	GL 2007	UK 2012†
Unweighted Base	**410**	**355**	**4,933**
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
16 - 19	**1**	5	3.5
20 - 24	**14**	18	14.5
25 - 34	**37**	29	29.4
35 - 44	**24**	24	23.8
45 - 54	**15**	16	17.9
55+	**7**	8	9.9
Total	**100**	**100**	**100**

† UK-wide data from this survey.

[2] Labour Force Survey, ONS, Four Quarter Average SIC 92 45, Summer 2010 to Spring 2011.

The youngest workers (16-24 year olds) account for 15% of the construction workers surveyed in 2012: including 1% of interviewees who were aged 16 to 19. This compares with 18% of construction workers in the UK being aged 16-24 years, including 3.5% aged 16 to 19. The lower proportion of under-25s interviewed in 2012 compared with 2007 highlights the impact of the economic downturn on the recruitment of school/college leavers to the sector.

More than three quarters of interviewees (37%) were aged between 25 and 34; but the percentage of workers in older age bands decreases slightly with increasing age: 35-44 year olds accounting for 24% of the sample; 45-54 year olds accounting for 15% and workers aged 55+ accounting for 7% of interviewees.

The physical nature of construction roles does support a younger workforce profile than many industries (and data presented in Section 6.2 will discuss workers' plans to leave the industry) yet we also note that there has been a reduction in recruitment of younger workers, which some fear many result in a net loss of skills, as older skilled workers are leaving the industry without having passed their skills and knowledge on to many in the 16-25 age band.

The majority (86%) of construction workers interviewed in Greater London were of White origins (94.9% UK-wide): 59% described themselves as White British; 6% as White Irish, and 21% as 'White other' (a group of workers that were more likely to be employed via an agency, or self-employed, and less likely to have formal construction qualifications).

Figure 5: Ethnic Profile of the Sample
Base: All respondents

	GL 2012	GL 2007	UK 2012	Construction Industry (Manual Roles) †
Unweighted Base	**410**	**355**	**4,933**	**2,130,010**
Weighted Base	*n/a*	*n/a*	*4,800*	*n/a*
	%	%	%	%
White	**86**	90	94.9	96.0
Black	**8**	4	1.7	4.0
Asian	**3**	6	1.4	
Other/not stated	**4**	-	0.9	
Total	**100**	**100**	**100**	**100**

† Source: Labour Force Survey, ONS, Four Quarter Average SIC 92 45, Summer 2010 to Spring 2011

Exceptionally, workers of black/minority ethnic (BME) origin made up 11% of the Greater London sample: 8% Black and 3% Asian: a much greater proportion of Black workers, but lower proportion of Asian workers than in the UK as a whole.

Figure 6 (over the page) shows the distribution of BME workers in the 2012 sample compared to that of the 2007 survey, and compared to the UK resident BME adult population. BME workers are under-represented in construction compared to the resident population of the UK. Some variation can be seen between regions: compared with the resident population, representation appears to be lowest in the North East, North West and Yorkshire & Humber regions, and highest in the East of England and West Midlands.

Figure 6: Proportion of Construction Workforce of BME (Non-White) Origin
Base: All respondents

	BME in Survey 2012	BME in Survey 2007	BME in Construction Industry (Manual Roles) †	Nation/region's resident BME population (16-64)††
Unweighted UK Base	4,933	3,877	2,130,010	4,620,700
Weighted UK Base	*4,800*	*3,877*	*n/a*	*n/a*
	%	%	%	%
UK	**3.9**	3	4.0	11.6
East Midlands	**2.4**	2	2.5	10.2
East of England	**4.2**	3	1.4	7.8
Greater London	**11.6**	**10**	**19.3**	**36.3**
North East	*	*	0.5	4.4
North West	**1.7**	1	1.6	8.8
Northern Ireland	*	0	0.0	1.4
Scotland	**1.2**	0	1.3	3.6
South East	**3.1**	3	2.3	8.3
South West	**1.2**	2	1.3	3.5
Wales	*	1	0.7	3.8
West Midlands	**8.7**	7	8.3	15.0
Yorkshire & Humber	**1.4**	4	1.7	9.3

† Source: Labour Force Survey, ONS, Four Quarter Average SIC 92 45, Summer 2010 to Spring 2011
†† Source: Annual Population Survey, Jan 2010 – Dec 2010 (Ethnic Group by Age); http://www.nomisweb.co.uk

3.2 Occupational Profile

Workers were asked what their current MAIN trade or occupation was at the site on which they were interviewed. It is acknowledged that even on the largest construction sites, it is common for many workers to perform more than one of the roles listed in the survey: in these cases, workers were asked to define the main role they were undertaking (which in many cases would be the most skilled one). Those in supervisory roles were asked to reveal their trade/occupation background, as their supervisory responsibilities would be explored in later questions. In most cases a trade was established, but where no further information was forthcoming than 'supervisor'; 'foreman'; or 'chargehand', the broad categorisation of 'general operative/labourer' was used. Figure 7 (over the page) shows how workers classified their current role or occupation. The 2012 results are compared with those from 2007.

The most common occupation of interviewees in Greater London was general operative/labourer (a very broad SOC category, encompassing many roles within construction, including groundworkers): 22% of workers (22.4% UK). It should also be noted that where insufficient information was available to categorise an 'other' job role description provided by an interviewee, it was necessary to define them as 'general operative/labourer'.

Other common job roles were:

- Carpenter/joiner (GL 15% - UK 13.2%)
- Electrician (GL 11% - UK 8.2%)
- Plumber (GL 7% - UK 1.9%).

Figure 7: Occupational Profile
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
General op/ labourer	22	17	22.4
Carpenter / joiner	15	14	13.2
Bricklayer	4	10	10.1
Electrician	11	9	8.2
Plant/machine operative	6	5	2.5
Plumber (inc heating & air con)	7	7	1.9
Roofer	2	6	4.0
Scaffolder	1	8	4.0
Dryliner	4	With plasterer	3.7
Painter and decorator	3	1	3.7
Technical (e.g. Surveyor, Maintenance Tech)	6	0	2.6
Steel erector / rigger	4	5	2.6
Plasterer	1	4	2.5
Pipe fitter	4	3	2.4
Banksman	4	2	1.7
Floorer	1	2	1.3
Ceiling fixer	1	With plasterer	1.2
Window fitter / glazier	1	n/a	1.2
Welder	0	1	0.6
Mechanical fitter	*	n/a	0.6
Manager/supervisor	3	1	0.6
Other	*	*	*
Total	100	100	100

More than a third (38%) of workers in Greater London are directly employed by a company and over half (51%) are self-employed (47.5% and 46.0% respectively in the UK): nationally figures show considerable movement from employment to self-employment since 2007, whereas in London the figures were broadly similar, 40% and 55% respectively. The proportion of workers employed by an agency is higher than in 2007 (11% compared with 5%). See Figure 8 for data on workers' employment status.

The data appears to show that construction companies have increasingly sought ways of employing workers flexibly, but have favoured the use of self-employed labour to paying fees to agencies. The introduction of the Agency Workers Regulations 2010 from October 2011 gave equal pay and working conditions to agency workers as the hirer's permanent employees in comparable roles (after 12 weeks), thereby reducing further the attractiveness of agency workers as medium-term workers.

Figure 8: Employment Status
Base: All respondents

	GL	UK	Years working in construction			
	2012 %	2012 %	< 1 %	1-2 %	3-4 %	5+ %
Unweighted Base	410	4,933	13	28	53	311
Weighted Base	*n/a*	*4,800*	*n/a*	*n/a*	*n/a*	*n/a*
	%	%	%	%	%	%
Employed by a company	**38**	47.5	-	29	28	40
Self-employed	**51**	46.0	-	29	51	54
Work for an agency	**11**	6.5	-	43	21	5
Other (e.g.) placement	**0**	*	-	0	0	0
Total	**100**	**100**	**100**	**100**	**100**	**100**

The number of years a worker has spent in the construction industry has a significant effect on the likelihood of self-employment. Three in ten (29%) of workers who have been in the industry for 1-2 years are self-employed, compared with 54% of those who have been in the industry for 5 or more years (27.9% and 48.1% respectively in the UK).

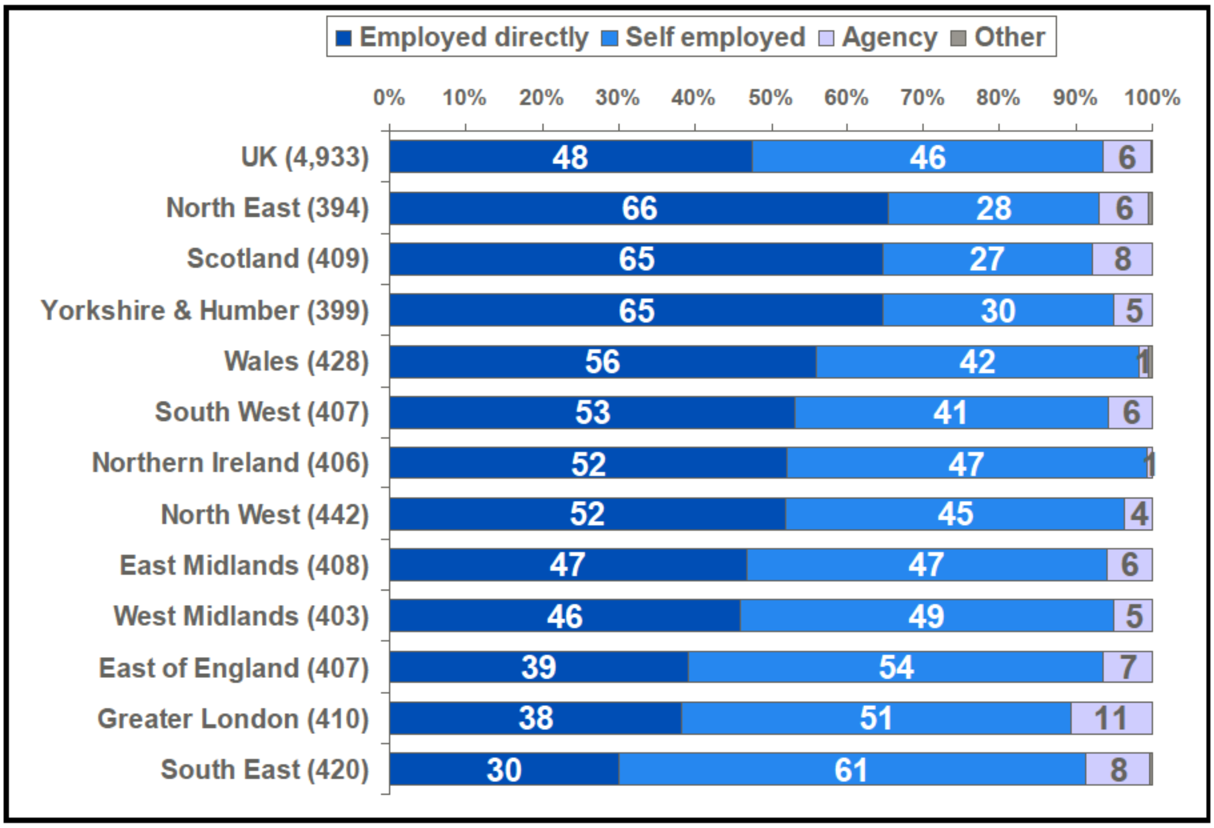
Figure 8 also shows that people who have spent less time in the industry (up to 2 years) are more likely to be employed by an agency than those with longer employment histories (3 years plus).

Geographical variations in employment status are shown in Figure 9. Two thirds of workers in the North East, Scotland and Yorkshire & Humber regions are employed directly by a company.

Particularly high levels of self-employment are seen in the South East (61%); the East of England (54%); and Greater London (51%).

Employment agencies provide the lowest proportion of construction labour in Wales and Northern Ireland, but more than one in ten workers (11%) on sites in Greater London.

Figure 9: Employment Status by Region/Nation
Base: All respondents



3.3 Work Histories

A key focus of this survey is to explore the routes that new recruits followed to enter the construction industry, as well as to examine whether people enter the industry for a short period, or do other jobs in between construction employment. Another aim is to examine, at occupational level, the extent to which workers change occupations within the industry.

This section looks at:

- Time spent in the industry
- Pre-construction employment histories
- Occupational switching and progression
- Employment contract basis: permanent or temporary/fixed term.

3.3.1 Time in the Sector

The cumulative proportions of workers who have been employed in construction for various lengths of time are shown in Figure 10 below.

In Greater London, 29% had no more than 5 years of construction experience (including 10% with less than 2 years' experience); whereas 20% had in excess of 20 years' experience working in construction.

A difference can be seen between the length of time worked in the construction sector in 2012 and 2007, with far fewer 'new' entrants to the sector were found in 2012. Although 34%

of those interviewed in 2007 had a maximum of five years' construction experience, in 2012 this proportion had fallen to just 29%.

Across the UK, one in five workers (21%) had no more than 5 years of construction experience, including 8.5% with less than 2 years' experience. Three workers in ten (29.9%) had in excess of 20 years' experience working in construction.

Figure 10: Years Spent Working in the Construction Sector (Cumulative)
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
Less than 6 months	1	2	1.2
Up to 1 year	3	10	3.7
Up to 2 years	10	16	8.5
Up to 5 years	29	34	21.0
Up to 10 years	57	54	43.8
Up to 20 years	78	74	69.0
More than 20 years	20	26	29.9

Agency workers in the UK tend to have fewer years of construction experience than other workers, but not dramatically so: a fifth (21.4%) of agency workers have at least 20 years of construction experience.

Self-employed workers tend to have a few more years' experience than those employed directly, but in Greater London the same proportion of the self-employed and the directly employed (25%) have been working in construction for no longer than 5 years. Some companies predominantly use self-employed labour, perhaps offering permanent contracts to supervisors who manage sub-contracting teams.

3.3.2 Pre-Construction Employment Histories

Three quarters (76%) of those surveyed in Greater London had never worked outside of the construction industry (mostly without periods of unemployment, although 9% said that they had experienced periods out of work, but had not turned to other sectors). Just 5% had started their working lives in construction, but had also taken employment in other sectors during their careers. These proportions were broadly similar to the picture in 2007. Compared to the UK as a whole, a greater proportion of workers in Greater London have never worked outside of construction.

Almost a fifth (18%) started work in another sector immediately after leaving full-time education and before moving into work in construction at a later date (significantly lower than the 37% reported in 2007).

Age has a some influence on the likelihood of having worked in another sector before construction (15% of 16-34 year olds and 22% of those aged 35+), number of years in construction shows a stronger relationship, thereby suggesting that the sector is still attractive to career switchers. A third (34%) of workers with less than 2 year's experience in construction have previously worked in another industry, compared with 21% of those with less than 2 years' experience; 17% of those with 3-4 years' experience and 16% of those with 5+ years in the sector.

Workers employed by a company are the most likely to have started work in another sector: 23% compared with 20% for those employed by an agency, and 14% for the self-employed. Construction workers with the highest levels of construction-related qualifications are the least likely to have switched sector: only 4% of those qualified to NVQ/SVQ level 4 or higher began work in another sector; 13% of those at level 3; 10% of those at level 2, and 24% of those only qualified to level 1 in construction related skills.

Small variations are evident between regions. Just 7.1% of Northern Ireland's construction workforce and 16.5% of Yorkshire & the Humber's construction workforce started work in a different sector, compared to the UK average of 23.3%.

Those who had worked in other sectors before starting their construction careers were asked what their first job after full-time education had been. A diverse range of jobs were mentioned: 62 different 3-digit SOC codes were mentioned across the UK as a whole. Some of these jobs used very similar skills to construction, even though they were outside the sector. Hence for many, moving into construction can be seen as a reasonably natural progression.

3.3.3 Job Roles Undertaken In Other Sectors

Those who had worked in other sectors before starting their construction careers were asked what their previous jobs had been. The following analysis also includes non-construction occupations undertaken by these workers mid-career. Some workers mentioned five or more different jobs (and sometimes moved in and out of the same roles), but when coded to Standard Occupational Classification [SOC] code 3-digit level, the greatest number of job roles recorded was four (frequently workers mentioned two or more previous job roles within the same SOC code group).

Two fifths (39%) of Greater London-based workers who had worked outside construction had worked in some sort of 'Elementary Occupation'; 31% had worked in 'Skilled Trades'; and 12% had worked in 'Sales & Customer Service' roles (33.4%; 34.0% and 12.4% respectively in the UK as a whole).

Just over one in ten (12%) had worked in an 'Associate Professional & Technical' role outside of construction, many of whom would have skills that were transferable to the construction role they later undertook.

Figure 11: Percentage Having Worked in Various Non-Construction Job Roles by SOC Level

Base: Those whose first job after full time education was not in construction

	GL 2012	UK 2012
Unweighted Base	75	1,113
Weighted Base	*n/a*	*1150*
	%	%
SOC 1 – Managers, Directors, and Senior Officials	8	4.7
SOC 2 – Professional Occupations	1	2.8
SOC 3 – Associate Professional and Technical	12	11.8
SOC 4 – Administration & Secretarial	5	3.7
SOC 5 – Skilled Trades	31	34.0
SOC 6 – Caring, Leisure & Other Service Occupations	0	1.6
SOC 7 – Sales & Customer Service	12	12.4
SOC 8 – Process, Plant & Machine Operators	11	21.3
SOC 9 – Elementary Occupations	39	33.4

Multiple responses included

Further UK-wide analysis (using the 2-digit SOC) reveals the following top ten occupation groups in which those who had jobs prior to commencing work in construction have worked:

15.0%	Elementary, Administrative & Service Occupations
14.9%	Skilled Metal, Electrical & Electronic Trades
10.0%	Elementary Trades and Related Occupations
9.7%	Process, Plant & Machine Operatives
9.4%	Sales Occupations
8.4%	Textiles, Printing & Other Skilled Trades
5.9%	Protective Service Occupations
5.0%	Transport & Mobile Machine Drivers & Operatives
2.9%	Skilled Agricultural & Related Trades
2.8%	Administrative Occupations.

3.3.4 Occupational Switching & Progression within Construction

It has long been known that workers often switch job roles within the construction industry, hence as in 2007, the survey asked workers not only about their current main role, but also about other roles they had performed within the sector. Results show that not only did workers reveal movement between the occupation groups that might be considered to be progression of skills or sideward movements, but in order to remain in employment, some workers had taken 'backwards' steps into labouring/general operative roles, or returned to a previous trade.

In Greater London, 18% of workers had undertaken more than one type of construction occupation. Nationally, 21.7% of workers had undertaken more than one type of construction occupation: a third (35.4%) have undertaken at least two different construction roles, often more.

As might be expected, the rate of switching varies considerably by current occupation group: further analysis is provided in the UK report.

4 QUALIFICATIONS & SKILLS

This section examines the competence and qualification levels of construction workers, including variations within the workforce by experience, occupation, region/nation and so on. Questions were asked to establish:

- The range of skill cards/certificates held, including the level of CSCS cards held.
- Construction-related qualifications gained before starting work in construction including those gained during an apprenticeship)
- Construction-related qualifications gained while working in construction.
  - Supervisors/managers were also asked about formal training and/or qualifications specifically designed to improve their supervisory/managerial skills or knowledge.
- Construction-related qualifications currently being worked towards.
- Workers' self-perceived need for additional training in basic skills to help them get on better at work: reading; writing; speaking English and/or maths.

4.1 Construction Skill Cards and Certificates

Over recent years, increasing emphasis has been placed on health and safety for everyone entering construction sites, and there have been moves to ensure that all workers and regular visitors have received a certain level of health and safety awareness training that can be evidenced. The vast majority of construction sites now require evidence in the form of a Construction Skills Certification Scheme (CSCS) card (equivalent from an affiliate scheme such as Construction Plant Competence Scheme; Construction Industry Scaffolders Records Scheme; or the Joint Industry Board's Electrotechnical Certification Scheme).

Respondents were asked whether they had any skill cards/certificates and what these were.

Figure 12: Whether Have a Skill Card/Certificate by Region/Nation
Base: All respondents

	2012	2007
Unweighted Base	**4,933**	**3,877**
Weighted Base	*4,800*	*3,877*
	%	%
UK	**97.3**	68
Northern Ireland	**100.0**	84
West Midlands	**100.0**	79
East Midlands	**98.8**	60
North East	**98.8**	68
North West	**98.5**	75
Scotland	**98.3**	59
East of England	**98.0**	81
South West	**97.4**	70
Yorkshire & Humber	**96.7**	66
Greater London	**95.9**	72
South East	**95.7**	71
Wales	**92.3**	82

Overall, 96% of construction workers interviewed in Greater London were clear that they held at least one of the recognised skill cards/certificates (97.3% in the UK). Although the number of 'non-holders' is small, the reality may be that some of those workers do actually hold a card, but that it is held by their employer or college (especially if on short-term work experience placement. As Figure 12 (above) shows, the proportion of construction workers that hold a skill card/certificate has increased dramatically since 2007 (72%), suggesting that it is now a pre-requisite of employment on most sites (many sites 'signing in' books require the worker's CSCS card number to be recorded as they sign in each day). Greater London now ranks 10th out of 12 regions/nations in terms of penetration of skill cards/certificates.

Figure 13 illustrates that the lowest incidence of skill cards/certificates is in fact among new entrants to the industry (up to 2 years). This suggests that preparation for, and acquisition of, a CSCS card (or similar) is not always undertaken at the earliest stages of training, or perhaps that young trainees are not always made aware of the significance of the health and safety test they take through college/training provider, and are not always issued with a card before they commence work placements (with assurances of H&S training or accreditation levels being passed directly from training provider to site management).

Figure 13: Whether Have a Skill Card/Certificate by Other Variables
Base: All respondents (unweighted regional base)

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
ALL (410)	**96**	72	97.3
<1 year in construction (13)	**-**	40	89.4
1 - 2 years (28)	**68**	55	86.4
3 - 4 years (53)	**91**	66	95.9
5+ years (311)	**99**	78	98.4
16 - 19 (5)	**-**	63	86.1
20 - 24 (59)	**88**	64	95.4
25 - 44 (247)	**97**	72	98.6
45+ (90)	**99**	79	97.2
Employed directly (157)	**99**	72	96.8
Self-employed (209)	**99**	71	98.7
Agency (44)	**68**	78	91.9
UK / ROI national (111)	**96**	n/a	97.3
Migrant worker (299)	**95**	n/a	97.7

Bases shown within tables are weighted bases

In Greater London, agency workers are also less likely to have a skill card/certificate (68%) than those employed directly (99%) and compared to the self-employed (99%).

Given the high penetration of skill cards/certificates (particularly the CSCS and its affiliate schemes) it is not surprising that there is very little variation in the proportions that have skill cards/certificates between different occupation groups.

Figure 14 below shows the proportions of workers reporting the possession of various types of skill cards/certificates. We are aware that many construction workers hold several different cards (usually, but not always of the same/equivalent level) issued under different schemes e.g. many hold CSCS and CPCS cards. However, it also became clear during fieldwork that some construction companies apply for cards on behalf of their workers, and retain the cards in an office, rather than passing the card to the employee, hence some workers are unsure of the level/type of card they hold. Interviewers also commented that many construction workers understood that affiliate schemes are equivalent to CSCS, and therefore they told the interviewer that their card was a CSCS (although when they got it out to check the colour, it could be seen to be from another scheme).

Figure 14: Type of Skill Card/Certificate Held
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	**410**	**n/a**	**4,933**
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
CSCS (Construction Skills Certification Scheme) (GB) / CRS (Construction Skill Register) (NI)	**91**	n/a	91.8
CPCS (Construction Plant Competence Scheme)	**11**	n/a	11.1
CISRS (Construction Industry Scaffolders Records Scheme)	**2**	n/a	3.0
Gas Safe Register†	**1**	n/a	1.4
JIB ECS (Electrotechnical Certification Scheme)	**2**	n/a	1.2
CTA (Certificate of Training Achievement)	**1**	n/a	1.1
Engineering Services SKILLcard	**2**	n/a	1.0
Safe Pass	**1**	n/a	0.6
Other	**8**	n/a	6.9
Don't know	**1**	n/a	0.5
None	**4**	n/a	2.7

Multiple responses included
† Gas Safe Register replaced 'CORGI Registration' between the 2007 and 2012 surveys

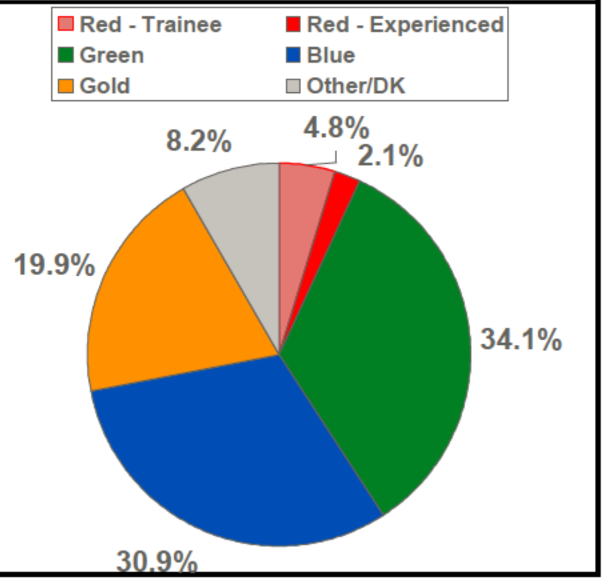
The majority (91%) of construction workers in Greater London hold a CSCS or CRS card (or an affiliate card that they know equates to a CSCS card), compared with 91.8% in the UK. The possession/attainment of other cards is much less widespread, as would be expected, since other cards tend to be more skill/trade specific than the CSCS/CSR card. Alongside the increased level of reporting of CSCS card possession, it is also striking that across the UK numbers mentioning having no card/certificate, not knowing whether they hold such an accreditation, or mentioning something other than those listed above a recognised by the CSCS has fallen.

Further analysis (see Appendix Table 7) shows that variations in specific cards attained by different groups of workers are minimal.

Many construction workers carry their skill cards in their wallets, and although they could not remember the colour or level of their card, it could be checked during the interview, and compared to a showcard with both the 'new' and 'old' cards pictured. However, there is still some confusion between older style 'operative' and 'skilled worker' cards (where the blue or green typeface on a white background is arguably less distinct and memorable). Figure 15 below shows that awareness of the colour/level of CSCS/CSR cards held has increased significantly among card holders since 2007, and the strongly coloured cards now being issued is an important factor in this.

Figure 15: Type of CSCS or CSR Card Held
Base: Those with CSCS or CSR cards

	GL 2012	GL 2007	UK 2012
Unweighted Base	393	228	4 810
Weighted Base	*n/a*	*n/a*	*4,355*
	%	%	
Red (trainee)	**7**	7	
Red (experienced worker)	**1**		
Green (operative)	**33**	34	
Blue (skilled - NVQ/SVQ 2)	**22**	23	
Gold (supervisor - NVQ/SVQ 3)	**17**	15	
Platinum (manager - NVQ/SVQ 4)	**3**	<1	
Black (NVQ/SVQ 5)	**2**	1	
Other	**6**	3	
Don't know/not sure	**10**	16	
Total	**100**	**100**	



One third of the workforce (33%) holds the green (operative) card and a fifth (22%) holds the blue (skilled NVQ/SVQ 2) card; and 17% holds a gold (supervisor/NVQ/SVQ 3) card. Other cards are held by a much smaller proportion of the workforce. The proportion of workers reporting that they are not sure which card they hold has decreased significantly between 2007 and 2012. The distribution of CSCS card types is broadly in line with the UK distribution shown in the pie chart above.

4.2 Construction Qualifications Held

Workers were asked what formal qualifications relevant to construction they obtained before they started work in the sector (to include qualifications gained through undertaking an apprenticeship). Where more than one relevant qualification had been gained, the highest level was recorded.

Another question asked was whether additional qualifications had been gained since commencing work (or completing apprenticeship) in the construction sector.

Together, these questions allowed researchers to derive the highest level of construction qualification held at the time of interview, also the main type of qualification (NVQ/SVQ, City & Guilds etc.) through manual re-coding, and an assessment of how relevant the subject of the qualification was to the current occupation.

The survey results reveal that is it common for employers to arrange or support accredited qualifications (as well as non-accredited skills training) that may be at the same or lower level as those already held by workers – perhaps as part of a workforce-wide training programme. These additional qualifications, although not at as high a level as existing qualifications may be, are often more focused on a specific technical skill. Although difficult to evidence within the survey data, it was evident during interviewing that many courses undertaken during employment were described as being at a certain NVQ/SVQ level, but were not actually full NVQ/SVQs.

The following analysis takes the level and type of qualification at face value as described by the worker. However, we have excluded mentions of 'tickets' and cards of competence for operation of various types of construction equipment and plant (IPAF and PASMA were frequently mentioned by plant operators, by those in various general operative/labourer roles, as well as by some skilled craftsmen).

Three fifths (60%) of construction workers in Greater London reported holding a construction-specific qualification: Figure 16 shows the variation in qualification penetration between groups of construction workers, and further detail can be seen in Appendix Table 8.

Figure 16: Whether Hold Any Construction-Specific Qualification
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
ALL (410)	**60**	36	45.7
<1 year in construction (13)	**-**	6	10.7
1 - 2 years (28)	**28**	15	18.3
3 - 4 years (53)	**53**	13	39.6
5+ years (311)	**67**	47	49.6
16 - 19 (5)	**-**	21	21.7
20 - 24 (59)	**44**	21	37.7
25 - 44 (247)	**63**	38	47.9
45+ (90)	**62**	46	48.4
Employed directly (157)	**67**	39	48.9
Self-employed (209)	**63**	35	44.2
Agency (44)	**23**	28	34.0

Greater London workers who have been in the sector for one to two years are much less likely than average to have achieved a construction-specific qualification (28%): many, but not all, will be undertaking qualifications (including through an apprenticeship programme). A similar and correlated finding is that a lower proportion of young people hold a construction qualification (44% of 20-24 year olds).

Agency workers are significantly less likely than average to have a construction qualification (23%) compared to both those who are employed (67%) and those who are self-employed (63%): 46.9%; 66.3% and 66.2% respectively for the UK as a whole.

Migrant workers in the UK are also less likely than average to hold a construction qualification (33%).

Figure 17 below shows the proportion of the UK workforce holding a construction-specific qualification by occupation (the regional bases for individual occupation groups are too low report separately). Those in occupations where there is a high likelihood of having a construction-related qualification (i.e. where 50% or more of the workforce say they have a qualification) are shown in the left column. Those with a low likelihood (less than 50%) are shown in the right column.

Plumbers, electricians, carpenters/joiners, and bricklayers and are the occupations that are most likely to report having a construction-specific qualification (89.0%, 88.9%, 85.8% and 80.3% respectively). For most of the occupation groups in the lower likelihood, between half and two thirds reported having a construction-related qualification. The lowest incidence of self-declared construction qualifications (other than test certificates required to get CSCS cards or to operate machinery on site) was among floorers, banksmen, steel erectors/riggers, roofers and general operative/labourers (all below 58%).

Figure 17: Whether Hold a Construction-Specific Qualification by Occupation
Base: All respondents (unweighted UK base)

HIGH likelihood			LOW likelihood		
	2012	2007		**2012**	2007
	%	%		%	%
Plumber (279)	**89.0**	64	**Plasterer (142)**	**68.9**	41
Electrician (422)	**88.9**	70	**Ceiling fixer (57)**	**68.3**	
Carpenter / joiner (637)	**85.8**	65	**Mechanical fitter (30)**	**64.3**	
Bricklayer (524)	**80.3**	73	**Plant/machine op (348)**	**60.3**	37
Painter / decorator (187)	**77.8**		**Dryliner (181)**	**59.6**	†
Technical (114)	**77.0**		**Floorer (63)**	**57.8**	
Scaffolder (198)	**74.6**		**Banksman (80)**	**56.1**	37
Site manager (25)	**73.3**	73	**Steel erector/rigger (113)**	**55.6**	
Welder (32)	**72.4**		**Roofer (185)**	**55.6**	29
Window fitter/glazier (58)	**72.4**		**Gen op/labourer (1,106)**	**54.1**	19
Pipe fitter (116)	**72.4**				

† Dryliners were reported in combination with plasterers in 2007. Reporting in 2007 only presented the top five and bottom five occupations – hence it is not possible to present comparative data for all groups.

Where information from 2007 is available some interesting changes can be observed, particularly increase in the proportions with construction qualifications in occupation groups that previously had low qualification rates. The table above (Figure 17) shows that the proportions of ‘site managers’ with a construction qualification is unchanged, but that for all other occupations with comparative data, the proportions have increased. The greatest increase can be seen among occupation groups that are semi-skilled or relatively unskilled, including plant/machine operative, banksman, and general operative/labourer, underlining the increased provision of nationally recognised qualifications (largely NVQ/SVQs) targeted at these roles.

4.3 Type of Construction Qualifications Held

Data presented below combines reports of construction-related qualifications gained before employment in the sector, during apprenticeships and while working. Wherever possible interviewers probed for details of any qualifications gained during an apprenticeship, hence ‘apprenticeship’ is only recorded where it was an informal or company-specific programme without accredited qualifications, or where the worker was unsure of any qualifications undertaken.

In 2012, 72% of workers in Greater London with a construction-related qualification reported that their main qualification was an NVQ/SVQ: this compares with 71.3% for the UK as a whole.

A further 10% of those with qualifications had a City and Guilds qualification as their main construction qualification. Other types of qualifications were rarely reported as the main type (see Figure 18 for a full breakdown).

Some interesting changes can be seen to have occurred in the last five years within Greater London. The proportion of workers with an NVQ/SVQ increased from 57% to 72% between 2007 and 2012, an increase of 15 percentage points. In contrast, there was a decrease of 20 percentage points in workers holding a City and Guilds qualification as their main qualification.

Figure 18: Main Type of Construction Specific Qualification Held
Base: Those with a qualification

	GL 2012	GL 2007	UK 2012
Unweighted Base	**163**	**119**	**2,284**
Weighted Base	*n/a*	*n/a*	*2,196*
	%	%	%
NVQ/SVQ	**72**	57	71.3
City & Guilds	**10**	30	17.1
Construction Award	**1**	2	*
Apprenticeship	**0**	6	0.9
HNC/HND/BTEC Higher	**2**	1	1.3
Degree	**4**	-	0.6
Other	**4**	n/a	2.9
Don't know/not sure	**7**	n/a	5.6
Total	**100**	**100**	**100**

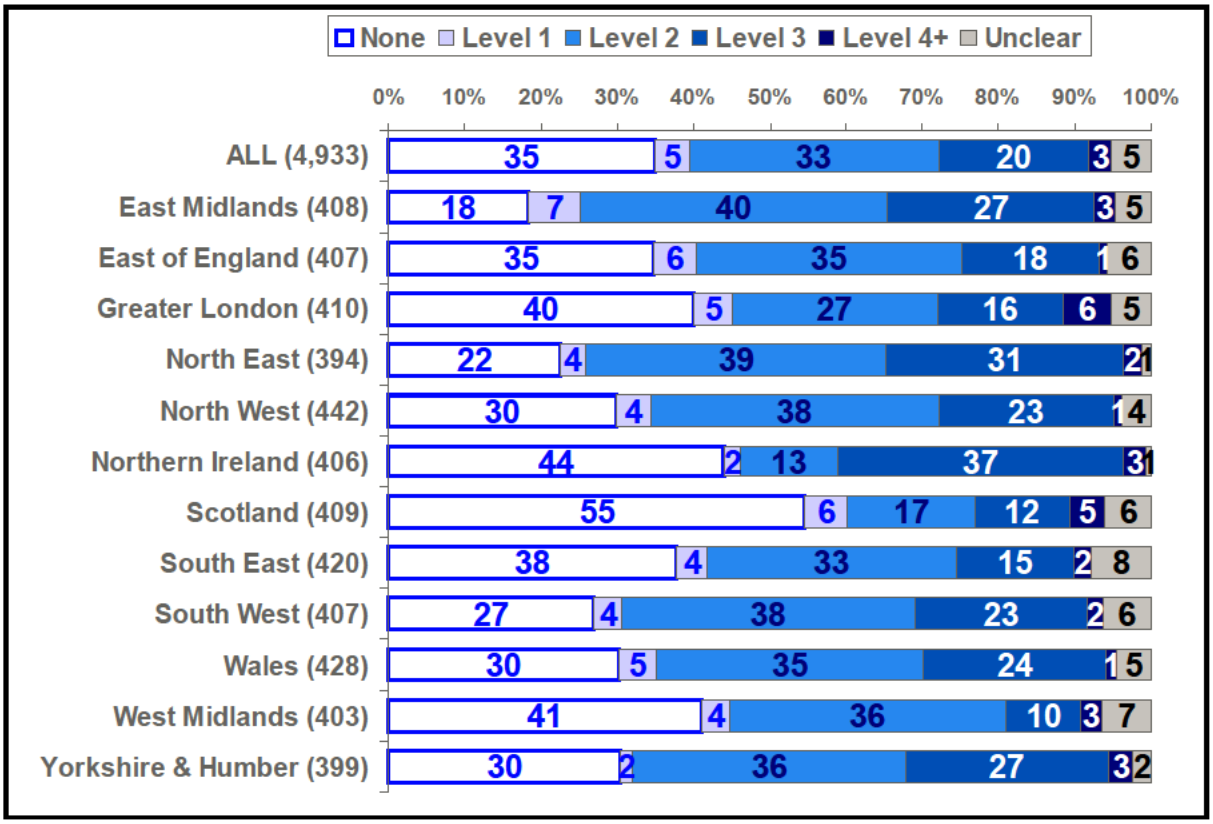
So far, this section has examined the penetration and type of qualifications held by construction workers. Figures 19 and 20, over the page, focus on the level of qualification (on the National Qualification Framework) that construction workers have reached, by occupation and region/nation.

Two fifths (40%) of workers in Greater London did not have a construction related qualification, and a further 5% did not provided sufficient information about any construction training courses they had done for a level to be derived. A relatively low proportion (5%) of construction workers in Greater London are qualified to level 1 only. The majority have either a level 2 (27%) or a level 3 (16%) qualification (33% and 20% respectively in the UK).

There are some interesting variances in the current qualification levels of the workforce by region/nation (see Figure 19). Scottish workers (55%) are most likely to have no current qualification to report. This is the only geographical area in which more than half of the workforce has no construction qualification. Northern Ireland (44%), the West Midlands (41%), Greater London (40%) and South East (38%) also have high proportions of the workforce with no current qualification.

Workers are most likely to currently hold a qualification (at any level) in the East Midlands and North East regions.

Figure 19: Current Qualification Level by Region/Nation
Base: All respondents

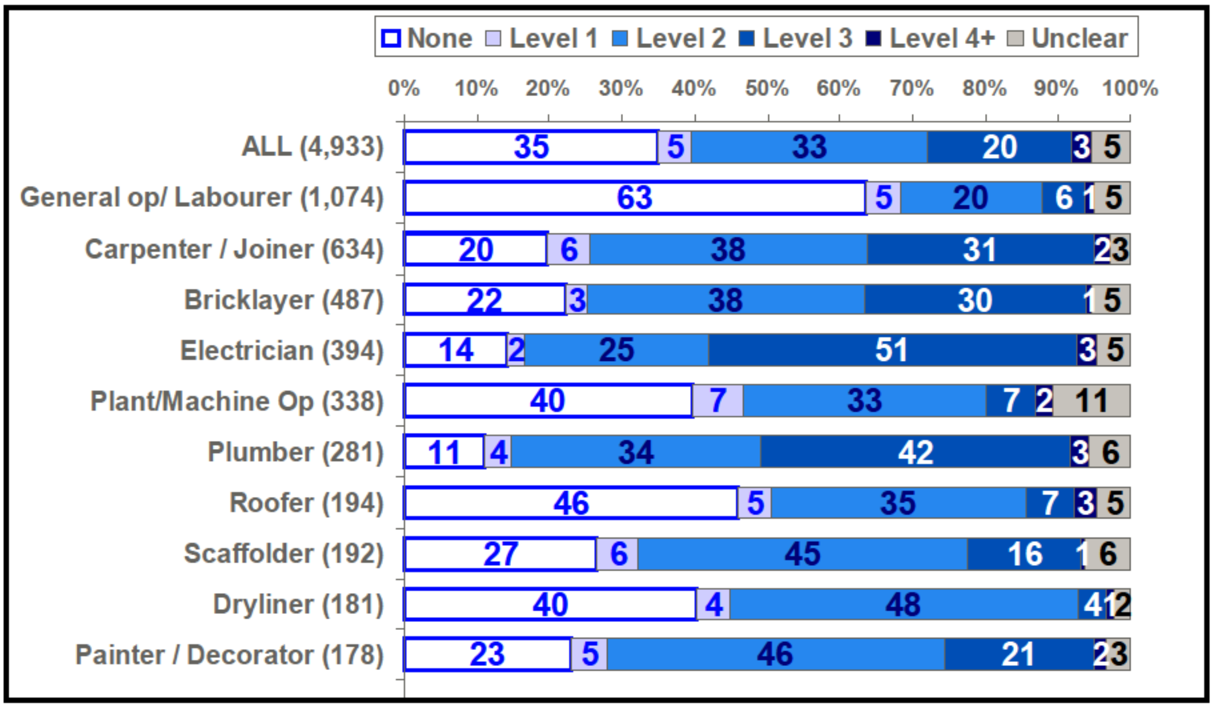


Across the UK as a whole, workers undertaking unskilled and relatively low-skilled tasks such as labourers/general operatives are least likely to have a construction qualification. Of those who do, one fifth (20%) have a level 2 qualification. Just under half of all roofers (46%) and two in five plant/machine operatives (40%) and dryliners (40%) and also have no specific qualification/level to report.

There is variability in the proportion of the UK workforce with a level 2 qualification by occupation, ranging from 20% for general operatives/labourers to 48% for dryliners. There is also significant variability in the proportion of the workforce with a level 3 qualification by occupation. Occupational groups with the highest qualification levels include electricians (of whom just over half have a level 3 or level 4 qualification) and plumbers (just over two fifths have a level 3 or level 4 qualification).

Across all occupation groups, fewer than 5% of workers in the UK are qualified to level 4.

Figure 20: Current Qualification Level by Occupation (UK)
Base: All respondents



4.4 Additional Formal Training

To establish the extent to which there are additional skills/training needs across the construction workforce, construction workers were asked to state whether they are currently undertaking any additional qualifications, and also, whether they have any basic skills needs to help them undertake their work.

4.4.1 Self-Assessment of Basic Skills Needs

In Greater London, workers' self-assessed need for training in basic skills has remained roughly static between 2007 and 2012, with around a quarter of the whole workforce stating that they require training in one or more of these areas (see Figure 21). There have only been minimal changes in self-assessed need for each type of training in the last five years: a slight increase can be seen for maths, and a decrease for other skills.

Figure 21: Self-Assessed Need for Training in Basic Skills
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
Any need identified	**26**	24	19.7
Maths	**10**	8	10.3
Reading	**11**	14	9.1
Writing	**11**	12	8.8
Speaking English	**14**	15	8.0

Multiple responses included

Further analysis shows that older workers (35+) are less likely to report that they would benefit from training in any basic skill (22%), as are those who have been working in construction for more than 5 years. Those aged 35+ are also less likely to be open to receiving support with maths (6%) than younger workers (12% of workers aged under 35).

Those with a supervisory/management role (24%) are less likely to feel they require any basic skills training than those with no supervisory/management responsibilities (27%). Also, those with higher qualifications (15% at level 4) are less likely than the average to feel they could benefit from any basic skills training.

Nationally, there are a number of specific occupational groups who are more likely to report that they could benefit from some sort of basic skills training: window fitters/glaziers (33.9%), banksmen (28.0%) and roofers (25.3%).

4.4.2 Current Study for Additional Construction Qualifications

Just 12% of workers in Greater London said that they were working towards additional construction qualifications at the time of the interview, compared with 15% in 2007 and one in ten (10.5%) in the UK as a whole. Interestingly 3% reported that they were unsure whether or not they were working towards a qualification at that time: anecdotally, this was a combination of not having felt they had been aware that they were working towards qualifications in the past until an assessor visited them at work, and not being sure whether their employer-led training had a nationally recognised qualification attached or not. However, even if all those who were 'unsure' were actually working towards a qualification, the overall proportion would still be lower than in 2007.

A higher than average rate of current learning activity can be seen amongst a range of groups including:

- Workers who are 'new' to the sector: 1-2 years (18%).
- Younger workers: 20-24 years (22%).
- Those who are directly employed by a company (12%).
- Certain trades in the UK: electricians (21.5%), window fitters (20.7%) and scaffolders (19.4%).

Figure 22: Whether Working Towards Additional Construction Qualifications
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
ALL (410)	**12**	15	10.5
<1 year in construction (13)	**-**	40	26.4
1 - 2 years (28)	**18**	9	35.4
3 - 4 years (53)	**15**	17	21.0
5+ years (311)	**10**	12	7.5
16 - 19 (5)	**-**	42	55.7
20 - 24 (59)	**22**	17	19.5
25+ (337)	**9**	13	7.0

4.5 Supervisory and Managerial Qualifications and Training

All workers who reported that they had some supervisory or management responsibilities on their current site were asked what formal training (if any) they had ever received that had been specifically designed to improve managerial or supervisory knowledge and skills. A showcard was used with seventeen common forms of supervisory/management training (including various qualifications) listed in Figure 23 below.

Figure 23: Training Received to Improve Supervisory/Management Skills
Base: Those with supervisory or managerial duties

	GL 2012	GL 2007	UK 2012
Unweighted Base	84	56	801
Weighted Base	*n/a*	*n/a*	*814*
	%	%	%
No training received †	**11**	46	29.0
In-house training	**38**	32	23.6
Site Safety Supervisors Course	**25**	5	19.3
SMSTS (Site Manager Safety Training Scheme)	**36**	5	16.7
Chargehand and Team Leader Training	**6**	11	6.9
NVQ / SVQ Level 4 in Construction Site Management	**4**	0	4.6
CIOB Site Management Education and Training Scheme (SMETS)	**6**	0	3.2
CIOB Site Supervisor	**6**	2	3.0
Assessor and Verifier Training	**4**	9	3.0
Site Supervisor Safety Training Scheme (SSSTS)	**1**	n/a	3.0
Project Management short courses	**5**	2	2.1
Supervisory Management Training and Development (SMTD)	**2**	4	2.1
IOSH (Institute of Occupational Safety and Health) unspecified	**0**	5	2.0
Managing Safely in the Construction Industry (for CSR)	**4**	5	1.9
IOSH Managing Safety for Construction Managers	**1**	0	1.6
Civil Engineering Site Managers Scheme	**2**	2	1.4
Institute of Supervision and Management workshops	**1**	0	0.7
IOSH Safety for Senior Managers	**0**	2	*
Safety for Senior Executives (for CSR)	**1**	0	*
Other	**1**	2	3.4
Can't remember	**2**	n/a	4.4

† 2007 data includes 'can't remember'.

The proportion of construction supervisors/managers in partially manual roles that had received some sort of formal training for staff supervision had increased dramatically since the previous survey (87% in 2012 compared to 54% in 2007). This is a positive finding for the entire workforce, not only for those asked to undertake supervision of teams (often as sub-contractor team leaders) but also for individual site workers, who have senior colleagues or leaders with enhanced awareness of their responsibilities, legal requirements, importance of communication, health and safety knowledge etc.

The proportion of supervisors/managers in Greater London who had received no training of this kind was 11% compared with 29% in the UK as a whole.

There is some variation in the types of training undertaken to improve supervisory/ management skills. Not only are more workers in supervisory roles receiving training, but nationally fewer report that the training is in-house. Therefore there is evidence of the sector increasingly investing in external training courses, including those with recognised certification. However, within Greater London, receipt of in-house training increased slightly from 32% in 2007 to 38% in 2012.

There have been notable increases in participation in two courses/schemes: Site Safety Supervisors Course (25% compared with 5% in 2007) and Site Manager Safety Training Scheme (36% compared with 5%).

4.6 Overall Skill Levels

An overview of the qualification and skill levels of construction workers surveyed has been derived by combining data from various separate measures, and is presented in Figure 24.

The vast majority of construction workers have a construction-related qualification and/or skill card/certificate (or were working towards a qualification at the point of interview): only 4% of those interviewed in Greater London could not say that they were at least working towards obtaining a CSCS card (or similar) or construction qualification. This is a significant improvement from 2007, where 20% did not have, and were not working towards, any sort of proof of skill or knowledge relating to the industry. Over half of the regional workforce (56%) hold a skill card/certificate, but have no other construction qualification: up from 43% in 2007.

Figure 24: Qualification Status Summary
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	**410**	**355**	**4,933**
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
Hold a formal construction qualification or a skill card/certificate or working towards a qualification	**96**	80	97.8
Hold a formal construction qualification or a skill card/certificate	**96**	76	97.7
Hold a skill card/certificate	**96**	72	97.3
Hold a skill card/certificate but no other construction qualification	**56**	43	52.0
Working towards a qualification	**12**	15	10.5

Multiple responses included

There has been a small decrease in the proportion of workers in Greater London who are working towards a construction qualification (from 15% to 12%), and a clearer pattern of decline in training was seen in the UK as a whole (from 17% to 10.5%). This may be partially indicative of a slow-down in recruitment of new workers (especially younger workers enrolled in training to qualifications) and of employers closely managing spend on training and qualifications, but is also likely to reflect the great steps already taken in recent years to deliver relevant qualifications to the workforce.

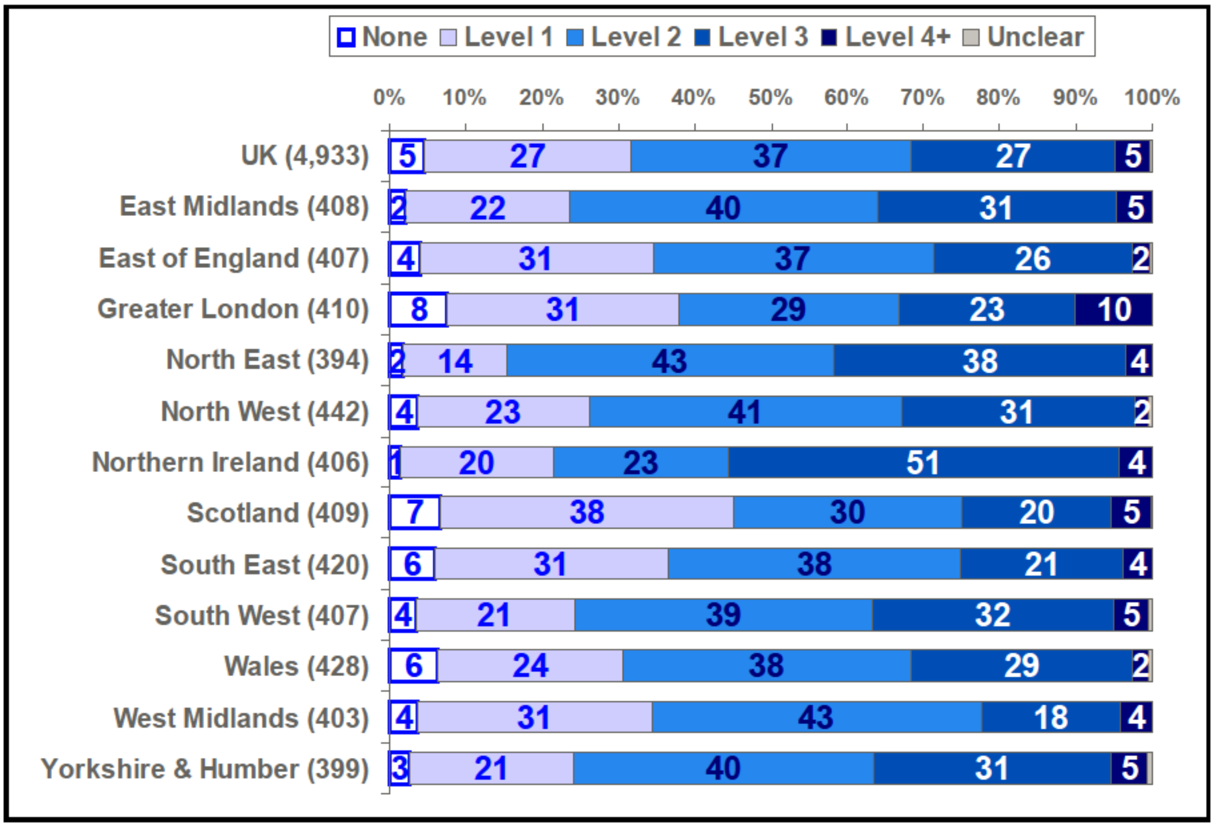
Following analysis conducted in 2007, an overall skill level has been calculated by combining the formal qualification levels discussed above, with assumed NVQ/SVQ level equivalence of the various supervisory/management course recorded, and cross-referencing with the type of CSCS (or affiliate) card held. The resultant variable has been used to produce Figure 25, which illustrates the overall skill level of the workforce by region/nation.

On average, 8% of workers had no evidenced skill/qualification level: compared with 9% in 2007, and 5% in the UK as a whole. Absence of evidenced skills/qualifications is slightly higher than average in Scotland (7%), but lower than average in Northern Ireland (1%), the East Midlands and the North East regions (2% and 2% respectively).

In Greater London, 31% have evidence of skill/qualification at level 1; 29% at level 2; and 23% at level 3. Across the UK workforce, just over a quarter (27%) have a skill/qualification equivalent to level 1 only; more than a third (37%) at level 2; another quarter (27%) at level 3.

The geographical areas in which construction workers are significantly more likely to hold qualifications at a higher level (level 3 or more) are Northern Ireland (54.9%) and the North East (41.6%).

Figure 25: Overall Skill Level by Region/Nation
Base: All respondents



Analysis by other factors reveals that those who have worked in construction for 2 years or fewer are less likely to have reached level 2 or higher (17% compared with 68% for those with 3 or more years' experience). As one might expect, those with a supervisory/ management role are more likely to have reached level 3 or above than those with no supervisory role (70% compared with 24%).

5 GEOGRAPHIC MOBILITY

A key driver of this research was to gather an up-to-date picture of the geographic mobility of construction workers, including to establish which areas of the UK are net 'importers' or 'exporters' of construction workers. Furthermore, this research will document which sections of the workforce (according to factors such as occupation group and qualification/skill level) are the most mobile. This data can support CITB-ConstructionSkills and other sectoral organisations' planning for training provision and investment.

There are numerous ways in which worker mobility can be measured, and several approaches were employed in this survey:

- Comparison of the region of residence immediately before joining the construction workforce, and the current region of employment.
- The proportion of their construction career that has been spent working in the current region.
- Whether the current site is commuted to daily from their main permanent residence or temporary accommodation is being used.
- The miles travelled to site each day.
- Whether the next site is 'commutable' or requires the use of temporary accommodation.

Of course these factors largely measure relatively long-distance inter-regional/national mobility, but some workers move between sites regularly (daily in the case of some technical occupations and scaffolders). For these workers, additional training can be more difficult to organise, potentially requiring absence from multiple sites, and support from more than one manager, or even company.

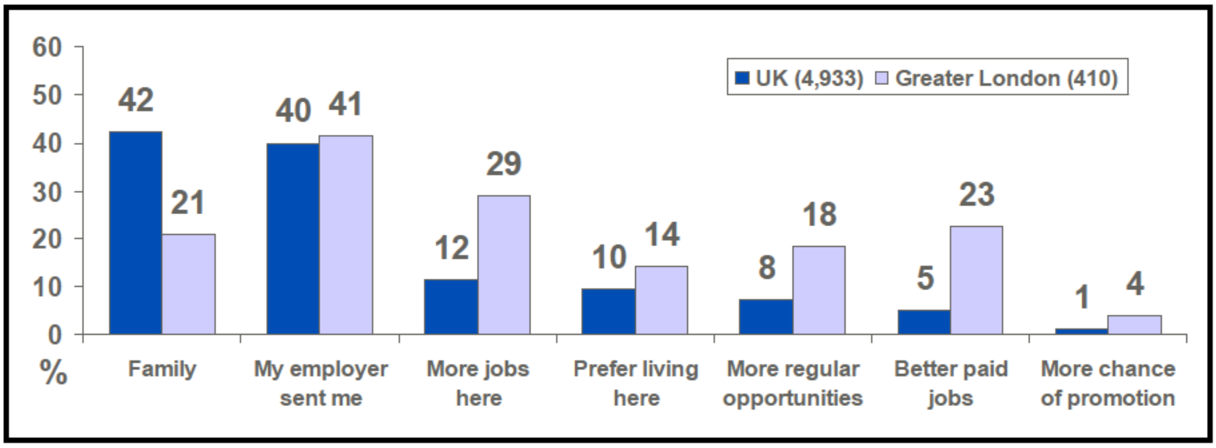
5.1 Work History in the Current Region

Unlike in the 2007 survey, all workers were asked why they were working in the area in which they were interviewed. Answers were recorded onto a pre-coded list of seven reasons, with the scope for noting any substantially different reasons given. More than one reason could be recorded.

One fifth (21%) gave an answer relating to family reasons: either that they grew up in the area / had lived there all/most of their lives, or that they have moved to the area to follow family or a partner (compared with 42.3% nationally). Two fifths (41%) said that their employer had sent them there: these were predominantly direct employees, or self-employed workers who worked exclusively for one company as if they were directly employed by them. In some cases the interpretation of 'this area' had been very localised (thinking about the location of the specific site within their home region/nation) hence answering that it was their employer's choice where they worked, whereas if the question had been specifically about working within that region/nation, they may have given a response fitting the 'family reasons'.

Nearly a third (29%) said there were more jobs available in that area than where they had lived/worked in the past. A quarter (23%) said that they were working in an area for better pay. One sixth (14%) stated that they preferred living in Greater London – suggesting that they had either relocated at that point, or had worked away from home for a while but returned out of choice.

Figure 26: Reason for Working in the Current Region/Nation
Base: All respondents



Of those construction workers interviewed in Greater London, 37% spent their entire construction career working there: a higher proportion than in 2007 (28%). One in three (33.0%) of the UK construction workforce reported that they had worked in the same region/nation for their entire construction career. The increased proportion that had worked for some period outside their home region/nation is most likely to be explained by sub-contracting companies taking contracts further from their base and requiring workers to travel, rather than individuals taking jobs away from home (either to 'go into digs' or to move house).

Figure 27: Proportion of Construction Career Worked in Current Region/Nation
Base: All respondents

	GL 2012	GL 2007	UK 2012
Unweighted Base	410	355	4,933
Weighted Base	*n/a*	*n/a*	*4,800*
	%	%	%
All of it	**37**	28	33.0
Most of it	**34**	43	35.9
Around half	**16**	17	12.1
A small proportion	**7**	10	13.5
Only on this job	**2**	1	3.2
Don't know	**3**	1	2.2

5.2 Worker Origins

Workers were asked which region/nation they were living in just before they got their first job in construction in the UK (or whether they moved from outside the UK). One in six (16%) of workers in Greater London were originally from outside the UK, compared with 22% in 2007. This is a much greater proportion than for the UK as a whole (5.7%): fewer than 2% were from the Republic of Ireland, and most of the remainder were from outside the EU, predominantly Eastern Europe. It appears that the number of migrant workers (from beyond the UK and ROI) in the UK has halved in the last five years. While construction workers still talk of the pressure of securing work in the industry against competition from migrant workers, this perception might have persisted from the reality of several years ago when construction was more buoyant. Site managers commented to interviewers that far fewer non-UK nationals are looking for work on their sites, although there is also a perception that many of those who have settled in the UK have moved away from working on large construction sites (often with teams from their home nation) to work self-employed for small building companies and directly for householders once their English language skills are good enough.

Some caution should be taken in the interpretation of this data, as it cannot distinguish between workers who had relocated; are staying in 'digs' short-term; are travelling long distances or those who live and work close to a regional/national border, and perhaps travel less distance into a neighbouring region/nation than other workers do within a region/nation.

On average, two thirds (65.8%) of workers in the UK were interviewed on construction sites in the same geographical area in which they were living when they started working in the construction sector. In Figure 28 (below) the diagonally grey shaded cells identify those still working in same region/nation, and the blue column identifies the proportion of workers interviewed in Greater London, by the region in which that they began their construction career.

The proportion of Greater London's workers that had also begun their construction career in the same region/nation as they were interviewed was 46%, compared with 65.8% for the UK: a lot less than average.

Figure 28: Inter-Regional/National Movement During Construction Careers
Base: All respondents

	WHERE CURRENTLY WORKING											
ORIGINAL HOME	**NI**	**WA**	**NE**	**SC**	**YH**	**NW**	**SW**	**EM**	**WM**	**SE**	**EE**	**GL**
Unweighted Base	406	428	394	409	399	441	408	407	403	420	407	411
Weighted Base	*142*	*228*	*170*	*402*	*370*	*469*	*422*	*340*	*402*	*718*	*499*	*638*
	%	%	%	%	%	%	%	%	%	%	%	%
Northern Ireland	95.7	*	*	1.2	*	2.6	*	*	1.7	1.0	*	0.9
Wales	*	85.7	*	*	*	2.6	3.1	0.6	1.5	*	*	0.5
North East	*	*	85.2	1.5	4.3	0.6	*	4.2	2.0	1.4	1.2	1.7
Scotland	0.7	0.9	0.6	83.4	*	2.8	*	0.6	0.7	*	1.0	0.8
Yorkshire & Humber	*	0.9	10.7	1.7	80.0	4.5	*	9.5	3.2	1.4	2.2	0.9
North West	*	6.3	2.4	*	6.5	79.4	*	3.6	5.7	0.7	3.0	0.9
South West	*	2.2	0.6	0.7	*	*	77.4	0.6	1.7	5.7	*	0.8
East Midlands	*	*	0.0	*	2.4	*	0.5	63.2	13.7	6.3	13.5	0.8
West Midlands	*	0.9	0.0	2.2	1.1	4.0	2.1	10.4	57.2	2.1	1.8	3.0
South East	*	*	0.0	0.5	0.5	0.6	12.1	0.9	1.5	52.4	15.7	23.5
East of England	*	*	0.6	*	*	*	*	2.4	0.5	6.0	48.3	3.5
London	*	*	*	2.2	0.8	*	1.9	1.2	1.7	11.7	10.1	46.0
Outside UK	3.6	1.3	*	5.7	0.8	2.1	1.4	3.0	8.0	9.7	2.0	16.2
Unclear	*	*	*	*	2.2	*	0.7	*	0.7	1.3	0.6	0.5

Regions/nations with the most stable workforces (i.e. importing the lowest proportions of workers) are Northern Ireland, Wales, the North East, Scotland and Yorkshire & Humber: arguably areas of geographic isolation. In addition to Greater London, the regions with the highest levels of construction workers imported from beyond the region are the more buoyant areas of southern England (East of England and the South East).

The key national patterns of mobility of construction workers between regions/nations of the UK can be summarised thus:

- More than half of workers on London sites were originally from beyond the city: including almost a quarter (23.5%) from the South East (presumably in the commuter belt). Notably 16.2% of workers we interviewed in the capital were living overseas before they got their first UK construction job – so they can reasonably be assumed to be economic migrants. The actual figure may be higher when those whose first UK construction job was not in London are added.
- London appears to be the greatest exporter of construction labour to other parts of the UK. Those starting out in construction in London account for at least one in ten workers in the South East and East of England, due to the closely adjacent borders of these more vibrant regions.
- One in ten workers in the North East were originally from the neighbouring Yorkshire & Humber region: mainly commuting daily up the A1 from the North Yorkshire borders and the West Yorkshire conurbations (where work is reported to be in short supply). Fewer than one in twenty Yorkshire & Humber site workers had started work in the North East.
- While Scotland's construction workforce is dominated with 'home-grown' employees, and a very small number from the regions of northern England, it is perhaps surprising to see London as the single greatest supply region. However, it is also noticeable that one in twenty workers lived outside the UK before their first construction job, hence it is likely that some overseas immigrants began work in London before being attracted to projects in Scotland. Several Scottish sites either requested Polish questionnaires, or commented upon the existence of workers from various Eastern European countries who would be comfortable being interviewed in English.
- Wales imports less than 15% of its construction workforce: the greatest area of supply is the North West, presumably not just through re-location of residence, but daily commute into North Wales.
- Northern Ireland imports very little labour from elsewhere; around 1% from other parts of the UK, and less than 5% from elsewhere (predominantly from its neighbour, the Republic of Ireland).

The proportion of construction workers reporting that they were working in the same region/nation in which they acquired their first construction qualification as they were when interviewed is shown in Figure 29. Great variation can be seen between regions/nations, from 97.8% down to 45.5%. Greater London has a close to average proportion stating that their first construction qualification was also gained within the region (64.3%): this proportion has increased from 56% in 2007.

Compared with 2007, a smaller proportion of construction workers on sites in the North East, East Midlands, West Midlands, East of England, and South East had achieved their first construction related qualification in the same region. In contrast, the North West and Greater London construction workforces have seen increases in the proportion of workers who undertook their first construction qualification in the same region as they were working when interviewed.

Figure 29: Where Working When First Qualification was Achieved
Base: Those with a qualification (unweighted base)

	2012 Within current region/nation	2007 Within current region/nation	Higher than average mentions for other regions/nations
	%	%	
Northern Ireland (135)	**97.8**	94	
Scotland (133)	**85.5**	84	
North West (204)	**85.3**	77	
Wales (226)	**85.0**	87	North West 6%
Yorkshire & Humber (192)	**82.6**	81	
North East (186)	**82.3**	90	Yorkshire & Humber 11%
South West (231)	**72.3**	71	South East 13%
Greater London (163)	**64.3**	**56**	**South East 16%, East of England 10%**
East Midlands (273)	63.9	78	West Midlands 11%
West Midlands (198)	**60.6**	83	East Midlands 16%
East of England (170)	**49.3**	71	South East 14%, East Midlands 14%
South East (173)	**45.5**	66	London 20%, East of England 9%

Higher than average mentions were given to some neighbouring regions/nations: South East and East of England for workers in the Greater London region. These findings suggest that in regional/national border areas, construction related qualifications are often gained in the neighbouring region/nation.

5.3 Travel to Site

As mentioned above, while most construction workers travel from their permanent home to their current construction site each day. For many this means driving into another region/nation and, for some, distances may be so great or traffic be so bad that they have a temporary residence: mid-week 'digs' or longer term temporary accommodation.

Consequently the survey asked about the location of each worker's permanent home (postcode if known) and distance to site, and for those using temporary accommodation, requested details about the location and distance from the temporary accommodation to site.

5.3.1 Relative Locations of Current Workplace to Home

The majority of construction workers were interviewed on a site that was located within the same region/nation as their permanent home: 62.6% for Greater London.

Unsurprisingly, it is London and the South East that 'import' the greatest proportion of construction workers (39.4% and 37.4% respectively). However, both import the majority of their workers from neighbouring regions, including each other. The East of England, West Midlands and East Midlands are also significant importers of labour, in each case at least three workers in every ten.

Other regions/nations tend to import between one in ten and one in five workers, predominantly from neighbouring regions/nations. However, Wales, Scotland and Northern

Ireland have lower levels of labour inflow. While 9.1% of those working on construction sites in Wales come from beyond the nation, two thirds of the incoming labour is from neighbouring regions. Scotland actually sources remarkably little of its imported construction labour force from the northern counties of England that it borders (just 2.0% of its entire workforce, but around one in four of its 'in-flowing' workers).

Northern Ireland has very few workers from beyond the nation: mostly from the Republic of Ireland.

Figure 30: Inter-Regional/National Movement from Permanent Residence to Current Site

Base: All respondents (unweighted base)

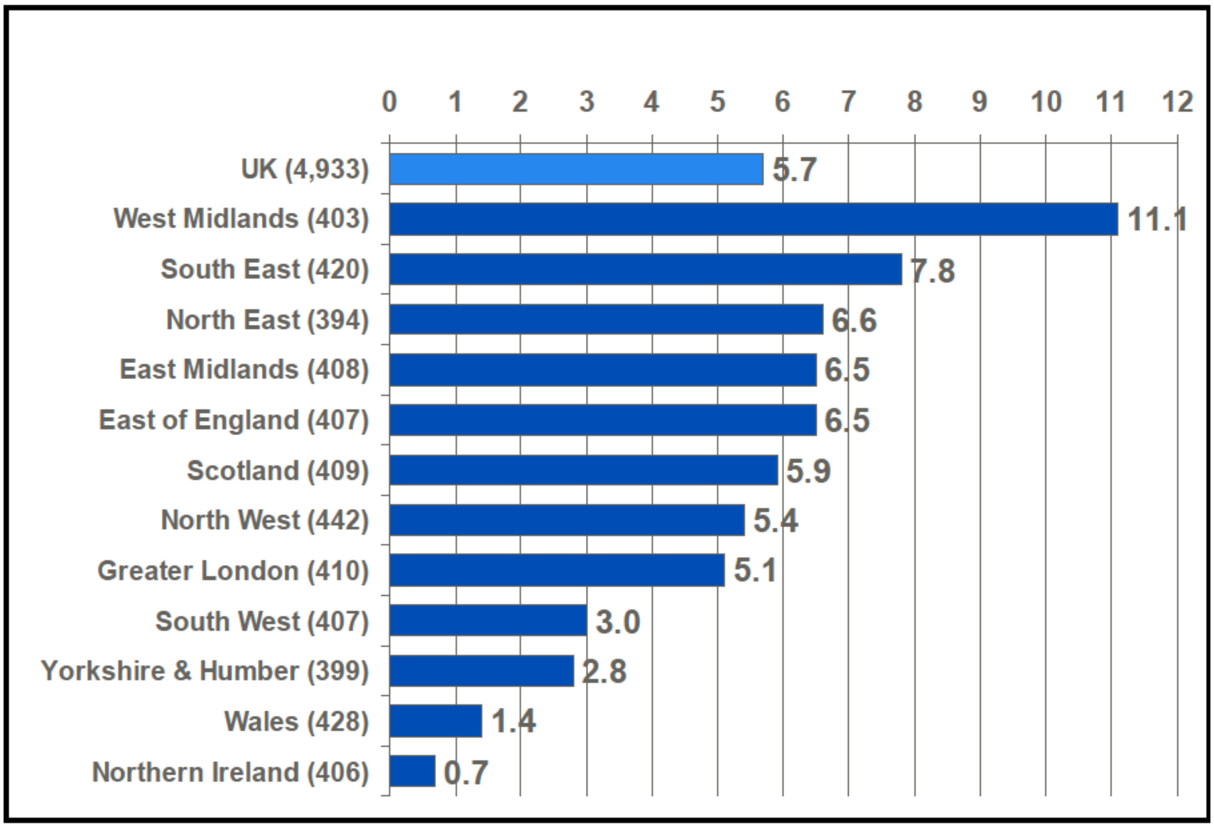
	2012			2007		
REGION/NATION OF CURRENT SITE	**% from same region/nation**	**% from different region/nation**	**% from neighbouring region/nation**	% from same Region/nation	% from different region/nation	% from neighbouring region/nation
Northern Ireland (406)	**98.5**	**1.5**	**1.5**	99	1	-
Scotland (409)	**92.2**	**7.8**	**2.0**	92	8	4
Wales (428)	**90.9**	**9.1**	**6.4**	87	13	7
North East (394)	**87.3**	**12.7**	**12.7**	91	9	6
North West (441)	**86.5**	**13.5**	**12.0**	87	13	10
Yorkshire & Humber (399)	**85.3**	**14.7**	**13.0**	84	16	15
South West (408)	**82.3**	**17.7**	**16.7**	78	22	13
East Midlands (408)	**69.2**	**30.8**	**26.9**	77	23	20
West Midlands (403)	**68.3**	**31.7**	**23.5**	87	13	10
East of England (407)	**66.9**	**33.1**	**26.2**	77	23	20
Greater London (410)	**62.6**	**37.4**	**29.8**	**68**	**32**	**30**
South East (420)	**60.8**	**39.2**	**36.0**	68	32	24

For sites in Northern Ireland, the Republic of Ireland was treated as the only neighbouring nation.

5.3.2 Temporary Accommodation Use

Nationally, one in twenty (5.7%) construction workers reported that they were staying in temporary accommodation. In Greater London, the proportion was 5.1%.

Figure 31: Percentage of Workers in Temporary Accommodation
Base: All respondents



5.3.3 Journey to Work

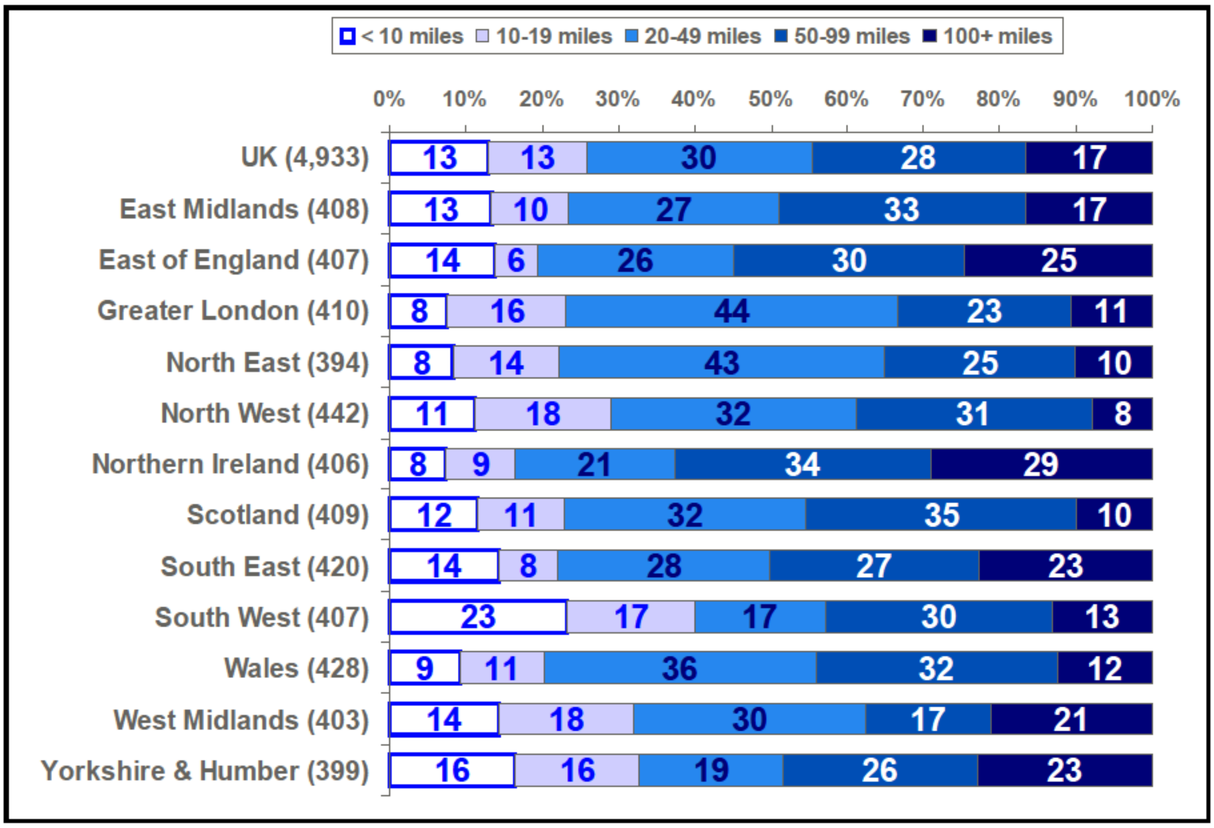
For those working in Greater London, the average (mean) distance from workers' homes to their current site was 30 miles, compared to a median of 17 miles.

Across the UK, the average (mean) distance from workers' homes to their current site was 35 miles, compared to a median of 21 miles.

When the reduced distance from temporary accommodation to sites in the Greater London was taken into account, construction workers were travelling an average (mean) of 25 miles each way, or a median journey of 15 miles.

As Figure 32 shows, 24% of workers on sites in Greater London live within 19 miles of the site on which they are currently working; 44% live between 20 and 49 miles away; another 23% live between 50 and 99 miles away (often travelling daily) and 11% live 100+ miles from the current site.

Figure 32: Distance From Home to Work by Region/Nation (current site)
Base: All respondents giving home address / mileage information



5.4 Site Duration and Change

As mentioned already, while some construction workers may have considerable stability if directly employed by a developer or main contractor on a particularly large project, others face considerable instability from frequent moves between sites, or out of employment as construction firms use the labour available to them as flexibly as possible.

5.4.1 Expected Site/Phase Duration

In order to obtain a snapshot measure of workplace stability, all workers were asked to estimate how long in total they would be working at the same site during the current phase of work if they expected to move on and off the current site in phases (i.e. how long the current 'visit' would it be before they had to travel to a different location for work).

A fifth (22%) did not expect to work on site for more than a month, including 6% who expected to change site after no more than a week. Site durations of between one month and one year were predicted by 37% of those on site in Greater London, and 14% expected to work continuously on the same construction site for a year or longer. However, it is important to note that 26% felt that they could not predict how much longer they would be working on the same site, that their agency or employer could send them elsewhere (or end their contract) at any time, regardless of whether the current site still required workers with their own skill set. Hence when combined with those stating that they expected to move site within a next month, half (48%) of the Greater London workforce could not comfortably expect to be travelling to the same site for more than a month (assuming that most respondents saying ‘don’t know’ had reason to expect that their work on the particular site could be terminated at short notice – either to move elsewhere or finish working for that employer).

In the UK as a whole, almost a quarter (23.2%) did not expect to work on site for more than a month. Two fifths (41.9%) anticipated working on the same site during that phase for more than a month, but no more than a year, and 14.6% expected to work continuously on the same construction site for a year or longer.

Nationally, the occupation groups that were the least likely to have a clear expectation of working at the same site for more than another month were those trades that would be expected to have relatively short durations undertaking specific tasks within certain phases of builds: floorers (66.1%); roofers (49.5%); and painter/decorators (48.3%); also general operatives/labourers (49.1%) who might be part of a short-phase specialist team, but who also tend to be given the least security by larger companies, which move general operatives around between sites as demand for labour peaks and declines. Numerous general operatives/labourers reported that they might find themselves circulating between a handful of sites operated by their employer for varying lengths of time, from a day or two, to several months.

5.4.2 Next Site Location

When asked where their next site (after the interview location) was likely to be, 65% of workers in Greater London were fairly confident that it would be within a daily commuting distance. Just 2% said that their next site would most likely require them to use temporary accommodation: compared with 4.5% in the UK as a whole. A fifth (22%) said that it would be up to their employer (but could be beyond daily driving distance) and a tenth (10%) that they did not know (including the self-employed of fixed-term contract workers who may have to find a new contract).

Across the UK, three in ten of those who were confident that their next job would take them away from home overnight, did not know in which region/nation of the UK their next construction site would be located.

6 SUB-SECTOR & SECTOR MOBILITY

This final section explores sub-sector mobility (movement between job roles within the construction sector) and how this varies between different groups of construction workers. It also examines the attitudes of construction workers towards their future employment in the sector.

6.1 Sub-Sector Mobility

Workers were asked which (if any) of six types of construction work they had spent significant periods working in (with the potential to add and describe 'others'). Despite stressing significant periods, it seems that some workers were keen to have all types of site they had worked on recorded, even if the duration was relatively short: this is an understandable way for individuals to underline the breadth of their experience. However, there is no reason that this phenomenon would have increased since 2007 and interviewers were briefed to stress 'significance' in 2012. Despite this, in 2012 we see increased proportions of workers reporting having spent significant periods on each type of site except for new housing. This change suggests that construction workers are moving between different types of sites more, suggesting that construction workers are being more flexible about the type of project on which they work as a result of the economic downturn. Many workers commented that it is better to work on a different type of project than to not work at all.

Figure 33: Type of Projects On Which Spent Significant Periods of Career
Base: All respondents

	GL 2012	GL 2007	UK 2012
	410	**355**	**4,933**
	n/a	*n/a*	*4,800*
	%	%	%
New housing	**66**	65	71.7
Public non-housing work such as schools, sports facilities, landscaping	**36**	53	59.0
Commercial work such as shops, offices, pubs etc	**39**	53	54.7
Private industrial work such as factories, warehousing etc	**34**	38	51.0
Housing repair and maintenance including extensions / loft conversions	**37**	49	46.6
Infrastructure projects - road/rail/airport, water treatment, power stations	**35**	19	37.8
One type of project only	**37**	29	23.7
Two types of project	**23**	19	16.7
Three types of project	**12**	19	14.5
Four types of project	**12**	12	13.2
Five types of project	**7**	14	15.0
All six types of project	**7**	6	15.3
Unclear / unsure	**1**	0	1.4

In Greater London (as in the UK as a whole) the greatest proportion had worked on new housing projects, with around one in three workers experiencing each of the other types of project..

More than a third of construction workers have only experienced one type of construction project.

Figure 34: Number of Sub-Sectors Worked by Occupation (UK)
Base: All respondents (unweighted base)

	1 type	2 types	3 types	4 types	5 types	6 types

Scaffolder (198)	12.0	7.8	11.5	7.3	15.1	45.3
Plasterer (142)	10.7	13.1	21.3	13.1	19.7	21.3
Bricklayer (524)	24.6	14.0	10.5	10.5	18.5	21.1
Floorer (63)	18.8	11.0	6.3	22.0	20.4	20.4
Painter / Decorator (187)	17.4	12.4	10.1	16.9	24.7	18.0
Electrician (422)	10.9	17.4	17.7	18.9	19.2	15.4
Carpenter / Joiner (637)	24.3	15.1	17.2	13.2	15.9	13.4
Plant/Machine Op (348)	22.4	17.2	17.2	14.2	14.8	12.7
General op/labourer (1,106)	30.6	19.2	13.3	11.3	11.1	12.4
Plumber (279)	21.7	18.3	12.2	16.7	17.9	12.2
Dryliner (181)	26.6	10.2	15.3	18.1	16.4	11.3
Roofer (185)	16.6	23.8	18.1	10.9	18.7	10.4
Banksman (80)	43.9	13.4	3.7	9.8	14.6	8.5

Unsurprisingly, scaffolders were the occupation group most likely to report having spent significant periods of time on all six types of construction site (45.3%), as their work is vital to support all construction work at height, and while a small proportion work within companies that focus on one to two types of construction site, most work in sub-contracting companies that supply scaffolding services to many sites across the sector.

One in five plasterers, bricklayers and floorers had worked on all six types of site (21.3%, 21.1% and 20.3% respectively).

Just one in ten dryliners, roofers and banksmen had worked on all six types of site (11.3%, 10.4% and 8.5% respectively). In fact more than two fifths of banksmen had only worked on one type of construction site – perhaps a factor of banksmen being predominantly required on large sites with significant vehicle/plant movement, and hence a tendency to be employed directly be larger construction companies, and able to remain with the same (possibly, specialist) employer.

6.2 Leaving the Sector

In order to assess the potential outflow from the sector in the next five years (led by worker preference), workers were asked to indicate on a set scale the likelihood of still wanting to work in construction in five years' time. This question was amended slightly from the 2007 survey, which asked how likely they thought it was that they will still be working in construction (i.e. did not explore whether they want to be working in construction as opposed to other industries, just whether they thought they would be).

Only responses from workers aged 59 years and younger are analysed. Those aged 60+ can be assumed to plan to retire within five years (although a small proportion may continue to work beyond 65 years of age). Figure 35 below shows that a small proportion of workers aged under 60 have plans to retire within the next five years (i.e. before they turn 65).

Figure 35: Likelihood of (Wanting) to Work in Construction in 5 Years' Time
Base: Those under 60 years of age

	2012	2007	16-34 years	35+ years
Unweighted Base	390	343	214	176
Weighted Base	*n/a*	*n/a*	*n/a*	*n/a*
	%	%	%	%
Definitely will	**39**	42	40	39
Very likely	**25**	29	25	26
Quite likely	**13**	13	14	11
Quite unlikely	**4**	3	3	5
Very unlikely	**4**	2	3	5
Definitely will not	**1**	1	1	1
Hope to be retired	**3**	2	1	4
Don't know	**10**	9	11	9
Total	**100**	**100**	**100**	**100**

When findings from 2012 are compared with those from 2007 there appear to be lower proportions selecting the most positive predictions for the future ('definitely will' and 'very likely'). However, due to the changes in question wording, caution must be taken when comparing findings between the surveys.

Figure 35 also shows that age has little influence on workers' assessment of whether they will still want to be working in construction in five years' time, except for the proportion indicating that they hope to retire within five years.

7 THE GREATER LONDON WORKFORCE 2012 SUMMARY

In Greater London, employment in SIC92 45 has declined from 255,813 in 2007 to 234,229 in 2011[3]: a decline of 8% in five years compared to 12% in the UK during the same period. While the challenging economic climate has seen the regional and UK construction workforce decline since 2007, the sector as a whole has to some extent been buffered by large scale public sector works. In 2012, we see some return of confidence in the market, and investment in housing and public building. For example while there has been a hiatus in commissioning school-build projects (since the cancellation of new Building Schools for the Future projects in the General Election), construction of pre-commission projects is continuing, and a new (albeit less ambitious) programme has recently been announced.

The manual construction workforce in Greater London in 2012 is still very much dominated by white males, but a lower proportion is aged 16-19 than was the case in 2007: showing that fewer school leavers have moved into the sector in recent years. This is further evidenced by the fact that just two in five workers today has no more than 5 years' construction experience, compared with three in five workers five years ago. A significant proportion of the workforce has moved from being directly employed by construction firms to self-employment (frequently working for a single firm long-term), and the use of agency workers has increased slightly.

The large proportion of construction workers in Greater London reporting that they hold at least one of the recognised skill cards/certificates has increased dramatically from seven in ten (72%) in 2007 to 96% today. Two fifths of construction workers in the region report holding a construction-specific qualification: seven out of ten of those list their main qualification as being an NVQ/SVQ: mostly levels 2 or 3. Uptake of training in supervisory/management skills has increased for staff in supervisory roles, from 54% to 89%. In Greater London, there has been an increase in in-house training, which is different to trends observed across the UK.

Three quarters of the region's construction workers have never worked in any other industry. One in five has moved around the construction industry and have undertaken at least two types of job role: in the UK as a whole this has been characterised by roles with closely correlating skills, or by retraining for a higher skilled 'craft' role.

A fifth cited family reasons such as 'I grew up here' or 'I followed my family/partner here' for choosing to work in Greater London. Just over a third of the workforce has worked in Greater London for their entire construction career, a higher proportion than in 2007. Just under half of workers interviewed on Greater London sites were living in the region when they started working in the construction sector.

The South East and London 'import' the greatest proportion of construction workers, predominantly from neighbouring regions. Around a quarter of workers live within 19 miles of the site on which they are currently working; but 45% live more than 50 miles from their current site. One in twenty workers reported that they were staying in temporary accommodation. The average (mean) distance from workers' homes to their current site was 30 miles (median 17 miles): use of temporary accommodation nearer to the site by one in twenty workers reduced the daily commute to an average (mean) of 25 miles each way (median 15 miles).

A fifth could not predict how much longer they would be working on the same site and a further quarter interviewees did not expect to remain at the same site for more than another month. However, 14% expected to stay for at least another year in the same location.

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[3] Labour Force Survey, ONS, UK Construction Industry Workforce SIC92 45 time-series

NATIONAL APPENDICES
(provided in a separate document)

Appendix 1 – Questionnaire
Appendix 2 – Showcards
Appendix 3 – Additional national data tables