

Workforce Mobility and Skills in the UK Construction Sector

Yorkshire and Humber Report

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Table of Contents

1	Background, Objectives and Methodology	1
1.1	Introduction	1
1.2	Key objectives of the research	1
1.3	Methodology	2
1.3.1	Desk research	2
1.3.2	Sampling.....	2
1.3.3	Telephone survey	3
1.3.4	Site visits	3
1.3.5	Challenges.....	3
1.4	Details of sites covered in the research	3
1.5	Structure of the report.....	4
1.6	Notes on tables	4
2	Management Summary	5
2.1	The profile of the workforce.....	5
2.2	Qualifications and Skills	5
2.3	Mobility.....	6
3	Profile, Work Status and Work Histories of the Construction Workforce	8
3.1	Demographic profile of the sample.....	8
3.2	Work status.....	9
3.3	Occupational profile	11
3.4	Years working in construction	12
3.4.1	Construction employment	12
3.4.2	Occupational switching and progression.....	13
4	Qualifications and Skills	14

4.1	Construction skill cards and certificates	14
4.2	Construction qualifications held	17
4.3	Working towards construction qualifications.....	19
4.4	Managerial qualifications	20
4.5	Summary of qualification and skills card status	21
4.6	Competence/qualification level of the construction workforce	21
4.7	Self assessment of skill level	23
5	Mobility.....	26
5.1	Worker origin.....	26
5.2	Location of workplace, current and permanent residence.....	28
5.3	Temporary accommodation	30
5.4	Proportion of career spent in current location	30
5.5	Travel to work distances	30
5.6	Sub-sector mobility.....	31
5.7	Leaving the industry	32

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1 Background, Objectives and Methodology

1.1 Introduction

ConstructionSkills commissioned BMRB to undertake a survey of construction workers to provide reliable data on the nature of the workforce in the UK and the Republic of Ireland (ROI) with regard to their competence/qualification levels and the extent of occupational and geographic mobility within the workforce. This report presents the results of the survey conducted in Yorkshire and Humber.

A separate technical appendix is available which includes a full technical report and a copy of the questionnaire used.

Where available, results from the 2007 survey have been compared with those from similar previous research conducted by IFF Research in 2004¹.

1.2 Key objectives of the research

The overall aim of the study was to provide reliable data on the nature of the construction workforce in regard to their competence/qualification levels and the extent of occupational and geographic mobility within the workforce. More specifically, the key objectives of the research were to examine:

- the qualification and skill levels of the construction workforce in the UK and ROI
- the extent to which the workforce in each region is constituted of workers originating or living in other parts of the UK (or further afield), and general mobility and travel to work issues
- the nature of the mobile workforce/'imported' workforce in terms of their occupations and their competence/qualification levels
- 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, and related to this the extent to which managers have received training specifically to enhance their managerial skills

The focus for the survey was on site-based manual occupations, thus excluding associated clerical and sales occupations and professions such as architects, surveyors and engineers.

¹ Comparative findings should be treated as indicative only due to key differences in the types of sites visited in 2004 and 2007. The profile of sites visited showing differences by size and category are included in the technical report.

1.3 Methodology

The key elements of the research approach were as follows:

1.3.1 Desk research

Prior to undertaking primary research a period of exploratory desk-based research was undertaken to examine the scope of information currently available; to identify other surveys and consultations to ascertain what can be learnt from these, and to ensure that any subsequent fieldwork was relevant and informed. The conclusions drawn from the desk research exercise were:

- there are studies covering similar issues to this study, however the target respondents of these studies tended to be employers
- the Labour Force Survey (LFS) is conducted among workers and covers similar issues as this study, however it is not specific to the construction industry
- there is little reliable information on the mobility of workers. The only exception is the LFS but it does not cover certain issues relevant to the construction workforce such as temporary accommodation, or where workers received training
- the desk research confirmed the need for detailed information from construction workers and for more information on workforce mobility in the UK and ROI.

A copy of the presentation summarising the desk research exercise can be found in the technical appendix.

1.3.2 Sampling

For the UK sample a list of current construction projects over £250,000 in value was drawn from Glenigan, an Emap service detailing current and forthcoming construction projects in the UK.

From the projects identified as being eligible for inclusion in the survey (the steps taken to select eligible records from Glenigan are detailed in the technical report), a stratified random sample of 99 postcode districts (e.g. NR2) was drawn to produce a representative sample of locations across the UK. For each selected district six eligible projects were identified. Projects were selected on the basis of value, 35% of sites with a value of less than £1 million and 65% of sites with a value of more than £1 million. In 2004, the survey focused on sites valued at over £1 million and the sampling process aimed to ensure a mix of sites by stage of development (first six months, midway, last six months). In 2007 the requirement was to also sample sites under £1 million, so this criterion needed to be reconsidered in that light. The 2004 definition of stage of development clearly assumed quite large, lengthy projects, appropriate for sites with minimum value of £1 million. With the introduction of smaller sites, some would be completely finished in six months. Therefore it was decided that an appropriate alternative definition would be to select according to value.

Quotas were set on the target number of sites for each region and by value. The target sample profile is described in the technical report.

1.3.3 Telephone survey

A telephone willingness stage was conducted in order to recruit construction projects selected from Glenigan to take part in the research. Interviewers were instructed to identify the best person to speak to about arranging a visit to the construction site and to collect some headline information about the site. Full details of the information collected and number of interviews achieved is included in the technical report.

1.3.4 Site visits

Once permission had been sought to interview at the particular site, the information was forwarded to a local face-to-face interviewer who contacted the site representative to arrange a date to visit. Interviews with construction workers were then conducted face-to-face on site. Interviewing normally took place in a canteen or site office during workers' break periods. In around one in ten cases interviewers were only able to visit the site if they supplied their own personal protective equipment.

A selection of interviewers' experiences of contacting and visiting sites is shown in the technical report.

1.3.5 Challenges

Given the complex nature of this research project a number of challenges arose during the life of the project. Each issue is discussed in detail in the technical report.

1.4 Details of sites covered in the research

The survey results presented in this report are based on fieldwork conducted in the Yorkshire and Humber from February to July 2007. This consisted of a total of 235 face-to-face interviews with site based workers obtained across 23 sites.

At the analysis stage, weighting was applied to the data to ensure each nation/region was represented in its correct proportions based on the relative size of the construction workforce. Labour Force Survey figures were used for UK regions/nations, (average profiles from the period October 2006 - June 2007). Unless otherwise stated, with the exception of base totals, the figures in this report are based on weighted data. Weighted, Yorkshire and Humber accounted for approximately 8% of the UK/ROI workforce.

Figures from the site managers interviewed at the telephone fieldwork stage indicated that there were 824 workers across the 23 sites. Using this figure it would appear that around 29% of the potential workforce took part in the research, however it should be noted that there were instances where on the day the site was visited many fewer workers were present than indicated by the site manager when first contacted. This was due to a number of factors, for example the site may have entered into another phase of the project by the time the interviewer was able to visit the site.

The proportion of workers interviewed varied greatly, at some sites we interviewed all workers present, on other sites particularly where interviewing only occurred during short break times only a small proportion of workers were interviewed.

1.5 Structure of the report

The report is structured as follows:

Chapter 1	Background, Objectives and Methodology
Chapter 2	Management Summary
Chapter 3	Profile, Work Status and Work Histories of the Construction Workforce
Chapter 4	Qualification and Skills
Chapter 5	Mobility

A separate technical report has been produced.

1.6 Notes on tables

Where respondents can give multiple responses to a question, the sum of the individual responses may be greater than 100 per cent.

Also the percentages in the tables do not always sum to 100 per cent due to rounding, and where percentages in the text differ to the sum of percentages in the tables, this too will be due to rounding.

An asterisk (*) in a table signifies a percentage that is greater than 0 but less than 0.5.

A dash (-) signifies a cell where data has not been included due to too small a base size.

N/A in a table signifies where we are unable to make a comparison with previous years as either the question wasn't asked or the data wasn't available.

With the exception of base totals the figures referred to are weighted.

The report contains some tables showing findings based on relatively small numbers of respondents (less than 70). Such low base sizes carry a greater risk of these figures being unrepresentative of the population in question and should, therefore, be treated as indicative only. Consistent with the 2004 report, only results based on 15 workers or more have been referenced in either tables or the text.

2 Management Summary

ConstructionSkills commissioned BMRB to undertake a survey of construction workers to provide reliable data on the nature of the workforce in the UK and the Republic of Ireland (ROI) with regard to their competence/ qualification levels and the extent of occupational and geographic mobility within the workforce.

The survey results presented in this summary are based on fieldwork conducted in Yorkshire and Humber from February to July 2007. This consisted of a total of 235 face-to-face interviews with construction workers obtained across 23 sites.

This summary highlights the key findings for each of the major themes covered. Where available, results from the 2007 survey have been compared with those from similar previous research conducted by IFF Research in 2004².

Detailed results are available in the body of the full report, and a full technical report is available containing full details of sampling and methodology.

2.1 The profile of the workforce

The profile of workers interviewed in Yorkshire and Humber is broadly similar to the UK/ROI profile and to the regional profile in 2004 in terms of age, gender, ethnicity, work status and contractual terms.

Construction workers interviewed in the region were also broadly representative of the overall profile and 2004 regional profile by occupation, with all occupations represented here. Although small bases preclude detailed analysis by occupation, the four trades accounting for the majority of the sample are consistent across the different samples.

The workforce is clearly mature, with three quarters in the industry for five or more years and with new entrants (no more than one years experience) making up six per cent. Over two-thirds of construction workers in Yorkshire and Humber began their working life in the industry, significantly higher than noted across the UK/ROI. Typically, those working as labourers and general operatives are more likely to be new to the industry while skilled tradesmen such as carpenter/joiners, bricklayers, plumbers and electricians account for two thirds of the long service group (20+ years).

The majority of construction workers in Yorkshire and Humber began their working life in the industry – a higher figure than nationally – while just three in ten entered after starting work in another field.

2.2 Qualifications and Skills

The picture in Yorkshire and Humber is mixed, though broadly in line with the national picture:

² Comparative findings should be treated as indicative only due to key differences in the types of sites visited in 2004 and 2007. The profile of sites visited showing differences by size and category are included in the technical report.

- three-quarters of workers believe they have all the skills they require for their current job, although this falls to two-thirds among those with no qualification and who are not currently working towards a qualification
- at the overall level, the results are encouraging, with the vast majority of the workforce holding some formal qualification or working towards one
- overall, two-thirds of workers hold a skill card or certificate, in line with the UK/ROI average. However, not quite half the workforce holds a CSCS/ CSR certificate or card and, despite an increase since 2004, this is the lowest figure recorded nationally
- three in five workers have other formal qualifications relevant to construction. This is significantly more than nationally and as reported in 2004. Interestingly, four in five workers with a qualification have either a City and Guilds or an NVQ/SVQ. While nationally there appears to have been a switch towards NVQs/SVQs away from City and Guilds, this is not apparent here, with the proportion of workers in the region with NVQs/SVQs trailing that recorded nationally, and vice versa
- the region is very positively outperforming the national average in the extent to which workers are studying for a new qualification. This has increased threefold since 2004 and suggests there may have been a significant push in the region to encourage workers to take up a course of study
- among the one in eight workers who have supervisory or managerial duties, two-thirds say they have received relevant training to improve their skill in this area, which is higher than the UK/ROI average and is notably better than in 2004
- one in three people indicated at least one basic skills area, such as reading, writing, speaking English and maths they would like to address, and broadly, one in five indicated each of these areas.

Workers aged between 25 and 44 are most likely to hold a skill card/certificate and those aged 45+ less likely. It is particularly notable that there is little change between the proportion of people with qualifications aged 25–44 and 45+, suggesting that there is a point at which workers with no relevant qualifications will not seek them out, and by implication that if a worker doesn't obtain a qualification early in their career, they are unlikely to do so later on. This is reflected by the general finding that the youngest age groups are most likely to believe they need more training and qualifications, with little demand amongst workers aged 45+ for construction related training. However, there is demand across the board for basic skills training.

2.3 Mobility

One challenge to delivering training to site-based workers is the relatively short period of time that workers stay at one site. In Yorkshire and Humber, just one in three workers expect to be on site for more than six months; lower than reported nationally, though better than in 2004 when less than a quarter expected to be on site that long.

Yorkshire and Humber is one of several geographic areas with a highly self-contained workforce, three-quarters of its construction workers originate from the region, with the relatively small amount of inward and outward migration centring on the East Midlands. To reinforce this, seventy per cent of workers here said they had spent all or most of their construction career in the region.

Just seven per cent of workers think it is unlikely they will be working in the industry in five years time. This is far outweighed by the majority who will definitely, or are very likely, to stay in construction. These results are very similar to the 2004 data, and, therefore, present a relatively stable picture in terms of intent to stay within the industry in the region.

3 Profile, Work Status and Work Histories of the Construction Workforce

In this chapter we look at the demographic details of the construction workers interviewed in terms of age, ethnicity and gender. We also look at the proportion working directly for a company, self-employed or for an agency, and the extent to which they are working on a permanent or temporary basis. The occupational profile of the sample and career histories are examined in terms of how many years they have worked in construction and the previous roles workers have had within the sector.

3.1 Demographic profile of the sample

The following table shows the demographic profile of our sample of construction workers in Yorkshire and Humber and compares this to the profile in 2004 and the overall workforce interviewed in the survey.

Table 3.1 Demographic profile of the sample			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
<i>Age: 16–19</i>	6	22	8
20–24	19		16
25–34	19	22	25
35–44	27	26	25
45–54	17	17	16
55+	11	14	10
<i>Ethnicity: White</i>	95	99	96
Asian	3	1	2
Black	1		1
Other	*		1
<i>Gender: Male</i>	99	99	99
Female	-	1	*
<i>Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)</i>			

The age profile of construction workers in Yorkshire and Humber reflects the national profile, with one in four (25%) workers aged under 25 and a similar proportion (28%) aged 45+. As has been noted in the overall UK/ROI report, the construction industry has a much younger profile than is seen in other industries and as such generalised concerns about an ageing

workforce and the potential loss of skills do not apply as strongly here. There has been no significant change in the age profile of the region since 2004.

The workforce interviewed here was wholly male, with no women taking part in the survey. This is not particularly notable given that 16 women were interviewed nationally, representing only 0.4% of the sample.

Four per cent of the workforce were of black minority ethnic (BME) origin; three per cent Asian and one per cent Black. This is in line with the overall profile (3% BME), but indicates that BME workers are marginally under-represented in Yorkshire and Humber when compared with the proportion of the resident population aged 16–80 who are from BME groups. Data from the Labour Force survey (Spring 2007) indicates that 7% of adult Yorkshire and Humber residents are of BME origin.

3.2 Work status

Around three-quarters (77%) of respondents in the region said they were employed on a permanent basis compared with one in five (19%) employed on a temporary basis.

Two-thirds (67%) were employed directly by a company. Almost three in ten (29%) were self-employed and two per cent (5 people) worked for an agency. These figures are in line with those recorded for Yorkshire and Humber in 2004, and for the UK/ROI overall.

At the national level, there continues to be a notable effect on the level of self-employment by how long people have worked in the industry. Whether the same is true in Yorkshire and Humber cannot be ascertained given the small base sizes, although a similar pattern appears to be in evidence in Table 3.2. Almost one in three (31%) workers who have been in the industry 5+ years are self-employed which is comparable to the 37% recorded in 2004.

Table 3.2 Work status						
	Yorkshire and Humber 2007 %	Overall Workforce (UK/ROI) 2007 %	Years working in construction			
			<1 year %	1–2 %	3–4 %	5+ %
Employed by a company	67	64	-	78	71	65
Self-employed	29	29	-	22	29	31
Work for an agency	2	5	-	-	-	1
Unemployed	-	1	-	-	-	-

Base: Yorkshire and Humber respondents (235); Overall workforce (3,877)

Table 3.3 highlights the occupations that are most likely to attract workers to become self-employed.

Table 3.3 Level of self-employment by occupation	
High	
2007	2004
Carpenters/Joiners (47%)	Bricklayers (66%)
Bricklayers (41%)	Carpenters/Joiners (43%)
-	Groundworkers (39%)

3.3 Occupational profile

Results showing how workers classified their current role or occupation are shown in Table 3.4 below. This lists those occupations mentioned by 1% or more of the Yorkshire and Humber sample in 2007. Comparative data is also provided for the UK/ROI total in 2007 and for the region in 2004.

Table 3.4 Occupational Profile			
	Yorkshire and Humber 2007 % (No.)	Yorkshire and Humber 2004 % (No.)	Overall Workforce (UK/ROI) 2007 % (No.)
Bricklayer	20 (46)	14 (86)	13 (536)
Carpenter/Joiner	18 (43)	15 (93)	14 (559)
Labourer/General Operative	17 (41)	16 (94)	17 (674)
Plant/Machine Operative	13 (30)	12 (74)	13 (502)
Plumber	6 (15)	4 (23)	5 (183)
Banksman/Banksperson	6 (14)	N/A	2 (81)
Electrician	6 (13)	3 (16)	7 (247)
Plasterer/Dry-liner	4 (9)	N/A	5 (190)
Roofer	4 (9)	N/A	4 (133)
Supervisor	3 (8)	3 (20)	5 (192)
Pipe Fitter	3 (6)	N/A	3 (102)
Steel Erector/Rigger	3 (6)	3 (21)	2 (75)
Manager	3 (6)	N/A	3 (111)
Civil Engineering Operative	2 (5)	N/A	2 (75)
Scaffolder	2 (4)	4 (27)	3 (112)
Painter/Decorator	1 (3)	3 (3)	2 (97)

Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)

The profile of workers interviewed in Yorkshire and Humber is broadly similar to the overall profile and to the regional profile in 2004, with all occupations represented (if only by one person in some cases). Although small bases preclude detailed analysis by occupation, the four trades accounting for the majority of the sample (bricklayers, carpenters, labourers and plant machine operatives) are consistent across the different samples.

3.4 Years working in construction

The majority (71%) of construction workers in the region have been in the industry for five or more years, with one in four (28%) having more than 20 years experience. New entrants, with no more than one years experience, make up just six per cent of the workforce.

Typically, those working as labourers and general operatives are more likely to be new to the industry (15% vs. 6% average). Conversely, skilled tradesmen such as carpenter/joiners, bricklayers, plumbers and electricians account for two-thirds (69%) of the long service group (20+ years).

Table 3.5 below summarises the workforce profile based on the amount of cumulative time spent in the industry. Yorkshire and Humber is broadly in line with the UK/ROI profile, although there appears to be fewer new entrants to the industry in the region compared with the overall figures (Up to one year; 6% vs. 11% respectively). Nevertheless, caution is due here as just 14 workers interviewed had spent up to a year working in construction.

Table 3.5 Years spent working in construction (cumulative)		
	Yorkshire and Humber 2007 %	Overall Workforce (UK/ROI) 2007 %
Less than 6 months	2	5
A year or less	6	11
2 years or less	14	17
5 years or less	32	33
10 years or less	49	50
20 years or less	69	71
More than 20 years	28	27

Base: Yorkshire and Humber respondents (235); Overall workforce (3,877)

3.4.1 Construction employment

The majority of construction workers in Yorkshire and Humber began their working life in the industry, which is a significantly higher proportion than noted across the UK/ROI (71% vs. 62% respectively). Certain trades are more likely to attract entrants to the industry immediately after leaving education; amongst this sample the majority of bricklayers (91%), carpenters (75%) and plumbers (80%) began their working lives in construction.

Nationally, almost two in five (38%) workers came into the industry after starting work in another field, but in Yorkshire and Humber this applied to just three in ten (29%) workers. As is seen elsewhere, however, this figure is significantly higher for labourers and general operatives (54%).

The 67 respondents whose first job was *not* in construction were asked what their previous job had been. Not surprisingly, a diverse range of occupations was mentioned, and although this list is too diverse to be included here there is, broadly speaking, a degree of consistency between the types of jobs undertaken previously and the subsequent move to construction (or indeed which are construction jobs but in other sectors).

Since starting their first job in construction, three-quarters (74%) of those who have had more than one job say they have worked in construction 'pretty much continuously'. Of the rest, nine per cent have worked exclusively in construction, but had spells of being out of work, while 14% have dipped in and out, doing other jobs at different times. The range of these other occupations is diverse, from transport drivers and operatives, to metal fitters and machinists through to elementary service roles.

This reflects the broad national picture in 2007, but regionally there appears to have been a shift to a more flexible way of working. Specifically, the 2004 survey reported that the vast majority (89%) had worked continuously, just two per cent had experienced spells out of work, and seven per cent had various other jobs.

3.4.2 Occupational switching and progression

An area of particular interest in the research was the extent of switching between occupations within construction. To this end workers were asked if they had always worked in their current role/occupation and if not, what their previous occupation had been.

In Yorkshire and Humber, over half (54%) said they had always had the same trade during their time in the construction industry. Again this is broadly in line with the UK/ROI overall (60%) but it is notably different to the 2004 data for the region which cited 80% of workers remaining in the same trade.

Detailed analysis by individual occupations is limited due to small bases for many. However, it is notable that labourers/operatives (63%) are more likely than average to have come to their current position via other roles. By contrast, carpenters/joiners (35%) are less likely to have switched. These workers are also highlighted in the UK/ROI overall report.

A number of other generalisations can be made, again reflecting the UK/ROI picture:

- many workers appear to begin their construction careers in unskilled positions before progressing to more skilled work
- supervisors appear to come from a wide range of occupations indicating that they move upwards from whatever occupation they are working in
- labourers/general operatives and plant/machine operatives tend to work flexibly between the two roles.

4 Qualifications and Skills

A key objective of this research was to measure the competence/ qualification levels of the construction workforce. A number of questions were asked to ascertain this:

- whether any construction skill certificate or card was held and if so which and, in the case of CSCS and CSR cards, to what level
- what formal qualifications relevant to the construction industry they held or were working towards, if any
- those with managerial or supervisory duties were asked about any training specifically designed to improve their managerial or supervisory skills or knowledge.

We also asked workers to assess their own skills, including basic skills and whether they felt they needed more training to do their current job.

4.1 Construction skill cards and certificates

There is a general move in the industry for all persons working on, or visiting construction sites to have a construction skill card or certificate. Already, many sites won't let workers on without an appropriate card to prove their skills. And this is set to increase as the industry-wide deadline approaches for a fully qualified workforce by 2010.

Overall, two-thirds (66%) of workers said they hold a skill card or certificate of some description. This is similar to the proportion reported for Yorkshire and Humber in 2004 (61%), but despite the relatively slow take-up compared with some other areas, the region's performance remains in line with the national average (68%).

Table 4.1 shows how possession of a skill card or certificate varies by key demographic variables:

Table 4.1 Whether have a skill card/certificate by other variables			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
Overall	66	61	68
<1 year in construction	-	32	39
1–2 years	61	50	60
3–4 years	64	N/A	65
5+ years	69	N/A	75
16–19	53	N/A	43
20–24	70	N/A	62
25–44	75	68	73
45+	54	58	72
Employed directly	67	70	70
Self-employed	68	43	69
Agency worker	-	31	62
<i>Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)</i>			

Workers aged between 25 and 44 are most likely to hold a skill card/certificate (75%), and those aged 45+ less likely (54%). Base sizes here are too small to reliably state that the youngest and least experienced (<1 year in construction) groups are also less likely to hold a card or certificate, although this is the case at the national level. Interestingly, self-employed workers are as likely as workers employed directly to say they hold a skills card/certificate (68% and 67% respectively).

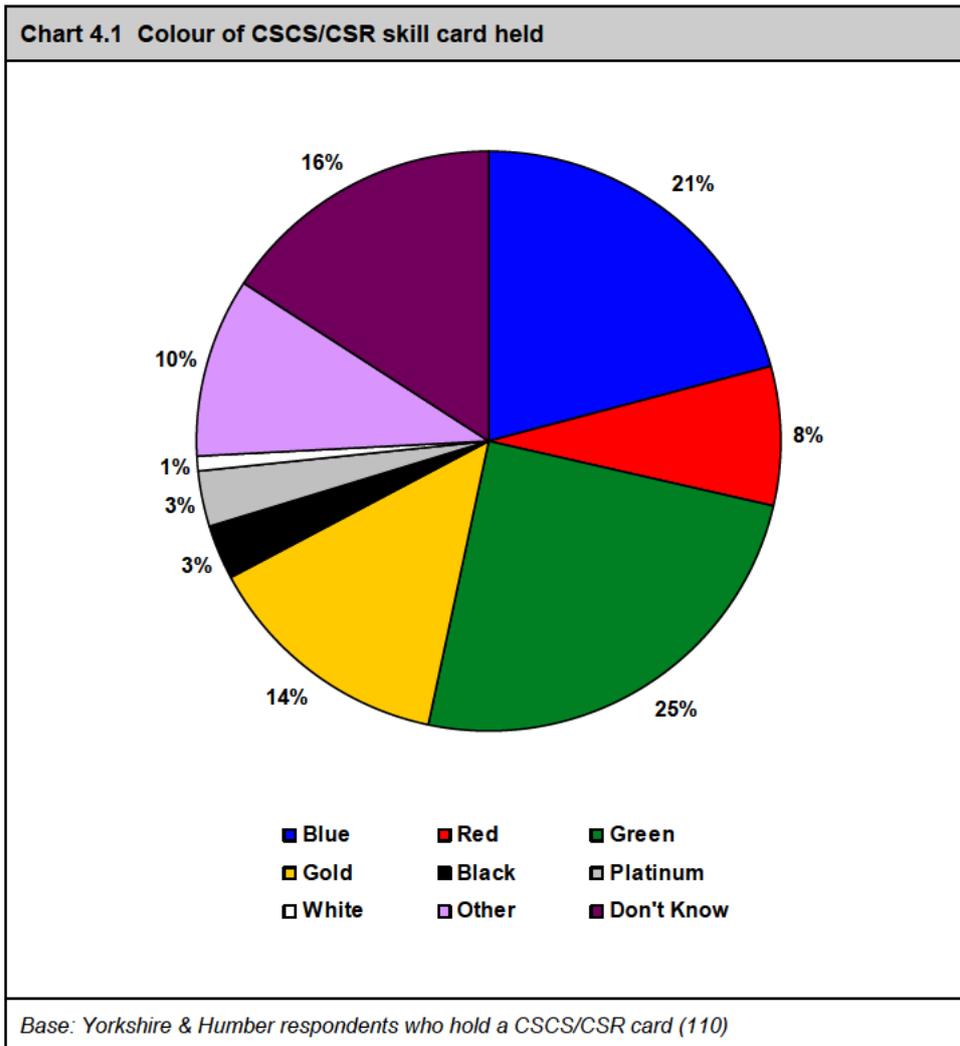
Encouragingly, at least half the workforce in each occupational group holds a skills card/certificate. Again base sizes are too small to provide reliable comparisons between most of the individual occupations. However, around eight in ten plumbers (80%) and plant machine operatives (77%) interviewed had a card/certificate compared with just half (50%) the bricklayers. These plant machine operatives and bricklayers were similarly highlighted for high and low penetration of skills cards respectively in 2004 and in the overall UK/ROI findings.

Looking at the workforce as a whole, i.e. including those who do not hold any certificate or card, almost half (47%) hold a CSCS/CSR certificate or card. Despite an increase since 2004 (40%) this is the lowest figure nationally, and compares poorly with other regions; Northern Ireland (79%), Wales (71%), East of England (70%) and the West Midlands (68%).

The 110 workers who said they have a CSCS/CSR card were also asked its colour level, and the top four (10 or more responses) were as follows:

- 25% Green - construction site operative card for general site workers
- 21% Blue - skilled NVQ/SVQ Level 2 or industry accreditation grade A
- 14% Gold - craft/supervisor card NVQ/SVQ Level 3 or industry accreditation grade B
- 8% Red – trainee registered for an NVQ/SVQ.

Despite saying they held a CSCS/CSR card, 16% were not sure what colour or level it was. Chart 4.1 shows the proportions of card-holders with each colour of card.



One in three (34%) workers do not have any card, while a further one in six have either a CPCS (Construction Plant Competence Scheme) (9%) or a CTA (Certificate of Training Achievement) (8%), with the remainder in possession of a variety of trade-specific or other certificates.

4.2 Construction qualifications held

Workers were also asked what other formal qualifications relevant to construction they held (excluding first aid certificates). As a relatively high proportion (12% in Yorkshire and Humber; 8% overall) did not give an answer to this question, results in this section are based on those who gave an answer. In Yorkshire and Humber, three in five (61%) workers (who gave a response) have such a qualification. This is significantly more than nationally and as reported for the region in 2004 (48% and 46%).

As with skill cards/certificates, there are predictable differences by age and length of time worked in the industry.

Table 4.2 Hold any construction specific qualification			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
Overall	61	46	48
<1 year in construction	N/A	5	15
1–2 years	31	21	30
3–4 years	50	N/A	39
5+ years	70	N/A	57
16–19	-	N/A	30
20–24	45	N/A	40
25–44	65	51	54
45+	67	42	50
Employed directly	61	42	48
Self-employed	64	52	54
Agency worker	-	44	30

Base: Yorkshire and Humber respondents who gave a response 2007 (206); All Yorkshire and Humber respondents 2004 (604); All UK/ROI respondents who gave response (3,594)

There is a notable increase in the proportion of qualified workers as they become more experienced, more than doubling from three in ten of those working 1–2 years, to seven in ten who have worked five or more years (31% to 70% respectively).

It is notable that there is little change between the proportion of people with qualifications aged 25–44 and 45+, suggesting that there is a point at which workers with no relevant qualifications will not seek them out, and by implication that if a worker doesn't obtain a qualification early in their career, they are unlikely to do so later on. There is no significant difference between those who are self-employed and those who are employed directly.

Again, small bases preclude detailed analysis by occupation, but bricklayers and carpenters/joiners are more likely to hold qualifications than construction workers generally (72% and 85% respectively vs. 61% average). The same appears to be true for electricians, but a small base (13) requires caution.

Workers who said they had a construction qualification were asked what type of qualification they held. Where more than one response was given the highest qualification was recorded.

Table 4.3 Main type of highest qualification held			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
NVQ/SVQ	40	41	51
City and Guilds	42	46	34
Construction Award	4	3	4
Apprenticeship	3	3	1
HNC/HND/BTEC higher	6	1	2
Degree	1	N/A	1
<i>Base: All with a qualification (2007: 125; 2004: 275); All UK/ROI respondents who gave response (1,810)</i>			

In Yorkshire and Humber, four in five workers with a qualification have either a City and Guilds (42%) or an NVQ/SVQ (40%). While nationally there appears to have been a switch towards NVQs/SVQs away from City and Guilds, this is not apparent here, with the proportion of workers in the region with NVQs/SVQs trailing that recorded nationally (40% vs. 51% respectively), and vice versa.

The majority (81%) of those with a formal construction qualification attained it whilst living in the Yorkshire and Humber region. No other region is particularly notable, although six per cent studied in the North West, and another six per cent in the East Midlands.

4.3 Working towards construction qualifications

One in four (26%) construction workers in Yorkshire and Humber said they are currently working towards a qualification that is specific to the construction industry. This is notably higher than the proportion recorded nationally (17%) and is almost twice the figure reported for the region in 2004 (14%).

Table 4.4 Working towards a construction specific qualification			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
Overall	26	14	17
<1 year in construction	-	37	28
1–2 years	28	46	32
3–4 years	39	20	36
5+ years	22	N/A	11
16–19	47	N/A	47
20–24	32		27
25+	23		12
<i>Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)</i>			

Continuing the positive story, amongst the more experienced groups in the region, i.e. those aged 25+, the proportion working towards a relevant qualification has increased threefold since 2004. Similarly, this figure is twice the national average. This suggests there may have been a significant push in the region to encourage workers to take up a course of study. Relevant data is highlighted in the table above.

Seven in ten (69%) people who are studying for a qualification (Base 62) are working towards an NVQ/SVQ. Five per cent are on an apprenticeship scheme, with just two per cent each (one person) mentioning Construction Awards and City and Guilds.

4.4 Managerial qualifications

A further area of investigation in relation to training and qualifications was to look at the extent to which workers with managerial or supervisory duties have had training specifically designed to improve their managerial and supervisory skills.

Just one in eight (12%) workers said they had supervisory or managerial duties on site at the time of the survey – 28 people in all. All these had spent at least five years in the industry, and about half described themselves as either managers or supervisors.

Two-thirds (64%) of those with supervisory or managerial duties said they had received relevant training to improve their skill in this area, while one-third (36%) had not. This is higher than the national average (53%) and is notably better than in 2004 when 28% of staff with managerial duties said they had received relevant training.

Encouragingly, the training undertaken is quite diverse, with most undergoing 'Chargehand and Team Leader' training (29%) and in-house training (25%), with others accessing a range of accredited, industry recognised programmes. The types of training undertaken by at least one respondent are show in Table 4.5.

Table 4.5 Type of training received to improve management or supervisory skills			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
None/can't remember	36	71	47
Chargehand and Team Leader Training	29	5	10
In-house training	25	13	31
Assessor and Verifier Training	11	2	5
IOSH Managing Safely for Construction Managers	11	N/A	3
Managing Safely in the Construction Industry (for CSR)	11	N/A	3
SMSTS (Site Manager Safety Training Scheme)	7	5	8
Civil engineering Site Managers Scheme	7	N/A	3
IOSH (Institute of Occupational Safety and Health)	7	N/A	3
Project Management Short Courses	4	N/A	3
Institute of Supervision and Management Workshops	4	3	1
IOSH Safely for Senior Executives	4	N/A	1
CSCS training	4	N/A	1

Base: All with management and supervisory duties Yorkshire and Humber (2007: 28; 2004: 93); All UK/ROI respondents who gave response (678)

4.5 Summary of qualification and skills card status

Table 4.6 summarises the extent to which the workforce has attained and/or is working towards relevant qualifications and skill cards/certificates. The results for Yorkshire and Humber are compared with the regional results in 2004 and the overall results in 2007.

Table 4.6 Qualification status			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
Hold a formal construction qualification or a skills card/certificate or working towards a qualification	85	81	82
Hold a formal construction qualification or a skills card/certificate	82	77	78
Hold a skills card/certificate	66	61	68
Hold a skills card/certificate but no other construction qualification	29	31	33
Working towards a qualification	26	14	17

Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)

At the overall level, the results are encouraging, in that the vast majority of the workforce at both the regional and national levels holds some formal qualification or is working towards one (85% and 82% respectively). This is a similar situation to that reported in 2004.

In most other respects, Yorkshire and Humber is performing in line with the national average and the level of attainment is broadly similar to that achieved in 2004. However, the region is very positively outperforming the national average in the extent to which workers are studying for a new qualification (26% vs. 17%).

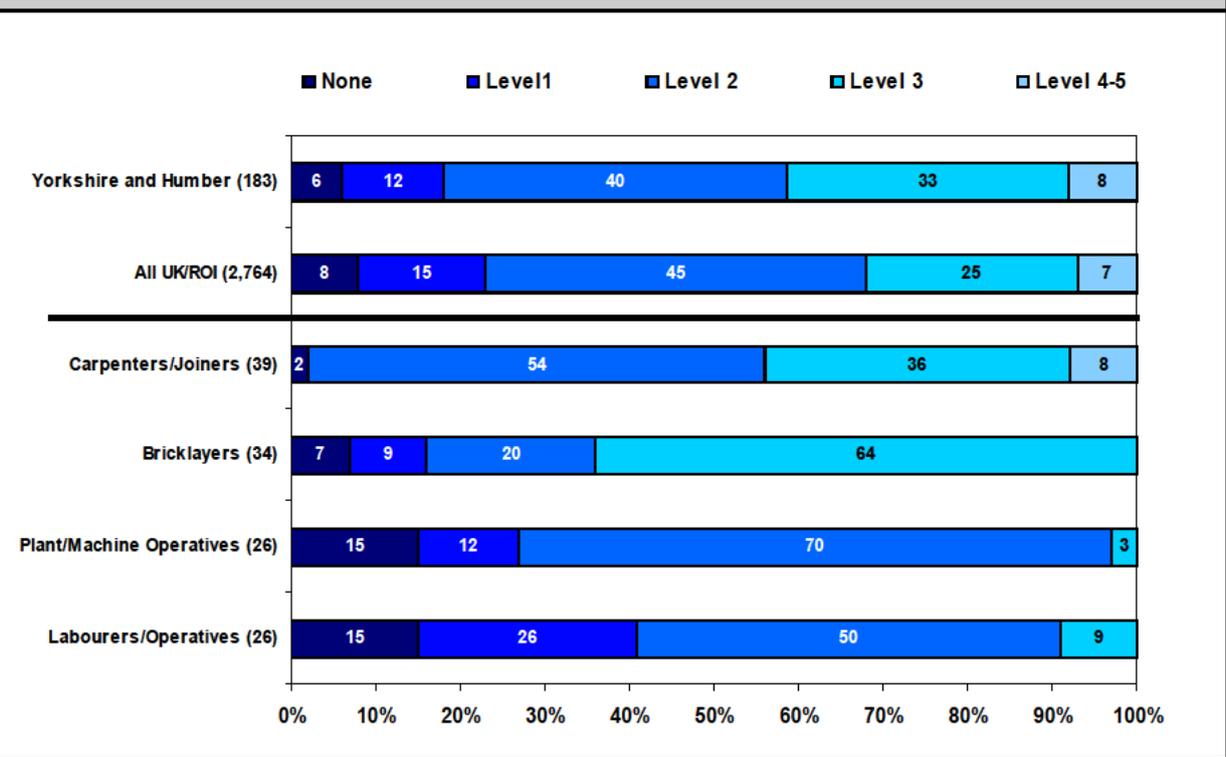
4.6 Competence/qualification level of the construction workforce

Using the responses given by workers for qualifications and skill cards/certificates held and managerial training undertaken, the highest competence/qualification levels have been derived for each worker. The technical report shows the definitions of each level, which are largely the same as those used in the 2004 survey³.

Chart 4.2 shows the results overall, and by occupation where base size allows.

³ In 2004 Green CSCS and CSR cards were categorised as Level 2, in 2007 they were categorised as Level 1.

Chart 4.2 Competence/qualification level by occupation



Base: All respondents where a competence/ qualification level could be calculated (183)

Just one in twenty (6%) construction workers in Yorkshire and Humber have no qualification, management training or skill card/certificate. The large majority (82%) have at least competence/qualification level 2, and two in five (41%) have reached level 3 or above, higher than the average across the UK/ROI as a whole (32%).

Although data for individual occupations is only available for very small bases, the broad picture reflects that reported for UK/ROI overall, with high competence/ qualification levels seen among bricklayers in particular. Similarly it is noted that a higher proportion of labourers and plant/machine operatives have no qualifications, as at the UK/ROI level.

4.7 Self assessment of skill level

Workers' own perceptions as to whether they have all the skills they need to do their current job were ascertained after they were asked about the various qualifications they held or were working towards. Table 4.7 summarises the results.

Table 4.7 Self assessment of skill level and training needs for current job			
	Yorkshire and Humber 2007 %	No skill card/ qualification/ nor working towards any 2007 %	Overall Workforce (UK/ROI) 2007 %
Have all the skills needed for current job	75	55	76
Need more training or qualifications	10	24	13
Need more experience	9	7	8
Don't know	6	14	3

Base: Yorkshire and Humber respondents (235); No qualification nor working towards any (57); Overall workforce (3,877)

Three quarters (75%) of workers believe they have all the skills they require for their current job, although this falls to around half (55%) of those with no skill card or qualification and who are not currently working towards a qualification.

Just ten per cent overall sees a need for more training or qualifications, though an additional nine per cent believes they simply need more experience. As would be expected, the youngest age groups are most likely to believe they need more training and qualifications, but demand is evident among just 20% for both the 16–19 year old and the 20–24 year old age groups. By contrast there is no demand amongst workers aged 45+.

All respondents were also asked whether they felt that training in basic skills, such as reading, writing, speaking English and maths would help them with their work. One in three (32%) indicated at least one basic skills area they would like to address, and broadly, one in five people indicated each of these areas as shown in the first column of the table.

Table 4.8 Need for training in basic skills			
	Yorkshire and Humber 2007 %	All identifying a need 2007 %	Overall Workforce (UK/ROI) 2007 %
Any need identified	32	100	21
Reading	23	78	12
Maths	22	68	10
Writing	18	58	10
Speaking English	17	53	12

*Base: Yorkshire and Humber respondents (235); All identifying a training need (94); Overall workforce (3,877)
NB: A comparison is not provided for the regional 2004 data due to a significant change to the question wording this year.*

It is notable that demand for basic skills training is higher in the region than nationally (32% vs. 21% overall). Again, age has some influence on demand, with around half (46%) those aged 16–19 requesting help with basic skills, although one in three (33%) aged 20–44 and a quarter (26%) of those aged 45+ are also interested in accessing this kind of training.

Another source of employee driven demand for training could potentially come from those wishing to change occupation within the sector. In Yorkshire and Humber, as nationally, one in seven (14%) workers said they would like to change the kind of work they do, whilst remaining in the construction industry.

There is insufficient data to draw conclusions about the type of worker most likely to change jobs, but one in three of those who would change (Base = 32) would like to switch to a managerial or supervisory role. Of the remainder, all the preferred roles identified are skilled occupations. Consequently, the majority (87%) identify a need for further training and qualifications to equip them for this new role, which represents 12% of the total Yorkshire and Humber workforce.

The top five reasons given for wanting to change occupation are as follows:

- Better pay – 62%
- More interesting work – 41%
- Need a change/Bored – 22%
- Less physical – 19%
- More responsibility – 16%.

One challenge to delivering training to site-based workers is the relatively short period of time that workers stay at one site, as well as the uncertainty that exists around how long the work will last. The following table indicates how much time workers in Yorkshire and Humber expect to spend at their current site and how this compares with the national picture.

Table 4.9 Total length of time expect to work at site		
	Yorkshire and Humber 2007 %	Overall Workforce (UK/ROI) 2007 %
<1 month	9	11
1–3 months	26	20
>3 up to 6 months	17	16
>6 months up to a year	11	17
More than a year	19	20
Don't know	19	17
<i>Base: Yorkshire and Humber respondents (235); Overall workforce (3,877)</i>		

In Yorkshire and Humber, just 30% of workers expect to be on site for more than six months; lower than reported nationally (37%), though better than in 2004 when less than a quarter (23%) expected to be on site that long. In 2004, however, almost half (46%) said they did not know how long they would be on site, so the current figure of 19% is a considerable improvement on this.

5 Mobility

A key aim of the survey is to gain an understanding of geographic mobility of construction workers and to try to get a measure of which regions are net 'importers' and which are net 'exporters'. Another aim is to identify which types of workers (for example, by occupation and competence/ qualification level) are particularly likely to be mobile. The results from this analysis clearly have a bearing on training planning, provision and investment.

What constitutes a mobile worker is not straightforward. Potentially it includes those who live outside a region and travel in on a daily basis, those who live in temporary accommodation while working but whose permanent address is outside the region, those who have moved to the area on a semi-permanent basis, as well as those who received their construction training elsewhere but have now moved to the region on a permanent basis. Hence for the survey a number of questions were asked covering these issues. These were:

- where respondents were from originally
- whether they travel from their permanent address or a temporary address (and if temporary why they work in the current region)
- the proportion of their time working in construction which has been on sites within the region where they are currently working
- the miles they travel to get to the site each day
- whether when they finish this site they expect to get a job which allows them to commute on a daily basis from their permanent address

These areas are discussed in turn. In the last section we also look at how long workers are typically based at an individual site to give some idea of the frequency of moving between sites. Clearly workers may have spent their whole working life in one region and therefore appear relatively immobile, but if they move site frequently, providing training to these workers could be problematic.

5.1 Worker origin

Workers were asked where they were from originally. As a measure of mobility clearly this is very broad, since people may have moved to a region on a permanent basis and done so many years ago for reasons other than their work. That said there are still some interesting differences between regions as far as importing and exporting workers is concerned which are shown in table 5.1.

Table 5.1 Where from originally/international and inter-region movement

Where from originally	Where currently working												
	NI %	NE %	Scot %	Wales %	NW %	Y&H %	WM %	ROI %	EM %	SW %	EE %	SE %	Lon %
Northern Ireland	92	*	-	2	1	-	*	*	1	*	1	1	1
North East	*	84	4	1	*	5	2	*	1	1	1	1	1
Scotland	1	1	84	*	*	1	1	*	1	1	-	*	1
Wales	-	*	-	79	3	1	1	-	2	5	*	2	1
North West	*	1	4	2	74	5	2	-	2	8	1	1	1
Yorkshire and Humber	*	4	2	-	4	74	2	1	9	3	1	1	1
West Midlands	*	-	1	1	11	-	70	-	7	7	1	3	*
Republic of Ireland	2	*	-	1	1	2	5	67	2	2	5	5	5
East Midlands	*	*	*	1	1	6	7	-	65	4	2	2	1
South West	-	1	-	7	-	*	3	-	1	60	2	4	*
East of England	1	4	-	-	*	3	1	*	2	2	57	7	9
South East	-	1	-	1	*	1	1	*	2	8	6	49	15
London	-	*	1	1	*	*	1	*	1	3	13	12	33
Outside UK and ROI	2	1	2	4	-	1	3	29	2	1	8	8	22

Base: All respondents (3,877)

NB: Dark shading denotes proportion of workers in nation/region originally from that nation/region. Yorkshire and Humber workers are also shaded (light).

Yorkshire and Humber is one of several geographic areas with a highly self-contained workforce – as shown in the chart, three-quarters of its construction workers originate from the region, with inward (and outward) migration coming mainly from the East Midlands, but also from across the British Isles. Nevertheless, other regions are more self-contained; namely Northern Ireland, the North East, Scotland and Wales. By contrast, London and the South East are notable as the largest ‘net importers’ of construction workers according to this measure.

Overall, 93% of construction workers in Yorkshire and Humber said they had lived in the UK/ROI all their life, which is greater than the average for UK/ROI (85%). Fewer than ten people who were interviewed came from countries outside the UK/ROI.

5.2 Location of workplace, current and permanent residence

All respondents were asked where they were living to get to their current place of work, whether this was their permanent address and, if not, where their permanent address was.

Table 5.2 presents results for *all* regions showing:

- the percentage of workers whose **permanent** residence is in the same nation/region as their current work
- the percentage of workers currently living in the same nation/region as their current work

In each instance the corresponding percentages resident in different regions are shown to the left and the percentages resident in neighbouring regions to the right. The results from the 2004 survey are also included for comparison.

Table 5.2 Region of establishment/permanent residence and work residence												
Region of establishment	Region of permanent residence						Region of current residence					
	% from different nation/region		% from same nation/region		% from neighbouring nation/regions		% from different nation/region		% from same nation/region		% from neighbouring nation/regions	
	2007	2004	2007	2004	2007	2004	2007	2004	2007	2004	2007	2004
Northern Ireland	1	0.5	99	99.5	-	-	0.5	0.5	99.5	99.5	-	-
Scotland	8	2	92	98	4	1	1	1	99	99	-	1
North East	9	5	91	95	6	4	8	4	92	96	5	3
West Midlands	13	11	87	89	10	10	7	10	93	90	7	9
Wales	13	10	87	90	7	5	12	8	88	92	7	4
Yorkshire and Humber	16	12	84	88	15	10	12	8	88	92	11	8
East of England	20	32	80	68	17	27	18	30	82	70	15	28
North West	12	19	82	81	15	17	18	13	82	87	15	12
South West	22	13	78	87	13	8	17	8	83	92	11	5
East Midlands	23	25	77	75	20	18	22	20	78	80	20	16
London	32	43	68	57	30	25	30	29	70	71	30	26
South East	32	27	68	73	24	23	31	21	69	79	25	21

Base: All respondents (2007: 3,877; 2004: 8,436)

Yorkshire and Humber draws the majority (84%) of its workforce from workers permanently resident in the region, with the remainder coming largely from neighbouring regions. This is broadly similar to the situation recorded in 2004.

Table 5.3 shows the percentage of construction workers working outside the nation/region where they have a permanent residence.

Table 5.3 Percentage working outside their nation/region of permanent or current residence		
Region of permanent address	Permanent 2007 %	Permanent 2004 %
West Midlands	31	27
London	30	35
East Midlands	28	43
East of England	28	29
South East	20	12
Yorkshire and Humber	18	22
North East	16	21
Wales	16	18
South West	15	27
North West	9	15
Northern Ireland	4	2
Scotland	1	8
All	18	21
<i>Base: All respondents (2007: 3,877; 2004: 8,436)</i>		

In this region, as highlighted in the table, almost one in five (18%) of those with a permanent address in the region are working on sites outside the region. This is in line with the UK/ROI average and the 2004 regional figure.

5.3 Temporary accommodation

While clearly not everyone based in temporary accommodation will necessarily be 'imported' workers (some may also have a permanent address within the nation/region), this group is a proxy for the highly mobile workforce and as such constitutes another measure of mobility.

In Yorkshire and Humber, seven per cent of workers were based at a temporary address. As we might expect, workers employed on a temporary basis were more likely to say they were living in temporary accommodation (20% vs. 4% permanent). No firm conclusions can be drawn on the basis of length of time spent in the industry, age or occupation given small base sizes.

5.4 Proportion of career spent in current location

Workers were asked what proportion of the time they had worked in construction in the UK/ROI had been spent on sites in the nation/region where they were currently working.

Table 5.4 Proportion of construction career spent in current nation/region			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
All of it	38	37	43
Most of it	32	35	33
Around half	14	11	9
Small proportion	9	15	8
Only this job	3	N/A	3
Don't know	3	N/A	3

Base: Yorkshire and Humber respondents (2007: 235; 2004: 604); Overall workforce (3,877)

Seventy per cent of workers in Yorkshire and Humber said they had spent all or most of their construction career in the region, with a quarter (26%) indicating a higher degree of mobility. This represents almost no change since 2004, and a slightly more mobile working population than seen in other parts of the UK/ROI.

5.5 Travel to work distances

The mean average number of miles travelled to work (each way) by workers in the region at the time of the survey was 23 miles (the same as in 2004) and in line with the national average of 24 miles. The median distance is 15 miles.

A quarter (23%) of workers reported travelling less than five miles, and almost two thirds (62%) travelled less than 25 miles. One in twelve (8%) workers said they were travelling over 50 miles each way to work, which compares with 10% nationally.

5.6 Sub-sector mobility

All respondents were asked whether they had spent significant parts of their construction career on any of the following types of project: new housing; housing repair and maintenance; commercial work such as shops, offices, pubs etc.; private industrial such as warehousing, land reclamation etc.; public non-housing such as schools, landscaping etc. and infrastructure such as road, tunnel etc. Results are summarised in table 5.5⁴.

Table 5.5 Type of projects spent significant periods of construction career on		
	Yorkshire and Humber 2007 %	Overall Workforce (UK/ROI) 2007 %
New housing	69	73
Commercial work	34	43
Housing repair and maintenance	32	38
Public non-housing	29	44
Private industrial	26	33
Infrastructure	9	21
One type of project only	49	34
Two types of project only	17	19
Three types of project only	14	15
Four types of project only	8	12
Five types of project only	8	11
Worked on all six types of project	1	6
<i>Base: Yorkshire and Humber respondents (235); Overall workforce (3,877)</i>		

It is notable that a greater proportion of workers have been employed in each of the given sub sectors at the UK/ROI level than in Yorkshire and Humber, suggesting there are fewer opportunities for movement between sub-sectors in the region than in other parts of the country.

This suggestion is borne out by the fact that just half (48%) of respondents in the region had been involved with at least two different sub sectors of the construction industry, much higher than nationally, where just 34% have worked in a single sub-sector.

New housing is the dominant sub-sector (69%) and accounts for 71% of the projects undertaken by those people who have only worked in one sub-sector. The remaining distribution of projects worked on in isolation are infrastructure (10%), private industrial (6%), public non-housing (6%) and private commercial (3%).

Results vary by age and length of time in the industry as we have seen elsewhere in this report. For example, while all 16–19 year olds have worked on just one or two types of project, this falls to two thirds (66%) of those aged 20–44, and to 58% amongst those aged 45+ who have worked on broader range of projects.

Small base sizes preclude detailed analysis by individual occupations.

5.7 Leaving the industry

A final measure of mobility is the anticipated outflow from the workforce, i.e. those leaving the industry. The results for workers aged below 60 are shown in table 5.6.

Table 5.6 Likelihood of working in construction in five years time			
	Yorkshire and Humber 2007 %	Yorkshire and Humber 2004 %	Overall Workforce (UK/ROI) 2007 %
Definitely will	41	47	44
Very likely	35	31	32
Quite likely	11	14	10
Quite unlikely	1	2	2
Very unlikely	2	2	2
Definitely will not	2	2	2
Hope to be retired	2	N/A	2
Don't know	6	2	6

Base: Yorkshire and Humber workers aged under 60 (2007: 221; 2004: 570); All respondents aged under 60 (3,686)

Seven per cent of workers think it is unlikely they will be working in the industry in five years time. This is far outweighed by the majority (76%) who will definitely, or are very likely, to stay in construction. These results are very similar to the 2004 data, and, therefore, present a relatively stable picture in terms of intent to stay within the industry in the region. The picture is also very similar for the UK/ROI as a whole.

No further conclusions can be drawn in relation to individual sub-groups.

⁴ Results are not directly comparable with 2004 on this measure as a different number and definition of types of projects was used in 2004.