

Workforce Mobility and Skills in the UK Construction Sector

Wales 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	5
2	Management Summary	6
2.1	The profile of the workforce.....	6
2.2	Qualifications and skills.....	6
2.3	Mobility.....	8
3	Profile, Work Status and Work Histories of the Construction Workforce	9
3.1	Demographic profile of the sample.....	9
3.2	Work status.....	10
3.3	Occupational profile	11
3.4	Years working in construction	12
3.4.1	Employment pre-construction	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	19
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	22
5	Mobility	25
5.1	Worker origin.....	25
5.2	Location of workplace, current and permanent residence.....	27
5.3	Temporary accommodation.....	28
5.4	Proportion of Career Spent in Current Location	29
5.5	Travel to work distances	29
5.6	Sub-sector mobility.....	29
5.7	Leaving the industry	31

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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 Wales.

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 is based on fieldwork conducted in Wales from February to July 2007. This consisted of a total of 293 face-to-face interviews with site based workers obtained across 21 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, Wales accounted for approximately 5% of the UK/ROI workforce.

Figures from the site managers interviewed at the telephone fieldwork stage indicated that there were 840 workers across the 21 sites. Using this figure it would appear that around 35% 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 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 Wales from February to July 2007. This consisted of a total of 293 face-to-face interviews with site based workers obtained across 21 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 age profile of construction workers in Wales differed little from that of the UK and ROI as a whole, although there was a lower proportion of workers aged 45 or above in the principality (21% vs. 26% for the overall workforce) and a higher proportion of 35–44 year olds (31% vs. 25%).

The most common occupations within the industry in Wales were carpenters/joiners (17%), labourers/operatives (14%) and plant/machine operatives (13%). The proportion of bricklayers in Wales (8%) was lower than that for the UK and ROI as a whole (13%) while a higher proportion worked as managers in Wales (8% vs. 3%).

With regard to employment status the profile for Welsh workers was again similar to that for the overall workforce. Two-thirds (68%) were employed directly by a company, while just over a quarter (27%) were self-employed and 5% worked for an agency. Bricklayers and carpenters/joiners were the most likely occupations to be self-employed while managers, labourers and plant/machine operatives were least likely.

2.2 Qualifications and skills

Construction workers in Wales were more likely to hold a skill card or certificate than those in all other regions except Northern Ireland. Four-fifths (82%) had a card or certificate compared with just over half (54%) in 2004. This rapid growth was seen across all levels of experience and all ages. It was still the case that those with less than a year's experience were least likely to hold a card or certificate but over two in five (44%) had one in 2007 compared with under one in five (17%) in 2004.

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.

Welsh workers were also more likely than average to hold other formal qualifications relevant to construction. Almost two-thirds (63%) had one of these qualifications, almost half as much again as in 2004 (when 43% held one) and a higher level than seen for the UK and ROI as a whole (48%). Again, this growth in ownership of qualifications was seen across all levels of experience.

Although the shift towards NVQs/SVQs seen for the overall workforce was also seen in Wales, those with qualifications in Wales were less likely than those from all other UK nation/regions, except Yorkshire and Humber, to have an NVQ or SVQ (44% of those with qualifications held an NVQ/SVQ in Wales compared with 51% of the overall workforce). However, Wales was the nation/region where workers were most likely to hold a degree (7% have one compared with 1% of the overall workforce).

Welsh construction workers were more likely than average to have said that they had supervisory or managerial duties on site (26% said they had compared with 18% of workers across the UK and ROI as a whole). Those with these types of duties were also more likely than average to have received training designed to improve their skills in this area (73% in Wales vs. 53% of the overall workforce). The proportion receiving this type of training had also improved since 2004 (73% vs. 55% in 2004).

As well as being more likely to have some sort of construction qualification, workers in Wales were slightly more likely than average to be working towards a construction specific qualification (19% in Wales compared with 17% across the UK/ROI). Almost half (46%) of those working towards a qualification did not already have one (equivalent to 9% of the total workforce in Wales compared with 8% of the UK/ROI workforce). Those working towards a qualification were most likely to be working towards an NVQ or SVQ (52%).

Despite a relatively high level of the workforce that had some sort of construction qualification there still seemed to be a significant demand for further training. Only two-thirds (67%) said that they had all the skills needed for their current job, the lowest proportion across the UK. However, workers in Wales were also a lot less likely than average to feel they needed training in basic skills, with just 11% having identified a need (compared with 21% of the overall workforce).

The potential demand for training from those who are looking to change their roles within the construction industry looks to be relatively low in Wales. A tenth (10%) said they would like to change the work they do (compared with 14% of workers across the UK and ROI), with the majority of them (83%) saying they would need further training and qualifications for their prospective new role.

The relatively short time that workers are on site is a potential barrier to the uptake and delivery of training. However, workers in Wales show a greater stability than average on this measure. A quarter (25%) said that they will be at their current site for three months or less (compared with 31% of the overall workforce). They were also more likely to have said they will be at their current site for more than a year (28% vs. 20% of the overall workforce).

2.3 Mobility

Construction workers in Wales were some of the most likely to be working in the region where they came from with around four-fifths (79%) of them originally from the principality. Incoming workers were most likely to come from the neighbouring South West region (7% of the Wales workforce originated in the South West), the same region where Welsh workers working outside of Wales were most likely to work (5% of the South West workforce originated in Wales).

Relatively few of those originally from Wales went outside of the region to work with just 16% doing so (compared with 31% of those from the West Midlands, the region that exported the highest proportion of native workers).

The mean number of miles travelled to work (distance from home to work) was 29, longer than the UK and ROI average of 24 miles. Workers in Wales were the least likely to travel less than five miles to work (10% vs. 24% across the UK/ROI). However, the proportion that travelled over 50 miles was similar to that for the overall workforce (9% in Wales vs. 10% across the UK and ROI).

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. We also look at the occupational profile of the sample and examine career histories 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 Wales and compares this to the profile in 2004 and the overall workforce interviewed in the survey.

Table 3.1 Demographic profile of the sample			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
Age: 16–19	8	27	8
20–24	18		16
25–34	22	26	25
35–44	31	23	25
45–54	13	15	16
55+	8	9	10
<i>Ethnicity: White</i>			
	99	99	96
Black	1	N/A	2
Asian	-	N/A	1
Other	-	N/A	1
<i>Gender: Male</i>			
	100	99	99
Female	<1	1	<1
<i>Base: Wales respondents (2007:293; 2004: 398); Overall workforce (3,877)</i>			

The age profile of construction workers in Wales was similar to that of the UK and ROI as a whole although there was a lower proportion of workers aged 45 or above in the principality (21% vs. 26% for the overall workforce) and a higher proportion of 35–44 year olds (31% vs. 25%).

It was still the case that the workforce was overwhelmingly male and white. Just four respondents interviewed in Wales were of BME origin, and one was female.

3.2 Work status

Again the profile for Welsh workers was similar to that for the overall workforce. Two-thirds (68%) were employed directly by a company, while just over a quarter (27%) were self-employed and 5% worked for an agency. These proportions were similar to those seen in 2004.

Table 3.2 Work status						
	Wales 2007 %	Overall Workforce (UK/ROI) 2007 %	Years working in construction			
			<1 year %	1-2 %	3-4 %	5+ %
Employed by a company	68	64	67	87	82	64
Self-employed	27	29	25	7	15	31
Work for an agency	5	5	6	7	3	4
Unemployed (all ROI)	-	1	-	-	-	-

Base: Wales respondents, (293); Overall workforce (3,877)

Those with at least five years' experience were most likely to be self-employed (31% of this group worked for themselves). Conversely, those working for an agency were more likely to have less than three years' experience.

Table 3.3 Level of self-employment by occupation			
High		Low	
2007	2004	2007	2004
Bricklayers (67%)	Bricklayers (61%)	Managers (0%)	Groundworkers (12%)
Carpenters/Joiners (49%)	Carpenters/Joiners (60%)	Labourers/General Operatives (10%)	Labourers/General Operatives (18%)
Plasterers/Dry-liners (41%)	Painters/Decorators (60%)	Plant/Machine Operatives (16%)	

Owing to low base sizes in a number of occupations, only those occupations where we interviewed 15 or more workers have been referenced.

Bricklayers and carpenters/joiners were still the most likely occupations to be self-employed. None of the managers interviewed and just 10% of labourers and 16% of plant/machine operatives were self-employed.

3.3 Occupational profile

Table 3.4 shows how construction workers in Wales classify their current role or occupation. Occupations mentioned by more than 1% of the Wales workforce are included.

The most common occupations were carpenters/joiners (17%), labourers/operatives (14%) and plant/machine operatives (13%). The proportion of bricklayers in Wales (8%) was lower than that for the UK and ROI as a whole (13%) while a higher proportion worked as managers in Wales (8% vs. 3%).

Table 3.4 Occupational Profile			
	Wales 2007 % No.	Wales 2004 % No.	Overall Workforce (UK/ROI) 2007 % No.
Carpenter/Joiner	17 (49)	9 (35)	14 (559)
Labourer/Operative	14 (42)	25 (99)	17 (674)
Plant/Machine Operative	13 (37)	11 (42)	13 (502)
Bricklayer	8 (24)	8 (33)	13 (536)
Manager	8 (24)	N/A	3 (111)
Electrician	6 (19)	3% (11)	7 (247)
Roofer	6 (18)	4 (16)	4 (133)
Plasterer/Dry-liner	6 (17)	3 (12)	5 (190)
Supervisor	6 (17)	3 (11)	5 (192)
Civil Engineering Operative	4 (12)	N/A	2 (75)
Plumber	3 (10)	N/A	5 (183)
Banksman/Banksperson	3 (8)	N/A	2 (81)
Painter/Decorator	3 (8)	4 (15)	2 (97)
Scaffolder	3 (8)	5 (20)	3 (112)
Technical	2 (7)	N/A	1 (38)
Pipe Fitter	2 (5)	3 (12)	3 (102)
Steel Erector/Rigger	2 (5)	N/A	2 (75)

Base: Wales respondents (2007:293; 2004: 398); Overall workforce (3,877)

3.4 Years working in construction

The proportion of new entrants working in the construction industry in Wales was slightly lower than for the UK and ROI as a whole with 8% of workers in Wales having had no more than a year's experience compared with 11% of those across the overall workforce. Table 3.5 below summarises results using cumulative proportions.

Table 3.5 Years spent working in construction (cumulative)		
	Wales %	Overall Workforce (UK/ROI) 2007 %
Less than 6 months	2	5
A year or less	8	11
2 years or less	13	17
5 years or less	32	33
10 years or less	48	50
20 years or less	73	71
More than 20 years	26	27
<i>Base: Wales respondents, (293); Overall workforce (3,877)</i>		

Roofers (11% worked in the industry for a year or less) and labourers were most likely to be new recruits to the industry (10%); supervisors were the least likely (none of those in the sample).

3.4.1 Employment pre-construction

A third (34%) of those in Wales ended up in the construction industry after first starting in another field. This is slightly below the figure for the UK and ROI as a whole (38%).

Plasterers/dry-liners and labourers were more likely than average to have worked in another field prior to starting in construction with 53% of plasterers/dry-liners and 50% of labourers having previously worked in another industry. Conversely, just over a tenth (12%) of supervisors and less than a fifth of bricklayers (17%) had started out in a non-construction occupation.

Since starting their first job in construction, the vast majority had only ever worked in this sector; 83% of those for whom their current job was not their first job said they have worked in construction pretty much continuously, with a further 2% working only in construction jobs but having periods of unemployment. The remainder (15%) had dipped in and out of the industry occasionally taking work in other fields. Plasterers/dry-liners were the most likely occupation to have spent time working in other fields between spells in construction (35% had done so).

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.

Welsh construction workers were as likely to have always had the same trade as the overall workforce (57% had always had the same trade vs. 60% of the overall workforce).

Plasterers/dry-liners, supervisors and roofers were the most likely occupations to have switched trades in the past. Almost three-fifths of these occupations had previously had another role within construction.

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.

Where possible results are compared with the findings from the research conducted in 2004.

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.

The proportion holding a skill card or certificate in Wales was 82%, higher than for all other regions except Northern Ireland (84%). The rate in growth of ownership since 2004 has been rapid. Just over half (54%) held a skill card or certificate in 2004.

This rapid growth has been seen across all levels of experience and all ages, not just among those who have worked in construction for shorter periods of time. It was still the case that those with less than a year's experience were least likely to hold a card or certificate but almost half (46%) had one in 2007 compared with just under a fifth (17%) in 2004.

Table 4.1 Whether have a skill card/certificate by other variables			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
Overall	82	54	68
<1 year in construction	44	17	39
1–2 years	67	48	60
3–4 years	85	38	65
5+ years	87	65	75
16–19	61	N/A	43
20–24	79		62
25–44	83	61	73
45+	92	68	72
Employed directly	86	55	70
Self-employed	74	58	69
Agency worker	71	27	62
Base: Wales respondents (2007:293; 2004: 398); Overall workforce (3,877)			

The main differences by occupation are shown in the following table which lists occupations with the highest and lowest penetrations from the 2004 and the 2007 surveys.

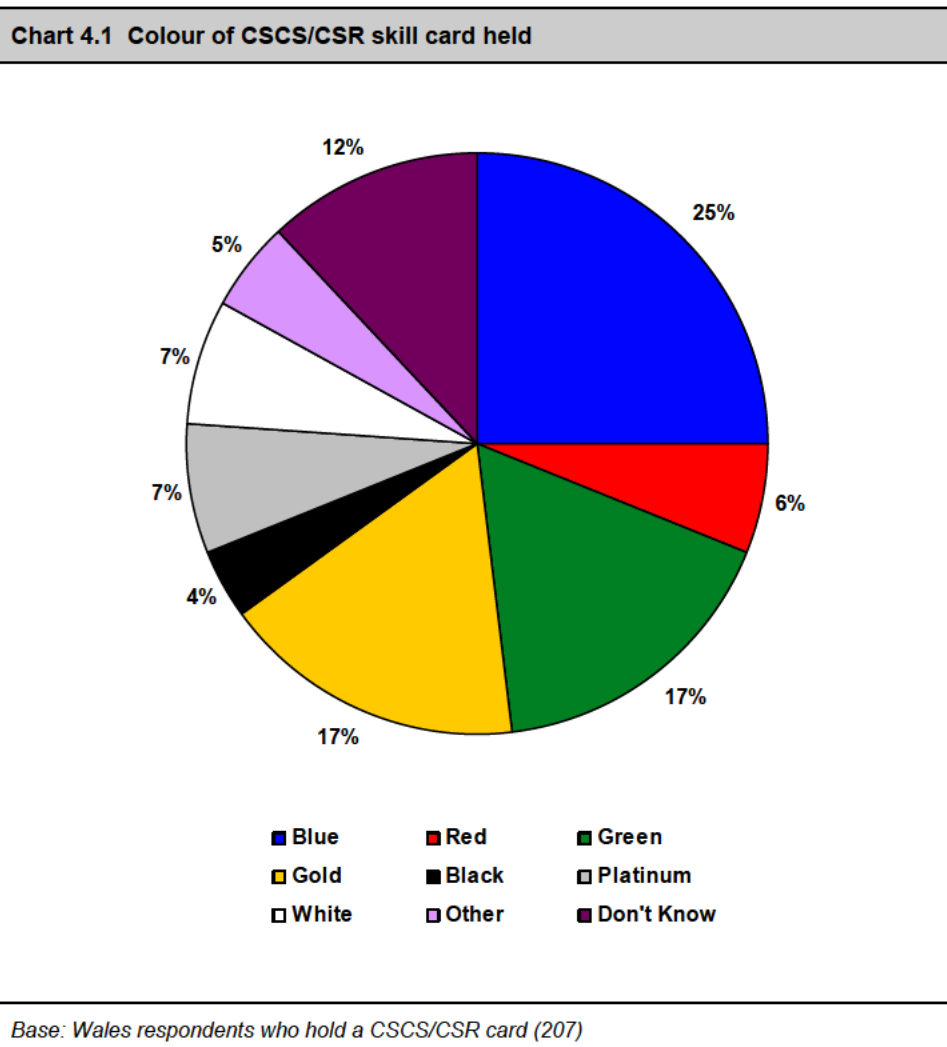
Table 4.2 Whether have a skill card/certificate by occupation			
<i>High likelihood</i>		<i>Low likelihood</i>	
2007	2004	2007	2004
Plasterers/Dry-liners (100%)	Plant/Machine Operatives (86%)	Roofers (67%)	Labourers/General Operatives (33%)
Electricians (100%)	Groundworkers (66%)	Bricklayers (79%)	
Plant/Machine Operatives (97%)	Scaffolders (65%)	Carpenters/Joiners (80%)	

All plasterers/dry-liners and electricians interviewed held a skill card or certificate as did almost all plant/machine operatives.

Roofers were the least likely occupation to hold a card or certificate although it was still the case that two-thirds of this group had one. The proportion of labourers with a card or certificate has seen particularly strong growth. In 2004 just a third (33%) had one compared with four-fifths (81%) who held one in 2007.

The main type of card held in Wales was the CSCS card, held by 71% of workers. Among those occupations with sufficient base size for reliable analysis, the most likely to hold this card were plasterers (100%) and managers (87%).

A quarter (25%) of CSCS card holders said they had a blue, NVQ/SVQ Level 2 card, while 17% said they had each of a gold, NVQ/SVQ Level 3 card and a green, general site card respectively. Despite saying they held a CSCS/CSR card, one in ten (12%) were not sure what colour or level it was. Chart 4.1 shows the proportions of card-holders with each colour of card.



4.2 Construction qualifications held

In addition to being asked to describe which skill card or certificate they had obtained (if any), workers were also asked what other formal qualifications relevant to construction they held (excluding first aid certificates). There was a fairly high proportion of non-response to this question in 2007 and so the 2007 results have been re-based on those who gave a response.

Almost two-thirds (63%) of those giving an answer had any such qualifications, half as many again as in 2004 (when 43% held one) and a higher level than seen for the UK and ROI as a whole (48%).

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

Table 4.3 Hold any construction specific qualification			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) %
Overall	63	43	48
<1 year in construction	38	8	15
1–2 years	40	48	30
3–4 years	45	38	39
5+ years	69	52	57
16–19	39	N/A	30
20–24	55		40
25–44	68	53	54
45+	68	45	50
Employed directly	63	41	48
Self-employed	68	54	54
Agency worker	23	23	30
<i>Base: Wales respondents who gave a response 2007 (278); All South West Respondents 2004 (398); All UK/ROI respondents who gave response (3,594)</i>			

The growth in ownership of these qualifications was seen across all levels of experience although agency workers were no more likely to have one of these qualifications in 2007 than in 2004.

Table 4.4 Whether have construction qualifications			
<i>High likelihood</i>		<i>Low likelihood</i>	
2007	2004	2007	2004
Bricklayers (96%)	Bricklayers (73%)	Roofers (28%)	Labourers/General Operatives (12%)
Managers (91%)	Carpenters/Joiners (63%)	Labourers/General Operatives (35%)	Groundworkers (23%)
Electricians (89%)	Plant/Machine Operatives (60%)	Plant/Machine Operatives (50%)	Roofers (25%)
	Painter/Decorators (60%)		

Bricklayers were still the most likely occupation to have a formal qualification with almost all having one. Managers (91%) and electricians (89%) were next most likely. Labourers were still one of the least likely occupations to hold a formal qualification but around three times as high a proportion of this group had one in 2007 than 2004 (35% vs. 12%). Therefore, the proportion of labourers with a skill card or certificate and the proportion with a formal qualification both saw large increases from 2004 to 2007.

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 4.5 Main type of highest qualification held			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
NVQ/SVQ	44	32	51
City and Guilds	30	37	34
Degree	7	N/A	1
Construction Award	5	N/A	2
HNC/HND/BTEC higher	5	2	1
Apprenticeship	3	2	4

Base: Wales respondents with qualification (2007: 174, 2004: 171); All UK/ROI respondents who gave response (1,810)

The shift towards NVQs/SVQs seen for the overall workforce was reflected in the results for Wales where 44% of those with a qualification had an NVQ or SVQ although this was the lowest level seen across the UK with the exception of Yorkshire and Humber (40%). Wales was, however, the UK region where workers were most likely to hold a degree (7% have one in Wales compared with 1% of the overall workforce).

4.3 Working towards construction qualifications

Construction workers in Wales were slightly more likely than average to be working towards a construction specific qualification (19% in Wales compared with 17% across the UK and ROI) and slightly more likely to be working towards a qualification than in 2004 when 16% were working towards one.

Table 4.6 Working towards a construction specific qualification			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
Overall	19	16	17
<1 year in construction	44	19	28
1–2 years	47	26	32
3–4 years	48	33	36
5+ years	10	12	11
16–19	57	N/A	47
20–24	35		27
25+	12	13	12
<i>Base: Wales respondents (2007: 293; 2004: 398); Overall workforce (3,877)</i>			

As we would expect younger workers were most likely to be working towards a qualification (57% of 16–19s compared with just 12% of over 25s) as were those with less experience (47% of those with less than five years experience compared with 10% of those with five or more). Almost half (47%) of those working towards a qualification did not already have one (equivalent to 9% of the total workforce in Wales, compared with 8% of the UK/ROI workforce).

Just over half (52%) were working towards an NVQ or SVQ, a lower proportion than for the overall workforce (61%). Only 7% were working towards a City and Guilds qualification.

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.

Welsh construction workers were more likely than average to have said that they had supervisory or managerial duties on site. A quarter (26%) said they had, compared with a fifth (18%) of workers across the UK and ROI as a whole. The vast majority (90%) of these managers had five years or more experience in the construction industry.

Just over a quarter (27%) of those with supervisory or managerial duties in Wales had not received any training designed to improve their skills, lower than the proportion seen across the UK and ROI (47%) and the proportion seen in Wales in 2004 when 45% had not received any of this type of training.

Those who had received some training were more likely to have undertaken in-house training rather than anything that was part of any accredited, industry recognised programme. The types of training undertaken are shown in table 4.7.

Table 4.7 Type of training received to improve management or supervisory skills			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
In-house training	44	35	31
None/can't remember	27	45	47
SMSTS (Site Manager Safety Training Scheme)	16	N/A	8
Site Safety Supervisors Course (for CSR)	15	N/A	7
Assessor and Verifier Training	9	1	5
CITB training	9	1	3
Chargehand and Team Leader Training	8	6	10
CIOB Site Supervisor (First Line Supervisor – FLS)	8	5	2
IOSH (Institute of Occupational Safety and Health)	7	N/A	3
Civil engineering Site Managers Scheme	4	3	3
Project Management Short Courses	4	3	3
CSCS training	4	N/A	1
IOSH Managing Safely for Construction Managers	4	N/A	3
Managing Safely in the Construction Industry (for CSR)	4	N/A	3
Institute of Supervision and Management Workshops	4	3	1
Supervisory Management Training and Development	3	6	2
CIOB Site Management Education and Training Scheme (SMETS)	3	3	2
NVQ/SVQ Level 4 in Construction Site Management	1	N/A	1
Safety for Senior Executives (for CSR)	1	N/A	1

Base: All with management and supervisory duties Wales (2007: 75; 2004: 78); All UK/ROI respondents who gave response (678)

4.5 Summary of qualification and skills card status

Table 4.8 summarises the situation regarding qualifications and skill cards/certificates attained and working towards. The results for Wales are compared with the results in 2004 and the overall results in 2007.

Table 4.8 Qualification status			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
Hold a formal construction qualification or a skills card/certificate or working towards a qualification	94	72	82
Hold a formal construction qualification or a skills card/certificate	90	67	78
Hold a skills card/certificate	82	54	68
Hold a skills card/certificate but no other construction qualification	30	24	33
Working towards a qualification	19	16	17
<i>Base: Wales respondents (2007: 293; 2004: 398); Overall workforce (3,877)</i>			

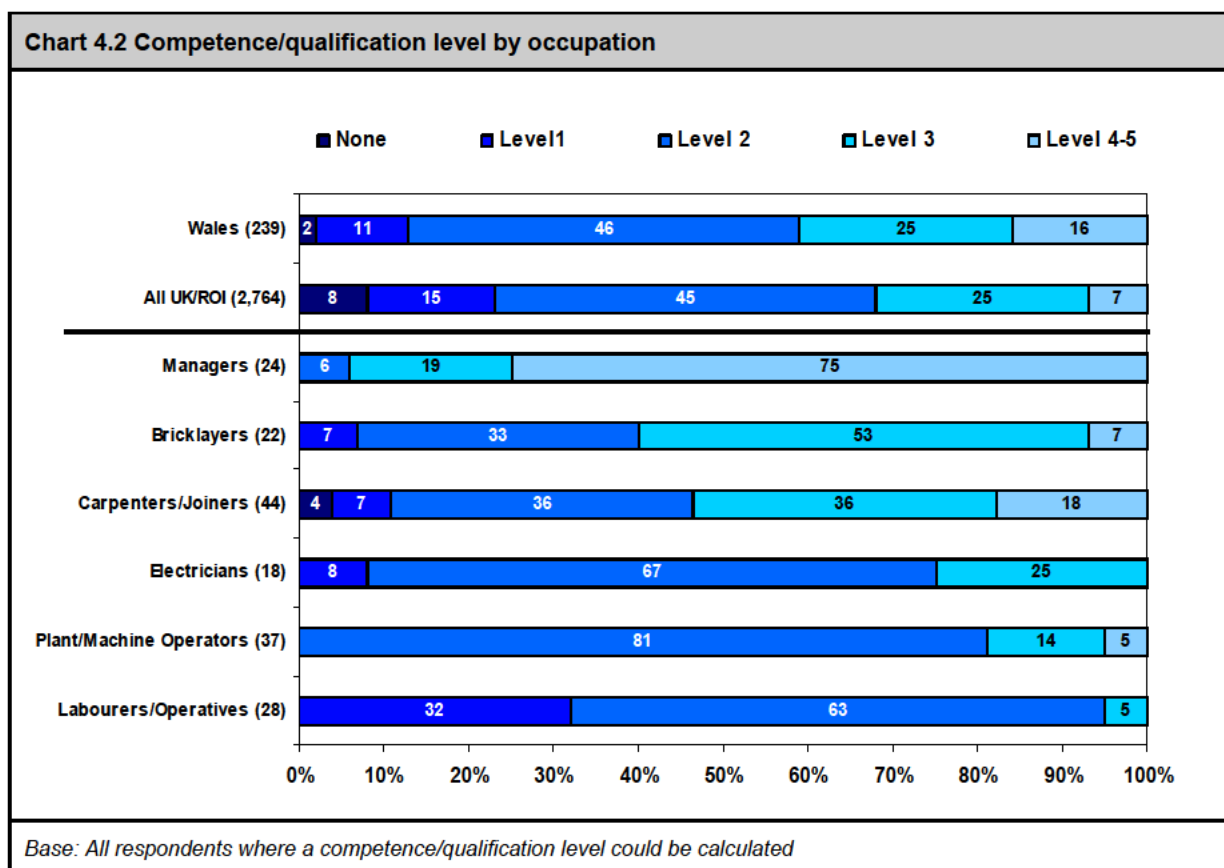
The vast majority (90%) of workers in Wales had some sort of construction qualification or skill card/certificate; indeed, workers in Wales were more likely than those from any other nation/region to do so.

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.

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

Chart 4.2 shows the results overall, and by occupation where base size allows (even so, base sizes within occupation are very low and care should be taken with interpreting these results).



Only 2% of the workforce in Wales had no qualifications (i.e. do not hold any qualification, management training or skill cards/certificates) compared with 8% of the overall workforce across UK and ROI. Two fifths (41%) had achieved Level 3 or higher, compared with a third (32%) of the UK/ROI as a whole.

Of the occupations shown, only carpenters had members who did not have any qualifications. Three in five (60%) bricklayers had qualifications above Level 2, as did half (54%) of carpenters/joiners, although the highest levels were seen among managers, three quarters of whom had competence/qualification Level 4 or 5. Plant/machine operatives, and in particular labourers, tended not to have qualifications above Level 2, but the large majority of them did have Level 2 qualifications.

4.7 Self assessment of skill level

Workers' own perceptions as to whether they had 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 4.9 summarises the results.

Table 4.9 Self assessment of skill level and training needs for current job			
	Wales 2007 %	No qualification, nor working towards any 2007 %	Overall Workforce (UK/ROI) 2007 %
Have all the skills needed for current job	67	74	76
Need more training or qualifications	25	17	13
Need more experience	7	9	8
Don't know	1	-	3
<i>Base: Wales respondents (293); No qualification nor working towards any (77); Overall workforce (3,877)</i>			

Despite the high proportion of the Welsh workforce that had some sort of construction qualification only two-thirds said that they had the skills required for their current job (compared with 76% of the overall workforce). Across the UK (i.e. excluding ROI), Wales is the nation/region where workers were least likely to say they have all the skills needed for their current job.

Those with no qualifications and not working towards any were actually more likely than the workforce as a whole to have said that they had all the skills they needed for their current job.

All workers were also asked whether they felt they needed training in basic skills. Those in Wales were less likely than average to feel they needed this type of training with 11% having identified a need (compared with 21% of the overall workforce).

Table 4.10 Need for training in basic skills			
	Wales 2007 %	All identifying a need 2007 %	Overall Workforce (UK/ROI) 2007 %
Any need identified	11	100	21
Reading	7	67	12
Writing	7	67	10
Maths	6	52	10
Speaking English	4	38	12
<i>Base: Wales respondents (293); All identifying a training need (33); Overall workforce (3,877)</i>			

The other means by which increased training may arise from a demand-led worker angle is those wishing to change occupation within the sector and anticipating the need for re-training. In Wales a tenth (10%) of workers said they would like to change the type of work they do within the construction industry (lower than the overall workforce average of 14%) and the vast majority of these workers (83%) said that they would need further training and qualifications to effect a switch in roles.

The most common roles workers want to switch to tend to be more skilled. Seventeen percent of those who wanted to switch said they would like a managerial position while a tenth said they wanted to be carpenters, bricklayers or supervisors respectively. The top two motivators given for switching were better pay (mentioned by 63%) and more interesting work (cited by 40%).

One challenge to delivering training to site-based workers is the relatively short time that workers stay at one site as well as the uncertainty that exists about how long the work will last. The following table shows the results for the length of time workers expect to work at their current site; results are shown for Wales and overall.

Table 4.11 Total length of time expect to work at site		
	Wales 2007 %	Overall Workforce (UK/ROI) 2007 %
<1 month	6	11
1–3 months	18	20
>3 up to 6 months	12	16
>6 months up to a year	24	17
More than a year	28	20
Don't know	12	17
<i>Base: Wales respondents (293); Overall workforce (3,877)</i>		

Workers in Wales show a greater stability than average on this measure. A quarter (25%) said that they will be at their current site for three months or less, compared with almost a third (31%) of the overall workforce. They were also more likely to have said they will be at their current site for more than a year (28% vs. 20% of the overall workforce).

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.

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 region originally from that nation/region. Wales workers are also shaded (light).

Construction workers in Wales were some of the most likely to come from the region where they work. Around four in five (79%) did so, a proportion only bettered in Northern Ireland, Scotland and the North East. Incoming workers were most likely to come from the neighbouring South West region (7% of the Wales workforce originated in the South West), the same region where Welsh workers working outside of Wales were most likely to work (5% of the South West workforce originated in Wales).

5.2 Location of workplace, current and permanent residence

Respondents were all 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 while as their current work.

In each instance the corresponding percentages resident in different regions are shown on 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 Nation/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)

Again, the vast majority of the workforce in Wales had a permanent residence within the region (87%), with 88% having a permanent or temporary home within Wales. However, the proportion of workers in Wales who came from a different region but had a permanent address in Wales had risen slightly from 10% in 2004 to 13% in 2007.

Table 5.3 shows the percentage of construction workers working outside the nation/region where they have a permanent residence. Workers from Wales were some of the least likely to work outside their own region with 16% doing so.

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
South East	20	12
East Midlands	28	43
East of England	28	29
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>		

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.

Four percent of construction workers in Wales lived in temporary accommodation, a figure below the average of 7%. This again demonstrates the relatively low level of incoming workers to the region.

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. Workers in Wales were as likely as average to have spent all or most of their time in the construction industry within the region (76% of the Welsh and the overall workforce).

In Wales there was little difference between those with and without construction qualifications in terms of the proportions spending all or most of their career in the region.

Table 5.4 Proportion of construction career spent in current nation/region			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
All of it	39	48	43
Most of it	37	33	33
Around half	12	9	9
Small proportion	9	9	8
Only this job	1	N/A	3
Don't know	2	N/A	3

Base: Wales respondents (2007: 293; 2004: 398); Overall workforce (3,877)

5.5 Travel to work distances

The mean number of miles travelled to work (distance from home to work) was 29 miles, longer than the UK and ROI average of 24 miles. Workers in Wales were the least likely to travel less than five miles to work (10% vs. 24% across the UK/ROI). However, the proportion travelling over 50 miles was similar to that for the overall workforce (9% in Wales compared with 10% across the UK and ROI).

5.6 Sub-sector mobility

All workers 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.

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.

Table 5.5 Type of projects spent significant periods of construction career on		
	Wales 2007 %	Overall Workforce (UK/ROI) 2007 %
New housing	67	73
Public non-housing	59	44
Commercial work	59	43
Private industrial	52	33
Housing repair and maintenance	44	38
Infrastructure	31	21
One type of project only	22	34
Two types of project only	19	19
Three types of project only	16	15
Four types of project only	18	12
Five types of project only	14	11
Worked on all six types of project	10	6
<i>Base: Wales respondents (293); Overall workforce (3,877)</i>		

Workers in Wales were more likely than average to have worked on all types of project with the exception of new housing which three-quarters (73%) of the overall workforce had been involved in, compared with two-thirds (67%) of Welsh workers.

They were also more likely to have worked on a wider variety of projects than average with two-fifths (42%) having worked on at least four types of project compared with just over a quarter (28%) of the overall workforce.

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			
	Wales 2007 %	Wales 2004 %	Overall Workforce (UK/ROI) 2007 %
Definitely will	60	55	44
Very likely	24	23	32
Quite likely	8	7	10
Quite unlikely	1	2	2
Very unlikely	1	1	2
Definitely will not	1	2	2
Hope to be retired	1	N/A	2
Don't know	4	10	6

Base: Wales workers aged under 60: (2007: 283; 2004: 387); All respondents aged under 60: (3,686)

The workforce in Wales was more likely than average to say they will definitely be in construction in five years' time (60% vs. 44% of the overall workforce). Only those in Northern Ireland were more likely to say they would definitely still be in the industry in five years' time (61%); 60% of workers in the North East said this also.