

Workforce Mobility and Skills in the UK Construction Sector (Scotland Report)

Research Report

prepared for

**ConstructionSkills, Department of Trade and Industry (DTI)
and ECITB**

by

IFF Research Ltd

April 2005

TABLE OF CONTENTS

1 BACKGROUND, OBJECTIVES AND METHODOLOGY	3
Research Methodology	3
Details of the sites covered in the research.....	4
2 MANAGEMENT SUMMARY	6
The profile of the workforce.....	6
Mobility issues	7
Training and Qualifications	7
3 PROFILE, WORK STATUS AND WORK HISTORIES OF THE CONSTRUCTION WORKFORCE	10
Demographic profile of the sample	10
Work status.....	11
Occupational profile	13
Years working in construction	14
Employment pre construction	15
Occupational switching and progression.....	15
4 QUALIFICATIONS AND SKILLS	16
Construction skill cards or certificates.....	16
Construction qualifications held	18
Those working towards a qualification	20
Managerial qualifications	21
Summary of qualifications and skill cards status.....	22
Qualification level of the construction workforce	22
Self assessment of skill level by site workers	24
5 MOBILITY	27
Where workers from originally.....	28
Region of workplace, current residence and permanent residence	29
Living in temporary accommodation	30
Proportion of UK Construction career spent in current region	31

Travel to work distances..... 31

Sub-sector mobility..... 32

Leaving the industry..... 33

Appendix A: Definition of qualification level..... 35

Table A1: Percentage of workers permanently resident in each region (horizontal %) 1

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1 Background, objectives and methodology

1.1 This report presents the findings of a survey conducted by IFF Research on behalf of ConstructionSkills (formerly CITB), the Engineering Construction Industry Training Board (ECITB) and the Department of Trade and Industry (DTI).

1.2 The overall aim of the study was to provide reliable data on the nature of the construction workforce in the UK in regard to their 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 UK construction workforce
- 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 qualifications levels
- A range of other issues such as switching between different occupations within the construction sector and the extent to which managers have received any training specifically to enhance their managerial skills.

Research Methodology

1.3 The key elements of the research approach were as follows:

- *Sample:* a list of current construction projects over £1m in value was drawn from Glenigan, an Emap publication detailing current and forthcoming construction projects. (Among the many details listed for each project are the value, the size, the nature of the project, the planned start and completion dates and the organisations and contact details for the key contractors and organisations involved). The sample was drawn within each region aiming to achieve a spread by value and by phase of project. We also aimed to include a significant number of civil engineering projects. For Engineering Construction projects, ECITB provided details of significant projects to supplement some appearing on the Glenigan list. The lists were checked for completeness and omissions by regional ConstructionSkills representatives.

- *Interviewing contractors / employers:* key contacts at each site were then called to collect some headline information about the sites (information such as the number of workers on site, the main occupations currently employed and the phase of the project) and then to ask for permission to interview at the named site (or an alternative if for some reason this was preferred).
- *Worker interviews:* once permission had been sought then dates for visits were arranged with site managers (this often involved contacting a different person within the organisation, or a different organisation). Site interviews were then conducted face-to-face by IFF interviewers. These normally took place in a canteen or equivalent. At some of the larger sites more than one interviewer attended, and in some cases interviewers returned on a second day. The interview took around 5 minutes to conduct. The questionnaire used is appended.

1.4 The survey results presented in this report is based on fieldwork conducted in Scotland from August to November 2004. This consisted of a total of 585 face-to-face interviews with site-based workers obtained across 24 sites.

1.5 At the analysis stage, weighting was applied to the UK data to ensure that each geographic area was represented in its correct proportions based on the relative size of the construction workforce via LFS figures. This is something of a proxy measure as these LFS figures do not tie in exactly the scope of the current survey (i.e. workers on large construction sites). Weighting was important both because, at a UK wide level, London and the South East were relatively oversampled, and then in the rest of the UK the sampling strategy intentionally oversampled smaller regions. Unless otherwise stated, and with the exception of base totals, the figures in this report are based on weighted data. Weighted, Scotland accounted for approximately 9% of the UK construction workforce.

Details of the sites covered in the research

1.6 The following table shows the profile of the sites covered by the research in Scotland by the type of work being undertaken. We show for each type of project the number of workers described by the contractor as being on site, and then the number of interviews carried out.

Table 1.1: Sites covered by type of activity			
	<i>Number of sites</i>	<i>Approximate current employment on site</i>	<i>Number of interviews</i>
<i>Total</i>	24	4,854	585
Other commercial	10	792	250
New Housing	7	383	146
Engineering construction	3	3,395	86
Housing repair	3	270	89
Civil Engineering projects	1	14	14

- 1.7 As shown the sites at which interviews were conducted in Scotland were predominantly ‘other commercial’ (covering offices, schools, hospitals and the like) or new housing.
- 1.8 Figures from the contractors interviewed at each site indicated that there were some 4,854 workers across the 24 sites. Hence in total we interviewed approximately 12% of the potential workforce at these sites.
- 1.9 The following table shows the coverage by the number of workers at the site.

Table 1.2: Sites covered by number of workers on the site			
	<i>Number of sites</i>	<i>Approximate current employment on site</i>	<i>Number of interviews (and proportion this represents of the total within that size band)</i>
<i>Total</i>	24	4854	585 (12%)
50 or less	14	359	246 (69%)
51-99	1	80	21 (26%)
100-199	5	620	186 (30%)
200+	4	3,795	132 (3%)

2 Management Summary

- 2.1 This report presents the findings of a survey conducted by IFF Research on behalf of ConstructionSkills, the Engineering Construction Industry Training Board (ECITB) and the Department of Trade and Industry (DTI). The survey consisted of interviews in Scotland with 585 construction workers employed across 24 sites. The work took place from August to November 2004. The survey covered large projects with an estimated value of £1m plus, and in this sense it did not seek to be representative of the overall construction workforce.
- 2.2 The project sought to establish reliable information on the qualification and skill levels of the UK construction workforce, and also geographic and occupational mobility.

The profile of the workforce

- 2.3 A wide range of occupations was covered in the research, though in Scotland labourers / general operatives (21%) and carpenters / joiners (19%) were by far the largest occupational groups, and the workforce was more concentrated in these two occupations than found UK-wide. The workforce in Scotland was somewhat older and more experienced than the national average: 30% were aged 45 plus (v. 25% UK-wide) and 40% had 20 plus year's experience (v 35% across the UK as a whole).
- 2.4 Seven in ten (71%) site workers were employed directly by a company, a fifth (21%) were self-employed and 8% worked for an agency. The level of self-employment varied enormously by occupation being particularly low among electricians, supervisors and pipe fitters. Among our sample of site-based construction workers in Scotland, the proportion directly employed was much higher than in the rest of the UK, and self employment less common.
- 2.5 Agencies appear to be used mainly for labouring / general operative and carpenter / joiner positions. Together these occupations accounted for 72% of agency workers interviewed.
- 2.6 Seven in ten (71%) workers said they were employed on a permanent basis compared with just one in nine (11%) working on a temporary basis (18%, worked on some other basis or were unsure if it was permanent or temporary).

Mobility issues

2.7 Scotland has a very ‘self-contained’ workforce in the sense that:

- Very few workers are drawn in from outside the country: 98% of the workers interviewed had their permanent residence in Scotland
- A very high proportion were originally from Scotland (91%), this higher than the equivalent figure for any other area of the UK with the exception of the North East.
- Nine in ten workers had spent all (66%) or most (26%) of their construction career on sites in Scotland (this significantly higher than found across the UK as a whole (87%).
- Overall 8% of those with a permanent address in Scotland were currently working outside the region, this significantly lower than the national average (21%), hence the outflow is relatively low.
- The vast majority of workers with a construction-specific qualification had gained this in Scotland region (90%). Only the North East had a higher proportion of its site workers with qualifications gained with the same region.

2.8 The average (mean) distance travelled is 18.5 miles each way. This is lower than the UK average (23 miles). More than half (56%) travel less than fifteen miles each way, while just 6% travel more than 50 miles each way to their current site.

Training and Qualifications

2.9 The site workforce in Scotland has higher qualification levels than found across the UK as a whole. The following table shows comparative results, these qualification levels showing *construction-related* qualifications.

Table 2.1: Highest construction-related qualification level		
	Scotland (585) %	UK (8,436) %
No qualifications	21	25
Level 1 or 2	36	45
Level 3	37	26
Level 4 or 5	6	3

- 2.10 More than two in five (43%) have a level 3 or higher construction qualification, compared with less than a third across the UK (29%). Of the main occupations electricians were amongst the most highly qualified (87% had a level 3 or higher, though supervisors were the most likely to have a level 4 or 5 qualification). Labourers / general operatives the least qualified (57% had no construction qualifications at all).
- 2.11 Three in five of Scottish workforce (59%) had a construction skills card or certificate, this on a par with the rest of the UK. The figure varies from 16% amongst those with less than a year's experience to two thirds (66%) who have more than five year's experience in the sector. Labourers / general operatives were the least likely to hold a skills card / certificate (31%). The main card held were CSCS cards, indeed 33% of the workforce possessed a CSCS card.
- 2.12 Approaching two thirds of the workforce (64%) have a qualification relevant to construction beyond a skills card or certificate. This is much higher than found across the UK as a whole (50%), and is clearly a very positive finding. The self-employed, those with at least five years experience, and those aged over 25 were slightly more likely than average to have such a qualification.
- 2.13 Just over a fifth of workers said they had managerial or supervisory duties at the site (21%). Over three in five of these (63%) had received any training designed to improve their managerial or supervisory knowledge or skills, significantly higher than the level found across the UK (39%). In-house training was considerably more common than more formal industry-recognised training. These results imply that a significant proportion of supervision and management on large construction sites is being carried out by people with no formal, industry-recognised training for this responsibility, although this is much less of an issue than for the rest of the UK.
- 2.14 Overall 16% of the workforce were working towards a construction-related qualification, again higher than the UK average (13%).
- 2.15 While levels are clearly encouraging, most of those working towards a qualification already had some construction qualification, card or certificate. In fact those studying towards a qualification who do not already have one represent just 4% of the workforce in Scotland.
- 2.16 Part of the continuing training and upskilling of unqualified workers may happen from a worker, demand-led angle, though the potential may be relatively limited:
- A minority of workers (8%) think they need more training or qualifications to do their current job. Perhaps surprisingly, this figure was actually lower (2%) among those who neither had a qualification nor were working towards any.

- Three percent of workers in Scotland identified the need for training and improvement in their basic skills.
 - Of greater potential are those looking to change the roles they carry out in construction (12% of all workers in Scotland). Among these workers, the majority (67%) recognise that training and / or further qualifications will be required.
- 2.17 One challenge to the uptake and delivery of training to site-based workers is the relatively limited time they are on each site. In Scotland just one in five of these site-based workers definitely expected to be on site for more than six months (lower than that found nationally, 27%), and over a third (37%) were unsure what the overall duration would be, neither factors likely to be conducive to workers considering on-site training.
- 2.18 Clearly however, the general situation regarding qualifications of the construction workforce in Scotland is very positive when compared with the rest of the UK.

3 Profile, work status and work histories of the construction workforce

3.1 In this chapter we look at the demographic details of the sample of 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.

Demographic profile of the sample

3.2 The following table shows the demographic profile of our sample of construction workers in Scotland, and compares this to the overall workforce in the UK.

Table 3.1: Demographic profile of the Scottish sample compared with the UK construction average		
	Scotland respondents (585) %	UK respondents (8,436) %
<i>Age:</i>		
16-17	2	2
18-24	16	19
25-34	24	27
35-44	29	26
45-54	19	16
55+	11	9
<i>Ethnicity:</i>		
White	99	97
Non-white	1	3
<i>Gender:</i>		
Male	99.5	99
Female	*	1

3.3 There is a broad spread by age in Scotland, with almost one in five (18%) under 25, representing the relatively new entrants to the industry in the region, and three in ten (30%) aged 45 plus. Compared to the UK average, Scotland has a relatively old (site-based construction) workforce. For example, UK-wide a quarter of the workforce was found to be 45 plus.

- 3.4 Just five respondents (1%) interviewed described themselves as non-white. This compares to the figure of 2% in the region who are non-white (according to the 2001 Census).
- 3.5 Predictably the workforce was very male dominated. In total only two female workers were interviewed in Scotland, representing just 0.3% of the total sample.

Work status

- 3.6 Seven in ten site workers (71%) of the sample of site workers were employed directly by a company. Around one in five (21%) were self-employed and the remainder (8%) worked for an agency. Compared to the situation across the UK, Scotland’s site-based workforce is significantly more likely to be directly employed and much less likely to be self-employed (see Table 3.2).
- 3.7 There is a notable effect by how long people have worked in the industry. After five years in the sector the incidence of self-employment rises to almost a quarter (24%). Among more recent recruits, working for an agency is quite common (22% of those in the industry less than a year do so), and relatively few work on a self-employed basis (4%). This is summarised in the following table.

Table 3.2: Work status						
<i>Base:</i>	<i>UK</i>	<i>Scotland</i>				
	<i>UK total (8,436)</i>	<i>Scotland total (585)</i>	<i>Years working in construction</i>			
			<i>< 1 (49)</i>	<i>1-2 (34)</i>	<i>2- 5 (44)</i>	<i>> 5 (458)</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Employed by a company	58	71	73	74	80	69
Self employed	35	21	4	15	7	24
Work for an agency	7	8	22	6	11	6

- 3.13 Self-employment reaches its peak among those aged 35-44 among whom almost three in ten (29%) were self-employed. Among older workers (i.e. those aged 45 and over) this falls and the proportion directly employed increases.

- 3.14 There were wide differences in the likelihood of being self-employed by occupation, as summarised on the following table. Owing to low base sizes in a number of occupations, only those occupations where we interviewed 15 or more workers have been referenced.

Table 3.3: Level of self-employment by occupation	
<i>High</i>	<i>Low</i>
Bricklayers (51%)	Electricians (3%)
Carpenters / joiners (39%)	Supervisors (3%)
Roofers (37%)	Pipe fitters (5%)

- 3.15 Agency workers account for 8% of our total sample. Agencies appear to be used mainly for labouring / general operative and carpenter / joiner positions (which collectively accounted for 72% of agency workers interviewed).
- 3.16 Seven in ten (71%) of our sample of workers said they were employed on a permanent basis compared with just one in nine (11%) working on a temporary basis (18%, worked on some other basis or were unsure if it was permanent or temporary).

Occupational profile

3.17 Results showing how workers classified their current role or occupation are shown in the following table, which lists those occupations mentioned by 3% or more of the sample. The actual number of respondents interviewed within each occupation is shown simply to indicate the base size of each group when we discuss occupational differences throughout the report.

Table 3.4: Occupational profile			
<i>Base: all respondents</i>	<i>Scotland</i>		<i>UK</i>
	585 Number	585 %	8,436 %
Labourer / general operative	124	21	16
Carpenter / joiner	114	19	13
Bricklayer	41	7	10
Supervisor	36	6	3
Electrician	30	5	7
Scaffolder	27	5	4
Plant / machine operator	27	5	7
Groundworker	25	4	7
Pipe fitter	19	3	4
Roofer	19	3	2
Steel erectors / riggers	17	3	3

3.18 Approximately half of the site workers interviewed classified themselves as carpenters / joiners, labourers / general operatives or bricklayers. Compared with the profile of site workers across the UK as a whole as interviewed on this survey, there were noticeably more labourers / general operatives and carpenters / joiners in Scotland.

Years working in construction

- 3.19 The length of time spent working in construction ranges from 8% of new entrants who have worked in the industry for a year or less, to two fifths (40%) who have worked in the industry for over 20 years. The following table summarises findings showing cumulative proportions (i.e. those who have worked in the industry for a year or less includes those who have worked in it for less than 6 months). As can be seen, Scottish construction workers are somewhat more experienced than average.

Table 3.5: Years spent working in construction (cumulative)		
<i>Base: all</i>	<i>Scotland</i> 585 %	<i>UK</i> 8,436 %
Less than 6 months	6	5
A year or less	8	8
2 years or less	14	15
5 years or less	22	25
10 years or less	35	39
20 years or less	60	65
More than 20 years	40	35

- 3.20 Labourers / general operatives were much more likely to be recent recruits to the industry (71% had worked in the sector for a year or less), this indicating quite strongly that people often start out doing this work before moving on to more skilled areas within the industry. That said there were still many labourers / general operatives who had worked in the industry for many years (14% had worked in construction for over 10 years).

Construction employment

- 3.21 A third (34%) of our sample of site workers in Scotland ended up in the construction industry after first starting in some other field (closely to the UK-wide figure of 35%).
- 3.22 Plant / machine operators (67%) and groundworkers (52%) were most likely to have started their careers in other industries. In other occupational areas it appears as if most chose from an early age that this is the type of work they want to do and enter this employment straight after leaving education. This includes electricians and plumbers among whom only 10% and 4% respectively had started out working in some non-construction field.
- 3.23 Since starting their first job in construction, the majority had only ever worked in the sector: 77% (vs. 83% nationally) reported having worked in construction continuously and a further 1% had only worked in this sector though had had spells out of work. Overall 12% had dipped in and out of the construction sector since their first construction job which was slightly higher than the picture nationally, where the figure was 8%. (10% did not give an answer to this question).

Occupational switching and progression

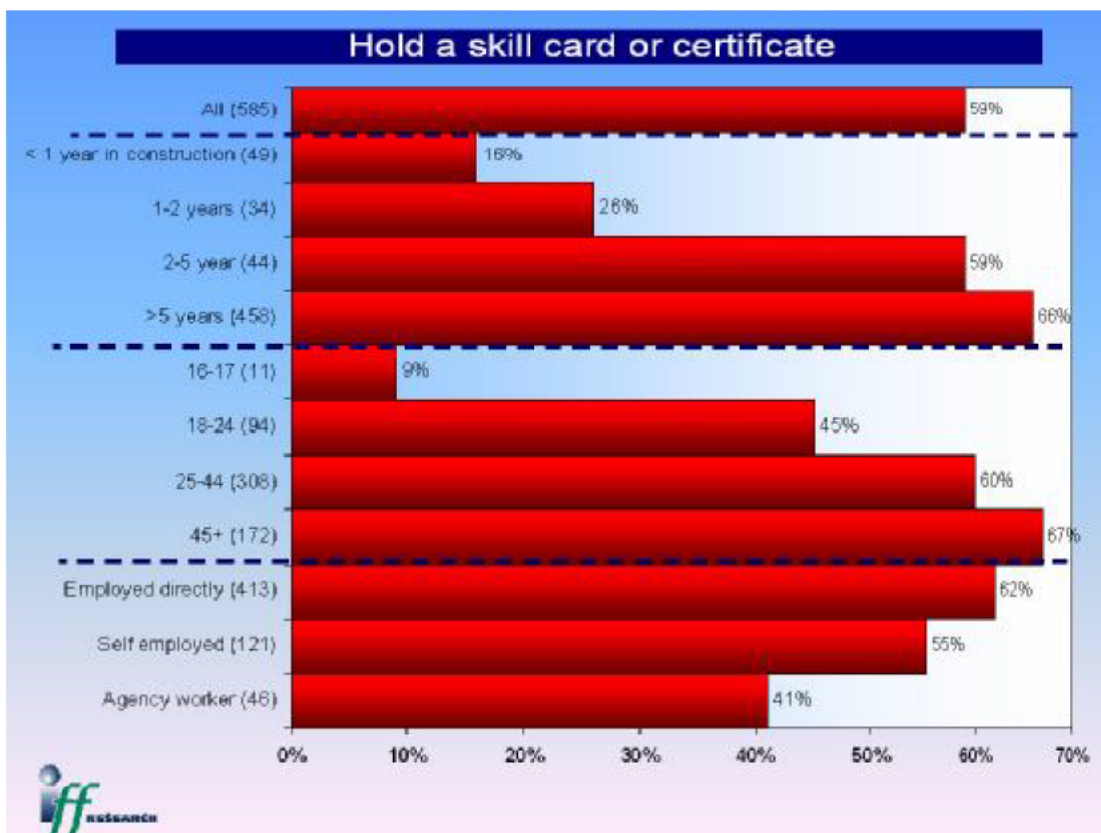
- 3.24 An area of particular interest in the research was the extent of switching between occupations within construction. For example, one possible way for employers to meet particular occupational shortages would be to recruit, or transfer staff, from related occupational groups. The same issue applies for ConstructionSkills when forecasting at an industry wide level particular occupational shortages. And in itself it is important to see typical career progression paths, for example the route from unskilled general labouring to more skilled positions.
- 3.25 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 (a fair number of respondents listed all their main previous construction occupations rather than their last one, but these responses have been kept).
- 3.26 The majority (81%) indicated that they had always worked in the same occupational area as their current job, this higher than the UK-wide figure (72%), indicating lower levels of occupational switching within Scotland. Not surprisingly, younger workers and those in the industry for less than a year were much less likely to have changed occupation.

4 Qualifications and skills

- 4.1 A key objective of the survey was to measure the 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 ECI 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 specifically asked about any training specifically designed to improve their managerial or supervisory skills or knowledge.
- 4.2 We report on each of these, and then summarise the findings in terms of their *construction-specific* qualification level (this is not equivalent to the qualification level of construction workers as we intentionally excluded qualifications with no relevance to construction). Readers wishing to look at figures on the qualification level of the workforce without looking at the figures on how this picture is built up from qualifications held should skip to section 4.23.
- 4.3 We also look at workers' own assessment of their skills, including basic skills, and how many felt they needed more training to do their current job.

Construction skill cards or certificates

- 4.4 There is a general move in the industry towards the need for workers to have construction skill cards and certificates, indeed on some large major sites having such cards is a requirement of employment. The issue has been very high profile within the industry because of the employment implications for those without such cards.
- 4.5 Overall three in five (59%) workers in Scotland had a skills card or certificate. This compares with 57% across the UK and 61% in the UK excluding London and the South East (the latter is a better comparator since the work in London and the South East was undertaken in 2003 whereas in the rest of the UK it took place around 12 months later). Thus results suggest Scotland is very close to the national picture.
- 4.6 Following the UK-wide pattern those directly employed, older workers and those with more than five years experience in the industry were all more likely than average to have a skills card or certificate.



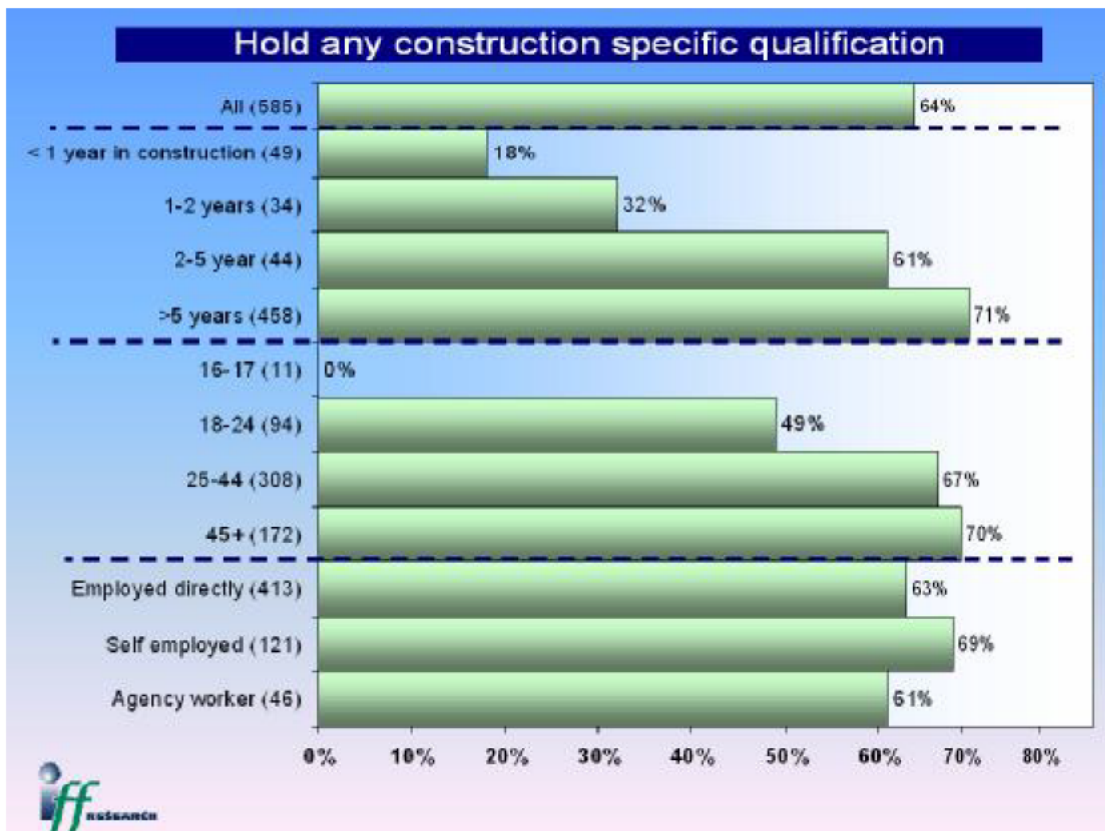
4.7 The main differences by occupation are shown in the following table which lists occupations with the highest and the lowest penetrations of skill card / certificates. Again only those occupations where at least 15 workers were interviewed have been included.

Table 4.1: Whether have a skill card / certificate by occupation	
<i>High likelihood</i>	<i>Low likelihood</i>
Steel erectors / riggers (94%) Electricians (87%) Plant machine operators (81%)	Labourers / general operatives (31%)

4.8 The main type of card held is CSCS cards, possessed by 33% of all site-based workers in the region, followed by CITB cards (held by 20%). Uptake of CSCS by occupation was highest among electricians (73%) and groundworkers (64%). The cards held were typically gold (level 3) or green (level 2), though approaching one in six (16%) of those with a CSCS card were unsure of its colour / level.

Construction qualifications held

4.9 Having described what skill card or certificates they held, workers were asked what *other* formal qualifications relevant to construction they held (excluding first aid certificates). Almost two in three (64%) had such a qualification which compares very favourably to the UK figure, where half (50%) of those interviewed said this was the case. After the North East, Scotland was the region where workers were most likely to have a construction-related qualification. As with skill cards or certificates, there were predictable differences by age and length of time worked in the industry, as summarised on the following chart.



4.10 The difference between those directly employed and the self-employed for card and certificates was not found for these other qualifications, indeed the self-employed were slightly more likely to have construction qualifications in Scotland, which was not the case nationally.

4.11 Again in contrast to results across the UK, the pattern in Scotland was that the older the worker, the greater likelihood of their having a construction qualification. Around two-thirds of workers aged over 25 held a qualification. This result was fairly consistent across all age brackets for the over-25s, peaking amongst 45-54 year-olds (73% of whom held a qualification).

- 4.12 Key variations by occupation are summarised below, showing occupations with high proportions with a qualification, and then those with low relative proportions.

Table 4.2: Whether have construction qualifications (other than skill cards / certificates)	
<i>High likelihood</i>	<i>Low likelihood</i>
Electricians (90%) Pipe fitters (89%) Plumbers (85%) Carpenters / joiners (83%)	Labourers / general operative (21%) Groundworkers (52%) Steel erectors / riggers (53%)

- 4.13 We come on to discuss the overall qualification level of the workforce later in the chapter. Here, as an indication of the type of qualifications held, we show the type of qualifications which respondents regarded as their highest. This is based on those with qualifications, not all respondents. UK figures are given in brackets.

Table 4.3: Main type of highest qualifications held	
<i>Base: those with a qualification (373)</i>	<i>%</i>
City and Guilds	45 (46)
NVQ	18 (25)
Apprenticeship (including Modern Apprenticeship)	9 (6)
CTA	6 (7)
HNC/HND/BTEC higher	3 (3)

- 4.14 The type of qualification held by construction workers in Scotland largely mirrors those seen across the UK, with City and Guilds the most likely to be held.
- 4.15 Workers were also asked *where* their highest qualification was attained. For the vast majority of workers holding a construction qualification, this had been in Scotland region (90%). In fact Scotland has one of the most 'self-sufficient' trained workforce in this regard - only the North East had a higher proportion of its site workers with qualifications gained with the same region. The remaining 10% of these workers achieved their qualification pretty evenly across the other regions (it was highest in the North East: 2% of those currently working in Scotland with a qualification gained it from there).

Those working towards a qualification

- 4.16 Around one in six of the workforce (16%) were working towards a construction qualification. This is slightly higher than the UK figure (13%) and is again an encouraging sign in regard to the current and future skill levels of the Scottish construction workforce.
- 4.17 Predictably new entrants and younger workers were much more likely than average to be working towards a qualification:
- | | |
|--|-----|
| ➤ 16-17 year olds (small base of 11 respondents) | 45% |
| ➤ 18-24 year olds | 33% |
| ➤ 25 plus | 12% |
| ➤ Worked in construction for less than a year | 20% |
| ➤ Worked in construction 1-2 years | 47% |
| ➤ Worked in the industry 2-5 years | 41% |
| ➤ Worked in the industry > 5 years | 10% |
- 4.18 With construction qualifications held, workers in Scotland were over twice as likely to hold a City and Guilds qualification as opposed to an NVQ. In respect to the types of qualifications being worked towards, the preponderance toward NVQs was marked. Approaching one in three (29%) of those working towards a qualification were working toward NVQs, compared with just 17% working toward a City and Guilds qualification. Apprenticeships accounted for 19% of the qualifications being worked towards.
- 4.19 An important point to note is that a majority of those working towards a construction qualification already have one. **In fact, those studying towards a qualification who do not already have a qualification or skill card / certificate represent just 4% of the total workforce** (matching the 4% figure nationally). If skill cards / certificates are not included in the figure for those with a construction qualification, then those working towards a qualification who do not already have one rises to 7% of the total workforce (vs. 8% nationally).

Managerial qualifications

- 4.20 A fifth of the workforce (21%) said they had supervisory or managerial duties at the site. Almost two thirds of those with current managerial and supervisory duties in Scotland (63%) had received any training designed to improve their skills in this area. This compares to 39% nationally, and is again a very positive finding for Scotland. Whilst no other regions in the country had trained such a large proportion of its managerial / supervisory workforce, results nonetheless imply that a significant amount of managerial and supervisory duties are being carried out by staff with no formal training in this area.
- 4.21 Where such training had been given, it was typically in-house training rather than part of any accredited, industry-recognised programme. This is shown on the following table, based on all those with supervisory or management duties.

Table 4.4: Type of training received to improve management or supervisory skills	
<i>Base: all with management and supervisory duties (124)</i>	<i>%</i>
None	36
In-house training	40
Chargehand and team leader training	4
Supervisory Management Training and Development (SMTD)	3
CIOB Site Management Education and Training Scheme (SMETS)	2
CIOB Site Supervisor (First Line Supervisor - FLS)	2
Other training	2
Institute of Supervision and Management Workshops	1
Project Management Short Courses	1

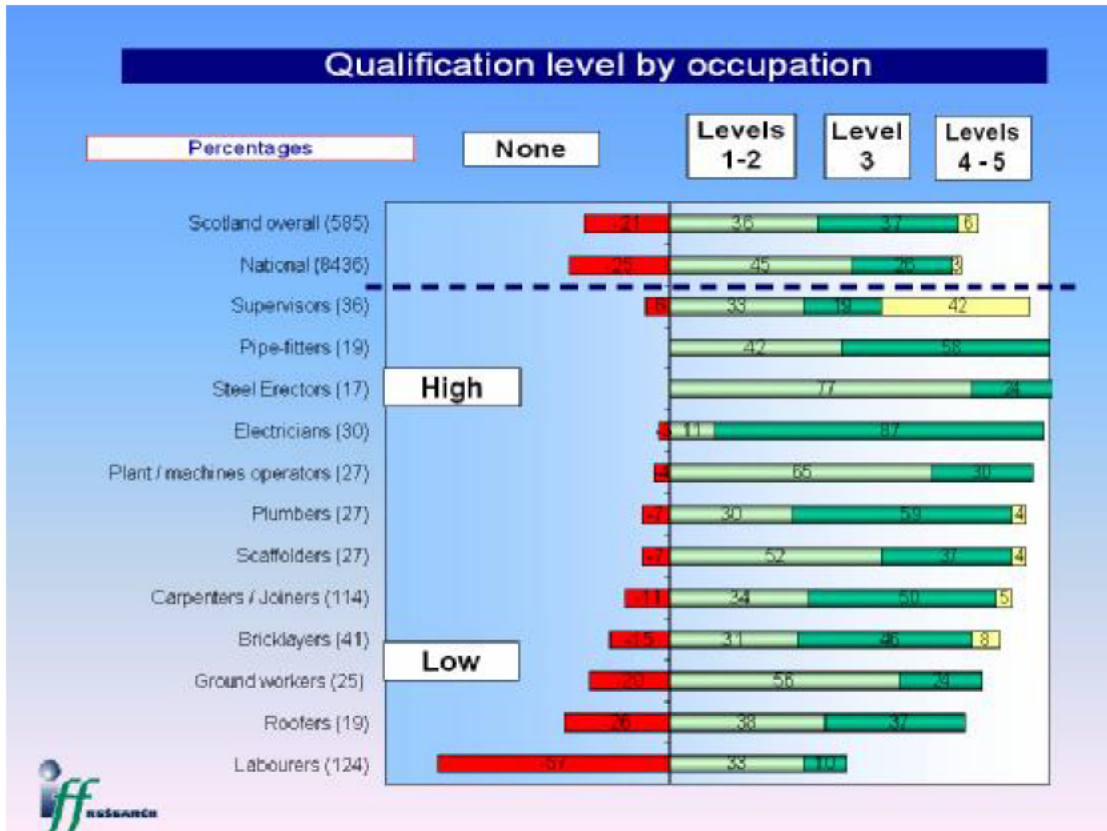
Summary of qualifications and skill cards status

- 4.22 The following table summarises the situation in regard to qualifications and skills cards / certificates attained and working towards, and compares Scotland to the rest of the UK. Clearly a positive picture emerges in comparison to the rest of the UK.

Table 4.5: Qualifications status		
<i>Base: all</i>	Scotland (585) %	UK (8,436) %
Hold a formal construction qualification <u>or</u> a skills card / certificate <u>or</u> working towards a qualification	83	79
Hold a formal construction qualification <u>or</u> a skills card / certificate	79	75
Hold a skills card / certificate	59	57
Hold a skills card / certificate <u>but</u> no other construction qualification	16	24
Working towards a qualification	16	13

Qualification level of the construction workforce

- 4.23 In this chapter to date we have discussed the qualifications and skill cards / certificates held and the managerial / supervisory training that workers have received. From this, highest qualification levels have been derived for each worker (the technical appendix lists the definitions of each level). As a note this has been defined in relation to qualifications relevant to construction; hence if somebody felt they had no such qualifications but they did have GCSEs or O levels from school, these latter qualifications have not been included.
- 4.24 For simplification we have merged levels 1 and 2 (the vast majority fall in to the latter) and levels 4 and 5 (overall 5% had a level 4 and 1% had reached level 5). We show the findings overall and then we present results by occupation showing occupations (where we interviewed at least 15 workers) with higher and lower than average qualification levels.



- 4.25 Compared to the rest of the UK, Scotland has a workforce with above-average qualification levels. One in five workers in the region (21%) have no construction qualification compared to a quarter (25%) across the UK, and a greater proportion of workers have a level 3 (37%) or level 4-5 (6%) compared to the UK average (26% and 3% respectively).
- 4.26 Results vary by occupation. Among roofers more than a quarter (26%) have no construction qualifications and for labourers / general operatives this rises to over half (57%). Clearly for significant increases to occur in the qualification level of construction workers it will be necessary for levels to be increased across the full range of occupations, particularly some of the larger occupations where relatively few have or are working towards any qualifications.

Self assessment of skill level by site workers

- 4.27 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. The table below summarises results; figures at a national level are given in brackets.

Table 4.6: Self-assessment of skill level and training needs for their current job		
<i>Base: all workers in Scotland</i>	585	No qualifications, skill card / certificates nor working towards any 97
	%	%
Have all the skills needed for current job	83 (83)	90
Need more training or qualifications	8 (10)	2
Need more experience	7 (5)	6

- 4.28 The vast majority of workers believe they have all the skills they require for their current job. Just 8% see a need for more training and / or achieving qualifications, whilst one in fourteen (7%) feel they just need more experience. As to be expected, the youngest workers were particularly likely to believe that they needed more training and qualifications (27% of 16-17 year olds and 23% among those aged 18-24).
- 4.29 Among those with no qualifications who were not working towards any, only 2% thought they needed more training or qualifications to do their current job. This suggests that for the group who might be considered most in need of training, some work is needed to communicate to these workers the potential benefits of training and qualifications.
- 4.30 Respondents were also asked whether they felt they needed training in basic skills. This was asked as follows:

“In most construction jobs nowadays, people need to be able do things such as read instructions and record information. Are there any such tasks you find difficult where training in writing, reading, communication or numeracy would help you with your work?”

- 4.31 Overall 3% of workers in Scotland (vs. 4% of workers outside London and the South East¹) recognised a need for such training. Those aged 16-17 are particularly likely to feel they need basic skills training or development: 9% compared with 3% of those aged 18 and over (although it must be noted that this result derives from a small base of just 11 respondents).
- 4.32 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 to re-train. Overall, one in eight (12%) say they want to change the kind of work they do (though a further 4% were undecided), and the majority of these (67%) say that to achieve this aim they will need further training and qualifications. This represents 8% of all those interviewed in Scotland, clearly a significant number of workers.
- 4.33 One important proviso of course is that wanting to change occupation and actually making this step are two different things, hence these figures may overstate the demand.
- 4.34 In contrast to other regions of the UK, the desire for a change of role was not more apparent among less skilled workers than it was in other occupations. Indeed around one in five pipe fitters (21%), scaffolders (19%) and supervisors (19%) expressed an interest in changing roles.
- 4.35 The clear desire is to take up positions which offer better pay (the key motive cited by 54% of those wishing to switch) but also offer more interesting work (cited by 49%). Hence the most common roles that people would like to switch to are:
- supervisors (17%)
 - technical roles (e.g. surveyor or maintenance technician, 17%)
 - managerial positions (14%)
 - bricklaying (6%), particularly popular among labourers wishing to change occupations (21%)
 - plumbing (6%)
 - Plant / machine operator (6%).

¹ This question was added in 2004; hence workers in LASER, surveyed in 2003, were not asked the question.

4.36 One challenge to delivering training to site-based workers which the survey reveals is the relatively short period of time that workers stay at one site as well as the uncertainty that exists about how long the work will last. This is shown on the following table shows results for Scotland and at a national level.

Table 4.7: Length of time expect to work at the site in total		
Base: All	Scotland (585) %	UK (8,436) %
< 1 month	13	13
1 - 3 months	10	17
> 3 up to 6 months	20	17
> 6 months up to a year	13	18
More than a year	7	9
Don't know	37	25

4.37 In Scotland just one in five workers definitely expected to be on site for more than six months (lower than found nationally, 27%) and well over a third (37%) were unsure what the overall duration would be, neither factors likely to be conducive to workers considering on-site training.

5 Mobility

- 5.1 A key aim of the survey was to gain an understanding of geographic mobility of construction workers across the UK, and to try to get a measure of which regions are net ‘importers’ and which are net ‘exporters’ (or donors), as well as which workers (for example, by occupation and qualification level) are particularly likely to be mobile. The results clearly have a bearing on training planning, provision and investment. It could be argued, for example, that training investment should take account of mobility to the extent that it should recognise where workers gain their skills rather than simply where they end up working. And information regarding geographic mobility by occupation clearly needs to be taken into account when forecasting potential regional occupational shortfalls, since shortfalls could be met, in part, by attracting mobile workers with relevant skills from other regions.
- 5.2 What constitutes a mobile worker is ‘multi-dimensional’. 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 measures 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 in the UK which has been on sites within the region where they are currently working
 - The miles they travel to get to the site each day (as well as the town and postcode of where they travel from)
 - 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.
- 5.3 We discuss these in turn. In the final section we also look at how long workers typically work at an individual site, giving 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 very frequently providing training to these workers may be problematic.

Where workers from originally

- 5.4 Workers were asked where they were from originally. As a measure of mobility clearly it is very broad, since people may have moved to a region on a permanent basis and done so many years ago. It is not in itself an indication of willingness to travel far to work. That said, there are some interesting differences between the regions as far as importing and exporting workers is concerned which are shown in the following table.

Where from originally...	Where currently working...											
	London	South East	East	NE	NW	Y&H	East Mids	West Mids	SW	Wales	Scot.	N. Ire
	%	%	%	%	%	%	%	%	%	%	%	%
London & South East	40	66	16	2	1	*	4	3	10	2	*	-
East	7	3	55	1	*	1	1	*	1	1	*	-
North East	5	2	3	91	2	3	1	1	1	1	1	*
North West	5	2	4	1	75	3	2	4	3	3	1	1
Yorkshire & Humberside	1	2	2	2	9	81	8	2	1	2	1	-
East Midlands	3	3	5	*	*	5	65	5	1	1	-	-
West Midlands	2	2	2	1	3	*	8	76	3	3	-	*
South West	1	4	*	1	*	1	1	*	67	3	*	*
Wales	3	1	1	-	2	*	1	1	5	81	1	-
Scotland	4	2	*	1	2	1	2	1	2	1	91	2
Northern Ireland	-	*	1	1	1	*	*	*	1	-	1	90
Outside the UK	30	12	11	*	5	5	7	7	5	2	4	7

- 5.5 Scotland is among those geographic areas with the most ‘self-contained’ workforces (where very high proportions originally come from the region) – this along with the North East and Northern Ireland. In each, nine in ten of the workers in were originally from the region / country. By contrast London and the East of England stand out as being the largest net ‘importers’ of construction workers on this measure.

Region of workplace, current residence and permanent residence

5.6 Respondents were all asked about 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 region as their current work (the column shown in bold on the table 5.2); and
- the percentage of workers currently living in the same region while working.

In each instance, the percentages resident in neighbouring regions are also presented.

Table 5.2: Region of establishment, work residence and permanent residence

Region of establishment...	Region of permanent residence				Region of current residence			
	Valid cases	% from different region	% from same region	% from neighbouring regions	% from different region	% from same region	% from neighbouring regions	
Scotland	544	2	98	1	1	99	1	
South West	470	13	87	8	8	92	5	
East	593	32	68	27	30	70	28	
North West	636	19	81	17	13	87	12	
Yorkshire & H.	570	12	88	10	8	92	8	
North East	352	5	95	4	4	96	3	
West Midlands	436	11	89	10	10	90	9	
East Midlands	364	25	75	18	20	80	16	
Northern Ireland	381	0.5	99.5	-	0.5	99.5	-	
Wales	355	10	90	5	8	92	4	
London	944	43	57	25	29	71	26	
South East	2,151	27	73	23	21	79	21	

5.7 Of the UK regions, Scotland is the second most likely (after Northern Ireland) to draw workers from residences within the region / country (98% of workers on sites in Scotland have their permanent address within the region). This contrasts with sites in London, the East, the South East and the East Midlands where relatively high levels are based outside region.

5.8 While sites in London attract workers mainly from the neighbouring regions of the South East and East of England, it will be of interest to readers in Scotland that around 2% of London's workforce permanently reside in Scotland (see table A1 in the appendix).

- 5.9 Table 5.3 shows the percentage of construction workers working outside the region where they have their permanent residence. Eight percent of those with a permanent address in Scotland were working on sites outside the region, a figure which is significantly lower than the average for all UK regions (21%).

Table 5.3: Percentage working outside their region of permanent residence

Region of permanent address	%
East Midlands	43
London	35
East	29
West Midlands	27
South West	27
Yorkshire & Humber	22
North East	21
Wales	18
North West	15
South East	12
Scotland	8
Northern Ireland	2
All	21

Living in temporary accommodation

- 5.10 While clearly not everyone based in temporary accommodation will necessarily be ‘imported’ workers (some may have a permanent address within the region), this group is a proxy for the highly mobile workforce and as such constitutes another measure of mobility.
- 5.11 One in twenty workers interviewed in Scotland (5%) were based at a temporary address to get to work, compared with the figure of 8% across the UK. Hence it is clear that compared to other geographical areas, survey results indicate that Scotland is not a big importer of labour (this figure was as high as 19% in London, and 10% in the North West).

Proportion of UK Construction career spent in current region

5.12 Workers were asked what proportion of the time they had worked in construction in the UK had been spent on sites in the region / country where they were currently working. Two-thirds (66%) said they spent *all* of their construction career on sites in the region, confirming that the labour force in Scotland draws on those originally from Scotland, and that workers tend to stay within the country. Overall, 8% said they had spent half or less of their time in construction working on sites in Scotland, representing the most mobile group of workers. The results suggest a lower degree of inter-regional mobility amongst workers in Scotland compared to the rest of the UK.

Table 5.4: Proportion of construction career spent in current region		
	Scotland	UK
<i>Base: all</i>	585	8,436
	%	%
All of it	66	41
Most of it	26	37
Around half	4	10
Small proportion	3	11

Travel to work distances

5.13 The mean average number of miles travelled to work (each way), in Scotland was 18.5 miles. This is lower than the UK average (23 miles). Around this average figure there are large variations, with over half (56%) travelling less than 15 miles and at the other extreme 6% travelling more than 50 miles each way to work. Scotland has fewer travelling such large distances compared with the UK as a whole (15%).

Sub-sector mobility

- 5.14 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 including extensions and lofts; other commercial work such as shops, offices factories, warehouses, stadia etc; civil engineering projects such as roads, bridges etc; engineering construction work such as power stations, oil refineries and chemical processing plants; and other types of project. Results are summarised on the following table. National figures are again in brackets.

Table 5.5: Types of project spent significant periods of construction career on	
<i>Base: all</i>	585 %
Other commercial (shops, factories, offices etc)	69 (76)
New housing	64 (72)
Housing repair and maintenance	45 (50)
Engineering construction	32 (28)
Civil engineering	27 (33)
One type of project only	34 (25)
Two types of project only	24 (23)
Three types of project only	23 (29)
Four types of project only	10 (14)
Worked on all five types of project	9 (10)

- 5.15 Two-thirds of workers (66%) in Scotland had spent significant periods working different sub-sectors within construction. This is somewhat lower than found UK-wide. A third (34%) had worked within one type of sub-sector only. This was most often the 'other commercial' sub-sector (37% of those working in one area only) or new housing (37%).

Leaving the industry

- 5.16 A final measure of mobility is the anticipated outflow from the workforce i.e. those expecting to leave the industry. This was asked of those aged under 60.

Table 5.6: Likelihood of working in construction in 5 year's time		
<i>Base: all aged under 60</i>	<i>All (564) %</i>	<i>UK (8,128) %</i>
Definitely will	56	45
Very likely	30	32
Quite likely	6	12
Quite unlikely	*	2
Very unlikely	2	2
Definitely will not	4	3
Don't know	1	3

- 5.17 Seven per cent of the under 60s think it unlikely they will be working in the industry in five years time. With over four in five saying it is definite (56%) or very likely (30%), this presents a relatively stable picture in terms of intent, though of course many external factors may affect what actually happens.

TECHNICAL APPENDICES

Appendix A: Definition of qualification level

Level	Qualification / Construction skill card held
1	NVQ level 1 Construction Award – Foundation 50% mentions NSDS CSCS card – Red 55% Spontaneous ‘other’ mentions(e.g. JIB, ECITB unspecified, Airport construction cert)
2	NVQ level 2 (plus 50% of NVQ unspecified / unsure of level) City and Guilds craft (plus 50% unspecified / unsure of level) Construction Award – Intermediate Modern Apprenticeship (FMA) 50% other unnamed Apprenticeship 50% informal Apprenticeship 50% mentions NSDS BTEC / Scotvec first general Certificate in Training Achievement - basic (CTA) Scaffolder’s Record Card Scheme – basic or advanced card CSCS card – Blue / Green CPCS (Construction Plant Competence Scheme) CITB Ticket ECI skills database card Grade 2,3 35% Spontaneous ‘other’ mentions (e.g. JIB, ECITB unspecified, Airport construction cert) SMSTS (Site Manager Safety Training Scheme) Civil engineering Site Managers Scheme Supervisory Management Training and Development (SMTD) Chargehand and Team Leader Training Institute of Supervision and Management Workshops Project Management Short Courses Assessor and Verifier Training Misc formal CITB qualifications for managerial or supervisory duties
3	NVQ level 3 (plus 50% of NVQ unspecified / unsure of level) City & Guilds advanced craft (plus 50% unspecified / unsure of level) Construction Award – Advanced Advanced Modern Apprenticeship (AMA) 50% other unnamed Apprenticeship 50% informal Apprenticeship OND / ONC / BTEC or Scotvec National NASEC Certificate in Training Achievement – advanced (CTA) ECI skills database card Grade 3 CIOB Site Supervisor (First Line Supervisor – FLS) CSCS card – Gold ECI skills database card Grade 4-6 10% Spontaneous ‘other’ mentions by respondents (e.g. JIB, ECITB unspecified)
4	NVQ level 4 Degree (MSc, PhD etc) HNC / HND / BTEC higher CIOB Site Management Education and Training Scheme (SMETS) CSCS card – Platinum
5	NVQ level 5 CSCS card – Black

NB – workers on the CSR (Construction Skills Register - N.Ireland equivalent of CSCS cards) were assigned levels in proportion to the different levels of CSCS held.

PRIVATE & CONFIDENTIAL

**CITB-ConstructionSkills
Mobility and Skills in
Construction Survey
Scotland version**

**J:/3852/
July 2004**

Office Use only:

SERIAL				CARD
				1
101	102	103	104	105

SITE NO.		
106	107	108

REGION
109

Date:	
Site Name:	
Job Title:	CHECK THAT RESPONDENT HAS MANUAL (NON-DESK) POSITION
Interviewer:	

- 1) Good morning / afternoon / evening. I'm from IFF Research, an independent market research agency and we are conducting a survey for the **(READ OUT AS APPROPRIATE DEPENDING ON SITE)** CITB-ConstructionSkills / Engineering Construction Industry Training Board (ECITB). This is looking at how far people travel to work and the type of qualifications people have. It will just take about 5-6 minutes. Is now a good time?

PLEASE BE REASSURED THAT EVERYTHING YOU SAY WILL BE STRICTLY CONFIDENTIAL (We will just be passing results back to our client in the form of aggregated statistics).

- 2) First can you tell me how many years experience you have working in the construction industry? **PROBE FOR BEST ESTIMATE (NOTE: EXCLUDE SPELLS OF TIME WORKING IN OTHER INDUSTRIES / UNEMPLOYMENT)**

	(110)
Less than 6 months	1
6 months to a year	2
More than a year (WRITE IN EXACT NUMBER)	
_____ years	
Don't know	X

111-112 = _ _

- 3) Thinking about your first serious job after leaving full time education, which one of the following apply:
READ OUT ALL AND CODE ONE ONLY

	(113)	
Your first serious job was NOT in construction	1	GO TO Q4
Working for your current employer is your first serious job	2	ASK Q7
Your first serious job was in construction	3	ASK Q5

- 4) **IF FIRST JOB NOT IN CONSTRUCTION, OTHERS CHECK Q5**
 What job were you doing immediately before you started working in construction?

PROBE FULLY - OBTAIN DETAILS OF SECTOR AND OCCUPATION (INCLUDING SPECIFIC JOB TITLES)

114-116= _____ 117-119 = _____

- 5) **ASK ALL EXCEPT IF THIS THEIR FIRST JOB AT Q3 (THESE ASK Q7)**
 Since your first job in construction, which of the following comes closest to your situation:
READ OUT AND CODE ONE ONLY

(120)

I have worked in construction pretty much continuously	1	GO TO Q7
I have only worked in construction jobs but have had spells of out of work	2	
I have done other sorts of jobs	3	ASK Q6

- 6) **IF DONE OTHER SORTS OF JOBS AT Q5 (OTHERS ASK Q7)**
 What are the main other jobs you have had in between construction jobs?
PROBE FULLY

121-123 = _____ 124-126 = _____

- 7) **ASK ALL**
 What is your role or occupation at this site?
PROMPT IF NECESSARY
INTERVIEWER NOTE:
IF SAY 'Supervisor' OR 'Charge hand' ALSO ASK FOR OCCUPATION AS WELL.
IF SAY 'engineer' ASK FOR TYPE OF ENGINEER (AND WRITE IN RESPONSE WITHIN 'OTHER')

	(127)		(128)		(129)
Banksman / banksperson	1	Labourer / operative	1	Plumbers	1
Bricklayer	2	Manager	2	Scaffolders	2
Carpenter / joiner	3	Mechanical fitter	3	Steel erectors / riggers	3
Ceiling fixers	4	Roofers	4	Supervisor	4
Dry liner	5	Painter / decorator	5	Technical (e.g. surveyor, maintenance technicians)	5
Electricians	6	Pipe fitters	6	Welder	6
Floorers	7	Plant / machine operator (e.g. fork lift / JCB operators)	7	Other (STATE)	0
Glaziers	8	Plasterer	8		
Groundworker	9	Plater	9		

130 = _____; 131 = _____

- 8) Have you worked in other occupations / roles while working in construction (or have you only ever worked as (answer from q7)?

(132)

Had other roles	1	ASK Q9
Only ever worked as (answer from q7)	2	ASK Q10

ASK IF HAD OTHER ROLES AT Q8

- 9) What was your **previous** construction job?

INTERVIEWER NOTE: NOT ALL PREVIOUS JOBS

	(133)		(134)		(135)
Banksman / banksperson	1	Labourer / operative	1	Plumbers	1
Bricklayer	2	Manager	2	Scaffolders	2
Carpenter / joiner	3	Mechanical fitter	3	Steel erectors / riggers	3
Ceiling fixers	4	Roofers	4	Supervisor	4
Dry liner	5	Painter / decorator	5	Technical (e.g. surveyor, maintenance technicians)	5
Electricians	6	Pipe fitters	6	Welder	6
Floorers	7	Plant / machine operator (e.g. fork lift / JCB operators)	7	Other (STATE)	0
Glaziers	8	Plasterer	8		
Groundworker	9	Plater	9		

136 = ____ 137 = ____

138 = ____ 139 = ____

ASK ALL

- 10) Are you currently.....?

READ OUT

(140)

Employed directly by a company	1	
Self-employed	2	
Working for an agency	3	
Or working on some other basis (SPECIFY)	4	

- 11) How long have you worked for (IF EMPLOYED DIRECTLY AT Q10: your current employer IF SELF-EMPLOYED AT Q10: for the current contractor / firm / person paying you / IF AGENCY AT Q10 this agency)?
WRITE IN EXACT FIGURE IF MORE THAN A YEAR IF THIS KNOWN OR PROMPT WITH A RANGE IF NECESSARY

(141)

Less than 6 months	1
6 months to a year	2
More than a year (WRITE IN EXACT NUMBER IF KNOWN) _____ years	3
PROMPT WITH RANGES IF EXACT NOT KNOWN	
More than a year up to 3 years	4
More than 3 years up to 5 years	5
More than 5 years up to 10 years	6
More than 10 years up to 20 years	7
More than 20 years	8
Don't know	X

142-143 = ____

- 12) Are you employed on a temporary or a permanent basis?

(144)

Temporary IF TEMPORARY ASK: How much longer do you expect to work for the employer / contractor / agency currently paying you? WRITE IN	1
Permanent	2
OTHER (SPECIFY) _____	3

- 12b) And how long in total do you expect to work at this specific site including any time you have already worked here? PROBE FOR BEST ESTIMATE

(145)

A week or less	1
A month or less	2
3 months or less	3
6 months or less	4
A year or less	5
More than a year (WRITE IN EXACT NUMBER IF KNOWN) _____ years	6
Don't know	X

146 = ____

- 13) Geographically, which one of the following best describes where (*IF DIRECTLY EMPLOYED* employer... *IF SELF-EMPLOYED*: the firm / person paying you... *IF AGENCY*: your agency) operates...: **READ OUT AND CODE ONE ONLY**

	(147)
ONLY locally i.e. within a 20-30 mile radius	1
ONLY within a 70 mile radius	2
Across England but not in the rest of the UK	3
Across the whole of the UK	4

148 = ____; 149 = _____

- 14) So would you say all, most, some or very little of your employer's (*IF NECESSARY FOR SELF-EMPLOYED*: the contractor / firm / person paying you *IF AGENCY*: your agency's) construction work takes place in Scotland: by Scotland I mean Ayrshire, Borders, Dumfries & Galloway, Dunbartonshire, Edinburgh & Lothian, Fife, Forth Valley, Glasgow, Grampian, Lanarkshire, Renfrewshire and Tayside.

(150)

All	1
Most	2
Some	3
Very little	4
Don't Know	X
Other (WRITE IN)	0

- 15) Which of the following best describes the work being undertaken at this site? E.g. what is being built? **PROMPT WITH ANSWER FROM CONTRACTOR OR FROM KNOWLEDGE OF SITE IF NEEDED**

- 15a) And which, if any, of the following types of construction work have you spent significant periods of your career in construction? **READ OUT ALL EXCEPT FOR THE ONE MENTIONED AT Q15**

	Q15 (151)	Q15a (152)
New housing	1	1
Housing repair and maintenance including extensions / loft conversions	2	2
Other commercial work such as shops, offices factories, warehouses, stadia etc	3	3
Civil engineering projects such as roads, bridges etc	4	4
Engineering construction work such as Power stations, Oil refinery, and chemical processing plants	5	5
Other (WRITE IN)	6	
None		6

153 = ____

ASK ALL

- 16) I'd like to turn now to qualifications. Are you currently **working towards** any **formal** qualifications relevant to the construction industry (such as City & Guilds qualifications or NVQs)? *By formal I mean certified, recognised qualifications*

(154)

Yes	1	ASK Q17
No	2	GO TO Q18

IF YES (OTHERS ASK Q18)

- 17) What subject, type and level of qualification(s) are you working towards (please tell me only about the highest qualification if you are working towards more than one)?
 INTERVIEWER - FILL IN **SUBJECT AND THEN TYPE / LEVEL**. *PROMPT IF NECESSARY eg if 'NVQ' ask what level this is being studied to*

SUBJECT OF QUALIFICATION (eg carpentry, management etc)

TYPE / LEVEL OF QUALIFICATION

	(155)		(156)
NVQ level 1	1	Apprenticeship (WRITE IN NAME OR BRIEF DETAILS)	1
NVQ level 2	2	Modern Apprenticeship (FMA/AMA)	2
NVQ level 3	3	HNC / HND / BTEC higher	3
NVQ level 4	4	OND / ONC / BTEC or Scotvec National	4
NVQ level 5	5	BTEC / Scotvec first general	5
NVQ (unsure of level)	6	Certificate in Training Achievement (CTA) for plant operators [= CITB plant ticket / card] – basic level or CPCS basic card	6
City & Guilds advanced craft	7	CTA for plant operators [= CITB plant ticket / card] – advanced level or CPCS advanced card	7
City and Guilds craft	8	Scaffolder's Record Card Scheme - Basic card [=CITB Scaffolders ticket / card]	8
City and Guilds (unspecified / unsure of level)	9	Scaffolder's Record Card Scheme – Advanced card. [=CITB Scaffolders ticket / card]	9
Construction Award - Advanced	0	NASEC	0
Construction Award – Intermediate	V	NSDS	V
Construction Award – Foundation	(156)		(156)
	1	Don't know	1
Degree (MSc, PhD etc)	2	Other (WRITE IN)	2

159-160 = ____

161 = ____

- 18) Do you hold any type of construction **skill** certificate or card, such as a CSCS card or any CITB or ECITB construction skill card - **please do not include a CIS (tax) card?**

(162)

Yes	1	ASK Q19
No	2	GO TO Q21
Not sure	3	

IF YES (OTHERS ASK Q21)

- 19) Which type of card or cards do you hold? PROMPT IF NECESSARY

(163)

CSCS (Construction Skills Certification Scheme) ££	1	CHECK Q20
CTA (Certificate of Training Achievement)	2	
CPCS (Construction Plant Competence Scheme)	3	
CITB ticket	4	
ECI skills database card \$\$	5	
ACE card	6	
Other (SPECIFY)	7	
Don't know	8	

164 = ___ 165 = ___

IF CSCS CARD ££ AT Q19 (OTHERS CHECK Q20a)

- 20) What colour card is this? PROMPT IF NECESSARY

(166)

Red (trainee)	1
Green (level 1)	2
Blue (skilled at level 2)	3
Gold (supervisor / NVQ3)	4
Platinum (manager / NVQ4)	5
Black (senior manager NVQ5)	6
Other (SPECIFY)	0
Don't know	X

167= _____

IF ECI SKILLS DATABASE CARD \$\$ AT Q19 (OTHERS ASK Q21)

- 20a) What type of ECI skills database card is this? PROMPT IF NECESSARY

(168)

Grade 1 – trainee / operative; new entrant	1
Grade 2 – trainee / operative and achieved a N/SVQ level 2 in Engineering Construction or proof of relevant competence	2
Grade 3 – trainee / operative new entrant; progressively achieving trade specific units of competence	3
Grade 4 – craftsman; achieved N/SVQ level 3 in Engineering Construction or relevant units of competence	4
Grade 5 – advanced craftsman; has N/SVQ level 3 AND has been in Engineering Construction for over 2 years at grade 4	5
Grade 6 – advanced craftsman (selected from grade 5 to undertake supervisory duties for an employer)	6
Don't know	X

ASK ALL

- 21) And do you hold any other formal qualifications that are relevant to the construction industry (such as City & Guilds qualifications or NVQs) - please do not include first aid certificates? *By formal I mean certified, recognised qualifications*

(169)

Yes	1	ASK Q22
No	2	GO TO Q23

IF DO HOLD FORMAL QUALIFICATION

- 22) I'd like to know a bit more about the highest qualification that you have relevant for construction. What subject, type and level qualification(s) do you hold? INTERVIEWER - FILL IN **SUBJECT** AND THEN **TYPE / LEVEL**. **PROMPT IF NECESSARY** (eg if 'NVQ' ask for level
(IF HOLD MORE THAN ONE QUALIFICATION ASK FOR LEVEL OF HIGHEST)

SUBJECT OF QUALIFICATION
(eg carpentry, management etc)

--

TYPE / LEVEL OF QUALIFICATION

	(170)		(172)
NVQ level 1	1	Apprenticeship (COLLECT NAME AND DETAILS)	1
NVQ level 2	2	Informal apprenticeship	2
NVQ level 3	3	Modern Apprenticeship (FMA/AMA)	3
NVQ level 4	4	HNC / HND / BTEC higher	4
NVQ level 5	5	OND / ONC / BTEC or Scotvec National	5
NVQ (unsure of level)	6	BTEC / Scotvec first general	6
City & Guilds advanced craft	7	Certificate in Training Achievement (CTA) for plant operators [= CITB plant ticket / card] – basic level or CPCS basic card	7
City and Guilds craft	8	CTA for plant operators [= CITB plant ticket / card] – advanced level or CPCS advanced card	8
City and Guilds (unspecified / unsure of level)	9	Scaffolder's Record Card Scheme - Basic card [=CITB Scaffolders ticket / card]	9
Construction Award – Advanced	0	Scaffolder's Record Card Scheme – Advanced card. [=CITB Scaffolder's ticket / card]	0
Construction Award – Intermediate	V	NASEC	V
Construction Award – Foundation	(171) 1	NSDS	(173) 1
Degree (MSc, PhD etc)	2	Don't know	2
		Other (WRITE IN)	3

174-175 = ____

176 = ____

22a) And where were you living when you were studying or training to get this qualification?

	(177)		(178)
London (within M25)	1	South West : Avon, Devon & Cornwall, Somerset, Gloucestershire, Dorset, Wiltshire	1
South East (Berks, Bucks, Hampshire, Oxfordshire, Kent, Sussex, Surrey but NOT Herts or Essex).	2	Wales (Clwyd, Dyfed, Gwent, Mid – Glamorgan, NE ales, Pembrokeshire, Powys, West Glamorgan, South Glamorgan, West Wales)	2
East of England (Essex, Bedfordshire, Herts, Norfolk, Suffolk, Cambridgeshire)	3	Scotland (Ayrshire, Borders Dumfries & Galloway, Dunbartonshire, Edinburgh & Lothian, Fife, Forth Valley, Glasgow, Grampian, Lanarkshire, Renfrewshire, Tayside)	3
North East (Tyne and Wear, County Durham, Northumberland, Tees Valley)	4	Northern Ireland (Co. Antrim, Co. Armagh, Co. Down, Co. Fermanagh, Co. Londonderry, Co. Tyrone)	4
North West (Greater Manchester, Merseyside, Cumbria, Lancashire, Cheshire / Warrington)	5	Ireland	5
Yorkshire and Humberside (Humberside, North Yorkshire, South Yorkshire, West Yorkshire)	6	EUROPE (SPECIFY)	6
East Midlands (Northants, Derbyshire, Notts, Leicestershire, Lincolnshire)	7	OTHER (SPECIFY)	7
West Midlands (B'ham, Black Country, Shropshire, Staffordshire, Coventry & Warwickshire, Hereford and Worcestershire)	8	REFUSED	8

179-180 = ____

201-204 as card 1
205=2

206-207= ____

ASK ALL

23) Do you have supervisory or managerial duties on this site?

(208)

Yes	1	ASK Q24
No	2	ASK Q26
Don't know	3	

IF YES AT Q23 (OTHERS ASK Q26)

24) Have you ever received formal training specifically designed to improve managerial or supervisory knowledge and skills?

(209)

Yes	1	ASK Q25
No	2	ASK Q26
DK	3	

- 25) **IF YES AT Q24**
What training was this? PROMPT IF NECESSARY

	(210)		(211)
CIOB Site Supervisor (First Line Supervisor –FLS)	1	Supervisory Training and Management Development (SMTD)	1
CIOB Site Management Education and Training Scheme (SMETS)	2	Chargehand and Team Leader Training	2
SMSTS (Site Manager Safety Training Scheme)	3	Institute of Supervision and Management Workshops	3
Civil engineering Site Managers Scheme (nb this not a formal programme)	4	Project Management Short Courses	4
In-house training	5	Assessor and Verifier Training	5
Other (SPECIFY)			0
Can't remember / DK			X

212= ___ 213 = ___

- 26) **ASK ALL**
And did you leave school, college or formal education with any of the following qualifications? **CODE ALL THAT APPLY. IF SAY NOT EDUCATED IN THIS COUNTRY WRITE IN HIGHEST QUALIFICATIONS ACHIEVED.**

	Yes	No	
a) CSEs / GCSEs / O levels / Scottish or other equivalents	1	2	(214)
IF YES AT a) ABOVE , do you have one in maths?	1	2	(215)
IF YES AT A) ABOVE , do you have one in English?	1	2	(216)
GNVQs	1	2	(217)
A levels or equivalent	1	2	(218)
Any other qualifications (STATE)	1	2	(219)
Left with no qualifications	1		(220)

221= ___ 222 = ___

- 27) Do you feel you have...**READ OUT AND CODE ONE ONLY**

	(223)
All the skills you need to do your current job	1
Or do you feel you need more training and or qualifications (IF SO PROBE: What further training / qualifications do you feel you require? WRITE IN)	2
Or do you feel that you the qualifications and training you need but you just more experience	3
(DO NOT READ OUT) Don't know	X

224= ___

- 27a) In most construction jobs nowadays, people need to be able do things such as read instructions and record information. Are there any such tasks you find difficult where training in writing, reading, communication or numeracy would help you with your work?

(225)

Yes	1	ASK Q27b
No	2	ASK Q28
Don't know	3	

IF YES AT Q27a

- 27b) What sort of training would be useful?
PROMPT IF NECESSARY. MULTICODE ALLOWED

Training in: (226)

Reading	1
Writing	2
Oral communication	3
Other (specify) WRITE IN	4
Numeracy	5

227= ___ 228= ___

ASK ALL

- 28) While staying in the construction trade do you want to carry on working in the same job that you currently do (cf Question 7) or do you want to change the kind of work that you do?

(229)

Same	1	ASK Q32
Different	2	ASK Q29
Don't know	3	ASK Q32

IF DIFFERENT (OTHERS GO TO Q32)

- 29) What kind of work would you like to change to?

	(230)		(231)		(232)
Banksman / banksperson	1	Labourer / operative	1	Plumbers	1
Bricklayer	2	Manager	2	Scaffolders	2
Carpenter / joiner	3	Mechanical fitter	3	Steel erectors / riggers	3
Ceiling fixers	4	Roofers	4	Supervisor	4
Dry liner	5	Painter / decorator	5	Technical	5
Electricians	6	Pipe fitters	6	Welder	6
Floorers	7	Plant / machine operator (e.g. fork lift / JCB operators)	7	Other (STATE)	0
Glaziers	8	Plasterer	8		
Groundworker	9	Plater	9		

233=____ 234= ____

30) What is the main reason for wanting to change? **CODE ALL THAT APPLY**

	(235)		(236)
Will be better paid	1	Will mean I can work closer to home	1
More interesting work	2	More suitable hours / conditions	2
Bored of what I'm doing / a change	3	Less physical	3
Easier to get that sort of work / more security	4	Other (WRITE IN)	0
Will be able to go self-employed	5		
More responsibility	6	No particular reason / don't know	X

31) Will you need further training and a qualification to do this kind of work? 237 = ____
(238)

Yes	1	
No	2	
DK	3	

ASK ALL

32) To change the subject a bit, please could you tell me where you live while working at this site? I am just interested in the town and postcode of where you come from to get to work here.
[INTERVIEWER NOTE: If respondent goes 'home' at weekends and stay locally during the week then it is the local address of interest. Hence on a Monday, e.g. address may not be where respondent came from that day to get to work].

TOWN / CITY / COUNTY		
POSTCODE		(239-242)

33) How many miles would you estimate it is from there to the site? **ASK FOR BEST ESTIMATE**

MILES _____ **243-245 =** _ _ _

Don't know.....X

34) Is this what you would consider your permanent address?
(246)

Yes – permanent	1	ASK Q36
No – temporary	2	ASK Q35

- 35) **IF CURRENT ADDRESS NOT PERMANENT ADDRESS ASK:**
 Could you tell me the town, postcode (IF NEEDED 'Country) for your permanent home?

TOWN / CITY		
POSTCODE		(247-250)
COUNTRY		(251-252)

ASK ALL

- 36) Is your permanent address close enough to allow you to commute to this site on a daily basis?

(253)

Yes	1	GO TO Q38
No	2	ASK Q37

IF NOT ABLE TO COMMUTE DAILY

- 37) What made you decide to come and work in Scotland? **DO NOT PROMPT**

(254)

No / little construction work in home area (generally or in respondent's particular field)	1
Construction work is better paid in Scotland	2
Better job opportunities in Scotland	3
Prefer living in Scotland	4
Don't Know	X
Other (WRITE IN)	0

255= _____

ASK ALL

- 38) When you finish this job, do you anticipate that you will get a job that allows you to commute from your permanent home address *on a daily basis*?

(256)

Yes	1	GO TO Q40
No	2	ASK Q39
It depends (e.g. on where I'm sent /where the work is)	3	GO TO Q40

IF NO (OTHERS GO TO Q40)

- 39) Are you expecting this next job will be in Scotland or do you expect it to be elsewhere?

(257)

Scotland	1
Abroad	2
Somewhere else (SPECIFY)	3
Don't Know	X

258= _____

- ASK ALL**
 40) What proportion of the time that you have been working in construction in the UK has been spent on sites in Scotland. Would you say that it has been....**READ OUT**

(259)

All of your time	1
Most of it	2
Around half your time	3
A small proportion of your time	4
Only this job	5
Don't Know	X
Other (WRITE IN)	0

- 41) And where are you from originally? CODE AS APPROPRIATE (PROMPT IF NECESSARY)

(260)

(26)

London (within M25)	1	South West: (Avon, Devon & Cornwall, Somerset, Gloucestershire, Dorset, Wiltshire)	1
South East (Berks, Bucks, Hampshire, Oxfordshire, Kent, Sussex, Surrey but NOT Herts or Essex).	2	Wales	2
East of England (Essex, Bedfordshire, Herts, Norfolk, Suffolk, Cambridgeshire)	3	Scotland	3
North East (Tyne and Wear, County Durham, Northumberland, Tees Valley)	4	Northern Ireland	4
North West (Greater Manchester, Merseyside, Cumbria, Lancashire, Cheshire / Warrington)	5	Ireland	5
Yorkshire and Humberside (Humberside, North Yorkshire, South Yorkshire, West Yorkshire)	6	EUROPE (SPECIFY)	6
East Midlands (Northants, Derbyshire, Notts, Leicestershire, Lincolnshire)	7	OTHER (SPECIFY)	7
West Midlands (B'ham, Black Country, Shropshire, Staffordshire, Coventry & Warwickshire, Hereford and Worcestershire)	8	REFUSED	8

262= ____; 263 = ____

INTERVIEWER RECORD GENDER

(264)

Male	1
Female	2

- 42) And finally, can I just ask you a few quick questions about yourself. Firstly, which of the following age brackets do you fall into?

(265)

16-17	1	45-54	5
18-24	2	55-59	6
25-34	3	60+	7
35-44	4	Don't Know /refused	8

IF AGED UNDER 60 (OTHERS ASK Q44)

- 43) How likely would you say that it is that in 5 years time you will still be working in construction? **READ OUT CODE ONE ONLY**

(266)

Definitely will	1
Very likely to be	2
Quite likely to be	3
Quite unlikely to be	4
Very unlikely to be	5
Definitely will not	6
Don't know	X

ASK ALL

- 44) Which of the following best describes your ethnic group? **READ OUT MAJOR CATEGORIES (IN BOLD) AND THEN ADD 'Is that...' MORE SPECIFIC CATEGORIES IN THAT MAJOR CATEGORY**

(Major category)	(more specific category)	
White	British (if prefer: English / Welsh / Scottish)	01
	Irish	02
	Any other white background	03
Black	Caribbean	04
	African	05
	Any other black background	06
Asian or Asian British	Indian	07
	Pakistani	08
	Bangladeshi	09
	Any other Asian background	10
Chinese		11
Mixed	White and Black Caribbean	12
	White and Black African	13
	White and Asian	14
	Any other mixed background	15
(DO NOT READ OUT) Other		16
(DO NOT READ OUT) Prefer not to say		17
(DO NOT READ OUT) Don't know		18

- 45) Do you have any long-term illness, health problem or disability which limits the type of work you can do in construction?

(269)

Yes	1
No	2
DK	3

- 46) And how many hours are you tending to work per week at the moment? PROBE FOR BEST ESTIMATE. (IF VARIES ASK FOR LAST FULL WEEK). [ADD IF NECESSARY: Include overtime etc but exclude time spent travelling to work].

NUMBER OF HOURS PER WEEK 270-271= _ _

- 47) And how long have you lived in the UK (READ OUT IF NECESSARY)

(272)

All my life	1
Less than a year	2
Less than 3 years	3
Less than 5 years	4
5 or more years	5
Don't Know	X
Other (WRITE IN)	0

- 48) Finally, our client, CITB ConstructionSkills, are considering talking to a handful of the 5,000 workers we are interviewing to get more details about their careers in construction, this is just to build up some interesting case studies. Would you be willing in principle to do this – if so I just need your first name and a contact number. We will not pass on any details to them about your specific answers.

(273)

Yes (COLLECT FIRST NAME AND CONTACT TELEPHONE NUMBER)	1	Thank and close
No	2	Thank and close

THANK RESPONDENT AND CLOSE INTERVIEW

I declare that this survey has been carried out under IFF instructions and within the rules of the MRS Code of Conduct.

Interviewer signature: _____ Date: _____

Finish time: _____ Interview Length _____

Table A1: Percentage of workers permanently resident in each region (horizontal %)

	<i>Base: all with region codes</i>		<i>North East</i>	<i>North West</i>	<i>Yorkshire & Humber</i>	<i>East Midlands</i>	<i>West Midlands</i>	<i>East</i>	<i>London</i>	<i>South East</i>	<i>South West</i>	<i>Scotland</i>	<i>Wales</i>	<i>Northern Ireland</i>
<i>Region of Site</i>		%												
Scotland	544	%	0.4	0.7	0.2	0.0	0.0	0.2	0.2	0.0	0.0	98.2	0.2	0.0
South West	470	%	0.2	0.0	0.0	0.4	1.7	0.2	1.3	6.2	86.6	0.4	3.0	0.0
East	593	%	0.8	1.0	0.5	7.9	1.3	68.3	13.3	5.9	0.2	0.2	0.3	0.2
North West	636	%	1.4	81.4	8.0	0.9	3.8	0.2	0.2	0.6	0.0	0.9	1.7	0.8
Yorkshire & Humb.	570	%	2.3	3.0	88.4	4.7	0.7	0.4	0.0	0.5	0.0	0.0	0.0	0.0
West Midlands	436	%	0.0	1.4	0.9	6.4	88.8	0.0	0.7	0.5	0.5	0.0	0.9	0.0
East Midlands	364	%	1.4	0.8	6.9	75.3	9.3	0.5	1.1	2.2	0.0	0.3	2.2	0.0
Northern Ireland	381	%	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	99.5
Wales	355	%	0.8	1.4	2.3	1.7	1.4	0.0	0.3	0.0	1.7	0.6	89.9	0.0
North East	352	%	94.6	0.6	2.8	0.0	0.6	0.0	0.0	0.3	0.6	0.3	0.3	0.0
London	944	%	3.5	4.1	1.5	1.8	1.6	10.1	57.3	14.4	1.8	1.9	2.0	0.0
South East	2,151	%	0.7	0.4	1.3	3.3	1.9	3.1	9.3	73.4	5.5	0.6	0.5	0.1
<i>All</i>	7,796	%	5.4	7.8	8.3	6.1	6.8	7.3	10.7	23.0	7.1	7.4	5.0	5.0