

The background of the cover is a collage of three images. The top image shows a bridge at night with a boat on the water below it. The middle image shows a large cathedral with a tall tower. The bottom image shows a harbor with several boats.

CONSTRUCTION 2000

**North East Construction
Whole Industry Labour Market Survey**

CONSTRUCTION 2000
NORTH EAST CONSTRUCTION WHOLE
INDUSTRY LABOUR MARKET STUDY

Prepared for CITB and Partners by
the Northern Economic Research Unit*

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Executive Summary

- ❑ The construction industry in the North East is close to the peak of its business cycle, and there is unlikely to be a downturn in the immediate future. (p. 5)
- ❑ Over 50,000 people are employed in the construction industry in the North East, equivalent to nearly 6% of the workforce, one of the highest proportions among UK regions. (p. 6)
- ❑ **Employment in the sector is still substantially lower than at the start of the 1990s; the North East experienced a net fall of 12.6% over the decade, compared with 7% nationally. Larger firms seem least willing to rebuild their employment to 1990 levels.** (p. 10)
- ❑ The ongoing lack of recruitment has led to large gaps in the age structure of the workforce, and a shortage of suitably qualified workers. Large firms can no longer be relied upon to introduce a steady stream of apprentices into the industry. (p. 12)
- ❑ The overwhelming majority of employees in the sector are male (86%, the highest proportion in Great Britain) and full-time (93%, above the national average). Nearly half of all employees are employed by general contractors, similar to the national pattern. (p. 7–8)
- ❑ **North East construction firms employ 8.6 people on average, by far the largest firm size of any British region. Nationally, construction firms employ an average of just 5 workers.** (p. 9)
- ❑ Only 20% of construction workers in the North East are self-employed, the lowest proportion in the UK. The national average is 38%. (p. 9)
- ❑ The average weekly earnings for a full-time male manual worker in the construction sector were £352 in 1999, the highest for any English region outside London and the South East. (p. 12)
- ❑ Hourly rates remain below those of similarly qualified craftsmen in manufacturing occupations, while working conditions, sick pay and other benefits are also of a generally lower standard. This deters young people from entering the industry, prompting recent efforts to raise the level of remuneration. (p. 13–14)
- ❑ The pass rate for construction-related NVQs is relatively low, compared with most other subject areas. This is due to the inclusion of theoretical aspects in the qualification, combined with the **poor educational attainment of a large proportion of those entering the industry as trainees.** Curriculum Centres provide a possible solution to these problems. (p. 15)
- ❑ Firms regard NVQs as adequate, but insufficient (in quality and length of courses, or in terms of availability of specialist courses). (p. 35)
- ❑ **Only one in eight firms responding to the North East survey experienced a fall in workload in the twelve months to May 2000, while 7% expect a fall over the following twelve months. The proportions anticipating a fall in employment in the next 12-18 months are similarly small.** (p. 22)

- The most in-demand tradesmen were joiners (around 20% of specified recruitment), followed by bricklayers, scaffolders and surveyors. (p. 24)
- The largest proportion of hard-to-fill vacancies over the previous twelve months have been in the joinery trades (a quarter of such vacancies), followed by bricklaying. Roofing and engineering vacancies are also proving difficult to fill with suitably qualified recruits. The North East, however, seems to be among the regions least affected by skills shortages. (p. 25)
- Around four in ten survey respondents had taken on what they **regarded as substandard workers** in the previous twelve months. **This is due to the lack of training and recruitment over the past decade, and a poor attitude towards obtaining suitable qualifications among some recruits.** (p. 26)
- Problem areas among the existing workforce include difficulties putting learned skills into practice, a lack of leadership skills, and a shortage of employees suitable to be promoted to site manager. (p. 27)
- Around one in six respondent companies had recruited a graduate in the past twelve months. The only difficulty is that higher education is prone to lag behind employer demand for new skills, although this can be rectified with continuing professional training. (p. 29)
- Most managers rely on personal or **workforce contacts to recruit new staff, especially for manual trades.** JobCentres and agencies are relatively unpopular recruitment sources. (p. 31)
- The most popular option for training is NVQs (39% of firms), followed by Modern Apprenticeships. **Nearly half of larger respondents are registered for Investors in People.** (p. 31–32)
- Around half of all respondents participate in the Construction Skills Certification Scheme, although only one in six indicated that it was stipulated in contracts. **Despite some cynicism,** it seems likely that the scheme will continue to grow in popularity. (p. 34)
- Although many firms are adopting information technology as a matter of course, the construction sector still lags behind in exploiting new developments. The exceptions to this are design consultants (architects, engineers etc.), who are now highly reliant on new technology. (p. 36)

Recommendations

1. Recognising the need for training to continue beyond NVQ standard, and possibly providing support for this.
2. Recruiting more young people into the profession, with particular efforts to upgrading the educational standards of entrants.
3. Improving working conditions, pay and benefits.
4. Establishing a definite career path, and a more stable long-term employment prospects.

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1 Introduction

1.1 The North East Construction Industry Study

This report is the first document of its type in the region which aims to renew and assess the current situation of the construction industry and its component parts in the North East. The reason for this is that a major employer in the area, the industry not only covers the contracting arm, i.e. site construction, but also includes the design and procurement of work by design consultants, housing associations and local authorities, a fact not recognised by most people outside of the industry itself. This report is therefore unique and a benchmark to monitor the performance of the ‘whole industry’ in the North East. In comparison with the situation in other regions, the construction industry in the North East is more significant, both in terms of employment and share of regional GDP. The importance of the sector in this region justifies the production of a single sector study, rather than relying on labour market information taken from studies which are too general in sectoral focus and thus lacking depth in relation to this industry.

The diversity of the construction industry, in terms of activities and occupational groups, suggests the need for a study which is sufficiently comprehensive to encompass all the activities and skills of the sector in the region. While labour market information (LMI) is available for the sub-sectors of the construction industry e.g. architects, civil engineers, etc., much of this compiled in isolation from that on other sub-sectors, resulting in information gaps. This is partly due to variations from sub-sector to sub-sector in the quality of LMI available, and partly due to the fact that isolated reports often ignore issues relating to the wider context of the construction industry and matters relating to the inter-relationships and synergy between sub-sectors.

Furthermore, the specific nature of the industry - including its project-based output, the number of (especially SME) companies involved, and the self-employed status of many of those working in the field - makes this a distinctive sector with respect to skill formation and training issues. The construction sector constantly needs to respond to a changing external environment with flexibility of its operation being the main driver in maintaining competitiveness. Developments in technology, materials, standards and practices, coupled with a large number of companies operating with low profit margins, has impacted on the way the industry is organised. In particular, this affects the nature of its operations and its skill needs, with important implications for skill formation and training in the longer term.

1.2 Objectives of study

This study aims to review and assess the construction industry in the North East, and in particular to:

- ❑ *Assess the current state and recent history of the construction industry in both the North East and also nationally*
- ❑ *Provide information on the current employment profile in the industry*
- ❑ *Summarise forecasts of job creation/growth in the industry (skills and occupational categories); and assess human resource (HR) issues, including current and projected training and HR-related needs of both SMEs and large companies*
- ❑ *Identify the key aspects of technological change within the industry and the implications for current and future skill needs (generic skills, specific skills and occupational groupings) and the extent to which these needs are provided for within the region*
- ❑ *Examine the situation regarding the recruitment of potential new entrants' into the construction industry (i.e. Year 11 pupils, FE students, and HE students); explore recruitment issues (including entry requirements, pay levels and issues to do with the industry's image)*
- ❑ *Identify areas for policy intervention aimed at improving the labour supply situation relating to construction*

1.3 Methodology

Labour market information is currently available in respect of a number of sub-sectors of the construction industry, such as that contained in reports produced by individual Federations and Institutions within the Construction Industry Training Board-led consortium. Such information is sometimes erratic and provides conflicting data. As such, this report has been compiled by consolidating three main sources of LMI:

- a. The manipulation of data from national sources e.g. Annual Employment Survey, Labour Force Survey, Census of Production, ES vacancy data, etc.
- b. Construction-specific survey work carried out in the North East through (and in consultation with) a cross-section of companies from all relevant sectors within the industry.
- c. Consultations with other relevant organisations in the North East; e.g. TECs, Chambers of Commerce, Government Agencies and Departments, HE sector, FE Colleges, Careers Offices, etc.

The Construction and Industry Training Board (CITB) is in a unique position to facilitate surveys within the construction industry, *via* its network of registered companies together with its liaison

with employer federations and professional institutions. A postal survey of a sample of CITB-registered companies and other construction organisations has also been undertaken, the design of which was guided by the information gaps identified in the desk research exercise. A sampling framework of members was created, designed specifically to achieve adequate representation of sub-sectors within the industry.

2 Regional state of the industry

2.1 General background

The construction industry in the North East, as in the rest of the country, is currently at, **or close to the peak of its business cycle**. Against a background of reasonably low interest rates, and low inflation, the property investment market is currently very stable (*The Journal, Commercial Property Quarterly Review*, 28/6/00). In particular, leisure and office developments (especially the booming growth of call centres), and large-scale prestige projects, funded by the Lottery or public money (such as Grainger Town or the Baltic Arts Centre), continue to generate work.

The *Construction Trends Survey* for Q4/99 (Construction Confederation, 2000) reports that the market was generally buoyant; despite some erratic progress in individual quarters, the overall trend in output over the whole of 1999 was positive for the Northern region¹, which was the fourth most successful region overall. Results on expected output were also highly positive, although new enquiries were relatively low, despite picking up in the latter half of the year.

The DETR report *The State of the Construction Industry* reveals much the same picture: output to Q2/99 grew at just over 4%, roughly in the middle of the rankings of UK regions, while the FMB's *Quarterly State of Trade Survey* is more pessimistic, with negative results for actual and expected changes in workload for three out of the four quarters of 1999, and a strongly negative view on expected workload in Q1/00. There are also erratic results on new enquiries - highly positive in Q3/99 and Q1/00, but negative otherwise. Reported employment, though, grew in the second half of the year, and in Q1/00, and is also expected to grow.

The RICS reports positive balances on workloads in the North throughout 1999. As ever, the sector continues to be erratic, with large variations from quarter to quarter, exacerbated by tighter margins compared to a decade ago. Overall, however, the trend is positive - there seems to be a consensus that workloads and employment *have* risen, borne out by the questionnaire results (reported in Section 3 below), although the extent of this, and how far it can be sustained, seems to be in doubt.

¹ CITB is administratively organised to conform spatially to the (now officially and statistically superseded) 'Northern region', i.e. the North East plus Cumbria. Data availability relating to recent years thus accordingly varies in its spatial coverage.

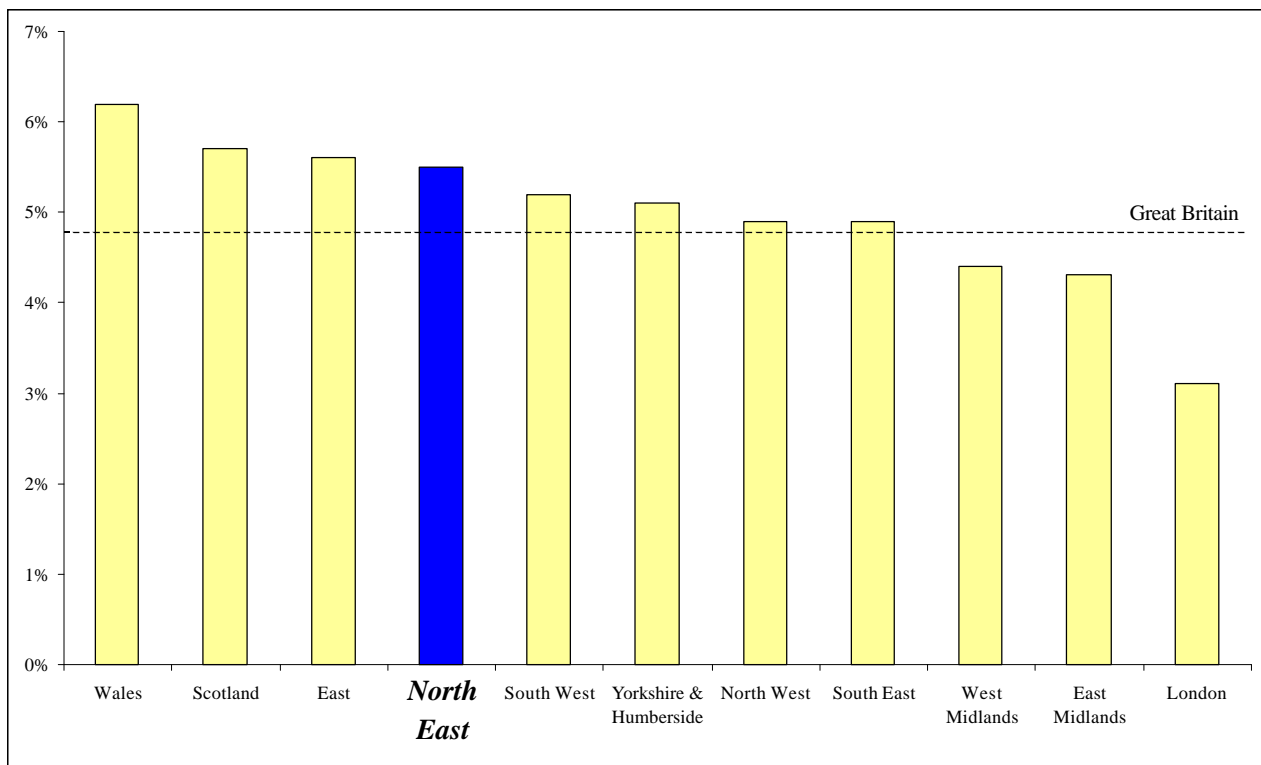
2.2 Official employment statistics

According to official figures (Employment, Earnings and Productivity Division, ONS), the construction sector in the North East (excluding firms made up solely of ‘professional’ occupations e.g. architects, and *excluding* self-employed workers - see Section 2.5) employed around **50,000 people in December 1999**, equivalent to 5.5% of employment in the region. This is an increase on the June and September figures (which stood at around 47,000). However, the recent (unrevised) quarterly employment figures given in *Labour Market Trends* are inclined to sudden shifts as a result of subsequent adjustments. This makes it difficult to comment *accurately* on short-term patterns.

Bearing this in mind, by way of comparison, manufacturing industries in the North East employed 182,000 (20%), and services employed 669,000 (73%).

As Figure 1 shows, the North East’s percentage of employment in the construction sector is among the highest in the country, with only the Eastern region, Scotland and Wales being greater. The English average of 4.6% is substantially lower, indicating the relative importance of the construction sector to the North East’s economy.

Figure 1 Percentage of employees in employment in construction (December 1999)



Source: Employment and Earnings Division ONS, *Labour Market Trends*, May 2000

Note: Figures exclude professional practice and self-employed workers

2.3 Sectoral Breakdown

In terms of employment by type of firm, the latest figures available come from the Annual Employment Survey (AES) conducted in September 1998. This gives employment by Standard Industrial Code; i.e. by the main *activity* of the firm, rather than the actual occupations of its employees. Again, it is difficult to provide figures for numbers of or employment in ‘professional’ firms, since the survey’s findings are not broken down sufficiently - the category that includes architects and consulting engineers also includes a number of other technical and consulting activities. Hence, this section is subject to the same restrictions referred to above.

As shown in Table 1, the construction sector in the North East is overwhelmingly male (just over **86% of employees**, the greatest proportion of any region; the British average is 83.3%) and full-time (93.9% of employees, also above the national average). **The small proportion of female employees, especially in the skilled trades (where they form 1.7% of all employees [DETR, 1999 - figures refer to 1998]), is a particular cause for concern, and this is an issue which has attracted CITB’s interest.**

Table 1 Gender and employment status by region (% of all employees)

	Male			Female			All	
	FT	PT	Total	FT	PT	Total	FT	PT
South East	79.5	1.6	81.0	12.0	7.0	19.0	91.4	8.6
East	80.7	1.7	82.4	11.1	6.6	17.6	91.8	8.2
London	81.7	1.4	83.1	11.4	5.5	16.9	93.1	6.9
South West	81.9	1.8	83.7	11.0	5.3	16.3	92.9	7.1
West Midlands	83.1	1.3	84.4	11.2	4.4	15.6	94.3	5.7
East Midlands	82.3	1.4	83.7	11.6	4.7	16.3	93.9	6.1
Yorks & Humber	79.9	1.8	81.8	10.6	7.6	18.2	90.5	9.5
Merseyside	83.0	1.0	84.0	10.7	5.3	16.0	93.7	6.3
North West	82.5	1.2	83.6	11.0	5.4	16.4	93.5	6.5
North East	85.2	1.0	86.2	8.7	5.0	13.8	93.9	6.1
Wales	79.4	2.1	81.5	11.7	6.8	18.5	91.1	8.9
Scotland	85.2	1.0	86.2	10.0	3.8	13.8	95.2	4.8
Great Britain	81.8	1.5	83.3	11.0	5.7	16.7	92.9	7.1

Source: Annual Employment Survey, 1998

This has been a major problem in the industry for a number of years. The CITB, with other industry partners, is addressing this by a high-profile recruitment campaign and other positive training opportunities.

Of the 52,000 people employees in the sector in the North East in September 1998, the majority (46.0% of employees) were employed in firms involved in 'general construction' activities, followed by 'installation of electrical wires and fittings' (11.6%), broadly similar to the pattern found in the rest of the country (national averages are 47.9% and 11.4% respectively). The only other sectors which have a significant presence are 'plumbing' and 'painting and glazing' (both having 6.4% of employees) and 'construction of highways' and 'other construction involving special trades' (with 5.4% each) - again, broadly similar to the pattern found nationally (see Appendix 1).

CITB's *Employment and Training Forecast 1999*, derived from their own employment model and Business Strategies Limited's model, put the total number of employees in the North East in 1998 at 58,930. The difference between this and estimates given above is explained by the inclusion of professional firms - architecture, civil engineering etc. Using this figure for construction employment, we can deduce that the professional practices in the area employ around 7,000 people in the North East.

For comparison, the AES 1995 reported that there were just over 47,000 employees in the construction sector in the North East, although the *pattern* of employment was slightly different. The general construction sector was the largest, as in 1998, although its share of employment was higher (just over 50%); a similar small decline in the employment share of this activity has been observed in most English regions. This is part of a longer term trend. Electrical installation, on the other hand, has experienced an increase in its share of employment, rising from 8.0% in 1995 to 11.6% in 1998.

2.4 Size distribution of firms

Due to the shift in AES definition in 1995 (from simply using PAYE records to a combination of VAT and PAYE), the number of firms in the sample increased dramatically. However, the impact on the total of employees was less, due to the fact that the increase in numbers came largely at the smaller end of scale - mostly firms with under 5 employees. Hence, for comparisons across time, this category of firms is excluded.

Excluding micro-firms, from 1991 onwards, the North East consistently has amongst the smallest percentage of companies with 5-10 employees (**43-45%**, compared to the national figure of **50-53%**). For 1995 and 1998, under the more 'inclusive' AES the same is true for micro-businesses (4 employees or fewer), with 75% in this band, compared to 83-84% nationally.

This is likely to be due to the North East's tradition of being less likely to use self-employed workers², leading to the average size of firms being substantially larger than in other regions. In 1998, the average number of employees per firm in the construction sector was **8.6**, compared to the GB sectoral average of **5.0**. Of the other regions, only Scotland is comparable, its average of 7.6 is close to the North East figure. The same pattern holds if companies with under 5 employees are excluded, to get a more consistent series. As Table 2 shows, the average size of North East construction firms is around 27.5 employees from 1991-95, rising to 29.6 in 1998, compared to the GB average of 22.8. The North East figure is clearly higher than all other GB regions.

Table 2 Average number of employees per construction firm (>4 employees only), 1998

	1991	1993	1995	1998
South East	20.8	20.1	19.0	19.2
East	19.8	21.4	19.5	20.5
London	22.1	24.3	23.5	24.9
South West	18.9	22.4	21.0	19.2
West Midlands	22.3	23.4	22.8	21.3
East Midlands	22.3	24.7	21.2	22.7
Yorkshire and the Humber	22.2	24.8	24.6	24.6
Merseyside	25.0	21.9	19.9	20.6
North West	24.6	25.7	23.8	25.5
North East	27.4	27.7	27.5	29.6
England	22.1	23.6	22.2	22.4
Wales	19.4	22.5	22.0	22.5
Scotland	25.6	26.2	28.2	27.1
GB	22.3	23.9	23.0	22.9

Source: Annual Employment Survey, 1998

2.5 Self-employment

In contrast to the AES, the Labour Force Survey includes the self-employed, although it tends to be less reliable by sector, and for small areas. Bearing this in mind, the 1998 figure for *all* workers in the North East construction sector was 84,000 (LFS, Nomis, 1998). Out of this total, around 17,000 are classified as self-employed (LFS, 1998, as reported in *Regional Trends*). This equates to 18.2% of *all* self-employed workers in the North East, the lowest proportion for any region outside London. Furthermore, only 20.4% of all workers in the construction sector in the North

² As noted in ERS (1997) - although explanations for this seem vague

East are self-employed, strikingly lower than the GB figure of 36.5%, and 38.4% for England (Table 3).

Table 3 Self-employment in the construction sector, 1998

	Total self-employment ('000s)	% in construction sector	No. of self-employed workers in construction	% of construction sector workers self-employed
South East	563	22.4	126.1	45.20
East	363	23.8	86.4	44.53
London	496	13.9	68.9	37.88
South West	368	21.3	78.4	41.92
West Midlands	276	23.4	64.6	40.37
East Midlands	231	24.7	57.1	39.08
Yorkshire and the Humber	268	18.8	50.4	31.29
North West	335	20.2	67.7	31.77
North East	94	18.2	17.1	20.37
Wales	153	19.3	29.5	30.76
Scotland	242	17.0	41.1	22.73
England	2994	20.6	616.8	36.52
UK	3475	20.1	698.5	38.40

Source: Labour Force Survey, Regional Trends

2.6 Recession and recovery

Figures from the AES reveal that the North East has experienced a relatively weak recovery since the recession of the early 1990s. In Great Britain as a whole³, construction employment was around 7% lower in 1998 than 1991, whereas the North East experienced a fall of 12.6% in employment in that same period. Of the 9,500 jobs lost during the first half of the 1990s, only 5,000 had been recovered by 1998 (the start of the current upturn), and latest figures, although unreliable and subject to revision, point to similar levels of employment.

The conclusion *might* be drawn from this that the region's construction sector has still not fully recovered from the recession. However, as noted above, the latest quarterly figures are known to be subject to significant revision. Certainly, the consensus view of interviewees consulted during the course of this research is that the market has been fairly buoyant over the past 18-24 months, and there seems to be no expectation of a downturn in the immediate future. Most were confident that they had contracts in place to guarantee work for at least the next year, which was as far ahead as they tended to plan. The manager of one firm commented that '*the roofing business in the North*

³ Excluding firms with 1-4 employees (in order to obtain a more consistent series)

East is permanently in recession’, but that they were nevertheless making a profit, for the first time in several years. There are a number of reasons, however, why official employment figures may tend not to fully reflect these buoyant conditions. These include the balance between direct and self-employment, and shortages of skills at a time when unemployment in general is relatively low.

As shown in Table 4, the North East is not alone in finding rebuilding employment to the levels of the early 1990s a slow process. London, the West Midlands, Merseyside, and Scotland all had fewer employees in 1998 than 1991, as did the North East. When small firms are excluded, the performances of all regions are worse, indicating that larger firms are **unable or unwilling to rebuild employment to 1991 levels**. One obstacle to employment recovery is the severe shortage of certain skilled trades, which seem set to continue, and even intensify, over the next few years. Even when there are contracts to be won, firms are finding it difficult to recruit the *right calibre* of labour (an issue returned to later in the report).

Table 4 Change in employment levels in the construction industry, 1991-98

	All firms			All >4		
	1991	1998	Change	1991	1998	Change
South East	120,924	148,293	20.4%	103,417	104,950	6.1%
East	77,802	104,994	30.0%	66,412	74,443	11.4%
London	119,354	116,136	-2.7%	106,426	89,502	-12.6%
South West	66,075	89,260	30.1%	56,121	62,960	11.5%
West Midlands	98,629	90,858	-8.2%	88,526	69,037	-18.9%
East Midlands	66,723	80,424	18.7%	58,293	61,938	1.5%
Yorkshire and the Humber	96,571	98,240	1.7%	86,588	79,221	-8.9%
Merseyside	22,805	17,493	-26.5%	20,210	13,654	-39.2%
North West	99,178	104,507	5.2%	87,265	83,666	-7.1%
North East	56,649	52,347	-7.9%	51,588	45,486	-17.3%
Wales	45,229	51,375	12.7%	38,845	39,142	0.8%
Scotland	133,615	116,874	-13.4%	121,475	100,580	-24.9%
GB	1,003,552	1,070,813	6.5%	885,170	824,570	-5.7%
ENGLAND	824,710	902,552	9.0%	724,849	684,849	-4.2%

Source: AES, 1998

Several companies, and other organisations, also indicated that some firms (commonly referred to as ‘cowboy builders’) were undercutting on contracts by the legally ‘grey’ use of self-employed or ‘unemployed’ workers, and that the larger firms in the area were, *de facto*, doing the same thing at one remove, by using those firms as subcontractors. The manager of one scaffolding firm said:

There's a number of scaffolders who'll remain on the register for as long as they can, because they can pick up fiddle work, £25 per day in the hand; when you're talking about competition, a lot of the smaller firms around the area have got maybe half a dozen scaffolders - the requirement generally is ten a week, so they've got four permanently casually employed; there's a number of people like that.

Such practices have an impact on quality, safety and, especially, training. Larger firms are not restoring their *direct* employment to previous (i.e. 1980s) levels (as the government presumably hoped they would by tightening up self-employment rules in the mid-1990s), resulting in an under-provision of training in the sector overall.

Another consequence of the erratic nature of the construction industry, and its long business cycles, is the age structure of the workforce. The long recessions, and lack of recruiting, tend to lead to large gaps between 'clusters' of employees of a similar age. One firm characterised its workforce as having '*lots of forty-year-olds, then nothing down to the 25s*'. Furthermore, with fewer young people coming into the industry (see Section 3.4 below), the average age of workers has tended to increase. In the short-term, this is sustainable (and some firms even find it desirable: older workers '*may not have the energy, but they have the skills... the craftsmanship*'), but it creates a host of longer-term problems - a large proportion of the current workforce will reach retirement age at the same time, with insufficient numbers of younger workers to replace them.

2.7 Levels of pay

2.7.1 The current situation

According to the 1999 *New Earnings Survey*, the average weekly earnings (i.e. including all overtime, bonuses etc.) for a full-time manual male worker in the construction sector in the North East was £352.10, the highest for any English region outside London and the South East (albeit by a small margin - most of the other regions are in the £340-350 range). The noticeably high level of remuneration in the South East pulls the average English earnings level up to £356.10, while the GB figure is £351.30. By comparison, the average wage for *all* industries and services in the North East was £325.60, with the manufacturing wage slightly higher, at £357.40 (Table 5).

Hourly rates in the North East, on the other hand, while still some way below London, and slightly behind those in the South East, are substantially higher than the other English regions, standing at £7.90, compared to the English average of £7.65.

Table 5 Full-time manual male average weekly earnings (£), selected sectors, April 1999

Region	Construction	Manufacturing	Wholesale/retail	Transport etc	All industries/ services
North East	352.1	357.4	262.2	328.4	325.6
North West	343.7	358.0	295.9	344.7	332.6
Yorks & Humber	340.3	341.4	275.9	336.9	321.5
E Midlands	346.1	342.7	303.9	330.0	329.7
W Midlands	343.4	341.9	289.8	334.7	328.2
South West	326.1	343.7	282.0	330.8	315.4
East	350.5	365.0	305.3	368.9	341.2
London	435.6	413.8	314.2	424.3	376.9
South East	375.4	368.7	336.3	372.2	347.1
England	356.1	354.1	300.6	362.6	336.0
Wales	316.1	356.7	275.4	326.9	326.4
Scotland	328.6	356.2	300.6	343.2	328.6
GB	351.3	354.6	299.4	359.6	335.0

Source: *New Earnings Survey*, 1999

However, it must be noted that there are large discrepancies in wage levels across the sector - apprentices are paid substantially lower wages (although attempts are being made to remedy this - see Section 2.7.2 below), while the hours worked to reach this level of earnings are likely to be high, compared to other professions. Figures for *non*-manual males and both manual and non-manual females in the sector are unavailable at the regional level, because of low numbers.

In occupational terms, the average hourly wage for *all* craft and related occupations is £8.44. Skilled construction trades earn £7.66, those in engineering (e.g. metal machinists, instrument makers, electrical and mechanical engineers) £9.38, and other skilled craftsmen (e.g. textile workers, printers, bakers, butchers, glass workers) £7.86. The rate for *all* manual occupations is £7.54, just below the *skilled* rate for construction, indicating that the sector is close to the bottom of the earnings ladder. Anecdotal evidence from interviewees suggests that construction employees work long hours, given their low basic pay rate, and this is backed up by national statistics. The *New Earnings Survey* indicates that, on average, full-time manual male construction employees work 46.4 hours per week, compared to 43.5 hours per week for manufacturing.

Both occupations in personal services (£5.92 per hour) and manual work in the wholesale and retail trade (£6.07) are not substantially lower than that for construction trades, and working conditions are often better in those sectors. In the light of this, it is unsurprising that large numbers of young people are turning their back on construction, and the low pay of the long apprenticeship/trainee period, in favour of the easier conditions in service occupations.

Box 1 Perspectives on pay increases in construction

The Bargaining Report survey focuses on collective agreements. The overall figure for the private sector during the 1998-9 pay round was 3.1% (mid-point). If the number of workers is taken into account, the figure would be 5%. The construction industry stands out with the highest rises (at a median level of 5%, or 7.6% if weighted to take account of numbers covered). Several construction industry settlements produced large increases in lowest basic rates, reflecting a high demand for skills in this industry in recent years.

[LRD Bargaining Report, September 1999]

In a breakthrough deal announced today between the Transport and General Workers Union and the Federation of Master Builders, over 200,000 construction workers will get a 4.4% pay increase. The minimum wage rate as part of the new agreement rises to £5.22. T&G national secretary for construction, Bob Blackman, described the new pay rates as a “real step forward” and “a national agreement that we’ve worked hard for.

Speaking after the announcement, Mr. Blackman said: “This really is a breakthrough national deal. Building workers from north, south, east and west are covered by a new minimum wage of £5.22 with a new minimum craft rate of £6.32. Tremendous news.”

*Additionally, the T&G have gained a commitment for a review of apprentice and youth rates in the construction industry. **The review will seek to replace these rates with ones to make the building industry more attractive to recruit new young workers. Talks on this are scheduled for April.*** *[No formal outcome has been received at this report’s time of print.]*

[Transport and General Workers Union press release, 16th Feb 2000]

Pay increase 'will attract young blood'

THE cost of construction doesn't get any cheaper. A new three-year staged pay deal for site workers will raise their wages by 20pc. This comes on top of the previous pay settlement negotiated between employers and unions in 1997. Taken as a whole, craftsmen will see their basic hourly rate of £4.83 rise to £7.30 from the end of June 2002, an increase of nearly 60pc in five years.

Neil Ramsey, chairman of Kendall Cross Holdings and a former president of the National Federation of Builders for Newcastle and Northumberland, believes the new settlement is in the best interests of the industry.

"If we're to attract new young blood into building, then earning levels must match their expectations. I question whether the 1997 three-year pay agreement did much to increase the numbers of school leavers entering the world of construction." The message for budding building owners is clear: build now, for expenditure on new or improved premises is set to rise sharply.

[Source: The Journal, 23rd June 2000]

2.7.2 The future

However, partly in order to remedy this situation, where other sectors’ wages and conditions are substantially more attractive than construction, pay rises in the sector have been extremely high for

some years. *Tyneside Economic Trends* has found that wage increases over the past two years or so in the sector in Tyneside have routinely averaged over 6%, compared to the average in other sectors of below 4%, and other sources agree that wages are steadily increasing (see Box 1). Similarly, several interviewees said that they paid high wages, but more to keep a core workforce, and ensure quality and consistency, rather than to attract new employees:

'We pay above the rate to keep the men, and our workforce is very stable, our guys have been with us since we started 10 years ago.' (road maintenance firm)

'We pay UCATT rates plus £25 per week.' (general builders)

'The only way to keep them is to look after the individuals themselves, but ultimately, it's in the pay packet - it's ensuring they've got a minimum fallback rate, which in many cases is in excess of the rate agreed by the National Joint Council.' (scaffolders)

However, there is still cynicism in some quarters over whether these recent increases are sufficient to accomplish their stated aims. Construction jobs remain 'hard work', both in reality and in the popular imagination. In order to attract young people, wages may have to be substantially higher even than the settlements above allow for, and the fringe benefits will have to be substantially improved. Holiday entitlement, sick pay, pensions and working conditions in general are all poor compared to most other industries, and wage rises alone cannot compensate for this.

2.8 Training provision

2.8.1 GNVQs/NVQs

The pass rate for construction-related GNVQs, which are full-time college-based courses with no site experience, is substantially lower than for all other subject areas, indicating a high drop-out rate, but involving only a small number of trainees. For example, the pass rate for construction subjects at foundation level is 34%, compared with 41% for all subjects (Table 6). Interviewees were agreed that this was due to a skills mismatch: those leaving school to enter construction-related courses tended to be low academic achievers, coupled with the fact that such individuals are not employed by companies whilst carrying out such studies. Many trainees who may have the ability to do practical occupational work are unable to cope with the demands of the more theoretical sections of GNVQs, and are more suited to the practical NVQs. The NVQ drop-out rate over a three-year period is similar to the GNVQ performance, but with approximately five times the number of trainees.

Table 6 GNVQ awards in Construction and the Built Environment, UK, 1999

Category	Active candidates	Full awards				
		Pass	Merit	Distinction	Total	%
Foundation - construction	3554	1063	127	34	1224	34.4%
<i>Foundation - total</i>	<i>21589</i>	<i>5576</i>	<i>2641</i>	<i>723</i>	<i>8940</i>	<i>41.4%</i>
Intermediate - construction	546	79	100	38	217	39.7%
<i>Intermediate - total</i>	<i>84254</i>	<i>23000</i>	<i>18155</i>	<i>5280</i>	<i>46435</i>	<i>55.1%</i>
Advanced - construction	1717	201	435	206	842	49.0%
<i>Advanced - total</i>	<i>83402</i>	<i>13626</i>	<i>22725</i>	<i>12382</i>	<i>48733</i>	<i>58.4%</i>

Source: Joint Council for General Awarding Bodies (<http://www.qca.org.uk/gnvq/>)

The key to solving the drop-out problem seems to be to market the construction industry to school-leavers, emphasise the skilled nature of the work, encourage more able students to come into the sector, and to have employment as a minimum requirement. However, one interviewee pointed to the lack of awareness among teachers about the career possibilities at GNVQ and NVQ level offered by colleges, employers and CITB, despite the efforts of CITB and its partners to address this on a regular basis. They expressed concern that if more able pupils are steered away from the industry, the low skills base is reinforced, and teachers will become more prejudiced against it - a Catch-22 situation. One solution is to hold marketing events *away* from school, as, for example, Gateshead Business Link has already been doing, to regularly update careers staff and teachers of opportunities in the industry, and to show the quality of the Construction Curriculum Initiative (2.8.3) within the National Curriculum.

2.8.2 Training performance

Nationally, up to 31st September 1999, a total of 193,317 NVQ certificates had been awarded in Construction, making it the fifth largest framework area behind Providing Business Services (nearly 1m awards), Providing Goods and Services, Engineering and Providing Health, Social and Protective Services, and accounting for about 7% of all NVQs awarded to that date. The majority of awards (105,605) were intermediate or Level 2 (equivalent to two GCSEs grades A*-C), as in most framework areas, although a significant proportion (25.7%, compared to 17.7% for all NVQs) were at Level 3 (equivalent to 2 A-Levels grades A-C).

The most popular choices were unsurprising: bricklaying level 2 (17,650 up to 30th September 1999), carpentry and joinery level 2 (22,603), electrical installation level 3 (16,026), mechanical engineering services (plumbing) level 2 (10,021), painting and decorating level 2 (11,878), trowel occupations level 1 (10,387) and wood occupations level 1 (12,667) and level 2 (15,134).

The latest figures available for the North East region relate to the year 1996-97 (*Construction Programme Area Review*, Further Education Funding Council, 1999), and are shown in Table 7. Generally, the northern counties have a higher proportion of students than jobs, with the reverse true for the south. The North East and North West combined have 23.3% of all students, but only 18% of employment (Institute for Employment Research figures).

Table 7 Provision of training in construction in Further Education colleges, 1997

	<i>College provision in all programme areas</i>	<i>College provision in construction programme area</i>	<i>% of region's provision in construction</i>	<i>% of national construction provision</i>
Full-time				
East Midlands	56,688	2,167	3.8	7.5
Eastern Region	81,699	2,869	3.5	9.9
Greater London	117,082	4,360	3.7	15.1
Northern Region	41,639	1,253	3.0	4.3
North West	130,100	5,390	4.1	18.6
South East	112,993	3,788	3.4	13.1
South West	76,084	2,863	3.8	9.9
West Midlands	99,795	2,794	2.8	9.7
Yorkshire & Humberside	78,201	3,454	4.4	11.9
Total full-time	794,281	28,938		100
Average			3.6	
Part-time				
East Midlands	277,087	10,436	3.8	10.7
Eastern Region	284,492	9,388	3.3	9.6
Greater London	329,388	11,206	3.4	11.5
Northern Region	181,650	5,523	3.0	5.7
North West	527,126	17,271	3.3	17.7
South East	364,538	11,021	3.0	11.3
South West	361,378	8,551	2.4	8.8
West Midlands	497,727	14,771	3.0	15.2
Yorkshire & Humberside	349,867	9,277	2.7	9.5
Total part-time	3,173,253	97,444		100
Average			3.1	
Overall total	3,967,534	126,382		100
Average			3.0	

Source: Institutions' strategic plans, July 1997, in *Construction Programme Area Review*, FEFC

Overall, in 1996-97, the construction sector in the North East had 1,253 full-time students (3% of all full-time students in the region) and 5,523 part-time students (also 3%) enrolled in a further education college. At a national level, the overwhelming majority (93%) were male, with **very few from non-white ethnic minority groups**, and the same appears to apply to the North East. The North East also had an unusually high proportion of full-time courses provided by colleges in collaboration with other organisations (16%, compared to the national average of 7%), and the relatively low proportion of collaborative part-time courses (5%, compared to 11% nationally).

The region is slightly over-represented in terms of the proportion of students enrolling on construction-related courses (around 6% of the national total, compared to around 5% of all enrolments⁴). The conclusions of the FEFC's report (although relying considerably on anecdotal evidence) highlight a number of problems in looking at skills shortages in the sector. The main problem seems to be the multitude of construction-related organisations, each with differing methodology, terminology and surveying/publishing schedule, reporting on skills and training in their own areas, with little common ground on which to base a consensus view.

2.8.3 Curriculum Centres

The CITB's Curriculum Centre Initiative, established in 1990, aims to improve knowledge and understanding of the construction sector among young people, in partnership with TECs, local colleges, schools and employers. Nationally, around 15% of all public sector maintained schools have been involved in the initiative. There are eight such centres in the North East, aiming to promote the industry to schoolchildren and students, and encouraging them to take up a career in construction, typically through 'taster' days and by providing training for Year 10 and 11 pupils to achieve NVQ units in construction occupations prior to leaving school.

Evaluations carried out by the National Foundation for Educational Research (Golden and Lewis, 2000) suggest that there has been some success in this. Young people, it suggests, enjoy the practical approach of the initiative, and learn more about the industry, developing (or laying the foundation for developing) some basic skills, and being better prepared for the construction industry in general than their peers who had not attended. In general, *'the prevailing view among the young trainees was that the Curriculum Centre Initiative had been a positive and beneficial experience'*. It is clear that it plays a valuable role in encouraging more young people to enter the construction sector, away from the prejudices of schools and careers advisors, or, equally importantly, discouraging those unsuitable for the trades before they start on expensive college courses.

⁴ These figures are from a graph in the FEFC report, and thus approximate

3 Employers' survey

3.1 Sample and methodology

Our survey of employers in the construction sector is not fully representative of the industry overall, with few building services firms (plumbers, electricians etc.), and a degree of over-representation of professional firms, which are usually neglected by studies of the sector. Its primary purpose was to elicit views of a wide cross-section of businesses, which will be *broadly* representative of the sector.

The survey was carried out during May 2000, using the questionnaire shown in Appendix 4. The entire North East region was included in the sample. In total, **464** questionnaires were sent out, **439** to private construction firms, details of which were supplied by the CITB, and the remaining 25 to Direct Labour organisations, sent anonymously by the Association of Direct Labour Organisations. Some **198** questionnaires were completed and returned, a response rate of 43%. However, just one response was received from a direct labour organisation, meaning this sector is largely excluded from the following discussion. Although Cleveland is slightly under-represented, and Durham slightly over-represented, in terms of the proportion of replies received, the geographical spread of returned questionnaires is reasonably close to the sample sent out (Table 8).

Table 8 Sample structure (% of firms/organisations by area)

	Cleveland	Co Durham	Cumbria	Northumberland	Tyne & Wear	Direct Labour
Sent	21.6	17.2	1.5	10.1	44.2	5.4
Returns	15.7	26.3	2.5	10.1	44.9	0.5

3.2 Profile of Respondents

3.2.1 Activities within construction

Table 9 shows the sectoral breakdown of respondents. Despite the poor returns from direct labour organizations already noted, the structure of responses was reasonably close to that of the original sample of companies. The largest grouping was general contractors (43% in the original sample, and almost the same proportion of responses), followed by specialist contractors (37% of responses, compared to 32% sent out).

Table 9 Sectoral distribution of sample firms

	Enquiries	Returns (%)
General Contractors (<i>Building & Civil Engineering national and regional companies and Construction Plant related organizations</i>)	197 (43%)	84 (42.4%)
Specialist Contractors (<i>Roofing & Cladding, Shopfitters, Interior Systems & Plasterers, Painting & Decorating, Scaffolding, Wall & Floor Tiling, Demolition and others</i>)	151 (32%)	74 (37.4%)
Housebuilding (<i>National and regional housebuilders and Housing Associations</i>)	19 (4%)	4 (2.0%)
Design Consultants (<i>Architects, Structural/Civil Engineers, Quantity Surveyors</i>)	75 (16%)	35 (17.7%)
Local Authorities (<i>Direct Labour organizations of local Authorities</i>)	25 (5%)	1 (0.5%)
Total	467	198 (100.0%)

The types of projects undertaken by respondent firms are shown in Table 10. Unsurprisingly, very few companies are capable of undertaking PFI projects, due to their size (just 15% of respondents), and private contracts are undertaken by slightly more than public ones (88% and 79% of respondent companies respectively⁵). Similarly, relatively few companies work on infrastructure or civil engineering projects (26% in total), with similar numbers (around 140, or 70%) undertaking each of the other four types of construction project specified. The most frequently undertaken type of project overall was private commercial work, undertaken by 130 companies (66%), which the DETR also identifies as the major sector nationally, contributing one-third of total new work for 1999, although it is forecast to begin to wane as Millennium/Lottery-funded projects reach completion.

Table 10 Activities of respondents**(a) Numbers of firms**

	Residential	Commercial	Industrial	Repairs	Infrastructure	Total
Public	85	91	77	100	43	156
Private	114	130	123	108	44	175
PFI	4	13	11	9	10	29
Total	137	147	142	133	52	

(b) Percentages

	Residential	Commercial	Industrial	Repairs	Infrastructure	Total
Public	42.9	46.0	38.9	50.5	21.7	78.8
Private	57.6	65.7	62.1	54.5	22.2	88.4
PFI	2.0	6.6	5.6	4.5	5.1	14.6
Total	69.2	74.2	71.7	67.2	26.3	

⁵ Multiple responses were allowed

3.2.2 Type of employees

Gender and hours worked. - Table 11 gives details of the types of employees at respondent firms. This distribution is very similar to that reported by the AES, with 85% of all workers male and full-time. There is a slight over-representation of full-timers among females (12%, compared to 9% in the AES). This is presumably due to the nature of the respondents, with a larger sample of professional firms, and a relatively small number of micro-firms (which tend not to have administrative support staff, the area which remains the most likely destination for women in the construction industry).

Table 11 Gender and job status of employees at respondent firms

	MFT	MPT	FFT	FPT	Employees	Temp	Self-emp	Total emp
Survey 2000 (no.)	12,113	58	1,739	241	14,151	228	1,527	15,906
Survey 2000 (%)	85.6%	0.4%	12.3%	1.7%	100%			
AES 1998 (%)	85.2%	1.0%	8.7%	6.8%	100%			

Occupations - Firms were also asked to break down their employment into broad occupational categories; in several cases, this total did not agree with the employment total, either due to errors in addition, difficulty in assigning workers to categories, or because of the inclusion of some or all of the temporary and self-employed workers in the classification. Therefore, the clearest way to present this data is in percentage form (Table 12).

Table 12 Occupational breakdown of employees in respondent firms (% of all employees)

	Management/ admin	Professional	Building	Specialist building	Civil engineering	Building services	Other
Survey	21.0	23.8	28.8	5.3	12.1	1.2	7.8
CITB - NE	15.7	4.6	31.1	7.6	14.2	18.9	7.8
CITB - GB	17.3	5.1	31.6	7.6	12.7	16.7	8.9

This is different to the occupational breakdown provided by CITB in two main respects: there is a degree of over-representation of professional and technical jobs in the sample, and a similar under-representation of building services employees (electricians and plumbers). This is due to the nature of the sample - many electrical/plumbing firms are likely to be small, specialist subcontractors, which have been largely excluded from the sample. Furthermore, an effort was

made to include a large sample of quantity surveyors, architects etc., and these firms had a high response rate, accounting for the large proportion of professional and technical jobs.

Size - As shown in Table 13, the majority of respondent companies (around 80%) had fewer than 50 employees, a figure which is similar to the original sample structure (82%) and to that for the construction sector as a whole in the North East (88% of firms, ignoring companies with fewer than 5 employees, are in this sizeband, according to AES).

Table 13 Number of employees in respondent firms

Sizeband	Number	%
No response	4	2.0
<10	33	16.7
10-19	48	24.2
20-49	50	25.3
50-99	32	16.2
100-199	19	9.6
200-499	9	4.5
1000+	3	1.5
Total	198	100.0

Therefore, in overall terms, the respondent sample allow us to examine issues such as workload, recruitment and training issues, with analysis being broadly representative of the industry within the region.

3.3 Workloads and employment

Only 25 respondent firms (12.6% of the total) reported that their workload had *decreased* in the previous 12 months, while even fewer (7.1%) anticipated that it would go down over the next year (Table 14/b). The majority of interviewees came to the same conclusion - the construction sector was buoyant, and had been for at least **18 months - 2 years**, with little expectation of a slowdown. Only five companies reported *both* an actual and anticipated downturn (Table 15), and detailed inspection revealed no real pattern to the type, location or size of companies expecting less work over the next twelve months, thus indicating that none of the sectors is anticipating significant change relative to the others.

Table 14 Change in workload

(a) in past 12 months

	Number	%
Increase	94	47.5
Decrease	25	12.6
Unchanged	64	32.3
No response	15	7.6
Total	198	100.0

(b) in next 12-18 months

	Number	%
Increase	97	49.0
Decrease	14	7.1
Unchanged	69	34.8
No response	18	9.1
Total	198	100.0

Table 15 Comparative change in workload

		<i>Expected change in next 12 months</i>			<i>Total</i>
		increase	decrease	same	
<i>Change in past 12 months</i>	increase	69	4	19	92
	decrease	11	5	9	25
	same	17	5	41	63
<i>Total</i>		97	14	69	180

Note: Only firms replying to *both* parts of the question are included; hence the total number is below that for respondents.

A similar picture to workload findings emerges when *employment* is considered. Only ten firms (5.0%) anticipate a decrease in the number of employees over the next six months, and nine (4.5%) over the next 12-18 months (Table 16a/b). The majority of firms (113, or 57%) expect very little change over the next six months, compared to 72 (36%) planning an increase; over the longer time frame, the gap is smaller, with 92 (47%) anticipating no change, and 85 (43%) an increase.

Table 16 Expected employment

(a) change over next 6 months

	Number	%
Increase	72	36.4
Decrease	10	5.1
No change	113	57.1
No response	3	1.5
Total	198	100.0

(b) over next 12-18 months

	Number	%
Increase	85	42.9
Decrease	9	4.5
No change	92	46.5
No response	12	6.1
Total	198	100.0

Most of the larger subsectors are fairly optimistic about their expected workforce changes, with 40-50% anticipating an increase; those subsectors with lower expectations are building & civil

engineering (only 37% expecting an increase in workforce), flooring trades (33%) and scaffolding (also 33%). The largest proportion of firms (73, or 37%) experienced no change in the past six months, and expect the same in the immediate future (Table 17).

Table 17 Comparative change in employment

		<i>Expected change in next 12-18 months</i>			Total
		Increase	Decrease	No change	
<i>Change in past 6 months</i>	Increase	48	1	16	65
	Decrease	4	2	2	8
	No change	32	6	73	111
Total		84	9	91	184

3.4 Recruitment

Gauging the extent of recruitment is difficult - many firms indicated that it depends heavily on their contracts, illustrating the erratic and insecure nature of construction employment, while others knew which occupations they were recruiting, but were unclear on numbers. In all, 115 companies provided additional information on recruitment (either over the forthcoming 6 months or 12 months, or, if they indicated ‘no change’ in the size of their workforce, presumably just to replace natural wastage).

The 56 companies which specified numbers of recruits were planning to take on a total of 308 workers. Of these, 53 (17%) were joiners, with a further seven specified as shopfitters. Furthermore, 15 firms which did not specify numbers of recruits were looking for joiners (or shopfitters), the largest proportion amongst this group which did not specify numbers of recruits. The next most numerous occupations for recruits were bricklayers and scaffolders (30 for each profession), followed by (quantity and building) surveying (26 recruits).

Bricklayers and surveyors were also in high demand among those firms which did not specify numbers. A manager of one firm commented that they were looking for ‘general operatives/joiners’ - presumably hoping to find operatives who were multiskilled or could be trained to do *some* joinery, albeit at an relatively low skill level, given the current state of demand for carpenters and joiners.

3.4.1 Hard-to-fill vacancies

Some 96 respondents (48.5%) indicated that they had experienced hard-to-fill (HTF) vacancies⁶ over the past twelve months, although these were not evenly spread across sectors. Around a quarter of these companies (25 firms) had HTF vacancies in more than one occupation. The most acute problem area appears to be joinery, with 24% of those firms which indicated that they had HTF vacancies mentioning this trade (23 firms in total). The next most difficult type of vacancy to fill appears to be bricklaying, mentioned by 16 firms in total.

HTF vacancies in more specialist occupational areas include engineering - seven out of nine civil & structural engineering firms which replied to the survey indicated that they had problems filling vacancies - and roofing, with around 50% of firms in the sector having HTF vacancies for tradesmen, mostly in slating and tiling work.

Other surveys - The pattern of responses broadly conforms to that revealed in DETR (2000), with, nearly 70% of Northern region firms reporting difficulties in finding bricklayers during 1999, and around half also having problems recruiting plasterers and carpenters. It also states that the difficulties in finding labour are close to previous peaks (1988 and 1998), ascribing this to the ageing workforce, boom-to-bust conditions encouraging workers to move into industries with less erratic conditions, the growth of construction work in the 'hidden economy' and in Ireland, as well as the lack of new entrants.

The latest FMB survey charts changes in HTF vacancies by quarter. Some 27% of respondents had difficulty in obtaining skilled (directly-employed) labour in Q1/00, up from 24% in Q4/99, and just 12% in Q3/99. This clearly indicates there has been a gradual tightening of the labour market as work has picked up. Nonetheless, this is the lowest figure for any region, and compares to a national figure of 55% of respondents having difficulties finding labour, double the proportion in this region. This difference may reflect the relative flatness of Northern construction as a whole, as well as, perhaps, generally low skill levels, and greater use of direct employment.

Of the Northern firms finding recruitment difficult, the greatest problem for the past three quarters has been with carpenters and joiners (consistently over 10% of respondents), with demand for other trades being more erratic over the course of the year. At a national level, the results are more consistent, with over 30% of firms having problems finding carpenters and joiners, followed by bricklayers. Perhaps surprisingly, no other regular member surveys from major construction-related employer organisations report on *regional* skills shortages, despite there being natural concerns regarding this.

⁶ Defined as workers in occupations which were hard to find, or not of the right level of ability/experience

However, the FMB also point out that the new taxation rules for subcontractors (the ‘Construction Industry Scheme’) are having the effect that firms which used to be mainly subcontractors are now competing for projects in their own right. This puts them in direct competition to recruit labour with the firms they used to work for. Hence, from an outside perspective, the construction labour market is unlikely to have appeared to have tightened at all; it is simply that some contractors, which *used* to rely on employing subcontractors, now need to look for staff themselves. The apparent tightening is all from the subjective point of view of the employers (See Box 2). This applies less to the North East, with its relative lack of a subcontracting tradition.

3.4.2 Unfilled vacancies

Some 36 respondents (18.2%) indicated that they *currently* had unfilled vacancies. No real geographical pattern is evident, with the proportion of firms with unfilled vacancies about the same in all counties.

3.4.3 Substandard recruits

Firms with contracts to fulfil need to recruit where their current workforce is insufficient to meet the workload. Many are thus forced to take on people they would consider less than ideal for the tasks in hand. Eighty respondents (40.4%) indicated that they had recruited substandard workers, with joiners again being the main problem area (mentioned by 23 respondents), followed by bricklayers (13). Half of painters and decorators and three out of four dry liners reported that they had experience of substandard recruits.

However, this situation (where firms regard certain recruits as substandard) may come about in some cases due to the fact that firms prefer to recruit fully trained employees (i.e. ‘time-served’, not fresh out of a NVQ programme), rather than actually training workers themselves. It was clear from questionnaires that some respondents regarded school-leavers as ‘substandard’ simply because they required training. **Several interviewees indicated that they were not opposed to training their workers *per se*, but that they simply did not have the resources to be able to do so. The industry is now suffering from this somewhat short-sighted attitude prevalent over the past decade. According to one general building firm, which needed four bricklaying squads for a job but could only find three of sufficient quality:**

There is clearly a skills shortage because of a lack of training over the last 10 years; the industry is suffering now... but we do not have the money to improve the situation, in fact we now lose time because of skill shortages.

Box 2 The Consequences of new tax rules

The start of a new year has seen no change in the issues that are of most concern to FMB members, headed by the Construction Industry Scheme for the taxation of sub-contractors in the industry. Indeed, the level of concern over the effects of the CIS has, if anything, increased since it came fully into operation. Of the more than 140 respondents who accepted the invitation to write in comments on the state of trade or on current issues - two-fifths of the total response - 40 focused on this topic.

As previously identified, there are three main dimensions to it, the largest of which is the reduced availability of tradespeople to work as sub-contractors, as many who have formerly played that part have opted to set out on their own, working direct to the public, often in competition with the firms for which they previously worked. There are now reports of firms turning down work because they cannot any longer secure the services of people who worked for them before, either as sub-contractors or as direct employees. Some say that they are having to put expansion plans on hold. For the first time, some others say that they fear being driven out of business.

The second dimension is the effect on rates of pay to sub-contractors, who are looking for increases to compensate them for the at-source deductions now in force. Most responses were received before the Government announced the lowering of the rate of deduction. The next survey, results of which will be published in July, will test whether this has any beneficial effect.

The third dimension is the increase in paperwork demanded of the small building firm, which is also being affected by changes in fiscal and social legislation that apply across the board and not just to construction, such as the introduction of tax credits. There is increasing resentment that, despite the assurances of successive governments that they are committed to reducing 'red tape' for small and medium-sized enterprises, the amount has increased and is still increasing quite substantially.

Source: FMB State of Trade Survey, Q1 2000

One interviewee commented that, to an extent, he frequently came across workers who seemed to have taken up an occupation which they regarded as 'easy' (*'painting: anyone can do that'*), and that they simply had not bothered to acquire the necessary skills. This resulted in his firm having to redo substandard jobs, and sometimes losing new contracts. **This indicates that a shift in attitude is needed among both employers and employees: the former need to be more willing to take people on and then train them** (aided by grants and other measures administered by CITB), and the latter need to be more aware of the minimum entry requirements, and also be willing to undertake basic training (including acquiring a higher level of literacy, numeracy and other 'Key Skills').

3.4.4 Workforce skill levels

Only five firms (2.5% of all respondents) indicated that the skills of their existing employees were 'inadequate'; the majority (66%) were of the view that skill levels within their firm were

'adequate'. Problems mentioned on questionnaire returns ranged from quality of workmanship and manual skills through to a pithy '*IQ*'. A further eight firms indicated that, although they were generally satisfied as far as trade-related skills were concerned, their employees nevertheless lacked team-building or leadership skills, and some criticised their workers' 'lack of practical knowledge'. The difficulty here is that leadership and managerial skills are only introduced at NVQ Level 3, while the majority of young trainees only achieve NVQ Level 2, which does not incorporate such training.

Another problem, raised by several interviewees, is the changing role of the site manager. Traditionally, the site manager was promoted from the general trades to oversee construction operatives and production, with a site clerk providing administrative support. The site manager role now encompasses a wide range of ancillary responsibilities, including Health & Safety and other legislation and the reporting of progress, pay, invoices etc. Many craftsmen lack the necessary clerical and administrative skills (which used to be delegated to the site clerk, a position no longer found on many sites) to do the job effectively. **Some suggested that, either potential site managers undertake some form of advanced training, or site clerks are reinstated, leaving the manager to concentrate on the 'practical' aspects of the site (this being sensible from the perspective of ensuring that legislative and health & safety requirements are met).**

3.4.5 School-leavers

Some 94 companies (47.5%) reported that they had recruited a school-leaver in the past year. The most popular discipline among such recruits was found to be joinery (23 firms), followed by bricklaying (18) and administrative/clerical jobs (13). Quantity surveying and technical work were also popular destinations for school-leavers, reported by 6 and 8 firms respectively.

There are perceived to be some problems with the quality of school-leaver recruits, however. A number of interviewees suggested that, in certain subsectors, the school-leavers that are recruited are the ones '*who have got nowhere else to go... nearly everyone left school with no qualifications*'. Another said: '*their attitudes have deteriorated; lads are not now willing to be flexible with working hours*'. Taking a more positive view, other respondents argue that these young recruits simply need training, recognising that '*some find it difficult to come out of school*' and that some possess a '*we know everything*' attitude that '*needs knocking out*'.

3.4.6 Attractiveness of the sector

It was repeatedly asserted that many young people simply do not *want* to enter the profession. The manager of a large general building firm said: '*we are very much aware that there are very few*

young faces coming into the industry'. In fact, many large builders are to some extent to blame for this state of affairs, by their use of subcontracting. This reluctance to enter the industry applies mostly to the manual trades. It is partly the result of the general image and perceived working environment and conditions, partly to the relatively low pay (during the apprenticeship period, rather than when they become qualified tradesmen.

'They get the minimum wage... but they can get work in Top Shop for £5 per hour, but we can't afford to pay them that much and train them'

'a bricklayer ends up with hands that are terrible, he's out in all weathers... who the hell wants to work on a building site?'

Health and safety also remains a problem, although undoubtedly less so than in the past. In 1999, nationally, there were 51 fatal injuries involving construction workers, a rate of 4.4 per 100,000 workers, compared to 1.6 for manufacturing and 0.3 for services; agriculture and the extraction/utilities sector remain more dangerous, however (Health and Safety Executive, 2000).

In spite of these factors discouraging young people from entering the industry, there *has* been a slight increase in the proportion of 16-24 year-olds in the construction sector (DETR, 2000). Firms have begun to demand more trainees after the lull of the mid-1990s, however, and demand continues to outstrip supply.

3.4.7 Graduates

Only 33 of the survey companies (16.7%) reported that they had recruited a graduate over the past 12 months, with quantity surveying (10 firms) and engineering (8 respondents) the main source of careers. In general, questionnaire respondents and interviewees seem happy with the quality of graduates. In fact, 90% of University of Northumbria Built Environment graduates find work in the construction industry within three months of graduating.

The main problem area seems to be caused by the lag between employers' requirements changing (both numbers of recruits and the skills demanded), and the supply of graduates completing the course. During periods of recession, recruitment into these professions dips, and universities alter their intake accordingly. However, when demand once again picks up, employers want new recruits as soon as possible, creating bottlenecks. Universities *do* adjust their intake (as Built Environment departments tend to work extremely closely with local firms), but it takes (at least) three years for these students to work their way through the system, leading in the interim to increasing salaries, and dissatisfied employers. A similar situation exists with regard to skills: the skills of existing employees (especially in fast-changing IT areas such as AutoCAD) are often well above those of fresh graduates.

However, quantity surveying, architectural and other courses are seen as preparation for further on-the-job training, which most firms undertake as a matter of course. One local university indicated that most firms are relatively good at sending employees for CPD, with the exception of architects. There seem to be two key requirements for university courses among construction firms: (a) teaching the use of the latest hardware and software, or at least preparing students to be able to work with it; and (b) actually teaching them the ‘nuts and bolts’ of the business (i.e. how a house fits together, what can and cannot be done, the practicalities of actually building something). This includes such areas as understanding technical drawing. A quantity surveyor said that new graduates are more grounded in theoretical aspects than previously, and while this may be a good thing for the industry, it is *not necessarily* good for individual firms, which have to undertake more training of new recruits than under the old system of polytechnics and technical colleges, which had a more practical slant. However, this is probably a ‘wish list’, rather than a need that is actually feasible, given the competing demands on universities, and the inherent time lag in restructuring courses.

3.4.8 Recruitment methods

Most firms use a variety of recruitment methods (Table 18), although by far the most popular is identified as ‘personal contacts’, used by 158 firms (80% of respondents), followed by advertisements in newspapers/trade journals etc., and contacts *via* employees (both around 130 firms, 66% of the sample). However, different methods tend to be used to recruit different professions and trades. For both management and technical and professional jobs, advertisements are used more than contacts (by a fairly small margin), while the opposite is true (by a larger margin) for the construction trades themselves.

Table 18 Methods used to recruit new employees in the North East

(a) Number of firms

	Management	Prof- essional	Bldg trades	Spec. bldg trades	Civil engineering	Building services	<i>Total</i>
JobCentre	47	10	58	23	23	5	103
Adverts	92	72	45	22	16	8	132
Agency	49	44	21	8	9	3	73
Personal contacts	76	66	72	50	39	15	158
Workforce contacts	32	31	70	41	34	6	129
Other	1	2	1	3	2	1	8
<i>Total</i>	140	101	107	67	53	24	-

(b) Percentages

	Management	Prof- essional	Bldg trades	Spec. bldg trades	Civil engineering	Building services	Total
JobCentre	23.7	5.1	29.3	11.6	11.6	2.5	52.0
Adverts	46.5	36.4	22.7	11.1	8.1	4.0	66.7
Agency	24.7	22.2	10.6	4.0	4.5	1.5	36.9
Personal contacts	38.4	33.3	36.4	25.3	19.7	7.6	79.8
Workforce contacts	16.2	15.7	35.4	20.7	17.2	3.0	65.2
Other	0.5	1.0	0.5	1.5	1.0	0.5	4.0
Total	70.7	51.0	54.0	33.8	26.8	12.1	-

JobCentres are relatively unpopular. They are used for building trades and management recruitment, but not to a great extent. Agencies are the least popular method, especially for construction trades, suggesting that workers who rely on an agency may have problems finding work. Comments in interviews suggest agencies may be used in an emergency, to fill a temporary gap, but not to find permanent employees.

3.5 Training

3.5.1 Types of training

(a)

firms (39%), with a further 19 companies planning to use them in the future. NVQs were most popular among 'building & civil engineering', painting & decorating, and dry lining firms (used by

quantity surveyors and scaffolders (around one-third). Some 64 companies also use the Modern

companies use Modern Apprenticeships, but either do not realise they lead to NVQs, or did not bother ticking that

companies indicated that they were unaware of these schemes (two for NVQs, three for Modern Apprenticeships).

takeup of NVQs (and other training schemes) are ambitious: 80% of employees to be qualified to NVQ Level 2 by 2004, which necessitates raising the numbers passing

registration are being routinely exceeded, with 27,775 registrations in 1998-99, compared to the

target of 24,800. However, the main obstacle to meeting targets remains the relatively poor pass rate (see Section 2.8.1).

(b) Other training - The next most popular choice of training source is private training providers, mostly for health and safety issues (mentioned by 14 firms), followed by IT and training specific to their trades. Relatively few firms used higher or further education.

(c) Investors in People - In the UK as a whole, 1,050 construction firms have been recognised as, or made commitments to IIP, 2.8% of the total, while only 11.3% of construction employees are in IIP firms, compared to the total of 32% for all sectors. Our survey showed that some 29 companies (14.6% of respondents) had registered for Investors in People (IIP). This is a higher percentage than found nationally, but is mainly a reflection of the sample characteristics.

The relatively poor performance of the construction industry against other industries at the national scale is likely to be due to the small average size of construction firms, since smaller firms tend to be the most under-represented area in terms of IIP recognitions. This is borne out by the North East survey results. In spite of the initiatives to encourage smaller companies to adopt IIP, only nine respondent companies with fewer than 50 employees have done so (7% of all such firms), compared to 42% of companies with between 100 and 199 employees, and 44% of those with 200-499 employees. Allowing for the effects of size, the North East survey shows that no subsector is substantially more disposed towards IIP than the others.

3.5.2 Suitability of training

There has been a (national) increase in the number of firms providing training. CITB's database indicates that this figure has risen from 12,200 in 1998 to 13,400 in 1999 (DETR, 2000). The majority of respondent firms are finding that the available training meets their needs - 141 respondents (71.2%) were happy with the situation as it stands. However, a number indicated that they had no criteria to assess this provision accurately, not having participated in any training schemes, or simply provided no answer (28 respondents)⁷.

Of the 29 firms (15%) which indicated their dissatisfaction with available training, four provided no supplementary information; of the firms which did, most answers fell into two broad categories: (a) a lack of specialist courses (for, among others, shopfitting, road surfacing, leadwork and architectural technicians), and (b) a lack of quality on existing courses (either they were too short,

⁷ The number of respondents declining to offer an answer to this question was higher than for all other questions.

of insufficient rigour or did not teach the trade to an adequate level, particularly in terms of practical experience).

'It's impossible to keep with all these schemes which appear to change their names every five minutes, but are essentially the same thing dressed up as another initiative. There was one name training for over 20 years; it's more important to know men that can practically do the jobs than wave a piece of paper'.

Some interviewees (a minority) tended to invoke some sort of 'golden age', when the large builders still trained apprentices. This was regarded as the 'traditional' structure of the industry, prior to attempts to standardise qualifications. This minority essentially want to reintroduce the apprenticeship system which they themselves came up through in their youth, and regard subsequent changes in qualifications as an unnecessary change to this preferred way of life.

The issue of costs was also raised. The FMB *State of Trade Survey* (Q1 2000) notes:

As in 1999, there are also firms that show they are taking a longer view of the condition of the industry, and are concerned about the level and the quality of training in construction skills. FMB members' written-in comments again show that there are many small and medium-sized firms in the industry that would like to be doing more to help train the future workforce, but are deterred by financial considerations, or the lack of suitable potential trainees.

Many interviewees agreed wholeheartedly with this view, pointing out that grants supplied via CITB were often insufficient to cover the cost of hiring a trainee in a highly competitive climate, especially when many recruits were of such a poor standard to begin with. When asked about taking on more trainees, a floorlaying firm said: *'We couldn't finance it - two's stretching it, because we only get £50 per week, but the kids'll not travel to Carlisle, or Durham or London'* [due to low wages and relatively poor working conditions]. Were extra money available, the manager indicated he would be able to double his number of trainees from two to four per year, which would be the ideal situation.

CITB does provide grant support, over a two-three year period, and also provides the college/training fees of apprentices (Table 19). However, the *full* cost to an employer of an apprentice may well be higher than the figure of just over £20,000, spread over three years, shown below⁸. It is debatable, in current competitive conditions, how many employers are willing to pay the amounts shown, especially when there is no guarantee of a job for the apprentice at the end of the training period.

⁸ The University of Portsmouth calculated that, for a construction operative on a basic wage of £3.48ph, the *total hourly cost* to an employer was actually £5.81 (<http://www.civl.port.ac.uk/pumice2/corporate/hrmdir/hrm.htm>).

Table 19 Typical cost of apprentice wages during training (starting age 16)

<i>Year 1</i>	Rates (June 2000)		CITB Grants & Support available (2000-1)	
		£		£
First six months	26 weeks @ £88.53	2,301.78	Registration Grant	600
Second six months	26 weeks @ 122.07	3,173.82	Attendance	1,300
			<i>College Fees</i>	(2,435)*
First year sub-total		5,475.60		
<i>Year 2</i>				
Third six months	26 weeks @ £154.44	4,015.44	Attendance	780
Fourth six months	26 weeks @ 183.30	4,765.80	NVQ 2 achievement	650
			<i>College Fees</i>	(992)*
Second year sub-total		8,781.24		
TOTAL COST TO NVQ LEVEL 2		14,256.84	TOTAL GRANT FOR NVQ 2	3,330
Typical Cost to Company for 2 years		10,927.00		
<i>Year 3</i>				
5 th and 6 th six months	52 weeks @ £207.09	10,768.68	Attendance	780
			NVQ 3 achievement	750
			<i>College Fees</i>	(1,092)*
Third year sub-total		10,768.68		
TOTAL COST TO NVQ LEVEL 3		25,025.52	TOTAL GRANT FOR NVQ 3	4,860
Typical Cost to Company for 3 years		20,165.52		

N.B.* College fees are paid directly by CITB to colleges. No note is made of travel costs to and from work. Travel costs to and from offsite training, i.e. college is paid by CITB

Source: BATJIC rates June 2000 & CITB Grants 2000-2001

3.5.3 Construction Skills Certification Scheme

Half of all respondents indicate that they participate in the industry-driven CSCS (98 firms in total), but only 32 firms (16.2%) indicate that it is stipulated in contracts. This is echoed by comments from interviewees, which indicate that it may be useful, but take-up simply is not yet sufficiently widespread for it to make a difference. Several contractors seem never to have heard of the scheme, saying that communications about CSCS are probably lost in the large amount of 'junk mail' that lands on their desk every day.

The main problem obstructing the widespread uptake of CSCS may be cynicism caused by previous similar standardised government-driven quality schemes (such as BS5750/ISO9000), which, despite their potential benefits, were expensive, and not widely required in contracts, both in the public and private sectors. This meant that companies which *did* apply for the standard (and assumed if they only achieved the standard, it would give them a competitive edge) faced a cost disadvantage compared to firms which chose not to participate, turning many firms against

government initiatives of this type. One painting & decorating firm manager illustrated this: ‘we paid £20,000 to implement BS5750...and it’s been no use at all’. Furthermore, the fact that (currently) local authorities are only able to specify in contracts that CSCS cards for all employees are ‘preferred’ is also an obstacle to the success of the scheme - if participation is unnecessary to compete for contracts from a major provider, firms will simply ignore the scheme. However, it is planned that CSCS specification will become mandatory in the next few years for public sector contracts, at which time the scheme will have significantly more force. The similar Certificate of Training Achievement (CTA) scheme for plant operatives has been in place for around twenty years, and has resulted in much tighter safety and training standards among such hazardous occupations as crane operation.

3.5.4 Perspectives on the training system

Most firms had few complaints concerning the training situation in the region. There were, however, comments from some interviewees about the bureaucracy involved. They expressed concern over the amount of paperwork required to employ a new trainee, and access financial support available through CITB. Other general complaints focused on the activity (or perceived lack of it) among various training bodies. Several interviewees took the opportunity to point out the lack of support, especially follow-up on agreed training plans, provided by training organisations. Value-for-money issues were also raised; it is felt that the levy paid to training organisations is not being used as effectively as it might be.

The research showed, however, that only a minority of managers had wide-ranging grievances in relation to the training system. Those with *specific* complaints against training organisations seem to be the firms which actually *want* to take on more trainees, and find themselves frustrated, either by lack of money, too much administration or the time they need to invest to train workers to a suitable level of competence. Some companies resist paying reasonable rates to apprentices, resulting in young people leaving prior to completing their qualifications, which simply frustrates employers. On the whole, managers find the training options (specifically NVQs) no more than adequate, but nonetheless have to supplement this training from their firm’s budgets (e.g. the roofing company which built a training rig in its yard).

From the perspective of construction firm managers, therefore, there are two major obstacles to increasing the numbers of trainees:

(a) Some managers would still prefer the ‘old style’ of apprentice training. They have reservations about NVQs and CSCS, and on the basis of anecdotal evidence, prefer the system of past decades (when training in the industry was not supported - and thus not ‘meddled with’ - by official

agencies to the extent which it is now). As NVQs have been in operation for ten years, this view will start reducing over time.

(b) Other firms, which *were* happy with the options currently available, still reported that they rarely took on trainees. Of the nearly 150 companies which expressed satisfaction with the system, some 49 respondents (or around one-third) were not planning to take on any extra recruits in the next year.

This suggests that a more proactive approach to targeting potential firms for new trainees, along with some thought about the 'selling' of training schemes to managers, may be necessary to avoid a greater problem of skills shortages in years to come.

3.6 Information Technology

Reaction amongst construction firms to IT seems polarised: some firms embrace it wholeheartedly, whereas others are positively reactionary, only grudgingly acknowledging that updating their technology is becoming a necessity. This is exemplified by two firms. The first introduced computerised accounts just eighteen months ago, and regarded it as a major innovation. Management dismissed the idea of taking laptops on-site: *'That's what we've got phones for'*. The second is a family-run firm: *'I'm afraid we're not computerised, we've got to get into it. Now father does not want them in and I don't really and the company secretary is afraid as well.'*

Architects, surveyors and engineers all now regard computerisation as the only way to conduct their business (*'it's getting more and more efficient'*, *'there is not a drawing board in the office now'*). Others are recognising the benefits - the larger general builders tend to use a significant amount of IT. However, many are reluctant to introduce, for example, on-site laptops, and other innovative use of technology, due to the cost of the actual equipment, and of training their (on the whole) IT-illiterate tradesmen.

Some smaller firms *are* enthusiastic about IT. One relatively small firm has their own website, for example. However, most tend to follow the lead of the big companies, and stick to using IT for necessities, or where it has been specified by a larger partner firm. In practice, this amounts to IT use being restricted to accounts, e-mail (of drawings and costings, for example) and CAD.

4 Policy issues

4.1 Short-term situation

The labour demand situation among the various subsectors of the construction industry in the region can be summarised as follows:

- **General Building/housebuilding** - the medium-to-large general builders seem set to continue on their current growth path. Although some areas are starting to wane (notably commercial and public non-residential building), the rise of partnering, as well as growth in private housing and repairs and maintenance, are likely to sustain most firms for the foreseeable future. However, whether or not these firms will take on more trainees is unclear. Anecdotal evidence suggests that the larger building firms are unwilling to take on the large numbers of young people they did in the past. They prefer, effectively, to employ site managers and subcontract large portions of their business. However, there are persistent shortages in relation to all the main building trades (and especially joiners and bricklayers) with just over half of all general contractors having HTF vacancies over the past year (many of these with multiple HTF positions), although these shortages seem less pronounced in the North East than nationally. Moreover, there are few signs that this situation is likely to improve, despite recent increases in the number of trainees.
- **Specialist building** - there seem to be slightly fewer skills problems affecting the specialist trades. Around half of specialist firms have had HTF vacancies, although few have multiple positions in this category, while their needs are highly varied (as would be expected). There are, however, questions being asked about the *quality* of training (from roofers in particular), and the high level of competitive pressures on firms. Many firms are reluctant to compromise on quality, and find themselves losing out in the competition for jobs to lower-priced companies, offering inferior quality.
- **Civil engineering** - the situation seems very similar to that in specialist building. On the whole, firms seem happy with the level and quality of training, and will supplement it themselves where necessary (especially in more dangerous areas like scaffolding). Again, there have been complaints about ‘cowboy’ operators, underscoring the need for the government’s current clampdown.
- **Consultants** - there are shortages of professionals due to the current upswing and the long lead time needed to obtain appropriate qualifications, and to alter the existing courses to reflect changes in the industry. Four in ten firms have hard-to-fill vacancies, with architecture being the most problematic area. With partnering becoming more widespread, architects and engineers are likely to become more central to the entire construction process.

- **Local authorities** - Not enough responses were received to successfully comment here.

It is clear that the labour market in construction in general is currently extremely tight and, given the continuing boom in the industry, this situation is unlikely to ease in the near future. Although the situation in the North is slightly less acute than in the rest of the country, the region is still suffering from shortages of particular trades, notably joiners and bricklayers. One interviewee expressed the concern that wages for certain trades would be over £1,000pw in 2-3 years, if the situation did not change.

On the whole, most interviewees felt that, while the industry *was* changing, skills would change less, although multi-skilling is likely to become more prevalent. Many (especially the local, well-established small builders) felt that new techniques such as pre-fabrication were unlikely to make an impact in the short term⁹, except perhaps in large-scale prestige projects (hospitals, for example), with most 'routine' construction continuing to be done in much the same way. There is less resistance to new materials than to completely new ways of building things, while such initiatives as 'design and build' and partnering have been positively welcomed.

At the management/administrative end of the business, innovation is likely to continue, and the demand for IT and higher level management skills is clearly set to increase. However, on the actual sites, there is little sign of change; with little leadership from larger builders, and outright resistance to new training and construction methods from certain quarters, only the relatively small number of 'progressive' builders are likely to change the way they work.

Similarly, small specialist firms seem in no danger of dying out. Although some of the large builders are likely to take on more staff as direct employees, the smaller and medium-sized firms will attempt to continue to subcontract. It is still too soon to predict the effect the new rules on taxation will have on the situation.

Overall, there are a large of important issues facing the industry at this point. In the short-term, the most pressing seem to be (1) the shortages of certain trades, (2) the lack of young people entering the industry and (3) the 'mediocrity' of the available training i.e. it is not necessarily at the level that employers require.

One interviewee commented that the old system was, *de facto*, still in place: the five-year apprenticeship, which formally ceased in the 1960s, now consisted of 2-3 years doing an NVQ qualification, getting a grounding and co-ordinated training with the firm, followed by a further 2-3 years further co-ordinated experience, on a more informal basis. If the idea behind NVQs was the standardisation of training across the industry, then they have partially succeeded: all Modern Apprentices get the same *basic* training, which does enable them to do the job, but not necessarily

⁹ Some, remembering previous pre-fab constructions, were exceptionally hostile to the idea

to the quality demanded of them by the better employers. The expectation of companies is that the qualification should 'make the individual'. The standard of work can be achieved in the 2-3 year formal apprenticeship; however, the output to industry norms can only be achieved in the 2-3 years of informal training following this.

4.2 Looking ahead

Identifying solutions to this situation is far from straightforward. A possible seven-point scheme arising out of discussions can be proposed as a means of improving the labour market aspects of the construction industry:

- ❑ Sustainable employment - trying to guarantee *direct* jobs for a significant length of time
- ❑ A definite career route
- ❑ More robust entrance criteria
- ❑ A greater level of assistance from government agencies etc.
- ❑ Greater flexibility for employees to move between employers
- ❑ Better conditions (holidays, pensions, sick pay, facilities on site as well as a better wage)
- ❑ Tax concessions for employing more apprentices

The problem with attempting to offer long-term employment, and a definite career route, is the uncertainty of future contracts. Construction firms tend not to make long-term plans, so even if an apprentice is taken on, with appropriate grants and assistance to subsidise their training, there is difficulty in maintaining a job. On the other hand, there may be a job for them *somewhere*.

The question of whether or not to take on apprentices in a boom and bust context remains a difficult one to answer, especially when so few of the skills acquired by apprentices are transferable outside a construction environment. A possible answer is to expand partnering (as a long-term association between a contractor and larger construction firm[s]) or the basic PFI/Housing Association concept, as advocated by, among others, the chairman of Carillion in his recent public lecture at Newcastle University. In this model, a construction firm expands its horizons beyond simply building something, and undertakes to run the project for a certain number of years.

To take an example, a group could engage a firm to build on their behalf an estate and then maintain it (not necessarily just the buildings, but potentially gardens, or amenities and utilities as well). The PFI concept expands this to include providing management services for major (formerly public) projects. This would provide some sort of longer-term job security, but requires a major shift in the culture of the industry, and was regarded with mixed feelings by interviewees.

Another possibility for encouraging uptake of apprentices is a more creative use of Section 106 of the Town and Country Planning Act, which enables anyone with an interest in land, usually someone applying to develop a piece of land, to enter into a planning obligation. It is effectively a

quid pro quo - if a firm gets planning permission for their project, they have to undertake some socially beneficial work as part of the deal. Examples include providing an access road, building low cost housing, and contributing to local transport services. A possible use of this (as already undertaken by Brent and Greenwich councils) is to create employment and training opportunities for local residents, as part of major local authority capital projects, and operates with limited success in the North East.

To improve the calibre of new recruits, a more robust view is needed of what is required to enter the construction industry, especially since NVQs are perceived to be more theoretical than many entrants and companies expect, but provide a practical approach to the occupation. This relates to upskilling and multiskilling within the industry, and to marketing this to school-leavers in particular, trying to convince a larger proportion of the brighter leavers to enter the sector.

This will prove difficult without improving both the image of the sector and the remuneration earned by the average employee, key planks in any plan to improve the supply of recruits to the profession, and to retain them.

APPENDICES

Appendix 2 Occupational breakdown (% of regional total for industry), 1999

	<i>NE</i>	<i>SE</i>	<i>E</i>	<i>SW</i>	<i>Wales</i>	<i>EM</i>	<i>WM</i>	<i>NW</i>	<i>YH</i>	<i>Sc</i>	<i>GB</i>
Mgt	<i>15.7</i>	20.2	18.3	16.1	17.3	19.4	14.4	18.5	16.2	17.8	<i>17.3</i>
Prof	<i>4.7</i>	6.0	5.5	4.7	5.1	5.8	4.2	5.5	4.8	5.3	<i>5.1</i>
Bldg	<i>31.1</i>	29.1	30.3	34.0	32.2	30.6	36.7	30.3	30.7	33.9	<i>31.6</i>
Spec bldg	<i>7.6</i>	7.9	8.0	8.8	8.0	7.8	7.9	7.6	7.9	6.7	<i>7.6</i>
CE	<i>14.2</i>	13.1	13.4	12.7	13.1	12.9	12.8	13.2	13.9	12.3	<i>12.7</i>
Bldg svces	<i>18.9</i>	16.9	17.5	16.7	17.2	16.5	17.0	17.6	18.8	17.1	<i>16.7</i>
Other	<i>7.8</i>	6.7	7.0	7.0	7.1	6.9	7.0	7.3	7.7	7.0	<i>8.9</i>

Source: *Construction Employment and Training Forecast*, CITB, 1999

Appendix 3 Top 20 construction companies regionally, ranked by pre-tax profit (1999-2000)

Firm	Location	Pre-tax profit ('000s)	No of emps
Barratt Developments plc	Newcastle	112000	2941
Bellway plc	Newcastle	68177	1527
Cussins Property Gp plc	North Shields	3254	451
Universal Sealants (UK) Ltd	Gateshead	1922	159
Volker Stevin (UK) ltd	Gateshead	1303	347
Hertel (UK) Ltd	Middlesbrough	1027	1114
Richard Irvin & Sons ltd	North Shields	1024	429
Bals Electrical Engineering Ltd	Ashington	952	133
Dane Architectural Systems Ltd	Newcastle	940	80
John G Gray (Homes) Ltd	Berwick	858	N/a
Chieftain Insulation Ltd	Newcastle	840	138
Heerema Fabrication Gp (UK) Ltd	Hartlepool	820	196
Harbour & General Works Ltd	Gateshead	675	319
Seymour (Civil Engineering Contractors) Ltd	Hartlepool	514	122
Pennine Windows (Home Improvements)	Newcastle	434	158
DW Tilley Ltd	Newcastle	420	60
Veale-Nixon Ltd	Newcastle	379	66
Durastic Ltd	Wallsend	328	74
Rotrax Engineering Services Ltd	Middlesbrough	323	171
Colmil Plant & Equipment Company Ltd	Gateshead	316	N/a

Source: Business Review North, June 2000, based on an Experian survey

Appendix 4 Top Construction Firms (by turnover)

Some twelve construction firms were featured in the latest Top 200 North East companies, ranked in terms of turnover:

Firm	1999 emp	1999 t/o	1999 rank	Area
Barratt	2,900	1,008,800	7	Tyne & Wear
Bellway	1,527	504,000	11	Tyne & Wear
Tolent	470	89,043	37	Tyne & Wear
Hertel	1,400	44,000	82	Cleveland
Bowey	329	40,749	88	Tyne & Wear
C A Group	246	32,182	111	Durham
Yuill Group	203	30,634	116	Cleveland
Pyeroy	500	26,000	130	Tyne & Wear
Hathaway Roofing	156	27,454	126	Durham
Lumsden & Carroll	200	18,542	166	Durham
Dane Group	234	20,900	152	Durham
Rite Vent	210	12,500	199	Tyne & Wear

Source: *The Journal*, May 18, 2000

Note: These companies accounted for a turnover of £1.86m, out of the Top 200 total of £23.5m, around 7.9%, compared with 7.4% in 1998. Their average turnover was £154.6m, compared to the average turnover for all Top 200 firms of £117.7m.

Appendix 5 Questionnaire

1. What contracts is your firm involved in? (✓ all that apply)

	Public	Private	PFI
Residential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial (offices/shops)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Repairs/maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How has your workload changed compared with twelve months ago?

- Increased Decreased
 Remained unchanged

3. How do you anticipate your workload changing over the next 12 months?

- Increase Decrease
 Remain unchanged

4. How many people are *directly* employed by the firm?

5. Of these, how many are:

male full-time	<input type="text"/>	female full-time	<input type="text"/>
male part-time	<input type="text"/>	female part-time	<input type="text"/>

6. How many of these employees are employed on a *temporary* basis?

7. How many *self-employed* workers are currently under contract to your firm?

8. How many workers in each of the following categories are employed by your firm?

Management/admin staff	<input type="text"/>	Professionals/technicians (Architects, engineers, quantity surveyors)	<input type="text"/>
Building trades (Carpenters/bricklayers/painters/plasterers)	<input type="text"/>	Specialist building trades (Roofers/floorers/glaziers etc.)	<input type="text"/>
Civil engineering trades (Scaffolders/plant operatives & mechanics/steel erectors)	<input type="text"/>	Building services (Electricians/plumbing etc. engineers)	<input type="text"/>
Other	<input type="text"/>		

9. How is employment at your firm likely to change in:

- (a) the next six months? Increase Decrease Remain unchanged
(b) the next 12-18 months? Increase Decrease Remain unchanged

10. Which trades and professional occupations, and how many workers in each, are you most likely to be recruiting?

.....

.....

11. Have you had any hard-to-fill vacancies over the past 12 months? Yes No

If YES, which trades/professional occupations have you had difficulty recruiting?

.....

12. Do you have any outstanding unfilled vacancies? Yes No
 If YES, how many, and in which occupations?

13. Have you recruited workers whose skills were not up to the standards you require? Yes No
 If YES, in which occupations are these skills problems particularly severe?

14. Which recruitment methods do you employ, and for which occupations? (tick all that apply)

	Mgt/admin staff	Prof/technicians	Bldg trades	Specialist bldg trades	Civil eng trades	Building svces
JobCentres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newspaper adverts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recruitment agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contacts through workforce	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Are the skills of your existing employees: Inadequate? Adequate? More than adequate?
 In which areas of their work would you say they are inadequate?

16. Have you recruited any school-leavers over the past 12 months? Yes No
 If YES, how many, and in which occupations?

17. Have you recruited any graduates over the past 12 months? Yes No
 If YES, how many, and in which occupations?

18. Have you made use of/plan to use, any of the following programmes/training providers? (tick/provide figures)

	Used in past yr	No. of workers covered	Plan to use	Not aware of programme
NVQs	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Modern Apprenticeships	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Deal	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investors in People	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
TECs	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Further education institutions	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Higher education institutions	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private training providers (please specify)	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Does the available training meet your needs? Yes No
 If NO, please give details

20. Do you participate in the construction skills certification scheme (CSCS)? Yes No

21. Do your contracts actually stipulate CSCS as a requirement? Yes No

22. Would you be willing to be contacted again as part of a follow-up to this questionnaire? Yes No

Appendix 6 List of acronyms

GDP	Gross Domestic Product
LMI.....	Labour Market Information
SME.....	Small-to-Medium Enterprise
HR	Human Resource(s)
FE	Further Education (post-16 education and training, except in universities)
HE.....	Higher Education (in universities)
TEC	Training and Enterprise Council
CITB.....	Construction Industry Training Board
ES	Employment Service
LFS	Labour Force Survey
AES.....	Annual Employment Survey
DETR.....	Department of the Environment, Transport and the Regions
FMB.....	Federation of Master Builders
RICS	Royal Institution of Chartered Surveyors
ONS	Office of National Statistics
NOMIS	National Online Manpower Information Service
LRD	Labour Research Department
NVQ.....	National Vocational Qualification
FEFC.....	Further Education Funding Council
PFI	Private Finance Initiative
HTF	Hard-To-Fill (vacancy)
CAD.....	Computer Aided Design
IT	Information Technology
CPD	Continuing Professional Development
IIP	Investors In People
CSCS	Construction Skills Certification Scheme
CTA	Certificate of Training Achievement

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