

P R E C *i* S

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No 6

Scotland's Construction Industry: skills needs and access to opportunity

By 2005 it is estimated that Scotland's construction industry will need an extra 27,000 recruits due to a projected significant increase in construction investment associated with the New Housing Partnerships, school building programmes, infrastructure developments and major commercial projects. This wide ranging study of Scotland's construction industry found that there is already a skills shortage in the industry and that this is likely to intensify. To tackle the skills shortage, it will be essential to take a harder look at how skills are generated for the industry, with a greater emphasis on more specialist skills training. It will also be important to widen the industry's recruitment base to bring in more recruits from socially excluded groups.

The main findings of the research were:

- Increased construction investment in Scotland over the next five to six years will lead to widespread skill shortages, particularly in the manual trades.
- Changes in the industry's processes have led to an increased demand for more specialist trades, but the training infrastructure is not adapting quickly and fully enough to the new demands.
- The negative image of the industry is a barrier for many potential entrants.
- Women and ethnic minorities are seriously under-represented in construction.
- The industry tends to recruit only to a limited extent from more excluded groups and regeneration areas, particularly for entry into apprenticeships.
- In purchasing construction services the public sector needs to seek 'best value' through partnering, rather than going for lowest price contracting, to promote the development of the skills base and the recruitment of more people from excluded groups.
- Addressing these issues requires comprehensive and co-ordinated activities at the national, sub-regional and local levels if the skill needs of the industry are to be met and the potential of excluded groups to help supply the labour needs of the construction industry is to be realised.



SCOTTISH EXECUTIVE



Scottish Enterprise



Glasgow

Policy context

The construction industry is a major contributor to Scotland's economy. A substantial ramping up of construction investment is forecast. In part, this will be driven by the investment programmes of New Housing Partnerships, many of which will focus on groups of the population most at risk of social exclusion, living in neighbourhoods in need of regeneration.

Coming on top of a period of sustained reduction in unemployment, this higher level of construction investment poses both challenges and opportunities:

- the challenge is to find the labour supply with the appropriate skills to meet these increased demands;
- the opportunity lies in the new jobs, many of which could go to excluded people traditionally not recruited in significant numbers by the construction industry;
- the prize is to meet simultaneously the challenge of supplying the skills needed by realising the opportunities for employing more people from excluded groups.

Challenge and opportunity

Construction faces a potentially serious shortage of skilled labour

The research evidence suggests a potential skills crisis:

- The Construction Industry Training Board (CITB) project a need for nearly 5,500 new entrants per annum into construction in Scotland up to 2005.
- Although the numbers training as apprentices have risen, the increase falls short of the growth in potential demand, and the trainees will take time to come through given the 4-year training period.
- By 2005, the Scottish construction industry could be short around 4,000 workers in the main building trades alone.
- The labour market will be particularly tight in the west of Scotland due to the potentially high level of construction investment in Glasgow... but it is already stressed in the Edinburgh area due to the buoyancy of the local economy.

- The situation in Scotland is made worse by the expectation of a general tightening of all regional construction labour markets in the UK.

- It will not be possible to address this increasing gap purely by raising the numbers going through the traditional apprenticeship system. The time lags are too great and the recruitment base for apprenticeships is too narrow.

The construction industry recruits from a limited section of the population

A number of studies have shown that the construction industry tends to recruit its workforce from a relatively narrow section of the working age population:

- The proportion of women employed in construction is 8.6%, up only modestly from 8.4% in 1990.
- The proportion of the construction workforce from ethnic minorities is 2.3%, although they make up 5.4% of all economically active adults.
- In 2000, around 4% of first year trainees were female and 5% from minority ethnic groups.
- For skilled manual entry, the industry's preference is for male school leavers with a reasonable level of qualifications.
- The industry tends not to recruit from more excluded groups such as the longer term unemployed and residents of regeneration areas.
- Although a number of innovative approaches have been developed, the numbers of excluded people assisted into the industry have been relatively low.

Reasons for looming skills shortage

There is no single factor behind the industry's recruitment and training problems. Below we list the main factors identified by the research.

Lack of awareness of the opportunities in the construction industry

One of the factors restricting interest in the construction industry may be the failure to perceive the growing employment and training opportunities on offer. For example,

research with New Deal clients and their personal advisors found that only 42% of advisors and only 48% of their clients anticipated a growth in construction job opportunities.

Negative image of the construction industry

The negative image of the construction industry is a barrier for many potential entrants. There are issues here about the attitudes and knowledge of the gatekeepers – guidance teachers, careers advisors etc. – who influence the flow of people towards construction training and employment. A significant proportion of young people, New Deal clients and residents of Social Inclusion Partnership (SIP) areas had concerns about:

- pay levels;
- the unreliability of the jobs;
- the 'heavy' and 'outdoors' nature of work.

The changing nature of the industry and its processes are certainly at odds with the last of the three main concerns listed above, and the temporary nature of construction contracts might be less of a problem where the labour market is tightening.

Changing skills demands, but traditional approaches to training

Around 80% of the manual skills required by the industry are created through the 4-year apprenticeship system. However, the industry is changing in terms of products and processes, with a significant move from building towards assembly of manufactured components on site, leading to an increasing demand for more specialist skills. Although training takes place within the construction industry around the development of more specialist skills:

- the framework for doing this does not appear to be sufficiently comprehensive and responsive to the speed of change of traditional jobs;
- the ladder of skills progression for existing employees within the industry is not sufficiently well constructed, and so their potential is not maximised.

Traditional approaches to contracting

The traditional emphasis by public and private sector clients buying construction services is on low cost and not best value. In addition, contracts are typically let on a one-off and on a relatively short-run basis.

The implications for skills are that:

- investment in training is squeezed by the need to submit low cost tenders;
- short term contracts militate against making longer term training investments.

Fragmented nature of the construction industry

A major trend in the construction industry over time is the substantial shift from direct employment to self employment. The industry is also bedevilled by 'cowboy' businesses with low standards, using inadequately skilled labour. There are a number of implications for investment in training:

- allied with the emphasis on least cost in tendering situations, contractors and subcontractors making significant training investment and/or using a high proportion of direct employees are at a cost disadvantage;
- the large number of self employed in the workforce reduces the amount of levy that can be raised by CITB to support investment in training.

Reasons for limited recruitment of excluded people

The other major factor limiting skills supply to the construction industry is the low number entering the industry from more excluded localities and groups of the population. The reasons for this are summarised below.

Employer perceptions of unemployed and other excluded groups

Employer perceptions of the long-term unemployed and other excluded groups are often negative, with concerns about reliability, drink and drugs problems and poor literacy and numeracy skills.



Traditional approaches to skilling

Entrants are predominantly 16/17 year old school leavers, with very limited recruitment from the adult unemployed. Qualifications required and trade tests set by the CITB, other training bodies and construction employers can raise barriers against young people with poor qualifications and limited basic skills.

Traditional approaches to contracting

The emphasis on least cost makes it difficult for contractors and subcontractors to take risks with recruiting excluded people. Additionally, the focus on short-term contracting feeds through into temporary job contracts which are a major problem for unemployed people coming off benefits.

Fragmented nature of the construction industry

The predominance of small firms means few can offer human resource or any other supports to recruits with potential problems, and the intensive cost competition in the industry gives workers little time to get up to speed.

Limited subcontractor base in SIP areas

Because such a high proportion of employment in construction is provided by very small subcontracting businesses, areas without this network of businesses tend to lose out on employment opportunities.

Limited effectiveness of existing programmes for excluded people

Little effective use is made by the construction industry of major government programmes such as New Deal, and linkages between group-based inclusion programmes such as New Deal and area-based regeneration initiatives appear to be limited. Additionally:

- contractors and subcontractors complain that the staff of some of the agencies do not know enough about the industry;

- some training interventions for the unemployed are poorly designed with no or insufficient on-site experience, little or no industry input and failure to focus sufficiently on the pace of work required.

Meeting skill needs and widening access to the construction industry

Raise awareness of the growing job opportunities in the construction industry

Construction businesses, training organisations and other industry stakeholders need to convey more effective messages about the nature and volume of employment opportunities in the construction industry. Staff involved in careers guidance activities in schools, colleges, careers services, local initiatives and the Employment Service also need to be more up to speed on the opportunities currently and prospectively available in the construction industry.

Improve the industry's image

The employers in the construction industry need to lead on the development of a promotional campaign highlighting:

- the changing nature of the industry;
- the changing types of jobs in the industry.

Major industry players need to deploy some of the resource and expertise they currently devote to marketing their own companies in selling the industry to its potential future workforce. Again, there is also a duty on the main careers guidance organisations to ensure that their staff are up to speed with the changing nature of work in the construction industry.

Promote Equal Opportunities

Work on changing the perceptions of the industry needs to be supported with innovative projects that seek to actively engage women and ethnic minorities, and generate role models. It may be that the partnering approach can be used to drive equal opportunities into the construction industry.

Respond to the changing nature of jobs and skills

The industry

There needs to be a more structured approach to generating the more specialist skills increasingly in demand. This should build upon modules within the apprenticeship curricula, facilitate accredited up-skilling of existing employees and open up access to more individuals from excluded groups. This should lead to the creation of a more effective 'skills escalator' for the construction industry with opportunities:

- to enter at a number of different levels, catering for a variety of backgrounds, experience, aptitudes etc;
- to progress upwards once in the industry:
 - from specialist skills to trade status;
 - from trades to supervisory/management positions.

These things happen – but not enough and not within a sufficiently well developed quality framework.

Clients

Major clients have the scope to influence skills developments and investment by insisting that the construction services they buy are delivered by appropriately skilled and certificated workers. This fits closely with the concept of contracting on a partnering basis, rather than for least cost. Given the substantial projected increase in construction investment in the city, Glasgow City Council is already working with local construction employers to test the development of a more extensive qualification framework for some of the newer, more specialised skills.

Design more effective inclusion interventions

Connect more effectively with intermediary organisations

Intermediary organisations, such as SIPs and the CITB, need to be mobilised more effectively to help socially excluded groups access the construction industry. This could involve:

- local development companies, locally based housing organisations involved in employment initiatives and possibly some of the thematic SIPs bringing forward good quality and well prepared candidates for skills training in the industry;
- working with the CITB and other relevant training organisations who would test the aptitudes and proficiencies of candidates, and then place them within the employing community;
- most of the funding should come through existing routes (e.g. Modern Apprenticeships), but there would be a need for resourcing support for the local initiatives and SIPs to provide a quality service linking into excluded groups and communities;
- the working relationships between the local initiatives, SIPs and the training organisations would be effectively a new intermediary-type partnership.

The approach could be piloted in a number of localities to develop the most effective processes.

Create a focus on construction

Because of the highly specialist nature of the construction industry, there is scope for a more focused approach to accessing construction opportunities for excluded people. This could be designed around New Deal, but synergies with other programmes (e.g. Training for Work, SIPs, etc) should be exploited. A strategic focus on major developments such as housing stock transfer would help galvanise the effort.

The key elements of this approach should include the following.

- Developing a fuller understanding of the construction industry's skill needs. This understanding has to pervade all levels in the organisations involved in New Deal, and other relevant programmes.
- Engaging the industry at as early a stage as possible, and keeping them on board in a range of practical ways, for example selecting trainees, briefing PAs, etc.
- Focusing on the skills that New Deal and other programmes can help create.
- Encouraging the industry and its

- training organisations to upgrade the existing workforce, with New Deal and other programmes backfilling.
- Evaluating more rigorously construction-related activities (e.g. intermediate labour markets (ILMs), college provision, etc), and disengaging or re-designing where these do not shape up.
- Identifying and removing barriers experienced by inclusion initiatives trying to link up with the various New Deals.
- Simplifying the New Deal interface with employers by having staff who 'account manage' the construction industry.

Develop the subcontractor base in SIP areas

There will be extensive work for smaller subcontractors in the capital and maintenance programmes associated with both the housing and non-housing investment projected for the coming years. This will mean substantial opportunities for construction businesses. Consideration needs to be given to construction-related business development initiatives in localities where there is expected to be a significant ramping up of construction investment. These might involve improving the capacity of construction companies to compete for business, and supporting the expansion of small firms and/ or the upskilling of the current workforce.

Generate more value from repair and maintenance expenditure

A number of actions are required in order to exploit the potential of repair and maintenance expenditure. These would include a number of the following:

- Registered Social Landlords (RSLs) coming together to let their maintenance contracts on a collective basis, looking for inclusion gains at the same time;
- working more effectively with small businesses located in or close to socially excluded localities with a view to raising their capacity;
- linking together local clients (for example RSLs), local initiatives and local schools to raise the number of young people from

socially excluded localities accessing apprenticeship opportunities.

These actions are best taken forward at the local level. The pending council housing stock transfer may create significant opportunities for implementation of these approaches.

Move more quickly towards partnering and best value contracting

Major clients

The influential Egan Report recommended the development of longer term partnering relationships between clients and contractors, as this provides greater long term value for money. Public and private sector clients can promote investment in skilling and recruitment from more excluded groups by:

- awarding contracts on best value rather than lowest cost basis;
- stipulating that contracts have to be delivered by contractors and subcontractors using direct employees, as opposed to the self employed;
- setting a minimum required skilled content for the workforce of contractors and subcontractors;
- spreading work put out to tender more evenly throughout the course of the financial year to provide subcontractors with continuity of work;
- letting longer term contracts on a partnering basis.

Scottish Parliament

Although the onus here is on major public and private sector purchasers of construction services, government can help. For example, clear guidance needs to be given to housing associations and local authorities in terms of what they can and cannot do in tendering situations. This relates to:

- the need or otherwise to accept lowest cost tenders;
- the capacity to set stipulations for contractors in terms of, say, a requirement to take on x apprentices or have y% of the project workforce as direct employees.

Create an appropriate national framework for a modern construction industry

Westminster Parliament

An appropriate and effective national framework is the essential underpinning of the more localised attempts to deal with skills supply and inclusion issues - and also the prerequisite of success in securing long-term value for money in the delivery of construction services. Issues where more effective national action is required include:

- securing a shift within the construction industry from bogus self-employment to direct employment;
- revisiting the case for compulsory registration of construction businesses to secure quality standards in an industry bedevilled by 'rogue traders', or finding other mechanisms for driving up the quality of the companies delivering construction services.

Overview of required actions

Although presented as a list of specific recommendations, we believe that the key to success is to implement these as a set of interventions. We are convinced that:

- action at the national level in terms of legislative or other effective frameworks of quality assurance set an operating context within which interventions at lower levels can be prosecuted more effectively;
- at sub-regional or city levels there is scope for more collective responses involving a range of stakeholders tackling skills and inclusion issues simultaneously;
- at local levels inclusion initiatives have the drive and inventiveness to formulate new solutions which open up wider access to the construction industry for their clients. However, they need an effective framework within which to operate and are dependent on appropriate action at sub-regional and national levels.

Our recommendations have tried to integrate this complex set of requirements with a view to meeting the long term needs of the construction industry, at the same time providing excluded sections of the

population and their families with access to good quality employment opportunities.

The way forward

This research has informed the deliberations of a working group drawn from key players in the public sector and the construction industry. The working group was co-ordinated by Communities Scotland at the request of the Scottish Executive and it is anticipated that a final report will be submitted to Ministers early in 2002.

Communities Scotland will continue to be involved in this work in addition to progressing the modernising procurement agenda and supporting RSLs to develop employment initiatives as part of their non-housing activities.

Scottish Enterprise Glasgow, in partnership with the Glasgow Housing Association, has set up a multi-agency group to examine the potential benefits arising from the proposed Glasgow housing stock transfer, to ensure that these are maximised for both local people and businesses. Of particular relevance are the current skill levels of the unemployed and access for those excluded from the labour market to potential employment opportunities. This will include consideration of a construction related business development initiative for the city to win extra work for the city's businesses and make the most of job gains in the Glasgow area.

As previously mentioned, Glasgow City Council is already working with local construction employers to test the development of a more extensive qualification framework for some of the newer, more specialised skills.

About the study

The study involved a comprehensive review of labour demand and supply trends in Scotland's construction industry, with a detailed focus also on the Glasgow economy. As well as analysing statistical data, interviews and workshops were held with a wide range of construction industry



stakeholders, including businesses, training bodies, development agencies and other players. Surveys and discussion groups were also held to capture the images of the industry held by school students, unemployed people on New Deal and residents of SIP areas, as well as the individuals providing them with careers guidance. Finally, a set of detailed case studies of construction-related initiatives was prepared. The fieldwork was carried out during the first six months of 2001.

The study was carried out by Alan McGregor, Andrea Glass, Malcolm Greig, Anne Lavery and Lynne Macdougall of the Training and Employment Research Unit at the University of Glasgow.

The research was sponsored by the Scottish Executive, Scottish Enterprise, Glasgow City Council and Communities Scotland who also managed the project on behalf of the sponsors.

Related research

The following research publications consider related issues:

House Building and Maintenance and the Highlands and Islands Economy, May 2001, Scottish Homes Precis 132.

Employment Creation through Public Investment in Housing, Apr 2000, Scottish Homes Research Review Nr 3.

Backward Linkages, Housebuilding and the Scottish Economy, Nov 1996, Scottish Homes Precis 55.

The Scottish Housebuilding Industry: Opportunity or Constraint, Dec 1995, Scottish Homes Precis 34.

Further Information

A complementary report by the Fraser of Allander Institute at the University of Strathclyde entitled "Market Capacity of Scottish Construction Industry and Potential for Training and Employment Initiatives" is available for reference in the libraries of Communities Scotland (Edinburgh) and Scottish Enterprise (Glasgow).

For copies of the following five reports by the Training and Employment Research Unit:

Skills needs and access to opportunity

Construction-related employment initiatives

Working in the construction industry: perceptions and realities

Skills and recruitment issues for construction businesses

College-based courses and construction industry skill needs

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