

# Training and the Built Environment 2013





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## Introduction

CITB is the Construction Industry Training Board and a partner in ConstructionSkills, the Sector Skills Council for the UK construction industry. This partnership delivers truly UK-wide policies and strategies that take account of the full breadth of the industry and its training, education and development needs. CITB's mission for the industry is to ensure **'right skills, right place, right time' for the construction industry in order to achieve a fully skilled and professional UK construction industry, working safely and delivering value.**

To achieve this, CITB needs to deliver the Sector Skills Agreement (SSA) that has been developed and agreed with stakeholders across government, industry and education<sup>1</sup>. The priorities identified are;

<b>Leadership Challenge</b>
Providing industry leadership on skills and leadership training for employers <ul style="list-style-type: none"><li>➤ Working across the industry to raise investment in skills</li><li>➤ Using our well-respected research data on future skills needs to influence Government policy</li><li>➤ Addressing employers' leadership and management needs</li><li>➤ Developing industry standards to improve Fairness, Inclusion and Respect</li></ul>
<b>Productivity Challenge</b>
<ul style="list-style-type: none"><li>➤ Helping our industry to compete</li><li>➤ Working to qualify experienced workers</li><li>➤ Improving health, safety and environment awareness and competence on site</li><li>➤ Helping employers' review their business skills needs and improve them cost-effectively</li><li>➤ Establishing productivity benchmarks for the industry</li><li>➤ Developing guidance on Building Information Modelling (BIM) and facilitating improved knowledge and skills for employers</li></ul>
<b>Low Carbon Challenge</b>
<ul style="list-style-type: none"><li>➤ Building knowledge on industry's future skills needs and sharing practical solutions</li><li>➤ Working to influence over policy and funding for low-carbon skills</li></ul>
<b>Employer Engagement Challenge</b>
<ul style="list-style-type: none"><li>➤ Promoting investment in training and development</li><li>➤ Diagnosing skills needs and identifying solutions</li><li>➤ Working with all types of employer groups to reach more businesses</li></ul>

<sup>1</sup>CITB, Sector Skills Agreement, <http://www.citb.co.uk/About-us/Who-we-are/Our-role-construction-industry/#OurStrategicPlan-SectorSkillsAgreement>



### Recruitment and Retention Challenge

- Keeping the pipeline of talent flowing
- Promoting and delivering apprenticeships
- Influencing the construction-related curriculum
- Working to support undergraduates
- Information, advice and guidance on qualifications and careers for potential recruits, parents, guardians and advisors
- Researching methods to increase employer confidence in the quality of training provision

### Education and Training Challenge

- Working with providers to deliver 'right skills, right place, right time'
- Working with providers to ensure industry's current and future skills needs are met with efficient, affordable and high quality training
- Using our authoritative understanding of skills provision to influence government funding
- Developing innovative ways of working with schools, colleges, and universities to stimulate interest in careers in the built environment

Research provides facts about the industry. These details then form the building blocks for change and improvements in performance for those who use and work in construction. CITB undertakes a regular programme of research that aims to identify the skills needed to improve the construction industry's competitiveness.

As part of the research programme, the **Training and the Built Environment Report** provides a complete picture of training in the built environment.

The main sections of the report are:

**Section 1: Trainee Numbers Survey 2012/2013** presents data collected on a voluntary basis from colleges, private training providers and construction industry training centres across Great Britain on the number of people entering construction training. These include those coming through CITB's own managing agency and those entering other formal certificated training at craft and technical level.

The Trainee Numbers Survey collects data on the number of first year trainees starting construction and built environment courses by qualification and by qualification level. This data is then translated into 23 occupational groups taken from the Construction Skills Network<sup>2</sup> (CSN). The translation of the first year trainee data from qualification to occupational groups allows us to examine the potential supply from training for these occupational groups and also enables comparison with the CSN employment forecast which is covered in Section 2.

**Section 2: Forecasted Demand for Craft and Technical Construction Training 2013–2017** analyses this training data alongside the CSN projected demand for skilled construction workers over the forecast period 2013–2017, in order to assess the adequacy of current training provision in terms of quantity.

<sup>2</sup> Construction Skills Network, Blueprint for UK Construction Skills 2013 to 2017  
<http://www.citb.co.uk/Research/construction-skills-network/summary-outputs/>



**Section 3: Construction Training Capacity 2012/2013** summarises the findings of the capacity questions from the Trainee Numbers Survey, which aims to determine the total capacity for skilled manual trades training that is currently available.

**Section 4: Higher Education in the Built Environment** presents data from the Higher Education Statistics Authority (HESA) on student enrolments on construction and the built environment degree courses in the academic year 2011/2012.



## Summary

- The number of first year trainees is just over 21,000; this is below the level reached in the 1990's recession.
- Wood trades and Bricklaying are the largest occupations in terms of absolute numbers for the sixth year running.
- The majority of first year trainees (50%) are undertaking Level 2 qualifications and a further 29% are undertaking Level 1 qualifications.
- The regions with the highest proportions of trainees overall are Yorkshire and Humber (18%) and the West Midlands (17%).
- The proportion of first year trainees commencing S/NVQ's has continued to decrease and is now just 31%.
- 59% of first year trainees undertaking a Level 2 or Level 3 qualification are starting an apprenticeship.
- Scotland has the largest share of apprentices accounting for 18% of all apprentices.
- Continuing a trend seen since 2006/07 57% of first year trainees are aged 18 and under.
- The proportion of female first year trainees is 3%, as has been the case for 8 years.
- The proportion of first year trainees from an ethnic minority background is 5%, which is consistent with their representation in the construction workforce.
- When comparing predicted demand and the amount of training taking place it is clear that the numbers coming through on Level 2 and Level 3 S/NVQ's are insufficient to meet the predicted demand for all of the four main trades.
- Areas of particular concern on supply from training are glaziers and steel erectors/structural as the survey has recorded no trainees coming through these occupations this year and very small numbers over the past two years.
- Applicant numbers have significantly decreased from 33,000 in 2010/2011 to just over 19,000 in 2012/2013.
- For the skilled manual trades the average ratio of applicants to starters is 1.2 to 1.
- The most oversubscribed trade is bricklaying with a ratio of 1.3 applicants per starter.
- Training providers report that the biggest constraints on expanding their provision relate to funding or the lack of employer places for S/NVQ's and Apprenticeships.
- In 2011/2012 23,763 students enrolled on higher education courses in construction and the built environment; over half of these were studying for a first degree.
- The most popular subject at higher education level was Building, accounting for 30% of all students.
- For the eighth year running Architecture has been the most popular subject with female students accounting for between 45% and 50% of all female students.



## Section 1: Trainee Numbers Survey 2012/2013

Section 1 examines the data obtained from the 2012/2013 Trainee Numbers Survey conducted by CITB, and includes analysis of this year's data as well as reviewing data collected in previous years, enabling the identification of any trends or patterns. The survey, conducted on a voluntary self-completion basis, is repeated annually and covers colleges, private training providers and construction industry training centres across Great Britain. The survey collects data on the number of first year trainees starting construction and the built environment courses by qualification and qualification level.

The results of the Trainee Numbers Survey are examined in the following sub-sections;

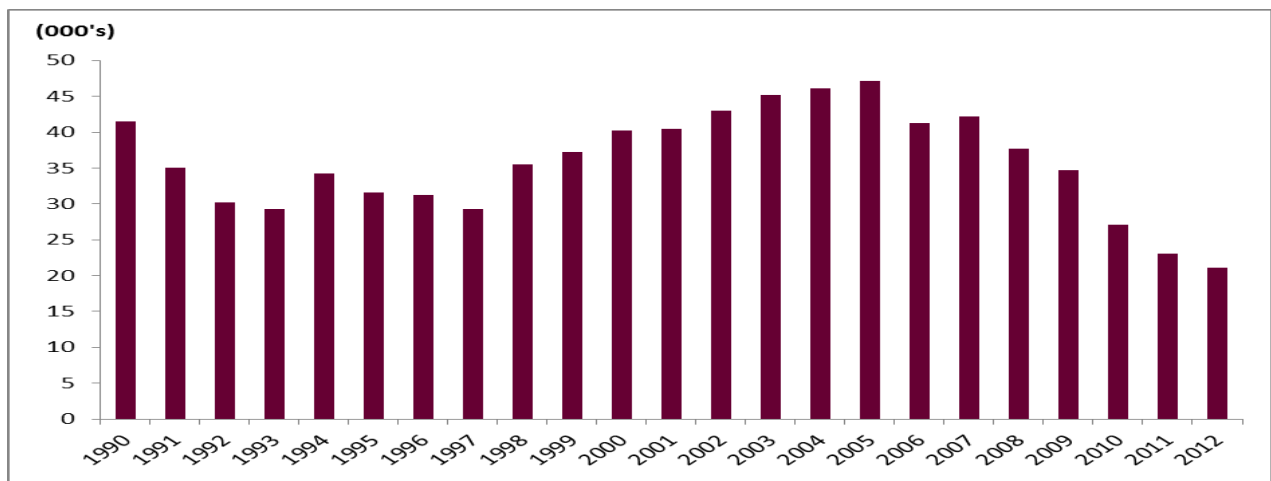
- 1.1 The national picture of trainee numbers
- 1.2 Training by occupation – looking at trainee numbers by occupational groupings
- 1.3 Training by qualification level
- 1.4 Geographical analysis
- 1.5 Trainee progression prospects
- 1.6 Mode of study – S/NVQ versus Diploma/Certificates
- 1.7 Apprenticeships – looking at the numbers of trainees starting apprenticeships
- 1.8 First year trainee characteristics; analysis by age, gender & ethnic minority.

### 1.1 The national picture

As can be seen in Chart 1 the numbers of first year trainees starting construction and the built environment courses has continued to decrease this year. At just over 21,000 numbers have now reached a level that is below that of the 1990's recession. Indeed since 2007 (just prior to the recession) the number of first year trainees has halved.

In 2012 the UK economy was badly affected by the sovereign debt crisis in the Eurozone with output estimated to have declined by 9%. With very muted growth forecast for the industry over the next five years (less than 1% per year) and a forecast decline in employment<sup>3</sup> the fall in trainee numbers is likely to continue.

Chart 1 – Numbers of first-year trainees 1990–2012 (Great Britain: All occupations)



**Notes:** Due to changes made to data collection during 2004/2005, the total first-year intake displayed in the chart for years 1999 onwards does not include trainees undertaking a mechanical engineering course.

Since 2010 some additional clarification instructions were added to the questionnaire in an effort to ensure that training undertaken by the existing workforce (such as upskilling via Train to Gain) is excluded from this survey.

<sup>3</sup> Construction Skills Network, Blueprint for UK Construction Skills 2013 to 2017

<http://www.citb.co.uk/Research/construction-skills-network/summary-outputs/>



## 1.2 Training by occupation

This sub-section analyses the first year construction and built environment trainee numbers data according to the 19 occupational groups used by the Construction Skills Network<sup>2</sup>. This data is obtained by taking the qualification data collected by the Trainee Numbers Survey and translating the qualifications into the 19 occupational groups used by the CSN. This data provides the potential supply of trainees for specific occupational groups (see Table 1), and enables comparison with the CSN employment forecast which is covered in Section 2.

Table 1 shows the number of first year trainees starting construction and the built environment courses across Great Britain for the year 2012/2013 by occupational group.

Table 1 – Numbers of first-year trainees 2012/2013 (Great Britain)

Occupation	Under 18		Over 18		Total
	Male	Female	Male	Female	
Construction Managers	<50	0	381	<50	<b>406</b>
Wood trades and interior fit-out	4,510	<50	2,134	<50	<b>6,725</b>
Bricklayers	2,942	<50	1,009	<50	<b>3,987</b>
Painters and decorators	1,187	154	507	111	<b>1,959</b>
Plasterers and dry liners	1,172	<50	761	<50	<b>1,964</b>
Roofers	78	0	129	<50	<b>208</b>
Floorers	65	<50	122	<50	<b>195</b>
Glaziers	0	0	0	0	<b>0</b>
Specialist Building operatives nec*	254	<50	307	<50	<b>569</b>
Scaffolders	60	0	443	0	<b>503</b>
Plant operatives	<50	0	1,105	<50	<b>1,167</b>
Plant mechanics/fitters	89	<50	243	<50	<b>343</b>
Steel erectors/structural	0	0	<50	0	<b>&lt;50</b>
Logistics	0	0	0	0	<b>0</b>
Civil engineering operatives nec*	993	<50	537	<50	<b>1,583</b>
Civil engineers	95	<50	124	<50	<b>268</b>
Other construction professionals and technical staff	240	<50	765	77	<b>1,101</b>
Architects	0	0	72	<50	<b>86</b>
Surveyors	0	0	69	<50	<b>81</b>
<b>Total</b>	<b>11,736</b>	<b>315</b>	<b>8,721</b>	<b>386</b>	<b>21,158</b>

\*nec = not elsewhere classified

Since 2007/2008 there has been an annual decline in first year trainee numbers, and this trend has continued in 2012/2013 with the majority of occupations seeing lower numbers than last year.

This year the occupational group with the largest decline in first year trainee numbers is Bricklayers, having reduced by 464 since last year. This may be a reflection of the increasing use of other building materials and off site construction.

In 2012/2013 there are four occupational groups that have seen an increase in first year trainee numbers; construction managers (plus 48), plasterers and dry liners (plus 243), specialist building operatives (plus 326) and plant mechanics/fitters (plus 73). The increase in numbers of plasterers and dry liners is mainly attributed to one college in Wales and two colleges in the West Midlands reporting higher numbers of students than they did last year.

The increase in numbers of specialist building operatives may be partly attributable to a change in official coding from SOC2000 to SOC2010. Under SOC2000 80% of construction operatives were classified under specialist building operatives nec\* with the remaining 20% going to civil engineering operatives nec\*. Under SOC2010 100% of construction operatives are classified as specialist building operatives nec\*. In addition to this the number of students reported as starting construction operative courses in the West Midlands, North East and South West has increased in 2012.





Table 2 shows the top ten occupational groups in terms of absolute numbers of first year trainees starting training in those occupations in descending order for 2012/2013. The table also shows the number of trainees in each occupational group over the last 5 years for comparison.

Table 2 – Comparison of first-year trainee numbers in the top ten occupational groups (by volume) 2007/2008 to 2012/2013 (Great Britain)

Occupations	2012/2013	2011/2012	2010/2011	2009/2010	2008/2009	2007/2008
Wood trades	6725	7093	8357	10758	11491	13743
Bricklayers	3982	4451	5712	7168	7778	8949
Plasterers and dry liners	1964	1721	1710	1940	1979	2407
Painters and decorators	1959	2084	2252	2428	3006	3453
Construction managers, professionals & technical staff	1942	3066	3553	4057	4254	3899
Civil engineering operatives	1583	1710	1920	1809	2248	2062
Plant operatives	1167	1476	1905	3847	4461	4746
Specialist building operatives	569	243	376	1110	441	451
Scaffolders	503	523	528	502	681	1055
Plant mechanics/fitters	343	270	294	409	505	511

Table 2 shows that since 2007/2008 wood trades and bricklayers have consistently held the highest numbers of first year trainees. However since the beginning of the recession in 2007/2008 their numbers have halved.

Table 2 also shows that for the first time the numbers of construction managers, professionals and technical staff has dropped considerably from 3066 in 2011/2012 to 1942 in 2012/2013 knocking this occupational group out of the top three for the first time since 2009/2010.

This occupational group is composed of five occupations; construction managers, civil engineering, other construction professionals and technical staff, architects and surveyors. Of these five occupational groups construction managers have seen little change in numbers whilst the other construction professionals and technical staff has suffered by far the largest drop in numbers being down by 735 on 2011. Further investigation reveals that the largest drops have occurred in Scotland (-247) and Yorkshire & Humber (-152). This drop in numbers would appear to be attributable to several training providers in each region who have either reported lower numbers of trainees than previously or who have not responded to the survey this year. This also explains the drop seen in numbers of architects and surveyors.

Chart 2 represents the proportion of trainees for each of the top ten occupational groups over the last five years and it is clear that the proportion of plasterers and dry liners have been gradually increasing over the last five years, and in contrast the proportion of plant operatives has been declining over the same period.



Chart 2 – Proportion of first year trainees by top ten occupational groups 2008/2009 to 2012/2013 (Great Britain)

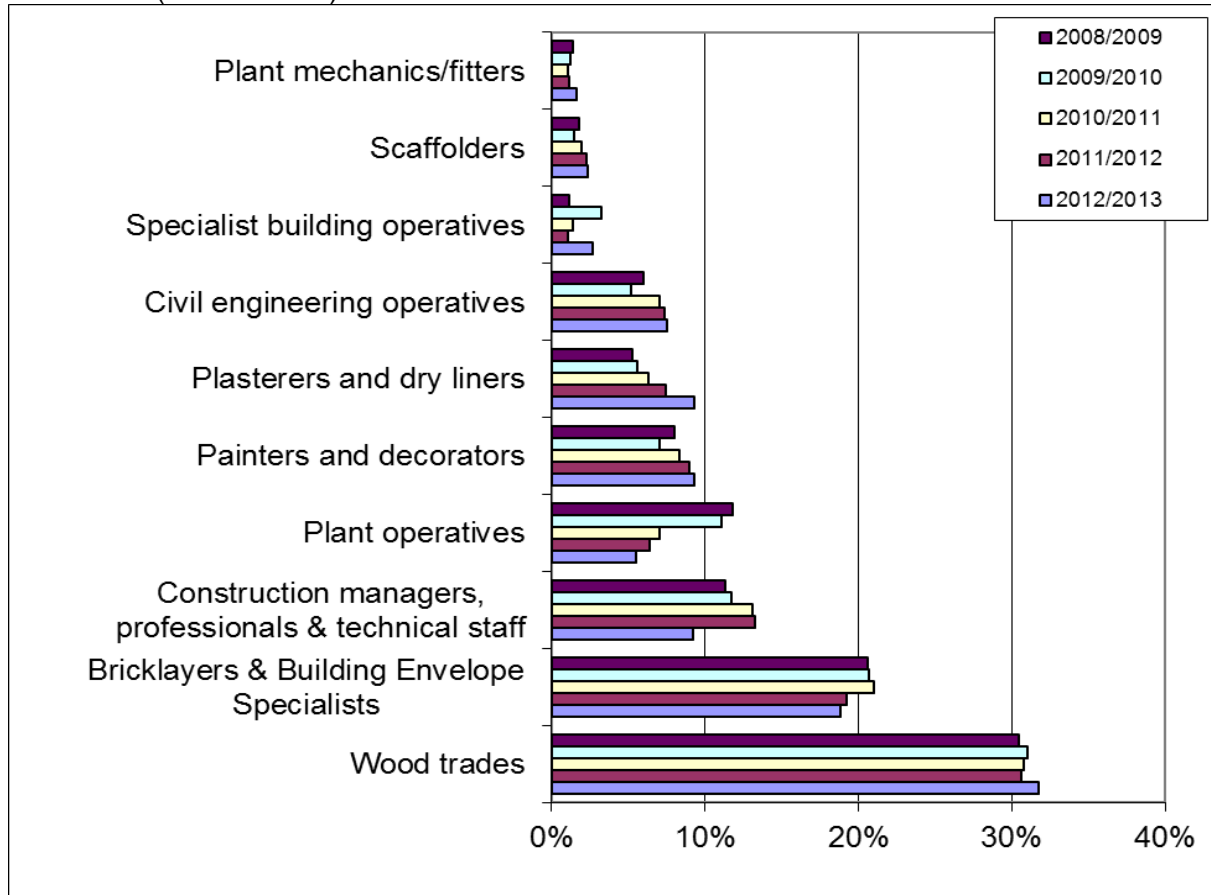
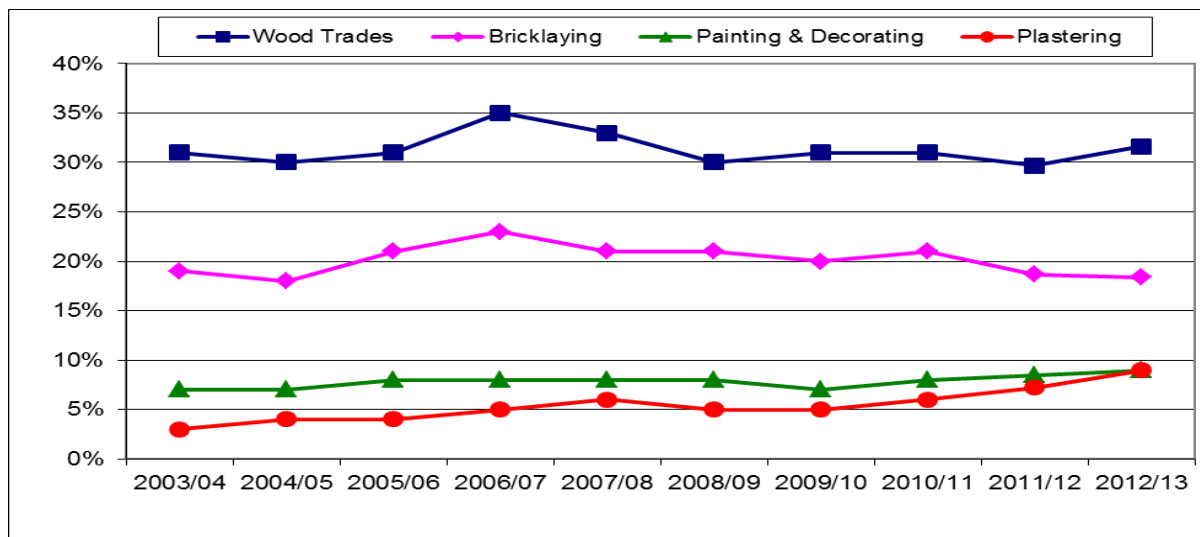


Chart 3 looks specifically at the four main building craft occupations and the proportions they represent of all first-year trainees over a ten year period – 2003/2004 to 2012/2013. As the chart shows the proportions of first year trainees in the four main building craft occupations has remained broadly the same over the ten year period. However it appears that wood trades and bricklaying are more volatile than the other two occupational groups. Since 2011/2012 the proportions of first year trainees in plastering and wood trades has increased.

Chart 3 – Proportion of all first-year trainees in the main Building Craft Occupations 2003–2013 (Great Britain)





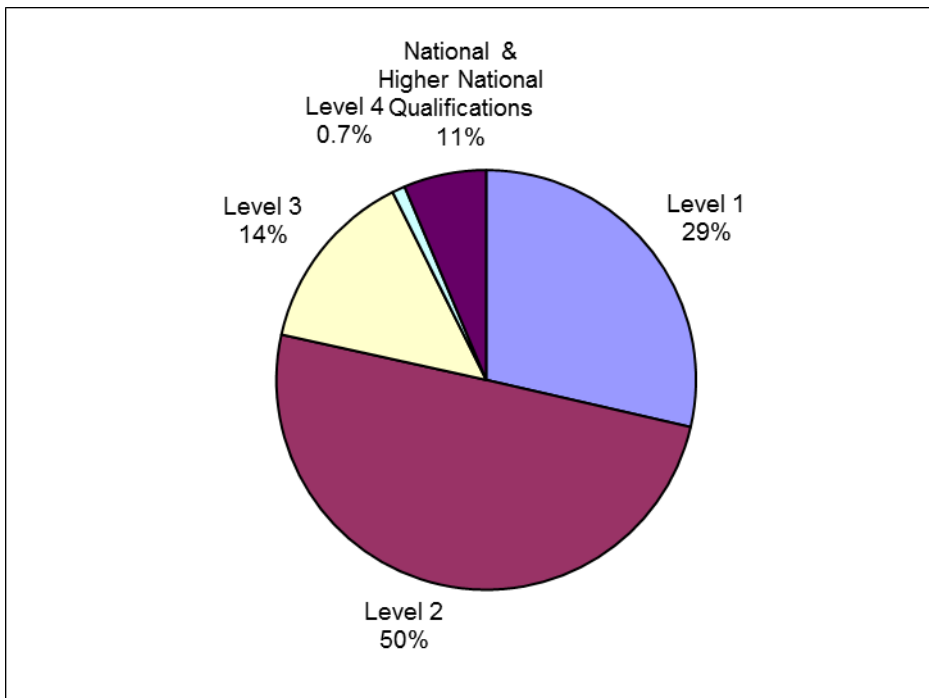
### 1.3 Training by qualification

Section 1.3 analyses the data collected by the Trainee Numbers Survey on first year trainees starting construction and the built environment qualifications in Great Britain at each of the following levels:

- Level 1<sup>4</sup>
- Level 2<sup>5</sup>
- Level 3<sup>6</sup>
- Level 4<sup>7</sup>
- National & Higher National Qualifications<sup>8</sup>

The proportions of first year trainees that are undertaking a construction and the built environment qualification at each of the above qualification levels across Great Britain is shown in Chart 4.

Chart 4 – First-year trainees undertaking a qualification by qualification level 2012/2013 (Great Britain)



**Note:** Please note that the Trainee Numbers Survey collects data from the Further Education sector and higher level qualifications are also provided by Higher Education Institutions. See Section 4 for more information.

Over the last four years the profile of levels of training undertaken by first year trainees across Great Britain has remained pretty consistent with the majority (around 50%) undertaking Level 2 courses and the smallest proportion (around 1% or less) undertaking Level 4 qualifications.

<sup>4</sup> S/NVQ Level 1; Level 1 Certificate or Level 1 Diploma; equivalent VRQ courses  
<sup>5</sup> S/NVQ Level 2; Level 2 Certificate or Level 2 Diploma; equivalent VRQ courses  
<sup>6</sup> S/NVQ Level 3; Level 3 Certificate or Level 3 Diploma; equivalent VRQ courses  
<sup>7</sup> S/NVQ Level 4; equivalent VRQ courses  
<sup>8</sup> National Certificate/Diploma; Higher National Certificate/Diploma



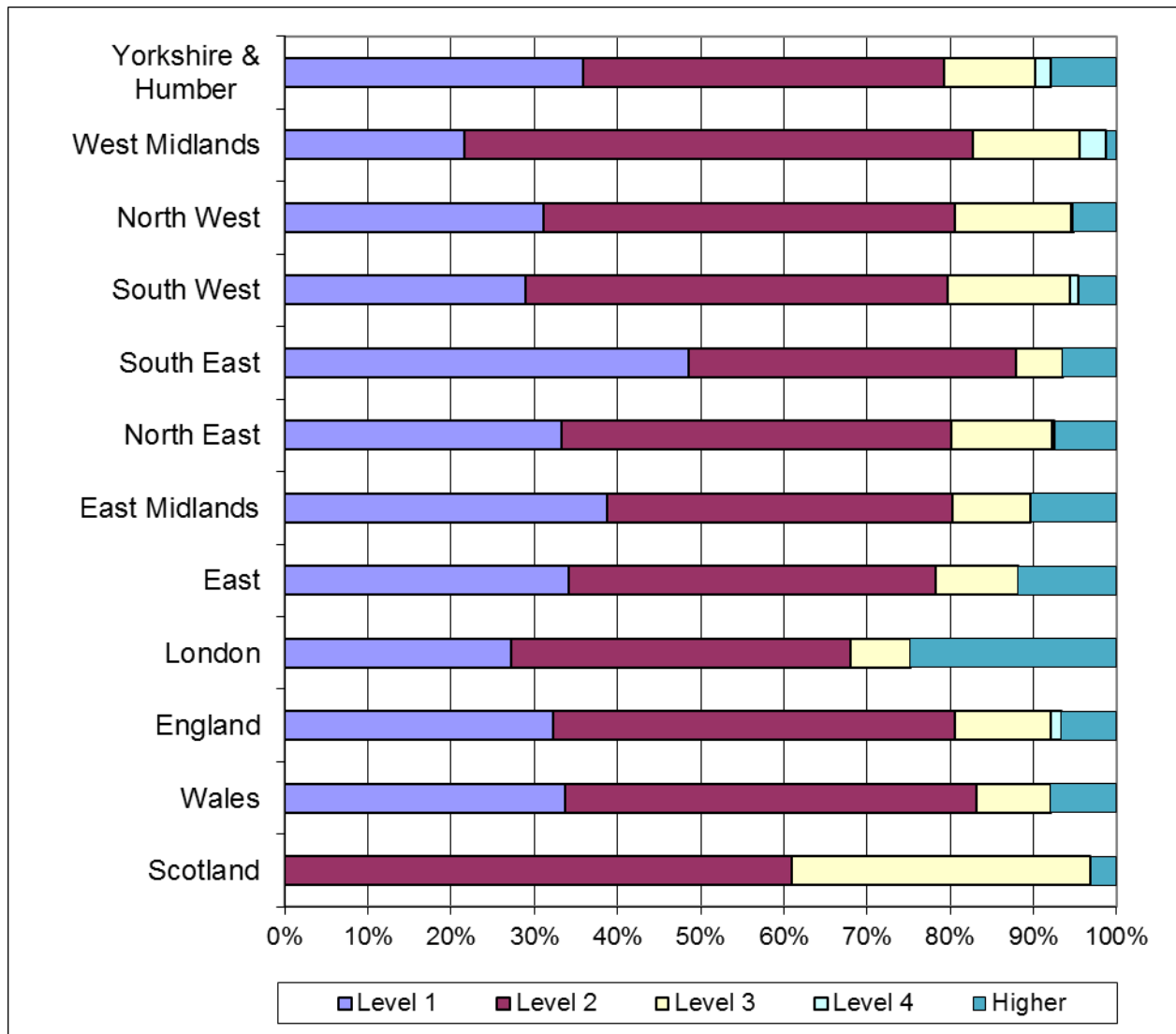
## 1.4 Geographical considerations

As mentioned at the beginning of the report, the number of first-year trainees is collected from colleges, private training providers and construction industry training centres across Great Britain. This data is then analysed by the numbers of first year trainees in the training establishments within each English region, Scotland and Wales.

Chart 5 shows the proportions of first year trainees at each qualification level by region/nation. It is clear from the chart that there are some significant differences in the proportions of first year trainees at each qualification level across the regions and nations.

It is immediately visible that Scotland has a different qualification structure to England and Wales as there are no first year trainees on Level 1 qualifications and greater proportions of trainees starting Level 2 (61%) and Level 3 qualifications (36%). For England (overall) and Wales the proportions of trainees commencing each level of qualification is very similar and has changed little over the last three years, with the majority undertaking Level 2 qualifications and the smallest proportion (if any) undertaking Level 4 qualifications.

Chart 5– First-year trainees by level of qualification and geographical area: 2012/2013 (Great Britain)



**Note:** See figure 1 in Appendix for a visual representation of the total number of first-year trainees by geographical area.



For the third year running the regions with the highest proportion of first year trainees are Yorkshire & Humber at 18%, followed by the West Midlands (17%) and the North West (12%). The regions/nations with the lowest proportions of first year trainees are London 3%, the East 5% and the East Midlands and Wales both at 6%.

Moving beyond Chart 5, if we consider the qualification breakdown by region Yorkshire & Humber has the highest proportion of Level 1 (22%) and Higher Level qualifications (22%), the West Midlands has the highest proportion of students on Level 2 (20%) and Level 4 qualifications (52%) and Scotland has the highest proportion of students undertaking Level 3 qualifications (29%).

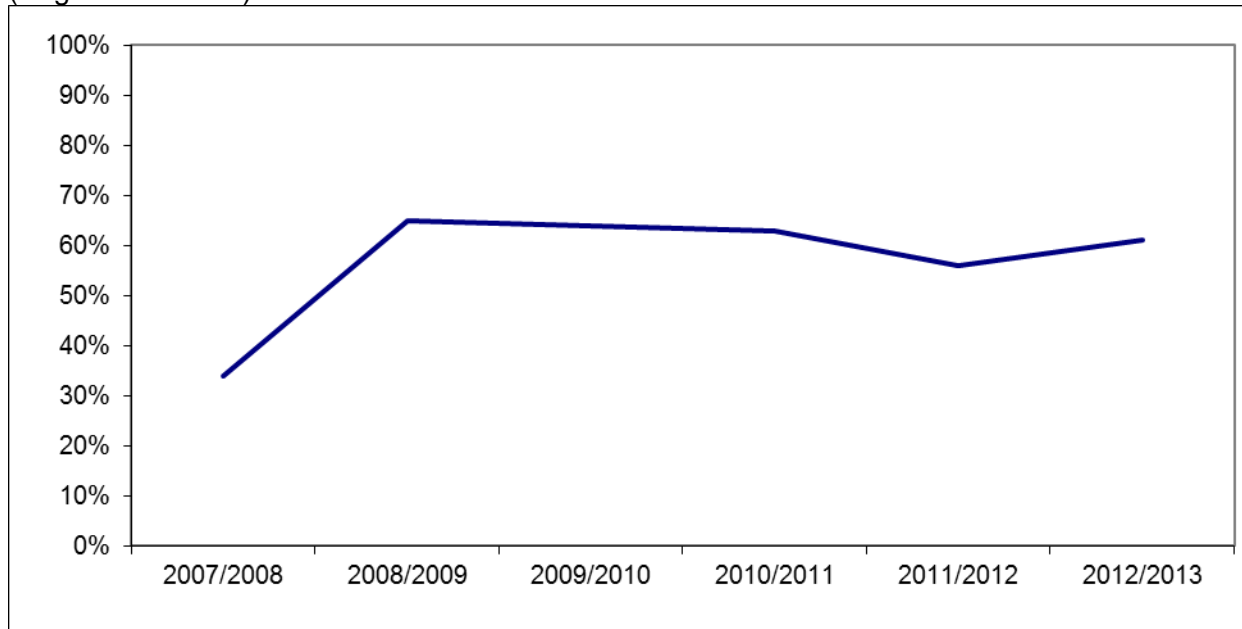


## 1.5 Trainee Progression

To obtain an insight into the movement of trainees from Level 1 qualifications, the survey has traditionally collected data on the progression of individuals from both Level 1 S/NVQ's and Level 1 Diplomas/Certificates. This is achieved by asking how many of the Level 1 students (for both S/NVQ's and Diplomas/Certificates) are expected to progress to a Level 2 qualification. However, over the last three years the data received for number of trainees starting a Level 1 S/NVQ has decreased to such an extent that the progression data for this group is not robust enough for meaningful analysis.

Chart 6 shows that since 2008 the proportion of first year trainees undertaking a Level 1 Diploma/Certificate who are expected to progress to a Level 2 qualification has remained relatively constant at around 60%. If we look at this data regionally London has the highest proportion of trainees predicted to progress to a Level 2 qualification at 80%.

Chart 6 – Expected progression of trainees from Level 1 Diploma/Certificates 2007-2012 (England & Wales)



**Note:** Diplomas/Construction Awards are not available in Scotland.



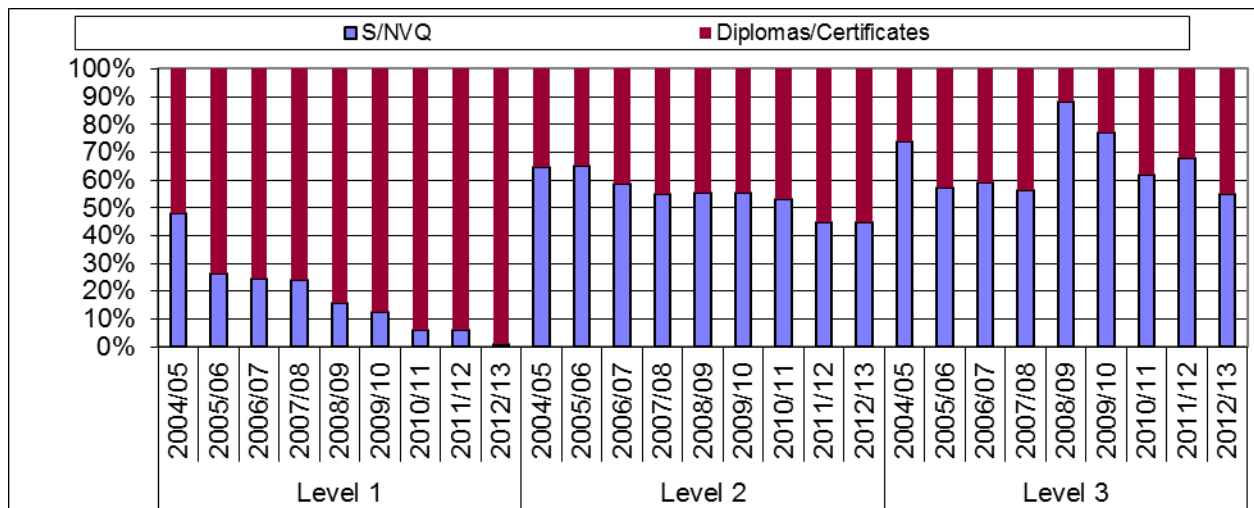
## 1.6 Mode of Study

As mentioned at the beginning of Section 1 the Trainee Numbers Survey collects first year trainee data by qualification type as well as qualification level, this sub-section examines first year trainees commencing a Level 1,2 or 3 S/NVQ or Diploma/Certificate in construction craft training.

Diplomas/Certificates are qualifications for craft occupations that can be completed part-time or full-time, but they do not include any proof of work undertaken on site, as opposed to the S/NVQ framework, which requires on-site experience/assessment. There are three levels of Diplomas/Certificates in-line with the NVQ system – Level 1, Level 2 and Level 3.

In 2012/2013 across England and Wales there are 17,231 first year trainees undertaking construction craft training, 69% of these are studying for a Diploma/Certificate. The proportion of trainees undertaking Diplomas/Certificates rather than S/NVQ's has been increasing each year since 2003/2004. However the pace of the increase appears to be slowing as this year the proportion has only increased by 1%. Therefore only 31% of first year trainees are undertaking S/NVQ's which is the lowest level since this data has been collected.

Chart 7 – Proportion of first-year trainees split by work-based training 2004/2005 to 2012/2013 (Craft training in England and Wales)



**Note:** Diplomas/Certificates are not available in Scotland, therefore all data for work-based training excludes Scottish trainee figures.

Since 2003/2004 the greatest proportion of trainees undertaking Diplomas/Certificates has been at Level 1, indeed since 2005/2006 the proportion has been considerably higher (over 70%) than those undertaking Level 2 and Level 3 qualifications. Level 1 S/NVQ's have continued to decline in popularity, in 2012/2013 the proportion of trainees undertaking a Level 1 S/NVQ is just 1%.

Of the three qualification levels Level 2 has historically been less volatile with the proportion undertaking S/NVQ's fluctuating around the 50% mark, this year the proportion has remained the same as in 2011/2012 at 45%. This year has also seen a return to decreasing numbers of trainees undertaking Level 3 S/NVQ's at 55% compared to 68% in 2011/2012.

It should be noted that this survey is always undertaken at the beginning of the academic year. Therefore, the numbers on Diplomas/Certificates may decrease as the year progresses and more trainees are placed with employers and move from a Diploma or Certificate into the relevant NVQ Level qualification.



## 1.7 Apprentices

The Trainee Numbers Survey also asks how many of the trainees recorded are working towards an Apprenticeship and this data is analysed here.

The number of first year trainees undertaking apprenticeship training has fallen for the fifth consecutive year to an all-time low of 3,539. However the rate of decline has slowed over the last two years: last year the decrease was 645 and this year it was just 164.

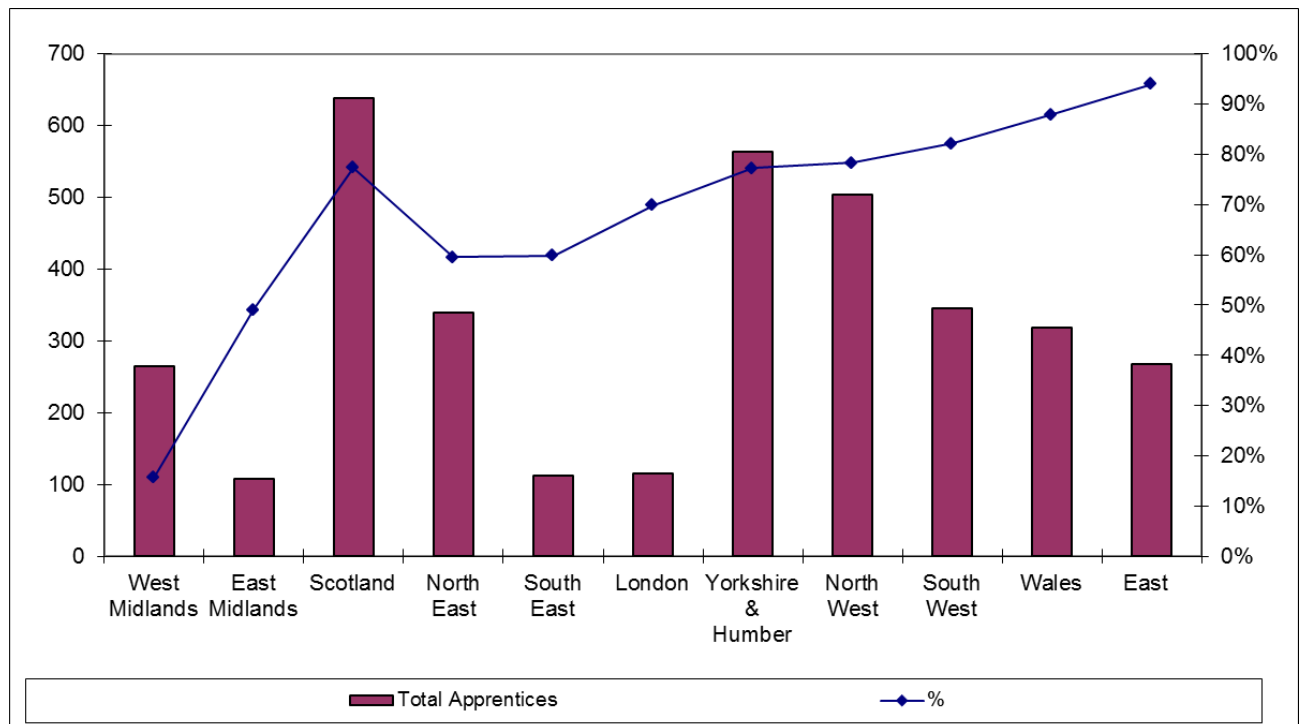
2,597 of the apprentices are undertaking a Level 2 apprenticeship (73%) and 981 (27%) are undertaking Level 3 apprenticeships. These proportions have changed very little over the last 6 years. Overall 59% of all first year trainees undertaking a Level 2 or Level 3 qualification are following an apprenticeship programme.

Chart 8 depicts both the number of first year trainees and the proportion undertaking an apprenticeship programme across Great Britain. It is clear that there are large differences in the numbers and proportions of apprentices across the regions and nations. For the last five years the region with the lowest proportion of trainees undertaking apprenticeships has been the West Midlands: in 2012/2013 just 16% of trainees in the region were undertaking apprenticeships. In contrast to this Wales has remained in the top three regions/nations over the last four years.

If we look at apprenticeships overall Scotland has an 18% share of all apprentices across Great Britain, which is the same number as in 2011/2012. The regions with the lowest proportions are the South East, East Midlands and London - all with just a 3% share of all apprentices.

Since 2006/2007 Scotland has held the greatest proportion of all Level 3 apprentices and 2012/2013 is no exception with 40% of all Level 3 apprentices being in Scotland, which reflects the consistent preference for Level 3 qualifications in Scotland.

Chart 8 – Number and proportion of first-year trainees following an apprenticeship programme by area 2012/2013 (Great Britain: S/NVQ Level 2 and Level 3)



**Note:** Chart 8 only refers to qualifications which are available at S/NVQ Level 2 and Level 3.

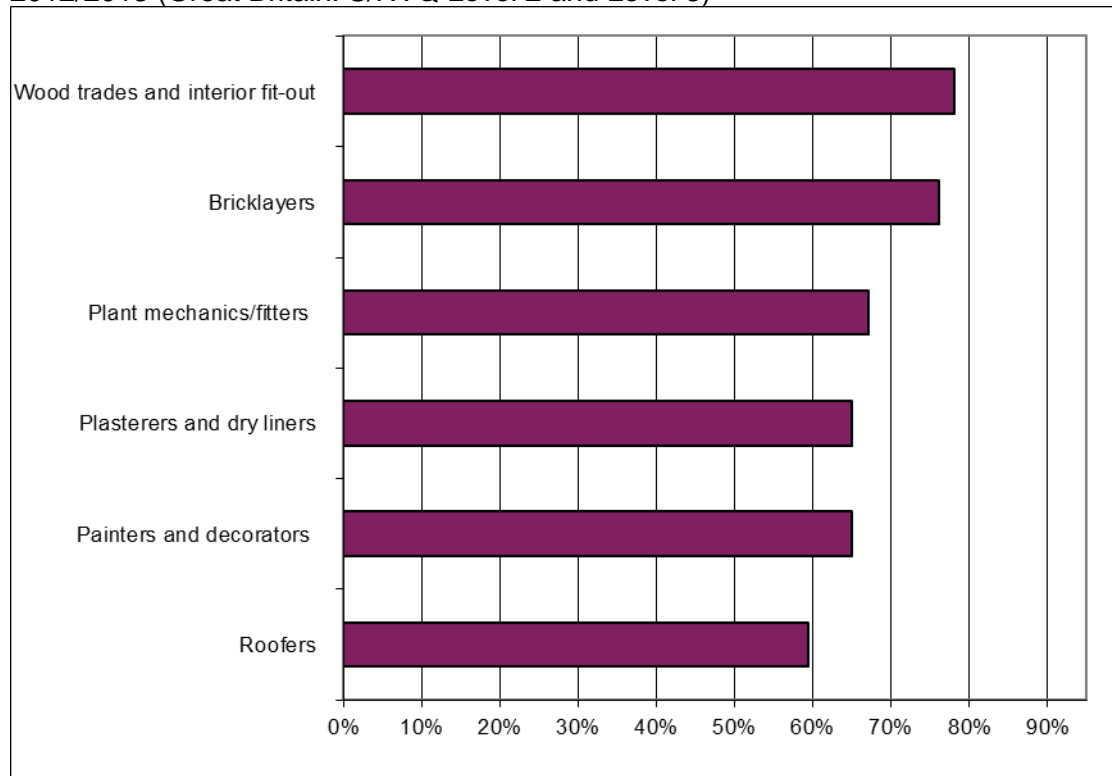
Given that the occupational groups with the highest numbers of trainees are wood trades and bricklaying it makes sense that these occupational groups would have the highest proportions of apprentices, which they do at 78% and 76% respectively (as shown in Chart 9).





The four main building craft trades are wood trades, bricklaying, painting and decorating and plastering and dry lining, these occupational groups have consistently accounted for the majority of apprenticeships since 2005/2006. This year they accounted for 77% of all apprenticeships.

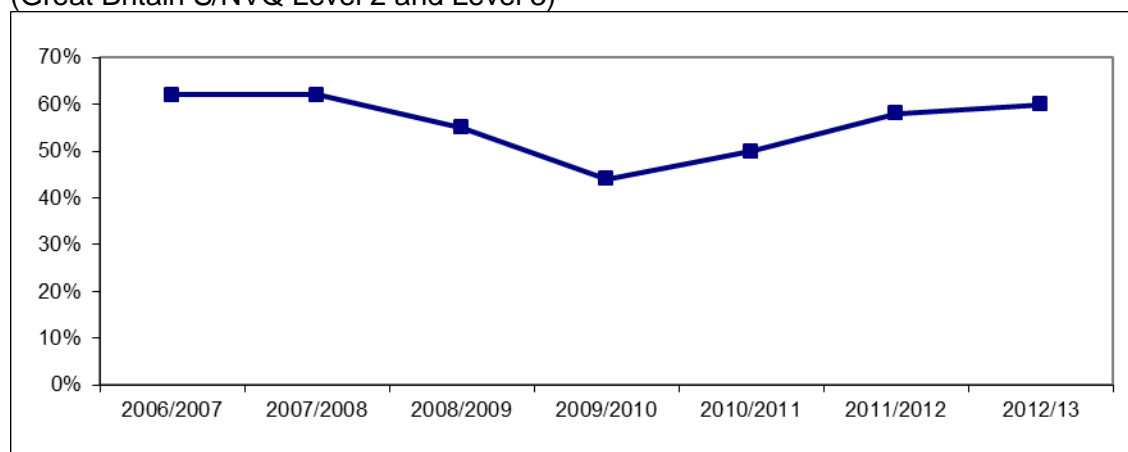
Chart 9 – Proportion of first-year trainees following an apprenticeship programme by occupation 2012/2013 (Great Britain: S/NVQ Level 2 and Level 3)



**Note:** Chart 9 only refers to qualifications that are available at both S/NVQ Level 2 and Level 3.

Chart 10 shows that at the beginning of the recession (from 2007/2008) the proportion of first year trainees following apprenticeships declined, however since 2009/2010 the proportion of first year trainees starting apprentices has increased reaching a pre-recession high of 60% in 2012/2013.

Chart 10– Proportion of first-year trainees following an apprenticeship programme 2006-2012 (Great Britain S/NVQ Level 2 and Level 3)





A fall in apprenticeship numbers has also been identified by the National Apprenticeship Service (NAS). According to their recently published figures, construction apprenticeships have fallen by 10% in 2013 while the number of applications has risen<sup>9</sup>. In the three months to May, 1,635 construction apprenticeships were advertised through the NAS online database, down 10.4 per cent from 1,824 vacancies on offer in the same period last year. Although according to the latest figures the number of applications submitted increased 10.6% year on year from 6,050 (between February and April 2012), to 6,690 this year. This would suggest an increase in the popularity of apprenticeships.

Commenting on the overall figures, Skills minister Matthew Hancock MP said: “With more vacancies than ever before, Apprenticeships are fast becoming the norm for young people who want to achieve their career goals through an alternative route to university.”

The government has continued to maintain its funding support for apprenticeships throughout the recession. NAS is offering up to 40,000 Apprenticeship Grants to small and medium sized businesses (employing less than 250 employees), to the value of £1,500, that recruit their first apprentice aged 16 to 24 years old.<sup>10</sup>

And in London the Mayor of London, Boris Johnson, has allocated £1.5m to help London-based small and medium-sized (SME) businesses take on young people as apprentices<sup>11</sup>. The fund, approved by the London Enterprise Panel (LEP), means that SMEs will be able to apply for a £3,000 incentive payment through the National Apprenticeship Service (NAS) – nationally the incentive payment available to employers is £1,500. It is estimated that the funding boost could help to create a further 1,000 new places in London. The news comes as the most recent employment statistics show that private sector employment is up by 6.5 per cent in the capital, compared with 3.2 per cent in the rest of the country.

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<sup>9</sup> Construction News <http://www.cnplus.co.uk/construction-apprenticeships-down-10-as-applications-soar/8648733.article>

<sup>10</sup> <http://www.apprenticeships.org.uk/News-Media/Latest-News/Article135.aspx>

<sup>11</sup> <http://www.london.gov.uk/media/mayor-press-releases/2013/06/mayor-boosts-apprenticeships-drive-with-15m-fund-for-small-and>



## 1.8 First-year trainee characteristics

In addition to collecting data on the type of training new entrants start each academic year, the Trainee Numbers Survey also captures first-year trainee characteristics as defined by their age, gender and ethnic minority.

### 1.8.1 Age

The survey asks respondents to breakdown the number of starters undertaking each qualification into two broad age categories:

- Under 18 years
- 18 years and over.

Chart 11 shows that over the last ten years the proportional split between first year trainees aged under 18 and those aged over 18 has averaged at 51% vs. 49%. The proportion of trainees aged under 18 has remained above 50% since 2006/2007, and has increased to a peak of 57% in 2012/2013.

Chart 11 - Age of first-year trainees as a proportion of total 2002–2012 (Great Britain)

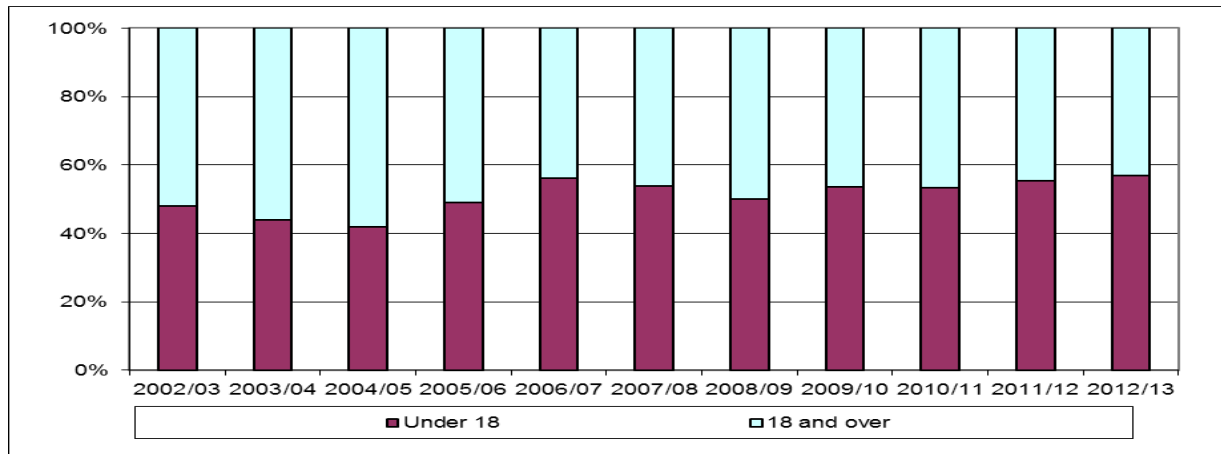
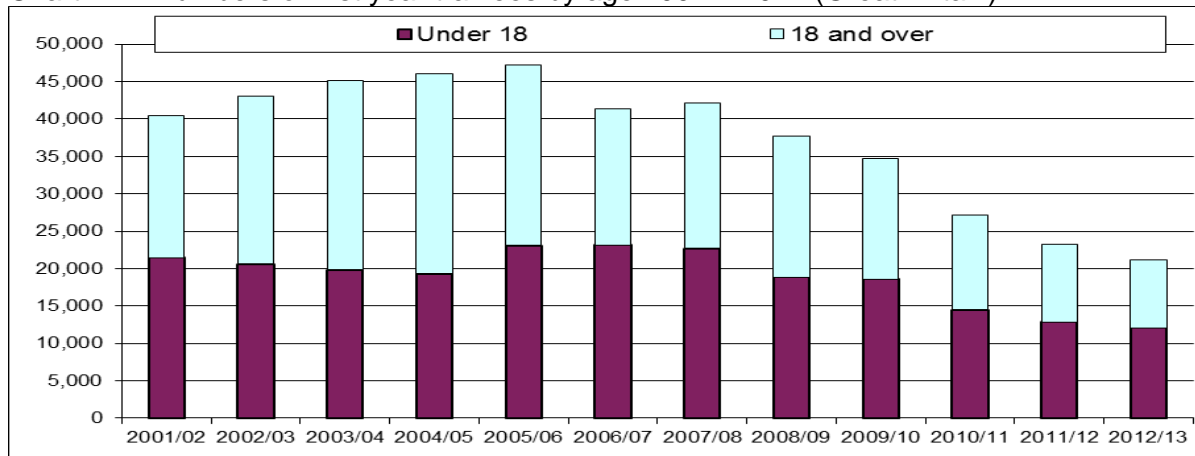


Chart 12 shows the actual numbers of first year trainees and shows the overall decrease in trainee numbers since 2007/2008. However the reduction in trainee numbers appears to be greater for those aged 18 and over.

Chart 12 – Numbers of first year trainees by age 2001 – 2012 (Great Britain)

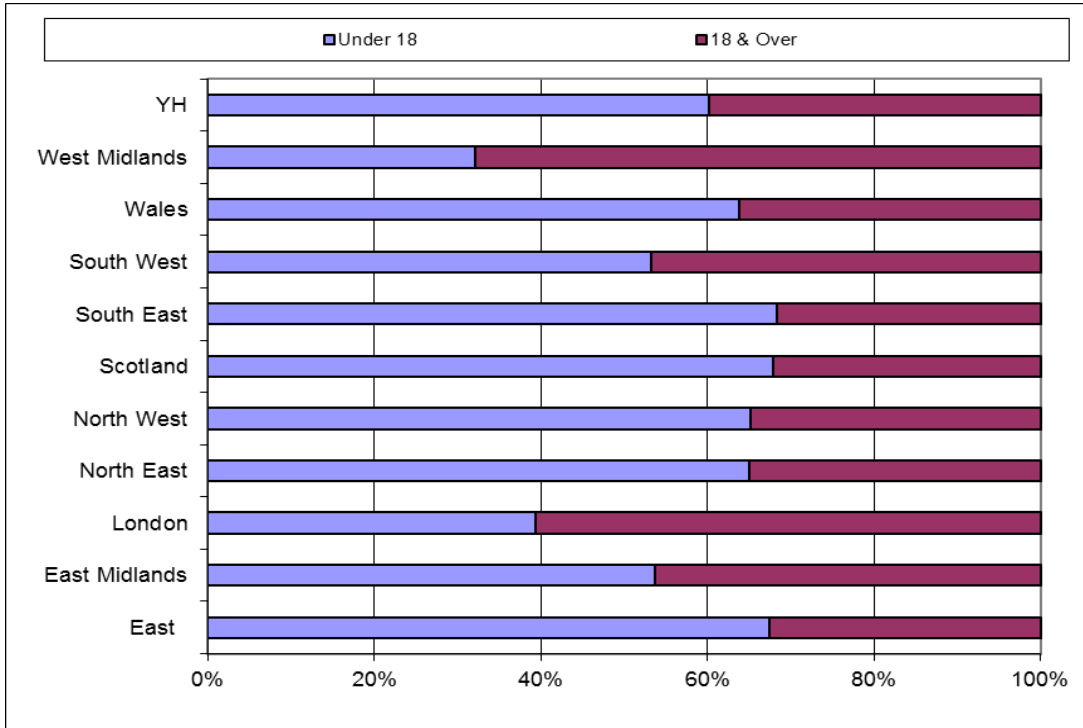


If we look at the age profile across the regions and nations there is a lot of variation. In chart 13 below the West Midlands and London both have considerably lower proportions of trainees



aged under 18 than the other regions and nations. Scotland and the South East have the joint highest proportion of trainees aged under 18 at 68%, closely followed by the East at 67%.

Chart 13 – Age of first-year trainees by geographical area 2012/2013 (Great Britain)



### 1.8.2 Gender

In addition to asking respondents to break down the number of starters for each qualification by age group the survey also asks for numbers within the age group split by gender. The number of first-year trainees broken down by gender is shown in Table 3.

Table 3 – Number of first-year trainees broken down by gender and age 2012/2013 (Great Britain)

Under 18 years		18 years & Over		Total	
Male	Female	Male	Female	Male	Female
11,736	315	8,721	386	20,457	701
55%	1%	41%	2%	97%	3%

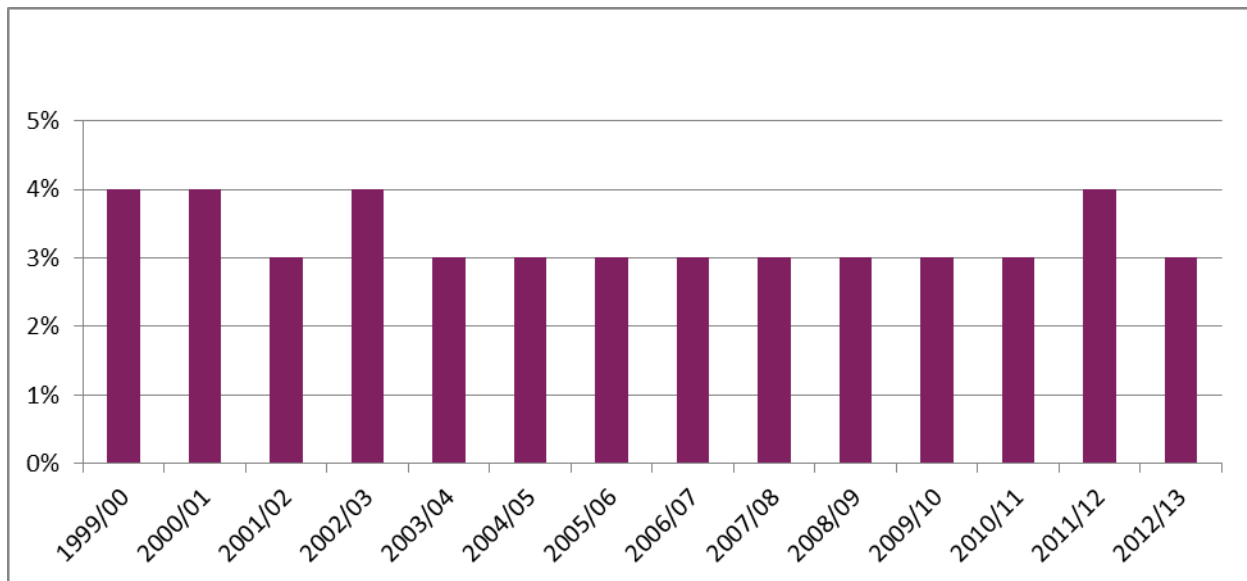
Table 3 shows that in 2012/2013 there were 701 (3%) female first year trainees compared to 20,457 (97%) males. With the exception of 2011/2012 the proportion of female trainees has been 3% for 9 years (as shown in Chart 14 below).

The proportion of women entering construction training is lower than their representation within the construction workforce where they currently account for 13% of employment in Great Britain<sup>12</sup>. However, the majority of these women are working in non-manual trades (95%). Currently only 1% of the manual construction workforce is female compared to 27% of the non-manual construction workforce.

<sup>12</sup> Labour Force Survey, 4 quarter average to Spring 2012 (SIC45) Great Britain



Chart 14 – Female first-year trainees as a proportion of the total number of first-year trainees 1999–2012(Great Britain)



Further analysis of the distribution of all female first year trainees across the UK reveals that for the third year running the two regions/nations with the highest proportions of all female first year trainees are Yorkshire & Humber (18%) and Scotland (14%). The region with the lowest proportion of female trainees is the East, which accounts for only 2% of all female trainees.

When looking at the proportions of female trainees in each area the majority of regions are consistent with the average of 3%, with the exception of London where 9% of the regions trainees are female. This is consistent with previous years with London having the highest proportion of female trainees since 2008/2009.

Analysis by qualification level shows that the majority of female trainees (12%) are undertaking professional qualifications, followed by 4% at Level 1 qualifications, 3% at Level 3 and above and 2% at Level 2 (interestingly this has been a consistent trend since 2002/2003).

Analysis by occupation illustrates that the highest proportions of females are found in the professional occupations; 18% of civil engineering trainees are female, followed by 16% of architects and 15% of surveyors. When looking at the craft trades painting and decorating has by far the largest percentage of female trainees per occupation with 14% of trainee painter and decorators being female. This occupation also has the largest percentage of female trainees overall, accounting for 38% of all female trainees.

These findings are consistent with the representation of females in the construction workforce as shown in the Labour Force Survey employment by occupation data (Spring 2012)<sup>13</sup> which highlights that the majority of females are found in professional occupations, for example 19% of architects and 13% of building and civil engineering technicians are women. The labour force survey also identifies painting and decorating as the craft occupation with the highest proportion of females at 2%.

### 1.8.3 Ethnic minorities

The Trainee Numbers Survey collects data on the ethnic minority representation amongst first year trainees by asking respondents to indicate for each qualification level how many of the trainees are from an ethnic minority and the results are analysed here.

<sup>13</sup> Labour Force Survey, 4 quarter average Spring 2012 Great Britain



In 2012/2013 there are 1,072 first year trainees who are from an ethnic minority, this equates to 5% of all first year trainees. This figure is consistent with their representation in the construction workforce<sup>12</sup>. Chart 15 shows the fluctuation in the proportion of trainees from an ethnic minority background, over the last decade it has averaged at 5.6%.

Chart 15 – Ethnic minority first-year trainees as a proportion of all first-year trainees 2003-2012 (Great Britain)

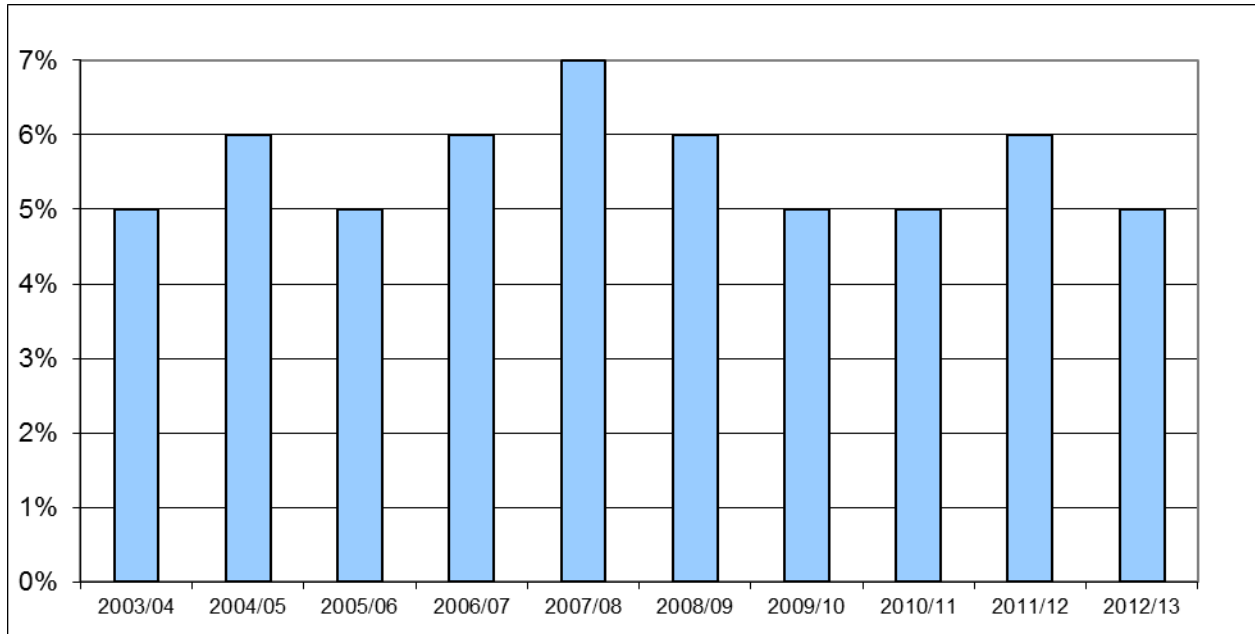
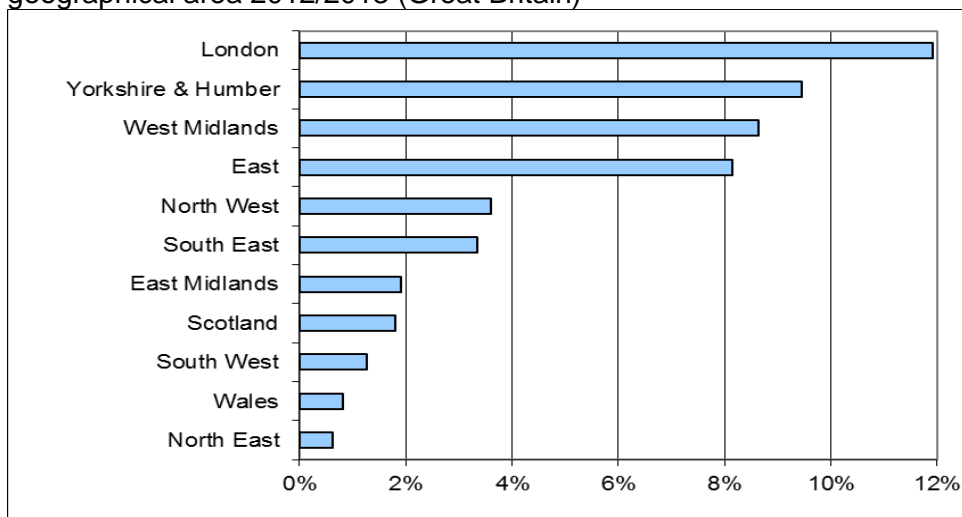


Chart 16 shows a breakdown of ethnic minority of first year trainees by region/nation. London has the highest proportion of trainees from an ethnic minority (12%), which has been the case for the last 11 years. However this percentage is a considerable reduction from the 2006/2007 peak of 43%.

Looking back over the last five years there are two regions/nations which consistently have the lowest proportions of trainees from ethnic minorities, these are Scotland and the North East of England.

Chart 16 – Ethnic minority first-year trainees as proportion of all first-year trainees by geographical area 2012/2013 (Great Britain)





## Section 2: Forecasted Demand for Craft and Technical Construction Training 2013–2017

CITB, through the Construction Skills Network<sup>2</sup>, publishes a forecast of the likely demand for skilled construction workers over the next five years. The forecast, which is made in partnership with Experian, uses data derived from foreseeable economic and industrial factors on employment. A subset of the current published forecasts is reproduced in the following two tables: Table 5 (by geographical area) and Table 6 (by construction trades).

First it is worth noting that there has been a significant drop in the forecast employment requirements, in the 2012-2016 forecast the average annual recruitment requirement for the period was forecast at 41,150<sup>14</sup> across all 26 occupational groups, in the 2013-2017 forecast this has dropped to 27,240<sup>2</sup>. The reason for this drop in the latest forecast is because it predicts that by 2017, construction output will still be 12% down on its 2007 peak and that this will lead to falling employment in construction until 2016, reaching a low of 2.36m – the lowest employment level in the industry since the year 2000.

Table 4 shows the requirement for skilled manual trades by area for Great Britain; the total annual requirement requirement (ARR) for 2013-2017 is forecast to be 15,440 per year, considerably lower than the figure from the 2012-2016 forecast of 22,600. The North East is forecast to have the lowest average annual requirement over the period 2013-2017 with the greatest demand being in the East and South East.

Table 4 – Requirement for skilled manual trades by geographical area 2013-2017 (Great Britain)

	Total employment		Annual recruitment requirement
	2013	2017	2013-2017
East	92,650	95,690	2,840
East Midlands	67,360	64,550	1,160
London	104,120	108,060	920
North East	35,290	32,570	130
North West	98,670	94,950	1,530
Scotland	87,600	85,720	1,580
South East	143,740	143,800	2,840
South West	95,240	91,930	1,360
Wales	44,410	42,380	1,360
West Midlands	63,260	57,750	520
Yorkshire & Humber	79,960	77,450	1,200
<b>Total</b>	<b>912,300</b>	<b>894,850</b>	<b>15,440</b>

Source: ConstructionSkills Employment Model, 2013

**Notes:** Table 4 is a subset of the table that appears in Blueprint for UK Construction Skills 2013-2017 report. It covers only the skilled manual trades and excludes managers, clerical staff, technical staff and professional occupations.

\*\*The Annual Requirement Requirement (ARR) is a gross requirement that takes into account workforce flows into and out of construction, due to such factors such as movements between industries, migration, sickness, and retirement;

<sup>14</sup> Construction Skills Network, Blueprint for UK Construction Skills 2013 to 2017  
<http://www.citb.co.uk/Research/construction-skills-network/summary-outputs/>



it does not include the flow from training. The ARR provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.<sup>15</sup>

See figure 2 in Appendix for a visual representation of the total number of first-year trainees by geographical area.

Table 5 shows the number of new entrants that the industry needs to recruit each year from 2013 – 2017 in order to meet the projected demand for each occupation. By analysing this projected demand, alongside the amount of training taking place in the industry, it is possible to assess the adequacy of current training provision in terms of quantity.

Table 5 – Requirement for skilled manual trades in the construction trades 2013-2017 (Great Britain)

	Forecast		Annual recruitment requirement 2013-2017
	2013	2017	
<b>Main trades</b>			
Wood trades and interior fit-out	252,760	254,040	3,960
Bricklayers	78,070	73,820	2,110
Building envelope specialists	85,670	83,500	580
Painters and decorators	111,840	108,420	950
Plasterers and dry liners	41,510	41,780	670
<b>Main trades total</b>	<b>569,850</b>	<b>561,560</b>	<b>8,270</b>
Roofers	33,950	31,990	190
Floorers	38,760	38,750	1,720
Glaziers	36,390	35,960	1,380
Specialist building operatives nec*	46,320	43,100	310
<b>Specialist building trades total</b>	<b>155,420</b>	<b>149,800</b>	<b>3,600</b>
Scaffolders	19,880	19,420	250
Plant operatives	39,760	38,950	2,420
Plant mechanics/fitters	38,640	38,950	170
Steel erectors/structural	27,060	25,950	50
Civil engineering operatives nec*	61,690	60,220	680
<b>Civil engineers total</b>	<b>187,030</b>	<b>183,490</b>	<b>3,570</b>
<b>Total</b>	<b>912,300</b>	<b>894,850</b>	<b>15,440</b>

Source: ConstructionSkills Employment Model, 2013

**Note:** Table 5 is a subset of the table that appears in Blueprint for UK Construction Skills 2013-2017 report. It covers only the skilled manual trades and excludes managers, clerical staff, technical staff and professional occupations.

\* nec = not elsewhere classified.

\*\*The annual recruitment requirement (ARR) is a gross requirement that takes into account workforce flows into and out of construction, due to such factors such as movements between industries, migration, sickness, and retirement; it does not include the flow from training. The ARR provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.<sup>14</sup>

The majority of occupations have seen a decrease in their forecast ARR with the largest drops being forecast for plasterers and dry liners -1690 and for painters and decorators -1310. Four occupational groups have seen an increase in their ARR for 2013 and these are Wood trades and interior fit out +750, floorers +270, building envelope specialists +230 and plant operatives

<sup>15</sup> Construction Skills Network, Blueprint for UK Construction Skills 2013-2017 (Appendix)  
[http://www.citb.co.uk/Documents/research/csn%20outputs/CSN\\_National\\_interactive.pdf](http://www.citb.co.uk/Documents/research/csn%20outputs/CSN_National_interactive.pdf)

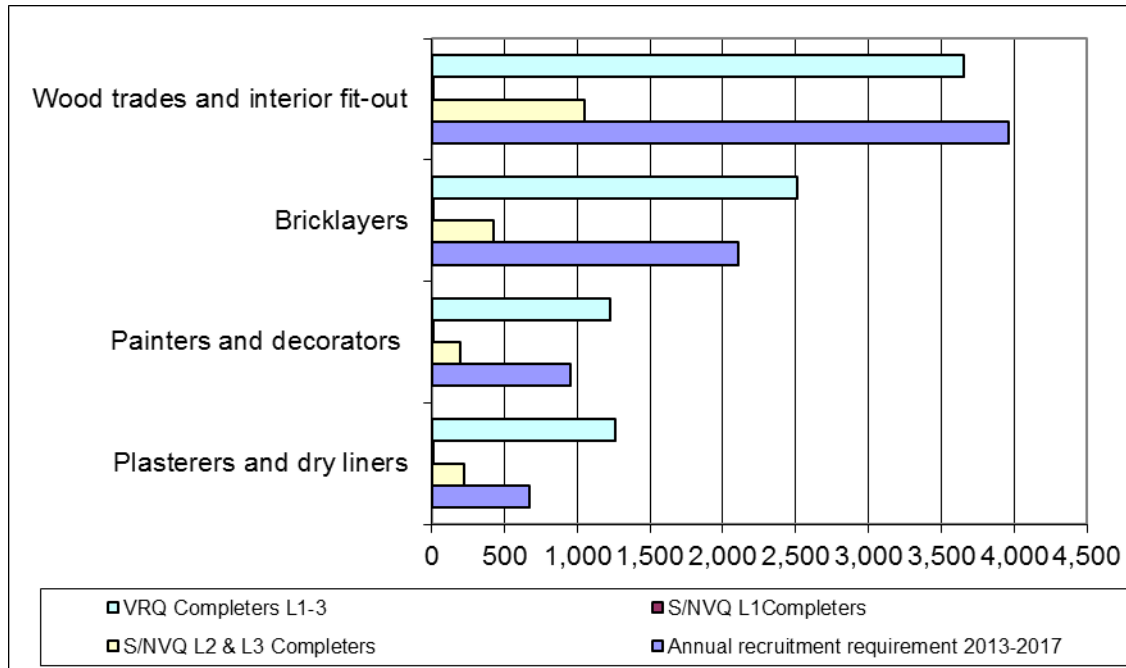




+30. The CSN forecast for 2013-2017 attributes the significantly lower ARR figures to a combination of the large numbers of unemployed and underemployment (construction workers not working at full capacity in terms of hours) in the industry.

Charts 17 and 18 compare the ARR for skilled manual trades against the expected number of successful completers from the 2012/13 intake of trainees.

Chart 17 – Annual recruitment requirement for main construction trades (2013-2017) and expected successful learner outcomes from the 2012/13 trainee intake. (Great Britain)



Source: Construction Skills Network Model 2013 CITB Trainee Numbers Survey 2012/2013; Data Service 2011/2012  
 Note: Numbers of students undertaking S/NVQ Level 1 courses are too small to show: 8 plasterers and dryliners, 8 painters and decorators, 10 bricklayers and 10 in wood trades and interior fit-out.

The bottom bar of the chart shows the average number of skilled workers that will be required to join the industry each year by occupation between 2013 and 2017. The remaining three bars show the expected number of completers across both S/NVQ and VRQ qualifications at Levels 1, 2 and 3. S/NVQ Level 2 and Level 3 completers are assumed to have been trained to a level where their skills are considered acceptable to work productively in the industry.

Chart 17 clearly shows that the numbers of trainees expected to complete Level 2 and Level 3 S/NVQ qualifications are insufficient to meet the predicted demand in all four occupational groups. Indeed the proportion of demand met by those completing these qualifications in the four occupations is only between 20% and 33%.

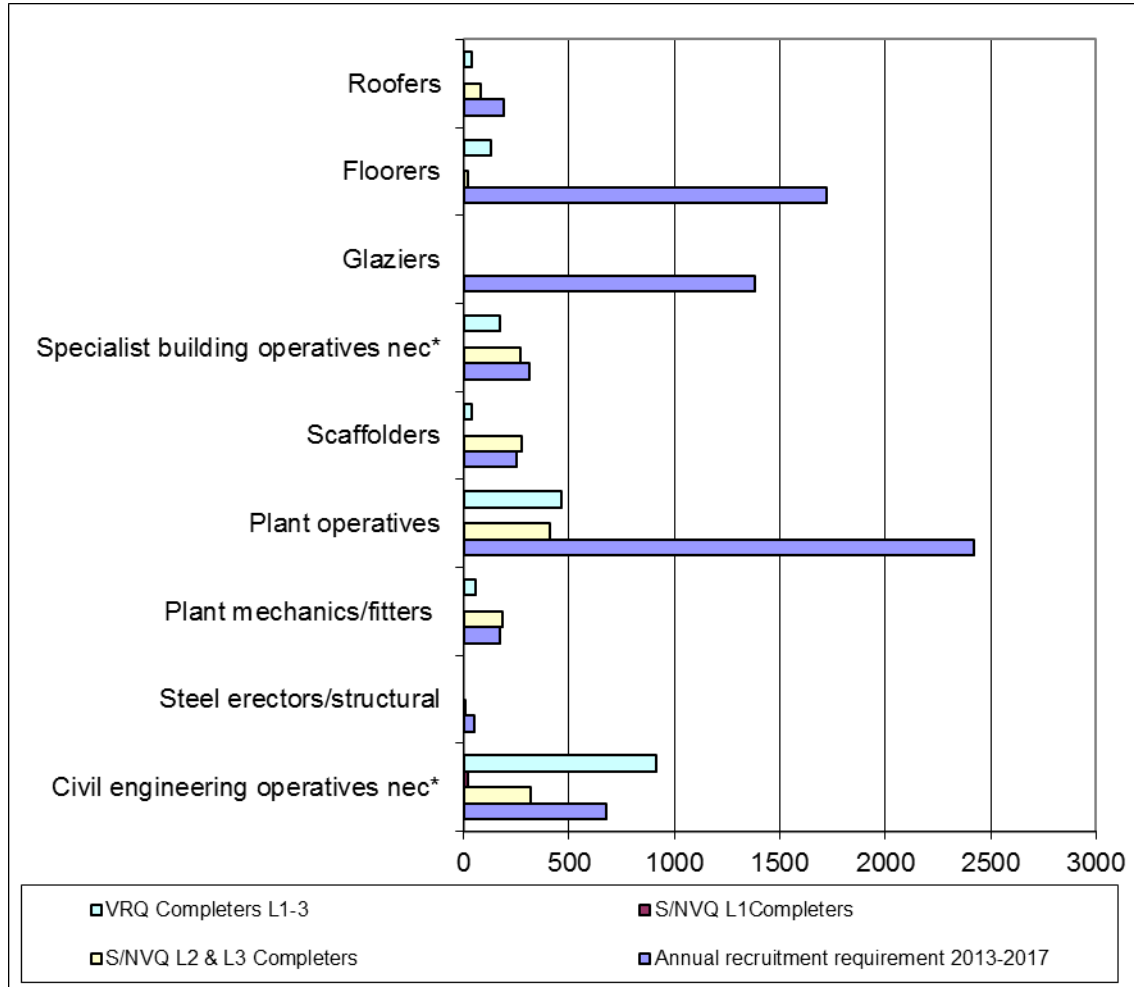
It is also clear from this chart that Vocational Related Qualifications (VRQ's) have remained very popular this year, whilst the industry does not consider individuals who have completed this type of training as sufficiently competent they do provide a route into training giving employers some flexibility for making up the short-fall in the near future.

If we combine the numbers of VRQ completers and S/NVQ's it shows that there is an over-supply in all four occupational groups.

As has been the case over the past three years the main construction trades have accounted for the largest proportion of all manual occupation training at 76% with the remaining 24% undertaking training in the specialist building and civil engineering occupations.



Chart 18 – Annual recruitment requirement for specialist construction trades and civil engineers (2012-2016) and expected successful learner outcomes from the 2011/12 trainee intake. (Great Britain)



Source: Construction Skills Network Model 2013 ConstructionSkills Trainee Numbers Survey 2012/2013; Data Service 2011/2012

The situation regarding training in the specialist construction trades and civil engineering occupations is similar to that of the main trades in respect of training numbers for Level 2 and Level 3 S/NVQ's not coming anywhere close to the predicted demand for these occupations, where it differs is that even if we add Level 1 S/NVQ's and Level 1-3 VRQ's the training levels are still not anywhere close to the predicted levels of demand for plant operatives, glaziers and floorers. This occupational group has seen a large decline in the numbers forecast through the CSN in 2013-2017 compared to 2012-2016.

Areas of particular concern may be glaziers and steel erectors/structural as the survey has recorded no trainees coming through these occupations this year and very small numbers over the past two years. Further investigation would be required to determine if this is representative and what the reasons for such low levels of trainees are.

The low numbers coming through as plant operatives are also a concern as the ARR figure is considerably higher than the numbers coming through training and the ARR only accounts for demand in the construction sector when it has been proven that approximately 79% of those currently training in this occupation will enter employment in another industry.<sup>16</sup>

<sup>16</sup> Experian, Construction Skills network, 1<sup>st</sup> Round Presentation 2009.



## Section 3: Construction Training Capacity 2012/2013

In recent years the construction industry has trained insufficient people to meet the demand for trained workers. The resultant shortfall has been made up in various ways, for example by people working more hours, delaying retirement, or using skilled migrant workers. The current decline in construction employment has meant that the shortfall in construction training is less of an issue (with only 5% of employers reporting hard to fill vacancies in 2011 compared to 29% in 2009)<sup>17</sup>, in the short-term in the main trades although it is still a very real problem in the specialist and civil engineering occupations. While training capacity is not at present a limit to training, it is still informative to look at the number of applicants to construction courses as a measure of interest in working in construction, and ultimately as a measure of the industry's ability to meet demand for skilled workers when the economic circumstances improve.

This section summarises the findings of the capacity questions from the Trainee Numbers Survey. The results are based upon the responses of 152 training providers across Great Britain and applied to the overall results from the main survey. The data covers the skilled manual trades only.

### 3.1 Applicants by course

In 2012/13 there were over 19,000 applicants for approximately 16,000 places on skilled manual trade construction courses, as shown in Table 6. This is an increase on last year's figures of just over 18,000 applicants and just under 15,000 starters; however the ratio of applicants per starter has remained the same at 1.2. Although the numbers of applicants and starts have increased this year (which may be as a result of more colleges who responded to the survey providing applicant numbers), they are still significantly lower than in 2010/11 when there were nearly 33,000 applicants for 23,500 starters.

Table 6 – Applicants and starters to skilled manual trade courses 2012/2013 (Great Britain)

	Applicants	Starts	Applicants per starter
Wood trades and interior fit-out	7,310	5,913	1.2
Bricklayers	4,556	3,607	1.3
Painters and decorators	1,989	1,647	1.2
Plasterers and dry Liners	2,002	1,676	1.2
<b>Main trades total</b>	<b>15,857</b>	<b>12,843</b>	<b>1.2</b>
Roofers	187	183	1.0
Floorers	202	174	1.2
Glaziers	-	-	0.0
Specialist building operatives nec*	586	541	1.1
<b>Specialist building trades total</b>	<b>975</b>	<b>898</b>	<b>1.1</b>
Scaffolders	503	503	1.0
Plant operatives	1,045	1,045	1.0
Plant mechanics/fitters	333	329	1.0
Steel erectors/structural	-	-	-
Civil engineering operatives nec*	633	575	1.1
<b>Civil engineering trades</b>	<b>2,514</b>	<b>2,452</b>	<b>1.0</b>
	<b>19,346</b>	<b>16,193</b>	<b>1.2</b>

Source: ConstructionSkills Trainee Numbers Survey 2012/2013

<sup>17</sup> ConstructionSkills, Training and Skills in the Construction Sector, 2011  
[http://www.cskills.org/sectorskills/researchfromssc/skills\\_needs\\_survey.aspx](http://www.cskills.org/sectorskills/researchfromssc/skills_needs_survey.aspx)



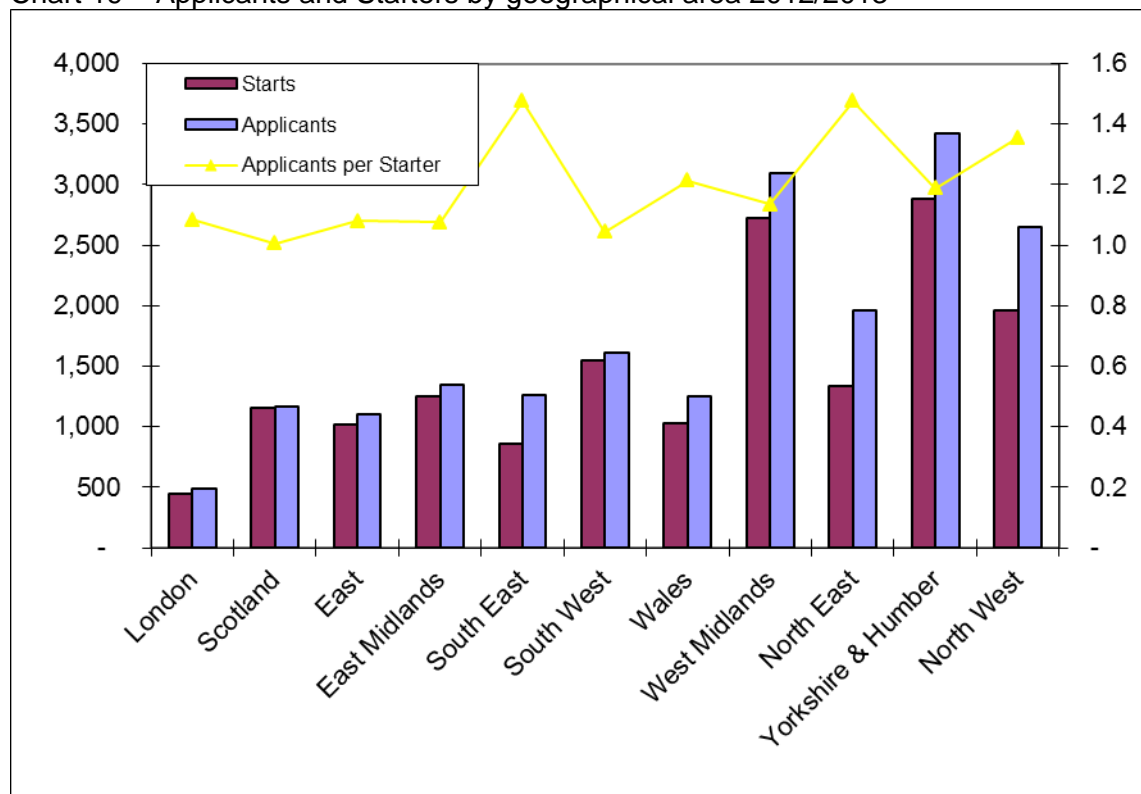
Table 6 also shows that the majority of specialist building and civil engineering trades have lower ratios of applicants per starter than the main trades, which would mean that the majority of applicants for these trades started a course. This has been a consistent trend since 2009/10.

### 3.2 Applicants by geographical area

If we analyse the skilled manual trades training capacity data by geographical area there are some wide variations in the numbers of starters, applicants and the applicants per starter, as shown in Chart 19.

The West Midlands and Yorkshire and Humber have both the highest number of applicants and highest number of starters and London has the least, continuing the trend seen since 2009/10. In terms of the ratio of applicants to starters the South East and North East have the highest ratio at 1.4 meaning that applicants in these regions have the most competition.

Chart 19 – Applicants and Starters by geographical area 2012/2013



Source: ConstructionSkills Trainee Numbers Survey 2011/2012

**Note:** See figure 3 in Appendix for a visual representation of the total number of first-year trainees by geographical area.

### 3.3 Capacity Expansion Constraints

Respondents to the survey were also asked to detail any limitations to expanding their provision at each qualification level and this information may help to explain the drop in trainee numbers experienced (overall there were 80 responses).

As in 2011/2012 four key themes are evident from the verbatim responses:

- Employment related issues – finding placements/sponsors
- Recession/Budgets/Funding availability/accessibility
- Space available for training facilities or within existing facilities
- Staffing/resource issues.



Employment related issues were the most frequently mentioned with 32% of responses relating to difficulties obtaining employer places/sponsorship.

However 29% of respondents to the question of capacity limitations (across all qualification levels) stated that there were no limitations to expanding their provision.

The majority of capacity constraints are listed against S/NVQ qualifications (73%), and of these 36% were said to be constrained by factors relating to employers and employment and employers ability to take on apprentices. This is not surprising given that an employer placement is required for these courses.

Availability and accessibility of funding available for employers to train further compounds this problem. This is corroborated by the findings of the Training and Skills in the Construction Sector (2011)<sup>18</sup> research mentioned earlier where 21% of employers listed funding issues as the main barrier to providing training.

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<sup>18</sup> ConstructionSkills, Training and Skills in the Construction Sector, 2011  
([http://www.cskills.org/sectorskills/researchfromssc/skills\\_needs\\_survey.aspx](http://www.cskills.org/sectorskills/researchfromssc/skills_needs_survey.aspx))



## Section 4: Higher Education in the Built Environment

### Student enrolments on built environment courses

The Higher Education Statistics Agency (HESA) is the official agency for the collection, analysis and dissemination of quantitative information about higher education.<sup>19</sup>

This section contains data from HESA on student enrolments on construction and the built environment courses in higher education. By combining the HESA data in this section with the data from Section 1 on the number of trainees starting construction related vocational training courses the report provides a complete picture of training in the built environment.

However, it should be noted that the HESA data reproduced here is for the academic year 2011/2012 while Trainee Numbers Survey figures refer to 2012/2013; hence direct comparison is not advisable. Additionally HESA data covers the UK whereas the Trainee Numbers Survey is a measure of Further Education training across Great Britain.

Table 7 shows the number of starters on construction and the built environment courses at higher education institutions split by qualification level and subject area. 2011/2012 sees a further decline in the number of students enrolling on built environment courses to 23,763. However the number only decreased by 537 this year compared to a drop of 3770 between 2009/2010 and 2010/2011.

The majority of enrolments are in first degree courses (55%), followed by 26% starting post graduate degree courses, 15% commencing other undergraduate courses and the remaining 4% starting foundation degrees. These proportions have remained broadly the same since 2008/2009.

Table 7 – Student enrolments on built environment courses by subject and qualification aim 2011/2012 (United Kingdom)

	Other Undergraduate	Foundation Degree	First Degree	Postgraduate Degree	Totals
Civil engineering	764	159	3,914	1,568	6,405
Architecture	557	81	3,836	1,962	6,436
Building	1,702	535	3,842	1,090	7,169
Landscape design	67	33	254	197	551
Planning (urban, rural & regional)	347	112	1,081	1,274	2,814
Others in architecture, building & planning	114	0	142	132	388
<b>Totals</b>	<b>3,551</b>	<b>920</b>	<b>13,069</b>	<b>6,223</b>	<b>23,763</b>

Source: HESA 2011/2012

The most popular courses overall were in building, with 30% of all students enrolling on courses in building. Building courses accounted for the highest proportions of enrolments at both foundation degree level (58% of all foundation degree students) and other undergraduate programmes (48%).

Students enrolling in postgraduate degree courses were the most evenly spread across the subjects with 32% on architecture courses, 25% on civil engineering courses, 20% on planning courses and 18% on building courses.

<sup>19</sup> For more information see [www.hesa.ac.uk](http://www.hesa.ac.uk)

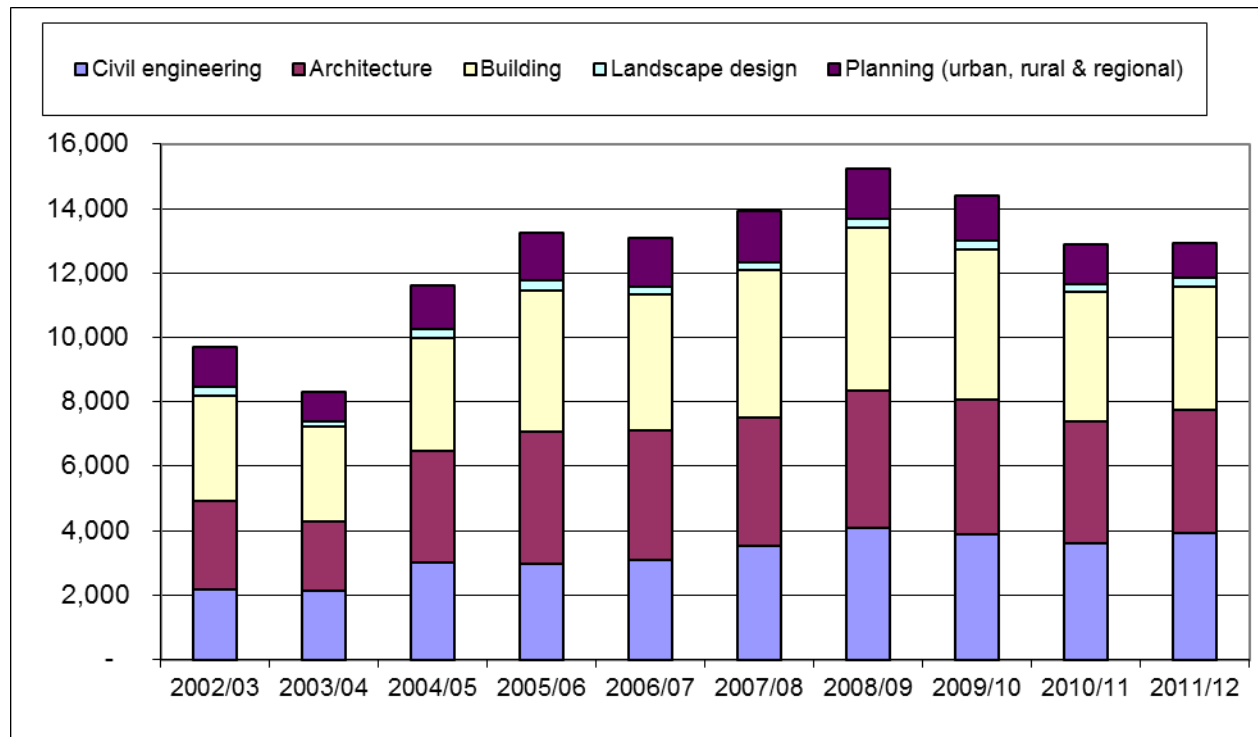


## 4.1 First Degree

As First Degrees represent the largest share of higher education starters (in the HESA data) they are examined in more detail here.

Chart 20 shows the ten year trend of students starting construction and the built environment first degrees. Numbers of first year degree students have increased year on year from 2003/2004 to a peak of just over 15,000 in 2008/2009. Between 2009/2010 and 2010/2011 there was a 10% decrease in numbers of first degree students. However 2011/2012 has seen a very slight increase in numbers to 12,927.

Chart 20 – Student enrolments on first degrees in built environment by subject 2002 - 2011 (United Kingdom)



Source: HESA 2011/2012

It is interesting to note that an increase in university tuition fees in England in 2006 had little effect on built environment first degree student numbers which increased over the next two years, reflecting a pattern seen with all degree courses not just those in construction<sup>20</sup>.

Further increases in university fees in England were implemented in September 2012 and these changes were reported to have impacted on enrolments between June 2011 and June 2012. In 2012 the University College Application Service (UCAS)<sup>21</sup> reported that student numbers had decreased by 10% in England, 2.1% in Scotland, and 2.9% in Wales. This decline is reflected in the reduction of built environment students on first degree courses seen in 2010/2011, which is shown in Chart 20.

Charts 21 and 22 show the proportions of males and females recorded for each of the first-degree construction and built environment courses. Looking at the gender split for first-degree students it has remained at around one quarter female and three quarters male since 2004/2005. Over the last eight years architecture has consistently been the most popular course with female students, accounting for between 45% and 50% of all female students. The

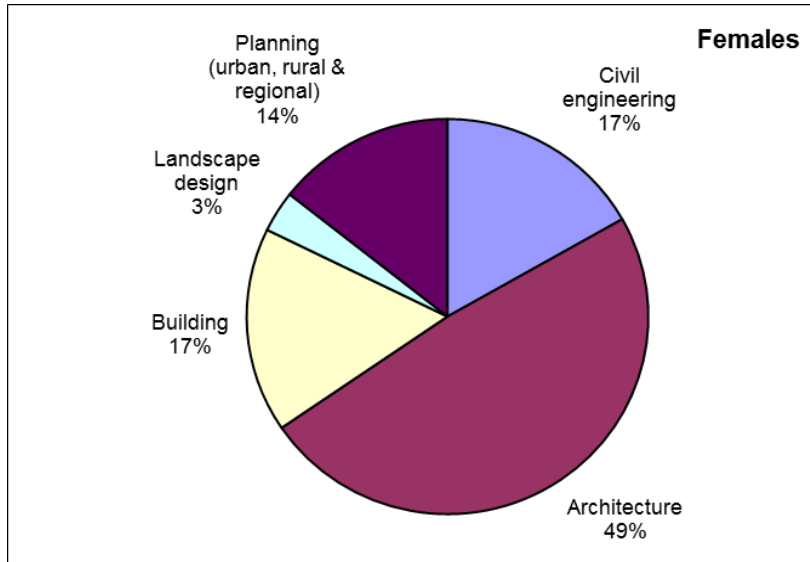
<sup>20</sup> <http://www.guardian.co.uk/education/2011/oct/24/university-applicants-drop-tuition-fees>

<sup>21</sup> <http://www.bbc.co.uk/news/education-19182000>



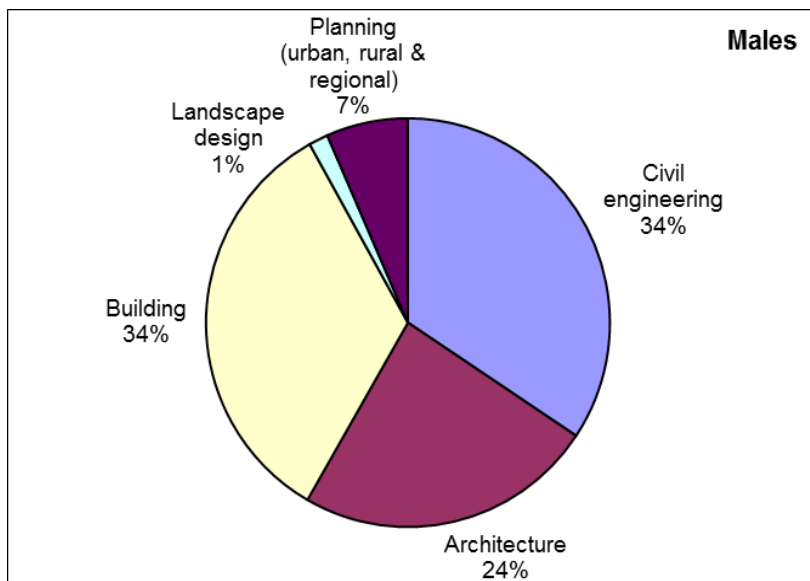
proportions of students (both male and female) across the subjects have changed very little over the last eight years.

Chart 21 – Distribution of all females enrolling on first-degree built environment courses by subject 2011/2012 (United Kingdom)



Source: HESA 2011/2012

Chart 22 – Distribution of all males enrolling on first-degree built environment courses by subject 2011/2012 (United Kingdom)



Source: HESA 2011/2012

HESA also collect data on ethnic origin. Over the last seven years there has been a gradual increase in numbers of ethnic minority students enrolling in built environment first degrees, from 15% in 2005/2006 to 22% in 2011/2012. The Black or Black British – African ethnic minority group has been the ethnic minority group with the highest proportion of all ethnic minorities for the last three years.

The representation of both females and students from ethnic minorities is higher at first-degree level than it is at craft and technical training (see Section 1). The Trainee Numbers Survey reports that 3% of craft and technical trainees are female and 5% are from an ethnic minority. At first-degree level 23% of students are female and 22% are from an ethnic minority.





## Conclusion

In 2012 the UK economy was badly affected by the sovereign debt crisis in the Eurozone with output estimated to have fallen by 9% overall. This was reflected in the construction industry which is still in a period of recession. According to CITB's Employer Panel research<sup>22</sup> the key challenge remaining for many firms is survival.

The Construction Skills Network shows that there has been a significant drop in the forecast for average annual recruitment requirement from 41,150 in the 2012-2016 forecast to just 27,240 in the 2013-2017 forecast. The reduction in the recruitment requirement is attributed to two factors: Construction output in 2017 being predicted to be 12% down on its 2007 peak; the significant numbers of individuals employed in the construction industry believed to be currently working under capacity (i.e. working reduced hours so there is some capacity to be taken up before new employees are required).

Training levels continue to be affected by the recession with first year trainee numbers dropping to just over 21,000, which is significantly lower than the level reached in the 1990's recession. Indeed the number of first year trainees is now half that seen before the start of the recession in 2007.

As seen last year the lack of available work placements has influenced the type of training undertaken, with 69% of first year trainees working towards Diplomas or Certificates (VRQ qualifications) as opposed to S/NVQ's which require work placements. This could create a skills problem in the future as the construction industry does not generally consider individuals with VRQ qualifications as being competent and ready to work.

Construction apprenticeship numbers have seen a further decline this year. Although the rate of decline has slowed considerably numbers have reached an all-time low of 3,539. This drop in numbers corresponds to a drop in apprenticeship places reported in the CITB Employer Panel<sup>22</sup> where the number of apprentices is reported as 65% of the number employed two years ago. And in figures reported by the National Apprenticeship Service (NAS), according to their data construction apprenticeships have fallen by 10% in 2013<sup>10</sup>.

However the proportion of Level 2 and Level 3 first year students undertaking an apprenticeship has remained high at 59%. The government has maintained financial support for apprenticeships throughout the recession and this may have contributed to the high proportion of first year trainees undertaking apprenticeships. Both NAS and the CITB Employer Panel<sup>22</sup> reported seeing an increase in applications submitted (NAS report a 10% increase in applicant numbers and 70% of employers in the employer panel survey reported higher numbers of applicants than available places), which could suggest that apprenticeships are becoming more popular, perhaps as a result of the recession and the increase in university tuition fees making 'earn while you learn' programmes more attractive.

Higher education enrolments have also been affected by the recession with numbers of enrolments on construction and the built environment courses continuing to fall since 2007/2008 from 28,520 to 23,763 in 2011/2012. This is likely to be partly due to the recession and partly attributable to the changes made to university fees in 2012. However, with the exception of English students, the increased fees do not affect those studying in their home nation<sup>23</sup>. First degrees remain the main popular courses in Higher Education amongst construction and built environment students, accounting for 55% of all enrolments.

While the Trainee Numbers Survey does not provide a complete census of construction training within the further education sector, it is a valuable indicator of the wider situation.

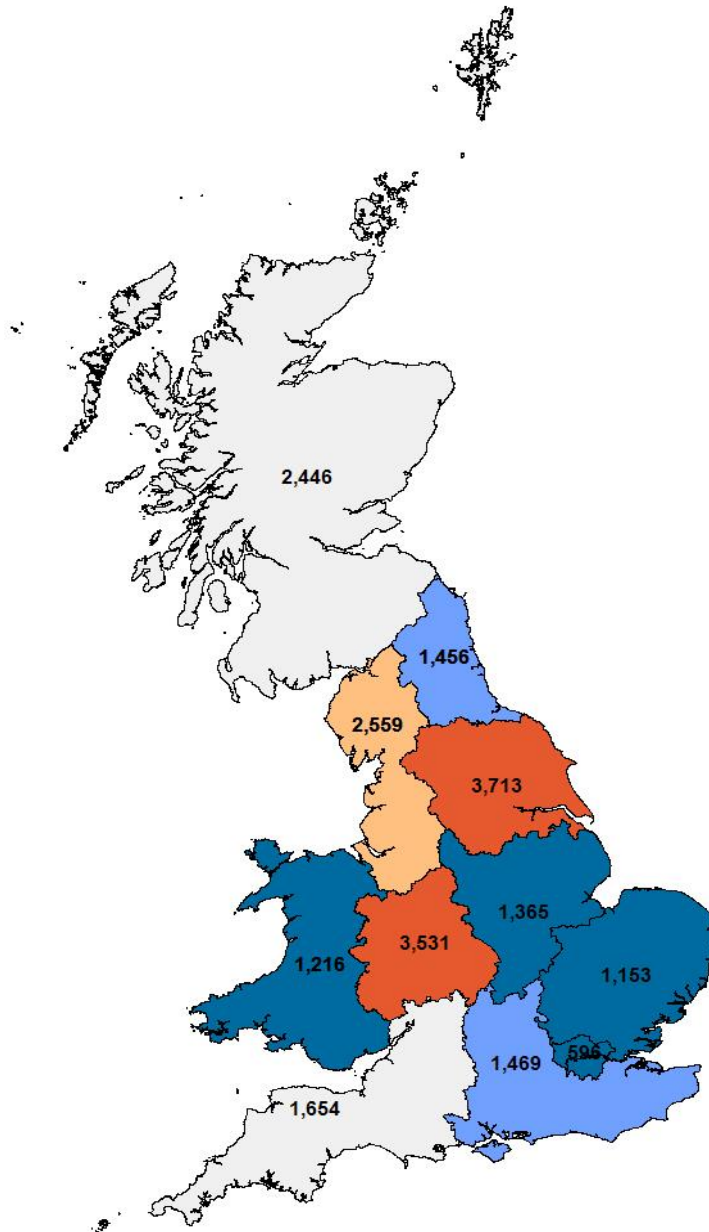
<sup>22</sup> CITB, Employer Panel, Wave 12, September 2012

<sup>23</sup> <http://www.bbc.co.uk/news/education-19182000>



## Appendix

Figure 1 – First-year construction trainees by geographical area 2012/2013 (Great Britain)



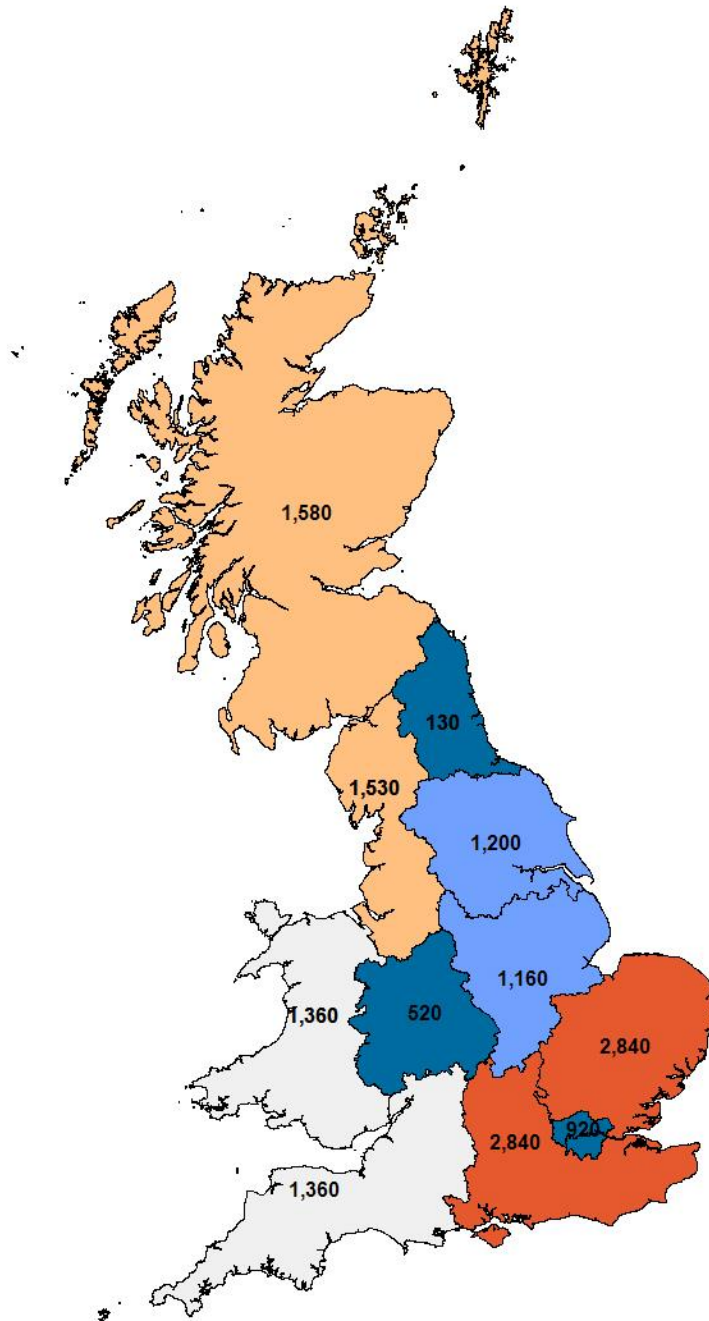
First Year Trainees 2012/2013  
by geographical Area (Great Britain)

■ 3,530 to 3,720 ■ 2,450 to 3,530 □ 1,470 to 2,450 ■ 1,370 to 1,470 ■ 590 to 1,370

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Figure 2 – Forecasted average recruitment requirement for skilled manual trade workers in construction by geographical area 2013-2017 (Great Britain)



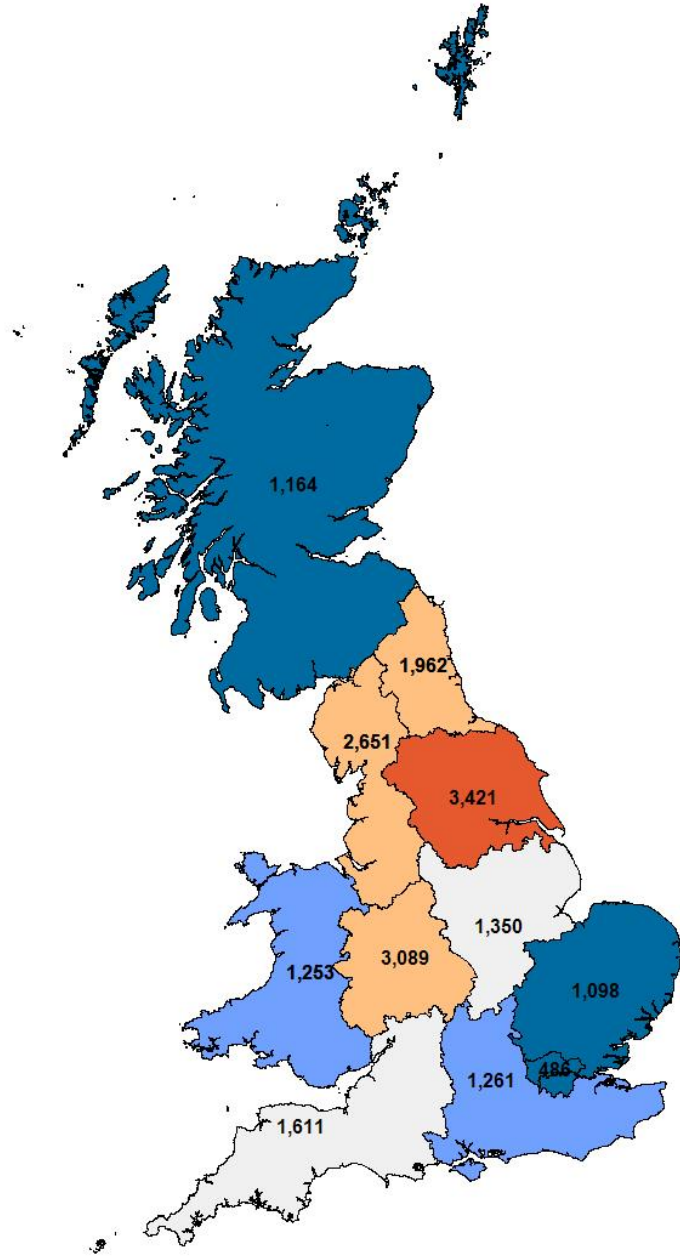
Forecasted Annual Average Requirement for Skilled Workers  
by Geographical Area (2013-2017 Great Britain)

■ 2,840 to 2,840 ■ 1,530 to 2,840 □ 1,360 to 1,530 ■ 1,160 to 1,360 ■ 130 to 1,160

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Figure 3 – Applicants to construction courses in the skilled manual trades by geographical area 2012/2013 (Great Britain)



Applicants to Construction Courses (Main Trades)  
by Geographical Area 2012/2013 (Great Britain)

■ 3,090 to 3,430	■ 1,960 to 3,090	■ 1,350 to 1,960	■ 1,250 to 1,350	■ 480 to 1,250
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