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Training and the Built Environment 2017

Introduction

CITB is the Industry Training Board and a partner in the Sector Skills Council for the construction industry in England, Scotland and Wales. It's our job to work with industry to encourage training, which helps build a safe, professional and fully qualified workforce.

The support and funding we provide helps companies to improve skills, increase their competitiveness and respond to challenges such as the low carbon agenda, reducing costs on site and recruiting the best talent for their sector.

The construction Industry is facing its biggest challenge since the industrial revolution.

The UK infrastructure plan, a housing boom and the importance of developing new ways of working and embracing new technologies, are combining to create demand for more skills, new skills and higher level skills.

CITB is here to support the construction industry in navigating these challenges by:

- understanding how future conditions could impact on its needs
- helping industry to access the products and services it needs
- providing the right financial support
- creating the right environment for industry through influencing, facilitating and collaborating

We have consulted and listened to Industry to organise our activity to address their priorities.

These strategic priorities are:

Strategic Leadership

Identifying current and emerging skills needs and providing intelligence on skills gaps to make sure communities deliver the skills that are needed, supported by CITB funding and investments.

Image and Recruitment

To engage with education and improve the image and culture of construction and provide engaging and accessible information to those who want to join the industry.

Industry Engagement

Listening to employers to shape the support that we can provide and delivering skills solutions to help build capability, and increase the competitive edge of businesses, both large and small.

Training and Development
Using our industry intelligence to identify ways to increase work readiness and ensure that we have the right training provision and qualifications that professionalise the workforce and deliver the skills industry needs now, and in the future.

Charitable Trading

Delivering a portfolio of products and services not provided by the market that meets industry's skills needs.

Running the Business

Transforming our operating model so that we're more effective, accurately represent our industry and work smarter and faster to address industry change.
Building Partnerships charts how, building upon our 50 year track record of working successfully in partnership with Industry and governments, we will deliver to these Strategic Priorities in 2015-2017.

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 picture of training in the built environment.

The main sections of the report are:

Section 1: CITB Trainee Numbers Survey 2016/2017 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.

Section 2: Forecasted Demand for Craft and Technical Construction Training

2017–2021 analyses this training data alongside the Construction Skills Network (CSN) projected demand for skilled construction workers over the forecast period 2017–2021, in order to assess the adequacy of current training provision in terms of quantity.

Section 3: 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 2015/16.

Section 4: Conclusion

Hereafter where reference is made to trainees or apprentices these are all individuals who are undertaking their first year of training courses in construction and the built environment only.

Section 1: CITB Trainee Numbers Survey 2016/2017

The Trainee Numbers Survey is conducted annually by CITB. The survey collects data from construction training providers across Great Britain on the number of first year construction and the built environment trainees by qualification and qualification level.

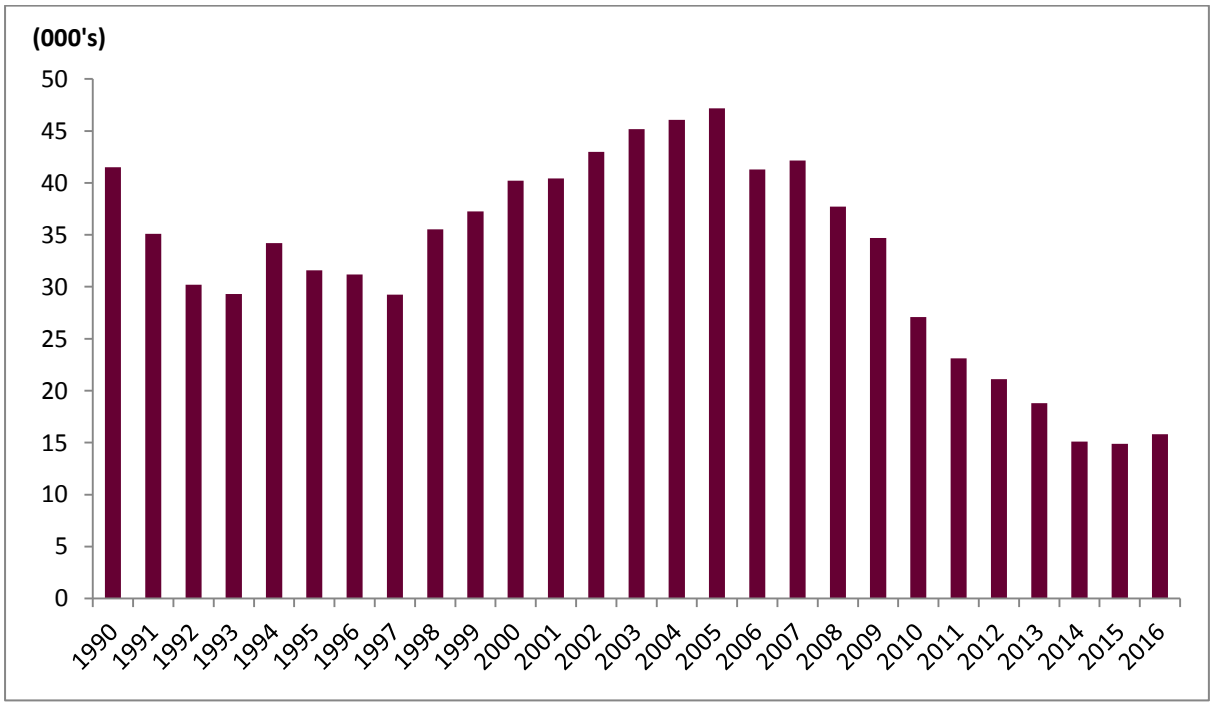
1.1 The National Picture

Chart 1 shows the number of first year trainees starting construction and built environment courses from 1990-2016. The number of first year trainees in 2016/2017 stood at 15,800, an increase compared to the total last year which stood at 14,900.

The Construction Skills Network (CSN) 2017-2021 reports the sector is due to grow over the forecasting period, despite political and economic uncertainty following on from last year's EU referendum. The infrastructure sector is to carry much of the growth (45%), followed by the private housing sector, which backs the Governments plans to create more new affordable homes. Over the next five years the CSN predicts by 2021 179,000 new workers will be needed to meet construction employment demand.

Training levels have begun to recover this year, albeit not as high as those recorded pre-recession. With the Governments introduction of T-levels this year (which offer a three month industry work placement), there could be a further rise in construction training in the future.

Chart 1 – Numbers of first-year trainees 1990-2016 (Great Britain: All occupations)



1.2 Training by Occupation

This section of the report translates data from the survey into occupational groups used by the CSN, allowing us to look at the potential supply of trainees by occupational groups enabling comparison with the CSN employment forecast (section 2).

In 2016/2017 there has been an increase in numbers in ten of the occupational groups, compared to eight which have decreased, with five remaining equal. Noticeable increases can be found in wood trades (+796), painters and decorators (+361) and bricklayers (+182). The most significant decreases can be found in scaffolders (-215), civil engineering operatives nec*[1] (-191), and plant operatives (-158).

Table 1 – Trainee numbers 2016/2017 (Great Britain)

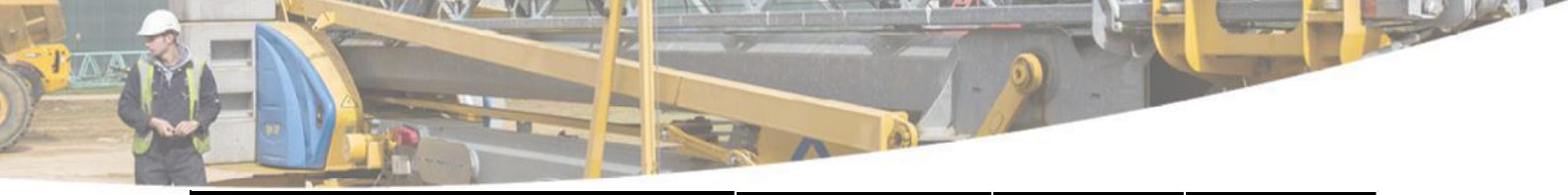
	Under 18		Over 18		
	Male	Female	Male	Female	Total
Senior executive & business process managers	0	0	0	0	**0**
Construction Trades Supervisors	0	0	82	<50	**82**
Construction Project Managers	0	0	<50	0	**<50**
Wood trades and interior fit-out	3,188	210	1,667	92	**5,157**
Bricklayers	1,942	<50	849	<50	**2,791**
Building envelope specialists	0	0	0	0	**0**
Painters and decorators	763	128	578	113	**1,582**
Plasterers and dry liners	591	<50	499	80	**1,170**
Roofers	117	0	80	<50	**197**
Floorers	71	<50	100	<50	**171**
Glaziers	<50	0	0	0	**<50**
Specialist building operatives nec*	140	<50	178	<50	**318**
Scaffolders	<50	0	194	0	**194**
Plant operatives	67	<50	295	<50	**362**
Plant mechanics/fitters	56	<50	91	<50	**147**
Steel erectors/structural	0	0	<50	0	**<50**
Labourers nec*	<50	0	<50	0	**<50**
Plumbing and HVAC Trades	161	<50	61	<50	**222**
Civil engineering operatives nec*	538	<50	342	<50	**970**
Civil engineers	174	<50	120	<50	**294**
Other construction professionals and technical staff	285	69	467	60	**881**
Architects	<50	<50	154	<50	**154**
Surveyors	<50	<50	<50	<50	**<50**
Total	**8,725**	**556**	**6,012**	**515**	**15,808**

*nec = not elsewhere classified

In terms of overall training, wood trades and bricklaying still continue to have the largest share. Since 2007/2008 both these occupational groups have been in decline, however this year it would appear wood and brick have started to recover.

Table 2 – Comparison of trainee numbers in the top ten occupational groups (by volume) 2014/2015 to 2016/2017 (Great Britain)

[1] *Not elsewhere classified.



Occupations	2016-17	2015-16	2014-2015
Wood trades and interior fit-out	5,157	4,361	4,536
Bricklayers	2,834	2,644	2,364
Painters and decorators	1,582	1,221	1,331
Specialist building operatives nec*	332	226	838
Plasterers and dry liners	1,183	1,083	833
Other construction professionals and technical staff	908	894	713
Civil engineering operatives nec*	914	1,244	706
Plant operatives	367	524	485
Construction Project Managers	69	165	422
Scaffolders	228	410	379

Chart 2 shows the top ten occupational groups by their share of training over a three year period. Four of these occupations have decreased, while six have increased. Specialist building operatives nec*[2] has witnessed the largest decline (9%to 2% over the three year period)

Chart 2 – Proportion of all trainees by top ten occupation groups 2014/2015 to 2016/2017 (Great Britain)

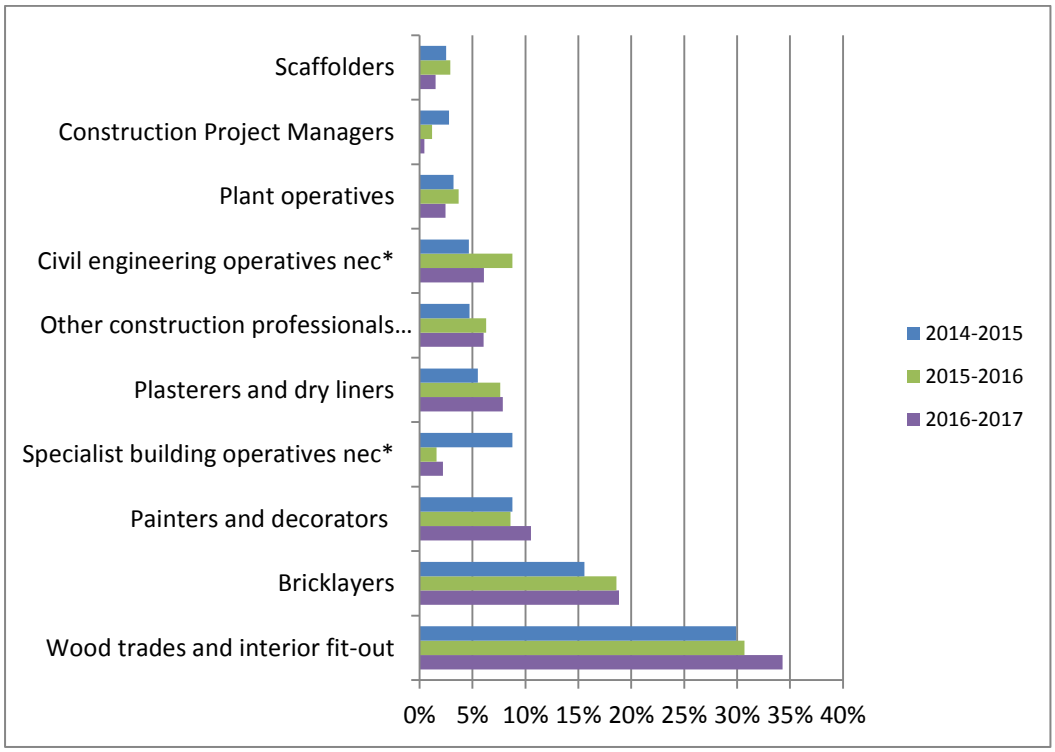


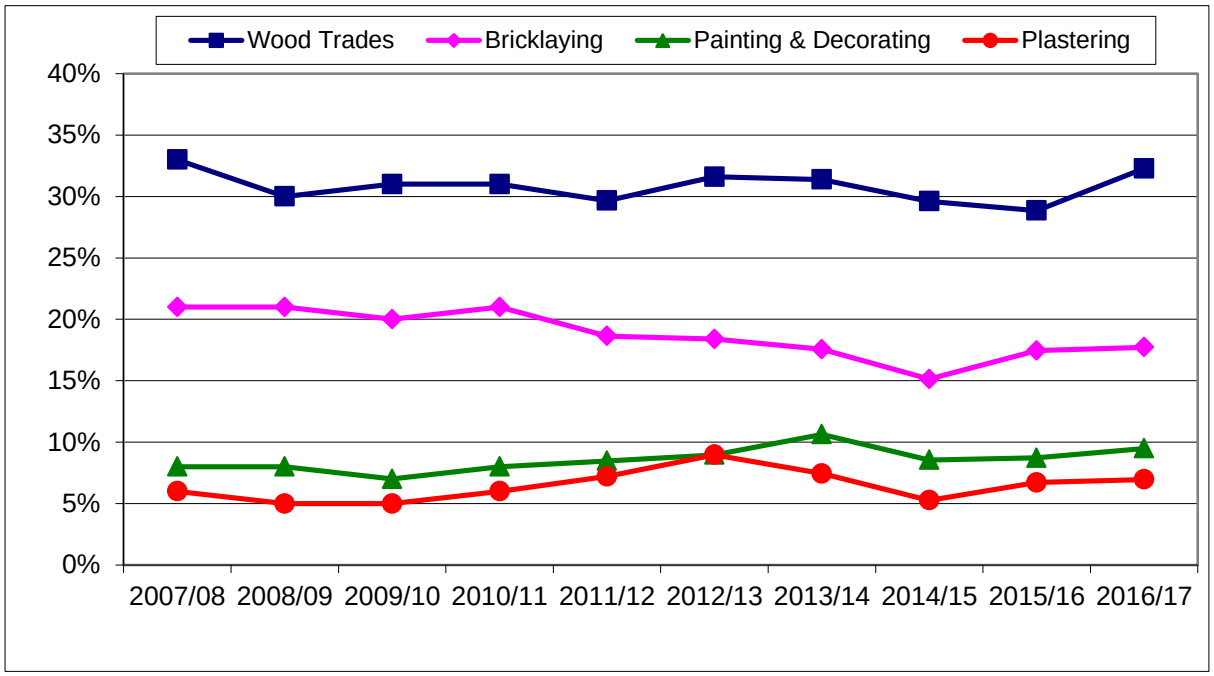
Chart 3 shows the four main building craft occupations: wood trades, bricklaying, painting and decorating, and plastering over the last decade. Their share of overall training has remained broadly similar over the years. In 2016/2017 there has been an increase in training in wood and brick, whereas painting and decorating and plastering has remained unchanged since last year.

Although, this year there have been increases in wood and brick training, over a ten year period these occupational groups have witness greater volatility. Painting and decorating

[2] *Not elsewhere classified.

has maintained more consistent proportions throughout the same period, and peaked at 11% in 2013/2014.

Chart 3 – Proportion of all first-year trainees in the main Building Craft Occupations 2007-2016 (Great Britain)



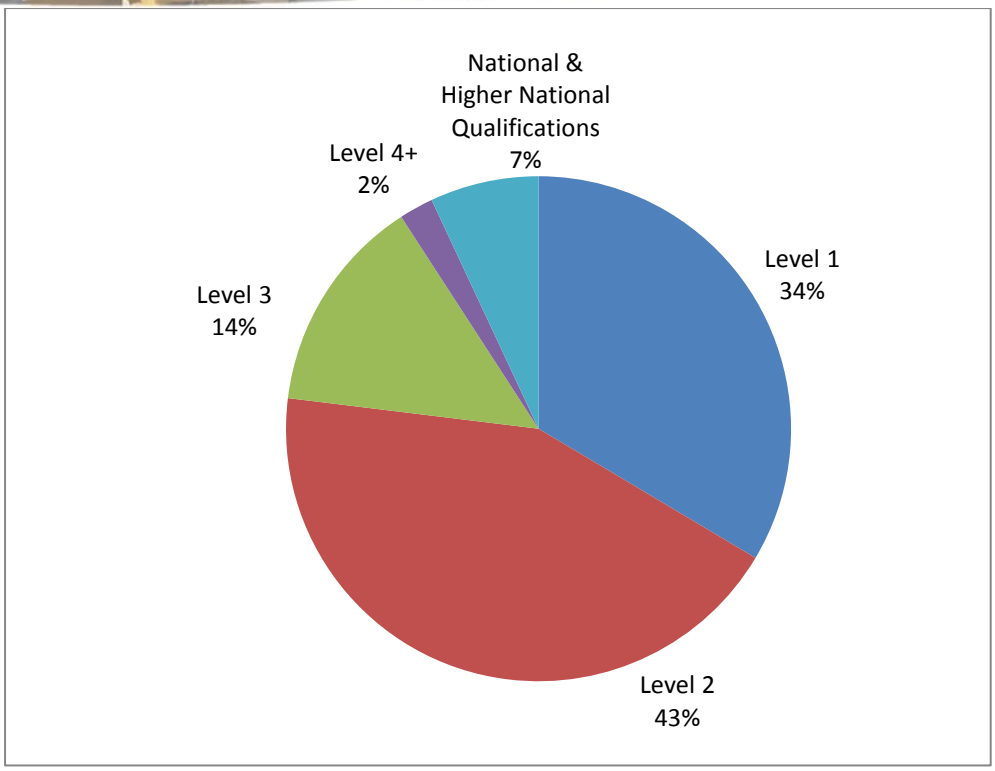
1.3 Training by Qualification

The survey looks at trainee numbers by qualification level. The levels of qualification are spilt into 5 categories:

- Level 1
- Level 2
- Level 3
- Level 4+
- National and Higher Qualifications

Chart 4 illustrates the majority of trainees are undertaking level 2 qualifications (43%), followed by 34% taking a level 1 qualification. Only 2% of trainees are undertaking a level 4+ qualification.

Chart 4 – Proportions of all trainees by qualification level 2016/2017 (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 3 for more information.

Over the years, level 2 qualifications have consistently had the highest share of trainees.

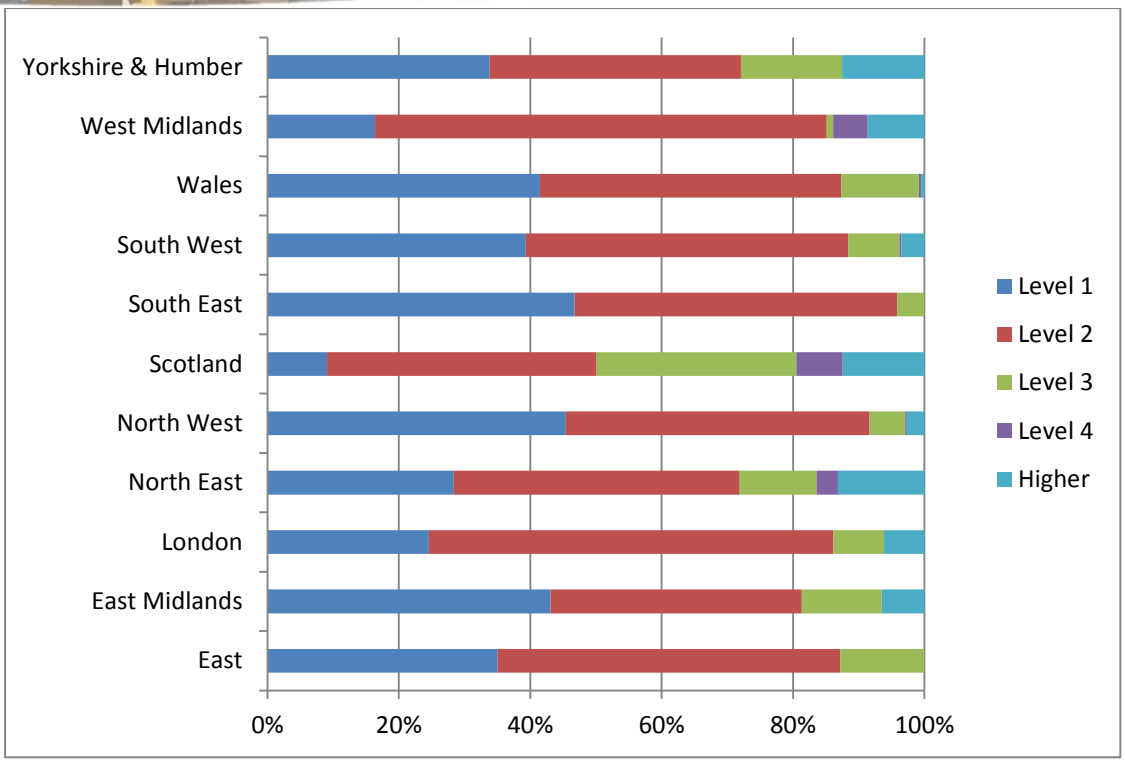
1.4 Geographical considerations

The survey responses are collected from training establishments across Great Britain. The data is split into regions and devolved nations, then further analysed by qualification level.

The highest proportion of overall trainees can be found in Scotland (19%), Wales (16%) and Yorkshire and Humber (13%). Lower proportions of trainees are found in the East, London and the West Midlands (all 5%) and in the South East (4%).

The geographical profile of qualification levels has stayed similar over the years with England and Wales normally having higher proportions undertaking level 1 and level 2 qualifications (81%), compared to Scotland whereby higher proportions are found undertaking levels 2 and 3 (71% compared to 60% in England and Wales).

Chart 5 – Trainees by level of qualification and geographical area 2016/2017 (Great Britain)



1.5 Qualification Type

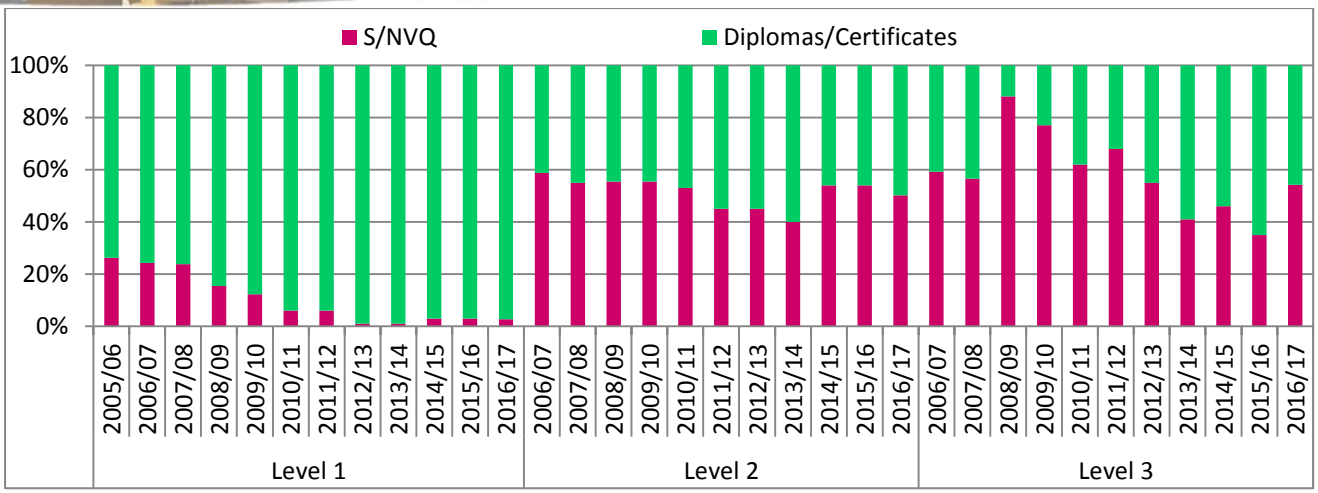
For construction craft occupations there are two types of qualification that can be undertaken; S/NVQ's and Diplomas[3], both are available at Levels 1, 2 and 3. The S/NVQ qualification requires on-site experience/assessment, whereas Diplomas are qualifications for craft occupations and can be completed part-time or full-time but do not require any proof of work undertaken on site.

This year 12,028 trainees in England and Wales are undertaking construction craft training. Of these, 68% are enrolled on Diplomas, compared to 32% on S/NVQ's. Over the last thirteen years the popularity of students undertaking S/NVQ's has fallen. In 2003/2004 S/NVQ enrolments stood at 70%, when compared to 32% in 2016/2017 it shows a significant decrease in their popularity. Consequently, the proportion of those studying diplomas over the same time period has risen.

This is highlighted by analysis of each level of qualification, nearly all level 1 qualifications are diplomas (97%), while they account for around a half of level 2 (50%) and level 3 (46%) enrolments. These proportions have remained comparable in recent years at levels 1 and 2; while there appears more volatility at a level 3.

Chart 6 - Proportion of trainees split by work-based training 2006/2007 to 2016/2017 (Construction craft training, England and Wales)

[3] All data for work based training excludes Scotland's trainee figures as Diplomas are not available in Scotland.



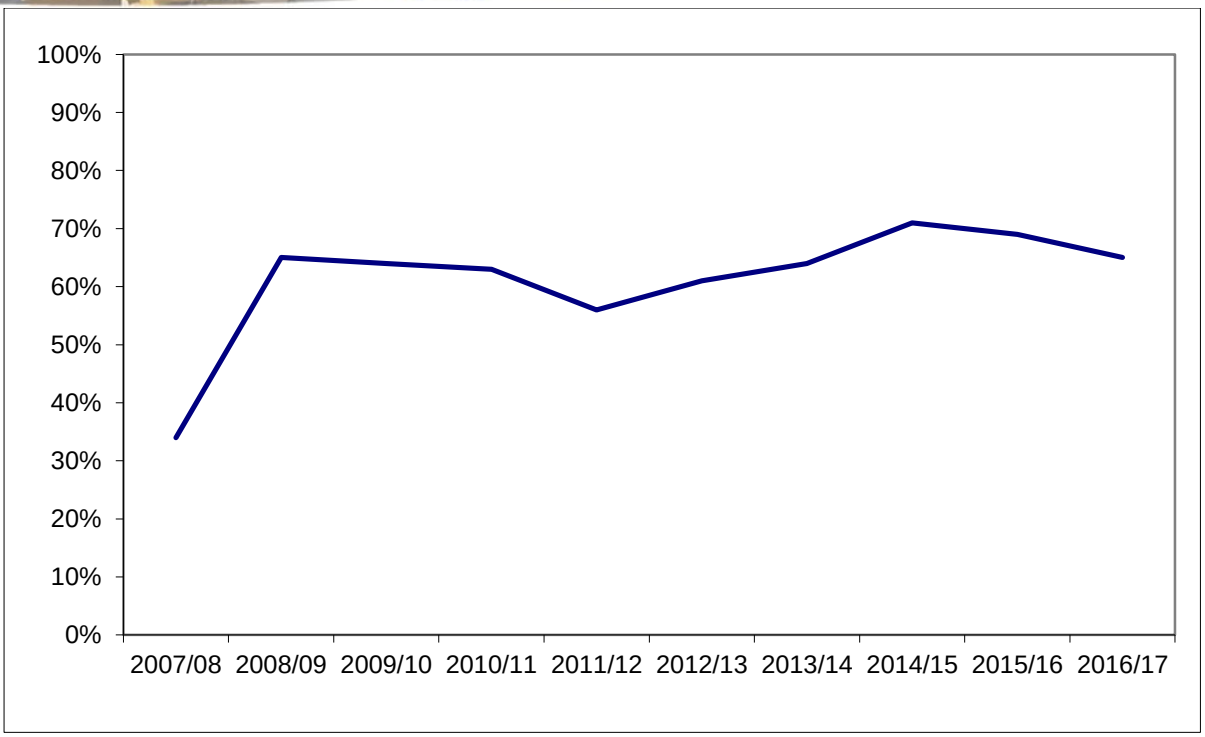
NB. This survey is always undertaken at the beginning of the academic year, therefore numbers on Diplomas/Certificates may decrease as the year progresses and more trainees are placed with employers and move from a Diploma or Certificate into the relevant NVQ Level qualification.

1.6 Trainee Progression

Initially the survey had sought to analyse the progression of trainees measuring how many had undertaken a Level 1 qualification (both S/NVQ'S and Diplomas) and were expected to progress onto a Level 2 qualification. However, over the last six years the progression data received for the number of trainees undertaking a Level 1 S/NVQ has decreased to such an extent that it is no longer robust enough for meaningful analysis. Therefore the following section only includes trainees who are on a Level 1 Diploma qualification.

Chart 7 shows the percentage of those studying a level 1 diploma, who are expected to progress onto a level 2. In 2016/2017 61% are expected to progress to a level 2, which is a decrease on last year's results (69%). Between 2010/2011 and 2014/15 proportions of those progressing had steadily increased, reaching a peak in of 71%. However since then, progression onto a level 2 diploma has been declining.

Chart 7 – Expected progression of trainees from Level 1 Diploma 2007-2016 (England & Wales)



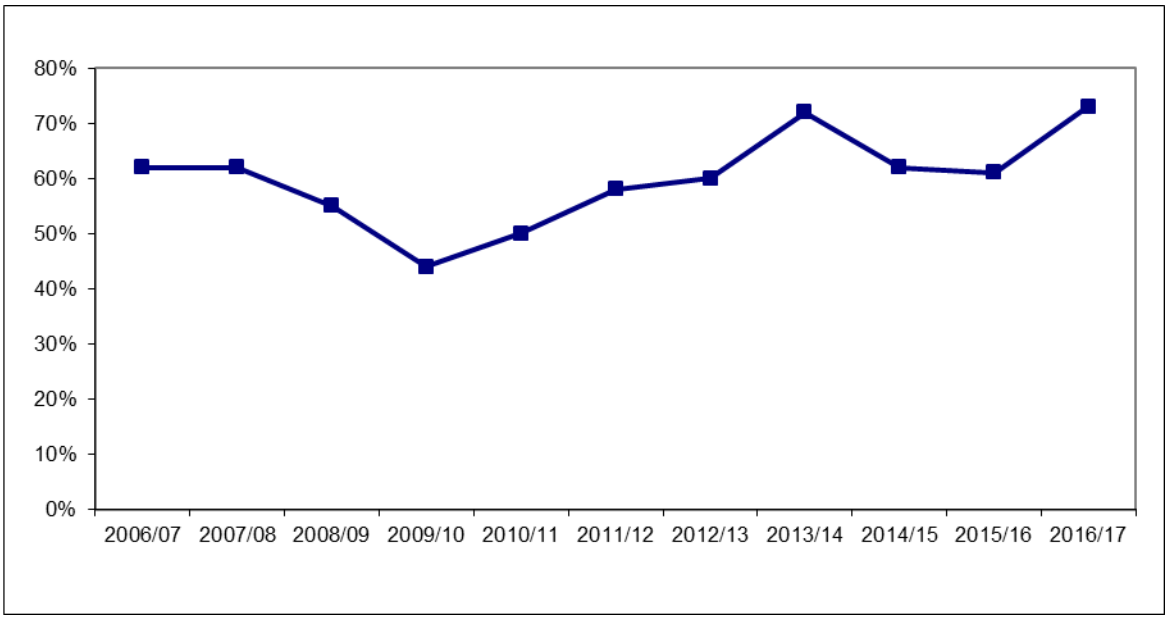
Note: Diplomas are not available in Scotland

1.7 Apprentices

The proportion of trainees that are following an apprenticeship programme has increased this year to 73%, compared to 61% last year (+12%).

This year there were 2,247 (74%) level 2 apprentices and 774 (26%) trainees on a level 3 apprenticeship. The share of those on level 2 and level 3 apprenticeships has remained broadly similar over the years.

Chart 8 – Proportion of trainees following an apprenticeship programme 2006-2016 (Great Britain S/NVQ Level 2 and Level 3)



When analysing apprenticeship starts and geographical area, there are stark differences between the English regions and devolved nations. Yorkshire and Humber has the highest number of overall of trainees taking an apprenticeship which stands at 482, while in the East Midlands just 113 trainees are undertaking an apprenticeship.

However, when additional analysis is applied which measures the share of apprenticeships compared to all training; a different picture emerges. Although, the South East have the lowest number of apprentices they represent nearly all the trainees on a Level 2 and 3 (98%), whereas in Yorkshire and Humber only 69% of trainees are on an apprenticeship programme.

Chart 9 – Number and proportion of trainees following an apprenticeship programme by area 2016/2017 (Great Britain: S/NVQ Level 2 and Level 3)

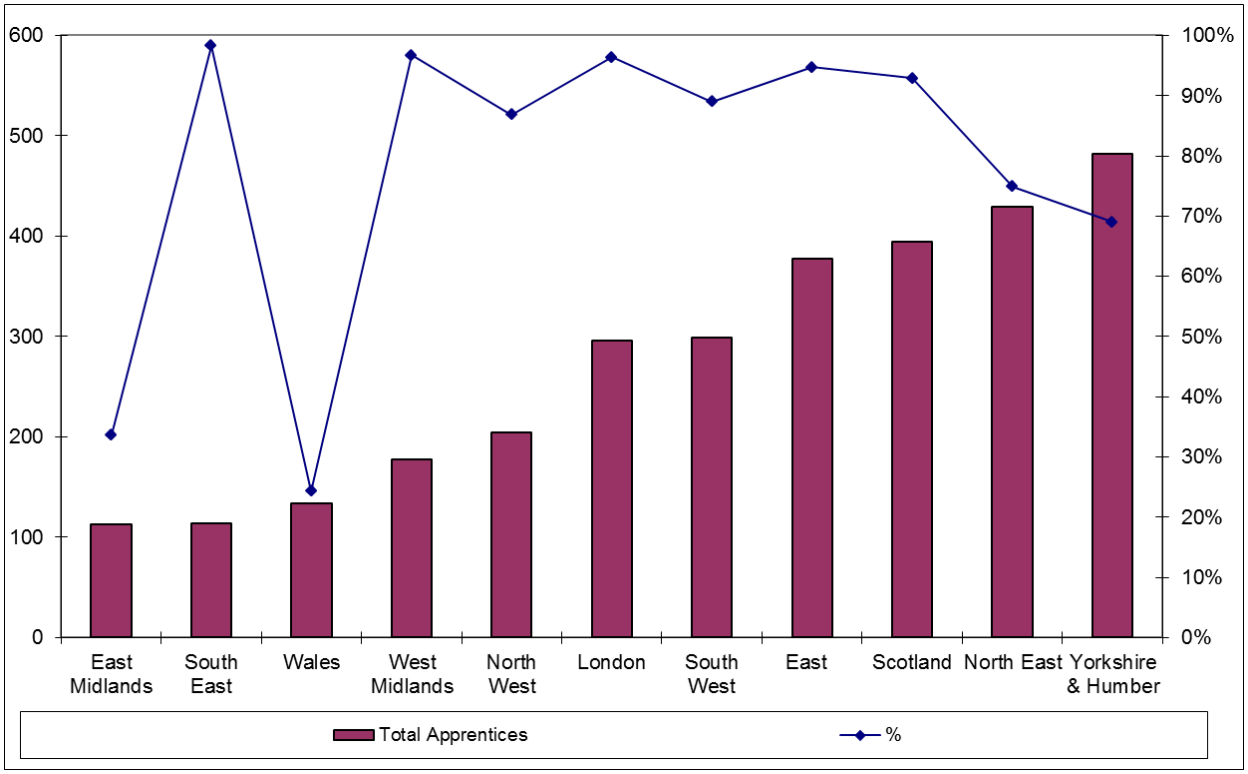
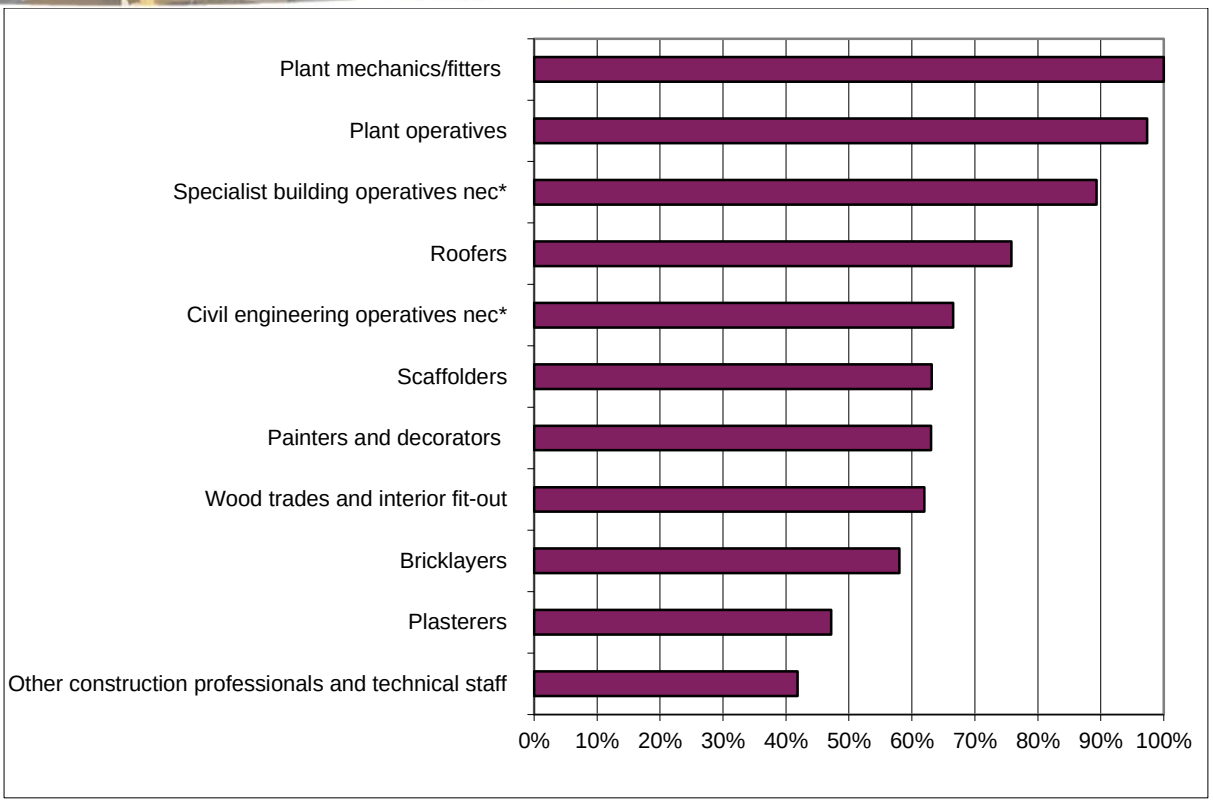


Chart 10 shows analysis of apprenticeships by occupation. The occupations which have the highest share of apprentices are plant mechanics/fitters (with all trainees on an apprenticeship (100%), which is a 5% increase on last year's proportion. Other occupations which witness high proportions of apprentices are plant operatives (97%), specialist building operatives nec* (89%), and roofers (76%). Over the last few years, the proportion of those studying an apprenticeship in the main trades (brick ,wood, painting and decorating and plastering) has dropped.

Chart 10 – Proportion of trainees following an apprenticeship programme by occupation 2016/2017 (Great Britain: S/NVQ Level 2 and Level 3)



1.8 First-year trainee characteristics

The survey collects information on age, gender and ethnicity to build a picture of the characteristics of trainees.

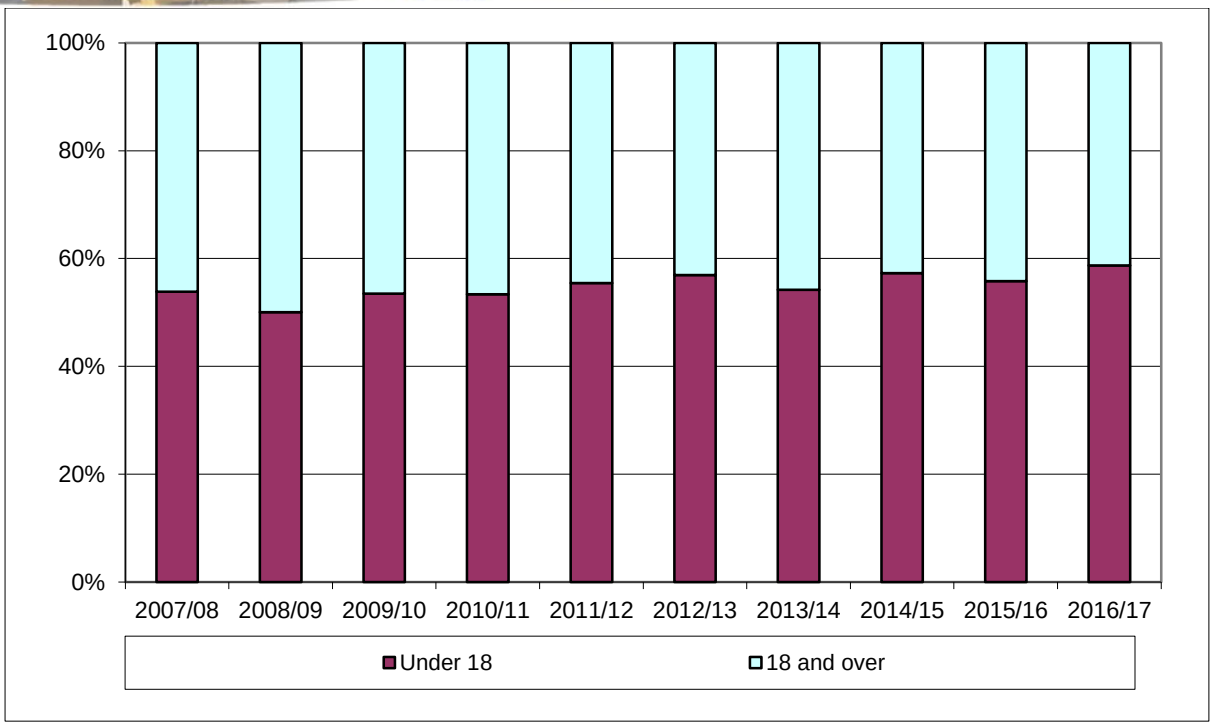
1.8.1 Age

The survey records the age of respondents from two age categories:

- Under 18 years
- Over 18 years

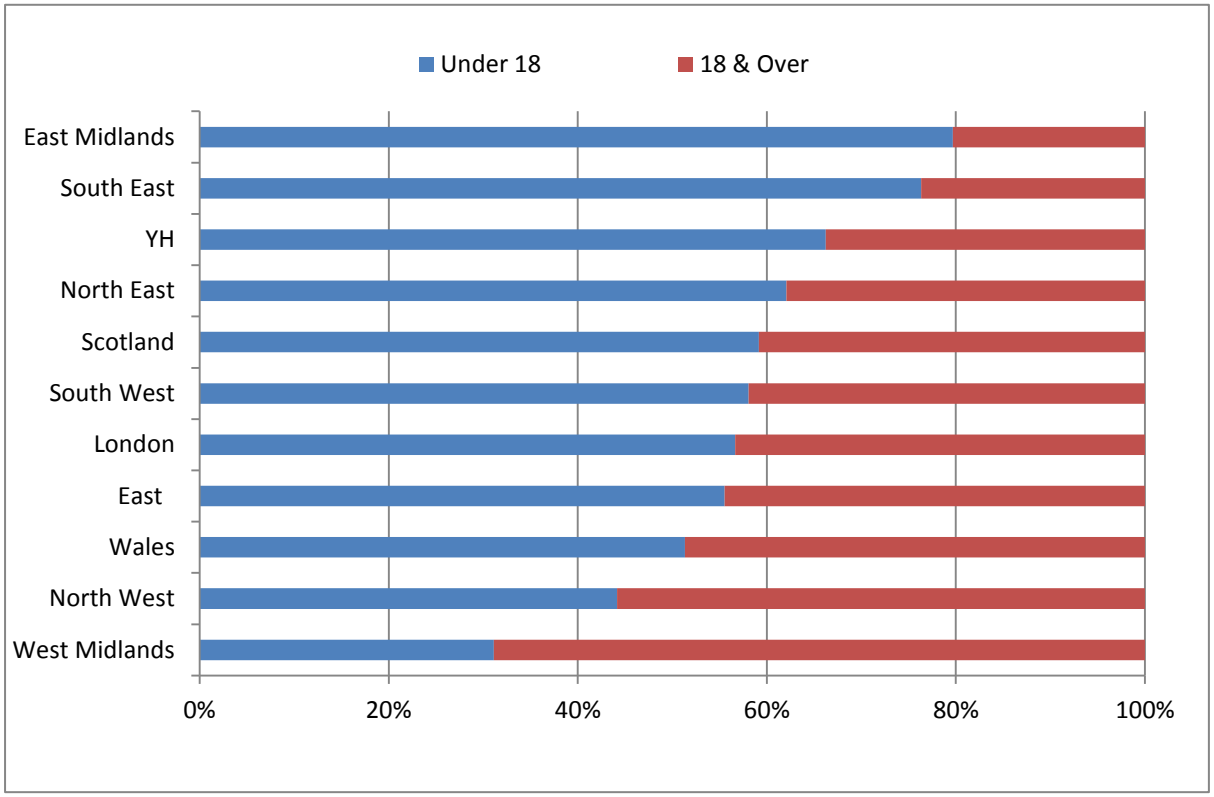
Chart 11 shows the proportions from both age categories has remanded relatively consistent across the decade, with under 18's usually having the higher share of training. When comparing the two proportions in 2016/17, under 18's stood at 59% (the highest proportion recorded by the survey) and over 18's at 41%(the lowest proportion recorded by the survey).

Chart 11 – Age of trainees as a proportion of total 2007-2016 (Great Britain)



When looking at age group and region/nation there are clear differences. In 2016/2017 the East Midlands has the highest proportion of trainees under the age of 18 (80%), followed by South East (76%) and Yorkshire and Humber (66%). The areas which have the highest share of trainees over the age of 18 are the North West (56%) and the West Midlands (69%).

Chart 12 – Age of trainees by Geographical area 2016/2017 (Great Britain)



1.8.2 Gender

A breakdown of trainee numbers by gender and age is show in Table 3.

Table 3 – Number of trainees broken down by gender and ages 2016/2017 (Great Britain)

Under 18		18 & Over		Total	
Male	**Female**	**Male**	**Female**	**Male**	**Female**
8,725	556	6,012	515	14,737	1,071
55%	4%	38%	3%	93%	7%

In 2016/2017 the proportion of female trainees stood at 7%, the highest level recorded by the survey (with an average of 4% in previous years). It would seem this increase has been mirrored within the industry also, as it has been reported the number of females joining the construction industry is at an all- time high[4].Chart 13 shows the proportions of females enrolling on construction courses since 1990. Over an 8 year period (2003/2004 – 2010/2011) the numbers of females stayed static at 3%.Since 2012/2013 the proportions of females has witnessed an increase year upon year.

Chart 13- Proportion of females on construction courses 1990-2016 (Great Britain: all occupations)

Chart 14 shows analysis of geographical area and distribution of females. There are significant differences between the regions with Wales (14%), followed by Scotland, the East and London all at 7%. The South East and the West Midlands have the lowest proportions of females with 3%.

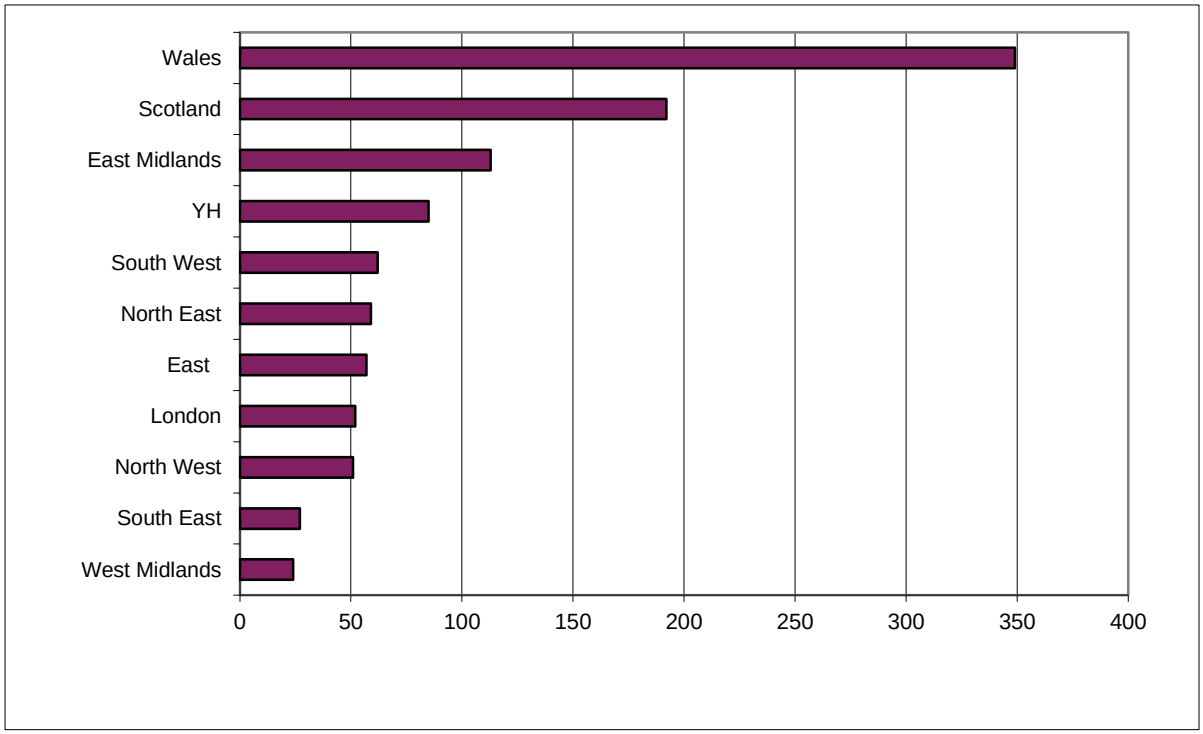
When comparing gender and occupation, the greatest proportion can be found taking courses in “professional” occupations (i.e non-manual) with architects being the most

[4] https://www.trainingjournal.com/articles/feature/women-%E2%80%93-uk-construction-needs-you

popular (21%), followed by civil engineers (15%) and surveyors (14%). When looking at manual occupations, females are more likely to be on painting and decorating courses (15%), which is similar to previous year's proportions. Plasterers and dry liners have the second highest proportion of females (8%) undertaking those courses.

According to the latest Labour Force Survey (LFS, Spring 2016) 15% of the UK construction workforce is female. The largest share of these (93%) are in non-manual trades such as architecture, draughtspersons and building and civil engineering technicians. Only 7% of all females working in construction are undertaking a manual occupation; representing 2% of the manual workforce[5].

Chart 14 – Females as a proportion of all training by geographical area 2016/2017 (Great Britain)



1.8.3 Ethnicity

This year the number of trainees that come from a Black, Asian and minority ethnic (BAME) background stands at 1,046, which equates to 7% of all trainees (the highest percentage of BAME trainees the survey has recorded since 2007/08. The ten year average for trainees with a BAME background stands at 5.9%.

Chart 15 – BAME trainees as a proportion of all trainees 2007-2016 (Great Britain)

[5] Labour Force Survey, 4 quarter average Spring 2016 (SIC2007), UK

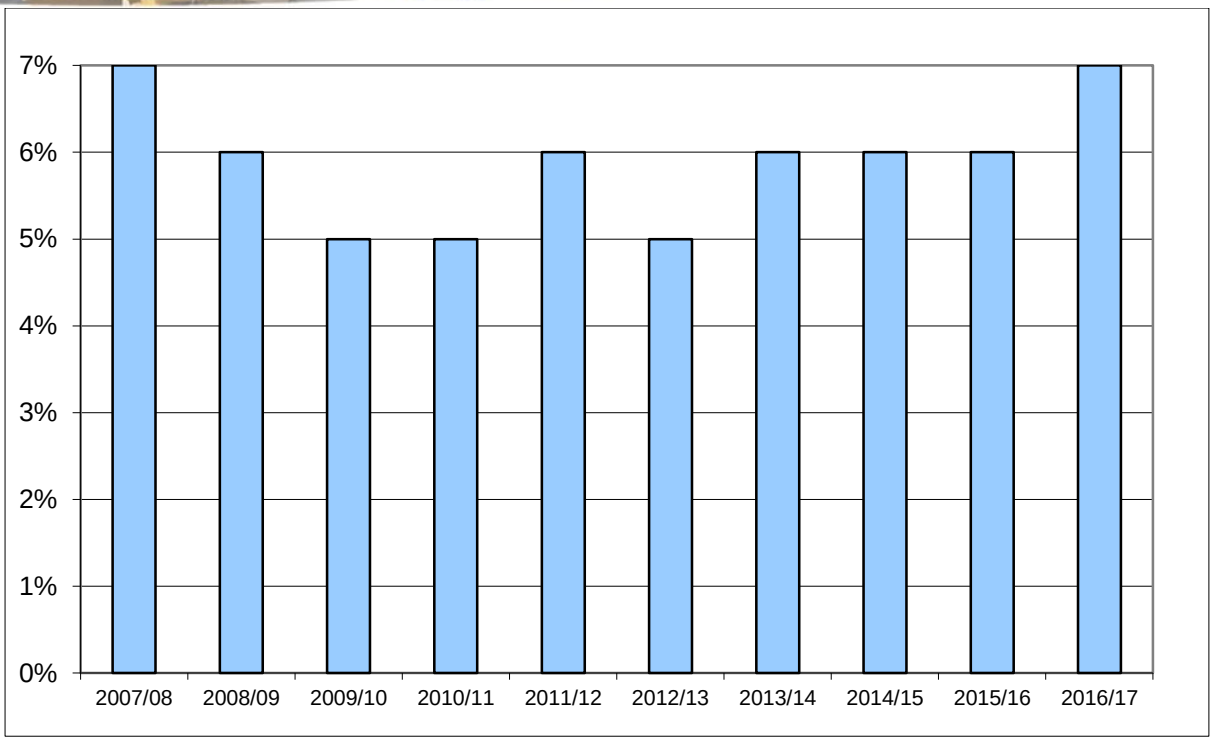
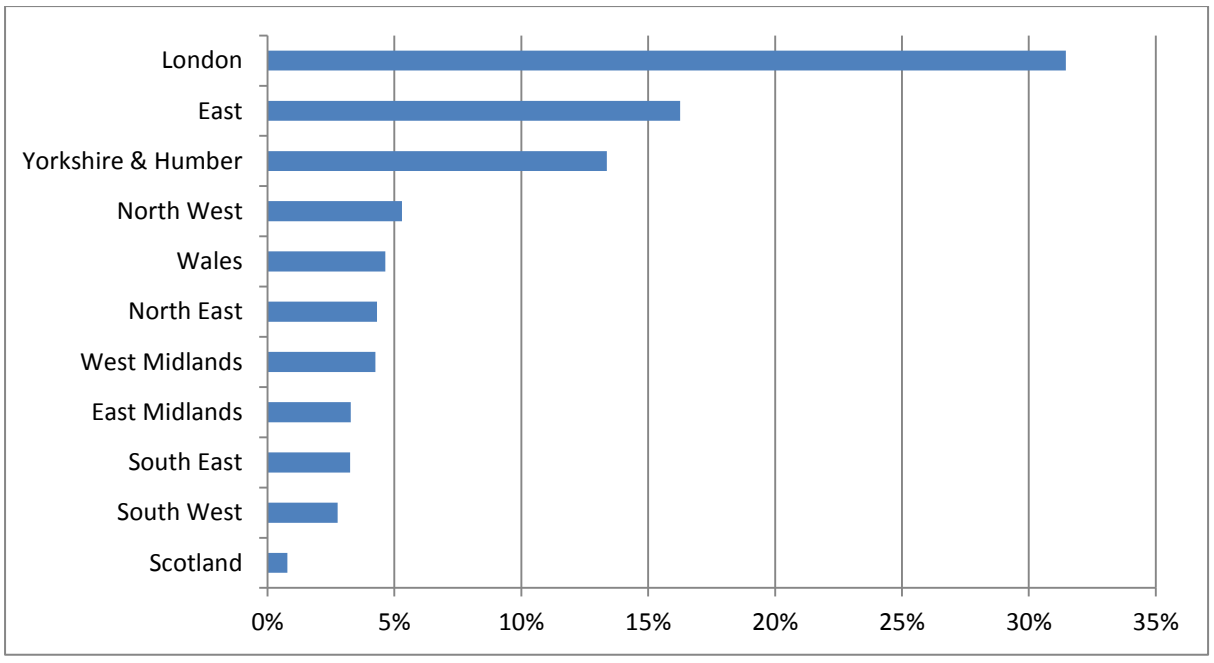


Chart 16 shows the differences between region and nation and proportions of trainees from BAME backgrounds. There a significant geographical variations ranging from nearly a third (31%) in London to just 1% in Scotland. These findings are very similar to the picture across the construction workforce, with London have the highest share of BAME workers (19%) and Scotland the least (1%)[6].

Chart 16- BAME trainees as a proportion of all trainees by geographical area 2016/2017 (Great Britain)



[6] Labour Force Survey

Section 2: Forecast Demand for Craft and Technical Construction Training 2017-2021

CITB, through the Construction Skills Network publishes a forecast of the likely demand for skilled 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 forecast is reproduced in the following two tables: Table 4 (by geographical area) and Table 5 (by construction trades).

Table 4 shows the requirement for skilled manual trades by area for Great Britain. The total annual recruitment requirement (ARR) for 2017-2021 is forecast to be 11,630 per year, a decrease from the 2016-2021 forecast of 19,670 (-8040). The lowest recruitment requirement can be found in Scotland (320), and the highest can be found in Wales with 1,750.

Table 4 – Requirement for skilled manual trades by geographical area 2017-2021 (Great Britain)

	Total employment		Average annual requirement
	2017	2021	2017-2020
East	158,530	81,590	1,540
East Midlands	62,370	59,490	750
London	134,080	133,480	360
North East	35,460	32,330	510
North West	94,560	99,520	2,220
Scotland	72,110	65,300	320
South East	127,620	127,930	1,170
South West	92,920	97,140	1,560
Wales	48,690	54,510	1,750
West Midlands	66,900	68,240	1,010
Yorkshire & Humber	71,060	62,930	440
Total	**964,300**	**882,460**	**11,630**

Notes: Table 4 is a subset of the table that appears in Blueprint for UK Construction Skills 2017-2021 report. It covers only the skilled manual trades and excludes managers, clerical staff, technical staff and professional occupations.
**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.
ARR <50 excluded from analysis

Table 5 illustrates the number of new entrants the industry needs to recruit each year from 2017-2021 in order to meet the projected demand for each occupation. By looking at the projected demand, and the amount of training taking place in the industry, it is possible to access the adequacy of current training provision in terms of quantity.

The 2017-2021 forecast shows all but one of the occupations have witnessed decreases in their ARR since last year. The largest decreases can be found in the following occupations; building envelope specialists (-2,040), bricklayers (-1,180), glaziers (-910) and floorers (-900). A rise has been witnessed in plant operatives (+490) and scaffolders has witnessed no change (300). This could insinuate that the pressure on skills has been slightly reduced.

Table 5 –Requirement for skilled manual trades in the construction trades 2017-2021 (Great Britain

	Employment forecast		Average Annual Requirement
	2017	2021	2017-2021
Main trades			
Wood trades and interior fit-out	255,140	252,660	3,710
Bricklayers	142,030	69,660	1,420
Building envelope specialists	105,880	103,800	420
Painters and decorators	109,180	108,000	1,820
Plasterers and dry Liners	47,280	45,540	730
Main trades total	**659,510**	**579,660**	**8,100**
Specialist building trades			
Roofers	43,260	42,710	620
Floorers	26,360	25,290	160
Glaziers	30,070	29,180	270
Specialist building operatives nec*	56,630	54,730	490
Specialist building trades total	**156,320**	**151,910**	**1,540**
Civil engineers			
Scaffolders	23,310	24,100	300
Plant operatives	37,810	40,270	900
Plant mechanics/fitters	40,220	38,520	250
Steel erectors/structural	25,480	25,260	340
Civil engineering operatives nec*	21,650	22,740	200
Civil engineers total	148,470	150,890	**1,990**
Total	**964,300**	**882,460**	**11,630**

Charts 17 and 18 compare the ARR for skilled manual trades against the expected number of successful completers from the 2016/2017 intake.

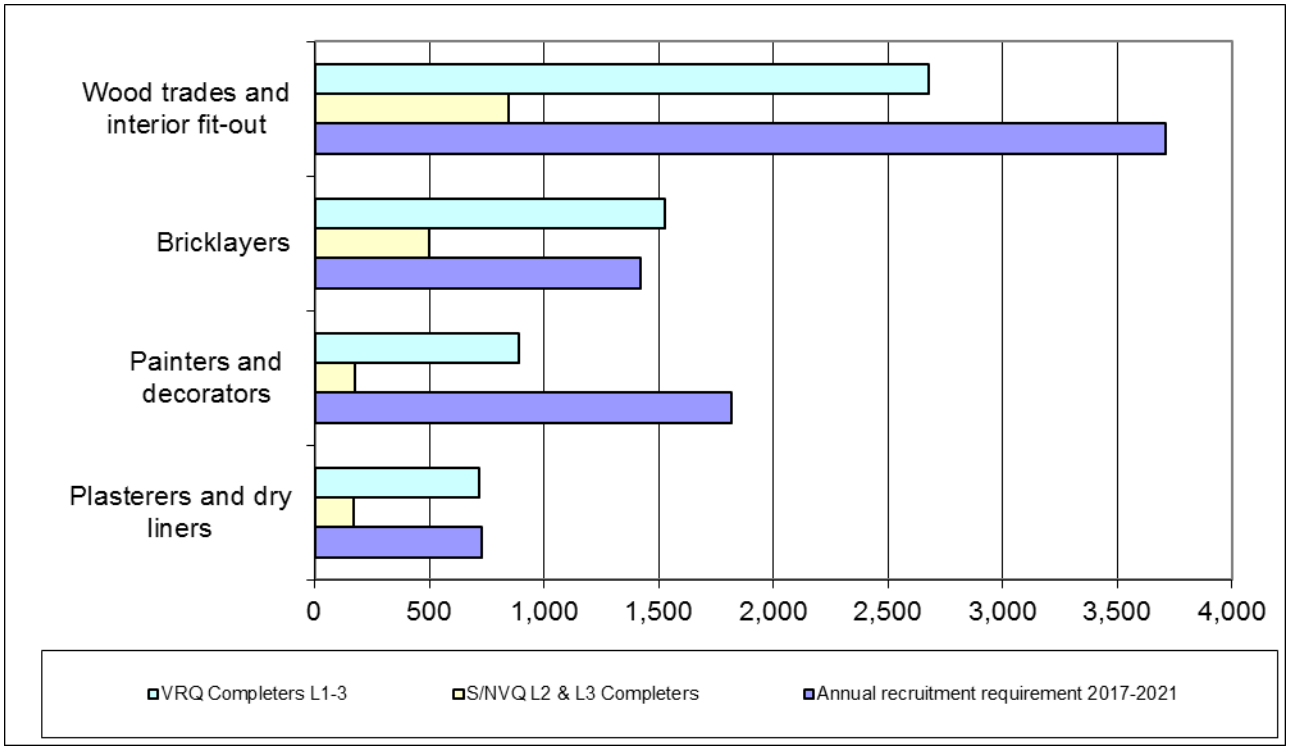
The bottom bar of the chart shows the average number of skilled workers that will be required to join the industry each year by occupation between 2017 and 2021. The remaining two bars show the expected number of completers across S/NVQ and VRQ qualifications at Levels 1, 2 and 3. S/NVQ Level 2 and Level 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 number 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.

It is clear from the chart that Vocational Related Qualifications (VRQ's) accounts for the majority of supply. In fact it highlights that there exists an oversupply of potential trainees with VRQs in Bricklaying. However, it should be noted that 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.

Chart 17 – Average recruitment requirement for main construction trades (2017-2021) and expected successful leaner outcomes from the 2016/2017 trainee intake (Great Britain)

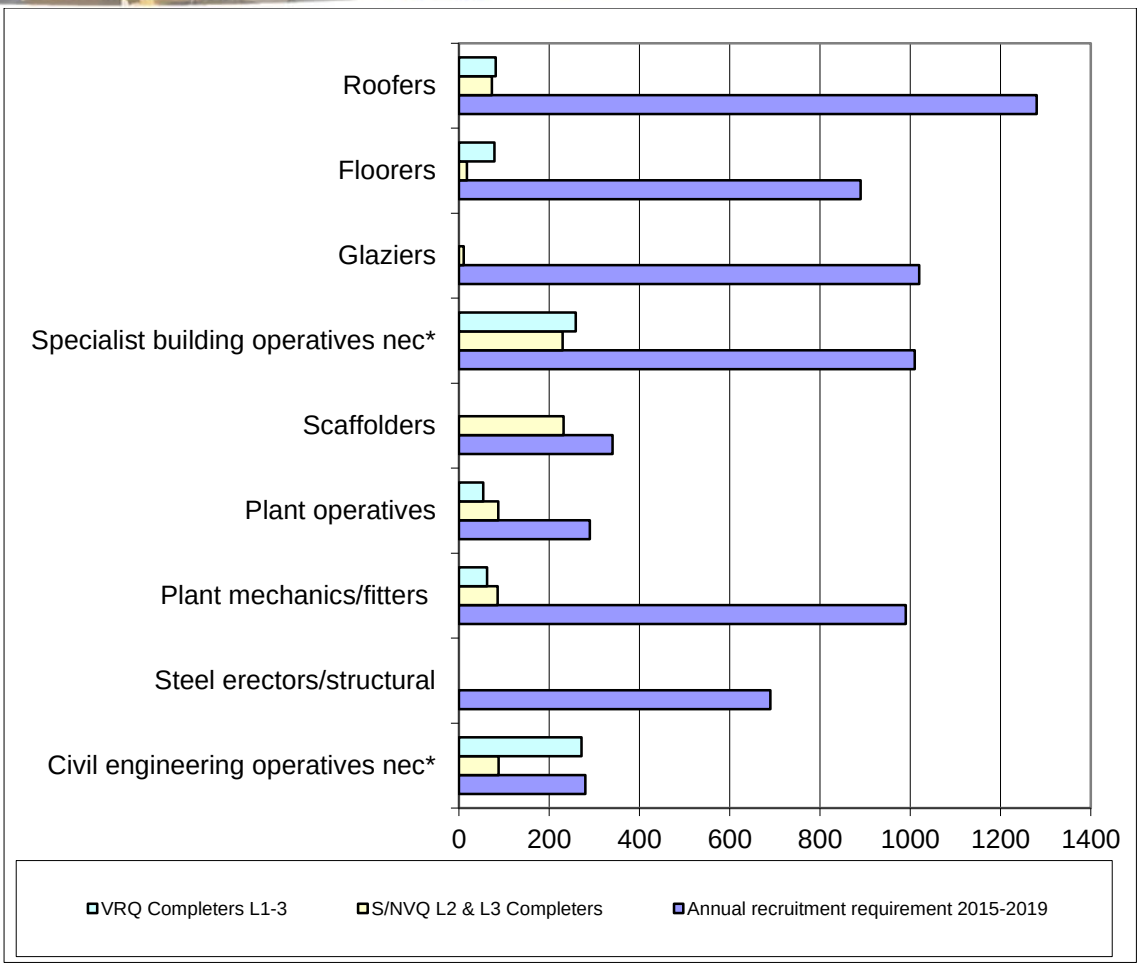


Source: Construction Skills Network 2017, CITB Trainee Numbers Survey 2016/2017; Data Service
Note: S/NVQ level 1 is not shown in the chart due to low numbers.

This year it would appear the situation regarding training in the specialist construction trades and civil engineering occupations is similar to that of the main trades. Apart from civil engineering operatives nec*, all current training levels are not sufficient to meet the predicated demand.

Over the past few years, the Trainee Numbers Survey has recorded very low numbers of trainees undertaking glaziers and steel erector qualifications. Further analysis would need to be undertaken to determine if this is representative and what possible reasons for such low levels of trainees are.

Chart 18 – Average recruitment requirement for specialist construction trades and civil engineers (2017-2021) and expected successful learner outcomes from 2016/2017 trainee intake (Great Britain)



Source: Construction Skills Network 2017, CITB Trainee Numbers Survey 2016/2017; Data Service
Note: S/NVQ level 1 is not shown in the chart due to low numbers.

Section 3: Higher Education in the Built Environment

3.1 Student Enrolments on built environment courses

This section contains data from HESA[7]on student enrolments on construction and the built environment courses in higher education. HESA data is published at least one academic year later it is collected, for instance the latest data reproduced here refers to the academic year 2015/2016. Therefore it is not possible to provide a complete picture of training for the current academic year as the FE data collected in the Trainee Numbers Survey figures refer to 2016/2017; 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 6 shows the number of enrolments on construction and the built environment courses at education institutions split by qualification level and subject area. There has been an increase in numbers of students enrolling on built environment courses in 2015/2016 to just under 20,500,compared to 2014/2015 where the number of enrolments stood under 20,000.

[7] The Higher Education Statistics Agency (HESA) is the official agency for the collection, analysis and dissemination of quantitative information about higher education.

Enrolments peaked in 2009/2010 at 28,000.

Table 6 – Student enrolments on built environment course by subject and qualification aim 2015/2016 (United Kingdom)

	Other Undergraduate	Foundation Degree	First Degree	Postgraduate Degree	Total
Civil engineering	633	152	3480	1140	5,406
Architecture	451	23	3659	2463	6,596
Building	1065	237	3299	1326	5,928
Landscape design	67	5	152	124	347
Planning (urban, rural & regional)	54	11	628	1156	1,848
Others in architecture, building & planning	29	0	214	127	370
Totals	**2,300**	**428**	**11,432**	**6,335**	**20,496**

When looking at the breakdown of different degree courses, it is clear first degrees have the highest proportion with over half of all enrolments (56%). This is followed by 31% on postgraduate courses, 11% on other undergraduate courses and only 2% on foundation degrees.

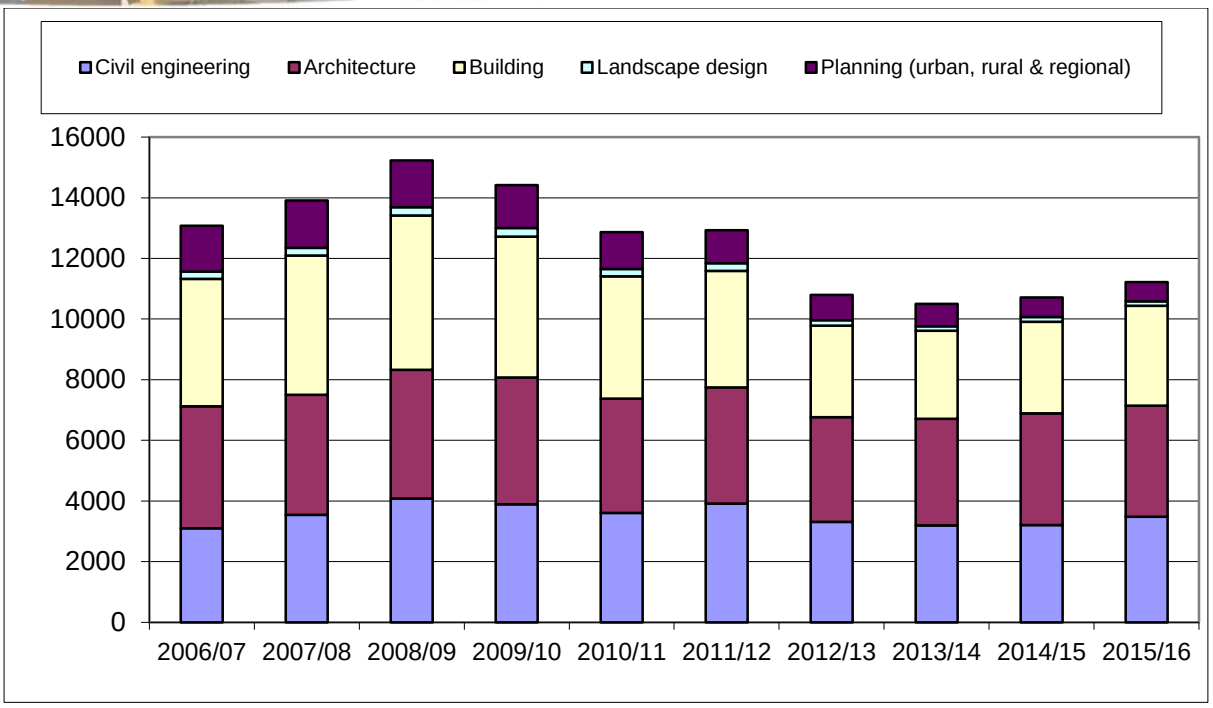
Overall, the most popular course is architecture (32%) closely followed by building (29%) and civil engineering (26%). The share of these courses has remained similar since 2013/2014.

3.2 First Degree

First Degrees represent the largest share of higher education starters in the HESA data. Therefore, these types of degree are analysed here in more detail.

Chart 19 illustrates the ten year trend for students starting construction and the built environment first degrees. Since the peak in enrolments on first degrees in 2008, numbers steadily declined. However, over the past two years there has been evidence of a pick-up in enrolments.

Chart 19 - Student enrolments on first degrees in built environment by subject 2006 – 2015 (United Kingdom)



In 2016 the UK Government announced there will be a rise in university tuition fees for 2017, and may apply to individuals who have already started courses[8]. Furthermore, maintenance grants have been abolished, affecting less wealthy individuals[9]. When taking these both into consideration, it is possible the upward trend in enrolments witnessed in recent years may be reversed.

Charts 20 and 21 analyse the proportions of males and females recorded for each of the degree subjects. This year there has been a further increase in proportions of females undertaking first year degree courses to 28% (the highest proportion recorded), an increase of 2% compared to the previous year. The ten year average for females undertaking first degrees in built environment subjects stands at 25%.

When looking at enrolment onto degrees courses across the built environment by gender, there are significant differences in popularity. Over the last twelve years, the most popular course with females has been architecture. Currently approximately half (52%) of females are undertaking this particular course, with less than 1 in 5 undertaking either building or civil engineering courses (18% vs 19% respectively). For males it would appear the split between courses is more evenly spread across the main subjects. Civil engineering is the most popular subject (36%) for males, followed by building (34%) and architecture (25%). Up until 2014/2015 building historically was the most popular subject for males to study.

Chart 20 – Females enrolling on built environment courses by subject 2015/2016 (United Kingdom)

[8] http://www.bbc.co.uk/news/education-40581643
[9] https://www.theguardian.com/money/2016/aug/01/maintenance-grants-scrapped-for-poorest-students

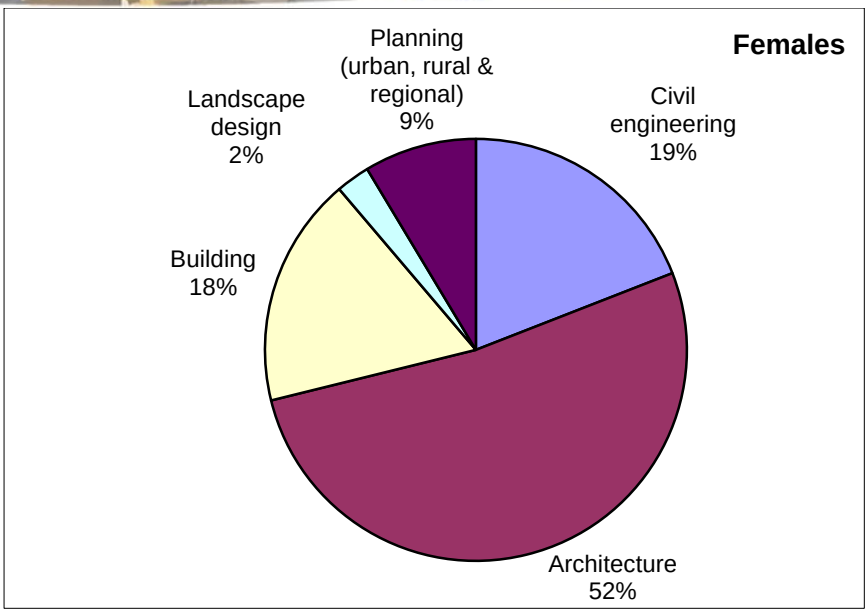
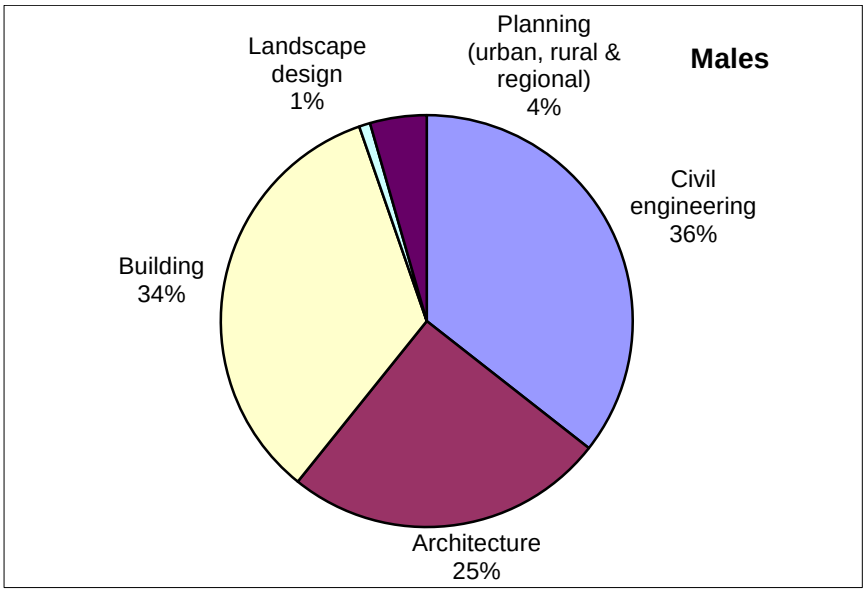


Chart 21 - Males enrolling on built environment courses by subject 2015/2016 (United Kingdom)



HESA additionally collects data on ethnic origin. Over the last twelve years the proportion of ethnic minorities undertaking first degrees has gradually risen. In 2004/2005 and 2005/2006 proportions of ethnic minorities stood at 15%. In 2016-2017 this proportion has almost doubled, and stands at 29%. This is an increase on the previous year of 1%. The ethnic minority groups Black or Black British – African and Other (including mixed) have the highest proportions of all ethnic minority groups (23% and 26%).

The representation of both females and students from ethnic minorities is higher at degree level that it is at craft and technical training (see Section 1). The Trainee Number survey reports 7% of craft and technical trainees are female and the same percentage (7%) are from an ethnic minority background, compared to 28% and 29% respectively at degree level.

Section 4: Conclusion

Training in construction this year has risen, with increases in numbers both in Further Education (FE) and Higher Education (HE).

In FE, still, Diplomas outweigh N/SVQ's in terms of popularity. Worryingly, the proportion of those on a level one diploma expected to progress onto the next level has decreased. The industry perceives a level 2 S/NVQ's as competent to be able to work within the industry. The take up of apprenticeships has risen this year, which is consistent with the situation in FE and HE.

This year there has been a rise in females undertaking construction courses at both FE and HE levels. Also, there has been a rise in BAME individuals at both levels. This could indicate diversity is becoming more visible within the industry.

In HE, there have been increases in enrolments at first degree and postgraduate courses. Potential reasons for this upturn could include the recent end to the cap on number of students being recruited to universities which has been lifted. Furthermore, (despite the rise in tuition fee's) findings suggests nearly half (49.3%) of individuals before the age of 30 will go to university[10], showing this could be the preferred route over other options.

With the political and economic turmoil of last year's EU referendum still causing uncertainty, it is positive that data from the Construction Skills Network 2017-2021 (CSN) predicts that construction output is due to grow at an annual average of 1.7%. The industry will need an average of 35,740 new workers each year to meet construction employment demand and replace individuals leaving the industry. It is crucial the industry continues to train to ensure the construction workforce is skilled and qualified.

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

[10] http://www.telegraph.co.uk/education/2017/09/28/hike-fees-has-not-put-people-going-university-figures-show/

Appendix

Figure 1 – First-year trainees by geographical area 2016/2017 (Great Britain)

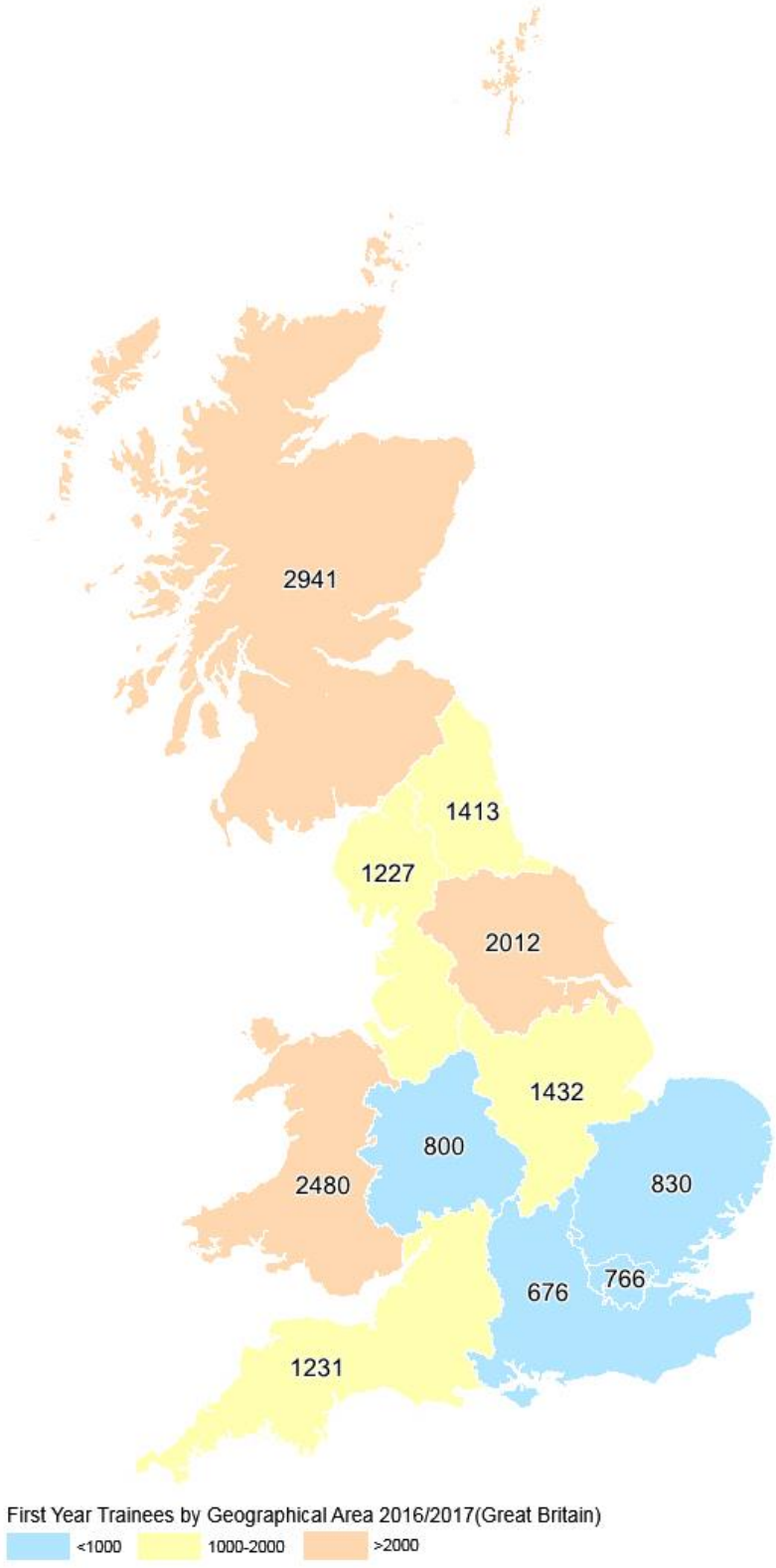
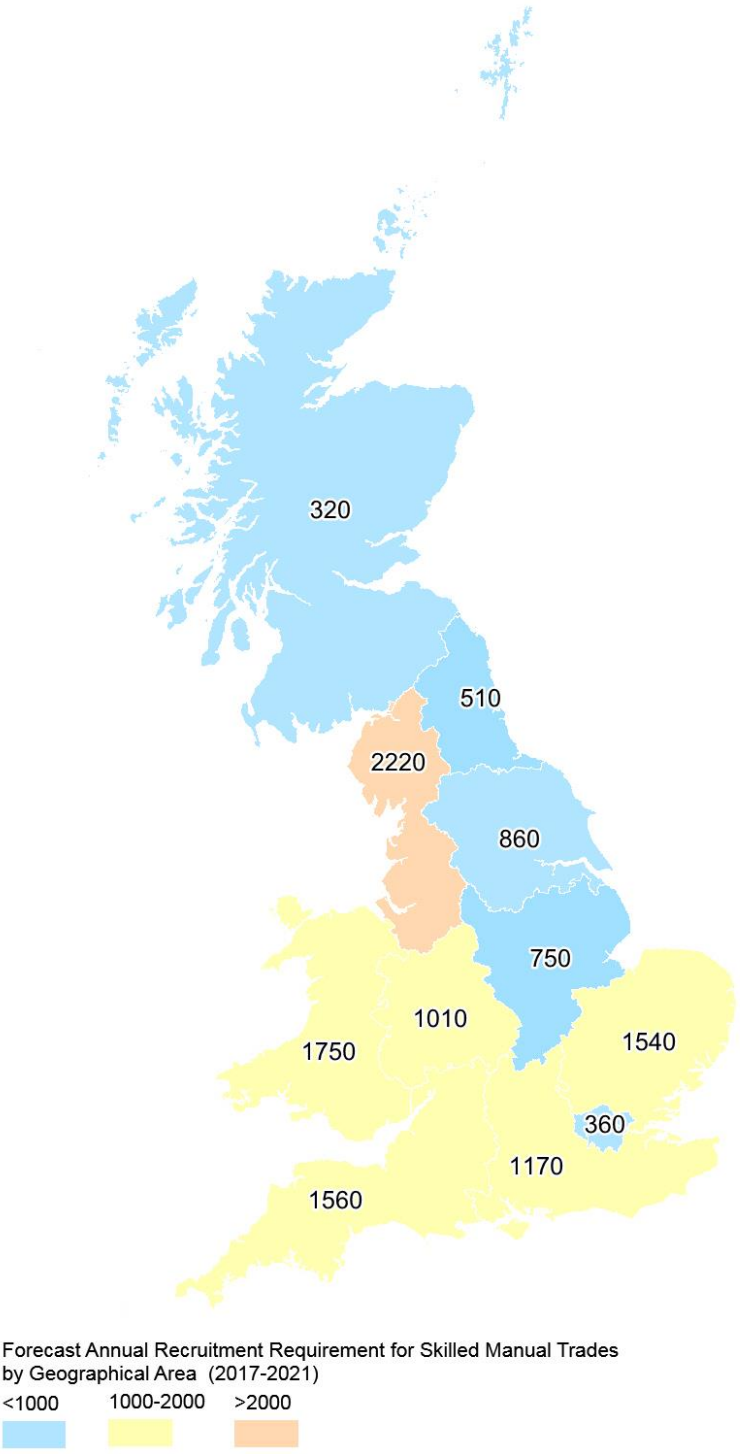


Figure 2 – Forecasted annual average requirement for skilled manual trade workers by geographical area 2017-2021 (Great Britain)



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