

Construction Skills Network

South West 2013-2017

Labour Market Intelligence





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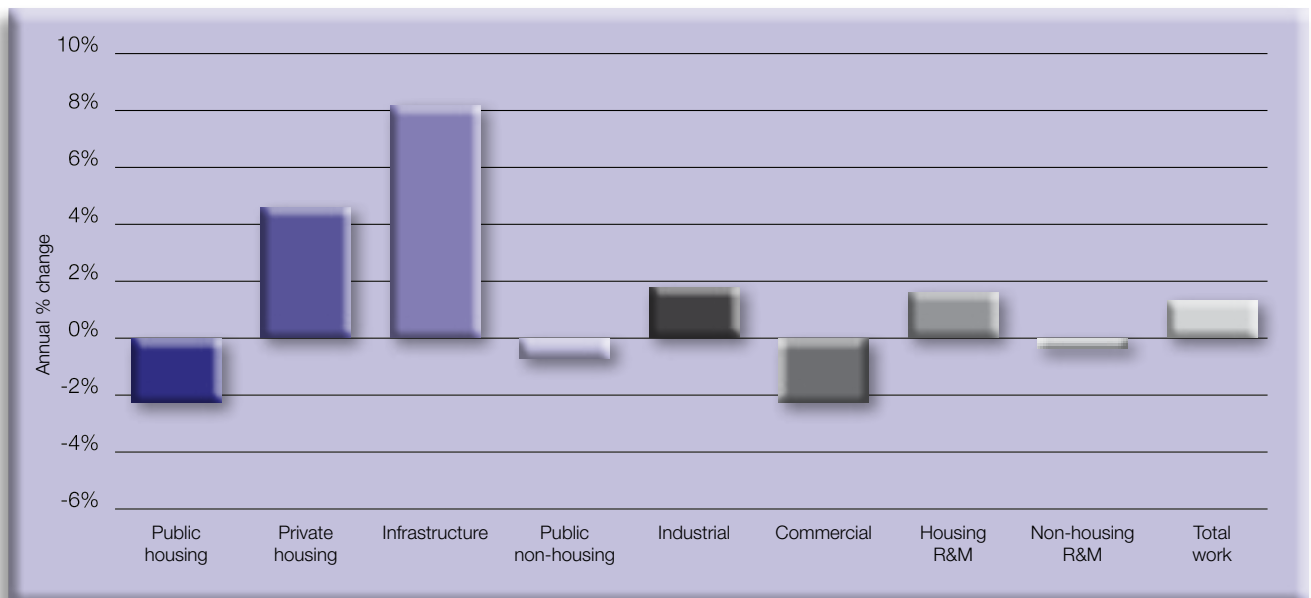
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1. Summary – South West

Construction output in the South West is forecast to rise at an average rate of 1.3% per year between 2013 and 2017. The new work sector is forecast to fare better than repair and maintenance (R&M), with average annual growth of 1.6% and 0.9%, respectively. The best performing sector is expected to be infrastructure, boosted by work at Hinkley Point C nuclear power station. In contrast, construction employment in the region is expected to see an average decline of 1.1% per year over the five years to 2017, largely reflecting the fact that the strongest output growth is in one of the least labour-intensive sectors.

Annual average construction output growth 2013-2017 – South West



Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2



South West construction output is forecast to rise at an average rate of 1.3% per year; this is above the UK average rate of 0.8% per year

Key findings

Average annual growth of 8.1% is forecast for the South West's infrastructure sector over the period to 2017. Main construction work is due to start in mid-2013 on the first reactor of the new nuclear power station at Hinkley Point, with construction of the second reactor expected to begin in 2015. In addition to this major project, there are a number of smaller ones, such as redevelopment works at Bristol Airport, which are due to start over the forecast period.

Output in the private housing sector is expected to rise at an average rate of 4.3% per year over the five years to 2017. Demand is currently being constrained by poor consumer confidence which has been dampened by the ongoing weak economic conditions. A more sustained improvement in the macro economy is forecast over the next year or so and this, along with receding concerns over unemployment, should provide some boost to demand for housing. The development of a new market town just outside Plymouth should also contribute to growth in private housing output.

In contrast, the public sectors, housing and non-housing, will continue to be affected by the public spending cuts in the shorter term, although the pace of contraction in these sectors is expected to moderate in 2013 and 2014, with growth returning in 2015. The much more constrained funding pot for social housing in England will mean lower levels of activity in the public housing sector going forwards, with an annual average decline of 2.1% expected for the sector to 2017. On the other hand, the region's public non-housing sector benefitted less from recent major investment programmes such as Building Schools for the Future (BSF) and thus output has less far to fall to return to more 'normal' levels than other regions and devolved nations.

Regional comparisons 2013-2017

	Annual average % change in output	Change in total employment	Total ARR
North East	1.7%	-7,950	690
Yorkshire and Humber	-0.9%	-16,110	1,910
East Midlands	-0.4%	-8,590	1,860
East of England	1.2%	6,550	5,820
Greater London	1.9%	10,060	1,180
South East	1.1%	-12,780	4,570
South West	1.3%	-12,400	2,910
Wales	2.7%	-7,080	2,950
West Midlands	-1.4%	-23,210	830
Northern Ireland	1.7%	-5,040	660
North West	-0.4%	-14,500	2,870
Scotland	1.1%	-10,690	2,800
UK	0.8%	-101,740	29,050

Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2

The lag between output and employment means that, although output returns to growth in 2014, employment is expected to continue to fall in each year of the forecast period, especially considering the strongest output growth is in infrastructure, one of the less labour-intensive sectors. Construction employment in the South West is forecast to decline to 211,250 by 2017. This is 21% below its recent peak in 2008.

Plant mechanics/fitters are expected to see employment rise by 8% over the five years to 2017, whilst the number of surveyors employed in the region is forecast to increase by 3% over the same time and the number of construction managers is predicted to be 2% higher in 2017.

The South West's annual recruitment requirement (ARR) is 2,910, which is equivalent to 1.3% of base 2013 employment, broadly in line with the UK average. In absolute terms, the trade sector with the largest requirement is wood trades and interior fit-out with 450. However, in terms of base 2013 employment, logistics personnel are expected to be most in demand.

2. The outlook for construction in the South West

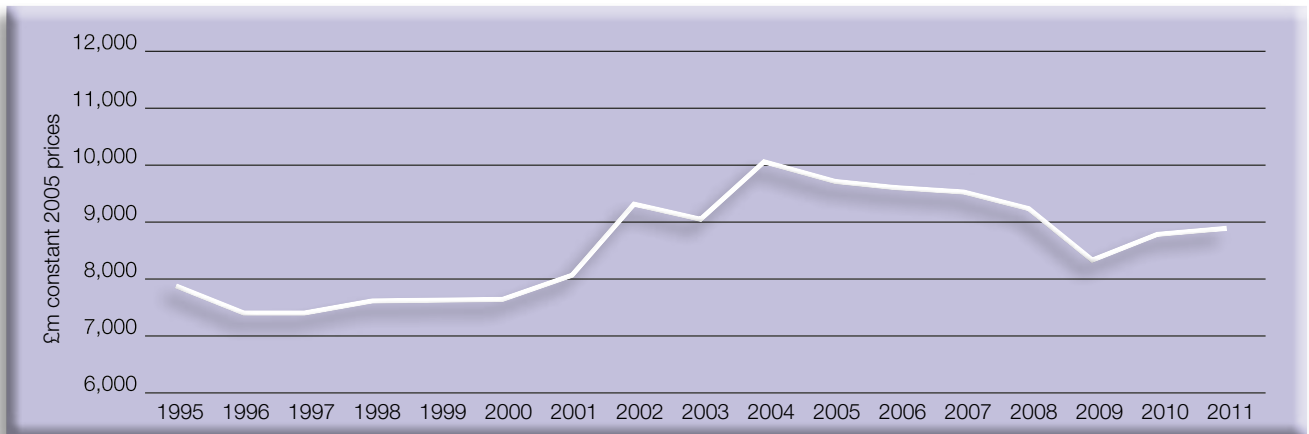
2.1 Construction output in the South West – overview

Following a return to growth in 2010, construction output in the South West edged up by 1% in 2011 to total £8.7bn in 2005 prices. New work output rose by 2% during the year whilst the repair and maintenance (R&M) sector saw a decline of 2%.

The strongest performance was from the infrastructure sector, where output rose by 27% to a nine-year high of £712m in 2005 prices, as preliminary works for the new nuclear reactor at Hinkley Point got underway. The public

housing sector saw a third successive year of double-digit growth in 2011 and output rose by 26% to £385m, the highest annual total since at least 1990 when our constant price regional data series begins. A second consecutive year of growth took output in the industrial construction sector to £359m, 6% above the previous year's total, whilst private housing construction output also rose by 6%. In contrast, the public non-housing sector was the only one to see a decline in 2011 as output fell by 19% from 2010's record high. Commercial construction output in the South West was unchanged in constant prices in 2011 but remained above the £2bn mark for the second successive year.

Construction output 1995-2011 – South West



Source: ONS ref. CSN Explained, Section 3, Note: 1

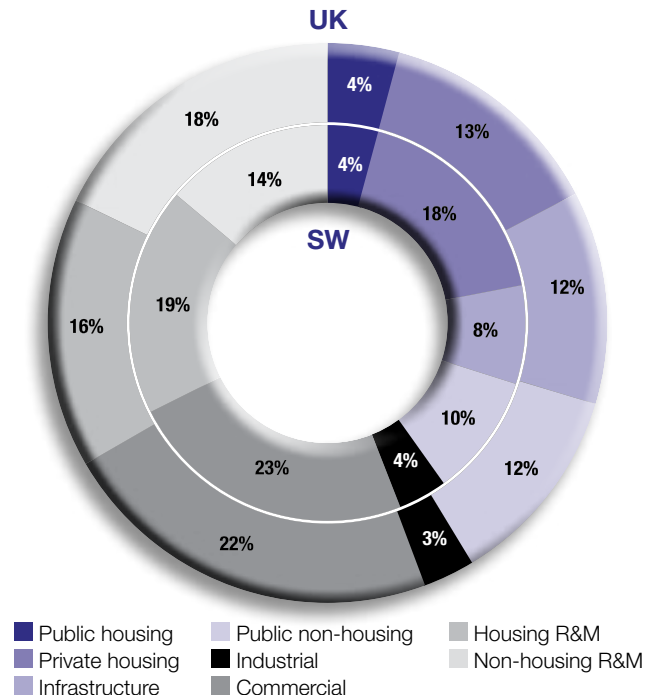
2.2 Industry structure

The diagram, construction industry structure 2011 – UK vs. South West, illustrates the sector breakdown of construction in the South West compared to that in the UK. Effectively, the percentages for each sector illustrate what proportion of total output each sector accounts for.

New work construction output took a 67% share of total construction output in the South West in 2011, unchanged from the previous year and just slightly above the national average of 66%.

One of the major differences in the structure of the South West's construction sector compared with the UK is the relative importance of the private housing sector, which took an 18% share of output in the region compared with 13% nationally in 2011. The region's infrastructure sector accounted for 8% of total construction output in 2011, compared with 12% nationally, and the South West's public non-housing sector (10%) is slightly less important than at a UK level (12%). Whilst the region's non-housing R&M sector takes a smaller share than at a national level, its housing R&M sector is relatively more important than in the UK as a whole.

Construction industry structure 2011 – UK vs. South West



Source: ONS, Experian

2.3 Economic overview

The expected performance of a regional or national economy over the forecast period (2013 – 2017) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic structure

Gross Value Added (GVA) in the South West fell by 1% in 2011, a third consecutive year of decline. Totalling £94.7bn in 2009 prices, the region accounted for 7.3% of total UK GVA, broadly unchanged from the previous year.

In 2011, the professional and other private services sector was again the largest sector in the South West. Its share of output increased to 24%, from 22% in 2010, as it was one of the few sectors to see growth during the year. The public services sector remained the next largest one with its share

unchanged at 20% in 2011, slightly higher than the sector's 19% share in the UK as a whole. The manufacturing sector in the South West accounted for 12% of GVA in the region, slightly above the 11% in the UK as a whole, whilst the wholesale and retail sector's 11% share was in line with the national average.

The strongest growth was in the professional and other private services sector in 2011, which saw an increase of 7.2%, following a 3.5% rise in 2010. Excluding construction, the manufacturing sector was the only other sector to see a rise in output in 2011, albeit by a more modest 0.5%. In contrast, the accommodation, food services and recreation sector saw an 18% decline, whilst finance and insurance activity dropped by 10% during the year and output in the information and communication sector fell by 8%.

Economic structure – South West (£ billion, 2009 prices)

Selected sectors	Actual 2011	Forecast <i>Annual % change, real terms</i>					
		2012	2013	2014	2015	2016	2017
Professional and other private services	23	1.5	0.8	1.7	2.2	2.4	2.5
Public services	19	0.9	-0.2	0.3	0.5	0.7	1.0
Manufacturing	11	-0.4	1.9	2.4	1.8	1.4	1.2
Wholesale and retail	10	-0.4	1.2	2.1	2.5	2.5	2.4
Finance and insurance	6	-0.8	0.5	1.0	2.4	3.2	3.4
Total Gross Value Added (GVA)	95	-0.3	0.6	1.6	2.0	2.2	2.2

Note: Top 5 sectors, excluding construction
Source: Experian
ref. CSN Explained, Section 3, Note 3

2.5 Forward looking economic indicators

The South West's economy is expected to return to growth in 2013, following a decline of 0.3% in 2012. The region's GVA is forecast to rise at an average rate of 1.7% per year between 2013 and 2017, slightly lower than the UK average of 1.9%.

Professional and other private services, the largest sector in the South West, is expected to see average annual growth of 1.9% over the forecast period, whilst the pace of increase in the second largest sector, public services, is expected to be more muted at just 0.5% per year on average. The strongest performances are expected to be from the accommodation, food services and recreation, and information and communication, with average annual growth of 2.4% forecast for both. Activity in the third largest sector in the region, manufacturing, will increase by 1.7% per year on average.

The squeeze on consumers continued in 2011 as real household disposable incomes fell by 2.3%, weakened by elevated inflation and sluggish wage growth. Consumer spending also fell, by 1.4%, as consumers cut back substantially on non-essential expenditure. Prospects are better over the forecast period, with easing inflation and a brighter outlook for employment contributing to average annual growth of 1.9% in real disposable incomes between 2013 and 2017. Household spending is also expected to increase, boosted by improving incomes, rising by 1.8% on average period year over the period.

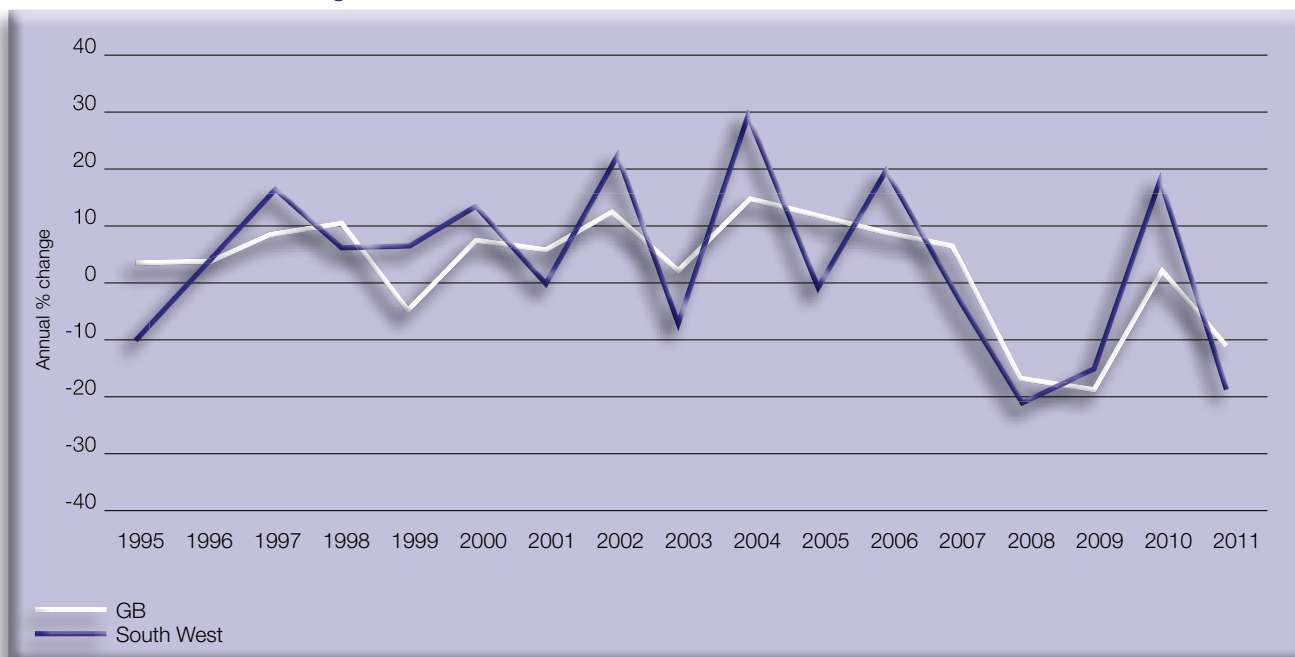
Unemployment in the South West was 17,404 in 2011, equivalent to an unemployment rate of 6.5%, substantially below the UK figure of 8.1%. The region's unemployment rate is expected to fall over the forecast period and reach 4.6% by 2017, remaining below the UK level (6.6%).

Economic indicators – South West (£ billion, 2009 prices – unless otherwise stated)

	Actual 2011	Forecast <i>Annual % change, real terms</i>					
		2012	2013	2014	2015	2016	2017
Real household disposable income	78	0.9	1.0	1.9	2.0	2.1	2.6
Household spending	83	-0.6	0.6	1.8	2.1	2.3	2.3
Working age population (000s and as % of all)	3,135	58.9%	59.2%	59.5%	59.8%	60.0%	60.1%
House prices (£)	215,886	0.4	-0.4	1.4	2.1	2.3	2.6
LFS unemployment (millions)	0.17	-2.94	2.98	-8.18	-8.96	-5.57	-8.37

Source: ONS, DCLG, Experian

New construction orders growth 1995-2011 – South West vs. GB



Source: ONS
ref. CSN Explained, Section 3, Note 4

2.6 New construction orders – overview

After marked growth of 18% in 2010, construction new orders in the South West fell by 20% in 2011 to total £3.7bn in current prices.

The private housing sector saw an increase of 7% in new construction orders in 2011, although at £1.2bn they were still down 40% on their 2006 peak, and commercial construction new orders edged up by 0.6% during the year. At the other end of the scale, the public non-housing sector saw a 57% drop in new orders, taking them to just £586m, the lowest annual total since 2006. Given the scale of the public funding cuts and the recent boost to the sector from Building Schools for the Future (BSF) work, this marked decline was not unexpected. Industrial construction new orders declined for a fourth successive year, falling to just £143m, the lowest annual total since the series began in 1985. Infrastructure new orders fell by 13% and public housing new orders were 11% lower than in the previous year, as the cuts to the Affordable Housing Programme (AHP) began to be felt.

2.7 New construction orders – current situation

New construction orders in the South West rose by 4.6% in the first half of 2012 to total £2.02bn in current prices. Growth was particularly marked in two sectors – public non-housing and infrastructure, with the former seeing a surprising increase of 50% and the latter a rise of 48%. This strong performance from infrastructure new orders was most likely driven by contracts being let for further preliminary work at Hinkley Point.

Private housing orders also rose, albeit by a more modest 3%, and industrial construction orders edged up by 2%. In contrast, public housing new orders continued to decline, dropping by 35% on an annual basis, although this was compared to an exceptionally strong outturn in the first six months of 2011. It is also worth noting that the sector is relatively small and changes can be magnified in percentage terms. Commercial construction orders were also down, by 15%, with the outturn of just £206m in current prices in the three months to June 2012, the weakest since the third quarter of 1998.

New work construction orders – South West (£ million, current prices)

	Actual 2011	Annual % change				
		2007	2008	2009	2010	2011
Public housing	239	-10.7	44.2	16.3	9.0	-11.4
Private housing	1246	-19.3	-43.1	-22.5	58.3	6.7
Infrastructure	353	12.5	-9.3	-3.1	29.3	-13.3
Public non-housing	586	32.6	49.3	10.7	18.6	-57.4
Industrial	143	1.4	-36.7	-22.1	-1.0	-43.9
Commercial	1099	0.9	-30.5	-34.2	-4.1	0.6
Total new work	3,667	-2.9	-22.0	-16.1	18.4	-19.7

Source: ONS
ref. CSN Explained, Section 3, Note 4

2.8 Construction output – short-term forecasts (2013-2014)

Office for National Statistics (ONS) output statistics are published in current prices and are therefore inclusive of any inflationary effect. At the time of writing, ONS construction output statistics at a regional level were only available for the first two quarters of 2012.

In the six months to June 2012, construction output in the South West totalled £4.5bn in current prices, 8% lower than in the corresponding period of 2011. It was also 10.5% below the second half of 2011. Both new work and R&M output declined on an annual basis, although the former saw a stronger rate of contraction at almost 10% compared with 5% for R&M. Output fell across all the new work sectors, with the exception of the private housing one, but even then growth was only a negligible 0.2% on a year-on-year basis. In contrast, industrial construction output dropped by 48.5%, from an already low base, whilst the public non-housing and infrastructure sectors saw declines of 16% and 14%, respectively. This was particularly surprising for the infrastructure sector, given the number of preliminary works underway on the Hinkley Point C nuclear power station.

Following an estimated contraction of 11% in 2012, construction output in the South West is forecast to rise at an average rate of 0.4% per year in 2013-2014. A marginal fall of 1% in 2013 will be followed by a rise of 2% in 2014, with the new work sector the main driver of this growth.

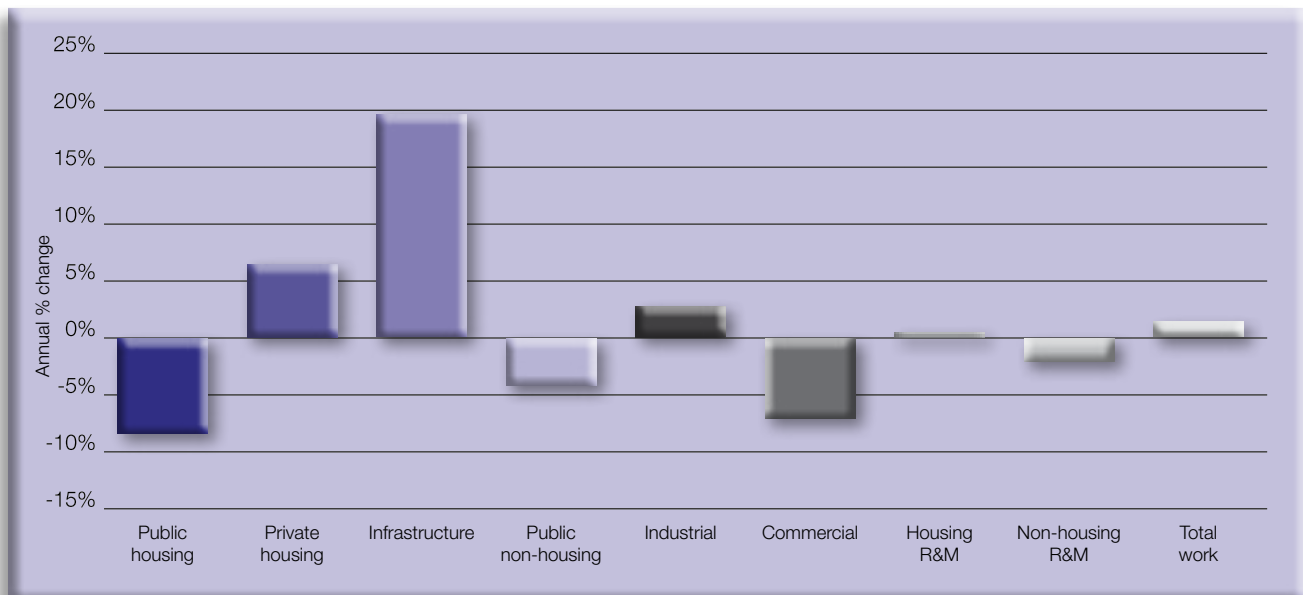
Growth is expected to be by far the strongest in the infrastructure sector, as work gets underway on Hinkley Point C nuclear power station in Somerset. Permission was given in 2012 for the construction of a 500 metre temporary jetty to service the site and the current timeline suggests that work could begin on the first reactor in mid-2013. The sector is forecast to see output rise by 19.7% per year on average in 2013 and 2014.

The private housing sector is also forecast to fare well over the next couple of years with average growth of 5.7% per year in 2013 and 2014. Whilst economic uncertainties and their impact on consumer confidence will continue to constrain housing output in the shorter term, there are a number of schemes due to start in the region which will boost the sector. Construction on a new market town, Sherford, on the outskirts of Plymouth is due to start at the back end of 2013 and plans include 5,500 new dwellings.

In contrast, the region's public housing sector is expected to decline by 8.5% per year on average in 2013/2014, not particularly surprising considering the marked fall in funding for the sector in England. Of the £241m of investment allocated to the South and South West under the 2011-15 Affordable Housing programme (AHP), £146m is available for the South West. This compares with £863m under the 2008-11 programme. The funding available under the 2011-15 programme is intended to build a little under 7,000 units for affordable rent and around 1,900 units for affordable home ownership, in contrast to around 19,000 affordable housing units funded under the previous AHP.

The public spending cuts will also impact on the public non-housing sector in the South West, although the average decline of 3.8% in 2013 and 2014 is much weaker than in some other regions and devolved nations. This reflects the fact that the region benefitted much less than some other English regions from the Building Schools for the Future (BSF) programme and therefore the sector has less far to fall for output to return to more 'normal' levels.

Annual average construction output growth 2013-2014 – South West



Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2

Construction output – South West (£ million, 2005 prices)

	Actual	Forecast annual % change			Annual average
	2011	2012	2013	2014	2013-14
Public housing	385	-15%	-15%	-1%	-8.5%
Private housing	1,517	-6%	3%	8%	5.7%
Infrastructure	712	-15%	22%	18%	19.7%
Public non-housing	849	-15%	-7%	-1%	-3.8%
Industrial	359	-38%	-1%	6%	2.8%
Commercial	2,034	-13%	-7%	-7%	-6.9%
New work	5,856	-13%	-1%	3%	1.0%
Housing R&M	1,625	-7%	-1%	1%	0.0%
Non-housing R&M	1,195	-4%	-2%	-1%	-1.5%
Total R&M	2,820	-5%	-1%	0%	-0.6%
Total work	8,676	-11%	-1%	2%	0.4%

Source: Experian
ref. CSN Explained, Section 3, Notes 1 and 2

2.9 Construction output – long-term forecasts (2013-2017)

Average annual growth of 1.3% is forecast for the South West's construction industry between 2013 and 2017, with new work output expected to rise by 1.6% compared with 0.9% for R&M. A decline of 1% in 2013 will be followed by a return to growth in 2014 as the contractions in the public sectors moderate and work continues on the Hinkley Point nuclear power station.

With main construction works due to start at Hinkley Point C in mid-2013 and continue beyond the forecast period, it is not surprising that the infrastructure sector is expected to be one of the main drivers of construction output in the South West over the period to 2017. In addition to this major project, there are a number of other schemes due to start over the forecast period. E.ON is planning a 150MW biomass power station for Portbury Docks, near Bristol, which could start in 2013, whilst there are still a number of improvement works due at Bristol Airport by 2015, including terminal extensions, new car parking facilities and a new fuel depot. Output in the sector is forecast to rise by 8.1% per year on average.

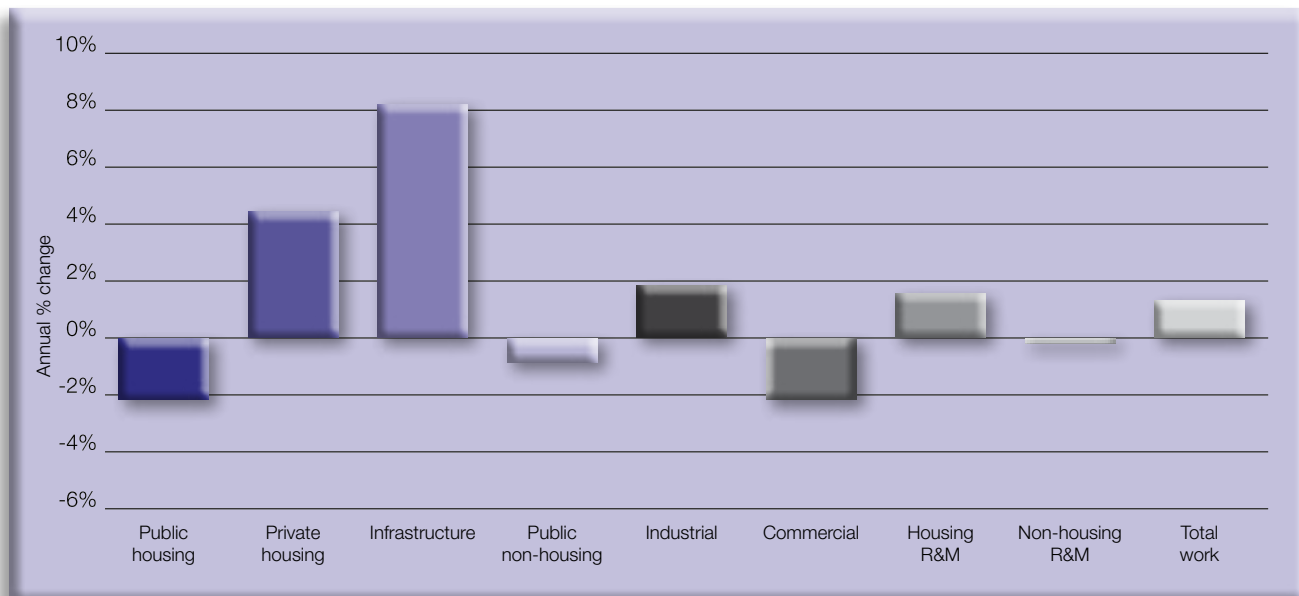
Between 2013 and 2017, industrial construction output in the region is forecast to rise at an average rate of 1.8% per year. At present, the poor performance of the manufacturing sector is constraining investment in new facilities, with the sector in the South West heavily engineering-based and thus strongly affected by the weakness in the UK's main export markets. Generally improving economic conditions should provide some impetus for the development of new facilities, and the growth of online shopping should stimulate demand for distribution hubs.

The commercial construction sector in the South West is forecast to see an average decline of 2% per year between 2013 and 2017. This reflects the difficult economic conditions which are likely to persist in the short term and their impact on the financial viability of schemes. However, the sector is expected to return to growth in 2015 when a number of projects pick up steam. The £500m redevelopment of Swindon's Union Square is underway, with the first two buildings already at structural stage. The £350m retail-led redevelopment of Kings Shopping Centre in Gloucester to become Kings Quarter is the largest commercial project currently in the pipeline, with work hoped to start in 2014.

Public non-housing construction output is expected to return to growth in 2015, although a weak short-term outlook for the sector means that over the 2013 to 2017 period, output is forecast to decline by 0.6% per year, on average. This is the weakest annual average contraction across all the regions and devolved nations, reflecting the region's relatively smaller reliance on the public sector. There are a number of defence and police capital projects in the pipeline in the region, although some of these may be Private Finance Initiative (PFI) funded. The largest of these is currently the £100m redevelopment of RNAS Yeovilton which is due to start by 2014. There are also a number of framework agreements which have been let recently, including the University of the West of England's four-year capital projects, one worth up to £150m, and a £100m four-year one for construction along with civil engineering works for Cornwall Council.

Infrastructure output is forecast to rise by 19.7% on average per year through to 2017, largely due to work at Hinkley Point C nuclear power station

Annual average construction output growth 2013-2017 – South West



Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2

Construction output – South West (£ million, 2005 prices)

	Estimate	Forecast annual % change					Annual average 2013-17
		2012	2013	2014	2015	2016	
Public housing	327	-15%	-1%	5%	1%	2%	-2.1%
Private housing	1,421	3%	8%	6%	4%	1%	4.3%
Infrastructure	609	22%	18%	6%	2%	-4%	8.1%
Public non-housing	718	-7%	-1%	3%	2%	0%	-0.6%
Industrial	221	-1%	6%	3%	0%	1%	1.8%
Commercial	1,778	-7%	-7%	2%	2%	0%	-2.0%
New work	5,074	-1%	3%	4%	2%	0%	1.6%
Housing R&M	1,519	-1%	1%	4%	2%	1%	1.6%
Non-housing R&M	1,149	-2%	-1%	1%	1%	1%	-0.1%
R&M	2,668	-1%	0%	3%	2%	1%	0.9%
Total work	7,743	-1%	2%	4%	2%	0%	1.3%

Source: CSN, Experian
ref. CSN Explained, Section 3, Notes 1 and 2

2.10 Beyond 2017

Work on the first reactor at Hinkley Point C is due to start in mid-2013, according to the latest information from the Nuclear Industry Association (NIA). This first reactor is due to be operational by mid-2019 with the second reactor not due to be completed until the end of 2020. A substantial amount of work on the project will take place after the current forecast period to 2017, boosting the infrastructure sector in the region. There is an additional nuclear power station planned for Oldbury in Gloucestershire, although enabling works are not expected to start until 2019 and completion is currently estimated for 2027.

As is the case with all the regions and devolved nations, there is the scope for energy efficiency improvements to the existing building stock and the installation of microgeneration measures to provide a substantial boost to the construction sector. In light of the UK's legally binding targets to reduce carbon emissions and to generate a certain proportion of electricity from renewable sources by 2020, this needs to happen sooner rather than later.

3. Construction employment forecasts for the South West

3.1 Total construction employment forecasts by occupation

The table presents actual construction employment (SICs 41-43, 71.1, and 74.9) in the South West for 2011, the forecast total employment in 26 occupations and in the industry as a whole between 2013 and 2017. A full breakdown of occupational groups is provided in Section 5 of CSN Explained.

Over the five years to 2017, construction employment in the South West is expected to continue to decline, falling at an average rate of 1.1% per year. This is a slightly stronger contraction than the UK average of 0.8%. Although output in the region is expected to return to growth in 2014, the

relationship between overall output and employment is not straightforward, given that some sectors are more labour-intensive than others. The main driver of construction output growth in the South West is the infrastructure sector, which is not one of the more labour-intensive sectors, therefore the weak outlook for employment is not unexpected.

In 2011, the largest trade occupation in the region was wood trades and interior fit-out, as is the case across most of the UK, taking a 13% share of total construction employment. The occupation is forecast to see a decline of over 4% over the five years to 2017, slightly less than for overall construction employment, but will retain its 13% share of construction employment.

Total employment by occupation – South West

	Actual 2011	Forecast	
		2013	2017
Senior, executive, and business process managers	7,990	7,940	8,010
Construction managers	18,100	18,140	18,540
Non-construction professional, technical, IT, and other office-based staff	31,490	29,230	26,580
Wood trades and interior fit-out	29,190	27,570	27,090
Bricklayers	8,580	7,420	6,470
Building envelope specialists	11,890	11,400	11,000
Painters and decorators	11,970	12,030	11,840
Plasterers and dry liners	4,860	4,430	4,240
Roofers	3,880	3,620	3,440
Floorers	4,780	4,320	4,070
Glaziers	4,150	3,970	3,840
Specialist building operatives nec*	4,990	4,700	4,370
Scaffolders	2,220	2,110	2,090
Plant operatives	3,970	3,860	3,720
Plant mechanics/fitters	3,540	3,620	3,860
Steel erectors/structural	920	790	660
Labourers nec*	7,880	7,970	8,060
Electrical trades and installation	18,710	17,980	16,480
Plumbing and HVAC trades	12,080	12,050	11,830
Logistics	1,260	1,270	1,250
Civil engineering operatives nec*	5,740	5,400	5,240
Non-construction operatives	2,690	2,690	2,590
Civil engineers	3,030	2,830	2,830
Other construction professionals and technical staff	15,000	14,010	13,520
Architects	4,240	4,040	4,060
Surveyors	5,370	5,430	5,570
Total (SIC 41-43)	200,880	192,510	185,270
Total (SIC 41-43, 71.1, 74.9)	228,520	218,820	211,250

Four occupations – plant mechanics/fitters (8%), surveyors (3%), construction managers (2%) and labourers not elsewhere classified (nec) (1%) – are expected to see an increase in employment over the forecast period. Surveyors are likely to be involved more in earlier stages of construction projects and thus benefit sooner from the return to growth. In contrast, steel erectors/structural workers (-19%) and bricklayers (-18%) are expected to see the strongest declines in employment.

3.2 Annual recruitment requirements (ARR) by occupation

The ARR is a gross requirement that takes into account workforce flows into and out of construction, due to factors such as movements between industries, migration, sickness, and retirement. However, these flows do not include movements into the industry from training due to inconsistency and coverage of supply data. Therefore, the annual recruitment requirement 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.

The ARR for the 26 occupations within the South West's construction industry is illustrated in the table. The figure of 2,910 is indicative of the average requirements per year for the industry, as based on the output forecasts for the region. This takes into account 'churn' i.e. the flows into and out of the industry, excluding training flows.

The largest requirement in absolute terms for trade occupations is for wood trades and interior fit-out at 450, equivalent to 15% of the South West's total ARR. However in

terms of as a proportion of base 2013 employment, logistics personnel are likely to be most in demand. The region's ARR of 2,910 is equivalent to 1.3% of base 2013 employment, broadly in line with the UK average (1.2%).

CITB-ConstructionSkills' latest mobility report provides an indication of geographic flows for the construction industry. According to the survey, 77% of the construction workforce in the South West originated there. Not surprisingly, the second largest contribution to the workforce was from the South East (12%).

Please note that all of the ARRs presented in this section are employment requirements and not necessarily training requirements. This is because some new entrants to the construction industry, such as skilled migrants or those from other industries where similar skills are already used, will be able to work in the industry without the need for significant retraining.

Non-construction operatives is a diverse occupational group including all of the activities under the SICs 41-43, 71.1, 74.9 umbrella that cannot be classified elsewhere, such as cleaners, elementary security occupations nec and routine inspectors and testers. The skills required in these occupations are highly transferable to other industries and forecasting such movement is hazardous given the lack of robust supportive data. Therefore the ARR for non-construction operatives is not published.

Finally, for certain occupations there will be no appreciable requirement over the forecast period, partly due to the recession creating a 'pool' of excess labour.

Annual recruitment requirement by occupation – South West

	2013-2017
Senior, executive, and business process managers	160
Construction managers	550
Non-construction professional, technical, IT, and other office-based staff	120
Wood trades and interior fit-out	450
Bricklayers	140
Building envelope specialists	-
Painters and decorators	100
Plasterers and dry liners	<50
Roofers	<50
Floorers	170
Glaziers	140
Specialist building operatives nec*	70
Scaffolders	50
Plant operatives	240
Plant mechanics/fitters	<50
Steel erectors/structural	-
Labourers nec*	240
Electrical trades and installation	-
Plumbing and HVAC trades	-
Logistics	90
Civil engineering operatives nec*	<50
Non-construction operatives	-
Civil engineers	70
Other construction professionals and technical staff	210
Architects	-
Surveyors	-
Total (SIC 41-43)	2,910
Total (SIC 41-43, 71.1, 74.9)	2,910

4. Comparisons across the UK

Interestingly, the profile of output growth at regional and devolved nation level over the 2013–17 period is not as south-east-centric as we might have expected, with Wales forecast to have the strongest average annual growth. However, Wales' growth is almost entirely due to the new nuclear power station planned at Wylfa in Anglesey, with average annual growth of just 0.6% if the project is removed from the forecast period. Although Hitachi's technology, the Advanced Boiling Water Reactor (ABWR) will need to go through a generic design assessment, construction is still expected to start during the current forecast period.

The North East is coming back up from a very low base – the region saw the worst fall of all the English regions between 2007 and 2012, with output declining by 30% over the period – hence the relatively stronger outlook for the region over the forecast period. In comparison, Scotland's decline over the same period was just 17%. To demonstrate how the greater south-east has weathered the last five years better than elsewhere, the best three performing regions were Greater London (+13%), the South East (-1%) and the East of England (-7%). Northern Ireland, in contrast, is coming back from an even lower base – output declined by 36% between 2007 and 2012. This, combined with the fact that it saw a falloff in public sector work a year before the other regions and devolved nations (2010 compared with 2011) meaning smaller declines going forward, indicates that the outlook for Northern Ireland may be a little better than the UK average.

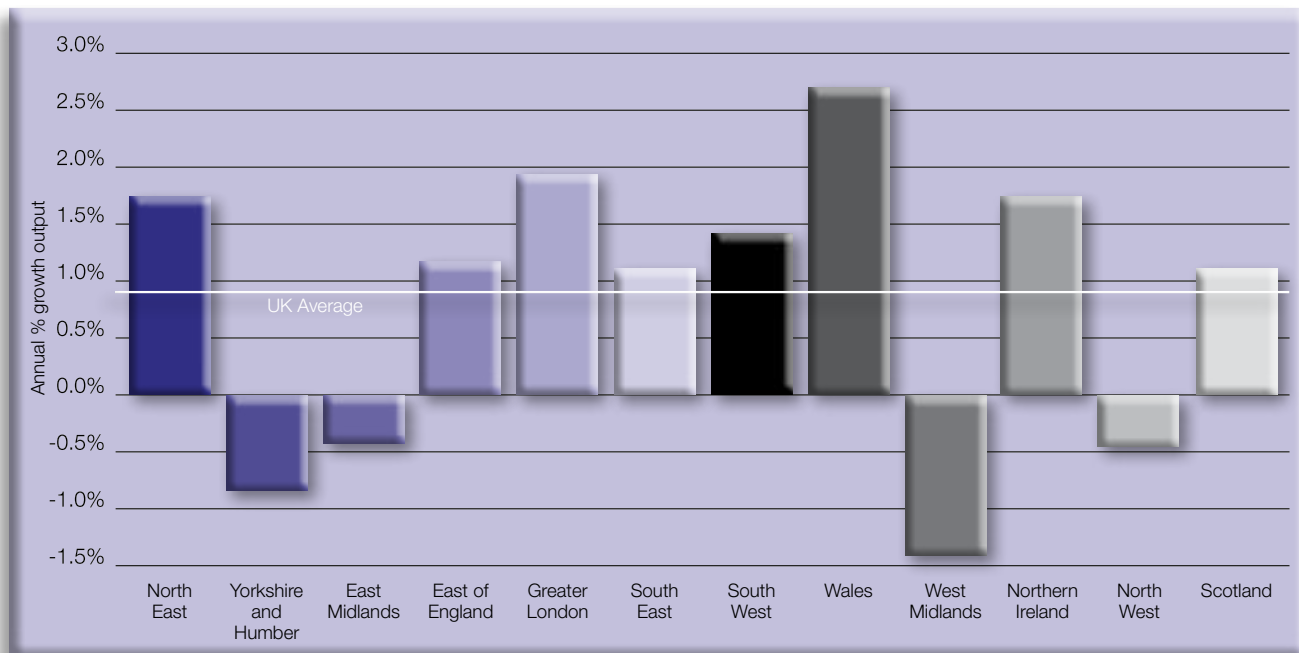
The profile of employment changes across the regions and devolved nations is different to that of output over the period to 2017. The relationship between overall output and employment is not straightforward given that some sectors are much more labour-intensive than others, and the relative performances of the sectors within overall output impacts on the prospects for employment across the UK. For example, Wales' output growth is largely predicated on the new nuclear power station at Wylfa and new nuclear build is one of the least labour intensive areas of the construction industry. Greater London and the East of England are the only two regions predicted to see employment growth over the forecast period, and even here it is very weak.

There is also the issue of underemployment in the industry coming to the fore, which will impact on the speed with which construction employment in a particular region and devolved nation returns to growth. For example, the North West saw output fall by an estimated 29% between 2007 and 2012 in real terms, whilst employment declined by just 11% over the same period. This substantial output and employment 'gap' suggests that firms in the region have not been shedding staff at the same rate as activity has been dropping. Job shedding is likely to continue in the region for some time after output starts to improve. A similar profile of output and employment declines has been seen across a number of regions and devolved nations to various degrees, with the 'gap' widening outside of the greater south east. It appears to be the case that parts of the UK with more directly-employed labour have seen this effect more than those with a more labour-only sub-contractor focus in terms of construction employment.



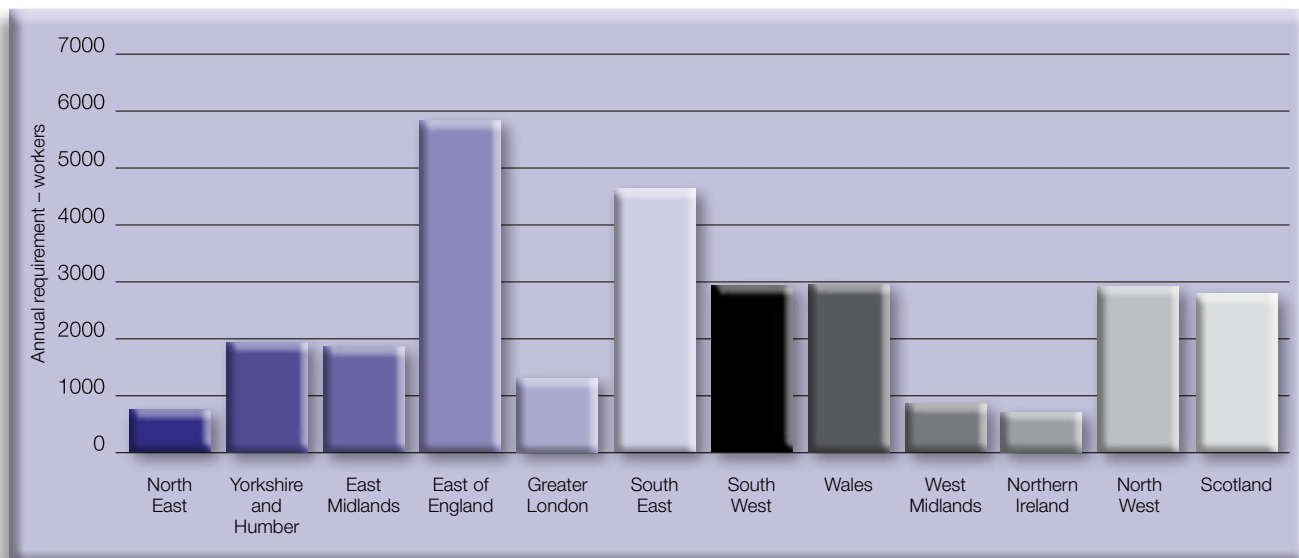
Output in the private housing sector is expected to rise at an average rate of 4.3% per year over the five years to 2017

Annual average output growth by region 2013-2017



Source: CSN, Experian ref. CSN Explained, Section 3, Note 2

Annual recruitment requirement (ARR) by region 2013-2017



Source: CSN, Experian



CSN Explained

This appendix provides further details and clarification of some of the points covered in the report.

Section 1 gives an overview of the underpinning methods that are used by the CSN, working in partnership with Experian, to produce the suite of reports at a UK, national and regional level.

Section 2 provides a glossary to clarify some of the terms that are used in the reports, while Section 3 has some further notes that relate to the data sources that are used for the various charts and tables. Section 3 also outlines what is meant by the term footprint, when talking about the areas of responsibility that lie with a Sector Skills Council.

Section 4 explains the sector definitions used within the report and provides examples of what is covered in each.

Section 5 gives a detailed breakdown of the 26 occupational groups into the individual standard occupational classification (SOC) codes that are aggregated to provide the employment and recruitment requirement.

Section 6 then concludes by giving details about the range of LMI reports, the advantages of being a CSN member and the contact details should people be interested in joining.



1. CSN Methodology

Background

The **Construction Skills Network** has been evolving since its conception in 2005 acting as vehicle for CITB-ConstructionSkills to collect and produce information on the future employment and training needs of the industry. CITB-ConstructionSkills, CIC and CITB Northern Ireland are working as ConstructionSkills, the Sector Skills Council for Construction to produce robust Labour Market Intelligence to provide a foundation on which to plan for future skills needs and to target investment.

The CSN functions at both a national and regional level. It comprises of a National Group, 12 Observatory groups, a forecasting model for each of the regions and countries, and a Technical Reference Group. An Observatory group currently operates in each of the nine English regions and also in Wales, Scotland and Northern Ireland.

Observatory groups currently meet bi-annually and consist of key regional stakeholders invited from industry, Government, education and other SSCs, all of whom contribute local industry knowledge and views on training, skills, recruitment, qualifications and policy. The National Group also includes representatives from industry, Government, education and other SSCs. This Group convenes twice a year and sets the national scene, effectively forming a backdrop for the Observatories.

At the heart of the CSN are a number of forecasting models which generate forecasts of employment requirements within the industry for a range of occupational groups. The models are designed and managed by Experian under the independent guidance and validation of the Technical Reference Group, comprised of statisticians and modelling experts. The Models have been, and will continue to be, evolved over time to ensure that they account for new research as it is published as well as new and improved modelling techniques. Future changes to the model will only be made after consultation with the Technical Reference Group.

The model approach

The model approach relies on a combination of primary research and views from the CSN to facilitate it. National data is used as the basis for the assumptions that augment the models, which are then adjusted with the assistance of the Observatories and National Group. Each English region, Wales, Scotland and Northern Ireland has a separate model (although all models are inter-related due to labour movements) and, in addition, there is one national model that acts as a constraint to the individual models and enables best use to be made of the most robust data (which is available at the national level). The models work by forecasting demand and supply of skilled workers separately. The difference between demand and supply forms the employment requirement.

The forecast total employment levels are derived from expectations about construction output and productivity. Essentially this is based upon the question 'How many people will be needed to produce forecast output, given the assumptions made about productivity?'

The **annual recruitment requirement (ARR)** is a gross requirement that takes into account workforce flows into and out of construction, due to such factors as movements between industries, migration, sickness, and retirement. However, these flows do not include movements into industry from training, due to the inconsistent currency and coverage of supply data. Therefore, the annual recruitment requirement 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.

Demand is based upon the results of discussion groups comprising industry experts, a view of construction output and a set of integrated models relating to wider national and regional economic performance. The models are dynamic and reflect the general UK economic climate at any point in time. To generate the labour demand, the models make use of a set of specific statistics for each major type of work that determine the employment, by trade, needed to produce the predicted levels of construction output. The labour supply for each type of trade or profession is based upon the previous year's supply (the total stock of employment) combined with flows into and out of the labour market.

The key leakages (outflows) that need to be considered are:

- transfers to other industries
- international/domestic OUT migration
- permanent retirements (including permanently sick)
- outflow to temporarily sick and home duties.

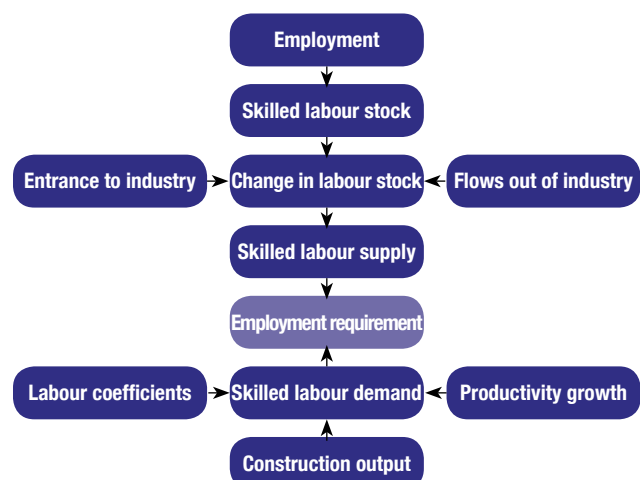
The main reason for outflow is likely to be transfer to other industries.

Flows into the labour market include:

- transfers in from other industries
- international/domestic IN migration
- inflow from temporarily sick and home duties.

The most significant inflow is likely to be from other industries.

A summary of the model is shown in the flow chart.



2. Glossary of Terms

- **Building envelope specialists** – any trade involved with the external cladding of the building other than bricklaying, e.g. curtain walling.
- **Demand** – demand is calculated using construction output data from the Office for National Statistics (ONS) and the Department of Finance and Personnel Northern Ireland (DFP), along with vacancy data from the National Employers Skills Survey, from the Department for Education and Skills. These data sets are translated into labour requirements by trade by using a series of coefficients to produce the labour demand that relates to the forecasted output levels.
- **GDP** – Gross Domestic Product – total market value of all final goods and services produced. A measure of national income. $GDP = GVA$ plus taxes on products minus subsidies on products.
- **GVA** – Gross Value Added – total output minus the value of inputs used in the production process. GVA measures the contribution of the economy as a difference between gross output and intermediate outputs.
- **Coefficients** – To generate the labour demand, the model makes use of a set of specific statistics for each major type of work to determine employment, by trade or profession, based upon the previous year's supply. In essence this is the number of workers in each occupation/ trade to produce £1m of output across each sub-sector.
- **LFS (Labour Force Survey)** – a UK household sample survey which collects information on employment, unemployment, flows between sectors and training, from around 53,000 households each quarter (>100,000 people).
- **LMI (Labour Market Intelligence)** – data that are quantitative (numerical) or qualitative (insights and perceptions) on workers, employers, wages, conditions of work, etc.
- **Macroeconomics** – the study of an economy on a national level, including total employment, investment, imports, exports, production and consumption.
- **Nec** – not elsewhere classified, used as a reference in LFS data.
- **ONS** – Office for National Statistics – official statistics on economy, population and society at national UK and local level.
- **Output** – total value of all goods and services produced in an economy.
- **Productivity** – output per employee.
- **SIC codes** – Standard Industrial Classification codes – from the UK Standard Industrial Classification of Economic Activities produced by the ONS.
- **SOC codes** – Standard Occupational Classification codes.
- **Supply** – the total stock of employment in a period of time plus the flows into and out of the labour market. Supply is usually calculated from LFS data.



3. Notes and Footprints

Notes

- 1 Except for Northern Ireland, output data for the English regions, Scotland and Wales are supplied by the Office for National Statistics (ONS) on a current price basis. Therefore national deflators produced by the ONS have been used to deflate to a 2005 constant price basis, i.e. the effects of inflation have been stripped out.
- 2 The annual average growth rate of output is a compound average growth rate, i.e. the rate at which output would grow each year if it increased steadily year-on-year over the forecast period.
- 3 Only selected components of gross value added (GVA) are shown in this table and so do not sum to the total.
- 4 For new construction orders comparison is made with Great Britain rather than the UK, owing to the fact that there are no orders data series for Northern Ireland.
- 5 Employment numbers are rounded to the nearest 10.
- 6 The tables include data relating to plumbers and electricians. As part of SIC 43, plumbers and electricians working in contracting are an integral part of the construction process. However, it is recognised by CITB-ConstructionSkills that SummitSkills has responsibility for these occupations across a range of SIC codes, including SIC 43.2.
- 7 The employment and ARR tables show separate totals for SIC 41-43 and SIC 41-43, 71.1 and 74.9. The total for SIC 41-43 covers the first 22 occupational groups on the relevant tables and excludes civil engineers, other construction professionals and technical staff, architects and surveyors. The total for SIC 41-43, 71.1 and 74.9 includes all occupations.

Footprints for Built Environment SSCs

CITB-ConstructionSkills is responsible for SIC 41 Construction of Buildings, SIC 42 Civil Engineering, SIC 43 Specialised Construction Activities and SIC 71.1 Architectural and engineering activities; Technical Testing and Analysis.

The table summarises the SIC codes (2007) covered by CITB-ConstructionSkills:

CITB-ConstructionSkills	
SIC Code	Description
41.1	Development of building projects
41.2	Construction of residential and non-residential buildings
42.1	Construction of roads and railways
42.2	Construction of utility projects
42.9	Construction of other civil engineering projects
43.1	Demolition and site preparation
43.3	Building completion and finishing
43.9	Other specialised construction activities nec
71.1*	Architectural and engineering activities and related technical consultancy

* AssetSkills has a peripheral interest in SIC 71.1

The sector footprints for the other SSCs covering the built environment:

SummitSkills

Footprint – Plumbing, Heating, Ventilation, Air Conditioning, Refrigeration and Electrotechnical.

Coverage – Building Services Engineering.

CITB-ConstructionSkills shares an interest with SummitSkills in SIC 43.21 Electrical Installation and SIC 43.22 Plumbing, heat and air-conditioning installation. CITB-ConstructionSkills recognises the responsibility of Summit Skills across Standard Industrial Classifications (SIC) 43.21 and 43.22, therefore data relating to the Building Services Engineering sector is included here primarily for completeness.

AssetSkills

Footprint – Property Services, Housing, Facilities Management, Cleaning.

Coverage – Property, Housing and Land Managers, Chartered Surveyors, Estimators, Valuers, Home Inspectors, Estate Agents and Auctioneers (property and chattels), Caretakers, Mobile and Machine Operatives, Window Cleaners, Road Sweepers, Cleaners, Domestic, Facilities Managers.

AssetSkills has a peripheral interest SIC 71.1 Architectural and engineering activities and related technical consultancy.

Energy and Utility Skills

Footprint – Electricity, Gas (including gas installers), Water and Waste Management.

Coverage – Electricity generation and distribution; Gas transmission, distribution and appliance installation and maintenance; Water collection, purification and distribution; Waste water collection and processing; Waste Management.

4. Definitions: types and examples of construction work

Public sector housing – local authorities and housing associations, new towns and government departments

Housing schemes, old people's homes and the provision within housing sites of roads and services for gas, water, electricity, sewage and drainage.

Private sector housing

All privately owned buildings for residential use, such as houses, flats and maisonettes, bungalows, cottages and the provision of services to new developments.

Infrastructure – public and private

Water

Reservoirs, purification plants, dams, water works, pumping stations, water mains, hydraulic works etc.

Sewerage

Sewage disposal works, laying of sewers and surface drains.

Electricity

Building and civil engineering work for electrical undertakings such as power stations, dams and other works on hydroelectric schemes, onshore wind farms and decommissioning of nuclear power stations.

Gas, communications, air transport

Gas works, gas mains and gas storage; post offices, sorting offices, telephone exchanges, switching centres etc.; air terminals, runways, hangars, reception halls, radar installations.

Railways

Permanent way, tunnels, bridges, cuttings, stations, engine sheds etc., signalling and other control systems and electrification of both surface and underground railways.

Harbours

All works and buildings directly connected with harbours, wharves, docks, piers, jetties, canals and waterways, sea walls, embankments and water defences.

Roads

Roads, pavements, bridges, footpaths, lighting, tunnels, flyovers, fencing etc.

Public non-residential construction¹

Factories and warehouses

Publicly owned factories, warehouses, skill centres.

Oil, steel, coal

Now restricted to remedial works for public sector residual bodies.

Schools, colleges, universities

State schools and colleges (including technical colleges and institutes of agriculture); universities including halls of residence, research establishments etc.

Health

Hospitals including medical schools, clinics, welfare centres, adult training centres.

Offices

Local and central Government offices, including town halls, offices for all public bodies except the armed services, police headquarters.

Entertainment

Theatres, restaurants, public swimming baths, caravan sites at holiday resorts, works and buildings at sports grounds, stadiums, racecourses etc. owned by local authorities or other public bodies.

Garages

Buildings for storage, repair and maintenance of road vehicles, transport workshops, bus depots, road goods transport depots and car parks.

Shops

Municipal shopping developments for which the contract has been let by a Local Authority.

Agriculture

Buildings and work on publicly financed horticultural establishments; fen drainage and agricultural drainage; veterinary clinics.

Miscellaneous

All work not clearly covered by any other headings, such as fire stations, police stations, prisons, reformatories, remand homes, civil defence work, UK Atomic Energy Authority work, council depots, museums, libraries.

Private industrial work

Factories, warehouses, wholesale depots, all other works and buildings for the purpose of industrial production or processing, oil refineries, pipelines and terminals, concrete fixed leg oil production platforms (not rigs); private steel work; all new coal mine construction such as sinking shafts, tunnelling, etc.

¹ Where contracts for the construction or improvement of non-residential buildings used for public service provision, such as hospitals, are awarded by private sector holders of contracts awarded under the Private Finance Initiative, the work is classified as 'private commercial'.

Private commercial work²

Schools and universities

Schools and colleges in the private sector, financed wholly from private funds.

Health

Private hospitals, nursing homes, clinics.

Offices

Office buildings, banks.

Entertainment

Privately owned theatres, concert halls, cinemas, hotels, public houses, restaurants, cafés, holiday camps, swimming pools, works and buildings at sports grounds, stadiums and other places of sport or recreation, youth hostels.

Garages

Repair garages, petrol filling stations, bus depots, goods transport depots and any other works or buildings for the storage, repair or maintenance of road vehicles, car parks.

Shops

All buildings for retail distribution such as shops, department stores, retail markets, showrooms, etc.

Agriculture

All buildings and work on farms, horticultural establishments.

Miscellaneous

All work not clearly covered by any other heading, e.g. exhibitions, caravan sites, churches, church halls.

New work

New housing

Construction of new houses, flats, bungalows only.

All other types of work

All new construction work and all work that can be referred to as improvement, renovation or refurbishment and which adds to the value of the property³.

Repair and maintenance Housing

Any conversion of, or extension to, any existing dwelling and all other work such as improvement, renovation, refurbishment, planned maintenance and any other type of expenditure on repairs or maintenance.

All other sectors

Repair and maintenance work of all types including planned and contractual maintenance⁴.



² Where contracts for the construction or improvement of non-residential buildings used for public service provision, such as hospitals, are awarded by private sector holders of contracts awarded under the Private Finance Initiative, the work is classified as 'private commercial'.

³ Contractors reporting work may not always be aware of the distinction between improvement or renovation work and repair and maintenance work in the non-residential sectors.

⁴ Except where stated, mixed development schemes are classified to whichever sector provides the majority (i.e. over 50%) of finance.

5. Occupational Groups

Occupational group

Description, SOC (2000) reference.

Senior, executive and business process managers

Directors and chief executives of major organisations, 1112
Senior officials in local government, 1113
Financial managers and chartered secretaries, 1131
Marketing and sales managers, 1132
Purchasing managers, 1133
Advertising and public relations managers, 1134
Personnel, training and industrial relations managers, 1135
Office managers, 1152
Civil service executive officers, 4111
Property, housing and land managers, 1231
Information and communication technology managers, 1136
Research and development managers, 1137
Customer care managers, 1142
Storage and warehouse managers, 1162
Security managers, 1174
Natural environment and conservation managers, 1212
Managers and proprietors in other services nec*, 1239

Construction managers

Production, works and maintenance managers, 1121
Managers in construction, 1122
Quality assurance managers, 1141
Transport and distribution managers, 1161
Recycling and refuse disposal managers, 1235
Managers in mining and energy, 1123
Occupational hygienists and safety officers (H&S), 3567
Conservation and environmental protection officers, 3551

Non-construction professional, technical, IT, and other office-based staff (excl. managers)

IT operations technicians, 3131
IT user support technicians, 3132
Estimators, valuers and assessors, 3531
Finance and investment analysts/advisers, 3534
Taxation experts, 3535
Financial and accounting technicians, 3537
Vocational and Industrial trainers and instructors, 3563
Business and related associate professionals nec*, 3539
Legal associate professionals, 3520
Inspectors of factories, utilities and trading standards, 3565
Software professionals, 2132
IT strategy and planning professionals, 2131
Estate agents, auctioneers, 3544
Solicitors and lawyers, judges and coroners, 2411
Legal professionals nec*, 2419
Chartered and certified accountants, 2421
Management accountants, 2422
Management consultants, actuaries, economists and statisticians, 2423
Receptionists, 4216
Typists, 4217
Sales representatives, 3542
Civil Service administrative officers and assistants, 4112

Local government clerical officers and assistants, 4113
Accounts and wages clerks, book-keepers, other financial clerks, 4122
Filing and other records assistants/clerks, 4131
Stock control clerks, 4133
Database assistants/clerks, 4136
Telephonists, 4141
Communication operators, 4142
General office assistants/clerks, 4150
Personal assistants and other secretaries, 4215
Sales and retail assistants, 7111
Telephone salespersons, 7113
Buyers and purchasing officers (50%), 3541
Marketing associate professionals, 3543
Personnel and industrial relations officers, 3562
Credit controllers, 4121
Market research interviewers, 4137
Company secretaries (excluding qualified chartered secretaries), 4214
Sales related occupations nec*, 7129
Call centre agents/operators, 7211
Customer care occupations, 7212
Elementary office occupations nec*, 9219

Wood trades and interior fit-out

Carpenters and joiners, 5315
Pattern makers, 5493
Paper and wood machine operatives, 8121
Furniture makers, other craft woodworkers, 5492
Labourers in building and woodworking trades (9%), 9121
Construction trades nec* (25%), 5319

Bricklayers

Bricklayers, masons, 5312

Building envelope specialists

Construction trades nec* (50%), 5319
Labourers in building and woodworking trades (5%), 9121

Painters and decorators

Painters and decorators, 5323
Construction trades nec* (5%), 5319

Plasterers and dry liners

Plasterers, 5321

Roofers

Roofers, roof tilers and slaters, 5313

Floorers

Floorers and wall tilers, 5322

Glaziers

Glaziers, window fabricators and fitters, 5316
Construction trades nec* (5%), 5319

Specialist building operatives nec*

Construction operatives nec* (80%), 8149
Construction trades nec* (5%), 5319
Industrial cleaning process occupations, 9132

Scaffolders

Scaffolders, staggers, riggers, 8141

Plant operatives

Crane drivers, 8221

Plant and machine operatives nec*, 8129

Transport operatives nec*, 8219

Fork-lift truck drivers, 8222

Mobile machine drivers and operatives nec*, 8229

Agricultural machinery drivers, 8223

Plant mechanics/fitters

Metal working production and maintenance fitters, 5223

Motor mechanics, auto engineers, 5231

Labourers in process and plant operations nec*, 9139

Tool makers, tool fitters and markers-out, 5222

Vehicle body builders and repairers, 5232

Auto electricians, 5233

Vehicle spray painters, 5234

Tyre, exhaust and windscreen fitters, 8135

Steel erectors/structural

Steel erectors, 5311

Welding trades, 5215

Sheet metal workers, 5213

Metal plate workers, shipwrights and riveters, 5214

Construction trades nec* (5%), 5319

Smiths and forge workers, 5211

Moulders, core makers, die casters, 5212

Metal machining setters and setter-operators, 5221

Labourers nec*

Labourers in building and woodworking trades (80%), 9121

Electrical trades and installation

Electricians, electrical fitters, 5241

Electrical/electronic engineers nec*, 5249

Telecommunications engineers, 5242

Lines repairers and cable jointers, 5243

TV, video and audio engineers, 5244

Computer engineers, installation and maintenance, 5245

**Plumbing and heating, ventilation,
and air conditioning trades**

Plumbers and HVAC trades, 5314

Pipe fitters, 5216

Labourers in building and woodworking trades (6%), 9121

Construction trades nec* (5%), 5319

Logistics

Heavy goods vehicle drivers, 8211

Van drivers, 8212

Packers, bottlers, canners, fillers, 9134

Other goods handling and storage occupations nec*, 9149

Buyers and purchasing officers (50%), 3541

Transport and distribution clerks, 4134

Security guards and related occupations, 9241

Civil engineering operatives nec*

Road construction operatives, 8142

Rail construction and maintenance operatives, 8143

Quarry workers and related operatives, 8123

Construction operatives nec* (20%), 8149

Labourers in other construction trades nec*, 9129

Non-construction operatives

Metal making and treating process operatives, 8117

Process operatives nec*, 8119

Metal working machine operatives, 8125

Water and sewerage plant operatives, 8126

Assemblers (vehicle and metal goods), 8132

Routine inspectors and testers, 8133

Assemblers and routine operatives nec*, 8139

Stevedores, dockers and slingers, 9141

Hand craft occupations nec*, 5499

Elementary security occupations nec*, 9249

Cleaners, domestics, 9233

Road sweepers, 9232

Gardeners and groundsmen, 5113

Caretakers, 6232

Civil engineers

Civil engineers, 2121

**Other construction professionals
and technical staff**

Mechanical engineers, 2122

Electrical engineers, 2123

Chemical engineers, 2125

Design and development engineers, 2126

Production and process engineers, 2127

Planning and quality control engineers, 2128

Engineering professional nec*, 2129

Electrical/electronic technicians, 3112

Engineering technicians, 3113

Building and civil engineering technicians, 3114

Science and engineering technicians nec*, 3119

Architectural technologists and town planning technicians, 3121

Draughtspersons, 3122

Quality assurance technicians, 3115

Town planners, 2432

Electronics engineers, 2124

Building inspectors, 3123

Scientific researchers, 2321

Architects

Architects, 2431

Surveyors

Quantity surveyors, 2433

Chartered surveyors (not Quantity surveyors), 2434

* not elsewhere classified

6. CSN website and contact details

The CSN website – www.cskills.org/csn

The CSN website functions as a public gateway for people wishing to access the range of Labour Market Intelligence (LMI) reports and research material regularly produced by the CSN.

The main UK report, along with the twelve LMI reports (one for Northern Ireland, Scotland, Wales and each of the nine English regions) can be downloaded from the site, while other CITB-ConstructionSkills research reports are also freely available on our website.

Having access to this range of labour market intelligence and trend insight allows industry, Government, regional agencies and key stakeholders to:

- pinpoint the associated, specific, skills that will be needed year by year
- identify the sectors which are likely to be the strongest drivers of output growth in each region and devolved nation
- track the macro economy
- understand how economic events impact on regional and devolved nations' economic performance
- highlight trends across the industry such as national and regional shifts in demand
- plan ahead and address the skills needs of a traditionally mobile workforce
- understand the levels of qualified and competent new entrants required into the workforce.

The website also contains further information about:

- how the CSN functions
- the CSN Model approach
- how the Model can be used to explore scenarios
- how to contact the CSN team
- related CITB-ConstructionSkills research
- how to become a member of the network.

The CSN website can be found at:

www.cskills.org/csn

CSN members area

While the public area of the CSN website is the gateway to the completed LMI and research reports, being a member of the CSN offers further benefits.

As a CSN member you will be linked to one of the Observatory groups, which play a vital role in being able to feed back observations, knowledge and insight on what is really happening on the ground in every UK region and nation. This feedback is used to fine tune the assumptions and data that go into the forecasting programme such as:

- details of specific projects
- demand within various types of work or sectors
- labour supply
- inflows and outflows across the regions and devolved nations.

CSN members therefore have:

- early access to forecasts
- the opportunity to influence and inform the data
- the ability to request scenarios that could address 'What would happen if...' types of questions using the Model.

Through the members' area of the CSN website, members can:

- access observatory-related material such as meeting dates, agendas, presentations and notes
- download additional research material
- comment/feedback to the CSN team.

As the Observatory groups highlight the real issues faced by the industry in the UK, we can more efficiently and effectively plan our response to skills needs. If you would like to contribute your industry observations, knowledge and insight to this process and become a member of the CSN, we would be delighted to hear from you.

Contact details

For further information about the CSN website, enquiries relating to the work of the CSN, or to register your interest in joining the CSN as a member, please contact us at:

csn@cskills.org



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