INDUSTRY INSIGHTS

Construction Skills Network
Forecasts 2016–2020

South West 2016–2020

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4.4%

Construction output in the South West is forecast to grow at an annual average rate of 4.4% between 2016 and 2020, compared to 2.5% at the UK level. Growth will be driven primarily by an increase of 14.2% in infrastructure construction on the same metric. Total employment in the construction sector in the South West is expected to grow at an annual average rate of 2.1%, well above the UK average of 1.1%, rising to an all-time high of 257,560 by 2020. The South West's projected annual recruitment requirements (ARR) for 2016–2020 is 6,480, representing 2.7% of base 2016 employment, well above the UK average of 1.7%.

Key Findings

Total construction output growth in the South West hovered around the 3% mark in 2013 and 2014. However, output is estimated to have stagnated in 2015 as rises in private housing, infrastructure and housing repair and maintenance (R&M) were cancelled out by falls in the remaining sectors.

Growth is expected to return in 2016 and average 4.4% a year over the forecast period, driven by very strong expansion in infrastructure activity.

The infrastructure sector will benefit primarily from the construction of the Hinckley Point C nuclear power station, on which we expect main construction works to commence in 2017 and to continue until 2024. The proposed construction of Avon power station, a gas fired power facility in Bristol could add a further £1.4bn to construction output in the forecast period if it goes ahead. The Government road-building programme across the region should also contribute £2bn.

The commercial and private housing sectors are also expected to grow at decent annual average rates of 3.9% and 3.4% respectively in the 2016 to 2020 period. In the former growth will be supported by expansion in most of the areas that drive demand for commercial premises.

The latter sector will benefit from a number of large home-building developments across the region including a £2.3bn scheme in Bath.

Public non-housing and public housing are expected to be the slowest growing of the new work sectors with output forecast to increase at an annual average rate of 3.1% and 2% respectively. The key driver of growth in the former will be the redevelopment of a number of military facilities. The latter sector will be constrained by Government rules restricting housing association rents from April 2016.

Employment is forecast to grow at an annual average rate of 2.1% between 2016 and 2020, well above the UK equivalent of 1.1%. Of the 28 occupational aggregates 25 are set to expand. Logistics workers are expected to see the strongest annual average growth (4.3%), followed by architects (3.9%), other construction process managers (3.4%), construction project managers (3.2%), and surveyors (3.2%).

The South West's projected ARR for 2016–2020 is 6,480, which represents 2.7% of base 2016 employment, compared to the UK average of 1.7%. Of the construction-specific occupational categories, those with the largest absolute ARRs are bricklayers (480) and plasterers (400).

ANNUAL AVERAGE CONSTRUCTION OUTPUT GROWTH 2016–2020 — SOUTH WEST
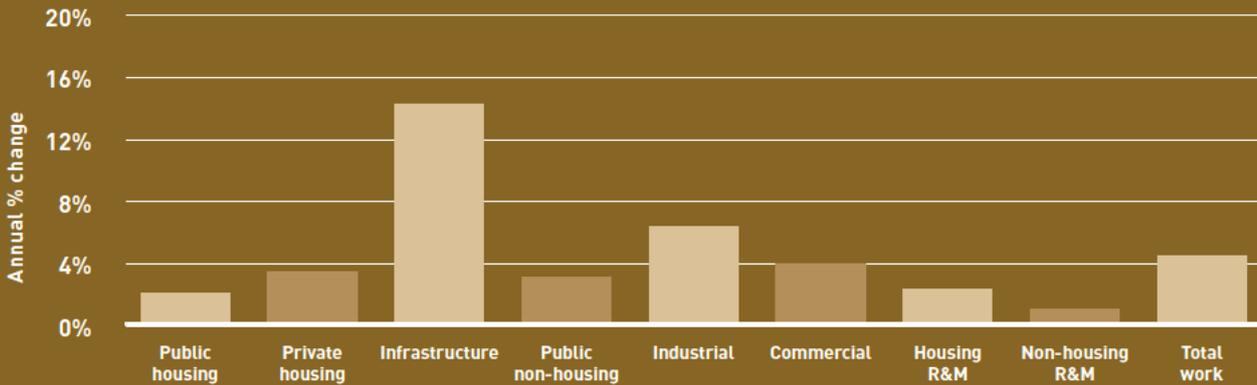
Source: CSN, Experian. Ref: CSN Explained, Section 3, Note 2

REGIONAL COMPARISON 2016–2020

	Annual average % change in output	Change in total employment	Total ARR
North East	1.5%	3,260	3,160
Yorkshire and Humber	2.4%	8,360	3,230
East Midlands	1.0%	1,210	3,110
East of England	2.3%	13,950	3,910
Greater London	3.5%	42,670	3,650
South East	0.9%	2,110	1,730
South West	4.4%	25,850	6,480
Wales	7.1%	17,490	5,440
West Midlands	1.7%	10,200	3,030
Northern Ireland	3.0%	4,660	1,760
North West	2.6%	22,430	6,650
Scotland	0.5%	-7,360	4,270
UK	**2.5%**	**144,830**	**46,420**

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

❝ Construction output in the South West will grow on average by 4.4% per year, higher than the UK average of 2.5%. ❞

THE OUTLOOK FOR CONSTRUCTION IN THE SOUTH WEST

2.1 Construction output in the South West – overview

Construction output in the South West grew by 3% in 2014 in constant 2012 prices to an estimated outturn of just over £9.9bn. There was growth in both new work and R&M, of 1% and 7% respectively.

The main driver of growth in new work was private housing, the largest sector in the region, for which output rose by 12%. Infrastructure and industrial output increased by 13% and 8% respectively. The commercial, public non-housing and public housing sectors all saw declines in construction output. The fall in construction output in the public housing sector was the most precipitous at -35%.

2.2 Industry structure

The diagram, Construction Industry Structure 2014 – UK vs. the 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.

The structure of the South West's construction industry is overall fairly similar to that of the UK. Both have similar divisions between new work and R&M, with the former accounting for 62% of output in the UK and 61% in the South West. The main differences are in the respective shares that the private housing and commercial sectors take, and the split between residential/non-housing within R&M. At 23% of total construction output, the share of the private housing sector in the South West is much bigger than the UK share (17%). More emphasis is also placed on the region's housing repair and maintenance sector (23% vs 19%). In contrast, the commercial and the non-housing R&M sectors make up a smaller share of construction output in the South west than in the UK (16% Vs 19% in both cases).

2.3 Economic overview

The expected performance of a regional or national economy over the forecast period (2016–2020) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic structure

GVA in the South West picked up by a robust 2.6% in 2014 to £113bn in 2012 prices, the largest increase since 2010. As a share of the UK, the region accounted for 6.7% of GVA.

The industrial structure of the South West remains well balanced, broadly in line with that of the UK. The largest contributor to output comes from the professional services sector, which contributed 26.4% of GVA in the region in 2014, compared to 26.8% at the UK level. The public services sector makes up the second largest share of GVA in the South West at 21.1% compared to 18.8% nationally.

At a more disaggregated level the South West contains a decent level of high-tech manufacturing, a well-developed tourist sector, and a broad range of professional and consumer services. Bristol, the region's principal city, has a large presence of aerospace manufacturing, which is benefiting from significant Government investment and a vibrant professional service sector. Due to its location as an entry point into the rest of the South West and Wales, the city also has a sizeable logistics and transport industry.

CONSTRUCTION OUTPUT 1998-2014 – SOUTH WEST

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

CONSTRUCTION INDUSTRY STRUCTURE 2014 – UK VS SOUTH WEST

UK
19%, 16%, 4%, 2%, 23%, 17%

SOUTH WEST
9%, 11%, 8%, 8%, 3%, 3%, 16%, 19%, 23%, 19%

Legend:
- Public housing
- Private housing
- Infrastructure
- Public non-housing
- Industrial
- Commercial
- Housing R&M
- Non-housing R&M

Source: ONS, Experian
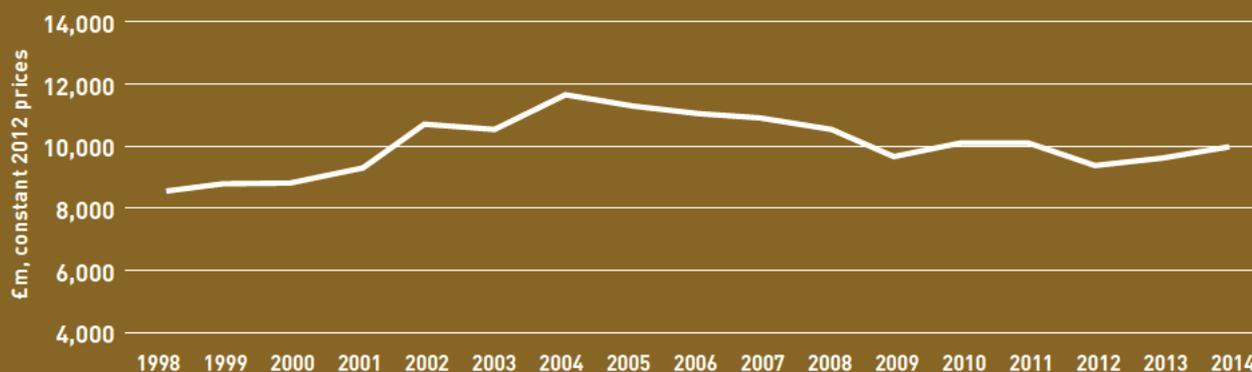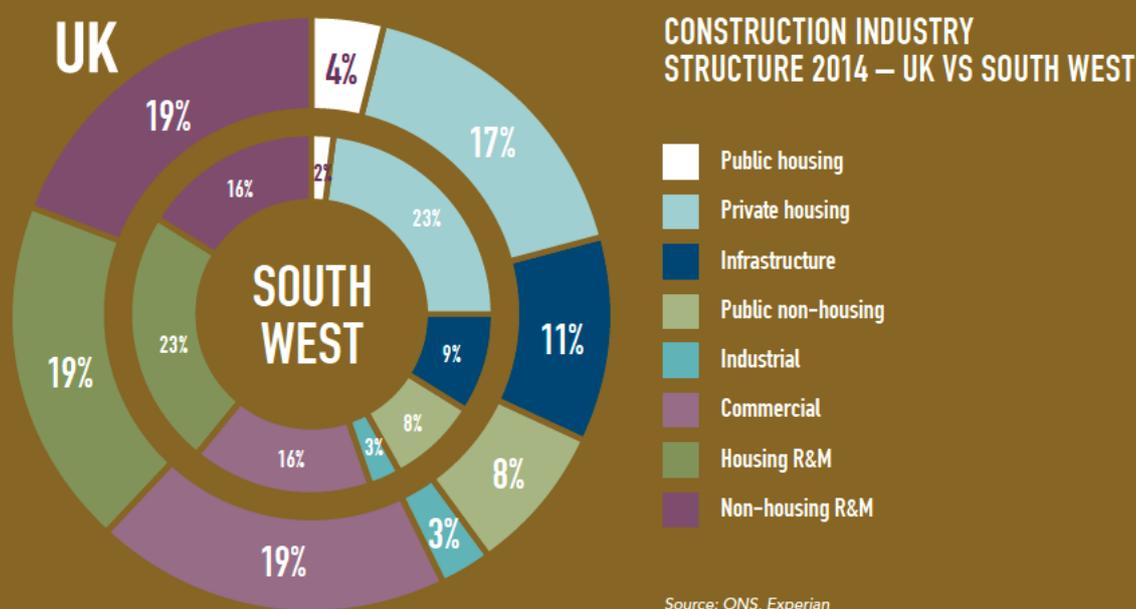
ECONOMIC STRUCTURE – SOUTH WEST (£ BILLION, 2012 PRICES)

Selected sectors	Actual	Forecast Annual % change, real terms					
	2014	2015	2016	2017	2018	2019	2020
Professional and other private services	29.9	3.3	3.0	2.9	2.9	2.7	2.6
Public services	23.9	0.3	-0.1	-0.2	0.4	1.2	2.1
Manufacturing	13.4	1.3	1.7	2.9	3.0	1.7	1.4
Wholesale and retail	13.2	4.3	2.6	2.4	2.5	2.4	2.3
Finance and insurance	7.1	0.4	3.0	3.4	2.8	2.7	2.6
Total Gross Value Added (GVA)	**113.0**	**2.5**	**2.2**	**2.2**	**2.3**	**2.2**	**2.3**

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

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2.5 Forward looking economic indicators

GVA in the South West is forecast to grow at an annual average rate of 2.2% over the 2016 to 2020 period, slightly below the UK average of 2.4%.

In the largest sector, professional services, GVA grew by 3.8% in 2014, the largest gain since before the recession. In 2015 we expect GVA growth in the sector to have moderated to a still respectable 3.3% and grow at an annual average rate of 2.8% in the 2016 to 2020 period. In the same period the wholesale and retail sector and the manufacturing sector are expected to grow at an annual average rate of 2.4% and 2.1% respectively. The large public services sector is expected to grow by a more modest 0.7%.

Employment, on the workforce jobs measure, grew by a very strong 3.2% in 2014 in the South West, in line with the UK rate. Inevitably employment growth will slow from this very high rate and the estimate for 2015 is for a rise of around 1.2%. In the 2016–2020 period employment is forecast to grow at an annual average rate of 0.6%, slightly lower than the UK rate of 0.7%. Accompanying employment growth was a fall in the unemployment rate to 4.8% in 2014, well below the 6.2% at the UK level. The unemployment rate in the region is expected to remain below the national rate throughout the forecast period and drop to 4.3% by 2020.

In 2015 real personal disposable income (RPDI) is estimated to have grown by 3.5%, a marked uptick from the 0.6% gain registered in 2014. This is forecast to underpin growth in consumption last year of 3.1%. In the 2016–2020 period increases in RPDI in the region should moderate to an annual average rate of 1.9%, with consumption growing by 2.3%, in line with the UK average.
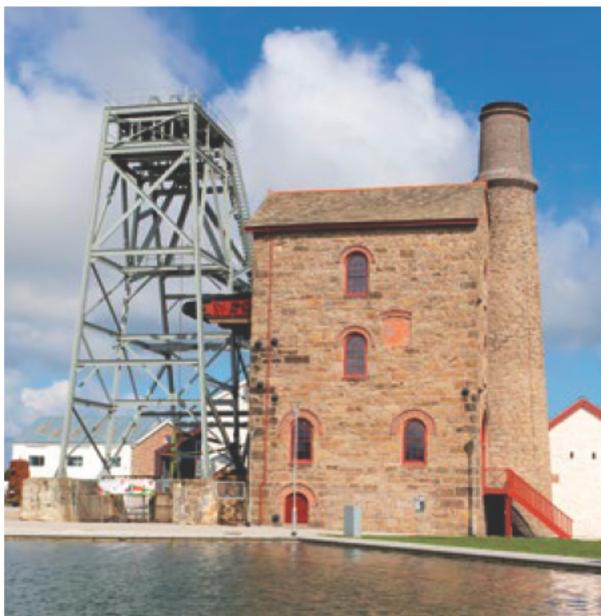
House prices in the South West rose by 5.9% to an average of £243,000 in 2014, as reported by the Office for National Statistics' (ONS) mix-adjusted house price series. In the third quarter of 2015 prices were up 3.4% on the previous quarter and 4.8% on the corresponding period of 2014. This compares to growth of 3.9% and 4.4% at the national level.

2.6 New construction orders – overview

New construction orders fell by 11.5% to £4.1bn in 2014 following two years of healthy growth. This places new orders nearly £2bn below their peak in 2006. They declined across all the new work sectors, with the worst performance in industrial where orders fell by 40% following two years of strong growth, and in public housing where they contracted by 34%. In the infrastructure, public non-housing, commercial and private housing sectors new orders decreased by 18%, 12%, 7% and 4% respectively.

2.7 New construction orders – current situation

The outlook for new construction orders brightened in the first half of 2015. Compared to the second half of 2014 they were largely flat but they showed a 6.8% increase compared to the same period a year earlier. The increase is attributable mainly to the strong growth in the infrastructure and public housing sectors of 69% and 34% respectively comparing the first half of 2015 with the first half of 2014. There was also an increase in the public non-housing sector, of 19%. The private housing sector registered a decline of 5%.

2.8 Construction output – short-term forecasts (2016–2017)

Regional ONS output statistics are published in current prices and are therefore inclusive of any inflationary effect. At the time of writing, regional ONS construction output statistics were only available for the first two quarters of 2015.

The ONS data shows that total construction output declined by 4.3% in the first half of 2015 compared to the previous half year. Compared to the first half of 2014 the decline was 2.5%.

The contraction in output in the first half of 2015 compared to the previous half year and the same period of 2014 was driven largely by a fall in public non-housing output (23% on the previous half year and 19% on the same period of 2014). The four-quarter moving total in the sector has now been in decline for eight consecutive quarters. The industrial, commercial and housing R&M sectors also registered declines (10%, 27% and 13%, and 19%, 9% and 7% on the same measures). The four-quarter moving total for construction output in the industrial sector has declined for four consecutive quarters, and by five consecutive quarters in the commercial and housing R&M sectors.

ECONOMIC INDICATORS — SOUTH WEST
(£ BILLION, CURRENT PRICES — UNLESS OTHERWISE STATED)

Selected sectors	Actual	Forecast Annual % change, real terms					
	2014	2015	2016	2017	2018	2019	2020
Real household disposable income	97.8	3.5	1.8	2.2	2.2	1.5	2.0
Household spending	102.4	3.1	2.4	2.4	2.2	2.2	2.2
Working age population (000s and as % of all)	3,237	60.0%	60.1%	60.0%	59.8%	59.9%	60.2%
House prices (£)	243,000	5.0	4.6	3.8	2.7	2.8	3.4
LFS unemployment (millions)	0.16	-9.7	-5.1	0.6	1.0	1.6	0.1

Source: ONS, DCLG, Experian

NEW CONSTRUCTION ORDERS GROWTH 1998–2014
— SOUTH WEST VS. GB
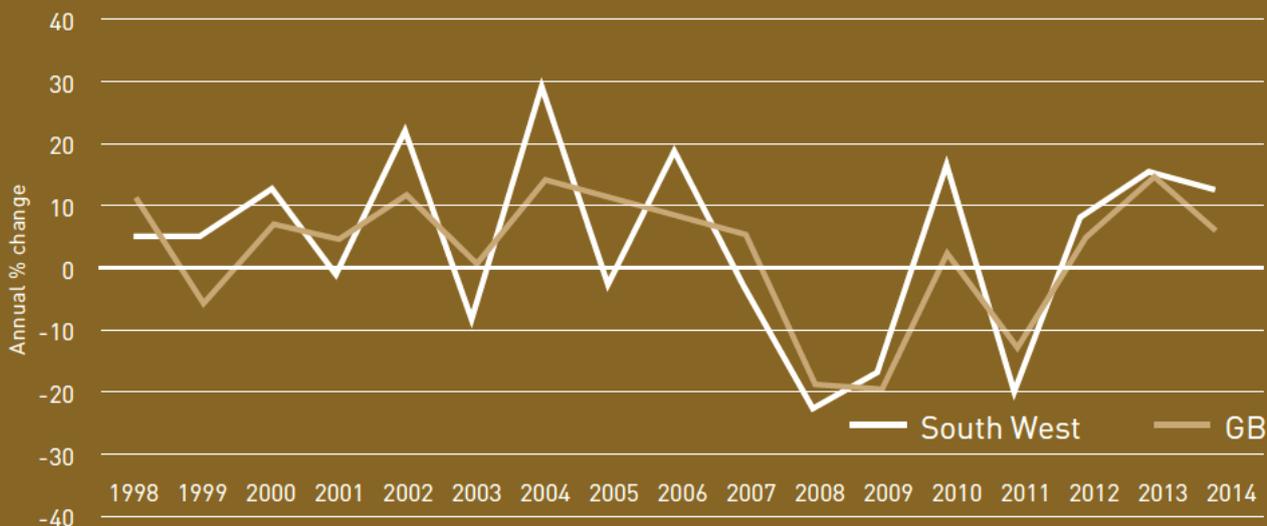
Source: ONS. Ref: CSN Explained, Section 3, Note 4

NEW WORK CONSTRUCTION ORDERS — SOUTH WEST
(£ MILLION, CURRENT PRICES)

	Actual	Annual % change				
	2014	2010	2011	2012	2013	2014
Public housing	76	9.3	-11.5	-15.5	-43.1	-33.9
Private housing	1,571	58.1	6.6	9.5	19.7	-3.7
Infrastructure	670	29.5	-13.5	37.4	67.8	-17.7
Public non-housing	688	18.6	-57.4	50.0	-10.8	-12.2
Industrial	191	-1.2	-43.5	22.9	80.2	-40.1
Commercial	905	-4.1	0.6	-18.0	7.9	-7.0
Total new work	**4,101**	**18.5**	**-19.7**	**9.2**	**15.7**	**-11.5**

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

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Countering the declines were 30% and 50% increases in infrastructure construction output in the first half of 2015 compared to the previous half year and the same period of 2014 respectively. The four-quarter moving total has increased in the sector for 10 consecutive quarters. There were also gains made in the public housing and private non-housing R&M sectors (17% and 7%, and 10% and 1% on the same measures). Both sectors have seen two quarters of increases in the four-quarter moving average.

In the private housing sector there was a decrease in construction output of 7% comparing the first half of 2015 with the second half of 2014, but an increase of 1% compared to the same period of 2014. Public non-housing R&M displayed the same trend (-12% and +9% on the same measure). The four-quarter moving total in the sector has declined for eight consecutive quarters. Infrastructure R&M increased by 4% comparing the first half of 2015 with the previous half, although it decreased by 2% compared to the first half of 2014.

For 2015 as a whole total construction output in the South is estimated to have been flat following steady growth of around 3% in both 2013 and 2014. Growth of around 27% in infrastructure and 3% in private housing is likely to have been cancelled out by declines in output in all other sectors, principal of which is a fall of 25% in industrial construction.

Short-term growth in output in the South West is projected to average nearly 11% in 2016 and 2017, with the former year experiencing expansion of around 5% but the latter year seeing a substantial acceleration to over 17%.

In 2016 all sectors should see some growth, at between 4.4% (infrastructure) and 8.9% (industrial). The public housing sector is an exception to this, with a 10.8% contraction forecast.

The very robust growth in 2017 is driven primarily by the doubling of infrastructure output. The upsurge is attributable to the commencement of main construction works on the Hinkley Point C nuclear power station in Bridgwater. In early September EDF reaffirmed its commitment to the project despite reporting further delays to a similar scheme in Flamanville, France. Meanwhile the British Government is to provide up to £2bn of guarantees to ensure that the financing for the project materialises. This has, in part, prompted calls for the project to be referred to the National Audit Office. Given that there is still some uncertainty around the project the expected start time for main construction work on the project is the beginning of 2017. Estimates of the total cost of the Hinkley Point project vary between £16bn and £24bn, with approximately 50% of this the construction cost.

2.9 Construction output – long-term forecasts (2016–2020)

In the five years to 2020 construction output is expected to grow at an annual average rate of 4.4%, compared to growth of 2.5% on the same measure at the UK level.

Construction output gains in the long term forecast are driven primarily by expected annual average growth of 14.2% in the infrastructure sector. As well as Hinkley Point, the proposed construction of Avon power station, a gas fired power facility in Bristol will also add £1.4bn to construction output in the South West between 2017 and 2020 if it goes ahead. In addition, some £2bn has been allocated to improve the capacity of the roads in the South West between now and 2021. The schemes outlined by Highways England will see construction work taking place on the M49, M5, A303 and A358, A417 and A30.

The commercial sector is expected to grow at an annual average rate of 3.9% in the 2016 to 2020 period. Good growth is projected for most of the sectors that drive demand for commercial premises. In particular professional and other private services (2.9% a year on average) and finance and insurance (2.8% a year on average), should provide the impetus for robust expansion in office construction.

In the private housing sector an annual average growth rate of 3.4% is expected for the 2016–2020 period. A £2.3bn house building project in Bath will provide a boost to the sector out to 2019 as will a £400m apartment building project outlined under the Bournemouth town centre redevelopment scheme. In Plymouth, the construction of 5,507 residential and commercial units is underway in a £300m scheme due for completion in 2018. Similarly, in Bristol the construction of 2,690 houses and flats is due to commence this year in a £2bn project due for completion by 2026.

CONSTRUCTION OUTPUT — SOUTH WEST (£ MILLION, 2012 PRICES)

	Actual	Forecast annual % change			Annual average
	2014	2015	2016	2017	2016-2017
Public housing	161	-4%	-11%	9%	-1.5%
Private housing	2,320	3%	7%	7%	7.1%
Infrastructure	910	27%	3%	105%	45.5%
Public non-housing	809	-14%	6%	7%	6.7%
Industrial	271	-25%	9%	9%	8.9%
Commercial	1,570	-11%	7%	8%	7.6%
Total new work	**6,042**	**-1%**	**6%**	**26%**	**15.4%**
Housing R&M	2,264	3%	5%	5%	4.8%
Non-housing R&M	1,655	-3%	1%	2%	1.6%
Total R&M	**3,918**	**1%**	**4%**	**4%**	**3.5%**
Total work	**9,960**	**0%**	**5%**	**17%**	**10.9%**

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

ANNUAL AVERAGE CONSTRUCTION OUTPUT GROWTH 2016-2017 — SOUTH WEST
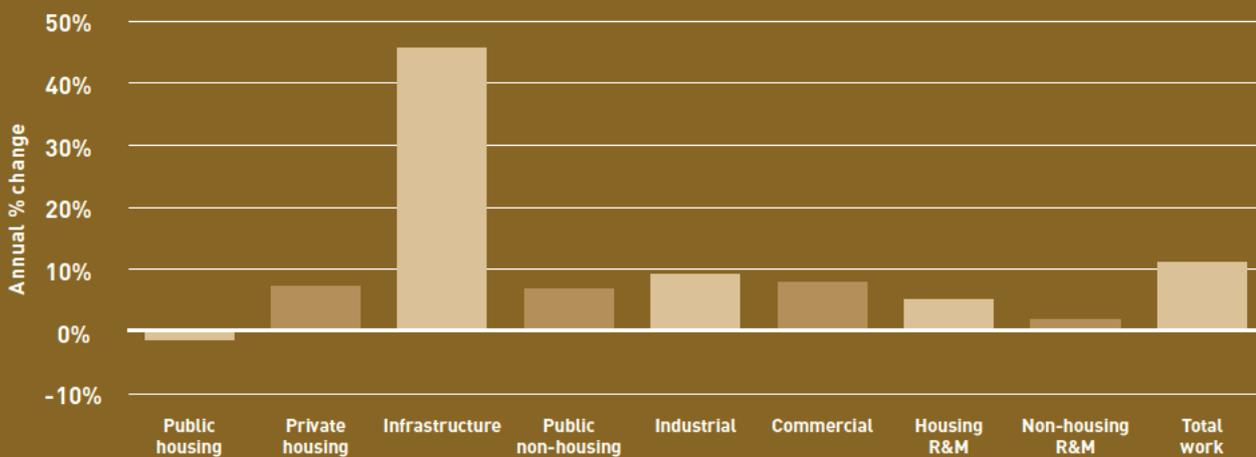
Source: Experian. Ref: CSN Explained, Section 3, Note 2

> By 2020 construction employment is predicted to reach over 257,000 the highest it has ever been.

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Public non-housing output is forecast to grow at 3.1% on an annual average basis between 2016 and 2020. The strongest growth within the sector is likely to come from a number of projects to redevelop the military facilities in the region. The largest of these projects is the £4.4bn revamp of Ashchurch army camp due for completion in 2020.

The public housing sector is expected to show the slowest annual average construction output growth of any new work sector in the 2016 to 2020 period, at 2%. The sector will be adversely hit by last year's announcement that both councils and housing associations will be obliged to decrease their rents by 1% a year from 2016/17 to 2019/20. This combined with the announcement of the extension of Right to Buy to housing associations inevitably exacerbates the already difficult operating environment for the sector.

In the R&M sectors the largest project identified in the pipeline is the refurbishment of 4,600 homes in the city between 2016 and 2019, at a cost of around £2bn. The demise of the Green Deal programme, current relatively low energy costs, and the hefty reduction in Feed-in Tariffs are likely to slow down the installation of energy efficiency and renewable generation measures.

2.10 Beyond 2020

Construction activity in the South West is inevitably going to be driven by the nuclear new build programme, assuming that it goes ahead, with work on Hinkley Point C due to continue to 2024. As this project draws to a close, work should get underway on the second nuclear new build project in the region, at Oldbury, which is scheduled to continue until 2029. The construction element of these two projects will deliver at least £12bn of output over the 2015 to 2029 period in a market that is presently worth about £11bn annually in current prices. The ongoing decommissioning of the power station at Berkeley will add a further £7bn to infrastructure construction output by 2028.

CONSTRUCTION OUTPUT — SOUTH WEST (£ MILLION, 2012 PRICES)

	Estimate	Forecast annual % change					Annual average
	2015	2016	2017	2018	2019	2020	2016-2020
Public housing	155	-11%	9%	11%	4%	-1%	2.0%
Private housing	2,395	7%	7%	-2%	2%	3%	3.4%
Infrastructure	1,157	3%	105%	3%	-8%	-4%	14.2%
Public non-housing	696	6%	7%	2%	-3%	3%	3.1%
Industrial	203	9%	9%	7%	4%	3%	6.3%
Commercial	1,404	7%	8%	3%	3%	-2%	3.9%
Total new work	**6,009**	**6%**	**26%**	**1%**	**-1%**	**0%**	**6.0%**
Housing R&M	2,335	5%	5%	-2%	2%	2%	2.3%
Non-housing R&M	1,608	1%	2%	0%	1%	1%	1.0%
Total R&M	**3,942**	**4%**	**4%**	**-1%**	**2%**	**1%**	**1.7%**
Total work	**9,952**	**5%**	**17%**	**1%**	**0%**	**0%**	**4.4%**

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

ANNUAL AVERAGE CONSTRUCTION OUTPUT GROWTH 2016–2020 — SOUTH WEST
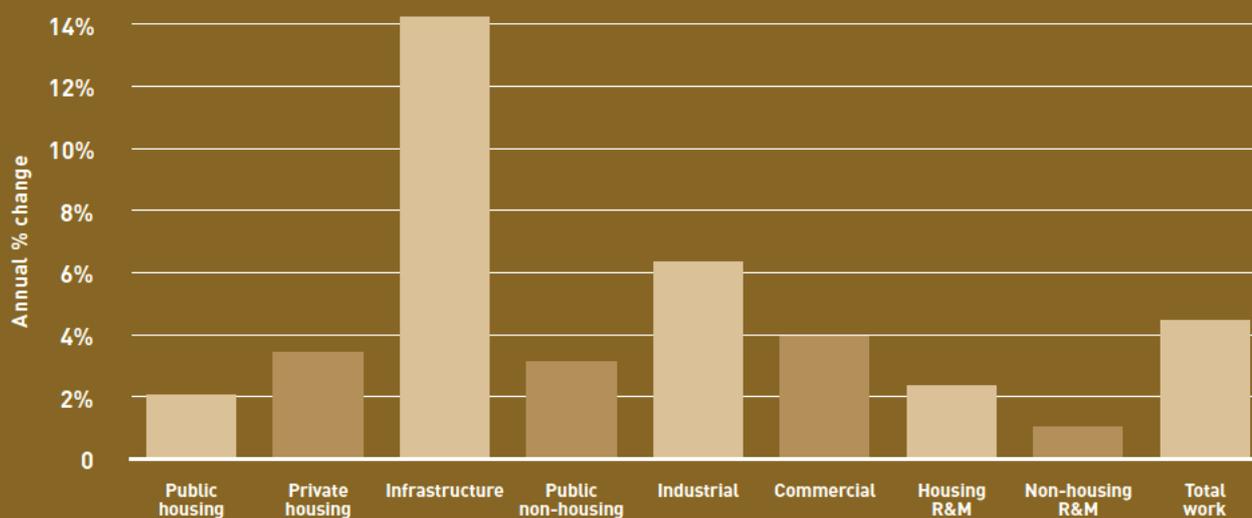
Source: Experian. Ref: CSN Explained, Section 3, Note 2

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 2014, the estimated total employment across 28 occupational categories in 2015 and forecasts for the industry for 2016 to 2020. A full breakdown of occupational groups is provided in Section 5 of CSN Explained.

Total employment in the construction sector in the South West is expected to grow at an annual average rate of 2.1% in the 2016 to 2020 period, well above the UK average of 1.1%. Total employment in the sector is predicted to reach 257,560 by 2020, a rise of nearly 26,000 over 2015's level, and the highest it has ever been.

The employment growth rate is expected to peak in 2016 and 2017 and then subside thereafter, with the rise in the former year due to the general health of the industry and in the latter driven by Hinkley Point.

The majority (25) of the 28 occupational aggregates are set to expand over the forecast period. Logistics workers are expected to see the strongest annual average growth (4.3%), followed by architects (3.9%), other construction process managers (3.4%), construction project managers (3.2%), and surveyors (3.2%). This doesn't mean that good growth will not be seen across many of the trades as well – annual average expansion of 2.6% is projected for bricklayers – just that professionals and managers of various types are likely to see stronger demand.

TOTAL EMPLOYMENT BY OCCUPATION — SOUTH WEST

	Actual 2014	Estimate 2015	Forecast	
			2016	2020
Senior, executive, and business process managers	13,580	13,530	14,100	15,140
Construction project managers	2,710	2,870	3,060	3,370
Other construction process managers	12,330	12,180	12,960	14,390
Non-construction professional, technical, IT and other office-based staff	32,000	33,330	34,770	37,300
Construction trades supervisors	3,610	3,680	3,910	4,230
Wood trades and interior fit-out	29,820	31,590	32,880	35,430
Bricklayers	7,600	7,990	8,340	9,090
Building envelope specialists	12,110	11,720	12,190	13,170
Painters and decorators	9,920	10,560	10,790	11,370
Plasterers	4,940	4,750	4,930	5,210
Roofers	4,300	4,630	4,790	5,150
Floorers	1,170	1,140	1,180	1,250
Glaziers	2,530	2,700	2,800	3,010
Specialist building operatives nec*	4,360	4,210	4,330	4,590
Scaffolders	3,530	3,770	3,830	3,660
Plant operatives	4,140	4,410	4,700	5,120
Plant mechanics/fitters	2,480	2,410	2,320	2,250
Steel erectors/structural fabrication	2,610	2,540	2,630	2,750
Labourers nec*	7,560	7,320	7,340	6,710
Electrical trades and installation	15,090	14,550	14,940	15,760
Plumbing and HVAC Trades	19,220	19,810	20,420	21,500
Logistics	830	840	900	1,040
Civil engineering operatives nec*	2,560	2,480	2,530	2,650
Non-construction operatives	1,630	1,570	1,620	1,620
Civil engineers	2,830	2,800	2,960	3,240
Other construction professionals and technical staff	14,680	14,390	15,260	16,840
Architects	2,910	2,920	3,120	3,530
Surveyors	6,580	6,990	7,410	8,190
Total (SIC 41-43)	**200,630**	**204,580**	**212,260**	**225,760**
Total (SIC 41-43, 71.1, 74.9)	**227,630**	**231,680**	**241,010**	**257,560**

*Source: ONS, CSN, Experian. Ref: CSN Explained, Section 3, Notes 5 and 6. *Not elsewhere classified.*

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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 the inconsistency and coverage of supply data. Therefore, 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.

The South West's projected ARR for the 2016 to 2020 period is 6,480, representing 2.7% of base 2016 employment, well above the UK average of 1.7%. Of the construction-specific occupational categories, those with the largest absolute ARRs are bricklayers (480) and plasterers (400), although in terms of ratios to base 2016 employment, the requirement is highest for logistics personnel (10%), plasterers (8%), glaziers (6%), and floorers (6%).

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, and 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.

ANNUAL RECRUITMENT REQUIREMENT BY OCCUPATION — SOUTH WEST

	2016-2020
Senior, executive, and business process managers	790
Construction project managers	-
Other construction process managers	270
Non-construction professional, technical, IT and other office-based staff	2,700
Construction trades supervisors	150
Wood trades and interior fit-out	-
Bricklayers	480
Building envelope specialists	290
Painters and decorators	220
Plasterers	400
Roofers	230
Floorers	70
Glaziers	180
Specialist building operatives nec*	120
Scaffolders	100
Plant operatives	-
Plant mechanics/fitters	-
Steel erectors/structural fabrication	-
Labourers nec*	170
Electrical trades and installation	150
Plumbing and HVAC Trades	-
Logistics	90
Civil engineering operatives nec*	-
Civil engineers	-
Other construction professionals and technical staff	-
Architects	70
Surveyors	-
Total (SIC 41-43)	**6,410**
Total (SIC 41-43, 71.1, 74.9)	**6,480**

*Source: CSN, Experian. Ref: CSN Explained, Section 3, Notes 5 and 6. *Not elsewhere classified.*

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2.5%

The overall UK forecast of an annual average rise in output of 2.5% over the 2016 to 2020 period is a little higher than the 2.1% seen in the last growth period for construction between 1995 and 2007. However, it disguises some quite different regional/devolved nation performances, from expected expansion of over 7% in Wales to just 0.5% in Scotland.

Wales and the South West are top of the growth rankings and have remained so for some time, but their strong performance is heavily predicated on nuclear new build projects at Hinkley Point and Wylfa. Greater London is also projected to have a strong infrastructure sector, with the work starting on the Northern Line extension and Thames Tideway and High Speed 2 in the pipeline. These projects should more than offset completion of the Crossrail and Thameslink schemes.

While growth in London and the East of England is expected to be robust, the forecast for the South East is relatively poor with a dearth of major projects in the pipeline, the £2bn Paramount Park scheme excepted. Therefore, the forecasts are less South East England centric than they sometimes can be.

Northern Ireland is likely to be one of the faster growing regions in the five years to 2020, although construction output will be coming back from a very low base and there are concerns that current political uncertainties could delay the start of public projects.

Scotland is seeing an exceptionally high level of investment in infrastructure at present, with output in 2014 around twice its previous 10 year average and due to increase even further in 2015. Thereafter projects, such as the current spate of motorway upgrades, begin to complete and activity in the sector is likely to fall sharply, bringing the overall Scottish construction growth rate down to only about half a per cent a year on average.

Employment growth across the regions and devolved nations tends to mirror that of output, but at a lower level to take account of expected productivity gains and with some minor adjustments depending on whether output growth is in high or low labour intensive sectors. Annual employment growth across the UK as a whole is projected to average 1.1% over the 2016 to 2020 period, with a high of 2.9% in Wales and a low of a 0.7% a year decline in Scotland. Despite the fact that nuclear new build is not particularly labour intensive, Wylfa is a very big project in a small market, therefore it will add nearly 2% to construction employment in Wales in 2020. The impact is smaller in the South West, which has a bigger construction market, but even there it will help to drive good employment growth of over 2% a year on average. In Scotland the converse is true and a sharp fall in infrastructure output, despite its relatively low labour input, is likely to lead to a drop in construction employment north of the border post 2016.

The pattern of ARR can look significantly different from the profile of output and employment, as some regions and devolved nations have historically strong net inflows and some suffer from large net outflows. The most extreme examples of this trend tend to be Greater London and Wales. London has a relatively low ARR despite strong projected employment growth (2% a year) as it acts as a natural magnet for construction workers throughout the UK and beyond, therefore its ARR ratio to base 2016 employment is low at 0.9%. At the other end of the scale Wales tends to suffer strong net outflows, in particular to the North West and South West of England and this, combined with a buoyant output and employment growth forecast, means its ARR ratio to base 2016 employment is a high 4.7%.

ANNUAL AVERAGE CONSTRUCTION OUTPUT GROWTH BY REGION 2016–2020

Annual % growth output

8%	
7%	
6%	
5%	
4%	
3%	UK average
2%	
1%	
0%	

North East, Yorkshire and Humber, East Midlands, East of England, Greater London, South East, South West, Wales, West Midlands, Northern Ireland, North West, Scotland
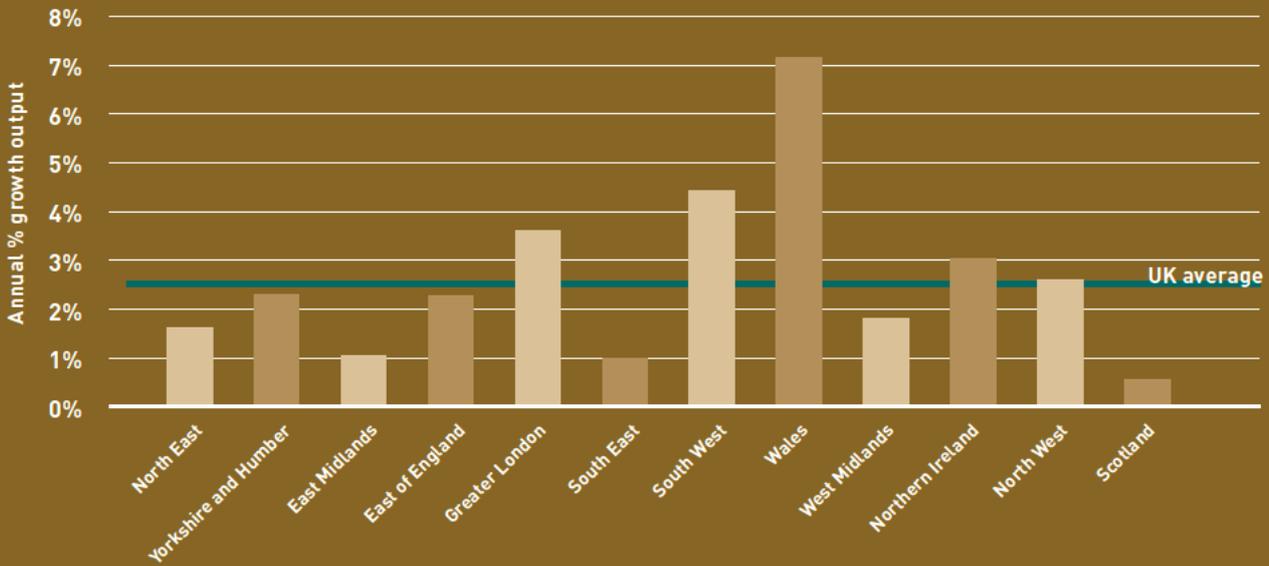
ANNUAL RECRUITMENT REQUIREMENT (ARR) BY REGION 2016–2020

Annual requirement – workers

7,000
6,000
5,000
4,000
3,000
2,000
1,000
0

North East, Yorkshire and Humber, East Midlands, East of England, Greater London, South East, South West, Wales, West Midlands, Northern Ireland, North West, Scotland
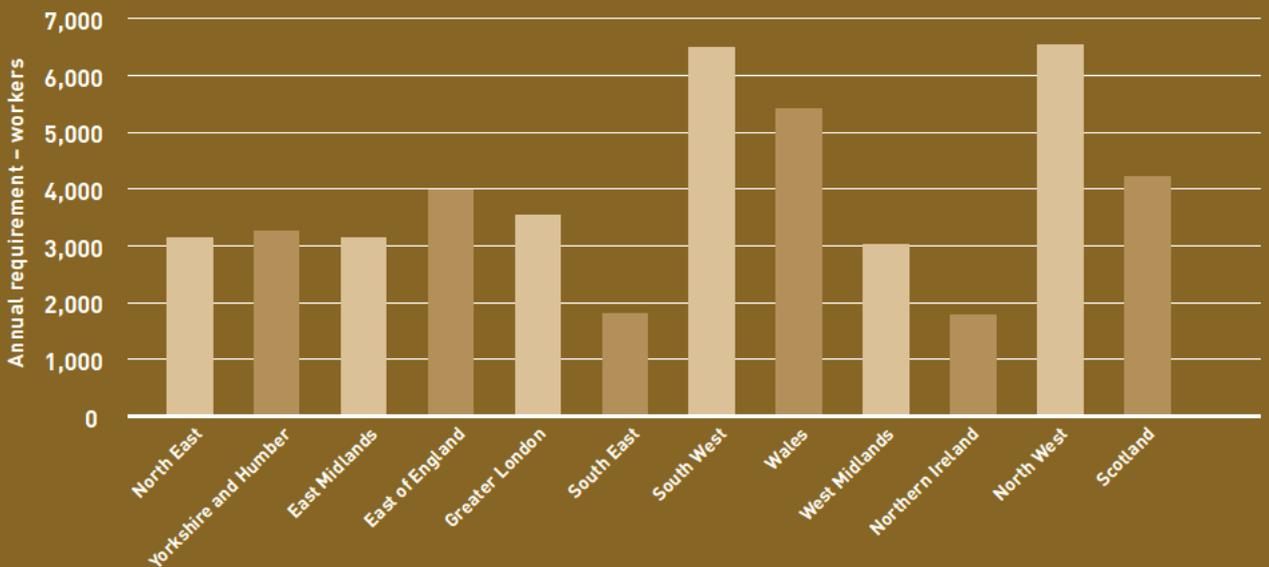
> Infrastructure is predicted to be the best performing sector increasing on average by 14.2% per year.

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.

Section 3 has some further notes relating to the data sources used for the various charts and tables. This section also outlines what is meant by the term 'footprint', when talking about the areas of responsibility that lie with a Sector Skills Council (SSC) or Sector Bodies.

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 28 occupational groups into the individual standard occupational classification (SOC) codes that are aggregated to provide the employment and recruitment requirement.

Section 6 concludes this appendix by giving details about the range of LMI reports, the advantages of being a CSN member and details of who to contact if readers are interested in joining.

CSN METHODOLOGY

Background

The Construction Skills Network has been evolving since its conception in 2005, acting as a vehicle for ConstructionSkills to collect and produce information on the future employment and training needs of the industry.

ConstructionSkills is the Sector Skills Council for Construction and produces robust labour market intelligence that provides 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 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 twice a year and consist of key regional stakeholders invited from industry, Government, education and other SSCs and Sector Bodies, all of whom contribute their 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 and Sector Bodies. 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 several models that 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, which is comprised of statisticians and modelling experts.

The models have evolved over time and will continue to do so, 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 interrelated 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 the industry from training, although robust data on training provision is being developed by CITB in partnership with public funding agencies, further education, higher education and employer representatives. Thus, 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.

Estimates of demand are based upon the results of discussion groups comprising industry experts, a view of construction output and 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 use a set of specific statistics for each major type of work to 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 permanent sickness)
- Outflow to temporary sickness and home duties.

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

Flows into the labour market include:
- Transfers from other industries
- International/domestic immigration
- Inflow from temporary sickness 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.

EMPLOYMENT

SKILLED LABOUR STOCK

ENTRANCE TO INDUSTRY → CHANGE IN LABOUR STOCK ← FLOWS OUT OF INDUSTRY

SKILLED LABOUR SUPPLY

EMPLOYMENT REQUIREMENT

LABOUR COEFFICIENTS → SKILLED LABOUR DEMAND ← PRODUCTIVITY GROWTH
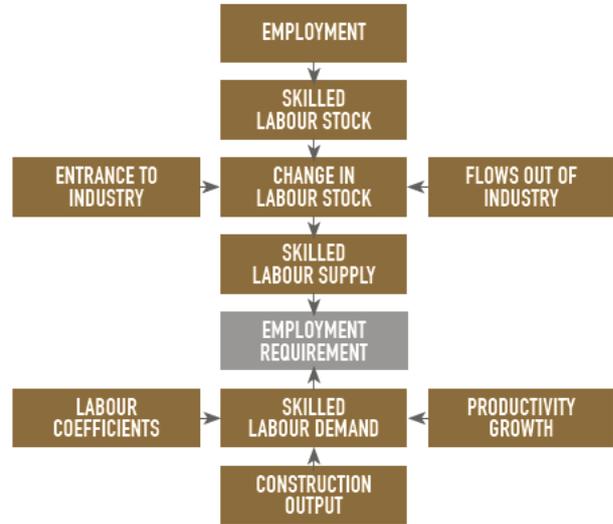
CONSTRUCTION OUTPUT

GLOSSARY OF TERMS

Building envelope specialists – any trade involved with the external cladding of a building other than bricklaying, e.g. curtain walling.

Demand – this 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 Employer Skills Survey, produced by the Department for Education and Skills. These data sets are translated into labour requirements by trade using a series of coefficients to produce figures for labour demand that relate to forecast 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 of each occupation or trade needed to produce £1m of output across each sub-sector.

LFS (Labour Force Survey) – a UK household sample survey that collects information on employment, unemployment, flows between sectors and training. Information is collected from around 53,000 households each quarter (the sample totals more than 100,000 people).

LMI (labour market intelligence) – data that is quantitative (numerical) or qualitative (insights and perceptions) on workers, employers, wages, conditions of work, etc.

Macroeconomics – the study of an economy at 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) – organisation producing official statistics on the economy, population and society at both a national 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 United Kingdom Standard Industrial Classification of Economic Activities produced by the ONS.

SOC codes (Standard Occupational Classification codes) – from the United Kingdom Standard Occupational Classification produced by the ONS.

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.

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NOTES AND FOOTPRINTS

Notes

1 Except for Northern Ireland, output data for the English regions, Scotland and Wales is supplied by the Office for National Statistics (ONS) on a current price basis. Thus, national deflators produced by the ONS have been used to deflate prices to a 2005 constant price basis, so that 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 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 ConstructionSkills that SummitSkills has responsibility for these occupations across a range of SIC codes, including SIC 43.2.

7 A reporting minimum of 50 is used for the annual recruitment requirement (ARR). As a result some region and devolved nation ARR forecasts do not sum to the total UK requirement.

8 The Employment and ARR tables show separate totals for SIC41–43 and SIC41–43, 71.1 and 74.9. The total for SIC41–43 covers the first 24 occupational groups on the relevant tables and excludes civil engineers, other construction professionals and technical staff, architects and surveyors. The total for SIC41–43, 71.1 and 74.9 includes all occupations.

Footprints for Built Environment Sector Bodies

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 and related technical consultancy.

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

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

The Building Futures Group has a peripheral interest in SIC 71.1.

The sector footprints for the other Sector Bodies covering the Built Environment:

SummitSkills

Footprint – plumbing, heating, ventilation, air conditioning, refrigeration and electrotechnical.

Coverage – Building services engineering.

ConstructionSkills shares an interest with SummitSkills in SIC 43.21 Electrical installation and SIC 43.22 Plumbing, heat and air-conditioning installation. ConstructionSkills recognises the responsibility of SummitSkills across SIC 43.21 and SIC 43.22; thus data relating to the building services engineering sector is included here primarily for completeness.

The Building Futures Group

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, domestics, facilities managers.

The Building Futures Group has a peripheral interest in 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.

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DEFINITIONS: TYPES AND EXAMPLES OF CONSTRUCTION WORK

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

Housing schemes, care homes for the elderly 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 construction[1]

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.

Private commercial work[1]

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 property.[2]

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 maintenance.[3]

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'.

2   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.

3   Except where stated, mixed development schemes are classified to whichever sector provides the largest share of finance.

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OCCUPATIONAL GROUPS

Occupational group
Description, SOC (2010) reference.

Senior, executive, and business process managers

Chief executives and senior officials	1115
Financial managers and directors	1131
Marketing and sales directors	1132
Purchasing managers and directors	1133
Human resource managers and directors	1135
Property, housing and estate managers	1251
Information technology and telecommunications directors	1136
Research and development maanagers	2150
Managers and directors in storage and warehousing	1162
Managers and proprietors in other services nec*	1259
Functional managers and directors nec*	1139
IT specialist managers	2133
IT project and programme managers	2134
Financial accounts managers	3538
Sales accounts and business development managers	3545

Construction project managers

Construction project managers and related professionals	2436

Other construction process managers

Production managers and directors in manufacturing	1121
Production managers and directors in construction	1122
Managers and directors in transport and distribution	1161
Waste disposal and environmental services managers	1255
Health and safety officers	3567
Conservation and environmental associate professionals	3550

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

IT operations technicians	3131
IT user support technicians	3132
Finance and investment analysts and 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 standards and regulations	3565
Programmers and software development professionals	2136
Information technology and telecommunications professionals nec*	2139
Estate agents and auctioneers	3544
Solicitors	2413
Legal professionals nec*	2419
Chartered and certified accountants	2421
Business and financial project management professionals	2424
Management consultants and business analysts	2423
Receptionists	4216
Typists and related keyboard occupations	4217
Business sales executives	3542
Bookkeepers, payroll managers and wages clerks	4122
Records clerks and assistants	4131
Stock control clerks and assistants	4133
Telephonists	7213
Communication operators	7214
Personal assistants and other secretaries	4215
Sales and retail assistants	7111
Telephone salespersons	7113
Buyers and procurement officers	3541
Human resources and industrial relations officers	3562
Credit controllers	4121
Company secretaries	4214
Sales related occupations nec*	7129
Call and contact centre occupations	7211

Customer service occupations nec*	7219
Elementary administration occupations nec*	9219
Chemical scientists	2111
Biological scientists and biochemists	2112
Physical scientists	2113
Laboratory technicians	3111
Graphic designers	3421
Environmental health professionals	2463
IT business analysts, architects and systems designers	2135
Conservation professionals	2141
Environment professionals	2142
Actuaries, economists and statisticians	2425
Business and related research professionals	2426
Finance officers	4124
Financial administrative occupations nec*	4129
Human resources administrative occupations	4138
Sales administrators	4151
Other administrative occupations nec*	4159
Office supervisors	4162
Sales supervisors	7130
Customer service managers and supervisors	7220
Office managers	4161

Construction trades supervisors

Skilled metal, electrical and electronic trades supervisors	5250
Construction and building trades supervisors	5330

Wood trades and interior fit-out

Carpenters and joiners	5315
Paper and wood machine operatives	8121
Furniture makers and other craft woodworkers	5442
Construction and building trades nec* (25%)	5319

Bricklayers

Bricklayers and masons	5312

Building envelope specialists

Construction and building trades nec* (50%)	5319

Painters and decorators

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

Plasterers

Plasterers	5321

Roofers

Roofers, roof tilers and slaters	5313

Floorers

Floorers and wall tilers	5322

Glaziers

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

Specialist building operatives not elsewhere classified (nec*)

Construction operatives nec* (100%)	8149
Construction and building trades nec* (5%)	5319
Industrial cleaning process occupations	9132
Other skilled trades nec*	5449

Scaffolders

Scaffolders, stagers and riggers	8141

Plant operatives

Crane drivers	8221
Plant and machine operatives nec*	8129
Fork-lift truck drivers	8222
Mobile machine drivers and operatives nec*	8229

Plant mechanics/fitters

Metalworking production and maintenance fitters	5223
Precision instrument makers and repairers	5224
Vehicle technicians, mechanics and electricians	5231
Elementary process plant occupations nec*	9139
Tool makers, tool fitters and markers-out	5222
Vehicle body builders and repairers	5232

Steel erectors/structural fabrication

Steel erectors	5311
Welding trades	5215
Metal plate workers and riveters	5214
Construction and building trades nec* (5%)	5319
Smiths and forge workers	5211
Metal machining setters and setter-operators	5221

Labourers nec*

Elementary construction occupations (100%)	9120

Electrical trades and installation

Electricians and electrical fitters	5241
Electrical and electronic trades nec*	5249
Telecommunications engineers	5242

Plumbing and heating, ventilation, and air conditioning trades

Plumbers and heating and ventilating engineers	5314
Pipe fitters	5216
Construction and building trades nec* (5%)	5319
Air-conditioning and refrigeration engineers	5225

*Not elsewhere classified

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Logistics

Large goods vehicle drivers	8211
Van drivers	8212
Elementary storage occupations	9260
Buyers and purchasing officers (50%)	3541
Transport and distribution clerks and assistants	4134

Civil engineering operatives not elsewhere classified (nec*)

Road construction operatives	8142
Rail construction and maintenance operatives	8143
Quarry workers and related operatives	8123

Non-construction operatives

|	
Metal making and treating process operatives	8117
Process operatives nec*	8119
Metalworking machine operatives	8125
Water and sewerage plant operatives	8126
Assemblers (vehicles and metal goods)	8132
Routine inspectors and testers	8133
Assemblers and routine operatives nec*	8139
Elementary security occupations nec*	9249
Cleaners and domestics*	9233
Street cleaners	9232
Gardeners and landscape gardeners	5113
Caretakers	6232
Security guards and related occupations	9241
Protective service associate professionals nec*	3319

Civil engineers

Civil engineers	2121

Other construction professionals and technical staff

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Architects	2431

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*Not elsewhere classified

CSN WEBSITE AND CONTACT DETAILS

The CSN website
citb.co.uk/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 12 LMI reports (one for Northern Ireland, Scotland, Wales and each of the nine English regions) can be downloaded from the site, while other CITB research reports are also freely available on the CITB 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 that 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 to enter the workforce.

The website also contains information about:

- How the CSN functions

- The CSN model approach

- How the model can be used to explore scenarios

- CSN team contact information

- Access to related CITB research

- Details for those interested in becoming members of the network.

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 that play a vital role in feeding back observations, knowledge and insight into 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 goes 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 becoming a member of the CSN, please contact us at: **csn@citb.co.uk**

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CSN EXPLAINED

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