

2007-2011 Construction Skills Network Labour Market Intelligence

South East

Construction Skills Network

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1. Headlines

Construction Skills Network



1. Headlines

1.1 South East Economy

- Worth £151bn in 2005 (around 15% of the total UK economy), the South East economy is forecast to grow at an annual average rate of 3.2% between 2007 and 2011.
- The Financial & Business Services sector accounted for almost 29% of GVA in 2005, and thus is proportionally more important in the South East than it is nationally.
- The fastest growing sector in the region over the forecast period is expected to be Transport & Communications although Financial & Business Services should also see strong growth.

1.2 Construction Output in the South East

- Worth £11.7bn in 2005, in 2000 prices. Construction in the South East accounts for around 15% of the UK total.
- Output is forecast to grow at an annual average rate of 3.2% between 2007 and 2011.
- The public and private housing sectors will be the main drivers of growth as strong demand further inflates house prices and the government commits resources to increasing the supply of affordable housing in the region.
- Relative to the UK average, construction output is forecast to grow strongly in the South East.

1.3 Construction Employment in the South East

- Total construction employment of 327,650 in 2005 in the South East is forecast to rise by 17% to 382,200 in 2011.
- To meet this demand, after taking into account of those entering and leaving the industry, the South East requires an extra 13,560 workers each year.
- Wood Trades & Interior Fit-out has the largest annual requirement, closely followed by the requirement for Construction Professionals & Technical Staff.



Source: Experian

Regional Comparison 2007-2011

	Annual Average % Change in Output	Growth in Total Employment	Total Average Annual Requirement
North East	1.3%	4,380	3,300
Yorkshire and Humber	1.9%	16,110	6,090
East Midlands	1.9%	13,340	5,210
East of England	3.5%	36,360	10,160
Greater London	4.5%	42,350	12,880
South East	3.2%	41,390	13,560
South West	1.9%	16,350	6,360
Wales	2.5%	9,080	5,090
West Midlands	1.6%	16,070	6,340
Northern Ireland	4.3%	8,790	2,940
North West	1.4%	19,260	8,830
Scotland	1.5%	17,800	6,830
UK	2.6%	241,280	87,590

Source: CSN, Experian

Footnote: 2 (See Appendix III)

2. The Outlook for Construction in the South East

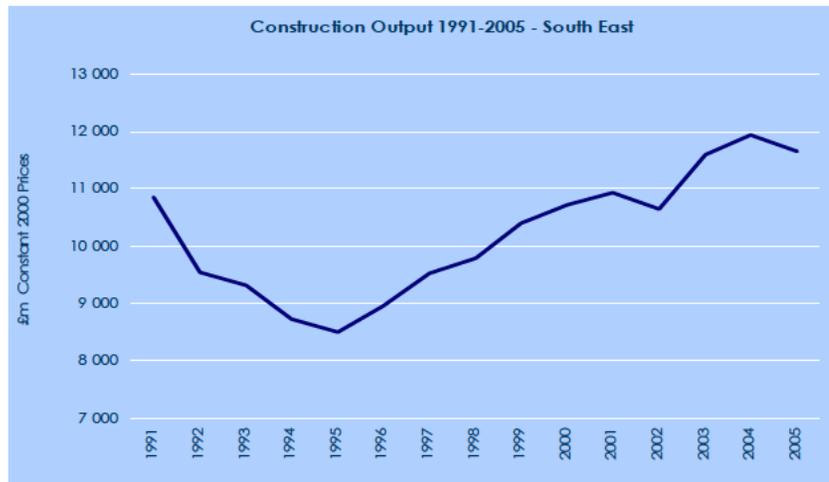
2. The Outlook for Construction in the South East

2.1 Construction Output in the South East – Overview

The South East's construction industry enjoyed a long period of real annual growth between 1996 and 2001, although this only brought activity in the region back up to its level in 1991 (see graph below).

Construction output in the South East increased by an annual average rate of 4.6% between 1996 and 2000, rising from £9bn in the former year to £10.7bn in the latter, in 2000 prices. Robust growth was seen in both the new work and repair and maintenance (R&M) sectors during this period. Relative to the region's buoyancy between 1996 and 2000, the recent past has been very subdued. Output increased by an annual average rate of just 1.6% between 2001 and 2005.

Weakness on the new work side, particularly in the commercial sector, was the main culprit for the turnaround in the region's fortunes. With commercial sector output down substantially in both 2002 and 2005, by 21% and 13% respectively. To apportion full blame to the commercial sector would, however, be unfair. With the exception of public housing and public non-housing,



Source: Experian

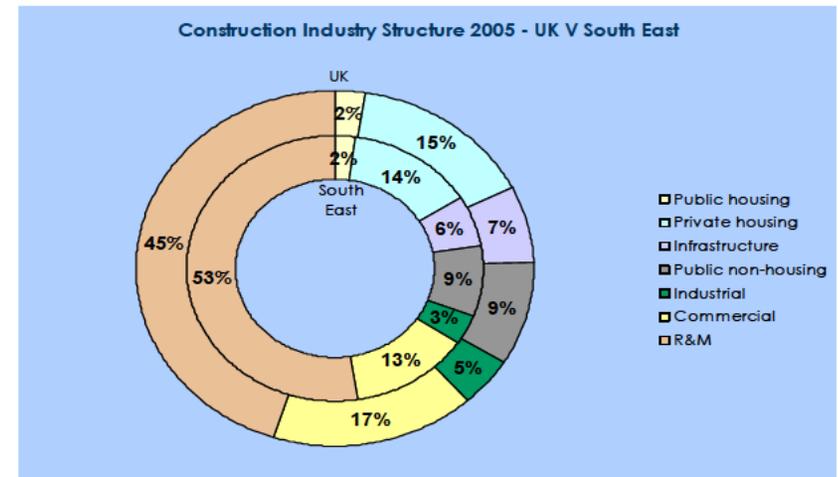
Footnote: 1 (See Appendix III)

the performance of all sectors was weaker between 2001 and 2005. During this period, output declined, on average each year, in three sectors, namely commercial, industrial and infrastructure, by 6.2%, 3.9% and 0.9% respectively.

2.2 Industry Structure

From the chart below it is noticeable that there is some difference between the South East and the UK in terms of workload mix, with the R&M sector taking a proportionally larger share of output in the South East than the UK as a whole.

Conversely the commercial sector output takes a smaller share in the South East than the UK as a whole. While interesting, the chart below presents just a snapshot and can change over time. In the early part of the decade, for example, the share of total output in the South East taken by the commercial sector was roughly in line with the national average.



Source: DTI, DFP

2. The Outlook for Construction in the South East

2.3 Economic Overview

The expected performance of a regional or national economy over the forecast period (2007-2011) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic Structure

In 2005 the South East economy was worth £151bn, in 2003 prices, 1.9% higher than in 2004 and worth around 15% of the UK total.

Financial & Business Services was the largest component of Gross Value Added (GVA) in the South East, accounting for nearly 29% of the total in 2005 (see table below). Public Services took the second largest share valued at 19% of the total.

Over the forecast period (2007-2011) GVA in the South East is forecast to grow by 13%. Expansion in the Public Services sector is likely to be subdued, while the Financial & Business Services and Transport & Communications sectors drive the region forward. To 2011, GVA in these sectors is forecast to increase by 19% and 25% respectively.

Economic Structure - South East (£ billion, 2003 prices)

Selected Sectors	Actual 2005	Forecast Annual % Change, Real Terms					
		2006	2007	2008	2009	2010	2011
Public Services	29	2.4	1.7	1.9	2.1	2.1	2.6
Financial & Business Services	43	7.1	3.5	4.1	4.7	4.6	4.4
Transport & Communications	12	4.5	3.2	5.0	5.9	6.1	6.0
Manufacturing	19	1.8	2.4	1.5	2.2	2.1	1.9
Distribution, Hotels & Catering	25	4.3	2.9	3.0	3.5	3.4	3.2
Total Gross Value Added (GVA)	151	3.6	2.7	2.7	3.4	3.3	3.2

Source: Experian

Footnote: 3 (See Appendix III)

2.5 Forward Looking Economic Indicators

Economic growth in the South East is likely to be slightly higher than the national average over the forecast period as a whole. Growth in real household disposable income is expected to increase a little more rapidly than household spending to 2011 (see table below).

By 2011 we expect the debt to income ratio in the South East to be 2.5. This is significantly higher than the national average.

In 2005 the Department for Communities and Local Government (DCLG) reported that average house prices in the South East reached £233,000, around 27% higher than the national average. Going forward, house prices are expected to continue to rise rapidly, relative to the national average. By 2011 prices are expected to be around 26% higher than in 2006, compared to a 17% increase forecast nationally.

Economic Indicators - South East (£ billion, 2003 prices - unless otherwise stated)

	Actual 2005	Forecast Annual % Change, Real Terms					
		2006	2007	2008	2009	2010	2011
Real Household Disposable Income	118	2.1	3.6	4.2	4.1	3.5	3.3
Household Spending	114	1.7	2.3	2.7	3.6	3.6	3.2
Debt:Income Ratio	2.2	2.3	2.4	2.4	2.4	2.5	2.5
House Prices (£'000, current prices)	233	4.1	3.5	3.7	6.1	6.1	4.3
LFS Unemployment (millions)	0.2	25.9	1.2	-0.7	-4.6	-4.3	-1.2

Source: ONS, DCLG, Experian

2. The Outlook for Construction in the South East

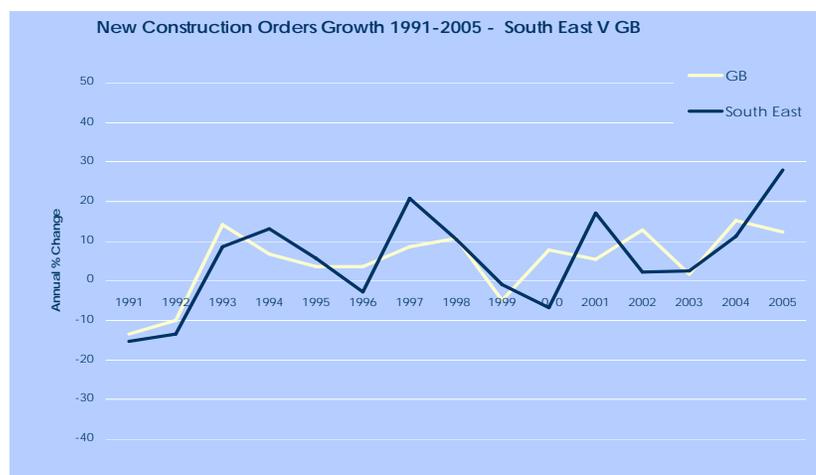
New orders statistics are based on the Department of Trade and Industry's (DTI) monthly survey of construction contractors. The time taken for new orders to feed into output differs from sector to sector and from project to project. As a general rule, Industrial orders tend to be converted into output relatively quickly and infrastructure orders relatively slowly, due to project scale and complexity.

2.6 New Construction Orders – Overview

Since 2000 new construction orders in the South East have recorded strong year-on-year growth. In 2005 they reached £6.3bn, in current prices, almost double their value in 2000 (see chart and table below).

New work orders were particularly strong in 2005, increasing by 28% from 2004. 2005's strength is predominantly due to the letting of sizeable water and sewerage contracts in the infrastructure sector. Prior to 2005, 2001 stands out as a particularly strong year for new work orders in the South East, with orders up by 17% on 2000's level.

The effect that large individual contracts can have on orders



Source: DTI

Footnote: 4 (See Appendix III)

statistics is apparent from the volatility shown in the chart below. Resulting output streams tend to be much smoother.

2.7 New Construction Orders – Current Situation

The buoyancy of 2005, however, failed to be sustained in the first three quarters of 2006. Orders totalled £4.5bn, in current prices, during this period, 10% down on the first three quarters of 2005.

A 70% decline in infrastructure orders was the main cause of the overall weakness, and conceals significant growth in commercial and public housing orders, of 36% and 35% respectively.

A 15% decline in the private housing sector, whose relatively large size makes any change in the sector significant overall, was also important.

For the remaining sectors, public non-housing and industrial, orders increased in the first three quarters of 2006. Public non-housing orders rose marginally, by 1.9%, while industrial orders increased by 14%.

New Work Construction Orders - South East (£ million, current prices)

	Actual 2005	Annual % Change				
		2001	2002	2003	2004	2005
Public housing	263	53.2	75.8	37.1	6.6	7.8
Private housing	1901	14.2	15.3	6.7	21.5	15.4
Infrastructure	1131	17.7	0.2	-15.4	5.4	121.8
Public non-housing	986	8.9	47.9	-4.2	3.5	22.0
Industrial	394	30.1	9.0	7.2	-22.4	30.5
Commercial	1662	17.9	-28.1	5.2	19.2	15.4
Total New Work	6337	17.1	2.1	2.5	11.3	28.0

Source: DTI

Footnote: 4 (See Appendix III)

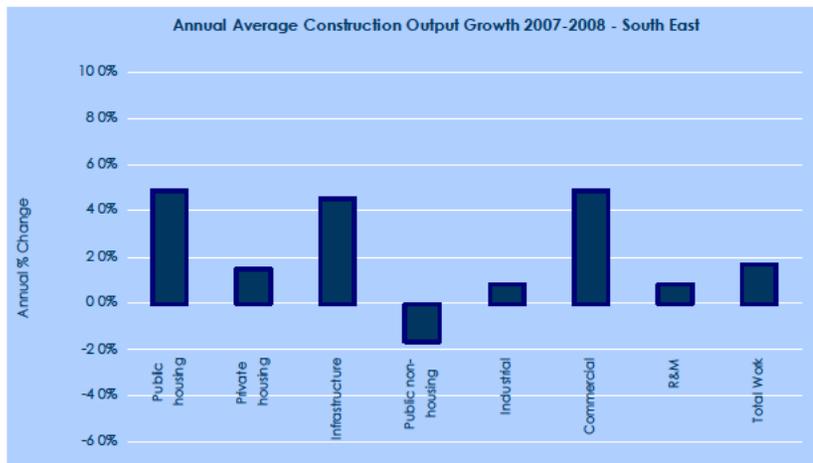
2. The Outlook for Construction in the South East

2.8 Construction Output – Short-term Forecasts (2006-2008)

Total construction output, in current prices, in the South East was 5% higher in the first half of 2006 than in the first half of 2005. Regional DTI output statistics are published in current prices, and thus are inclusive of any inflationary effect. At the time of writing DTI output statistics for the first half of 2006 were available.

Construction output in the South East is forecast to grow moderately over the next few years, at an annual average rate of 1.7% (see chart and table below). The short term outlook for new work is much better than for R&M, which is expected to remain flat until 2008.

Output in the public non-housing sector declined by 3% in the first half of 2006 compared to the first half of 2005. It is envisaged the second half of the year will be even more subdued than the first and the decline over the year as a whole is likely to be around 7%. The short-term outlook remains muted, with the South East missing out on the first two waves of the Building Schools for the Future (BSF) programme. Kent will come on stream in wave three of the programme.



Source: Experian

Footnote: 2 (See Appendix III)

The first half of 2006 was particularly good for the commercial and infrastructure sectors. Current priced output in both was up by 24% from the first half of 2005. These sectors are forecast to grow at annual average rates of 4.9% and 4.5% respectively in the short term. To 2008 infrastructure growth will be centred on roads, while an office sub-sector recovery bodes well for the commercial sector.

The outlook for housing is reasonably good. On the public side growth in 2007 and 2008 should average nearly 5% as funding allocated in the Housing Corporation's National Affordable Housing Programme begins to yield output. Compared to the recent past the outlook for the private housing sector is a little less buoyant, although after stalling in 2006 a return to growth is forecast in 2007.

Having declined in 2004 and 2005, prospects for R&M output are unlikely to improve in the short-term. Retrenchment by the government is likely to counteract any expansion in private sector R&M activity. By 2008 a return to modest growth is expected.

	Actual 2005	Forecast Annual % Change			Annual Average 2007-2008
		2006	2007	2008	
Public housing	261	-1%	5%	5%	4.9%
Private housing	1 624	0%	2%	1%	1.5%
Infrastructure	714	5%	4%	5%	4.5%
Public non-housing	992	-7%	-3%	0%	-1.7%
Industrial	408	11%	-1%	2%	0.8%
Commercial	1 540	18%	5%	5%	4.9%
New Work	5 538	5%	2%	3%	2.6%
R&M	6 113	0%	0%	2%	0.8%
Total Work	11 650	3%	1%	2%	1.7%

Source: DTI, Experian

Footnote: 1 & 2 (See Appendix III)

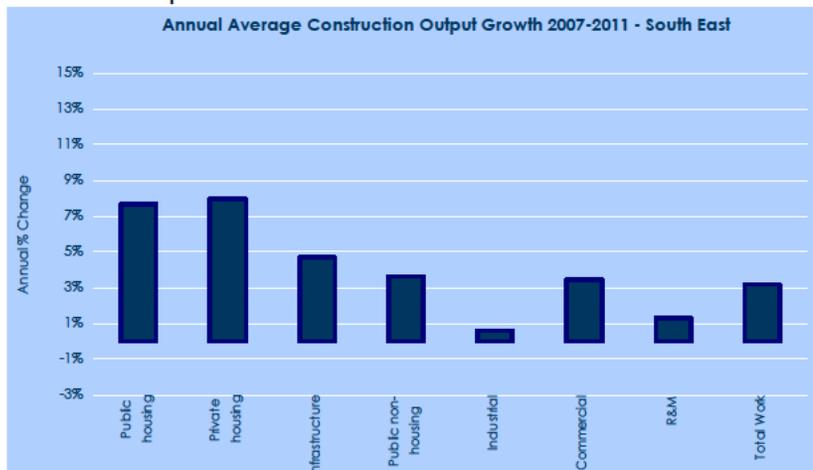
2. The Outlook for Construction in the South East

2.9 Construction Output – Long-term Forecasts (2007-2011)

Over the longer term, output is forecast to rise by an annual average rate of 3.2%. Growth in new work output is expected to accelerate in the 2009-2011 period, while the outlook for the R&M sector continues to be subdued (see figures below).

Strong demand for housing in the South East will sustain house price inflation and the lure of greater profit margins will encourage developers to increase their output wherever possible. However, planning in the region is difficult to obtain and until activity increases in the Thames Gateway area, the scope for further growth will be limited. On the public housing side, growth will be driven both by government funding and by private sector activity in the Thames Gateway, as private developers incorporate affordable housing units into their developments in order to get planning approval.

The infrastructure sector is also expected to expand strongly to 2011. In addition to work on the M25 and Southern Water's £1.6bn capital investment programme, a proposal to build a £200m wastewater treatment centre on the Sussex coast was recently re-submitted, and if, successful could start on site during the forecast period.



Source: Experian

Footnote: 2 (See Appendix III)

To 2011 commercial output growth will centre around several large scale mixed-use developments planned in the South East, including a £235m sustainable development at Brighton marina, the £120m redevelopment of Newbury town centre and the £750m redevelopment of Bracknell town centre. The retail and leisure sub-sectors should benefit most from these projects.

As construction work begins on Kent's £187m BSF programme, public non-housing output growth should accelerate post 2008. Eleven schools will be redeveloped in Kent, eight of which will be funded by the public purse.

Prospects for the industrial sector are much more subdued. Between 2007 and 2011 annual growth is forecast to be 0.6%. Muted growth is forecast for manufacturing in the South East, and the industry will remain fragile as the UK struggles to compete in a global marketplace. As such, a marginal improvement in manufacturing's prospects during this forecast period is unlikely to fuel a surge in investment.

For the R&M sector, the outlook is generally unexciting. Annual average growth of 1.3% is forecast between 2007 and 2011.

Construction Output - South East (£ million, 2000 prices)							
	Estimate 2006	Forecast Annual % Change					Annual Average 2007-2011
		2007	2008	2009	2010	2011	
Public housing	260	5%	5%	10%	9%	7%	7.7%
Private housing	1 634	2%	1%	13%	12%	7%	7.9%
Infrastructure	754	4%	5%	5%	4%	5%	4.7%
Public non-housing	923	-3%	0%	4%	5%	6%	3.7%
Industrial	454	-1%	2%	3%	3%	-6%	0.6%
Commercial	1 820	5%	5%	2%	4%	3%	3.5%
New Work	5 846	2%	3%	6%	6%	5%	5.0%
R&M	6 124	0%	2%	1%	0%	2%	1.3%
Total Work	11 970	1%	2%	4%	3%	3%	3.2%

Source: Experian

Footnote: 2 (See Appendix III)

3. Construction Employment Forecasts for the South East

3. Construction Employment Forecasts for the South East

3.1 Total Construction Employment Forecasts by Occupation

The table, right, presents actual construction employment (SIC 45 and 74.2, see Appendix III) in the South East for 2005 and the forecast total employment in 25 occupations and in the industry as a whole between 2007 and 2011. By 2011 total employment in construction in the South East is expected to stand at around 382,200, with approximately 54,550 more people being employed in the industry than in 2005. 343,970 people will be classified as working in SIC 45 in 2011, with 38,230 falling under the SIC 74.2 umbrella.

The largest occupational groups are forecast to be Wood Trades & Interior Fit-out, Non-construction Operatives, Construction Professionals & Technical Staff, Construction Managers and Office-based Staff (excl Managers), each with employment forecast above 30,000 in the South East in 2011.

Construction Professionals & Technical Staff is forecast to see the greatest proportional increase, with total employment expected to rise 25% between 2007 and 2011. Rises of more than 15% are also forecast for Scaffolders, Bricklayers and Building Envelope Specialists.

Occupational groupings have been improved following the 2006-2010 model run to incorporate new research and to reflect feedback from Observatory members and other stakeholders. A full breakdown of the 25 occupations is provided in Appendix IV.

The most significant change is that research into the contents of the Construction Trades nec category has enabled us to publish numbers for Building Envelope Specialists, which includes activities like cladding. Wood Trades has become Wood Trades & Interior Fit-out and Architects & Professionals is now based on a more appropriate group of SOC codes and has been renamed Construction Professionals & Technical Staff.

Total Employment by Occupation - South East			
	Actual	Forecast	
	2005	2007	2011
Senior & Executive Managers	1,330	1,410	1,610
Business Process Managers	9,210	9,440	10,380
Construction Managers	32,830	33,510	37,300
Office-based Staff (excl. Managers)	31,160	31,890	34,830
Other Professionals/Technical Staff & IT	6,360	6,520	7,170
Wood Trades & Interior Fit-out	32,510	33,240	36,700
Bricklayers	10,030	10,730	12,930
Building Envelope Specialists	10,870	11,620	14,000
Painters & Decorators	15,130	15,950	18,120
Plasterers & Dry Liners	6,430	6,640	7,260
Roofers	3,960	4,250	4,630
Floorers	6,630	6,800	7,600
Glaziers	7,720	7,500	8,320
Specialist Building Operatives nec	8,840	9,180	10,270
Scaffolders	1,710	1,880	2,190
Plant Operatives	4,790	4,930	5,350
Plant Mechanics/Fitters	3,770	3,900	4,400
Steel Erectors/Structural	2,800	2,920	3,140
Labourers nec	9,550	10,270	10,520
Electrical Trades & Installation	22,880	24,010	26,170
Plumbing & HVAC Trades	23,700	25,430	28,360
Logistics	3,270	3,560	3,990
Civil Engineering Operatives nec	7,970	8,590	9,750
Non-construction Operatives	30,130	31,090	38,980
Construction Professionals & Technical Staff	34,070	35,550	38,230
Total (SIC 45)	293,580	305,260	343,970
Total (SIC 45 & 74.2)	327,650	340,810	382,200

Source: ONS, CSN, Experian

Footnote: 5 & 6 (See Appendix III)

3. Construction Employment Forecasts for the South East

3.2 Construction Average Annual Requirements by Occupation

The table, right, outlines the Average Annual Requirement for 25 occupations within the South East construction industry between 2007 and 2011. The Average Annual Requirement represents the number of extra workers that are required each year to enable the industry to meet the forecast change in construction output after taking into account those entering and leaving the industry.

To meet forecast demand for construction workers in the South East it is estimated 13,560 additional workers will be required each year over the 2007-2011 period.

The group Wood Trades & Interior Fit-out is forecast to have the greatest Average Annual Requirement at 1,840. At 1,770, the requirement for Construction Professionals & Technical Staff is also significant.

A relatively large Average Annual Requirement for Office-based Staff (excl Managers), given the expected increase in total employment, is due in part to the high transferability of skills in this occupation between industries.

Please note that all of the Average Annual Requirements presented in this section are employment requirements and not necessarily training requirements. Recruiting from other industries with similar skills base or employing skilled migrant labour could mean the actual training requirement is lower.

Non-construction Operatives is a diverse occupational group including all of the activities under the SIC45 and 74.2 umbrella that cannot be classified elsewhere, such as Cleaners, Elementary Security Occupations nec and Routine Inspectors & 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 Average Annual Requirement for Non-construction Operatives is not published.

Average Annual Requirement by Occupation - South East	
	2007-2011
Senior & Executive Managers	70
Business Process Managers	420
Construction Managers	1,350
Office-based Staff (excl. Managers)	1,290
Other Professionals/Technical Staff & IT	120
Wood Trades & Interior Fit-out	1,840
Bricklayers	720
Building Envelope Specialists	790
Painters & Decorators	490
Plasterers & Dry Liners	280
Roofers	170
Floorers	130
Glaziers	290
Specialist Building Operatives nec	410
Scaffolders	140
Plant Operatives	140
Plant Mechanics/Fitters	190
Steel Erectors/Structural	100
Labourers nec	50
Electrical Trades & Installation	1,630
Plumbing & HVAC Trades	740
Logistics	60
Civil Engineering Operatives nec	370
Construction Professionals & Technical Staff	1,770
Total (SIC 45)	11,790
Total (SIC 45 & 74.2)	13,560

Source: CSN, Experian

Footnote: 5 & 6 (See Appendix III)

4. Regional Comparisons

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4. Regional Comparisons

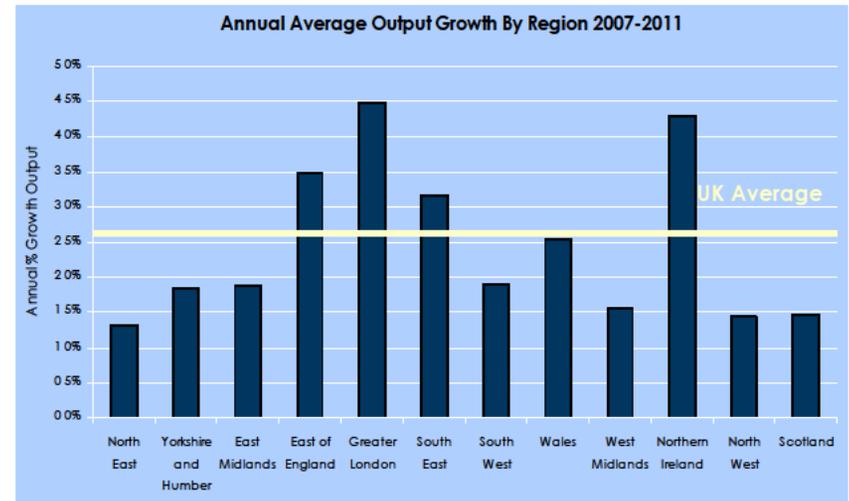
Construction output in Greater London is forecast to see strong year-on-year growth throughout the forecast period as infrastructure recovers and housing and commercial sectors continue to thrive. Prospects are also good for Northern Ireland, the East of England and the South East.

In the early part of this decade the northern half of the UK enjoyed something of a construction boom, with the North West, Yorkshire and Humber and the South East faring especially well. Slower construction output growth is forecast in these regions going forward, although it is important to stress that all English regions, Wales, Northern Ireland and Scotland, are expected to see real output growth between 2007 and 2011.

Over the past few years increased activity in the private housing and public non-housing sectors has driven construction output growth across the UK as a whole. While these sectors are expected to grow further over the forecast period (2007-2011), the outlook is much more subdued. The infrastructure and commercial sectors are expected to take the lead in driving the industry forward over the coming years.

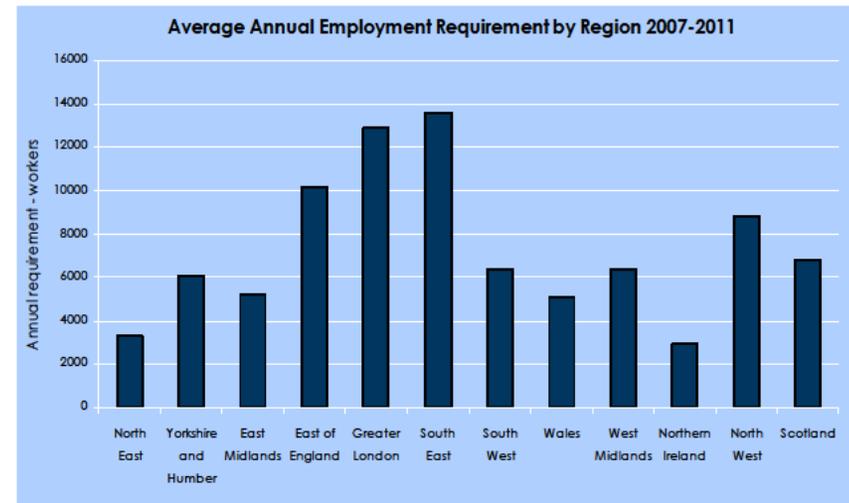
Focusing on employment, the south has the greatest need for skilled construction workers between 2007 and 2011. Inward migration into Greater London is expected to be stronger than in the South East, lowering the average annual additional requirement slightly. Nevertheless the average annual requirement in this region still reaches 12,880. The annual average requirements of the South East and East of England both exceed 10,000.

Given that the construction industry of Northern Ireland is relatively small, it is forecast to have the smallest employment requirement each year. However, it is still estimated that total employment will need to rise by an average of 2,940 in order to meet demand.



Source: Experian

Footnote: 2 (See Appendix III)



Source: CSN, Experian

Appendix I - Methodology

Construction Skills Network



Appendix I - Methodology

Background

The **Construction Skills Network (CSN)**, launched in 2005, represents a radical change in the way that ConstructionSkills collect and produce information on the future employment and training needs of the industry. CITB-ConstructionSkills, the Construction Industry Council (CIC) and CITB Northern Ireland work in partnership as the Sector Skills Council (SSC) 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 the 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 who can contribute local knowledge of the industry and views on training, skills, recruitment, qualifications and policy.

The National Group also includes representatives from industry, Government, education and other SSCs. This group (which will convene twice in 2007) sets the national scene, effectively forming a backdrop for the Observatories.

At the heart of the CSN is a forecasting model which generates forecasts of employment requirements within the industry for a range of trades.

The model was designed and is managed by Experian under the independent guidance of the Technical Reference Group, comprised of statisticians and modelling experts.

It is envisaged that the model will evolve over time as new research is published and modelling techniques improve. 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 model, which is 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 UK 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 **Average Annual Requirement** is a gross requirement that takes into account the dynamic factors influencing all of the flows into and out of construction employment, such as movement to and from other industries, migration, sickness, and retirement. Young trainees are not included in the flows. Therefore, the Average Annual 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.

Appendix I - Methodology

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 model is dynamic and reflects the general UK economic climate at any point in time. To generate the labour demand, the model makes use of a set of specific statistics for each major type of work (labour coefficients) 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 years' supply (the total stock of employment) combined with flows into and out of the labour market.

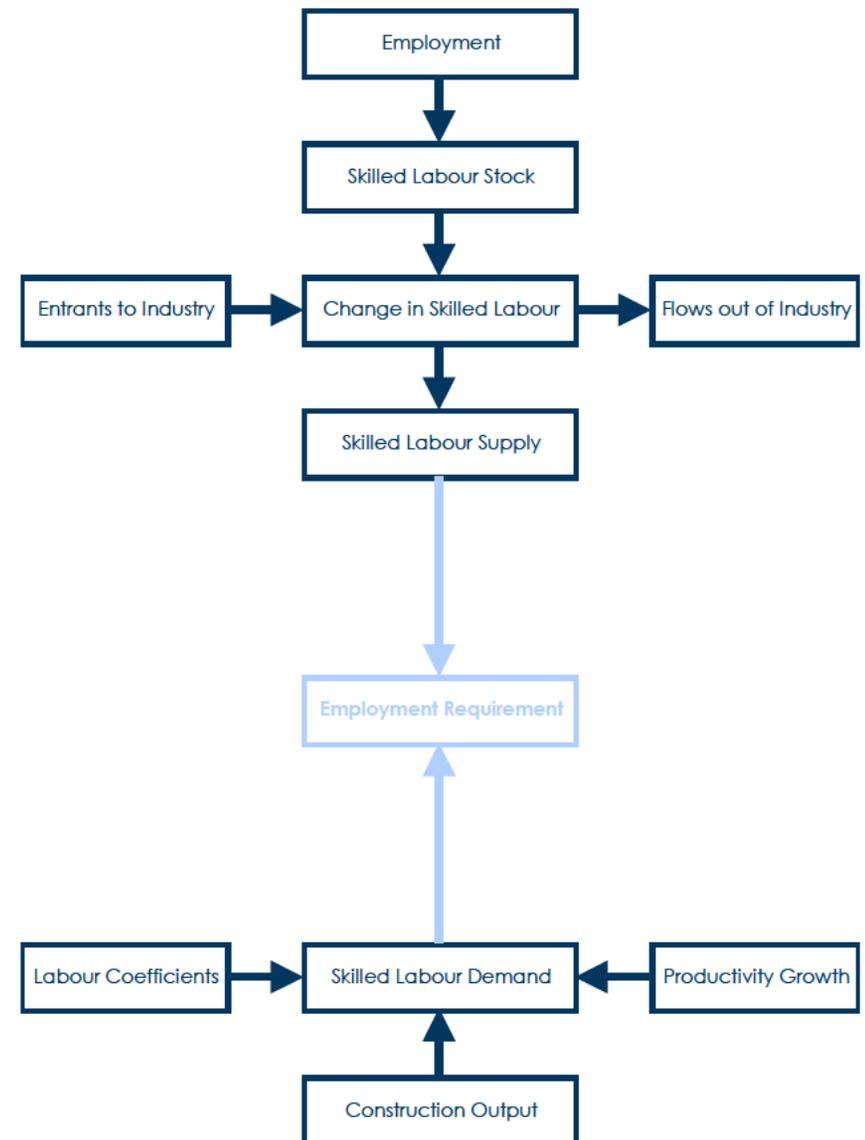
The key leakages (outflows) that need to be considered are:

- 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.

New entrants (e.g. young trainees attached to formal training programmes) are not included in the flows of the labour market but are derived from the forecasted Average Annual Requirement for employment. The most significant inflow is likely to be from other industries. A summary of the model is shown in the Flow Chart.



Source: Experian

Appendix II – Glossary of Terms

Construction Skills Network

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Appendix II – Glossary of Terms

- **Demand** – construction **output**, vacancies, and a set of **labour coefficients** to translate demand for workers to labour requirements by trade. Demand is calculated using Department of Trade and Industry (DTI) and the Department of Finance and Personnel Northern Ireland (DFP) output data. Vacancy data are usually taken from the National Employers Skills Survey from the Department for Education and Skills.
- **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.
- **Labour coefficients** – the labour inputs required for various types of construction activity. The number of workers of each occupation/trade to produce £1m of output in 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 Information – 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.
- **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**.
- ConstructionSkills is responsible for SIC 45 Construction and part of SIC 74.2 Architectural and Engineering activities and related technical consultancy.
- ConstructionSkills shares an interest with SummitSkills in SIC 45.31 Installation of wiring and fittings and SIC 45.33 Plumbing. AssetSkills has a peripheral interest in SIC 74.2.
- **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.

Appendix III – Footnotes & Footprints

Construction Skills Network



Appendix III – Footnotes & Footprints

Footnotes

1. Except for Northern Ireland, output data for the English regions, Wales and Scotland are supplied by the Department of Trade and Industry (DTI) on a current price basis. Thus national deflators produced by the DTI have been used to deflate to a 2000 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 GB 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 45, 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 45.31 and 45.33.

Footprints for Built Environment SSCs

The table summarises the SIC codes covered by ConstructionSkills.

	SIC Code	Description
ConstructionSkills	45.1	Site preparation
	45.2	Building of complete construction or parts civil engineering
	45.3	Building installations (except 45.31 and 45.33 which are covered by SummitSkills)
	45.4	Building completion
	45.5	Renting of construction or demolition equipment with operator
	74.2*	Architectural and engineering activities and related technical consultancy

* AssetSkills has a peripheral interest in SIC 74.2

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.

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.

Energy & 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.

Appendix IV – Occupational Groups (SOC codes)

Appendix IV – Occupational Groups

Bricklayers & Building Envelope Specialists

Bricklayers, masons 5312
Construction trades nec (50%) 5319
Labourers in building & woodworking trades (5%) 9121

Roofers

Roofers, roof tilers & slaters 5313

Plumbing & HVAC Trades

Plumbers, heating & ventilating engineers 5314
Pipe fitters 5216
Labourers in building & woodworking trades (6%) 9121
Construction trades nec (5%) 5319

Electrical Trades & Installation

Electricians, electrical fitters 5241
Electrical/electronic engineers nec 5249
Telecommunications engineers 5242
Lines repairers & cable jointers 5243

Civil Engineering Operatives nec

Road construction operatives 8142
Rail construction & maintenance operatives 8143
Quarry workers & related operatives 8123
Construction operatives nec (20%) 8149
Labourers in other construction trades nec 9129

Plant Operatives

Crane Drivers 8221
Plant & machine operatives nec 8129
Transport operatives nec 8219
Fork-lift truck drivers 8222
Mobile machine drivers & operatives nec 8229

Scaffolders

Scaffolders, staggers, riggers 8141

Wood Trades & Interior Fit-out

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

Steel Erectors/Structural

Steel erectors 5311
Welding trades 5215
Sheet metal workers 5213
Metal plate workers, shipwrights & riveters 5214
Construction trades nec (5%) 5319

Labourers nec

Labourers in building & woodworking trades (80%) 9121

Logistics

Heavy goods vehicle drivers 8211
Van drivers 8212
Packers, bottlers, canners, fillers 9134
Other goods handling & storage occupations nec 9149
Buyers & purchasing officers (50%) 3541
Transport & distribution clerks 4134
Security guards & related occupations 9241

Plant Mechanics/Fitters

Metal working production & maintenance fitters 5223
Precision instrument makers & repairers 5224
Motor mechanics, auto engineers 5231
Labourers in process & plant operations nec 9139

Specialist Building Operatives nec

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

Appendix IV – Occupational Groups

Non-construction Operatives

Metal making & treating process operatives 8117
 Process operatives nec 8119
 Metal working machine operatives 8125
 Water & sewerage plant operatives 8126
 Assemblers (vehicle & metal goods) 8132
 Routine inspectors & testers 8133
 Assemblers & routine operatives nec 8139
 Stevedores, dockers & slingers 9141
 Hand craft occupations nec 5499
 Elementary security occupations nec 9249
 Cleaners, domestics 9233
 Road sweepers 9232
 Gardeners & groundsmen 5113
 Caretakers 6232

Construction Professionals & Technical Staff

Civil engineers 2121
 Mechanical engineers 2122
 Electrical engineers 2123
 Chemical engineers 2125
 Design & development engineers 2126
 Production & process engineers 2127
 Planning & quality control engineers 2128
 Engineering professional nec 2129
 Electrical/electronic technicians 3112
 Engineering technicians 3113
 Building & civil engineering technicians 3114
 Science & engineering technicians nec 3119
 Architectural technologists & town planning technicians 3121
 Draughtspersons 3122
 Quality assurance technicians 3115
 Architects 2431
 Town planners 2432
 Quantity surveyors 2433
 Chartered surveyors (not Quantity surveyors) 2434

Electronics engineers 2124
 Building inspectors 3123

Painters & Decorators
 Painters & decorators 5323
 Construction trades nec (5%) 5319

Plasterers & Dry Liners

Plasterers 5321

Glaziers

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

Construction Managers

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

Other Professionals/Technical Staff & IT

IT operations technicians 3131
 IT user support technicians 3132
 Estimators, valuers & assessors 3531
 Finance & investment analysts/advisers 3534
 Taxation experts 3535
 Financial & accounting technicians 3537
 Vocational & Industrial trainers & instructors 3563
 Business & related associate professionals nec 3539
 Legal associate professionals 3520
 Inspectors of factories, utilities & trading standards 3565
 Software professionals 2132
 IT strategy & planning professionals 2131

Appendix IV – Occupational Groups

Estate agents, auctioneers 3544
 Solicitors & lawyers, judges & coroners 2411
 Legal professionals nec 2419
 Chartered & certified accountants 2421
 Management Accountants 2422
 Management consultants, actuaries, economists & statisticians 2423

Senior & Executive Managers

Directors & chief executives of major organisations 1112
 Senior officials in local government 1113

Business Process Managers

Financial managers & chartered secretaries 1131
 Marketing & sales managers 1132
 Purchasing managers 1133
 Advertising & Public relations managers 1134
 Personnel, training & Industrial relations managers 1135
 Office managers 1152
 Civil Service executive officers 4111
 Property, housing & land managers 1231
 Information & communication technology managers 1136
 Research & development managers 1137
 Customer care managers 1142
 Storage & warehouse managers 1162
 Security managers 1174
 Natural environment & conservation managers 1212
 Managers & proprietors in other services nec 1239

Office-based Staff (excl. Managers)

Receptionists 4216
 Typists 4217
 Sales representatives 3542
 Civil Service administrative officers & assistants 4112
 Local government clerical officers & assistants 4113
 Accounts & wages clerks, book-keepers, other financial clerks 4122

Filing & 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 & other secretaries 4215
 Sales & retail assistants 7111
 Telephone salespersons 7113
 Buyers & purchasing officers (50%) 3541
 Marketing associate professionals 3543
 Personnel & 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

Floorers

Floorers and wall tilers 5322

Appendix V – CSN Website

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Appendix V – CSN Website & Contact Details

The CSN Website

The CSN website functions as a gateway into the construction industry.

Co-ordinated by ConstructionSkills, the CSN benefits from the technical expertise of Davis Langdon Management Consulting and Experian. It collates the knowledge and experience of Government; Sector Skills Councils; construction companies; education and training providers; regional agencies; and customers across the UK. In short, it provides a single, clear understanding of the industry's current skills position.

This unique collaboration means the CSN offers, as near as possible, a consensus view of the current and future skills and training needs of the industry.

The Network gives us an authoritative basis on which to plan for recruitment strategies, education and training requirements and funding delivery. The Network forecasts are based on a series of assumptions and trends, to provide a picture of how the industry could look in five years time.

The Network gives construction clients insight into what type of buildings are likely to be constructed, when and where, as well as how to invest training budgets. For contractors and consultants the data can inform the type of building they should design and how best to avoid regional or occupational skills shortages and high labour costs.

Employees and prospective new recruits can use these insights to discover where in the country they are likely to find consistent work, or what trade or profession offers the best career prospects.

The new CSN Website is found here at

<http://www.constructionskills.net>

The Members' area offers access to a wealth of documentation produced by the CSN Observatories. The CSN Members, wider group members and industry stakeholders can use this area to stay up to date with what is happening within the CSN Workshop cycle.

All the tables in this regional document, and the other regional and national documents, can be found on the website.

ConstructionSkills and partners produce a number of reports which have been based on evidence from various datasets. The Data Store, from the Research section, has been set up to give the CSN Members access to this resource so that they may carry out their own research utilising on this primary data.

For more information about us as a Sector Skills Council visit:

<http://www.constructionskills.net>

Workshop Essentials allows Members to stay in touch with CSN developments with their diary of upcoming events. This area also includes all feedback documentation from the current round of workshops, giving members all the relevant information they need in one place.

Contact Details

For enquiries relating to the work of the CSN please contact Sandra Lilley, CSN Manager, at

sandra.lilley@citb.co.uk

For further information about the CSN website, or to register your interest in joining the CSN please contact Sally Riley, Researcher, at

sally.riley@citb.co.uk